

Alma Analytics – Beyond out-of-the-box reports: Tips for formatting and customization

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Agenda

- Account default settings
- Title view
- Row count totals
- "No Results" messages
- Number and date formats
- String functions

- Bins
- Reordering and sorting columns
- Table formatting
- Conditional formatting
- Graphs/charts
- Prompts

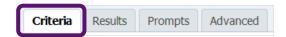


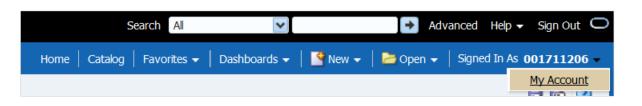
Changing your default settings

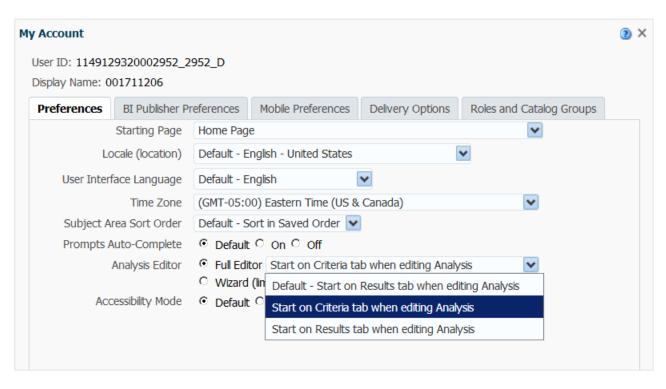
When editing an analysis:



You can choose to start on the **Criteria** tab instead of the **Results** tab if you prefer.

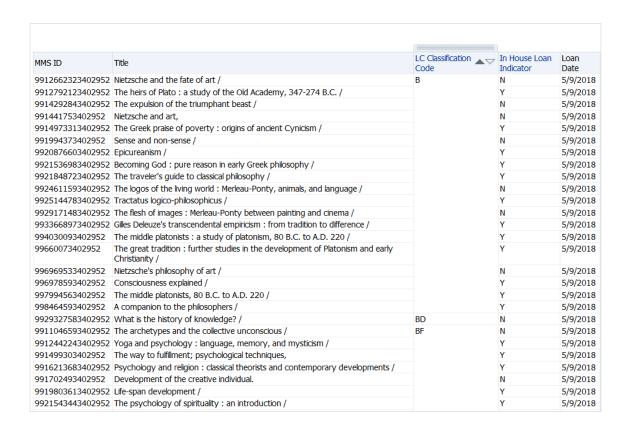








General cosmetic improvements



A default analysis without any formatting provides no context clues for the user.

Unanswered questions:

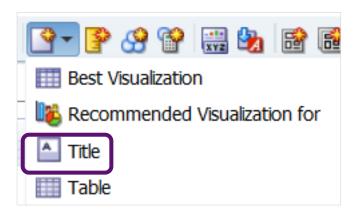
- -What am I looking at?
- -How many results are there?



Adding an analysis title

In the **Results** tab, select the **New View** icon

to add a title view.

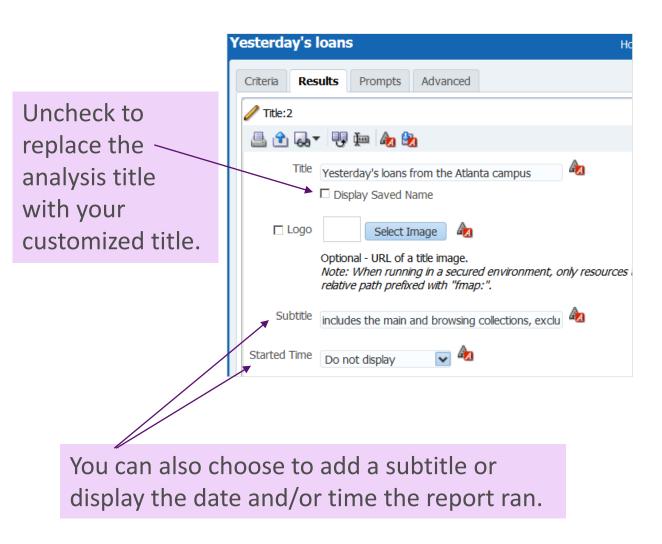


By default this will display the name you have given your analysis, but you can customize this by editing the view.



Note: When you add views, they originally appear on the Compound Layout in the order you create them. You'll need to drag a newly created Title view to the top.

Editing the title view



	from the Atlanta campus prowsing collections, excludes reserves			
MMS ID	Title	LC Classification Code	In House Loan Indicator	Loan Date
9912662323402952	Nietzsche and the fate of art /	В	N	5/9/2018
9912792123402952	The heirs of Plato: a study of the Old Academy, 347-274 B.C. /		Υ	5/9/2018
9914292843402952	The expulsion of the triumphant beast /		N	5/9/2018
991441753402952	Nietzsche and art,		N	5/9/2018
9914973313402952	The Greek praise of poverty: origins of ancient Cynicism /		Υ	5/9/2018
991994373402952	Sense and non-sense /		N	5/9/2018
9920876603402952	Epicureanism /		Υ	5/9/2018
9921536983402952	Becoming God: pure reason in early Greek philosophy /		Υ	5/9/2018
9921848723402952	The traveler's guide to classical philosophy /		Υ	5/9/2018
9924611593402952	The logos of the living world: Merleau-Ponty, animals, and language /		N	5/9/2018
9925144783402952	Tractatus logico-philosophicus /		Υ	5/9/2018
9929171483402952	The flesh of images: Merleau-Ponty between painting and cinema /		N	5/9/2018
9933668973402952	Gilles Deleuze's transcendental empiricism : from tradition to difference /		Υ	5/9/2018
994030093402952	The middle platonists: a study of platonism, 80 B.C. to A.D. 220 /		Υ	5/9/2018
99660073402952	The great tradition: further studies in the development of Platonism and early Christianity /		Υ	5/9/2018
996969533402952	Nietzsche's philosophy of art /		N	5/9/2018
996978593402952	Consciousness explained /		Υ	5/9/2018
997994563402952	The middle platonists, 80 B.C. to A.D. 220 /		Υ	5/9/2018
998464593402952	A companion to the philosophers /		Υ	5/9/2018
9929327583402952	What is the history of knowledge? /	BD	N	5/9/2018
9911046593402952	The archetypes and the collective unconscious /	BF	N	5/9/2018
9912442243402952	Yoga and psychology: language, memory, and mysticism /		Υ	5/9/2018
991499303402952	The way to fulfillment; psychological techniques,		Υ	5/9/2018

Adding a row count total

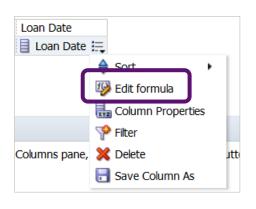
In Criteria view, add ANY extra column to your analysis;

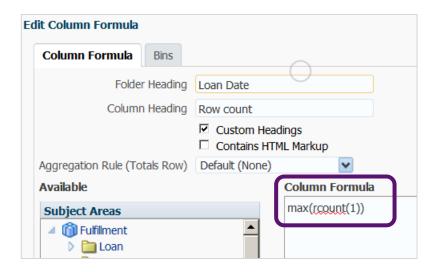
Keep note of the column #



Column # 6

Edit the column's formula to be: MAX(RCOUNT(1))



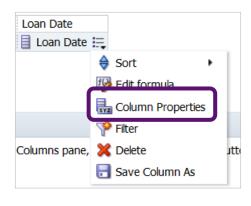




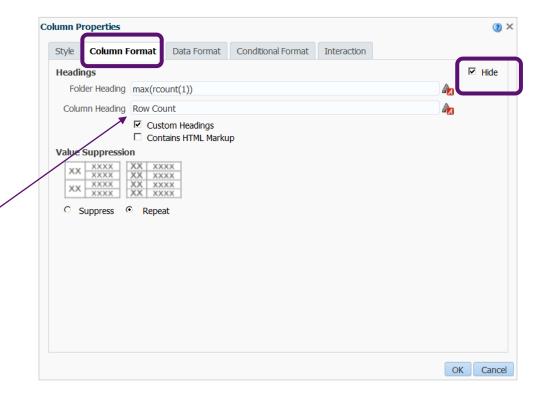
Row count

Edit the column's properties to hide it from display:

Column Properties – Column Format – top right check box



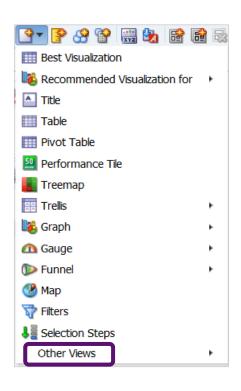
Even though the column isn't visible in the results, it is useful to rename it something related to its function.

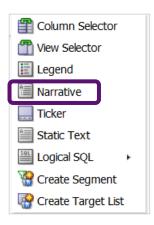


Row count

Add a **Narrative** view:

Switch to the Results tab - New View - Other Views - Narrative





The narrative view allows you to combine text with query column values - useful for providing context or extended descriptions, etc.

If you don't need to pull values from the query, but just need to add text, you could also consider the **Static Text** view.

Row count

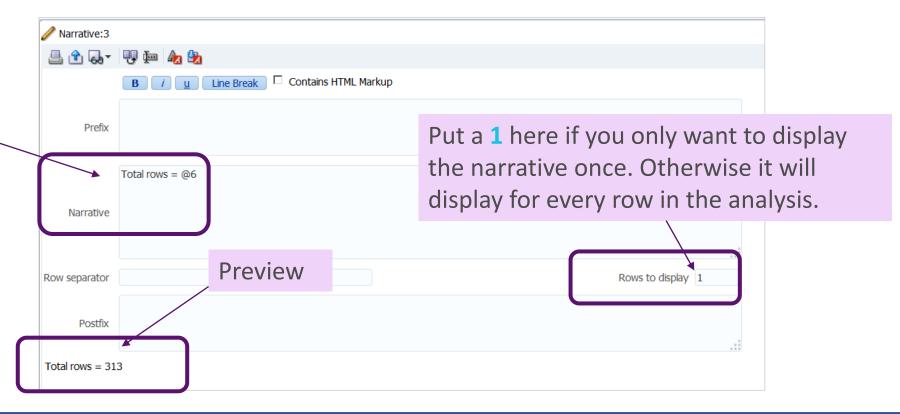
Edit **Narrative** view



In the **Narrative box,** call the column values you want to retrieve.

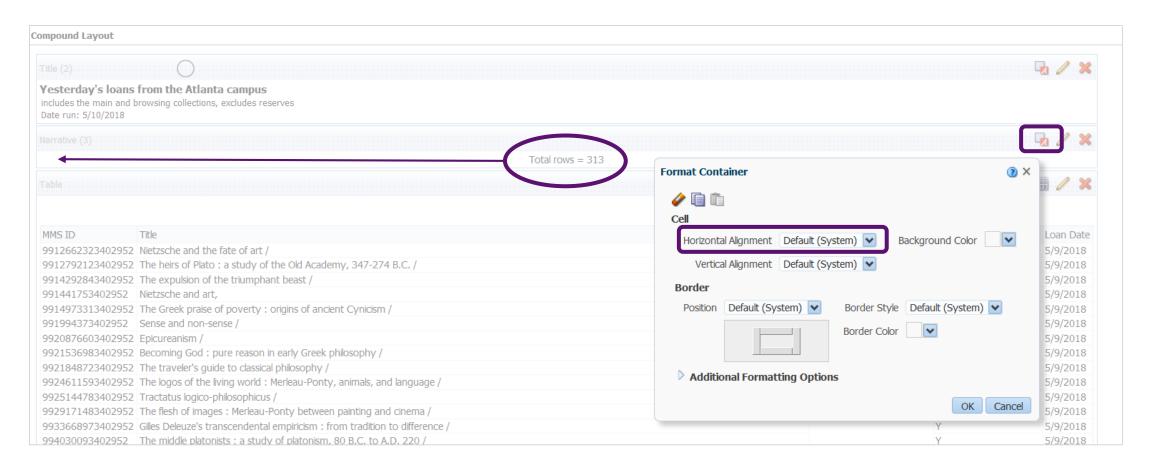
Use the @ symbol and the # of the column(s) you want to call. @6 calls the values for the Row Count column.

Total rows = is the text I'm adding in.



Adjusting container alignment

7) Use the Format Container option to adjust the horizontal alignment of the Narrative.





Improved analysis

Yesterday's loans from the Atlanta campus

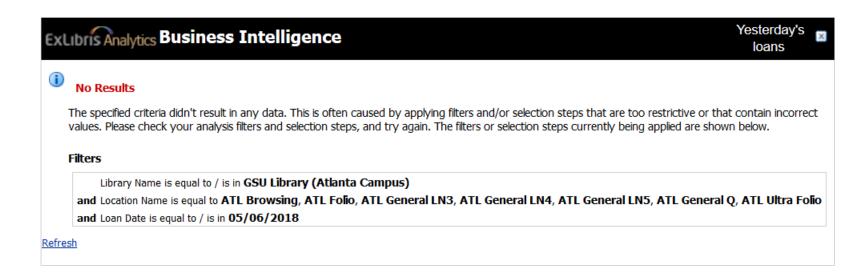
includes the main and browsing collections, excludes reserves Date run: 5/10/2018

Total rows = 313

MMS ID	Title	LC Classification Code	In House Loan Indicator	Loan Date
9912662323402952	Nietzsche and the fate of art /	В	N	5/9/2018
9912792123402952	The heirs of Plato: a study of the Old Academy, 347-274 B.C. /		Υ	5/9/2018
9914292843402952	The expulsion of the triumphant beast /		N	5/9/2018
991441753402952	Nietzsche and art,		N	5/9/2018
9914973313402952	The Greek praise of poverty: origins of ancient Cynicism /		Υ	5/9/2018
991994373402952	Sense and non-sense /		N	5/9/2018
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9921848723402952	The traveler's guide to classical philosophy /		Υ	5/9/2018
9924611593402952	The logos of the living world: Merleau-Ponty, animals, and language /		N	5/9/2018
9925144783402952	Tractatus logico-philosophicus /		Υ	5/9/2018
	The flesh of images: Merleau-Ponty between painting and cinema /		N	5/9/2018
9933668973402952	Gilles Deleuze's transcendental empiricism : from tradition to difference /		Υ	5/9/2018
994030093402952	The middle platonists: a study of platonism, 80 B.C. to A.D. 220 /		Υ	5/9/2018
99660073402952	The great tradition: further studies in the development of Platonism and early Christianity /		Υ	5/9/2018
996969533402952	Nietzsche's philosophy of art /		N	5/9/2018
996978593402952	Consciousness explained /		Υ	5/9/2018
997994563402952	The middle platonists, 80 B.C. to A.D. 220 /		Y	5/9/2018
998464593402952	A companion to the philosophers /		Υ	5/9/2018
9929327583402952	What is the history of knowledge? /	BD	N	5/9/2018
9911046593402952	The archetypes and the collective unconscious /	BF	N	5/9/2018
9912442243402952	Yoga and psychology: language, memory, and mysticism /		Υ	5/9/2018
991499303402952	The way to fulfillment; psychological techniques,		Υ	5/9/2018

Customizing the no results message

The library was closed yesterday...

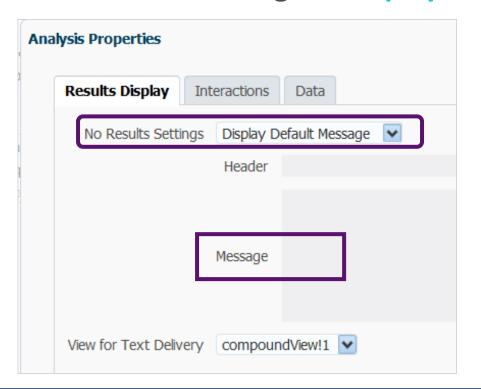


Customizing the no results message

Use the "xyz" Edit Analysis Properties button on the Results tab.



Change the No results settings to Display Custom Message and create your own.



No Results Found for "Yesterday's Loans"
No items circulated yesterday.

Refresh



Customizing error messages



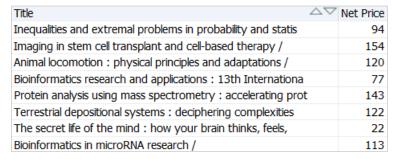
System generated error messages are technically customizable, but not by us. Access to administration in Oracle BI analytics and server files is required \odot



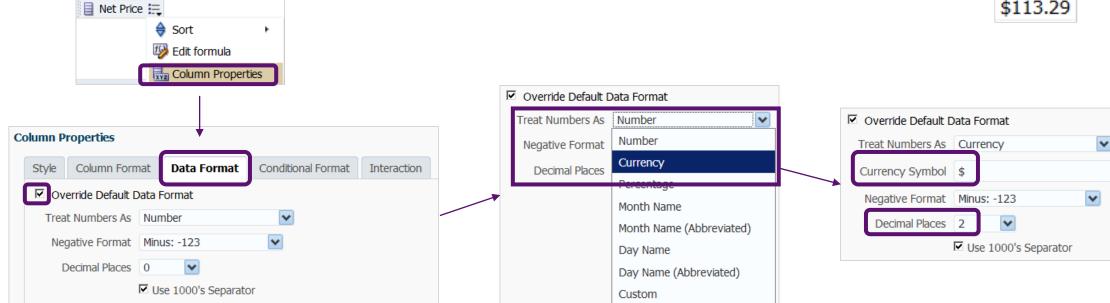
Changing the format of numbers

Edit Column Properties – Data Format tab – Check Override Default Data Format – select desired options

PO Line



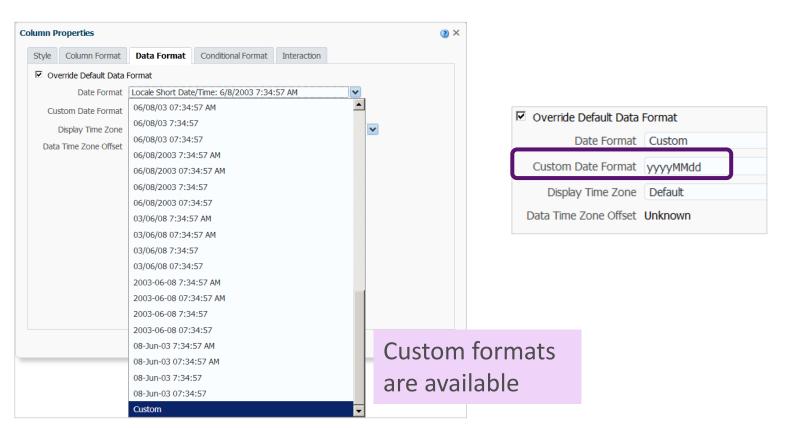




Changing the format of dates

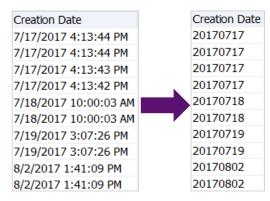
The **Data Format** tab is contextual. Alter the date format the same way:

Edit Column Properties – Data Format tab – Check Override Default Data Format – select desired options



Revised custom date format:

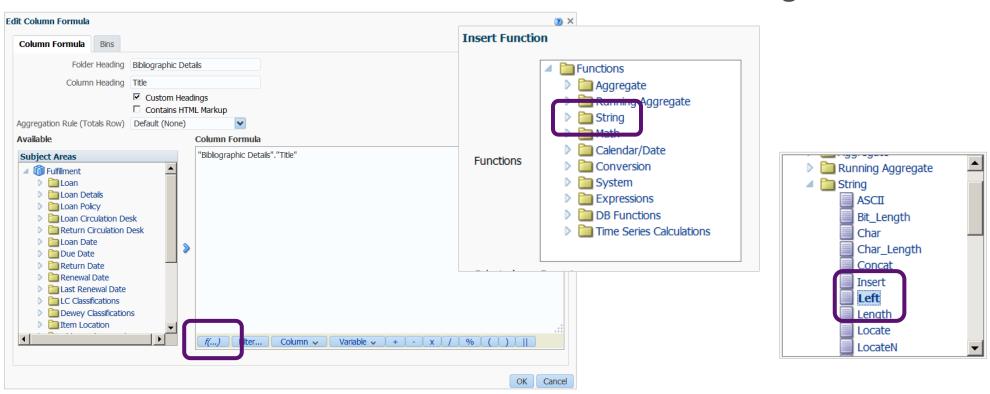
yyyyMMdd



Formatting with string functions

String functions perform various character manipulations.

Criteria tab – Edit Column Formula – Insert Function – String

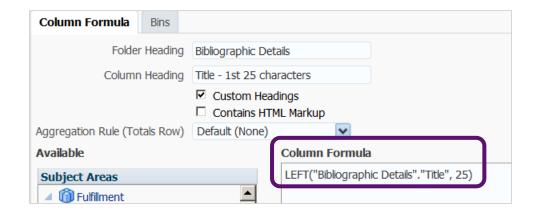


String functions

LEFT returns a specified number of characters from the left of a string.

Syntax = LEFT(expression, integer)

LEFT("Bibliographic Details"."Title", 25)



Title	Title - 1st 25 characters	Author
"Between your house and mine" : the letters of Lorine Niedecker to Cid Corman, 1960 to 1970 /	"Between your house and m	Niedecker, Lorine.
"Her kind" and the canon : Anne Sexton's erotic poetry and body politics /	"Her kind" and the canon	Nelson-Born, Katherine A., 1960
"To immerse myself in words": text and music in selected choral works of Samuel Barber /	"To immerse myself in wor	Nally, Donald J.
\$30 writing school /	\$30 writing school /	Dean, Michael W. (Michael Warel
(Dis)forming the American canon : African-Arabic slave narratives and the vernacular /	(Dis)forming the	Judy, Ronald A. T., author.



Concatenation

Concatenation combines two or more values into one, for example combining two columns or appending text to a column. Tip: use the || symbol provided at the bottom of the formula box as a shortcut.

Syntax: expression | expression

"Bibliographic Details". "Author" | | ' +++ ' | | "Bibliographic Details". "Begin Publication Date"





More string functions

RIGHT – returns a specified number of characters from the right of a string.

INSERT – Inserts a specified string into a specific location in another string.

LOWER and UPPER – converts string to lower or upper case.

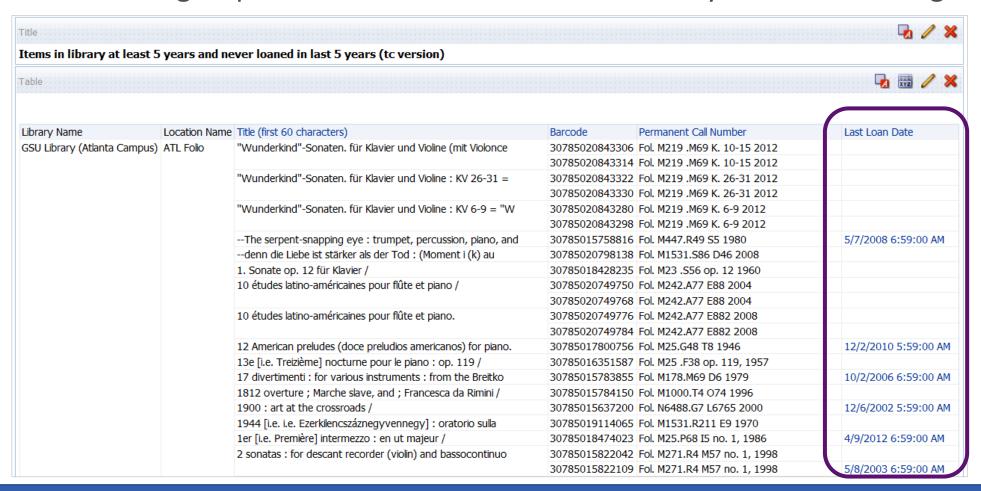
TRIMBOTH, TRIMLEADING, or TRIMTRAILING - Trims specified characters from the front and/or back of a string.

REPLACE – replaces a specified character or string with another character or string.



Bins

Bins are used to group results contained in a column into your desired categories.





Bins

Edit Column Formula ? X Edit Column Formula -Column Formula Bins Bins - Add Bin Never 1. Y Last Loan Date is null A X V circulated 5-10 years ₩ Last Loan Date is between 01/01/2008 A X V 12:00:00 AM and 12/31/2013 12:00:00 AM (2) X **New Filter** Y Then add each bin as you 4. All other values Last Loan Date would a filter. Operator is between **~** € Value **∨** 箭 Value Add More Options ▼ Clear All ☐ Protect Filter Provide a name for them ☐ Convert this filter to SQL when prompted. ☐ Treat result as a numeric value OK Cancel **Edit Bin Name** OK Cancel Cancel

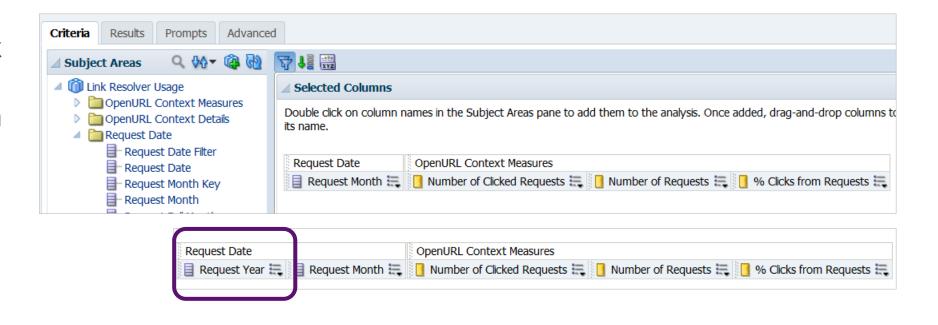


Bins



Reordering columns

I'm creating a link resolver report, and have added a new column – I dragged it to the location where I wanted it on the left.



But when I preview in the **Results** tab, the order is not what I wanted.

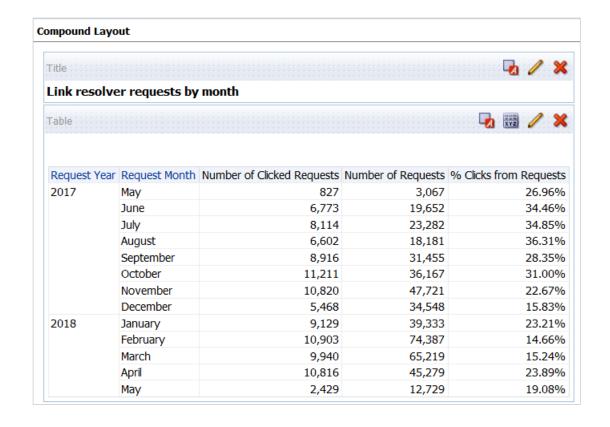
Request Month	Number of Clicked Requests	Number of Requests	% Clicks from Requests	Request Year
July	8,114	23,282	34.85%	2017
August	6,602	18,181	36.31%	2017
September	8,916	31,455	28.35%	2017



Reordering columns

Column order is set on the **Results** tab by dragging and dropping. (It may look like you have some control on the Criteria tab, but that's mostly an optical illusion.)

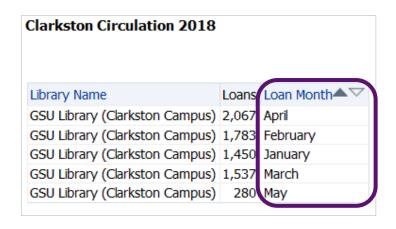
Many important design functions are controlled in the Compound Layout of Results view.

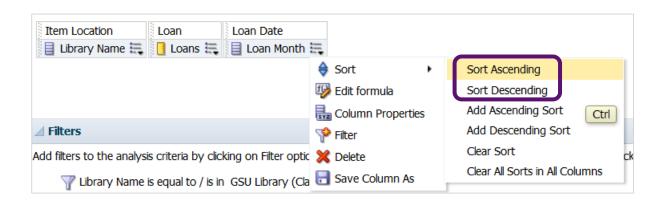




Sorting tips

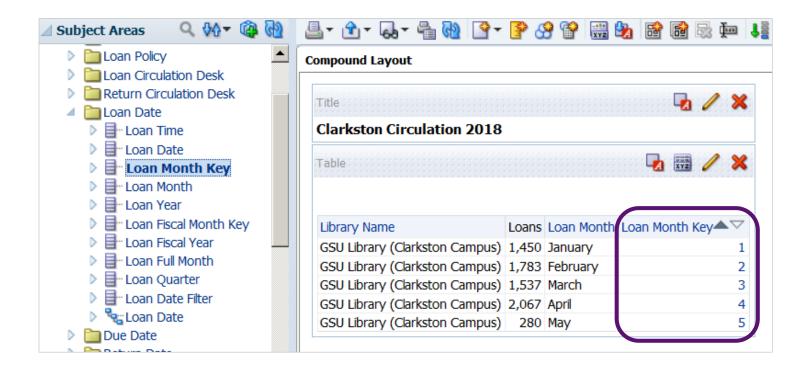
Problem: This query built from the Fulfillment subject area sorts the months alphabetically by default. The only sorting choices for Loan Month are ascending and descending.





Sorting tips

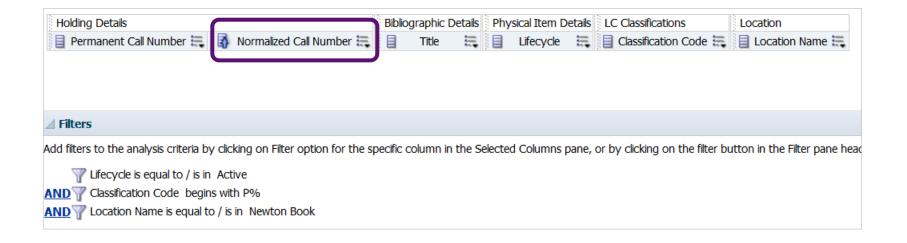
Solution: Add the column **Loan Month Key** (or Loan Fiscal Month Key) to the report, and sort on that column. Then hide this column from the results.





Sorting tips

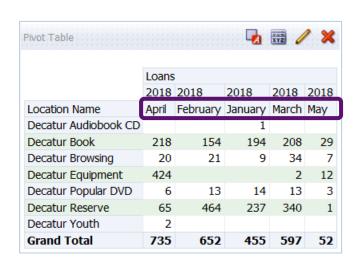
To solve a similar issue where the Permanent Call Number field doesn't properly sort, also include **Normalized Call Number** in your analysis. Then alphabetically sort and hide this column.

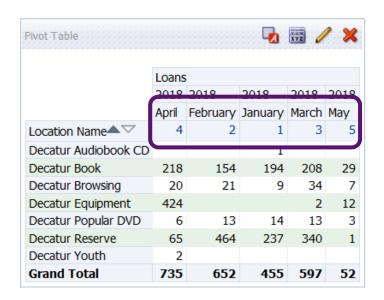


Another sort problem

This is a modification of the out of box report **Count of Items Loaned**. In addition to applying some filters, I added the **Loan Month** dimension. Again, the months are sorting alphabetically.

But, adding the Loan Month Key column with an ascending sort in the Criteria tab does not fix the problem in the Pivot Table View.



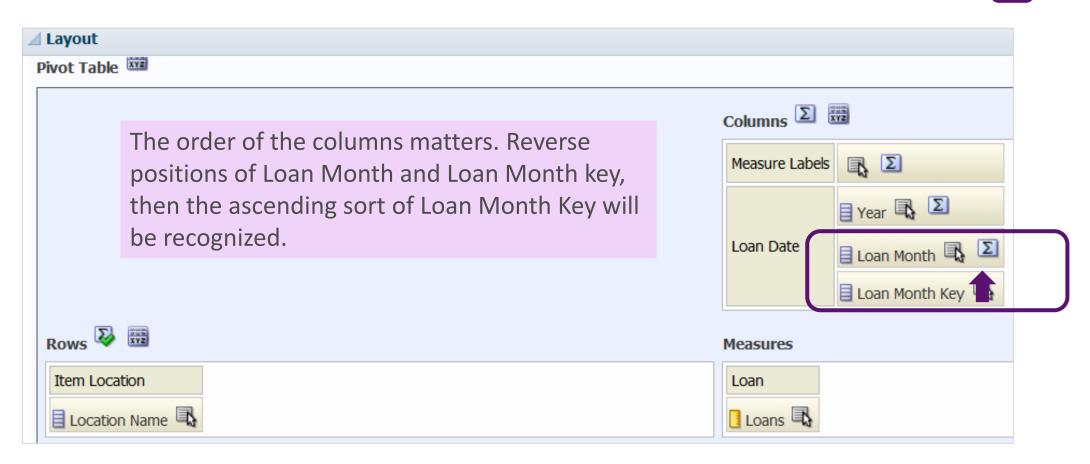




Editing the pivot table

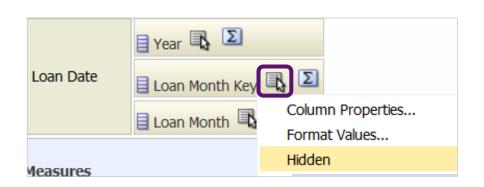
You also need to edit the pivot table layout.

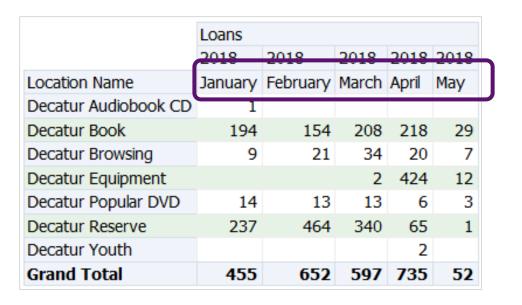




Editing the pivot table

Then you can hide the **Loan Month Key** column from the pivot table and the problem is solved.

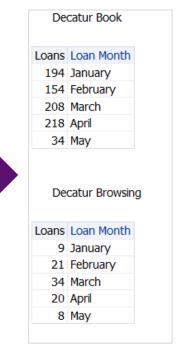






Sectioned Tables

Location Name	Loan Month	Loans
Decatur Audiobook CD	January	1
Decatur Book	January	194
Decatur Browsing	January	9
Decatur Popular DVD	January	14
Decatur Reserve	January	237
Decatur Book	February	154
Decatur Browsing	February	21
Decatur Popular DVD	February	13
Decatur Reserve	February	464
Decatur Book	March	208
Decatur Browsing	March	34
Decatur Equipment	March	2
Decatur Popular DVD	March	13
Decatur Reserve	March	340
Decatur Book	April	218
Decatur Browsing	April	20
Decatur Equipment	April	424
Decatur Popular DVD	April	6
Decatur Reserve	April	65
Decatur Youth	April	2
Decatur Book	May	34
Decatur Browsing	May	8
Decatur Equipment	May	12
Decatur Popular DVD	May	6
Decatur Reserve	May	1



While editing Table Layout - drag and drop a column into the **Sections** field. This creates separate "mini" tables – one for each value in the column.

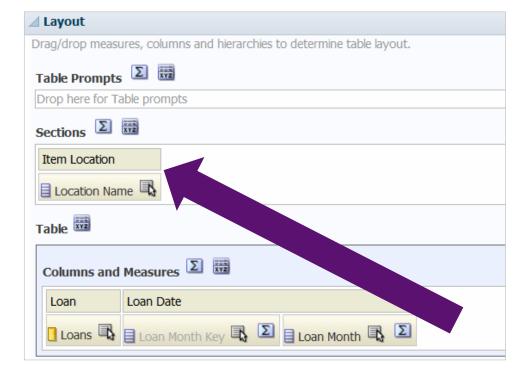




Table formatting

Several format options for tables are located in the Table Layout view in the **Columns and Measures** area.

Use the **Sum** (Σ) buttons to add totals to columns.

The general Sum button adds totals to the bottom of columns with measures.

Transaction Date	Transaction Amount
5/2/2018	5.00
5/7/2018	5.00
	116.00
5/10/2018	1,360.00
5/11/2018	25.00
5/14/2018	5.00
5/15/2018	19.00
Grand Total	1,535.00

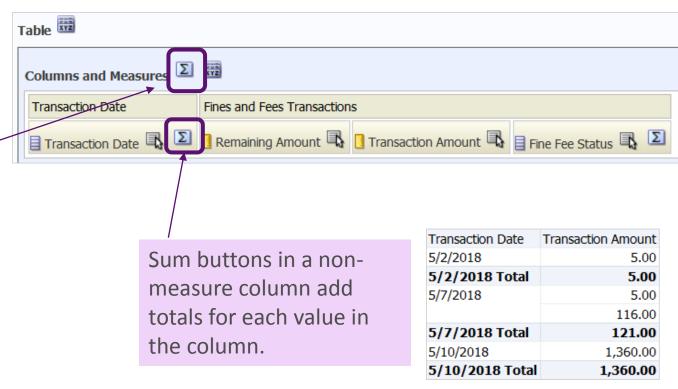
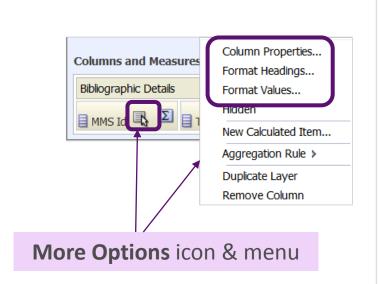
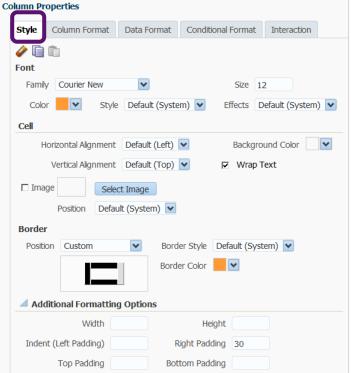


Table formatting

More Options is another important formatting button under Columns and Measures. General stylistic changes are found on the Style tab.





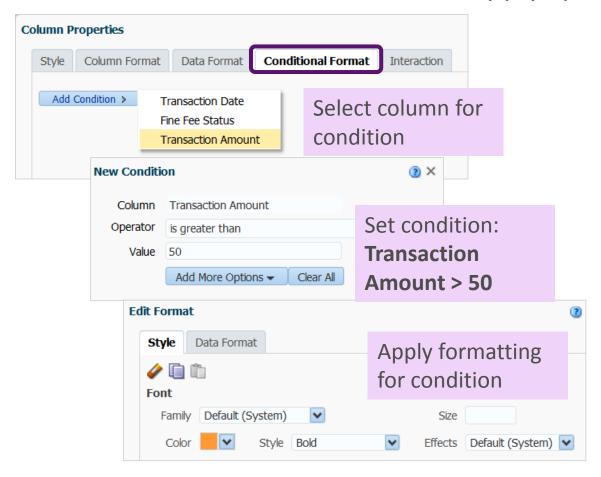
Changes in **Column Properties** and **Format Headings** to alter font, border, and cell padding in the MMS Id column are reflected in the table below.

MMS Id	Title
9934395951902952	Inequalities and extremal problems in probability a
9934395952002952	Imaging in stem cell transplant and cell-based ther
9934395952402952	Animal locomotion: physical principles and adapta
9934395952602952	Bioinformatics research and applications: 13th Int
9934396044402952	Protein analysis using mass spectrometry: accele
9934396044902952	Terrestrial depositional systems: deciphering com



Conditional formatting

Use the Conditional Format tab to apply special formatting to specific conditions.



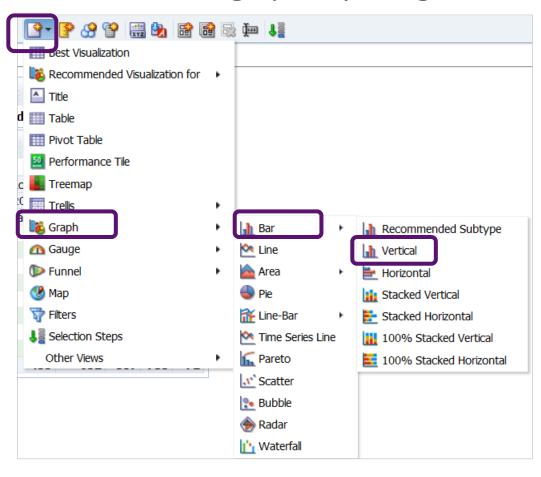


Transaction Date	Transaction Amount
5/2/2018	5.00
5/7/2018	5.00
	116.00
5/10/2018	1,360.00
5/11/2018	25.00
5/14/2018	5.00
5/15/2018	19.00



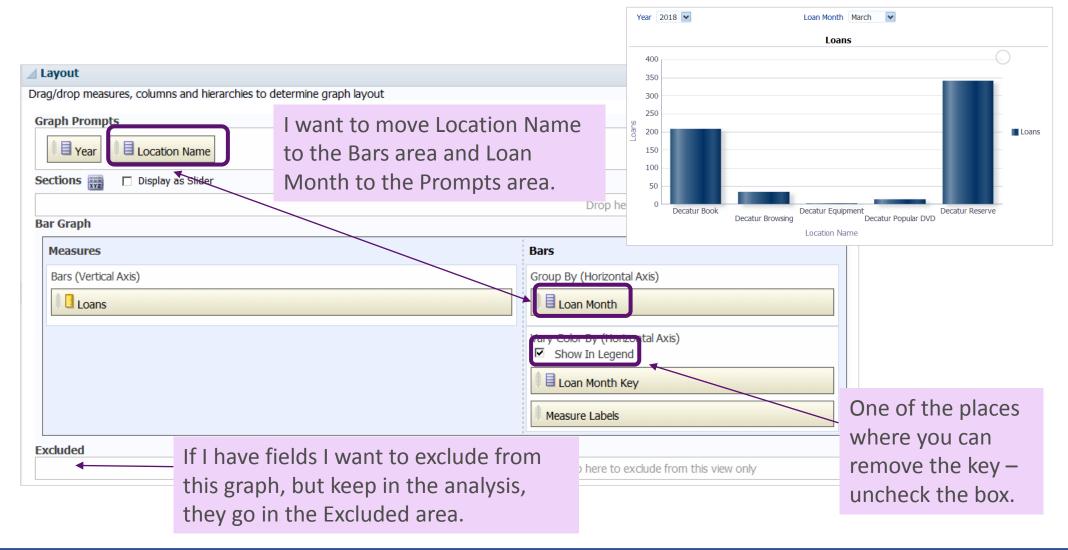
Adding graphs and charts

Add charts and graphs by using New View on the Results tab.

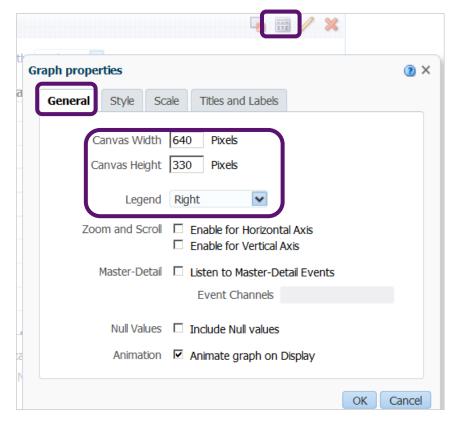




What initially appears might not be what you had in mind. Use the **pencil** to edit. For example, I want the user to choose the month, and for locations to appear on the horizontal axis.



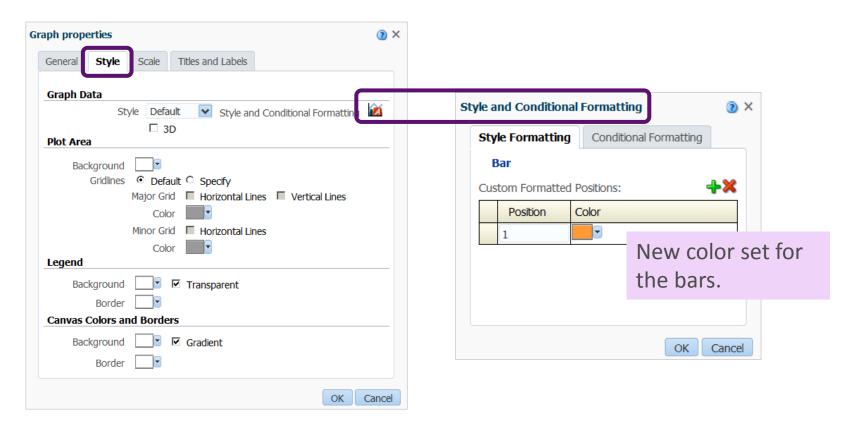
Other edits are made using the tabs under **View Properties**. The tabs are contextual, so will relate to the chart you are editing.



Use the **General** tab to change the canvas size of the chart.

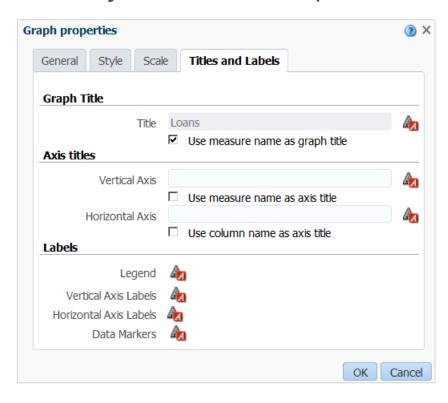
This is where you reposition the legend, and another place where you can turn it off.

The **Style** tab contains options such as changing the colors of the bars or configuring grid lines.





The **Titles and Labels** tab lets you choose if you want to display these things and to format them if you do. For example, you can set data markers to always display instead of just on rollover (default setting).





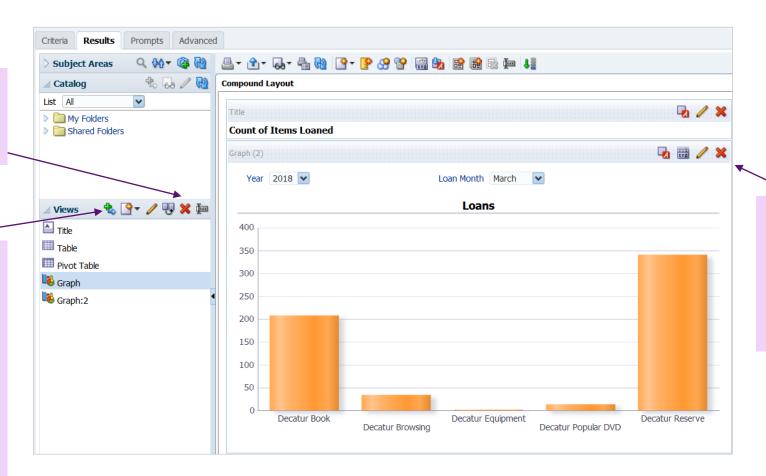
Revised chart with new bar colors and no axis titles or key.



Removing views

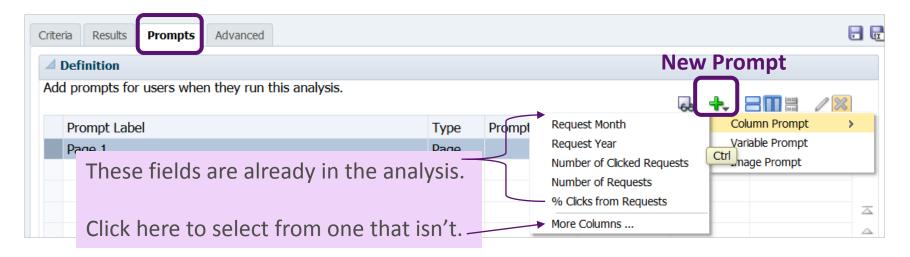
This **X** will remove the selected View from the analysis.

If the selected View is hidden from the Compound Layout, the Add View icon is green and enabled, so you can add it back in. If the View is already visible, the icon is grey.



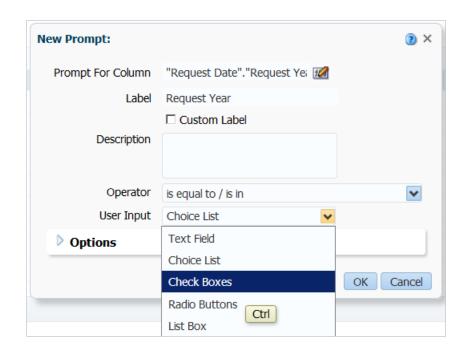
This **X** will remove the View from the Compound Layout, but will keep it in the analysis.

You can allow users to select filters when they run a report by adding prompts: Select **New Prompt** in the Definition area of the **Prompts** tab.



A Column Prompt lets users select a value from a column (either visible or not) that exists within the Alma Analytics subject area(s) you are using.





Prompt choices:

Text Field – requires user to enter a single value

Choice List – select one or more values from a drop-down menu

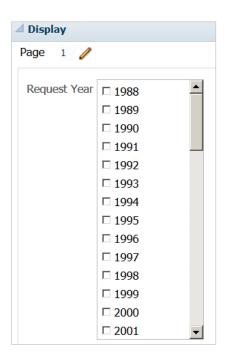
Check Boxes – select one or more values from a list

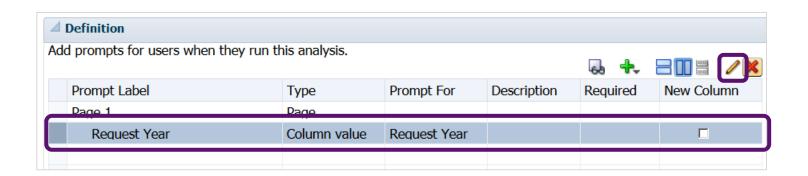
Radio Buttons – select a single value

List Box – allows user to make a single or multiple selections using SHIFT and CTRL; very flexible and configurable



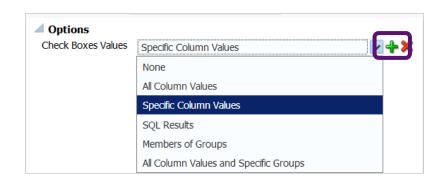
Setting which choices appear: Initially the check boxes for Request Year include all the years the system can see – way too many for the report being designed. To adjust this, select the prompt in the **Definition** section and click the **pencil** to edit.

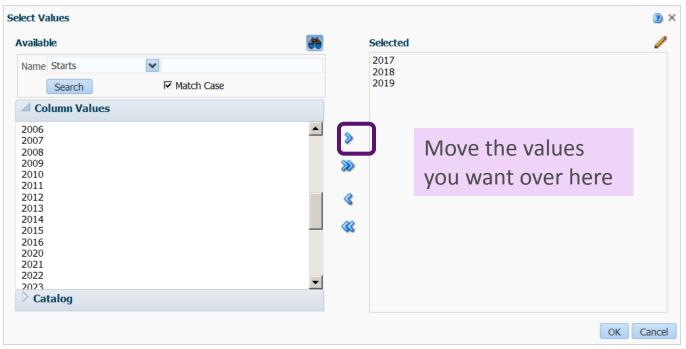






Expand the **Options** under Edit Prompt. Under **Check Boxes Values**, select **Specific Column Values**. Use 4 to add values.

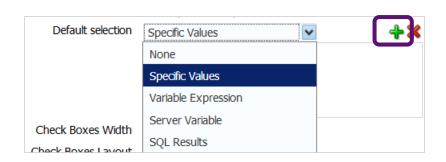


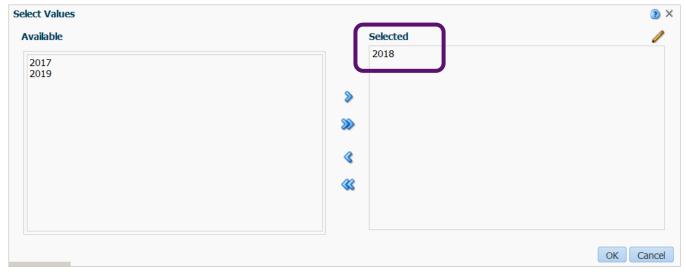




Selecting a default choice for the user:

This is also under **Edit Prompt – Options**. Under **Default Selection** choose **Specific Values**. Then add your selection.





The finished prompt is a manageable list, with the most probable selection already made.





Remember to use "Open" instead of "Edit" in Analytics if you want to view/select the prompts.



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Opening image: Boo in Soda Box, by elorgwhee, https://www.flickr.com/photos/elorg/2196371990, (CC BY-NC-ND 2.0)

