

# What's New in Stratum 7.5 with Admin Notes & Action Items

Ready to upgrade? Contact us at info@silvon.com.

## Explore Your Stratum Data Model, Fine Tune Reports With New Filter Types, & Easily Capture Key Performace Indicator Trends

Silvon has enhanced the latest version of Stratum with the following functionality.

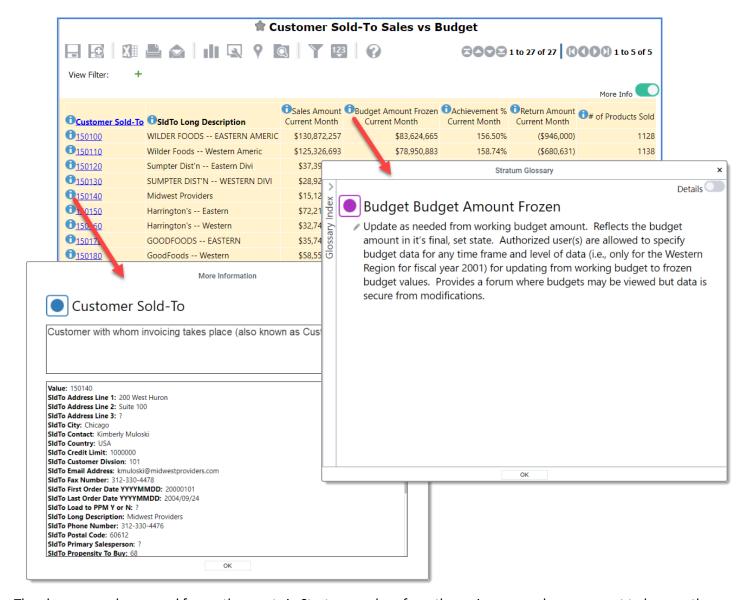
- Stratum Glossary features give you a broader understanding of data in Stratum reports. Look up details or explore all the report-building items that exist in your Stratum Data Model. Administrators can add custom descriptions to data that supply users with extra details, such as where your data is sourced and how it is intended to be used. <u>Learn More</u>. See also Admin Notes & Action Items.
- Attribute relationship filters allow for dynamic filtering by attribute data. Filters can be text- or numeric-based, which allows for additional filtering refinement. For example, you can easily filter to only show Products that have "Oranges" in their Long Description and with a Current List Price greater than 50. <u>Learn More</u>. See also Admin Notes & Action Items.
- New Key Performance Indicator (KPI) properties
  make it easy to add specialized performance
  monitoring data to views. It's simple to set up a view
  that counts the number of products sold in each
  territory or that includes KPI data such as a region's
  Average Monthly Sales, a store's Maximum Weekly
  Returns, or a product's Standard Deviation of Weekly
  Available Inventory. Learn More. See also Admin
  Notes.
- Also part of Stratum 7.5 are options to link views to each other through their measure items, a setting to treat attribute relationships as either text or numbers in views, and a refreshed look to many windows. <u>Learn More</u>. See also Admin Notes and Action Items for <u>drilldown views</u>, <u>view creation &</u> <u>treatment of calculated measure items</u>, and <u>upgrades</u> to 7.5.

#### **Stratum Glossary Features**

Explore comprehensive info about your Stratum Data Model via the Stratum Glossary from any Stratum view (click their Info icons to open the glossary). Also, get a full summary of each member value in a view via their glossary information windows. Use the Stratum Glossary to answer questions like:

- How is the Actual Sales Gross Margin Amount calculated in this view?
- What does Product Category Role data represent?
- Does this Forecasting data come from one of my corporate business systems, or is it supplied by users?
- What other data exists in my Stratum Data Model?

Other glossary options let administrators customize descriptions of data and can help with data validation tasks. The example on the next page shows the glossary details about a member of the Customer Sold-To level. The example also shows glossary info about the Budget measure for the view's Budget Amount Frozen Current Month measure item.

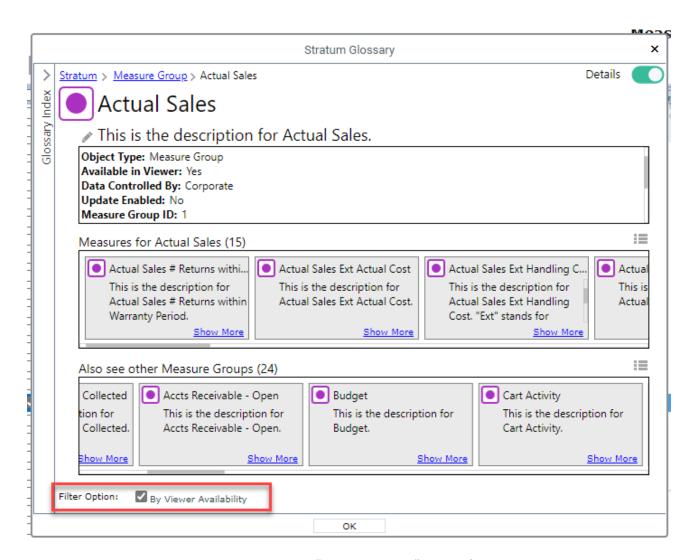


The glossary can be opened from other spots in Stratum, such as from the main menu, when you want to browse the entire Stratum Data Model.

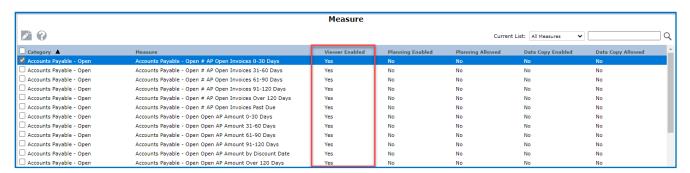


#### **Admin Notes & Action Items for Stratum Glossary:**

- 1. The Stratum Glossary shows lists of Stratum items that are filtered by their "Viewer Availability" status. Items that are enabled for use in Stratum meet the filter criteria of "Viewer Availability" and will show in the glossary when the "By Viewer Availability" filter option is selected.
  - a. Items typically designated as enabled in Stratum (and thus treated as "available" by the glossary) are those that have meaningful data and that you want to be available to users.

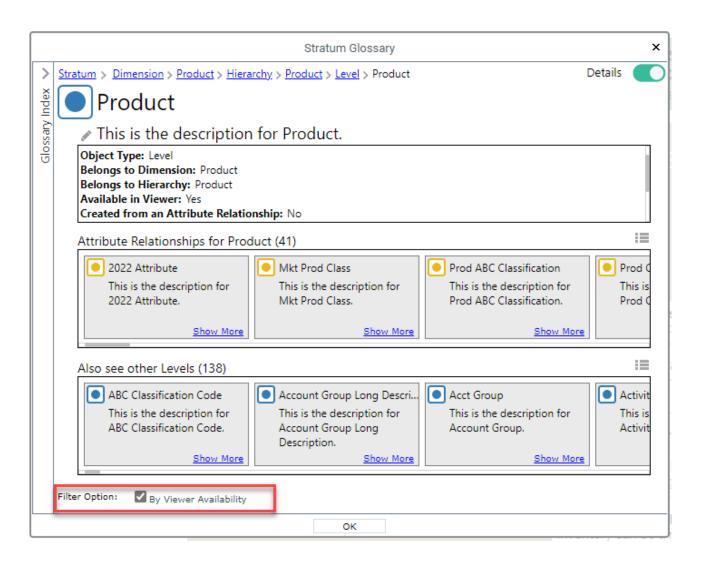


**ACTION ITEM**: In Measure maintenance, review the "Viewer Enabled" setting for each measure to determine whether the measure should be available to add to views and included in the Stratum Glossary when the "By Viewer Availability" filter is applied.

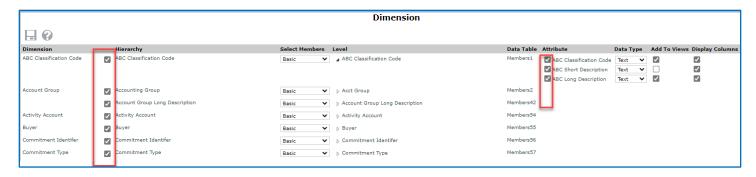


- a. **Selected** Typically means that you have meaningful data for the measure. The measure is available to be added to views and will display when the "By Viewer Availability" filter is applied in the glossary.
- b. **Deselected** Typically means that you do not yet have meaningful data for the measure. The measure is not available to be added to views and will not display when the "By Viewer Availability" filter is applied in the glossary.

**Note:** Changing a measure's Viewer Enabled setting from Yes to No does not affect views that already use that measure. The measure will still appear in those views, but it will not be available to add to other views.



**ACTION ITEM**: In Dimension maintenance, review the checkboxes to the left of each hierarchy and attribute to determine if the hierarchy and attribute should be available/enabled to be added to views and included in the Stratum Glossary when the "By Viewer Availability" filter is applied.

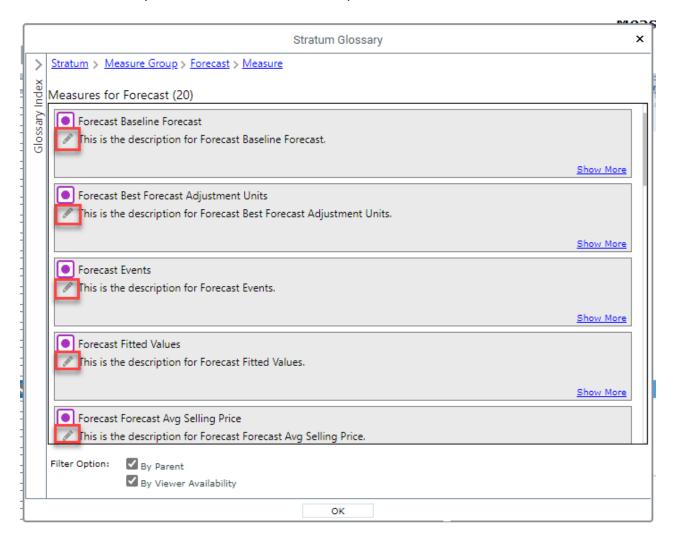


- a. **Selected** Typically means that you have meaningful data for the hierarchy / level and attribute. The items are available to be added to views and will display when the "By Viewer Availability" filter is applied in the glossary.
- b. **Deselected** Typically means that you do not yet have meaningful data for the hierarchy / level and attribute. The items are not available to be added to views and will not display when the "By Viewer Availability" filter is applied in the glossary.

**Note:** Changing an item's status from selected to deselected does not affect views that already use the item. The item will still appear in those views, but will not be available to add to other views.

**ACTION ITEM**: Create meaningful descriptions for use in the glossary using the provided features for editing descriptions. Include information such as where the data is sourced and how it is intended to be used in Stratum.

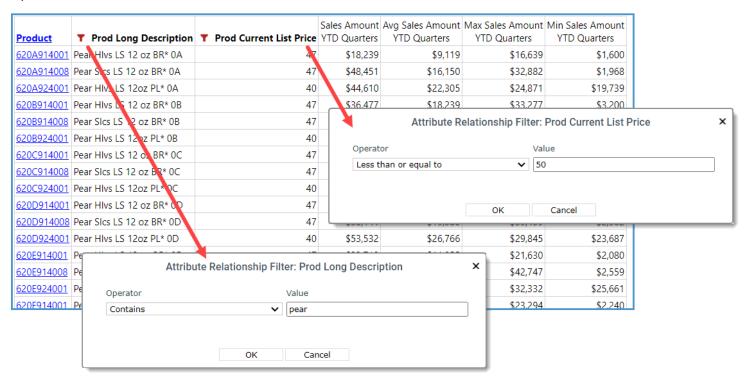
- a. The V7.5 upgrade will set default descriptions to "This is the description for" <Name of the Item>.
- b. View and security administrators can edit all descriptions.



#### **Attribute Relationship Filters**

Create dynamic and sophisticated filtering with new features for attribute relationships. First, you can filter by any attribute relationship displayed in view. The filter will be applied each time the view is used, showing the current set of data that meet the filter criteria – for example, set up a filter to show the current set of Products that contains a certain phase in its Long Description. The view below is filtered by the Prod Long Description to show only Products that currently have the phrase "Pear" in their description.

Also, attribute relationship values that represent numerical data such as pricing or commodity codes can now be treated as numerical values. The view below treats the Prod Current List Price as a number and filters for values less than or equal to 50.

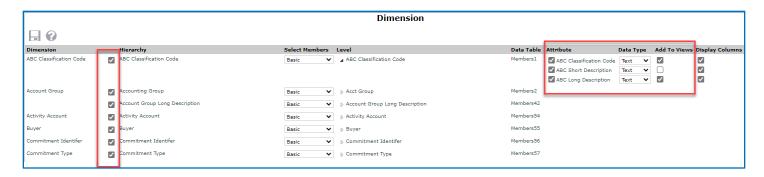


#### Admin Notes & Action Items for Attribute Relationship Filters:

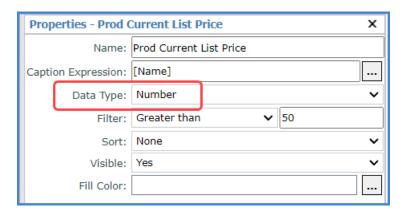
Administrators have Dimension maintenance options to control the default Text vs. Number settings for all attribute relationships in a Stratum environment. Administrator settings can be overridden in views to customize attribute relationship treatment for your individual views.

1. Attribute relationship columns defined as a number will be right justified in Stratum views and the Export to Excel output for views with their Export Type property set to Excel Report. The Data Type property for an attribute relationship column has no impact on the Export to Excel's Excel Data output. It also does not affect the use of Stratum data in the Excel Connector or Power BI Connector.

**ACTION ITEM**: Review your attribute's Data Type definitions in the Dimension window. Setting the data type of attributes that have numeric data to number will give better filtering results to your users.



- a. By default, all attributes have their Data Type set to Text.
- b. For existing views that use the attribute, you will have to update the Data Type property on the Attribute's properties window. Changing the property in Dimension maintenance will not change any existing view definitions.



#### Stratum Key Performance Indicator (KPI) Enhancements

Two new features contribute to the ease of setting up specialized calculations in Stratum. They are the Stratum function "Count Members" and a KPI property for measure items with time ranges.

#### **Stratum Count Function**

This function is part of the Stratum set of functions that guide you in setting up frequently used, specialized calculations. A few clicks to pick the function then pick the relevant level (Product in this example) and measure item data (Sales Amount Current Month) to be counted are all it takes to calculate the number of products sold by region, territory, or customer class, and more. The calculation marked below uses the Stratum Count function to show you the number of Products sold in each Ship-To Territory for the current month.

1 Ship-To Territory	STerr Long Description	Sales Amount Current Month	Budget Amount Frozei Current Month	🗊 # of Products Sold
<u>1100</u>	Southwest	\$44,669,677	\$30,781,250	856
<u>1101</u>	South Central	\$115,551,545	\$74,161,74	1163
<u>1102</u>	Gulf Coast	\$44,072,940	\$29,209,420	1091
<b>1</b> 103	Midlantic	\$61,137,326	\$40,294,39	1318
<u>1104</u>	New England	\$138,546,432	\$85,637,28	1527
<u>1105</u>	Great Lakes	\$16,882,232	\$12,686,43	424
<u>1106</u>	Great Plains	\$67,416,307	\$40,925,77	1352
<b>1</b> 107	Northwest	\$43,935,095	\$25,857,51	783
<u>1108</u>	Western Provinces	\$52,932,086	\$32,673,93	1176
<b>1</b> 109	Central Provinces	\$54,621,157	\$35,778,614	845
A1111	Eastern Atlantic Provinces	¢00 766 755	¢57.601.00 <i>6</i>	1/107

#### **Admin Notes for Count Function:**

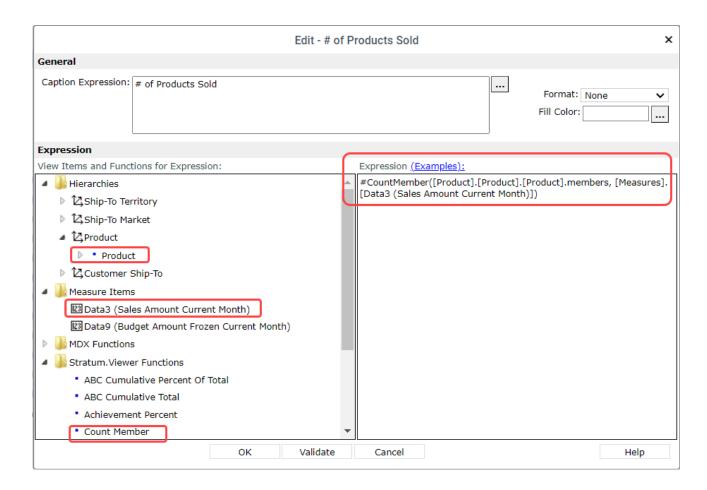
Use the new #CountMember Stratum function when creating count calculations. The above example uses the Count Member function to count the number of products sold by Ship-To Territory in the current month. You can find the #CountMember function in the Stratum. Viewer Functions folder of the Expression window. Clicking it adds the following to the expression and then you'll click the level and measure item for the expression.

#CountMember(«Level Expression», «Numeric Expression») where

<<Level Expression>> resolves to [Dimension Name].[Hierarchy Name].[Level Name].members <<Numeric Expression >> resolves to [Measures].[Measure Item Name]

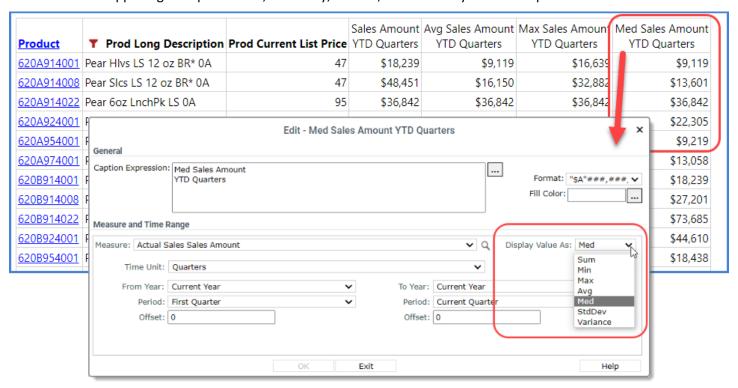
**Note**: Be aware that the #CountMember function can be very resource intensive when working with two or more very large dimensions. For example, use care when counting the number of products sold by customer ship-to.

See the image on the next page for the expression associated with the count calculation in the view shown above.



#### **Property For KPI Value Setup**

The new setting available for measure items with time ranges has multiple options dedicated to returning KPI values such as Min, Max, Variance, and Std Deviation. Monitor important business conditions for a given period of time to keep track of what's happening with production, inventory, returns, and other key sales and operations conditions.



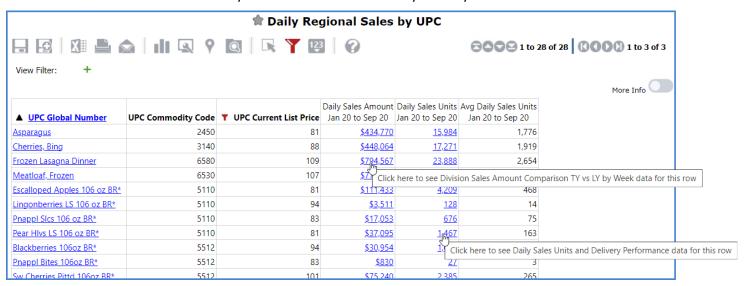
#### Other Enhancements In Stratum 7.5

A few other changes and updates for Stratum are listed below.

#### **More Drilldown View Linking Options**

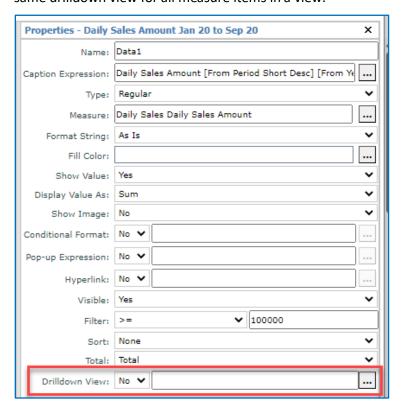
Measure items in a view can be launch pads to run different views directly from the current view. The drilled-to-view that opens for a measure item will be filtered to return data applicable to the level/measure data you drilled from in the original view.

The first measure item in the example below links to a view comparing weekly Actual Sales Amount data by Division. The second measure item links to a Delivery Performance view that analyzes Daily Sales Units data.



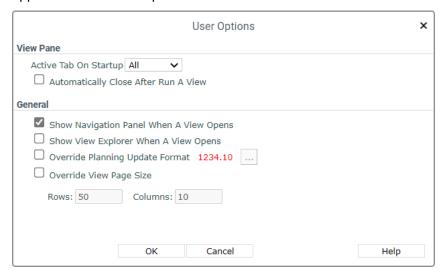
#### **Admin Notes for Drilldown Views:**

Use the new DrillDown View property for individual measure items to select a drill down view for a measure item in your view. The Drilldown View property is also available on the Properties window for the measure item's axis to choose the same drilldown view for all measure items in a view.



#### **User Interface Refresh For Many Windows**

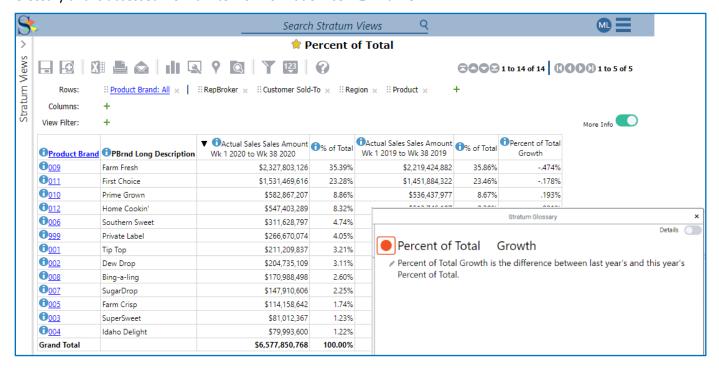
Secondary windows launched from views and other spots in Stratum were given a simple refresh to enhance their visual appeal. Here's an example of a refreshed window.



#### View Creation – Treatment of Calculated Measure Items

#### **Admin Notes for View Creation:**

1. **Descriptions For Calculated Measure Items** - You can now include a description for any calculated measure item you create to help users better understand the contents for their views. The description feature is part of the Stratum Glossary and is accessed from an item's information icon 1 in a view.



2. **Include in Relationship Filter Property for Calculated Measure Items** – This new property gives the user control over which calculated measure items are included as part of the relationship filter. Setting the property to "No" means that the calculated measure item is not used as part of the relationship filter for the view. This can result in a more optimized result set especially when the calculated measure item uses an attribute relationship.

**Note**: The Relationship Filter determines the initial result set for a view. (The initial result set is the list of members that have data for any of the measure items of the view.)

- a. "No" is the default for all new calculated measure items and is the recommended setting.
- b. The upgrade to V7.5 will set all existing calculated measure items to "Yes". This is done to ensure that existing views will continue to work the same after V7.5 upgrade.

The following are examples of *NEW* recommendations for setting up various calculations. See your Stratum online help for more examples of calculations and their expressions.

- Extended List Price
- Standard Cost
- Cost Difference

The new recommendations assume that the Include in Relationship filter property has been left at its default of "No". If you are changing an existing calculation (created prior to V7.5), make sure to change the property to "No".

#### **Extended List Price - New Recommendation**

This calculation determines the extended list price for the year to date by multiplying a measure item in a view by the Prod Current List Price attribute relationship from the Product level. It uses a Val function in its expression. The validation built into the calculation only allows it to proceed if the attribute relationship in it has numeric values.

// Only do the calculation if the Prod Current List Price attribute

// value is numeric

IIF(isnumeric([Product].[Product].Properties("Prod Current List Price")) = True,

// Here's the calculation

#### Val([Product].[Product].Properties("Prod Current List Price"))\*[Measures].[Data2 (Daily Sales Units)],

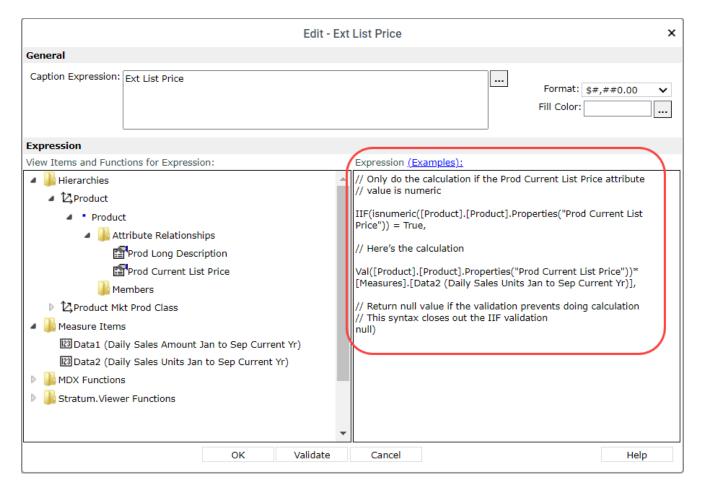
// Return null value if the validation prevents doing calculation

// This syntax closes out the IIF validation

null)

Here's an example view that uses the calculation, followed by an image of the Expression window for it.

Product	Prod Current List Price	Daily Sales Amount Jan to Sep Current Yr	Daily Sales Units Jan to Sep Current Yr	Ext List Price
<u>Applesauce 12oz BR* 0A</u>	47	\$313	19	\$879.59
Pear Slcs LS 12 oz BR* 0A	47	\$64	4	\$209.17
Peach HIvs LS 12 oz BR* 0A	47	\$113	7	\$310.93
Peach Slcs LS 16 oz BR* 0A	58	\$39	2	\$106.01
Peach Slcs HS 12 oz BR* 0A	47	\$247	15	\$691.39
Sw Cherries Pittd 12oz BR* 0A	53	\$41	2	\$115.33
Peach Sics LS 12oz BR* 0A	47	\$79	5	\$220.92
Tropical Mix LS 12oz BR* 0A	55	\$50	3	\$148.41
Pnappl Slcs 12 oz BR* 0A	48	\$234	16	\$764.12
Pnappl Bites 12oz BR* 0A	48	\$18	1	\$50.14
FrtCktail 6oz LnchPk BR* 0A	95	\$153	5	\$504.10
Charpy Filling 12 oz PD* 04	4.4	¢10	1	¢40.70



#### **Standard Cost - New Recommendation**

This calculation determines the standard cost for last year by multiplying a measure item in a view by the value of a Std Cost Last Year attribute relationship from the Product level. It uses a Val function in its expression. The validation built into the calculation only allows it to proceed if the attribute relationship in it has numeric values.

// Only do the calculation if the Std Cost Last Year attribute

// value is numeric

IIF(isnumeric([Product].[Product].Properties("Prod Std Cost Last Year")) = True,

// Here's the calculation

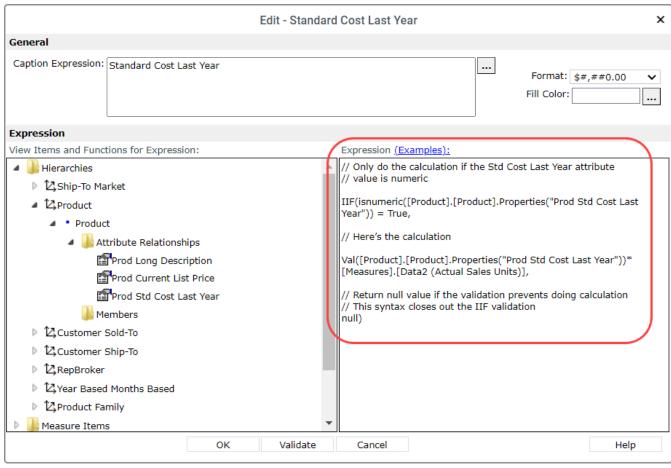
#### Val([Product].[Product].Properties("Prod Std Cost Last Year"))\*[Measures].[Data2 (Actual Sales Units)],

// Return null value if the validation prevents doing calculation

// This syntax closes out the IIF validation null)

The next images show an example view that uses the calculation and the Expression window for it.

		Year Based	<u>2020</u>		
<u>Ship-To</u> <u>Market</u>	Product	Prod Std Cost Last Year	Actual Sales Amount	Actual Sales Units	Standard Cost Last Year
<u>Chicago</u>	Pear HIvs LS 12 oz BR* 0A	31.0209	\$248	6	\$171.24
	Applesauce 12oz BR* 0A	33.1923	\$4,867	113	\$3,756.04
	Pear Slcs LS 12 oz BR* 0A	37.1205	\$1,224	28	\$1,024.53
	Peach HIvs LS 12 oz BR* 0A	31.3517	\$9,847	224	\$7,008.99
	Peach Slcs LS 16 oz BR* 0A	39.9241	\$3,194	58	\$2,314.00
	Pear 6oz LnchPk LS 0A	65.8812	\$20,983	237	\$15,637.56
	Peach Slcs HS 12 oz BR* 0A	32.8256	\$29,312	671	\$22,015.47
	Peach Slcs LS 12oz BR* 0A	31.0008	\$14,937	339	\$10,524.15
	Pnappl Slcs 12 oz BR* 0A	33.0349	\$2,610	58	\$1,914.70
	Deappl Dites 12ez DD* 04	22.0240	¢4.600	105	977 464 70



#### **Cost Difference - New Recommendation**

This example uses a Val function and two Cost attribute relationships for UPC Global Number. The "Cost This Yr" and "Cost Last Yr" attributes are subtracted to find the difference in costs between this year and last year. Validations built into the calculation only allow it to proceed if the attribute relationships in it are numeric.

// Only do the calculation if the UPC Std Cost This Year AND

// Last Year attribute values are numeric

IIF(isnumeric([UPC Global Number].[UPC Global Number].Properties("UPC Std Cost This Year")) = true AND isnumeric([UPC Global Number].[UPC Global Number].Properties("UPC Std Cost Last Year")) = true,

// Here's the calculation

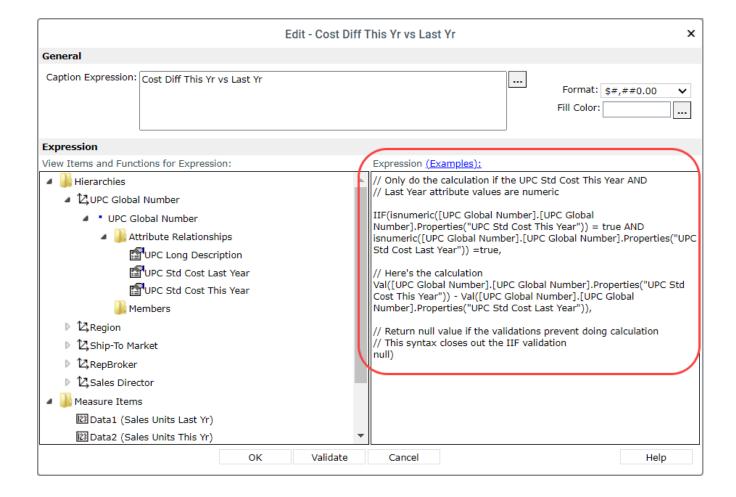
Val([UPC Global Number].[UPC Global Number].Properties("UPC Std Cost This Year")) - Val([UPC Global Number].[UPC Global Number].Properties("UPC Std Cost Last Year")),

// Return null value if the validations prevent doing calculation

// This syntax closes out the IIF validation null)

Here's an example view that uses the calculation, followed by an image of the Expression window for it.

UPC Global Number	Cost Last Yr	Cost This Yr	Sales Units Last Yr	Sales Units This Yr	Cost Diff This Yr vs Last Yr
<u>0 - 02749 - 25408 - 6</u>	48.6172	52.1065	256,968	296,292	\$3.49
<u>0 - 02749 - 99231 - 6</u>	60.5924	66.2983	140,285	162,418	\$5.71
<u>0 - 02749 - 99267 - 6</u>	67.6452	70.7202	296,408	341,375	\$3.08
<u>0 - 06403 - 92736 - 2</u>	59.1423	63.9217	258,037	293,864	\$4.78
<u>0 - 13800 - 30321 - 9</u>	74.0117	81.3928	370,996	426,410	\$7.38
<u>0 - 13800 - 78934 - 9</u>	72.0117	80.3928	376,707	431,312	\$8.38
<u>0 - 24000 - 12411 - 4</u>	52.7903	55.3111	60,286	81,919	\$2.52
<u>0 - 24000 - 12413 - 4</u>	33.0349	34.5909	265,384	271,414	\$1.56
<u>0 - 24000 - 12416 - 4</u>	66.9482	70.623	1,599	1,649	\$3.67
<u>0 - 24000 - 12417 - 4</u>	56.2094	59.0066	7,960	9,484	\$2.80
<u>0 - 24000 - 12418 - 4</u>	51.0094	53.9826	78,948	103,453	\$2.97
<u>0 - 24000 - 12419 - 4</u>	51.0094	53.9826	19,225	22,450	\$2.97
<u>0 - 24000 - 12422 - 4</u>	51.8342	56.9317	69,590	73,855	\$5.10
<u>0 - 24000 - 12429 - 4</u>	27.6948	29.1289	159,542	171,627	\$1.43
0 - 24000 - 12430 - 4	55 1,100	57 2786	101 721	11/1677	\$3.4A



#### Stratum 7.5 Upgrade

Contact support to schedule your upgrade for Stratum 7.5. Some things to consider for upgrades are listed below.

#### **Admin Notes for Upgrades:**

- 1. Full Process is NOT required in Stratum Connector when upgrading from V7.2 or greater to V7.5.
- 2. Full Process IS required in Stratum Connector when upgrading from a version prior to V7.2
- 3. CustomerNet has all V7.5 upgrade and requirements documentation.
- 4. Version 7.5 of Stratum is compatible with Windows Server and SQL Server 2022.

### Recap Of Stratum 7.X Releases

Version	New & Updated Features
7.5 Q2 2023	New In Stratum – Stratum Glossary features show you more details about your Stratum Data Model. Administrators can add custom descriptions for items in the data model that help users get to know the data. The Stratum Count function (part of the Stratum Functions) makes it simple to calculate counts of items in a view. Options for adding KPI data to views such as Minimum, Maximum, Average, Median, Standard Deviation, and Variance are now available. Filter options added for a view's attribute relationships, which can be treated as either text or numbers. Individual measure items can have drilldown views attached to them. The look of many Stratum windows got a design refresh. Support added for Stratum 7.5 with Windows Server & SQL Server 2022.
7.4 June 2022	What's New PDF – New charting widget features were added to Stratum Dashboards. Hosted Stratum implementations were integrated with Microsoft Identity and Azure Active Directory identify services, allowing for single sign-on across apps and other security benefits. Stratum Access Hub (Broadcast Manager) was updated with email notifications for admins to keep them informed about action, broadcast group, and broadcast schedule processing.
7.3.1 Oct 2021 & 7.3 June 2021	What's New PDF – Stratum View Pane with tabs to browse to Favorites, Recents, or All views. Search field in top panel to search all Stratum views. "Run In A New Tab" option to opens views from search results in new tabs while search results remain visible. A StratumView.aspx page for easier 3 <sup>rd</sup> party Stratum view access. Filtering options for Stratum Dashboards URL's to create tailored home pages for users and a Save As shortcut to create new dashboards. A central menu in Stratum's top panel to access all help, admin tools, and specialty features. Updates to Application window that control the look of the Stratum View Pane and group together properties for the Stratum Analyst Hub and Access Hub. Preview feature for the Select Format window to check selections before applying them to view. New Connectors – Stratum Excel Connector Add-In to get data into/out of the Stratum Data Hub to/from Excel (Watch Video). And the "Go To Stratum" Power BI extension that links reports in Power BI directly to more detailed data in Stratum Views.
7.2 Dec. 2020	What's New PDF – Master Data Augmentation and User Controlled Attribute functionality to supplement existing core Stratum data. New grid formatting options to enhance the style of reports. Administrators can control attribute availability in views and which display by default when their levels get used in views. Level filtering has a, Include/Exclude choice (include only the designated members or see all members except designated ones. Shortcuts to edit captions, format string, and fill color when editing measure items from the Measures window. Streamlined step for copying view URL's to share.
7.1.2 Aug 2020	What's New PDF – More tools to control and access Stratum data. See below. Shortcuts for setting up calculated measure item captions, options to control detail for emailed views and Excel exports and the order of views attached to Actions, and ability to track who is actively using Stratum. More icon choices for Conditional Formats and custom logos to help distinguish between multiple Stratum environments.  Data Import – Bring budgets, market trends, plans, and other outside data that compliments enterprise data into the Stratum Data Hub from user-curated Excel spreadsheets. Immediately see imported data in Stratum for centralized analysis with the rest of your business data. Watch Video.  StratumLink – A web-based ETL for Stratum power users to pull high volumes of additional core business data into the hub from complex data sources (ERP, CRM, custom databases, IoT systems, cloud sources). See newly loaded data shows in context with other enterprise data. Watch Video.  Stratum Dashboards – All-in-one resources for highlighting complimentary Stratum reports, charts, and outside content. Leverage existing content in new ways to give broader insights into business performance. Drill to other reports or link to other resources from items in a dashboard. Learn More.  Stratum Power BI Connector – A bridge between Microsoft Power BI and your Stratum data. Stratum Power BI Connector provides Stratum Data Hub access to your Power BI Users while capitalizing on your existing Stratum reports and the hub's security model. Learn More.