



PULSE Dashboard & Reporting Software Advanced Techniques User Training Material

(Updated 10-19)

The Next Step with PULSE Dashboard

PULSE Dashboard is a tool that allows you to create custom reports from Macola data without the need for a programmer or programming knowledge. We give you standard reports to begin with and allow you to make changes as needed to create new custom reports. Now that you have worked with the basic functionality, using additional functionality will allow you to refine your reports and expand your use of PULSE.

Obtaining technical support

- You have unlimited phone/e-mail support and training with PULSE Dashboard.
- Phone us (513)723-8095 or e-mail us at Support@PULSEDashboard.com

At this training class, we will show you how to use or develop:

- Custom tabs and filter panel
- 'Clean sheet' reports. That is, starting with a blank screen.
- PULSE Column Chooser
- Custom formula data fields
- Filter Panel
- Publish reports to other Users
- NEW – Embed external reports in the Inventory Item Detail View screen
- Designer module Query Analyzer for creating custom reports
- Advanced Report Designer - Dynamically link two screens together. That is, instead of drilling into another screen, you can show the drill-down results in a new side-by-side screen.
- Using the Customer Collection Notes feature
- Right-clicking on an item, customer or vendor number to create a quick order
- Right-clicking on a POP production order to change the due date or report production
- Capabilities of the PULSE SDK software
- Printing the PULSE Archive report to pinpoint old and no longer needed data

Some sections of this training material will be demonstrated during the training class and some sections are for your future reference. Please feel free to contact our support desk with any questions at any time.

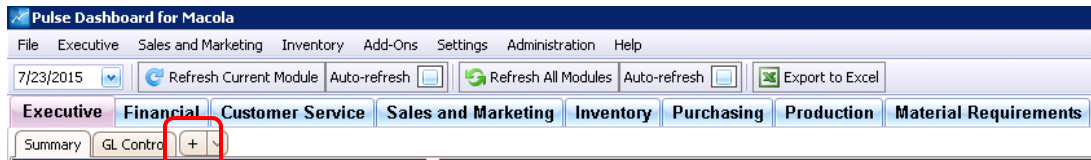
Table of Contents

Creating Custom Tabs and Filer Panel	3
Adding New Reports	3
Changing Reports.....	4
How to Better Use the Column Chooser	5
Creating Custom Formulas	9
Publishing Tabs	13
Designer Module – Advanced Report Designer	15
Designer Module – Query Analyzer	18
Embedding Other Reports into the Inventory Item Detail View.....	20
PULSE Archive Report	22
Importing, exporting and restoring your setting	23
Setting up the MRP Shortages Screens	25
How do I Set-up and Use the Customer Collection Notes Feature?	26
Right-clicking on an item, customer or vendor number to Create and Order	29
Right-clicking on a POP Production Order Number to Change the Due Date, Change the Captured Bill, Report Scrap & Report Production	30

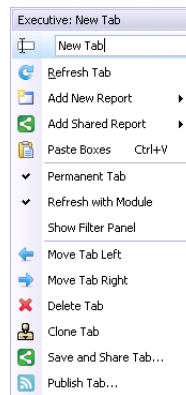
Creating Custom Tabs & Filter Panel

Custom Tabs may be added within each module with reports added which allows the User the ability to group standard or custom reports in a way that works best for them. Tabs can then be Shared with or Published to other Users as needed.

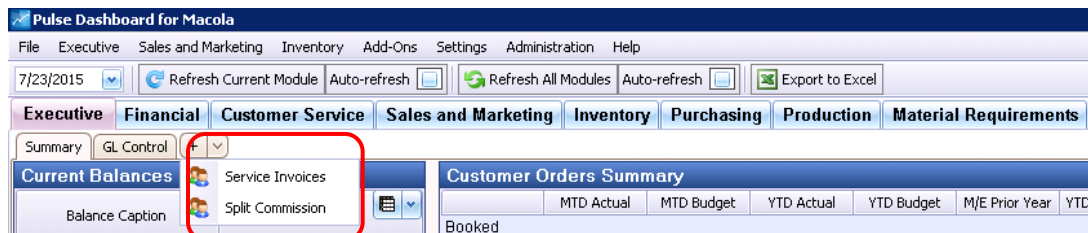
New Tabs may be added by using the "+" icon near the end of the row of existing tabs in a module. The New Tab will have no reports on it and the User can copy existing reports or add new reports as needed.



By using the right mouse button in an area outside of a report on the tab, the User can rename or otherwise control the actions of the new tab.



If another User has shared a Tab from their PULSE Dashboard screens it may be added by using the "V" icon to select the Tab(s) that has been shared to the User (two example tabs are shown).



Adding New Reports

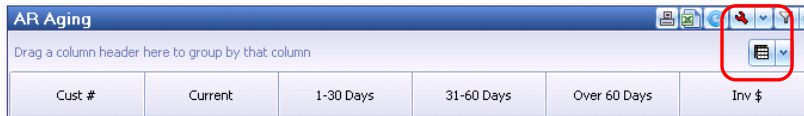
A new report may be added to a Tab in multiple ways:

- Use the right mouse button on the Tab and select Add New Report (see above)
- Use the right mouse button on the Tab and select Add Shared Report (see above)
- Copy an existing report from another any Tab or Module in Dashboard

Changing Reports

In addition to making changes to reports using the Column Chooser, several reports in the Executive Module have the ability to display the report in Summary or Detail Presentation Mode. This is controlled in the report Setup (red wrench icon). This will change the format of the report to allow the detail normally found on the drill-down screen and also allow access to the Column Chooser on the main screen of the report.

The Column Chooser is available on many reports or sub-reports.



Once the User has become familiar with the layout and the columns that are available on the different reports in Pulse Dashboard, using a given report to create something totally different is possible by deleting all of the columns from one of the standard reports and building a new custom report with Columns that are available on the report. For example a report that is standard that may have Customer information on it but a report is needed for Item information. Using the Customer-based report and deleting all of the Customer information columns to start with a "clean slate" and replacing them with Item columns will create the Item-based report needed quickly.

Several reports recommended for 'clean slate' development:

- Executive - G/L Control
- Customer Service - Customer Orders Dynamic View
- Sales and Marketing - Sales Analysis
- Inventory - Inventory Status
- Purchasing - Purchase Order Receipts
- Production - Production Orders
- Designer - Query Analyzer

How to Better Use the Column Chooser



The Column Chooser will allow the User to change the columns that appear on the report based on a list of columns associated with that report. Columns selected for the report may be added, deleted or re-arranged on the report. Custom Formula columns may also be defined and added to the report. Depending on the report this icon may be available on the main screen of the report or on the drill-down screen.

The screenshot shows the Column Chooser interface. At the top, there are radio buttons for 'All', 'Keys', 'Dates', 'Numeric', '\$', and '%', along with a 'Table filter:' dropdown. Below these are buttons for 'Create Custom Formula', 'Edit Formula', 'Delete Formula', and 'Add to Visible'. The main area is a table with three columns: 'Category', 'Full Caption', and 'Column Caption'. The table lists various data columns, including 'Batch ID', 'Document Due Date', 'Document Number', 'Invoice Quarter', 'Invoice Week', 'Invoice Year', 'Invoiced \$', 'Order Date', 'Order Fiscal Period', 'Order Period', 'Order Quarter', 'Order Week', 'Order Year', 'Total \$', 'Transaction Posted Flag', and several 'AR Aging' periods. The right side of the interface shows the 'Visible Order' of selected columns, including 'Cust #', 'AR Period 1', 'AR Period 2', 'AR Period 3', 'AR Period 4', and 'Inv \$'. Each row in the 'Visible Order' table has columns for 'Column Caption', 'Format', 'Freeze Pane', and 'Merge'. At the bottom, there are buttons for 'OK', 'Cancel', 'Reset to Default', and 'Save/Share...'. There are also checkboxes for 'Show Group Pannel', 'Show Auto-filter Row', 'Show Row Indicator', and 'Auto-size columns'.

The Column Chooser screen is divided into two main sections. On the left side of the screen is a list of all of the columns available to appear on the report. The three columns that make up this section of the Column Chooser begin with the table in Macola or the calculated table from PULSE Dashboard that the column is from. The second column is the full name of the data column that may be selected to appear on the report and the third column is the abbreviated name of the data column. By highlighting the column to be added to the report and either selecting the 'Add To' Visible button at the top or double-click on the data column name the data column will be added to the report.

The "blank line" below Category/Full Caption/Column Caption header line allows the User to type in the value of the Category/Full Caption/Column Caption as a search mechanism when adding columns.

The right side of the Column Chooser screen lists the data columns that have been selected for the report. The columns may be reorganized by highlighting the field to be moved up or down in the display order by using the up/down arrow buttons above the selected fields. Highlighting the data column and selecting the "X" button will remove the data column from the report.

When the User is finished making data column selections for the report, select the "OK" button to save the layout and return to the report screen.

Advanced Functionality

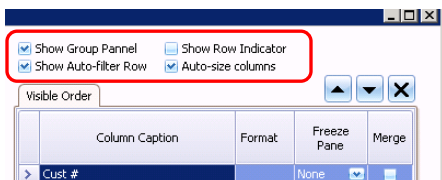
At the top of the Column Chooser screen to the right are four Checkboxes:

Show Group Panel

Show Row Indicator

Show Auto-Filter Row

Auto-Size Columns



These refer to how the main report screen appears.

- Show Group Panel controls whether the Group Panel appears on the screen and will allow the User to Group the report based on any of the Columns in that report.
- Show Row Indicator will allow each row on the report to be sequentially numbered. For example a "Top 10 List" of Items, Vendors or Customers.
- Show Auto-Filter Row allows the User to display or hide the "blank line" on a report where a value is typed in to define a filter based on the value.
- Auto-size Columns when **not** selected will keep the column widths that the User selects when the report is refreshed. When selected the column widths will return to the default with when the report is refreshed.

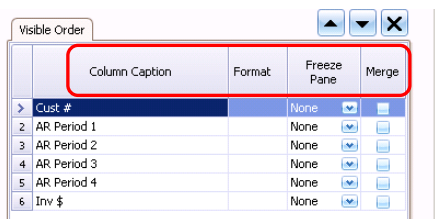
Additional Column Chooser Settings on the Visible Order (right-side of the screen) include:

Column Caption

Format

Freeze Pane

Merge



By changing the values of these settings the main screen of the report may have new display characteristics.

- The Column Caption value may be changed by simply selecting the current value displayed for the column name and making the change to a value that has meaning for your company. This may be done if the User has Administrator rights in Pulse Dashboard and will rename the column dynamically on all reports for all Users of Pulse Dashboard. This is especially helpful if the company has used a User Defined Field in Macola and this value would be helpful on Pulse Dashboard reports.
- The Format value appears as a blank for each column entered and a standard value is defined as part of Pulse Dashboard. However there are situations where that value may display more or fewer decimal places than needed. 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.

Changing column names

Note that you can also change the column name of any data field. This is especially important when you are using the Macola User-Defined data fields or the Notes fields.

You must be a PULSE administrator to make these changes. Note that these changes will affect all PULSE users.

To make the change, on the right panel, in the 'Column Caption' column, just highlight the field name and modify it.

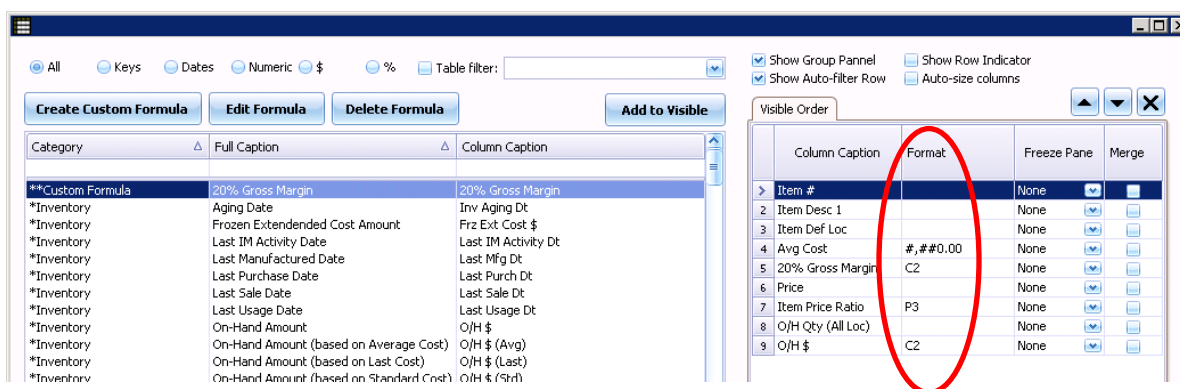
Standard Formatting

The Column Chooser interface shows a list of fields with their full and column captions. The '20% Gross Margin' column is highlighted in the Column Chooser. The Stock Status report shows the resulting data table with standard formatting. A red circle highlights the '20% Gross Margin' column in both the Column Chooser and the report.

Category	Full Caption	Column Caption
**Custom Formula	20% Gross Margin	20% Gross Margin
*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)

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
MULTIPLEXOR	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								

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%

- Freeze Pane is similar to the feature in Excel where the User may select a column on the screen and "freeze" that column from moving when the report scrolls Left or Right. The default value of "None" means there will be no freeze when scrolling. Other values are Left and Right.
- Merge allows the User to "cleanup" the display of the report by removing repetitive values in a column until that value changes.

Not Merged Item# values:

Customer Orders Summary				
Drag a column header here to group by that column				
OE Ord #	Status	Item #	Δ	Ord Period
136	P	BCABLE		2014-06
138	P	BCABLE		2014-06
141	P	BCABLE		2014-09
146	P	BCABLE		2015-03
155	1	BCABLE		2015-05
168	P	BCABLE		2016-01
179	1	BCABLE		2016-04
146	P	BIKEAS		2015-03
163	1	BIKEAS		2015-08
158	1	BIKEOF		2015-08

Merged Item# values:

Customer Orders Summary				
Drag a column header here to group by that column				
OE Ord #	Status	Item #	Δ	Ord Period
136	P	BCABLE		2014-06
138	P			2014-06
141	P			2014-09
146	P			2015-03
155	1			2015-05
168	P			2016-01
179	1			2016-04
146	P	BIKEAS		2015-03
163	1			2015-08
158	1	BIKEOF		2015-08

Creating Custom Formulas

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 creating 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 that is associated with the area of a report that it is needed on. 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:

Drag a column header here to group by that column				
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:

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 \$

Creating a new Custom Formula Column:

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

Create Custom Formula

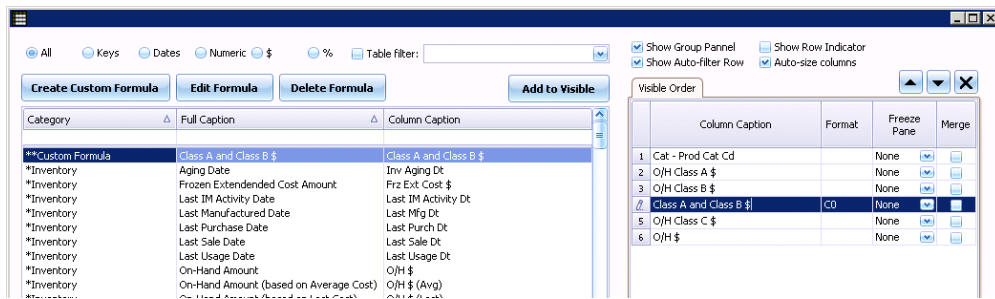
Please enter new custom formula name

OK

Cancel

Class A and Class B \$

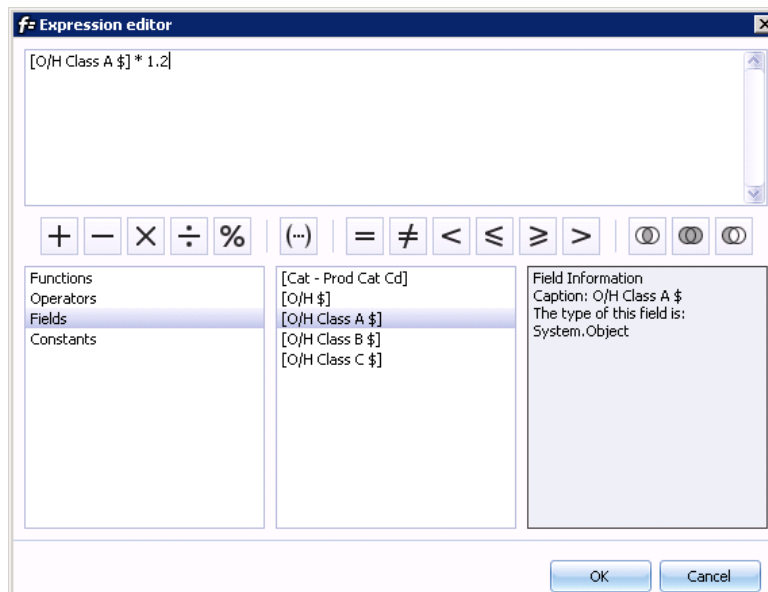
- b. The Expression Editor window will open and is segmented into
 - i. Expression area where the formula will be created
 - ii. Basic Operator Icons and Listing of All Operators
 - iii. Categories
 - iv. Detailed Category Selection Definition



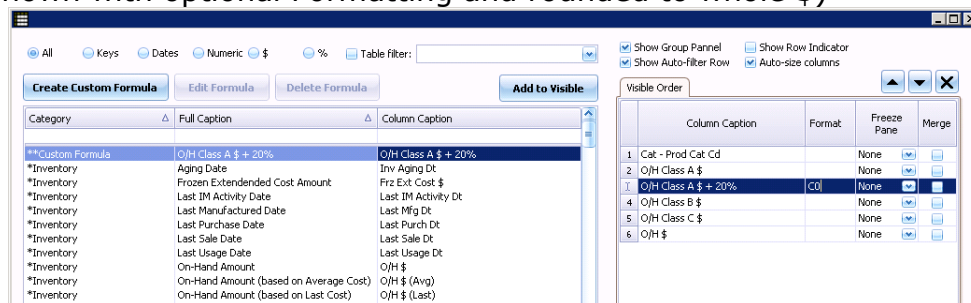
(Shown with optional Total added)

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

Other Examples:

Custom Formulas that SUM existing values that may display 0/blank/Null values in one of the columns can be addressed by changing the formula expression to properly handle blank (null) values. You will need to use the IsNull ([field name], 0) function for fields that can be blank.

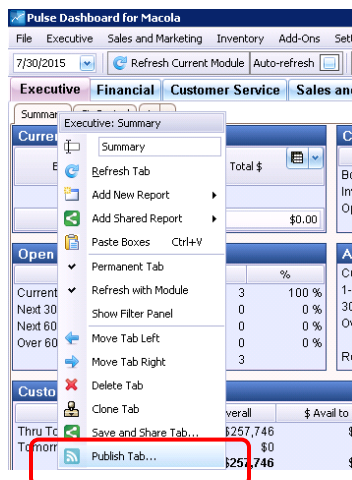
Original formula example: [Inv \$ - Period 01] + [Inv \$ - Period 02]

Modified formula example: IsNull ([Inv \$ - Period 01], 0) + IsNull ([Inv \$ - Period 02], 0)

Publishing Tabs

Different from Save and Share, Publish is a feature that may be performed at the Tab level. To Publish a Tab is to allow the User to add an entire Tab of reports (one or more reports) to another User's screen. The other User does not have to add the tab to their screen. After it has been published to them, the recipient will see the new Tab when they log into PULSE Dashboard the next time. The Publish function is setup for each User if Publisher rights are needed by your PULSE Dashboard Administrator.

Publish Tab may be found as an option on all tabs in PULSE Dashboard by doing a right-click on a tab header. It is a way to share your work with others easily.



Publish Reports vs Save & Share

The Publish feature of Pulse Dashboard is only available to the User if they are defined as a Publisher in Pulse User Control. This application is designed for those Users to easily “push” complete tabs of reports to other Users.

If the user does not have Publisher rights in Pulse Dashboard, there is still a method of getting a complete tab of customized reports to other Users. This is by using the Save and Share feature in Pulse Dashboard. After the tab has been created and ready to share with other Users, right-click on the Tab header and select Save and Share from the menu. There you can select the Users with whom you would like to have access to the tab. You may also select whether the tab may be overwritten if that User should already have an existing tab with the same name. This will all for Updates to the tab. Once all Users have been select to receive the tab, select OK and the tab will be made available to those Users. This will not automatically add the tab to those Users screens but they can easily add the new tab by clicking on the “v” tab at the end of the existing row of tabs and a list of all Shared tabs will appear. Select the new tab and it is added to that Users’ screen.

Save and Share is slightly different than the Publish feature but the end result is the same.

Designer Module - Advanced Report Designer

Basics

The Advanced Report Designer in the Pulse Dashboard Designer Module allows the user to use two related Dashboard reports that have been combined as one. This is helpful in situations where some information needed is available on one report and other needed information is shown on a different report. By using the Advanced Report Designer both of these reports may be combined on one report.

The two reports may be displayed either horizontally or vertically as this is user selectable in the Setup (red wrench) of the Advanced Designer Report.

Advanced Report Designer - Top Items

Item #	Item Desc 1	Ord \$	Inv \$	Credit
PAR	Parent Item	\$433,755.00	\$433,854.00	\$0.00
MONITOR S1	Monitor - S1	\$13,554.00	\$2,710.80	\$0.00
486-66	Personal Computer	\$500.00	\$500.00	\$0.00
XCABLE4	Cable - Cross Over 4 Male	\$93.04	\$93.04	\$0.00

XCABLE4
Cable - Cross Over 4 Male - Shop Floor - Scheduled

All Locations Totals
On-hand: 99.0000
On Order: 0.0000
Allocated: 1.0000
MRP On-Hold: 0.0000
Net Qty: 98.0000

Item Details View (Item # - XCABLE4 AND Item Desc 1 - Cable - Cross Over 4 Male)

Item #: XCABLE4 Location: (ALL) View Transactions Transaction Date From: 1/1/2013 To: 7/5/2013

Summary

Qty O/H	Qty Alloc	Qty On-Order	Qty Avail	Mths O/H	Last Sale	Last Purch	Last Usage	YTD Usage	12 Mth Usq	Avg 12 Mth Usq	12 Mth Inv Turn
99	1	0	98	297.00	03/29/13		03/29/13	3	4	0.3	0.10

Historical Summary

	07/13	06/13	05/13	04/13	03/13	02/13	01/13	12/12	11/12	10/12	09/12	08/12
Qty O/H	97	97	97	97	19	19	19	19	19	19	20	20
Receipts												
Usage				3						1		
Transfer In												
Transfer Out												
Turns	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0	0

Refreshing optimized table (OPT_CustomerOpenOrders)... complete.

Srv: XEONSERVER DB: DATA_004 User: LEAHYCONSULTING\MGEUY

To create the combined report Add a New Report selecting the Advanced Report Designer from the Designer Module. Then Copy and Paste the first report from PULSE Dashboard into the upper or left portion of the Advanced Designer Report. Select a second related report and Copy and Paste it into the lower or right portion of the Advanced Designer Report.

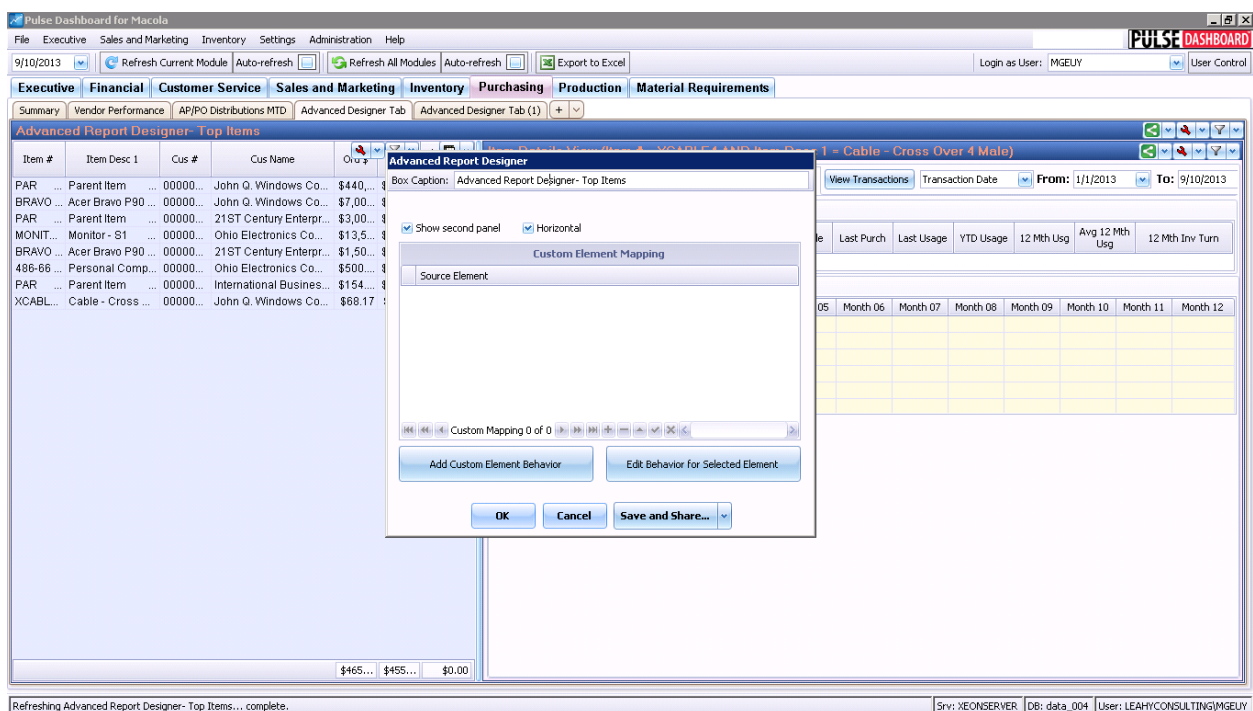
Setup

The Setup screen (red wrench icon) will allow the user to control the information displayed in the secondary report (bottom or right) based on information in the primary report (top or left) by passing parameters from the primary to the secondary report.

The Box Caption may be changed to be more reflective of the information on the report to what the user decides by changing the Box Caption field.

The Show second panel checkbox, if unselected, will disable the display of the secondary portion (bottom or right) of the report.

The Horizontal checkbox, when selected, will change the display of the two reports from top and bottom reports to left and right reports.



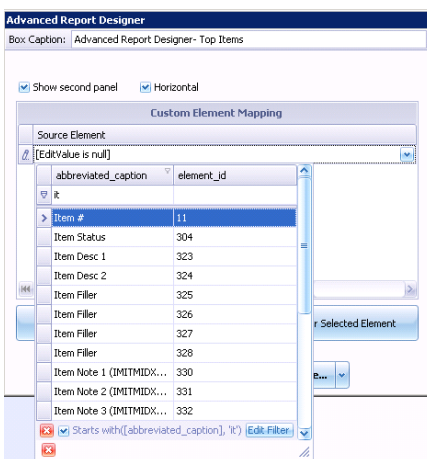
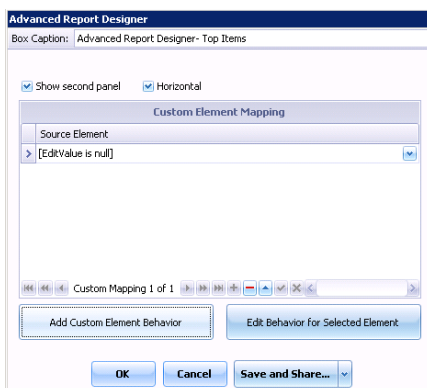
Advanced Setup

In addition to the Basic Setup described above, an additional more complex setup is available and may be added if needed to further define the relationship between the primary and secondary reports used.

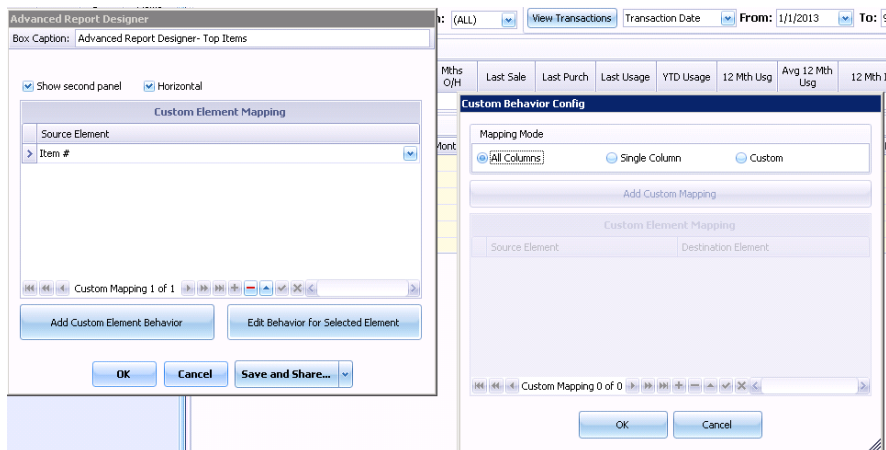
Custom Elements similar to filters may be added to the definition of information on the report where over 2100 predefined elements (fields) may be selected to base the information on the screen. This capability can be very complex and confusing especially for the novice user and may exclude valid information from the report if too much filtering is applied.

To Add a Custom Element, select the Add Custom Element Behavior button to add a line in the Custom Element Mapping box. Multiple Custom Elements may be added if needed. This controls the combination of values selected for filtering from the primary report used in the Advanced Designer Report.

Once the Element is added, use the down arrow at the end of the new line to select the element (field) to filter on.



Once the Element is selected, use the Edit Behavior of Selected Element button to the filter even further the behavior of the filter using All Columns, a Single Column to filter on or add an additional level of filtering by selecting the Custom button to select an additional field for filtering.



Designer Module - Query Analyzer

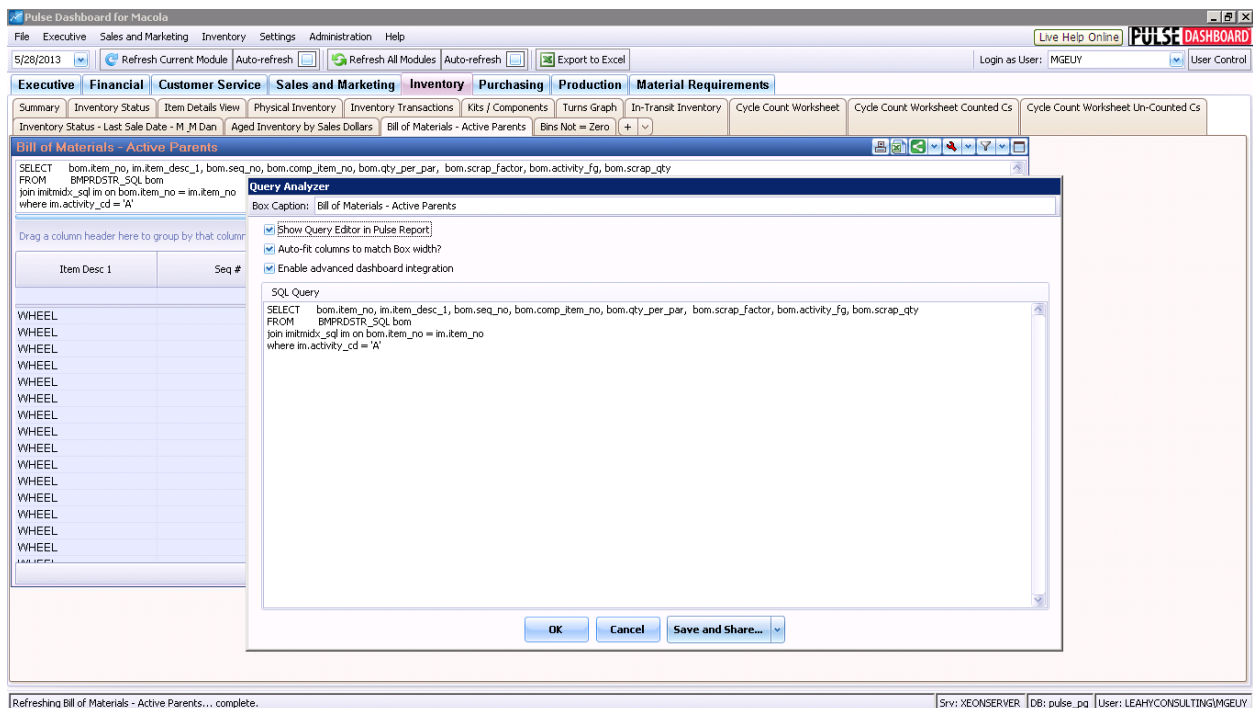
Using the Query Analyzer box available in the Pulse Dashboard Designer Module to create custom reports can be approached in two ways. The Report may be created by adding a SQL Script directly into the Query Analyzer box or you may use the Query Analyzer box to execute a SQL Stored Procedure. Either way is acceptable and should allow the user to create custom reports for display in Pulse Dashboard where they may be printed, exported to Excel, shared, filtered, grouped or sorted just as any other standard report in Pulse Dashboard.

While the full Column Chooser application is not available in the Query Analyzer application, there is a limited column chooser available that will show fields that were included in the SQL query (the SQL query may include several fields, but not all of them have to be visible). This column chooser is available by right-clicking on any column header and selecting "Column Chooser" or by clicking the middle mouse button.

A Basic Example

Adding a SQL Script to a Query Analyzer box is done by using syntax similar to that used in a normal Query Analyzer application written in Microsoft SQL. You may use any table or field in the Macola database or any other SQL database that is needed for reporting in Pulse Dashboard. By allowing access to non-Macola databases or non-Macola SQL tables, the reporting capabilities in Pulse Dashboard may expand to associated Quality Information systems, calculated fields from tables created by custom stored procedures, Exact Synergy tables, CRM systems or any other SQL applications.

After creating the report with the SQL Script, it may be shared with other users and added to the screen for any user that has access to the Query Analyzer box in the Designer Module of Pulse Dashboard.



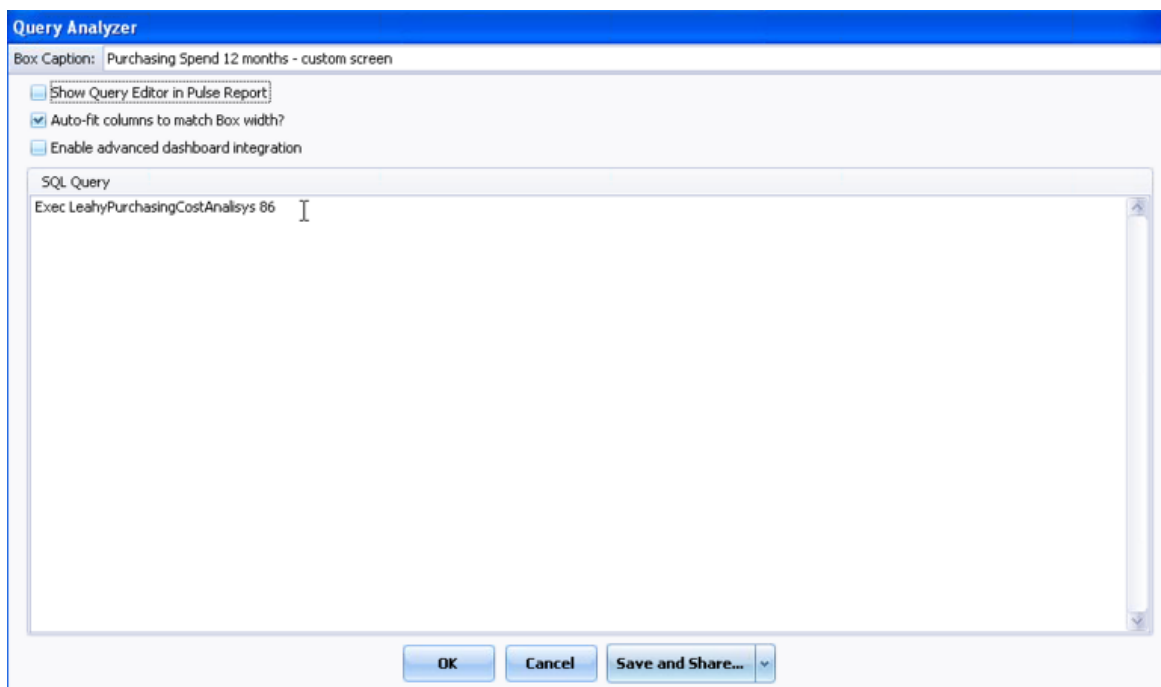
Using a Stored Procedure

The user must have "Enable advanced dashboard integration" not selected to run stored procedures OR to use the SQL "ORDER BY" clause.

Using a stored procedure has some advantages over creating a box with a SQL script in it. By creating and maintaining a single stored procedure, any update or change may be made to the stored procedure and will immediately be implemented. The next time that a user runs the report, any update to the procedure will be realized without any other copying or sharing of reports. For a large organization with many users running the same report, this may be the preferred method of sharing the information.

In the example below, the **exec** command is used to run the named stored procedure. Following the name of the stored procedure is any parameter that would need to be passed to the stored procedure for specifying item_no, loc, customer or other similar information when running the report.

If the Query Analyzer box has been added to a tab in Pulse Dashboard where the Filter Panel has been added to the tab, the filter information specified at the tab level will also be used as part of the criteria in the custom report created here as part of that tab.



Embedding Another PULSE Dashboard Report into Inventory Item Detail View screen

There may be times when having additional information about an item on the same screen with the standard information available on the Inventory Item Detail View would be beneficial. Adding a Custom Report to the Inventory Item Detail View is possible in the Setup (red wrench) for the report.

Create the new (or use an existing) report for the item that should be included in the Item Detail View. Copy the report with Ctrl-C or right-click and select Copy Report.

Item #	Item Desc 1	Loc	Cat - Prod Cat Cd	O/H Qty (Loc)	Inv Turns May-2016	Usage Qty - 12 Month Total (Loc)	Usage Qty - YTD Total (Loc)
NEEDLE	NEEDLE	CA	RK	996	0.0	0.0	0.0
PATCH	PATCH FOR REPAIR KIT	CA	RK	996	0.0	0.0	0.0
PATCH	PATCH FOR REPAIR KIT	MA	RK	585	0.0	0.0	0.0
BCABLE	CABLE FOR BRAKES 1	CA	SP	1,097	0.0	0.0	0.0
BCABLE	CABLE FOR BRAKES 1	MA	SP	934	0.0	7.0	5.0
BCALIPER	BRAKE CALIPER, TITANIUM	CA	SP	999	0.0	0.0	0.0
BCALIPER	BRAKE CALIPER, TITANIUM	MA	SP	983	0.0	0.0	0.0
BPADS	BRAKE PADS, EXTRA DUAL PIVOT	MA	SP	774	0.0	0.0	0.0
BRACKETS	BRACKETS FOR SEAT	MA	SP	280	0.0	0.0	0.0
CABLEHOUSE	CABLE HOUSING, DERAILLEUR	MA	SP	1,017	0.0	0.0	0.0
CASS12	CASSETTE 12 SPEED ALUM	CA	SP	996	0.0	0.0	0.0
CASS12	CASSETTE 12 SPEED ALUM	MA	SP	993	0.0	0.0	0.0
CASS21	CASSETTE 21 SPEED ALUM	CA	SP	995	0.0	0.0	0.0

In the Item Detail View Setup (red wrench) select the Add Report from Clipboard button to add the report. By changing the Button Caption, the report can be attached to the Item Detail View and displayed by selecting the new Custom Report button.

Item Details View
Box Caption: Item Details View

General Settings

Included Reports

- ☒ Include ATP
- ☒ Include Summary
- ☒ Include Loc/Bin/Lot Details
- ☒ Include Historical Summary
- ☒ Include MRP Summary
- ☒ Include MRP Details
- ☒ Include Bill of Material
- ☒ Include Where-Used

Do not cause shortage within X days default:
[IMTMDX_SQL] planning_lead_tm Offset by: 0

Custom Reports

Button Caption	Report Name
Item Turns Chart	Inventory Turns Details Chart

Add Report from Clipboard Remove Selected Report

OK Cancel Save and Share...

Item Details View

Item: [] Loc: [ALL] View Transactions Transaction Date From: 1/1/2016 To: 5/17/2016

ATP Qty Needed: 0 Ship by: 5/17/2016 Do not allow shortages within 0 days JIT Replenishment Preview in MRP

Custom Reports

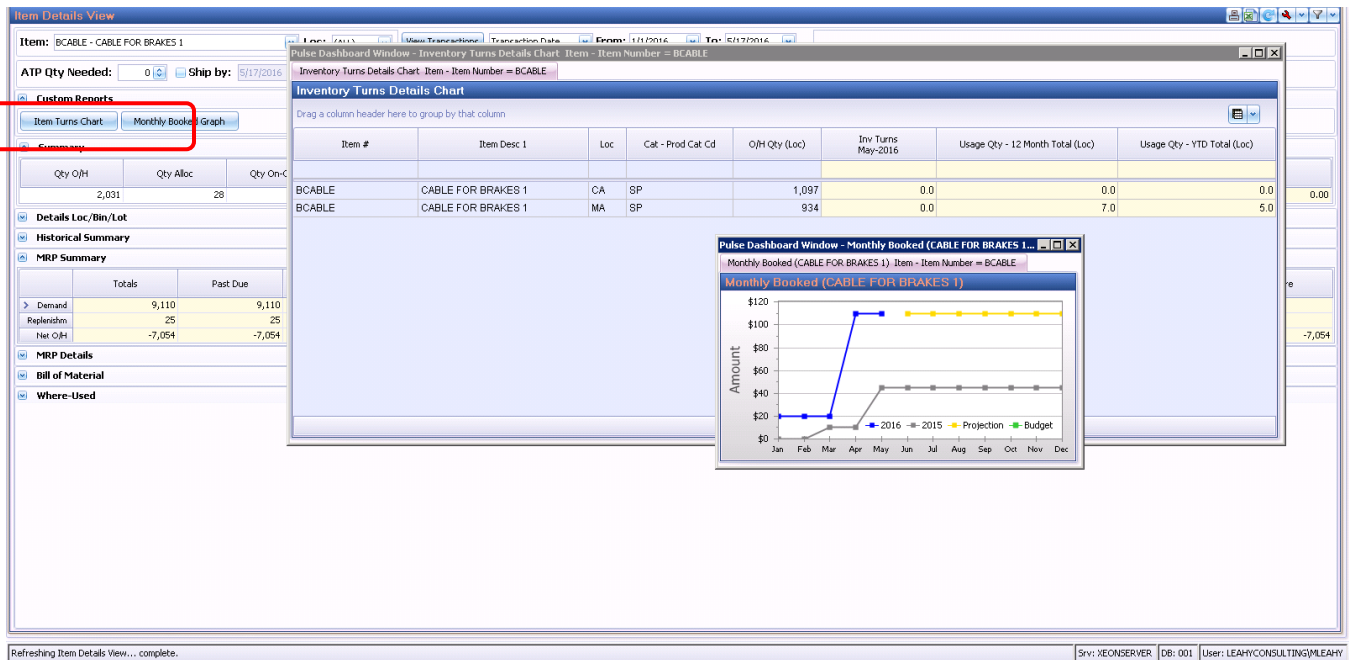
- Item Turns Chart

Summary

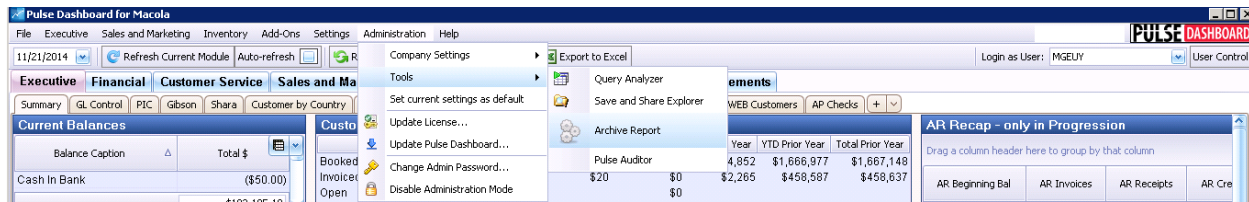
Qty O/H	Qty Alloc	Qty On-Order	Qty Avail	Mths O/H	Last Sale	Last Purch	Last Usage	YTD Usage	12 Mth Usq	Avg 12 Mth Usq	12 Mth Inv Turn
2,031	28	10	2,003	3,481.72	01/23/16	04/03/13	01/23/16	5	7	0.6	0.00

Details Loc/Bin/Lot

Multiple Reports may be added to the screen to quickly display several different views for the item.



PULSE Archive Report



The Pulse Archive Report will allow the User to print two different reports and if needed can export the reports to Excel for evaluation. One report list the number of records in the database by table name with a total number of records and also a breakdown of those records by the year that they were added. This allows the User to evaluate whether the data base is getting to large and overall system performance is beginning to decline because of the number of old records being maintained in the database.

To maintain optimum system performance there are two options:

1. Purging unused/seldom used data in the database will permanently remove the old data
2. Use Pulse Archive to move old data to another archive database using Pulse Archive Software. Old data may be maintained in and accessed through Macola by changing from the Live Company to the Archive Company. As data is moved to the Archive Database Pulse Archive also gives the User the ability to further optimize performance by re-indexing the database through Microsoft SQL.

Pulse Archive Report (current database: DATA_004)

This report displays the number of records by year for each critical file in your Macola Progression or ES database. The Pulse Archive software removes unnecessary data from your Macola database and archives it to another Macola database in the event you need it in the future. For a demonstration or more information, please call (513) 723-8091 or view the brochure online: [PULSE Archive Software Brochure \(pdf\)](#)

Record Counts for Selected Macola Progression Tables (this is to be used to developed a file retention policy)

Table Name	Number of records	BLANK/NULL	1989	1990	1992	1993	1994	1995	1996	1998	2001	2006	2007
APDISFIL (grouped by field: dist_dt)	80					35	19						
APOPNFIL (grouped by field: ap_opn_dt)	26						6	6					
APDPNHST (grouped by field: trn_dt)	28					7	8						
APVENADT (grouped by field: aud_dt)	183						168	9					
APVENFIL (grouped by field: acct_dt)	37		1	1	1	12	16	2					
ARCOMDUE (grouped by field: doc_dt)	66						15	1					
ARCUSADT (grouped by field: aud_dt)	208						81	118					
ARCUSFIL (grouped by field: start_dt)	74	46				1	24						
ARDISFIL (grouped by field: dist_dt)	143						51	2					
AROPNFIL (grouped by field: doc_dt)	54						16						
ARDPNHST (grouped by field: doc_dt)	56						16	2					
BEDEPFIL (grouped by field: post_dt)	22	21					1						
BBDEPFIL (grouped by field: post_dt)	22	21					1						
BEDEPHDR (grouped by field: post_dt)	14	13					1						
BBDEPHDR (grouped by field: post_dt)	14	13					1						

The Index Fragmentation Report may be run to display the amount of data fragmentation in each of the tables. Over time data tables become fragmented through normal processing and as the table becomes more fragmented performance can be affected as the system works harder to find data needed during processing. Pulse Archive Software may be used to Re-Index the data tables of the database increasing performance for your Macola / Pulse Dashboard system.

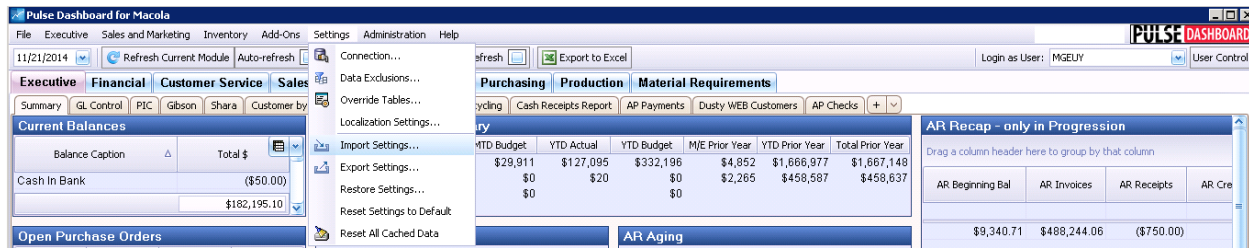
Index Fragmentation

Drag a column header here to group by that column

Table Name	Field Names	Index Name	Fill Factor	Fragmentation
1. imrtrfil_sql	gen_file, item_no, item_filler	Imrtrfil_sql0	0	92.59 %
2. IMDISFIL_SQL	dist_type, mn_no, sb_no, dp_no, item_no, item_filler, pkg...	IMDISFIL_SQL0	90	92.00 %
3. SYJNLHST_SQL	pkg_id, syth_cd, syth_dt, syth_no	SYJNLHST_SQL0	90	91.67 %
4. OEHDRHST_SQL	ord_type, ord_no, inv_no	IOEHDRHST_SQL0	90	91.67 %
5. iminvloc_sql	prod_cat, item_no, item_filler, loc	Iminvloc_sql2	0	90.91 %
6. oecdrchr_sql	ord_type, ord_no	Ioecdrchr_sql0	0	90.00 %
7. imitmidx_sql	search_desc, A4GLIdentity	Imitmidx_sql1	0	88.89 %
8. IMINVTX_SQL	source, user_name, trn_dt, batch_id, A4GLIdentity	IMINVTX_SQL5	90	88.89 %
9. IMDISFIL_SQL	dist_dt, mn_no, sb_no, dp_no, A4GLIdentity	IMDISFIL_SQL3	90	88.89 %
10. IOELINHST_SQL	ord_type, ord_no, line_seq_no, inv_no	IOELINHST_SQL0	90	87.50 %
11. imrlwfil_sql	gen_file, low_mv_cd, item_no, item_filler, gen_type, due d...	Imrlwfil_sql0	0	87.50 %

Importing, Exporting and Restoring You PULSE Settings

Import Settings



User Settings in Pulse Dashboard are specific to each User and Database and are sometimes referred to as their "User Profile". The User begins with Default screens and over time will make changes to reports, add filters, add tabs and many other changes specific to their personal preferences and job requirements. These Settings may be Exported if the User has a need or would like to and they may also be Imported if need be. This might be to restore screens to a previous version or when setting up a new User with existing screens from another User or if the User would like their screens from one database to be used in another database.

Export Settings



User Settings in Pulse Dashboard are specific to each User and Database and are sometimes referred to as their "User Profile". The User begins with Default screens and over time will make changes to reports, add filters, add tabs and many other changes specific to their personal preferences and job requirements. These Settings may be Exported if the User has a need or would like to and they may also be Imported if need be. This might be to restore screens to a previous version or when setting up a new User with existing screens from another User or if the User would like their screens from one database to be used in another database.

Restoring Your Settings



The Restore Settings application could be used by the User to restore their entire User Settings (User Profile) as of a specific Date. This may be needed for restoration of reports or tabs that were changed or deleted accidentally or if the User Settings had become corrupted for some reason. By selecting the appropriate Settings Date and selecting Restore Settings, the User Settings saved when exiting Pulse Dashboard on that date will be restored and replace the current settings being used.

Restore User Settings

		Settings Date
>	1	11/25/2014
	2	11/24/2014
	3	11/21/2014
	4	11/20/2014
	5	11/17/2014
	6	11/10/2014
	7	11/3/2014

Restore Settings

Cancel

Setting up the MRP Shortages Screens

All of the following sample screens are using the 'MRP Orders' box. The columns and groupings in each of the following three sample screens can be used as a guide to pinpoint component shortages by:

- Order number
- Customer number
- Item number

The screens are designed to show you the component item numbers that are causing the shortage as well as its parent item number.

The screenshot displays the 'Pulse Dashboard for Macola' interface. The top menu bar includes 'File', 'Executive', 'Sales and Marketing', 'Inventory', 'Settings', 'Administration', and 'Help'. A 'Live Help Online' button and the 'PULSE DASHBOARD' logo are on the right. Below the menu, a status bar shows the date '6/20/2008', 'Refresh Current Module', 'Auto-refresh', 'Refresh All Modules', 'Auto-refresh', 'Export to Excel', 'Login as User: MIKE LEAHY', and 'User Control'.

The main navigation tabs are 'Executive', 'Financial', 'Customer Service', 'Sales and Marketing', 'Inventory', 'Purchasing', 'Production', and 'Material Requirements'. The 'Production' tab is selected, and the 'MRP Orders Causing Shortages' sub-tab is active.

The first screen, 'Production Components Causing Shortages by Order Number', features a search box for 'Ord #' and a table with columns: Item #, Cus Number, Ord Type, Org Ord #, Org Item #, PP Item Desc 1, Demand/Replenish Date, Par Item #, Item Desc 1, Calc Demand Qty, and New Qty On-Hand (Loc). A filter box shows '[pulse_ord_type] = 'Production (Demand)''.

The second screen, 'Production Components Causing Shortages by Customer', has search boxes for 'Cus Number' and 'Org Ord #', and a table with columns: Item #, Item Desc 1, Par Item #, PP Item Desc 1, Ord #, Ord Type, Demand/Replenish Date, Calc Demand Qty, and New Qty On-Hand (Loc). A filter box shows '[pulse_ord_type] = 'Production (Demand)''.

The third screen, 'Production Components Causing Shortages by Item Number', has a search box for 'Item #' and a table with columns: Item Desc 1, Par Item #, PP Item Desc 1, Ord #, Ord Type, Org Ord #, Cus Number, Demand/Replenish Date, Calc Demand Qty, and New Qty On-Hand (Loc). A filter box shows '[pulse_ord_type] = 'Production (Demand)''.

At the bottom, a status bar indicates 'Refreshing optimized table (610a9792626c44b0ab76606009d4f9e4)... complete.' and 'Srv: Mikedesktop DB: data User: MIKEDESKTOP\MIKE LEAHY'.

How Do I Setup and Use the Customer Collection Notes Feature?

As part of the A/R Aging Report in PULSE Dashboard, we have added the ability to include Customer and Invoice Collection Notes, Priority Codes and Follow-up Dates to the report. The ability to enter and maintain notations in Pulse Dashboard to track information at the Customer Level and also detailed notes at the Invoice Level has been a request by many customers. This function became available in Version 5.19.5.0 (released June 2016).

A/R Aging Report New Columns

- Customer Collection Notes – Notes that pertain to the customer.
- Customer Collection Modified Date – Date the collection note was last changed.
- Customer Collection User Name – Name of the user who last changed the note.
- Customer Collection Follow-Up Date – Date assigned for follow-up.
- Collection Priority – User defined codes that define importance.
- Invoice Collection Notes – Notes that pertain to a specific invoice.*
- Invoice Collection Follow-up Date – Date assigned for follow-up.*

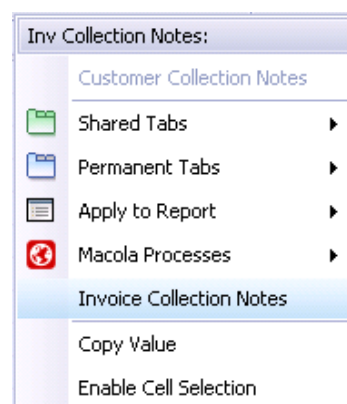
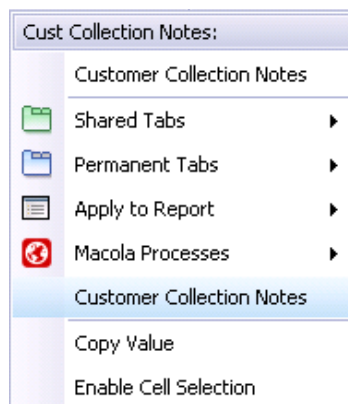
* Note: The invoice number column must be added to the report to use of this column.

Using Collection Notes

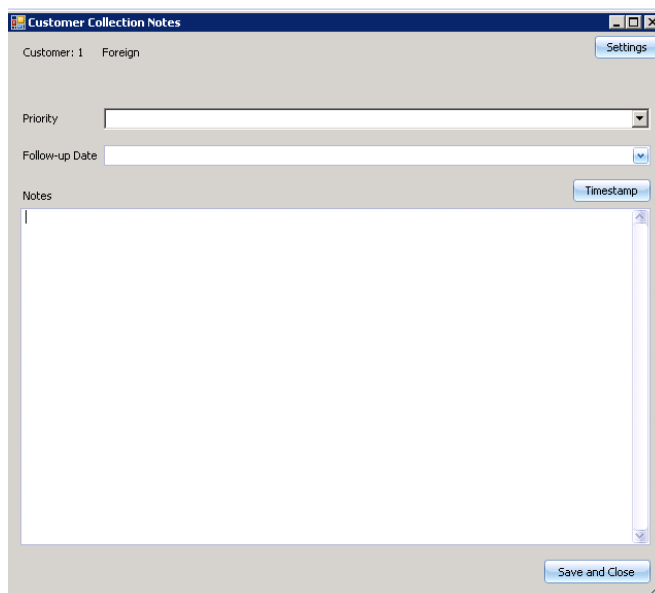
Customer or Invoice Collection Notes may be added to the A/R Aging Report drill-down screen if using the report in summary mode. If you are using the report in detail mode, notes can be added to both the primary and drill-down screens. Use the column chooser to add the customer or invoice collection notes columns to the A/R Aging Report. At the same time, you may want to also add the Follow-up Date, Modified Date, Collection Priority and/or Collection User Name columns to the report.

Adding / Maintaining Collection Notes

After the Customer or Invoice Notes field has been added to the report for a customer or invoice, right-click on the Notes field for the specific Customer or Invoice. From the drop down menu select Customer Collection Notes or Invoice Collection Notes:



When the Customer or Invoice Collection Notes has been selected a screen similar to this will be displayed:

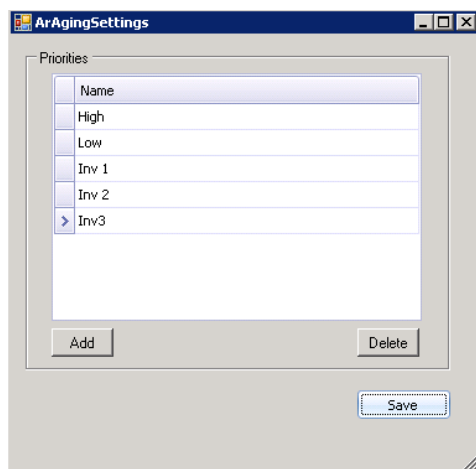


The screenshot shows a window titled "Customer Collection Notes". At the top, it says "Customer: 1 Foreign" with a "Settings" button to the right. Below this is a "Priority" dropdown menu. Underneath is a "Follow-up Date" field with a calendar icon. The main area is a large text box labeled "Notes". To the right of the notes box is a "Timestamp" button. At the bottom right corner is a "Save and Close" button.

A Timestamp button is available to insert a name and time similar to Exact Synergy functionality into the Notes field where all Customer specific or Invoice specific information may be entered and stored. The Follow-up Date may be entered to allow you to sort on this column for later follow-up.

The Priority field may have a predefined value entered into it to describe the importance of this information. This value may correspond to a code that you develop and can also be sorted. For example, these values may be High/Med/Low or 1/2/3/4/5 and are developed in the Settings screen.

Selecting the Settings button will allow you to develop an optional Priority Code for use on all collection and invoice notes.



The screenshot shows a window titled "ArAgingSettings". It has a section labeled "Priorities" containing a list box with the following items: "Name", "High", "Low", "Inv 1", "Inv 2", and "Inv3". Below the list box are "Add" and "Delete" buttons. At the bottom right of the window is a "Save" button.

Use the Add and Delete buttons to create new values and the Save button when completed. Once established these codes may be used on customer or invoice notes.

Customer Collection Notes

Customer: 1 Foreign Settings

Last modified by mgeuy on 6/24/2016 3:27:59 PM

Priority: High

Follow-up Date: 7/1/2016

Notes Timestamp

[mgeuy 6/24/2016] Discussed payment of past due with Mike and he assures payment this week.

Save and Close

When finished select the Save and Close button at the bottom of the screen and refresh the report.

Right-clicking on an item, customer or vendor to create an order

We recently added a new feature to allow you to create a quick customer order, purchase order and/or POP production order by simply right-clicking on an item number, customer number or vendor number.

In the example below, we have created a quick purchase order:

The screenshot displays a software interface for creating an order. At the top, a right-click context menu is open over a table, showing options: 'Create POP Order', 'Create Purchase Order', and 'Create OE Order'. Below this, the 'Order Number 17462-00' form is visible. The form includes fields for Vendor (6000), ABC FASTENERS - SEATTLE, Buyer/Planner (PD), PURCHASING DEPT, and Order Date (03/21/18). It also has sections for Address (CHARLOTTE NC), Main Contact, and Options (Payment Terms: N60, NET 60 DAYS; Status: Unreleased; Tax Code; Ship Via: DAY, DAYTON FREIGHT; Collect/Prepaid; Confirmation; Acknowledgement). A 'Line Items' table is shown with one item: Line # 1, Item # E3089, Desc 1 EDGE HOUSING, Request Dt 06/19/18, Quantity 2,000, Stk Loc LA, Move-To LA, UOM YD, Vend Item #, Notify, Cmt Cd 1, Cmt Cd 2, Comments, Expected Unit Cost \$7, and Job Number. At the bottom, there are sections for Shipping (Ship-To: EW, FOB: NA, NA), Misc (User Defined Field 1-5), and Totals (Currency, Total Cost \$13,900.00, Total Weight 0.00, Total CBM 0.00). A 'Save' button is located in the bottom right corner.

Order Number 17462-00

Vendor: 6000 ABC FASTENERS - SEATTLE Buyer/Planner: PD PURCHASING DEPT Order Date: 03/21/18

Address: CHARLOTTE NC Edit

Main Contact: Edit

Tel: Fax:

Options:

Payment Terms: N60 NET 60 DAYS

Status: Unreleased

Tax Code:

Ship Via: DAY DAYTON FREIGHT

Collect/Prepaid: Add Landed Cost

Confirmation: Acknowledgement

Line Items:

Line #	Item #	Desc 1	Desc 2	Request Dt	Promise Date	Quantity	Stk Loc	Move-To	UOM	Vend Item #	Notify	Cmt Cd 1	Cmt Cd 2	Comments	Expected Unit Cost	Job Number
1	E3089	EDGE HOUSING		06/19/18		2,000	LA	LA	YD						\$7	

Record 1 of 1

Shipping:

Ship-To: EW

FOB: NA NA

Misc:

User Defined Field 1

User Defined Field 2

User Defined Field 3

User Defined Field 4

User Defined Field 5

Totals:

Currency

Total Cost: \$13,900.00

Total Weight: 0.00

Total CBM: 0.00

Save

Right-click on a POP Production Order Number to Change the Due Date, Change the Captured Bill, Report Scrap & Report Production.

We recently added a new feature to allow you to change the due date of a POP order, change the captured bill of material, report scrap and report production. The reporting of production includes bins, lots and serial numbers.

POP Ord #: 00188743

- Create Purchase Order
- Shared Tabs
- Permanent Tabs
- Apply to Report
- Macola Processes
- Copy Value
- Enable Cell Selection

Edit Production Order

Order Number 00219607 **Status: Unreleased**

Item to Produce: WHEEL

Location: CIN

Quantity: 1

Unit Price: \$6.5

Unit Cost: 24.75046

Release Date: 12:00:00 AM

Quantity Reported: 0

Due Date: 04/19/16

Start Date: 04/19/15

Job Number:

Reference:

Bill of material to be used for this order

Sequence N...	Com...	Description1	Location Code	Quan...	Quantity	Reason	Notes
1	F715...	FRONT HOUSING	CIN	2.1700	2.17		
2	SELF...	PACKAGING MATERIALS	CIN	1.0000	1		
3	DENS...	PACKAGING MATERIALS	CIN	1.0000	1		
4	CAR...	SHIPPING CARTON	CIN	1.0000	1		
5	POLY...	BUSHING	CIN	4.0000	4		
6	EW9...	EDGE HOUSING	CIN	1.0000	1		
7	LABO...	LABOR COST	CIN	0.5710	0.571		
8	OVER...	OVERHEAD COST	CIN	0.5710	0.571		

Buttons: Add Component, Remove Component, History, Settings, Report Production, Complete, Release, Unrelease, Save

Report Production

Quantity: 1 Order Complete: ☐ Report Cancel

Item Number	Location	Order #	Quantity	Qty Per	UOM	Action
9627-F71...	CIN	00219607	1	0	EA	Produce
F715 ...	CIN		2.17	2.17	YD	Issue
SELF-...	CIN		1	1	EA	Issue
DENS ...	CIN		1	1	EA	Issue
CART...	CIN		1	1	EA	Issue
POLY ...	CIN		4	4	FT	Issue
EW9R...	CIN		1	1	EA	Issue
LABO...	CIN		0.571	0.571	HR	Issue
OVER...	CIN		0.571	0.571	HR	Issue

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

Copyright Notice: 2019 by Leahy Consulting, Inc., Cincinnati, Ohio (513) 723-8090. This document is intended as a reference for PULSE Dashboard licensed customers.