

PULSE DASHBOARD™

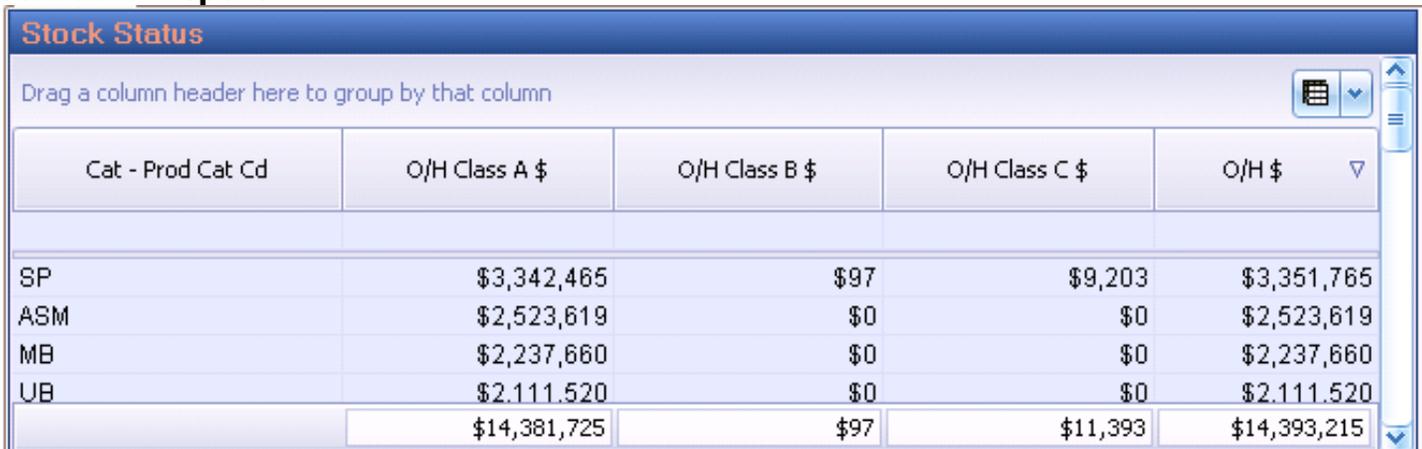
How to Use Custom Formulas in Pulse Dashboard

Pulse Dashboard has many fields available from the Macola database that can be used to create custom reports in Pulse Dashboard and many additional fields not available from Macola that have been calculated and added to the available fields by Leahy Consulting. Each report in Pulse Dashboard has been designed to have available the fields most often needed by companies to monitor their activity on that report. While most needed fields have been added, at times there may be a field that is not available on a report to augment the information already available on a report. If by adding available fields together or adding a set percentage to an existing field to create a new field, the report may give additional insight into the workings of the company that are unique to the operation.

Adding Custom Formula fields to a report is possible in the Column Chooser for the area of a report where a new column is needed. If a report with a Custom Formula field is shared with another User, the new field will "travel" with the report but will not be available on other reports for the other User. If a shared report with a Custom Formula field is copied to create a new report, the Custom Formula field will be available on the new report. A Custom Formula field is associated with the particular instance of the report and does not transfer to other reports. Custom Formulas, once added to a report, may also be used in additional formulas on the report if needed.

In the example below an Inventory Stock Status has been used to show the same report with default columns. A new Custom Formula will be used to create a new column that may be used on the report.

Standard Report:



Cat - Prod Cat Cd	O/H Class A \$	O/H Class B \$	O/H Class C \$	O/H \$
SP	\$3,342,465	\$97	\$9,203	\$3,351,765
ASM	\$2,523,619	\$0	\$0	\$2,523,619
MB	\$2,237,660	\$0	\$0	\$2,237,660
UB	\$2,111,520	\$0	\$0	\$2,111,520
	\$14,381,725	\$97	\$11,393	\$14,393,215

Column Chooser:

All
Keys
Dates
Numeric
\$
%

Table filter:

Show Group Panel
 Show Row Indicator
 Show Auto-filter Row
 Auto-size columns

Create Custom Formula
Edit Formula
Delete Formula

Add to Visible

Category	Full Caption	Column Caption
*Inventory	Aging Date	Inv Aging Dt
*Inventory	Frozen Extended Cost Amount	Frz Ext Cost \$
*Inventory	Last IM Activity Date	Last IM Activity Dt
*Inventory	Last Manufactured Date	Last Mfg Dt
*Inventory	Last Purchase Date	Last Purch Dt
*Inventory	Last Sale Date	Last Sale Dt
*Inventory	Last Usage Date	Last Usage Dt
*Inventory	On-Hand Amount	O/H \$
*Inventory	On-Hand Amount (based on Average Cost)	O/H \$ (Avg)
*Inventory	On-Hand Amount (based on Last Cost)	O/H \$ (Last)
*Inventory	On-Hand Amount (based on Standard Cost)	O/H \$ (Std)
*Inventory	On-Hand Amount (Class A)	O/H Class A \$
*Inventory	On-Hand Amount (Class B)	O/H Class B \$
*Inventory	On-Hand Amount (Class C)	O/H Class C \$
*Inventory	On-Hand Amount (Other Classes)	O/H Other Classes \$
*Inventory - Historical Summary	On-Hand Amount Current Year Period 01	On-Hand \$ - Cur Year Per 01
*Inventory - Historical Summary	On-Hand Amount Current Year Period 02	On-Hand \$ - Cur Year Per 02
*Inventory - Historical Summary	On-Hand Amount Current Year Period 03	On-Hand \$ - Cur Year Per 03
*Inventory - Historical Summary	On-Hand Amount Current Year Period 04	On-Hand \$ - Cur Year Per 04
*Inventory - Historical Summary	On-Hand Amount Current Year Period 05	On-Hand \$ - Cur Year Per 05
*Inventory - Historical Summary	On-Hand Amount Current Year Period 06	On-Hand \$ - Cur Year Per 06
*Inventory - Historical Summary	On-Hand Amount Current Year Period 07	On-Hand \$ - Cur Year Per 07
*Inventory - Historical Summary	On-Hand Amount Current Year Period 08	On-Hand \$ - Cur Year Per 08
*Inventory - Historical Summary	On-Hand Amount Current Year Period 09	On-Hand \$ - Cur Year Per 09
*Inventory - Historical Summary	On-Hand Amount Current Year Period 10	On-Hand \$ - Cur Year Per 10
*Inventory - Historical Summary	On-Hand Amount Current Year Period 11	On-Hand \$ - Cur Year Per 11
*Inventory - Historical Summary	On-Hand Amount Current Year Period 12	On-Hand \$ - Cur Year Per 12
*Inventory - Historical Summary	On-Hand Amount Prior Year Period 01	On-Hand \$ - Prior Year Per 01
*Inventory - Historical Summary	On-Hand Amount Prior Year Period 02	On-Hand \$ - Prior Year Per 02
*Inventory - Historical Summary	On-Hand Amount Prior Year Period 03	On-Hand \$ - Prior Year Per 03
*Inventory - Historical Summary	On-Hand Amount Prior Year Period 04	On-Hand \$ - Prior Year Per 04
*Inventory - Historical Summary	On-Hand Amount Prior Year Period 05	On-Hand \$ - Prior Year Per 05

OK
Cancel
Reset to Default
Save/Share...

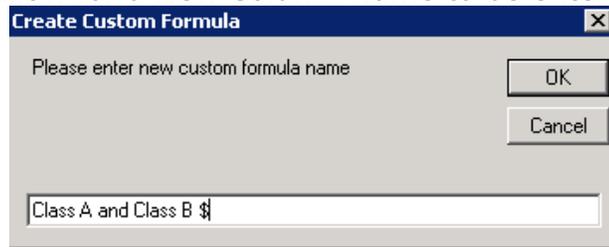
Visible Order

▲
▼
✕

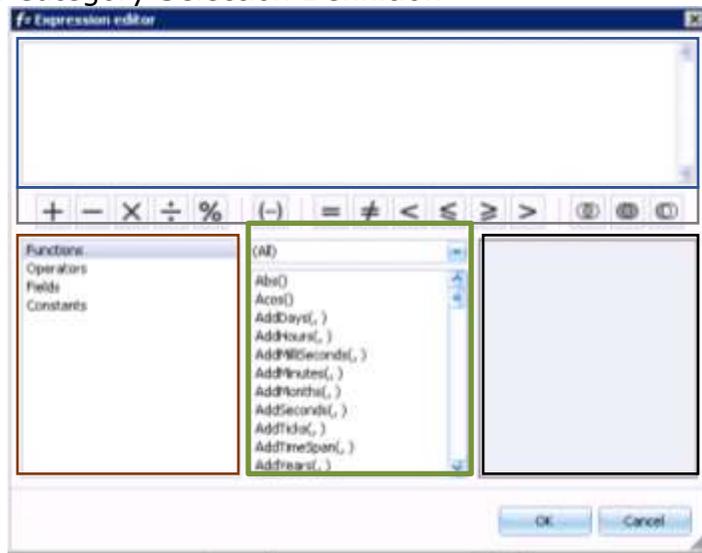
Column Caption	Format	Freeze Pane	Merge
> Cat - Prod Cat Cd		None	<input type="checkbox"/>
2 O/H Class A \$		None	<input type="checkbox"/>
3 O/H Class B \$		None	<input type="checkbox"/>
4 O/H Class C \$		None	<input type="checkbox"/>
5 O/H \$		None	<input type="checkbox"/>

Creating a new Custom Formula Column:

1. Select Create Custom Formula
 - a. This window will allow for a New Column Name to be entered

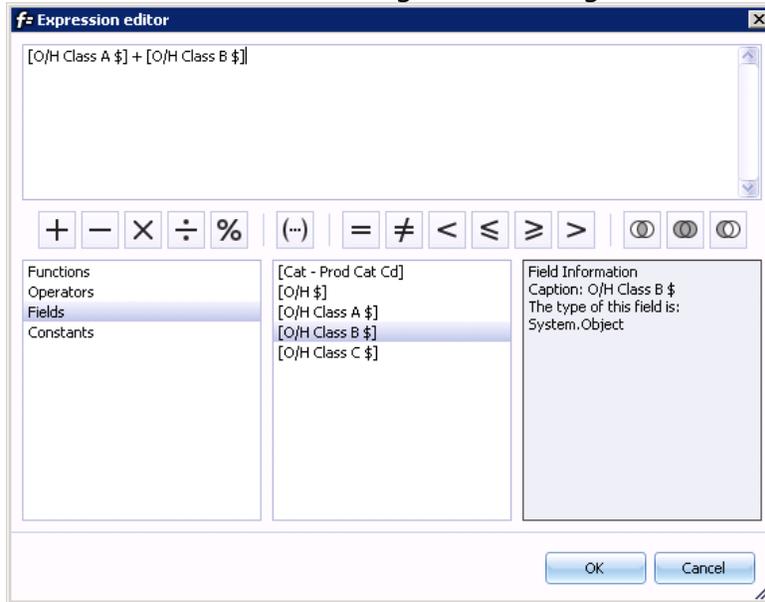


- b. The Expression Editor window will open and is segmented into
 - i. Expression area where the formula will be created
 - ii. Basic Operator Icons and Listing of All Operators
 - iii. Categories
 - iv. Detailed Category Selection Definition

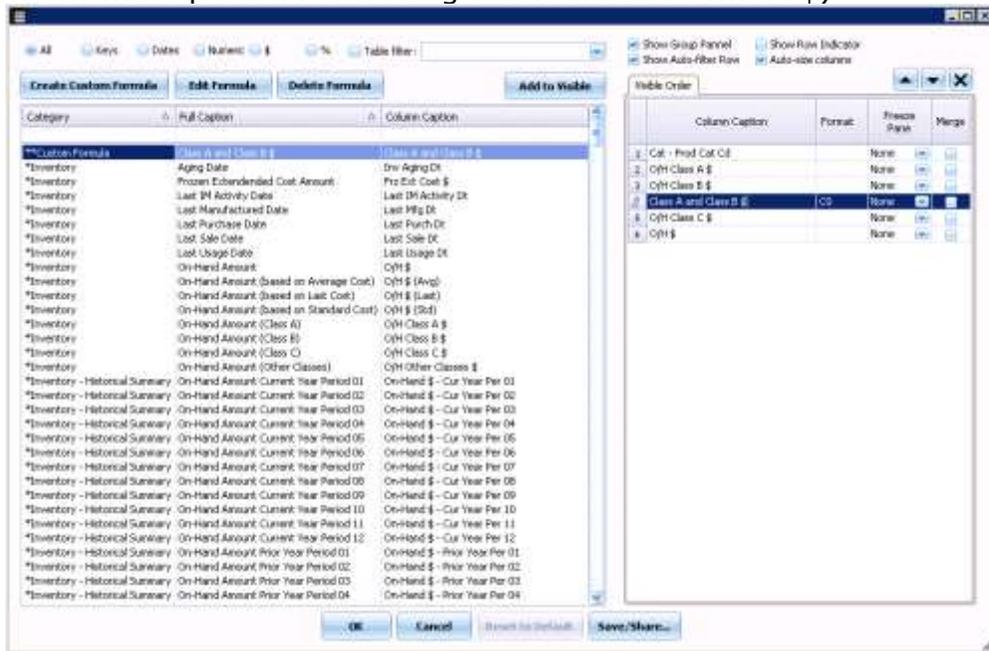


Advanced Mathematical Functions	Mathematical Operators	Fields Currently on the Report	Constants
(All) Abs() Acos() AddDays(,) AddHours(,) AddMilliSeconds(,) AddMinutes(,) AddMonths(,) AddSeconds(,) AddTicks(,) AddTimeSpan(,) AddYears(,)	^ == != < <= >= > In Like Between And Or Not	[Cat - Prod Cat Cd] [O/H \$] [O/H Class A \$] [O/H Class B \$] [O/H Class C \$]	True False ?

c. Example A - Create a Column Adding two existing Columns



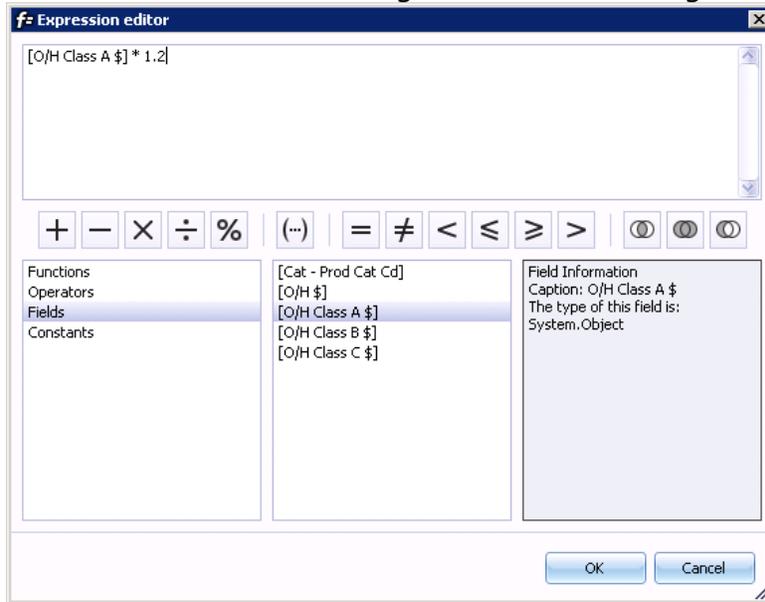
(Shown with optional Formatting and rounded to whole \$)



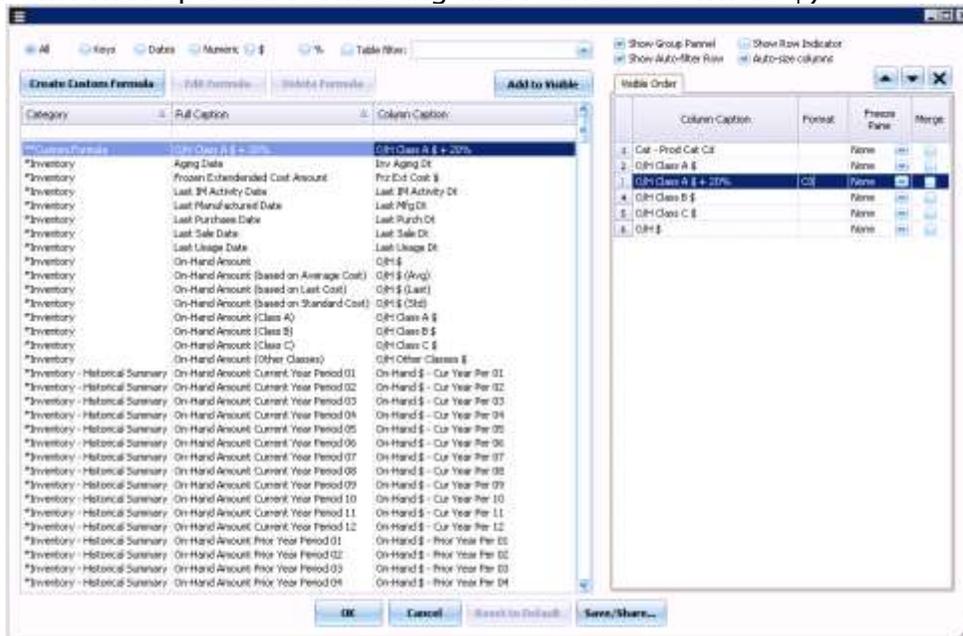
(Shown with optional Total added)

Stock Status					
Drag a column header here to group by that column					
Cat - Prod Cat Cd	O/H Class A \$	O/H Class B \$	Class A and Class B \$	O/H Class C \$	O/H \$
SP	\$3,342,465	\$97	\$3,342,563	\$9,203	\$3,351,765
ASM	\$2,523,619	\$0	\$2,523,619	\$0	\$2,523,619
MB	\$2,237,660	\$0	\$2,237,660	\$0	\$2,237,660
UB	\$2,111,520	\$0	\$2,111,520	\$0	\$2,111,520
	\$14,381,725	\$97	SUM=\$14,381,822	\$11,393	\$14,393,215

d. Example B - Create a Column Adding 20% to an existing Column



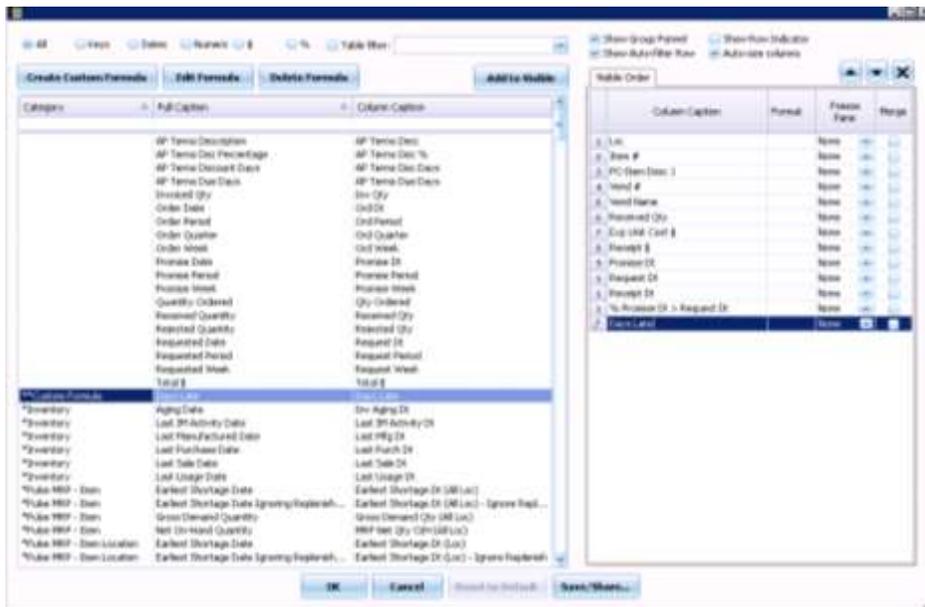
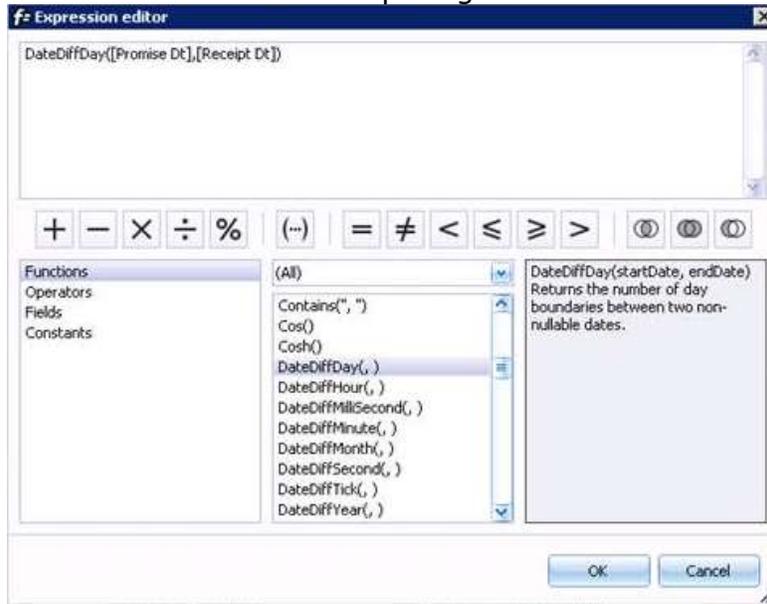
(Shown with optional Formatting and rounded to whole \$)



(Shown with optional Total added)

Stock Status					
Drag a column header here to group by that column					
Cat - Prod Cat Cd	O/H Class A \$	O/H Class A \$ + 20%	O/H Class B \$	O/H Class C \$	O/H \$
SP	\$3,342,465	\$4,010,958	\$97	\$9,203	\$3,351,765
ASM	\$2,523,619	\$3,028,343	\$0	\$0	\$2,523,619
MB	\$2,237,660	\$2,685,192	\$0	\$0	\$2,237,660
UB	\$2,111,520	\$2,533,824	\$0	\$0	\$2,111,520
	\$14,381,725	SUM=\$17,258,070	\$97	\$11,393	\$14,393,215

e. Example C - Create a Column Comparing two Date Columns



Vendor Performance

Receipt Date From 3/12/2013 To 3/12/2015

Show a column header here to group by that column

Loc	Item #	PO Item Desc 1	Vendor #	Vendor Name	Received Qty	Exp Unit Cost \$	Receipt \$	Promise Dt	Receipt Dt	Receipt Dt	% Promise Dt > Receipt Dt	Days Late
CO	COM3		00030000100	Computer Electronics Center	50		\$100			1/10/14	0 %	
DAR	COM50	Component 50	00030000100	Computer Electronics Center	100	\$2.000000	\$200	3/29/14	3/29/14	4/15/14	100 % -18	
DAR	COM50	Component 50	00030000100	Computer Electronics Center	200	\$2.000000	\$400	4/29/14	4/29/14	4/17/14	100 % -12	
DAR	COM50	Component 50	00030000100	Computer Electronics Center	80	\$2.000000	\$160	4/30/14	4/30/14		0 %	
DAR	COM50	Component 50	00030000100	Computer Electronics Center	80	\$2.000000	\$160	5/6/14	5/6/14		0 %	
DAR	COM50	Component 50	00030000100	Computer Electronics Center	300	\$2.000000	\$600	5/29/14	5/29/14	4/18/14	100 % -41	
TO1	DIP SWITCHES 68		00030000400	Mid West Deflector, International	4		\$21			6/17/14	0 %	
CO	PLATING FOR 50	Plating for 50	00030000100	Computer Electronics Center	10	\$1.000000	\$10			7/22/14	0 %	
					1,530		\$3,046					

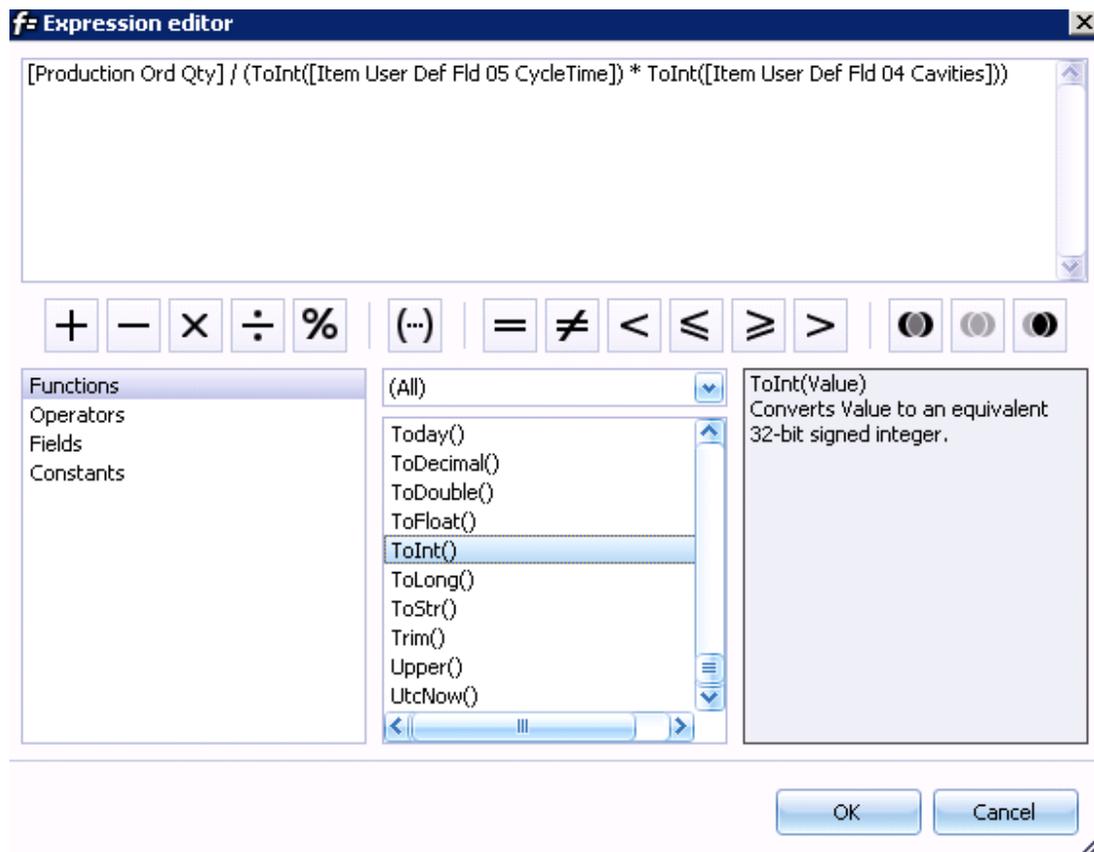
How To Use Custom Formulas to Convert Alphanumeric Values to Numeric

Many Macola tables have User Defined (or similar) fields in them that are stored in the database as alphanumeric character fields and not as numeric values that sometimes are used to store numbers. These "numeric" values sometimes are needed in calculations within Pulse Dashboard and alphanumeric values cannot be used in numeric formulas to add, subtract, multiply etc.

Creating a Custom Formula in the Pulse Dashboard Column Chooser it is possible to convert these alphanumeric "numbers" stored in the User Defined fields to numeric values in order to use them in arithmetic calculations.

In this example, (using the Reported Production Report) the Item User Defined Field 04 and Item User Defined Field 05 from the Item Master File are used to store "numbers" although these fields are defined as alphanumeric in the database. Numeric values are stored in these 30-character fields and will be used to multiply the two values then divide another value by the product of the User Defined 4 and 5 fields.

1. In the Column Chooser add the Item User Def Fld 04 and Item User Def Fld 05 to the report.
2. Create a Custom Formula and name it Std/Hrs Order.
3. Add the formula shown below where the Production Order Qty is divided by the product of UDF4 x UDF5 after they were converted to Integers.



4. Add the new Column to the report.
5. To show the new value as a 4-place decimal on the report use the Format setting in the Column Chooser to show the value as (N)umeric followed by the number of decimal places (4) – N4 in this case.

All Keys Dates Numeric \$ % Table filter:

Show Group Panel Show Row Indicator
 Show Auto-filter Row Auto-size columns

Create Custom Formula Edit Formula Delete Formula Add to Visible

Category	Full Caption	Column Caption
	Complete Flag	Complete Fg
	Extended Cost \$	Cost \$
	Original Count	Org Count
	Original Item Number	Org Item #
	Original Order Number	Org Ord #
	PP Unit Cost \$	PP Unit Cost \$
	Production Processing Customer Name	POP Cust Name
**Custom Formula	Std Hrs / Order	Std Hrs / Order
*Inventory	Aging Date	Inv Aging Dt
*Inventory	Last IM Activity Date	Last IM Activity Dt
*Inventory	Last Manufactured Date	Last Mfg Dt
*Inventory	Last Purchase Date	Last Purch Dt
*Inventory	Last Sale Date	Last Sale Dt
*Inventory	Last Usage Date	Last Usage Dt
*Pulse MRP - Item	Earliest Shortage Date	Earliest Shortage Dt (All Loc)
*Pulse MRP - Item	Earliest Shortage Date Ignoring Denalich	Earliest Shortage Dt (All Loc) - Ignore Den

Visible Order	Column Caption	Format	Freeze Pane	Merge
1	Trx Dt		None	
2	POP Ord Type		None	
3	POP Ord #		None	
4	Item #		None	
5	Item Desc 1		None	
6	Loc		None	
7	Complete Fg		None	
8	Production Ord Qty		None	
9	Production Reported Qty		None	
10	Production Trx Reported Qty		None	
11	Item User Def Fld 04 Cavities		None	
12	Item User Def Fld 05 CycleTime		None	
13	Std Hrs / Order	N4	None	

Finished Report

Reported Production

Drag a column header here to group by that column

Trx Dt	POP Ord Type	POP Ord #	Item #	Item Desc 1	Loc	Complete Fg	Production Ord Qty	Production Reported Qty	Production Trx Reported Qty	Item User Def Fld 04 Cavities	Item User Def Fld 05 CycleTime	Std Hrs / Order
9/15/15	P	00000030	POP	Parent Item	CO		10	7.00	1.00	6	3600	0.0005
7/15/15	P	00000030	POP	Parent Item	CO		10	7.00	1.00	6	3600	0.0005
11/15/15	P	00000030	POP	Parent Item	CO		10	7.00	1.00	6	3600	0.0005
12/15/15	P	00000030	POP	Parent Item	CO		10	7.00	1.00	6	3600	0.0005
1/15/16	P	00000030	POP	Parent Item	CO		10	7.00	1.00	6	3600	0.0005
									13.00			

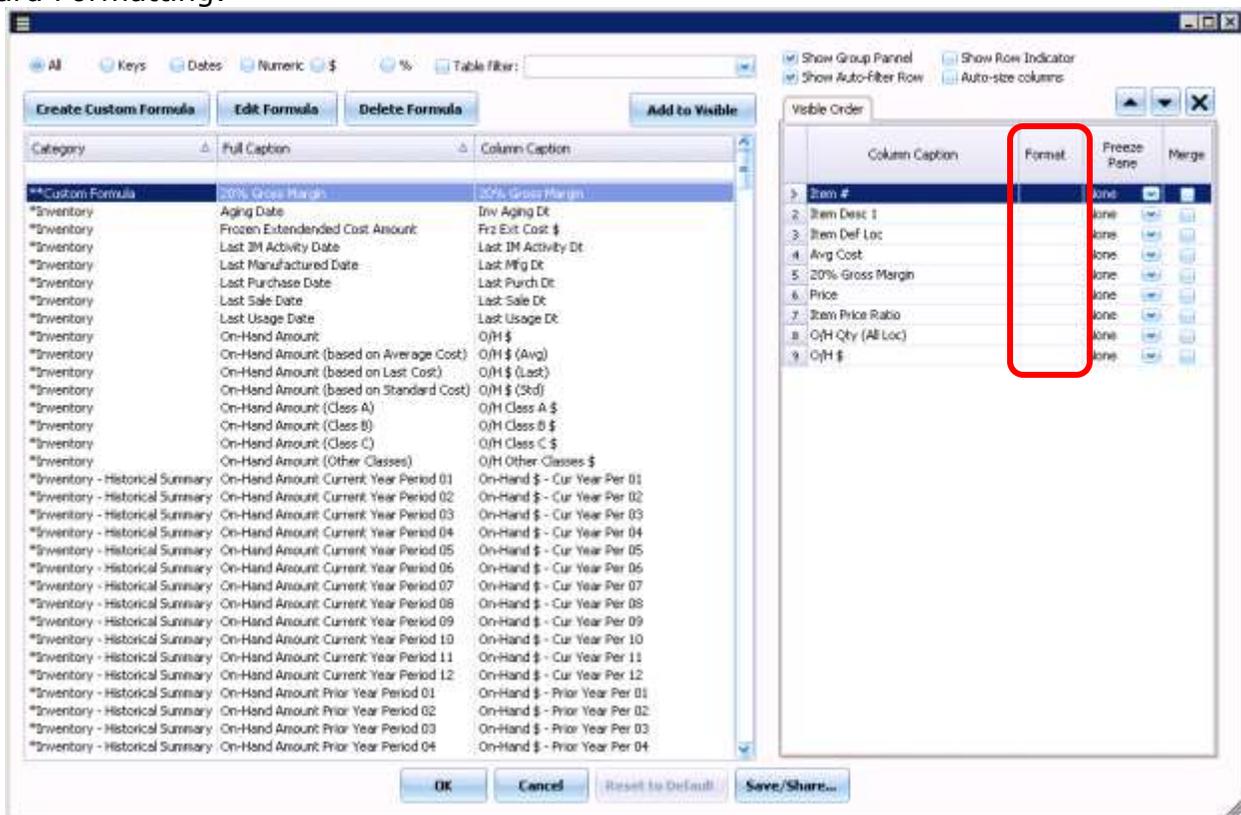
How to Use the Format Option in Pulse Dashboard

Numeric columns in Pulse Dashboard can be formatted to include the number of decimal places shown, percent signs and currency values. This can be for existing fields listed in the Column Chooser or new fields created by defined using a custom formula. This can be setup by any User in Pulse Dashboard.

In the Column Chooser any numeric or currency value field may be displayed as a currency value, a numeric value or as a percentage. Each of these may also be formatted to use the maximum decimal places as defined by Macola in the database.

In the examples below an Inventory Stock Status has been used to show the same report with standard formatting and with custom formatting. Values entered in the Format column in the Column Chooser control the display of the values on the report for that column.

Standard Formatting:

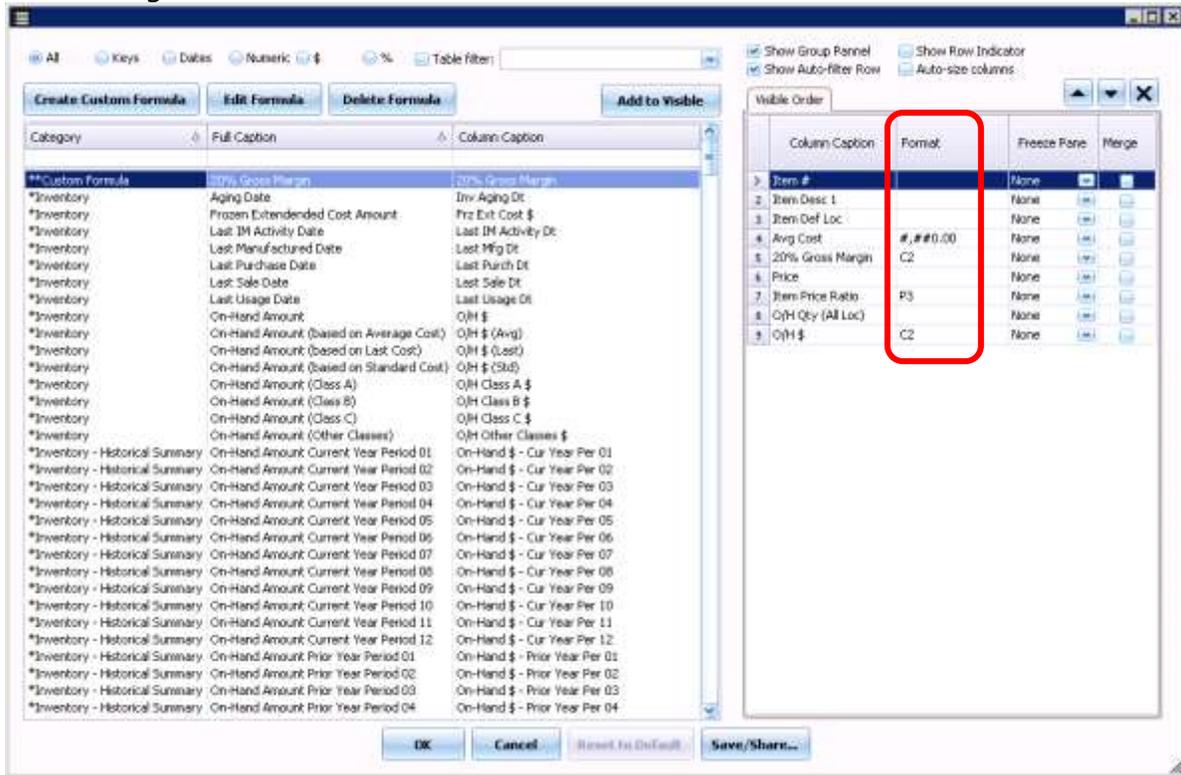


Stock Status w/o Formatting

Drag a column header here to group by that column

Item #	Item Desc 1	Item Def	Avg Cost	20% Gross Margin	Price	Item Price Ratio	O/H Qty (All Loc)	O/H \$
PRINTER	HP IV Laser Jet	CO	\$500.123456	600.1481472	\$995.00	2,400.00 %	1,000	\$500,123
PRINTERDM	Epson Dot Matrix Printer	CO	\$500.000000	600	\$1,000.00	100.00 %	1,000	\$500,000
MULTIPLEXOR	Thomas Conrad Multiplexor...	LA	\$500.000000	600	\$1,000.00	100.00 %	1,000	\$500,000
BRAVO	Acer Bravo P90	CO	\$500.000000	600	\$1,000.00	100.00 %	989	\$494,500
MS-OFFICE-PROF	Microsoft Office Professional	CO	\$145.000000	174	\$349.00	100.00 %	1,000	\$145,000
CPU	Mother Board FOR Parent ...	CO	\$0.000000	0	\$344.00	100.00 %	361	\$87,500
								\$3,142,300

Custom Formatting:



Stock Status w/Formatting

Drag a column header here to group by that column

Item #	Item Desc 1	Item Def	Avg Cost	20% Gross Margin	Price	Item Price Ratio	O/H Qty (All Loc)	O/H \$
PRINTER	HP IV Laser Jet	CO	500.12	\$600.15	\$995.00	2,400.000 %	1,000	\$500,123.46
PRINTERDM	Epson Dot Matrix Printer	CO	500.00	\$600.00	\$1,000.00	100.000 %	1,000	\$500,000.00
MULTIPLICEXOR	Thomas Conrad Multiplexor...	LA	500.00	\$600.00	\$1,000.00	100.000 %	1,000	\$500,000.00
BRAVO	Acer Bravo P90	CO	500.00	\$600.00	\$1,000.00	100.000 %	989	\$494,500.00
MS-OFFICE-PROF	Microsoft Office Professional	CO	145.00	\$174.00	\$349.00	100.000 %	1,000	\$145,000.00
								\$3,142,300

Accepted Example Values for use in the Format Column of the Column Chooser:

Format Type	Decimal Precision	Format Entry Value	Example Data Value	Example Displayed Value
Currency	0	C0	512.1	\$512
	1	C1	512.1	\$512.1
	2	C2	512.1	\$512.10
Numeric	0	N0 (or #,##0)	512.1	512
	1	N1 (or #,##0.0)	512.1	512.1
	2	N2 (or #,##0.00)	512.1	512.10
Percentage	0	P0	0.25	25%
	1	P1	0.25	25.0%
	2	P2	0.25	25.00%

Please call our PULSE support desk us with questions and comments at
(513) 723-8095 or Support@PULSEDashboard.com

We encourage phone calls with suggestions for making our software function better for your organization. We also offer custom modifications, and if your suggestion is applicable to other users, it may be made at no charge.

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Developer of Pulse Dashboard software