

Use Aggregate to create a Custom Consolidation in Planning Analytics

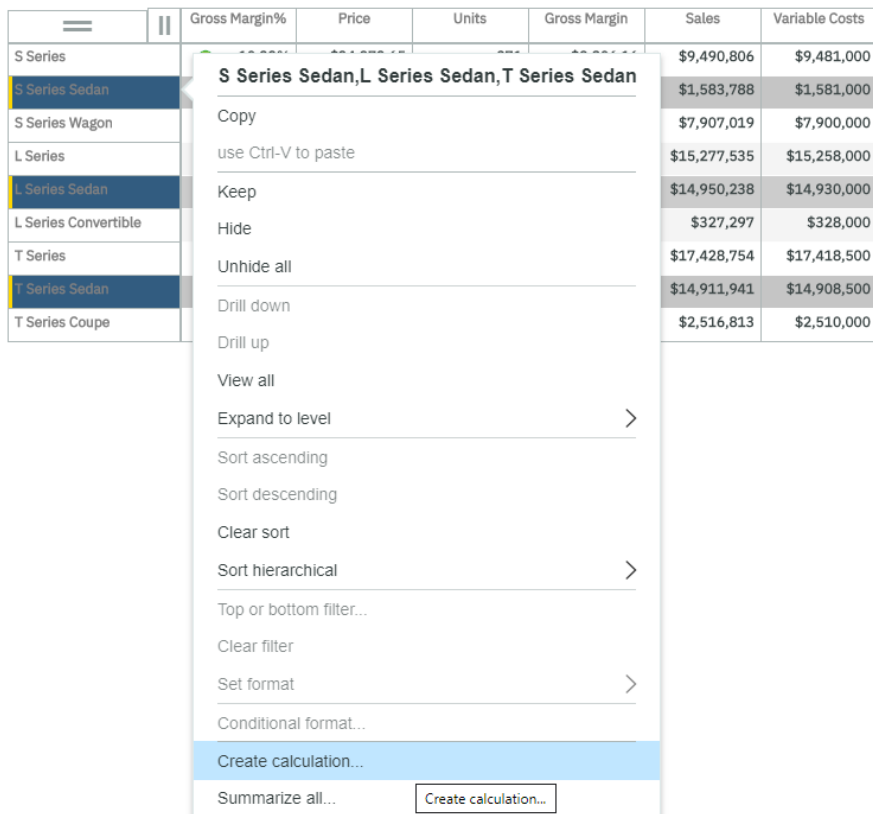
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If our TM1 and Planning Analytics modelers were all seeing and all knowing, we wouldn't ever have to create a custom consolidation. Every roll-up of accounts, product, regions and anything else we want to report on and plan for would always be there in the TM1 cube. Our model creators aren't perfect. That's why the calculation capability exists, so that you can create your own custom consolidations, and since Planning Analytics Workspace SC48 and PA 2.0.9 you can create calculations that respect the rule logic of the cube by selecting **Aggregate** as your roll-up method.

Steps to create a Custom Consolidation

Here's how it works. In this example, I'm showing key indicators for all our product lines, but I'm interested in seeing a summary for all sedans. I just control click the three sedan product lines and select **Create calculation**.



The screenshot shows a table with columns: Gross Margin%, Price, Units, Gross Margin, Sales, and Variable Costs. The rows are categorized by product line. A context menu is open over the 'S Series Sedan', 'L Series Sedan', and 'T Series Sedan' rows. The menu options include Copy, Paste, Keep, Hide, Unhide all, Drill down, Drill up, View all, Expand to level, Sort ascending, Sort descending, Clear sort, Sort hierarchical, Top or bottom filter..., Clear filter, Set format, Conditional format..., Create calculation..., and Summarize all... The 'Create calculation...' option is highlighted in blue.

	Gross Margin%	Price	Units	Gross Margin	Sales	Variable Costs
S Series					\$9,490,806	\$9,481,000
S Series Sedan					\$1,583,788	\$1,581,000
S Series Wagon					\$7,907,019	\$7,900,000
L Series					\$15,277,535	\$15,258,000
L Series Sedan					\$14,950,238	\$14,930,000
L Series Convertible					\$327,297	\$328,000
T Series					\$17,428,754	\$17,418,500
T Series Sedan					\$14,911,941	\$14,908,500
T Series Coupe					\$2,516,813	\$2,510,000

The new option here is the Aggregate option. Instead of doing a simple sum or average, the aggregate calculation respects the rule logic.

Key Models

	Gross Margin%	Price
S Series	10.33%	\$34,973.65
S Series Sedan	17.60%	\$37,379.76
S Series Wagon	8.88%	\$34,528.47
L Series	12.79%	\$21,540.19
L Series Sedan	13.54%	\$21,440.90
L Series Convertible	-21.47%	\$27,318.72
T Series	5.88%	\$50,372.12
T Series Sedan	2.31%	\$51,068.29
T Series Coupe	27.07%	\$46,607.65

Create - S Series Sedan,L Series Sedan,T S...

All Sedans

Look across the row values

- Average
- Minimum
- Maximum
- Median
- Sum
- Aggregate

Preview

Calculates the aggregate value of the members

OK Cancel

If we trace the cell to look at the **Gross Margin %** calculation we can see its **Gross Margin \ Sales * 100**, in other words, a percent calculation and we know we can't just average percent, so while Aggregate might add up all Sales or Costs, for Gross Margin % it will do the percent calculation at the consolidated level for All Sedans:

Trace Cell

Display unrounded values

Cell	Value	Source
Actual,Canada,S Series,Gross Margin%,Apr	0.10	['Gross Margin%']=['Gross Margin'] \ ['Sales'] * 100;
Gross Margin	9,806.16	Consolidation
Sales	9,490,806	Consolidation

The result is a custom consolidation for All Sedans that calculates correctly for all types of values. That All Sedans calculation can be saved with the view in the content store and it can be used in the exploration crosstab like any other member, so you can use it in the context, swap it to columns or even use it as the basis of another calculation.

Key Models

		Gross Margin%	Price	Units	Gross Margin	Sales	Variable Costs
S Series	●	10.33%	\$34,973.65	271	\$9,806.16	\$9,490,806	\$9,481,000
S Series Sedan	●	17.60%	\$37,379.76	42	\$2,787.60	\$1,583,788	\$1,581,000
S Series Wagon	◆	8.88%	\$34,528.47	229	\$7,018.56	\$7,907,019	\$7,900,000
L Series	●	12.79%	\$21,540.19	709	\$19,535.34	\$15,277,535	\$15,258,000
L Series Sedan	●	13.54%	\$21,440.90	697	\$20,238.03	\$14,950,238	\$14,930,000
L Series Convertible	■	-21.47%	\$27,318.72	12	\$(702.69)	\$327,297	\$328,000
T Series	◆	5.88%	\$50,372.12	346	\$10,254.34	\$17,428,754	\$17,418,500
T Series Sedan	◆	2.31%	\$51,068.29	292	\$3,441.24	\$14,911,941	\$14,908,500
All Sedans	◆	8.42%	\$30,481.33	1,031.65	\$26,466.87	\$31,445,967	\$31,419,500
T Series Coupe	●	27.07%	\$46,607.65	54	\$6,813.10	\$2,516,813	\$2,510,000