

## Tips and Techniques: *Linking an Excel File to a BI Snapshot*

One of the most common questions that the HRIS team receives is, “How do I link this Excel spreadsheet that I have to one of the BI snapshots so I can merge the data?” The ability to link data from a Business Intelligence snapshot in order to supplement data in an Excel spreadsheet is a major advantage of the Data Point Viewer application. Whether the Excel spreadsheet is from an external source or created within the KSU community, you can merge any spreadsheet with data from the BI snapshots as long as you have a common field in a common format.

As an example, let’s pretend that you have an Excel file from an external source and one of the fields is the ADP Employee Number. Here are a few important tips for a successful merger of data.

**1. Make sure that you have similar column headings.**

This will make it link to a database snapshot automatically since the snapshots contain this same field name. So, in the Daily\_Active\_EEs\_Snap there is field called “Empl ID”. Therefore, you will want to have the employee ID column in the Excel file named “Empl ID”.

**2. Make sure that this column is formatted as text with a leading apostrophe (').**

The database snapshots have the “Empl ID” field formatted as a text field with a leading apostrophe so that leading zeros are not dropped when converting a BI report to an Excel file.

If you have an Excel file that has the Employee ID formatted as a number (i.e., no leading zeros), here is an easy way to create a column formatted properly.

- Insert a new column and make the title “Empl ID” (see 1, above)
- The formula to convert the numeric employee id is:  
=CONCATENATE(“'”,text(B2,”0000000”))

Note that there is an apostrophe between the quotes and B2 represents the cell that contains the numeric employee ID.

If you have an Excel file that has the Employee ID as a text field (i.e., with leading zeros) you will still need to add the apostrophe at the beginning.

- Insert a new column and make the title “Empl ID” (see 1, above)
- The formula to convert the text field of employee id is:  
=CONCATENATE(“'”,B2)

Note that there is an apostrophe between the quotes and B2 represents the cell that contains the numeric employee ID.

Now your Excel file will link to the database snapshot based on the fields “Empl ID” automatically.

Now that you are ready to merge the Excel file with a BI snapshot, the following steps are recommended:

**1. Pull the Excel file into Data Point first.**

- Data Source = Microsoft Excel
- Browse to find your Excel file
- Make sure that the proper worksheet is selected if there are more than one in the workbook.
- Check the “Review column properties” box so that you verify your data.

**2. Pull the Snapshot into Data Point second.**

- Click on “Add data”
- Pull in the selected data snapshot as you normally would.

**3. Merge the data by:**

- Click on the “Datasets” tab in the lower left hand corner of Data Point
- Click on the box that contains your Excel file sheet name
- Click on ‘Add Step’ and then select “Merge – Join by key column”
  - a. The “Master dataset” should be your worksheet name
  - b. Select your BI snapshot for the “Dataset to merge”
  - c. For the join type, the most common selection is “Left Outer” join. This will return data for all rows in the spreadsheet, even if there is no matching data in the BI snapshot. Hover the mouse over each of the four options for a description of what each selection does.
  - d. When you click on “Next” a list of all common field names will be displayed. Remove all field names except the “Empl ID” field name.
  - e. After you click on “Next” two times the final wizard step is displayed. Click on the box “Refresh dataset immediately...” so that your link will complete.
  - f. After you click “Finish”, click on the “Dimensional View” tab at the bottom of the screen.
  - g. You will see all of your fields names merged under your Excel worksheet name and can now create reports or graphs with the merged data.

So there you have it. In just a few steps you can merge data between Excel and BI snapshots, or even between two Excel files, or more.