



Alarm Manager

Module FG 0105

Search for text in the presentation

Presentation script

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Presentation outline



Presentation toolbar

PDF attachment

Purpose

In this module you will learn:

- Learn how to perform basic functions in the Active Alarms screen of FabGuard

Objective

Upon Completion of this module, you will be able to:

- Access the Active Alarms screen from FabGuard Web and FabGuard IPM
- Display, sort, and filter active alarms
- Drill down to reports, data, and OCAPs related to an active alarm
- Clear and delete active alarms

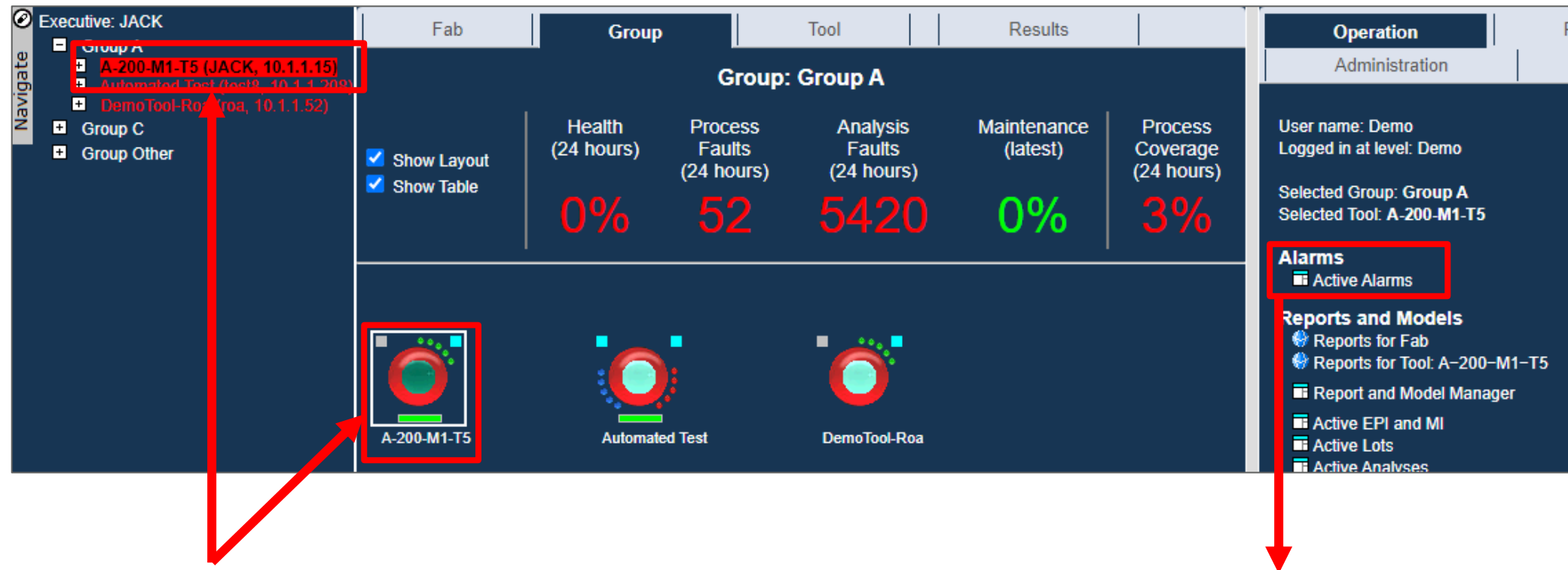
Outline

- 1** Access the Active Alarms Screen
- 2** Display, Sort, and Filter Active Alarms
- 3** Drill Down to Reports, Data, and OCAPs
- 4** Clear and Delete Active Alarms

1

Access the Active Alarms Screen

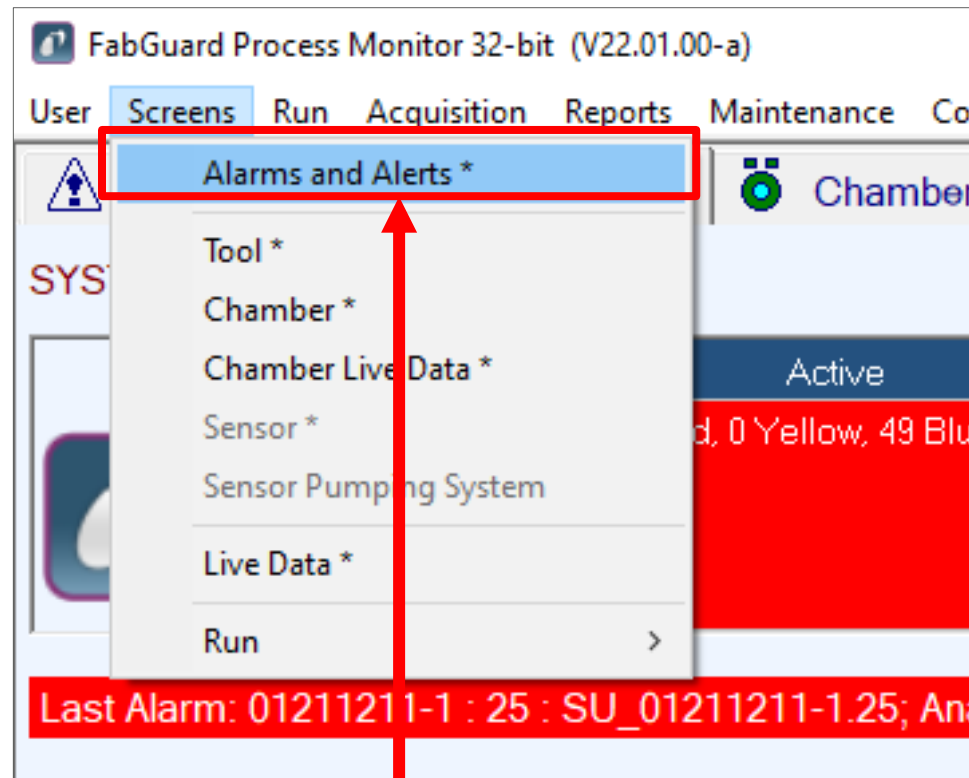
Accessing Active Alarms from FabGuard Web



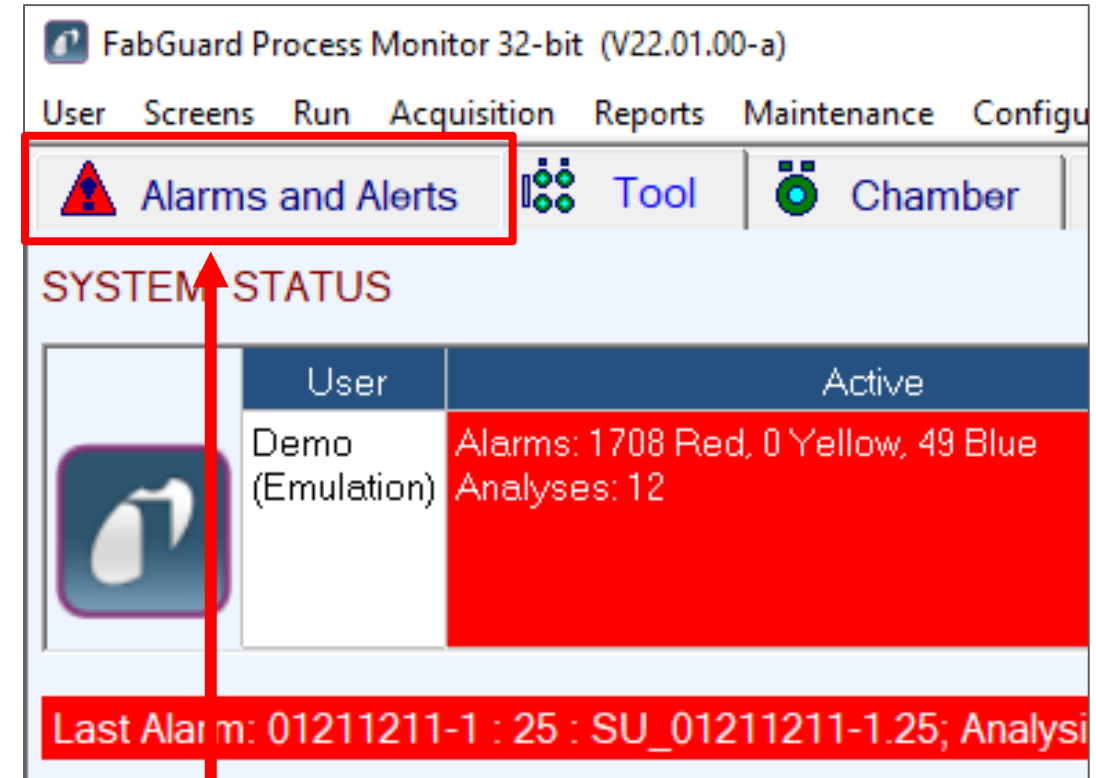
1 – Select a **Tool** from the **Navigation** pane or from any **Display** pane.

2 – From the **Operation** tab, click **Active Alarms**.

Accessing Active Alarms from FabGuard IPM



A – From the **Screens** menu, click **Alarms and Alerts**.



B – Click the **Alarms and Alerts** tab.



Display, Sort, and Filter Alarms

Consolidated Alarms

Similar alarms are consolidated to one alarm entry by:

- Violation type (SPC above limit)
- Report that generated the alarm
- Source (Tool 1, Chamber 5, Sensor 3)

The count column shows how many alarms of this type have occurred since the last clear or delete action

Class	Count	Time	Type	Detail	Category	Lot : Slot : Substrate
A C B Y		Any Time		*	An I/O Sys	
Blue	1	04/27/2021 01:03:27	Length of Step too long	" Step 1	Acquisition	042700-78 : 25 : S165_042700-78.25
Yellow	8920	04/27/2021 15:22:55	Expert Logic Data point fault Moderate	'O2 Flow too High' Step 1	Analysis	042715-218 : : S165_042715-218.20
Yellow	70	04/27/2021 13:46:34	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.0909 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-202 : 5 : S165_042713-202.5
Yellow	201	04/27/2021 15:00:04	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.092 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042714-214 : 21 : S165_042714-214.21
Red	70	04/27/2021 13:40:52	SPC RbR above USL Critical	'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-201 : 25 : S165_042713-201.25
Red	3	04/27/2021 15:21:38	Maintenance Required	AFC #6 Ar Flow Rate: S10002905 Value=1004.1 outside of Threshold=1000 in 'MI Ar Flow Rate'	Analysis	::
Yellow	199	04/27/2021 15:13:43	Maintenance Reminder	AFC #6 Ar Flow Rate: S10002905 Value=999.14 outside of Threshold Reminder=600 in 'MI Ar Flow Rate'	Analysis	::
Red	1	04/27/2021 01:02:18	SECS Critical Error	Event Output failed	I/O	::
Blue	24	04/27/2021 15:21:14	Number of processes mismatch	For 1 Substrates, Processes per Substrate are not the same as the median count	Acquisition	042715-217 : : S165_042715-217.24
Blue	39	04/27/2021 15:15:17	Number of processes mismatch	For 2 Substrates, Processes per Substrate are not the same as the median	Acquisition	042715-216 : : S165_042715-216.16 S165_042715-216.22

Displaying Alarm Details

1 – Select a consolidated Alarm from the list.

2 – The Alarm details will be populated in the lower pane.

The screenshot shows the FabGuard Alarms interface. The top pane displays a table of alarms with columns for Class, Count, Time, Type, Detail, Category, and Lot: Slot: Substrate. A red box highlights a specific alarm row: Class: Red, Count: 70, Time: 04/27/2021 13:40:52, Type: SPC RbR above USL Critical, Detail: 'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'. A red arrow points from the text '1 – Select a consolidated Alarm from the list.' to this row.







The bottom pane shows the details for the selected alarm, including the title 'Analysis - SPC RbR above USL Critical; 'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)', a summary of 70 similar alarms, and specific details for the latest alarm: ID: 923, Class: Red, Time: 04/27/2021 13:40:52. A red arrow points from the text '2 – The Alarm details will be populated in the lower pane.' to this pane.

Class	Count	Time	Type	Detail	Category	Lot: Slot: Substrate
ACBYR		Any Time		*	An I/O Sys	
Blue	1	04/27/2021 01:03:27	Length of Step too long	" Step 1	Acquisition	042700-78 : 25 : S165_042700-
Yellow	8921	04/27/2021 15:24:00	Expert Logic Data point fault Moderate	'O2 Flow too High' Step 1	Analysis	042715-218 : : S165_042715-2
Yellow	70	04/27/2021 13:46:34	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.0909 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-202 : 5 : S165_042713-
Yellow	201	04/27/2021 15:00:04	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.092 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042714-214 : 21 : S165_042714-
Red	70	04/27/2021 13:40:52	SPC RbR above USL Critical	'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-201 : 25 : S165_042713-
Red	4	04/27/2021 15:24:25	Maintenance Required	AFC #6 Ar Flow Rate: S10002905 Value=1007.2 outside of Threshold=1000 in 'Ml Ar Flow Rate'	Analysis	::
Yellow	199	04/27/2021 15:13:43	Maintenance Reminder	AFC #6 Ar Flow Rate: S10002905 Value=999.14 outside of Threshold Reminder=600 in 'Ml Ar Flow Rate'	Analysis	::
Red	1	04/27/2021 01:02:18	SECS Critical Error	Event Output failed	I/O	::
Blue	24	04/27/2021 15:21:14	Number of processes mismatch	For 1 Substrates, Processes per Substrate are not the same as the median count	Acquisition	042715-217 : : S165_042715-2
Blue	39	04/27/2021 15:15:17	Number of processes mismatch	For 2 Substrates, Processes per Substrate are not the same as the median	Acquisition	042715-216 : : S165_042715-2

Analysis - SPC RbR above USL Critical; 'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'
Alarm represents 70 similar Alarms occurring from 10/22/2020 14:31:41 to 04/27/2021 13:40:52
Information below is from the latest Alarm
ID: 923
Class: Red
Time: 04/27/2021 13:40:52
Equipment Information
Tool Group: Group A

Clear or Delete All matching Alarms:

Alarm Icons

Icon	Alarm State
	Informational Alarm Cleared
	Warning Alarm Cleared
	Critical Alarm Cleared
	Informational Alarm Active
	Warning Alarm Active
	Critical Alarm Active

Sorting Alarms

Sort ascending or descending by clicking the column headers.

The screenshot shows the FabGuard Alarms interface. At the top, there is a menu bar with options: User, Screens, Run, Acquisition, Reports, Maintenance, Configuration, Help. Below the menu bar is a toolbar with icons for Alarms and Alerts, Tool, Chamber, Sensor, Live Data, Runs, Multi Run Viewer, Reports & Models, and Help. The main window is titled 'FabGuard Alarms' and contains a table of alarms. A red arrow points to the 'Class' column header. The table has columns: Class, Count, Time, Type, Detail, Category, and Lot: Slot: Substrate. The table contains several rows of alarm data. Below the table is a detailed view of a selected alarm, showing its ID, class, time, and equipment information. At the bottom of the interface, there are buttons for 'Clear All' and 'Delete All'.

Class	Count	Time	Type	Detail	Category	Lot: Slot: Substrate
Blue	1	04/27/2021 01:03:27	Length of Step too long	" Step 1	Acquisition	042700-78 : 25 : S165_042700-
Yellow	8921	04/27/2021 15:24:00	Expert Logic Data point fault Moderate	'O2 Flow too High' Step 1	Analysis	042715-218 : : S165_042715-2
Yellow	70	04/27/2021 13:46:34	SPCRbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.0909 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-202 : 5 : S165_042713-
Yellow	201	04/27/2021 15:00:04	SPCRbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.092 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042714-214 : 21 : S165_042714
Red	70	04/27/2021 13:40:52	SPCRbR above USL Critical	'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-201 : 25 : S165_042713
Red	4	04/27/2021 15:24:25	Maintenance Required	AFC #6 Ar Flow Rate: S10002905 Value=1007.2 outside of Threshold=1000 in 'Ml Ar Flow Rate'	Analysis	: :
Yellow	199	04/27/2021 15:13:43	Maintenance Reminder	AFC #6 Ar Flow Rate: S10002905 Value=999.14 outside of Threshold Reminder=600 in 'Ml Ar Flow Rate'	Analysis	: :
Red	1	04/27/2021 01:02:18	SECS Critical Error	Event Output failed	I/O	: :
Blue	24	04/27/2021 15:21:14	Number of processes mismatch	For 1 Substrates, Processes per Substrate are not the same as the median count	Acquisition	042715-217 : : S165_042715-2
Blue	39	04/27/2021 15:15:17	Number of processes mismatch	For 2 Substrates, Processes per Substrate are not the same as the median	Acquisition	042715-216 : : S165_042715-2

Analysis - SPCRbR above USL Critical: 'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'

- Alarm represents 70 similar Alarms occurring from 10/22/2020 14:31:41 to 04/27/2021 13:40:52
- Information below is from the latest Alarm
- ID: 923
- Class: Red
- Time: 04/27/2021 13:40:52
- Equipment Information
 - Tool Group: Group A

Clear or Delete All matching Alarms:

Filtering Alarms

Filter the alarm list by clicking a filter icon.

The screenshot shows the FabGuard Alarms interface. At the top, there is a menu bar with options: User, Screens, Run, Acquisition, Reports, Maintenance, Configuration, Help. Below the menu bar, there are tabs for Alarms and Alerts, Tool, Chamber, Sensor, Live Data, Runs, Multi Run Viewer, Reports & Models, and Help. The main area displays a table of alarms with columns: Class, Count, Time, Type, Detail, Category, and Lot, Substrate. A red box highlights the first row of the table, which has a filter icon (a blue triangle with a white 'f') in the Class column. Below the table, there is a detailed view of a selected alarm, showing its ID (923), Class (Red), Time (04/27/2021 13:40:52), and Equipment Information (Tool Group: Group A). At the bottom, there are buttons for 'Clear All' and 'Delete All'.

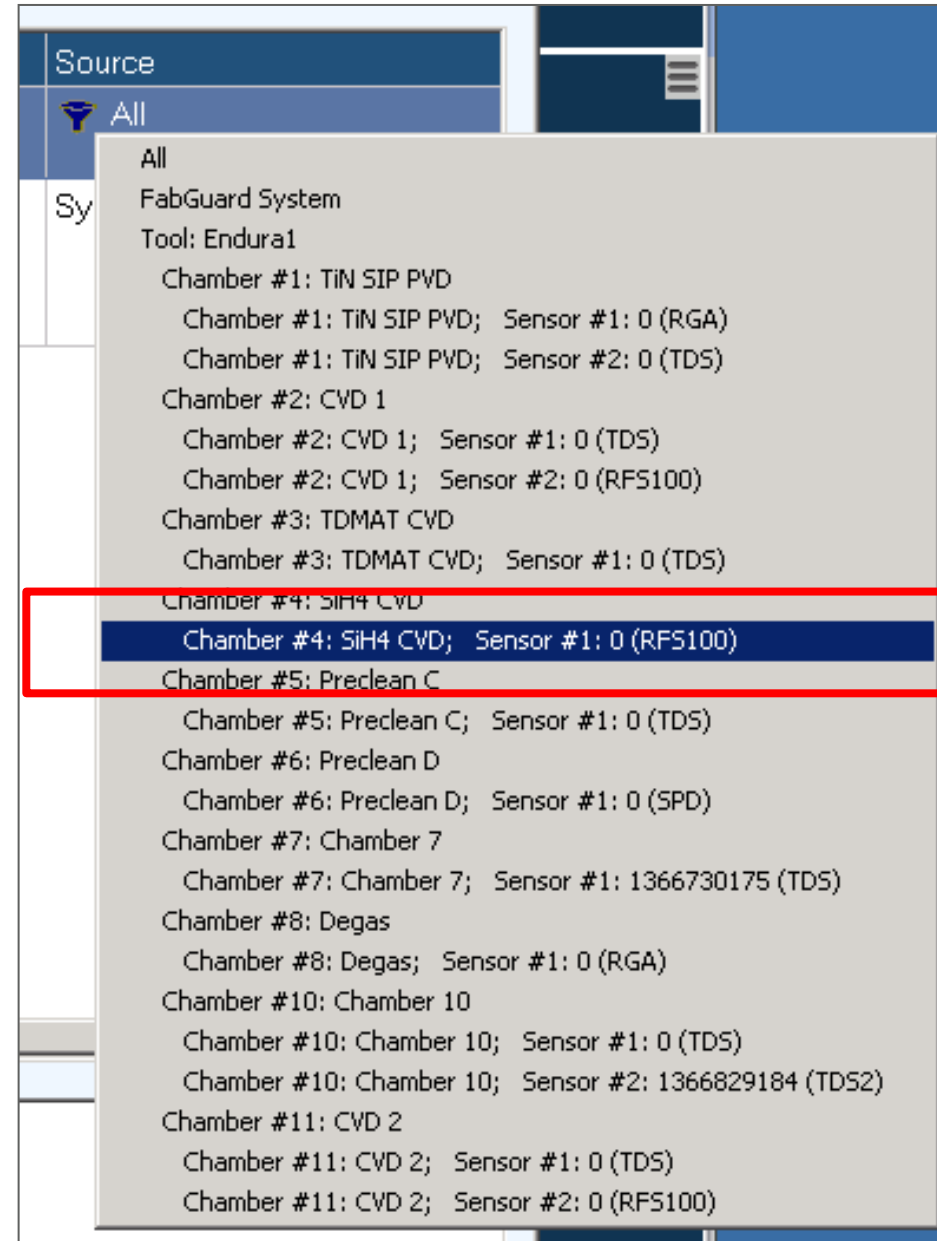
Class	Count	Time	Type	Detail	Category	Lot, Substrate
AC BYR		Any Time			An I/O Sys	
Blue	1	04/27/2021 01:03:27	Length of Step too long	" Step 1	Acquisition	042700-78 : 25 : S165_042700-
Yellow	8921	04/27/2021 15:24:00	Expert Logic Data point fault Moderate	'O2 Flow too High' Step 1	Analysis	042715-218 : : S165_042715-2
Yellow	70	04/27/2021 13:46:34	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.0909 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-202 : 5 : S165_042713-
Yellow	201	04/27/2021 15:00:04	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.092 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042714-214 : 21 : S165_042714
Red	70	04/27/2021 13:40:52	SPC RbR above USL Critical	'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-201 : 25 : S165_042713
Red	4	04/27/2021 15:24:25	Maintenance Required	AFC #6 Ar Flow Rate: S10002905 Value=1007.2 outside of Threshold=1000 in 'MI Ar Flow Rate'	Analysis	: :
Yellow	199	04/27/2021 15:13:43	Maintenance Reminder	AFC #6 Ar Flow Rate: S10002905 Value=999.14 outside of Threshold Reminder=600 in 'MI Ar Flow Rate'	Analysis	: :
Red	1	04/27/2021 01:02:18	SECS Critical Error	Event Output failed	I/O	: :
Blue	24	04/27/2021 15:21:14	Number of processes mismatch	For 1 Substrates, Processes per Substrate are not the same as the median count	Acquisition	042715-217 : : S165_042715-2
Blue	39	04/27/2021 15:15:17	Number of processes mismatch	For 2 Substrates, Processes per Substrate are not the same as the median	Acquisition	042715-216 : : S165_042715-2

Analysis - SPC RbR above USL Critical; 'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'

- Alarm represents 70 similar Alarms occurring from 10/22/2020 14:31:41 to 04/27/2021 13:40:52
- Information below is from the latest Alarm
- ID: 923
- Class: Red
- Time: 04/27/2021 13:40:52
- Equipment Information
 - Tool Group: Group A

Clear or Delete All matching Alarms:

Drop Down Lists in Filters



Text Matching in Filters

Class	Count	Time	Type	Detail
AC BYR		Any Time		*11*
Yellow	8924	04/27/2021 15:27:07	Expert Logic Data point fault Moderate	'O2 Flow too High' Step 1
Yellow	70	04/27/2021 13:46:34	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.0909 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'
Yellow	201	04/27/2021 15:00:04	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.092 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'
Red	70	04/27/2021 13:40:52	SPC RbR above USL Critical	'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'

Matches are exact, except when wildcards are used:

* = wildcard for 0 or more characters

? = wildcard for exactly 1 character

! = NOT (NOT clauses are AND'ed)

For example the filter: A, B*, C, !*D, !E is interpreted as (A or B* or C) and (!*D and !E)



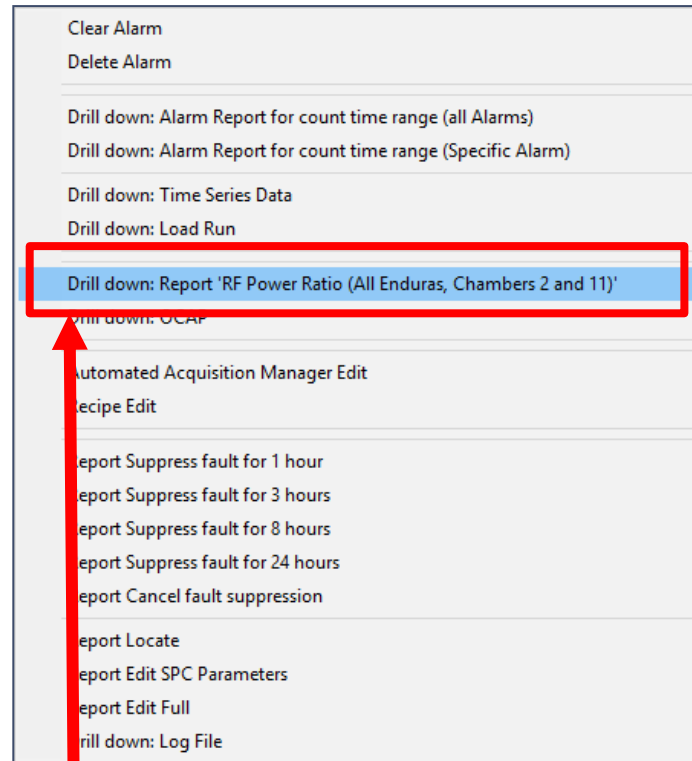
Drill Down to Reports, Data, and OCAPs

Alarm Icons

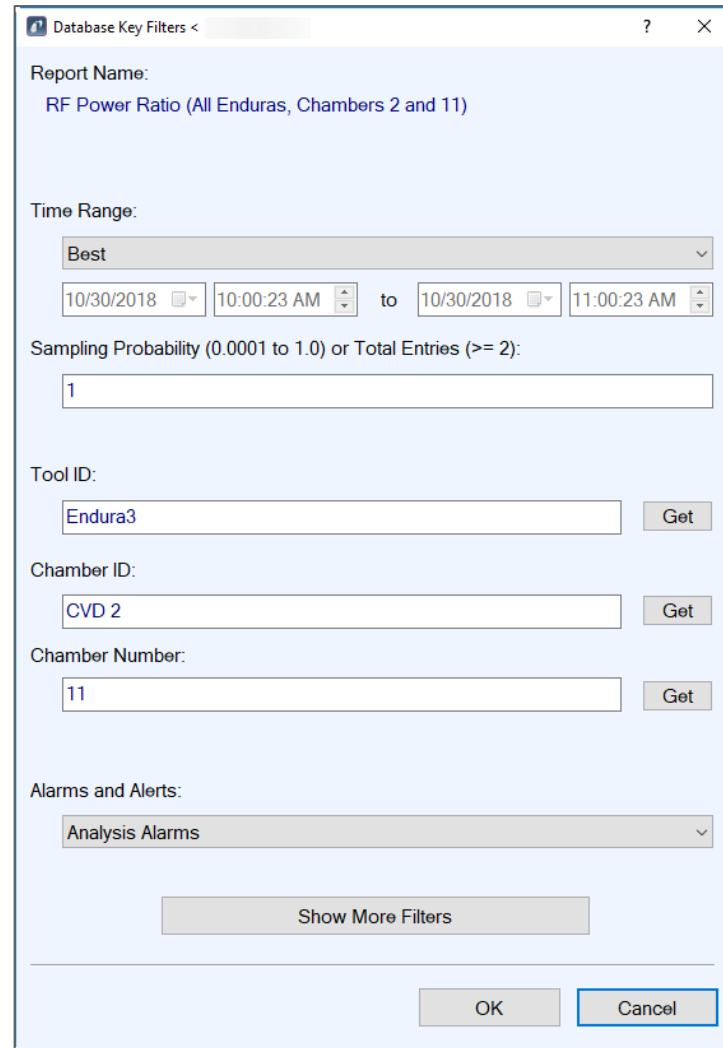
Classify the Alarm

- Real tool problem
- Limits problem (false alarm)
- Data collection problem (false alarm)

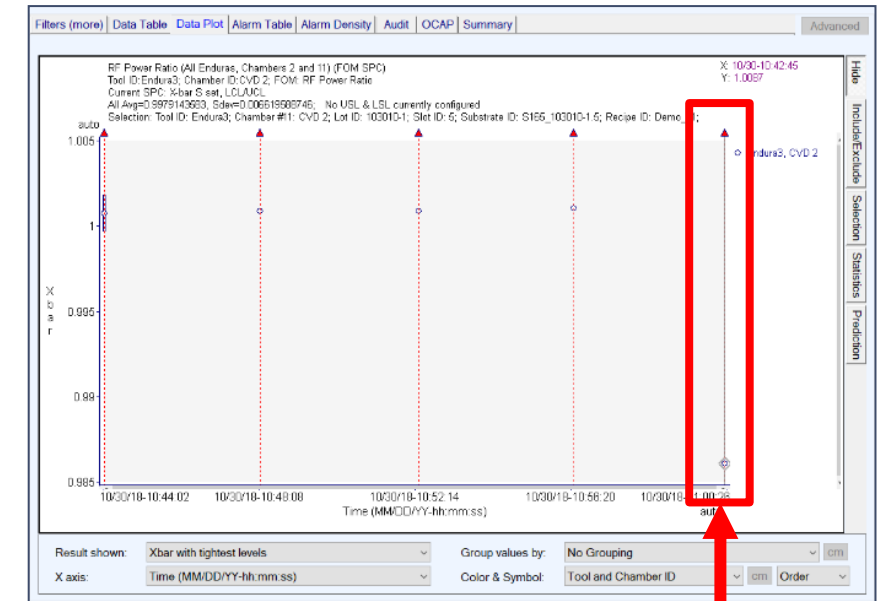
Report Drill Down



1 – Right-click an alarm and select **Drill down: Report.**

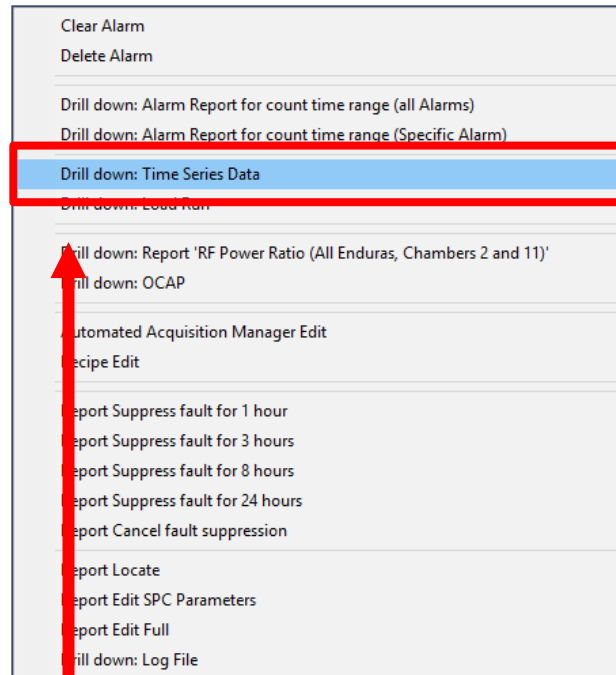


2 – Modify the key database filters if needed.

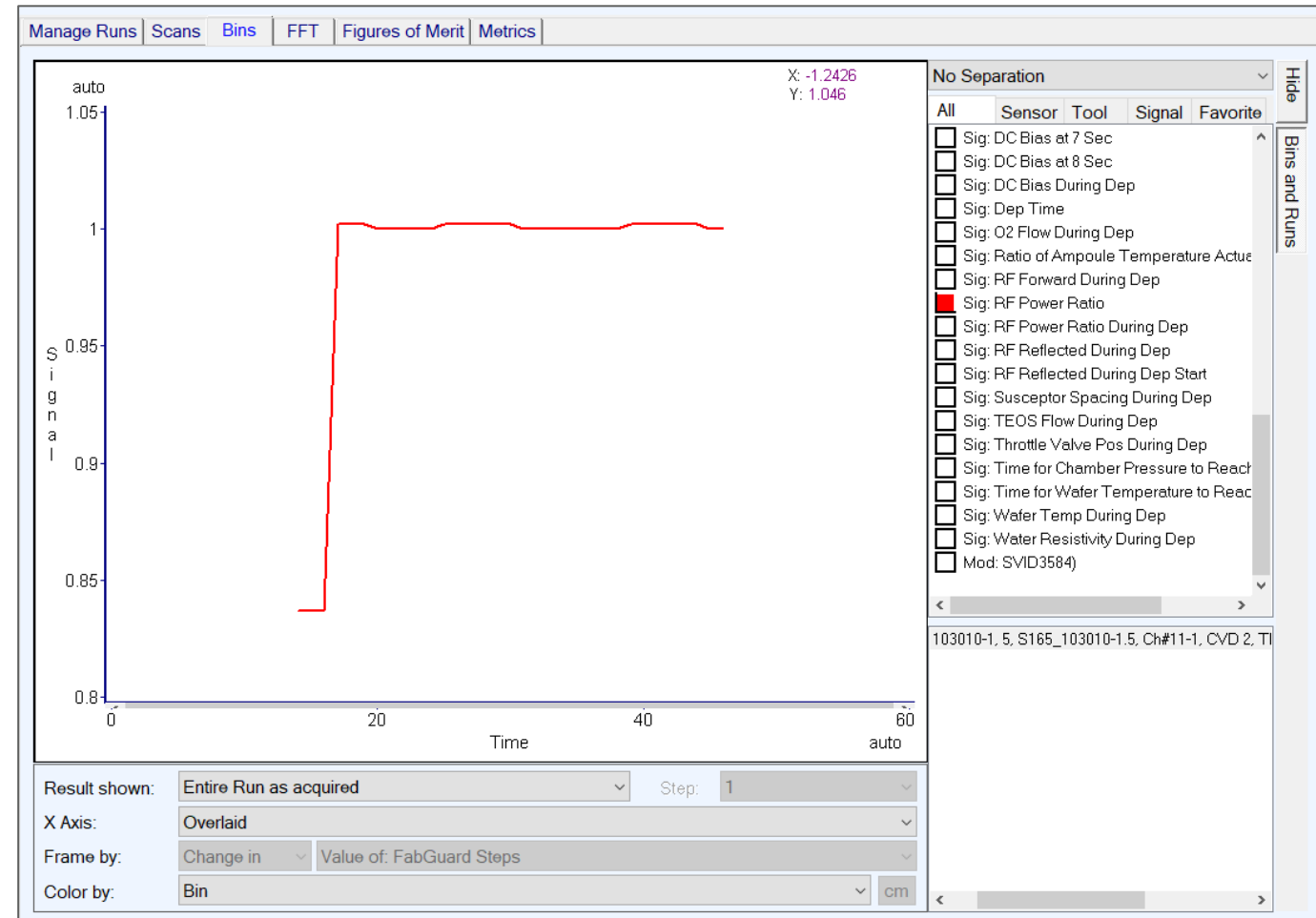


3 – The point that generated the alarm will be selected in the report.

Time Series Data Drill Down

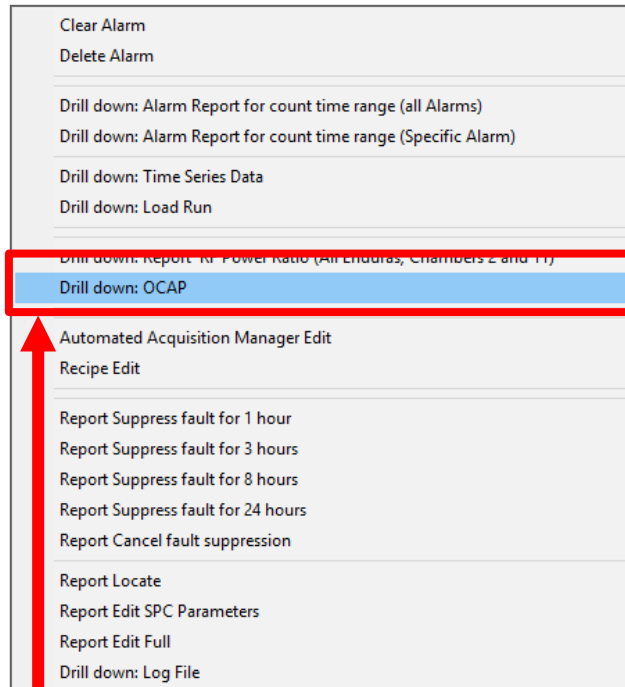


1 – Right-click an alarm and select **Drill down: Time Series Data**.

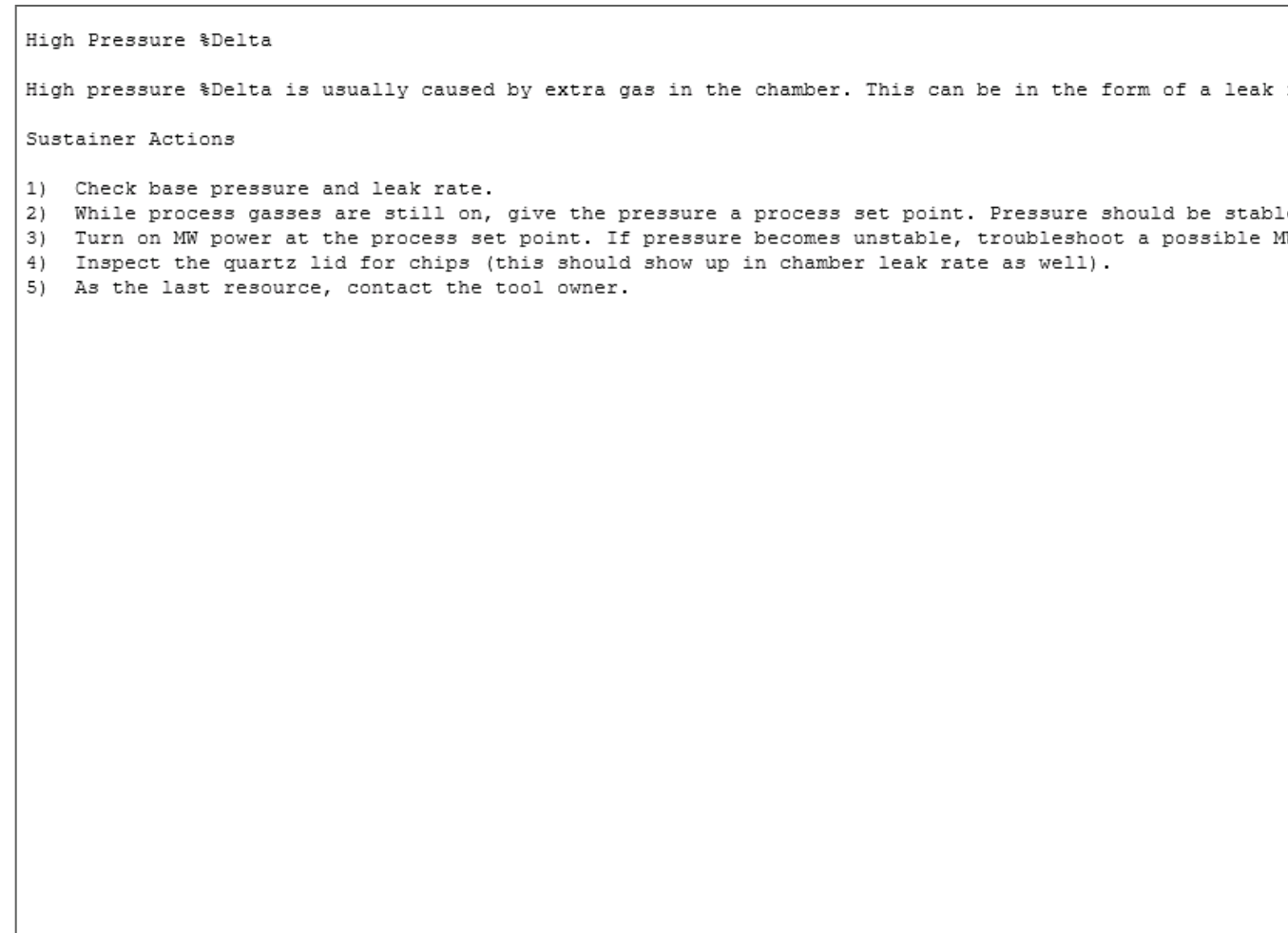


2 – Time series data from the run is loaded into the **Multi Run Viewer**.

OCAP Drill Down



1 – Right-click an alarm and select **Drill down: OCAP**.

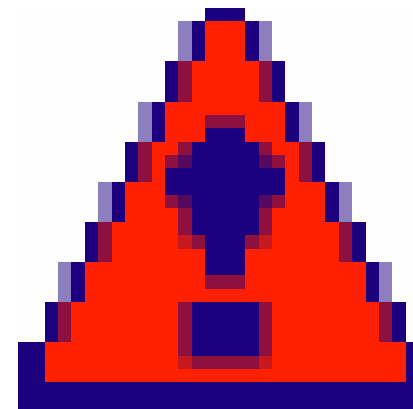


2 – The configured OCAP is opened for viewing.

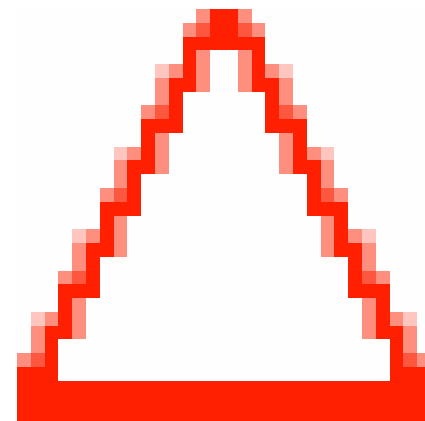
4

Clear and Delete Alarms

Active vs. Cleared Icons



Active



Cleared

Clear and Delete All Alarms from FabGuard IPM

Clear All

- Clear all alarms for the selected Tool

Delete All

- Delete all alarms for the selected Tool

Class	Count	Time	Type	Detail	Category	Lot : Slot : Substrate
A C B Y R		Any Time		*	An I/O Sys	
Blue	1	04/27/2021 01:03:27	Length of Step too long	" Step 1	Acquisition	042700-78 : 25 : S165_042700-
Yellow	8921	04/27/2021 15:24:00	Expert Logic Data point fault Moderate	'O2 Flow too High' Step 1	Analysis	042715-218 : : S165_042715-2
Yellow	70	04/27/2021 13:46:34	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.0909 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-202 : 5 : S165_042713-
Yellow	201	04/27/2021 15:00:04	SPC RbR above USW Moderate	'RF Power Ratio' Step 1 Value=1.092 above USW=1.0848 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042714-214 : 21 : S165_042714
Red	70	04/27/2021 13:40:52	SPC RbR above USL Critical	'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'	Analysis	042713-201 : 25 : S165_042713
Red	4	04/27/2021 15:24:25	Maintenance Required	AFC #6 Ar Flow Rate: S10002905 Value=1007.2 outside of Threshold=1000 in 'MI Ar Flow Rate'	Analysis	: :
Yellow	199	04/27/2021 15:13:43	Maintenance Reminder	AFC #6 Ar Flow Rate: S10002905 Value=999.14 outside of Threshold Reminder=600 in 'MI Ar Flow Rate'	Analysis	: :
Red	1	04/27/2021 01:02:18	SECS Critical Error	Event Output failed	I/O	: :
Blue	24	04/27/2021 15:21:14	Number of processes mismatch	For 1 Substrates, Processes per Substrate are not the same as the median count	Acquisition	042715-217 : : S165_042715-2
Blue	39	04/27/2021 15:15:17	Number of processes mismatch	For 2 Substrates, Processes per Substrate are not the same as the median	Acquisition	042715-216 : : S165_042715-2

Analysis - SPC RbR above USL Critical; 'RF Power Ratio' Step 1 Value=1.1139 above USL=1.1048 in 'RF Power Ratio (All Enduras, Chambers 2 and 11)'

Alarm represents 70 similar Alarms occurring from 10/22/2020 14:31:41 to 04/27/2021 13:40:52

Information below is from the latest Alarm

ID: 923

Class: Red

Time: 04/27/2021 13:40:52

Equipment Information

Tool Group: Group A

Clear or Delete All matching Alarms:

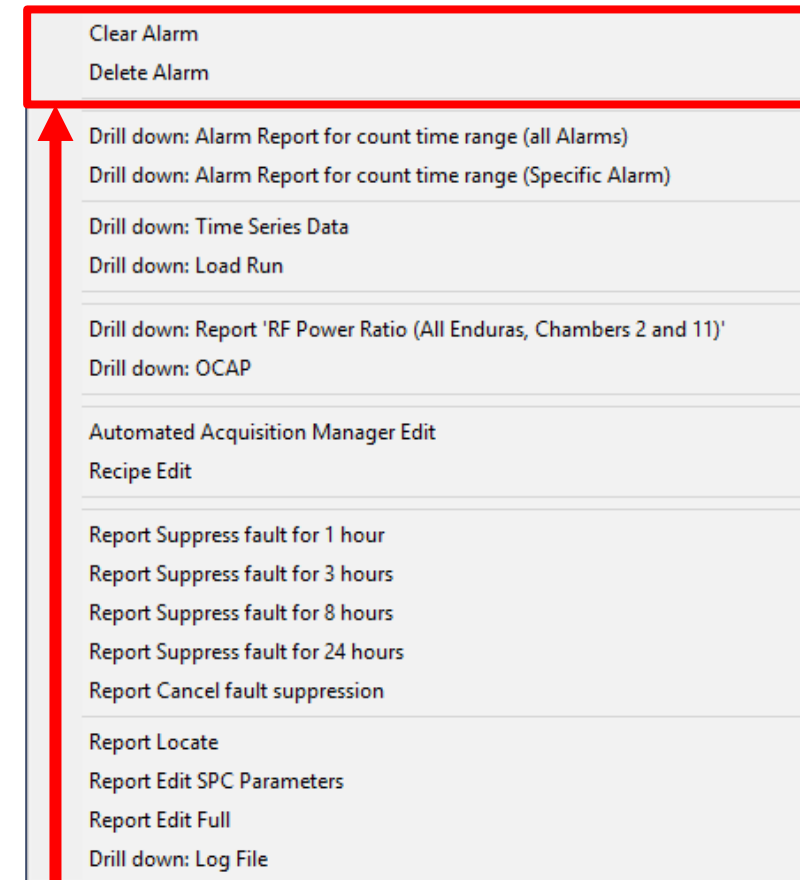
Clear and Delete a Single Alarm from FabGuard IPM

Clear Alarm

- Right-click a consolidated alarm to and select **Clear Alarm** to clear the selected alarm for the Tool

Delete Alarm

- Right-click a consolidated alarm to and select **Delete Alarm** to delete the selected alarm for the Tool



Right-click an alarm and select **Clear Alarm** or **Delete Alarm**.

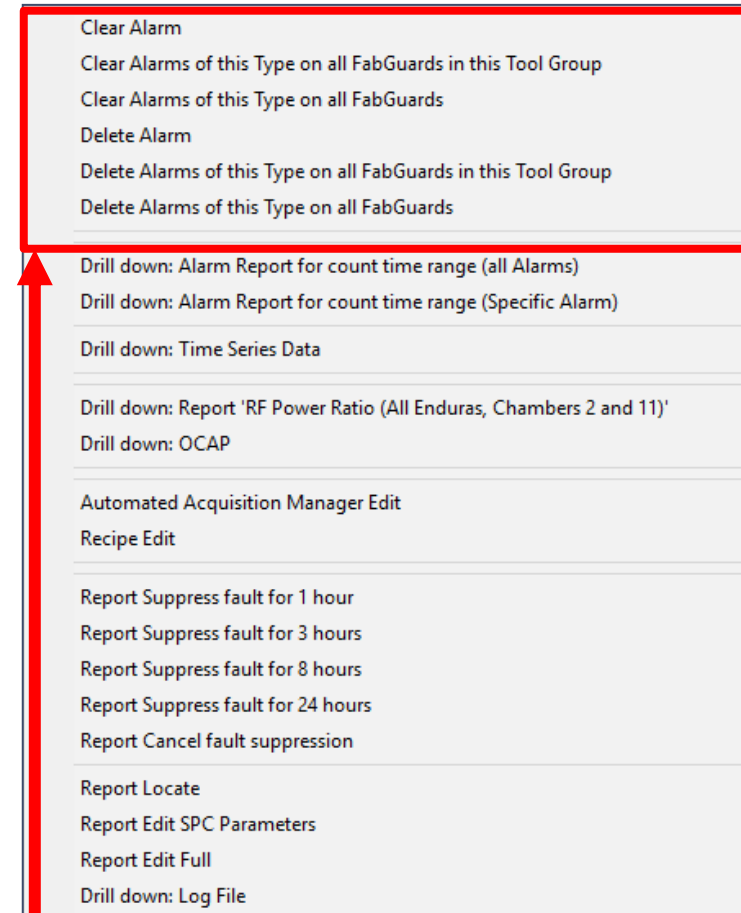
Clear and Delete Alarms from FabGuard Web

All FabGuards in this Tool Group

- Clear or delete this alarm from all FabGuard Nodes belonging to the same Tool Group as the selected alarm

All FabGuards

- Clear or delete this alarm from all FabGuard Nodes connected to the same FabGuard Executive as the selected alarm



Right-click an alarm and select one of these options.

Module Summary

In this module, you have learned:

- How to access the Active Alarms screen from FabGuard Web and FabGuard IPM
- How to display, sort, and filter active alarms
- How to drill down to reports, data, and OCAPs related to an active alarm
- How to clear and delete active alarms

Thank You!

You have completed the
Alarm Manager module!

You may come back and review the
content of this module at any time.

Contact Information



If you have any questions about this module, please contact Michael Neel:

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617.527.1219