



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.

Note: For this example, it is assumed that you already have two data providers from queries from different universes. In this example, one query is named **Students** and the other is named **Dept**.

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:

A screenshot of the 'Available Objects' panel. The title bar says 'Available Objects'. A search bar at the top has 'Type here to filter tree'. Below it is a tree view of objects:

- Class Roster
- Students
 - Attended Indicator
 - Course Name
 - Course Session Key
 - Employee
 - Instructor
 - SessionDate and Time
 - Session Location
 - UIN
- Dept
 - Employee UIN
 - * Employee Detail Campus Name
 - * Employee Detail Department Name
- Variables
- References

Merge Dimension Objects

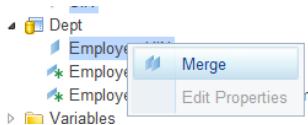
Merge Dimensions allows you to join the two data sources based on objects with common values. Note that the objects do not need to have the same name, but must be the same type (character, date, number). You can also merge two variables, or merge a variable with another object. The variables must be dimension objects and must come from different queries. You cannot merge objects coming from the same query.

1. In the Available Objects menu, select the first object to merge.

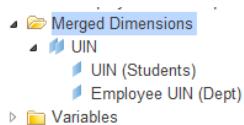
- Hold down the **CTRL** key, and select the second object to merge.

Note: The object may be grayed out, but you will still be able to select it.

- Right-click that object, and select **Merge**



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

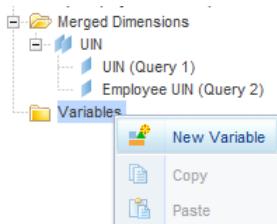


Create Variables for Objects to be Displayed with Other Data Source

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

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

- Select **New Variable**



Note:

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

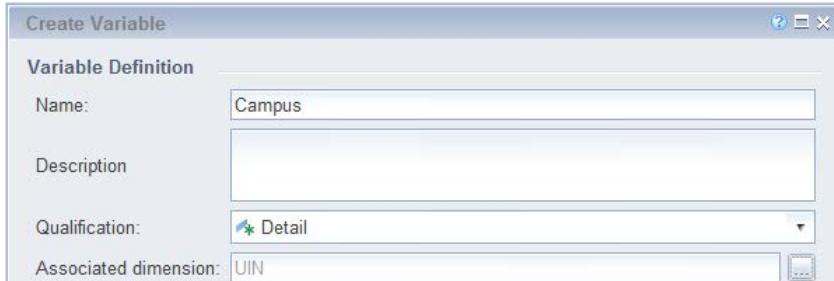
- Enter a name for the variable.

Note: The name cannot be the same as any of the objects in your query.

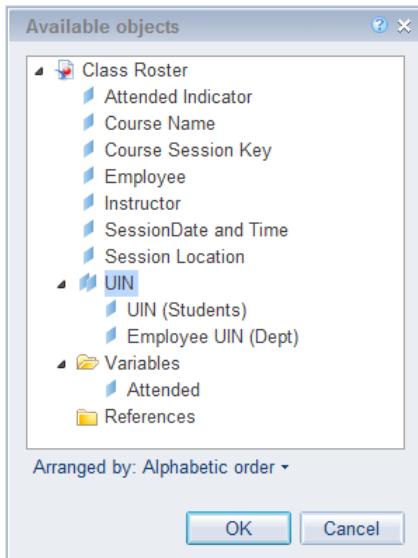


- From the Qualifications drop-down menu, select **Detail**

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

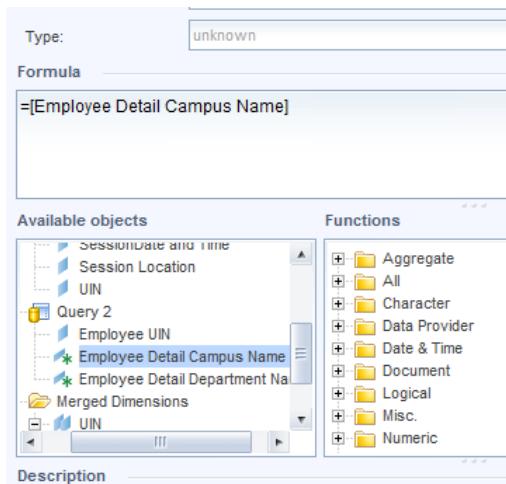


6. Select the **Merged Dimension** object from the list of available objects.



7. Click **OK**

8. For the formula for the new variable, 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.





9. Click **OK**.

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

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

The screenshot shows the Web Intelligence interface. On the left, the 'Variables' folder is expanded, showing a 'Campus' variable. On the right, a data table is displayed with columns: #, Attended, Employee, UIN, and Campus. A red arrow points from the 'Campus' variable in the Variables folder to the 'Campus' column header in the Data Block table.

#	Attended	Employee	UIN	Campus
1	No	Adams, Stephanie J	077784790	University Administration
2	No	Bodine, Amanda	0712746138	University Administration
3	No	Curry, Patricia Ann	0730761632	University Administration
4	No	Miller, Colleen Rose	0701010107	University Administration
5	No	Myers, Jerry D	0700013300	University Administration

11. Repeat these steps to create variables for all non-merged objects that need to be added to the report table.