IRA Pivot Table Review

and

Using Answers to Modify Reports

Training Agenda

- IRA vs. Answers
- What is a Pivot Table?
- Pivot Table View in IRA
  - Data available by report in appendix
- Filter Selection Options
- Examples and Exercises

What is a Pivot Table?

- A pivot table takes rows of detailed data (such as the lines in a downloadable table) and summarizes them at a higher level using a defined structure.

Group By Org

Entity	Org	Funding	Activity	Subactivity	Natclass	Effective Date	Posted Date	Budget Amount	Actual Amount	Encumb Amount	Encumb Type Name	JE Source Short Name	Reference 1
20-College Only	546-Accounting Operations	368000-Subvention College	343601-Accounting Services	0000-Default	7511-SUPPLIES Office	1/31/2009	1/30/2009	0.00	44.38	0.00	Unknown	Inventory	12732
20-College Only	546-Accounting Operations	368000-Subvention College	343601-Accounting Services	0000-Default	7511-SUPPLIES Office	1/31/2009	1/30/2009	0.00	330.60	0.00	Unknown	Inventory	12732

Grand Total

Org	Budget Amount	Actual Amount	Encumb Amount
546-Accounting Operations	0.00	374.98	0.00
Grand Total	**0.00**	**374.98**	**0.00**

Grand Total Section is a pivot table of the detail in the downloadable table or report table.

What is a Pivot Table?

- IRA Launchpad Reports (IRA) include a “canned” pivot table view that uses the data returned, based on the filters selected, and summarizes it in a pre-determined structure:

Select a View Selection Criteria

Org is equal to **545-Financial Reporting**, **546-Accounting Operations**, **547-Controllers Ofc**
and Funding is equal to **368000-Subvention College**
and Activity is equal to **343601-Accounting Services**, **343602-Accts Payable Office**, **343605-Controller Central**
and Subactivity is LIKE (pattern match) %
and Natclass is equal to **7511-SUPPLIES Office**
and JE Source Short Name is LIKE (pattern match) %
and JE Transaction Type is LIKE (pattern match) %
and Effective Date is between **1/31/09 and 1/31/09**

Select a View Pivot Table

			7-JAN	7-JAN	7-JAN
Org	Funding	Activity	Budget Amount	Actual Amount	Encumb Amount
546-Accounting Operations	368000-Subvention College	343601-Accounting Services	0.00	374.98	0.00

Modifying Pivot Table View

- The pivot table view of IRA reports may be customized to meet a variety of individual reporting needs using the Answers tool.
- Customization is accomplished by included and/or excluding the data fields available for that report (see IRA Pivot Views Appendix).
- Choose and run an IRA report based on the data fields needed in the customized report (see Data Fields Matrix). Save your report using “Page Options” in case you want to start over. Click Modify to go to the Answers tool.

Select a View Pivot Table

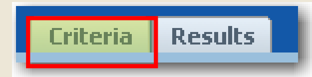
			7-JAN	7-JAN	7-JAN
Org	Funding	Activity	Budget Amount	Actual Amount	Encumb Amount
546-Accounting Operations	368000-Subvention College	343601-Accounting Services	0.00	374.98	0.00

Grand Total

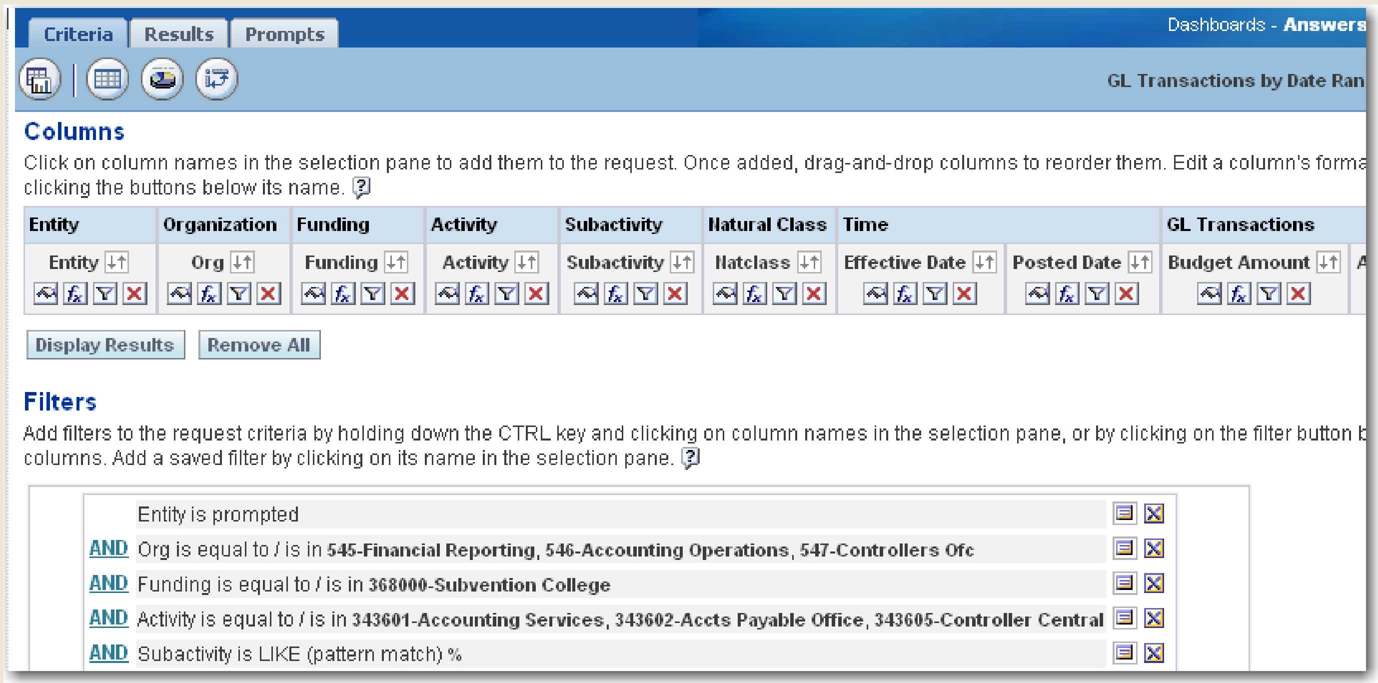
Org	Budget Amount	Actual Amount	Encumb Amount
546-Accounting Operations	0.00	374.98	0.00
Grand Total	**0.00**	**374.98**	**0.00**

Modify - Refresh - Print - Download

Modifying Pivot Table View

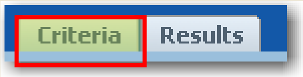


- Answers, Criteria tab:

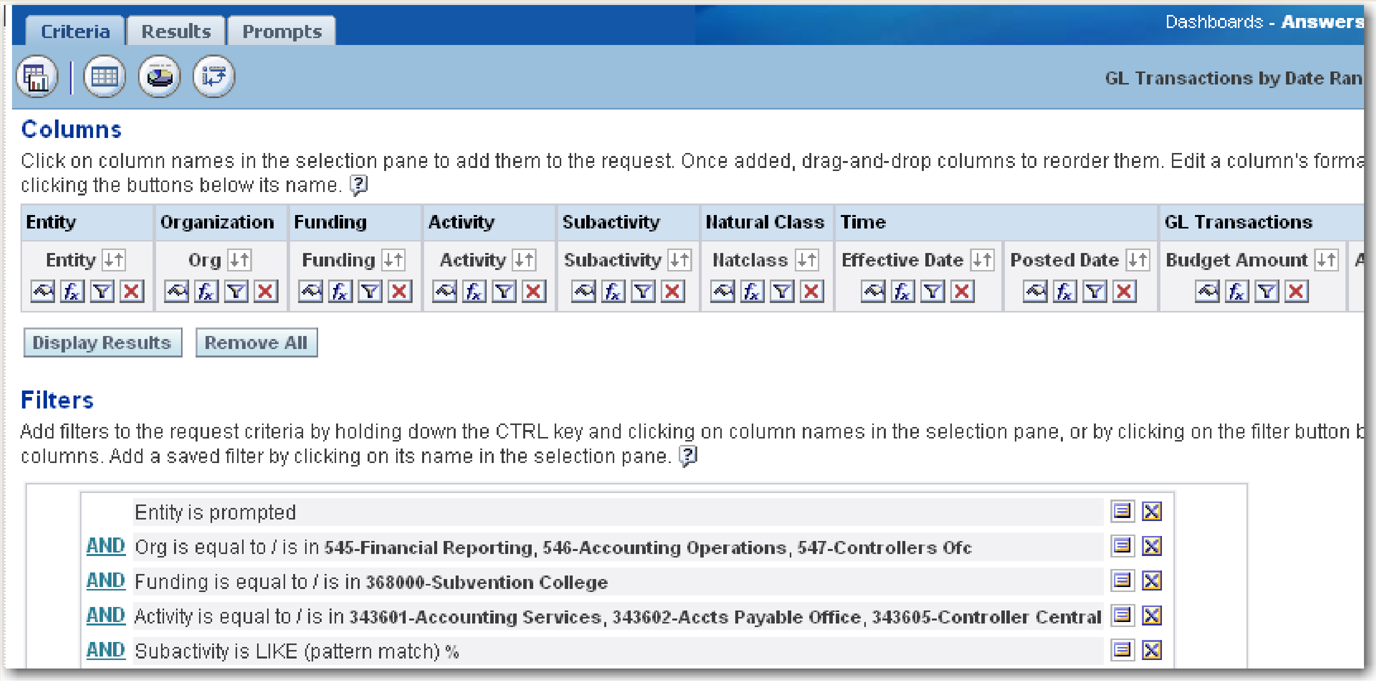


You are seeing the underlying structure of the IRA report. Changes made here do not affect the IRA canned report design. Changes made here create a custom report design to include data you want to see and exclude data you don't want to see in your report. Once saved, this report can be used instead of the IRA report.

Modifying Pivot Table View

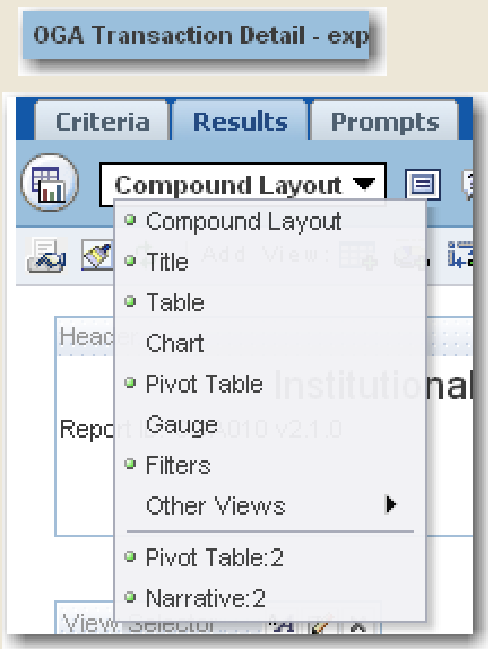


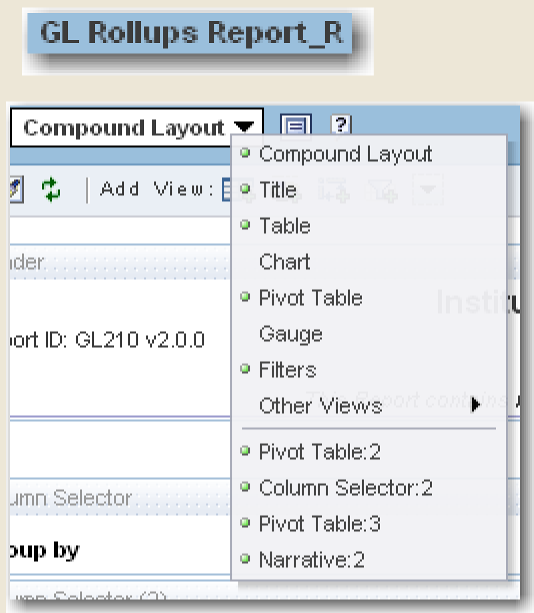
- The criteria tab shows all filters chosen when you ran the IRA report. You can add additional filters and modify existing filters here. Once you have saved your customized report design, you can run reports that query the same data warehouse that IRA does, and get updated financial data.

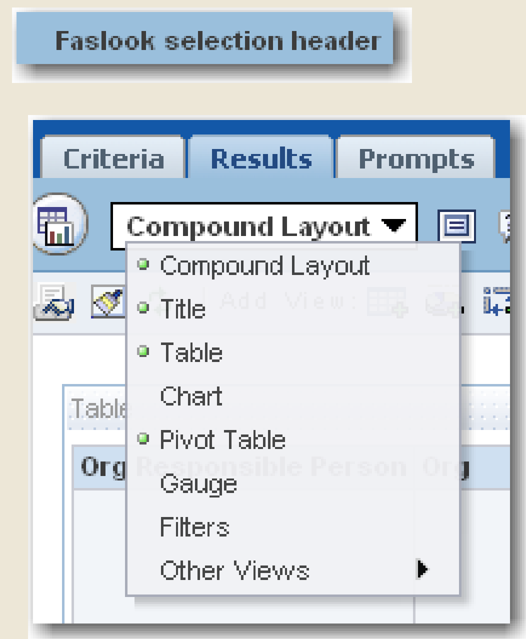


Modifying Pivot Table View

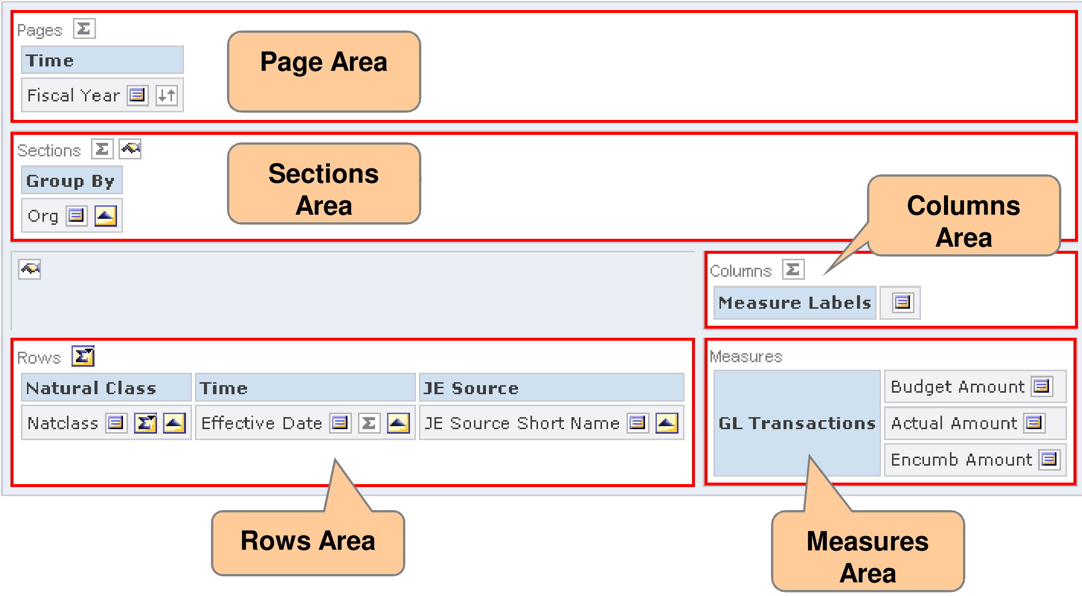
- To customize the pivot table structure, choose the Results tab and choose a Pivot Table view from the pulldown menu. Each report has up to three pivot table views. Choose one view as a starting place to customized your report. In most cases you will choose Pivot Table 2.

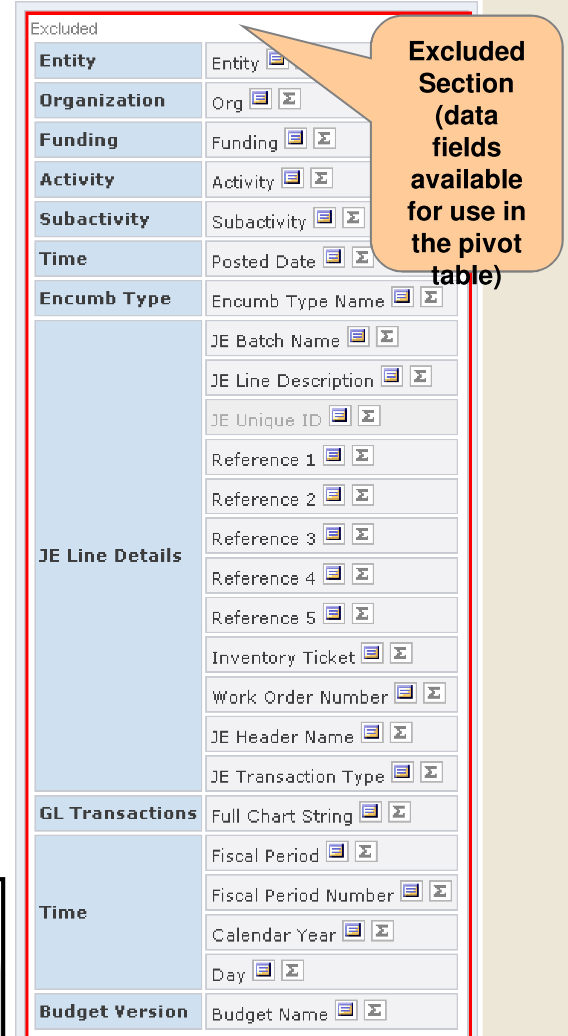






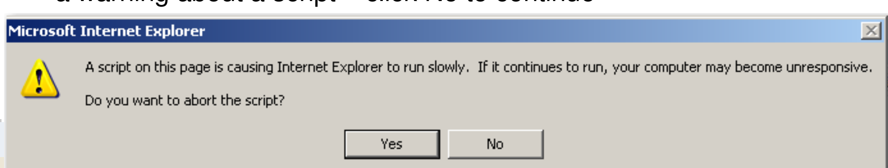
Pivot Table Structure - example



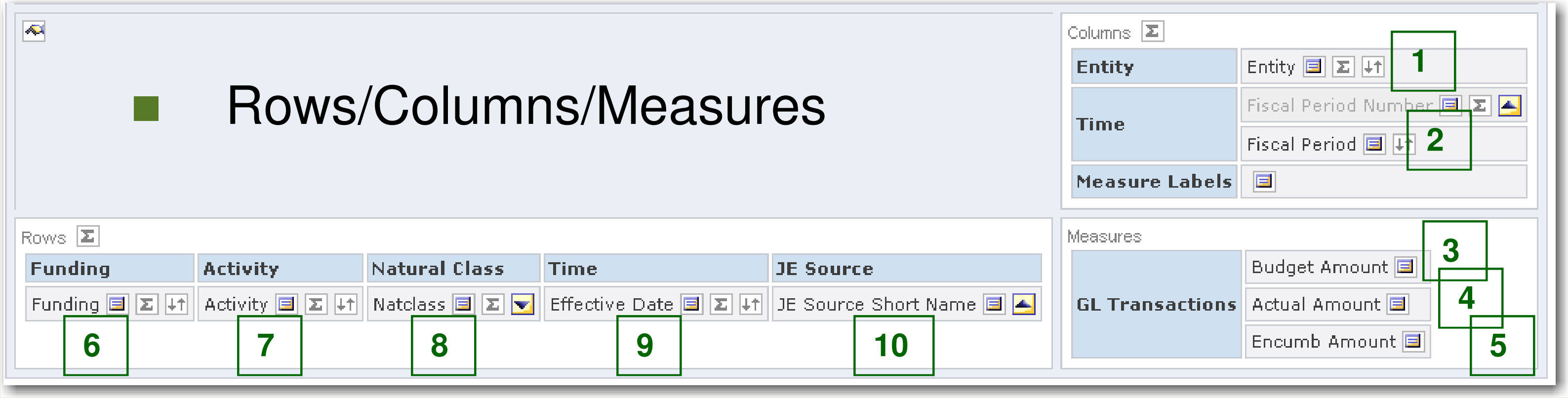


TIP: *Turn the Display Results option off by removing the check from the checkbox. Otherwise the data will refresh every time data fields are moved, which causes a delay as the view changes. When you are ready to see results, check Display Results.*

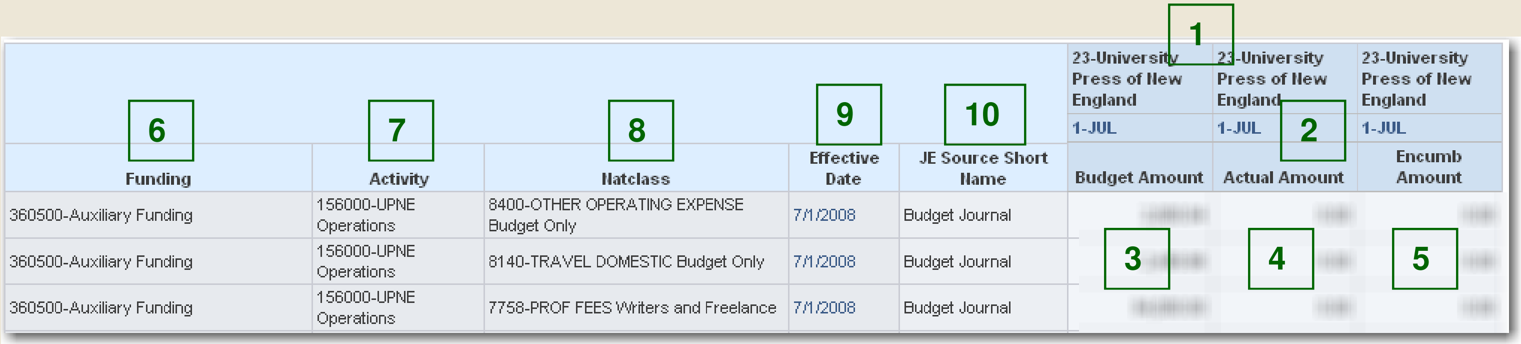
When displaying results and making a lot of changes, you may see a warning about a script – click No to continue



Pivot Table Structure - example



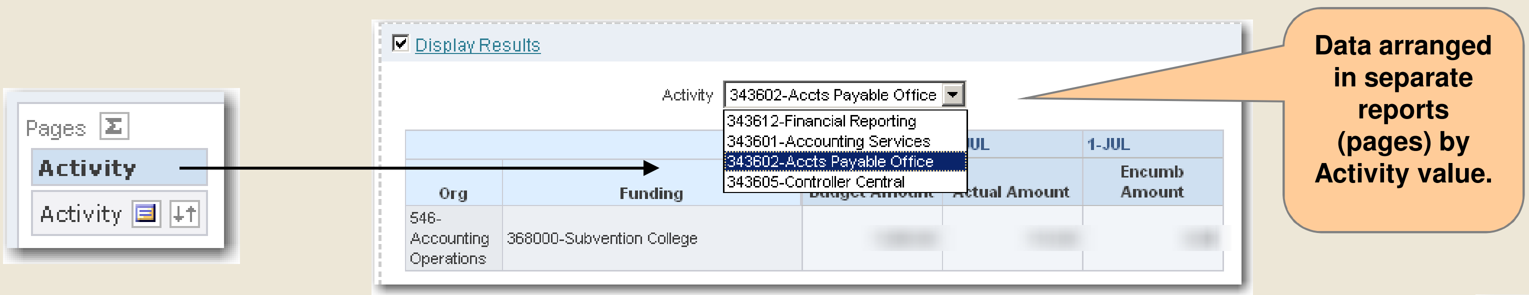
Pivot results:



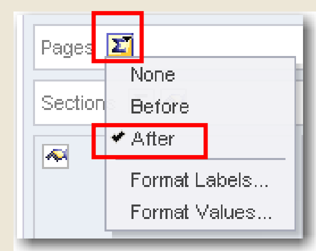
How the data fields are placed in the various areas determines the organization of the pivot table report. The specific data returned is determined by the filters on the Criteria tab.

Pivot Table Structure

- Placing a data field in the Page Area will allow you to view the data by each value for that data field. Leaving it empty will return all data in one view.

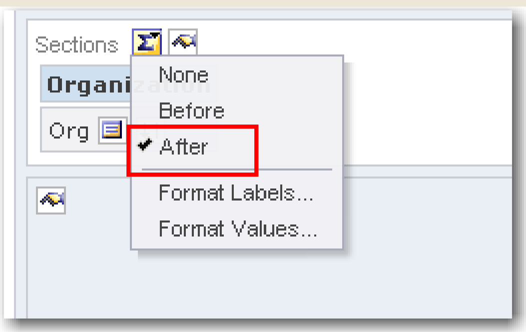


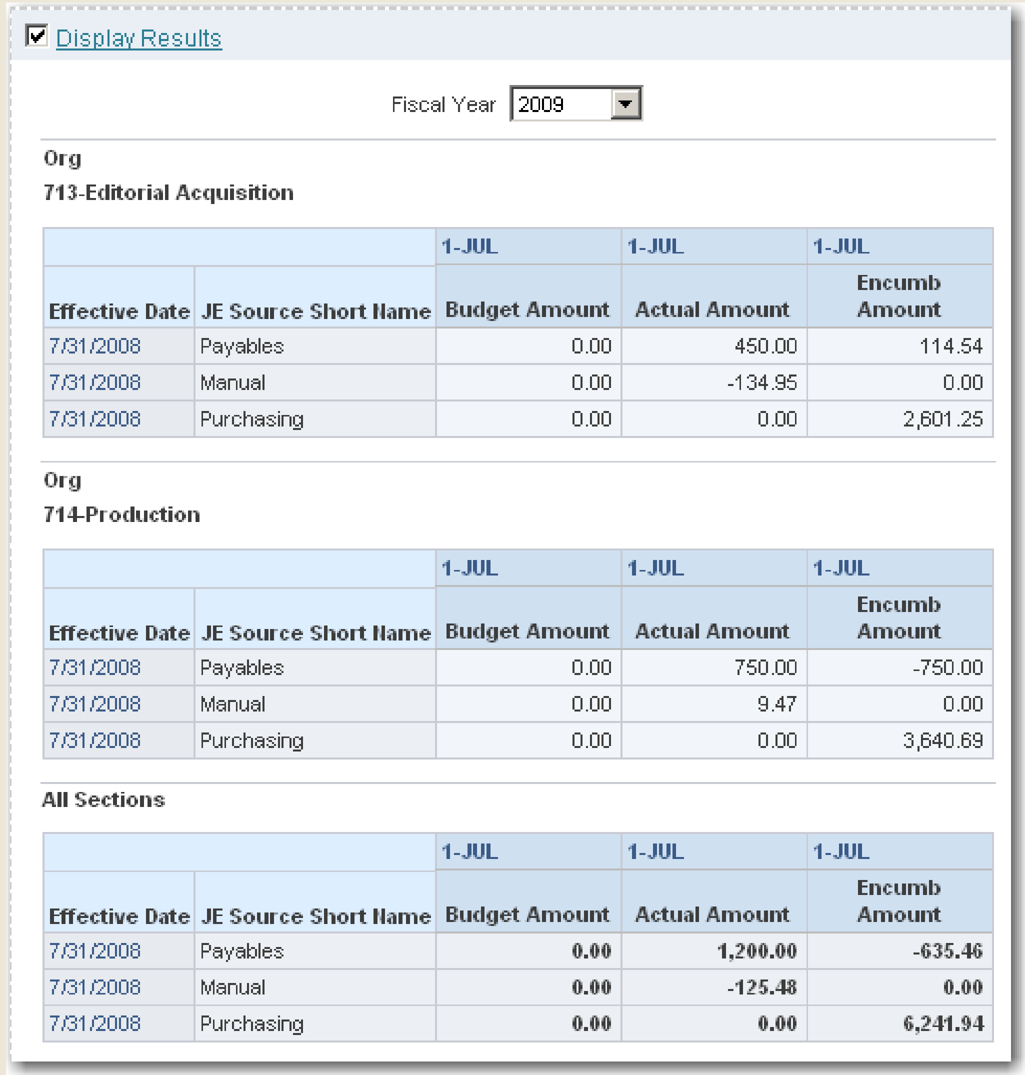
Note: To include All Pages as a choice in the dropdown list, click the sum icon next to Pages, and select "After":



Pivot Table Structure

- Placing data fields in the Sections Area will divide results into sections based on values for those data fields. Leaving it blank will consolidate results into one section.





Org
713-Editorial Acquisition

		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
7/31/2008	Payables	0.00	450.00	114.54
7/31/2008	Manual	0.00	-134.95	0.00
7/31/2008	Purchasing	0.00	0.00	2,601.25

Org
714-Production

		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
7/31/2008	Payables	0.00	750.00	-750.00
7/31/2008	Manual	0.00	9.47	0.00
7/31/2008	Purchasing	0.00	0.00	3,640.69

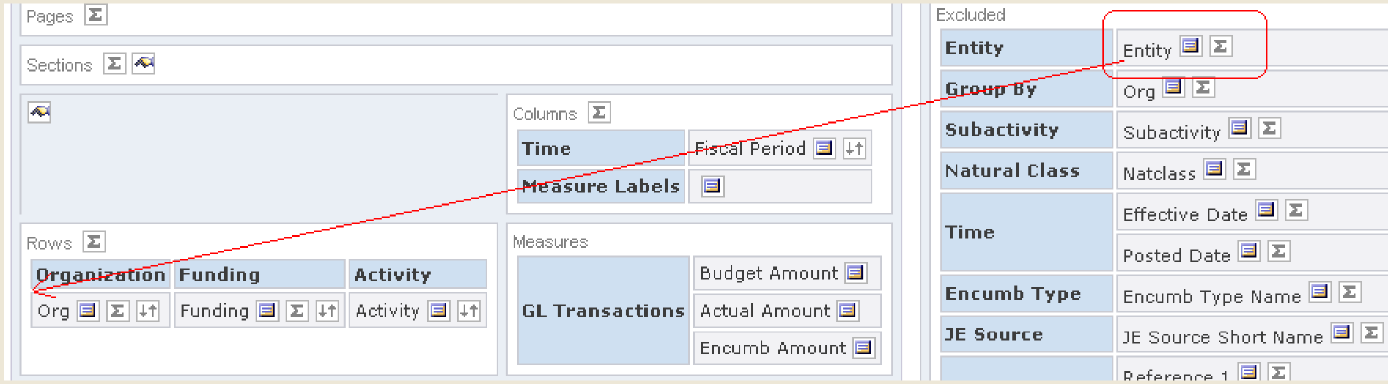
All Sections

		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
7/31/2008	Payables	0.00	1,200.00	-635.46
7/31/2008	Manual	0.00	-125.48	0.00
7/31/2008	Purchasing	0.00	0.00	6,241.94

- Adding a total to the Section Area will add an All Section that will show a sum of all other sections.

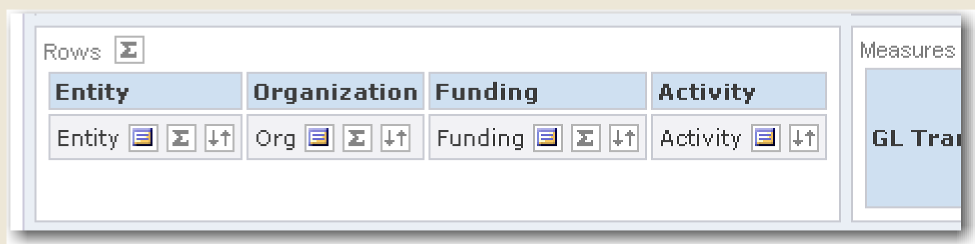
Adding & Removing Data Fields

- To add data fields to the report, drag and drop the fields from the Excluded Area into the appropriate areas in the pivot table report set-up.



Blue line indicates where the field will drop:

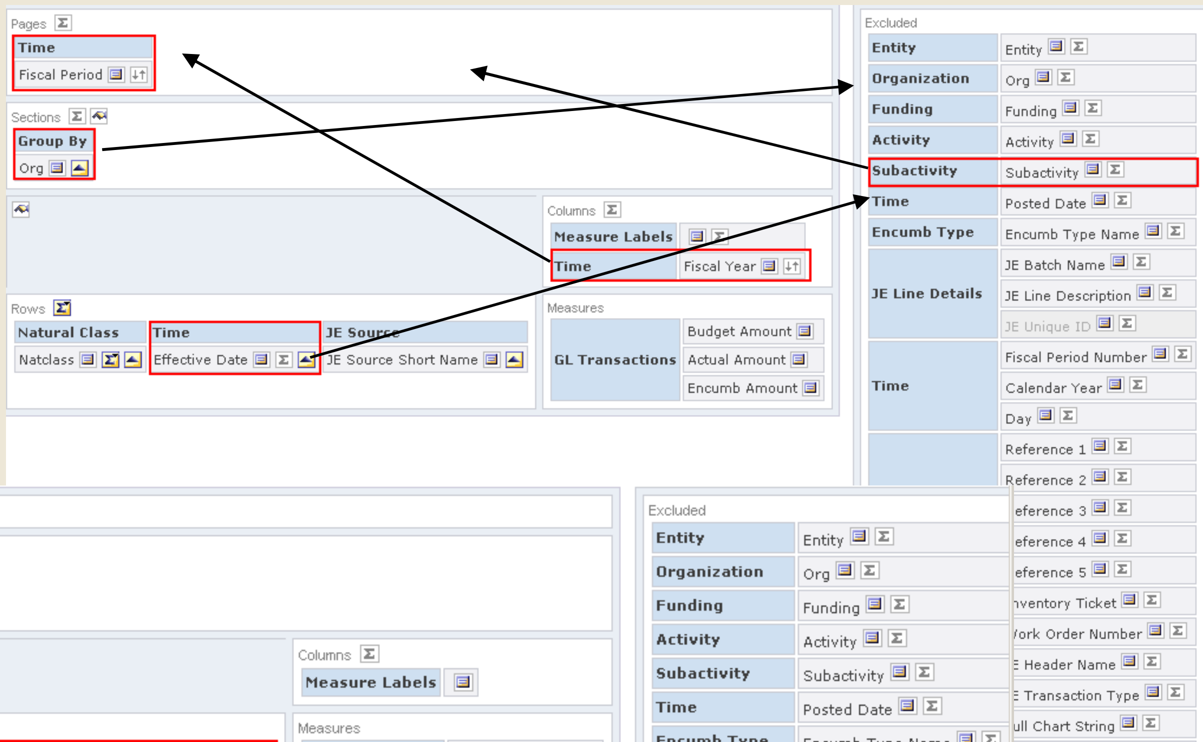
Result:

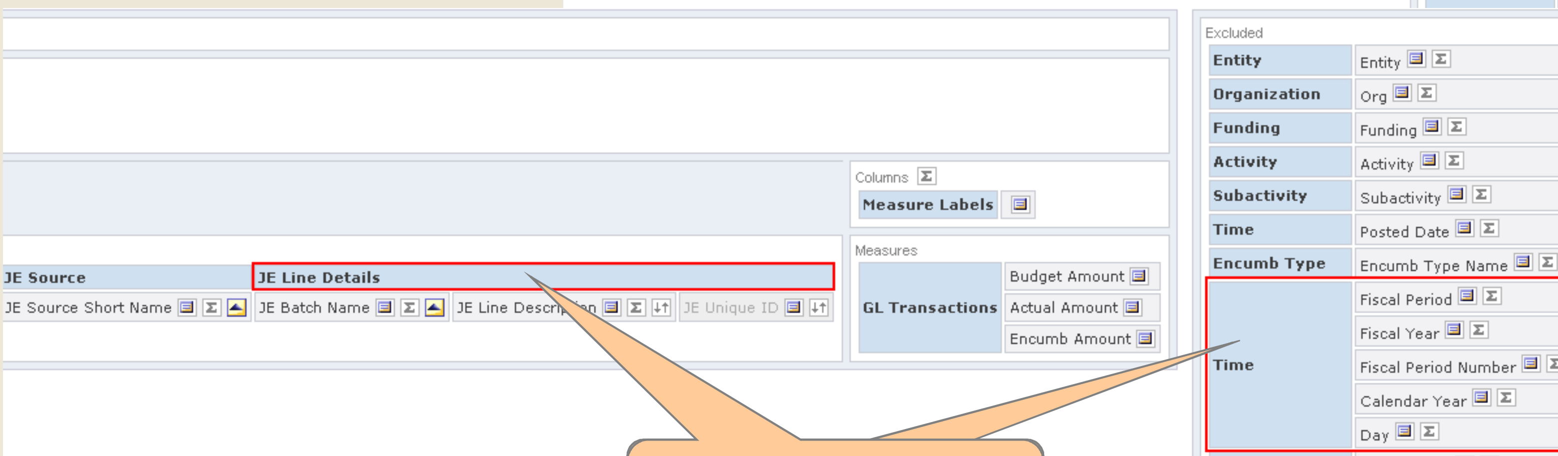


- To remove a data field, drag it to anywhere in the Excluded Area and drop.

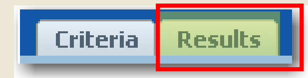
Rearranging Fields

- Drag and Drop data fields between the report set-up areas and Excluded area as needed
- Only Dollar and Fact fields should be added to the Measures area. You must have at least one measure.



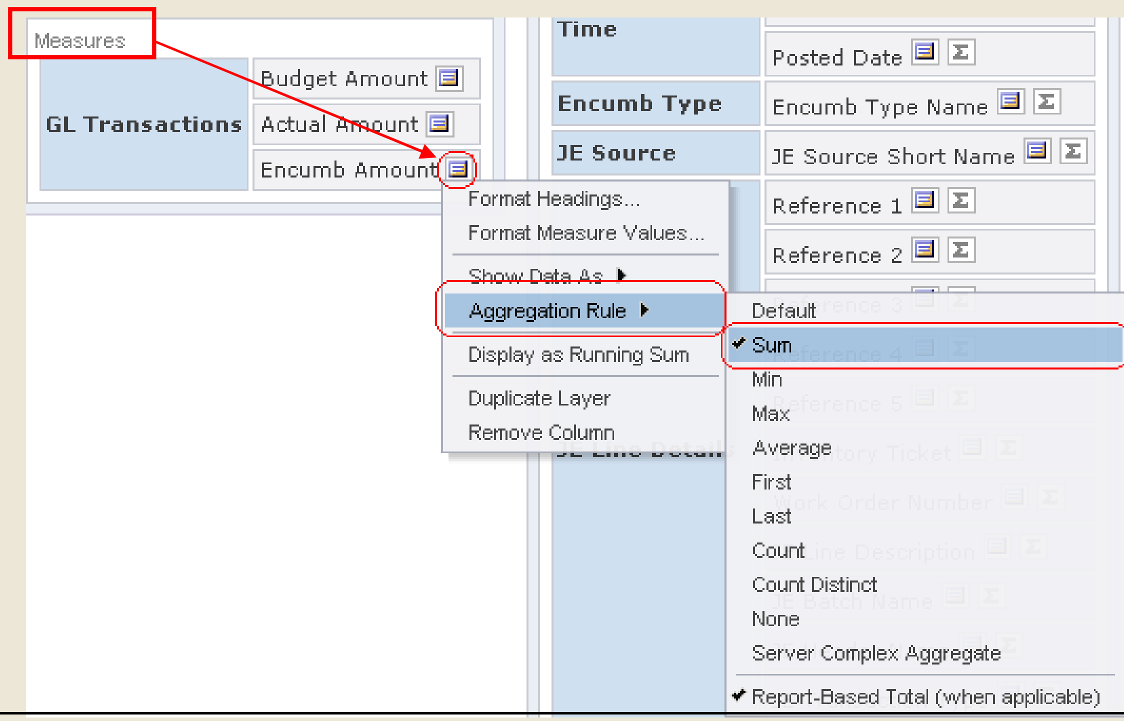


Drag the data section header to move all related data fields



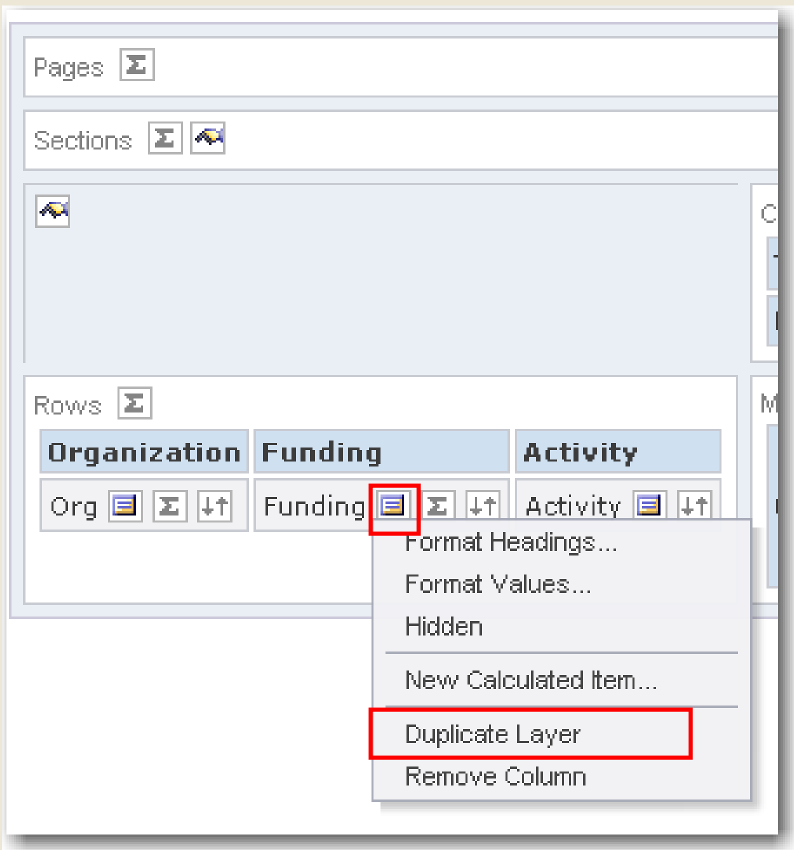
Measures Aggregation Rule

- **Measures** Aggregation Rule is set to "Default", which will not allow calculations or sums to process correctly. ALWAYS verify that the Aggregation Rule is set to something other than Default for all data fields in the Measures area. Change this setting using the ***More Options*** button. For dollar amounts, choose Sum.
- Caution: When Measures data fields are moved in and out of the pivot table set-up area, the Aggregation Rule may revert to Default. Remember to reset these to something other than default.

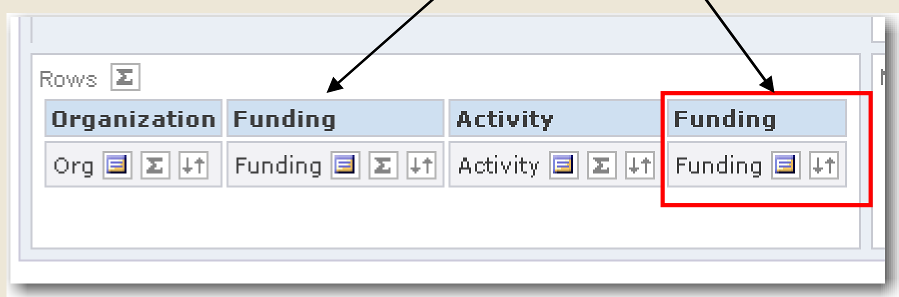


Duplicating a Data field

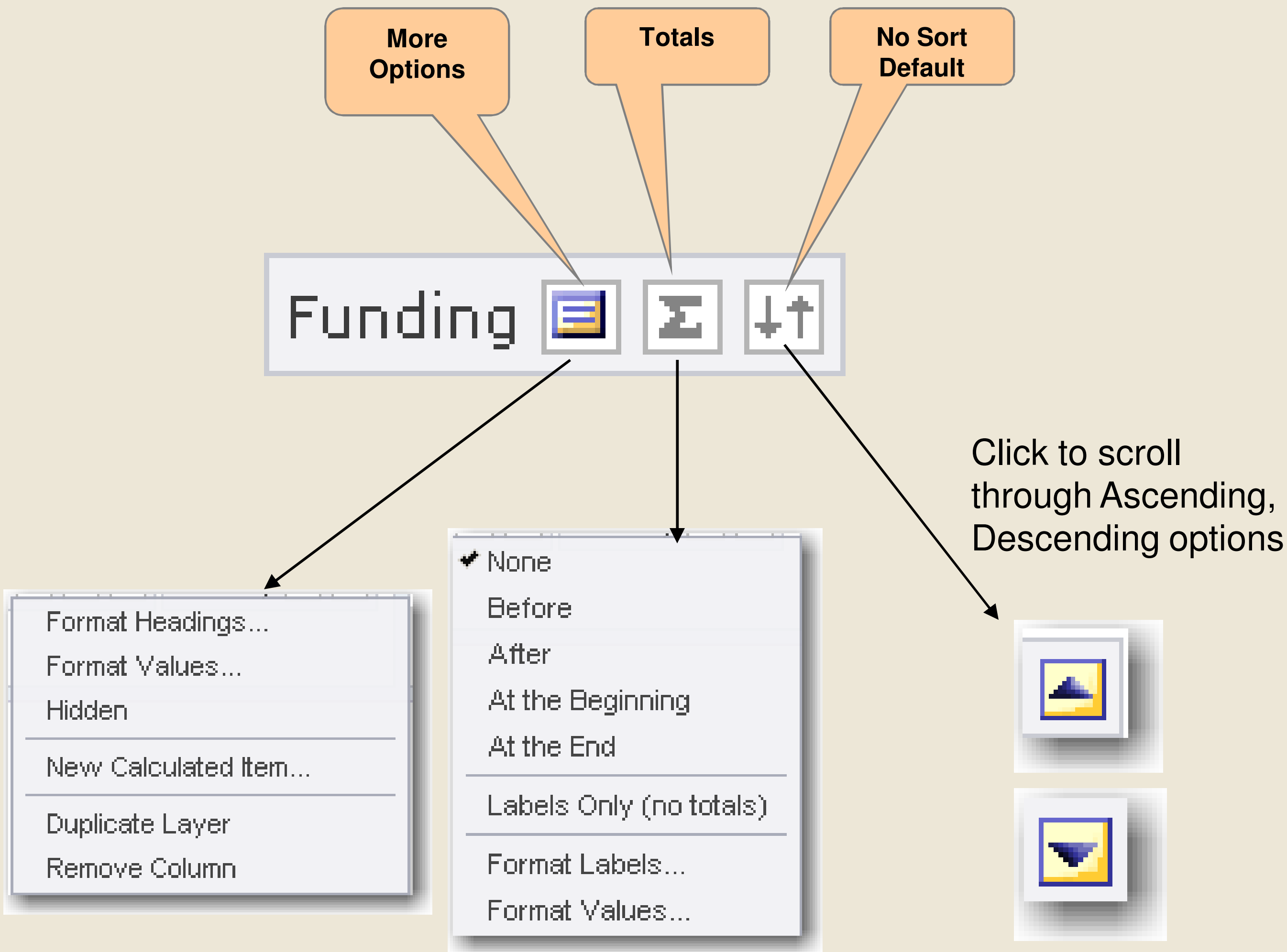
- An individual data field may need to be used in more than one area in a pivot table. Since it is only listed once in the available fields, use "Duplicate Layer" to create another of the same field:

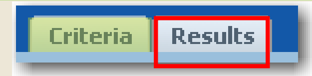


A duplicate of the same data field is available for use in another area of the report.



Setting Field and Area Properties

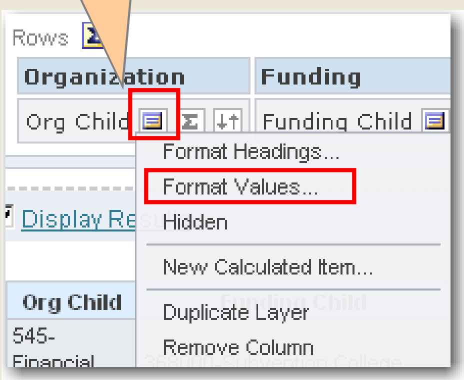


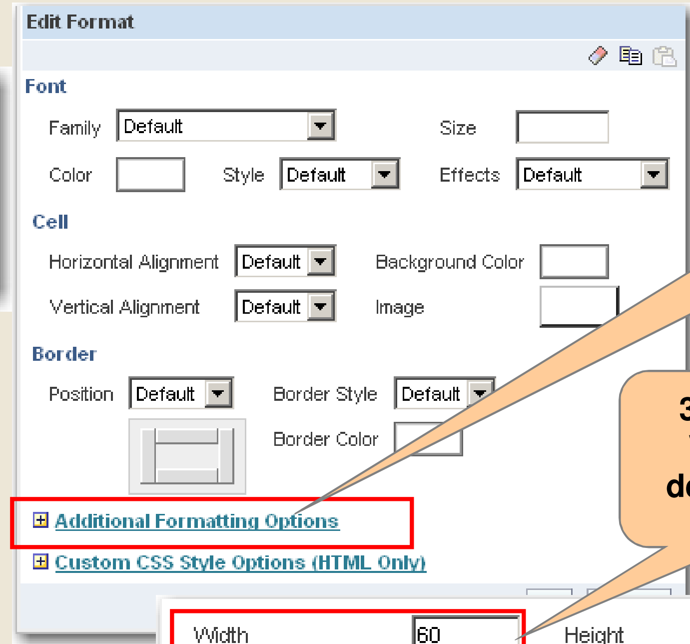


Setting Column Width

Here, the Org column is narrow:

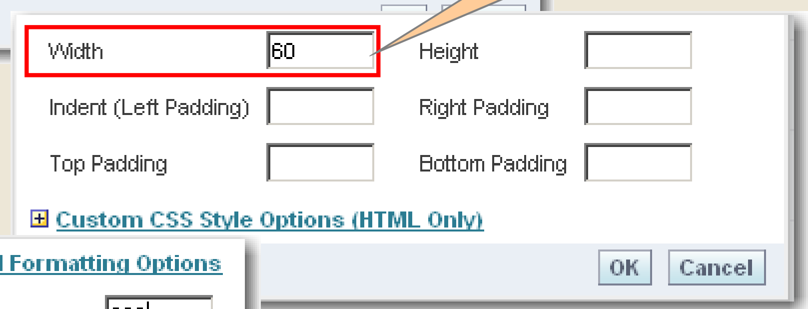
1. Choose More Options -> Format Values



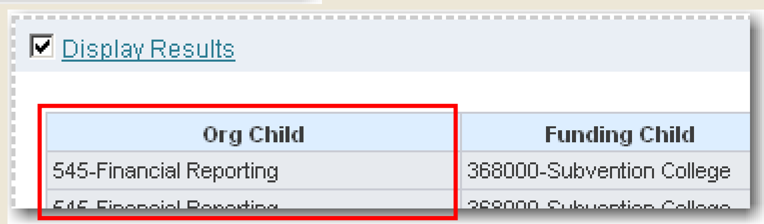


2. Open Additional Formatting Options

3. Change Width as desired and click OK

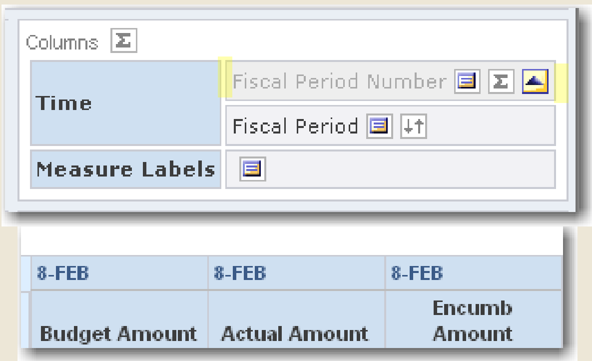


Resulting adjusted width:



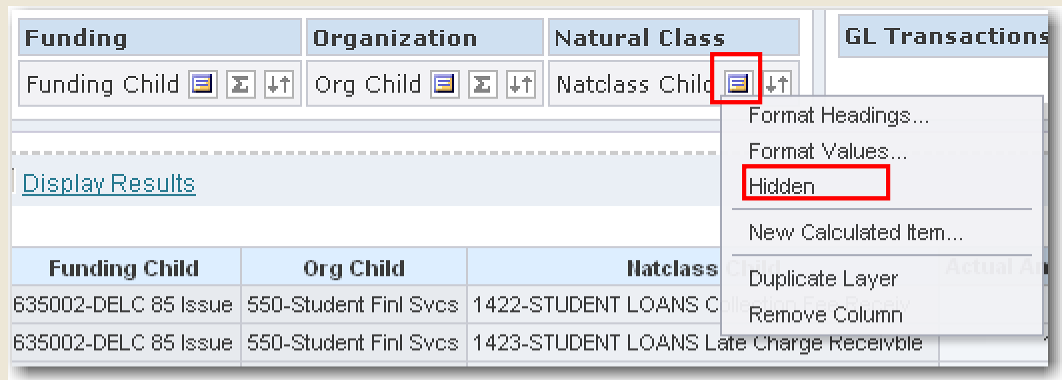
Hiding a Data Field

- You may want a data field available for use in a pivot table, but also hidden from view. For example, in the GL Transactions Pivot Table 2, Fiscal Period Number can be used to sort, but it does not appear in the pivot table results.

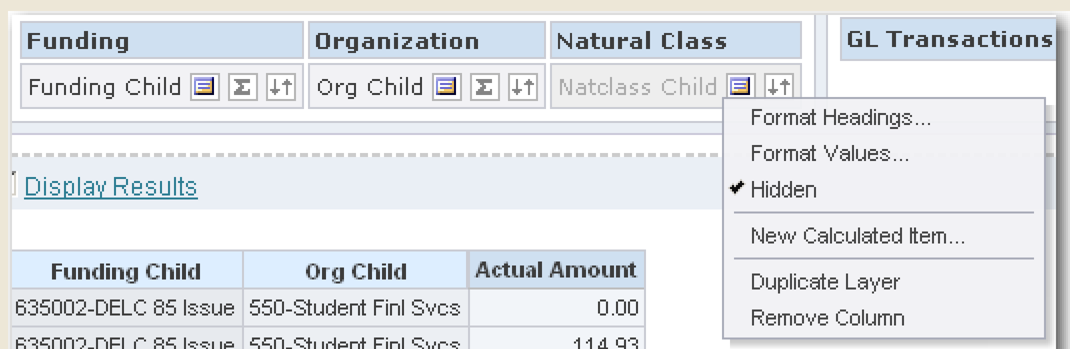


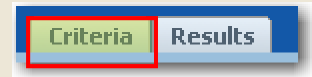
Hidden data fields appear in light gray to indicate they are hidden, even though you can sort and total on these fields.

To hide, on Results Tab choose More Options -> Hidden:



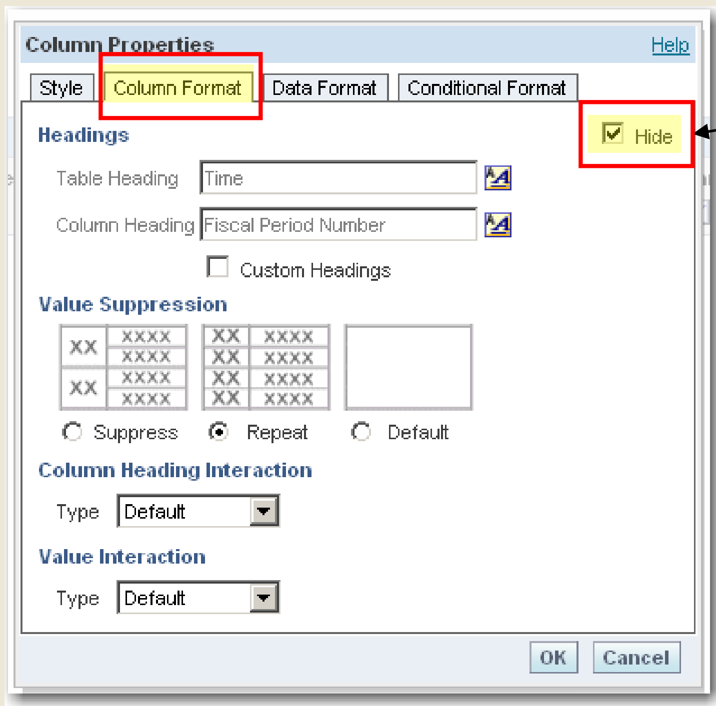
Data field grayed out, Hidden checked, Data field does not show in pivot:





Existing Hidden Data Field

- If you add a new data field to your pivot table design and it does not show in the resulting report, it has been hidden on the Criteria tab. Data fields hidden there will not show as grayed out in the pivot table design.
- To unhide these, go to the Criteria tab and for the given data field, choose Column Properties:

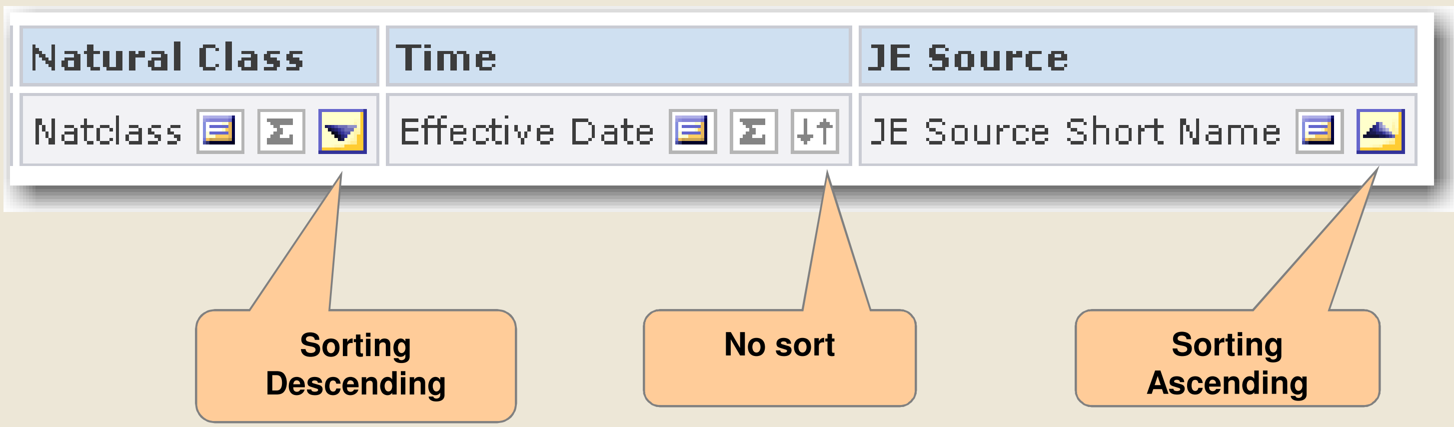


Choose Column Format tab and uncheck Hide.

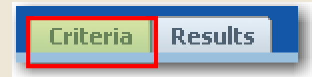
Sorting

The initial sort is determined by the IRA report structure.

Click sort icon to change.

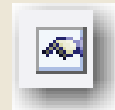


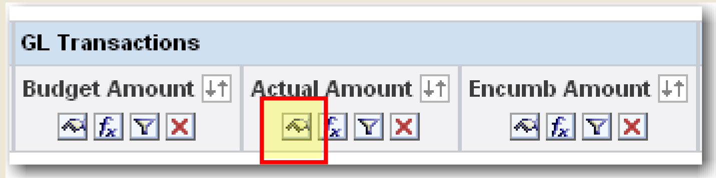
Sorting functions from left to right. Here, Natural Class will sort Descending, and then JE Source will sort Ascending *within each Natural Class*.



Setting Field Properties/Numbers

- To reformat dollar values, choose the properties icon:



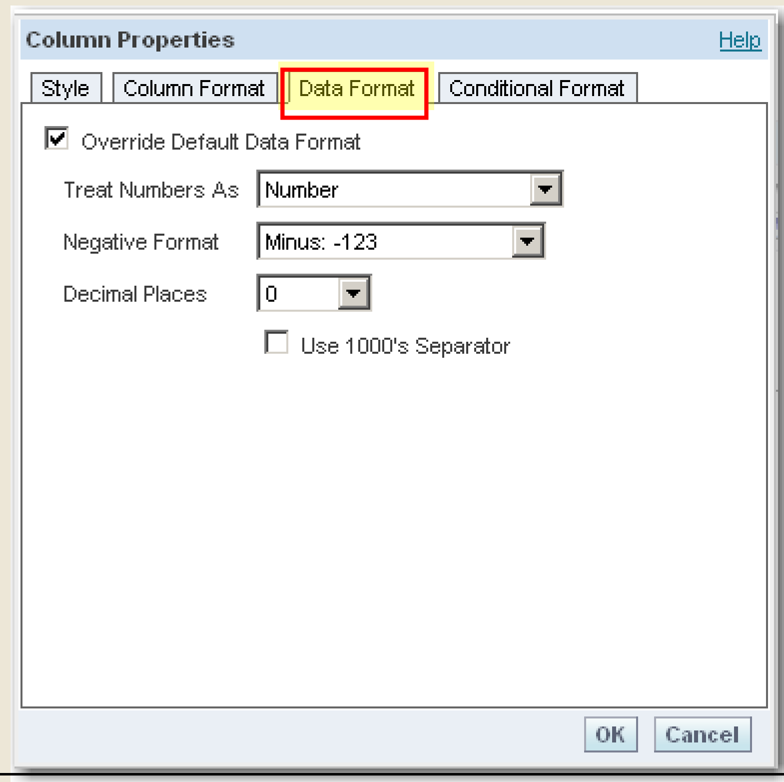


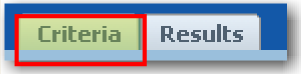
Select “Data Format” tab.

The default format for dollar amounts in IRA is #,###.## and - #,###.##

To change this, click “Override Default Data Format” and select desired number format.

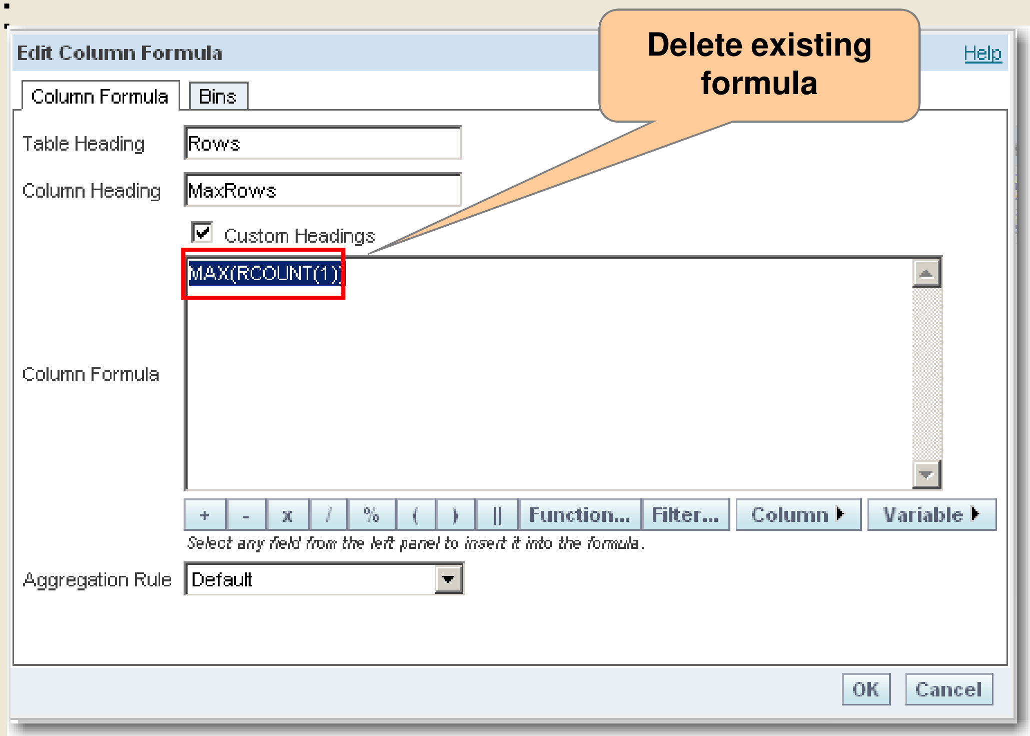
Click OK to apply changes.





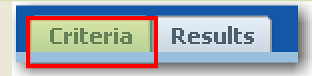
Adding Calculated Item

- While a brand new data field cannot be created, an existing data field can be modified to create a calculated item.
- On the Criteria tab, choose a column not needed for your analysis* and click the Edit Formula icon:

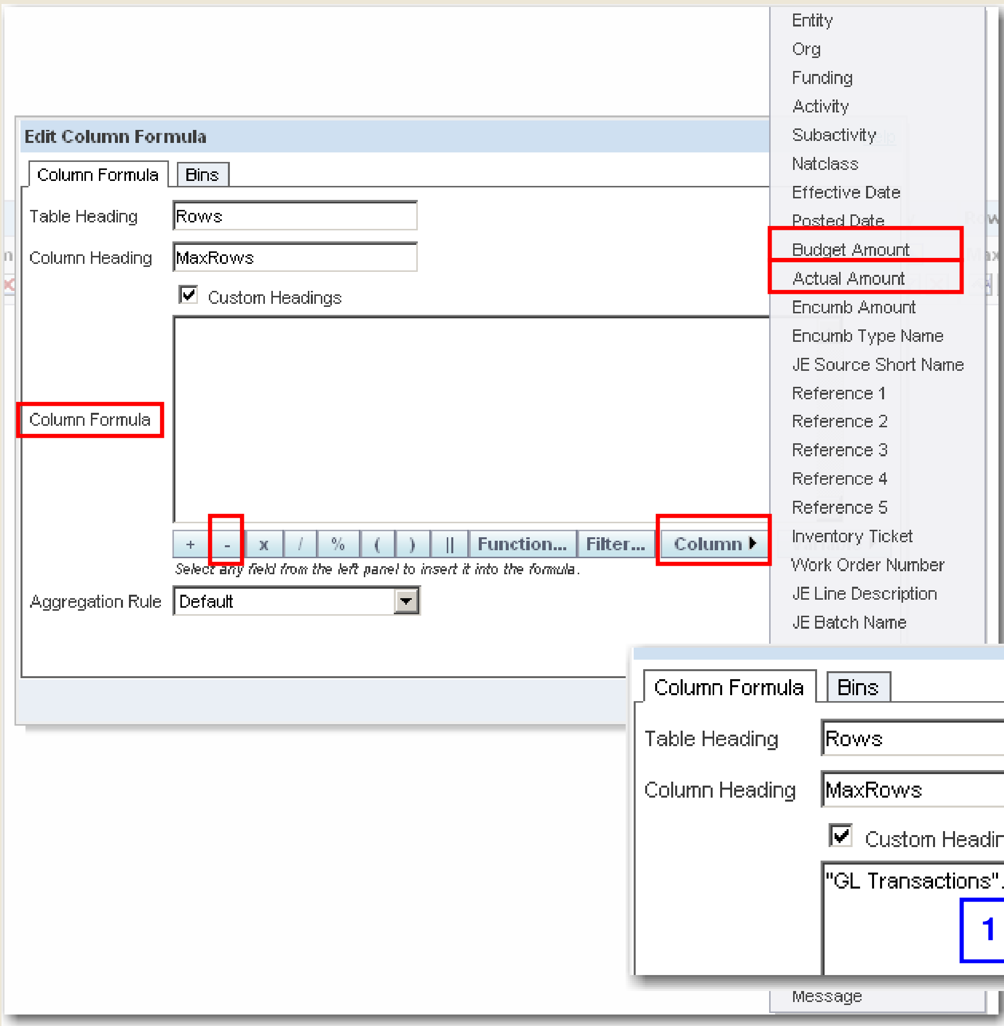


* DO NOT use any Group By data fields, or the <JE Unique ID> data field for this. These fields need to remain as is.

Adding Calculated Item



With cursor in Column Formula box, Click Column to choose variables for the formula, and individual buttons for mathematical operators:



For example, for a calculation of Budget less Actual, click

1

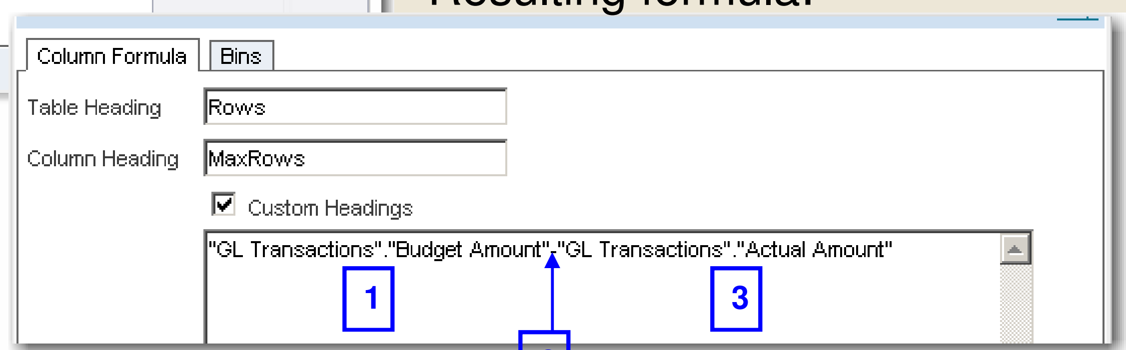

then the minus sign

2

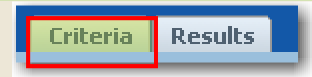

then

3

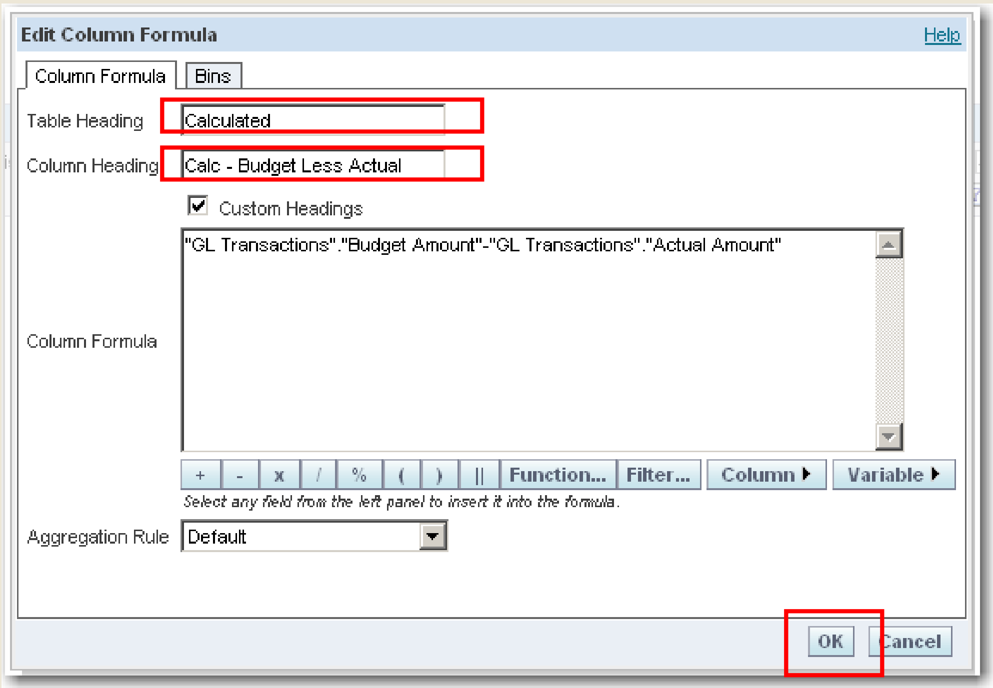

Resulting formula:



Adding Calculated Item

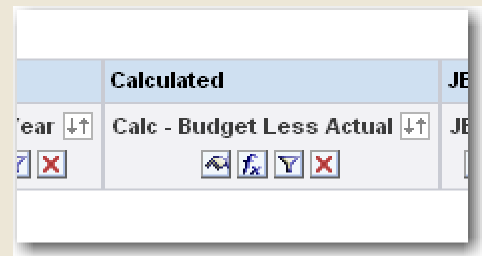


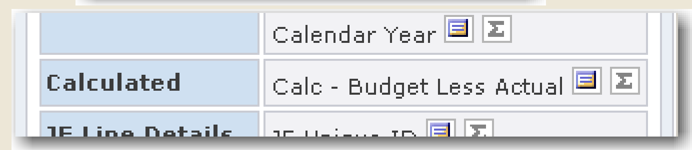
Once the formula is complete, it is important to rename the Table Heading and Column Heading, including in the name wording to indicate this as a calculated column:



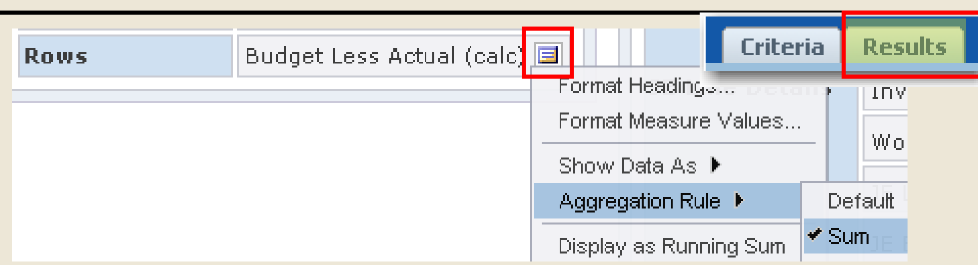
Click OK.

The new calculated item appears on the Criteria tab and in the Excluded area of the pivot table set-up:



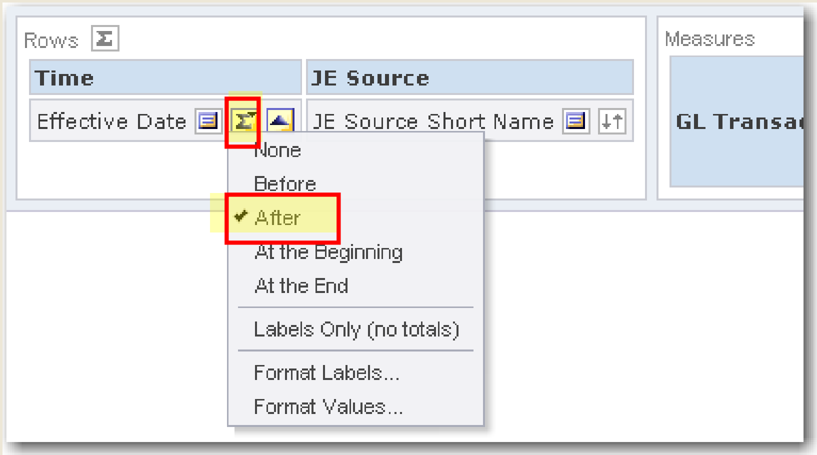


Note: When adding Calculated Item to the Measures area, change Aggregation Rule from Default:



Adding Totals

Row Total:



Note: Sort data first and then add Totals.

In this example, data is sorted ascending by Effective date, and adds totals *After* each Effective Date value.

Results:

Without Row totals:

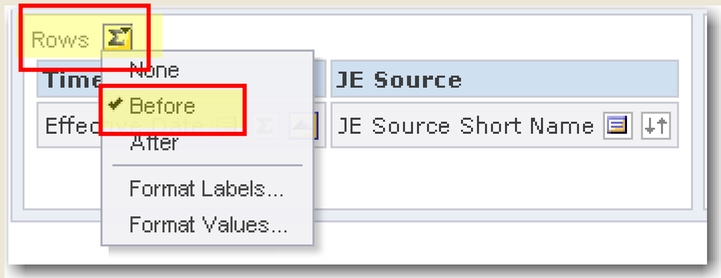
		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
7/1/2008	Budget Journal	320,689.08	0.00	0.00
7/5/2008	OLD	0.00	-1,465.00	0.00
7/19/2008	OLD	0.00	2,261.97	0.00
7/21/2008	Manual	0.00	-123.50	0.00
7/31/2008	OLD	0.00	12,527.18	0.00
7/31/2008	Manual	0.00	9.47	0.00
7/31/2008	Purchasing	0.00	0.00	3,640.69
7/31/2008	Payables	0.00	750.00	-750.00

With Row Totals:

		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
7/1/2008	Budget Journal	320,689.08	0.00	0.00
7/1/2008 Total		**320,689.08**	**0.00**	**0.00**
7/5/2008	OLD	0.00	-1,465.00	0.00
7/5/2008 Total		**0.00**	**-1,465.00**	**0.00**
7/19/2008	OLD	0.00	2,261.97	0.00
7/19/2008 Total		**0.00**	**2,261.97**	**0.00**
7/21/2008	Manual	0.00	-123.50	0.00
7/21/2008 Total		**0.00**	**-123.50**	**0.00**
7/31/2008	OLD	0.00	12,527.18	0.00
7/31/2008	Manual	0.00	9.47	0.00
7/31/2008	Purchasing	0.00	0.00	3,640.69
7/31/2008	Payables	0.00	750.00	-750.00
7/31/2008 Total		**0.00**	**13,286.65**	**2,890.69**

Adding Totals

Row Grand Total:



Attached to *Rows* area label, not to a specific data field in the Rows area.

Results:

Without Row Grand Total:

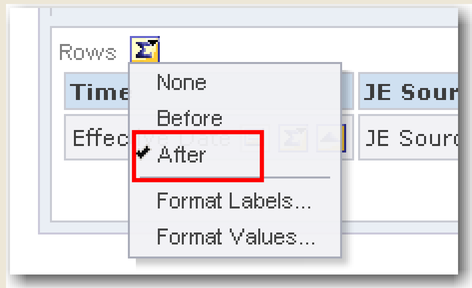
		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
7/1/2008	Budget Journal	320,689.08	0.00	0.00
7/5/2008	OLD	0.00	-1,465.00	0.00
7/19/2008	OLD	0.00	2,261.97	0.00
7/21/2008	Manual	0.00	-123.50	0.00
7/31/2008	OLD	0.00	12,527.18	0.00
7/31/2008	Manual	0.00	9.47	0.00
7/31/2008	Purchasing	0.00	0.00	3,640.69
7/31/2008	Payables	0.00	750.00	-750.00
7/4/2009	OLD	0.00	0.00	2,040.93

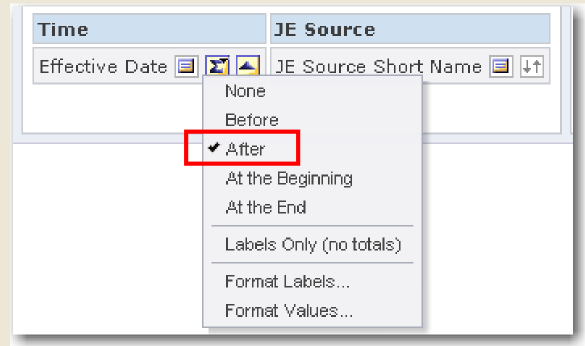
With Row Grand Total:

		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
Grand Total		**320,689.08**	**13,960.12**	**4,931.62**
7/1/2008	Budget Journal	320,689.08	0.00	0.00
7/5/2008	OLD	0.00	-1,465.00	0.00
7/19/2008	OLD	0.00	2,261.97	0.00
7/21/2008	Manual	0.00	-123.50	0.00
7/31/2008	OLD	0.00	12,527.18	0.00
7/31/2008	Manual	0.00	9.47	0.00
7/31/2008	Purchasing	0.00	0.00	3,640.69
7/31/2008	Payables	0.00	750.00	-750.00
7/4/2009	OLD	0.00	0.00	2,040.93

Adding Totals

Row Totals plus
Row grand total

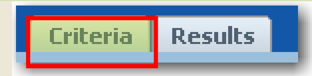




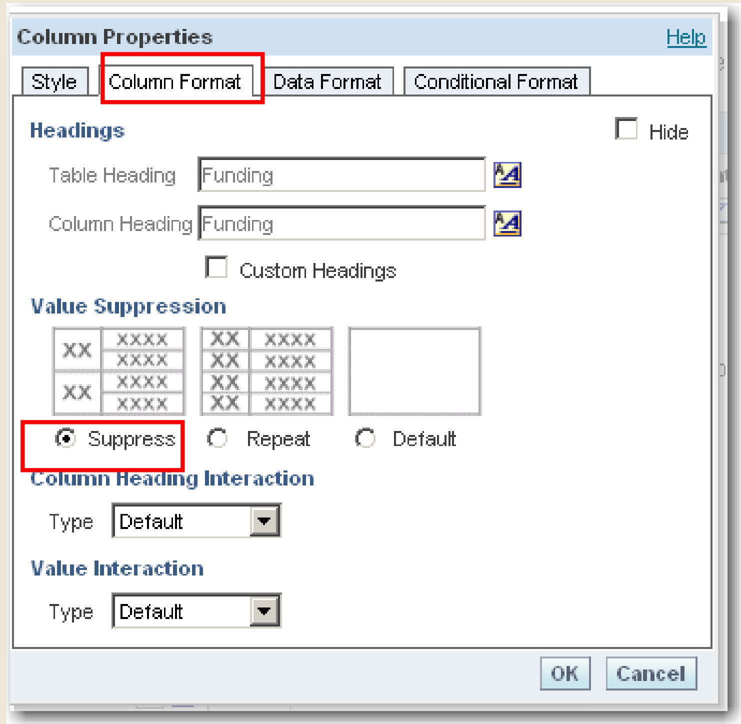
Results:

		1-JUL	1-JUL	1-JUL
Effective Date	JE Source Short Name	Budget Amount	Actual Amount	Encumb Amount
7/1/2008	Budget Journal	320,689.08	0.00	0.00
7/1/2008 Total		**320,689.08**	**0.00**	**0.00**
7/5/2008	OLD	0.00	-1,465.00	0.00
7/5/2008 Total		**0.00**	**-1,465.00**	**0.00**
7/19/2008	OLD	0.00	2,261.97	0.00
7/19/2008 Total		**0.00**	**2,261.97**	**0.00**
7/21/2008	Manual	0.00	-123.50	0.00
7/21/2008 Total		**0.00**	**-123.50**	**0.00**
7/31/2008	OLD	0.00	12,527.18	0.00
7/31/2008	Manual	0.00	9.47	0.00
7/31/2008	Purchasing	0.00	0.00	3,640.69
7/31/2008	Payables	0.00	750.00	-750.00
7/31/2008 Total		**0.00**	**13,286.65**	**2,890.69**
7/4/2009	OLD	0.00	0.00	2,040.93
7/4/2009 Total		**0.00**	**0.00**	**2,040.93**
Grand Total		**320,689.08**	**13,960.12**	**4,931.62**

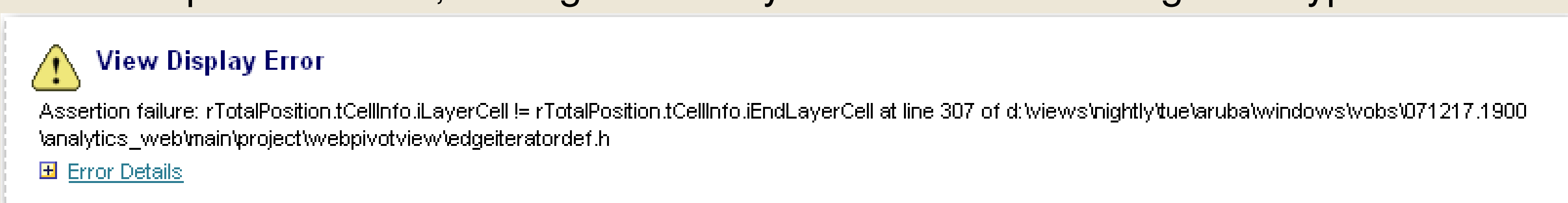
Adding Totals



When adding totals to other than the first data field in the Rows area, go to the Criteria tab and for each data field to the left of the data field you are totaling, choose Properties, the Column Format tab, and Suppress to group duplicate values in that column:



If this step is not taken, adding totals may result in the following error type:

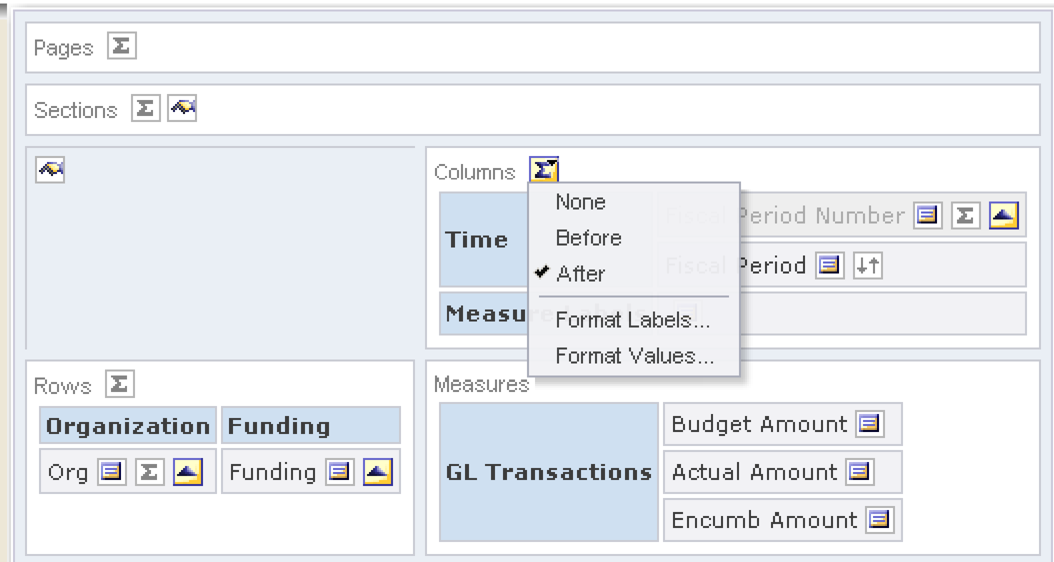


Adding Column Totals

Multiple Columns, here by month:

		6-DEC	6-DEC	6-DEC	7-JAN	7-JAN	7-JAN
Org	Funding	Budget Amount	Actual Amount	Encumb Amount	Budget Amount	Actual Amount	Encumb Amount
546-Accounting Operations	368000-Subvention College	0.00	341.71	0.00	0.00	1,357.96	0.00

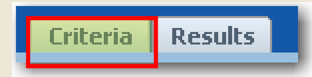
In Columns Area, choose sum icon and choose Before or After



Result: Sum totals of columns:

		6-DEC	6-DEC	6-DEC	7-JAN	7-JAN	7-JAN			
Org	Funding	Budget Amount	Actual Amount	Encumb Amount	Budget Amount	Actual Amount	Encumb Amount	Budget Amount	Actual Amount	Encumb Amount
546-Accounting Operations	368000-Subvention College	0.00	341.71	0.00	0.00	1,357.96	0.00	**0.00**	**1,699.67**	**0.00**

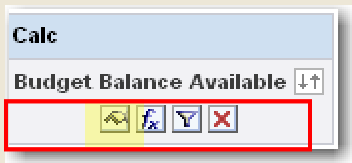
Conditional Formatting



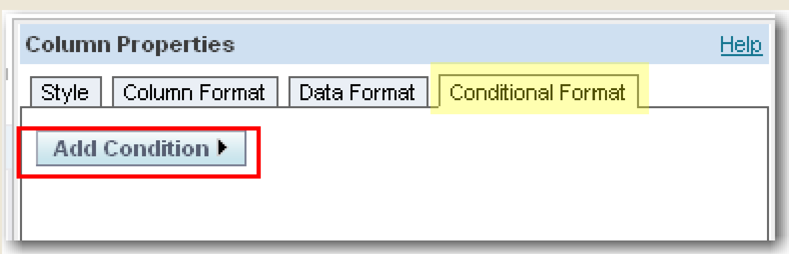
- Conditional formatting can be added to data fields.

For example, **Budget Balance Available** can be set to be highlighted if it is negative:

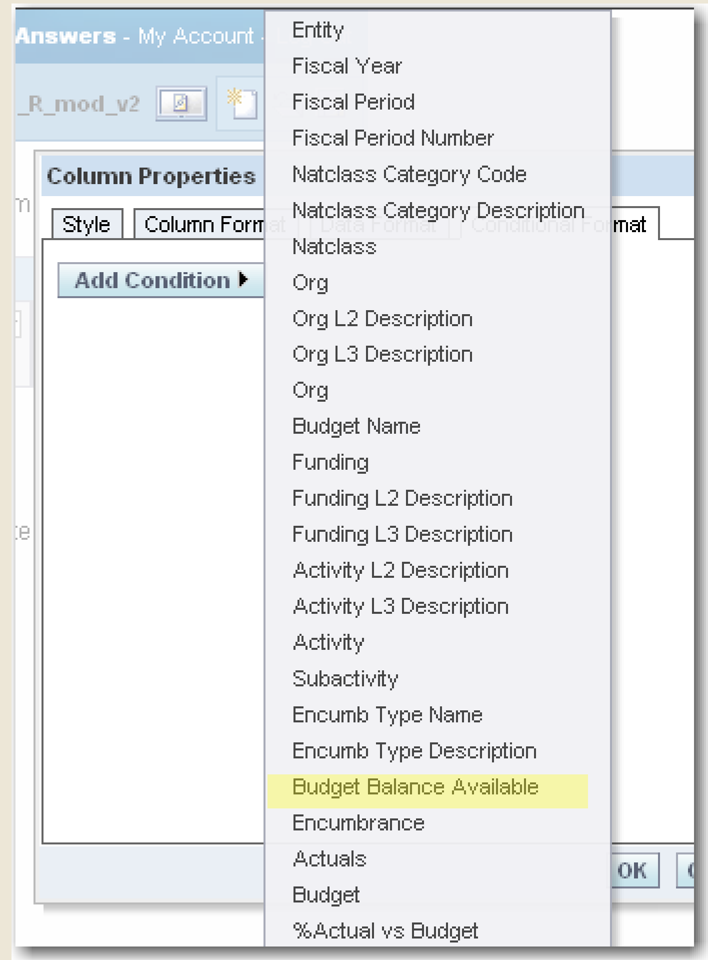
1. Choose Column Properties for Budget Balance Available



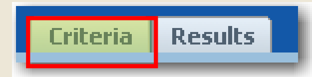
2. Choose Conditional Format tab, Add Condition



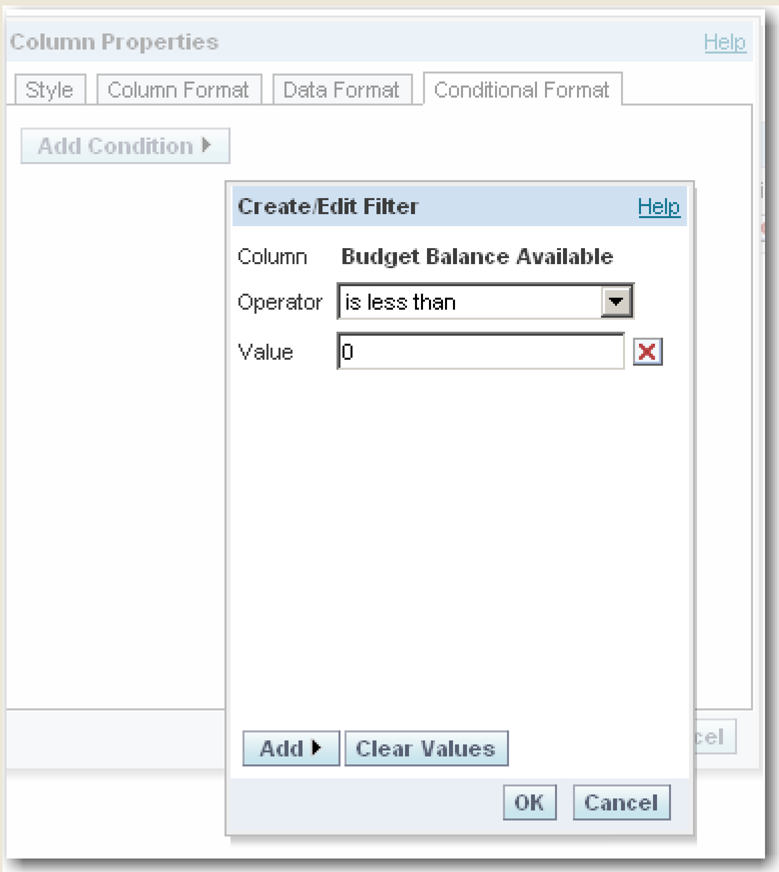
3. Choose the data field to apply the condition to



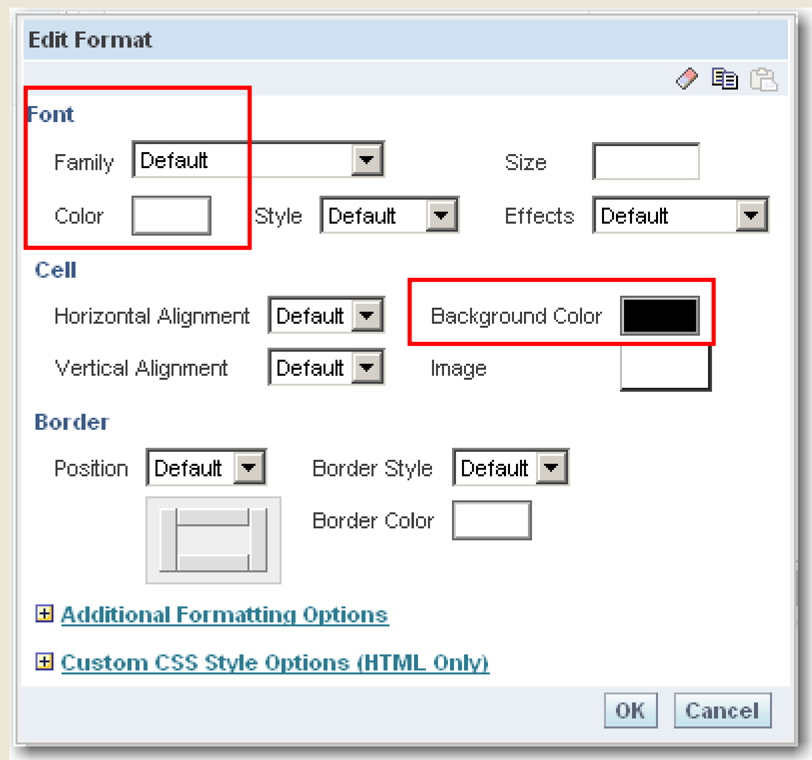
Conditional Formatting

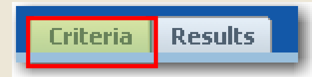


4. Fill in the condition; click OK



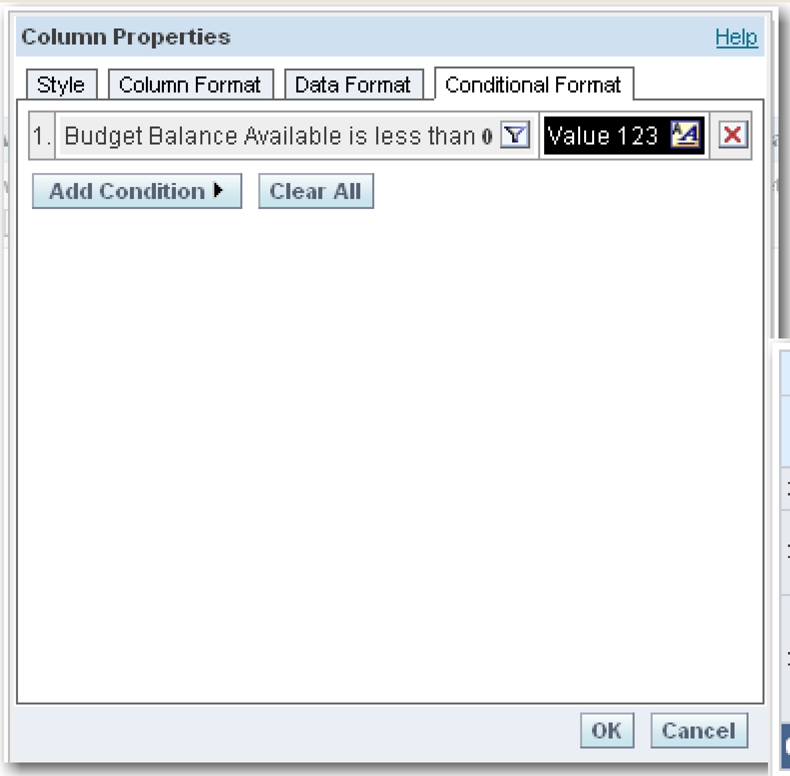
5. Choose the Format of the data field when the condition is met; click OK





Conditional Formatting

6. Review conditions and click OK

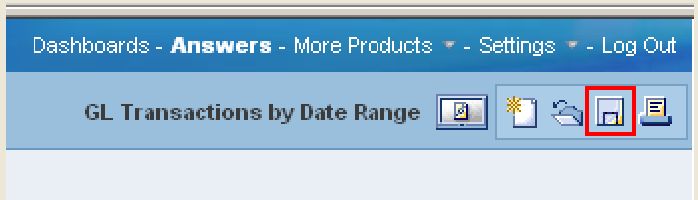


Result in pivot table:

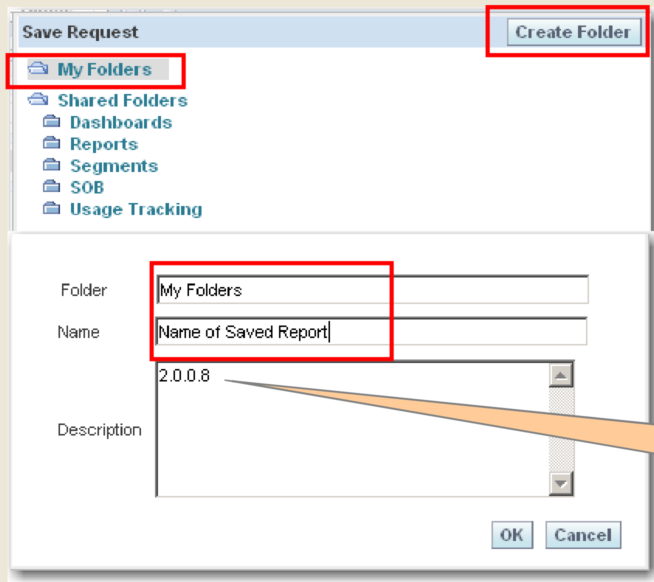
Funding	Natclass Category Description	2009 Budget Balance Available
363000-Central Funding College only	ALL OTHER	0.00
363006-Offset to Endowment Return	ALL OTHER	-8,612.26
	COMP AND FRINGE	8,612.26
368000-Subvention College	ALL OTHER	203,655.46
	COMP AND FRINGE	24,457.74
	REVENUE	-8,527.96
Grand Total		**219,585.24**

Saving/Downloading/Printing

Choose Save icon from upper-right-hand corner:



Choose My Folders or a folder created under My Folders, and save under unique file name. Click OK.



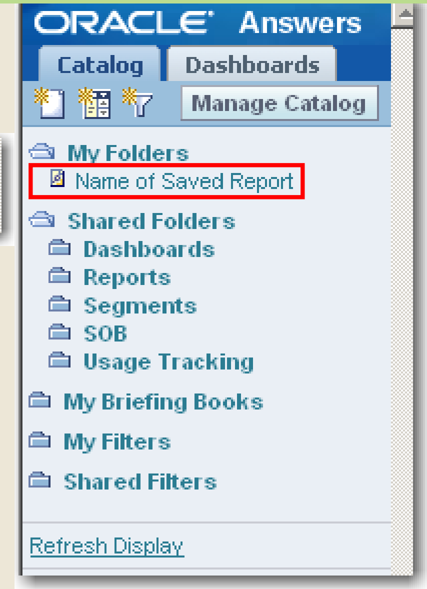
Use folder structure and naming conventions that are meaningful to you

Enter a description of the report (opt.)

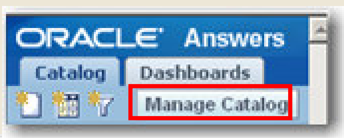
See IRA Basic Training materials for downloading and printing options.

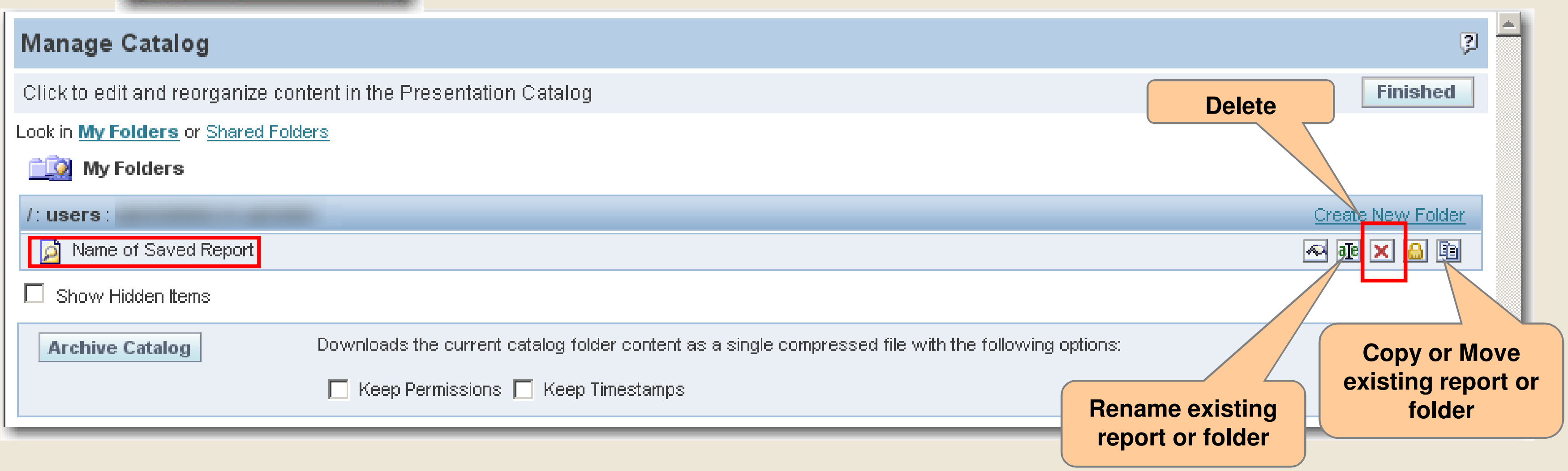
Saved Reports

To run a saved report, choose Answers, and click on report name:



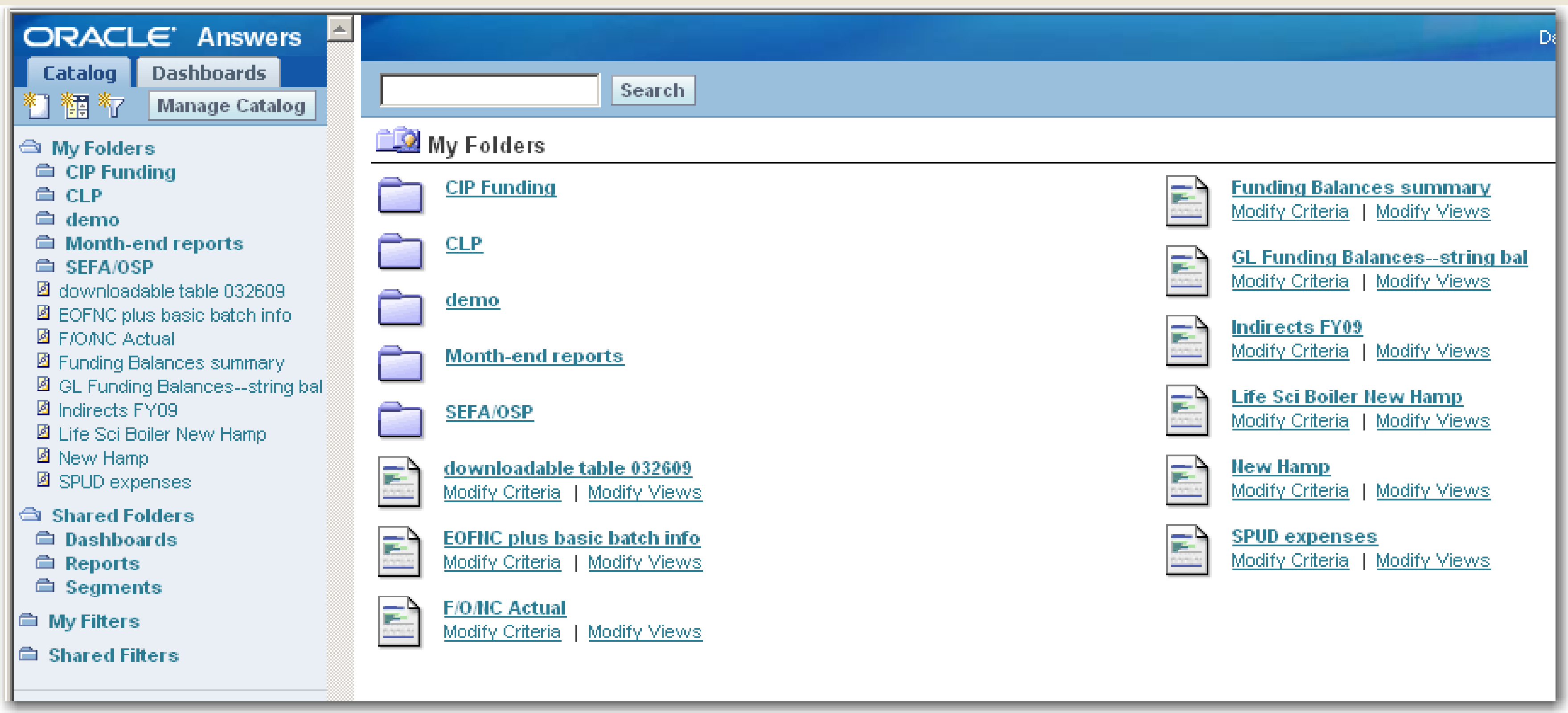
To manage saved reports or subfolders, click on Manage Catalog. Use the icons to delete, change file or subfolder names, and copy or move files and folders.



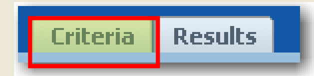


Folders/Files View

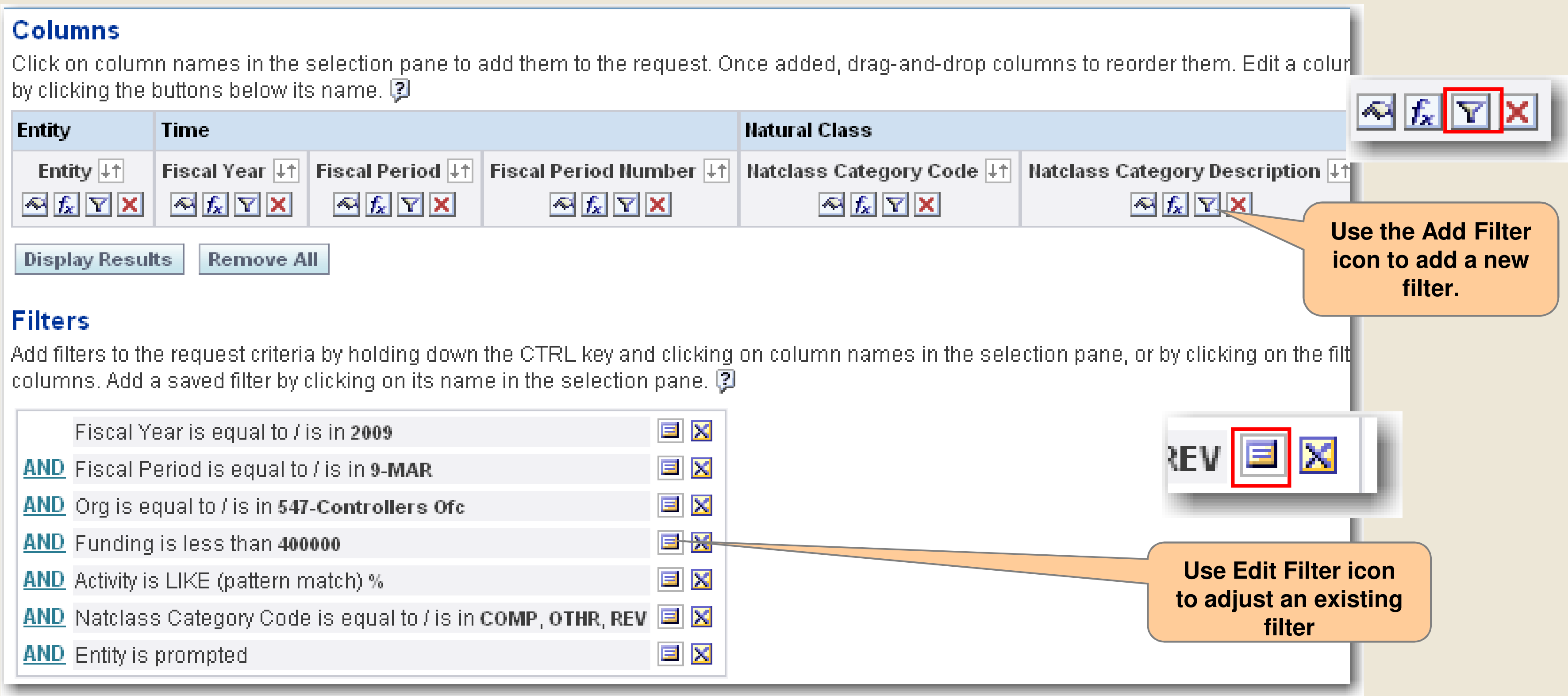
Tip: After accessing Answers, you can click on My Folders or any subfolder to see report links and Modify Criteria/Modify Views options. Choosing the report link will run the report. Choosing Modify Criteria will take you directly to the Criteria tab to modify filters before running the report. Choosing Modify Views will run the report in the Results tab to make it easier to modify the report view.



Filters

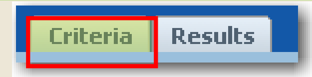


Filters are rules applied to financial data that determine what data will be returned in a report. They show in the Criteria tab and can be modified, or new filters can be created.



Note: Multiple filters can be created against the same data field. Choose the Add Filter icon as many times as needed on the same data field.

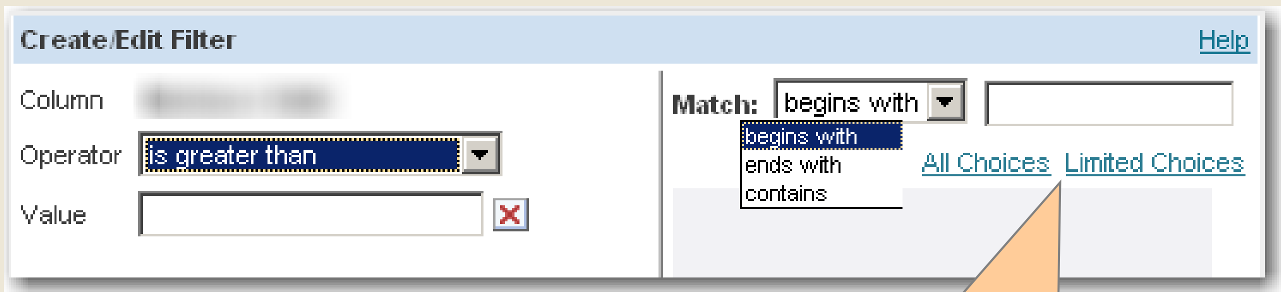
Modifying Filters

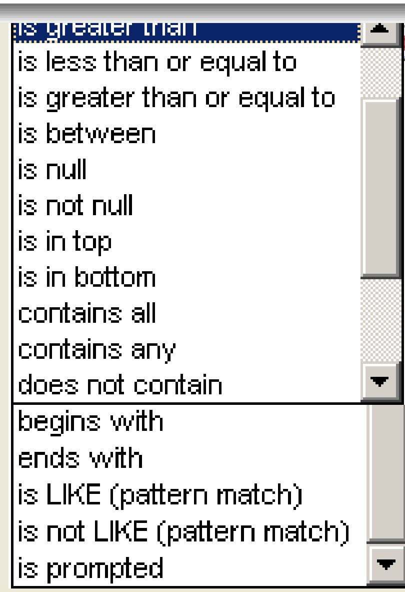


Answers offers a variety of filter options to allow you to both isolate information and widen searches to capture all available information.

Use Operator selections on the left to choose the report criteria without specifying exact values:

Use selection on the right to search for exact values the report should include, and click to add values to the left:





Enter a Match criterion and click EITHER

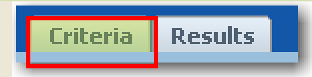
All Choices – lists all values that meet the criterion

OR

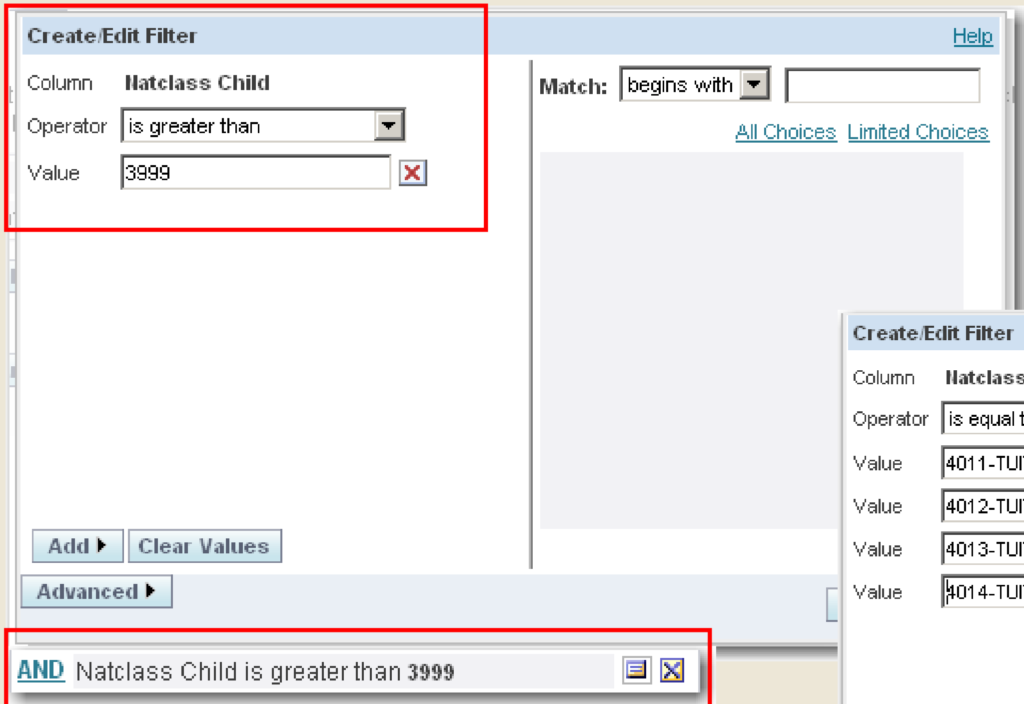
Limited Choices – cascades values based on data field filters already in place

Click once on a value to add it to the filter to the left.

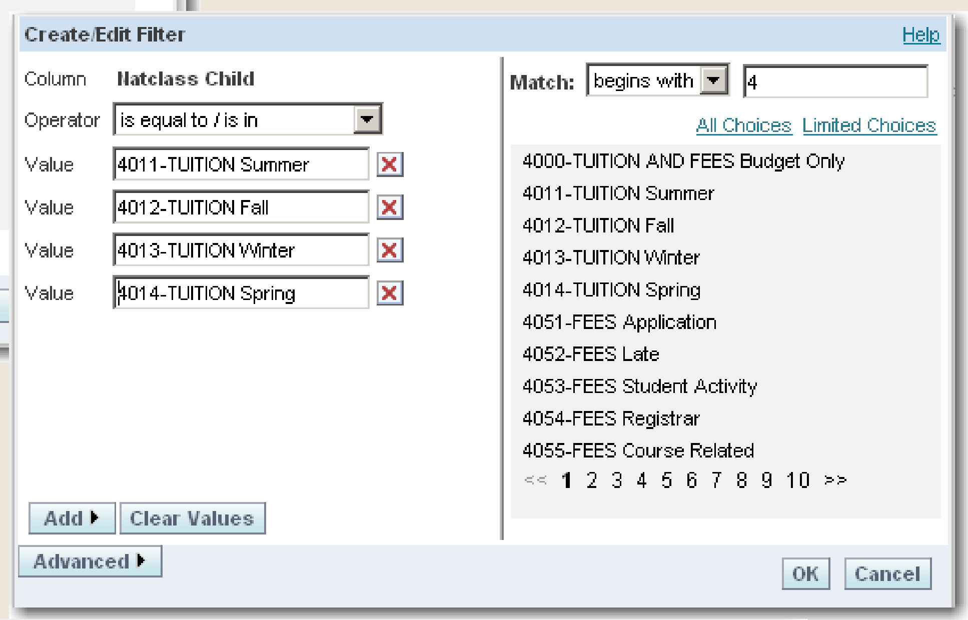
Modifying Filters

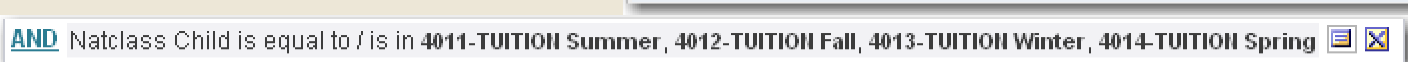


For example, here all Natural Class values greater than 3999 will be included in the report, or 4000 – 9999. Each value does not need to be listed.

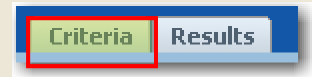


In contrast, below is a search on NC beginning with 4, where only the first four values are then moved to the left to be included in the report:





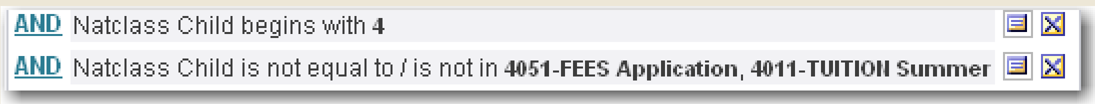
Modifying Filters



The two kinds of filters can be combined:

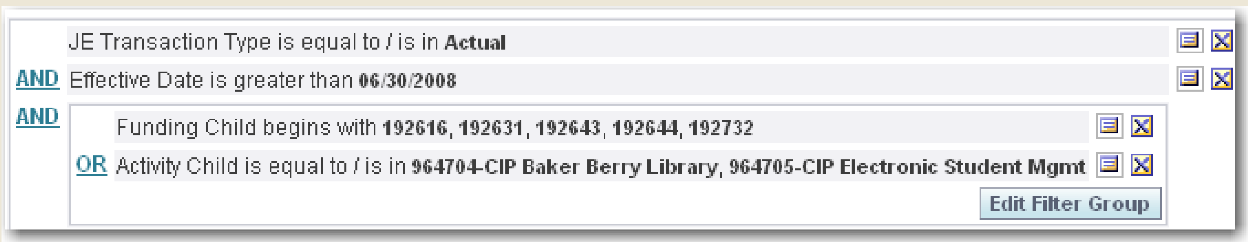
Filter 1

Filter 2



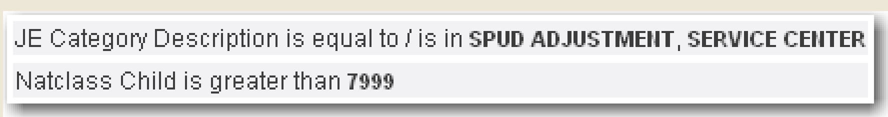
Here, the report will include all revenue Natural Classes (begins with 4) EXCEPT 4051 and 4011. To create this set of filters, use the Filter icon on NatClass Child twice.

Other examples:

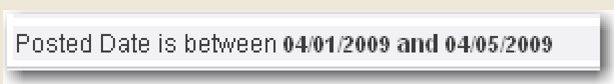


Click AND to change to OR; all transactions with the specified Funding values OR the specified Activities will be included. These filters need to be adjacent in the filter list for the OR to work correctly.

Use first five segments in chart string to include all natural classes used with that combination



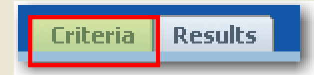
For specific Sources, include all Natural Classes 8000 and higher



To see what was posted on a specific range of days

Modifying Filters

Other examples:



Org Child is equal to / is in **545**
AND Funding Child is not equal to / is not in **368000**

Exception Reporting: For ORG 545, show all transactions using something other than Subvention 368000

Natclass Child is equal to / is in **7512-SUPPLIES Photocopying and Printing, 7778-PUR SRVCS OTHR Printing External, 7822-SERVICE CTR Printing, 7853-INT DEPT Copying and Printing**

Combine non-contiguous natural classes that all relate to Printing

Created By is equal to / is in **John Smith**

Include all transactions created by an individual

JE Source Short Name is equal to / is in **Manual**
Created By is not equal to / is not in **John Smith**

Include Manual (ADI) entries not uploaded by John Smith (choose names from picklist to ensure correct syntax)

Vendor/Employee Name is equal to / is in **Fisher Scientific**
Expenditure Type Description is equal to / is in **7035A EQUIP UNDR 2500 Lab, 7116A EQUIP 2500to24999 Lab, 7116A EQUIP 5000to24999 Lab, 7471A SUPPL LAB Chemical Gases, 7472A SUPPL LAB Chem Reagents, 7473A SUPPL LAB Disposables, 7474A SUPPL LAB Drugs, 7475A SUPPL LAB Glassware, 7476A SUPPL LAB Personal Safty**

Includes transactions to Fisher Scientific for various lab-related expenditures

Modifying Filters

Criteria Results

Caution:

Fiscal Periods: For reports with multi-select fiscal periods on the IRA report, choose one or more fiscal periods. For reports with a pull-down for fiscal period on the IRA report, be careful when choosing more than one fiscal period for the modified report. If multiple periods are chosen, be sure they are broken out in the pivot table or the balances will be combined and overstated.

Multi-select example:

GL Transactions | Fiscal Period is equal to / is in **8-FEB** — Returns February transactions

GL Transactions | Fiscal Period is equal to / is in **1-JUL, 2-AUG, 3-SEP, 4-OCT, 5-NOV, 6-DEC, 7-JAN, 8-FEB** — Returns transactions Feb YTD

Pull-down select example:

GL Rollups Report_R | Fiscal Period is equal to / is in **8-FEB** — Returns YTD balances as of Feb 28

GL Rollups Report_R | Fiscal Period is equal to / is in **8-FEB, 1-JUL, 2-AUG, 3-SEP, 4-OCT, 5-NOV, 6-DEC, 7-JAN** — Be sure to keep months showing separately in the pivot table, or all YTD balances will be summed.