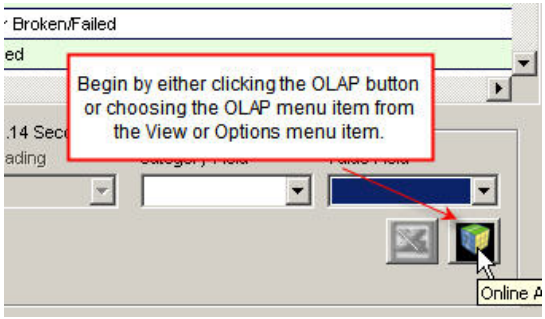
MaintSmart 4.1 OLAP (Online Analytical Processing) Component

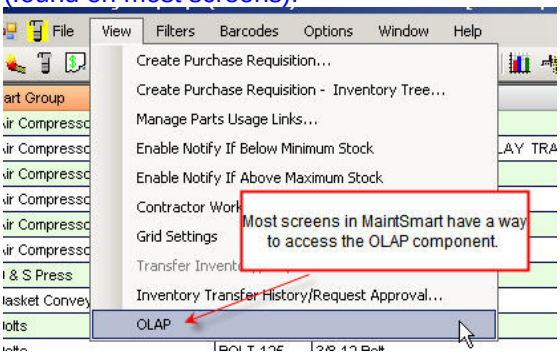
OLAP is a tremendously powerful component that provides analytical processing features similar to those found in Microsoft Excel Pivot Tables and Pivot Charts. Drag-and-drop views give you real-time information, insights, and results in seconds. Drag up to five column fields, five row fields and five value fields to generate a user-defined two or three dimensional data set of virtually any data in the MaintSmart database.

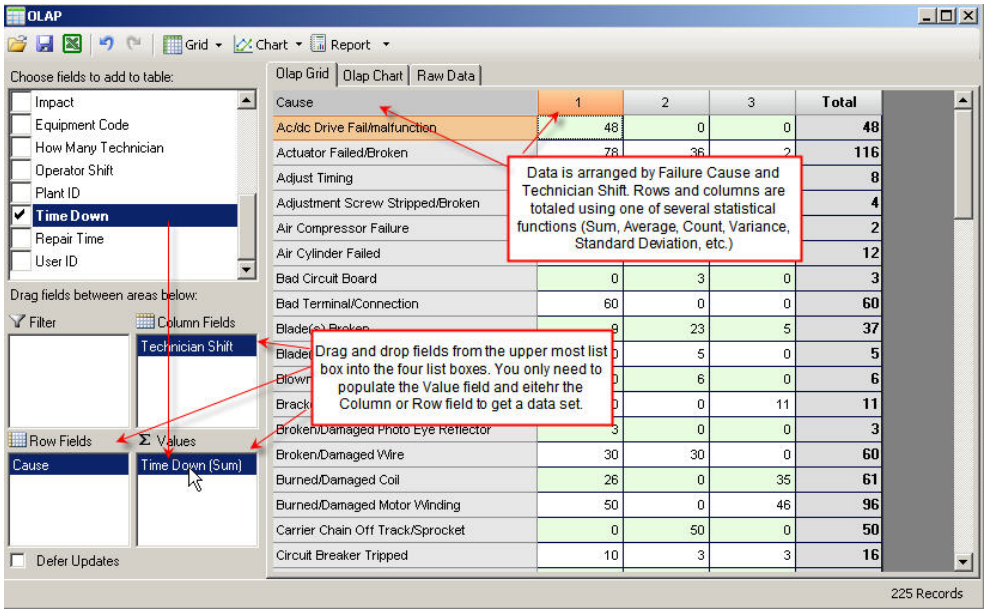
MaintSmart leverage the data queries you create in the MaintSmart Analysis screens by linking to these user defined data sets with the OLAP component. Additionally OLAP is available on most other screens including work order, down time, purchasing, inventory and preventive maintenance screens. Data from any of these screens may be arranged as needed by drag and drop in the OLAP screen. This data may then be totaled by row and column using one of several statistical functions. This data set is then charted automatically.

Clicking on a grid cell in the OLAP data grid causes the underlying data for that cell to be displayed in a separate grid. The OLAP data grid may be exported directly to Excel (just like all grids in MaintSmart) for further analysis.



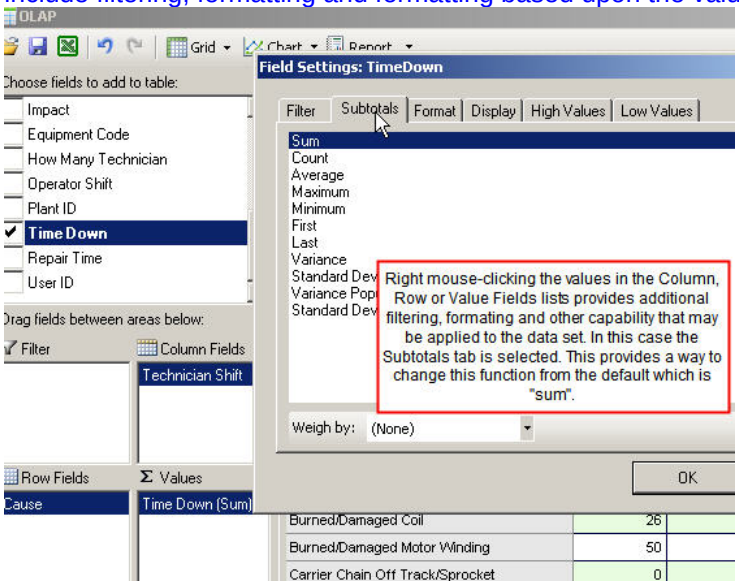
Click the OLAP button (found on some screens OR click the OLAP menu item (found on most screens).

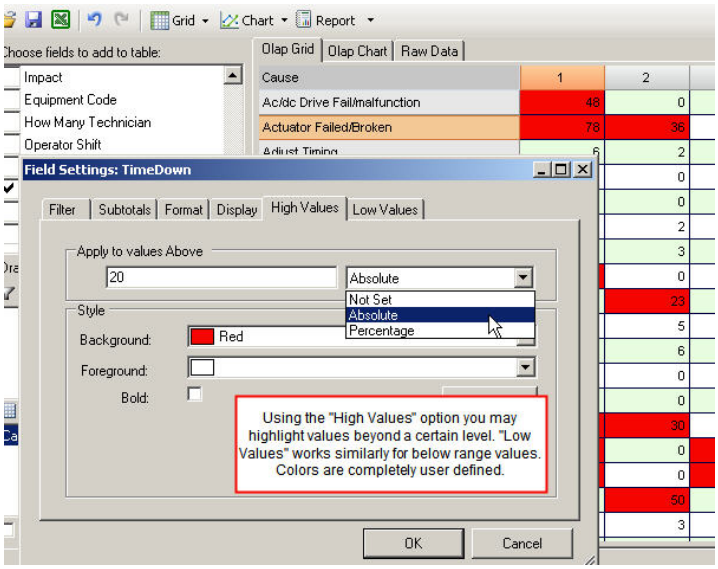




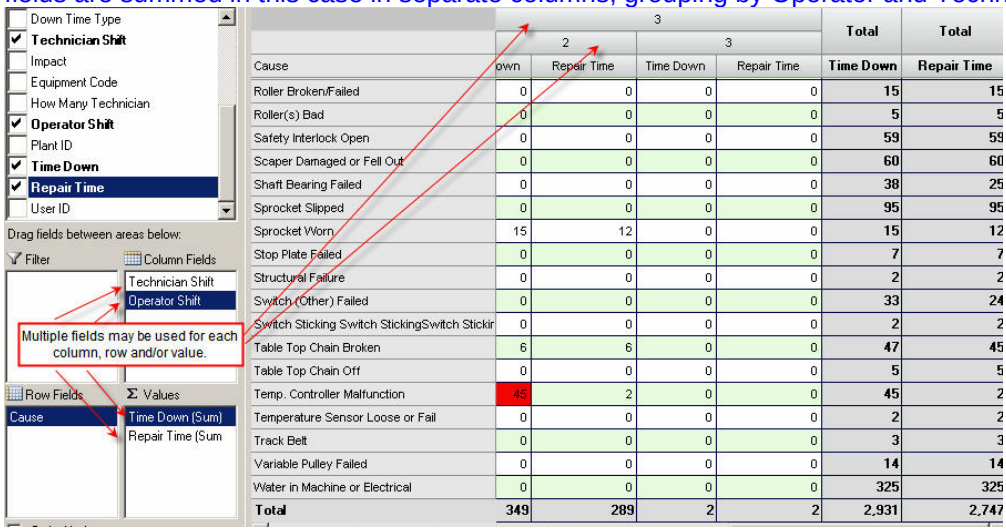
When OLAP screen appears drag and drop fields from the uppermost filed box to the lower list boxes. You may drag up to five fields into each box, however the data grid and chart may become cluttered with this much data.

There are several options available by right-clicking on the selected field(s) and choosing from the resulting dialog screen. These include filtering, formatting and formatting based upon the value.

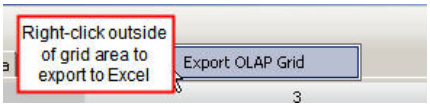


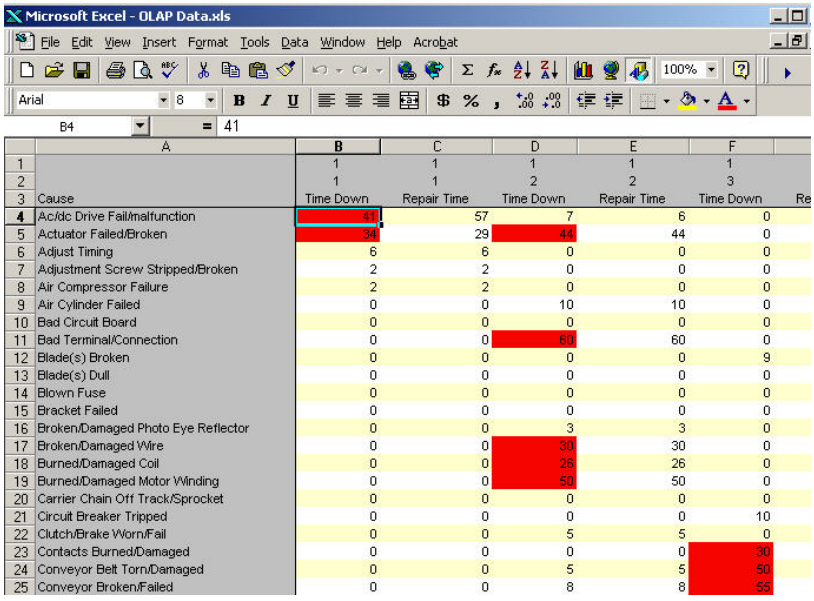


Below shows how multiple fields are displayed. In this example there are two column fields and two value fields. The value fields are summed in this case in separate columns, grouping by Operator and Technician Shift. Rows are also summed.

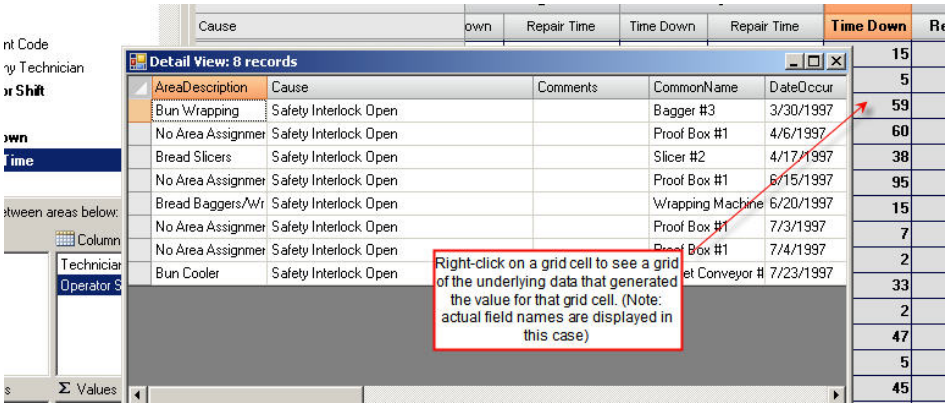


Easily export the resulting data from grid to Excel.

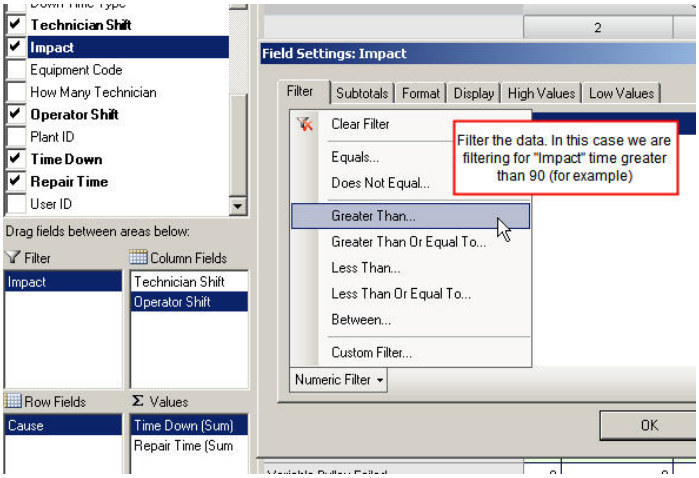




This is the resulting Excel spreadsheet. You may also click the Excel icon at top of screen however this option simply saves the data as Excel but doesn't automatically open the spreadsheet after saving.

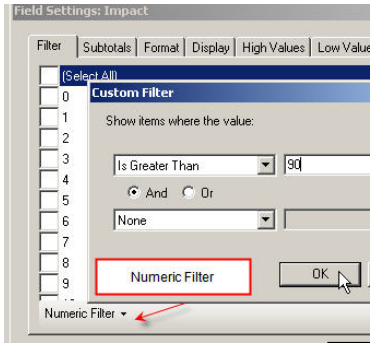


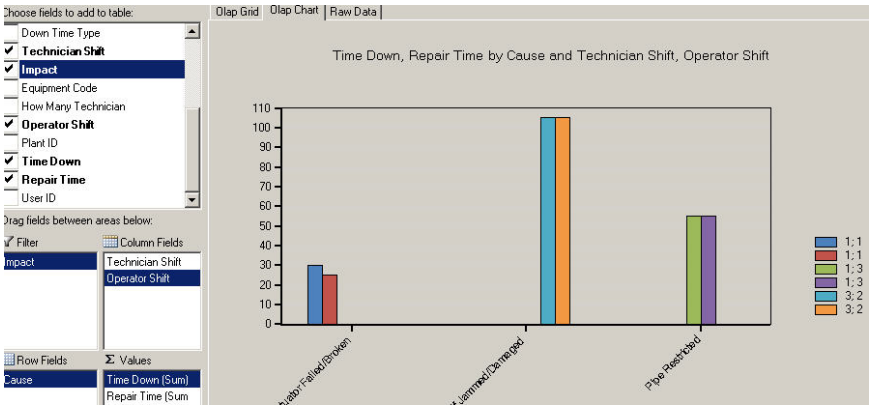
Right clicking in the grid area on a particular cell causes the underlying data that generated the value in that cell to be displayed in a separate grid.



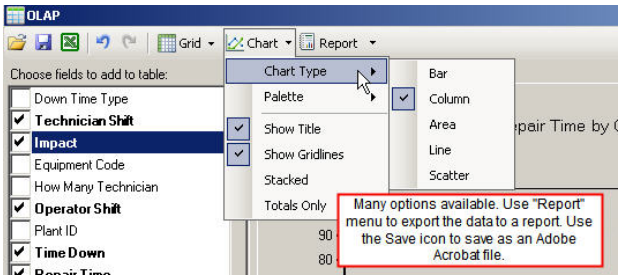
Right-click a Value field and you will have the opportunity to format, filter or change the subtotal setting for that value. Subtotal settings include: Sum, Average, Max, Min, Variance, Standard Deviation and more.

Format colors based upon high or low value constraints as shown below:





MaintSmart will also create a corresponding chart for the data.



Olap Grid | Olap Chart | Raw Data

Filtered data set.

Cause	1 / 3 e Down	1 / 3 Repair Time	3 / 2 Time Down	3 / 2 Repair Time	Total Time Down	Total Repair Time
Actuator Failed/Broken	0	0	0	0	30	25
Oven Shelf Jammed/Damaged	0	0	105	105	105	105
Pipe Restricted	55	55	0	0	55	55
Total	**55**	**55**	**105**	**105**	**190**	**185**

This is an example of a filtered data set. In many cases you'll want to filter the data especially if you want a legible uncluttered chart.

As you can see this is a tremendously powerful and useful tool. The OLAP component is very flexible and available on all screens where appropriate.