Before you begin: Access Library in the Education sandbox

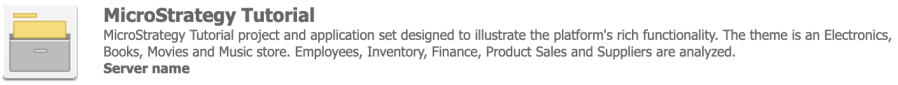
The Education sandbox is a shared, cloud-based environment to help you learn about and experiment with MicroStrategy Web and Library.

Use the Education sandbox to complete various report and dossier exercises. Complete the steps below to access the sandbox.

1. In your browser, navigate to **education.microstrategy.com/MicroStrategy/servlet/mstrWeb**.
2. Log in to the sandbox with your **MicroStrategy Account** credentials.

Open the Tutorial project

3. The MicroStrategy landing page opens. Click the **MicroStrategy Tutorial** project.



   The MicroStrategy Tutorial home page opens.

4. Click **Go to MicroStrategy Library**.
5. If prompted, enter your **MicroStrategy Account** credentials, and then click **Log in with Identity**.

   Your Library home page displays.

Exercise: Improve the data structure during data import

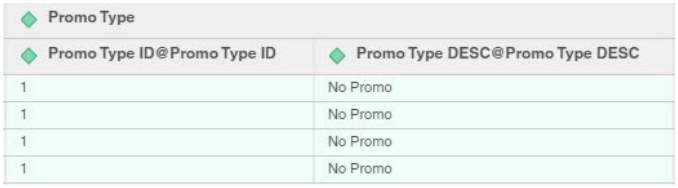
You need to import data that supports creating the requested network visualization, which will display the relationship between sales promotion types and purchase types. This data is saved as the Sheet2 worksheet in an Excel spreadsheet. In this exercise, you improve the quality of the data's structure during import by:

- Combining columns to define multi-form attributes

  The worksheet contains two columns with information about the type of sales promotion with which customers buy items: ID and description (DESC). Each column is imported as a separate attribute.

Promo Type DESC	Promo Type ID
No Promo	1
No Promo	1
No Promo	1
No Promo	1

You combine the columns to create a single attribute, called Promo Type, that contains both forms. In a network visualization, you use one attribute to display the nodes. Having multiple forms in a single attribute allows multiple descriptive categories to be displayed in each node. You can display the number (the ID) as a quick reference or to save space in a visualization, the description to provide more information, or both at the same time.



Promo Type	
Promo Type ID@Promo Type ID	Promo Type DESC@Promo Type DESC
1	No Promo
1	No Promo
1	No Promo
1	No Promo

You also create a Purchase Type attribute, with an ID form and a description form, for the same reason.

- Converting an attribute to a metric

  The Item Qty column is identified as an attribute, but it should be a metric, because it is a business measure.

- Converting a metric to an attribute

  The Order Number column is identified as a metric, but it should be an attribute, because it provides context for business measures.

The Excel file with the necessary data is provided in the Exercise Files.

Prerequisites

This exercise builds on progress you've made with the dossier so far. Before you begin:

1. Access Library. For a reminder on how to do this, see *Exercise: Access Library in the Education sandbox*.

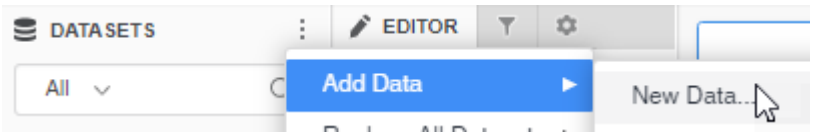
2. In Library, open the **Yearly Regional Performance** dossier in Edit mode. For a reminder on how to do this, see *Exercise: Import a MicroStrategy report and Excel data into a new dossier*.

3. Ensure that you have:

   - Imported data into the dossier in *Exercise: Import a MicroStrategy report and Excel data into a new dossier*.
   - Created the grid visualization in Exercise: Create a grid visualization.
   - Created the bubble chart visualization in *Exercise: Create a bubble chart visualization*.

Improve the data structure during data import

1 In the Datasets panel, click the menu icon ⋮, point to **Add Data**, and then select **New Data**.



2 On the Connect to Your Data window, click **File From Disk**.

3 On the Upload Your Files window, click **Choose files**.

4 In the Open window, navigate to the folder where you saved the Exercise Files provided, select **Sales Analysis.xlsx**, and click **Open**.

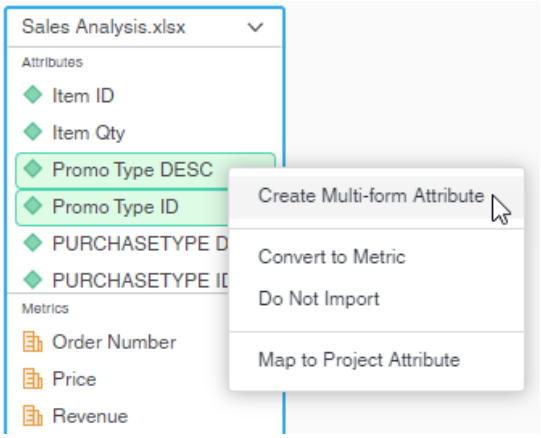
5 Click **Prepare Data**.

6 If your Excel file has multiple worksheets, you can select which ones to import. On the Select Worksheets page, clear the **All Worksheets** check box, then select only the **Sheet2** check box.

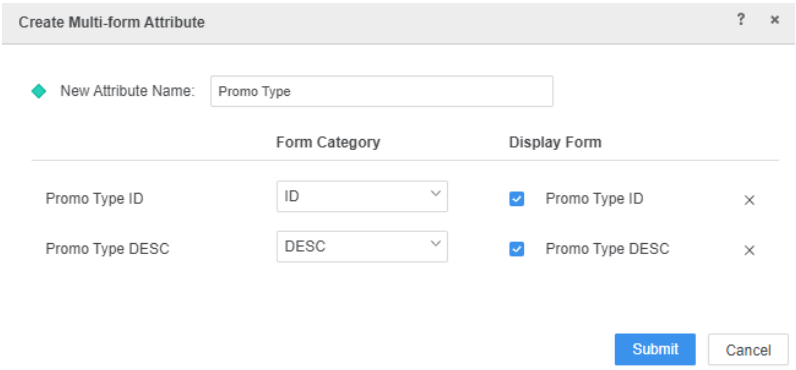
7 Click **Select**.

Create a multi-form attribute

8 In the table at the top of the Preview page, SHIFT+click **Promo Type DESC** and **Promo Type ID** to select both columns. Right-click the selected columns and click **Create Multi-form Attribute**.

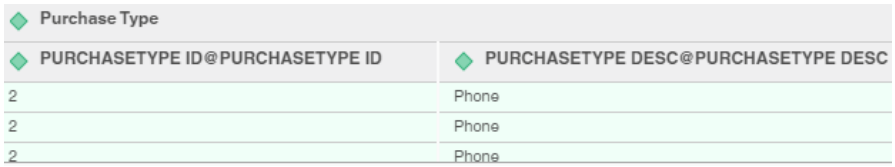


9 On the Create Multi-form Attribute page, in the **New Attribute Name** box, rename the attribute to **Promo Type.** The ID and description forms have automatically been identified with the correct form category. You want each attribute form to be available to display, so leave the Display Form check boxes selected.



10 Click **Submit**.

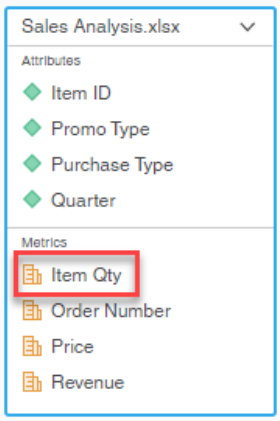
11 Create the **Purchase Type** attribute by combining the **PURCHASETYPE DESC** and **PURCHASETEYPE ID** columns the same way you created the Promo Type attribute. The resulting attribute looks like the following at the bottom of the Preview window:



Convert an attribute to a metric

12 Item Qty should be a metric, instead of an attribute. In the table at the top of the Preview page, right-click **Item Qty**, and select **Convert to Metric**.

The column is now displayed as a metric:



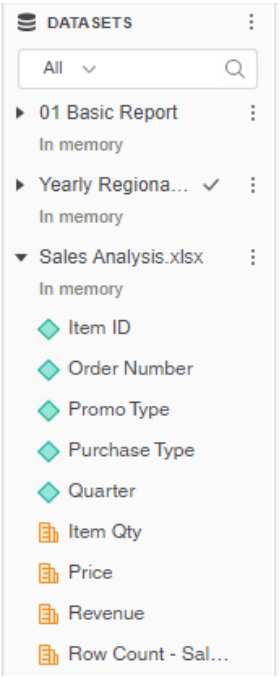
Convert a metric to an attribute

13 Order Number should be an attribute, instead of metric. In the table at the top of the Preview page, right-click **Order Number**, and select **Convert to Attribute**. The column is now displayed as an attribute.

Import the data

14 Click **Finish** to import the worksheet's data into the dossier.

The file is displayed in the Datasets panel in your dossier.



The other datasets are collapsed in this image so that you can focus on the objects from the newly imported dataset.

15 **Save** your dossier.

The datasets you imported into your dossier do not have defined relationships linking them. If you link them, you can display information from multiple datasets in a single visualization. To learn more about linking datasets, see the Enterprise Analyst learning path.