

Working with Filters

Stratum.Viewer 7

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Getting Started

Access to Filtering

Filtering functionality is available to all users – you can add, edit, and remove all types of filters using the Filters window. You can also click the filter cue **Y** next to a filtered item in the grid to edit that specific filter.

Introduction to Filtering

Filtering is a way of selecting the data that is most important to you. Filters can be associated with levels, measure items, totals, the overall view, and rows and columns. You can combine filters with sorts to achieve a view of data that best suits your business needs. A filter cue **Y** displays next to an item when a filter has been applied. Click on that filter cue to review, edit, or clear the applied filter.

You also can add and manage multiple types of filters from the [Filters window](#), which is accessed from the Manage All Filters icon in a view. When filters exist in a view, that icon displays as red as a hint that filters exist.

★ My RepBroker's Comparative Sales by Brand

Rows: Product Brand: All x > Product: All x > **Y** 123 ? Show All 1 to 30 of 3091 1 to 50 of 99

Columns: Customer Sold-To: All x +

View Filter: **Y** RepBroker: Multiple x **Y** Customer

| Product Brand | Product | Customer Sold-To | 150120 | | | 150130 | | | | | | | | |
|---------------|------------|------------------|--------------------------------------|--------------------------------------|----------------|--------------------------------------|--------------------------------------|--------------------|----------|----------|------|--|--|----|
| | | | Actual Sales Amount Jul 17 to Sep 17 | Actual Sales Amount Jul 16 to Sep 16 | Sales % Change | Actual Sales Amount Sep 17 to Sep 17 | Actual Sales Amount Sep 16 to Sep 16 | MTD Sales % Change | | | | | | |
| 001 | 620A954014 | Asparagus 0A | | | 0% | | | 0% | \$98,602 | \$90,097 | 9.4% | | | 0% |

FILTERS ✕

| Levels | Data | Axis | |
|-------------------|--|------|--|
| RepBroker: | 308 - Dean Cizek, 309 - Terry Bruno, 312 - Mike Hartney, 313 - Eleanor Toma... | | ⌵ ✕ |
| Customer Type: | A - Class A Customer, B - Class B Customer | | ⌵ ✕ |
| Customer Sold-To: | No filter exists | | ⌵ Change Filter |
| Product Brand: | No filter exists | | ⌵ ✕ |
| Product: | No filter exists | | ⌵ ✕ |
| Ship-To Market: | No filter exists | | ⌵ ✕ |

OK
Cancel

Level Filter

You can filter levels using members, user lists, named sets, and expressions. For example, you have a view listing RepBrokers and you want to only see three. You apply the member filter shown below.

★ Regional RepBroker Daily Sales

📄 🔍 📄 ✉ 📊 📍 🔍 ⌵ 123 ? ⏪ ⏩ ⏴ ⏵ 1 to 10 of 10 | ⏪ ⏴ ⏵ ⏩ 1 to 2 of 2

Rows: ⌵ Sales Dir: All ✕ > ⌵ Region: All ✕ > ⌵ RepBroker: Filtered ✕ > ⌵ Product ABC Class ✕ ⌵ Product ✕ ▶ +

Columns: +

View Filter: +

| Sales Dir | Region | RepBroker | Daily Sales Amount Jul 2017 to Sep 2017 | Daily Sales Units Jul 2017 to Sep 2017 |
|--------------------|---------------------------|-------------------|--|---|
| Helen Briggs | East | Nicole Toscano | \$2,675,823 | 62,905 |
| | | Michelle Knapp | \$98,729 | 1,585 |
| | | East Total | \$2,774,552 | 64,490 |
| | West | Michelle Knapp | \$122,992 | 2,119 |
| | | West Total | \$122,992 | 2,119 |
| | Helen Briggs Total | | \$2,897,544 | 66,609 |
| Steve Mentas | West | Mary Lopez | \$388,926 | 8,649 |
| | | West Total | \$388,926 | 8,649 |
| | Steve Mentas Total | | \$388,926 | 8,649 |
| Grand Total | | | \$3,286,470 | 75,258 |

SELECT MEMBERS: REPBROKER ✕

3 Selected Search By: RepBroker Contains ▼

| | RepBr | RepBr Long Description |
|-------------------------------------|-------------|------------------------|
| <input type="checkbox"/> | RepBroker ▲ | |
| <input type="checkbox"/> | % | % |
| <input type="checkbox"/> | ? | ? |
| <input checked="" type="checkbox"/> | 300 | Nicole Toscano |
| <input type="checkbox"/> | 301 | Patrick Hurley |
| <input type="checkbox"/> | 302 | Mark Fiedler |
| <input checked="" type="checkbox"/> | 303 | Michelle Knapp |
| <input type="checkbox"/> | 304 | John Trasky |
| <input type="checkbox"/> | 305 | Janice Tierney |
| <input type="checkbox"/> | 306 | John Trainor |
| <input type="checkbox"/> | 307 | Guy Nelson |
| <input type="checkbox"/> | 308 | Dean Cizek |
| <input type="checkbox"/> | 309 | Terry Bruno |
| <input type="checkbox"/> | 312 | Mike Hartney |
| <input type="checkbox"/> | 313 | Eleanor Toman |
| <input checked="" type="checkbox"/> | 315 | Mary Lopez |
| <input type="checkbox"/> | 318 | Neil MacDonald |

1 to 16 of 16 ⏪ ⏩ 1 ⏪ ⏩

Measure Item Filter

You can filter individual measure items by selecting a filter operator and value. For example, you may have a Daily Sales Amount measure item but only want to include amounts greater than or equal to \$100,000. You would select the Daily Sales Amount measure and apply a filter of ≥ 100000 .

★ UPC Daily Sales by Ship-To Region

Rows: UPC Global Number: All Product Ship-To Market Product Family Product ABC Clas

Columns: +

View Filter: Ship-To Region: Multiple +

| | | Daily Sales Amount Jan 17 to Sep 17 | Daily Sales Units Jan 17 to Sep 17 |
|---|-------------------------------|--|---------------------------------------|
| ▲ UPC Global Number | UPC ABC Classification | | |
| Asparagus | C | \$104,011 | 3,769 |
| Cherries, Bing | B | \$138,881 | 5,238 |
| Frozen Lasagna Dinner | A | \$213,883 | 6,298 |
| Meatloaf, Frozen | B | \$209,954 | 6,841 |
| Applesauce 106oz PL* | A | | |
| Peach Slcs LS 106oz BR* | B | | |
| FrtCktail LS 106 oz BR* | B | | |
| Peach Slcs LS 12oz BR* | B | | |
| Apples Red Delicious | B | | |
| Sirloin Tips - USDA Grade A | A | | |
| Pork Chops - Butterfly | C | | |
| Ground Round 90% Lean | C | | |
| Sweet Onions, Chopped | C | | |
| Romaine Specialty Salad | A | \$119,237 | 4,833 |
| All Others | | \$1,949,960 | 104,894 |
| Grand Total | | \$3,810,042 | 185,229 |

MEASURE ITEM FILTER: DAILY SALES AMOUNT JAN 17 TO SEP 17 ✕

Operator Value

Axis Filter

You can filter the row or column axis. Use this type of filter when you want to filter by multiple measure items or both measure items and attribute relationships. The below example has a filter applied to the rows. The only product data displayed meets the following filter criteria: sales less than \$2,000 and Product ABC Classification equal to B.

★ Sales After Returns

Rows: Ship-To Region: All × Product: All × UPC Global Number × ABC Classification Code ×

Columns: +

View Filter: +

| Ship-To Region | Product | Prod ABC Classification | Sales Amount Jan 2017 to Sep 2017 | Sales Return Amount Jan 2017 to Sep 2017 | Sales after Returns |
|----------------|---|-------------------------|--------------------------------------|---|---------------------|
| 50 | Cherry Filling 12 oz BR* 0A | B | \$349 | (\$804) | ● |
| 50 | Cherry Filling 12 oz BR* 0B | B | \$699 | (\$1,608) | ● |
| 50 | Cherry Filling 12 oz BR* 0C | B | \$384 | (\$884) | ● |
| 50 | Cherry Filling 12 oz BR* 0D | B | \$419 | (\$965) | ● |
| 50 | Cherry Filling 12 oz BR* 0E | B | \$454 | (\$1,045) | ● |
| 50 | Cherry Filling 12 oz BR* 0F | B | \$489 | (\$1,125) | ● |
| 50 | Cherry Filling 12 oz BR* 0G | B | \$524 | (\$1,206) | ● |
| 50 | Cherry Filling 12 oz BR* 0H | B | \$559 | (\$1,286) | ● |
| 50 | Cherry Filling 12 oz BR* 0I | B | \$504 | (\$1,367) | ● |

EXPRESSION - ROWS

View Items and Functions for Expression:

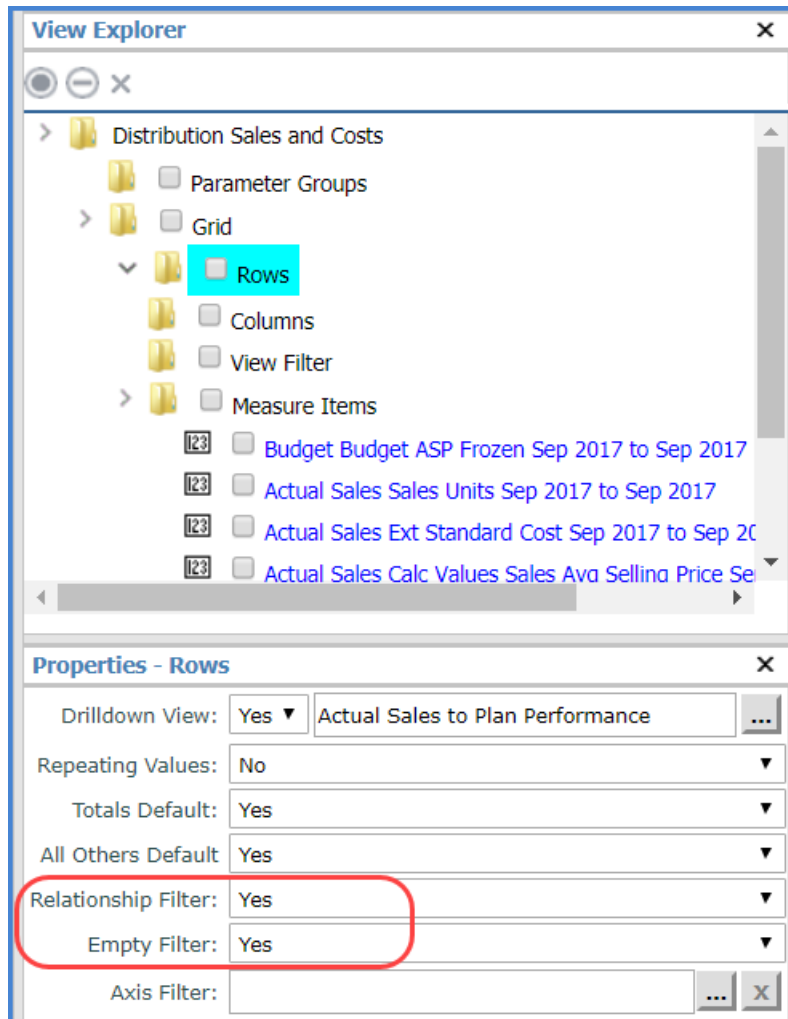
- ▲ Hierarchies
 - ▶ Ship-To Region
 - ▲ Product
 - ▲ Product
 - ▲ Attribute Relationships
 - Prod Long Description
 - Prod ABC Classification
 - Members
 - ▶ UPC Global Number
 - ▶ ABC Classification Code
 - ▶ Product Category
 - ▶ Measure Items
 - ▶ MDX Functions
 - ▶ Stratum.Viewer Functions

Expression (Examples):

```
[Measures].[Data1 (Sales Amount Jan 2017 to Sep 2017)] < 2000 AND
[Product].[Product].Properties("Prod ABC Classification") = "B"
```

Relationship and Empty Filter

You can filter rows and columns through their Relationship and Empty Filter properties. That type of filtering takes into consideration the existence of data or lack of data in the database given the levels and measure items for the view.



View Filter

You can filter an overall view in relation to members of a particular level through the View Filter section. The data returned in the rest of the view will be just the data relevant to members specified by the View Filter. For example, you have a view listing Lot data, but you want to filter to include only Lot data pertaining to A products. You add the Product ABC Class level to the View Filter section and filter it by A products.



★ Lot Variance Current Month & YTD Last/Current Yr



Rows: Lot: All × +
Columns: +

View Filter: Product ABC Class: A × +

| Lot | Daily Sales Amount Sep 2016 to Sep 2016 | Daily Sales Amount Jan 2016 to Sep 2016 | Daily Sales Amount Jan 2017 to Sep 2017 | Variance YTD 2016 vs 2017 |
|----------------|---|---|---|---------------------------------|
| 19994536954018 | \$52,078 | \$59,783 | \$6,705 | \$25,134 |
| 19994740954018 | \$52,773 | \$59,439 | \$6,666 | \$24,990 |
| 19994437954018 | \$52,207 | \$58,802 | \$6,595 | \$24,722 |
| 19994336954018 | \$50,195 | \$56,536 | \$6,340 | \$23,769 |
| 19994639954018 | \$44,457 | \$50,073 | \$5,616 | \$21,052 |
| 19994437954006 | \$31,032 | \$34,952 | \$3,920 | \$14,695 |
| 19994639954006 | \$28,117 | \$31,668 | \$3,552 | \$13,314 |
| 19994740954006 | \$27,975 | \$31,508 | \$3,534 | \$13,247 |
| 19994538954006 | \$27,727 | \$31,229 | \$3,502 | \$13,130 |
| 19994336954006 | \$24,479 | \$27,572 | \$3,092 | \$11,592 |
| 19994639954012 | \$24,247 | \$27,310 | \$3,063 | \$11,482 |
| 19994740954012 | \$23,365 | \$26,316 | \$2,951 | \$11,064 |

Tasks - Adding

Apply a Filter to Levels



1. Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#).
2. From the Levels tab in Filters window, click the Change Filter icon  next to the level name.
3. The Select Members window for defining the filter will display. Select the members in the [Select](#) or [Advanced Select Members window](#), then click OK.

If you need to apply a different type of filter, click the More button and choose Change Filter Type. Then choose the filter method (User List, Named Set, Expression) from the Select Filter Method window. Use the applicable filter window that displays to set up the filter, and then click OK.

- **User List** - select a list from the [Select User List Filter window](#).
 - **Named Set** - select a named set from the [Select Named Set Filter window](#).
 - **Expression** - adjust the filter expression in the [Expression window](#).
4. You can apply filters to additional levels by clicking their Change Filter icon. Then see Step 2 above. When you are done in the Filters window, click OK.

Note: If you only have one filter to set up, right-click the level in the view and select Filter then Edit. Proceed from there in setting up the filter on that level.

Apply a Filter to Measure Items

1. Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#).
2. From the Data tab in the Filters window, click the Change Filter icon  next to the measure item.
3. Select the filter operator and enter a filter value in the [Measure Item Filter window](#). Then click OK.
4. You can apply filters to additional measure items by clicking their Change Filter icon. Then see Step 2 above. When you are done in the Filters window, click OK.

Note: If there are levels on the same axis as measure items, you will need to initiate the filtering from the grid. Right-click the measure item in the grid and select Filter then Edit.

Apply a Filter to Totals

1. Right-click the caption of a measure item in a Grand Total row or column, and select Filter then Edit.
2. Select the filter operator and enter a filter value in the [Measure Item Filter window](#).
3. Click OK.

Apply a Relationship or Empty Filter



1. Double-click the Rows or Columns folder in view explorer. The [Rows](#) or [Columns](#) Properties window displays.
2. Adjust the Yes and No settings for the filter that you want to set up.

Note: In order for the Empty Filter property to be set to Yes, the Relationship Filter property must be set to Yes.

Apply a View Filter

Option 1

If the level(s) that you want to use for a View Filter already exist in the view, do the following. Otherwise, see Option 2.

1. Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#). From the Levels tab in the Filters window, click the Change Filter icon  next to the name of the level that will act as the View Filter.
2. The Select Members window for defining the filter will display. Select the members in the [Select](#) or [Advanced Select Members window](#), then click OK.

If you need to apply a different type of filter, click the More button and choose Change Filter Type, Then choose the filter method (User List, Named Set, Expression) from the Select Filter Method window. Use the applicable filter window that displays to set up the filter, and then click OK.


- **User List** - select a list from the [Select User List Filter window](#).
 - **Named Set** - select a named set from the [Select Named Set Filter window](#).
 - **Expression** - adjust the filter expression in the [Expression window](#).
3. Repeat the prior steps for any other levels that will act as the View Filter.

4. Click OK in the Filters window when you are done setting up filters on all applicable levels.
5. If the level(s) you just added a filter to were not drilled to yet in the view (not visible yet), they will be moved to the View Filter section for you automatically after you close the Filters window. Otherwise, you will need to manually drag and drop the level(s) from rows or columns to the View Filter section for the view filter to take effect.*

***Note:** A level will not act as a filter on the entire view until the level is positioned in the View Filter section. If the level that you filtered is not yet positioned in the View Filter section of the view, drag and drop it to that section from the grid, Navigation Panel, or view explorer.

Option 2

If the level(s) that you want to act as a view filter don't exist in the view yet, follow the steps below to add them to the View Filter section and then filter them.



1. In the View Filter section, click the Add Levels To View Filter icon .
2. Use the Add Hierarchies window to add levels and click OK.
3. In the View Filter section, click the level you just added.
4. The Select Members window for defining the filter will display. Select the members in the [Select](#) or [Advanced Select Members window](#), then click OK.

If you need to apply a different type of filter, click the More button and choose Change Filter Type. Then choose the filter method (User List, Named Set, Expression) from the Select Filter Method window. Use the applicable filter window that displays to set up the filter, and then click OK.

- **User List** - select a list from the [Select User List Filter window](#).
- **Named Set** - select a named set from the [Select Named Set Filter window](#).
- **Expression** - adjust the filter expression in the [Expression window](#).

5. Repeat steps 3 and 4 for each level you added to the View Filter section.

Apply an Axis Filter



1. Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#).
2. From the Filters window, click the Axis tab then the Change Filter icon  next to the Rows or Columns section (whichever axis you want to filter).
3. Use the [Expression window](#) that displays to set up the expression for the filter, and then click OK.
4. Click OK in the Filters window when you are done setting up the filter.


See also: [Example Expressions for Filtering an Axis](#) and [Axis Filter Behavior When Levels are on Opposite Axis](#).

Change Existing Filters



Options for editing filters on different types of items follow. Use the Filters window to make your edits if you have multiple items to edit – for example, if you need to add filters to some items and remove or edit filters on other items. You can make all edit changes for levels, measure items, and a view axis from the Filters window then apply all changes at once.


Axis Filters

1. Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#).
2. From the Filters window, click the Axis tab then Change Filter icon  next to the Rows or Columns section (whichever axis you want to filter).
3. Use the [Expression window](#) to edit the filter expression, and click OK.
4. Change or add other filters if needed.
5. Click OK in the Filters window when you're done with all your changes.



Note: In the Navigation Panel, clicking the filter icon  next to the name of the filtered axis opens the Expression window for editing that axis filter.

Level Filters


1. Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#).
2. From the Levels tab in the Filters window, click the Change Filter icon  next to the level name.
3. The appropriate window for editing the filter will display depending on the filter type (member, named set, expression, user list).
 - **Member List** - adjust the members in the [Select](#) or [Advanced Select Members window](#), then click OK.
 - **User List** - select a list from the [Select User List Filter window](#), then click OK.
 - **Named Set** - select a named set from the [Select Named Set Filter window](#), then click OK.
 - **Expression** - adjust the filter expression in the [Expression window](#), then click OK.
4. Change or add other filters if needed.
5. Click OK in the Filters window when you're done with all your changes.

Note: If you only have one filter to change, click the filter icon  next to the filtered level in the view and make changes in the applicable editing window that opens.

Measure Item Filters

1. Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#).
2. From the Data tab in the Filters window, click the Change Filter icon  next to the measure item.

3. Use the [Measure Item Filter window](#) to edit the filter, and click OK.
4. Change or add other filters if needed.
5. Click OK in the Filters window when you're done with all your changes.


Note: If you only have one filter to change, click the filter icon  next to the filtered measure item in a view, which opens the [Measure Item Filter window](#) for use in editing that filter.

Relationship or Empty Filters

1. Double-click the Rows or Columns folder in view explorer. The Rows or Columns Properties window displays.
2. Adjust the Yes and No settings for the filter that you need to edit.



Note: In order for the Empty Filter property to be Yes, the Relationship Filter property must be Yes.

Total Filters

1. Click the filter icon  next to the caption of the measure item in the Grand Total row or column.
2. Use the [Measure Item Filter window](#) to edit the filter.

Clear Filters

Clear Individual Filter

Click the Manage All Filters icon  in the grid toolbar to access the [Filters window](#). From the Filters window, click the Clear Filter icon  next to the item names on the applicable Levels, Data, or Axis tab.

Note: Options for clearing filters also are provided in the pop-up menus for filtered items in the grid. Advanced users and administrators have that option.

Clear All Filters

Right-click any filtered object in the grid (measure item, level, axis), and select Filter then Clear All.

Examples

Expressions for Rolling "N" Period Based Views

These examples show how to create period based views that display rolling "N" periods. This is done by creating a level filter on a time hierarchy. The time range property for the view in both examples was set to No.

The first view is a rolling 12 weeks. It has rows comprised of the two levels from the Year Weeks time hierarchy. The Weeks level has a Rolling "12" filter on it that calculates the current week and prior 11 weeks. The filter returns Week 38 back through Week 27 in this example.

| View Name: <i>Rolling 12 Weeks for Sales</i> | | | | | | | | | |
|--|-------------------------------|----------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
| View Filter | | | | | | | | | |
| | Company >> | 100 | | | | | | | |
| | Co Long Description | Fresh to Market Foods, Inc | | | | | | | |
| | RepBroker >> | 300 | | 301 | | 302 | | | |
| | RepBr Long Description | Nicole Toscano | | Patrick Hurley | | Mark Fiedler | | Mich | |
| ▼ Year | ▼ Weeks | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units |
| 2014 | Week 38 | \$37,500,634 | 786,436 | \$2,456,915 | 42,399 | \$6,981,694 | 121,890 | \$ | |
| | Week 37 | \$46,125,781 | 1,769,482 | \$3,022,006 | 95,398 | \$8,587,484 | 274,252 | \$ | |
| | Week 36 | \$65,854,480 | 1,391,916 | \$4,083,679 | 73,901 | \$11,657,521 | 203,782 | \$ | |
| | Week 35 | \$25,234,922 | 605,479 | \$1,447,819 | 31,502 | \$4,161,486 | 81,892 | \$ | |
| | Week 34 | \$28,554,418 | 1,362,328 | \$1,639,609 | 70,881 | \$4,708,660 | 184,257 | \$ | |
| | Week 33 | \$28,353,845 | 1,453,150 | \$1,626,763 | 75,606 | \$4,675,827 | 196,541 | \$ | |
| | Week 32 | \$28,836,934 | 605,479 | \$1,653,469 | 31,502 | \$4,747,902 | 81,892 | \$ | |
| | Week 31 | \$57,479,261 | 1,226,362 | \$4,026,631 | 67,511 | \$10,257,370 | 178,545 | \$ | |
| | Week 30 | \$29,125,416 | 620,883 | \$2,399,867 | 36,009 | \$5,581,544 | 96,653 | \$ | |
| | Week 29 | \$20,096,537 | 1,490,120 | \$1,655,909 | 86,420 | \$3,851,265 | 231,966 | \$ | |
| | Week 28 | \$29,125,416 | 620,883 | \$2,399,867 | 36,009 | \$5,581,544 | 96,653 | \$ | |
| | Week 27 | \$54,362,560 | 1,145,877 | \$4,122,783 | 63,670 | \$10,683,421 | 184,963 | \$ | |
| | 2014 Total | \$450,650,203 | 13,078,395 | \$30,535,318 | 710,808 | \$81,475,717 | 1,933,285 | \$3 | |
| | Grand Total | \$450,650,203 | 13,078,395 | \$30,535,318 | 710,808 | \$81,475,717 | 1,933,285 | \$3 | |

View Explorer

- Rolling 12 Weeks for Sales
 - Parameter Groups
 - Grid
 - Rows
 - Year Weeks**
 - Year
 - Weeks
- Columns
 - Company
 - RepBroker
- View Filter
- Measure Items
 - Actual Sales Sales Amount
 - Actual Sales Sales Units
- Presentation
- Charts

The expression for the level filter is:

```
COUNT(EXISTS([Time].[Year Weeks].CurrentMember, LASTPERIODS(12, EXISTS([Time].[Year Weeks].[Weeks].members, [Time].[Year Based Weeks Based].[Year Based].[Current Year].[Current Week]).Item(0))))
```

This expression uses the Year Based Weeks Based hierarchy to determine the Current Week, Current Year.

EXPRESSION - WEEKS

| View Items and Functions | Expression |
|---|---|
| <ul style="list-style-type: none">▲ Hierarchies<ul style="list-style-type: none">▲ ↻ Year Weeks<ul style="list-style-type: none">▶ Year▶ Weeks▶ ↻ Company▶ ↻ RepBroker▶ Measure Items▶ Functions | <pre>COUNT(EXISTS([Time].[Year Weeks].CurrentMember, LASTPERIODS(12, EXISTS([Time].[Year Weeks].[Weeks].members, [Time].[Year Based Weeks Based].[Year Based].[Current Year].[Current Week]).Item(0))))</pre> |

Buttons: OK, Validate, Cancel, Help

A simple change to the expression changes the view to a rolling 52 weeks. Change the 12 in the expression to 52. It will calculate the current week and prior 51 weeks.

COUNT(EXISTS([Time].[Year Weeks].CurrentMember, LASTPERIODS(52, EXISTS([Time].[Year Weeks].[Weeks].members, [Time].[Year Based Weeks Based].[Year Based].[Current Year].[Current Week]).Item(0))))

Here is the refreshed view after making that change. The filter returns Week 38 of 2014 through Week 39 of 2013.

| Company >> | | 100 | | | | | | |
|------------------------|-------------------|----------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| Co Long Description | | Fresh to Market Foods, Inc | | | | | | |
| RepBroker >> | | 300 | | 301 | | 302 | | 303 |
| RepBr Long Description | | Nicole Toscano | | Patrick Hurley | | Mark Fiedler | | Michelle Kn |
| ▼ Year | ▼ ↑ Weeks | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount |
| 2014 | Week 38 | \$37,500,634 | 786,436 | \$2,456,915 | 42,399 | \$6,981,694 | 121,890 | \$3,009,1 |
| | Week 37 | \$46,125,781 | 1,769,482 | \$3,022,006 | 95,398 | \$8,587,484 | 274,252 | \$3,701,1 |
| | Week 36 | \$65,854,480 | 1,391,916 | \$4,083,679 | 73,901 | \$11,657,521 | 203,782 | \$5,436,4 |
| | Week 35 | \$25,234,922 | 605,479 | \$1,447,819 | 31,502 | \$4,161,486 | 81,892 | \$2,159,9 |
| | Week 34 | \$28,554,418 | 1,362,328 | \$1,639,609 | 70,881 | \$4,708,660 | 184,257 | \$2,442,1 |
| | Week 33 | \$28,353,845 | 1,453,150 | \$1,736,763 | 75,606 | \$4,675,827 | 196,541 | \$2,426,6 |
| | Week 6 | \$22,877,2 | 479,674 | \$2,356 | 2,356 | \$4,189,877 | 76,470 | \$1,411,3 |
| | Week 5 | \$48,783,399 | 1,008,329 | \$2,751,111 | 50,302 | \$8,322,154 | 151,923 | \$3,010,3 |
| | Week 4 | \$25,906,067 | 528,655 | \$1,494,091 | 27,466 | \$4,132,277 | 75,453 | \$1,591,3 |
| | Week 3 | \$25,906,067 | 528,655 | \$1,494,091 | 27,466 | \$4,132,277 | 75,453 | \$1,591,3 |
| | Week 2 | \$25,906,067 | 528,655 | \$1,494,091 | 27,466 | \$4,132,277 | 75,453 | \$1,591,3 |
| | Week 1 | \$39,534,325 | 801,316 | \$2,394,257 | 41,991 | \$7,370,596 | 126,292 | \$2,688,3 |
| | 2014 Total | \$1,174,876,032 | 30,041,048 | \$76,265,834 | 1,619,405 | \$207,724,492 | 4,500,057 | \$88,943,0 |
| 2013 | Week 52 | \$13,628,258 | 272,662 | \$900,166 | 14,525 | \$3,238,319 | 50,839 | \$1,096,9 |
| | Week 51 | \$13,628,258 | 272,662 | \$900,166 | 14,525 | \$3,238,319 | 50,839 | \$1,096,9 |
| | Week 50 | \$13,628,258 | 272,662 | \$900,166 | 14,525 | \$3,238,319 | 50,839 | \$1,096,9 |
| | Week 49 | \$13,628,258 | 272,662 | \$900,166 | 14,525 | \$3,238,319 | 50,839 | \$1,096,9 |
| | Week 48 | \$23,706,682 | 471,237 | \$1,916,347 | 33,655 | \$4,924,612 | 79,136 | \$1,773,3 |
| | Week 47 | \$23,706,682 | 471,237 | \$1,916,347 | 33,655 | \$4,924,612 | 79,136 | \$1,773,3 |
| | Week 46 | \$23,706,682 | 471,237 | \$1,916,347 | 33,655 | \$4,924,612 | 79,136 | \$1,773,3 |
| | Week 45 | \$23,706,682 | 471,237 | \$1,916,347 | 33,655 | \$4,924,612 | 79,136 | \$1,773,3 |
| | Week 44 | \$48,523,380 | 961,223 | \$4,342,602 | 68,863 | \$10,599,859 | 170,432 | \$4,258,6 |
| | Week 43 | \$24,816,698 | 489,986 | \$2,426,255 | 35,209 | \$5,675,247 | 91,297 | \$2,485,2 |
| | Week 42 | \$24,816,698 | 489,986 | \$2,426,255 | 35,209 | \$5,675,247 | 91,297 | \$2,485,2 |
| | Week 41 | \$24,816,698 | 489,986 | \$2,426,255 | 35,209 | \$5,675,247 | 91,297 | \$2,485,2 |
| | Week 40 | \$68,146,075 | 1,395,716 | \$6,152,394 | 96,903 | \$13,375,194 | 231,045 | \$5,918,9 |
| | Week 39 | \$43,329,377 | 905,730 | \$3,726,139 | 61,695 | \$7,699,948 | 139,748 | \$3,433,6 |
| | 2013 Total | \$383,788,684 | 7,708,222 | \$32,765,950 | 525,807 | \$81,352,467 | 1,335,014 | \$32,548,4 |
| Grand Total | | \$1,558,664,716 | 37,749,270 | \$109,031,784 | 2,145,212 | \$289,076,959 | 5,835,071 | \$121,491,4 |

If you want to see rolling periods in the future, use a negative number for the LASTPERIODS part of the expression. Here is the expression when the 52 is changed to -52. It will calculate the current week and next 51 weeks.

```
COUNT(EXISTS([Time].[Year Weeks].CurrentMember,LASTPERIODS(-52,EXISTS([Time].[Year Weeks].[Weeks].members,[Time].[Year Based Weeks Based].[Year Based].[Current Year].[Current Week]).Item(0))))
```

Here is the refreshed view after making that change. The filter returns Week 37 of 2015 through Week 38 of 2014. The future weeks for actual sales do not have data yet, so those cells are empty in the view. This type of filter would be useful in views that contain measures that have anticipated future data, such as budget or forecast measures.

| | | Company >> 100 | | | | | | | | | |
|--------------------|-------------------|------------------------|------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------|--|
| | | Co Long Description | | Fresh to Market Foods, Inc | | | | | | | |
| | | RepBroker >> 300 | | 301 | | 302 | | 303 | | | |
| | | RepBr Long Description | | Nicole Toscano | | Patrick Hurley | | Mark Fiedler | | Michelle Knapp | |
| ▼ Year | ▼ Weeks | Actual Sales | Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | | |
| 2015 | Week 37 | | | | | | | | | | |
| | Week 36 | | | | | | | | | | |
| | Week 35 | | | | | | | | | | |
| | Week 34 | | | | | | | | | | |
| | Week 33 | | | | | | | | | | |
| | Week 32 | | | | | | | | | | |
| | Week 5 | | | | | | | | | | |
| | Week 4 | | | | | | | | | | |
| | Week 3 | | | | | | | | | | |
| | Week 2 | | | | | | | | | | |
| | Week 1 | | | | | | | | | | |
| | 2015 Total | | | | | | | | | | |
| 2014 | Week 52 | | | | | | | | | | |
| | Week 51 | | | | | | | | | | |
| | Week 50 | | | | | | | | | | |
| | Week 49 | | | | | | | | | | |
| | Week 48 | | | | | | | | | | |
| | Week 47 | | | | | | | | | | |
| | Week 46 | | | | | | | | | | |
| | Week 45 | | | | | | | | | | |
| | Week 44 | | | | | | | | | | |
| | Week 43 | | | | | | | | | | |
| | Week 42 | | | | | | | | | | |
| | Week 41 | | | | | | | | | | |
| | Week 40 | \$37,500,634 | 786,436 | \$2,456,915 | 42,399 | \$6,981,694 | 121,890 | \$3,009,195 | 4 | | |
| | Week 39 | \$37,500,634 | 786,436 | \$2,456,915 | 42,399 | \$6,981,694 | 121,890 | \$3,009,195 | 4 | | |
| | Week 38 | \$37,500,634 | 786,436 | \$2,456,915 | 42,399 | \$6,981,694 | 121,890 | \$3,009,195 | 4 | | |
| | 2014 Total | \$112,501,903 | 2,359,309 | \$7,370,746 | 127,197 | \$20,945,082 | 365,669 | \$9,027,586 | 13 | | |
| Grand Total | | \$112,501,903 | 2,359,309 | \$7,370,746 | 127,197 | \$20,945,082 | 365,669 | \$9,027,586 | 13 | | |

Expressions for Filtering Levels

Expression filters that reference member values and attribute relationships were used to filter levels in the following examples. The levels referenced in the filters need to be visible in the view in order for the filters to impact the view.

- [Single Member in Expression](#)
- [Multiple Members in Expression](#)
- [Attribute Relationships in Expression](#)

Note: These same types of expressions can be used when creating dynamic user lists.

Single Member in Expression

This expression returns Customer Sold-To members with values greater than 150280. You can adjust the filter quickly to return different results by changing out the > symbol in the expression for other symbols (such as <) or by changing the "150280" in the expression to a different value.

[Customer Sold-To].[Customer Sold-To].CurrentMember.Name > "150280"

| View Name: <i>Expression Filter with Member</i> | | | | | | | |
|---|-------------------------------|---|--|----------------|---|--|---------------------------------------|
| View Filter | | | | | | | |
| | Product Brand >> | 001 | | | | | 002 |
| | PBrnd Long Description | Tip Top | | | | | Dew Dr |
| Customer Sold-To | SldTo Long Description | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Amount Jan 2014 to Sep 2014 | YTD % of Total | Actual Sales Sales Units Sep 2014 to Sep 2014 | Actual Sales Sales Amount Sep 2014 to Sep 2014 | Actual S Sales U Jan 2014 to Sep 2014 |
| 150290 | Montelissi Distribution | 43,082 | \$2,462,797 | 10% | 5,130 | \$319,989 | 43,082 |
| 150300 | Auburn Providers | 43,387 | \$2,658,087 | 10% | | | 6,000 |
| 150310 | Maple Tree Foods | 36,752 | \$2,266,995 | 9% | 12,409 | \$797,832 | 6,000 |
| 150320 | Quebec Foods | 30,795 | \$1,653,760 | 6% | 5,846 | \$383,155 | 4,000 |
| 150330 | Canadian Imports | 37,630 | \$2,453,227 | 9% | 5,697 | \$382,779 | 8,000 |
| 150340 | Alberta Foods | 41,301 | \$2,415,657 | 9% | | | 6,000 |
| 150350 | Chicago's Finest | 54,234 | \$3,468,513 | 13% | 11,812 | \$782,800 | 3,000 |
| 150360 | St. Louis Distributors | 41,581 | \$2,296,830 | 9% | 6,085 | \$374,624 | 4,000 |
| 150370 | Southwest Foods | 34,992 | \$2,080,132 | 8% | 17,718 | \$1,141,874 | 4,000 |
| 150380 | Packingham Foods | 50,805 | \$2,910,259 | 11% | 5,816 | \$384,567 | 7,000 |
| 150390 | Pacific Providers | 23,249 | \$1,205,925 | 5% | | | 1,000 |
| Grand Total | | 437,809 | \$25,872,183 | 100% | 70,514 | \$4,567,621 | 59,000 |

Multiple Members in Expression

This expression filter returns Customer Sold-To members in a range that is greater than or equal to 150280 and less than or equal to 150350.

[Customer Sold-To].[Customer Sold-To].CurrentMember.Name >= "150280" AND [Customer Sold-To].[Customer Sold-To].CurrentMember.Name <= "150350"

| View Name: <i>Expression Filter with Member</i> | | | | | | | |
|---|-------------------------------|---|--|----------------|---|--|-------------------------------------|
| View Filter | | | | | | | |
| | Product Brand >> | 001 | | | | | 002 |
| | PBrnd Long Description | Tip Top | | | | | Dew Drc |
| Customer Sold-To | SldTo Long Description | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Amount Jan 2014 to Sep 2014 | YTD % of Total | Actual Sales Sales Units Sep 2014 to Sep 2014 | Actual Sales Sales Amount Sep 2014 to Sep 2014 | Actual Sa Sales Un Jan 2014 Sep 201 |
| 150280 | New York Foods | 32,484 | \$2,075,524 | 11% | 6,085 | \$358,317 | 48 |
| 150290 | Montelissi Distribution | 43,082 | \$2,462,797 | 13% | 5,130 | \$319,989 | 45 |
| 150300 | Auburn Providers | 43,387 | \$2,658,087 | 14% | | | 69 |
| 150310 | Maple Tree Foods | 36,752 | \$2,266,995 | 12% | 12,409 | \$797,832 | 65 |
| 150320 | Quebec Foods | 30,795 | \$1,653,760 | 9% | 5,846 | \$383,155 | 46 |
| 150330 | Canadian Imports | 37,630 | \$2,453,227 | 13% | 5,697 | \$382,779 | 81 |
| 150340 | Alberta Foods | 41,301 | \$2,415,657 | 12% | | | 64 |
| 150350 | Chicago's Finest | 54,234 | \$3,468,513 | 18% | 11,812 | \$782,800 | 34 |
| Grand Total | | 319,666 | \$19,454,561 | 100% | 46,979 | \$3,024,872 | 456 |

Attribute Relationships in Expression

This filter returns Product Category members that have the text 'fruit' in their PCat Long Description attribute relationship.

(INSTR(1, [Product Category].[Product Category].CurrentMember.Properties("PCat Long Description"), "Fruit") <> 0)

| View Name: <i>Expression Filter with AR</i> | | | | | | | |
|---|-----------------------|---|----------------|--|----------------|--|---|
| View Filter | | | | | | | |
| | | Actual Sales Sales Amount Wk 1 2014 to Wk 38 2014 | % of Total | Actual Sales Sales Units Wk 1 2014 to Wk 38 2014 | % of Total | Actual Sales Sales Amount Wk 38 2014 to Wk 38 2014 | Actual Sales Sales Units Wk 38 2014 to Wk 38 2014 |
| 201 | Canned Fruit | \$1,979,809,747 | 83.39% | 45,351,254 | 83.38% | \$58,950,296 | 1,123,590 |
| 204 | Fresh Fruit | \$294,627,014 | 12.41% | 7,243,387 | 13.32% | \$11,084,764 | 223,802 |
| 207 | Frozen Fruit Products | \$99,856,357 | 4.21% | 1,794,107 | 3.30% | \$3,193,268 | 45,582 |
| Grand Total | | \$2,374,293,118 | 100.00% | 54,388,749 | 100.00% | \$73,228,327 | 1,392,973 |

Expressions for Filtering an Axis

The following examples show an axis filter that uses just measure items and an axis filter that uses a measure item and attribute relationship. A table containing more example expressions follows these two examples.

Note that expressions that reference attribute relationships should use an IIF statement to check whether or not the level for the attribute relationship is visible. The second example that follows shows the impact of using an IIF statement.

- [Example 1 - Two Measure Items in Axis Filter](#)
- [Example 2- Measure Item and Attribute Relationship in Axis Filter](#)
- [More Example Expressions](#)

Example 1 - Two Measure Items in Axis Filter

This axis filter on columns returns columns where Avg Selling Price is greater than or equal to \$75.00 and Profit is greater than \$50,000.

[Measures].[Data6 (Avg Selling Price)]>=75 AND [Measures].[Data8 (Profit)]>50000

| Product >> | FrtCktail 6oz LnchPk BR* 0A | Pear 6oz LnchPk LS 0B | Peach 6oz LnchPk BR* 0B | FrtCktail 6oz LnchPk BR* 0B | FrtCktail 6oz LnchPk BR* |
|---------------------|-----------------------------|-----------------------|-------------------------|-----------------------------|--------------------------|
| Sales Amount | \$216,087 | \$249,990 | \$240,896 | \$432,175 | \$237,6 |
| Sales Return Amount | (\$23,795) | (\$22,981) | (\$19,987) | (\$47,591) | (\$26,1 |
| Sales After Returns | \$192,292 | \$227,009 | \$220,909 | \$384,584 | \$211,5 |
| Sales Units | 2,545 | 2,840 | 2,738 | 5,089 | 2,7 |
| Sales Return Units | (331) | (268) | (233) | (590) | (3 |
| Avg Selling Price | \$84.92 | \$88.02 | \$87.98 | \$84.92 | \$84 |
| Actual Cost | \$138,142 | \$173,177 | \$154,078 | \$276,284 | \$151,9 |
| Profit | \$54,150 | \$53,832 | \$66,831 | \$108,299 | \$59,5 |

Here is the Expression window for the filter.

EXPRESSION - COLUMNS X

| View Items and Functions | Expression |
|--|---|
| <ul style="list-style-type: none"> ▶ Hierarchies ▶ Measure Items <ul style="list-style-type: none"> <input type="checkbox"/> Data1 (Sales Amount) <input type="checkbox"/> Data2 (Sales Return Amount) <input type="checkbox"/> Data7 (Sales After Returns) <input type="checkbox"/> Data4 (Sales Units) <input type="checkbox"/> Data3 (Sales Return Units) <input type="checkbox"/> Data6 (Avg Selling Price) <input type="checkbox"/> Data5 (Actual Cost) <input type="checkbox"/> Data8 (Profit) ▶ Functions | <pre>[Measures].[Data6 (Avg Selling Price)]>=75 AND [Measures].[Data8 (Profit)]>50000</pre> |

Example 2 - Measure Item and Attribute Relationship in Axis Filter

This axis filter on rows returns rows where the Product sales for the current period of the current year are greater than \$150,000 and the Prod ABC Classification for the Product is A. The first part of the expression contains the sales measure item criteria, and the second part contains the attribute relationship criteria.

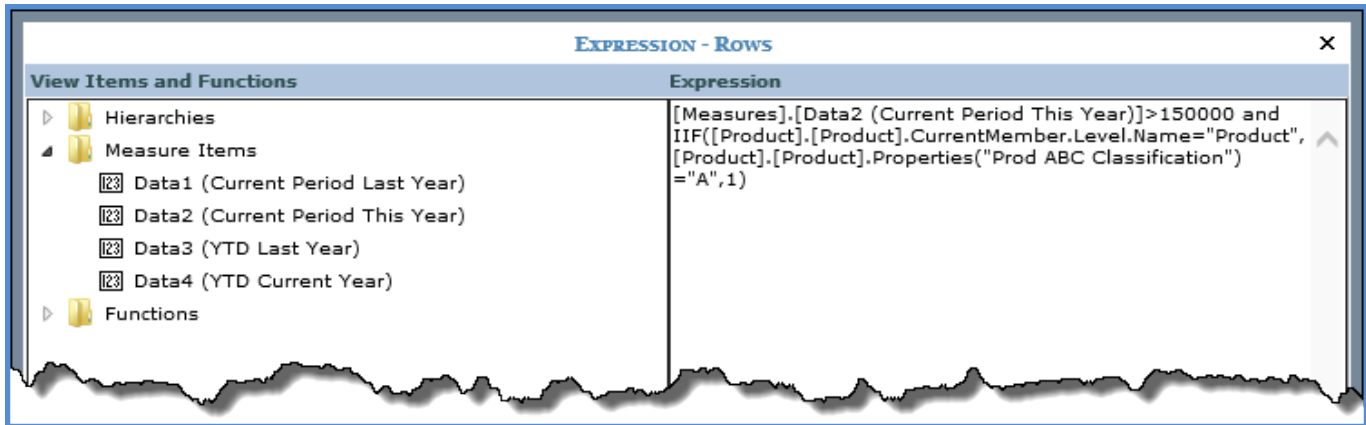
The IIF statement in the second part checks that the level for the attribute relationship referenced in the expression is visible in rows. In this case, the level is visible so Stratum.Viewer considers that filter condition when executing the filter. If the level had not been visible, the condition would have been ignored while executing the filter.

[Measures].[Data2 (Current Period This Year)]>150000 and
 IIF([Product].[Product].CurrentMember.Level.Name="Product",[Product].[Product].Properties("Prod ABC Classification")="A",1)

Note: The portion of the above MDX that checks for the level visibility references the name of the dimension and hierarchy for the level -- in this case [Product].[Product]. The hierarchy name is needed in cases where there are multiple hierarchies within the same dimension.

| RepBroker | Product | Prod ABC Classification | Current Period Last Year | Current Period This Year | YTD Last Year | YTD Current Year |
|-----------|-------------------------|-------------------------|--------------------------|--------------------------|---------------|------------------|
| 300 | Pear 6oz LnchPk LS 5B | A | \$321,653 | \$255,774 | \$13,178,521 | \$7,500,585 |
| | Pnappl Slcs 12oz PL* 5B | A | \$208,384 | \$168,596 | \$9,366,632 | \$5,309,002 |
| | Pear 6oz LnchPk LS 5D | A | \$192,992 | \$153,464 | \$7,907,113 | \$4,500,351 |
| | Pear 6oz LnchPk LS 5E | A | \$209,074 | \$166,253 | \$8,566,039 | \$4,875,381 |
| | Pear 6oz LnchPk LS 5F | A | \$225,157 | \$179,042 | \$9,224,965 | \$5,250,410 |
| | Pear 6oz LnchPk LS 5G | A | \$241,240 | \$191,831 | \$9,883,891 | \$5,625,439 |
| | Pear 6oz LnchPk LS 5H | A | \$257,322 | \$204,619 | \$10,542,817 | \$6,000,468 |
| | Pear 6oz LnchPk LS 5I | A | \$273,405 | \$217,408 | \$11,201,743 | \$6,375,498 |
| | Pear 6oz LnchPk LS 5J | A | \$289,487 | \$230,197 | \$11,860,669 | \$6,750,527 |
| | Pnappl Slcs 12oz PL* 5I | A | \$187,545 | \$151,736 | \$8,429,969 | \$4,778,101 |

This is the Expression window for the filter.



Here's what the view would look like if you were to drill up to RepBroker. Only the [Measures].[Data2 (Current Period This Year)]>150000 part of the axis filter expression is executed since Product is no longer visible.

View Name: Axis Filter on Rows

View Filter

| RepBroker | Current Period Last Year | Current Period This Year | YTD Last Year | YTD Current Year |
|---------------------------|--------------------------|--------------------------|------------------------|------------------------|
| 300 | \$43,329,377 | \$37,500,634 | \$2,034,499,253 | \$1,161,247,774 |
| 301 | \$3,726,139 | \$2,456,915 | \$132,397,108 | \$75,365,668 |
| 302 | \$7,699,948 | \$6,981,694 | \$352,265,971 | \$204,486,173 |
| 303 | \$3,433,655 | \$3,009,195 | \$153,524,572 | \$87,846,078 |
| 304 | \$2,283,987 | \$2,626,736 | \$155,507,823 | \$89,707,395 |
| 305 | \$17,916,802 | \$15,022,164 | \$877,750,849 | \$510,513,452 |
| 306 | \$5,058,991 | \$4,504,960 | \$196,770,700 | \$114,729,358 |
| 307 | \$1,409,623 | \$1,117,367 | \$57,488,785 | \$33,992,154 |
| 308 | \$4,269,497 | \$3,347,914 | \$158,242,107 | \$89,149,261 |
| 309 | \$2,573,712 | \$2,815,224 | \$127,422,712 | \$72,776,501 |
| 312 | \$11,923,874 | \$10,408,297 | \$548,158,596 | \$315,109,984 |
| 313 | \$16,772,903 | \$14,197,829 | \$735,352,351 | \$418,232,088 |
| 315 | \$4,062,845 | \$3,499,178 | \$180,284,697 | \$105,410,011 |
| 318 | \$950,798 | \$1,471,982 | \$69,800,032 | \$40,668,788 |
| Grand Total | \$125,412,150 | \$108,960,090 | \$5,779,465,556 | \$3,319,234,685 |

More Example Expressions

| Desired Results... | Example Axis Filter |
|---|--|
| For all levels, Average Selling Price is >= 75 and Profit > 50,000. | [Measures].[Data6 (Avg Selling Price)]>=75 And [Measures].[Data8 (Profit)]>50000 |
| When at Product level, will return rows where Prod ABC Classification = "A" AND Actual Sales Sales Units Jan 2014 to Sep 2014 is > 150,000. When at any other level - Actual Sales Sales Units Jan 2014 to Sep 2014 is > 150,000. | [Measures].[Data1 (Actual Sales Sales Units Jan 2014 to Sep 2014)]>150000 and IIF([Product].[Product].CurrentMember.Level.Name="Product", [Product].[Product].Properties("Prod ABC Classification")="A",1) |

| | |
|--|--|
| Only for the Product level, return rows where Prod ABC Classification = "A" AND Actual Sales Sales Units Jan 2014 to Sep 2014 is > 150,000. When at any other level – No filter applied. | IIF([Product].[Product].CurrentMember.Level.Name="Product" , IIF ([Product].[Product].Properties("Prod ABC Classification")="A" AND [Measures].[Data1 (Actual Sales Sales Units Jan 2014 to Sep 2014)]>150000, 1,0) , 1) |
| When at Product level, will return rows where Actual Sales Sales Units Jan 2014 to Sep 2014 is > 150,000. When at any other level - Actual Sales Sales Units Jan 2014 to Sep 2014 is > 10,000,000. | IIF([Product].[Product].CurrentMember.Level.Name="Product" , IIF ([Measures].[Data1 (Actual Sales Sales Units Jan 2014 to Sep 2014)]>150000, 1,0) , [Measures].[Data1 (Actual Sales Sales Units Jan 2014 to Sep 2014)] > 10000000) |
| When at Product level, will return rows where Prod ABC Classification = "A" AND Actual Sales Sales Units Jan 2014 to Sep 2014 is > 150,000. When at any other level - Actual Sales Sales Units Jan 2014 to Sep 2014 is > 10,000,000. | IIF([Product].[Product].CurrentMember.Level.Name="Product" , IIF ([Product].[Product].Properties("Prod ABC Classification")="A" AND [Measures].[Data1 (Actual Sales Sales Units Jan 2014 to Sep 2014)]>150000, 1,0) , [Measures].[Data1 (Actual Sales Sales Units Jan 2014 to Sep 2014)] > 10000000) |

Examples of Sorts and Filters on Totals

This view displays year to date (YTD) sales data by Sales Director and UPC Global Number. A filter has been applied to the total column for the current year YTD sales. The result is a view where the only detail sales data on display for each Sales Director is that of Products that make up the top 20 percent of total YTD sales.

The screenshot shows a data table with the following columns: Sales Dir, UPC Global Number, UPC Long Description, Actual Sales YTD 2014, Actual Sales YTD 2013, and Grand Total. A red box highlights the 'Actual Sales YTD 2014' column, with a callout box labeled 'Top Percent 20' indicating the filter applied to this column.

| | Sales Dir >> | Helen Briggs | | Steve Mentas | | Actual Sales YTD 2014 | Actual Sales YTD 2013 |
|---------------------------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|
| 0 - 13800 - 30321 - 9 | Frozen Lasagna Dinner | \$67,474,884 | \$114,640,211 | \$52,791,395 | \$91,799,773 | \$120,266,278 | \$205,439,985 |
| 0 - 13800 - 78934 - 9 | Meatloaf, Frozen | \$62,969,705 | \$109,019,253 | \$53,046,268 | \$88,655,860 | \$116,015,974 | \$197,675,113 |
| 0 - 24000 - 12431 - 4 | Applesauce 106oz PL* | \$61,198,544 | \$102,926,472 | \$39,810,495 | \$66,757,441 | \$101,009,039 | \$169,683,913 |
| 0 - 02749 - 25408 - 6 | Asparagus | \$54,327,537 | \$90,241,412 | \$36,101,356 | \$61,306,990 | \$90,428,893 | \$151,548,403 |
| 0 - 06403 - 92736 - 2 | Orange Juice Conc. | \$50,270,451 | \$84,207,881 | \$33,523,552 | \$56,420,498 | \$83,794,003 | \$140,628,378 |
| 0 - 02749 - 99267 - 6 | Cherries, Bing | \$42,383,321 | \$73,262,012 | \$31,376,355 | \$52,936,770 | \$73,759,676 | \$126,198,782 |
| Grand Total | | \$338,624,442 | \$574,297,241 | \$246,649,422 | \$416,877,332 | \$585,273,863 | \$991,174,573 |

In this example, quarterly sales data is displayed by Distribution Center Warehouse and Customer Ship-To. A filter has been applied to the total column for the current year, current quarter sales. The result is a view where the detail data on display is Customer Ship-To's with total sales greater than \$2,000,000. Also, a sort was applied to the same total column to organize the Customer Ship-To's in descending order.

| 1 to 50 of 79 1 to 6 of 6 Viewer ▾ | | | | | | |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--|-----------------------------|
| View Name: <i>Ship-To Analysis by Warehouse</i> | | | | | | |
| View Filter | | | | | | |
| Distribution Center Warehouse >> | 19 | | 21 | | >= 2000000 Total | |
| Customer Ship-To | Actual Sales Amount Q3 2014 | Actual Sales Amount Q3 2013 | Actual Sales Amount Q3 2014 | Actual Sales Amount Q3 2013 | ▼ Actual Sales Amount Q3 2014 | Actual Sales Amount Q3 2013 |
| Wilder Foods -- St Louis MO WOB | \$3,784,881 | \$3,784,881 | \$4,611,329 | \$4,611,829 | \$8,396,209 | \$8,396,209 |
| Wilder Foods -- St Louis MO WOJ | \$3,406,393 | \$3,406,393 | \$4,150,196 | \$4,150,196 | \$7,556,588 | \$7,556,588 |
| Wilder Foods -- St Louis MO WOI | \$3,217,149 | \$3,217,149 | \$3,919,629 | \$3,919,629 | \$7,136,778 | \$7,136,778 |
| Wilder Foods -- St Louis MO | \$3,045,002 | \$3,045,002 | \$3,701,887 | \$3,701,887 | \$6,746,889 | \$6,746,889 |
| Wilder Foods -- St Louis MO WOH | \$3,027,905 | \$3,027,905 | \$3,689,063 | \$3,689,063 | \$6,716,967 | \$6,716,967 |
| Wilder Foods -- St Louis MO WOG | \$2,838,660 | \$2,838,660 | \$3,458,496 | \$3,458,496 | \$6,297,157 | \$6,297,157 |
| Wilder Foods -- St Louis MO WOF | \$2,649,416 | \$2,649,416 | \$3,227,930 | \$3,227,930 | \$5,877,347 | \$5,877,347 |
| Wilder Foods -- St Louis MO WOE | \$2,460,172 | \$2,460,172 | \$2,997,364 | \$2,997,364 | \$5,457,536 | \$5,457,536 |
| Wilder Foods -- Buffalo NY WOB | \$2,537,763 | \$2,537,763 | \$2,548,447 | \$2,548,447 | \$5,086,210 | \$5,086,210 |
| Wilder Foods -- St Louis MO WOD | \$2,270,928 | \$2,270,928 | \$2,766,797 | \$2,766,797 | \$5,037,726 | \$5,037,726 |
| Wilder Foods -- St Louis MO WOC | \$2,081,684 | \$2,081,684 | \$2,536,231 | \$2,536,231 | \$4,617,915 | \$4,617,915 |
| Wilder Foods -- Buffalo NY WOJ | \$2,283,987 | \$2,283,987 | \$2,293,602 | \$2,293,602 | \$4,577,589 | \$4,577,589 |
| Wilder Foods -- Buffalo NY WOI | \$2,157,098 | \$2,157,098 | \$2,166,180 | \$2,166,180 | \$4,323,278 | \$4,323,278 |

Advanced Select Members Window

The screenshot shows the 'ADVANCED SELECT MEMBERS: UPC GLOBAL NUMBER' window. At the top, a search field contains 'apple', a search icon, and dropdown menus for 'Search By: UPC Long Description' and 'Starts with'. Below are two tables of results, each with a '1 to X of Y' indicator and navigation arrows. The first table shows 5 items, and the second shows 4 items. Buttons for 'Add', 'Add All', 'Clear', 'Clear All', 'OK', 'Cancel', 'More...', and 'Help' are visible. Red circles with numbers 1-4 highlight key UI elements.


| UPC Long Description | UPC Global Number | UPC ABC Classification |
|--|-----------------------|------------------------|
| <input type="checkbox"/> Apple Filling 106oz BR* | 0 - 24000 - 12422 - 4 | B |
| <input type="checkbox"/> Apple Filling 106oz PL* | 0 - 24000 - 12529 - 4 | A |
| <input type="checkbox"/> Apple Filling 12oz BR* | 0 - 24000 - 12522 - 4 | B |
| <input type="checkbox"/> Apple Filling 12oz PL* | 0 - 24000 - 12429 - 4 | A |
| <input type="checkbox"/> Apples Red Delicious | 0 - 39484 - 92837 - 1 | B |

| UPC Long Description | UPC Global Number | UPC ABC Classification |
|---|-----------------------|------------------------|
| <input type="checkbox"/> Applesauce 106oz BR* | 0 - 24000 - 12430 - 4 | A |
| <input type="checkbox"/> Applesauce 106oz PL* | 0 - 24000 - 12431 - 4 | A |
| <input type="checkbox"/> Applesauce 12oz BR* | 0 - 24000 - 12530 - 4 | A |
| <input type="checkbox"/> Applesauce 12oz PL* | 0 - 24000 - 12531 - 4 | A |

1

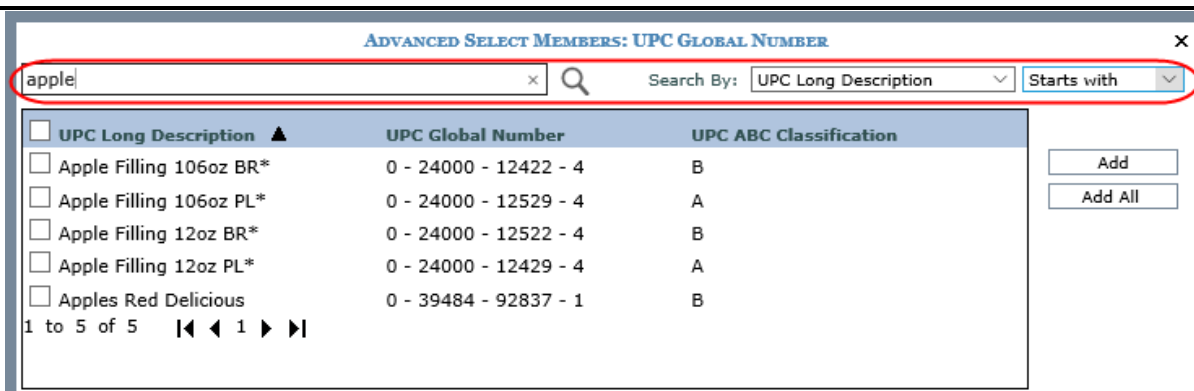
Use the search properties to specify the criteria and the parameters by which to search for members to be used in the member list. That list can be used as a level filter, to create a user list, or to help build an expression.

Note: The window also is used when administrators set up roles.

Click the search icon  after you specify your search properties:

- Enter a value in the search field. Multiple values can be entered by separating them with a semicolon. If the field is left blank, the available list displays all members for the active level.
- Optionally use the Search By drop-down lists. The first list is to select the attribute relationship to perform the search on. The other list lets you choose whether you want your search to contain, not contain, start with, be equal to, not equal to, greater than, or less than the value(s) specified in the search.

In the following example, we searched for UPC long descriptions starting with “apple” and 5 items were retrieved.



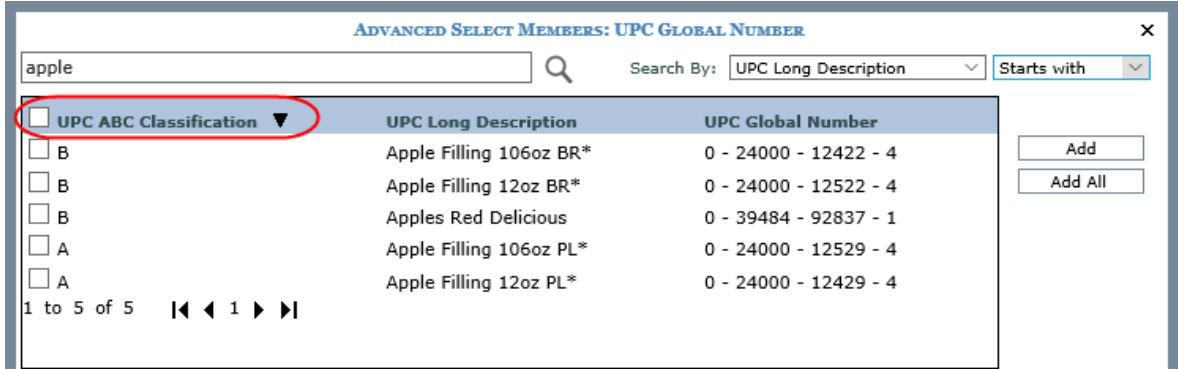
2

Available Selection list – The list area displays members returned by your search. Click checkboxes next to members then click Add to move the selected members to the bottom portion of the window. Click OK when you are done making various member selections.

Other options and tips:

- Selecting members in the top portion of the window then clicking OK will add the selected members to a filter and close the window.
- Click the checkbox in the heading area to select or deselect all members on all pages in the list at once.
- Use Shift+Click as a shortcut to selecting a range of consecutive members (click the first item, then press Shift key while clicking the last item).
- Click Add All to add all of the available members, from all pages, to the selected list in the bottom portion of the window.

Columns in this area are sort and drag/drop enabled. In the following example, we clicked the UPC ABC Classification column and dragged it to the first position. We also clicked the Sort icon and changed the sort from ascending to descending.



Use the paging arrows and links at the bottom of the list to move between pages of members. Selections made on various pages are retained as you move between pages in the list.

Note: For all windows that display lists (views, user lists, etc.), there is a single administrative setting on the Application window that controls the page size.

3

Selected list - displays the members selected for the member list. A count under the Clear All button indicates how many members are included in the member list filter.

To clear members, click checkboxes next to members you want to remove from the filter and then click Clear when you are done making selections.

Other options and tips:

- Use the checkbox in the heading area to select or deselect all members on all pages in the list at once.
- Use Shift+Click as a shortcut to selecting a range of consecutive members (click the first item, then press Shift key while clicking the last item).
- Click Clear All to clear all of the members, from all pages of the selected list.

In the following example, there are four items in the filter and two have been selected with the intention of clearing them. After the Clear button is clicked, the filter will contain only two items.

| <input type="checkbox"/> UPC ABC Classification ▼ | UPC Long Description | UPC Global Number |
|---|----------------------|-----------------------|
| <input type="checkbox"/> A | Applesauce 106oz BR* | 0 - 24000 - 12430 - 4 |
| <input checked="" type="checkbox"/> A | Applesauce 106oz PL* | 0 - 24000 - 12431 - 4 |
| <input type="checkbox"/> A | Applesauce 12oz BR* | 0 - 24000 - 12530 - 4 |
| <input checked="" type="checkbox"/> A | Applesauce 12oz PL* | 0 - 24000 - 12531 - 4 |

1 to 4 of 4 ⏪ ⏩ 1 ⏪ ⏩

Buttons: OK, Cancel, More..., Help

Buttons: Clear, Clear All, 4 Selected

Use the paging arrows and links at the bottom of the list to move between pages of members. Selections made on various pages are retained as you move between pages in the list.

Note: For all windows that display lists (views, user lists, etc.), there is a single administrative setting on the Application window that controls the page size.

4

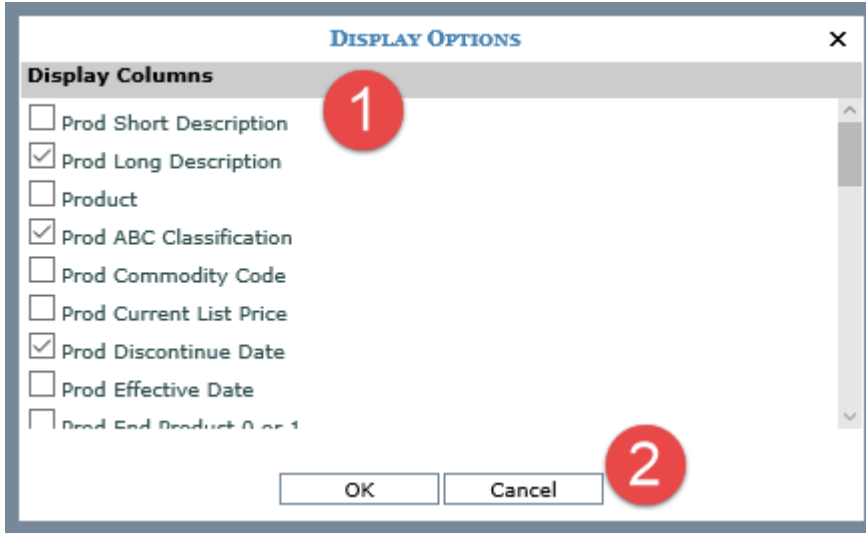
More... -- Click the More button for additional features:

- **Change Filter Type** – Click to access the Select Filter Method window if you need to apply a different type of filter to the level (User List, Named Set, or Expression).
- **Clear Filter** – Click as a shortcut to clearing the filter from the level.
- **Basic Select** – Click to access the Select Members window. This option may not display depending on administrative settings for the level. Administrators determine which version(s) of the window are available by dimension.
- **Display Options** – Use to change the display columns in this window. You can display up to 10 display columns for a level in the Advanced Select Members window.
- **Paste** – Click to access the Paste Members window, which lets you copy a list of members into the member list that you are building.

Change Filter Type
Clear Filter
Basic Select
Display Options
Paste

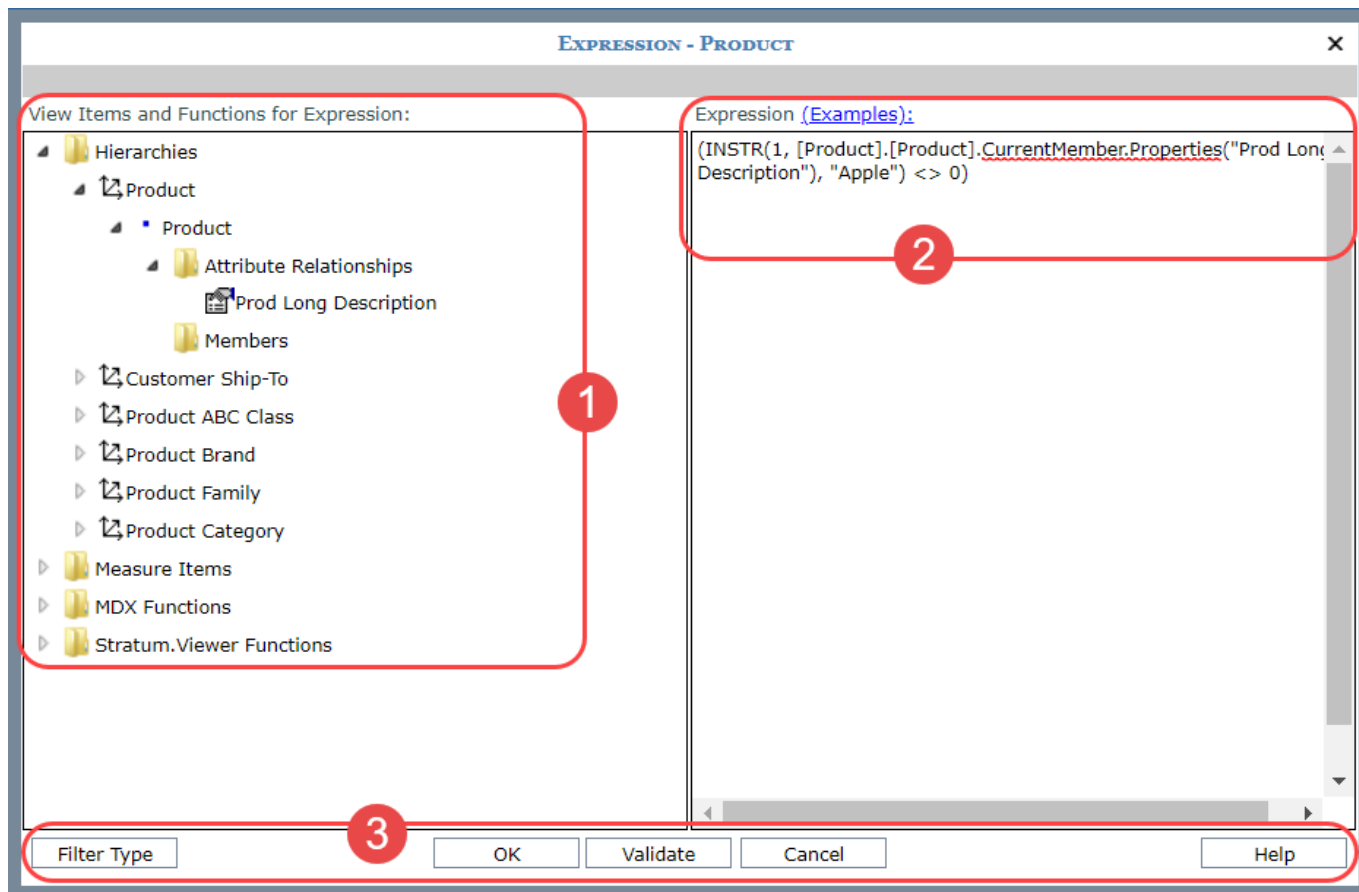
Buttons: Cancel, More...

Display Options Window for Select and Advanced Select Members Windows



| | |
|----------|--|
| <p>1</p> | <p>Display Columns - Select or deselect columns to control the information that displays on the Select Members and Advanced Select Members windows. Up to 10 columns of information can be displayed. The columns that display by default depend on where you accessed the window from within Stratum.Viewer. If accessed from views, the default columns are what's displayed in the grid. Up to the first 10 attribute relationships used in the view will be used as display columns. If accessed from windows such as User List Maintenance, the default columns are determined by administrator settings in the Dimension window. Up to the first 10 attribute relationships selected in administrator settings will be used as display columns.</p> |
| <p>2</p> | <p>OK - Clicking OK applies the changes for the current session only in the Select and Advanced Select Members windows. When you toggle back and forth between the two windows, the changes will be reflected in both windows. Once you exit the windows, display options return to their defaults.</p> |

Expression Window for Filters



1

View Items and Functions for Expression – Use this part of the window to select items or functions to use in building an expression for a filter on a level or an axis filter in the view. Click items or drag and drop them to use them in the Expression section.

Objects available to work with as you build your filter expression are described below.

Hierarchies Folder – Hierarchies, levels, and attribute relationships that are part of the view definition are in list in the Hierarchies folder. They appear in the same order as in the view explorer and regardless of whether or not they are visible or actively showing in the grid.

The Levels folder can be expanded to see the Attribute Relationships and Members folders. If attribute relationships were selected for the level, they will display when the Attribute Relationships folder is expanded.

- **Levels and Attribute Relationships** - Click a level or attribute relationship to add it to the expression. Objects can also be drag and dropped into the Expression portion of the window.
- **Members** - Another tool for building the expression is the Members folder. Click it to access the Select Filter Method window. From there, you can access the Select or Advanced Select Members window. This allows you to select specific members for the expression. Or, you can access the Named Set window and select a named set for the expression in cases when you are working with a single level time dimension.

When you add objects in this manner to the expression, they are added in MDX format. That format includes a reference to the object dimension and hierarchy. The standard MDX format for objects commonly used in expressions follows.

- **Level** - [Dimension name].[Hierarchy name].[Level name].members
- **Attribute Relationship** - [Dimension name].[Hierarchy name].Properties("Attribute Relationship name")
- **Member** - [Dimension name].[Hierarchy name].[Level name].[Member value]

Measure Items Folder – The Measure Items folder lists all the measure items associated with the view. Each measure item displays as Name (Caption). The name is the unique identifier associated with the measure item, which can be seen in the Properties window for the measure item. The caption makes it user friendly. They appear in the same order as in the view explorer.

You can include measure items as part of the expression using any of the following methods:

- Select measure items by clicking or drag and drop.
- Key in measure item names and captions directly in the Expression portion of the window in proper MDX format:

[Measures].[Name(Caption)]

where Name is the unique identifier that you can see for the measure item displayed in the Measure items folder of the expression window and Caption is the text that identifies the measure item in the view (caption also shows next to the Name for the measure item in the Measure Items folder).

MDX Functions Folder – A Functions folder provides you with logical, member, numeric, set, Stratum.Viewer-specific, tuple, and VBA functions that can be used for building the filter expression. You can select a function by clicking, double clicking, or drag and drop. You can also key in a function directly in the Expression portion of the window.

If you select a function for your expression, then the formula for it will display in the Expression section and each parameter will be enclosed in double arrows (<< >>). Function parameters enclosed in double arrows, such as «PARAMETER», are required. Parameters enclosed in brackets and double arrows, such as [«PARAMETER»], are optional. You can highlight each parameter and type over it directly in the Expression section. Or you can click the needed element from the tree structure in the window and it will be inserted into that section of the function.

Stratum.Viewer Functions Folder – This folder includes custom Stratum.Viewer functions that serve as shortcuts for building commonly used calculations, such as cumulative and percent of total functions. If you use them in an expression, they will be preceded by a pound sign (#) to distinguish them from standard MDX functions. The Stratum.Viewer specific functions are:

- ABC Cumulative Percent of Total
- ABC Cumulative Total
- Achievement Percent
- Cumulative Percent of Total
- Cumulative Total
- Divide With Zero Check
- Percent of Change
- Percent of Subtotal
- Percent of Total
- Total

There are pop-up labels for all functions, and they give you a brief description of the functions.

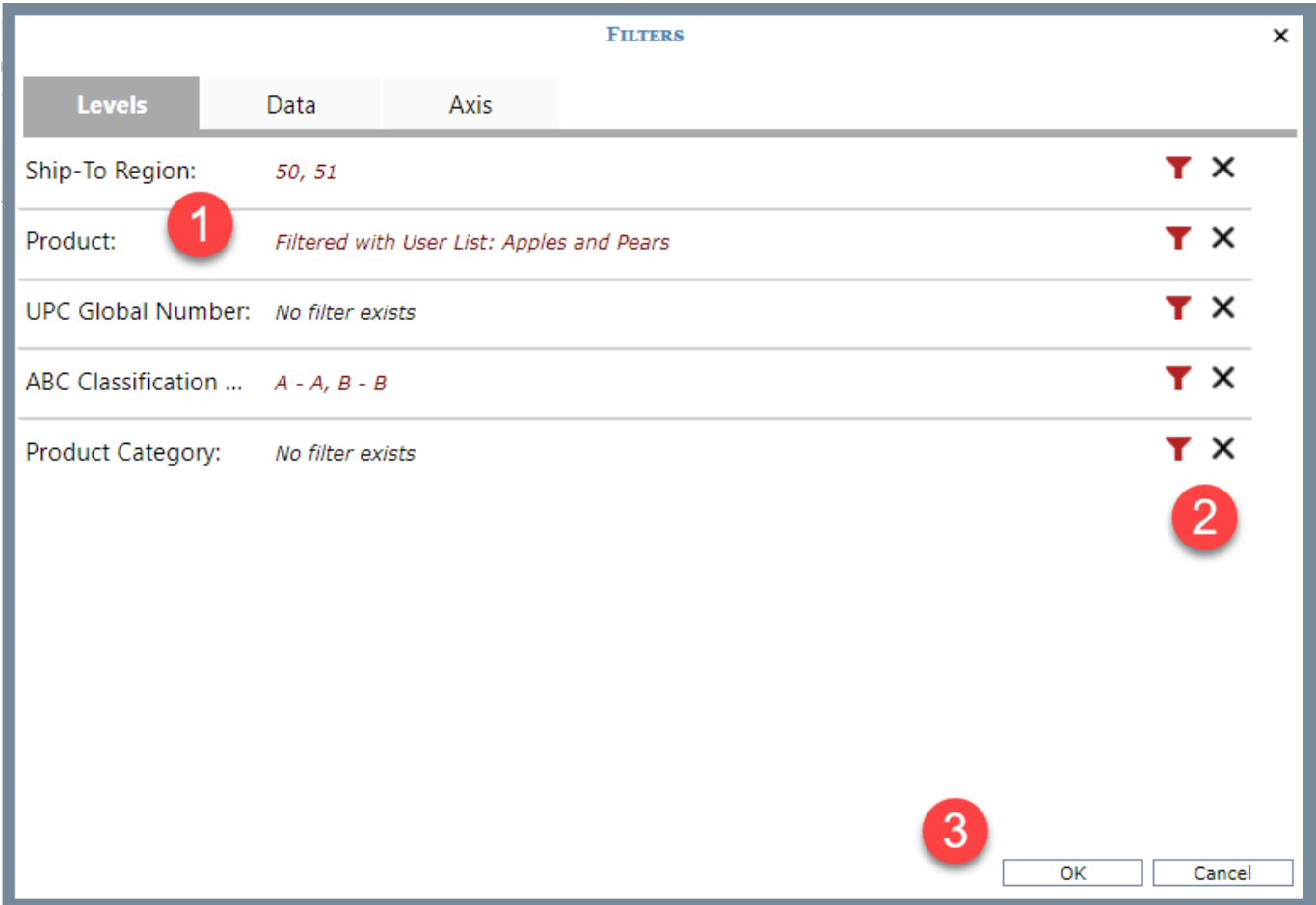
| | |
|----------|---|
| <p>2</p> | <p>Expression – Use this part of the window to build the expression for a filter on a level or an axis filter in the view. The MDX for objects selected from the View Items and Functions for Expression portion of the window display in this part of the window as you add them – add by clicking them or dragging and dropping them. You can also add objects to the expression by typing directly in the space provided in the Expression section of the window. Click the Examples link to see examples of expressions for different types of filters on levels or an axis in a view.</p> <hr/> <p>Note: Objects not visible in a view or not part of a view definition can be used in an expression by manually entering them into the Expression portion of the window. You must refer to them by their valid MDX format and they must exist in the cube associated with the view.</p> |
| <p>3</p> | <p>Filter Type – When you access this window from a view to create a filter for a level, it will include a Filter Type button. Click it to access the Select Filter Method window if you need to apply a different type of filter to the level (Member List, User List, Named Set).</p> <p>OK / Validate / Cancel – Click the Validate button at any point while you are building the expression. Stratum.Viewer will verify that the format of your expression is valid. If you do not click the Validate button while building the expression, then validation will be performed once you click the OK button. Click OK to apply the expression filter.</p> <p>Help – Click to access examples of expressions for level or axis filters.</p> |

Filters Window

There are three tabs in this window, used to filter any part of your view. Click to see descriptions of each tab.

- [Levels Tab](#)
- [Data Tab](#)
- [Axis Tab](#)

Levels Tab



1

Each level that is available (not hidden) in a view will display in the Levels tab of the Filters window. The level name will be followed by details about any filtering applied to the level.

- **Member Filter** – Members in the filter will be listed after the level name. Ship-To Region and ABC Classification in the previous image have member filters applied to them.
- **User List Filter** – The text “Filtered with User List:” will display followed by the name of the user list. The Product level in the previous image has a user list filtered applied to it.
- **Named Set Filter** – The text “Filtered with Named Set:” will display followed by the name of the named set.
- **Expression Filter** – The text “Filtered with Expression:” will display followed by the expression.
- **No filter exists** – This text will display next to levels that do not have a filter applied to them. This text also displays for cases where a level is filtered but not yet drilled to in the view at the time the Filters window was accessed.

If a level's filter information has a series of dots “...” at the end of it, click the dots to activate a cursor. This enables you to scroll right and see the rest of the filter details for the level. In this example, the dots for a filtered RepBroker level were clicked.





A cursor displays so you can scroll right and see the names of the rest of the members in the RepBroker member filter.



2

Each level has icons available for adding, changing, or clearing filters for the respective level.

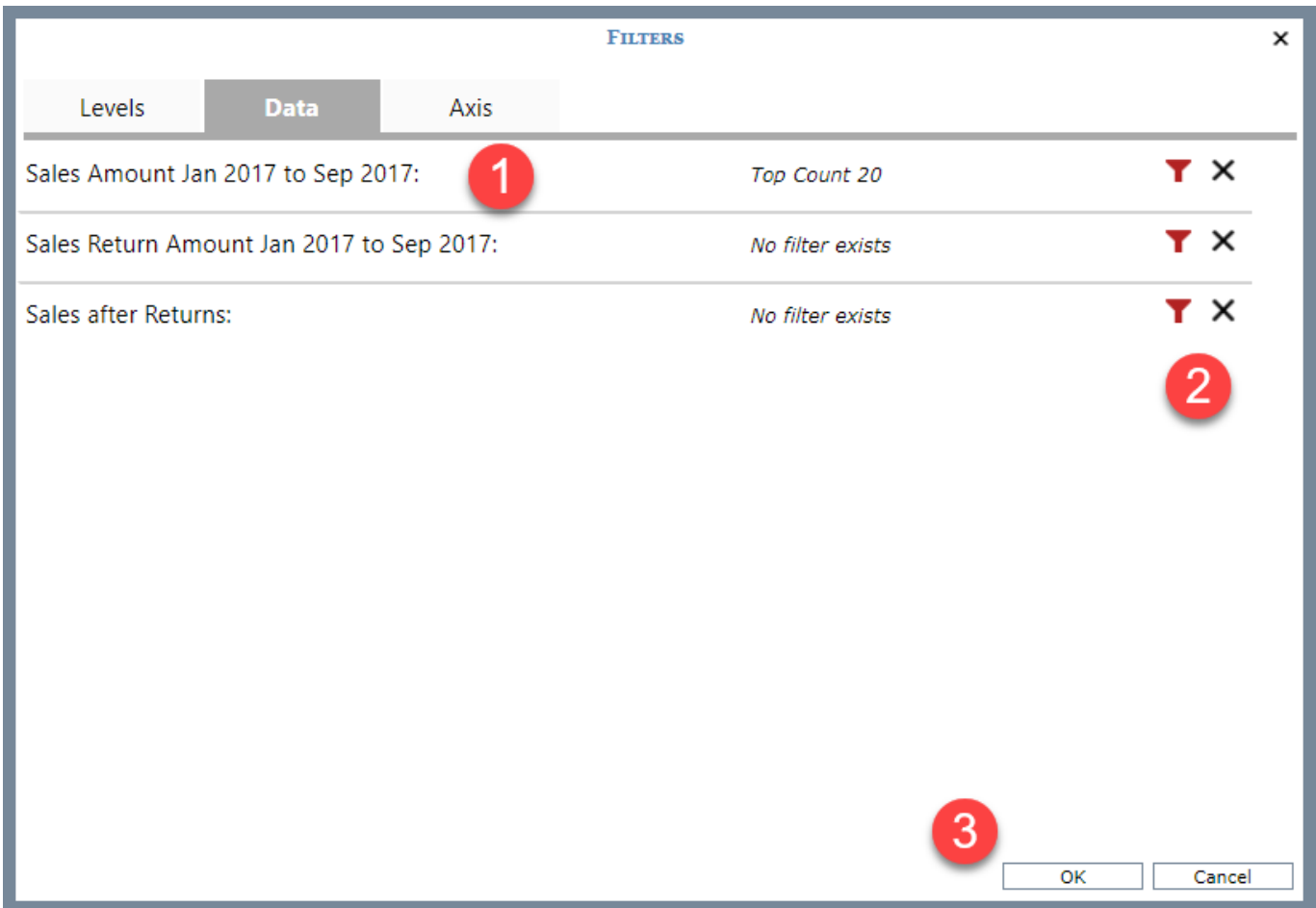
- Change Filter  – Click this icon to add or change a filter. When you are setting up a new filter, the [Select Members window](#) will display. If you want to set up a different type of filter than a member filter, click the More button then choose Change Filter Type and select the filter type from the [Select Filter Method window](#) that displays. If you click the icon to change a filter, the window for the type of filter applied to the level will display. For example, if the level has a user list filter applied to it, the [Select User List Filter window](#) will display.
- Clear Filter  – Click this icon to remove a filter for a level.



3

OK – Click OK to apply all the changes that you made in the Filters window. Changes made on any tabs will be applied to the view.

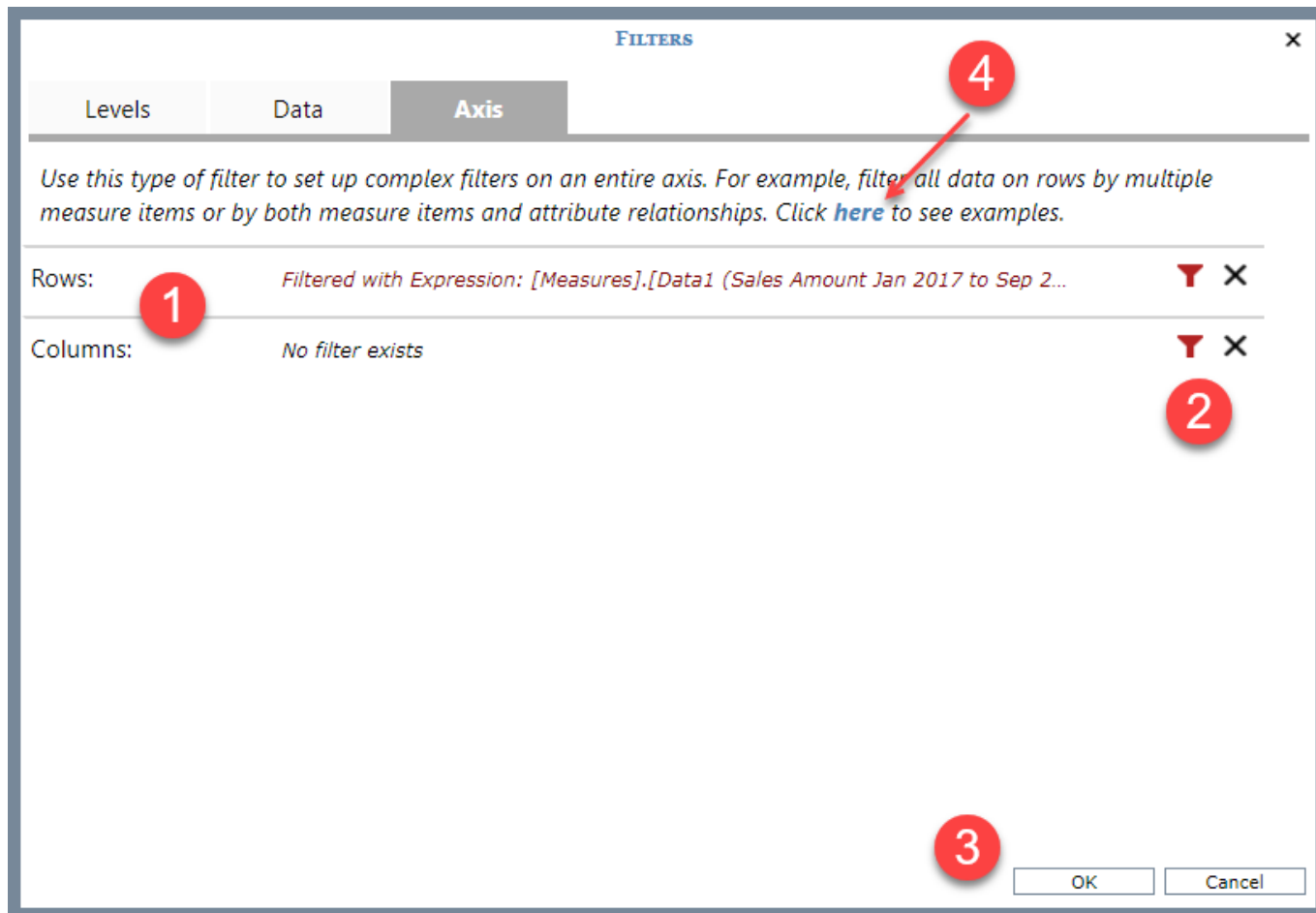
Cancel – Click Cancel to close the window without applying your changes.

Data Tab



| | |
|----------|---|
| <p>1</p> | <p>Each measure item included in the view will display in the Data tab of the Filters window. The measure item name will be followed by details about any filtering applied to the measure item.</p> <ul style="list-style-type: none"> • Top Count, Top Percent, Top Sum • Bottom Count, Bottom Percent, Bottom Sum • Recursive Top/Bottom Count, Percent, Sum • Overall Top / Bottom Count, Percent, Sum • No filter exists – This text will display next to measure items that do not have a filter applied to them. |
| <p>2</p> | <p>Each measure item has icons available for adding, changing, or clearing filters for the respective measure item.</p> <ul style="list-style-type: none"> • Change Filter  – Click this icon to add or change a filter. When you are setting up a new filter, the Measure Item Filter window will display. • Clear Filter  – Click this icon to remove a filter. |
| <p>3</p> | <p>OK – Click OK to apply all the changes that you made in the Filters window. Changes made on any tabs will be applied to the view.</p> <p>Cancel – Click Cancel to close the window without applying your changes.</p> |

Axis Tab



| | |
|----------|---|
| <p>1</p> | <p>Set up filters on the rows or columns axis using the Axis tab.</p> <p>Use axis filters when you need to set up filters involving multiple measure items or both measure items and attribute relationships. For example, use an axis filter to return all rows that fit the criteria of two different measure items -- such as all rows where Sales Units are greater than 1,000 and Profit Margin is less than 20%.</p> <ul style="list-style-type: none"> • Filtered with Expression – If a filter exists, the filter expression displays next to the Rows and Columns section of this tab. • No filter exists – This text will display next to an axis if it does not have a filter applied to them. <p>If axis filter information has a series of dots “...” at the end of it, click the dots to activate a cursor. This enables you to scroll right and see the rest of the filter details for the axis.</p> <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p><i>Filtered with Expression: [Measures].[Data1 (Sales Amount Jan 2017 to Sep 2...</i></p> </div> |
| <p>2</p> | <p>Each axis has icons available for adding, changing, or clearing filters for the respective axis.</p> <ul style="list-style-type: none"> • Change Filter – Click this icon to add or change a filter. When you are setting up or editing a filter, the Expression window will display. • Clear Filter – Click this icon to remove a filter for an axis. |
| <p>3</p> | <p>OK – Click OK to apply all the changes that you made in the Filters window. Changes made on any tabs will be applied to the view.</p> |

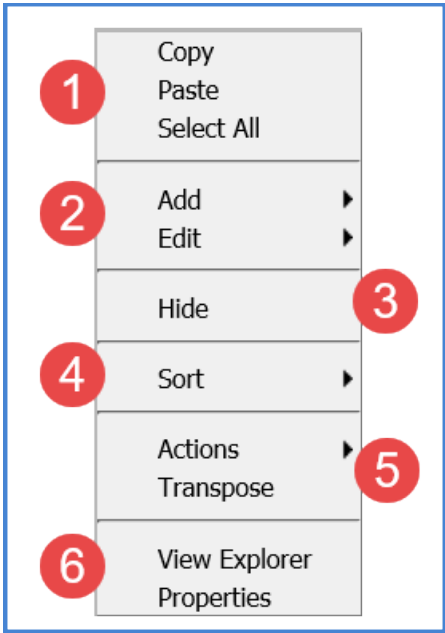
| | |
|----------|--|
| | Cancel – Click Cancel to close the window without applying your changes. |
| 4 | <i>Click here to see examples.</i> - Example expressions are available to review or even copy and paste into your expression definition. |

Grid Pop-up Menu

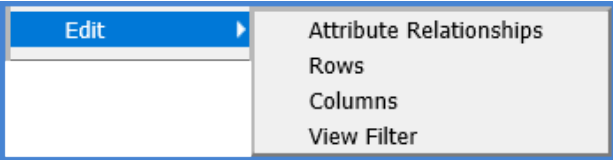
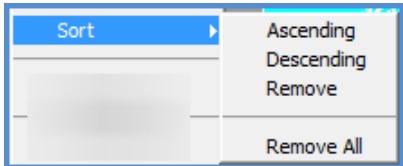
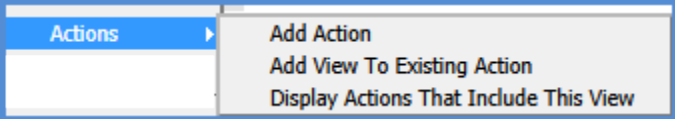
Right-click objects in views to display available functionality for them such as inserting measure items, transposing the grid, filtering objects in the grid, and so forth. Many of the functions can also be controlled through view explorer and the Properties window, giving you several ways to make changes.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

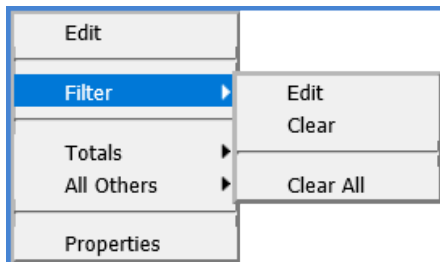


| | |
|----------|--|
| 1 | <p>Copy - This option allows you to copy sections of a view that you have selected.</p> <p>Paste - Allows you to paste data into update enabled cells. This option only shows in planning enabled views.</p> <p>Select All - Use this option to select the entire grid.</p> |
| 2 | <p>Add - The sub menu has options for adding 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> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> </div> <p>Edit - Edit the attribute relationships or edit hierarchies on the rows, columns, or view filter.</p> |

| | |
|---|---|
| |  |
| 3 | <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> |
| 4 | <p>Sort - Sort options are Ascending, Descending, Remove, and Remove All.</p>  |
| 5 | <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> |
| 6 | <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 attribute relationship properties including sorting and whether it is visible or not.</p> |

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

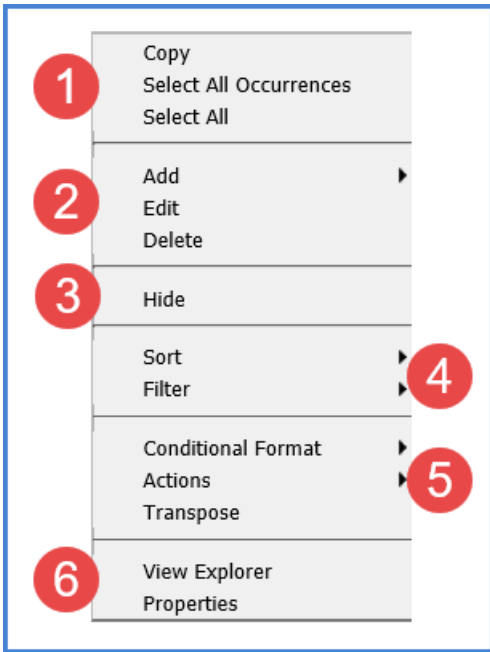
Right-click within the grid to display actions that you can take such as transposing the rows, columns, and measure items.



| | |
|----------|---|
| 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 style="border: 1px solid black; padding: 5px; margin: 10px 0;"> </div> <p>Edit - Edit the hierarchies on the rows, columns, or view filter.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> </div> |
| 3 | <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> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> </div> <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> |
| 4 | <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)

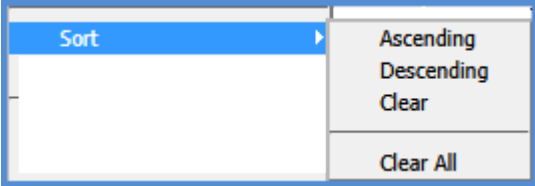
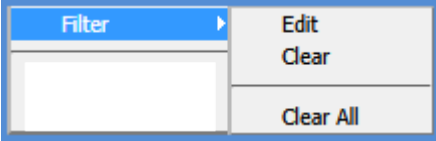
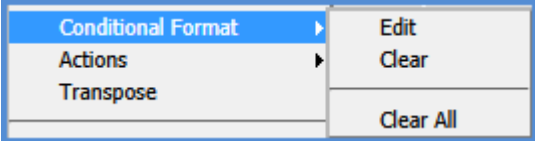
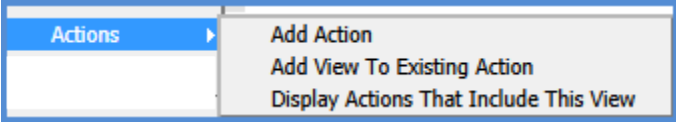
Measure items can be assigned to one axis, either rows or columns. Right-click the caption of a measure item in a detail row or column to display actions that you can take related to that object, such as inserting additional measure items or applying conditional formats.



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.

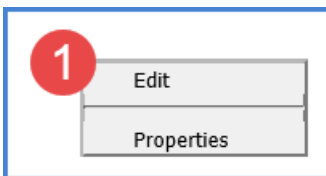
Descriptions follow of the menus for measure items in detail and Grand Total rows or columns.

| | |
|---|---|
| 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. 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> |
| 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 style="border: 1px solid black; padding: 5px; margin: 10px 0;"> </div> <p>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.</p> <hr/> <p>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.</p> <hr/> <p>Delete - Deletes the measure item from the view definition without confirmation. It will no longer display in the view explorer.</p> |

| | |
|---|--|
| 3 | <p>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.</p> |
| 4 | <p>Sort - Sort options are Ascending, Descending, Clear, and Clear All.</p>  <p>Filter - Filter options are Edit, Clear, and Clear All.</p>  |
| 5 | <p>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.</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> |
| 6 | <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 measure item properties including the name, caption expression, type, pop-up labels, hyperlinks, and so forth.</p> |

View Filter Pop-up Menu

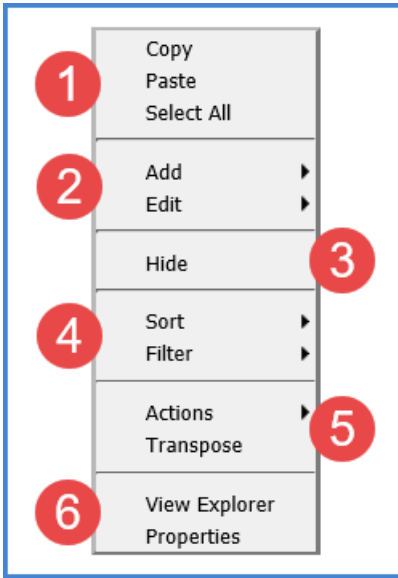
Right-click the View Filter heading to display actions that you can take related to that object or section of the grid, such as filtering levels in that section.

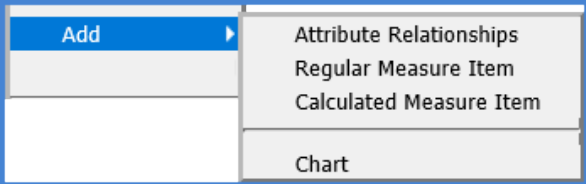
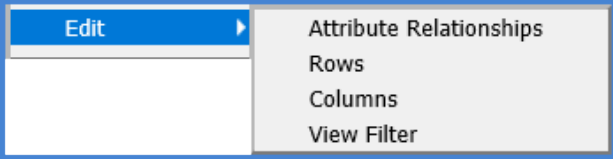


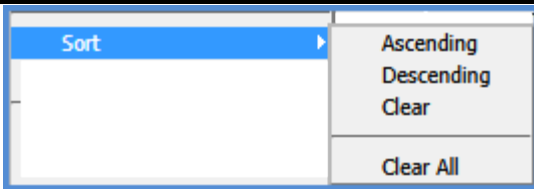
| | |
|---|---|
| 1 | <p>Edit - Edit the hierarchies in the view filter. A shortcut to adding hierarchies to the View Filter is to click the Add icon + that's provided in the View Filter section of the view.</p> |
|---|---|

Levels Pop-up Menu

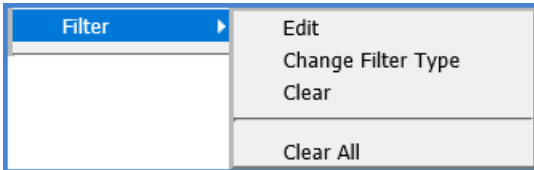
Right-click the level to display actions that you can take related to the level, such as editing the hierarchy.



| | |
|----------|--|
| <p>1</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.</p> <p>Select All - Use this option to select the entire grid.</p> |
| <p>2</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>3</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>4</p> | <p>Sort - Sort options are Ascending, Descending, Clear, and Clear All.</p> |

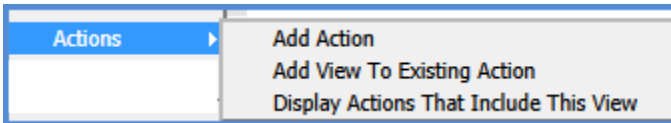


Filter - Filter options are Edit, Change Filter Type, Clear, and Clear All. Change Filter Type opens a window where you can select the type of filter to set up or change. By default, a new filter you create from the Filter > Edit option is a list of members from the level with which you are working.



5

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.

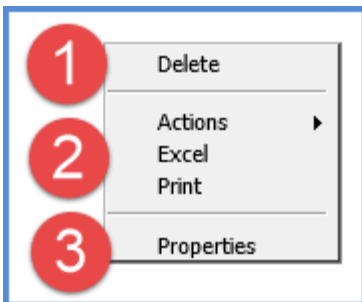
6

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 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.

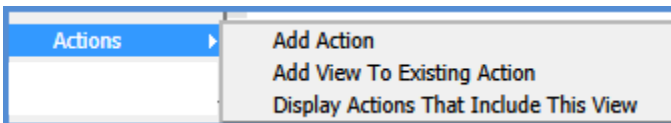


1

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

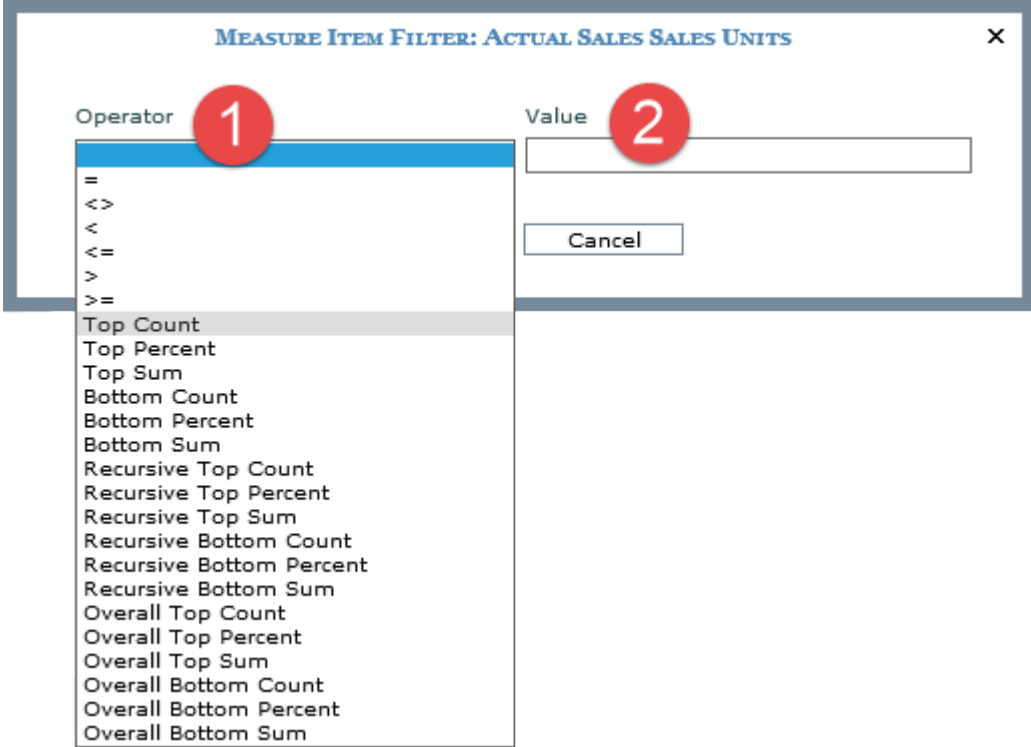
Actions – Use this option to add new actions, add the active view to existing actions, or display the actions that include the active view.



Excel - Click to initiate an export of the view to Microsoft Excel.

| | |
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| | Print - Click to print the active page of the view. |
| 3 | Properties - Click to maintain the view properties including the name, description, type and view group. |

Measure Item Filter Window



| | |
|----------|---|
| 1 | Operator list - Choose what type of filter to apply, such as greater than or less than, top / bottom, recursive top / bottom, or overall top / bottom filters. |
| 2 | Value list - Type in the numeric value by which to filter the measure. |

Navigation Panel

★ Growth by Customer Ship-To

Rows: Customer Ship-To: All × > Product Category × Product Family × Product Group × Product ABC Class × Product × +

Columns: Region: Filtered × > Distribution Center Warehouse: All × +

View Filter: +

| Region | | 331 | | | | | | | | | | | |
|-----------------------------------|---|------------|---|------------|-------------------------|---|------------|---|------------|-------------------------|---|------------|---|
| Rgn Long Description | | West | | | | | | | | | | | |
| Distribution Center Warehouse | | 19 | | 21 | | | | | | 331 Total | | | |
| Customer Ship-To | Actual Sales Amount Wk 1 2017 to Wk 37 2017 | % of Total | Actual Sales Amount Wk 1 2016 to Wk 37 2016 | % of Total | Percent of Total Growth | Actual Sales Amount Wk 1 2017 to Wk 37 2017 | % of Total | Actual Sales Amount Wk 1 2016 to Wk 37 2016 | % of Total | Percent of Total Growth | Actual Sales Amount Wk 1 2017 to Wk 37 2017 | % of Total | Actual Sales Amount Wk 1 2016 to Wk 37 2016 |
| Southwest Foods -- Phoenix AZ | \$3,428,556 | 9.30% | \$3,103,853 | 9.25% | ↑ .042% | \$2,866,194 | 7.82% | \$2,630,713 | 7.87% | ↓ -.051% | \$6,294,751 | 8.56% | \$5,734,566 |
| Chicago's Finest -- Oak Lawn I | \$2,453,392 | 6.65% | \$2,204,833 | 6.57% | ↑ .078% | \$3,469,395 | 9.47% | \$3,284,193 | 9.83% | ↓ -.360% | \$5,922,786 | 8.05% | \$5,489,025 |
| Penn Brands -- Pittsburgh PA | \$3,051,312 | 8.27% | \$2,943,426 | 8.78% | ↓ -.503% | \$2,512,289 | 6.85% | \$2,410,786 | 7.21% | ↓ -.358% | \$5,563,600 | 7.57% | \$5,354,212 |
| Southwest Foods -- Phoenix AZ WOB | \$2,659,921 | 7.21% | \$2,442,095 | 7.28% | ↓ -.069% | \$2,610,861 | 7.12% | \$2,403,957 | 7.19% | ↓ -.069% | \$5,270,781 | 7.17% | \$4,846,052 |
| Penn Brands -- Philadelphia PA | \$2,533,431 | 6.87% | \$2,320,495 | 6.92% | ↓ -.050% | \$2,565,041 | 7.00% | \$2,299,139 | 6.88% | ↑ .120% | \$5,098,472 | 6.93% | \$4,619,634 |

1

Active and Available Levels – The Rows and Columns section show all levels in the view.

- Active levels currently showing in the view display in blue. An underlined format means you can click the level to drill up or down, controlling what type of detail shows in the view. Hover text will tell you where the drill will take you.
- Levels that are available in the view to drill to but not actively showing in the view display in grey text. Levels with a Visible status set to No will not show up in the Navigation Panel.
- Filtered levels have the word “Filtered” after them.

Rows: Customer Ship-To: All × > Product Category × Product Family × Product Group × Product ×

Columns: Region: Filtered × > Distribution Center Warehouse: All × +

View Filter: +

Click here to drill back to Region

If an axis is filtered, a filter icon will show to the left of the section title.

Rows: Customer Ship-To: All × > Product Category ×

Columns: Region: All × > Distribution Center Warehouse: All ×

2

Add Levels – Click the Add Levels icon + for rows or columns to add levels to either section.

Rows: Customer Ship-To: All × > Product Category × Product Family × Product Group × Product ABC Class ×

Columns: Region: Filtered × > Distribution Center Warehouse: All × +

View Filter: +

Add Levels To Columns

Delete Levels – Click the Delete Level icon × next to any level to delete that level from the view.

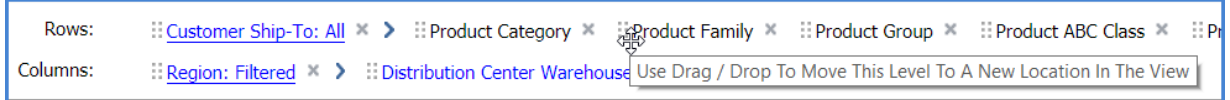
Rows: Customer Ship-To: All × > Product Category × Product Family × × Product Group × Product ×

Columns: Region: Filtered × > Distribution Center Warehouse: All × +

Delete Level

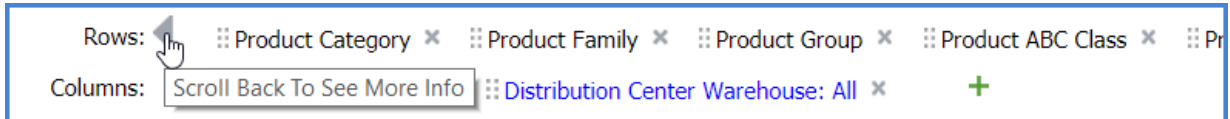
3

Drag and Drop Levels – You can move levels around in the view, changing whether they show on rows, columns, or the View Filter and changing what order levels display in on rows or columns. Click or tap the provided icon ☰ next to the level and then move the level to where you want it to show in the view.



4

Scroll To See More Info – Scrolling arrows are provided when there isn't enough space available in the browser to show all the levels that exist in a part of the Navigation Panel. You can scroll back or ahead to the rest of the information displayed in the panel.



Paste Members Window

PASTE MEMBERS X

Invalid Members: 1 of 10 Duplicate Members: 1 of 10 Valid Members: 8 of 10

Paste a list and click 'Validate'

0 - 2400 - 12450 - 4

| UPC | Global Number | UPC Short Description | UPC Long Description |
|-----------------------|---------------|---------------------------|----------------------------|
| 0 - 24000 - 12543 - 4 | | Peach Slcs HS 106oz PL* | Peach Slcs HS 106oz PL* |
| 0 - 24000 - 12553 - 4 | | Grapefruit SctnUnS 12oz B | Grapefruit Sctn UnS 12oz B |
| 0 - 24000 - 12516 - 4 | | Lingonberries LS 12oz BR* | Lingonberries LS 12 oz B |
| 0 - 24000 - 12593 - 4 | | Grapefruit SctnSw 12oz BR | Grapefruit Sctn Sw 12oz |
| 0 - 24000 - 12416 - 4 | | Lingonberries LS 106oz BR | Lingonberries LS 106 oz |
| 0 - 24000 - 12443 - 4 | | Peach Slcs HS 12oz PL* | Peach Slcs HS 12oz PL* |
| 0 - 24000 - 12476 - 4 | | Pnapp1 Crsh 106oz BR* | Pnapp1 Crsh 106oz BR* |
| 0 - 24000 - 12576 - 4 | | Pnapp1 Crsh 12oz BR* | Pnapp1 Crsh 12oz BR* |


Validate OK Cancel Help



| | |
|----------|--|
| 1 | Paste Members – Use in combination with the Validate button to copy a list of members, validate the list, and then add valid members to the member list you are creating. Members copied into this section need to be separated by a carriage return. Examples of sources from which you can copy members would be a column in an Excel spreadsheet or list of members from a Stratum.Viewer view. You can also use a comma-delimited list from an email or text file. |
| 2 | Validated Members - This section is display-only. It is populated with valid members that were entered in the left portion of the window. |
| 3 | Member Status - Counts of invalid, duplicate, valid, and total members validated while using this window display at the top of the window. |
| 4 | Validate - Click to verify the pasted members are valid for the level with which you are working. Valid members are moved to the right side of the window. Invalid members remain in the left side of the window. Duplicate members are removed. Counts are updated in the member status displayed at the top of the window. OK - Click to return all valid members back to the Advanced Select Members window. In that window, you can make adjustments such as sorting or removing some of the members from the member list with which you are working. |

Properties Window for Attribute Relationships

| | |
|----------|--|
| 1 | <p>Name – The name of the attribute. Used in the view explorer and filter windows.</p> <p>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.</p> |
| 2 | <p>Sort - Use to add, edit, or remove Ascending and Descending sorts.</p> <p>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.</p> |


Properties Window for Columns








| | |
|----------|---|
| 1 | <p>Drilldown View – Assign a drilldown view if you want to drill from the last level displayed on columns to another view, for example, to a view with related or complimentary data to the originating view. Choose Yes and then use the Select View window that displays to choose a view.</p> |
| 2 | <p>Repeating Values – Use to control whether or not duplicate column values display in the grid. Set the option to Yes if you want to see the following values repeated across the column detail cells in the grid: level display text, level attribute relationships, headings for All Others (if Others Summary is enabled), sub-totals, and grand totals.</p> <hr/> <p>Note: This property also can be edited from the Display Options window  in a view.</p> |
| 3 | <p>Totals Default – Use to control whether or not Totals display by default for new levels inserted on columns. Leave the property set to Yes if you want all new levels that are inserted on columns to have totals displayed for them. Change to No if you want totals to be disabled for all new levels that you</p> |

| | |
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| | <p>insert on columns. You can control the totals settings for individual levels using the “Total” setting in a level’s Properties window.</p> <p>All Others Default – Use to control whether or not All Others values display by default for new levels inserted on columns. Leave the property set to No if you do not want All Others values to display by default. Change to Yes if you want all new levels that are inserted on columns to have All Others values display. All Others values represent the sum of all members not in a filter. You can control the All Others settings for individual levels using the “All Others” setting in a level’s properties window.</p> <hr/> <p>Note: You also can enable or disable these properties for all levels on rows using the Display Options window  in a view.</p> |
| <p>4</p> | <p>Relationship Filter and Empty Filter – When the Relationship Filter is set to Yes, only the members that have data for the measures and time ranges defined in the view will display. When the Relationship Filter is set to No, all members will be displayed. This allows you to see members with and without data for the measures and time ranges defined in the view. You can additionally use the Empty Filter property. In order for the Empty Filter property to be set to Yes, the Relationship Filter property must be set to Yes. The empty filter will remove any columns where no data exists, but that were not removed by the relationship filter. This can occur when there is a level filter on the axis opposite the measure item axis.</p> |
| <p>5</p> | <p>Axis Filter – Use to work with an axis filter on columns:</p> <ul style="list-style-type: none"> • Click the Browse button  to add or edit a filter on the columns axis. An Expression window displays for setting up the filter. A pop-up label for this field displays expression criteria for an existing filter. • Click the "X" button to remove a filter. |

Properties Window for Individual Measure Items

Regular Measure Items

| | |
|---|--|
| 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 “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. |


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| | <ul style="list-style-type: none"> 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> |
| 4 | <p>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>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.

Calculated and Distinct Calculated Measure Items

The screenshot shows a dialog box titled "Properties - Percent of Total Growth" with the following fields and callouts:

- 1** Name: Data7
- 1** Caption Expression: Percent of Total Growth
- 2** Type: Calculated
- 2** Expression: [Measures].[Data5 (% of Total)] - [Measures].[Data6
- 3** Format String: #,###.000%
- 4** Value: No
- 4** Image: No
- 5** Conditional Format: Yes Percent of Total Growth
- 5** Pop-up Expression: Yes #MeasureItem("Value")
- 6** Hyperlink: No
- 6** Visible: Yes
- 7** Filter: (empty)
- 7** Sort: None
- 8** Total: Total

| | |
|----------|--|
| 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> <hr/> <p>Note: See the previous table for information about regular types.</p> <hr/> <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 | Format String – Use this drop-down list to apply a format such as decimal places, monetary symbols, commas, or a combination of formatting. |
| 4 | <p>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>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 | 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 | <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.

Properties Window for Levels

The screenshot shows a window titled "Properties - UPC Global Number". It contains the following fields and values:

- Name: UPC Global Number
- Caption Expression: UPC #
- Filter: Members
- Sort: None
- Total: Yes
- All Others: Yes
- Visible: Yes
- Display Text: Value



Red circles with numbers 1 through 4 are overlaid on the image to highlight specific fields: 1 is next to the Name field, 2 is next to the Filter field, 3 is next to the Total field, and 4 is next to the Visible field.


| | |
|----------|---|
| <p>1</p> | <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 Stratium.Viewer locations that they appear, such as in view explorer and the Select Members window.</p> |
| <p>2</p> | <p>Filter and Sort - Use to add, edit, or remove filters and sorts.</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. |
| <p>3</p> | <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> |
| <p>4</p> | <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> |

Properties Window for Rows

The screenshot shows the 'Properties - Rows' dialog box with the following settings and callouts:

- 1**: Drilldown View: Yes (dropdown), ASP Trends (text field)
- 2**: Repeating Values: No (dropdown)
- 3**: Totals Default: Yes (dropdown)
- 4**: Empty Filter: Yes (dropdown)
- 5**: Axis Filter: (empty text field)

| | |
|----------|--|
| 1 | <p>Drilldown View – Assign a drilldown view if you want to drill from the last level displayed on rows to another view, for example, to a view with related or complimentary data to the originating view. Choose Yes and then use the Select View window that displays to choose a view.</p> |
| 2 | <p>Repeating Values – Use to control whether or not duplicate row values display in the grid. Set the option to Yes if you want to see the following values repeated across the row detail cells in the grid: level display text, level attribute relationships, headings for All Others (if Others Summary is enabled), sub-totals, and grand totals.</p> <hr/> <p>Note: This property also can be edited from the Display Options window  in a view.</p> |
| 3 | <p>Totals Default – Use to control whether or not Totals display by default for new levels inserted on rows. Leave the property set to Yes if you want all new levels that are inserted on rows to have totals displayed for them. Change to No if you want totals to be disabled for all new levels that you insert on rows. You can control the totals settings for individual levels using the “Total” setting in a level’s Properties window.</p> <p>All Others Default – Use to control whether or not All Others values display by default for new levels inserted on rows. Leave the property set to No if you do not want All Others values to display by default. Change to Yes if you want all new levels that are inserted on rows to have All Others values display. All Others values represent the sum of all members not in a filter. You can control the All Others settings for individual levels using the “All Others” setting in a level’s properties window.</p> <hr/> <p>Note: You also can enable or disable these properties for all levels on rows using the Display Options window  in a view.</p> |
| 4 | <p>Relationship Filter and Empty Filter – When the Relationship Filter is set to Yes, only the members that have data for the measures and time ranges defined in the view will display. When the Relationship Filter is set to No, all members will be displayed. This allows you to see members with and without data for the measures and time ranges defined in the view. You can additionally use the Empty Filter property. In order for the Empty Filter property to be set to Yes, the Relationship Filter property must be set to Yes. The empty filter will remove any rows where no data exists, but that were not removed by the relationship filter. This can occur when there is a level filter on the axis opposite the measure item axis.</p> |
| 5 | <p>Axis Filter – Use to work with an axis filter on rows:</p> |

- Click the Browse button  to add or edit a filter on the rows axis. An Expression window displays for setting up the filter. A pop-up label for this field displays expression criteria for an existing filter.
- Click the "X" button to remove a filter.

Properties Window for View Filter

There are no properties for this folder in view explorer. If there are levels in the View Filter, they will each have their own properties window. See [Properties Window for Levels](#).

Select Filter Method Window





Only the Member List and Named Set options display when the window is accessed from the Expression window:



1

Filter Methods - Choose None then click OK if you are removing a filter. To apply or change a filter, select an option and click OK or use the quick filter option noted in item 2.

- **Member List** - clicking OK after selecting this option opens the [Select](#) or [Advanced Select Members window](#). Search for and select members for the filter.

- **User List** - clicking OK after selecting this option opens the [Select User List Filter window](#). Use the search or filter  tools as aids in finding a list. Optionally click Show Details  after selecting a list to see more information about it before applying it as a filter. Click OK to apply the selected list as a filter.
- **Named Set** - clicking OK after selecting this option opens the [Select Named Set Filter window](#). Select a named set for the filter.
- **Expression** - clicking OK after selecting this option opens the Expression window. Set up an expression for the filter.

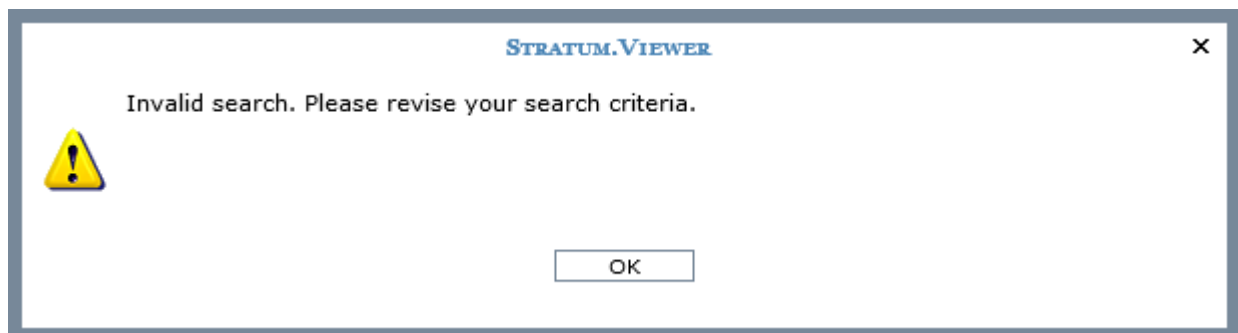
2

Quick Filter Field – Perform a quick filter by selecting Member List, using this field to specify the level members, then clicking OK. Separate the values in the field by semicolons and do not use any spaces between the values and semicolons.

When using this method and working in a view, you need to refer to members based on the level's display text. For example, enter member values if the level display text is set to Value or enter member attribute relationships if the level display text is set to one of its attribute relationships. Here is a quick filter specified for three Ship-To Markets. The values entered in the field were Chicago;Dallas;Phoenix because the Ship-To Market display text is set to SMkt City:



You will see the following message if you do not refer to members based on their display text setting, if you enter members not applicable to the level, or if you enter members that your role permissions do not permit you to see.



You can enter wildcard criteria in the Quick Filter field. In this example, the Member List option is selected and Product Category has been quick filtered by a wildcard search of %Fruit%. Categories with "Fruit" in their display text were returned by the filter.

View Name: Wildcard Filter

View Filter

| Product Category | Sales Amount | |
|-----------------------|-------------------------|-------------------------|
| | Wk 1 2014 to Wk 38 2014 | Wk 1 2013 to Wk 38 2013 |
| Canned Fruit | \$1,979,809,747 | \$3,431,256,971 |
| Fresh Fruit | \$294,627,014 | \$501,706,538 |
| Frozen Fruit Products | | |
| All Others | | |
| Grand Tot | | |

SELECT FILTER METHOD X

None
 Member List
 User List
 Named Set
 Expression

X


Select Members Window

| UPC ABC Classification | UPC Long Description | UPC Commodity Code |
|-------------------------------------|-------------------------------|--------------------|
| <input type="checkbox"/> | Asparagus | 2450 |
| <input type="checkbox"/> | Strawberries | 4850 |
| <input checked="" type="checkbox"/> | Orange Juice Conc. | 5230 |
| <input type="checkbox"/> | Blueberry Filling 106oz PL* | 5110 |
| <input type="checkbox"/> | Grapefruit Sctn UnS 106oz BR* | 5110 |
| <input checked="" type="checkbox"/> | Mand Org Pcs 106oz BR* | 5110 |
| <input type="checkbox"/> | Blueberry Filling 106oz BR* | 5110 |
| <input checked="" type="checkbox"/> | Mand Org Pcs 12oz PL* | 5110 |
| <input type="checkbox"/> | Blueberry Filling 12oz PL* | 5110 |
| <input type="checkbox"/> | Grapefruit Sctn UnS 12oz BR* | 5110 |
| <input checked="" type="checkbox"/> | Mand Org Pcs 12oz BR* | 5110 |
| <input type="checkbox"/> | Blueberry Filling 12oz BR* | 5110 |
| <input checked="" type="checkbox"/> | Mand Org Pcs 106oz PL* | 5110 |
| <input checked="" type="checkbox"/> | Navel Oranges | 3160 |
| <input type="checkbox"/> | Pork Chops - Butterfly | 3347 |
| <input type="checkbox"/> | Ground Round 90% Lean | 3347 |
| <input type="checkbox"/> | Sweet Onions, Chopped | 9999 |

1 The 'Selected' count in the upper left corner shows how many members are included in the filter. The count adjusts as you change selections in the window.

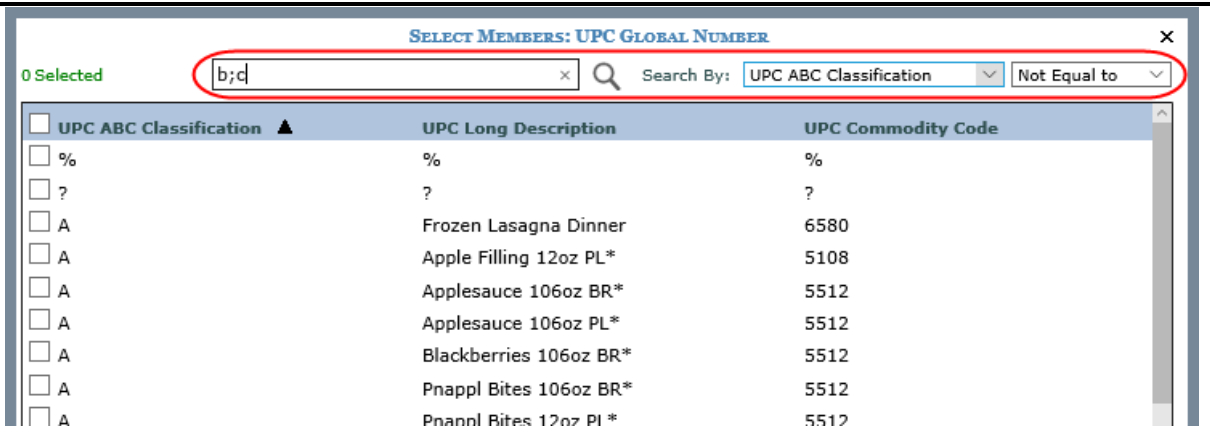
This window is initially populated with all authorized members for the active level. Make selections from the entire list, or execute a search to narrow down the list. Use the search properties to specify the criteria and the parameters by which to search for members to be used in a member list filter or user list.

Note: The window is also used when selecting members from the expression window for calculated measure items and when administrators set up roles.

Click the search icon  after you specify your search properties:

- Enter a value in the search field. Multiple values can be entered by separating them with a semicolon. If the field is left blank, the available list displays all members for the active level.
- Optionally use the Search By drop-down lists. The first list is to select the attribute relationship to perform the search on. The other list lets you choose whether you want your search to contain, not contain, start with, be equal to, not equal to, greater than, or less than the value(s) specified in the search.

In the following example, we searched for UPC ABC Classification not equal to "b or c".



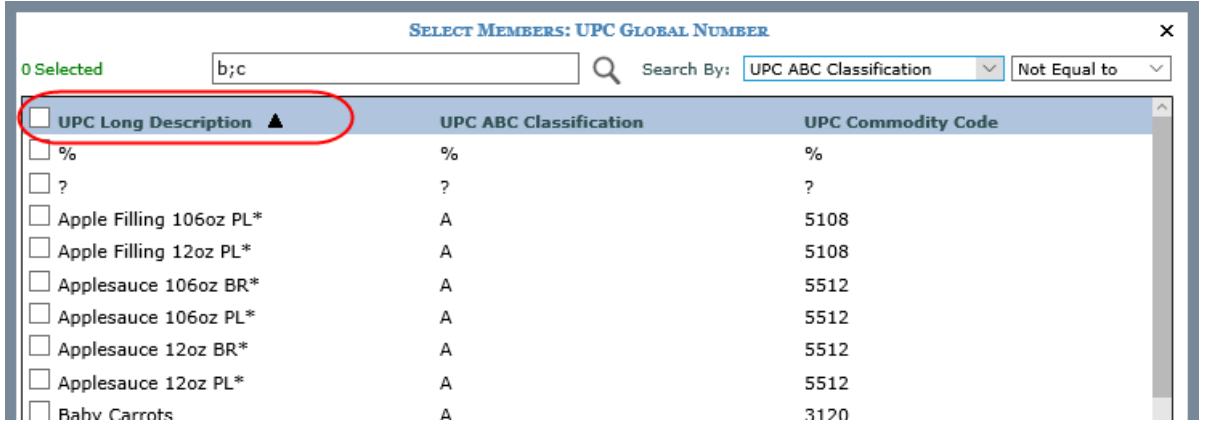
2

Available Selection list – Use this list to select the members to include in a member list filter, expression, etc. Click the checkboxes next to members or click anywhere in member rows to select or deselect members. Click OK when you are done making various selections to apply your filter.

Other options and tips:

- If your search returns only one member, the member will display as selected. At that point, you can click the OK button to close the window and add that member to a filter.
- Selecting members then clicking OK will add the selected members to a filter and close the window.
- Click the checkbox in the heading area to select or deselect all members on all pages in the list at once.
- Use Shift+Click as a shortcut to selecting a range of consecutive members (click the first item, then press Shift key while clicking the last item).

Columns in this area are sort and drag/drop enabled. In the following example, we clicked the UPC Long Description column and dragged it to the first position. We also clicked the Sort icon to perform the sort on that column in ascending order.



Use the paging arrows and links at the bottom of the list to move between pages of members. Selections made on various pages are retained as you move between pages in the list.

Note: For all windows that display lists (views, user lists, etc.), there is a single administrative setting on the Application window that controls the page size.

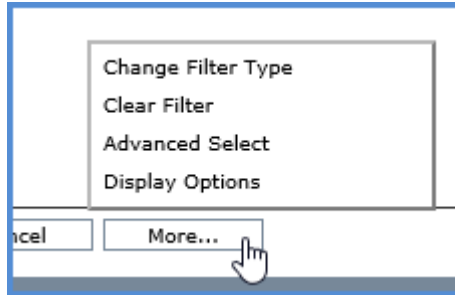
3

Clear All – Click this button to clear all member selections from a filter. The window remains open so you can make new selections.

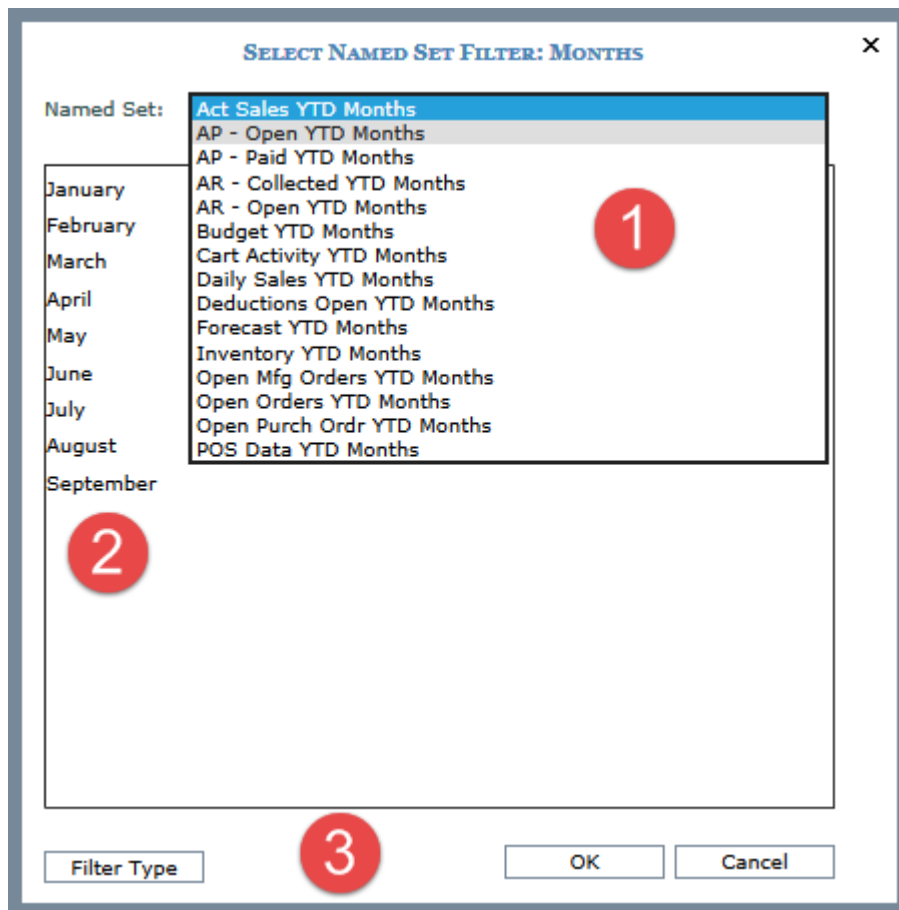
More... -- Click the More button for additional features:

4

- **Change Filter Type** – Click to access the Select Filter Method window if you need to apply a different type of filter to the level (User List, Named Set, or Expression).
- **Clear Filter** – Click as a shortcut to clearing the filter from the level.
- **Advanced Select** – Click to access the Advanced Select Members window if you prefer to use that advanced version of the window to search for, select, or clear. The advanced window is helpful when working with levels for which a large amount of members exist.
- **Display Options** – Use to change the display columns in this window. You can display up to 10 display columns for a level in the Select Members window.



Select Named Set Filter Window



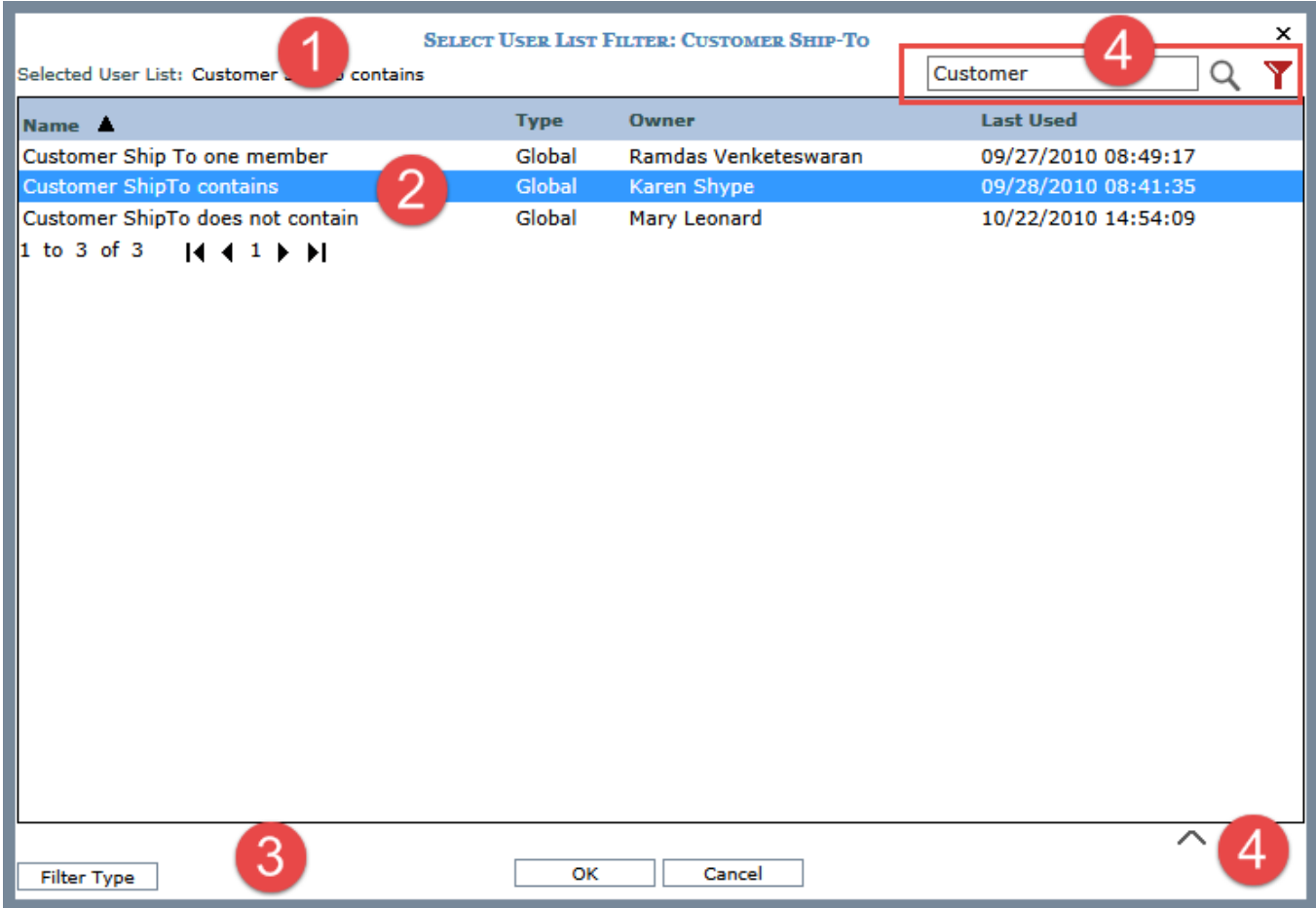
1

Named Set – Select a named set from this list to filter a level from a single-level time hierarchy by its YTD periods. Choose a type applicable to the measure items in your view. For example, an Actual Sales named set if there are Actual Sales measure items in the view.

| | |
|---|--|
| | Note: The list will be disabled and a "No named sets available" message will display in the window for levels that don't have named sets. |
| 2 | Named Set Members – The time members that make up the named set will display in this section after you select a named set from the above list. |
| 3 | OK – Click OK to apply the named set selection made in this window and to close the window. Cancel – Click Cancel to close the window without applying your selection. Filter Type - When you access this window from a view to create a level filter, it will include this button. Click to access the Select Filter Method window if you need to apply a different type of filter to the level (Member List, User List, Expression) |

Select User List Filter Window

Main Window Sections

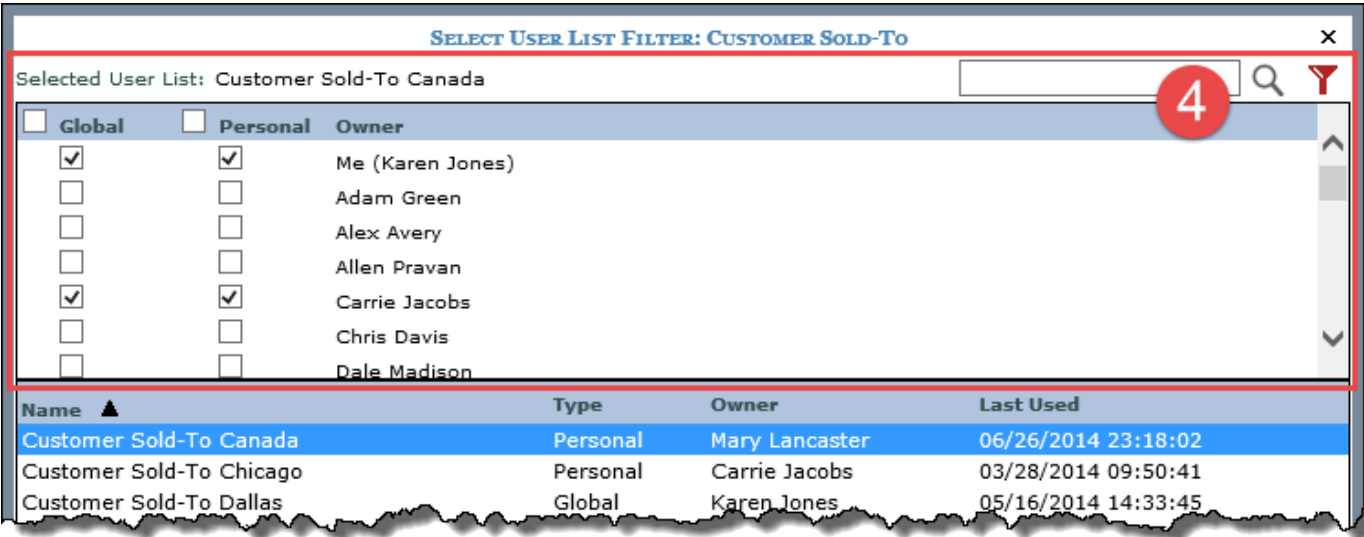


| | |
|---|---|
| 1 | Selected User List – The name of the actively selected list displays here. |
| 2 | Available User Lists – Click a list then OK to apply the list as a filter. <ul style="list-style-type: none"> This is a list of all user lists that meet search and filter criteria. You can use search to find a user list with a particular name or use the filter tool to look up lists of only certain users (See |


| | |
|-----------------|---|
| | <p>Search and Filter Features). You can use the Show Details section to look up list properties and members.</p> <ul style="list-style-type: none"> To sort the displayed lists, click the Name, Type, Owner, or Last Used column heading. Click a sort icon to change between ascending ▲ and descending ▼ order. To rearrange columns in the section, click a column heading, drag it before or after another column heading, and drop it at the new location. At the bottom of this section (you may need to scroll down), this is a count of how many lists are displayed in the window. There are paging arrows to move between pages of lists. Arrows are active only when more lists exist than can be displayed in a single page of this section. <p>1 to 27 of 27 ◀ ◀ 1 ▶ ▶ </p> |
| <p>3</p> | <p>OK – Click OK to apply the user list selection made in this window and to close the window.</p> <p>Cancel – Click Cancel to close the window without applying your selection.</p> <p>Filter Type - When you access this window from a view to create a level filter, it will include this button. Click to access the Select Filter Method window if you need to apply a different type of filter to the level (Member List, Named Set, and Expression).</p> |
| <p>4</p> | <p>See the next two sections for information about the search, filter, and detail lookup tools in this window.</p> |


Search and Filter Features

Optionally use the search and/or filter features (section marked '4' in following image) to look for particular user lists.





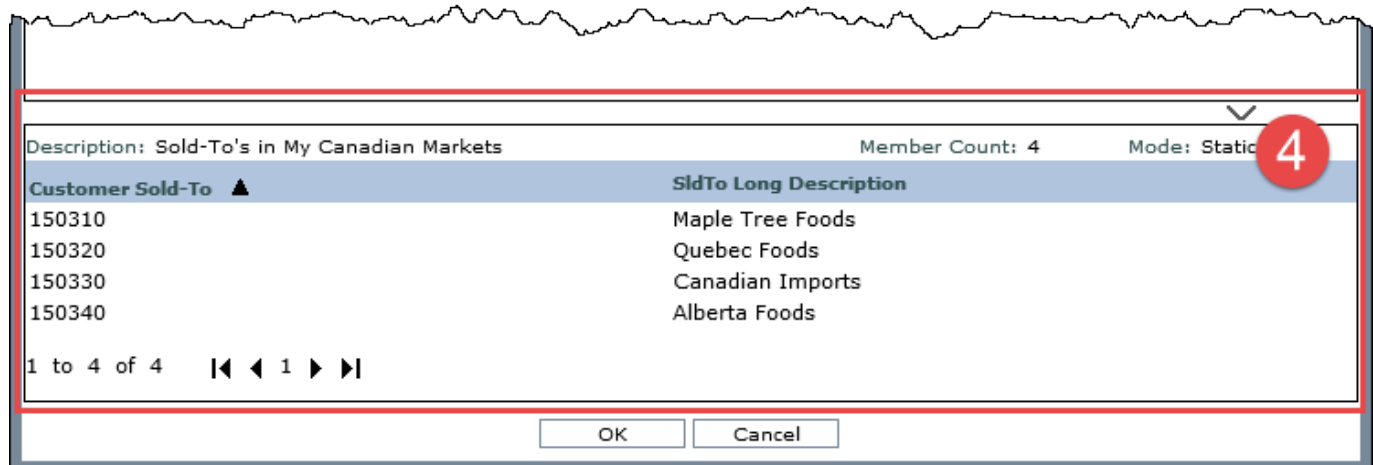
- Search** – Enter all or part of the name(s) of the list(s) you are searching for and then click the Search button to execute the search.

- **Filter** – Click the provided button  to use the filter feature. It acts as a toggle to show or hide the filter feature. Use the Global and Personal checkboxes to the left of a user's name to indicate whose lists you want to see (users with selected checkboxes will be included in filter results). The checkboxes next to the Global and Personal headings are toggles that select or deselect all Global or Personal lists of all users at one time (for example, if the Personal heading checkbox is selected, all Personal lists of all users will display in the window). At the bottom of the filter section (you may need to scroll down), there is a count of users. There are paging arrows to move between pages of users. Arrows are active only when more users exist than can be displayed in a single page of this section.

Note: The filter toggle will be red  if a filter has been applied. If you are using the filter section and then access the details section of the window, the filter section will close automatically.

Show Details Feature

Optionally use this section to view details about the list that is actively selected in the window. Select a list and then click the Show Details  button. Click the Hide Details  button to hide the section. You can see the members in the list, the list description, count of members in the list, and the list mode (Static or Dynamic).



- Information that displays for list members depends on whether you accessed the window from a view or the Role Maintenance window. If accessed from a view, the section displays attribute relationships available for the level in the view. If accessed from the Role Maintenance window, the section displays attribute relationships as defined by administrative settings in the Dimension window.

Note: Only members your role permits you to access will display. The section will be blank if your role doesn't permit you to access any of the list members.

- To sort detail information, click the heading for any column of information displayed for the members. Click a sort icon to change between ascending ▲ and descending ▼ order. To rearrange columns in the section, click a column heading, drag it before or after another column heading, and drop it at the new location.
- At the bottom of the details section (you may need to scroll down), this is a count of how many members are in the list. There are paging arrows to move between pages of members. Arrows are active only when more members exist than can be displayed in a single page of this section.

Note: If you are using the details section and then access the filter section of the window, the details section will close automatically.

Advanced Concepts

Axis Filter Behavior When Levels are on Opposite Axis

Axis filters tend to be used in views where no levels exist on the axis opposite from the axis filter. That tendency is due to the basic nature of axis filters -- they take into account overall measure item totals for objects (level members) that are on the same axis as the axis filter. Also, the axis filter disregards any filtering impact that levels on the opposite axis have on the measure items and objects. The example that follows shows what to expect from an axis filter in a view with levels on the axis opposite the axis filter.

The following view has levels on rows and columns. Additionally there is a filter on the level in columns that returns one member of the Sales Director level.

| View Name: <i>Axis Filters Example 1</i> | | | | | | |
|--|--|---------------------------------------|-----------------|--|---------------------------------------|-----------------|
| View Filter | | | | | | |
| | | | | | | |
| T Sales Dir >> | Steve Mentas | | | | | |
| <u>Ship-To Market City</u> | Sales Amount after Returns Q1 to Q3 14 | Sales Units after Returns Q1 to Q3 14 | ASP Q1 to Q3 14 | Sales Amount after Returns Q1 to Q3 13 | Sales Units after Returns Q1 to Q3 13 | ASP Q1 to Q3 13 |
| Buffalo | \$114,641,854 | 2,234,182 | \$51 | \$196,876,407 | 3,143,917 | \$62 |
| Calgary | \$57,381,046 | 1,315,652 | \$44 | \$98,721,363 | 1,868,353 | \$53 |
| Chicago | \$76,373,335 | 1,524,738 | \$50 | \$130,499,511 | 2,101,447 | \$62 |
| Dallas | \$164,838,778 | 3,258,055 | \$51 | \$284,071,921 | 4,601,809 | \$61 |
| Phoenix | \$54,475,771 | 1,070,463 | \$51 | \$93,574,570 | 1,513,328 | \$62 |
| Pittsburgh | \$31,274,349 | 629,490 | \$50 | \$51,927,462 | 847,681 | \$61 |
| Quebec | \$172,659,668 | 3,290,846 | \$53 | \$301,599,661 | 4,750,837 | \$63 |
| Raleigh-Durham | \$114,740,214 | 2,182,747 | \$53 | \$195,692,040 | 3,074,005 | \$63 |
| Seattle | \$47,550,283 | 1,014,939 | \$47 | \$81,269,831 | 1,437,470 | \$56 |
| St Louis | \$39,336,991 | 800,286 | \$49 | \$67,101,515 | 1,104,388 | \$60 |
| St. John | \$79,861,356 | 1,629,895 | \$49 | \$133,880,862 | 2,249,995 | \$59 |
| Winnipeg | \$133,698,869 | 2,611,061 | \$51 | \$232,572,343 | 3,734,308 | \$62 |
| All Others | | | | | | |
| Grand Total | \$1,086,832,514 | 21,562,356 | \$51 | \$1,867,787,486 | 30,427,538 | \$61 |

An axis filter is going to be applied to the row axis. The filter is meant to return members from the currently drilled to level, Ship-To Market City, that meet the following conditions:

- Sales Units after Returns Q1 to Q3 14 that are greater than 1,500,000
- ASP Q1 to Q3 14 that are greater than or equal to \$50

Here is the view after the axis filter has been applied. The Ship-To Market Cities that meet the axis filter conditions are Phoenix, Pittsburgh, Seattle, and Winnipeg. Keep in mind that the axis filter disregards the filter effect that the Sales Director member has on the measure items and rows. The axis filter considers the overall measure item totals for members of the Ship-To Market City level. If you were to hide the Sales Director level, you would see why these four cities were returned -- their overall measure item totals meet both of the measure item conditions that were specified in the axis filter (see the second image that follows).

View Name: Axis Filters Example 1

View Filter
 [Measures].[Data17 (Sales Units after Returns Q1 to Q3 14)]>1500000 AND [Measures].[Data8 (ASP Q1 to Q3 14)]> 50

Sales Dir >> Steve Mentas

| Ship-To Market City | Sales Amount after Returns Q1 to Q3 14 | Sales Units after Returns Q1 to Q3 14 | ASP Q1 to Q3 14 | Sales Amount after Returns Q1 to Q3 13 | Sales Units after Returns Q1 to Q3 13 | ASP Q1 to Q3 13 |
|---------------------|--|---------------------------------------|-----------------|--|---------------------------------------|-----------------|
| Phoenix | \$54,475,771 | 1,070,463 | \$51 | \$93,574,570 | 1,513,328 | \$62 |
| Pittsburgh | \$31,274,349 | 629,490 | \$50 | \$51,927,462 | 847,681 | \$61 |
| Seattle | \$47,550,283 | 1,014,939 | \$47 | \$81,269,831 | 1,437,470 | \$56 |
| Winnipeg | \$133,698,869 | 2,611,061 | \$51 | \$232,572,343 | 3,734,308 | \$62 |
| All Others | \$819,833,241 | 16,236,402 | \$51 | \$1,408,443,280 | 22,894,751 | \$61 |
| Grand Total | \$1,086,832,514 | 21,562,356 | \$51 | \$1,867,787,486 | 30,427,538 | \$61 |

Here is the view with Sales Director hidden. You can see that Phoenix, Pittsburgh, Seattle, and Winnipeg each have overall more than 1,500,000 sales units after returns for Q1 to Q3 of 2014 and each have overall average selling prices greater than or equal to \$50 for Q1 to Q3 of 2014.

View Name: Axis Filters Example 1

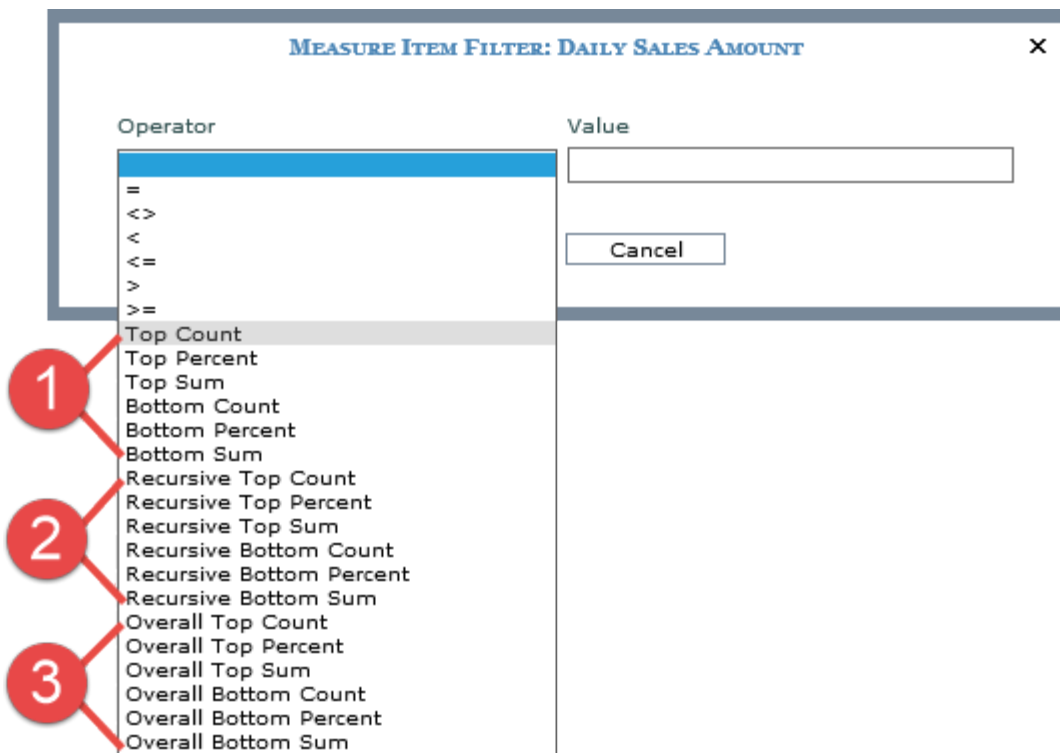
View Filter

| Ship-To Market City | Sales Amount after Returns Q1 to Q3 14 | Sales Units after Returns Q1 to Q3 14 | ASP Q1 to Q3 14 | Sales Amount after Returns Q1 to Q3 13 | Sales Units after Returns Q1 to Q3 13 | ASP Q1 to Q3 13 |
|---------------------|--|---------------------------------------|-----------------|--|---------------------------------------|-----------------|
| Phoenix | \$213,980,453 | 4,236,117 | \$51 | \$368,792,840 | 5,962,322 | \$62 |
| Pittsburgh | \$80,319,387 | 1,566,455 | \$51 | \$140,392,735 | 2,226,122 | \$63 |
| Seattle | \$213,376,352 | 4,220,801 | \$51 | \$360,956,298 | 5,911,416 | \$61 |
| Winnipeg | \$270,579,255 | 5,251,312 | \$52 | \$465,832,841 | 7,412,240 | \$63 |
| All Others | \$2,696,027,091 | 60,247,090 | \$45 | \$4,629,177,345 | 85,234,653 | \$54 |
| Grand Total | \$3,474,282,539 | 75,521,775 | \$46 | \$5,965,152,058 | 106,746,754 | \$56 |

Comparison of Top / Bottom, Recursive, and Overall Filters

Measure item filters in Stratum.Viewer include sets of predefined Stratum filters – Top / Bottom, Recursive Top / Bottom, and Overall Top / Bottom. They can be applied as a Count, Sum, or Percent filter. They are meant to be used in views with multiple levels where you have drilled down through levels by header (which is done by clicking on level names). [Examples in the next section](#) illustrate how the different types of filters behave in views.

1. **Top and Bottom** – A filter that is applied only to the most detailed subtotal level displayed in a view. You will see the top or bottom performers at that subtotal level in relation to **every** member that's on display in **every** prior level.
2. **Recursive Top / Bottom** – A filter that is applied to all subtotal levels displayed in a view and that takes into account the top or bottom performing members from all prior levels.
3. **Overall Top / Bottom** – A filter that is applied at the most detailed level displayed in a view to give you the overall top performers based on all the levels displayed.



Predefined Stratum filters are intended to be used in views where multiple levels exist on the axis opposite of measure items. In the following examples, measure items are on columns so the filters will impact levels on rows.

We will drill down on levels by header in the following examples to illustrate the difference between various predefined Stratum filters. Drilling down by header is done by clicking the names of levels in these multi-level views.

Example 1 – “Count” Filters

Here is a view with no filtering applied to its measure items and no other levels drilled to yet.

| Ship-To Market | SMkt Long Description | Daily Sales Amounts Wk 1 to Wk 30 2014 | Daily Sales Units Wk 1 to Wk 30 2014 |
|--------------------------------|------------------------------|---|---|
| 100 | Chicago | \$879,979 | 35,281 |
| 112 | Buffalo | \$1,088,461 | 45,023 |
| 115 | Dallas | \$811,920 | 31,419 |
| 123 | St Louis | \$1,366,502 | 55,631 |
| 153 | Phoenix | \$607,924 | 21,315 |
| 171 | Seattle | \$574,384 | 21,557 |
| 172 | Raleigh-Durham | \$875,126 | 35,274 |
| 185 | Philadelphia | \$678,110 | 26,203 |
| 187 | Pittsburgh | \$251,223 | 9,138 |
| 207 | Quebec QC | \$1,141,740 | 45,591 |
| 229 | Calgary AB | \$655,085 | 26,769 |
| 249 | Winnipeg MB | \$853,129 | 31,875 |
| 296 | St. John NB | \$291,324 | 11,763 |
| Grand Total | | \$10,074,906 | 396,838 |

The next image shows the view after drilling down by header to the Product Category level. All of the Product Categories for all Ship-To Markets are displayed.

See the next three images for illustrations of how the view results will vary depending on whether a Top, Recursive, or Overall Count filter was applied to the view.

| Ship-To Market | SMkt Long Description | Product Category | Daily Sales Amounts Wk 1 to Wk 30 2014 | Daily Sales Units Wk 1 to Wk 30 2014 |
|--------------------------------|------------------------------|---|---|---|
| 100 | Chicago | Fresh Vegetables | \$176,459 | 7,817 |
| | | Canned Fruit | \$351,386 | 14,467 |
| | | Pork | \$57,620 | 1,901 |
| | | Beef | \$23,096 | 1,063 |
| | | Fresh Fruit | \$136,662 | 6,612 |
| | | Frozen Fruit Products | \$6,471 | 181 |
| | | Frozen Prepared Dinners | \$128,284 | 3,240 |
| 112 | Buffalo | Fresh Vegetables | \$140,859 | 6,023 |
| | | Canned Fruit | \$601,066 | 26,153 |
| | | Pork | \$79,821 | 2,964 |
| | | Beef | \$37,514 | 1,389 |
| | | Fresh Fruit | \$109,279 | 5,196 |
| | | Frozen Fruit Products | \$11,274 | 334 |
| | | Frozen Prepared Dinners | \$108,647 | 2,962 |
| 115 | Dallas | Fresh Vegetables | \$117,708 | 5,710 |
| | | Canned Fruit | \$292,976 | 11,012 |

Top Count Results

Here's what the view looks like after applying a Top 3 Count filter to Daily Sales Units. Since Top Count filters are applied only to the most detailed subtotal level displayed in a view, only the top 3 Product Categories for **every** Ship-To Market are displayed.

| Ship-To Market | SMkt Long Description | Product Category | Daily Sales Amounts Wk 1 to Wk 30 2014 | Daily Sales Units Wk 1 to Wk 30 2014 |
|--------------------------------|---------------------------------------|---|---|---|
| 100 | Chicago | Canned Fruit | \$351,386 | 14,467 |
| | | Fresh Vegetables | \$176,459 | 7,817 |
| | | Fresh Fruit | \$136,662 | 6,612 |
| 112 | Buffalo | Canned Fruit | \$601,066 | 26,153 |
| | | Fresh Vegetables | \$140,859 | 6,023 |
| | | Fresh Fruit | \$109,279 | 5,196 |
| 115 | Dallas | Canned Fruit | \$292,976 | 11,012 |
| | | Fresh Vegetables | \$117,708 | 5,710 |
| | | Frozen Prepared Dinners | \$173,301 | 4,762 |
| 123 | St Louis | Canned Fruit | \$1,010,252 | 42,698 |
| | | Fresh Vegetables | \$128,965 | 5,711 |
| | | Fresh Fruit | \$58,664 | 2,466 |
| 153 | Phoenix | Canned Fruit | \$251,995 | 8,625 |
| | | Fresh Vegetables | \$105,296 | 4,344 |
| | | Fresh Fruit | \$60,009 | 3,135 |
| 171 | Seattle | Canned Fruit | \$224,771 | 7,631 |
| | | Fresh Fruit | \$93,038 | 4,630 |
| | | Fresh Vegetables | \$82,698 | 3,688 |
| 172 | Raleigh-Durham | Canned Fruit | \$476,031 | 19,693 |
| | | Fresh Fruit | \$114,898 | 5,356 |
| | | Fresh Vegetables | \$75,352 | 3,812 |
| 185 | Philadelphia | Canned Fruit | \$416,695 | 17,542 |
| | | Fresh Vegetables | \$57,181 | 2,201 |
| | | Fresh Fruit | \$49,388 | 2,095 |
| 187 | Pittsburgh | Canned Fruit | \$77,387 | 2,281 |

Recursive Top Count Results

Here's what the view looks like when you change the filter to a Recursive Top 3 Count. Since Recursive Count filters are applied to all subtotal levels displayed in a view, only the top 3 Product Categories from each of the top 3 Ship-To Markets are displayed.

| Ship-To Market | SMkt Long Description | Product Category | Daily Sales Amounts Wk 1 to Wk 30 2014 | Daily Sales Units Wk 1 to Wk 30 2014 |
|--------------------|-----------------------|------------------|---|---|
| 123 | St Louis | Canned Fruit | \$1,010,252 | 42,698 |
| | | Fresh Vegetables | \$128,965 | 5,711 |
| | | Fresh Fruit | \$58,664 | 2,466 |
| 207 | Quebec QC | Canned Fruit | \$635,903 | 25,666 |
| | | Fresh Vegetables | \$144,927 | 6,275 |
| | | Fresh Fruit | \$99,829 | 5,655 |
| 112 | Buffalo | Canned Fruit | \$601,066 | 26,153 |
| | | Fresh Vegetables | \$140,859 | 6,023 |
| | | Fresh Fruit | \$109,279 | 5,196 |
| Grand Total | | | \$2,929,745 | 125,844 |

Overall Top Count Results

Here's what the view looks like when you change the filter to an Overall Top 3 Count. Since Overall Top Count filters are applied to only the most detailed level displayed in the view, only the top 3 Ship-to Market/Product Category combinations in terms of overall sales units are displayed.

| Ship-To Market | SMkt Long Description | Product Category | Daily Sales Amounts Wk 1 to Wk 30 2014 | Daily Sales Units Wk 1 to Wk 30 2014 |
|--------------------|-----------------------|------------------|---|---|
| 123 | St Louis | Canned Fruit | \$1,010,252 | 42,698 |
| 112 | Buffalo | Canned Fruit | \$601,066 | 26,153 |
| 207 | Quebec QC | Canned Fruit | \$635,903 | 25,666 |
| Grand Total | | | \$2,247,221 | 94,517 |

Example 2 – “Percent” Filters

Here is a view with no filtering applied to its measure items and no other levels drilled to yet.

| 1 to 23 of 23 1 to 6 of 6 | | | | | | |
|--|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|
| View Name: <i>Top N Percent Multiple Levels of Analysis</i> | | | | | | |
| View Filter | | | | | | |
| ▼ Year Based >> | Current Year | | Last Year | | Grand Total | |
| ▼ Customer Parent | Actual Sales Amount | Actual Sales Units | Actual Sales Amount | Actual Sales Units | Actual Sales Amount | Actual Sales Units |
| Wilder Foods | \$988,190,296 | 20,784,963 | \$1,945,532,956 | 40,614,753 | \$2,933,723,251 | |
| Sumpter Distribution | \$268,517,849 | 4,882,917 | \$542,787,394 | 9,700,909 | \$811,305,243 | |
| St Louis Dist Inc | \$32,516,509 | 539,063 | \$69,144,235 | 1,098,868 | \$101,660,744 | |
| Southwest Inc | \$44,557,893 | 723,721 | \$90,696,698 | 1,453,994 | \$135,254,591 | |
| Smith Inc | \$31,539,124 | 533,642 | \$63,012,323 | 1,054,314 | \$94,551,446 | |
| Quebec Foods | \$38,144,729 | 587,609 | \$73,453,037 | 1,131,060 | \$111,597,766 | |
| Prestwick Inc | \$64,239,197 | 1,112,737 | \$132,850,579 | 2,253,739 | \$197,089,776 | |
| Penn Brands | \$76,477,776 | 1,219,030 | \$153,320,082 | 2,407,532 | \$229,797,858 | |
| Packingham Corp | \$33,005,636 | 535,474 | \$65,864,346 | 1,042,991 | \$98,869,981 | |
| Pacific Corp | \$28,873,974 | 464,822 | \$55,495,871 | 889,367 | \$84,369,845 | |
| Oliveri | \$113,868,098 | 2,128,039 | \$229,817,815 | 4,222,725 | \$343,685,913 | |
| NY Foods | \$34,081,846 | 543,282 | \$65,224,607 | 1,042,132 | \$99,306,453 | |
| Montelissi | \$25,772,379 | 427,196 | \$51,695,819 | 830,525 | \$77,468,197 | |
| Midwest Providers | \$62,545,804 | 1,022,632 | \$122,908,486 | 1,976,354 | \$185,454,290 | |
| Maple Tree | \$28,714,464 | 476,372 | \$56,066,296 | 900,162 | \$84,780,760 | |
| Harrington's | \$432,533,742 | 6,738,617 | \$849,596,667 | 13,102,262 | \$1,282,130,409 | |
| Good Foods, Inc. | \$356,819,117 | 5,337,602 | \$709,963,424 | 10,585,136 | \$1,066,782,542 | |
| Dallas Food Service | \$31,312,694 | 518,351 | \$62,533,410 | 1,026,362 | \$93,846,104 | |
| Chicagos Finest | \$42,011,896 | 657,269 | \$83,871,702 | 1,285,344 | \$125,883,598 | |
| Canadian Imports Inc | \$34,835,640 | 569,798 | \$67,498,896 | 1,095,843 | \$102,334,536 | |
| Auburn Providers | \$26,644,294 | 435,214 | \$54,442,984 | 882,992 | \$81,087,278 | |
| Alberta Foods | \$31,714,545 | 515,296 | \$63,950,442 | 1,029,967 | \$95,664,988 | |
| Grand Total | \$2,826,917,501 | 50,753,647 | \$5,609,728,068 | 99,627,330 | \$8,436,645,569 | |

The next image shows the view after drilling down by header to the Product Category level. All of the Product Categories for all Customer Parents are displayed.

See the next three images for illustrations of how the view results will vary depending on whether a Bottom, Recursive, or Overall Percent filter was applied to the view.

| 1 to 25 of 155 1 to 6 of 6 | | | | | | | |
|---|---|----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|
| View Name: <i>Top 11 Percent Multiple Levels of Analysis</i> | | | | | | | |
| View Filter | | | | | | | |
| | ▼ Year Based >> | Current Year | | Last Year | | Grand Total | |
| ▼ Customer Parent | Product Category | Actual Sales Amount | Actual Sales Units | Actual Sales Amount | Actual Sales Units | Actual Sales Amount | Actual Sales Amount |
| Wilder Foods | Fresh Vegetables | \$43,360,536 | 858,095 | \$88,116,887 | 1,720,820 | \$131,477,422 | |
| | Canned Fruit | \$837,969,453 | 18,294,844 | \$1,637,856,034 | 35,613,655 | \$2,475,825,487 | |
| | Pork | \$18,353,016 | 270,925 | \$37,585,226 | 546,034 | \$55,938,242 | |
| | Beef | \$14,294,909 | 223,181 | \$30,083,825 | 470,176 | \$44,378,734 | |
| | Fresh Fruit | \$30,549,965 | 615,023 | \$61,542,687 | 1,227,553 | \$92,092,652 | |
| | Frozen Fruit Products | \$11,211,182 | 167,515 | \$20,174,836 | 295,269 | \$31,386,018 | |
| | Frozen Prepared Dinners | \$32,451,236 | 355,379 | \$70,173,460 | 741,247 | \$102,624,696 | |
| Sumpter Distribution | Fresh Vegetables | \$49,470,236 | 980,596 | \$100,845,734 | 1,966,132 | \$150,315,969 | |
| | Canned Fruit | \$94,441,475 | 1,997,978 | \$183,758,138 | 3,880,872 | \$278,199,613 | |
| | Pork | \$16,651,792 | 246,089 | \$33,591,090 | 485,748 | \$50,242,882 | |
| | Beef | \$19,662,029 | 299,999 | \$39,082,548 | 612,294 | \$58,744,576 | |
| | Fresh Fruit | \$39,025,185 | 772,591 | \$77,686,820 | 1,520,121 | \$116,712,005 | |
| | Frozen Fruit Products | \$13,930,898 | 203,919 | \$28,866,570 | 417,264 | \$42,797,468 | |
| | Frozen Prepared Dinners | \$35,336,235 | 381,743 | \$78,956,494 | 818,477 | \$114,292,730 | |
| St Louis Dist Inc | Fresh Vegetables | \$6,291,713 | 135,100 | \$13,264,067 | 281,084 | \$19,555,780 | |
| | Canned Fruit | \$7,920,866 | 113,929 | \$14,965,889 | 215,057 | \$22,886,755 | |
| | Pork | \$2,410,875 | 35,698 | \$4,947,371 | 72,095 | \$7,358,246 | |
| | Beef | \$3,456,106 | 54,712 | \$6,186,792 | 95,583 | \$9,642,897 | |
| | Fresh Fruit | \$5,223,177 | 112,287 | \$10,541,104 | 219,420 | \$15,764,281 | |
| | Frozen Fruit Products | \$2,635,239 | 38,886 | \$5,085,008 | 74,818 | \$7,720,247 | |
| | Frozen Prepared Dinners | \$4,578,534 | 48,450 | \$14,154,004 | 140,811 | \$18,732,538 | |
| Southwest Inc | Fresh Vegetables | \$7,236,723 | 148,119 | \$14,120,725 | 280,834 | \$21,357,448 | |
| | Canned Fruit | \$24,765,482 | 374,546 | \$48,622,971 | 734,442 | \$73,388,453 | |

Bottom Percent Results

Here's what the view looks like after applying a Bottom 10 Percent filter to Actual Sales Amount. The bottom 10% of Product Categories for **every** Customer Parent is displayed. The Bottom Percent filter was applied only to the most detailed subtotal level, Product Category.

The screenshot shows a software interface with a table of sales data. A red box highlights the filter 'Bottom Percent 10' applied to the 'Actual Sales Amount' column. Another red box highlights the first few rows of the table, including 'Wilder Foods' and 'Sumpter Distribution'.

| Customer Parent | Product Category | Actual Sales Amount | Actual Sales Units | Actual Sales Amount (Last Year) | Actual Sales Units (Last Year) |
|----------------------|-------------------------|---------------------|--------------------|---------------------------------|--------------------------------|
| Wilder Foods | Frozen Fruit Products | \$11,211,182 | 167,515 | \$20,174,836 | 295,269 |
| | Beef | \$14,294,909 | 223,181 | \$30,083,825 | 470,176 |
| | Pork | \$18,353,016 | 270,925 | \$37,585,226 | 546,034 |
| | Fresh Fruit | \$30,549,965 | 615,023 | \$61,542,687 | 1,227,553 |
| | Frozen Prepared Dinners | \$32,451,236 | 355,379 | \$70,173,460 | 741,247 |
| Sumpter Distribution | Frozen Fruit Products | \$13,930,898 | 203,919 | \$28,866,570 | 417,264 |
| | Pork | \$16,651,792 | 246,089 | \$33,591,090 | 485,748 |
| St Louis Dist Inc | Pork | \$2,410,875 | 35,698 | \$4,947,371 | 72,095 |
| | Frozen Fruit Products | \$2,635,239 | 38,886 | \$5,085,008 | 74,818 |
| Southwest Inc | Frozen Fruit Products | \$953,501 | 13,993 | \$2,281,223 | 32,925 |
| | Pork | \$1,473,736 | 21,228 | \$2,787,021 | 39,550 |
| | Beef | \$1,742,478 | 28,444 | \$4,396,268 | 69,043 |
| | Frozen Prepared Dinners | \$2,944,235 | 31,441 | \$6,645,070 | 68,310 |
| Smith Inc | Frozen Fruit Products | \$467,880 | 7,063 | \$1,948,643 | 27,970 |
| | Pork | \$2,326,782 | 34,706 | \$5,996,366 | 87,630 |
| | Beef | \$2,850,093 | 47,229 | \$5,964,097 | 99,425 |
| Quebec Foods | Frozen Fruit Products | \$1,382,423 | 20,350 | \$3,477,189 | 50,644 |
| | Beef | \$2,175,293 | 33,293 | \$4,313,989 | 63,496 |
| | Pork | \$3,164,429 | 45,320 | \$5,100,858 | 72,573 |
| Prestwick Inc | Frozen Fruit Products | \$3,788,338 | 57,289 | \$6,682,377 | 99,885 |
| | Beef | \$4,838,456 | 77,105 | \$8,648,467 | 142,084 |
| Penn Brands | Frozen Fruit Products | \$3,839,591 | 58,530 | \$7,207,944 | 109,341 |
| | Beef | \$4,919,569 | 76,379 | \$9,252,252 | 142,432 |
| Packingham Corp | Frozen Fruit Products | \$1,740,793 | 24,683 | \$3,579,342 | 51,005 |

Recursive Bottom Percent Results

Here's what the view looks like when you change the filter to a Recursive Bottom 10 Percent. The bottom 10% of Product Categories from each of the bottom 10% of Customer Parents is displayed. The Recursive Bottom Percent filter was applied to each level, Customer Parent and Product Category.

The screenshot shows a data table with a toolbar at the top. The toolbar includes icons for save, print, search, and other functions. The current view is titled "View Name: Top N Percent Multiple Levels of Analysis" and the filter is set to "View Filter". The table has columns for Customer Parent, Product Category, Actual Sales Amount, Actual Sales Units, and Last Year (Actual Sales Amount and Actual Sales Units). A red box highlights the filter dropdown menu, which is set to "Recursive Bottom Percent 10". A larger red box highlights the data rows, which are sorted by Customer Parent and Product Category. The data rows are as follows:

| Customer Parent | Product Category | Actual Sales Amount | Actual Sales Units | Last Year Actual Sales Amount | Last Year Actual Sales Units |
|---------------------|-------------------------|---------------------|--------------------|-------------------------------|------------------------------|
| St Louis Dist Inc | Pork | \$2,410,875 | 35,698 | \$4,947,371 | 72,095 |
| | Frozen Fruit Products | \$2,635,239 | 38,886 | \$5,085,008 | 74,818 |
| Smith Inc | Frozen Fruit Products | \$467,880 | 7,063 | \$1,948,643 | 27,970 |
| | Pork | \$2,326,782 | 34,706 | \$5,996,366 | 87,630 |
| | Beef | \$2,850,093 | 47,229 | \$5,964,097 | 99,425 |
| Packingham Corp | Frozen Fruit Products | \$1,740,793 | 24,683 | \$3,579,342 | 51,005 |
| | Beef | \$1,754,651 | 26,344 | \$3,726,302 | 55,011 |
| Pacific Corp | Frozen Fruit Products | \$880,915 | 13,573 | \$421,994 | 6,328 |
| | Pork | \$955,101 | 13,878 | \$1,717,374 | 24,935 |
| | Beef | \$2,283,039 | 30,983 | \$4,765,971 | 69,182 |
| NY Foods | Pork | \$2,395,073 | 35,297 | \$4,876,617 | 70,948 |
| | Frozen Fruit Products | \$2,509,613 | 36,462 | \$4,656,899 | 67,895 |
| Montelissi | Frozen Fruit Products | \$902,365 | 14,222 | \$1,875,821 | 29,250 |
| | Pork | \$1,416,669 | 21,400 | \$3,238,271 | 47,230 |
| | Frozen Prepared Dinners | \$2,956,182 | 33,541 | \$6,615,240 | 71,874 |
| Maple Tree | Frozen Fruit Products | \$1,889,081 | 27,738 | \$4,083,118 | 59,173 |
| | Canned Fruit | \$2,115,213 | 31,537 | \$4,052,995 | 60,376 |
| Dallas Food Service | Frozen Fruit Products | \$1,372,583 | 21,018 | \$3,228,222 | 48,795 |
| | Beef | \$1,852,935 | 33,350 | \$4,293,614 | 74,783 |
| Auburn Providers | Frozen Fruit Products | \$1,450,925 | 21,018 | \$3,921,626 | 56,009 |
| | Pork | \$2,189,380 | 32,014 | \$4,048,184 | 59,498 |
| Alberta Foods | Frozen Fruit Products | \$1,639,217 | 24,569 | \$3,221,392 | 47,610 |
| | Pork | \$2,832,686 | 42,418 | \$5,816,543 | 85,749 |
| Grand Total | | \$43,827,289 | 647,628 | \$92,081,012 | 1,347,590 |

Overall Bottom Percent Results

Here's what the view looks like when you change the filter to an Overall Bottom 10 Percent. Only the bottom 10% of Customer Parent/Product Category combinations in terms of overall sales amount is displayed.

| Customer Parent | Product Category | Actual Sales Amount | Actual Sales Units | Last Year Actual Sales Amount | Last Year Actual Sales Units |
|-------------------|-------------------------|---------------------|--------------------|-------------------------------|------------------------------|
| St Louis Dist Inc | Pork | \$2,410,875 | 35,698 | \$4,947,371 | 72,095 |
| | Frozen Fruit Products | \$2,635,239 | 38,886 | \$5,085,008 | 74,818 |
| | Beef | \$3,456,106 | 54,712 | \$6,186,792 | 95,583 |
| | Frozen Prepared Dinners | \$4,578,534 | 48,450 | \$14,154,004 | 140,811 |
| | Fresh Fruit | \$5,223,177 | 112,287 | \$10,541,104 | 219,420 |
| | Fresh Vegetables | \$6,291,713 | 135,100 | \$13,264,067 | 281,084 |
| Southwest Inc | Frozen Fruit Products | \$953,501 | 13,993 | \$2,281,223 | 32,925 |
| | Pork | \$1,473,736 | 21,228 | \$2,787,021 | 39,550 |
| | Beef | \$1,742,478 | 28,444 | \$4,396,268 | 69,043 |
| | Frozen Prepared Dinners | \$2,944,235 | 31,441 | \$6,645,070 | 68,310 |
| | Fresh Fruit | \$5,441,738 | 105,949 | \$11,843,420 | 228,891 |
| Smith Inc | Frozen Fruit Products | \$467,880 | 7,063 | \$1,948,643 | 27,970 |
| | Pork | \$2,326,782 | 34,706 | \$5,996,366 | 87,630 |
| | Beef | \$2,850,093 | 47,229 | \$5,964,097 | 99,425 |
| | Frozen Prepared Dinners | \$4,968,586 | 53,910 | \$8,371,959 | 89,300 |
| | Canned Fruit | \$5,646,516 | 87,146 | \$10,784,036 | 166,881 |
| | Fresh Fruit | \$6,319,050 | 130,022 | \$13,142,999 | 262,344 |
| Quebec Foods | Frozen Fruit Products | \$1,382,423 | 20,350 | \$3,477,189 | 50,644 |
| | Beef | \$2,175,293 | 33,293 | \$4,313,989 | 63,496 |
| | Pork | \$3,164,429 | 45,320 | \$5,100,858 | 72,573 |
| | Fresh Fruit | \$4,385,462 | 81,533 | \$9,112,729 | 171,547 |
| | Fresh Vegetables | \$5,795,266 | 117,843 | \$12,188,465 | 235,240 |
| Prestwick Inc | Frozen Fruit Products | \$3,788,338 | 57,289 | \$6,682,377 | 99,885 |
| | Beef | \$4,838,456 | 77,105 | \$8,648,467 | 142,084 |

Edit the Information Displayed in the Select and Advanced Select Members Windows

1. In either window, click More then choose Display Options.
2. Make the desired changes in the [Display Options window](#):
 - Select or de-select display columns to change which ones display.
 - Select a value from the Return Members list to change how many members display per page in the search results section of the [Advanced Select Members window](#).
3. Click OK.

Factors Influencing Default Settings in Filtering Windows

The default state of the following windows depends on how you accessed the window, either from a view or from an administrative page such as Role Maintenance or User List Maintenance.

- [Select User List Filter window](#)
- [Select Members](#), [Advanced Select Members](#), and [Paste Members windows](#)

Windows Accessed from Views or View Prompt Window

When filtering windows are opened from a view, the display columns that display by default are the values and/or attribute relationships showing in the grid. The Search By drop-down lists in the Select and Advanced Select Members windows depend on administrator settings in the Dimension window. If an attribute relationship was selected in those settings for the applicable level, then Search By will default to that attribute relationship. If System Defined was selected in those administrative settings for the level, then searches will default to the level's display text in the view.

The Buyer level in this view has three attribute relationships available for use in the view, and two of them are showing in the view. The Buyer Short Description is the display text, and the Buyer Phone Number also is on display. Those two attribute relationships are the default display columns in the filtering windows. The Buyer Short Description displays first and is the default selection for Search By. This is the default because the administrative Select Members Options settings for that level were set to System Defined and because that attribute relationship is the display text in the view.

The screenshot shows a software interface with a data grid and two side panels. The grid displays sales data for a 'Buyer' named Jane Burns. The 'View Explorer' panel on the right shows a tree structure with 'Buyer' selected, and its 'Properties' panel shows 'Buyer Short Description' as the 'Display Text'.

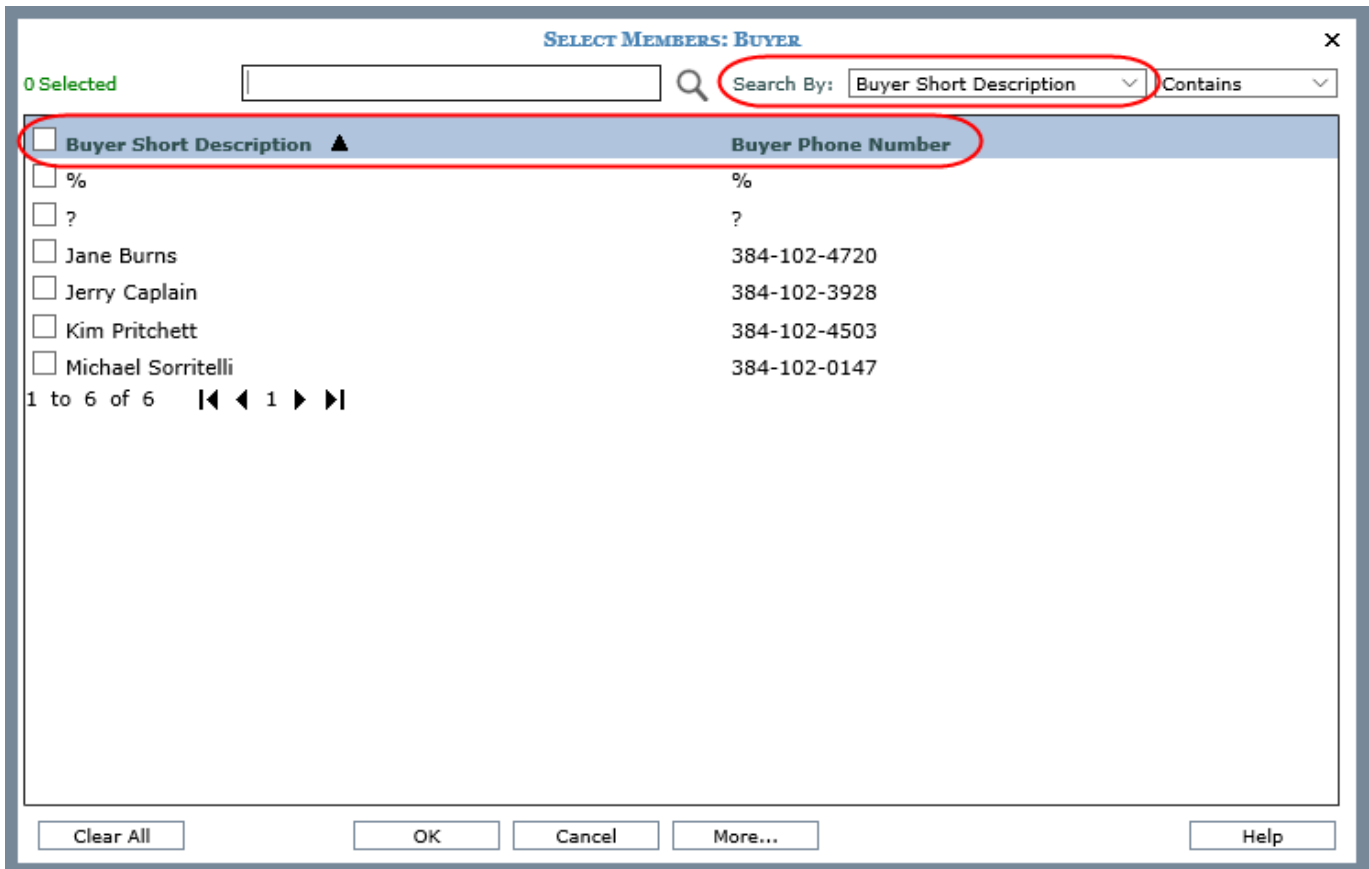
| Buyer >> | Jane Burns | | | | |
|---|-------------------------------|--------------------------------|------------|---------------|-------------------|
| Buyer Phone Number | 384-102-4720 | | | | |
| Ship-To Territory >> | 1100 | | 1101 | | |
| STerr Long Description | Southwest | | South Cen | | |
| Customer SIC Code >> | Whlsaler; Groc. Gen. Line | Whlsaler; Groc/Rel., NEC | All Others | 1100 Total | Whlsaler; Groc. |
| SIC Long Description | Wholesaler; Groceries General | Wholesaler; Grocery/Related NE | | | Wholesaler; Groce |
| Actual Sales Sales Amount Per1 2012 to Per45 2014 | \$49,493,425 | \$51,380,843 | | \$100,874,268 | |
| Actual Sales Sales Return Units Per1 2012 to Per45 2014 | (13,880) | (15,986) | | (29,866) | |
| Actual Sales Sales Units Per1 2012 to Per45 2014 | 795,569 | 825,533 | | 1,621,103 | |
| Actual Sales Ext Actual Cost Per1 2012 to Per45 2014 | \$20,137,634 | \$21,909,932 | | \$42,047,567 | |
| Actual Sales Ext Handling Cost Per1 2012 to Per45 2014 | \$771,050 | \$838,245 | | \$1,609,294 | |

View Explorer

- Buyer and Ship-To Sales Etc. Figures
 - Parameter Groups
 - Grid
 - Rows
 - Columns
 - Distribution Center Warehouse
 - Vendor Buyer
 - Buyer
 - Buyer
 - Buyer Short Description
 - Buyer Fax Number
 - Buyer Phone Number
 - Ship-To Territory
 - Customer SIC Code
 - Product Type
 - Customer Sold-To
 - UPC Global Number
 - View Filter
 - Measure Items

Properties - Buyer

| | | |
|--------------|-------------------------|-----|
| Filter | None | ... |
| Sort | None | ▼ |
| Total | Yes | ▼ |
| All Others | Yes | ▼ |
| Visible | Yes | ▼ |
| Display Text | Buyer Short Description | ▼ |



When running views with parameters, a Display Text property for parameters can be used to customize what users see when they access filtering windows from the View Prompt window. When the property is set to View, the filtering window behaves the same as described in the prior section. When the property is set to an attribute of the level, the defaults in the filtering windows will use that attribute when windows are accessed from the View Prompt window.

Note: Display Text settings for a parameter only take effect if the Search By setting for a level in the Dimension window are set to System Defined. If an attribute relationship is selected for a level's Search By setting in that window, then Search By will default to that administrator-specified attribute relationship.

The following View includes a Select Members parameter on the UPC Global Number level. The parameter Display Text is set to UPC Long Description. Information displayed in the grid for the level are UPC Commodity Code, ABC Classification, and Short Description. The Search By setting in the Dimension window for the level is set to System Defined. When users access the Select and Advanced Select Members from the View Prompt window to make their UPC selections, the Search By and first display column will default to the UPC Long Description, according to the parameter Display Text setting.

View Name: *UPC Daily Sales by Ship-To Region*

View Filter

| Ship-To Region >> | | | E. US | | S. US | | MidW US |
|-----------------------|------------------------|---------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|
| SRgn Country | | | USA | | USA | | USA |
| UPC Global Number | UPC ABC Classification | UPC Short Description | Daily Sales Amount Jan 14 to Sep 14 | Daily Sales Units Jan 14 to Sep 14 | Daily Sales Amount Jan 14 to Sep 14 | Daily Sales Units Jan 14 to Sep 14 | Daily Sales Amount Jan 14 to Sep 14 |
| 0 - 39484 - 92837 - 1 | B | Apples Red Delicious | \$9,574,364 | 6,905 | \$13,700,369 | 10,271 | \$10,848,5 |
| 0 - 24000 - 12430 - 4 | A | Applesauce 106oz BR* | \$6,421,048 | 1,546 | \$5,651,066 | 2,346 | \$6,560,4 |
| 0 - 24000 - 12431 - 4 | A | Applesauce 106oz PL* | \$13,563,955 | 1,797 | \$19,136,315 | 5,825 | \$17,732,0 |
| 0 - 24000 - 12530 - 4 | A | Applesauce 12oz BR* | \$6,062,108 | 1,478 | \$3,188,540 | 676 | \$7,927,1 |
| 0 - 24000 - 12531 - 4 | A | Applesauce 12oz PL* | \$18,921,470 | 8,768 | \$8,790,517 | 3,887 | \$27,569,8 |
| 0 - 02749 - 25408 - 6 | C | Asparagus | \$20,400,226 | 2,871 | \$19,747,022 | 5,475 | \$25,778,2 |
| 0 - 79453 - 02938 - 9 | A | Baby Carrots | \$7,456,195 | 4,426 | \$7,923,022 | 2,177 | \$8,523,2 |
| 0 - 39484 - 24300 - 1 | B | Bananas | \$2,613,118 | 1,674 | \$3,187,710 | 1,273 | \$3,500,8 |
| 0 - 24000 - 12432 - 4 | A | Blackberries 106oz BR* | \$2,753,608 | 311 | \$2,990,502 | 395 | |
| 0 - 24000 - 12532 - 4 | A | Blackberries 12oz BR* | \$3,267,656 | 975 | \$1,266,028 | 373 | \$4,144,2 |
| 0 - 24000 - 12477 - 4 | B | Blueberries 106oz BR* | \$1,304,435 | 126 | \$1,910,835 | 288 | \$1,715,5 |
| 0 - 24000 - 12577 - 4 | B | Blueberries 12oz BR* | \$2,089,920 | 293 | \$897,349 | 86 | \$2,777,2 |
| 0 - 24000 - 12456 - 4 | C | Blueberry Filling 106oz B | \$2,330,422 | 737 | \$5,375,531 | 1,896 | |
| 0 - 24000 - 12450 - 4 | C | Blueberry Filling 106oz P | | | \$548,892 | 198 | |

View Explorer

- UPC Daily Sales by Ship-To Region
 - Parameter Groups
 - ShipTo Region Parameters
 - UPC Parameters
 - MemberParameter
 - Grid
 - Rows
 - Columns
 - View Filter
 - Measure Items
 - Presentation
 - Charts

Properties - MemberParameter

| | |
|---------------|------------------------|
| Name | MemberParameter |
| Type | Select Members |
| Prompt | Choose UPC's to Review |
| Default Value | |
| Display Text | UPC Long Description |

SELECT MEMBERS: UPC GLOBAL NUMBER

0 Selected

Search By: **UPC Long Description** Contains

| <input type="checkbox"/> UPC Long Description ▲ | UPC ABC Classification | UPC Short Description |
|--|------------------------|-------------------------|
| <input type="checkbox"/> % | % | % |
| <input type="checkbox"/> ? | ? | ? |
| <input type="checkbox"/> Apple Filling 106oz BR* | B | Apple Filling 106oz BR* |
| <input type="checkbox"/> Apple Filling 106oz PL* | A | Apple Filling 106oz PL* |
| <input type="checkbox"/> Apple Filling 12oz BR* | B | Apple Filling 12oz BR* |
| <input type="checkbox"/> Apple Filling 12oz PL* | A | Apple Filling 12oz PL* |
| <input type="checkbox"/> Apples Red Delicious | B | Apples Red Delicious |
| <input type="checkbox"/> Applesauce 106oz BR* | A | Applesauce 106oz BR* |
| <input type="checkbox"/> Applesauce 106oz PL* | A | Applesauce 106oz PL* |
| <input type="checkbox"/> Applesauce 12oz BR* | A | Applesauce 12oz BR* |
| <input type="checkbox"/> Applesauce 12oz PL* | A | Applesauce 12oz PL* |
| <input type="checkbox"/> Asparagus | C | Asparagus |
| <input type="checkbox"/> Baby Carrots | A | Baby Carrots |
| <input type="checkbox"/> Bananas | B | Bananas |
| <input type="checkbox"/> Blackberries 106oz BR* | A | Blackberries 106oz BR* |
| <input type="checkbox"/> Blackberries 12oz BR* | A | Blackberries 12oz BR* |
| <input type="checkbox"/> Blueberries 106oz BR* | B | Blueberries 106oz BR* |

Clear All OK Cancel More... Help

Windows Accessed from Administrative Pages

The default display columns and Search By are determined by administrator settings when filtering windows are accessed from administrative pages. Administrators use a Dimension window to choose the defaults for each level.

Here is the Select Members window for the Buyer level shown in the first example. The window was accessed from the User List Maintenance window while setting up a user list. Based on administrator settings, the default Search By is value (Buyer) and the default display columns are value, Buyer Short Description, and Buyer Long Description.

| <input type="checkbox"/> Buyer ▲ | Buyer Short Description | Buyer Long Description |
|----------------------------------|-------------------------|------------------------|
| <input type="checkbox"/> % | % | % |
| <input type="checkbox"/> ? | ? | ? |
| <input type="checkbox"/> JAB | Jane Burns | Jane Burns |
| <input type="checkbox"/> JCC | Jerry Caplain | Jerry Caplain |
| <input type="checkbox"/> KAP | Kim Pritchett | Kim Pritchett |
| <input type="checkbox"/> MCS | Michael Sorritelli | Michael Sorritelli |

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.

| 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) | (\$29,527) |
| 19990101924015 | (\$1,046) | (\$987) | (\$637) | | (\$601) | (\$7,121) |
| 19990101924401 | (\$6,154) | (\$5,806) | (\$4,653) | (\$4,390) | (\$44,415) | (\$41,901) |

Named Sets

Year to Date (YTD) named sets are created by Stratum.Connector for Viewer during the processing of the Analysis Services database for your Stratum.Viewer environment. There will be YTD named sets created for each single level, absolute time dimension. The named sets will consist of the time members for a year up to the current period -- for example, days in the year up to the current day, weeks up to the current week, months up to the current month, and quarters up to the current quarter.

This table shows examples of types of Stratum.Viewer dimensions that would and wouldn't have named sets.

| Dimension | Hierarchy | Level(s) | Has a Named Set? |
|------------------------|------------------------|---|---|
| Weeks | Weeks | Weeks | Yes. This is an absolute time dimension with a single level. |
| Year Weeks | Year Weeks | <ul style="list-style-type: none"> • Year • Weeks | No. This is an absolute time dimension, but it has multiple levels. |
| Year Based Weeks Based | Year Based Weeks Based | <ul style="list-style-type: none"> • Year Based • Weeks Based | No. This is a based time dimension. |
| Product Brand | Product Brand | Product Brand | No. This is not a time dimension. |

Named sets can be used in Stratum.Viewer for period based analysis and filtering levels from single level, absolute time dimensions. The named sets also can be used for setting up calculated measure items. More details:

- [Named Sets Created for Single Level, Absolute Time Dimensions](#)
- [Accessing Named Sets and Using them in Views](#)

Named Sets Created for Single Level Time Dimensions

Here are examples of named sets and their members that are created by Stratum.Connector for Viewer for single level, absolute time dimensions. Factors that determine the named sets are measure groups and their related Stratum.Server Structure Codes, the Based Periodic ViewSets in ViewGroups associated with the Structure Codes (excluding Based Year ViewSets), Categories in the Structure Codes, and Current Period information in the Stratum.Server database. For each Category in a Structure Code, a Named Set for each type of Based Periodic ViewSet is created.

| Structure Code | ViewGroup Associated with Structure Code | Based Periodic ViewSets in the ViewGroup |
|----------------|--|--|
| Sales | Sales | Year Based |
| | | Quarters Based |
| | | Months Based |
| | | Weeks Based |
| Inventory | Inventory | Year Based |
| | | Quarters Based |

| | | |
|----------|----------|----------------|
| | | Months Based |
| | | Weeks Based |
| Forecast | Forecast | Year Based |
| | | Quarters Based |
| | | Months Based |

Additionally, the Structure Codes contain these Categories.

| Structure Code | Category |
|----------------|-----------|
| Sales | Sales |
| Inventory | Inventory |
| Forecast | Forecast |

Given this set up, Stratum.Connector for Viewer will create the following named sets. Their names consist of the Category name, a space, the text "YTD" (for year to date), another space, and the name of the Absolute Periodic ViewSet on which the Based Periodic ViewSet in the ViewGroup was based.

| Structure Code | Named Set |
|----------------|------------------------|
| Sales | Sales YTD Quarters |
| | Sales YTD Months |
| | Sales YTD Weeks |
| Inventory | Inventory YTD Quarters |
| | Inventory YTD Months |
| | Inventory YTD Weeks |
| Forecast | Forecast YTD Quarters |
| | Forecast YTD Months |

More Information:

Named sets are comprised of members that make up the YTD Periods for the related Absolute Periodic ViewSet. Current Period information determines the member list for each named set. For example, if the current month in the Stratum.Server storage database is defined as April, the YTD Periods for the Months ViewSet would be January, February, March, and April. Given this, named sets such as Sales YTD Months and Forecast YTD Months would be comprised of the members January, February, March, and April.

Given the example named sets shown previously, if the Current Period was September 2014, then:

- The list of members for Sales YTD Quarters and other YTD Quarters named sets would be Q1, Q2, and Q3.
- The list of Members for Sales YTD Months and other YTD Months named sets would be January, February, March, April, May, June, July, August, and September.
- The list of Members for Sales YTD Weeks and other YTD Weeks named sets would be Week 1 through Week 38.

Accessing Named Sets and Using Them in Views

Named sets are accessed from the Select Named Set Filter window, which in turn is accessed from the Select Filter Method window when you are working with filters or working with expressions. Examples of using named sets follow. Remember, to use named sets you must be working with a single level, absolute time dimension such as Weeks, Months, Quarters, or Periods. When you are choosing a named set for a filter or expression, be sure that the set is relevant to the measure items in the view or expression. For example, if the measure item in a view is Actual Sales and you are filtering a level by a named set, choose one that pertains to Actual Sales rather than one pertaining to Budget.

Named Set Used for a Filter

The following view includes the Months level, which is from the Months time hierarchy and time dimension. Because the Months dimension is a single level, absolute time dimension, you can use the named sets for the Months level when working with the view. The Budget YTD Months named set was used to filter the level because Budget measure items are in the view. More information follows this image.

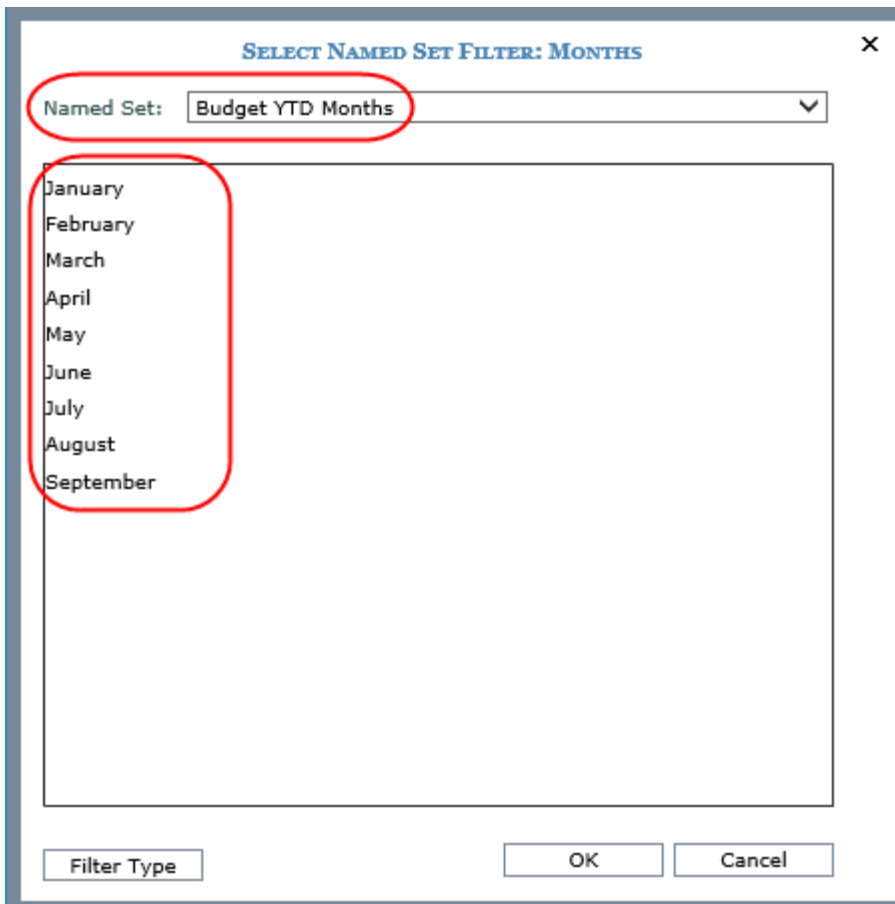
| View Name: <i>Period Based Budget View</i> | | | | | | |
|--|------------------------------|-----------------------------|-----------------------------|----------------------------|------------------------------|-----------------------------|
| View Filter | | | | | | |
| Year >> | 2015 | | | 2014 | | |
| Months | Budget Budget Amount Working | Budget Budget Amount Frozen | Budget Budget Units Working | Budget Budget Units Frozen | Budget Budget Amount Working | Budget Budget Amount Frozen |
| January | | | 2,293 | 8,341,792 | \$373,945,683 | \$4,222,380,810 |
| February | | | 5,765 | 5,920,590 | \$262,448,013 | \$2,145,679,272 |
| March | \$464,814,077 | \$490,889,486 | 8,010,147 | 8,406,831 | \$371,851,261 | \$4,222,380,810 |
| April | \$492,567,438 | \$520,199,772 | 8,801,982 | 8,970,905 | \$394,053,951 | \$4,222,380,810 |
| May | \$512,879,272 | \$541,651,071 | 8,357,900 | 9,282,902 | \$410,303,418 | \$4,222,380,810 |
| June | \$509,645,159 | \$538,235,529 | 8,134,081 | 9,139,116 | \$407,716,127 | \$4,222,380,810 |
| July | \$605,162,241 | \$639,110,984 | 10,635,023 | 10,844,762 | \$484,129,793 | \$5,145,679,272 |
| August | \$717,565,679 | \$757,820,095 | 11,592,988 | 12,744,824 | \$574,052,543 | \$6,422,380,810 |
| September | \$524,254,824 | \$553,664,775 | 9,970,425 | 9,335,601 | \$419,403,859 | \$4,222,380,810 |
| Grand Total | \$4,622,380,810 | \$4,881,689,811 | 73,470,603 | 82,987,323 | \$3,697,904,648 | \$4,222,380,810 |

To set up the filter, the Months level was right-clicked and Filter then Edit was selected from the pop-up menu that displayed. In the Select Members window that displayed by default, the More button was clicked then Change Filter Type was selected to open the Select Filter Method window. In that window, Named Set was selected and OK was clicked.

Note: Another option in the following window would have been to select Named Set, enter the name of the named set in the quick filter field, and click OK. In that case, the filter would be applied without accessing the Select Named Set Filter window.



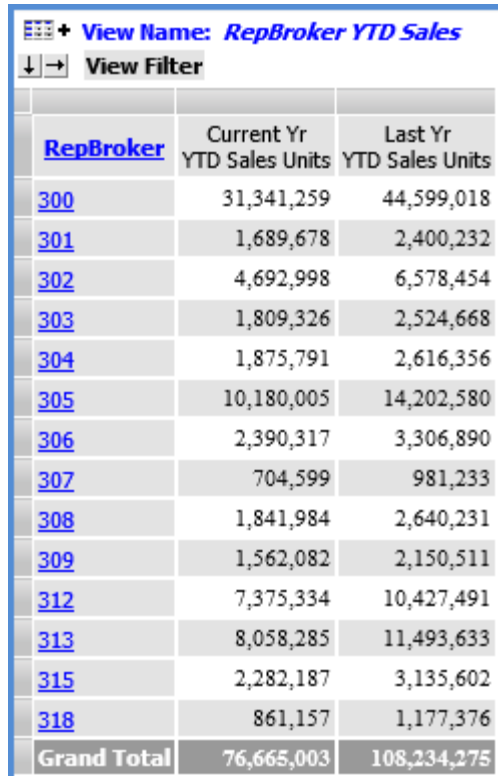
The Select Named Set Filter window displayed, and the Budget YTD Months named set was selected. The window displayed the members in the named set. Then, OK was clicked to apply the filter.



Named Set Used for a Calculated Measure Item

Here is an example of named sets used for calculated measure items. Both YTD calculated measure items use a named set in their expression. The calculated measure items take into account data from all months up to and including the current month for the last year and current year. More information follows this image.

Note: You can create a similar view using measure items with time ranges. The view would need to be one in which the Time Range property is enabled.

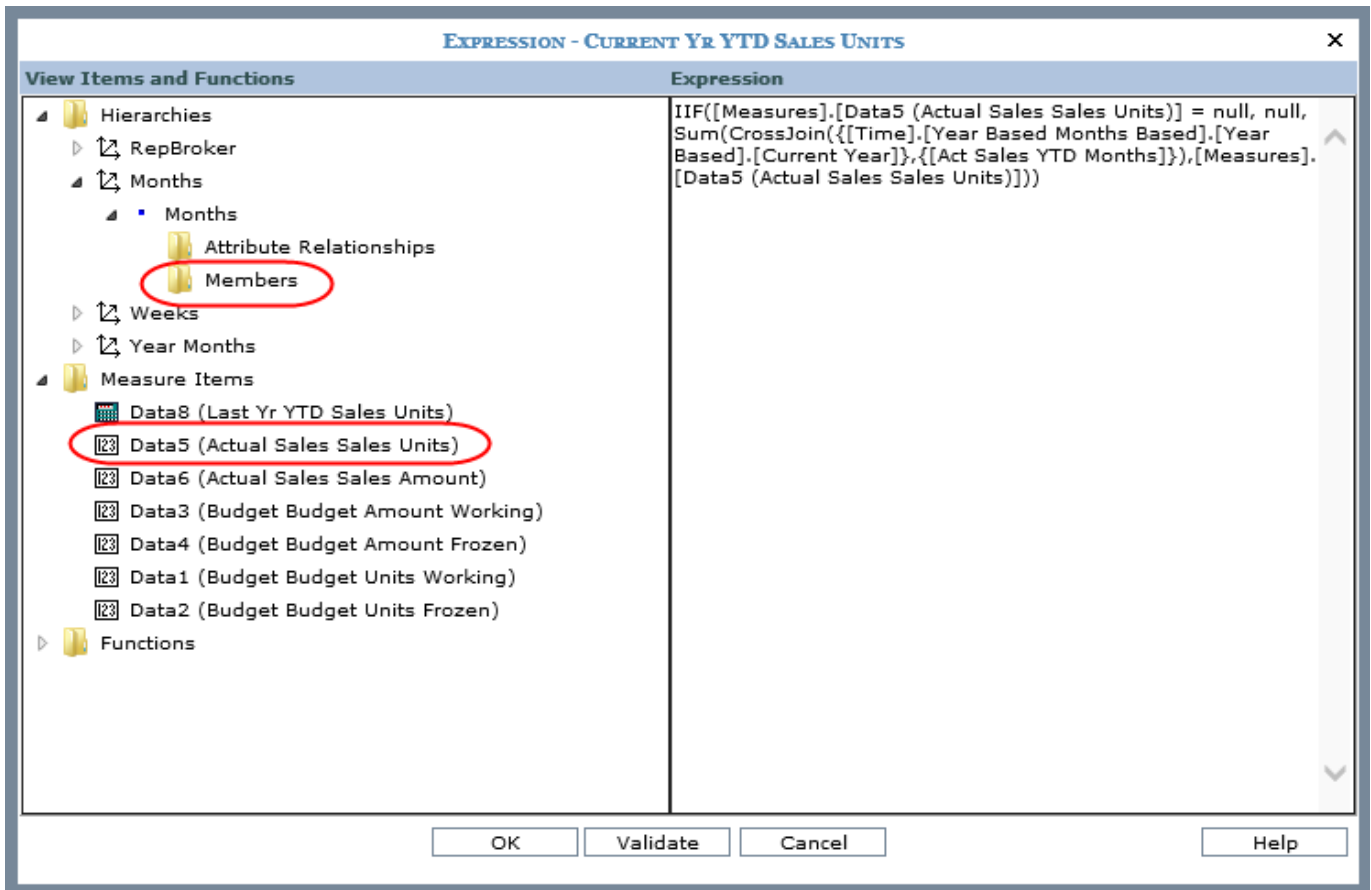


| RepBroker | Current Yr YTD Sales Units | Last Yr YTD Sales Units |
|---------------------------|-------------------------------|----------------------------|
| 300 | 31,341,259 | 44,599,018 |
| 301 | 1,689,678 | 2,400,232 |
| 302 | 4,692,998 | 6,578,454 |
| 303 | 1,809,326 | 2,524,668 |
| 304 | 1,875,791 | 2,616,356 |
| 305 | 10,180,005 | 14,202,580 |
| 306 | 2,390,317 | 3,306,890 |
| 307 | 704,599 | 981,233 |
| 308 | 1,841,984 | 2,640,231 |
| 309 | 1,562,082 | 2,150,511 |
| 312 | 7,375,334 | 10,427,491 |
| 313 | 8,058,285 | 11,493,633 |
| 315 | 2,282,187 | 3,135,602 |
| 318 | 861,157 | 1,177,376 |
| Grand Total | 76,665,003 | 108,234,275 |

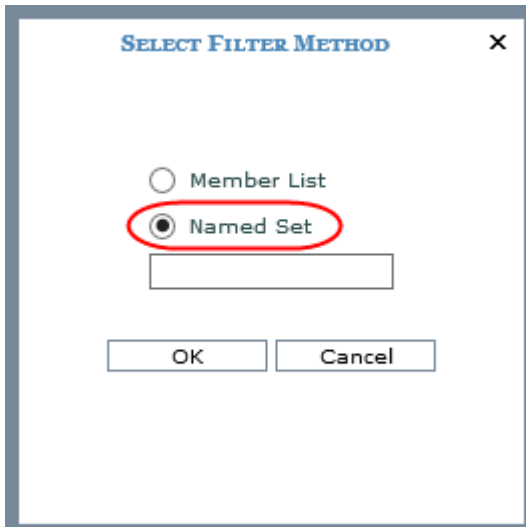
The expression for the first measure item is:

```
IIF([Measures].[Data5 (Actual Sales Sales Units)] = null, null, Sum(CrossJoin({[Time].[Year Based Months Based].[Year Based].[Current Year]},{[Act Sales YTD Months]}),[Measures].[Data5 (Actual Sales Sales Units)]))
```

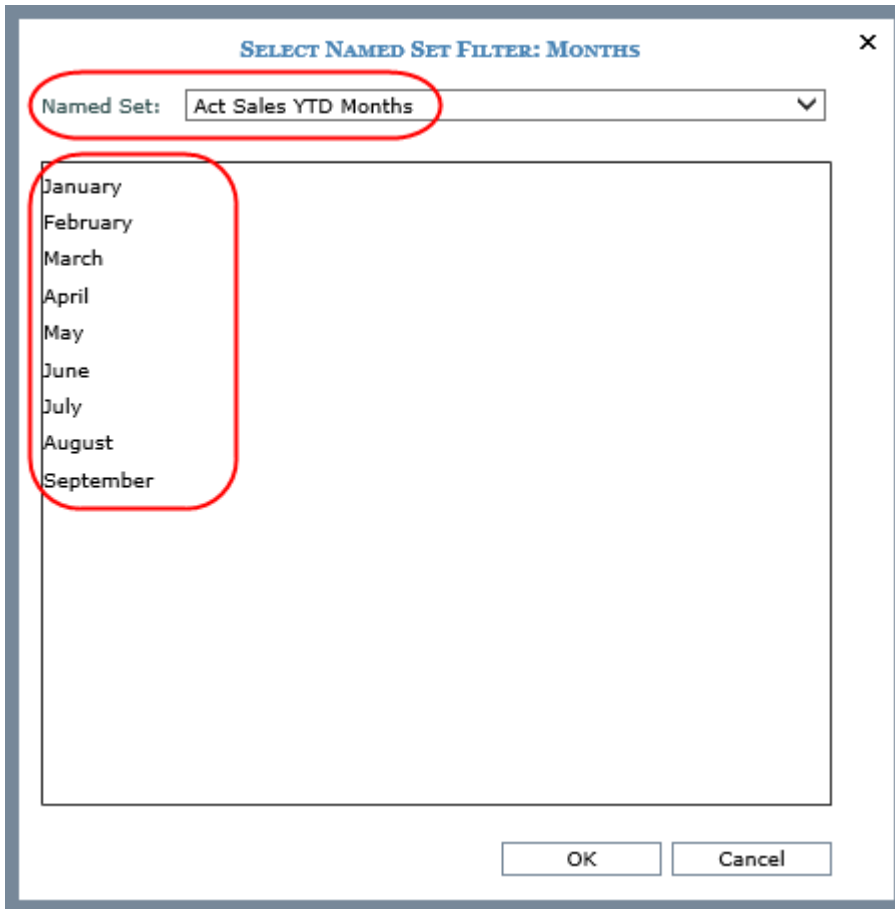
This expression uses the Act Sales YTD Months named set and the Actual Sales Sales Units measure item, which is part of the view definition but hidden from display. The expression has been optimized to check whether or not sales units data exists. The expression will be executed only for cases where there is data. Running the expression without this check could be time consuming.



When building such expressions, you can enter the name of the relevant named set directly into the Expression window. Or, navigate to the appropriate level in the window and click its Members sub-folder to access the Select Filter Method window. For this measure item's expression, the Members sub-folder of the Months level was clicked to access the Select Filter Method window. Named Set was selected, and OK was clicked.



The Act Sales YTD Months named set was selected since the measure item in the expression is Actual Sales Sales Units.



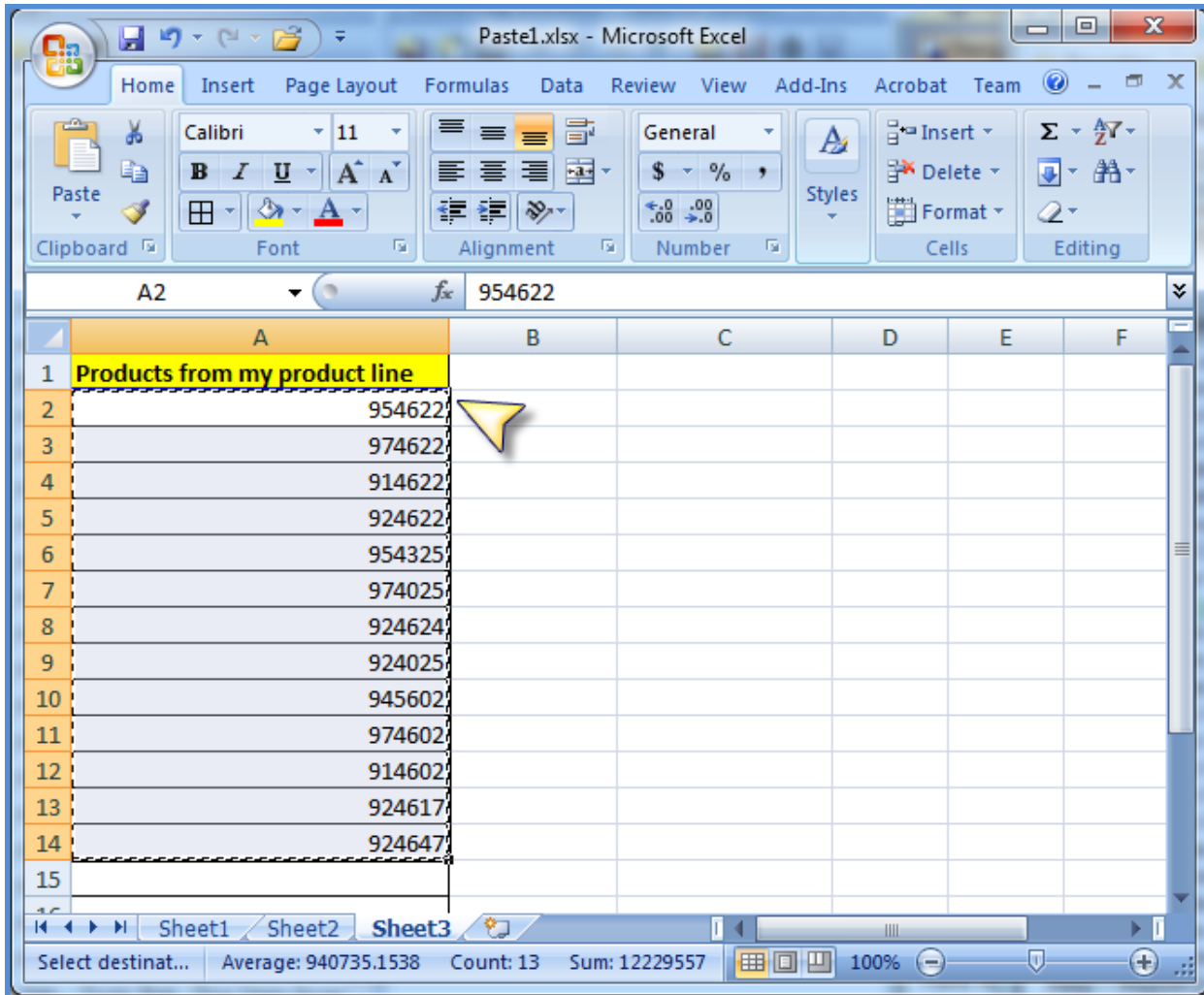
Potential Sources of Data for use with Pasting Members

Paste Members functionality lets you copy a list of members into Stratum.Viewer, validate the list, and then add valid members to the member list filter or user list definition with which you are working. You can copy members from sources such as:

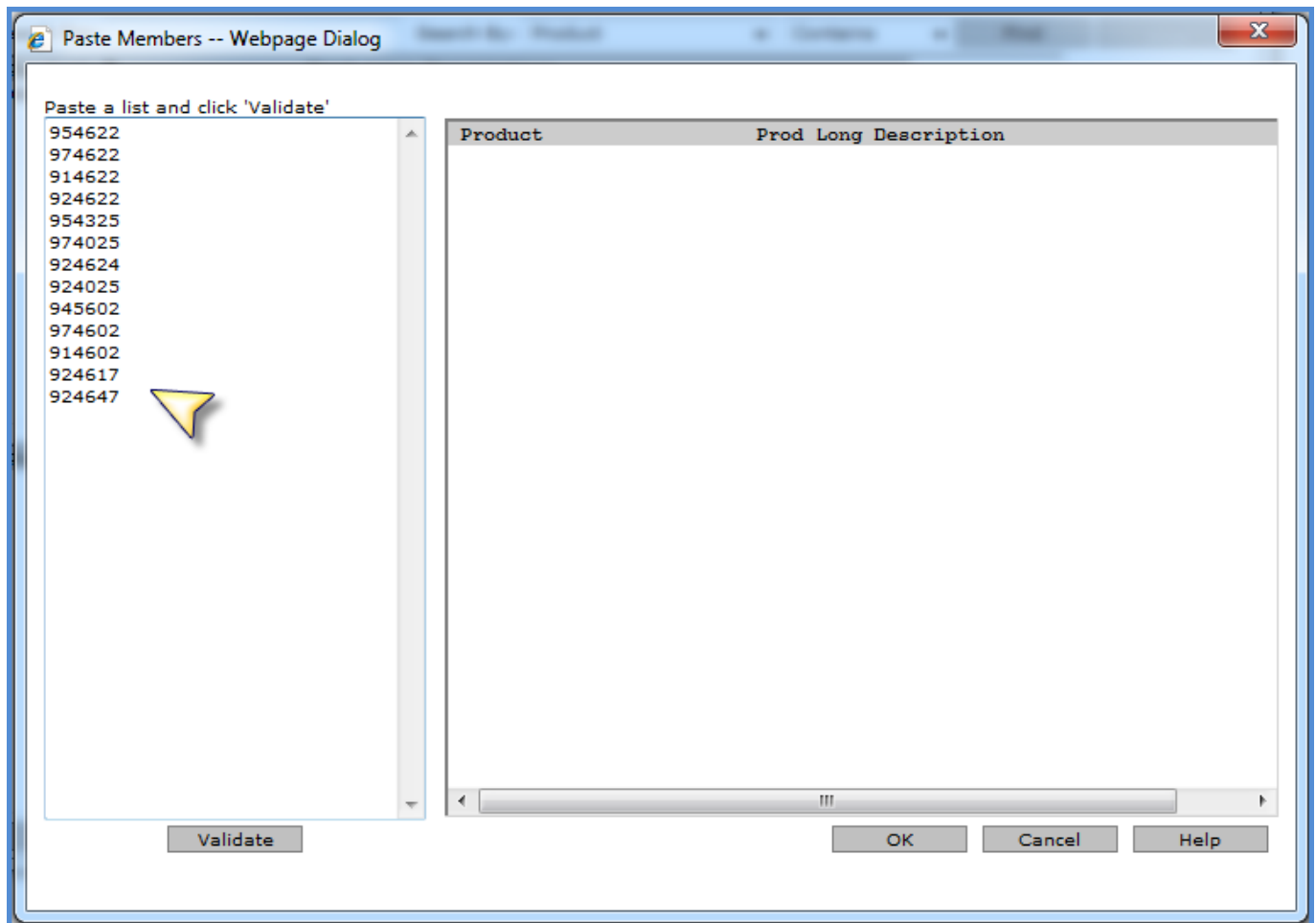
- [A column](#) in a Microsoft Excel spreadsheet.
- [A list of members separated by paragraph returns](#) in a Microsoft Word document.
- [A comma-delimited list of members](#), such as from an e-mail or text file. You can remove the commas before the paste via Excel as shown in the last example that follows.

Excel Example

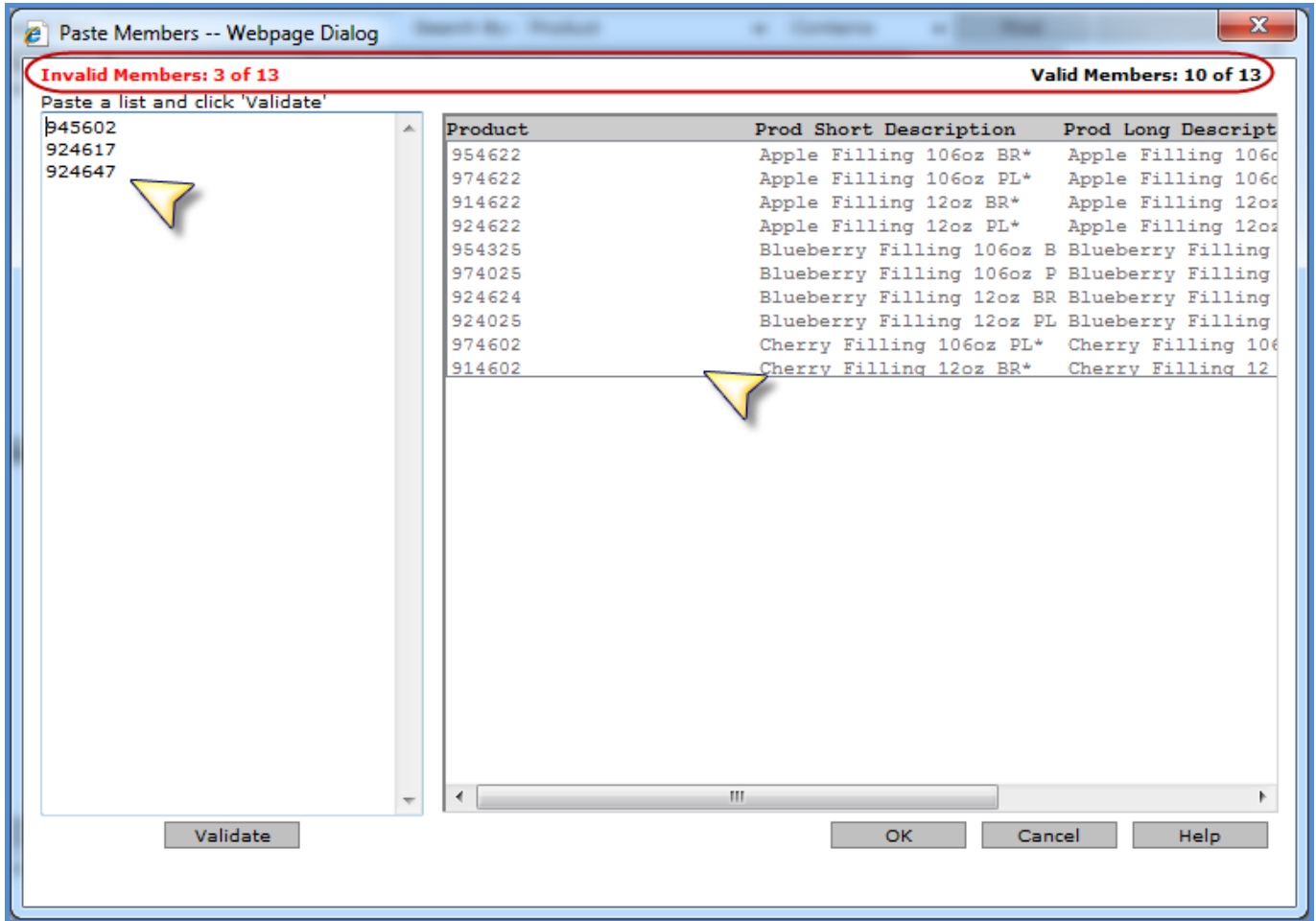
Here is an example of pasting members while working with the Product level. The Advanced Select Members window had been accessed for that level and then Paste was selected from the More menu. Next, this list of values for Product members was copied from an Excel spreadsheet column.



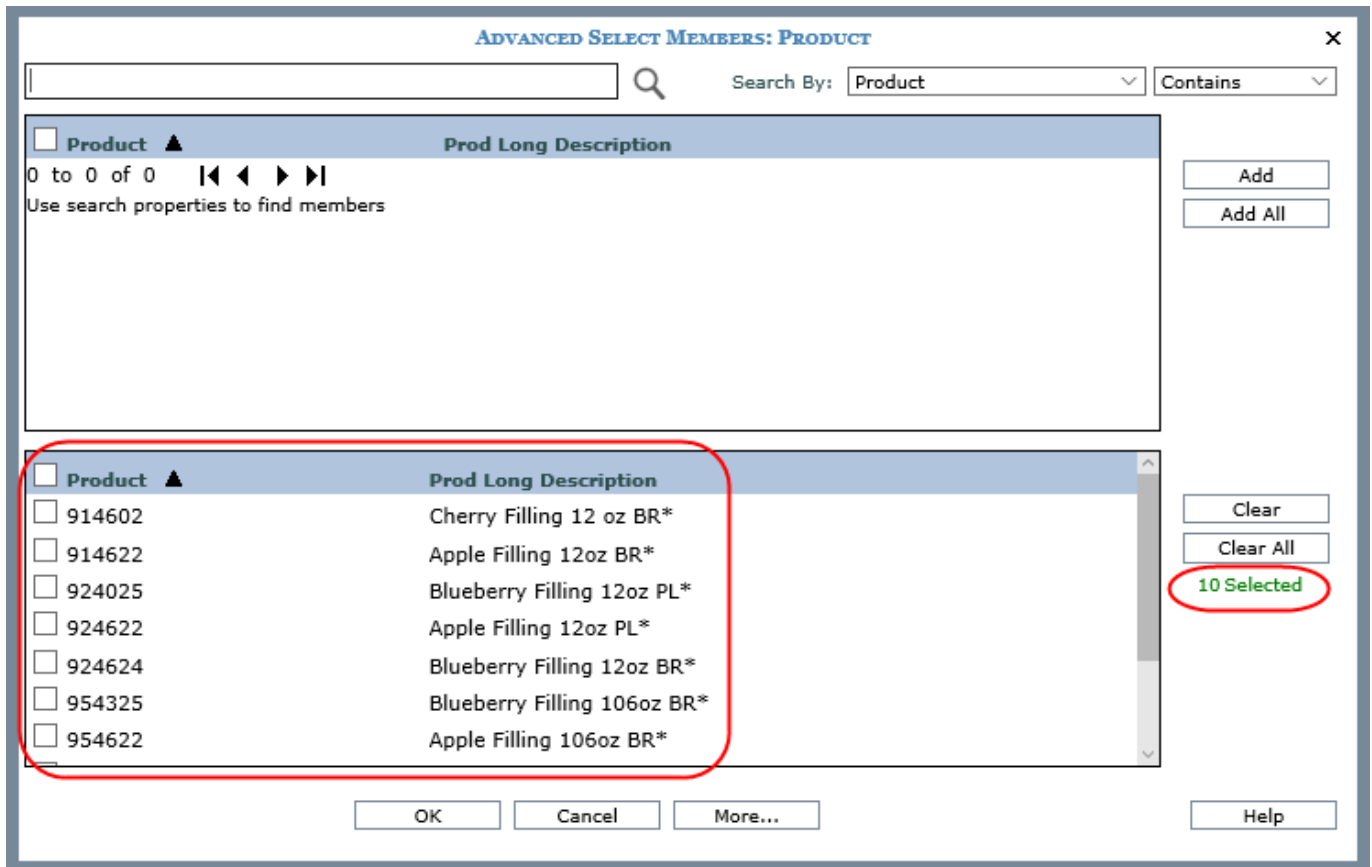
The copied text was pasted into the Paste Members window.



The Validate button was clicked. Valid members were moved to the right side of the window. Invalid members remained in the left side of the window.

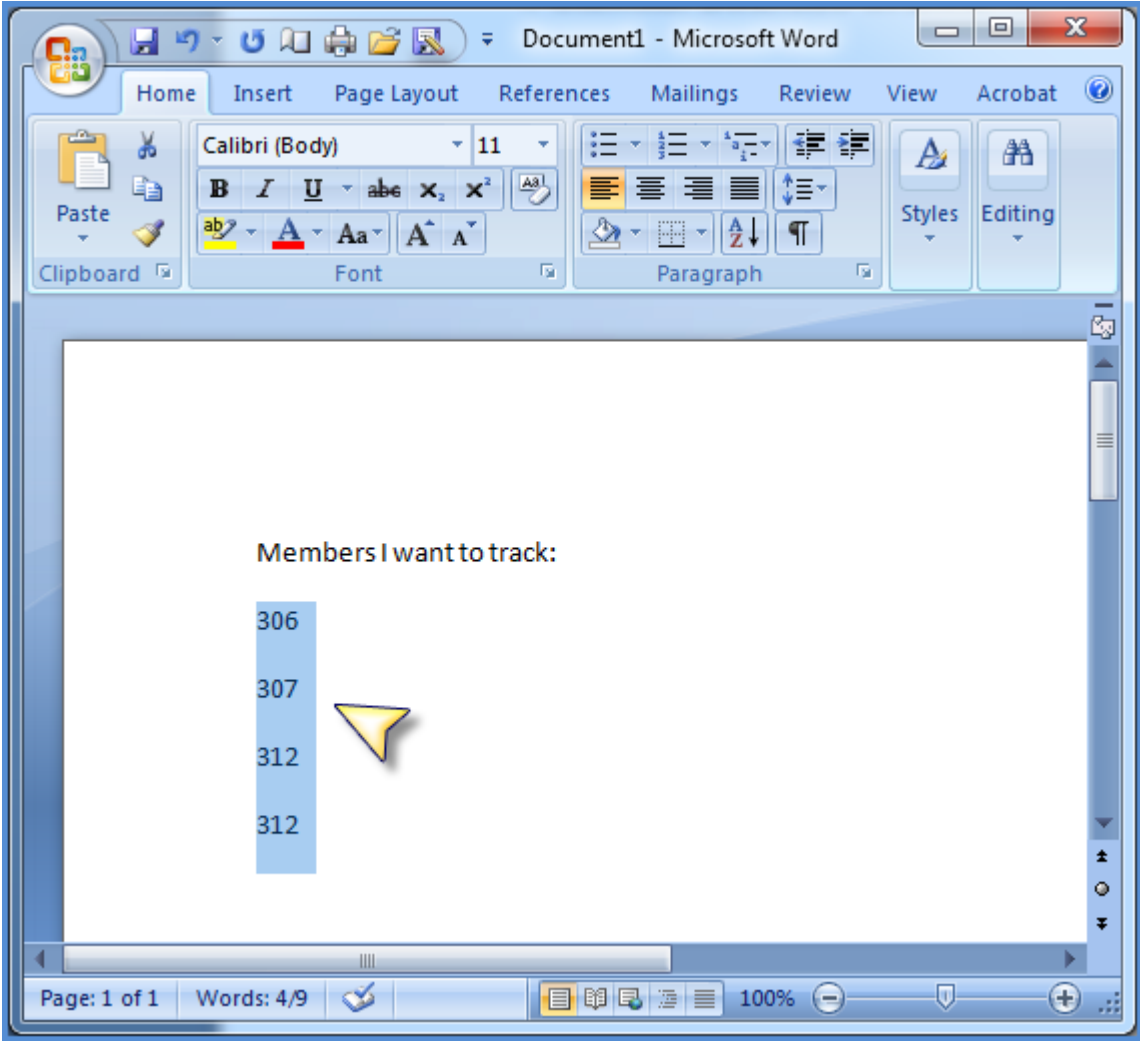


The user could have potentially edited the invalid information to correct it by typing in the left side of the window. Or, the user could have pasted or typed additional new members then performed another validate. Instead, the OK button was clicked to return the valid members to the Advanced Select Members window.

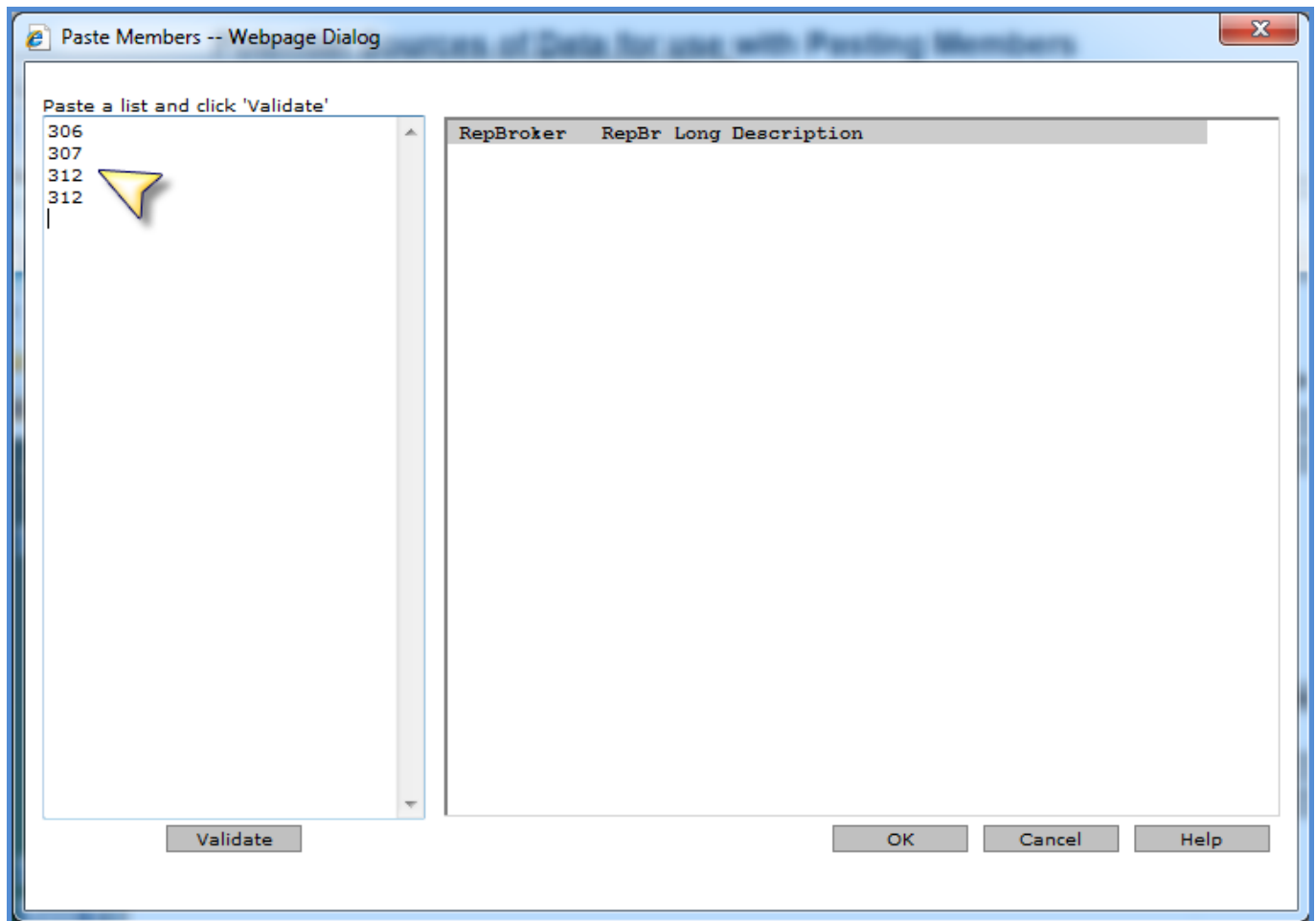


Word Example

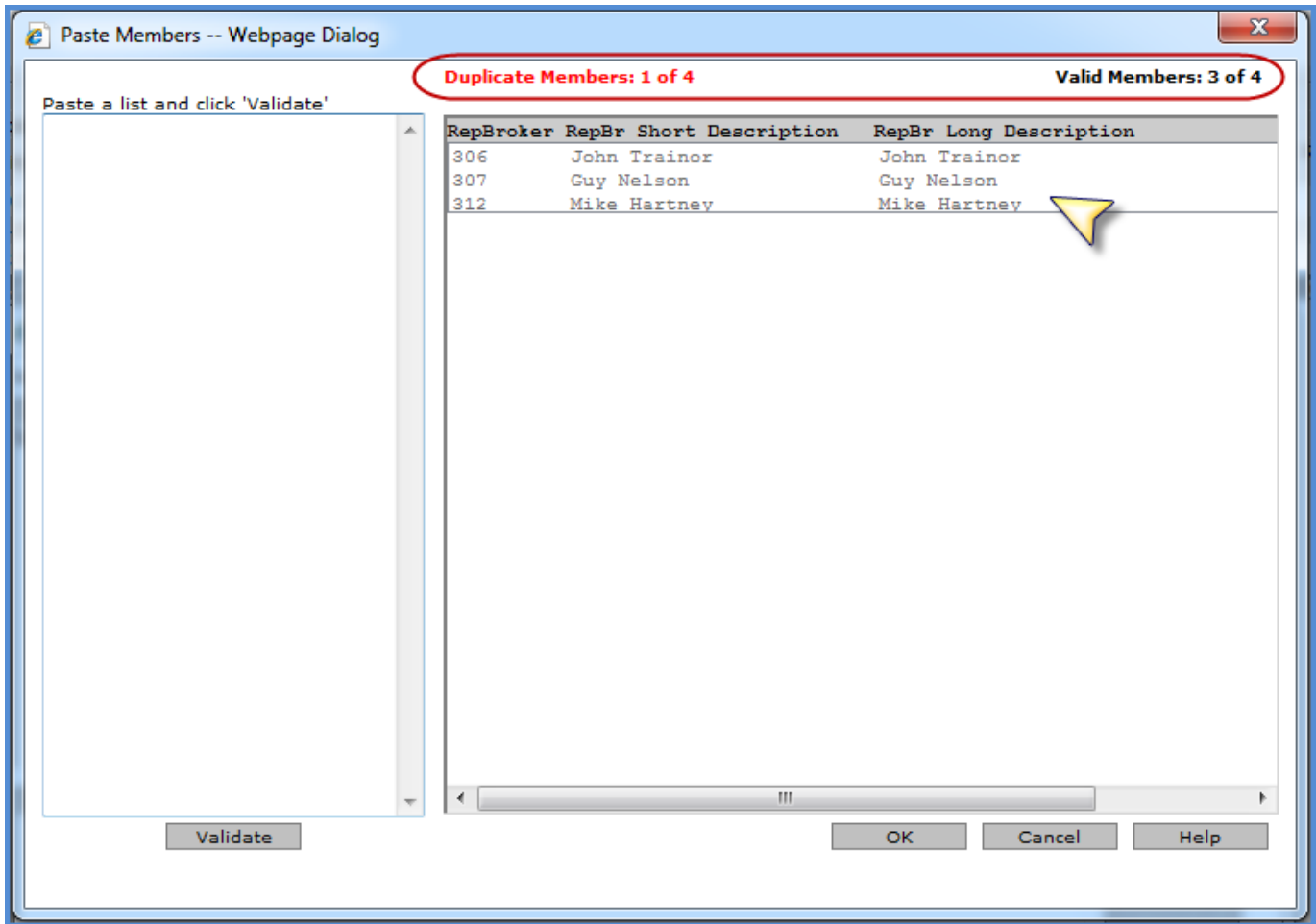
Similar pasting can be done from Word. Here is an example of RepBroker members in a Word document.



The text was copied from Word then pasted into the Paste Members window.

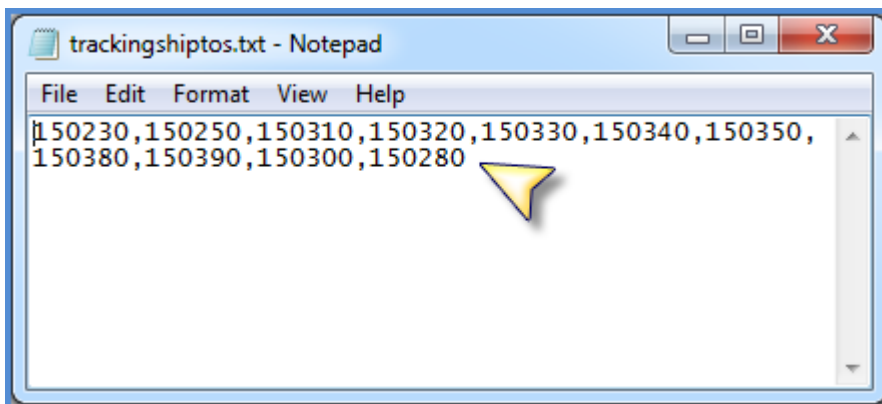


Here is the window after the Validate button was clicked. The member 312 appeared twice in the pasted text, so it was considered a duplicate member and only counted once in the count of valid members.

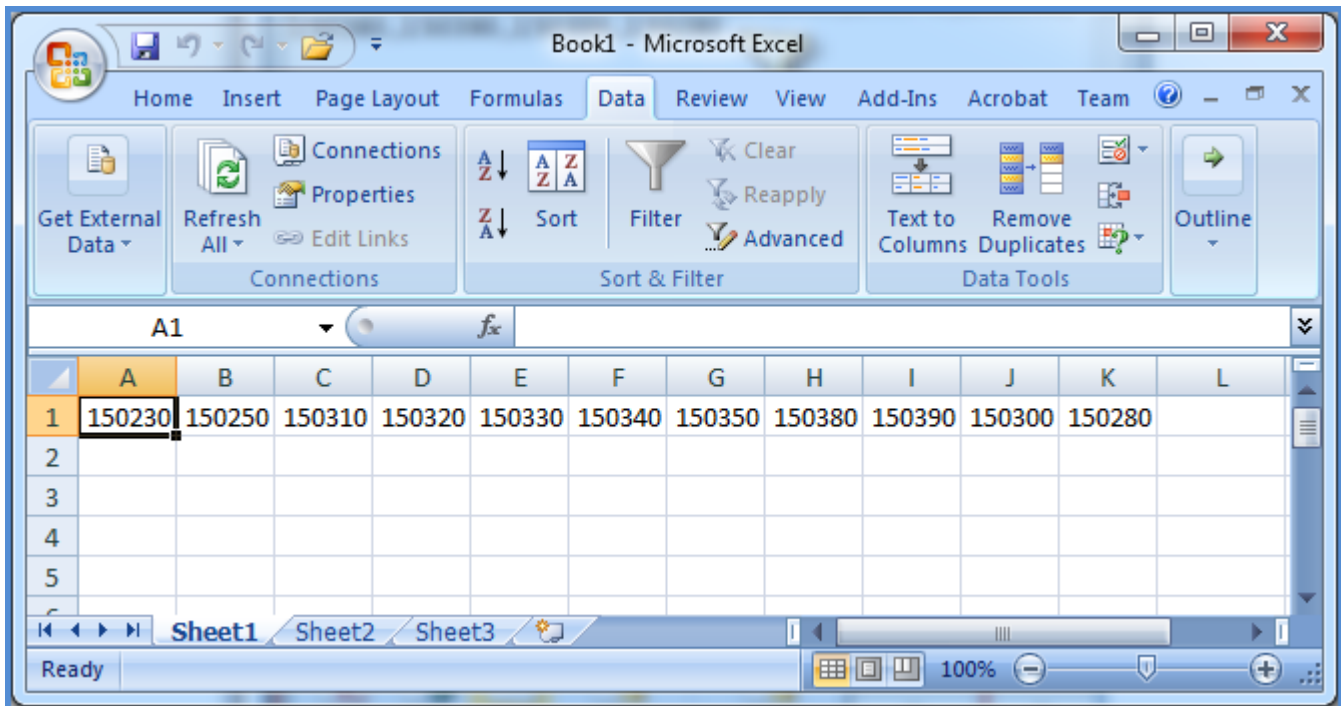
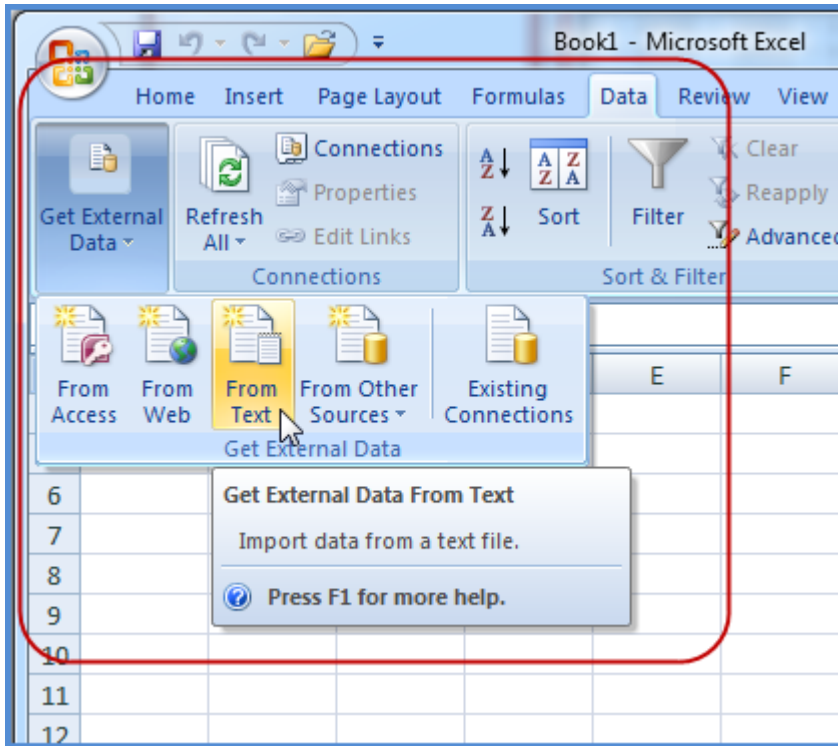


Text File Example

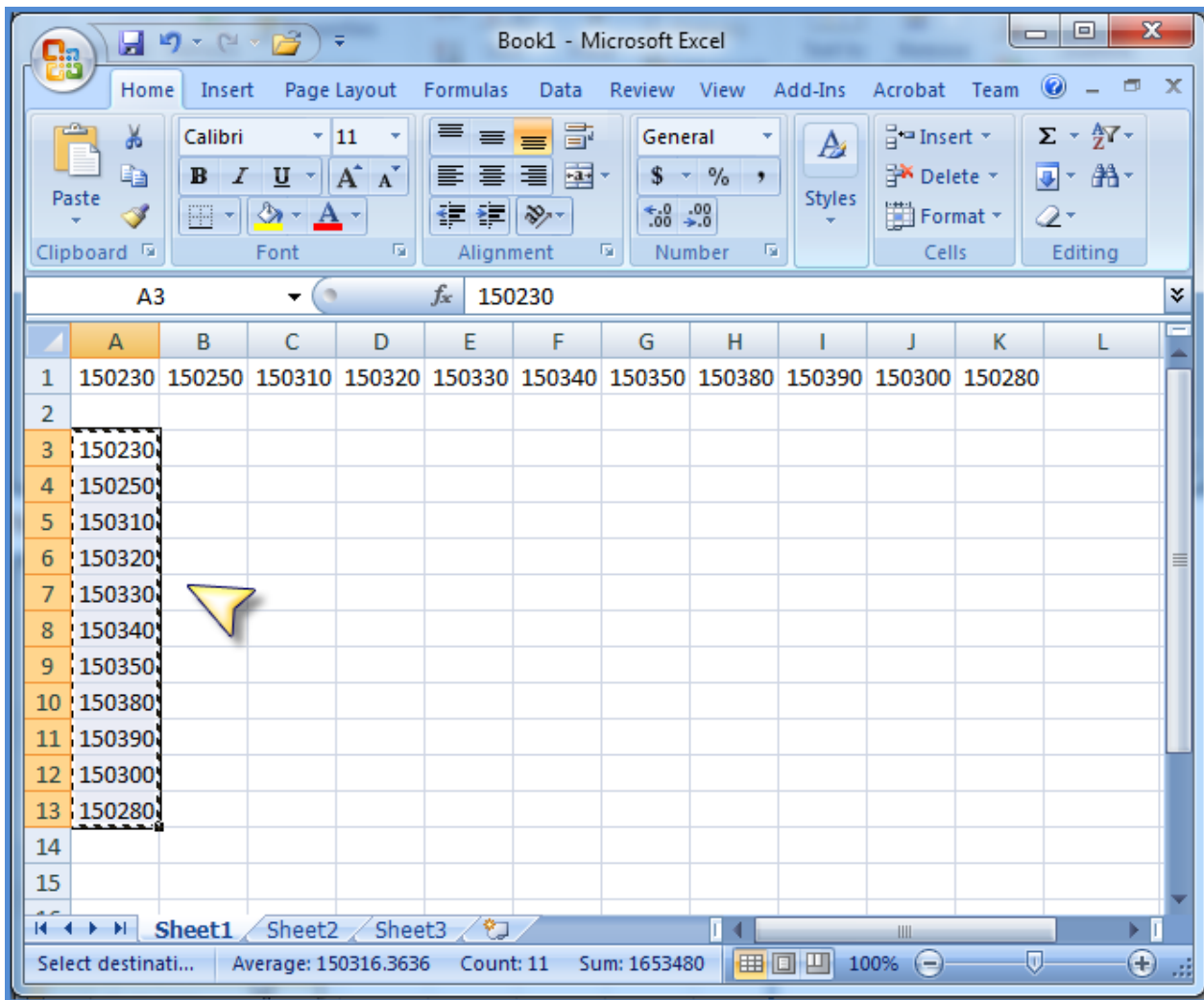
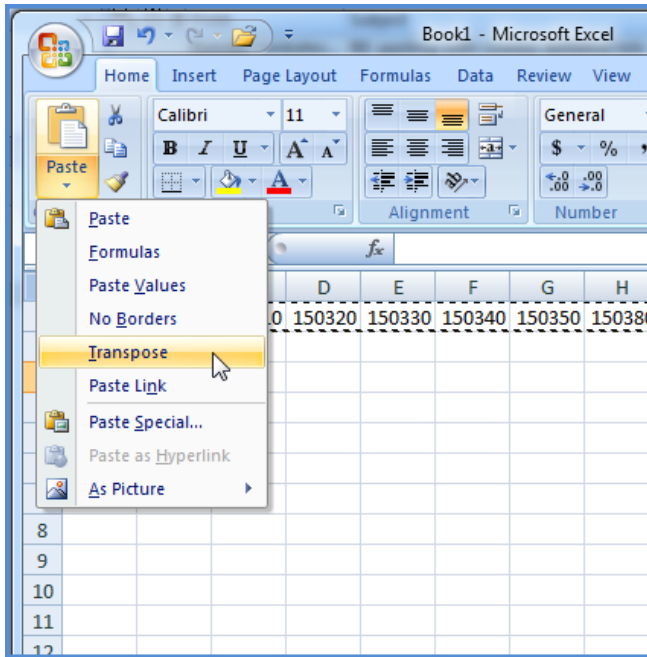
Here is a list of values for Customer Sold-To members in a text file.



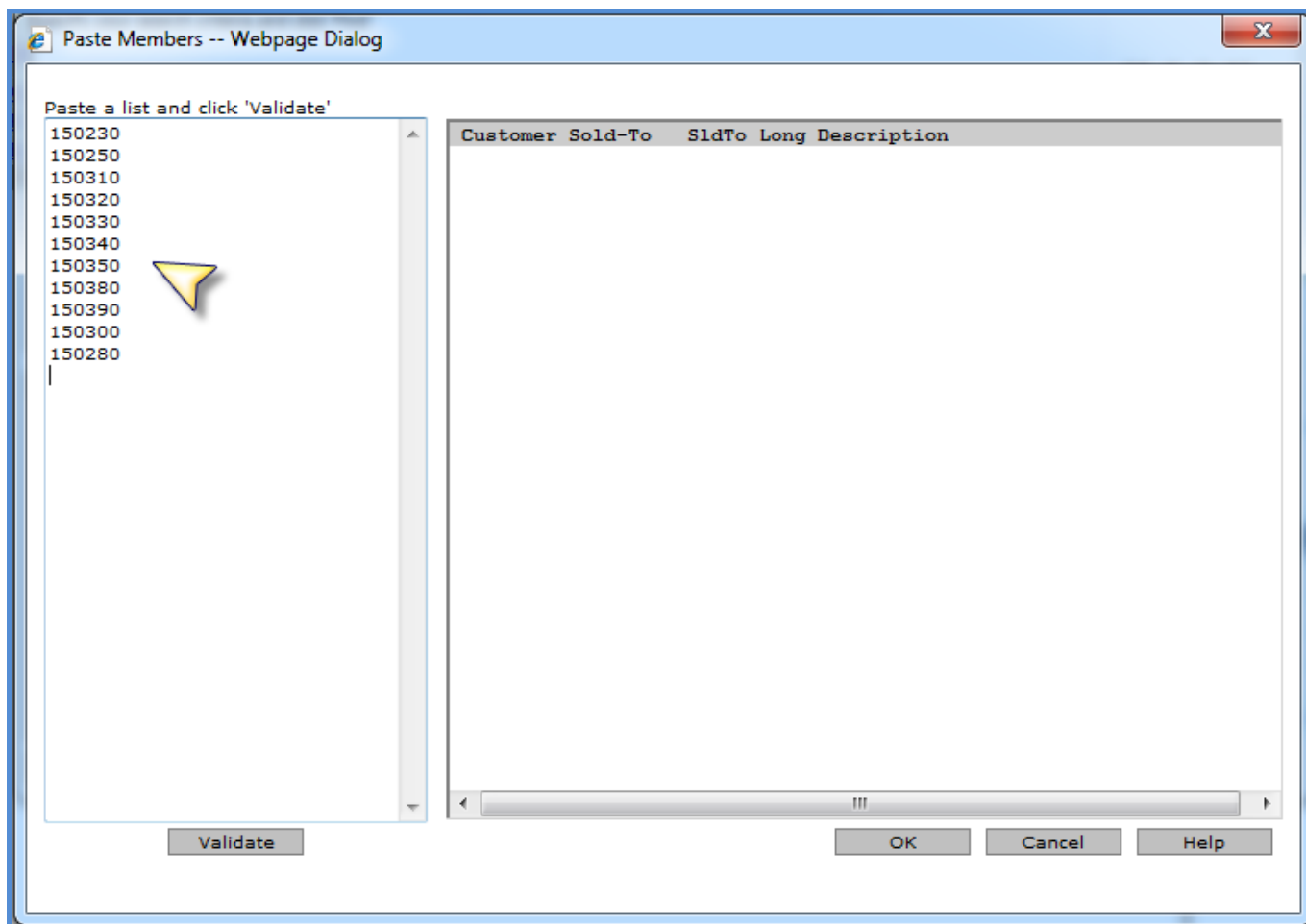
The text was imported into Excel to remove the commas.



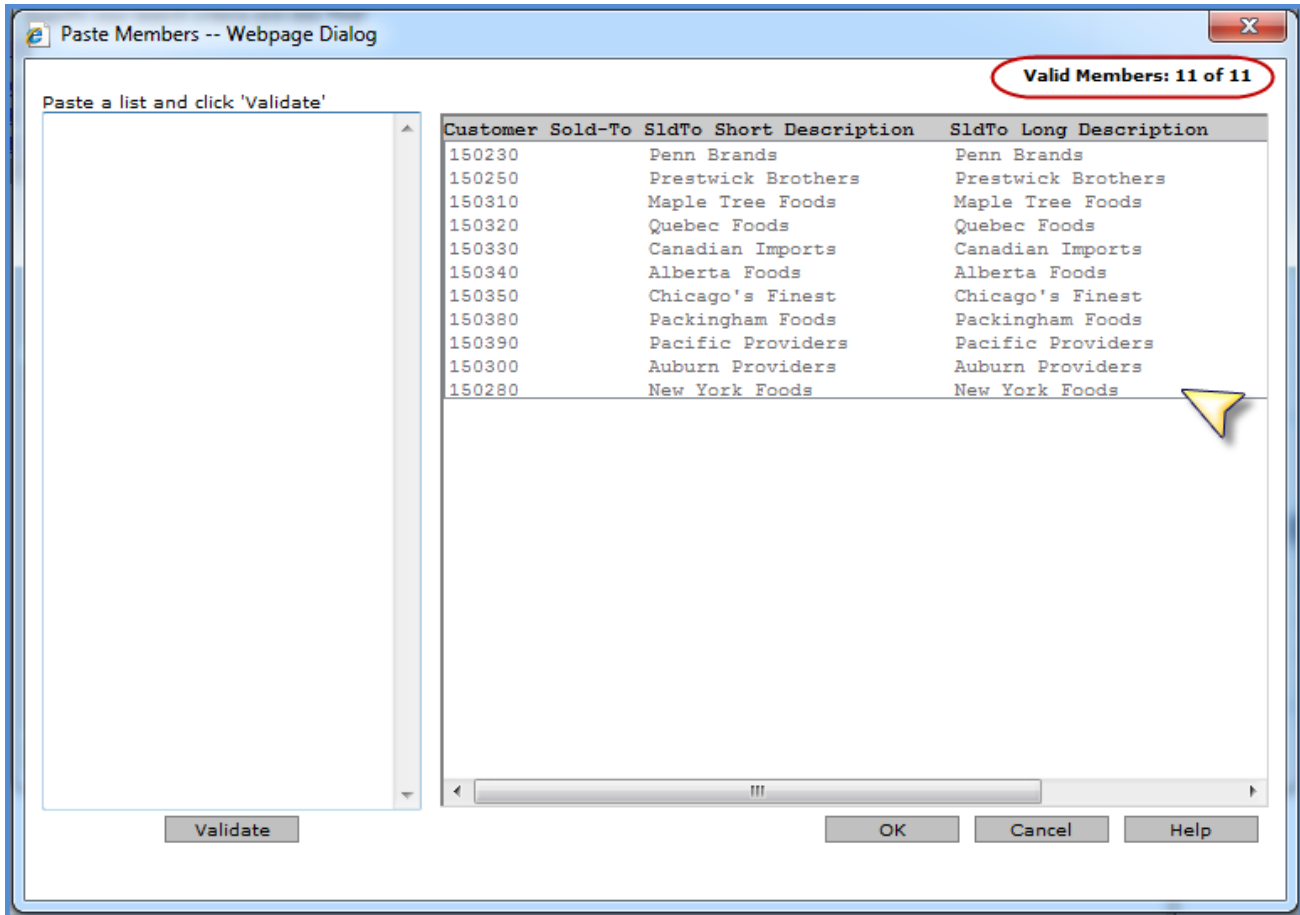
Then copied and pasted via a transpose to place the text into a single column.



Then the text was copied from that column into the Paste Members window.



Here is the window after the Validate button was clicked. All members were valid and there were no duplicates.



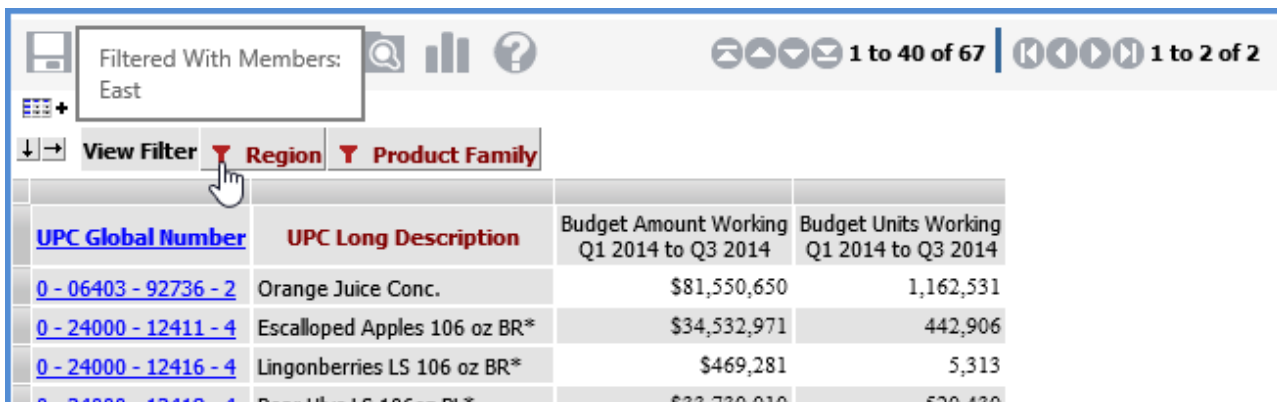
Recommendations for View Filters

Here are some behaviors and recommendations to consider when setting up view filters in your views.

- [Multiple Levels in View Filters](#)
- [Calculated Measure Items and View Filters](#)

Multiple Levels in View Filters

Levels in a View Filter [need a level filter defined](#) for them to have a filtering impact on a view. This is true whether there is a single level or multiple levels in the View Filter section. The following view has two levels in the View Filter. Region is filtered by a member list.



Product Family is filtered by a user list.

Filtered With User List: Product Family 60s

| UPC Global Number | UPC Long Description | Budget Amount Working Q1 2014 to Q3 2014 | Budget Units Working Q1 2014 to Q3 2014 |
|---------------------------------------|------------------------------|---|--|
| 0 - 06403 - 92736 - 2 | Orange Juice Conc. | \$81,550,650 | 1,162,531 |
| 0 - 24000 - 12411 - 4 | Escalloped Apples 106 oz BR* | \$34,532,971 | 442,906 |
| 0 - 24000 - 12416 - 4 | Lingonberries LS 106 oz BR* | \$469,281 | 5,313 |
| 0 - 24000 - 12418 - 4 | Pear Hlvs LS 106oz PL* | \$33,730,010 | 520,430 |
| 0 - 24000 - 12419 - 4 | Pear Hlvs LS 106 oz BR* | \$11,305,509 | 144,914 |
| 0 - 24000 - 12422 - 4 | Apple Filling 106oz BR* | \$22,163,347 | 294,205 |
| 0 - 24000 - 12429 - 4 | Apple Filling 12oz PL* | \$28,872,651 | 810,503 |
| 0 - 24000 - 12430 - 4 | Applesauce 106oz BR* | \$25,244,052 | 327,925 |
| 0 - 24000 - 12431 - 4 | Applesauce 106oz PL* | \$101,809,018 | 1,622,014 |
| 0 - 24000 - 12432 - 4 | Blackberries 106oz BR* | \$9,353,277 | 106,127 |
| 0 - 24000 - 12438 - 4 | Sw Cherries Pittd 106oz BR* | \$23,900,987 | 243,269 |
| 0 - 24000 - 12440 - 4 | Cherry Filling 106 oz BR* | \$19,936,894 | 264,691 |
| 0 - 24000 - 12441 - 4 | Peach Hlvs HS 106oz PL* | \$265,508 | 4,083 |
| 0 - 24000 - 12443 - 4 | Peach Slcs HS 12oz PL* | \$968,593 | 25,087 |
| 0 - 24000 - 12446 - 4 | Prunes Pitted 106 oz BR* | \$1,568,703 | 20,365 |

The view results change if you remove the filter from either level. The following example shows the view after the member list filter was removed from Region. The view changed to show data for all Regions. The measure item values have increased, and the number of rows returned has increased from 67 to 72.

| UPC Global Number | UPC Long Description | Budget Amount Working Q1 2014 to Q3 2014 | Budget Units Working Q1 2014 to Q3 2014 |
|---------------------------------------|------------------------------|---|--|
| 0 - 06403 - 92736 - 2 | Orange Juice Conc. | \$107,866,368 | 1,540,531 |
| 0 - 24000 - 12411 - 4 | Escalloped Apples 106 oz BR* | \$44,870,327 | 575,424 |
| 0 - 24000 - 12416 - 4 | Lingonberries LS 106 oz BR* | \$469,281 | 5,313 |
| 0 - 24000 - 12418 - 4 | Pear Hlvs LS 106oz PL* | \$44,499,778 | 686,569 |
| 0 - 24000 - 12419 - 4 | Pear Hlvs LS 106 oz BR* | \$14,260,630 | 182,790 |
| 0 - 24000 - 12422 - 4 | Apple Filling 106oz BR* | \$27,243,730 | 361,620 |
| 0 - 24000 - 12429 - 4 | Apple Filling 12oz PL* | \$28,872,651 | 810,503 |
| 0 - 24000 - 12430 - 4 | Applesauce 106oz BR* | \$34,785,355 | 451,834 |
| 0 - 24000 - 12431 - 4 | Applesauce 106oz PL* | \$131,241,080 | 2,090,745 |
| 0 - 24000 - 12432 - 4 | Blackberries 106oz BR* | \$10,988,977 | 124,672 |
| 0 - 24000 - 12438 - 4 | Sw Cherries Pittd 106oz BR* | \$28,452,312 | 289,581 |
| 0 - 24000 - 12440 - 4 | Cherry Filling 106 oz BR* | \$19,936,894 | 264,691 |

Calculated Measure Items and View Filters

View Filters affect regular, calculated, and distinct calculated measure items. There is a special case in which a View Filter will not affect calculated and distinct calculated measure items. That case is when a level is used in both the View Filter and the expression for the calculated or distinct calculated measure item. In that case, the View Filter will not impact the calculated or distinct calculated measure item for that level.

The next view has a calculated measure item with an expression that uses the Region Unit level. The expression is ([Region].[Region].[Region].[331],[Measures].[Data2 (Budget Units Working)]).

The screenshot shows a data table with the following columns: UPC Global Number, UPC Long Description, Budget Amount Working Q1 2014 to Q3 2014, Budget Units Working Q1 2014 to Q3 2014, and Budget Units Working Region West 331. The last column is circled in red. The interface includes a toolbar at the top with icons for save, print, search, and navigation, and a status bar indicating '1 to 40 of 102' items and '1 to 3 of 3' pages.

| UPC Global Number | UPC Long Description | Budget Amount Working Q1 2014 to Q3 2014 | Budget Units Working Q1 2014 to Q3 2014 | Budget Units Working Region West 331 |
|---------------------------------------|-----------------------------|--|---|--------------------------------------|
| 0 - 02749 - 25408 - 6 | Asparagus | \$116,213,555 | 1,545,622 | 423,304 |
| 0 - 02749 - 99231 - 6 | Strawberries | \$79,942,688 | 1,075,169 | 295,140 |
| 0 - 02749 - 99267 - 6 | Cherries, Bing | \$96,154,822 | 1,285,136 | 333,385 |
| 0 - 06403 - 92736 - 2 | Orange Juice Conc. | \$107,866,368 | 1,540,531 | 378,000 |
| 0 - 13800 - 30321 - 9 | Frozen Lasagna Dinner | \$156,537,087 | 1,608,142 | 371,753 |
| 0 - 13800 - 78934 - 9 | Meatloaf, Frozen | \$150,581,441 | 1,605,166 | 348,240 |
| 0 - 24000 - 12411 - 4 | Escaloped Apples 106 oz BR* | \$44,870,327 | 575,424 | 132,518 |
| 0 - 24000 - 12413 - 4 | Pnappl Slcs 12oz PL* | \$56,224,002 | 1,416,572 | |
| 0 - 24000 - 12416 - 4 | Lingonberries LS 106 oz BR* | \$469,281 | 5,313 | |
| 0 - 24000 - 12417 - 4 | Pnappl Slcs 106 oz BR* | \$4,751,053 | 59,372 | 59,372 |
| 0 - 24000 - 12418 - 4 | Pear Hlvs LS 106oz PL* | \$44,499,778 | 686,569 | 166,139 |
| 0 - 24000 - 12419 - 4 | Pear Hlvs LS 106 oz BR* | \$14,260,630 | 182,790 | 37,876 |
| 0 - 24000 - 12422 - 4 | Apple Filling 106oz BR* | \$27,243,730 | 361,620 | 67,415 |
| 0 - 24000 - 12429 - 4 | Apple Filling 12oz PL* | \$28,872,651 | 810,503 | |
| 0 - 24000 - 12430 - 4 | Applesauce 106oz BR* | \$34,785,355 | 451,834 | 123,909 |
| 0 - 24000 - 12431 - 4 | Applesauce 106oz PL* | \$131,241,080 | 2,090,745 | 468,731 |
| 0 - 24000 - 12432 - 4 | Blackberries 106oz BR* | \$10,988,977 | 124,672 | 18,545 |
| 0 - 24000 - 12433 - 4 | Pnappl Bites 106oz BR* | \$498,477 | 6,223 | 6,223 |

Then the Region level, filtered by member 330, is set up as a View Filter. The View Filter is ignored for the calculated measure item -- notice the measure item values have not changed for the calculated measure item.

Filtered With Members: East

1 to 40 of 102 | 1 to 3 of 3

View Filter Region

| UPC Global Number | UPC Long Description | Budget Amount Working Q1 2014 to Q3 2014 | Budget Units Working Q1 2014 to Q3 2014 | Budget Units Working Region West 331 |
|---------------------------------------|------------------------------|--|---|--------------------------------------|
| 0 - 02749 - 25408 - 6 | Asparagus | \$84,703,055 | 1,122,318 | 423,304 |
| 0 - 02749 - 99231 - 6 | Strawberries | \$57,858,450 | 780,030 | 295,140 |
| 0 - 02749 - 99267 - 6 | Cherries, Bing | \$71,429,033 | 951,752 | 333,385 |
| 0 - 06403 - 92736 - 2 | Orange Juice Conc. | \$81,550,650 | 1,162,531 | 378,000 |
| 0 - 13800 - 30321 - 9 | Frozen Lasagna Dinner | \$120,571,548 | 1,236,389 | 371,753 |
| 0 - 13800 - 78934 - 9 | Meatloaf, Frozen | \$118,012,867 | 1,256,926 | 348,240 |
| 0 - 24000 - 12411 - 4 | Escalloped Apples 106 oz BR* | \$34,532,971 | 442,906 | 132,518 |
| 0 - 24000 - 12413 - 4 | Pnappl Slcs 12oz PL* | \$56,224,002 | 1,416,572 | |
| 0 - 24000 - 12416 - 4 | Lingonberries LS 106 oz BR* | \$469,281 | 5,313 | |
| 0 - 24000 - 12417 - 4 | Pnappl Slcs 106 oz BR* | | | 59,372 |
| 0 - 24000 - 12418 - 4 | Pear Hlvs LS 106oz PL* | \$33,730,010 | 520,430 | 166,139 |
| 0 - 24000 - 12419 - 4 | Pear Hlvs LS 106 oz BR* | \$11,305,509 | 144,914 | 37,876 |
| 0 - 24000 - 12422 - 4 | Apple Filling 106oz BR* | \$22,163,347 | 294,205 | 67,415 |
| 0 - 24000 - 12429 - 4 | Apple Filling 12oz PL* | \$28,872,651 | 810,503 | |
| 0 - 24000 - 12430 - 4 | Applesauce 106oz BR* | \$25,244,052 | 327,925 | 123,909 |
| 0 - 24000 - 12431 - 4 | Applesauce 106oz PL* | \$101,809,018 | 1,622,014 | 468,731 |
| 0 - 24000 - 12432 - 4 | Blackberries 106oz BR* | \$9,353,277 | 106,127 | 18,545 |
| 0 - 24000 - 12433 - 4 | Pnappl Bites 106oz BR* | | | 6,223 |

Treatment of Time-Related Levels by the Filters Window


Time hierarchies in Stratum.Viewer can be multiple-level hierarchies or single level hierarchies. An example of a multiple-level hierarchy is Year Months with its Year and Months levels. An example of a single level hierarchy is the Months hierarchy with its Months level.

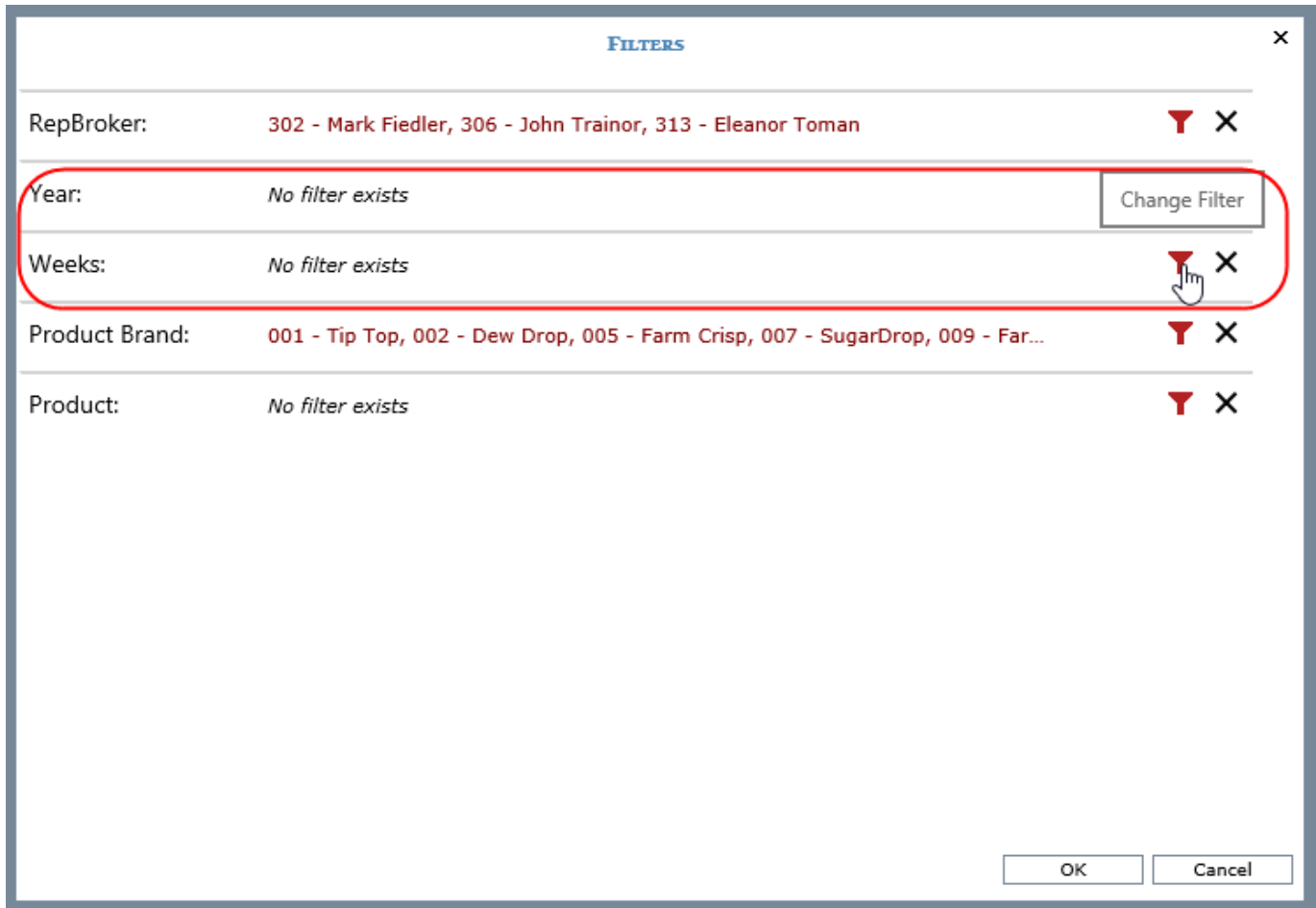
The following example shows how the Filters window treats second levels of multiple-level hierarchies in cases when the second level is not yet drilled to in a view and you filter the level from the window. Stratum.Viewer will drill to that level and apply your filter once you have exited the Filters window.

This view has the Year Weeks hierarchy on columns. The Year level is visible. The Weeks level is also defined to be available in the view (Visible property is set to Yes), but that level hasn't been drilled to yet.

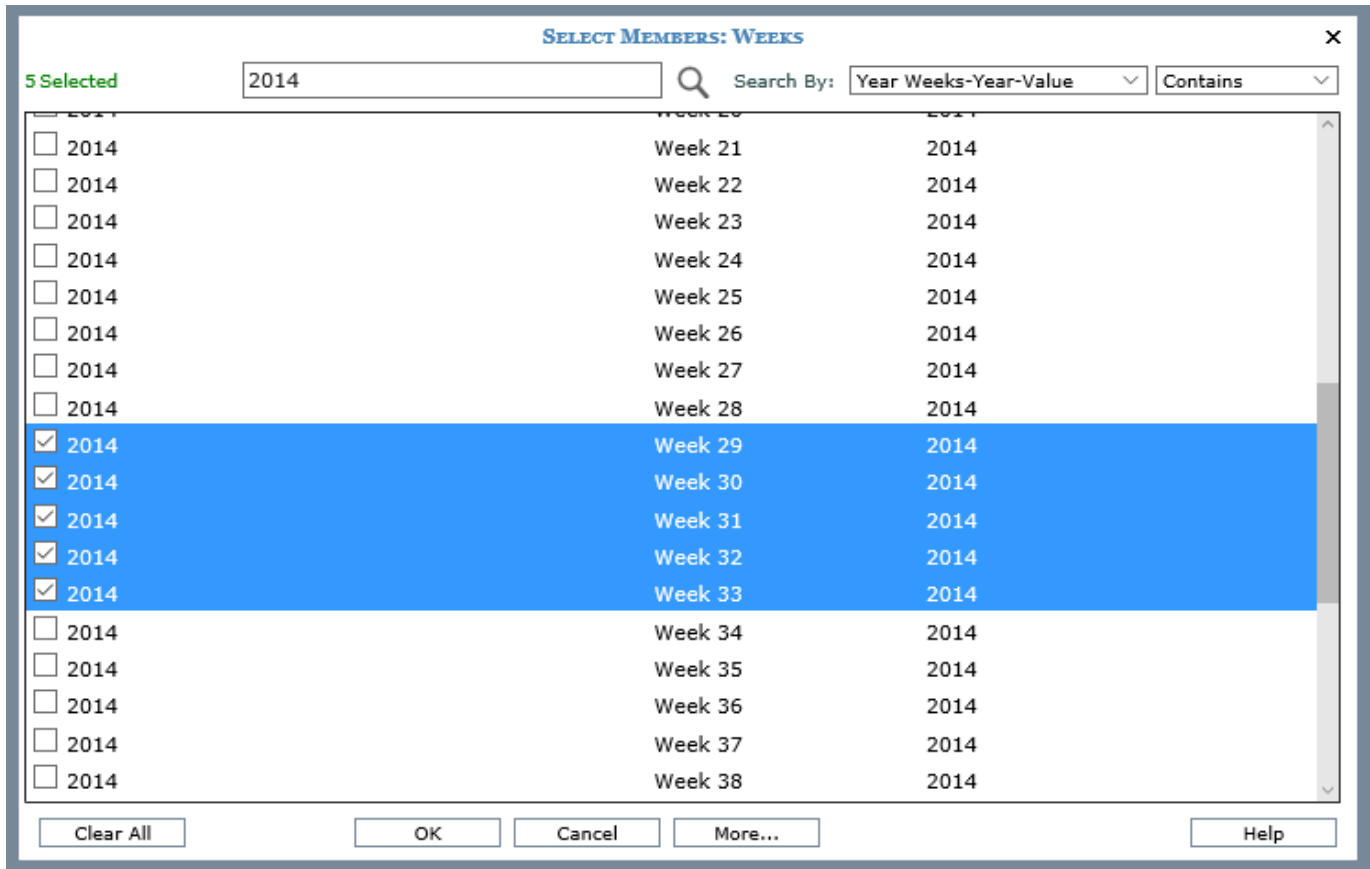
The screenshot displays the Stratum.Viewer interface. The main window shows a data table titled "Trending Weekly Sales Data" with a filter set to "RepBroker". The table has columns for Product Brand, PBrnd Long Description, and sales data for the years 2012, 2013, and 2014. The View Explorer on the right shows a hierarchy: Trending Weekly Sales Data > Grid > Rows > Columns > Year Weeks > Year > Weeks. The Properties - Weeks window shows the following settings:

| Property | Value |
|--------------|-------|
| Filter | None |
| Sort | None |
| Total | Yes |
| All Others | No |
| Visible | Yes |
| Display Text | Value |

The Manage All Filters icon  is clicked to open the Filters window. All levels that are defined as visible display in the window; there are 5 of those levels including Year and Weeks.



The filter icon for Weeks is clicked, and a few weeks are selected as filters on the level from the Select Members window.



After clicking OK in the Select Members window and then OK in the Filters window, the view is refreshed. Notice that the view is now drilled to the Weeks level that you just filtered and the level reflects your filter.

FILTERS ✕

RepBroker: 302 - Mark Fiedler, 306 - John Trainor, 313 - Eleanor Toman ▼ ✕

Year: No filter exists ▼ ✕

Weeks: Week 29, Week 30, Week 31, Week 32, Week 33 ▼ ✕

Product Brand: 001 - Tip Top, 002 - Dew Drop, 005 - Farm Crisp, 007 - SugarDrop, 009 - Far... ▼ ✕

Product: No filter exists ▼ ✕

1 to 7 of 7 | 1 to 21 of 21

View Name: Trending Weekly Sales Data

View Filter: ▼ RepBroker

| | | ▼ Year >> 2014 | | | | | | | | | | | | | |
|-----------------|------------------------|--|--------------------|-------------------|---------------------|--------------------|-------------------|---------------------|--------------------|-------------------|---------------------|--------------------|-------------------|---------------------|--------------------|
| | | ▼ Weeks >> Week 29 Week 30 Week 31 Week 32 Week 33 | | | | | | | | | | | | | |
| ▼ Product Brand | PBrnd Long Description | Actual Sales Amount | Actual Sales Units | Avg Selling Price | Actual Sales Amount | Actual Sales Units | Avg Selling Price | Actual Sales Amount | Actual Sales Units | Avg Selling Price | Actual Sales Amount | Actual Sales Units | Avg Selling Price | Actual Sales Amount | Actual Sales Units |
| 001 | Tip Top | \$637,665 | 31,189 | \$20.45 | \$924,152 | 12,996 | \$71.11 | \$1,234,022 | 16,845 | \$73.26 | \$309,870 | 3,850 | \$80.49 | \$309,870 | 9,241 |
| 002 | Dew Drop | \$479,672 | 36,893 | \$13.00 | \$695,177 | 15,372 | \$45.22 | \$1,499,927 | 30,079 | \$49.87 | \$811,252 | 14,707 | \$55.16 | \$804,749 | 35,291 |
| 005 | Farm Crisp | \$190,256 | 16,562 | \$11.49 | \$275,734 | 6,901 | \$39.96 | \$696,949 | 17,711 | \$39.35 | \$436,440 | 10,810 | \$40.37 | \$421,216 | 25,941 |
| 007 | SugarDrop | \$223,373 | 10,492 | \$21.29 | \$323,729 | 4,372 | \$74.05 | \$620,816 | 8,412 | \$73.80 | \$297,087 | 4,041 | \$73.52 | \$297,087 | 9,691 |
| 009 | Farm Fresh | \$3,256,382 | 160,734 | \$20.26 | \$4,719,394 | 66,972 | \$70.47 | \$9,958,489 | 141,121 | \$70.57 | \$5,343,066 | 74,149 | \$72.06 | \$5,239,095 | 177,951 |
| 011 | First Choice | \$2,172,199 | 132,122 | \$16.44 | \$3,148,114 | 55,051 | \$57.19 | \$6,474,046 | 113,001 | \$57.29 | \$3,402,817 | 57,950 | \$58.72 | \$3,325,932 | 139,081 |
| Grand Total | | \$6,959,548 | 387,993 | \$17.94 | \$10,086,301 | 161,664 | \$62.39 | \$20,484,250 | 327,170 | \$62.61 | \$10,600,532 | 165,506 | \$64.05 | \$10,397,948 | 397,211 |

Using a View Filters vs. a Level Filter

Use a view filter when you want the filter to be in effect no matter what other levels are visible in the view. The view filter will filter the entire view regardless of the levels that have been drilled to in the view. Use a level filter when you want to filter a particular level and any levels under that level in the view drill down path. Filters on individual levels are only active when you have drilled to that level in the view.

This view has a view filter that consists of member A from the ABC Classification Code level.

| View Filter | | ABC Classification Code | | | |
|--------------------------------|-----------------------------|---|--|---|--|
| Region >> | | East | | West | |
| RepBroker | Product Brand | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 |
| Janice Tierney | 002 | \$14,443,445 | 338,131 | | |
| | 003 | \$5,508,606 | 170,232 | | |
| | 009 | \$14,180,149 | 232,929 | | |
| | 010 | \$11,846,117 | 164,483 | | |
| | 011 | \$79,358,878 | 1,602,519 | | |
| | 012 | \$19,633,870 | 258,246 | | |
| | 999 | \$5,822,962 | 181,186 | | |
| | Janice Tierney Total | \$150,794,027 | 2,947,727 | | |
| Mark Fiedler | 002 | \$6,155,379 | 145,689 | \$5,134,777 | 118,315 |
| | 003 | \$2,932,304 | 86,205 | \$1,378,494 | 44,880 |
| | 009 | \$8,898,810 | 241,004 | \$1,895,295 | 30,060 |
| | 010 | \$5,341,178 | 79,800 | \$3,428,554 | 49,743 |
| | 011 | \$7,841,851 | 263,294 | \$3,437,051 | 68,960 |
| | 012 | \$5,572,627 | 69,194 | \$7,136,178 | 94,117 |
| | 999 | \$2,894,935 | 92,203 | \$1,464,038 | 46,074 |
| | Mark Fiedler Total | \$39,637,083 | 977,388 | \$23,874,386 | 452,149 |
| Michelle Knapp | 002 | \$3,345,991 | 75,802 | \$1,344,085 | 34,208 |
| | 003 | \$369,001 | 10,337 | \$792,715 | 24,276 |
| | 009 | \$491,482 | 7,973 | \$2,366,360 | 38,415 |
| | 010 | \$1,460,151 | 23,093 | \$1,454,814 | 21,241 |
| | 011 | \$1,558,559 | 31,191 | \$2,270,675 | 45,125 |
| | 012 | \$5,360,213 | 69,417 | \$4,352,447 | 57,007 |
| | 999 | \$763,771 | 23,922 | \$667,855 | 20,105 |
| | Michelle Knapp Total | \$13,349,168 | 241,736 | \$13,248,952 | 240,377 |
| Grand Total | | \$203,780,278 | 4,166,851 | \$37,123,338 | 692,526 |

Wherever you drill to in the view, you will see data relevant to member A. Here is the same view after drilling up from Product Brand to RepBroker. Notice the grand totals are the same as they were in the prior state of the view.

| View Name: <i>View Filter Examples</i> | | | | |
|--|---|--|---|--|
| View Filter ABC Classification Code | | | | |
| Region >> | East | | West | |
| RepBroker | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 |
| Janice Tierney | \$150,794,027 | 2,947,727 | | |
| Mark Fiedler | \$39,637,083 | 977,388 | \$23,874,386 | 452,149 |
| Michelle Knapp | \$13,349,168 | 241,736 | \$13,248,952 | 240,377 |
| Grand Total | \$203,780,278 | 4,166,851 | \$37,123,338 | 692,526 |

Here is the same view with the ABC Classification Code level positioned on rows, still filtered for member A. The level is visible, so the filter is in effect.

| View Name: <i>View Filter Examples</i> | | | | | |
|--|-------------------------|---|--|---|--|
| View Filter | | | | | |
| Region >> | | East | | West | |
| RepBroker | ABC Classification Code | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 |
| Janice Tierney | A | \$150,794,027 | 2,947,727 | | |
| Janice Tierney Total | | \$150,794,027 | 2,947,727 | | |
| Mark Fiedler | A | \$39,637,083 | 977,388 | \$23,874,386 | 452,149 |
| Mark Fiedler Total | | \$39,637,083 | 977,388 | \$23,874,386 | 452,149 |
| Michelle Knapp | A | \$13,349,168 | 241,736 | \$13,248,952 | 240,377 |
| Michelle Knapp Total | | \$13,349,168 | 241,736 | \$13,248,952 | 240,377 |
| Grand Total | | \$203,780,278 | 4,166,851 | \$37,123,338 | 692,526 |

When you drill up in the view, the ABC Classification Code level is hidden; therefore, the ABC Classification Code filter is no longer active. Notice the grand totals are higher than what they were in the prior state of the view. That is because all measure items values for the RepBrokers are being returned versus just the values for items with an ABC Classification Code of A.

| View Name: <i>View Filter Examples</i> | | | | |
|--|---|--|---|--|
| View Filter | | | | |
| Region >> | East | | West | |
| RepBroker | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 | Actual Sales Amount Jan 2014 to Sep 2014 | Actual Sales Units Jan 2014 to Sep 2014 |
| Janice Tierney | \$540,557,780 | 10,180,005 | | |
| Mark Fiedler | \$142,534,177 | 3,207,275 | \$75,915,384 | 1,485,722 |
| Michelle Knapp | \$41,236,689 | 823,724 | \$52,627,779 | 985,602 |
| Grand Total | \$724,328,646 | 14,211,004 | \$128,543,163 | 2,471,324 |

Using Relationship and Empty Filters

An [overview](#) of relationship and empty filters is provided below. Additional information is provided about when to use them and how the filters behave depending on other characteristics of a view. See these sections:

- [Period Based Views](#)
- [All Others Data and Empty Filters](#)
- [Null vs. Non-null Values and Empty Filters](#)
- [Calculated Measure Items](#)
- [Views with Levels and Measure Items on the Same Axis](#)
- [Level Filters and Relationship Filters](#)
- [View Filters](#)

Overview

Use the Relationship and Empty Filters to filter out members of a result set where no related data exists. Related data is based on the visible measure items of the view. Filtering out those members where no data exists related to the measure items in the view produces a more focused result set.

By default, the Relationship and Empty Filter properties are enabled (Yes) for rows and columns. If you wanted to see all members on an axis regardless of related data, you would set the Relationship and Empty Filter properties to No. These properties are controlled through the [Properties windows for rows](#) and [columns](#).

For example, in a view displaying the current year YTD sales by product and where the Relationship and Empty Filters are enabled, the result set would include only product members that have sales for the current year (related data). When the Relationship and Empty Filter are disabled, the result set would include all products -- those that have sales as well as those that don't have sales.

Relationship Filter and Empty Filter = No

Here is the example view with both properties set to No, returning all products. Results show products with and without YTD sales.

| Product Category >> | | Fresh Vegetables | | Grand Total | |
|---------------------|-----------------------------|--|--|--|--|
| Product | Prod Long Description | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2013 to Sep 2013 | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2013 to Sep 2013 |
| 624B954012 | Sweet Onions, Chopped 4B | 226,421 | 314,842 | 226,421 | 314,842 |
| 624J954012 | Sweet Onions, Chopped 4J | 203,779 | 283,358 | 203,779 | 283,358 |
| 624I954012 | Sweet Onions, Chopped 4I | 192,458 | 267,615 | 192,458 | 267,615 |
| 624H954012 | Sweet Onions, Chopped 4H | 181,137 | 251,873 | 181,137 | 251,873 |
| 624G954012 | Sweet Onions, Chopped 4G | 169,816 | 236,131 | 169,816 | 236,131 |
| 624B954021 | Romaine Specialty Salad 4B | 160,198 | 221,828 | 160,198 | 221,828 |
| 624F954012 | Sweet Onions, Chopped 4F | 158,495 | 220,389 | 158,495 | 220,389 |
| 624B954013 | Potatoes - Idaho Russett 4B | 158,373 | 219,667 | 158,373 | 219,667 |
| 624B954010 | Tasker Lettuce Salad 4B | 158,178 | 219,380 | 158,178 | 219,380 |

Relationship Filter = Yes and Empty Filter = No

Here is the view when just the Relationship is set to Yes. The row count has decreased because results now show only the products that have YTD sales.

| Product Category >> | | Fresh Vegetables | | Grand Total | |
|---------------------|-----------------------------|--|--|--|--|
| Product | Prod Long Description | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2013 to Sep 2013 | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2013 to Sep 2013 |
| 624B954012 | Sweet Onions, Chopped 4B | 226,421 | 314,842 | 226,421 | 314,842 |
| 624J954012 | Sweet Onions, Chopped 4J | 203,779 | 283,358 | 203,779 | 283,358 |
| 624I954012 | Sweet Onions, Chopped 4I | 192,458 | 267,615 | 192,458 | 267,615 |
| 624H954012 | Sweet Onions, Chopped 4H | 181,137 | 251,873 | 181,137 | 251,873 |
| 624G954012 | Sweet Onions, Chopped 4G | 169,816 | 236,131 | 169,816 | 236,131 |
| 624B954021 | Romaine Specialty Salad 4B | 160,198 | 221,828 | 160,198 | 221,828 |
| 624F954012 | Sweet Onions, Chopped 4F | 158,495 | 220,389 | 158,495 | 220,389 |
| 624B954013 | Potatoes - Idaho Russett 4B | 158,373 | 219,667 | 158,373 | 219,667 |
| 624B954010 | Iceberg Lettuce Salad 4B | 158,178 | 219,280 | 158,178 | 219,280 |
| 624E954012 | Sweet Onions, Chopped 4E | 147,174 | 204,647 | 147,174 | 204,647 |

Relationship Filter and Empty Filter = Yes

Here is the view when Empty Filter also is set to Yes. The row count is only 250 after this change because the view only returns products that have YTD sales given the level and member(s) on columns. In this case, returning only products with YTD sales for the Fresh Vegetables member of Product Category.

| Product Category >> | | Fresh Vegetables | | Grand Total | |
|---------------------|-----------------------------|--|--|--|--|
| Product | Prod Long Description | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2013 to Sep 2013 | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2013 to Sep 2013 |
| 624B954012 | Sweet Onions, Chopped 4B | 226,421 | 314,842 | 226,421 | 314,842 |
| 624J954012 | Sweet Onions, Chopped 4J | 203,779 | 283,358 | 203,779 | 283,358 |
| 624I954012 | Sweet Onions, Chopped 4I | 192,458 | 267,615 | 192,458 | 267,615 |
| 624H954012 | Sweet Onions, Chopped 4H | 181,137 | 251,873 | 181,137 | 251,873 |
| 624G954012 | Sweet Onions, Chopped 4G | 169,816 | 236,131 | 169,816 | 236,131 |
| 624B954021 | Romaine Specialty Salad 4B | 160,198 | 221,828 | 160,198 | 221,828 |
| 624F954012 | Sweet Onions, Chopped 4F | 158,495 | 220,389 | 158,495 | 220,389 |
| 624B954013 | Potatoes - Idaho Russett 4B | 158,373 | 219,667 | 158,373 | 219,667 |
| 624B954010 | Iceberg Lettuce Salad 4B | 158,178 | 219,280 | 158,178 | 219,280 |
| 624E954012 | Sweet Onions, Chopped 4E | 147,174 | 204,647 | 147,174 | 204,647 |

Period Based Views

For period based views that have levels from time hierarchies visible on rows or columns, it is recommended that you set the Relationship Filter and Empty Filter properties to No for the axis where the time levels are used. This will ensure that all periods will display in the view, even those for which no data exists.

Example 1

Levels from the Weeks time hierarchy are on rows in this view. Both Relationship and Empty Filter are No, which means all weeks display -- even those where there is no related data. Rows for all 52 weeks display in calendar order.

| Product >> | 620A914004 | | All Others | | Grand Total | |
|-------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
| Prod Long Description | FrtCktail HS 12 oz BR* 0A | | | | | |
| Weeks | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units |
| Week 1 | | | \$270,847,881 | 4,747,679 | \$270,847,881 | 4,747,679 |
| Week 2 | | | \$262,296,006 | 4,675,739 | \$262,296,006 | 4,675,739 |
| Week 3 | | | \$262,573,713 | 4,684,978 | \$262,573,713 | 4,684,978 |
| Week 4 | | | \$264,434,998 | 4,716,801 | \$264,434,998 | 4,716,801 |
| Week 5 | \$3,851 | 87 | \$465,723,116 | 8,337,493 | \$465,726,967 | 8,337,580 |
| Week 6 | \$3,851 | 87 | \$228,126,968 | 4,129,746 | \$228,130,818 | 4,129,833 |
| Week 7 | \$6,595 | 149 | \$233,485,768 | 4,229,869 | \$233,492,364 | 4,230,018 |
| Week 8 | \$3,851 | 87 | \$232,594,744 | 4,204,751 | \$232,598,595 | 4,204,838 |
| Week 9 | \$10,796 | 244 | \$430,329,745 | 7,780,639 | \$430,340,541 | 7,780,883 |
| Week 10 | \$3,985 | 91 | \$223,440,646 | 4,057,691 | \$223,444,632 | 4,057,781 |
| Week 11 | \$3,985 | 91 | \$235,359,251 | 4,276,195 | \$235,363,236 | 4,276,285 |
| Week 12 | \$3,985 | 91 | \$239,654,553 | 4,358,835 | \$239,658,538 | 4,358,926 |
| Week 13 | \$11,070 | 252 | \$239,618,440 | 4,371,923 | \$239,629,510 | 4,372,174 |
| Week 14 | \$3,985 | 91 | \$400,946,905 | 7,264,802 | \$400,950,890 | 7,264,893 |
| Week 15 | | | \$239,073,564 | 4,326,664 | \$239,073,564 | 4,326,664 |
| Week 16 | | | \$257,422,344 | 5,615,653 | \$257,422,344 | 5,615,653 |
| Week 17 | | | \$254,074,802 | 4,612,384 | \$254,074,802 | 4,612,384 |
| Week 18 | | | \$475,959,021 | 8,605,724 | \$475,959,021 | 8,605,724 |

Here is the same view with Relationship and Empty Filter set to Yes. Only the weeks that have related data display.

| Product >> | 620A914004 | | All Others | | | Grand Total | |
|-------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--|
| Prod Long Description | FrtCktail HS 12 oz BR* 0A | | | | | | |
| Weeks | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | Actual Sales Sales Amount | Actual Sales Sales Units | |
| Week 5 | \$3,851 | 87 | \$465,723,116 | 8,337,493 | \$465,726,967 | 8,337,580 | |
| Week 6 | \$3,851 | 87 | \$228,126,968 | 4,129,746 | \$228,130,818 | 4,129,833 | |
| Week 7 | \$6,595 | 149 | \$233,485,768 | 4,229,869 | \$233,492,364 | 4,230,018 | |
| Week 8 | \$3,851 | 87 | \$232,594,744 | 4,204,751 | \$232,598,595 | 4,204,838 | |
| Week 9 | \$10,796 | 244 | \$430,329,745 | 7,780,639 | \$430,340,541 | 7,780,883 | |
| Week 10 | \$3,985 | 91 | \$223,440,646 | 4,057,691 | \$223,444,632 | 4,057,781 | |
| Week 11 | \$3,985 | 91 | \$235,359,251 | 4,276,195 | \$235,363,236 | 4,276,285 | |
| Week 12 | \$3,985 | 91 | \$239,654,553 | 4,358,835 | \$239,658,538 | 4,358,926 | |
| Week 13 | \$11,070 | 252 | \$239,618,440 | 4,371,923 | \$239,629,510 | 4,372,174 | |
| Week 14 | \$3,985 | 91 | \$400,946,905 | 7,264,802 | \$400,950,890 | 7,264,893 | |
| Week 31 | \$1,474 | 34 | \$666,132,486 | 11,923,043 | \$666,133,960 | 11,923,077 | |
| Week 32 | \$1,474 | 34 | \$314,153,761 | 5,589,879 | \$314,155,235 | 5,589,913 | |

Example 2

Levels from the Year Months time hierarchy are on rows in this view. Here is the view where both Relationship and Empty Filter are No, which means the rows for December through October of 2014 still display even though there is no related data yet for those months (the current month of the year is September, so no data exists yet for the months after that current month).

| + View Name: <i>Period Based Rel and EmptyFilter</i> | | | |
|--|-----------|---------------------------|--------------------------|
| View Filter | | | |
| ▼ Year | Months | Actual Sales Sales Amount | Actual Sales Sales Units |
| 2014 | January | \$350,714,364 | 6,258,847 |
| | February | \$322,332,391 | 5,825,361 |
| | March | \$361,004,874 | 6,553,215 |
| | April | \$327,807,806 | 6,867,712 |
| | May | \$352,020,685 | 7,798,802 |
| | June | \$375,671,295 | 8,910,194 |
| | July | \$391,977,666 | 9,613,083 |
| | August | \$485,764,510 | 12,744,274 |
| | September | \$569,861,272 | 12,093,515 |
| | October | | |
| | November | | |
| | December | | |
| 2014 Total | | \$3,537,154,864 | 76,665,003 |
| 2013 | January | \$650,655,727 | 11,579,068 |
| | February | \$549,211,669 | 9,929,320 |
| | March | \$652,242,257 | 11,862,018 |
| | April | \$645,861,506 | 11,733,747 |
| | May | \$468,934,747 | 8,413,481 |

Here is the same view with Relationship and Empty Filter set to Yes.

| + View Name: <i>Period Based Rel and EmptyFilter</i> | | | | |
|--|-------------------|---------------------------|--------------------------|-------------------|
| View Filter | | | | |
| ▼ Year | Months | Actual Sales Sales Amount | Actual Sales Sales Units | |
| 2014 | January | \$350,714,364 | 6,258,847 | |
| | February | \$322,332,391 | 5,825,361 | |
| | March | \$361,004,874 | 6,553,215 | |
| | April | \$327,807,806 | 6,867,712 | |
| | May | \$352,020,685 | 7,798,802 | |
| | June | \$375,671,295 | 8,910,194 | |
| | July | \$391,977,666 | 9,613,083 | |
| | August | \$485,764,510 | 12,744,274 | |
| | September | \$569,861,272 | 12,093,515 | |
| | 2014 Total | | \$3,537,154,864 | 76,665,003 |
| | 2013 | January | \$650,655,727 | 11,579,068 |
| | | February | \$549,211,669 | 9,929,320 |
| March | | \$652,242,257 | 11,862,018 | |
| April | | \$645,861,506 | 11,733,747 | |
| May | | \$468,934,747 | 8,413,481 | |

All Others Data and Empty Filters

The Empty Filter setting has no impact on All Others rows and columns. If an All Others row or column has no data and Empty Filter is set to Yes, that empty row or column will remain in the view.

The screenshot shows a data grid with the following columns: Ship-To Territory, STerr Long Description, Daily Sales Amount (Jun 17 2014 to Sep 15 2014), and Daily Sales Units (Jun 17 2014 to Sep 15 2014). The rows are numbered 1100 to 1111, followed by an 'All Others' row and a 'Grand Total' row. The 'All Others' row is circled in red. To the right, the 'Properties - Rows' panel is visible, with the 'Empty Filter' property set to 'Yes' and circled in red.

| Ship-To Territory | STerr Long Description | Daily Sales Amount Jun 17 2014 to Sep 15 2014 | Daily Sales Units Jun 17 2014 to Sep 15 2014 |
|-------------------|----------------------------|---|--|
| 1100 | Southwest | \$1,083,805 | 21,737 |
| 1101 | South Central | \$2,429,386 | 55,702 |
| 1102 | Gulf Coast | \$1,446,060 | 31,767 |
| 1103 | Midlantic | \$1,560,213 | 35,775 |
| 1104 | New England | \$3,145,793 | 71,858 |
| 1105 | Great Lakes | \$447,905 | 9,307 |
| 1106 | Great Plains | \$1,570,445 | 35,951 |
| 1107 | Northwest | \$1,023,632 | 21,883 |
| 1108 | Western Provinces | \$1,169,909 | 27,338 |
| 1109 | Central Provinces | \$1,516,509 | 31,967 |
| 1111 | Eastern Atlantic Provinces | \$2,550,581 | 57,743 |
| All Others | | | |
| Grand Total | | \$17,944,239 | 401,028 |

Null vs. Non-null Values and Empty Filters

The Empty Filter only considers cells to be empty when they have null or no data in them. Cells with zero (0) or text are not considered empty and therefore will not be excluded from the result set.

Calculated Measure Items

The Relationship Filter considers all visible measure items (regular and calculated) when determining which members to include in the result set. This means that each calculated measure item expression is performed for all members. In cases where the expression contains a constant or an attribute relationship, this can cause an unexpected result set. In cases where the expression is time consuming, view performance can be impacted.

When an expression contains a constant or an attribute relationship, the calculated measure item produces a non-null value for every member, this results in the Relationship Filter not excluding any members from the result set since every member has "related" data. For example, if a calculated measure item expression includes an attribute relationship, then every member will have related data. You can set up conditions in the expression for the calculated measure item to be executed only under certain conditions. An example follows.

The Extended List Price measure item in the next view is a calculated measure item which has the expression:

```
[Product].[Product].Properties("Prod Current List Price") * [Measures].[Data13 (Actual Sales Sales Units Jan 2014 to Sep 2014)]
```

The Prod Current List Price in the expression is an attribute relationship. Every product has a list price, which means every product will have an Extended List Price result and no rows will be removed from the view by the relationship filter. If the calculation is made conditional to only execute when YTD sales units exists, then the view will contain only those products that have YTD sales units.

Navigation: 1 to 40 of 5582 | 1 to 2 of 2

View Name: Calculations and Rel/Empty Filters

View Filter

| Product | Prod Current List Price | Actual Sales Sales Units Jan 2014 to Sep 2014 | Ext List Price |
|---|-------------------------|--|-----------------|
| Applesauce 106oz PL* 5B | 65 | 286,688 | \$18,634,709.28 |
| Pnappl Slcs 12 oz BR* 5B | 48 | 261,553 | \$12,554,536.11 |
| Peach Slcs LS 12oz BR* 5B | 47 | 259,604 | \$12,201,387.43 |
| Applesauce 106oz PL* 5J | 65 | 258,019 | \$16,771,238.53 |
| Applesauce 106oz PL* 5I | 65 | 243,685 | \$15,839,502.93 |
| Applesauce 12oz PL* 5B | 41 | 243,543 | \$9,985,255.10 |
| Frozen Lasagna Dinner 4B | 109 | 238,731 | \$26,021,686.76 |
| Meatloaf, Frozen 4B | 107 | 238,676 | \$25,538,319.52 |
| Apples Red Delicious 4B | 46 | 237,311 | \$10,916,327.65 |
| Pnappl Slcs 12 oz BR* 5J | 48 | 235,398 | \$11,299,082.64 |
| Peach Slcs LS 12oz BR* 5J | 47 | 233,644 | \$10,981,248.78 |
| Applesauce 106oz PL* 5H | 65 | 229,350 | \$14,907,767.44 |

EXPRESSION - EXT LIST PRICE

View Items and Functions

- Hierarchies
 - Product
 - Product
 - Attribute Relationships
 - Prod Long Description
 - Prod Current List Price
 - Members
 - Product Brand
 - Product Category
 - Product ABC Class
 - Product Category Role

Expression

```
[Product].[Product].Properties("Prod Current List Price") *
[Measures].[Data13 (Actual Sales Sales Units Jan 2014 to
Sep 2014)]
```

Here is the expression, modified to check for YTD sales units. This optimized expression will not proceed with the expression calculation in cases where no YTD Sales Units exists

IIF([Measures].[Data13 (Actual Sales Sales Units Jan 2014 to Sep 2014)] <> Null, [Product].[Product].Properties("Prod Current List Price") * [Measures].[Data13 (Actual Sales Sales Units Jan 2014 to Sep 2014)], null)

Here is the updated view, which now has fewer rows because the relationship filter removed rows without YTD Sales units.

| Product | Prod Current List Price | Actual Sales Sales Units Jan 2014 to Sep 2014 | Ext List Price |
|---|-------------------------|---|-----------------|
| Applesauce 106oz PL* 5B | 65 | 286,688 | \$18,634,709.28 |
| Pnappl Slcs 12 oz BR* 5B | 48 | 261,553 | \$12,554,536.11 |
| Peach Slcs LS 12oz BR* 5B | 47 | 259,604 | \$12,201,387.43 |
| Applesauce 106oz PL* 5J | 65 | 258,019 | \$16,771,238.53 |
| Applesauce 106oz PL* 5I | 65 | 243,685 | \$15,839,502.93 |
| Applesauce 12oz PL* 5B | 41 | 243,543 | \$9,985,255.10 |
| Frozen Lasagna Dinner 4B | 109 | 238,731 | \$26,021,686.76 |
| Meatloaf, Frozen 4B | 107 | 238,676 | \$25,538,319.52 |
| Apples Red Delicious 4B | 46 | 237,311 | \$10,916,327.65 |
| Pnappl Slcs 12 oz BR* 5J | 48 | 235,398 | \$11,299,082.64 |
| Peach Slcs LS 12oz BR* 5J | 47 | 233,644 | \$10,981,248.78 |
| Applesauce 106oz PL* 5H | 65 | 229,350 | \$14,907,767.44 |
| Sweet Onions, Chopped 4B | 62 | 226,421 | \$14,038,123.71 |

The next view contains YTD calculated measure items for sales amount and units. The expressions for both measure items use named sets and therefore were optimized by making them conditional based on the existence of related data. The YTD calculations will execute only when Actual Sales Sales Amount and Actual Sales Sales Units respectively are not null. Here is the expression for the YTD Sales Amount measure item. A similar expression was used for the YTD Sales Units measure item.

`IIF([Measures].[Data1 (Actual Sales Sales Amount)] = null, null, Sum(CrossJoin([Time].[Year Based Months Based].[Year Based].[Current Year],[Act Sales YTD Months]),[Measures].[Data1 (Actual Sales Sales Amount)]))`

View Name: RepBroker YTD Sales \$ and Units

View Filter

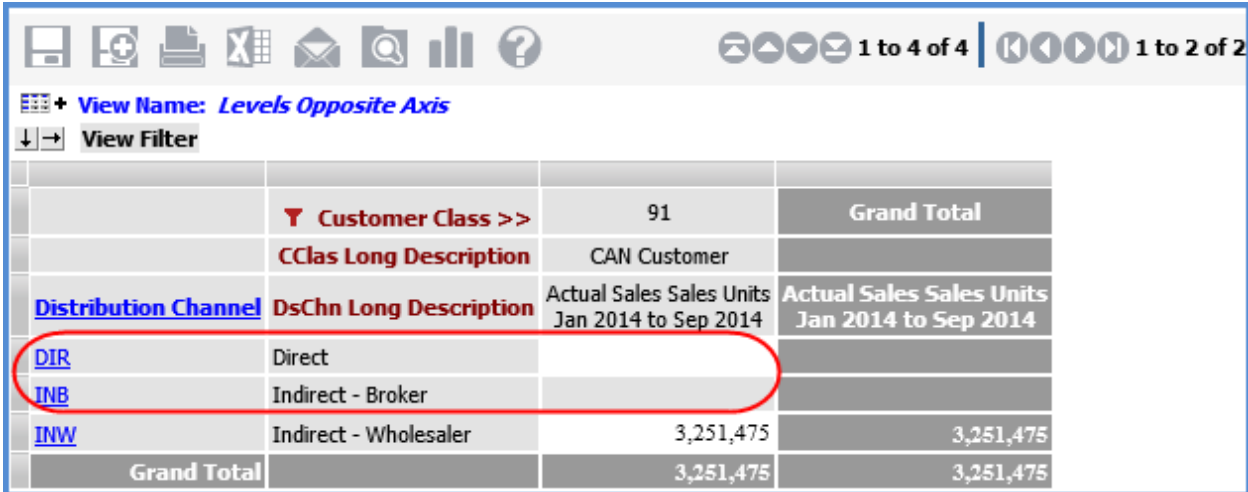
| RepBroker | YTD Sales Amount | YTD Sales Units |
|--------------------|------------------------|-------------------|
| 300 | \$1,236,249,042 | 31,341,259 |
| 301 | \$80,279,499 | 1,689,678 |
| 302 | \$218,449,561 | 4,692,998 |
| 303 | \$93,864,469 | 1,809,326 |
| 304 | \$94,960,867 | 1,875,791 |
| 305 | \$540,557,780 | 10,180,005 |
| 306 | \$123,739,278 | 2,390,317 |
| 307 | \$36,226,887 | 704,599 |
| 308 | \$95,845,090 | 1,841,984 |
| 309 | \$78,406,950 | 1,562,082 |
| 312 | \$335,926,577 | 7,375,334 |
| 313 | \$446,627,746 | 8,058,285 |
| 315 | \$112,408,366 | 2,282,187 |
| 318 | \$43,612,752 | 861,157 |
| Grand Total | \$3,537,154,864 | 76,665,003 |

Views with Levels and Measure Items on the Same Axis

When a view has levels and measure items on the same axis, only members that have null data for all measure items will be removed by a Relationship and Empty Filter.

Level Filters and Relationship Filters

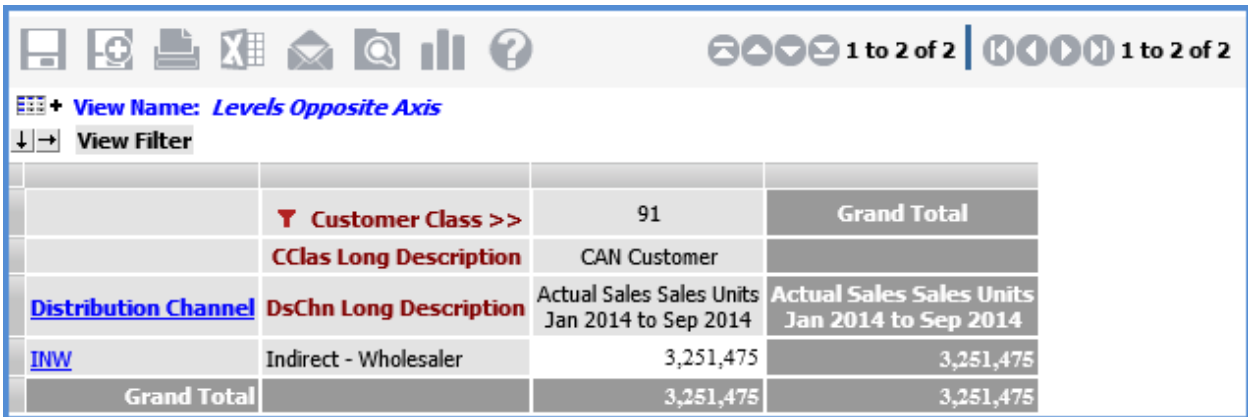
Relationship Filters on one axis will ignore level filters on the opposite axis when determining which members have related data. For example, this view has a filter on the Customer Class level in columns that returns class 91. Relationship Filter is enabled for rows and returns all Distribution Channels with YTD Sales Units. Once the Customer Class filter is applied, the result set may contain empty rows. In this case two distribution channels do not have any YTD Sales Units for Customer Class 91, but do have YTD Sales for another Customer Class. These empty rows could be removed by enabling the Empty Filter.



The screenshot shows a software interface with a table. The table has four columns: 'Customer Class >>', 'C Clas Long Description', 'Actual Sales Sales Units Jan 2014 to Sep 2014', and 'Actual Sales Sales Units Jan 2014 to Sep 2014'. The rows are: 'Customer Class >>' (91), 'C Clas Long Description' (CAN Customer), 'Distribution Channel' (DIR, INB, INW), and 'Grand Total'. The rows for 'DIR' and 'INB' are circled in red, indicating they are empty rows.

| | Customer Class >> | 91 | Grand Total |
|-----------------------------|-------------------------------|--|--|
| | C Clas Long Description | CAN Customer | |
| Distribution Channel | DsChn Long Description | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2014 to Sep 2014 |
| DIR | Direct | | |
| INB | Indirect - Broker | | |
| INW | Indirect - Wholesaler | 3,251,475 | 3,251,475 |
| Grand Total | | 3,251,475 | 3,251,475 |

Here is the view after Empty Filter has been enabled on rows.



The screenshot shows the same software interface as above, but with the 'Empty Filter' enabled. The rows for 'DIR' and 'INB' are no longer visible, and the 'Grand Total' row now only includes the 'INW' row.

| | Customer Class >> | 91 | Grand Total |
|-----------------------------|-------------------------------|--|--|
| | C Clas Long Description | CAN Customer | |
| Distribution Channel | DsChn Long Description | Actual Sales Sales Units Jan 2014 to Sep 2014 | Actual Sales Sales Units Jan 2014 to Sep 2014 |
| INW | Indirect - Wholesaler | 3,251,475 | 3,251,475 |
| Grand Total | | 3,251,475 | 3,251,475 |

View Filters

The sequence in which filters are executed in relation to View Filters is View Filter first, then Relationship Filter, and then Empty Filter. Only data that meets the View Filter criteria will be considered by the Relationship Filter.

FAQ's

Can Measure Items with Conditional Formatting including Images and Indicators be included in a Filter?

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

What Does “Not Mapped” Mean in Views?

A row or column of “Not Mapped” data in a view means that measure item data exists for a period of time that has not been defined in Stratum Administration. Such measure item data is assigned to a “Not Mapped” member so you can still see the data in the view.

| Year Based | Year Based Quarters Based-Year Based-Abs Year | Quarters Based | Daily Sales Daily Sales Amount | Daily Sales Daily Sales Units |
|------------------------------|--|---------------------------------|--------------------------------|-------------------------------|
| Last Year | 2015 | 2 Quarters Ago | \$1,557,900 | 115,200 |
| | | Previous Qtr | \$7,146,190 | 192,697 |
| | | Current Quarter | \$509,721,493 | 538,659 |
| | | Not Mapped | \$689,881 | 102,312 |
| | | Last Year Total | \$519,115,465 | 948,868 |
| Current Year | 2016 | 2 Quarters Ago | \$2,129,130 | 157,440 |
| | | Previous Qtr | \$9,335,956 | 196,929 |
| | | Current Quarter | | |
| | | Not Mapped | \$1,589,775 | 280,256 |
| | | Current Year Total | \$13,054,861 | 634,625 |
| Grand Total | | | \$532,170,326 | 1,583,494 |

The view in the prior example has levels from Year Based Quarters on rows. Notice that each year has a “Not Mapped” row of Daily Sales data. This means that there are insufficient based quarter time periods defined in Stratum.Administration. In this example, an additional based quarter definition for a 3 Quarters Ago period needs to be defined in Stratum.Administration. After that, the previously unmapped data will be assigned to the 3 Quarters Ago period and display in the view for that member of Year Based. Here is the view after the period has been defined.

| Year Based | Year Based Quarters Based-Year Based-Abs Year | Quarters Based | Daily Sales Daily Sales Amount | Daily Sales Daily Sales Units |
|------------------------------|--|---------------------------------|--------------------------------|-------------------------------|
| Last Year | 2015 | 3 Quarters Ago | \$689,881 | 102,312 |
| | | 2 Quarters Ago | \$1,557,900 | 115,200 |
| | | Previous Qtr | \$7,146,190 | 192,697 |
| | | Current Quarter | \$509,721,493 | 538,659 |
| | | Last Year Total | \$519,115,465 | 948,868 |
| Current Year | 2016 | 3 Quarters Ago | \$1,589,775 | 280,256 |
| | | 2 Quarters Ago | \$2,129,130 | 157,440 |
| | | Previous Qtr | \$9,335,956 | 196,929 |
| | | Current Quarter | | |
| | | Current Year Total | \$13,054,861 | 634,625 |
| Grand Total | | | \$532,170,326 | 1,583,494 |

What Does “Not Valid” Mean in Views and Filter Windows?

A row or column of “Not Valid” data in a view means that a time level in the view does not apply to some of the measure items in the view. Such measure items have their data assigned to the “Not Valid” member so you can still see their data in the view.

The screenshot shows a software interface with a data table and a 'View Explorer' pane. The table has the following columns: Year, Daily Sales Daily Sales Amount, Actual Sales Sales Amount, Budget Budget Amount Frozen, and Forecast Baseline Forecast. The rows are years from 2006 to 2016, followed by a 'Not Valid' row and a 'Grand Total' row. The 'View Explorer' pane shows a tree structure with 'Year Days' selected, and 'Year' and 'Days' members listed below it.

| Year | Daily Sales Daily Sales Amount | Actual Sales Sales Amount | Budget Budget Amount Frozen | Forecast Baseline Forecast |
|-------------|--------------------------------|---------------------------|-----------------------------|----------------------------|
| 2006 | | | | |
| 2007 | | | | |
| 2008 | | | | |
| 2009 | | | | |
| 2010 | | | | |
| 2011 | | | | |
| 2012 | \$996,282,287 | | | |
| 2013 | \$1,081,490,510 | | | |
| 2014 | \$1,351,863,138 | | | |
| 2015 | | | | |
| 2016 | | | | |
| Not Valid | | \$14,389,522,497 | \$15,649,612,359 | 1,671,369,633 |
| Grand Total | \$3,429,635,936 | \$14,389,522,497 | \$15,649,612,359 | 1,671,369,633 |

The view in the prior example has levels from Year Days on rows. The levels are applicable to the Daily Sales measure item in the view. There is Daily Sales data for years 2012 through 2014. The Year Days levels are not valid for the other three measure items of Actual Sales, Budget, and Forecast. Data for those three measure items gets assigned to the “Not Valid” member for Year Days. The “Not Valid” member also will show up in related filtering windows for Year Days such as in the Select Members window.

Consider choosing a time dimension that is applicable to all measure items in the view. In the following example, using Year Months instead of Year Days eliminates the “Not Valid” row. Year Months is valid for all four measure items. Here is the updated view after changing the time dimension.

The screenshot shows the same software interface but with the 'Year Months' member selected in the 'View Explorer' pane. The data table now shows data for all four measure items (Daily Sales, Actual Sales, Budget, and Forecast) for the years 2012 through 2015. The 'Not Valid' row is no longer present.

| Year | Daily Sales Daily Sales Amount | Actual Sales Sales Amount | Budget Budget Amount Frozen | Forecast Baseline Forecast |
|------|--------------------------------|---------------------------|-----------------------------|----------------------------|
| 2006 | | | | |
| 2007 | | | | |
| 2008 | | | | |
| 2009 | | | | |
| 2010 | | | | |
| 2011 | | | | |
| 2012 | \$996,282,287 | \$3,840,207,548 | | |
| 2013 | \$1,081,490,510 | \$7,012,160,085 | \$5,108,428,009 | 401,694,827 |
| 2014 | \$1,351,863,138 | \$3,537,154,864 | \$4,819,744,955 | 695,251,224 |
| 2015 | | | \$5,721,439,395 | 574,423,582 |
| 2016 | | | | |

Why can't I Access the Select Members Window?

This happens if administrative settings are set up such that only the [Advanced Selected Members window](#) is available for a level. Administrators may choose to set up the application that way for levels with a large number of members, for example, the Lot level. In such cases, the Simple Select option will not display when you click the More button in the Advanced Select Members window.

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

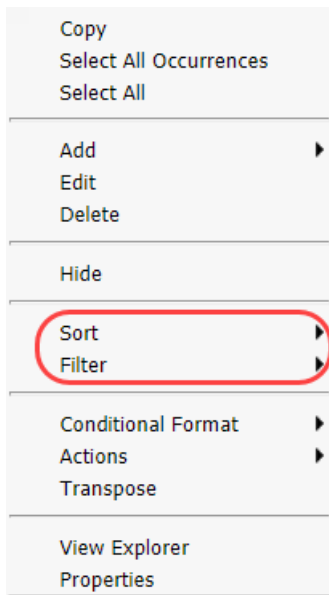
The results of a cumulative calculation are accumulating in nature; therefore, sorting and filtering functionality is not available on calculated measure items that use cumulative functions in their expression. Those functions include the Cumulative Total, Cumulative Percent of Total, ABC Cumulative,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

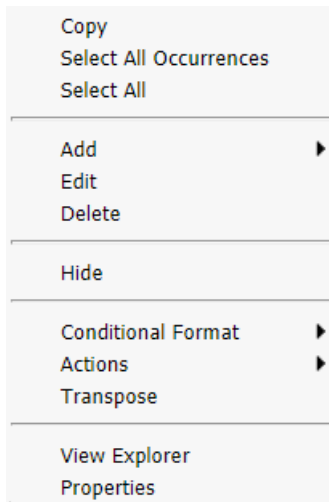
The view that follows shows an example of this scenario. The “Percent of Total” calculated measure item can be sorted and filtered because it does not perform a cumulative calculation. The “Cumulative % of Total” calculated measure item cannot be sorted and filtered.

| View Name: <i>RepBroker Cumulative Sales</i> | | | | |
|--|---|--|-------------------------|------------------------------|
| 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:



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.

View Name: *RepBroker Cumulative Sales*

View Filter

Recursive Top Count 5

| | | ▲ Actual Sales Jan 2014 to Sep 2014 | ▼ Percent of Total | Cumulative % of Total |
|-------------------------------|---|--|--------------------|-----------------------|
| RepBroker | Product Category | | | |
| 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 Did a Level That I Filtered Get Moved to the View Filter Section of My View?

When you add a new filter to your view, the Filters window in Stratum.Viewer automatically moves that level to the View Filter section. An example follows.

***Note:** If the level in question is the second level of a time hierarchy, the level is treated differently than what is described in this topic. See [Treatment of Time-related Levels by the Filters Window](#).

In this view, the Product level currently displays and you can see other levels that are available to drill to in view explorer including RepBroker.

The screenshot shows the 'RepBroker Sales Achievement Percentage' view. The filter bar includes 'Product: All', 'Product Brand', 'Product Category', 'Product Family', and 'RepBroker' (circled in red). The columns are 'Ship-To Territory: Filtered' and 'Ship-To Territory Sales Mngr'. The view filter is empty. The table below shows data for three territories: Gulf Coast, Midlantic, and Great Plains. Each territory has columns for Actual Sales Amount, Budget Amount, Achievement Percentage, Average Selling Price, Actual Sales Return, and Actual Sales Return Units. The table lists various products like 'Pear Hlvs LS 12 oz BR* OA' and 'Peach Hlvs HS 12 oz BR* OA' with their respective values and trends.

| Product | Gulf Coast | | | Midlantic | | | Great Plains | | |
|--------------------------------|--|---|--|--|---|--|--|---|--|
| | Actual Sales Amount Q1 2017 to Q3 2017 | Budget Amount Frozen Q1 2017 to Q3 2017 | Achievement Percentage Sales vs Budget Amount Q1 2017 to Q3 2017 | Average Selling Price Q1 2017 to Q3 2017 | Actual Sales Return Amount Q1 2017 to Q3 2017 | Actual Sales Return Units Q1 2017 to Q3 2017 | Actual Sales Amount Q1 2017 to Q3 2017 | Budget Amount Frozen Q1 2017 to Q3 2017 | Achievement Percentage Sales vs Budget Amount Q1 2017 to Q3 2017 |
| Pear Hlvs LS 12 oz BR* OA | | | 0% | | | (8) | | | 0% |
| Peach Hlvs HS 12 oz BR* OA | | | 0% | | | | \$1,855 | \$1,144 | 162% |
| Applesauce 12oz BR* OA | \$1,080 | \$666 | 162% | \$43.48 | (\$477) | (11) | \$3,354 | \$2,068 | 162% |
| FrtCktail HS 12 oz BR* OA | | | 0% | | | | \$17,004 | \$10,484 | 162% |
| Pear Slcs LS 12 oz BR* OA | \$3,197 | \$1,971 | 162% | \$44.55 | (\$2,266) | (50) | | | 0% |
| Peach Hlvs LS 12 oz BR* OA | | | 0% | | | | \$9,295 | \$5,731 | 162% |
| Peach Slcs LS 16 oz BR* OA | | | 0% | | | | \$3,198 | \$1,972 | 162% |
| Pear 6oz LnchPk LS OA | | | 0% | | | | | | 0% |
| Mand Org Pcs 12oz BR* OA | | | 0% | | | | \$3,081 | \$1,900 | 162% |
| Escalloped Apples 12 oz BR* OA | | | 0% | | | | \$6,868 | \$4,235 | 162% |
| Peach Slcs HS 12 oz BR* OA | \$373 | \$230 | 162% | \$45.07 | (\$759) | (17) | \$14,309 | \$8,822 | 162% |

The Manage All Filters icon is clicked, and the Filters window shows all levels available (not hidden) for the view. The Change Filter icon is clicked for the RepBroker level.

The screenshot shows the same view as above, but with the 'Manage All Filters' dialog box open. The dialog box contains the text: 'Manage the filters applied to your data. Change one or more filter at a time.' and a 'Learn More' link. The 'RepBroker' filter in the filter bar is highlighted with a red box.

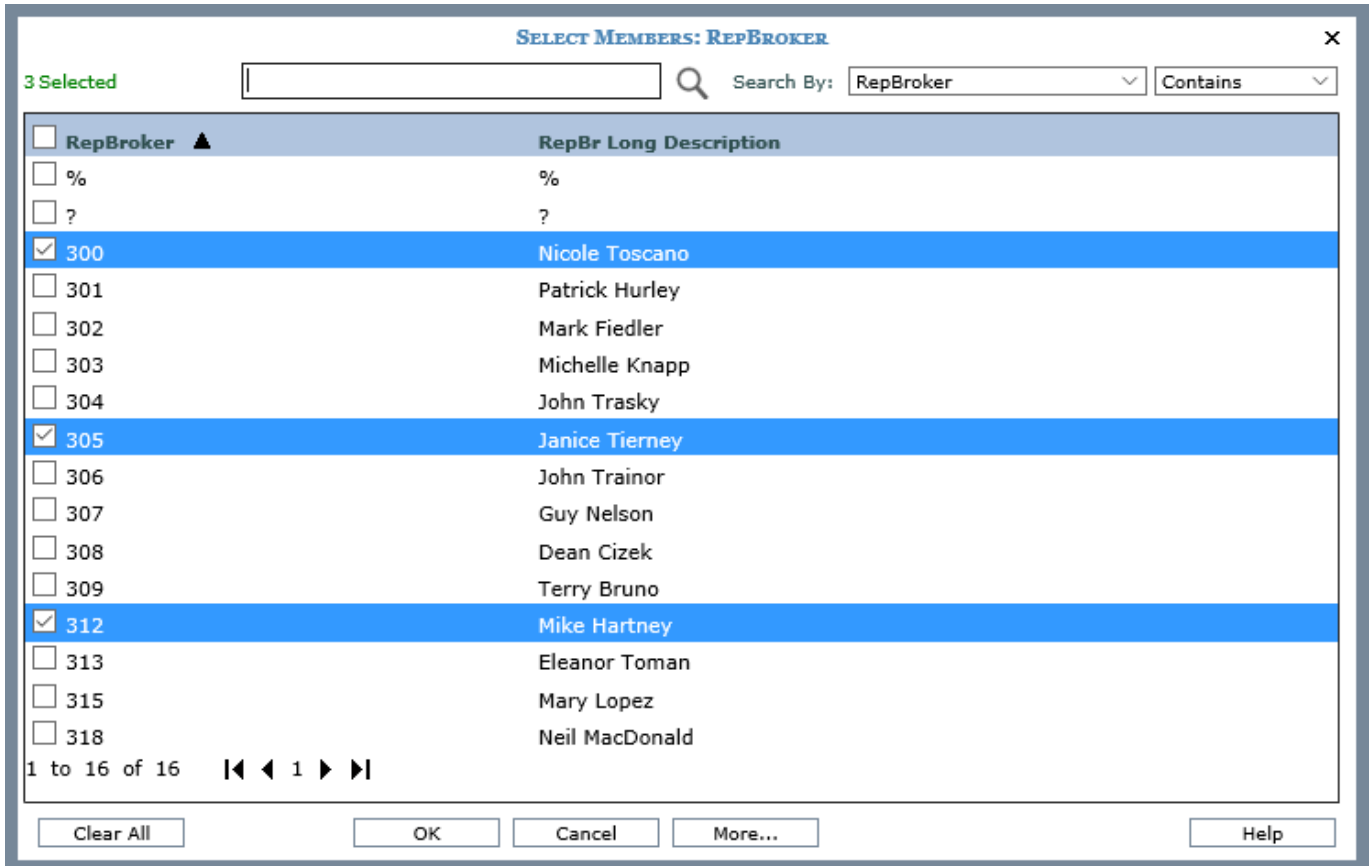
FILTERS ✕

| Levels | Data | Axis |
|------------------------|---|------|
| Ship-To Territory: | 1102 - Gulf Coast, 1103 - Midlantic, 1106 - Great Plains, 1111 - Eastern Atlanti... | ▼ ✕ |
| Ship-To Territory S... | No filter exists | ▼ ✕ |
| Product: | No filter exists | ▼ ✕ |
| Product Brand: | No filter exists | ▼ ✕ |
| Product Category: | No filter exists | ▼ ✕ |
| Product Family: | No filter exists | ▼ ✕ |
| RepBroker: | No filter exists | ▼ ✕ |

OK Cancel

▼ ✕
Change Filter

Three of the RepBrokers are selected, and OK is clicked in the Select Members window.



The Filters window displays my selections.

The screenshot shows a window titled "FILTERS" with a close button (X) in the top right corner. Below the title bar are three tabs: "Levels" (selected), "Data", and "Axis". The main area contains a list of filter categories with their current selections and controls:

| Filter Category | Current Selection | Filter Icon | Remove Icon |
|------------------------|---|-------------|-------------|
| Ship-To Territory: | 1102 - Gulf Coast, 1103 - Midlantic, 1106 - Great Plains, 1111 - Eastern Atlanti... | Y | X |
| Ship-To Territory S... | No filter exists | Y | X |
| Product: | No filter exists | Y | X |
| Product Brand: | No filter exists | Y | X |
| Product Category: | No filter exists | Y | X |
| Product Family: | No filter exists | Y | X |
| RepBroker: | 300 - Nicole Toscano, 305 - Janice Tierney, 312 - Mike Hartney | Y | X |

At the bottom right of the window are two buttons: "OK" and "Cancel". The "RepBroker" row is highlighted with a red rounded rectangle.

I click OK in that window. The window closes and the refreshed view has RepBroker in the View Filter section. The view is filtered by the three RepBrokers that I selected for the level.

★ RepBroker Sales Achievement Percentage

Rows: [Product: All](#) × > [Product Brand](#) × [Product Category](#) × [Product Family](#) × +

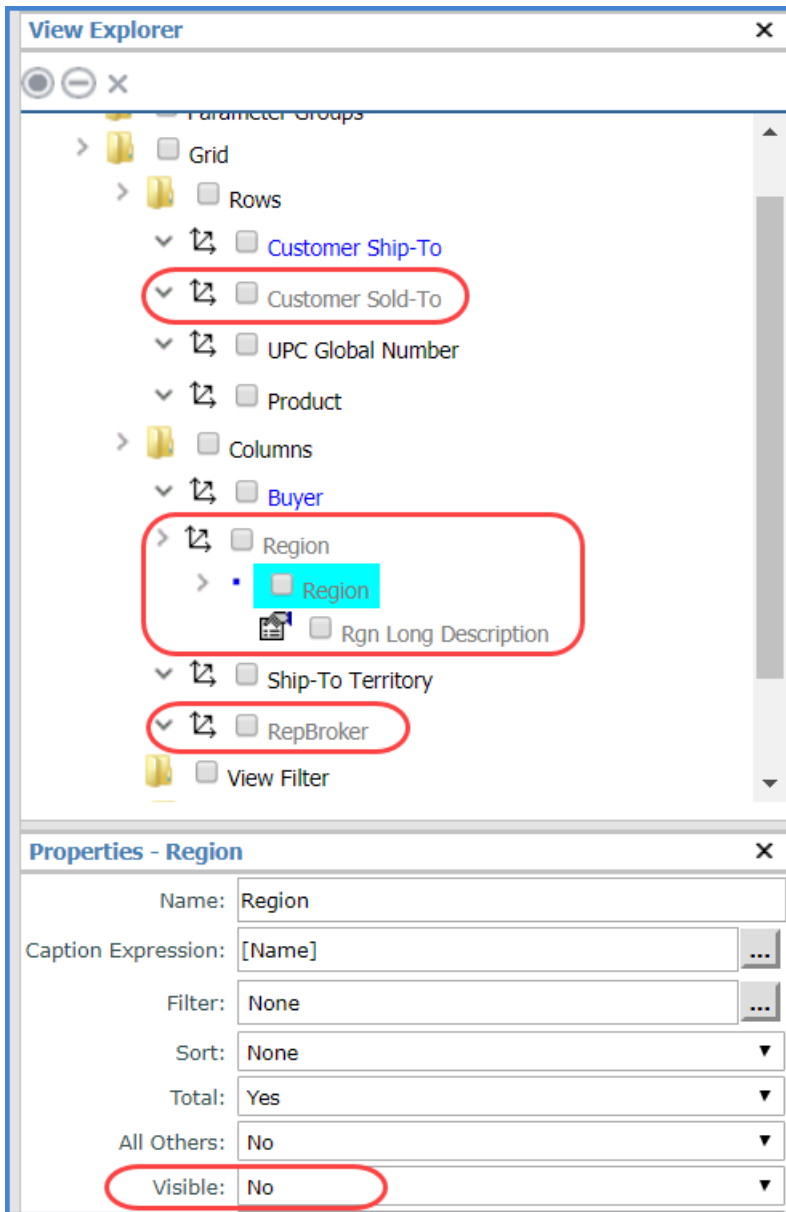
Columns: [Ship-To Territory: Filtered](#) × > [Ship-To Territory Sales Mngr](#) × +

View Filter: [RepBroker: Multiple](#) × +

| STerr Long Description | 1102 | | | | | | 1103 | | | | | | 1106 | | |
|--------------------------------|--|---|--|--|---|--|--|---|--|--|---|--|--|---|--|
| | Gulf Coast | | | | | | Midlantic | | | | | | Great Plains | | |
| Product | Actual Sales Amount Q1 2017 to Q3 2017 | Budget Amount Frozen Q1 2017 to Q3 2017 | Achievement Percentage Sales vs Budget Amount Q1 2017 to Q3 2017 | Average Selling Price Q1 2017 to Q3 2017 | Actual Sales Return Amount Q1 2017 to Q3 2017 | Actual Sales Return Units Q1 2017 to Q3 2017 | Actual Sales Amount Q1 2017 to Q3 2017 | Budget Amount Frozen Q1 2017 to Q3 2017 | Achievement Percentage Sales vs Budget Amount Q1 2017 to Q3 2017 | Average Selling Price Q1 2017 to Q3 2017 | Actual Sales Return Amount Q1 2017 to Q3 2017 | Actual Sales Return Units Q1 2017 to Q3 2017 | Actual Sales Amount Q1 2017 to Q3 2017 | Budget Amount Frozen Q1 2017 to Q3 2017 | Achievement Percentage Sales vs Budget Amount Q1 2017 to Q3 2017 |
| Pear Hlvs LS 12 oz BR* OA | | | ▶ 0% | | | | | | | | | | | | ▶ |
| Peach Hlvs HS 12 oz BR* OA | | | ▶ 0% | | | | \$1,855 | \$1,144 | ▲ 162% | \$44.81 | (\$362) | (8) | | | ▶ |
| Applesauce 12oz BR* OA | \$1,080 | \$666 | ▲ 162% | \$43.48 | (\$477) | (11) | \$3,354 | \$2,068 | ▲ 162% | \$43.40 | (\$466) | (11) | \$4,387 | \$2,705 | ▲ 16 |
| FrtCktail HS 12 oz BR* OA | | | ▶ 0% | | | | \$17,004 | \$10,484 | ▲ 162% | \$44.01 | (\$849) | (19) | | | ▶ |
| Pear Slcs LS 12 oz BR* OA | | | ▶ 0% | | | | | | | | | | | | ▶ |
| Peach Hlvs LS 12 oz BR* OA | | | ▶ 0% | | | | \$9,295 | \$5,731 | ▲ 162% | \$44.31 | (\$622) | (14) | \$9,847 | \$6,071 | ▲ 16 |
| Peach Slcs LS 16 oz BR* OA | | | ▶ 0% | | | | \$3,198 | \$1,972 | ▲ 162% | \$55.17 | (\$451) | (8) | \$3,194 | \$1,969 | ▲ 16 |
| Pear 6oz LnchPk LS OA | | | ▶ 0% | | | | | | | | | | \$20,983 | \$12,937 | ▲ 16 |
| Mand Org Pcs 12oz BR* OA | | | ▶ 0% | | | | \$3,081 | \$1,900 | ▲ 162% | \$50.74 | (\$719) | (14) | | | ▶ |
| Escalloped Apples 12 oz BR* OA | | | ▶ 0% | | | | \$6,868 | \$4,235 | ▲ 162% | \$62.21 | (\$675) | (11) | \$11,717 | \$7,224 | ▲ 16 |

Why Doesn't a Level for a View Show in the Filters Window?

The Filters window only displays levels in a view that have their Visible property set to Yes. A level will not display in the window if it is defined as hidden (Visible = No). In the following example, three of the levels in the view are hidden including the Region level. The Filters window will display the five levels that are defined as visible, listing the levels that are on columns first followed by the levels on rows.



FILTERS ✕

Levels Data Axis


| | | |
|--------------------|---|-----|
| Buyer: | <i>No filter exists</i> | ▼ ✕ |
| Ship-To Territory: | <i>No filter exists</i> | ▼ ✕ |
| Customer Ship-To: | <i>101100ACTH - Wilder Foods -- Quebec QC THA, 101100ADMC - Wilder Foods -...</i> | ▼ ✕ |
| UPC Global Number: | <i>No filter exists</i> | ▼ ✕ |
| Product: | <i>No filter exists</i> | ▼ ✕ |

Why is a Filter Property Disabled?

This can happen when:

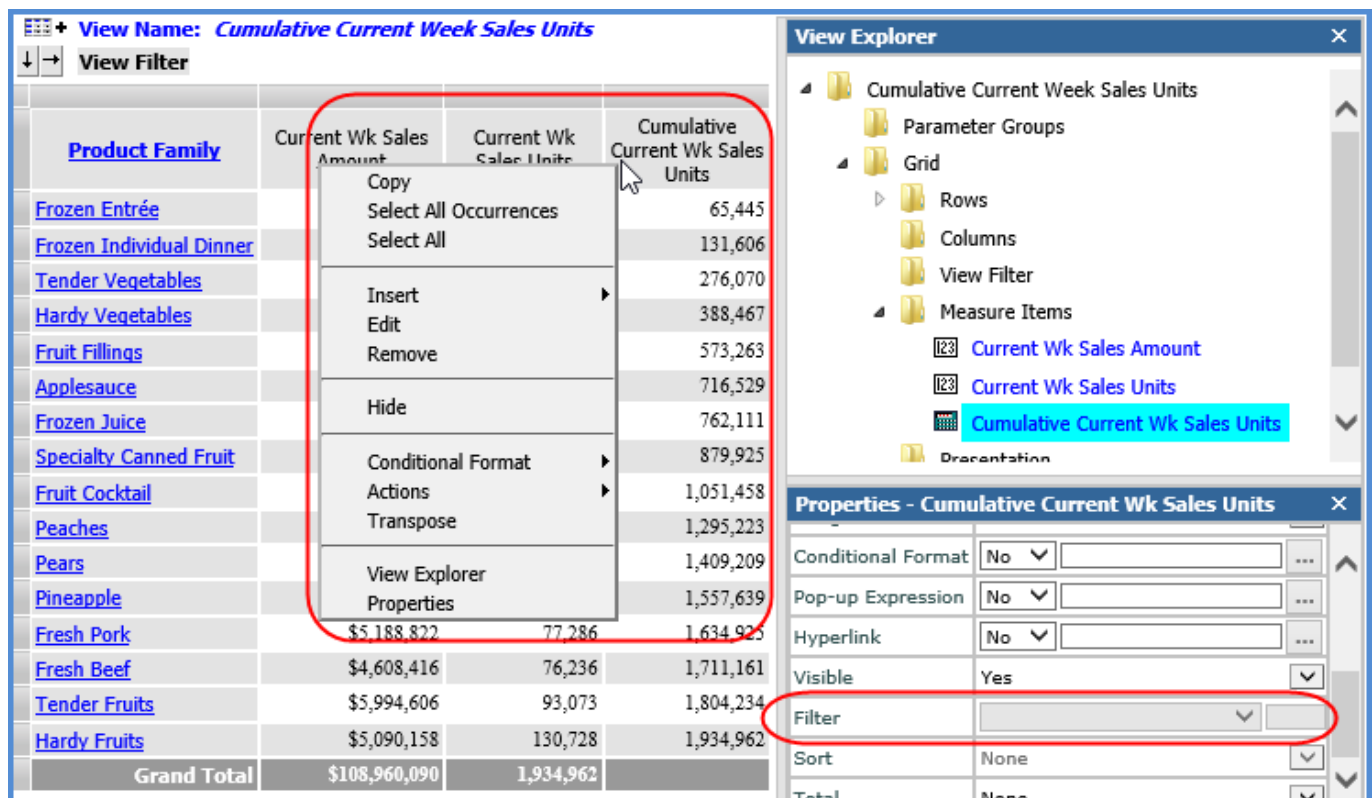
- [You're a casual user.](#)
- [You're working with a cumulative calculated measure item.](#)
- [You're working with measure items and there are levels on the same axis as level items.](#)
- You are trying to filter Grand Totals that are on the axis opposite from the measure item axis. See [Guidelines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

Casual User

The grid pop-up menu for casual users does not have a Filter option on it. Casual users can however use the Filters window from the view toolbar to add filters or change existing ones. And they can edit existing filters by clicking the filter icon  next to a filtered item in a view.

Cumulative Calculated Measure Item

Filtering 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 Filter option will not display on the grid pop-up menu of a calculated measure item that uses a cumulative function. Also, the Filter properties will always be disabled in the Properties window for those measure items.



The screenshot displays a data grid with columns: Product Family, Current Wk Sales Amount, Current Wk Sales Units, and Cumulative Current Wk Sales Units. A context menu is open over the 'Cumulative Current Wk Sales Units' column, listing options like Copy, Select All Occurrences, Select All, Insert, Edit, Remove, Hide, Conditional Format, Actions, Transpose, View Explorer, and Properties. The 'Filter' option is missing. To the right, the 'View Explorer' shows the hierarchy: Cumulative Current Week Sales Units > Grid > Measure Items > Cumulative Current Wk Sales Units. Below, the 'Properties - Cumulative Current Wk Sales Units' window shows the 'Filter' property is disabled (greyed out).

| Product Family | Current Wk Sales Amount | Current Wk Sales Units | Cumulative Current Wk Sales Units |
|--------------------------|-------------------------|------------------------|-----------------------------------|
| Frozen Entrée | | | 65,445 |
| Frozen Individual Dinner | | | 131,606 |
| Tender Vegetables | | | 276,070 |
| Hardy Vegetables | | | 388,467 |
| Fruit Fillings | | | 573,263 |
| Applesauce | | | 716,529 |
| Frozen Juice | | | 762,111 |
| Specialty Canned Fruit | | | 879,925 |
| Fruit Cocktail | | | 1,051,458 |
| Peaches | | | 1,295,223 |
| Pears | | | 1,409,209 |
| Pineapple | | | 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 Filter will be disabled in measure item Properties windows. You must first filter 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 Filter property is disabled in all measure item Properties windows. You can filter by right-clicking an instance of a measure item in the grid (for A, B, or C code) and using the Filter option on the pop-up menu.

After setting up the initial filter that way, the Filter properties will be enabled in the Properties window. You can then edit or remove the filter from the grid or Properties window.

The screenshot shows a data grid with a context menu open over the 'Filter' option. The grid has columns for 'Product Family', 'Current Wk Sales Amount', 'Current Wk Sales Units', 'Cumulative Current Wk Sales Units', and several other sales metrics. The context menu includes options like 'Copy', 'Insert', 'Sort', and 'Filter'. The 'Filter' option is highlighted, and a sub-menu is open with 'Edit' and 'Clear' options. The 'Properties - Current Wk Sales Amount' window is open on the right, showing various properties for the selected measure. The 'Filter' property is highlighted in red in the Properties window.

| Product Family | Current Wk Sales Amount | Current Wk Sales Units | Cumulative Current Wk Sales Units | Current Wk Sales Amount | Current Wk Sales Units | Cumulative Current Wk Sales Units | Current Wk Sales Amount |
|----------------------------|-------------------------|------------------------|-----------------------------------|-------------------------|------------------------|-----------------------------------|-------------------------|
| ABC Classification Code >> | A | | | B | | | C |
| ABC Long Description | A | | | B | | | C |
| Product Family | | | | | | | |
| Hardy Fruits | 65,445 | 65,445 | | | | | |
| Grand Total | \$32,541,383 | 592,797 | \$53,964,245 | 949,837 | | | \$22,45 |

Properties - Current Wk Sales Amount

| | |
|--------------------|---------------------------|
| Caption Expression | Current Wk Sales Amount |
| Type | Regular |
| Measure | Actual Sales Sales Amount |
| Format String | As Is |
| Value | Yes |
| Image | No |
| Conditional Format | No |
| Pop-up Expression | No |
| Hyperlink | No |
| Visible | Yes |
| Filter | [Dropdown] |
| Sort | None |

Axis Filter

Axis filters are a means of creating complex filters that contain more than one condition in their filter expression, joined by “and” or “or” statements. They are well suited for analysis that takes into account multiple business conditions. Use them when you need to set up filters involving multiple measure items or both measure items and attribute relationships. For example, you have a business need to see all rows of data for products that meet a certain sales goal but you also want to factor in another performance indicator such as a profit margin, rate of return, or average selling price. You use an axis filter with multiple conditions to zero in on the products of interest to you.

You can set up axis filters on the rows or columns axis. For example, use an axis filter to return all rows that fit the criteria of two different measure items -- such as all rows where Sales Units are greater than 1,000 and Profit Margin is less than 20%.

Display Column

Display columns provide descriptive information about objects displayed in Stratum.Viewer windows such as the View List and [Select User List Filter windows](#). The display columns available vary by window and object type. Examples of display columns are the date a user list was created, an attribute relationship for a level member, and the owner of a view. You can determine which display columns show while using the [Select Members](#), [Advanced Select Members](#), User List, Member List, and Conditional Format windows.

View Filter

The View Filter acts as a filter on all visible levels and measure items in a view so that only data that meets View Filter criteria displays. A View Filter is applied no matter what levels are displayed in the view. See also [Using a View Filter vs. a Level Filter](#).