
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.

Access Library in the Education 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.



MicroStrategy Tutorial

MicroStrategy Tutorial project and application set designed to illustrate the platform's rich functionality. The theme is an Electronics, Books, Movies and Music store. Employees, Inventory, Finance, Product Sales and Suppliers are analyzed.
Server name ENV-218880LAIOUSE1

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: Use a report as a filter to generate a list of specific customers

To encourage customers to purchase a variety of items, your organization's marketing department is starting a new campaign that shows the benefits of combining different types of athletic activities. Specifically, they want to target customers who are interested in both ballet and baseball.

In this exercise, you create a report that lists customers who are interested in ballet. Then, you use that report as a filter in a report that lists customers who are interested in baseball. The results provide a list of customers who are interested in both ballet and baseball.

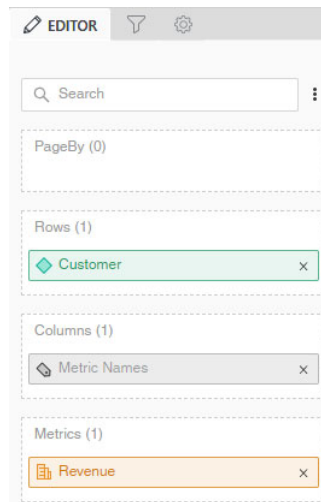
Create a report displaying customers interested in ballet

- 1 In the Library toolbar, click the **Create New** icon , and then select **Report**.
 - For a reminder on how to access Library, see *Exercise: Access Library in the Education sandbox*.
- 2 In the Select Project window, select **MicroStrategy Tutorial**. Select the **Remember Selected Project** check box. With this selection, if you create another report or dossier during the current Library session, this window does not display. Click **OK**.


A blank report displays in Edit mode, with data retrieval paused.
- 3 In the Objects panel, click **Schema Objects**, then **Attributes**, and then the **Customers** folder.
- 4 Double-click **Customer** to add it to the report.
- 5 From the drop-down list in the Objects panel, expand **Public Objects** and click **Metrics**.
- 6 Click the **Sales Metrics** folder, and then double-click the **Revenue** metric to add it to the report.

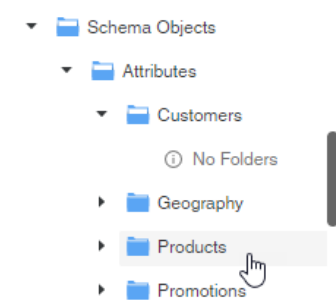
For this scenario, you do not need to know the revenue generated by each customer, but adding it to the report creates a relevant list of customers for your starting point by relating Customer and Item. Only customers who bought an

item (that is, generated revenue) are displayed. You need a metric on a report to ensure filters work correctly.

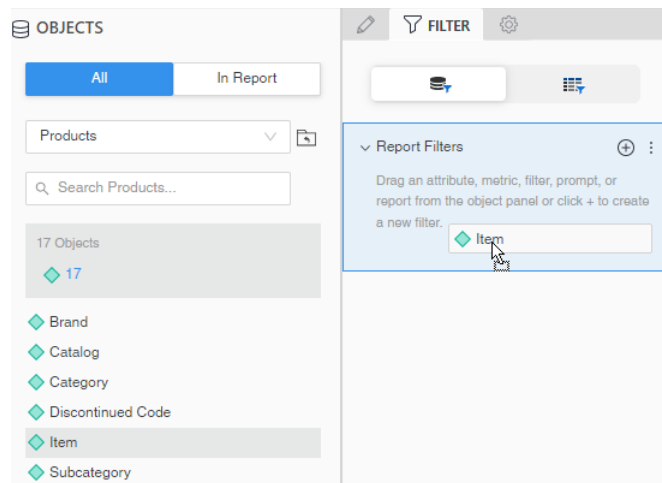


Create a filter for the ballet item

- 7 Click the **Filter** icon  to display the Filter panel.
- 8 From the drop-down list in the Objects panel, scroll to **Schema Objects** and then **Attributes**. Click the **Products** folder.

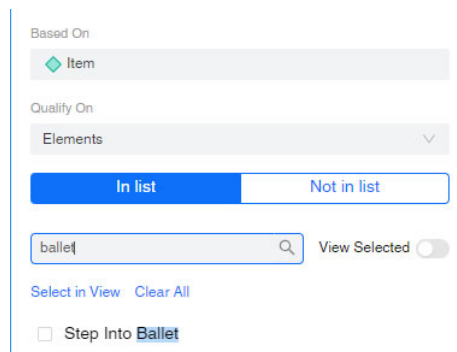


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- 9 Drag the **Item** attribute from the Objects panel to the **Report Filters** tab.




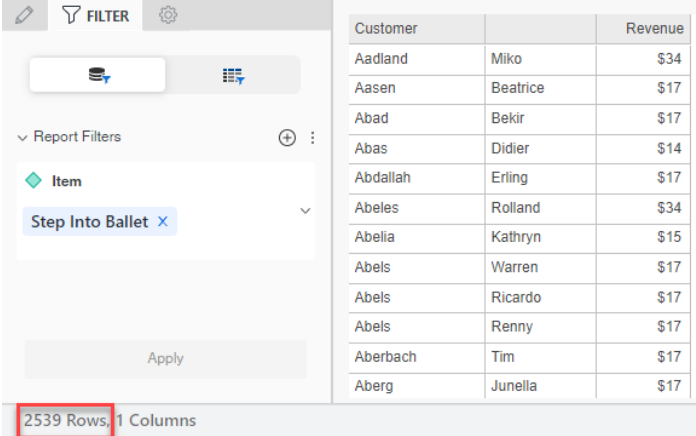
- 10 By default, the filter is set to qualify on Item attribute elements in a list. You want to add an item that is related to ballet (a movie titled Step Into Ballet) to the list. Instead of scrolling through the Available list of items to find it, in the **Search For** box, type **Ballet**.

The search result displays the relevant item, Step Into Ballet.



- 11 Select the check box for **Step Into Ballet**, and then click **Done**.
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- 12** Click the **Resume Data Retrieval** icon  to see the report results. A portion of the report results is shown below. Notice that the report contains 2,539 rows, representing customers who have purchased Step Into Ballet.



The screenshot shows a report interface with a 'Report Filters' panel on the left and a data table on the right. The filter panel has an 'Item' filter set to 'Step Into Ballet'. The data table has columns for 'Customer', 'Name', and 'Revenue'. At the bottom of the filter panel, a red box highlights the text '2539 Rows, 1 Columns'.

Customer		Revenue
Aadland	Miko	\$34
Aasen	Beatrice	\$17
Abad	Bekir	\$17
Abas	Didier	\$14
Abdallah	Erling	\$17
Abeles	Rolland	\$34
Abelia	Kathryn	\$15
Abels	Warren	\$17
Abels	Ricardo	\$17
Abels	Renny	\$17
Aberbach	Tim	\$17
Aberg	Junella	\$17

Save the report

- 13** From the **File** menu, select **Save As**.

- 14** Save the report in the **My Reports** folder, with the name **Ballet Customers**.

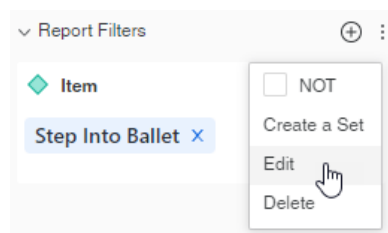
In the sandbox environment, you cannot save items in the Shared Reports folder.

Add the baseball item to the Item filter

You want to know which of these customers are also interested in baseball. You decide to add an item related to baseball (a book titled Test Your Baseball IQ) to your Item filter.

- 15** Click the **Filter** icon  to display the Filter panel.

- 16** Next to the Item filter, click the arrow , and then select **Edit**.



- 17 In the search box, type **Baseball**. The search results display the relevant item, Test Your Baseball IQ.


The screenshot shows a search interface with the following elements:

- Based On:** A dropdown menu with 'Item' selected.
- Quality On:** A dropdown menu with 'Elements' selected.
- Buttons:** 'In list' (highlighted in blue) and 'Not in list'.
- Search Box:** Contains the text 'baseball' and a magnifying glass icon.
- View Selected:** A toggle switch.
- Links:** 'Select in View' and 'Clear All'.
- Results:** A list item with a checkbox, the text 'Test Your Baseball IQ', and a magnifying glass icon.

- 18 Select the check box for **Test Your Baseball IQ**, and then click **Done**. Both the items display in the Report Filters tab.


The screenshot shows the 'Report Filters' tab with the following elements:

- Filter Icon:** A funnel icon.
- Report Filters:** A dropdown menu with 'Item' selected.
- Filters:** A list of filters with checkboxes and 'x' icons: 'Step Into Ballet' and 'Test Your Baseball IQ'.

- 19 Click the **Resume Data Retrieval** icon  to see the report results. A portion of the report results is shown below.

Customer		Revenue
Aaby	Alen	\$3
Aadland	Miko	\$34
Aaron	Ferrell	\$6
Aaronson	Maxwell	\$2
Aasen	Beatrice	\$17
Abad	Geoffrey	\$3
Abad	Bekir	\$20
Abadilla	Lennie	\$3
Abas	Didier	\$14
Abatemarco	May	\$3
Abbasi	Dwayne	\$6
Abdallah	Erling	\$23


The report now contains 4,775 rows, more than the previous report. Is this the report that you need?

- 20** To see what each customer bought, add Item to the report. Click the **Editor** icon . In the Objects panel, search for the **Item** attribute and double-click it to add it to the report's rows.

Customer		Item	Revenue
Aaby	Alen	Test Your Baseball IQ	\$3
Aadland	Miko	Step Into Ballet	\$34
Aaron	Ferrell	Test Your Baseball IQ	\$6
Aaronson	Maxwell	Test Your Baseball IQ	\$2
Aasen	Beatrice	Step Into Ballet	\$17
Abad	Geoffrey	Test Your Baseball IQ	\$3
Abad	Bekir	Test Your Baseball IQ	\$3
		Step Into Ballet	\$17
Abadilla	Lennie	Test Your Baseball IQ	\$3
Abas	Didier	Step Into Ballet	\$14
Abatemarco	May	Test Your Baseball IQ	\$3
Abbasi	Dwayne	Test Your Baseball IQ	\$6
Abdallah	Erling	Test Your Baseball IQ	\$6
		Step Into Ballet	\$17

You can see that the report includes customers who purchased Step Into Ballet, Test Your Baseball IQ, or both. However, you only want to see customers who bought both.

Adding Test Your Baseball IQ to the Item filter did not achieve your desired results, so you decide to try a different approach.

- 21** Click the **Library** icon  to return to your Library home page. In the Notification window click **Don't Save**.

Create a new report that uses the Ballet report as a filter

To generate the list of customers interested in ballet and baseball, use the Ballet report as a filter in a new report that is also filtered for the baseball item.

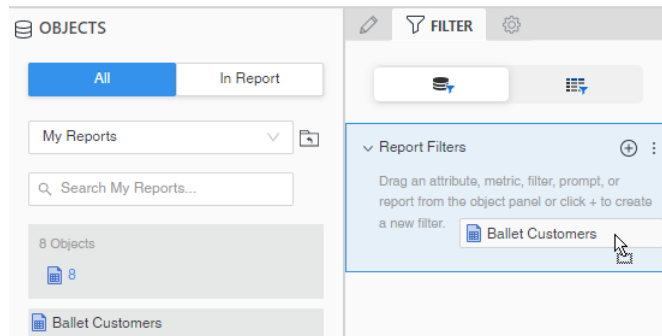
- 1** Create a new report that contains the following objects:



- **Customer** attribute
- **Revenue** metric

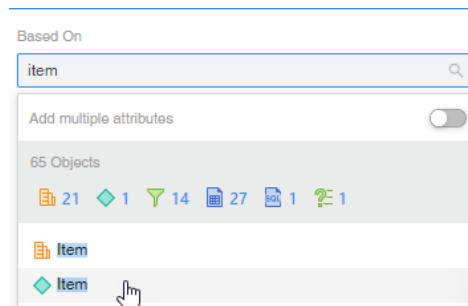
For a reminder on how to add these objects to a report, see *Create a report displaying customers interested in ballet*.

- 2** Click the **Filter** icon  to display the Filter panel.
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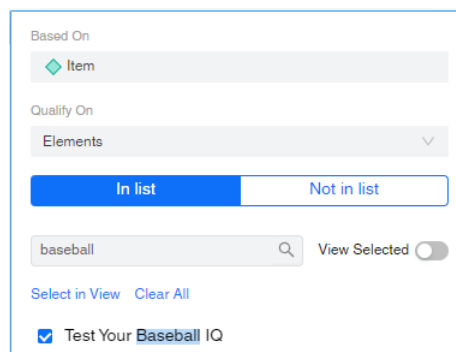
- 3 From the drop-down list in the Objects panel, expand **My Personal Objects**, and then click **My Reports**.
- 4 Drag the **Ballet Customers** report from the All Objects pane to the **Report Filter** area. You are using the results of the Ballet Customers report to filter this new report.



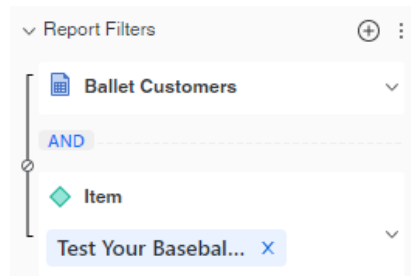
- 5 Click the **Resume Data Retrieval** icon  to see the report results. The report displays customers who purchased Step Into Ballet (2,539 rows).
- 6 In the Report Filters tab, click the **Add** icon .
- 7 In the **Based On** search box, type **item**, and then select the **Item** attribute.



- 8 In the element list search box, type **Baseball**. Then, select the check box for **Test Your Baseball IQ** and click **Done**.



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- 9 Keep the AND operator between the Ballet Customers filter and the Item filter because you want the report to display customers who ordered both Step Into Ballet and Test Your Baseball IQ.



- 10 Click **Apply** in the Report Filters tab to see the report results. A portion of the report results is shown below. The report now only contains 868 rows, representing customers who purchased the items Step Into Ballet and Test Your Baseball IQ. The marketing department now has a relevant list of customers to reach out to for their new campaign.

Customer		Revenue
Abad	Bekir	\$3
Abdallah	Erling	\$6
Abels	Renny	\$3
Aberson	Percy	\$3
Abrica	Leesa	\$3
Abrom	Sammi	\$3
Accinelli	Brandon	\$6
Acencio	Lucie	\$3
Adamina	George	\$3
Adams	Mikel	\$3
Adams	Anne-Marie	\$3
Agatep	Susan	\$3
Agbon	Ebby	\$3
Agcaoili	Roland	\$3
Agee	Dwight	\$3
868 Rows, 1 Columns		

Save the report

- 11 Click **Save** in the toolbar.
- 12 **Save** the report in the **My Reports** folder with the name **Ballet and Baseball Customers**.

In the sandbox environment, you cannot save items in the Shared Reports folder.

- 13 Click the **Library** icon  to return to your Library home page.
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