Learn how to create a custom report using multiple universes.

**Overview**

You can create a custom report using data from multiple universes in WorldShare Report Designer. Before creating a multiple universe report, there are a few things you should know.

- In order to generate reports using data from multiple universes, there must be a common data point in each universe. (e.g., Item Barcode and LHR Item Barcode)
- Queries are used in Web Intelligence to access data. Rather than having to know the specifics of formal Structured Query Language (SQL), you only need to know which universe the data that you want is stored in, the data object requested, and its basic relationships to get started.
- Reports are built in the Query Panel using report objects.

For an overview of the Query Panel, see About Report Designer.

Note: Report Designer times out after 20 minutes of inactivity.

**Watch a video**

**Multiple universe reports (12:46)**

In this video, you'll learn how to create multiple universe reports in WorldShare Report Designer. People also refer to this task as making cross-universe reports, or merging data from different universes.

Create a query for the first universe

1. In the left navigation, click Report Launch Pad.
2. Select Web Intelligence from the Applications drop-down list in the upper right-hand toolbar.
3. Click the New button.
5. From the Universe dialog, double-click the universe from which you want to create your first query.
6. In the Query Panel, select the report objects and query operators you want to include in your query.
7. **(Optional)** Click **Refresh** above the Data Preview panel to produce a preview of the data that will be generated once your query is run. Verify that your desired data is included.

8. **(Optional)** By default, the query will be named Query 1. You can rename your query to better identify it (e.g., Acquisitions query).
   a. Right-click the query name tab and select **Rename** from the pop-up menu.
   b. From the Rename query dialog, enter a new **name** in the New value form field.
   c. Click **OK**.

9. **(Recommended)** Click **Run Query**.

### Create a query for the second universe

1. Click the **Edit Data Provider button**.
2. From the Query Panel, navigate to **Add Query > From the universe**.
3. From the Add Query dialog, double-click the **universe** from which you want to create your second query.
4. Select the **report objects** and **query filters** you want to include in your query.
5. **(Optional)** Click **Refresh** above the Data Preview panel to produce a preview of the data that will be generated once your query is run. Verify that your desired data is included.
6. **(Optional)** By default, the query will be named Query 2. You can rename your query to better identify it (e.g., Acquisitions query).
   a. Right-click the query name tab and select **Rename** from the pop-up menu.
   b. From the Rename query dialog, enter a new **name** in the New value form field.
   c. Click **OK**.
7. Click **Run Queries**.

### Merge data

1. From the Report screen, navigate to **Data Access > Merge**.
2. From the Available Objects dialog:
   1. Click the **common data point** you want to merge on from your first query.
   2. Press **Ctrl** and click the **common data point** from your second query.
      Note: The data point may not have the same name across universes (e.g., Item Barcode vs. LHR Item Barcode).
   3. Click **OK**.

### Add report objects from second query to the report

Web Intelligence has a rule that only objects from a single universe can be displayed in one table together. If you attempt to add a report object that is not in both universes to your multiple universe report, the report object will not appear and all other report objects from that universe query will be grayed out in the Available Objects panel.
You can create a variable and associate it with your desired merged report object (i.e., the match point you set up between universes) to resolve this issue.

To create a variable:

1. From the Available Objects pane, right-click the Variables folder.
2. Select New from the pop-up menu.
3. From the Create Variable dialog:
   a. Enter a name for the variable in the Name form field. This name cannot match the name of any existing report object.
   b. Select Detail from the Qualification drop-down menu.
   c. Click the ... button (…) for under Associated dimension.
   d. From the Objects and Variables dialog, under Merged Dimensions, double-click the report object that you are using as a match point between universes.
   e. Click OK. The Objects and Variables dialog closes.
4. From the Available Objects panel, double-click the object for which you want to create a variable.
5. (Optional) Repeat steps 1-4 for additional match points.
6. To add a variable to the report, select the variable and drag it to the desired location in the report.