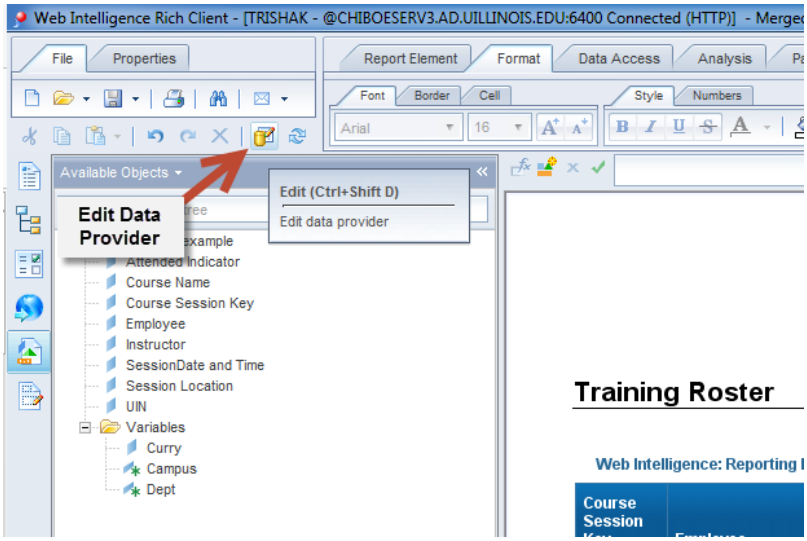
Merged Dimensions (Joining Data from Different Data Sources)

The process of joining the data from different data sources based on a common dimension is referred to as Merging Dimensions. This document will walk you through the process of querying multiple data sources, merging dimensions, creating variables, and adding the variable objects to a report table.

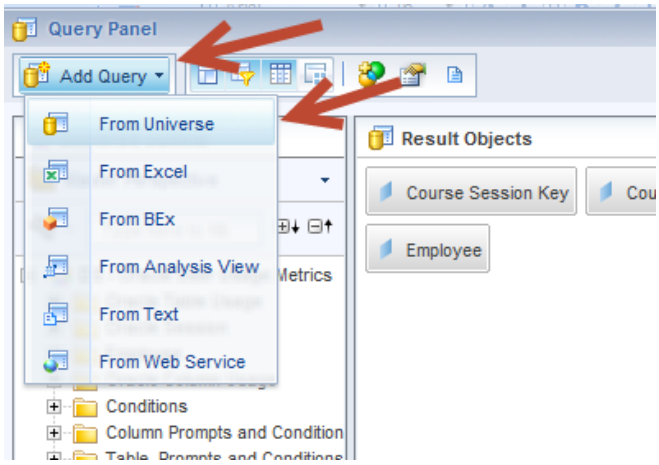
Step 1: Adding an Additional Query

Note: *For this step, it is assumed that you have already created and run a single query. We will use the example of creating a second query from a different universe than the first query.*

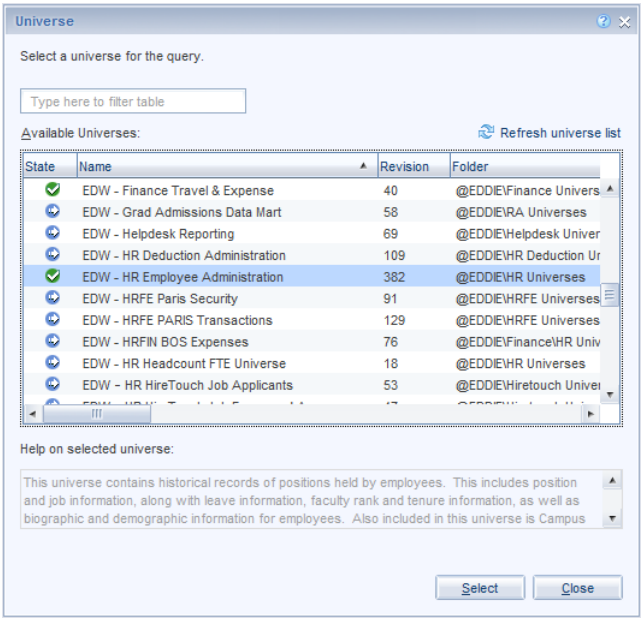
1. From the Report window, click the Edit Data Provider button to return to the Query panel.



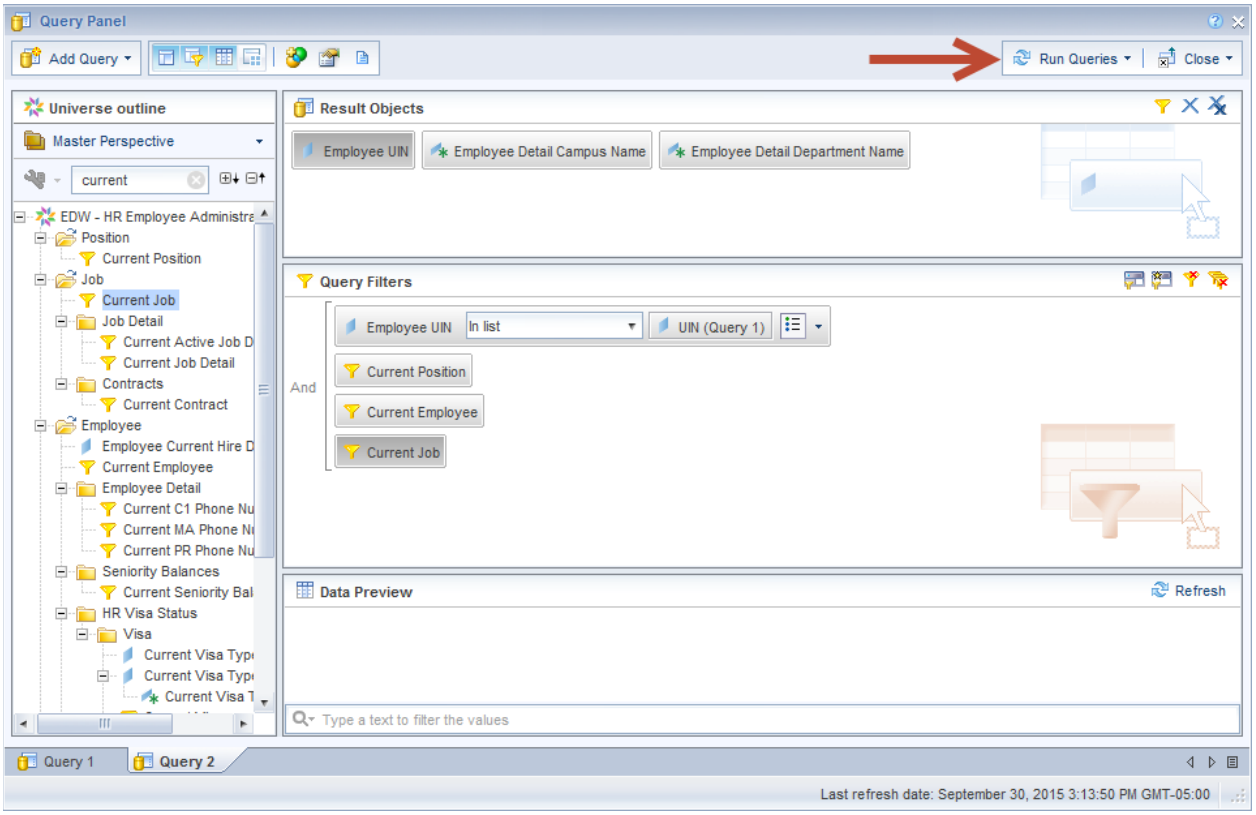
2. In the Query Panel, click the **Add Query** button.
3. Select **From Universe** from the Add Query menu.



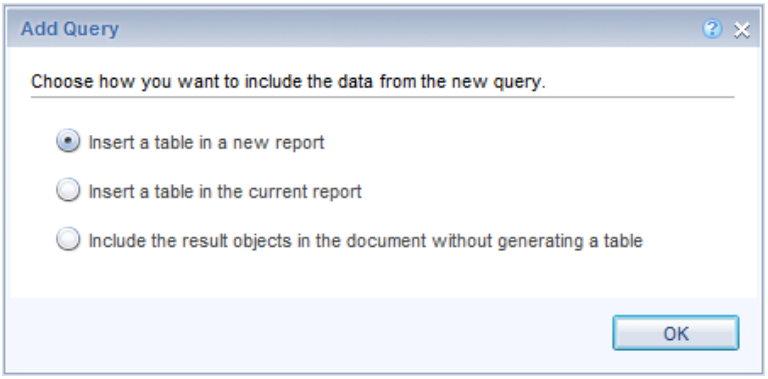
4. Select the desired Universe from the Universe Selection window.



5. Add the desired objects and filters for the new query.
6. Click the **Run Queries** button.

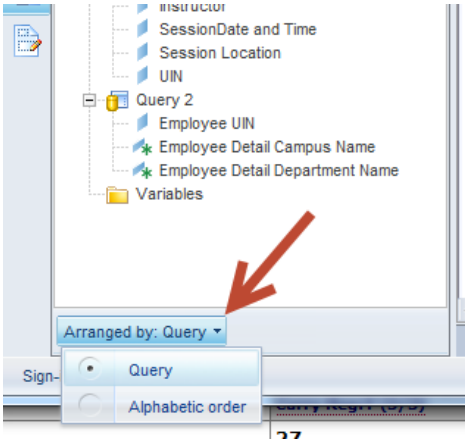


7. Select how you would like to include the data from the new query and click **OK**.

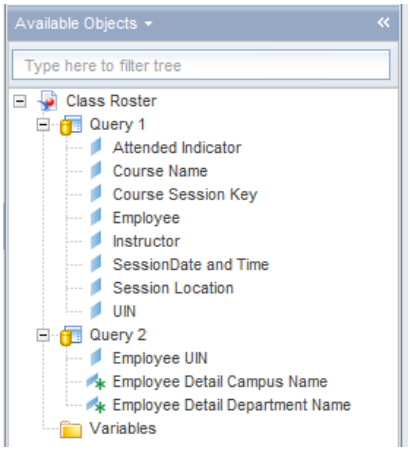


Step 2: Sort Available Objects by Query

1. At the bottom of the Available Objects panel, select the **Arranged by:** drop-down menu
2. Select **Query**



The Available Objects list will now be sorted by Query:

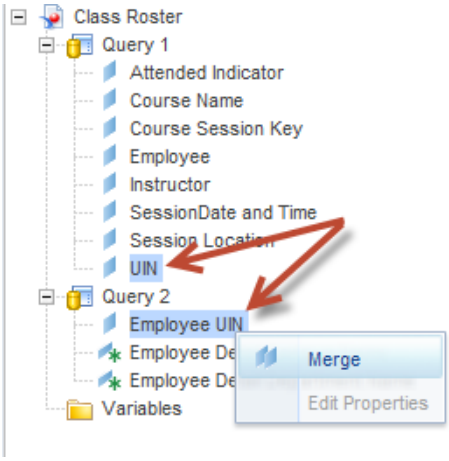


Step 3: Merge Dimension Objects

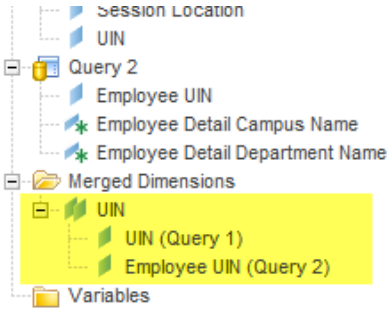
Merge Dimensions allows you to join the two data sources based on a common Dimension object. It is important to join the data sources together with an object they have in common, such as UIN. Note that the objects do not need to have the same name, but the data must be the same.

1. In the Available Objects menu, select the first object to merge.
2. Hold down the **CTRL** key, and select the second object to merge.

   Note: The object will most likely be grayed out, but you will still be able to select it.
3. Right-click on that object, and select **Merge**



The new Merged Dimension will be displayed in the **Merged Dimension** folder:

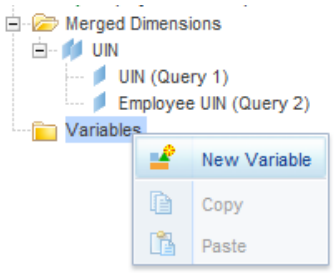


Step 3: Create Variables for Objects to be Displayed with Other Data Source

Business Objects has a rule that only objects from a single data source may be displayed together in a table (or block) of data. In order to join objects from multiple data sources into the same block of data, you must build Varaiables for each object, and those variables must be created as Details of the Merged Dimension.

1. In the Available Objects listing, right-click on the **Variables** folder

2. Select **Create New Variable**



> **Note:**
> You may also select the **Data Access** toolbar tab, then select **New Variable** from the Data Objects menu.

3. Enter a name for the variable.

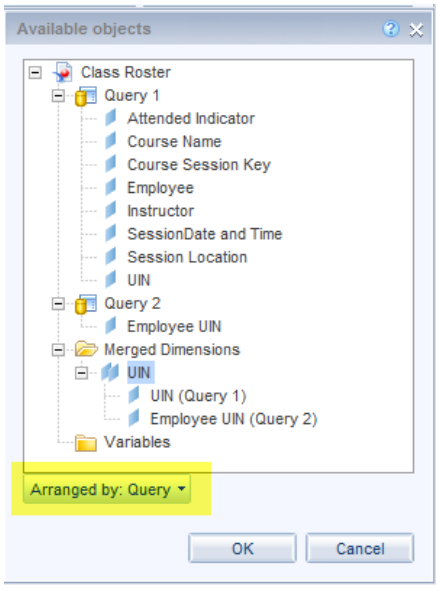
   Note: You must use a distinct name. It cannot be the same as any of the objects in your query.

4. From the Qualifications drop-down menu, select **Detail**

5. Select the  button to the right of the Associated Dimension field.

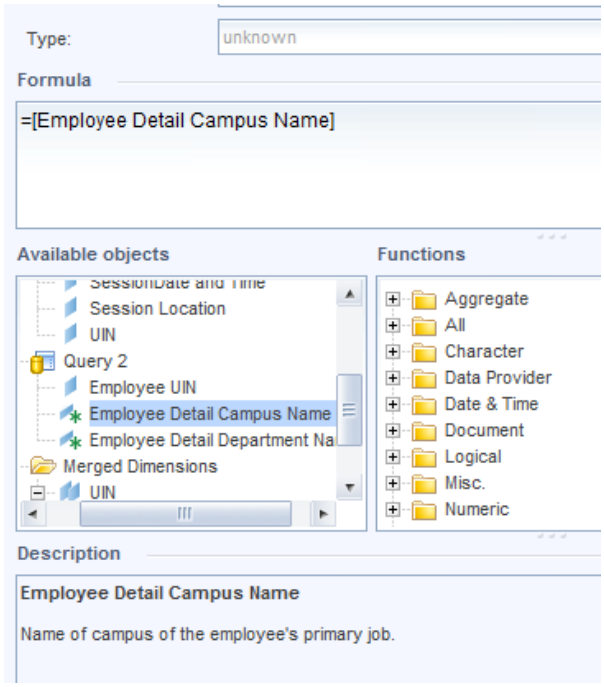
6. Change the **Arranged by:** option to **Query**

7. Select the Merged Dimension object from the list of available objects.



8. Click **OK**

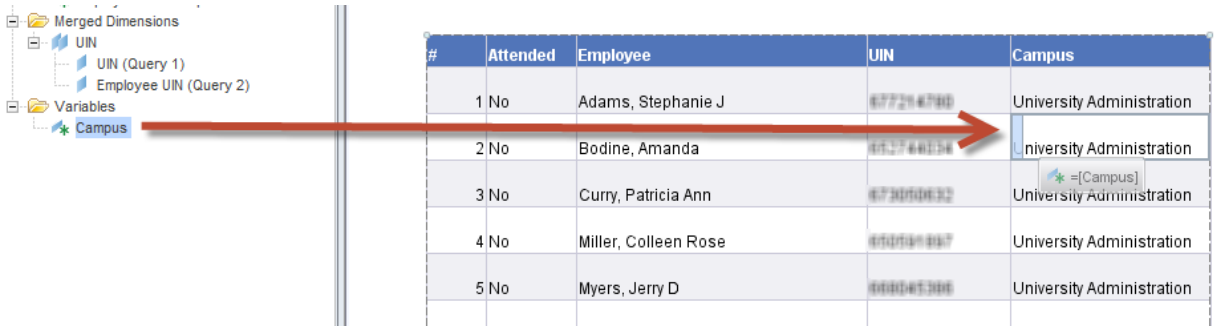
9. Double-click the desired object from the Available Objects list in the variable window. The formula **=[object name]** will be populated in the Formula box.



10. Click **OK**

    The new detail variable has been created and added to the **Variables** folder.

11. Drag and Drop the variable into the desired location in the Data Block.



12. Repeat these steps to create variables for all objects that need to be added to the report table.