

Working with Sorts

Stratum.Viewer 7



Getting Started

- [Access to Sorting](#)
- [Introduction to Sorting](#)

Tasks

- [Apply a New Sort](#)
- [Edit Existing Sorts](#)
- [Clear Sorts](#)

Additional Information

Windows

- [Grid Pop-up Menus](#)
- Properties Windows for:
 - [Attribute Relationships](#)
 - [Individual Measure Items](#)
 - [Levels](#)

Advanced Concepts

- [Calendar Based Sorting](#)
- [Guidelines for Sorting and Filtering Totals](#)
- [Treat Attribute Relationship Data As Numbers In Views](#)

FAQ's

- [Can Multiple Objects be Sorted in Views?](#)
- [Do Sorts Impact Measure Items with Conditional Formatting including Images and Indicators?](#)
- [Why can't I Filter or Sort Cumulative Calculated Measure Items?](#)
- [Why is a Sort Property Disabled?](#)
- [Why were Sorts Removed from Measure Items?](#)

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	✗	✓*
Advanced	✓	✓
View Administrator	✓	✓
Security Administrator	✓	✓

***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.

Numeric Sorts

Stratum.Viewer will sort measure data numerically. Attribute relationships defined as a number will also be sorted numerically. The following view has an ascending sort on the first measure item.

View Name: Sales by Type and Territory							
View Filter							
Customer Type	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 Ext 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	\$1,407,532	
	Gulf Coast	\$1,356,559	\$2,107,039	-\$750,480	\$1,668,568	\$2,107,039	
	Northwest	\$1,686,239	\$1,391,828	\$294,411	\$2,074,074	\$1,391,828	
	Great Plains	\$4,544,327	\$4,838,341	-\$294,014	\$5,589,522	\$4,838,341	
	Western Provinces	\$4,832,958	\$5,513,788	-\$680,830	\$5,944,538	\$5,513,788	
	Midlantic	\$5,103,940	\$5,629,220	-\$525,280	\$6,277,847	\$5,629,220	
	Eastern Atlantic Provinces	\$6,627,886	\$7,647,500	-\$1,019,614	\$8,152,299	\$7,647,500	
	South Central	\$10,714,654	\$12,376,633	-\$1,661,979	\$13,179,024	\$12,376,633	
	New England	\$13,481,930	\$15,779,759	-\$2,297,829	\$16,582,775	\$15,779,759	
Grand Total		\$49,599,938	\$56,691,641	-\$7,091,703	\$61,007,924	\$56,691,641	

The next view has a descending sort on the Prod Current List Price attribute relationship. It's a numeric sort because the attribute relationship was set up to have its data treated as numbers in this view.

View Filter:		More Info			
▼ Product	▼ ▼ Prod Current List Price	Budget Budget Amount Frozen Jan 2020 to Sep 2020	Actual Sales Sales Amount Jan 2020 to Sep 2020	Budget Budget Units Frozen Jan 2020 to Sep 2020	Actual Sales Sales Units Jan 2020 to Sep 2020
Applesauce 106oz PL* 4D	65	\$231,221	\$375,023	4,809	6,193
Blackberries 12oz BR* 4D	53	\$11,156	\$18,922	285	384
Blueberries 12oz BR* 4D	53	\$6,458	\$10,806	167	222
Applesauce 12oz BR* 4D	47	\$16,718	\$28,274	489	656
Baby Carrots 4D	47	\$1,053,108	\$1,715,741	33,344	43,341
Apples Red Delicious 4D	46	\$5,150,594	\$8,546,319	167,167	220,334
Applesauce 12oz PL* 4D	41	\$69,023	\$112,455	2,330	3,014
Bananas 4D	26	\$323,200	\$558,491	16,472	22,578
Grand Total		\$6,861,478	\$11,366,032	225,064	296,722

Alphanumeric Sorts

Stratum.Viewer will sort most non-calendar based objects alphanumerically. Attribute relationship designated as text (default) will be sorted alphanumeric. The following view has a descending sort on the Region level in columns and ascending sort on the UPC Long Description attribute relationship in rows. The sort on the attribute relationship is treated alphanumerically in this example because it was set up to have its data treated as text in this view.

View Name: Total Number Products Sold										
View Filter										
▼ ▼ Region >>		331		330						
Rgn Long Description		West		East						
UPC Global Number	▲ 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	Sales Amount Q3 2014 to Q3 2014
0 - 24000 - 12431 - 4	Applesauce 106oz PL*	\$12,298,965	(\$254,621)	50	103	\$43,709,710	(\$394,621)	94	103	
0 - 24000 - 12531 - 4	Applesauce 12oz PL*			50	103	\$30,325,482	(\$213,278)	94	103	
0 - 02749 - 25408 - 6	Asparagus	\$11,748,521	(\$372,975)	50	103	\$32,856,000	(\$1,057,052)	94	103	
0 - 02749 - 99267 - 6	Cherries, Bing	\$14,001,060	(\$529,751)	50	103	\$32,473,135	(\$1,202,761)	94	103	
0 - 13800 - 30321 - 9	Frozen Lasagna Dinner	\$16,962,271		50	103	\$59,440,138		94	103	
0 - 13800 - 78934 - 9	Meatloaf, Frozen	\$15,994,439		50	103	\$57,645,091		94	103	
0 - 06403 - 92736 - 2	Orange Juice Conc.	\$9,566,166		50	103	\$31,563,473		94	103	
0 - 24000 - 12520 - 4	Peach 6oz LncHpk BR*			50	103	\$29,887,455	(\$252,701)	94	103	
0 - 24000 - 12491 - 4	Peach Slcs LS 106oz BR*	\$2,320,479	(\$108,534)	50	103	\$28,007,355	(\$304,192)	94	103	
0 - 24000 - 12591 - 4	Peach Slcs LS 12oz BR*			50	103	\$38,969,187	(\$176,420)	94	103	
0 - 24000 - 12528 - 4	Pear 6oz LncHpk LS			50	103	\$25,837,466	(\$171,811)	94	103	
0 - 24000 - 12517 - 4	Pnappl Slcs 12 oz BR*			50	103	\$27,126,524	(\$318,541)	94	103	
0 - 70606 - 02232 - 8	Pork Chops - Butterfly	\$8,406,051		50	103	\$34,580,280		94	103	
0 - 79453 - 59433 - 6	Romaine Specialty Salad	\$5,762,298		50	103	\$26,027,675		94	103	
0 - 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	

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 and their attribute relationships. In this view, descending sorts exist on the Year Based level in columns and Months level in rows.

View Name: <i>Monthly Sales Views</i>						
View Filter <i>Company</i>						
▼ Year Based >>	Current Year			Last Year		
▼ Months	Sales Amount	Sales Units	Avg Selling Price	Sales Amount	Sales Units	Avg Selling Price
December				\$220,048,674	3,624,759	\$60.71
November				\$367,487,985	6,093,229	\$60.31
October				\$394,333,571	6,581,900	\$59.91
September	\$569,861,272	12,093,515	\$47.12	\$627,060,751	11,125,528	\$56.36
August	\$485,764,510	12,744,274	\$38.12	\$755,754,978	13,414,447	\$56.34
July	\$391,977,666	9,613,083	\$40.78	\$997,610,460	17,933,690	\$55.63
June	\$375,671,295	8,910,194	\$42.16	\$682,957,762	12,242,975	\$55.78
May	\$352,020,685	7,798,802	\$45.14	\$468,934,747	8,413,481	\$55.74
April	\$327,807,806	6,867,712	\$47.73	\$645,861,506	11,733,747	\$55.04
March	\$361,004,874	6,553,215	\$55.09	\$652,242,257	11,862,018	\$54.99
February	\$322,332,391	5,825,361	\$55.33	\$549,211,669	9,929,320	\$55.31
January	\$350,714,364	6,258,847	\$56.03	\$650,655,727	11,579,068	\$56.19
Grand Total	\$3,537,154,864	76,665,003	\$46.14	\$7,012,160,085	124,534,163	\$56.31

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

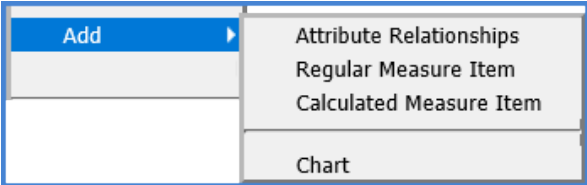
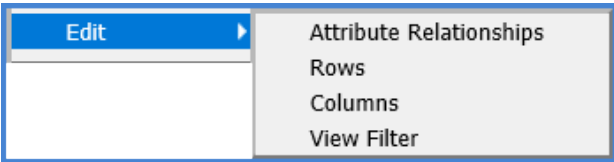
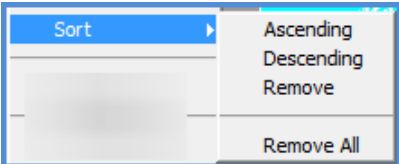
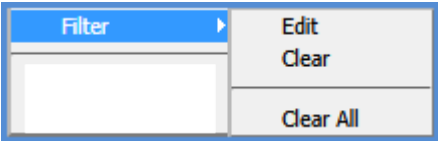
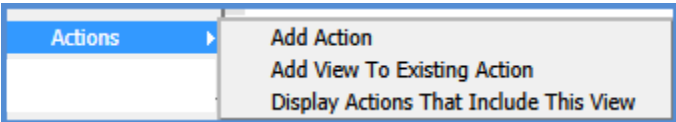
Right-click objects in views to display available functionality for them such as inserting measure items, transposing the grid, filtering objects in the grid, and so forth. Many of the functions can also be controlled through view explorer and the Properties window, giving you several ways to make changes. 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.



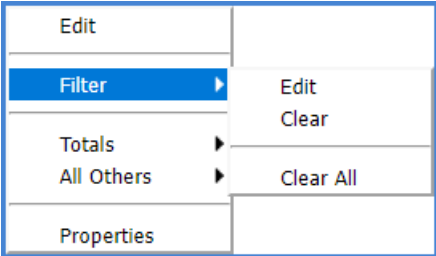
1	More Info – Opens more details about the attribute relationship in the Stratum Glossary.
----------	---

2	<p>Copy - This option allows you to copy sections of a view that you have selected.</p> <p>Paste - Allows you to paste data into update enabled cells. This option only shows in planning enabled views.</p> <p>Select All - Use this option to select the entire grid.</p>
3	<p>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.</p>  <p>Edit - Edit the attribute relationships or edit hierarchies on the rows, columns, or view filter.</p> 
4	<p>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.</p>
5	<p>Sort - Sort options are Ascending, Descending, Remove, and Remove All.</p>  <p>Filter - Filter options are Edit, Clear, and Clear All.</p> 
6	<p>Actions – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.</p>  <p>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.</p>
7	<p>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.</p>

	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.

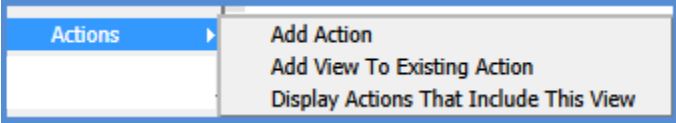


General Pop-up Menu

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

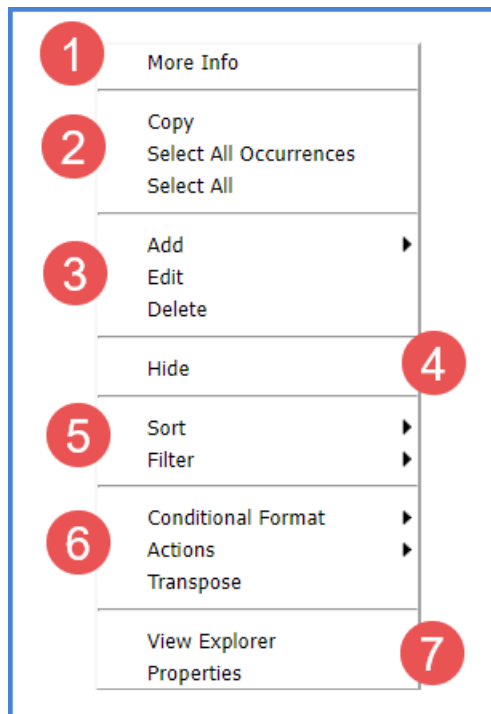


1	<p>Copy - This option allows you to copy sections of a view that you have selected.</p> <p>Paste - Allows you to paste data into update enabled cells. This option only shows in planning enabled views.</p> <p>Select All - Use this option to select the entire grid.</p>
2	<p>Add - The sub menu has options 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.</p> <div data-bbox="263 1547 820 1692"> </div> <p>Edit - Edit the hierarchies on the rows, columns, or view filter.</p> <div data-bbox="263 1755 820 1881"> </div>

<p>3</p>	<p>Actions – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.</p>  <p>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.</p>
<p>4</p>	<p>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.</p>

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.



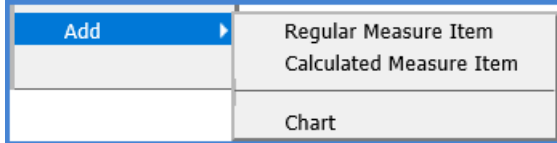
Or, right-click the caption of a measure item in a Grand Total row or column to work with values in that area of a view, such as by applying sorts and filters to them.

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

<p>1</p>	<p>More Info – Opens more details about the measure item in the Stratum Glossary.</p>
<p>2</p>	<p>Copy - This option allows you to copy sections of a view that you have selected.</p> <p>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.</p> <p>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.</p> <p>Select All - Use this option to select the entire grid.</p>

3

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.

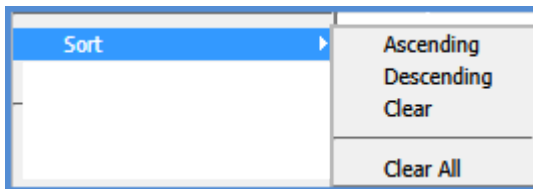
Delete - Deletes the measure item from the view definition without confirmation. It will no longer display in the view explorer.

4

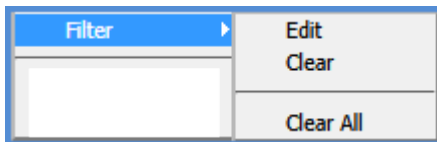
Hide - When a measure item is right-clicked and Hide is selected, the selected object is hidden from the grid. The Visible property for the measure item changes to No. From view explorer, you can drag a measure item back in the grid if needed, or you can change the Visible property to Yes.

5

Sort - Sort options are Ascending, Descending, Clear, and Clear All.

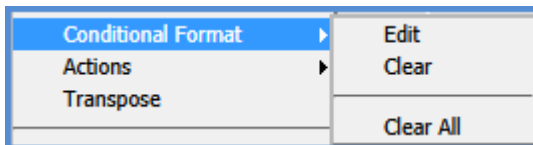


Filter - Filter options are Edit, Clear, and Clear All.

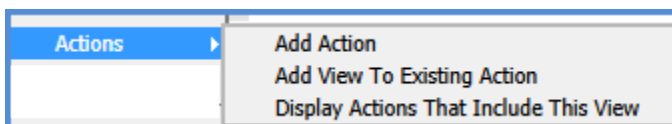


6

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.



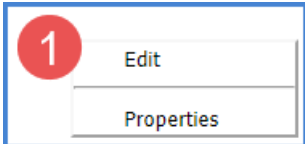
Actions – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.




	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.
7	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.



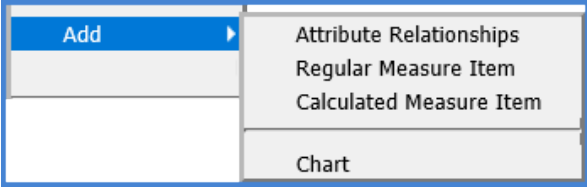
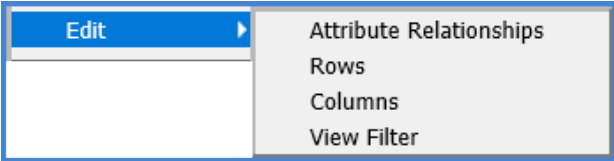
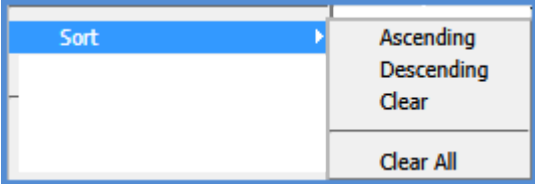
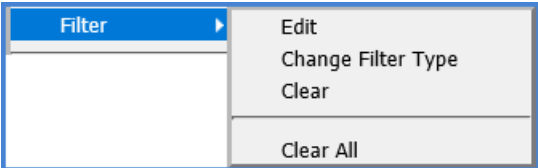
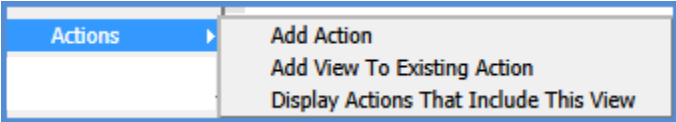
1	Edit - Edit the hierarchies in the view filter. A shortcut to adding hierarchies to the View Filter is to click the Add icon  that's provided in the View Filter section of the view.
---	---

Levels Pop-up Menu

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

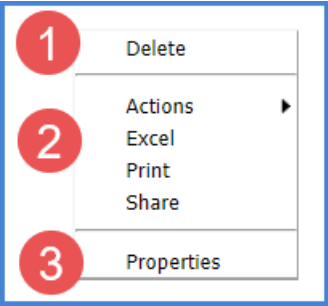


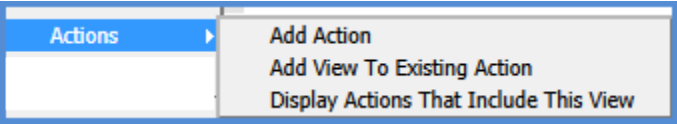
1	More Info – Opens more details about the level in the Stratum Glossary. If you right-click a level's member and choose More Info, you will see more details about that member such as its value and attribute relationships for the level.
2	Copy - This option allows you to copy sections of a view that 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.

<p>3</p>	<p>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.</p>  <p>Edit - Edit the attribute relationships or edit hierarchies on the rows, columns, or view filter.</p> 
<p>4</p>	<p>Hide - When a level is right-clicked and Hide is selected, the selected object is hidden from the grid. The Visible property for the level changes to No. From view explorer, you can drag a level back in the grid if needed, or you can change the Visible property to Yes.</p>
<p>5</p>	<p>Sort - Sort options are Ascending, Descending, Clear, and Clear All.</p>  <p>Filter - Filter options are Edit, Change Filter Type, Clear, and Clear All. Change Filter Type opens a window where you can select the type of filter to set up or change. By default, a new filter you create from the Filter > Edit option is a list of members from the level with which you are working.</p> 
<p>6</p>	<p>Actions – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.</p>  <p>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.</p>
<p>7</p>	<p>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.</p> <p>Properties - Click to maintain the level properties including the filter, sort, totaling, visibility, and display text.</p>

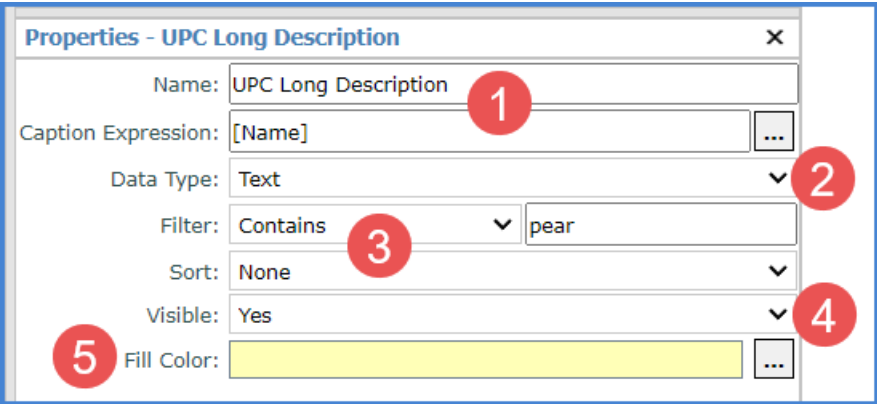
View Name Pop-up Menu

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



1	Delete - Choose Delete to delete the view with confirmation. Anyone can delete their own personal views, but only view and security administrators may delete global views.
2	Actions – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.  Excel - Click to initiate an export of the view to Microsoft Excel. Print - Click to print the active page of the view. Share – Click to open a window with the URL for the view. Click Copy to copy the URL to use for sharing with other Stratum users.
3	Properties - Click to maintain the view properties including the name, description, type and view group.

Properties Window for Attribute Relationships



1	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.
---	---

2	Data Type – Used to control whether the data for the attribute relationship is treated as Text or Number values in the active view. If set to Text, the data will display left aligned in its column and be treated as non-numeric data for filters and sorts. If set to Number, the data will display right aligned in its column and be treated as numeric for filters and sorts.
3	Filter – Use to add, edit, or remove a filter on an attribute relationship. 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. Sort - Use to add, edit, or remove Ascending and Descending sorts.
4	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.
5	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

The screenshot shows the 'Properties - Actual Sales Sales Amount Wk 38 2020 to Wk 38 2020' window. The properties are as follows:

- 1** Name: Data1
- 2** Caption Expression: [Measure] [From Period Short Desc] [From Year YYYY]
- 2** Type: Regular
- Measure: Actual Sales Sales Amount
- 3** Format String: As Is
- Fill Color: (Light Blue)
- 4** Show Value: Yes
- Display Value As: Sum
- Show Image: No
- 5** Conditional Format: Yes (Sales less than 100K)
- 5** Pop-up Expression: Yes ("Red indicator represents when sales are below")
- Hyperlink: No
- 6** Visible: Yes
- 7** Filter: Recursive Top Count (15)
- Sort: Descending
- Total: Total
- 8** Drilldown View: No

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
---	--

	<p>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.</p> <p>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.</p>
2	<p>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 “Regular” if you are inserting or editing a regular measure item.</p> <hr/> <p>Note: See the next table for information about calculated and distinct calculated types.</p> <hr/> <p>Measure – This field is a read only field that displays the underlying measure you selected when setting up the regular measure item.</p> <ul style="list-style-type: none"> 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. 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.
3	<p>Format String – Use this drop-down list to apply a format such as decimal places, monetary symbols, commas, or a combination of formatting.</p> <p>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.</p>
4	<p>Show 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.</p> <p>Display Value As – This drop-down list only displays for measure items with time ranges. This property defaults to Sum, and its other options can be used to create Key Performance Indicators (KPIs) based on the selected measure.</p> <ul style="list-style-type: none"> Sum - The sum of the values for the measure item within the specified time range. This is the default and most commonly used setting for this property. Min - The minimum value for the measure item within the specified time range. Max - The maximum value for the measure item within the specified time range. Avg - The average value for the measure item within the specified time range. Med - The median value for the measure item within the specified time range. StdDev - The Standard deviation of the measure item values within the specified time range. The standard deviation is the average amount of variability in your dataset. It tells you, on average, how far each value lies from the mean. Variance - The measure of dispersion of data points from the mean for measure item values within the specified time range. Low variance indicates that data points are generally similar

	<p>and do not vary widely from the mean. High variance indicates that data values have greater variability and are more widely dispersed from the mean.</p> <p>Show Image – This property is used when setting up calculated measure items that display images. See the next table for information about this property.</p>
5	<p>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.</p> <p>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  icon.</p> <p>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.</p>
6	<p>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.</p>
7	<p>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.</p> <p>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.</p>
8	<p>Total – Use to control the type of total that is performed for a measure item. The default setting for all measure items is Total.</p> <ul style="list-style-type: none"> • 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.
9	<p>Drilldown View - Assign a drilldown view if you want to drill from this measure item to another view, for example, to a view with related or complimentary data to the originating view. Choose from views that you normally have access to in the application. If you select a Drilldown view for both the measure items axis and an individual measure item, the selection for the individual measure item takes precedence.</p>

Calculated and Distinct Calculated Measure Items

Properties - Percent of Total Growth

1 Name: Data7

2 Caption Expression: Percent of Total Growth

3 Type: Calculated

4 Expression: [Measures].[Data5 (% of Total)] - [Measures]

5 Format String: #,###.000%

6 Fill Color:

7 Show Value: Yes

8 Show Image: No

9 Conditional Format: Yes Percent of Total Growth

10 Pop-up Expression: Yes #MeasureItem("Value")

Hyperlink: No

Visible: Yes


Filter:








Sort: None

Total: None

Include In Relationship Filter: No

Drilldown View: No



1	<p>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.</p> <p>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.</p>
2	<p>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.</p> <p>Note: See the previous table for information about regular types.</p> <p>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  next to the field.</p>

	<p>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.</p> <ul style="list-style-type: none"> 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.
3	<p>Format String – Use this drop-down list to apply a format such as decimal places, monetary symbols, commas, or a combination of formatting.</p> <p>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.</p>
4	<p>Show 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.</p> <p>Show 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.</p>
5	<p>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.</p> <p>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  icon.</p> <p>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.</p>
6	<p>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.</p>
7	<p>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.</p> <p>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.</p>
8	<p>Total – Use to control the type of total that is performed for a measure item. The default setting for all measure items is Total.</p> <ul style="list-style-type: none"> None – No total will be displayed.

	<ul style="list-style-type: none"> • 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.
9	Include In Relationship Filter – Defaults to No and is recommended in most cases for optimizing calculations, especially those use include attribute relationships in their expressions. That default makes for the most efficient calculation performance and gives you a more focused result set. The default makes sure the calculation is only carried out for members in the view that have data for the applicable measure item used in the calculation.
10	Drilldown View - Assign a drilldown view if you want to drill from this measure item to another view, for example, to a view with related or complimentary data to the originating view. Choose from views that you normally have access to in the application. If you select a Drilldown view for both the measure items axis and an individual measure item, the selection for the individual measure item takes precedence.

Properties Window for Levels

1	<p>Name – Name of the level. Used in the view explorer and filter windows.</p> <p>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.</p>
2	<p>Filter and Sort - Use to add, edit, or remove filters and sorts.</p> <ul style="list-style-type: none"> • Filter Mode – This property controls how Viewer treats a member list, user list, expression, or named set filter. The “Include” option means the applied filter returns only the members

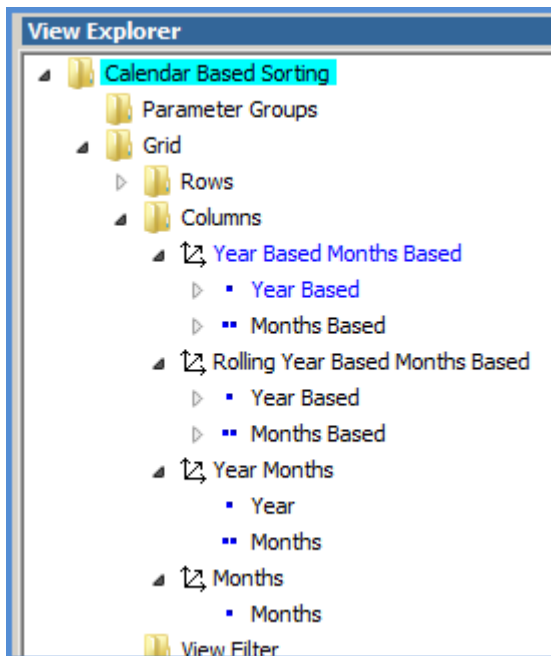
	<p>specified by your filter selections/criteria. “Exclude” means the applied filter returns all members except the ones specified by your filter selections/criteria.</p> <ul style="list-style-type: none"> • Filter - click the Browse button  to access the Select Filter Method window and either add or change a filter. If a filter already exists, the filter type displays in this field and a pop-up label shows filter criteria. • Sort - use the list provided to add Ascending or Descending sorts or to change or remove a sort.
3	<p>Total – Use to control whether or not Total values display for the level. When the property is Yes, totals will display for the level, When the property is No, totals will not display.</p> <p>All Others – Use to control whether or not All Others values display for the level. All Others values represent the sum of all members not in a filter. When the property is Yes, All Others values will display for the level, When the property is No, All Others will not display.</p>
4	<p>Visible – Set this property to No to hide the level in a view. Set this property to Yes to display the level in a view.</p> <p>Display Text – This property controls what displays in the first row or column for the level. The default is the level value. You can change it to any of the attribute relationships that have been made available in the view for the level.</p>
5	<p>Fill Color – Assign a fill color that will be used in the row or column containing the level. 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.</p>

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 Filter

Year >>	2012		2013		2014	
Months	Actual Sales Units	Actual Sales Amount	Actual Sales Units	Actual Sales Amount	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
June	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
October	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		
December	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.

View Name: *Calendar Based Sorting*

View Filter

<div> <div>▼</div> <div>Year >></div> </div>	2014		2013		2012	
<div> <div>Months</div> </div>	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
April	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
June	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
October			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
December			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.

+ View Name: <i>Calendar Based Sorting</i>				
View Filter				
Year	Months	Actual Sales Units	Actual Sales Amount	
2012	January	5,007,078	\$280,571,491	
	February	4,660,289	\$257,865,913	
	March	5,242,572	\$288,803,899	
	April	4,744,533	\$262,246,245	
	May	4,991,233	\$277,181,642	
	June	5,287,949	\$295,804,171	
	July	6,008,177	\$334,309,311	
	August	7,071,967	\$394,294,470	
	September	7,739,849	\$435,840,359	
	October	6,152,790	\$364,922,428	
	November	6,927,943	\$421,277,394	
	December	3,740,752	\$227,090,225	
	2012 Total	67,575,132	\$3,840,207,548	
2013	January	11,579,068	\$650,655,727	
	February	9,929,320	\$549,211,669	
	March	11,862,018	\$652,242,257	
	April	11,733,747	\$645,861,506	
	May	8,413,481	\$468,934,747	
	June	12,242,975	\$682,957,762	

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.

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

View Name: <i>Calendar Based Sorting</i>				
View Filter				
▼ Year	▼ Months	Actual Sales Units	Actual Sales Amount	
2014	December			
	November			
	October			
	September	12,093,515	\$569,861,272	
	August	12,744,274	\$485,764,510	
	July	9,613,083	\$391,977,666	
	June	8,910,194	\$375,671,295	
	May	7,798,802	\$352,020,685	
	April	6,867,712	\$327,807,806	
	March	6,553,215	\$361,004,874	
	February	5,825,361	\$322,332,391	
	January	6,258,847	\$350,714,364	
	2014 Total	76,665,003	\$3,537,154,864	
2013	December	3,624,759	\$220,048,674	
	November	6,093,229	\$367,487,985	
	October	6,581,900	\$394,333,571	
	September	11,125,528	\$627,060,751	
	August	13,414,447	\$755,754,978	
	July	17,933,690	\$997,610,460	

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.

View Name: <i>Calendar Based Sorting</i>				
View Filter				
▲ Year Based	Year Based Weeks Based-Year Based-Abs Year	Actual Sales Units	Actual Sales Amount	
3 Years Ago	2011			
2 Years Ago	2012	67,575,132	\$3,840,207,548	
Last Year	2013	123,809,211	\$6,968,150,351	
Current Year	2014	77,389,955	\$3,581,164,599	
Next Year	2015			
Grand Total		268,774,298	\$14,389,522,497	

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 Name: <i>Calendar Based Sorting</i>				
View Filter				
▼ Year Based	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	\$361,004,874
	5 Months Ago	2014/April	6,867,712	\$327,807,806
	4 Months Ago	2014/May	7,798,802	\$352,020,685
	3 Months Ago	2014/June	8,910,194	\$375,671,295
	2 Months Ago	2014/July	9,613,083	\$391,977,666
	Previous Month	2014/August	12,744,274	\$485,764,510
	Current Month	2014/September	12,093,515	\$569,861,272
	Current Year Total		64,580,794	\$2,864,108,109
Last Year	6 Months Ago	2013/March	11,862,018	\$652,242,257
	5 Months Ago	2013/April	11,733,747	\$645,861,506
	4 Months Ago	2013/May	8,413,481	\$468,934,747
	3 Months Ago	2013/June	12,242,975	\$682,957,762
	2 Months Ago	2013/July	17,933,690	\$997,610,460
	Previous Month	2013/August	13,414,447	\$755,754,978
	Current Month	2013/September	11,125,528	\$627,060,751
	Next Month	2013/October	6,581,900	\$394,333,571
	2 Months Out	2013/November	6,093,229	\$367,487,985
	3 Months Out	2013/December	3,624,759	\$220,048,674
	4 Months Out	2014/January	6,258,847	\$350,714,364
	5 Months Out	2014/February	5,825,361	\$322,332,391
	Last Year Total		115,109,984	\$6,485,339,445
Grand Total			179,690,778	\$9,349,447,554

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 Name: <i>Calendar Based Sorting</i>					
View Filter					
▼ Year Based	Months Based	▼ Rolling Year Based Months Based-Months Based-Abs Months	Actual Sales Units	Actual Sales Amount	
Current Year	Current Month	2014/September	12,093,515	\$569,861,272	
	Previous Month	2014/August	12,744,274	\$485,764,510	
	2 Months Ago	2014/July	9,613,083	\$391,977,666	
	3 Months Ago	2014/June	8,910,194	\$375,671,295	
	4 Months Ago	2014/May	7,798,802	\$352,020,685	
	5 Months Ago	2014/April	6,867,712	\$327,807,806	
	6 Months Ago	2014/March	6,553,215	\$361,004,874	
	Current Year Total		64,580,794	\$2,864,108,109	
Last Year	5 Months Out	2014/February	5,825,361	\$322,332,391	
	4 Months Out	2014/January	6,258,847	\$350,714,364	
	3 Months Out	2013/December	3,624,759	\$220,048,674	
	2 Months Out	2013/November	6,093,229	\$367,487,985	
	Next Month	2013/October	6,581,900	\$394,333,571	
	Current Month	2013/September	11,125,528	\$627,060,751	
	Previous Month	2013/August	13,414,447	\$755,754,978	
	2 Months Ago	2013/July	17,933,690	\$997,610,460	
	3 Months Ago	2013/June	12,242,975	\$682,957,762	
	4 Months Ago	2013/May	8,413,481	\$468,934,747	
	5 Months Ago	2013/April	11,733,747	\$645,861,506	
	6 Months Ago	2013/March	11,862,018	\$652,242,257	
	Last Year Total		115,109,984	\$6,485,339,445	
Grand Total			179,690,778	\$9,349,447,554	

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.

1 to 40 of 2055 | 11 to 16 of 16 Viewer

+ View Name: Returns by Lot, Reason Code

↓ → View Filter

Return Reason Code >>	624		625			Grand Total	
RtnCd Long Description	Damaged Product		Price				
Lot	Current Yr YTD Months Return Amt	Previous Yr YTD Months Return Amt	Current Yr YTD Months Return Amt	Previous Yr YTD Months Return Amt		Current Yr YTD Months Return Amt	Previous Yr YTD Months Return Amt
19990101914001	(\$475)	(\$448)	(\$289)			(\$3,431)	(\$3,237)
19990101914002	(\$459)	(\$433)	(\$280)			(\$3,315)	(\$3,127)
19990101914003	(\$629)	(\$593)	(\$383)			(\$4,538)	(\$4,281)
19990101914008	(\$2,825)	(\$2,665)	(\$1,719)			(\$20,386)	(\$19,232)
19990101914304	(\$1,921)	(\$1,812)	(\$1,169)			(\$13,863)	(\$13,078)
19990101914422	(\$2,282)	(\$2,153)	(\$968)				(\$10,828)
19990101914602	(\$1,024)	(\$966)	(\$1,068)				(\$6,972)
19990101914603	(\$690)	(\$651)	(\$567)				(\$4,695)
19990101914604	(\$238)	(\$224)	(\$101)				(\$1,128)
19990101924003	(\$5,279)	(\$4,980)	(\$2,640)			(\$31,298)	(\$29,627)
19990101924015	(\$1,046)	(\$987)	(\$637)			(\$7,548)	(\$7,111)
19990101924401	(\$6,154)	(\$5,806)	(\$4,653)			(\$44,415)	(\$41,901)

- Copy
- Select All
- Insert ▶
- Edit ▶
- Sort ▶
- Filter ▶
 - Edit
 - Clear
 - Clear All
- Actions ▶
- Transpose
- View Explorer

Treat Attribute Relationship Data As Numbers In Views

Data for attribute relationships is typically treated as text (alphanumeric characters) in Stratum views, unless they are specifically designated to be treated as numbers. That can be done at the application level by administrators, as described in the Dimension maintenance section of help, or by any user in their individual views. See the steps below for changing settings within an individual view.

1. In the view where the attribute relationship exists, right-click and choose Properties from the menu that displays.
2. In the Data Type drop-down selection list of the Properties window, select Number.
3. Click OK in the Apply Changes window and save the view.

Here's a few other things to consider about this property. The type of information communicated by an attribute relationship and how you want it displayed in views and treated by sorts and filters helps you decide when to treat attribute relationships as numbers instead of text.

- If the attribute relationship conveys numerical data and its values consist of all numeric characters, consider setting their Data Type property to Number. Commodity codes or pricing data are examples of numerical data.
- If you want an attribute relationship's values to be treated as numeric for sorts and filters and displayed right aligned in a view's columns (like measure item values) and for exports to Excel that are set to be Excel Report output types, then set their Data Type property to Number.

FAQ's

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.

View Name: Daily Sales by RepBroker and Country							
View Filter							
▼ Customer Ship-To Country >>		USA					
RepBroker	▲ RepBr Long Description	Daily Sales Amount Wk 38 2014 to Wk 38 2014	Daily Sales Units Wk 38 2014 to Wk 38 2014	Daily Sales Amount Wk 37 2014 to Wk 37 2014	Daily Sales Units Wk 37 2014 to Wk 37 2014	Daily Sales Amount Wk 36 2014 to Wk 36 2014	Daily Sales Units Wk 36 2014 to Wk 36 2014
308	Dean Cizek	\$2,937	438	\$187,361	1,119	\$35,950	
313	Eleanor Toman	\$10,765	1,802	\$686,799	4,606	\$131,779	
307	Guy Nelson	\$1,124	198	\$71,684	505	\$13,754	
305	Janice Tierney	\$9,835	1,422	\$627,490	3,635	\$120,399	
306	John Trainor						
304	John Trasky	\$3,592	659	\$229,153	1,685	\$43,969	
302	Mark Fiedler	\$6,201	1,072	\$395,636	2,738	\$75,913	

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

<div> <div> <div></div> <div>+</div> </div> <div>View Name: <i>Monthly Sales Views filtered by Product Group</i></div> </div>				
<div> <div> <div></div> <div>→</div> </div> <div>View Filter</div> <div> <div>▼</div> <div>Product Group</div> </div> </div>				
▼ Year Based >>	Last Year		Current Year	
Year Based Months Based-Year Based-Abs Year	2013		2014	
Months	Sales Amount	Sales Units	Sales Amount	▲ Sales Units
October	\$134,726,370	2,325,511		
November	\$120,630,704	2,057,686		
December	\$75,669,211	1,281,288		
January	\$191,238,484	3,486,263	\$93,102,611	1,695,884
February	\$166,186,115	3,055,288	\$97,153,548	1,782,815
March	\$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
June	\$204,244,740	3,787,346	\$117,183,692	2,889,562
July	\$281,383,297	5,152,400	\$120,192,437	3,022,329
August	\$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 Sales Units measure item.

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

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 [pop-up menu](#) 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.

View Name: RepBroker Cumulative Sales				
View Filter				
RepBroker	Product Category	Actual Sales Jan 2014 to Sep 2014	Percent of Total	Cumulative % of Total
Mary Lopez	Frozen Fruit Products	\$5,029,230	.90%	.90%
	Pork	\$7,651,423	1.37%	2.27%
	Beef	\$11,814,665	2.11%	4.38%
	Frozen Prepared Dinners	\$15,690,970	2.81%	7.19%
	Fresh Fruit	\$19,235,673	3.44%	10.63%
	Canned Fruit	\$25,735,340	4.60%	15.23%
	Fresh Vegetables	\$27,251,065	4.87%	20.11%
	Mary Lopez Total	\$112,408,366		
Eleanor Toman	Frozen Fruit Products	\$9,455,123	1.69%	21.80%
	Pork	\$17,749,079	3.17%	24.97%
	Beef	\$18,908,033	3.38%	28.36%
	Fresh Fruit	\$32,031,428	5.73%	34.09%
	Frozen Prepared Dinners	\$44,281,161	7.92%	42.01%
	Fresh Vegetables	\$47,904,721	8.57%	50.58%
	Canned Fruit	\$276,298,202	49.42%	100.00%
	Eleanor Toman Total	\$446,627,746		
Grand Total		\$559,036,113		

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

Copy
Select All Occurrences
Select All
Add
Edit
Delete
Hide
Sort
Filter
Conditional Format
Actions
Transpose
View Explorer
Properties

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

Copy
Select All Occurrences
Select All
Add
Edit
Delete
Hide
Conditional Format
Actions
Transpose
View Explorer
Properties

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.

View Name: RepBroker Cumulative Sales				
View Filter				
Recursive Top Count 5				
RepBroker	Product Category	Actual Sales Jan 2014 to Sep 2014	Percent of Total	Cumulative % of Total
Mary Lopez	Fresh Vegetables	\$27,251,065	4.87%	6.37%
Mary Lopez Total		\$27,251,065		
Eleanor Toman	Fresh Fruit	\$32,031,428	5.73%	13.86%
	Frozen Prepared Dinners	\$44,281,161	7.92%	24.21%
	Fresh Vegetables	\$47,904,721	8.57%	35.41%
	Canned Fruit	\$276,298,202	49.42%	100.00%
Eleanor Toman Total		\$400,515,511		
Grand Total		\$427,766,577		

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.

The screenshot displays a data grid titled "Cumulative Current Week Sales Units" with four columns: Product Family, Current Wk Sales Amount (Wk 38 14 to Wk 38 14), Current Wk Sales Units (Wk 38 14 to Wk 38 14), and Cumulative Current Wk Sales Units. A context menu is open over the grid, showing options like Copy, Select All Occurrences, Select All, Insert, Edit, Remove, Hide, Conditional Format, Actions, Transpose, View Explorer, and Properties. The "Sort" option is missing. To the right, the "View Explorer" window shows the hierarchy: Cumulative Current Week Sales Units > Parameter Groups > Grid > Measure Items > Cumulative Current Wk Sales Units. Below the grid, the "Properties - Cumulative Current Wk Sales Units" window is open, showing various settings. The "Sort" property is set to "None" and is circled in red, indicating it is disabled.

Product Family	Current Wk Sales Amount (Wk 38 14 to Wk 38 14)	Current Wk Sales Units (Wk 38 14 to Wk 38 14)	Cumulative Current Wk Sales Units
Frozen Entrée	\$6,445		65,445
Frozen Individual Dinner	\$6,106		131,606
Tender Vegetables	\$8,070		276,070
Hardy Vegetables	\$5,467		388,467
Fruit Fillings	\$8,263		573,263
Applesauce	\$7,529		716,529
Frozen Juice	\$3,111		762,111
Specialty Canned Fruit	\$7,925		879,925
Fruit Cocktail	\$9,458		1,051,458
Peaches	\$13,223		1,295,223
Pears	\$6,209		1,409,209
Pineapple	\$6,639		1,557,639
Fresh Pork	\$5,188,822	77,286	1,634,925
Fresh Beef	\$4,608,416	76,236	1,711,161
Tender Fruits	\$5,994,606	93,073	1,804,234
Hardy Fruits	\$5,090,158	130,728	1,934,962
Grand Total	\$108,960,090	1,934,962	

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.

The screenshot shows a software interface with a data grid and a properties window. The grid displays sales data with columns for Product Family, Current Wk Sales Amount, and Cumulative Current Wk Sales Units. A context menu is open over the grid, showing options like Copy, Select All, Insert, Edit, Remove, Hide, Sort (with sub-options Ascending, Descending, Clear, Clear All), Filter, Conditional Format, Actions, Transpose, View Explorer, and Properties. The Properties window on the right shows the 'Current Wk Sales Units (Wk 38 14 to Wk 38 14)' measure item. The 'Sort' property is highlighted in red, showing it is set to 'None'.

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.
- **Case 2** - 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: <i>Monthly Sales Views filtered by Product Group</i>				
View Filter	Product Group			
Year Based >>	Last Year		Current Year	
Year Based Months Based-Year Based-Abs Year	2013		2014	
Months	Sales Amount	Sales Units	Sales Amount	▲ Sales Units
October	\$134,726,370	2,325,511		
November	\$120,630,704	2,057,686		
December	\$75,669,211	1,281,288		
January	\$191,238,484	3,486,263	\$93,102,611	1,695,884
February	\$166,186,115	3,055,288	\$97,153,548	1,782,815
March	\$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
June	\$204,244,740	3,787,346	\$117,183,692	2,889,562
July	\$281,383,297	5,152,400	\$120,192,437	3,022,329
August	\$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.

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

Case 2

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

View Name: <i>Daily Sales by Product ABC Class</i>									
View Filter									
	Product ABC Class >>	A		B		C		D	
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	Daily Sales Amount Wk 38 2014 to Wk 38 2014	Daily Sales Units Wk 38 2014 to Wk 38 2014	▼ Daily Sales Amount Wk 38 2014 to Wk 38 2014	Daily Sales Units Wk 38 2014 to Wk 38 2014	Daily Sales Amount Wk 38 2014 to Wk 38 2014	Daily Sales Units Wk 38 2014 to Wk 38 2014
011	First Choice	\$7,131	1,640	\$9,397	1,713	\$5,808	1,308	\$17	4
009	Farm Fresh	\$10,432	1,469	\$14,281	2,671	\$5,384	994	\$8,193	1,563
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			\$3,034	834
008	Bing-a-ling							\$4,022	574
012	Home Cookin'	\$7,132	794	\$6,947	809				
999	Private Label	\$3,495	750	\$1,440	374				
Grand Total		\$40,283	7,445	\$41,086	7,043	\$20,552	3,630	\$15,266	2,976

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

View Name: <i>Daily Sales by Product ABC Class</i>			
View Filter			
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	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	\$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.

View Name: Sales and Budget by Region, RepBroker								
View Filter								
		RepBroker >>	300	305	313	312	302	
Region	Rgn Long Description	RepBr Long Description	Nicole Toscano	Janice Tierney	Eleanor Toman	Mike Hartney	Mark Fiedler	John
330	East	Budget Amount Working	\$5,078,516,759	\$2,219,250,196	\$1,852,719,651	\$1,423,069,721	\$600,722,027	\$3
		▼ Sales Amount	\$4,977,057,972	\$2,188,247,896	\$1,813,251,060	\$1,392,813,857	\$588,990,820	\$8
		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%	
331	West	Budget Amount Working					\$314,604,279	\$1
		Sales Amount					\$312,314,732	\$1
		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	\$5
		Sales Amount	\$4,977,057,972	\$2,188,247,896	\$1,813,251,060	\$1,392,813,857	\$901,305,552	\$5
		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.

View Name: Sales and Budget by Region, RepBroker								
View Filter								
		▼ RepBroker >>	318	315	313	312	309	30
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				\$1,040,31
		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	\$399
		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	\$4,562,71
		Sales % Total						