Module 8

Advanced Features:

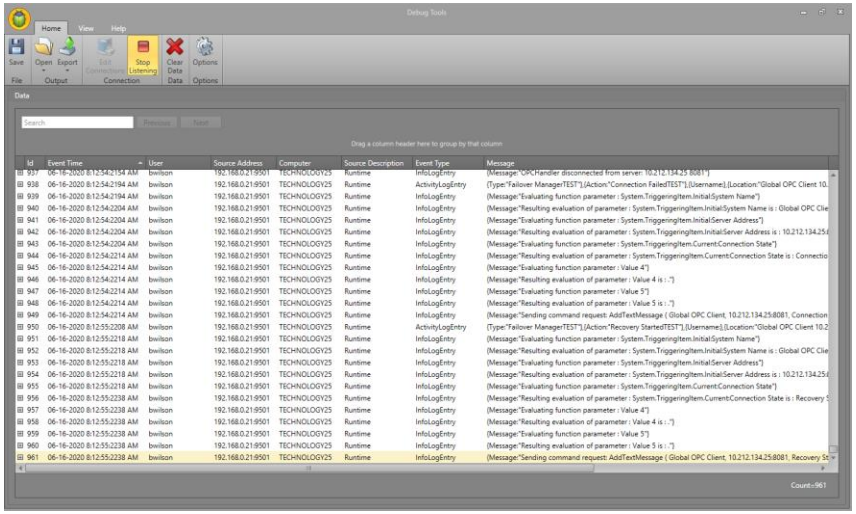
Debug Tools

IPFUSION

Overview

IPFUSION

Overview



- Assists in troubleshooting the project.
- Connects to both Designer and Runtime, as well as to running drivers.
- Shows all logging and debugging messages as you continue to work in the project.
- Provides capability to filter and search live data.

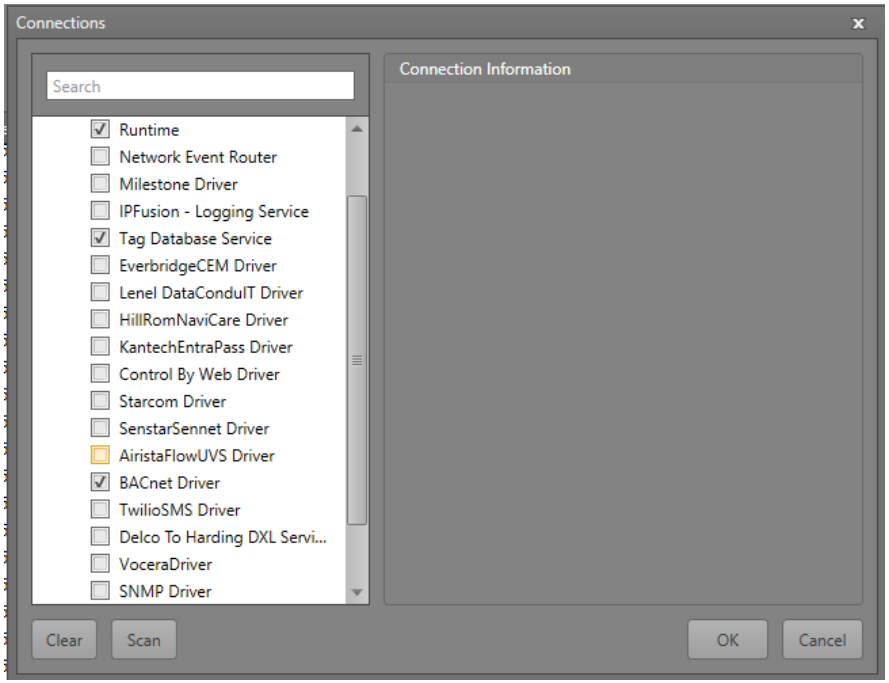
IPFUSION

Managing Connections

IPFUSION

Managing Connections

- Debug Tools can connect to many different entities.
- Possible to connect to multiple running processes at one time.
  - Multiple logs from different sources can be confusing. Use filtering.
- Add or scan for the connections to observe.
- Added and scanned connections are automatically saved.



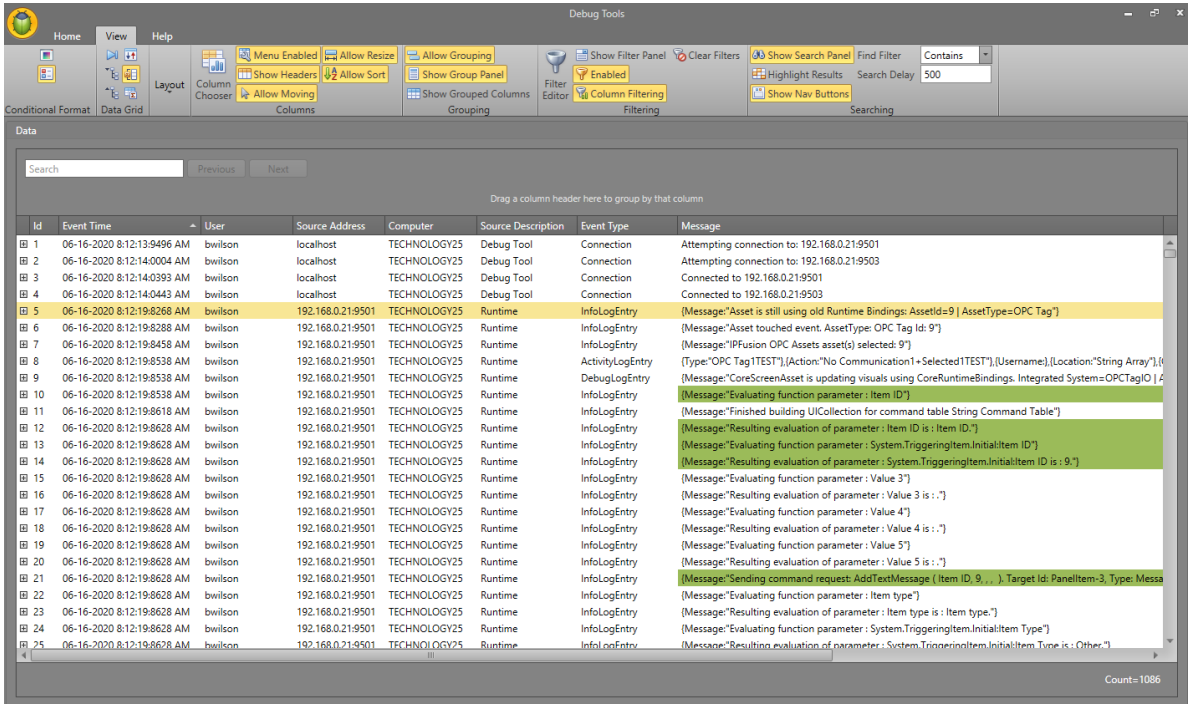
IPFUSION

Filtering Live Data

IPFUSION

Filtering Live Data

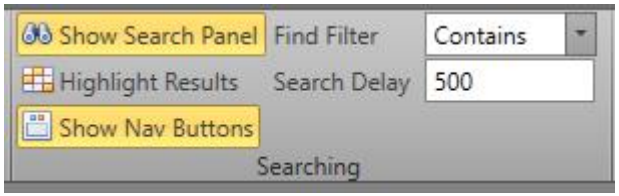
- Debug tools offer many options to filter the data incoming.
- Adding filters, formatting rules, and searching for specific strings.



IPFUSION

Searching the Data

- Search for specific text strings to filter the logs.
- Able to change the Search Filter formula and add different highlighting options to make traversing the search results easier.



connected | Previous | Next

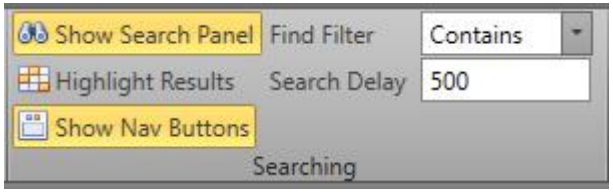
Drag a column header here to group by that column

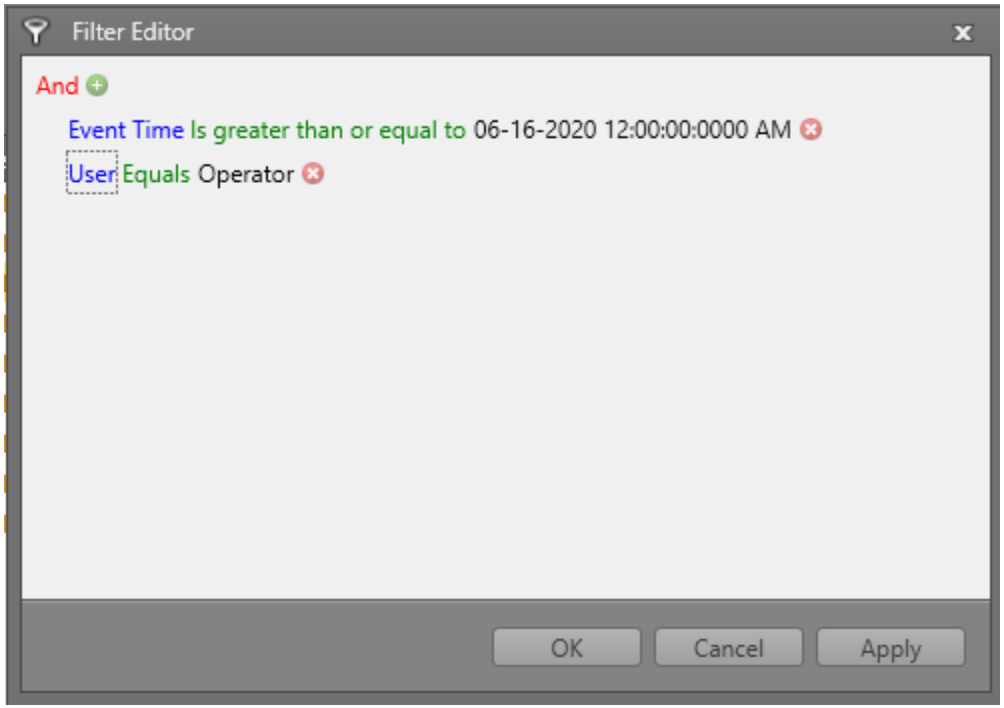
Id	Event Time	User	Source Address	Computer	Source Description	Event Type	Message
3	06-16-2020 8:12:14:0393 AM	bwilson	localhost	TECHNOLOGY25	Debug Tool	Connection	Connected to 192.168.0.21:9501
4	06-16-2020 8:12:14:0443 AM	bwilson	localhost	TECHNOLOGY25	Debug Tool	Connection	Connected to 192.168.0.21:9503
897	06-16-2020 8:12:32:1406 AM	bwilson	192.168.0.21:9501	TECHNOLOGY25	Runtime	InfoLogEntry	{Message:"OPCHandler disconnected from server: 10.212.134.25 8081"}
937	06-16-2020 8:12:54:2154 AM	bwilson	192.168.0.21:9501	TECHNOLOGY25	Runtime	InfoLogEntry	{Message:"OPCHandler disconnected from server: 10.212.134.25 8081"}
962	06-16-2020 8:13:16:2773 AM	bwilson	192.168.0.21:9501	TECHNOLOGY25	Runtime	InfoLogEntry	{Message:"OPCHandler disconnected from server: 10.212.134.25 8081"}
987	06-16-2020 8:13:19:3667 AM	bwilson	192.168.0.21:9501	TECHNOLOGY25	Runtime	InfoLogEntry	{Message:"OPCHandler disconnected from server: 10.99.96.188 8081"}
1012	06-16-2020 8:13:22:4445 AM	bwilson	192.168.0.21:9501	TECHNOLOGY25	Runtime	InfoLogEntry	{Message:"OPCHandler disconnected from server: 10.99.96.188 8081"}
1037	06-16-2020 8:13:25:5243 AM	bwilson	192.168.0.21:9501	TECHNOLOGY25	Runtime	InfoLogEntry	{Message:"OPCHandler disconnected from server: 10.99.96.188 8081"}
1062	06-16-2020 8:13:47:5829 AM	bwilson	192.168.0.21:9501	TECHNOLOGY25	Runtime	InfoLogEntry	{Message:"OPCHandler disconnected from server: 10.212.134.25 8081"}

IPFUSION

Filter Editor

- Create filter rules so as soon as the data is read, only the logs that satisfy the filter show.
- Can add multiple filters to create very specific conditions.

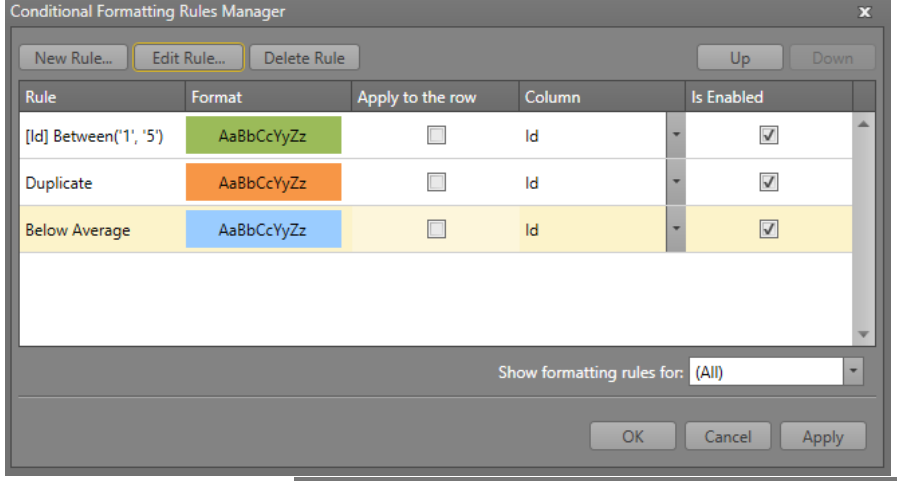


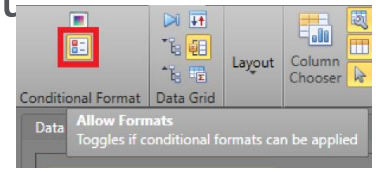


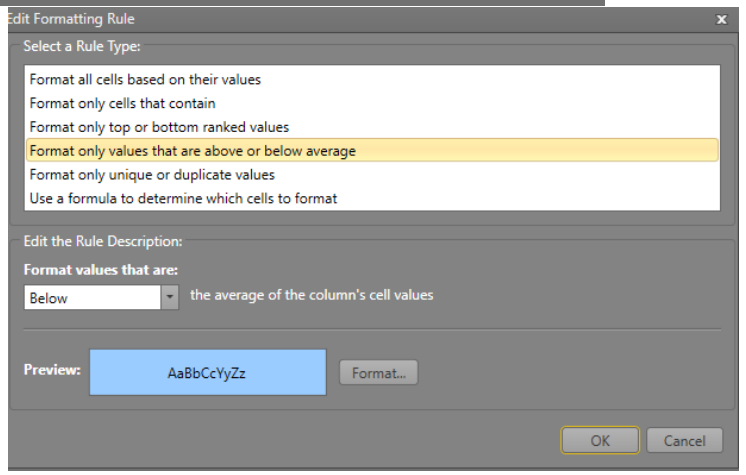
IPFUSION

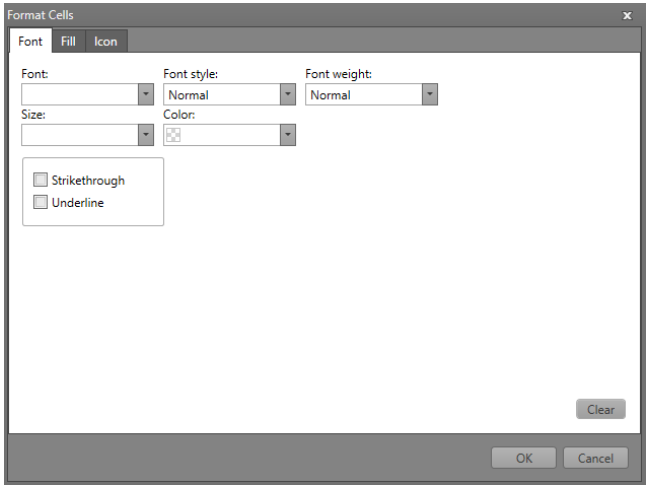
Formatting Rules

- Add formatting to the rows of logging entries to make them distinguishable.
- Create rules which will determine what entries get the format.
- Apply a series of different formats: font properties, fill color, or an icon.
- Select if the format will be applied to the whole row or just a specific data column.



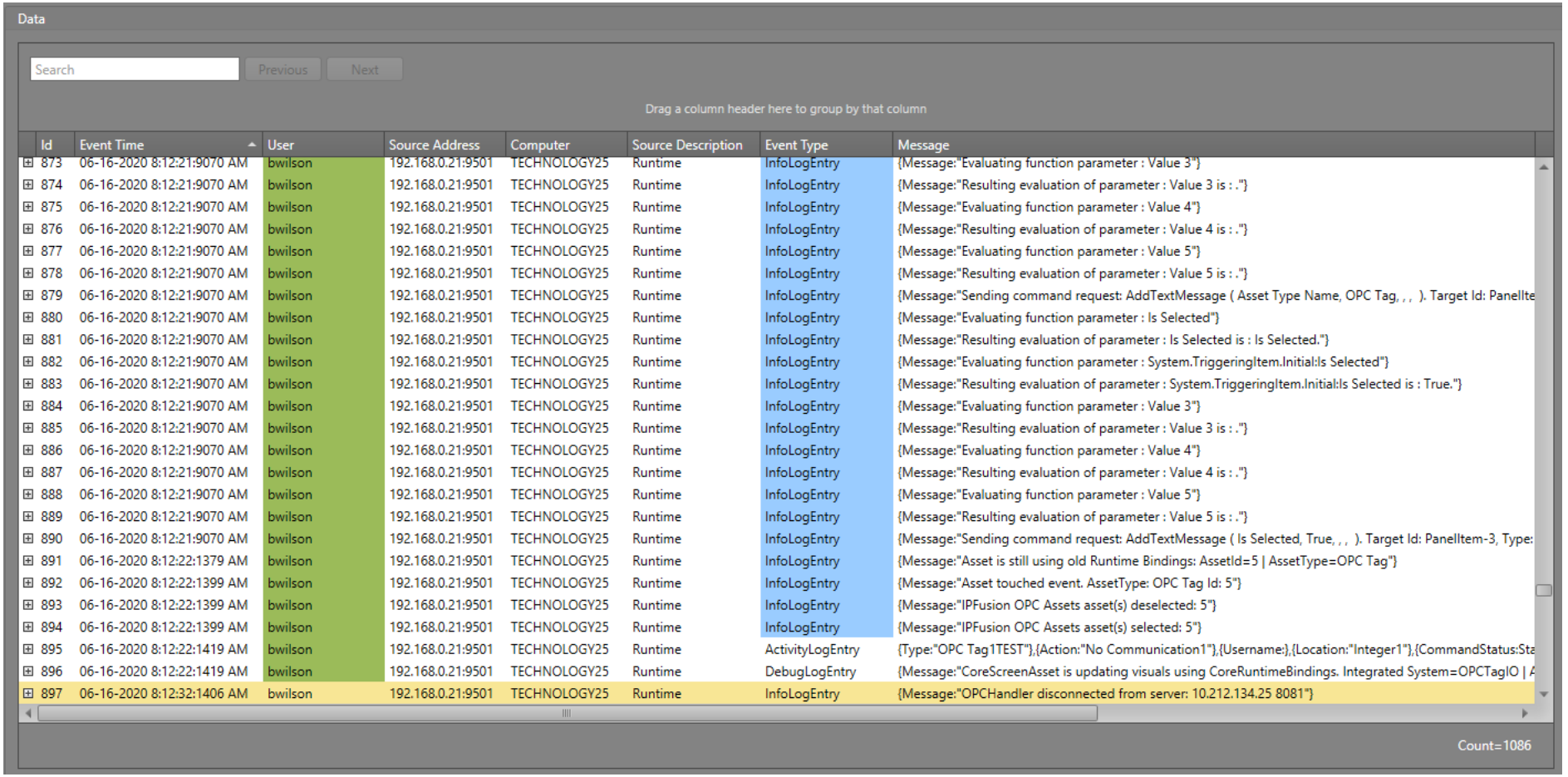






IPFUSION

Formatting Rules: Result



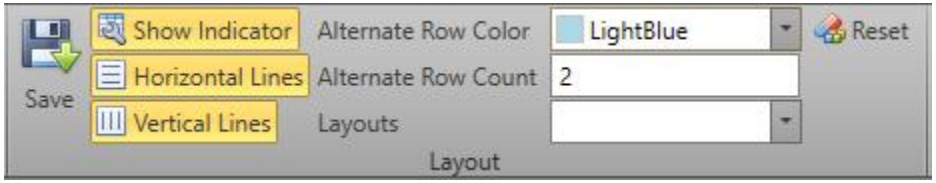
IPFUSION

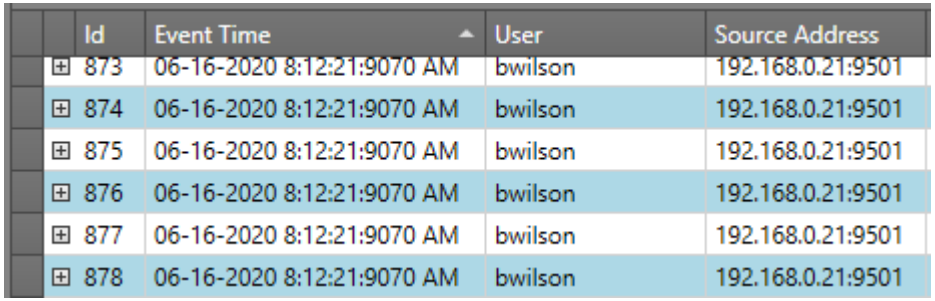
Customizing Live Data Layout

IPFUSION

Customizing Layout

- The live data area can be customized to include row lines, additional data columns, log count summaries, and grouping similar data together.
- Show simple layout options like a row indicator, and horizontal and vertical column lines can be enabled.
  - Pressing the Reset option reverts all changes back to default settings.
  - Alternate Row Count and Color are not implemented.



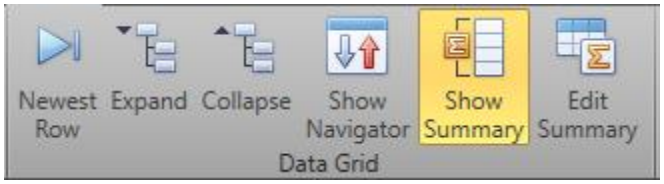


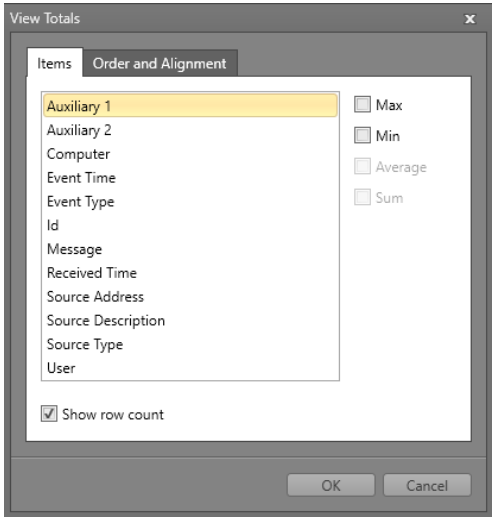
Id	Event Time	User	Source Address
873	06-16-2020 8:12:21:9070 AM	bwilson	192.168.0.21:9501
874	06-16-2020 8:12:21:9070 AM	bwilson	192.168.0.21:9501
875	06-16-2020 8:12:21:9070 AM	bwilson	192.168.0.21:9501
876	06-16-2020 8:12:21:9070 AM	bwilson	192.168.0.21:9501
877	06-16-2020 8:12:21:9070 AM	bwilson	192.168.0.21:9501
878	06-16-2020 8:12:21:9070 AM	bwilson	192.168.0.21:9501

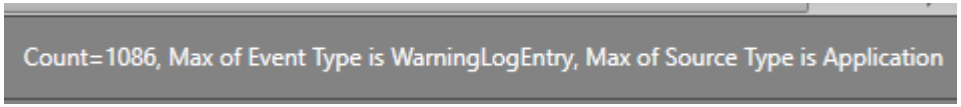
IPFUSION

Customizing Layout – Data Grid

- Show the newest data rows at the top.
- Expand or collapse the displayed information in each row.
- Show or hide a navigation panel and a summary panel.
- Summary panel can be edited to show the what data is logged the most and the least.





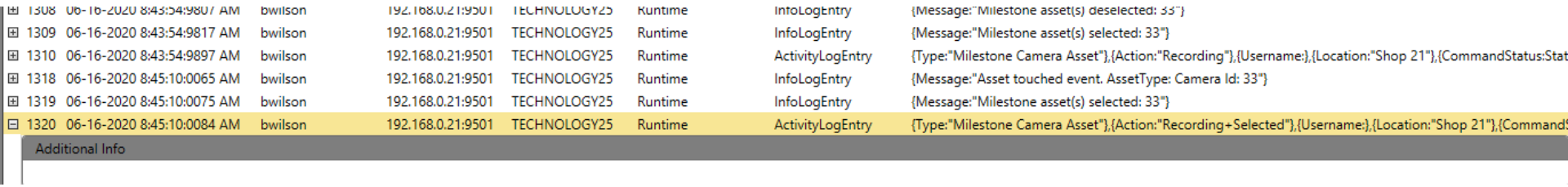


Navigation and Summary Panels

IPFUSION

Customizing Layout – Data Grid

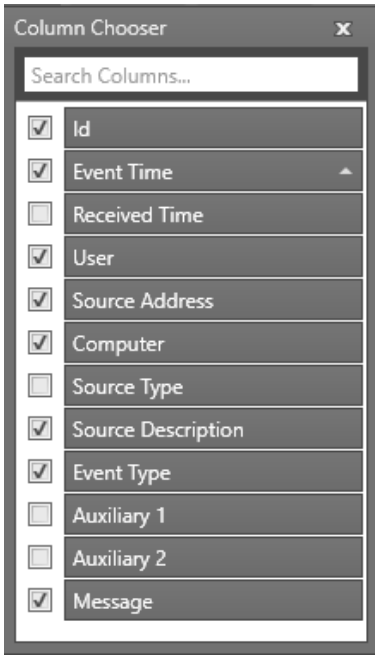
- Rows can be viewed either collapsed or expanded
- The expanded format can provide further information



IPFUSION

Customizing Layout: Columns

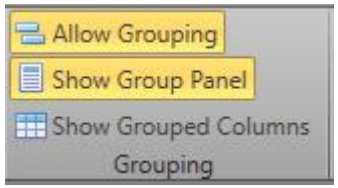
- Customize the columns section of the live data area.
- Show or hide headers, and enable or disable column moving, resizing, and sorting.
- Can also add additional columns to display more information.
  - Column Moving must be enabled to do this.

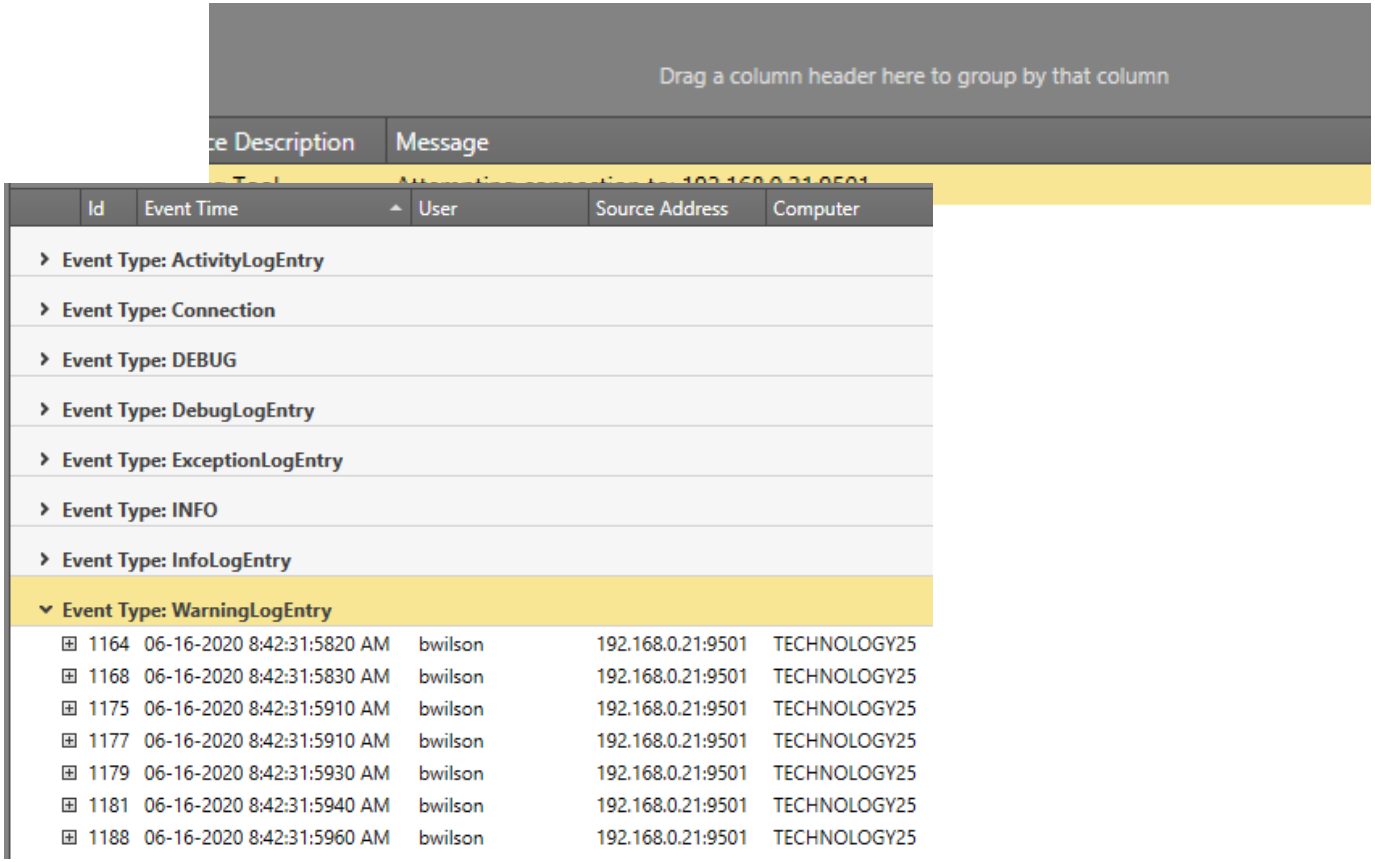


IPFUSION

Customizing Layout: Grouping

- Can also group columns together to display data in a specific organized fashion.
- Can group multiple columns together as well.



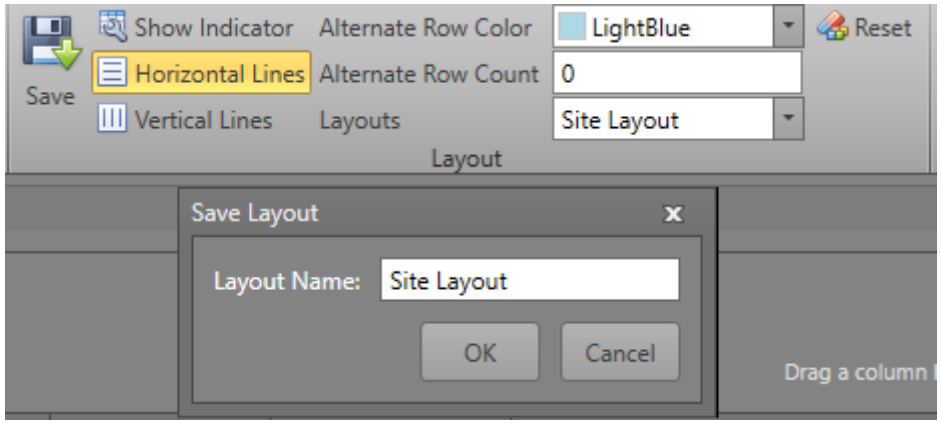


IPFUSION

Saving and Loading Layouts

Saving and Loading Layout

- Alongside the formatting rules and filters, the column, grouping, and navigation and summary panel data settings can be saved and loaded as a layout .xml file.
- Utilize different layouts and formats depending on the project and your preferences.
  - Note: **Visibility** and **Allow** properties are saved via the application.
  - When you open the application next time, it will remember these settings.



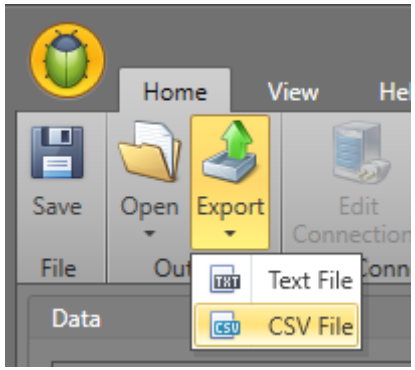
IPFUSION

Exporting

IPFUSION

Exporting Logs

- The current logs and data can both be printed or exported as a separate file (txt or csv).
- Use these tools to create records of logs that can easily be referenced and looked into by integrators and developers.



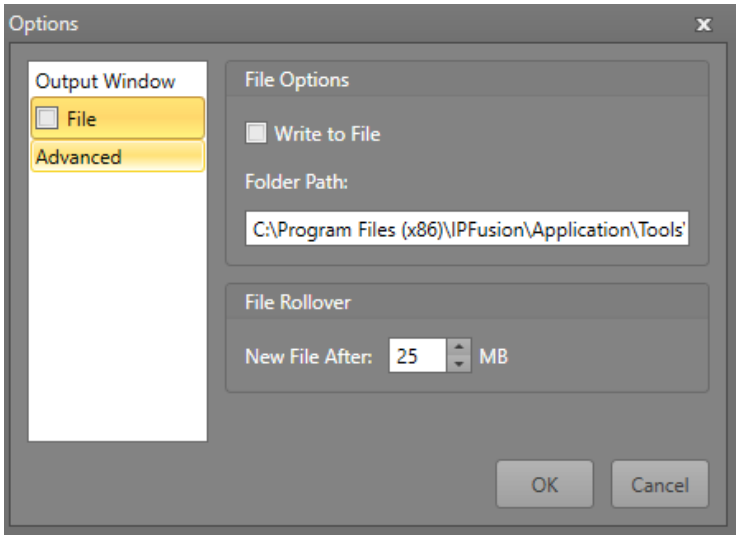
IPFUSION

Saving to File

IPFUSION

Saving to file

- Instead of live capturing the data, the logs can be saved to a file.
- Select and add the necessary information in the Options window.
- Useful if you cannot actively look at the data at the same time but still want to continuously log all the activity and debugging messages for later inspection.



IPFUSION

Module 8 Complete