Before you begin: Log in to your Education sandbox

You have a shared sandbox environment to learn about, use, and experiment with MicroStrategy Web.

1 In your browser, navigate to **education.microstrategy.com/MicroStrategy/servlet/mstrWeb**.

2 Log in to the sandbox with your **MicroStrategy Account** credentials.

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

4 Click **Go to MicroStrategy Web**.

The Shared Reports folder of the MicroStrategy Tutorial project opens.

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

Exercise: Create a transformation metric to calculate the quarterly profit to date

You need to know how much profit has been earned so far in this quarter. Create a transformation metric using the Quarter to Date (QTD) transformation to calculate this value.

Create the QTD Profit transformation metric

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

2 On the My Reports folder page, click **Create** and select **New Metric**.

3 In the Functions list on the left, click **Sum** to add it to the metric definition area.

4 Select the Profit fact:

a Click the **Browse** icon next to the **Search for a fact, metric, or attribute** box.

b Click the **Facts** folder.

c Click **Profit**.

Add a transformation to the metric

5 Click **Show All** to display the level, condition, and transformation properties.

6 Click the **Browse** icon 📁 next to the Transformation box.

7 Click **Quarter to Date**.

The Quarter to Date transformation is now applied as the metric's transformation.

8 In the **Metric Name** box, type **QTD Profit**.

Save the metric

9 Click **Save**.

10 In the Save As window, select **My Reports** from the **Save In** drop-down list.

The metric name that you typed in the Metric Editor is automatically used as the metric name, although you can change it in the Name box here.

11 Click **Save**.

1   On the My Reports folder page, click **Create**, point to **New Report**, and select **Blank Report**.

2   Add the **Region** attribute, the **Profit** metric, and the **QTD Profit** metric to the report.

- The Region attribute is saved in the Geography folder.

- The Profit metric is saved in the Sales Metrics folder.

- The QTD Profit metric is saved in the My Personal Objects\My Reports folder.

Run the report

3   Click the **Run Report** icon .

The resulting report resembles the following. The Profit and QTD Profit metrics both calculate the same value. The transformation metric is not producing a quarter-to-date value. Why?

Region	Profit	QTD Profit
Central	$764,323	764,323
Mid-Atlantic	$673,084	673,084
Northeast	$1,300,732	1,300,732
Northwest	$266,986	266,986
South	$806,956	806,956
Southeast	$336,675	336,675
Southwest	$561,331	561,331
Web	$583,538	583,538

None of the attributes on the report are time-based, so the transformation lacks a date to transform. Therefore, both metrics calculate the profit earned for each region for all time. You can provide the specific date that you want information on by creating a report filter.
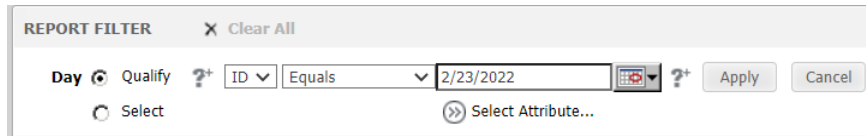
Create a report filter for a date

4   Click the **Design** icon to edit the report.

5   In the All Objects pane, select **Attributes** from the drop-down list.

6   Click **Time**.

7 Drag **Day** to the Report Filter pane. (If you double-click it, it is added to the report grid.)

8 Type **2/23/2022** in the value comparison box, as shown below:
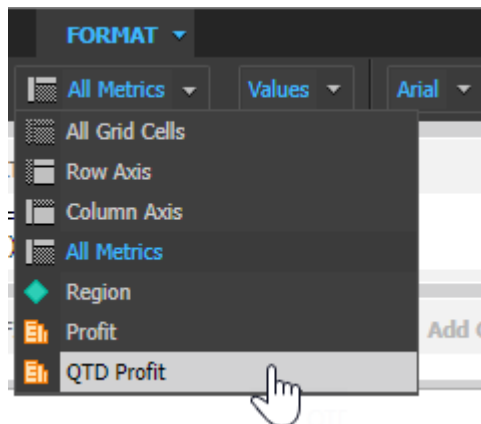

9 Click **Apply**.

Run the report

10 Click the **Run Report** icon .

Format the transformation metric's values

11 Click **Format** in the toolbar.

12 From the first drop-down list in the formatting toolbar, select **QTD Profit**.

13 From the next drop-down list, select **Values**.

14 Click the **Currency Style** icon in the toolbar.

15 Click the **Decrease Decimal** icon two times so that the metric values no longer display decimals.

The report resembles the following:

REPORT DETAILS

Report Filter:
Day (ID) = 2/23/2022

Region	Profit	QTD Profit
Central	$948	$46,838
Mid-Atlantic	$593	$43,590
Northeast	$1,293	$76,103
Northwest	$378	$16,223
South	$1,329	$48,057
Southeast	$621	$18,362
Southwest	$862	$32,096
Web	$992	$40,511

Now that the transformation has a date to transform, the report provides information on profit values for the specific date and for the quarter up to the date, that is, 1/1/2022 until 2/23/2022.

If the report cannot return any data, the dates in MicroStrategy Tutorial may have changed. Return to Design Mode and change the date in the report filter. When you rerun the report, data displays, although the values may not match the report sample.

Save the report

16 Click the **Save** icon 🖫.

17 From the **Save In** drop-down list, select **My Reports**.

18 Name the report **QTD Profit Report** and click **OK**.

19 Click **Run Newly Saved Report** then **close** the report.