# Working with Sorts Stratum. Viewer 7



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# **Getting Started**

# **Access to Sorting**

Your user profile level controls what you can do in terms of sorting levels, attribute relationships, measure items, and totals in views.

User Profile Level	Apply New Sorts	Edit Existing Sorts
Casual	*	<b>√</b> .
Advanced	<b>*</b>	<b>✓</b>
View Administrator	<b>*</b>	<b>→</b>
Security Administrator	<b>✓</b>	<b>*</b>

\*Note: Casual users can click an existing sort icon to change a sort. They will not see a Sort option when they right-click in the grid to access the grid pop-up menu.

# **Introduction to Sorting**

Sorts are a means of sequencing your data in a way that is most meaningful to you. Descending and ascending sorts can be applied to a level, an attribute relationship for a level, a measure item, or totals. You can combine sorts with filters to achieve a view of data that best fits your particular business needs.

# **Alphanumeric Sorts**

Stratum. Viewer will sort non-calendar based objects alphanumerically. This view has an ascending sort on the first measure item.

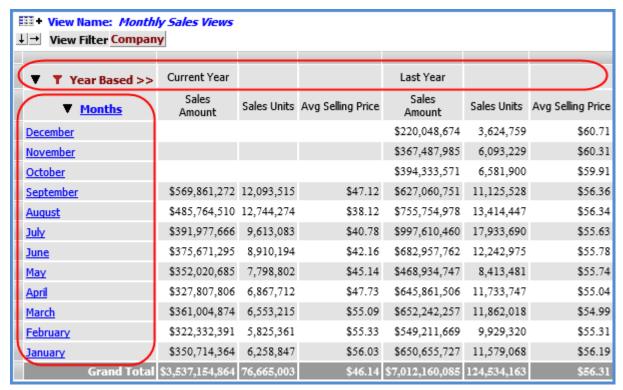
<u>Customer</u> <u>Type</u>	Ship-To Territory	Actual Sales Ext List Price Wk 38 2014 to Wk 38 2014	Actual Sales Ext List Price Wk 38 2013 to Wk 38 2013	Difference Current Wk 2014 vs 2013	Actual Sales Ext List Price Wk 37 2014 to Wk 37 2014	Actual Sales Ex List Price Wk 37 2013 to Wk 37 2013		
Class A Customer	Central Provinces	\$1,251,445	\$1,407,532	-\$156,087	\$1,539,277	\$1,407,53		
	Gulf Coast	\$1,356,559	\$2,107,039	-\$750,480	\$1,668,568	\$2,107,03		
	<u>Northwest</u>	\$1,686,239	\$1,391,828	\$294,411	\$2,074,074	\$1,391,82		
	Great Plains	\$4,544,327	\$4,838,341	-\$294,014	\$5,589,522	\$4,838,34		
	Western Provinces	\$4,832,958	\$5,513,788	-\$680,830	\$5,944,538	\$5,513,78		
	<u>Midlantic</u>	\$5,103,940	\$5,629,220	-\$525,280	\$6,277,847	\$5,629,22		
	Eastern Atlantic Provinces	\$6,627,886	\$7,647,500	-\$1,019,614	\$8,152,299	\$7,647,50		
	South Central	\$10,714,654	\$12,376,633	-\$1,661,979	\$13,179,024	\$12,376,63		
	New England	\$13,481,930	\$15,779,759	-\$2,297,829	\$16,582,775	\$15,779,75		
Grand Total		\$49,599,938	\$56,691,641	-\$7,091,703	\$61,007,924	\$56,691,64		

The next view has a descending sort on the Region level in columns and ascending sort on the UPC Long Description attribute relationship in rows.

									$\overline{}$	
	▼ ▼ <u>Region</u> >>	<u>331</u>				<u>330</u>			)	F
	Rgn Long Description	West				East				
<u>UPC Global</u> <u>Number</u>	▲ UPC Long Description	Sales Amount Q3 2014 to Q3 2014	Sales Return Amount Q3 2014 to Q3 2014	Number of Products Sold	Total Number of Products	▼ Sales Amount Q3 2014 to Q3 2014	Sales Return Amount Q3 2014 to Q3 2014	Number of Products Sold	Total Number of Products	
0 - 24000 - 12431 - 4	Applesauce 106oz PL*	\$12,298,965	(\$254,621)	50	103	\$43,709,710	(\$394,621)	94	103	
<u> - 24000 - 12531 - 4</u>	Applesauce 12oz PL*			50	103	\$30,325,482	(\$213,278)	94	103	
) - 02749 - 25408 - 6	Asparagus	\$11,748,521	(\$372,975)	50	103	\$32,856,000	(\$1,057,052)	94	103	
) - 02749 - 99267 - 6	Cherries, Bing	\$14,001,060	(\$529,751)	50	103	\$32,473,135	(\$1,202,761)	94	103	
) - 13800 - 30321 - 9	Frozen Lasagna Dinner	\$16,962,271		50	103	\$59,440,138		94	103	
) - 13800 - 78934 - 9	Meatloaf, Frozen	\$15,994,439		50	103	\$57,645,091		94	103	
) - 06403 - 92736 - 2	Orange Juice Conc.	\$9,566,166		50	103	\$31,563,473		94	103	
- 24000 - 12520 - 4	Peach 6oz LnchPk BR*			50	103	\$29,887,455	(\$252,701)	94	103	
) - 24000 - 12491 - 4	Peach Slcs LS 106oz BR*	\$2,320,479	(\$108,534)	50	103	\$28,007,355	(\$304,192)	94	103	
) - 24000 - 12591 - 4	Peach Slcs LS 12oz BR*			50	103	\$38,969,187	(\$176,420)	94	103	
) - 24000 - 12528 - 4	Pear 6oz LnchPk LS			50	103	\$25,837,466	(\$171,811)	94	103	
) - 24000 - 12517 - 4	Pnappl Slcs 12 oz BR*			50	103	\$27,126,524	(\$318,541)	94	103	
) - 70606 - 02232 - 8	Pork Chops - Butterfly	\$8,406,051		50	103	\$34,580,280		94	103	
) - 79453 - 59433 - 6	Romaine Specialty Salad	\$5,762,298		50	103	\$26,027,675		94	103	
) - 79453 - 09722 - 7	Sweet Onions, Chopped	\$6,965,593		50	103	\$26,900,805		94	103	
All Others		\$118,055,909	(\$5,168,630)	50	103	\$700,171,922	(\$12,648,224)	94	103	
Grand Total		\$222,081,751	(\$6,434,512)	50	103	\$1,225,521,698	(\$16,739,600)	94	103	Ü

#### Calendar Based Sorts

Stratum. Viewer will sort calendar based objects according to their calendar order. Calendar based objects are objects related to time, such as a Year or Months time level. In this view, descending sorts exist on the Year Based level in columns and Months level in rows.



# **Tasks**

#### **Apply a New Sort**

1. Right-click the object in the grid and select Sort then either Ascending or Descending. If you want to sort a Grand Total, right-click the caption of the measure item in the Grand Total row or column.

OR

- 1. Double-click the object in view explorer to open its Properties window.
- 2. Select Ascending or Descending from the Sort drop-down list.

**Note:** Use the first option if you are sorting a measure item and there are levels on the same axis as measure items. Also use the first option if you are sorting a Grand Total measure item.

# **Edit Existing Sorts**

1. Click the sort icon (▲ or ▼) next to the sorted object.

OR

- 1. Double-click the object in view explorer to open its Properties window.
- 2. Change to Ascending or Descending using the Sort drop-down list.

#### **Clear Sorts**

#### Clear Individual Sort

Right-click the sorted object in the grid and select Sort then Clear.

#### OR

Double-click the object in view explorer to open its Properties window. Then select None from the Sort drop-down list

#### Clear All Sorts

Right-click any sorted object in the grid (measure item, level value, level attribute relationship), and select Sort then Clear All.

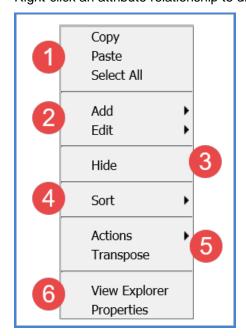
# Windows

#### **Grid Pop-up Menus**

Right-click objects in views to display available functionality for them such as inserting measure items, transposing the grid, filtering objects in the grid, and so forth. Many of the functions can also be controlled through view explorer and the Properties window, giving you several ways to make changes. Options on pop-up menus vary by user. Your user profile level determines which options are available to you. The menus in these examples are for a user with an advanced level of access. Menus are displayed in alphabetical order.

#### Attribute Relationships Pop-up Menu

Right-click an attribute relationship to display actions that you can take related to that object or axis.



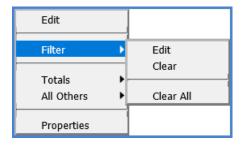


**Copy** - This option allows you to copy sections of a view that you have selected.

Paste - Allows you to paste data into update enabled cells. This option only shows in planning enabled views. **Select All -** Use this option to select the entire grid. Add - The sub menu has options for adding Attribute Relationships, Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu. Add Attribute Relationships Regular Measure Item Calculated Measure Item Chart Edit - Edit the attribute relationships or edit hierarchies on the rows, columns, or view filter. Edit Attribute Relationships Rows Columns View Filter Hide - When an attribute relationship is right-clicked and Hide is selected, the selected object is hidden from the grid. The Visible property for the attribute relationship changes to No. From view explorer, you can drag an attribute relationship back in the grid if needed, or you can change the Visible property to Yes. **Sort** - Sort options are Ascending, Descending, Remove, and Remove All. 4 Sort Ascending Descendina Remove Remove All Actions – Use this option to add new actions, add the active view to existing actions, or display the 5 actions that include the active view. Add Action Actions Add View To Existing Action Display Actions That Include This View Transpose - Use this option to change the axis for levels and measure items in the grid. Objects displayed in columns are switched to display in rows and vice versa. View Explorer - This option allows you to open and close view explorer. If the Properties window is 6 open when you close view explorer, the Properties window will also close. Properties - Click to maintain the attribute relationship properties including sorting and whether it is visible or not.

#### Axis Pop-up Menu

Right-click the Rows or Columns headings in the Navigation Panel (or their filter icon if an axis is filtered) to display a menu with options to edit properties of that axis including its filter, totals, or All Others properties. A shortcut to adding hierarchies to the Rows or Columns of a view is to click the Add icon + in those sections of the Navigation Panel.



# General Pop-up Menu

Right-click within the grid to display actions that you can take such as transposing the rows, columns, and measure items.

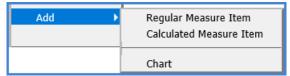


**Copy** - This option allows you to copy sections of a view that you have selected.

Paste - Allows you to paste data into update enabled cells. This option only shows in planning enabled views.

Select All - Use this option to select the entire grid.

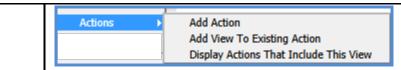
Add - The sub menu has options for adding Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu.



**Edit** - Edit the hierarchies on the rows, columns, or view filter.



**Actions** – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.



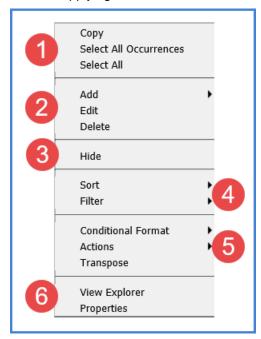
**Transpose** - Use this option to change the axis for levels and measure items in the grid. Objects displayed in rows are switched to display in columns and vice versa.



**View Explorer -** This option allows you to open and close view explorer. If the Properties window is open when you close view explorer, the Properties window will also close.

#### Measure Item Pop-up Menus (Detail and Grand Total Menus)

Measure items can be assigned to one axis, either rows or columns. Right-click the caption of a measure item in a detail row or column to display actions that you can take related to that object, such as inserting additional measure items or applying conditional formats.



Or, right-click the caption of a measure item in a Grand Total row or column to work with values in that area of a view, such as by applying sorts and filters to them.

Descriptions follow of the menus for measure items in detail and Grand Total rows or columns.



**Copy** - This option allows you to copy sections of a view that you have selected.

**Paste -** Allows you to paste data into update enabled cells. This option only shows in planning enabled views. This option does not display on the menu for Grand Totals.

**Select All Occurrences** - Use this option to select data for all occurrences of that measure item in the active page of the View. This option does not display on the menu for Grand Totals.

**Select All -** Use this option to select the entire grid.



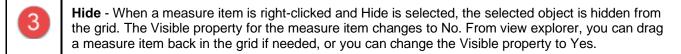
**Add** - The sub menu has options for adding Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu.



**Edit** - For regular measure items, opens the Edit Measure Item window with that measure item selected for editing. You can edit that measure item or any other regular measure items. For calculated measure items, opens an Edit window where you can edit the calculation, caption, and format for the calculated measure item.

**Note:** You also can access editing windows for measure items from the Measure Items window, which is accessible from view toolbars, or by double-clicking the caption of the respective measure item in the view grid.

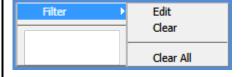
**Delete** - Deletes the measure item from the view definition without confirmation. It will no longer display in the view explorer.





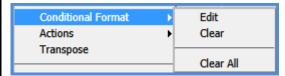


Filter - Filter options are Edit, Clear, and Clear All.

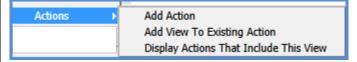


Conditional Format – Use this option to edit or add conditional formatting on the measure item.

There are also options for clearing the conditional format on the active measure item or all measure items.



**Actions** – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.



**Transpose** - Use this option to change the axis for levels and measure items in the grid. Objects displayed in columns are switched to display in rows and vice versa.



**View Explorer** - This option allows you to open and close view explorer. If the Properties window is open when you close view explorer, the Properties window will also close.

**Properties -** Click to maintain the measure item properties including the name, caption expression, type, pop-up labels, hyperlinks, and so forth.

#### View Filter Pop-up Menu

Right-click the View Filter heading to display actions that you can take related to that object or section of the grid, such as filtering levels in that section.

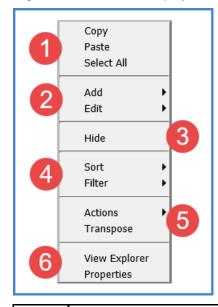




**Edit** - Edit the hierarchies in the view filter. A shortcut to adding hierarchies to the View Filter is to click the Add icon + that's provided in the View Filter section of the view.

#### Levels Pop-up Menu

Right-click the level to display actions that you can take related to the level, such as editing the hierarchy.





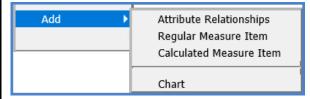
**Copy** - This option allows you to copy sections of a view that you have selected.

**Paste -** Allows you to paste data into update enabled cells. This option only shows in planning enabled views.

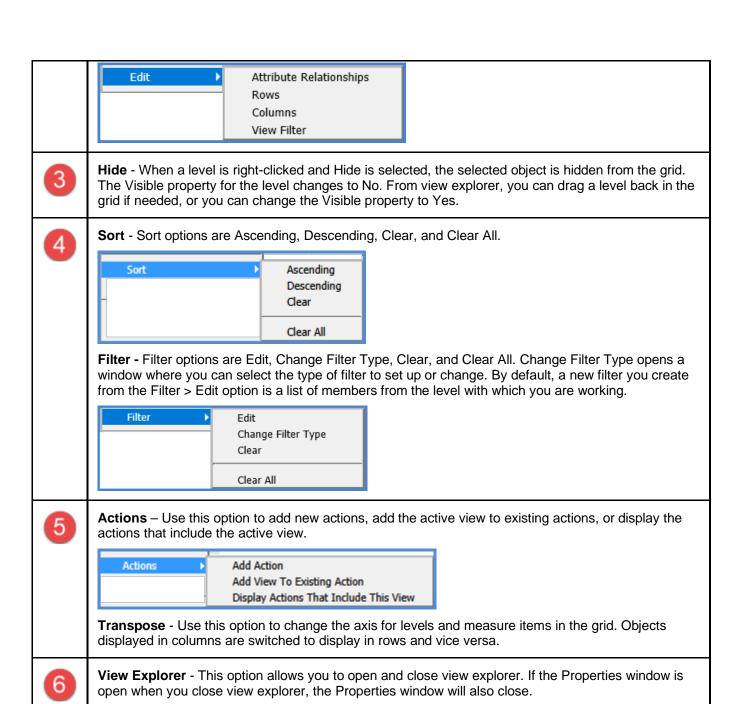
**Select All -** Use this option to select the entire grid.



**Add** - The sub menu has options for adding Attribute Relationships, Regular Measure Items, Calculated Measure Items, and Charts. Windows for adding the selected type of item will display once you make your selection from this sub menu.



Edit - Edit the attribute relationships or edit hierarchies on the rows, columns, or view filter.



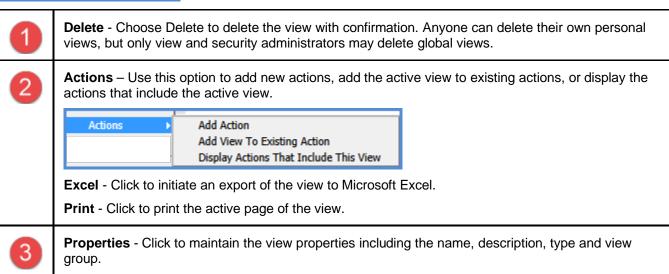
**Properties** - Click to maintain the level properties including the filter, sort, totaling, visibility, and

display text.

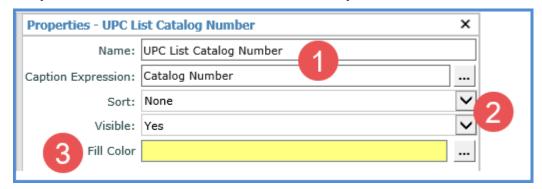
#### View Name Pop-up Menu

Right-click the view name to display actions that you can take related to the overall grid, such as exporting to Excel.





# **Properties Window for Attribute Relationships**



Name – The name of the attribute. Used in the view explorer and filter windows.

Caption Expression – A read only field that shows the expression behind the caption for an attribute relationship. The resolved text generated by the expression creates the caption, which is the text that displays for the attribute relationship in the view. The Caption Expression window can be accessed for editing the expression by clicking the Browse button — next to the field. Attribute relationships will be referred to by their names in all other Stratum. Viewer locations that they appear, such as in view explorer and the Select Members window.

Sort - Use to add, edit, or remove Ascending and Descending sorts.

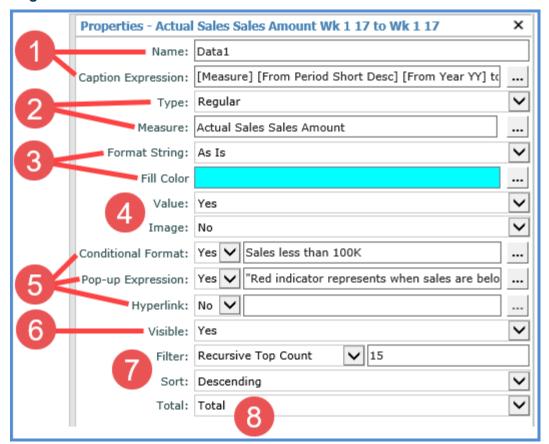
**Visible** – Set this property to No to hide the attribute relationship in a view. Set this property to Yes to display the attribute relationship in a view.



**Fill Color** – Assign a fill color that will be used in the row or column containing the attribute relationship. This makes it stand out from the rest of the grid. Click the Browse button next to the Fill Color property to choose a color from the Color window. Or, if there is already a color selected and you don't want a fill color used anymore, select the No Color checkbox.

#### **Properties Window for Individual Measure Items**

#### Regular Measure Items



1

Name – The text in this field determines the unique name that Stratum. Viewer will use to identify a measure item in the view. You can edit this field as needed. Default names given to new measure items are DataN. The "N" is a sequential number assigned by Stratum. Viewer to create a unique name. You will be prompted to make corrections to the name if you enter a duplicate name, use any spaces in the name, use too many characters (more than 50), or use invalid characters.

**Caption Expression** - A read only field that shows the expression behind the caption for a measure item. The resolved text generated by the expression creates the caption, which is the text that displays for the measure item in the view and other areas of the application such as view explorer. The Caption Expression window can be accessed for editing the expression by clicking the Browse button next to the field.

2	<b>Type</b> – This property shows the type of measure item you are working with – either regular, calculated, or distinct calculated. The property will be set to "Regular" if you are inserting or editing a regular measure item.
	Note: See the next table for information about calculated and distinct calculated types.
	<b>Measure</b> – This field is a read only field that displays the underlying measure you selected when setting up the regular measure item.
	• For measure items with time ranges, clicking the Browse button next to the Measure field opens the Edit Measure Item window. Use that window to edit the measure item's underlying measure or time range. The main Time Range property for a view must be set to Yes for the Properties window to behave in this manner.
	<ul> <li>For measure items without time ranges, clicking the search button next to the Measure field opens the Select Measure window for editing the underlying measure. The main Time Range property for a view must be set to No for the Properties window to behave in this manner.</li> </ul>
3	Format String – Use this drop-down list to apply a format such as decimal places, monetary symbols, commas, or a combination of formatting.
	Fill Color - Assign a fill color that will be used in the column or row containing the measure item.
	This makes it stand out from the rest of the grid. Click the Browse button —— next to the Fill Color property to choose a color from the Color window. Or, if there is already a color selected and you don't want a fill color used anymore, select the No Color checkbox.
4	<b>Value</b> – Determines if the measure item value displays in the Viewer grid. Set to Yes to display value. Set to No to hide the value, for example, in cases where you want to display only the conditional format icon for a measure item.
	<b>Image</b> – This property is used when setting up calculated measure items that display images. See the next table for information about this property.
5	Conditional Format – Controls the display of icons, and cell and text formatting for the measure item by applying the conditional format rules. The Browse button is only enabled when the Conditional Format field is set to Yes. When enabled, you can click the button to access the Select Conditional Format window to edit the conditional format associated with the measure item or create a new one. The name of the selected conditional format displays in the text box left of the icon.
	<b>Pop-up Expression</b> – Use this property to specify whether the selected measure item has a pop-up label that will display when you hover over the measure item value, indicator, or image. The Browse
	button is only enabled when the Pop-up Expression field is set to Yes. When enabled, you can click the button to access the Pop-up Label Expression window to edit the existing expression or
	create a new one. The active pop-up expression displays in the text box left of the icon.
	Hyperlink – Choose Yes if you want a hyperlink defined for the cell of a measure item. The Browse button is only enabled when the Hyperlink field is set to Yes. When enabled, you can click the
	button to access the Hyperlink Expression window to edit the expression or create a new one. The hyperlink defined displays in the text box left of the icon.
6	Visible – Set this property to No to hide the measure item in the view. Set this property to Yes to display the measure item in the view.

7

**Filter and Sort** – Use to add, edit, or remove filters and sorts. For filters, select the operator from the drop-down list and enter the value to filter by in the field next to the list. Pop-up labels showing filter criteria will show for the Filter field after a filter has been applied.

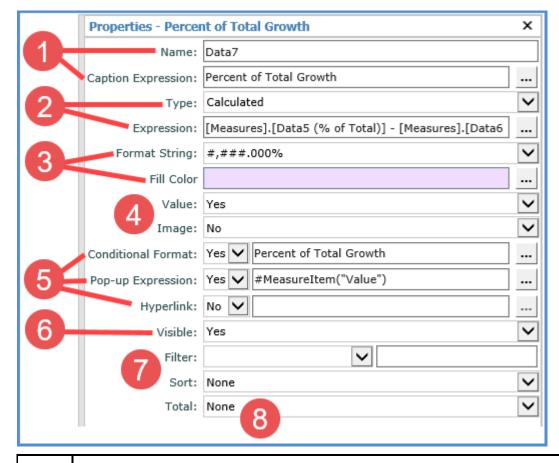
If your view has levels on the same axis as measure items, these properties will be disabled until you have applied an initial filter or sort via the grid.

8

**Total** – Use to control the type of total that is performed for a measure item. The default setting for all measure items is Total.

- None No total will be displayed.
- **Total** This designation takes into account any underlying calculations for a measure item's definition when generating Grand Totals, sub-totals, and All Others such as calculations defined in a measure item expression or associated with a Stratum.Planner calculated value.
- Sum This designation means that Viewer will generate totals by adding the values displayed in measure item detail cells. That summing will be used to generate the Grand Totals, sub-totals, and All Others. This type of total is intended for special cases where you don't want any of the underlying calculations that Viewer performs to be used when generating total values. You might choose to use a Sum total when a measure item calculation includes an IIF statement, such as a calculation with IF, Then, Else conditions.

#### Calculated and Distinct Calculated Measure Items



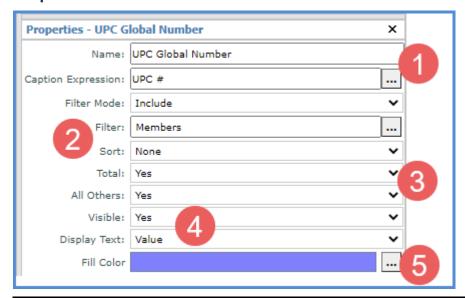
1

Name – The text in this field determines the unique name that Stratum. Viewer will use to identify a measure item in the view. You can edit this field as needed. Default names given to new measure items are DataN. The "N" is a sequential number assigned by Stratum. Viewer to create a unique name. You will be prompted to make corrections to the name if you enter a duplicate name, use any spaces in the name, use too many characters (more than 50), or use invalid characters.

Caption Expression – A read only field that shows the expression behind the caption for a measure item. The resolved text generated by the expression creates the caption, which is the text that displays for the measure item in the view and other areas of the application such as view explorer. The Caption Expression window can be accessed for editing the expression by clicking the Browse button next to the field. **Type** – This property shows the type of measure item you are working with – either regular, calculated, or distinct calculated. The property will be set to "Calculated" or "Distinct Calculated" if you are inserting or editing that type of measure item. **Note:** See the previous table for information about regular types. Expression – When "Calculated" or "Distinct Calculated" is the measure item type, an Expression field shows in this window. It's a read only field that shows the expression for calculating the measure item. The Expression window can be accessed for editing the expression by clicking the Browse button in next to the field. Note that when you are using a calculated measure item to display images in a view that the expression will determine the location/name of the image file for Stratum. Viewer to display. The image file must reside in the Stratum. Viewer application folders. It is recommended that all custom images reside in a subfolder of the Images folder of the Stratum. Viewer application. Supported file types for images are \*.jpg, \*.jpeg, \*.png, \*.bmp, \*.gif, \*.tif, and \*.tiff. The image will display according to its original, default size. Format String – Use this drop-down list to apply a format such as decimal places, monetary symbols, commas, or a combination of formatting. Fill Color – Assign a fill color that will be used in the column or row containing the measure item. This makes it stand out from the rest of the grid. Click the Browse button unext to the Fill Color property to choose a color from the Color window. Or, if there is already a color selected and you don't want a fill color used anymore, select the No Color checkbox. Value – Determines if the measure item value displays in the Viewer grid. Set to Yes to display value. Set to No to hide the value, for example, in cases where you want to display only the conditional format icon for a measure item. Image – This property is used when setting up calculated measure items that display images. You use the Expression window to define the location of the image and then set this property to Yes in order for the defined image to display in the grid. See item 2 above. Conditional Format - Controls the display of icons, and cell and text formatting for the measure 5 item by applying the conditional format rules. The Browse button is only enabled when the Conditional Format field is set to Yes. When enabled, you can click the button to access the Select Conditional Format window to edit the conditional format associated with the measure item or create a new one. The name of the selected conditional format displays in the text box left of the 🔤 icon. **Pop-up Expression** – Use this property to specify whether the selected measure item has a pop-up label that will display when you hover over the measure item value, indicator, or image. The Browse button is only enabled when the Pop-up Expression field is set to Yes. When enabled, you can click the button to access the Pop-up Label Expression window to edit the existing expression or create a new one. The active pop-up expression displays in the text box left of the will icon. Hyperlink – Choose Yes if you want a hyperlink defined for the cell of a measure item. The Browse button is only enabled when the Hyperlink field is set to Yes. When enabled, you can click the

button to access the Hyperlink Expression window to edit the expression or create a new one. The hyperlink defined displays in the text box left of the icon. Visible – Set this property to No to hide the measure item in the view. Set this property to Yes to 6 display the measure item in the view. Filter and Sort – Use to add, edit, or remove filters and sorts. For filters, select the operator from the drop-down list and enter the value to filter by in the field next to the list. Pop-up labels showing filter criteria will show for the Filter field after a filter has been applied. If your view has levels on the same axis as measure items, these properties will be disabled until you have applied an initial filter or sort via the grid. Total – Use to control the type of total that is performed for a measure item. The default setting for all 8 measure items is Total. **None** – No total will be displayed. **Total** – This designation takes into account any underlying calculations for a measure item's definition when generating Grand Totals, sub-totals, and All Others – such as calculations defined in a measure item expression or associated with a Stratum.Planner calculated value. Sum – This designation means that Viewer will generate totals by adding the values displayed in measure item detail cells. That summing will be used to generate the Grand Totals, sub-totals, and All Others. This type of total is intended for special cases where you don't want any of the underlying calculations that Viewer performs to be used when generating total values. You might choose to use a Sum total when a measure item calculation includes an IIF statement, such as a calculation with IF, Then, Else conditions.

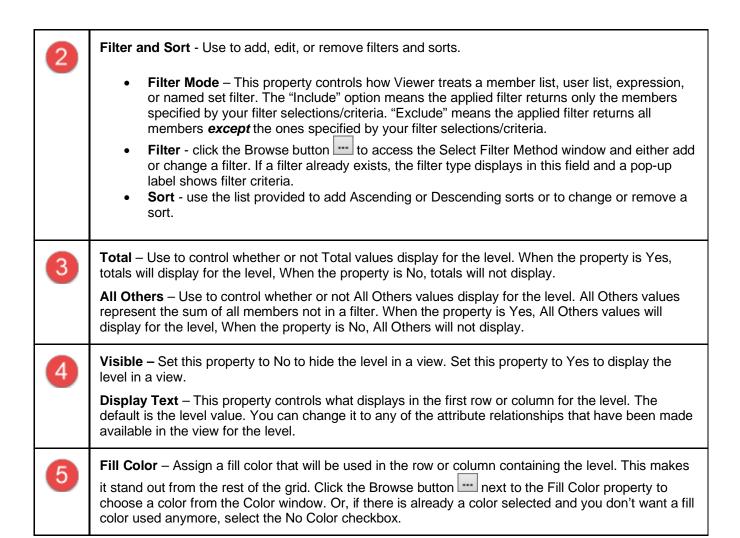
# **Properties Window for Levels**



1

Name – Name of the level. Used in the view explorer and filter windows.

**Caption Expression** – A read only field that shows the expression behind the caption for a level. The resolved text generated by the expression creates the caption, which is the text that displays for the level in the view. The Caption Expression window can be accessed for editing the expression by clicking the Browse button next to the field. Levels will be referred to by their names in all other Stratum. Viewer locations that they appear, such as in view explorer and the Select Members window.



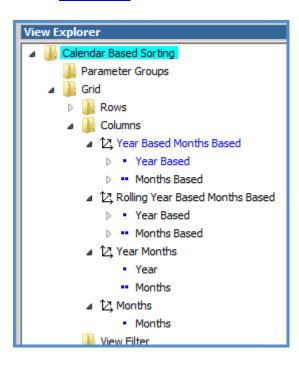
# Advanced Concepts

# **Calendar Based Sorting**

Calendar based objects are objects related to time, which are time hierarchies and their levels. Examples of time hierarchies and levels are Year Based Months Based, Rolling Year Based Months Based, Year Months, and Months. Sorting on calendar based objects is based on their calendar order. By default, the objects are displayed in order of oldest to most current. You can apply a descending sort to arrange objects from most current to oldest. To return the order to the default sequence, either apply an ascending sort or remove the sort all together. Sorting acts the same whether you sort the time member's value or attribute relationship.

A few examples follow.

- Absolute Time
- Based Time



#### **Absolute Time**

#### Example 1

The Year Months hierarchy is on columns and Months hierarchy is on rows in the following view. No sorting has been applied yet.

## View Name: Calendar Based Sorting							
↓ → View Filt	ter						
Vone	2012		2012		2014		
Year >> Months	2012 Actual Sales Units	Actual Sales Amount	2013 Actual Sales Units	Actual Sales Amount	2014 Actual Sales Units	Actual Sales Amount	
January	5,007,078	\$280,571,491	11,579,068	\$650,655,727	6,258,847	\$350,714,364	
February	4,660,289	\$257,865,913	9,929,320	\$549,211,669	5,825,361	\$322,332,391	
March	5,242,572	\$288,803,899	11,862,018	\$652,242,257	6,553,215	\$361,004,874	
April	4,744,533	\$262,246,245	11,733,747	\$645,861,506	6,867,712	\$327,807,806	
May	4,991,233	\$277,181,642	8,413,481	\$468,934,747	7,798,802	\$352,020,685	
<u>June</u>	5,287,949	\$295,804,171	12,242,975	\$682,957,762	8,910,194	\$375,671,295	
July	6,008,177	\$334,309,311	17,933,690	\$997,610,460	9,613,083	\$391,977,666	
August	7,071,967	\$394,294,470	13,414,447	\$755,754,978	12,744,274	\$485,764,510	
September	7,739,849	\$435,840,359	11,125,528	\$627,060,751	12,093,515	\$569,861,272	
<u>October</u>	6,152,790	\$364,922,428	6,581,900	\$394,333,571			
November	6,927,943	\$421,277,394	6,093,229	\$367,487,985			
<u>December</u>	3,740,752	\$227,090,225	3,624,759	\$220,048,674			
Grand Total	67,575,132	\$3,840,207,548	124,534,163	\$7,012,160,085	76,665,003	\$3,537,154,864	

A descending sort is applied to the Year level on columns, changing the order from 2014 to 2012. A descending sort could be applied to Months on rows too, if needed, and that would change the order from December to January. In this case, the order has been left at the default of January to December.

▼ Year >>	<u>2014</u>		<u>2013</u>		2012	)		
Months	Actual Sales Units	Actual Sales Amount	Actual Sales Units	Actual Sales Amount	Actual Sales Units	Actual Sales Amount		
January	6,258,847	\$350,714,364	11,579,068	\$650,655,727	5,007,078	\$280,571,491		
February	5,825,361	\$322,332,391	9,929,320	\$549,211,669	4,660,289	\$257,865,913		
March	6,553,215	\$361,004,874	11,862,018	\$652,242,257	5,242,572	\$288,803,899		
<u>April</u>	6,867,712	\$327,807,806	11,733,747	\$645,861,506	4,744,533	\$262,246,245		
May	7,798,802	\$352,020,685	8,413,481	\$468,934,747	4,991,233	\$277,181,642		
<u>June</u>	8,910,194	\$375,671,295	12,242,975	\$682,957,762	5,287,949	\$295,804,171		
July	9,613,083	\$391,977,666	17,933,690	\$997,610,460	6,008,177	\$334,309,311		
August	12,744,274	\$485,764,510	13,414,447	\$755,754,978	7,071,967	\$394,294,470		
September	12,093,515	\$569,861,272	11,125,528	\$627,060,751	7,739,849	\$435,840,359		
<u>October</u>			6,581,900	\$394,333,571	6,152,790	\$364,922,428		
November			6,093,229	\$367,487,985	6,927,943	\$421,277,394		
<u>December</u>			3,624,759	\$220,048,674	3,740,752	\$227,090,225		
Grand Total	76,665,003	\$3,537,154,864	124,534,163	\$7,012,160,085	67,575,132	\$3,840,207,548		

# Example 2

There are two levels from the Year Months hierarchy showing in this view. No sorting has been applied yet. The Year level has been filtered to display the years 2012 through 2014.

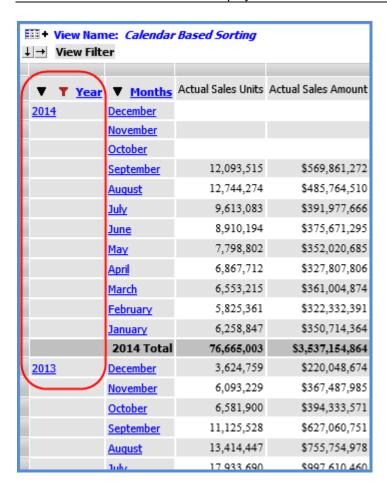
		ar Based Sorting	
Y <u>Year</u>	<u>Months</u>	Actual Sales Units	Actual Sales Amount
2012	<u>January</u>	5,007,078	\$280,571,491
	February	4,660,289	\$257,865,913
	<u>March</u>	5,242,572	\$288,803,899
	<u>April</u>	4,744,533	\$262,246,245
	<u>May</u>	4,991,233	\$277,181,642
	<u>June</u>	5,287,949	\$295,804,171
	<u>July</u>	6,008,177	\$334,309,311
	<u>August</u>	7,071,967	\$394,294,470
	<u>September</u>	7,739,849	\$435,840,359
	<u>October</u>	6,152,790	\$364,922,428
	November	6,927,943	\$421,277,394
	<u>December</u>	3,740,752	\$227,090,225
	2012 Total	67,575,132	\$3,840,207,548
2013	<u>January</u>	11,579,068	\$650,655,727
	<u>February</u>	9,929,320	\$549,211,669
	<u>March</u>	11,862,018	\$652,242,257
	<u>April</u>	11,733,747	\$645,861,506
	<u>May</u>	8,413,481	\$468,934,747
	luno	12 242 975	\$687 057 767

A descending sort on Months changes the order of months for each year from the most current of December back to the oldest month of January.

▼ <u>Year</u>	▼ Months	Actual Sales Units	Actual Sales Amount				
2012	<u>December</u>	3,740,752	\$227,090,225				
	<u>November</u>	6,927,943	\$421,277,394				
	<u>October</u>	6,152,790	\$364,922,428				
	<u>September</u>	7,739,849	\$435,840,359				
	<u>August</u>	7,071,967	\$394,294,470				
	<u>July</u>	6,008,177	\$334,309,311				
	<u>June</u>	5,287,949	\$295,804,171				
	<u>May</u>	4,991,233	\$277,181,642				
	<u>April</u>	4,744,533	\$262,246,245				
	<u>March</u>	5,242,572	\$288,803,899				
	<u>February</u>	4,660,289	\$257,865,913				
	<u>January</u>	5,007,078	\$280,571,491				
	2012 Total	67,575,132	\$3,840,207,548				
2013	<u>December</u>	3,624,759	\$220,048,674				
	<u>November</u>	6,093,229	\$367,487,985				
	<u>October</u>	6,581,900	\$394,333,571				
	<u>September</u>	11,125,528	\$627,060,751				
	<u>August</u>	13,414,447	\$755,754,978				
	1ulv	17 933 690	\$997 610 460				

A descending sort on Year changes the order of years to the most current of 2014 to the oldest year, which is 2012. The current month for 2014 is September, and that is why the months of December, November, and October do not have any data yet.

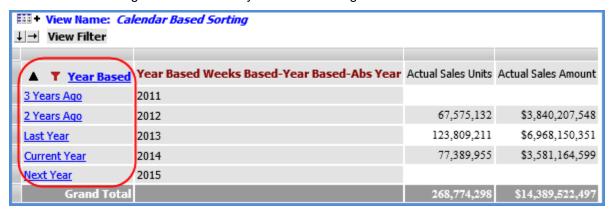
**Note:** For period based views that use time hierarchies, it is recommended that you set the Relationship Filter and Empty Filter properties to No for the axis where the time hierarchies are used. In this example, both properties were set to No for rows. This will ensure that all periods will display in the view, even those for which no data exists. For example, if both properties had been set to Yes for the rows in this view, then the rows for December through October of 2010 would not have displayed.



#### **Based Time**

#### Example 1

The next view has the Year Based Weeks Based hierarchy on rows. The first level, Year Based, is displayed and it is sorted in ascending order. The oldest year of 3 Years Ago shows first.



# Example 2

This view has the Rolling Year Based Months Based hierarchy on rows. Both the Year Based and Months Based levels are displayed. There is already a descending sort on the first level.

↓ → View Filter	Calendar Based Sor	ung		
▼ ▼ <u>Year</u> <u>Based</u>	Months Based	Rolling Year Based Months Based-Months Based -Abs Months	Actual Sales Units	Actual Sales Amount
Current Year	6 Months Ago	2014/March	6,553,215	\$361,004,87
	5 Months Ago	2014/April	6,867,712	\$327,807,80
	4 Months Ago	2014/May	7,798,802	\$352,020,68
	3 Months Ago	2014/June	8,910,194	\$375,671,29
	2 Months Ago	2014/July	9,613,083	\$391,977,66
	Previous Month	2014/August	12,744,274	\$485,764,51
	Current Month	2014/September	12,093,515	\$569,861,27
	Current Year Tota		64,580,794	\$2,864,108,10
<u>Last Year</u>	6 Months Ago	2013/March	11,862,018	\$652,242,25
	5 Months Ago	2013/April	11,733,747	\$645,861,50
	4 Months Ago	2013/May	8,413,481	\$468,934,74
	3 Months Ago	2013/June	12,242,975	\$682,957,7
	2 Months Ago	2013/July	17,933,690	\$997,610,4
	Previous Month	2013/August	13,414,447	\$755,754,9
	Current Month	2013/September	11,125,528	\$627,060,7
	Next Month	2013/October	6,581,900	\$394,333,5
	2 Months Out	2013/November	6,093,229	\$367,487,98
	3 Months Out	2013/December	3,624,759	\$220,048,67
	4 Months Out	2014/January	6,258,847	\$350,714,36
	5 Months Out	2014/February	5,825,361	\$322,332,39
	Last Year Tota		115,109,984	\$6,485,339,4
Grand Tot	al		179,690,778	\$9,349,447,5

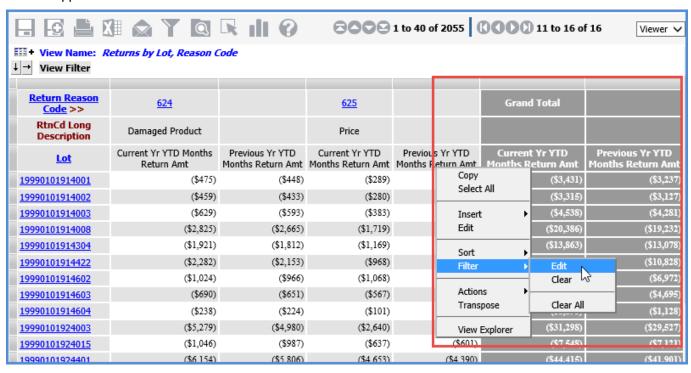
A descending sort is applied to the attribute relationship for the Months Based level. This arranges the Months members within each year from the most current to the oldest month.

→ View Filter				
▼ <u>Year</u> Based	Months Based	▼ Rolling Year Based Months Based-Months Based-Abs Months	Actual Sales Units	Actual Sale Amount
Current Year	Current Month	2014/September	12,093,515	\$569,861
	Previous Month	2014/August	12,744,274	\$485,764
	2 Months Ago	2014/July	9,613,083	\$391,977
	3 Months Ago	2014/June	8,910,194	\$375,671
	4 Months Ago	2014/May	7,798,802	\$352,020
	5 Months Ago	2014/April	6,867,712	\$327,807
	6 Months Ago	2014/March	6,553,215	\$361,004
	Current Year Total		64,580,794	\$2,864,108
ast Year	5 Months Out	2014/February	5,825,361	\$322,332
	4 Months Out	2014/January	6,258,847	\$350,714
	3 Months Out	2013/December	3,624,759	\$220,048
	2 Months Out	2013/November	6,093,229	\$367,487
	Next Month	2013/October	6,581,900	\$394,333
	Current Month	2013/September	11,125,528	\$627,060
	Previous Month	2013/August	13,414,447	\$755,754
	2 Months Ago	2013/July	17,933,690	\$997,610
	3 Months Ago	2013/June	12,242,975	\$682,957
	4 Months Ago	2013/May	8,413,481	\$468,934
	5 Months Ago	2013/April	11,733,747	\$645,861
	6 Months Ago	2013/March	11,862,018	\$652,242
	Last Year Total		115,109,984	\$6,485,339

# **Guidelines for Sorting and Filtering on Totals**

Here is some helpful information to know when sorting or filtering totals.

- Casual users can edit existing sorts and filters on totals.
- Advanced users and administrators can add new sorts and filters on totals and edit existing sorts and filters.
- This feature is available on the Grand Totals that are on the same axis as the measure items. For example, the measures items in this view are in columns. The Grand Totals in columns can have sorts and filters applied to them.

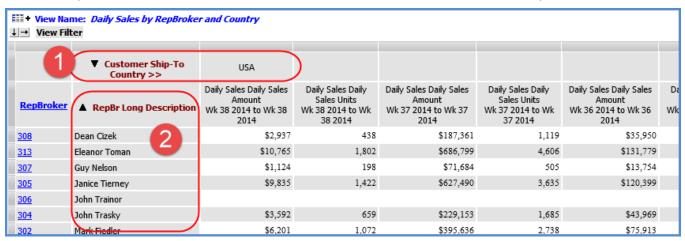


# Can Multiple Objects be Sorted in Views?

In some cases, multiple objects can be sorted. More than one level can be sorted in the same view, but only one measure item at a time can be sorted in a view.

See also: Why were Sorts Removed from Measure Items?.

In this example, there is a sort on the level in columns and a sort on an attribute relationship for the level on rows.



In this example, there is a sort on the Sales Units measure item.



Applying a sort to the Sales Amount measure item removes the sort that had been on the Sales Units measure item.



# Do Sorts Impact Measure Items with Conditional Formatting including Images and Indicators?

Yes. When a measure item with an associated image or indicator is sorted, the value of the measure item is used in the sort. The image and indicator are ignored by the sort.

#### Why can't I Filter or Sort Cumulative Calculated Measure Items?

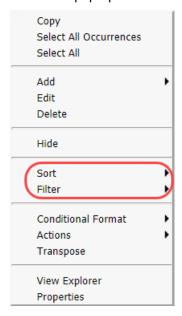
The results of a cumulative calculation are accumulating in nature; therefore, sorting and filtering functionality is not available on calculated measure items that use cumulative functions in their expression. Those functions include the Cumulative Total, Cumulative Percent of Total, ABC Cumulative, and ABC Cumulative Percent of Total functions.

- Sort and Filter options will not display on the <u>pop-up menu</u> of a calculated measure item that uses a cumulative function.
- Sort and Filter properties will be disabled in the Properties window for those measure items.
- Filtering those types of measure items will not be permitted when using the Data tab of the Filters window.
- If a non-cumulative calculated measure item has been sorted or filtered and you want to change it to a cumulative calculated measure item, you must first remove the sorting or filtering.

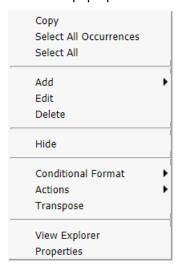
The view that follows shows an example of this scenario. The "Percent of Total" calculated measure item can be sorted and filtered because it does not perform a cumulative calculation. The "Cumulative % of Total" calculated measure item cannot be sorted and filtered.



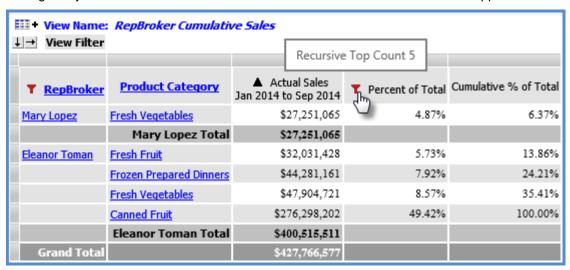
Here's the pop-up menu for Percent of Total, with the Sort and Filter options:



Here's the pop-up menu for Cumulative Percent of Total, without Sort and Filter options:



The "Percent of Total" calculated measure item in the next view has a Recursive Top Count filter applied to it. If you attempted to change the expression for "Percent of Total" to a cumulative percent of total, a message would display stating that you need to remove the filter before the cumulative function can be applied to the expression.



# Why is a Sort Property Disabled?

This can happen when:

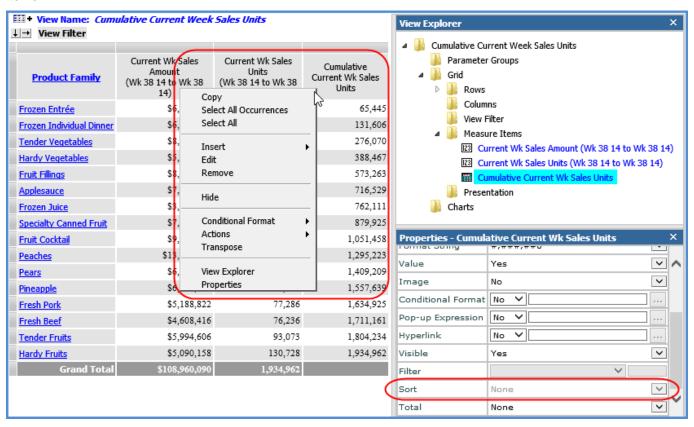
- You're a casual user.
- You're working with a cumulative calculated measure item.
- You're working with measure items and there are levels on the same axis as level items.
- You are trying to sort Grand Totals that are on the axis opposite from the measure item axis. See Guidelines for Sorting and Filtering on Totals.

#### Casual User

The grid pop-up menu for casual users does not have a Sort option on it. Casual users are only able to edit existing sorts by clicking the sort icon (▲ or ▼) next to the sorted level, attribute relationship, or measure item.

#### **Cumulative Calculated Measure Item**

Sorting is not permitted on calculated measure items that use cumulative functions in their expression. Those functions are the Cumulative Total, Cumulative Percent of Total, ABC Cumulative, and ABC Cumulative Percent of Total functions. The Sort option will not display on the grid pop-up menu of a calculated measure item that uses a cumulative function. Also, the Sort property will always be disabled in the Properties window for those measure items.

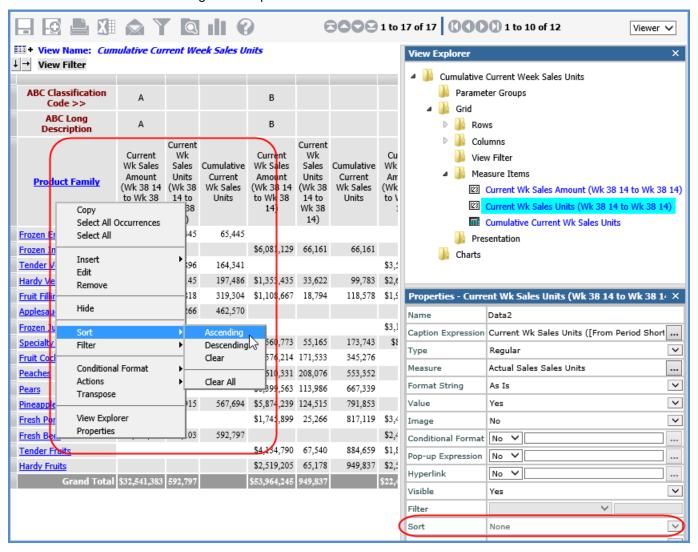


#### Levels on Same Axis as Measure Items

If there are levels on the same axis as the measure items, then Sort will be disabled in measure item Properties windows. You must first sort the measure item via the grid in relation to a particular level member on the measure item axis.

In this view, the measure items are on the columns axis and there is an ABC Classification Code level on columns. The Sort property is disabled in all measure item Properties windows. You can sort by right-clicking an instance of a measure item in the grid (for A, B, or C code) and using the Sort option on the pop-up menu.

After setting up the initial sort that way, the Sort property will be enabled in the Properties window. You can then edit or remove the sort from the grid or Properties window.



#### Why were Sorts Removed from Measure Items?

Sorts will be removed from measure items in these cases:

- Case 1 You sort one measure item then apply a sort to a different measure item.
- <u>Case 2</u> The sort on the measure item was associated with a particular level, and you remove that level from the view.
- Case 3 You sort a measure item then sort a level on the opposite axis.

See also Can Multiple Objects be Sorted in Views?

Case 1
In this view, there is a sort on the Sales Units measure item.

# View Name: Monthly Sales Views filtered by	Product Group	ı		
<b>↓</b> → View Filter <b>Y</b> Product Group				
▼ Year Based >>	Last Year		Current Year	
Year Based Months Based-Year Based-Abs Year	2013		2014	
<u>Months</u>	Sales Amount	Sales Units	Sales Amount	▲ Sales Units
<u>October</u>	\$134,726,370	2,325,511		
<u>November</u>	\$120,630,704	2,057,686		
<u>December</u>	\$75,669,211	1,281,288		
<u>January</u>	\$191,238,484	3,486,263	\$93,102,611	1,695,884
<u>February</u>	\$166,186,115	3,055,288	\$97,153,548	1,782,815
<u>March</u>	\$170,458,747	3,141,045	\$99,415,393	1,828,058
April	\$180,174,622	3,359,940	\$103,686,072	2,232,093
May	\$152,231,793	2,821,829	\$110,814,559	2,541,088
<u>June</u>	\$204,244,740	3,787,346	\$117,183,692	2,889,562
<u>July</u>	\$281,383,297	5,152,400	\$120,192,437	3,022,329
<u>August</u>	\$242,788,266	4,446,061	\$137,459,746	3,672,251
September	\$189,546,211	3,484,795	\$180,593,183	3,963,651
Grand Total	\$2,109,278,560	38,399,452	\$1,059,601,242	23,627,731

Applying a sort to the Sales Amount measure item removes the sort that had been on the other measure item.



Case 2

There is a sort on the Daily Sales Amount measure item for member C of the Product ABC Class level.

Product Brand   Daily Sales Amount Wk 38 2014   to Wk 38 20	
009         Farm Fresh         \$10,432         1,469         \$14,281         2,671         \$5,384         994         \$8,000           010         Prime Grown         \$6,656         1,224         \$4,334         593           002         Dew Drop         \$1,166         438         \$2,955         429           007         SugarDrop         \$3,903         531           001         Tip Top         \$3,903         531           003         SuperSweet         \$1,436         352           004         Idaho Delight         \$1,573         414           005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3,544           008         Bing-a-ling         \$4,54         \$4,54	Units 14 Wk 38
010         Prime Grown         \$6,656         1,224         \$4,334         593           002         Dew Drop         \$1,166         438         \$2,955         429           007         SugarDrop         \$2,071         305           001         Tip Top         \$3,903         531           003         SuperSweet         \$1,436         352           004         Idaho Delight         \$1,573         414           005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3           008         Bing-a-ling         \$4	17
002         Dew Drop         \$1,166         438         \$2,955         429           007         SugarDrop         \$2,071         305           001         Tip Top         \$3,903         531           003         SuperSweet         \$1,436         352           004         Idaho Delight         \$1,573         414           005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3,000           008         Bing-a-ling         \$4,000	93 1,56
007         SugarDrop         \$2,071         305           001         Tip Top         \$3,903         531           003         SuperSweet         \$1,436         352           004         Idaho Delight         \$1,573         414           005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3,008           Bing-a-ling         \$4,008         \$4,008         \$4,008	
001         Tip Top         \$3,903         531           003         SuperSweet         \$1,436         352           004         Idaho Delight         \$1,573         414           005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3,008           Bing-a-ling         \$4,008         \$4,008         \$4,008         \$4,008	
003         SuperSweet         \$1,436         352           004         Idaho Delight         \$1,573         414           005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3,008           Bing-a-ling         \$4,008         \$4,008         \$4,008	
004         Idaho Delight         \$1,573         414           005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3,008           Bing-a-ling         \$4,008         \$4,008         \$4,008         \$4,009	
005         Farm Crisp         \$2,835         779           006         Southern Sweet         \$3,544         531         \$3,000           008         Bing-a-ling         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$4,000         \$5,000	
006         Southern Sweet         \$3,544         531         \$3,008           Bing-a-ling         \$4,008	
008 Bing-a-ling \$4	
	34 83
012 Home Cookin' \$7,132 794 \$6,947 809	22 57
999 Private Label \$3,495 750 \$1,440 374	

The Product ABC Class level is removed from the view; therefore, the sort is removed.

Product Brand	PBrnd Long Description	Daily Sales Amount Wk 38 2014 to Wk 38 2014	Daily Sales Units Wk 38 2014 to Wk 38 2014			
011	First Choice	\$22,353	4,666			
009	Farm Fresh	\$38,290	6,697			
010	Prime Grown	\$10,990	1,817			
002	Dew Drop	\$4,121	867			
007	SugarDrop	\$2,071	305			
001	Тір Тор	\$3,903	531			
003	SuperSweet	\$1,436	352			
004	Idaho Delight	\$1,573	414			
005	Farm Crisp	\$2,835	779			
006	Southern Sweet	\$6,579	1,365			
008	Bing-a-ling	\$4,022	574			
012	Home Cookin'	\$14,080	1,603			
999	Private Label	\$4,935	1,124			
Grand Total		\$117,188	21,094			

Case 3
In this view, measure items are on the rows axis. There is a sort on one of the measure items.

III - View Nar I → View Filt			gion, RepBroker					
		RepBroker >>	300	<u>305</u>	<u>313</u>	312	<u>302</u>	
Region	Rgn Long Description	RepBr Long Description	Nicole Toscano	Janice Tierney	Eleanor Toman	Mike Hartney	Mark Fiedler	Joh
330	East	Budget Amount Working	\$5,078,516,759	\$2,219,250,196	\$1,852,719,651	\$1,423,069,721	\$600,722,027	\$
	(	▼ Sales Amount	\$4,977,057,972	\$2,188,247,896	\$1,813,251,060	\$1,392,813,857	\$588,990,820	s
		Cumulative Sales	\$4,977,057,972.48	\$7,165,305,868.54	\$8,978,556,928.88	\$10,371,370,786.37	\$10,960,361,606.59	\$11,315
		Sales % Total	41.00%	18.03%	14.94%	11.47%	4.85%	
<u>331</u>	West	Budget Amount Working					\$314,604,279	\$
		Sales Amount					\$312,314,732	\$
		Cumulative Sales					\$312,314,732.03	\$457
		Sales % Total					13.88%	
Grand Total		Budget Amount Working	\$5,078,516,759	\$2,219,250,196	\$1,852,719,651	\$1,423,069,721	\$915,326,307	s
		Sales Amount	\$4,977,057,972	\$2,188,247,896	\$1,813,251,060	\$1,392,813,857	\$901,305,552	\$
		Cumulative Sales	\$4,977,057,972.48	\$7,165,305,868.54	\$8,978,556,928.88	\$10,371,370,786.37	\$11,272,676,338.62	\$11,772
		Sales % Total						

Then a sort is applied to the level on columns, which removes the measure item sort.

III − View Name: Sales and Budget by Region, RepBroker  ↓ → View Filter								
		RepBroker >>	318	315	313	312	309	<u> </u>
Region	Rgn Long Description	RepBr Long Description	Neil MacDonald	Mary Lopez	Eleanor Toman	Mike Hartney	Terry Bruno	Dean
330	East	Budget Amount Working			\$1,852,719,651	\$1,423,069,721	\$321,722,996	
		Sales Amount			\$1,813,251,060	\$1,392,813,857	\$316,327,928	
		Cumulative Sales			\$1,813,251,060.34	\$3,206,064,917.83	\$3,522,392,846.22	
		Sales % Total			14.94%	11.47%	2.61%	
331	West	Budget Amount Working	\$176,582,394	\$479,040,355				\$399
		Sales Amount	\$175,899,506	\$474,781,894				\$389
		Cumulative Sales	\$175,899,506.29	\$650,681,400.34				\$1,040,3
		Sales % Total	7.81%	21.09%				
Grand Total		Budget Amount Working	\$176,582,394	\$479,040,355	\$1,852,719,651	\$1,423,069,721	\$321,722,996	\$39!
		Sales Amount	\$175,899,506	\$474,781,894	\$1,813,251,060	\$1,392,813,857	\$316,327,928	\$389
		Cumulative Sales	\$175,899,506.29	\$650,681,400.34	\$2,463,932,460.68	\$3,856,746,318.17	\$4,173,074,246.56	\$4,562,7]
		Sales % Total						