

# Example 5 – List of active interlocks, bypass, Ignore PV, Prompts



- Applicable to: DeltaV V13
- Application: Abnormal situation awareness
- Desired outcome: Increased operator visibility to active interlocks, bypassed interlocks or permissives, active Ignore PV, active prompts, etc.
- Background: DeltaV V13 provides a new ability to also filter the alarm summary on Functional Classification and/or Category as shown in the following examples.

# Example 5 – Initial Setup to Configure Lists

- Add “Report” alarm priority at level 4.
- Configure UserSettings to hide this priority in Alarm List

**User\_Ref**

This template is for a system-wide UserSettings picture. Save as UserSettings in the Standard workstations.

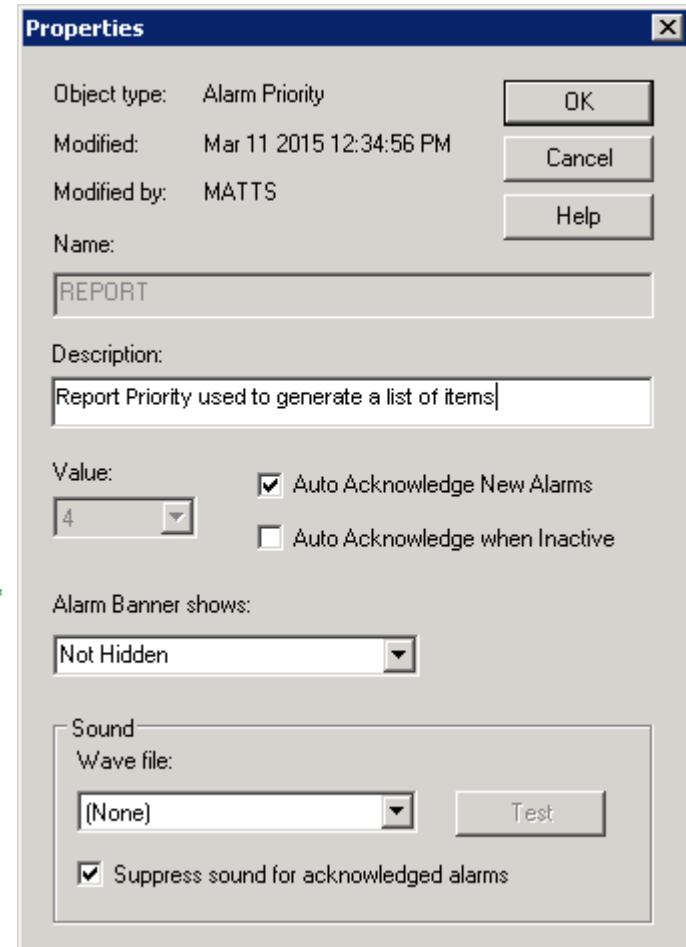
This template is also for a workstation-specific UserSettings picture. Save as <ComputerName>\_Settings.grf in the Standard workstations. For example, a workstation-specific UserSettings picture for a computer named TESTING\_OPST\_S should be saved as: **TESTING\_OPST\_SETTINGS.grf**.

You may have both system-wide and workstation-specific UserSettings pictures at all, or only a system-wide version, or only workstation-specific version(s).

```

'Alarm threshold initialization
'
NOTE
'Uncomment only ONE of the following #Const lines at a time
'To Disable - uncomment the '=0' line and comment the '=1' line.
'To Enable - uncomment the '=1' line and comment the '=0' line.
'
'Uncomment the following line to disable the initialization of the Alarm Threshold default values
#Const INIT_ALARM_THRESHOLD = 0  'Disables Initialization of Alarm Threshold Defaults
'
'Uncomment the following line to enable the initialization of the Alarm Threshold default values
#Const INIT_ALARM_THRESHOLD = 1  'Enables Initialization of Alarm Threshold Defaults
'
These values control the alarms that will be displayed
'Uncomment the following lines, and set the value to the desired threshold.
'in the alarm banner.
'default values :
Const PROCESS_THRESHOLD_DEFAULT = 4
Const DEVICE_THRESHOLD_DEFAULT = 7
Const HARDWARE_THRESHOLD_DEFAULT = 7
Const SIS_PROCESS_THRESHOLD_DEFAULT = 4
Const SIS_DEVICE_THRESHOLD_DEFAULT = 7
Const SIS_HARDWARE_THRESHOLD_DEFAULT = 4
#If INIT_ALARM_THRESHOLD Then
  If Not DeltaAlarmThreshold Is Nothing Then
    DeltaAlarmThreshold.InitDefaultAlarmThresholds PROCESS_THRESHOLD_DEFAULT, -
      DEVICE_THRESHOLD_DEFAULT, -
      HARDWARE_THRESHOLD_DEFAULT, -
      SIS_PROCESS_THRESHOLD_DEFAULT, -
      SIS_DEVICE_THRESHOLD_DEFAULT, -
      SIS_HARDWARE_THRESHOLD_DEFAULT
  End If
#End If
'end of Alarm threshold initialization

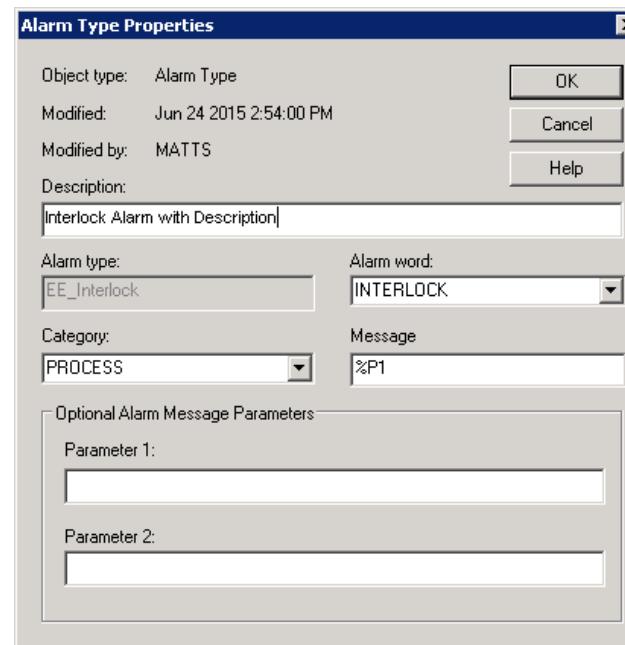
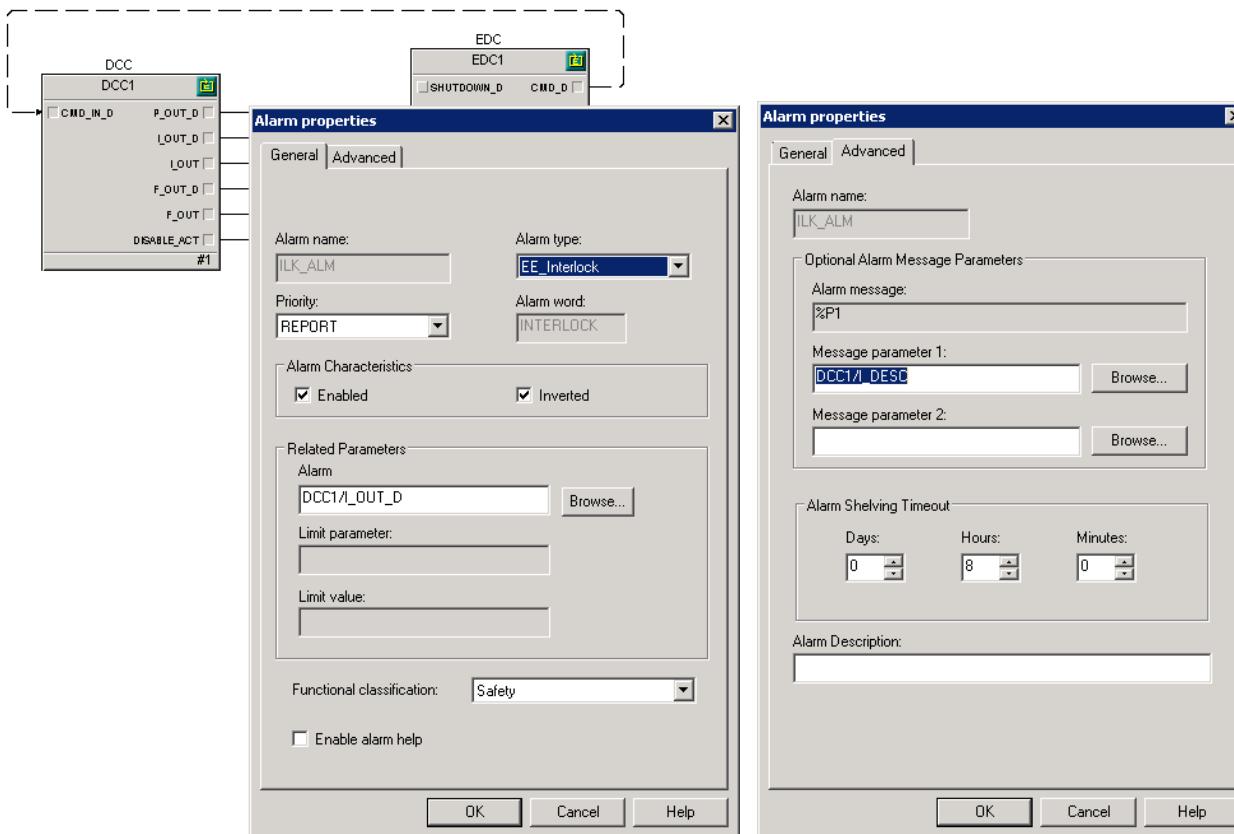
```



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# Example 5 – Active Interlock Summary

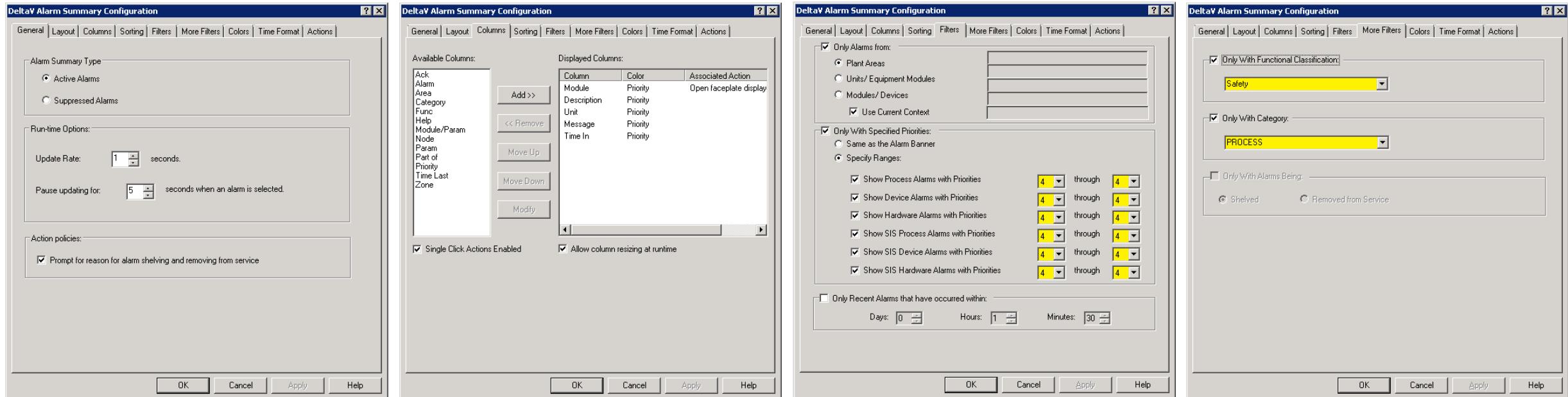
- Add Interlock Alarm Type
- Add Interlock Alarm on module(s).



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# Example 5 – Active Interlock Summary

- Configure Graphic with DeltaV Alarm Summary with below options

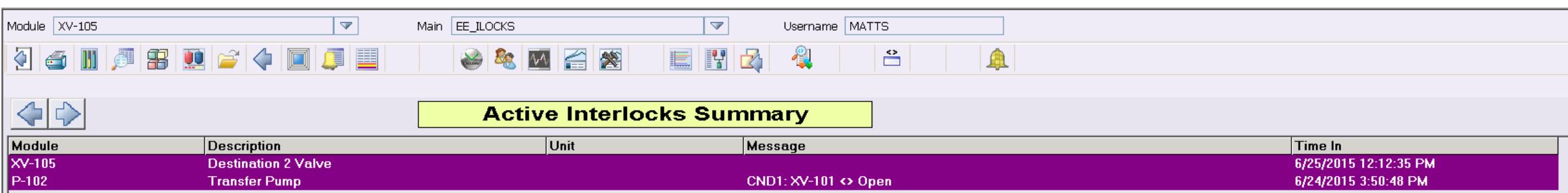


The image displays four side-by-side screenshots of the DeltaV Alarm Summary Configuration dialog box, showing different tabs and their settings:

- General Tab:**
  - Alarm Summary Type:** Active Alarms (selected).
  - Run-time Options:**
    - Update Rate: 1 seconds.
    - Pause updating for: 5 seconds when an alarm is selected.
  - Action policies:** Prompt for reason for alarm shelving and removing from service.
- Layout Tab:**
  - Available Columns:** A list of columns including Ack, Alarm, Area, Category, Func, Help, Module/Param, Node, Param, Part of Priority, Time Last, Zone.
  - Displayed Columns:** A list of columns currently displayed: Column, Color, Associated Action. The associated action is "Open faceplate display".
  - Buttons:** Add >>, << Remove, Move Up, Move Down, Modify.
  - Checkboxes:** Single Click Actions Enabled, Allow column resizing at runtime.
- Columns Tab:**
  - Only Alarms from:**
    - Plant Areas (radio button selected).
    - Units/ Equipment Modules.
    - Modules/ Devices.
    - Use Current Context (checkbox checked).
  - Only With Specified Priorities:**
    - Same as the Alarm Banner (radio button selected).
    - Specify Ranges (checkbox checked).
    - Priority ranges: Show Process Alarms with Priorities (4 through 4), Show Device Alarms with Priorities (4 through 4), Show Hardware Alarms with Priorities (4 through 4), Show SIS Process Alarms with Priorities (4 through 4), Show SIS Device Alarms with Priorities (4 through 4), Show SIS Hardware Alarms with Priorities (4 through 4).
  - Only Recent Alarms that have occurred within:** Days: 0, Hours: 1, Minutes: 30.
- Filters Tab:**
  - Only With Functional Classification:** Safety.
  - Only With Category:** PROCESS.
  - Only With Alarms Being:** Shelved, Removed from Service.

# Example 5 – Active Interlock Summary

- Open graphic in Run mode to see results
- Note the Message Column is Empty in one case but filled out in the other. The Message blank showing the Interlock is active but didn't change the state while the other did.

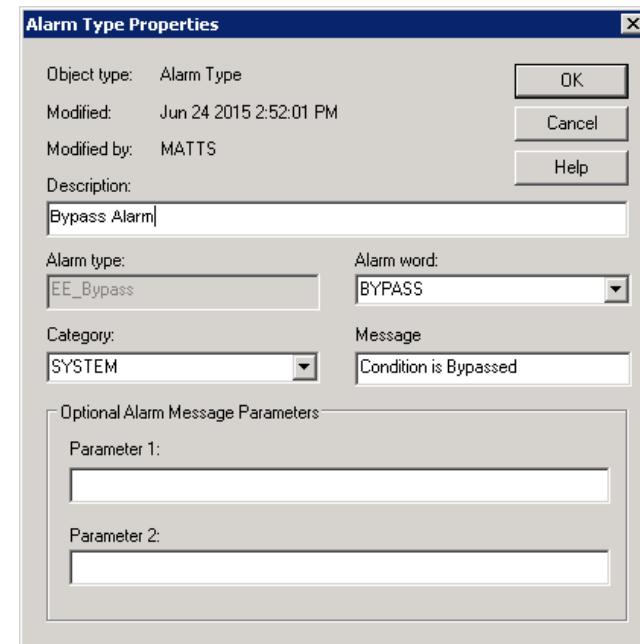
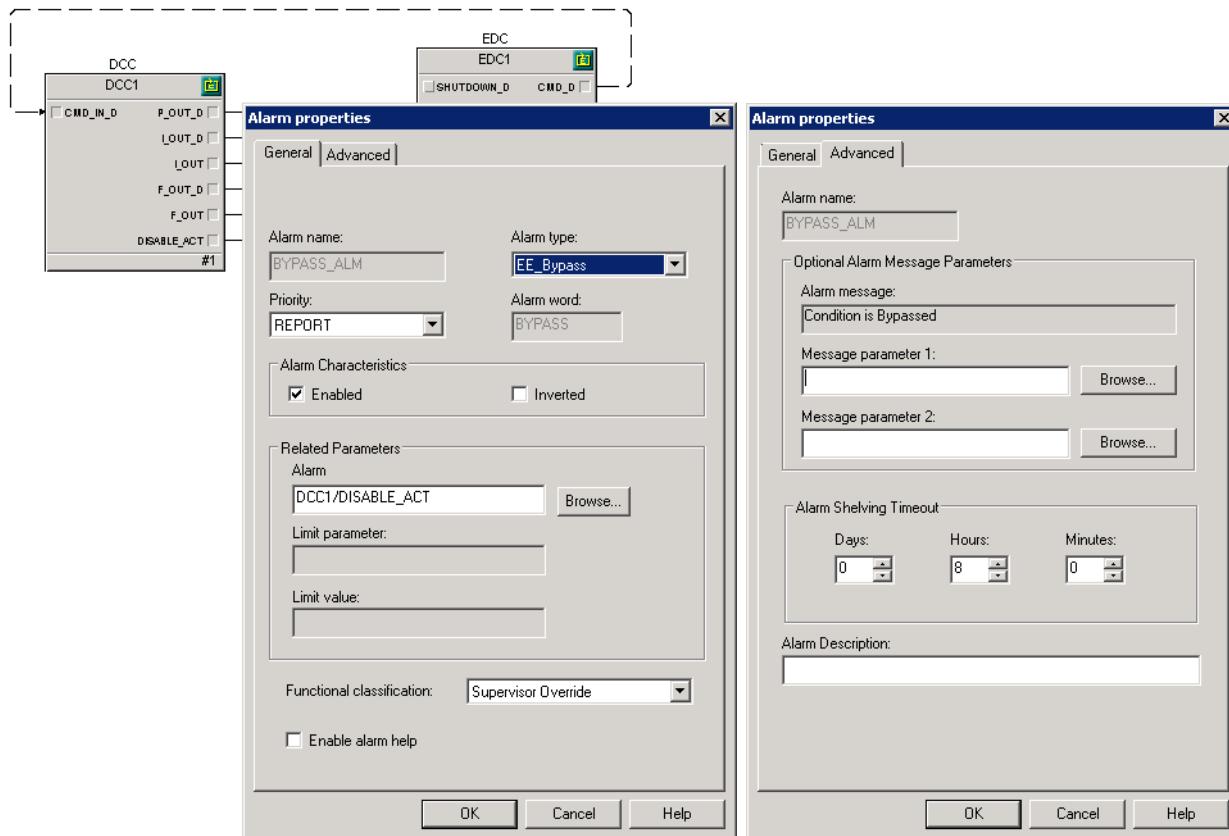


The screenshot shows a software interface for managing interlocks. At the top, there are three dropdown menus: 'Module' set to 'XV-105', 'Main' set to 'EE\_ILOCKS', and 'Username' set to 'MATTs'. Below the menus is a toolbar with various icons for file operations like open, save, print, and search, as well as system functions like refresh, help, and log. In the center, a yellow header bar displays the title 'Active Interlocks Summary'. Below this, a table lists active interlocks. The columns are 'Module', 'Description', 'Unit', 'Message', and 'Time In'. There are two entries:

Module	Description	Unit	Message	Time In
XV-105	Destination 2 Valve			6/25/2015 12:12:35 PM
P-102	Transfer Pump		CND1: XV-101 < Open	6/24/2015 3:50:48 PM

# Example 5 – Active Bypass Summary

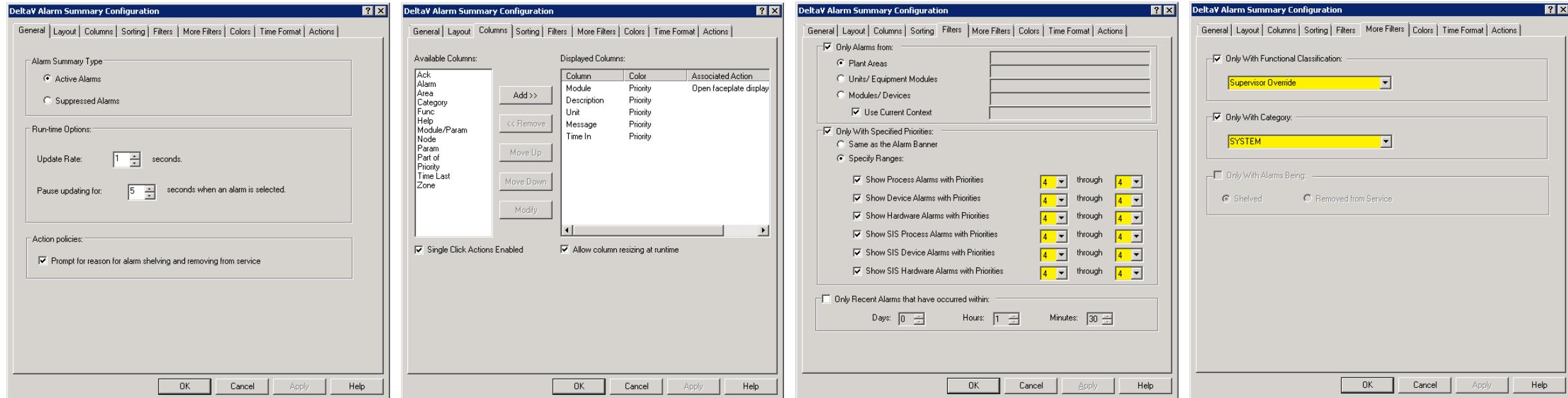
- Add Bypass Alarm Type
- Add Bypass Alarm on module(s).



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# Example 5 – Active Bypass Summary

- Configure Graphic with DeltaV Alarm Summary with below options



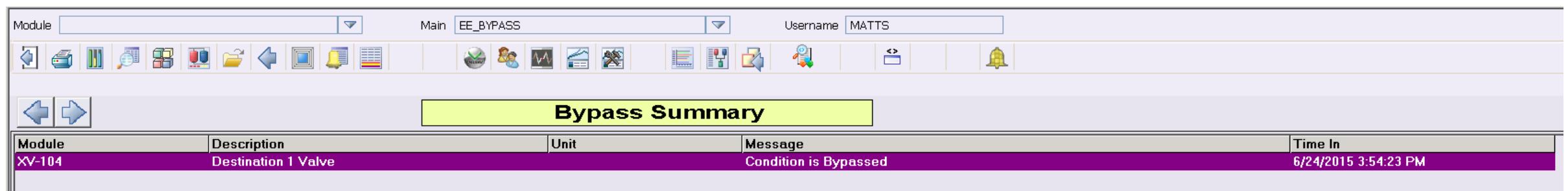
The image displays four side-by-side screenshots of the DeltaV Alarm Summary Configuration dialog box, showing different tabs and their settings:

- General Tab:**
  - Alarm Summary Type:** Active Alarms (selected).
  - Run-time Options:**
    - Update Rate: 1 seconds.
    - Pause updating for: 5 seconds when an alarm is selected.
  - Action policies:** Prompt for reason for alarm shelving and removing from service.
- Layout Tab:**
  - Available Columns:** A list of columns including Ack, Alarm, Area, Category, Func, Help, Module/Param, Node, Param, Part of Priority, Time Last, Zone.
  - Displayed Columns:** A list of columns currently displayed: Column, Color, Associated Action. The associated action is "Open faceplate display".
  - Buttons:** Add >>, << Remove, Move Up, Move Down, Modify.
  - Checkboxes:** Single Click Actions Enabled, Allow column resizing at runtime.
- Columns Tab:**
  - Only Alarms from:**
    - Plant Areas (radio button selected).
    - Units/ Equipment Modules.
    - Modules/ Devices.
    - Use Current Context (checkbox checked).
  - Only With Specified Priorities:**
    - Same as the Alarm Banner (radio button selected).
    - Specify Ranges (radio button selected).
    - Checkboxes for Show Process Alarms with Priorities through Priority 4, Show Device Alarms with Priorities through Priority 4, Show Hardware Alarms with Priorities through Priority 4, Show SIS Process Alarms with Priorities through Priority 4, Show SIS Device Alarms with Priorities through Priority 4, Show SIS Hardware Alarms with Priorities through Priority 4.
  - Only Recent Alarms that have occurred within:** Days: 0, Hours: 1, Minutes: 30.
- Filters Tab:**
  - Only With Functional Classification:** Supervisor Override.
  - Only With Category:** SYSTEM.
  - Only With Alarms Being:** Shelved (radio button selected).

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# Example 5 – Active Bypass Summary

- Open graphic in Run mode to see results



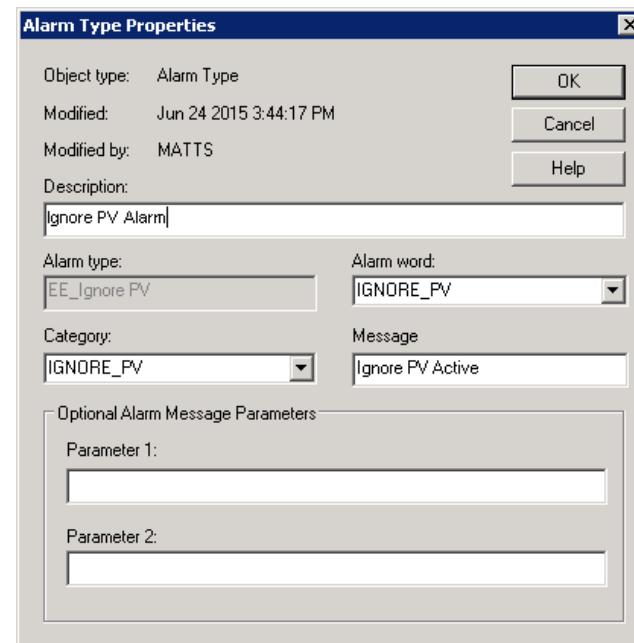
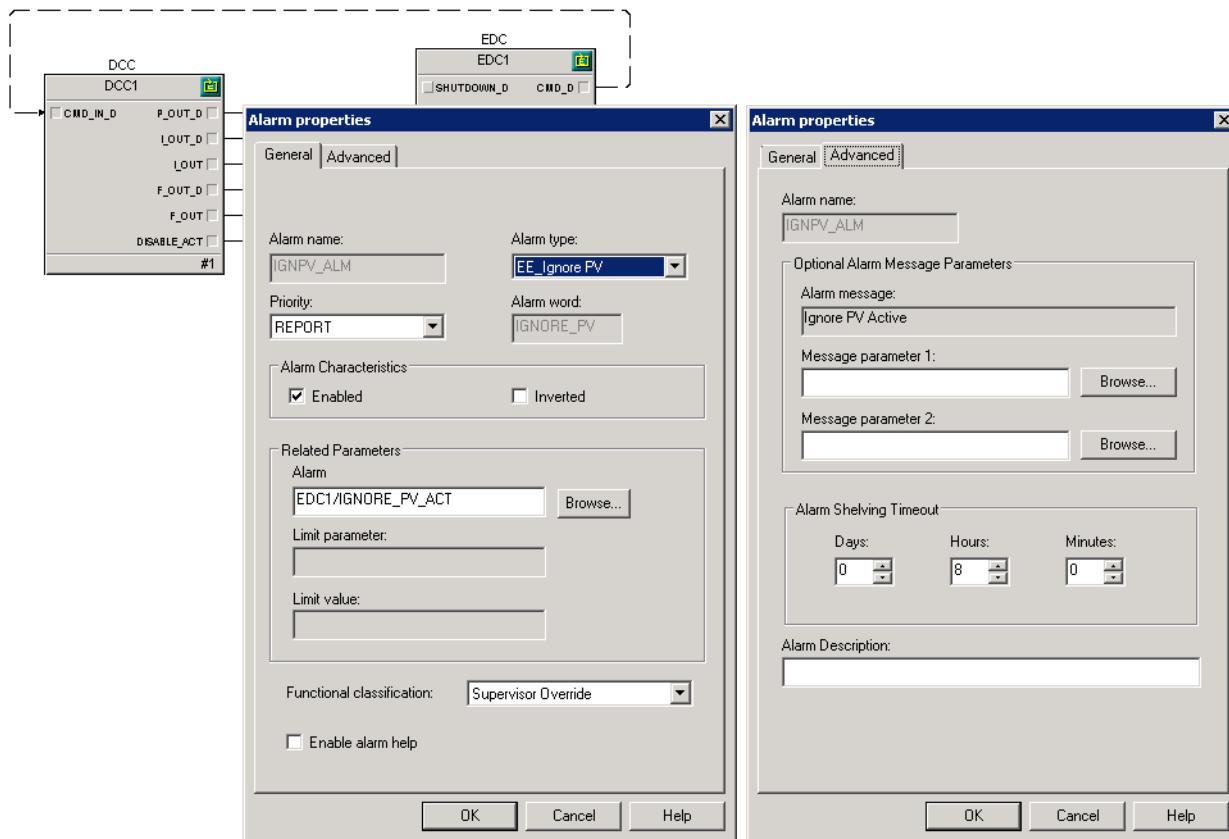
The screenshot shows a process control software interface with the following details:

- Top Bar:** Module dropdown, Main dropdown set to EE\_BYPASS, Username field containing MATTS.
- Toolbar:** Various icons for navigation, configuration, and monitoring.
- Navigation Bar:** Back, Forward, Home, and Search buttons.
- Title Bar:** Bypass Summary.
- Data Table:** A table with the following columns and data:

Module	Description	Unit	Message	Time In
XV-104	Destination 1 Valve		Condition is Bypassed	6/24/2015 3:54:23 PM

# Example 5 – Ignore PV Summary

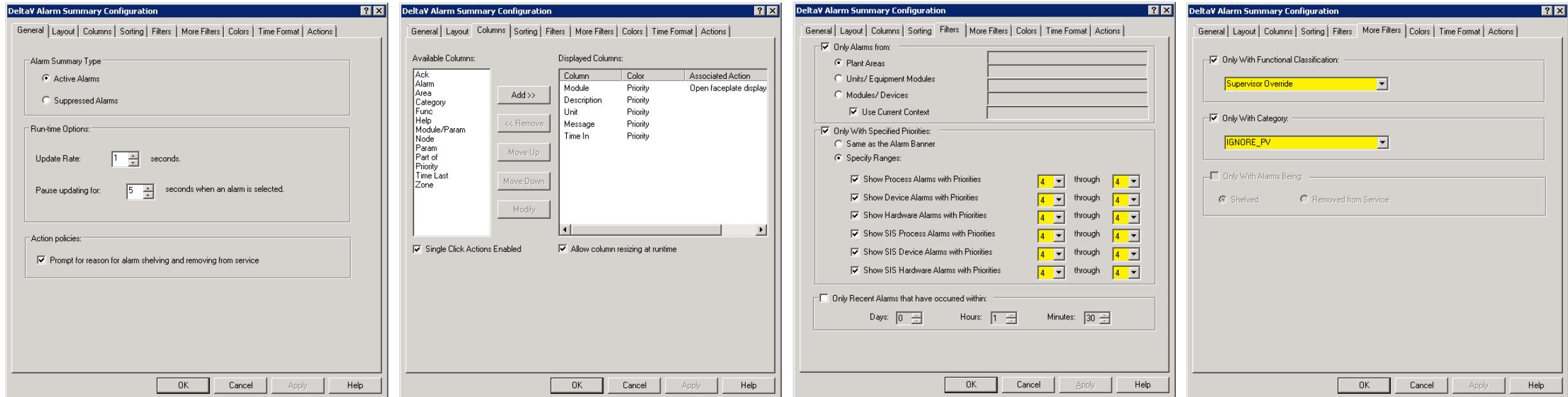
- Add Prompt Alarm Type
- Add Prompt Alarm on module(s).



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# Example 5 – Ignore PV Summary

- Configure Graphic with DeltaV Alarm Summary with below options



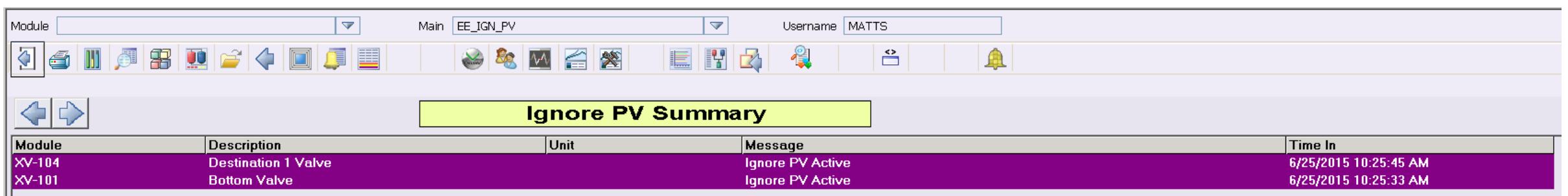
The image displays four side-by-side configurations of the DeltaV Alarm Summary Configuration dialog box, each showing a different set of filtering criteria:

- Leftmost Dialog:** Shows "Active Alarms" selected under "Alarm Summary Type". It includes "Run-time Options" for update rate (1 second) and pause duration (5 seconds), and an "Action policies" section with a checked "Prompt for reason for alarm shelving and removing from service" option.
- Second Dialog from Left:** Shows the "Columns" tab of the configuration. It lists "Available Columns" on the left and "Displayed Columns" on the right. The displayed columns include Ack, Alarm, Area, Category, Func, Help, Module/Param, Node, Param, Part of Priority, Time Last, Zone, Color, Priority, and Associated Action (Open faceplate display). Buttons for Add >>, << Remove, Move Up, Move Down, and Modify are available.
- Third Dialog from Left:** Shows the "General" tab. Under "Only Alarms from:", "Plant Areas" is selected. Under "Only With Specified Priorities:", "Specify Ranges" is selected, with priority ranges set to 4 through 4 for various categories. A checkbox for "Only Recent Alarms that have occurred within:" is present, along with dropdowns for Days (0), Hours (1), and Minutes (30).
- Rightmost Dialog:** Shows the "General" tab. Under "Only With Functional Classification:", "Supervisor Override" is selected. Under "Only With Category:", "IGNORE\_PV" is selected. A checkbox for "Only With Alarms Being:" is present, with "Shelved" selected.

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# Example 5 – Ignore PV Summary

- Open graphic in Run mode to see results

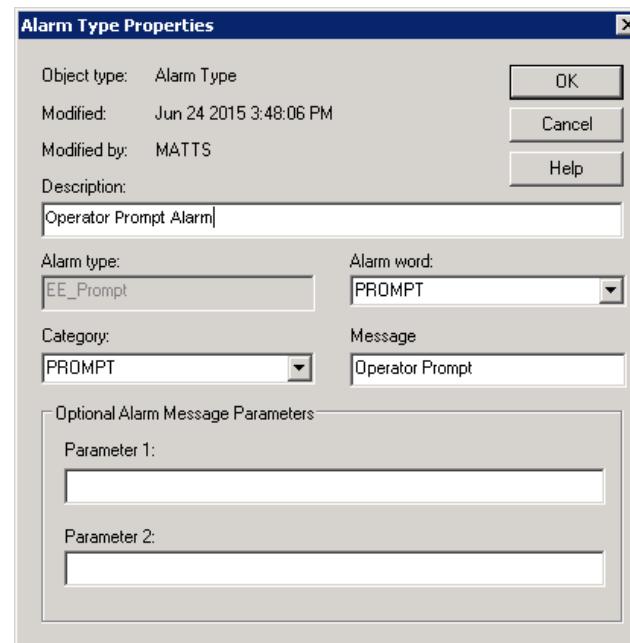
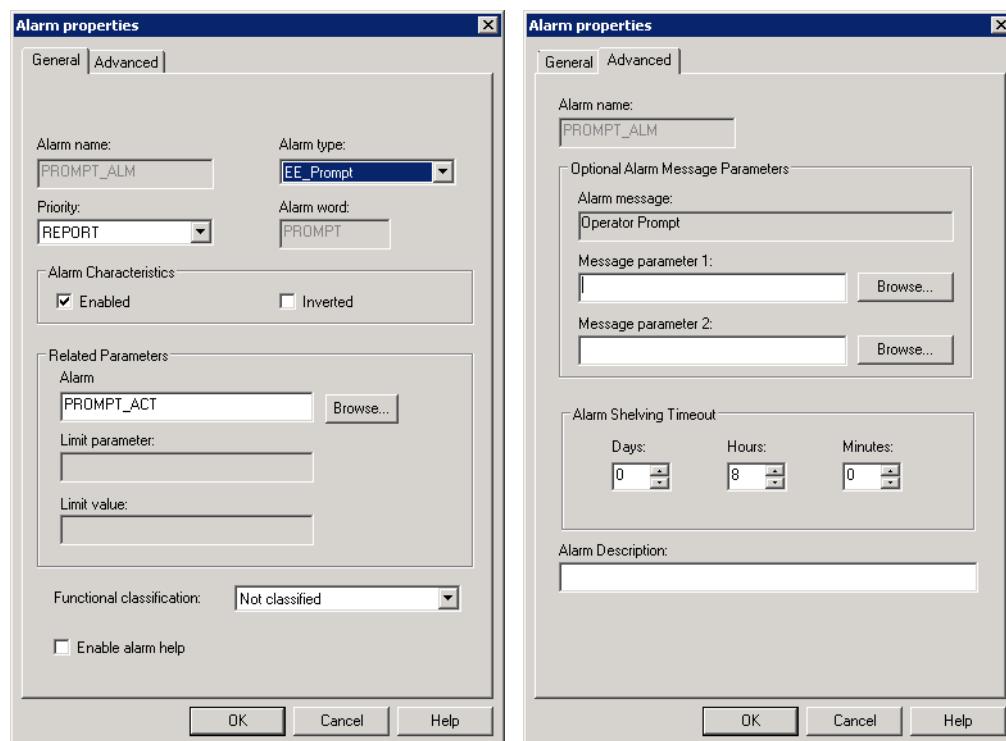


The screenshot shows a software interface for a control system. At the top, there are three input fields: 'Module' (empty), 'Main' set to 'EE\_IGN\_PV', and 'Username' set to 'MATTs'. Below these are two rows of icons, likely for navigation and system functions. The main area features a title bar with 'Ignore PV Summary' in green. In the bottom left corner of this area, there are two blue double-headed arrow icons. The main content area is a table with the following data:

Module	Description	Unit	Message	Time In
XV-104	Destination 1 Valve		Ignore PV Active	6/25/2015 10:25:45 AM
XV-101	Bottom Valve		Ignore PV Active	6/25/2015 10:25:33 AM

# Example 5 – Active Prompts Summary

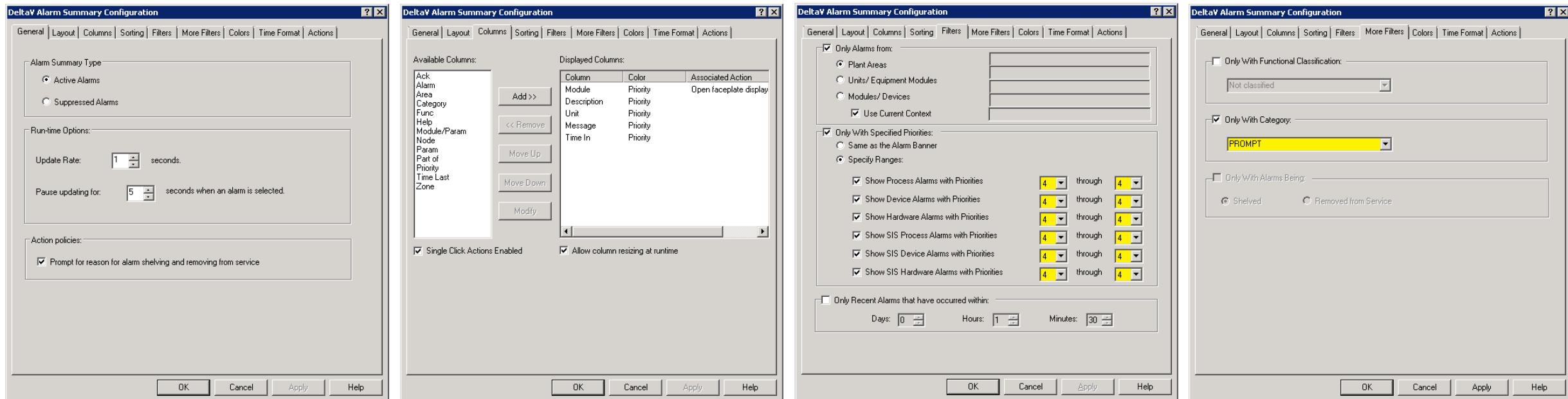
- Add Prompt Alarm Type
- Add Prompt Alarm on module(s).



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# Example 5 – Active Prompts Summary

- Configure Graphic with DeltaV Alarm Summary with below options



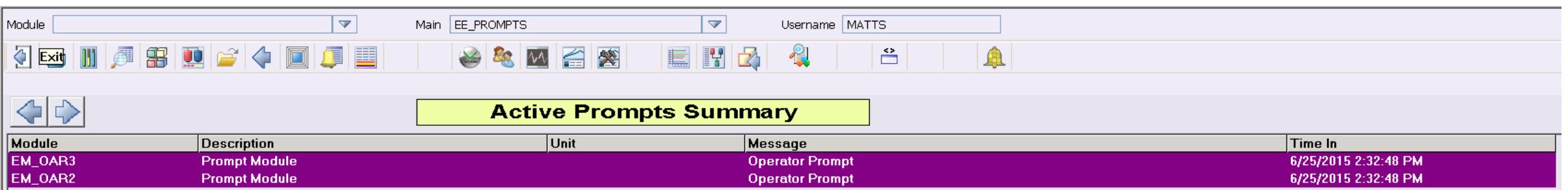
The image displays four side-by-side screenshots of the DeltaV Alarm Summary Configuration dialog box, showing different tabs and their settings:

- General Tab:**
  - Alarm Summary Type:** Active Alarms (selected).
  - Run-time Options:**
    - Update Rate: 1 seconds.
    - Pause updating for: 5 seconds when an alarm is selected.
  - Action policies:** Prompt for reason for alarm shelving and removing from service (selected).
- Layout Tab:**
  - Available Columns:** A list of alarm-related columns: Ack, Alarm, Area, Category, Func, Help, Module/Param, Node, Param, Part of Priority, Time Last, Zone.
  - Displayed Columns:** A table showing the current layout of columns:
 

Column	Color	Associated Action
Module	Priority	Open faceplate display
Description	Priority	
Unit	Priority	
Message	Priority	
Time In	Priority	
  - Buttons:** Add >>, << Remove, Move Up, Move Down, Modify.
  - Checkboxes:** Single Click Actions Enabled, Allow column resizing at runtime.
- Columns Tab:**
  - Only Alarms from:**
    - Plant Areas (radio button selected).
    - Units/ Equipment Modules.
    - Modules/ Devices.
    - Use Current Context (checkbox selected).
  - Only With Specified Priorities:**
    - Same as the Alarm Banner (radio button selected).
    - Specify Ranges (checkbox selected).
    - Priority ranges: Show Process Alarms with Priorities (4 through 4), Show Device Alarms with Priorities (4 through 4), Show Hardware Alarms with Priorities (4 through 4), Show SIS Process Alarms with Priorities (4 through 4), Show SIS Device Alarms with Priorities (4 through 4), Show SIS Hardware Alarms with Priorities (4 through 4).
  - Only Recent Alarms that have occurred within:** Days: 0, Hours: 1, Minutes: 30.
- Filters Tab:**
  - Only With Functional Classification:** Not classified.
  - Only With Category:** PROMPT (selected).
  - Only With Alarms Being:** Shelved, Removed from Service.

# Example 5 – Active Prompts Summary

- Open graphic in Run mode to see results

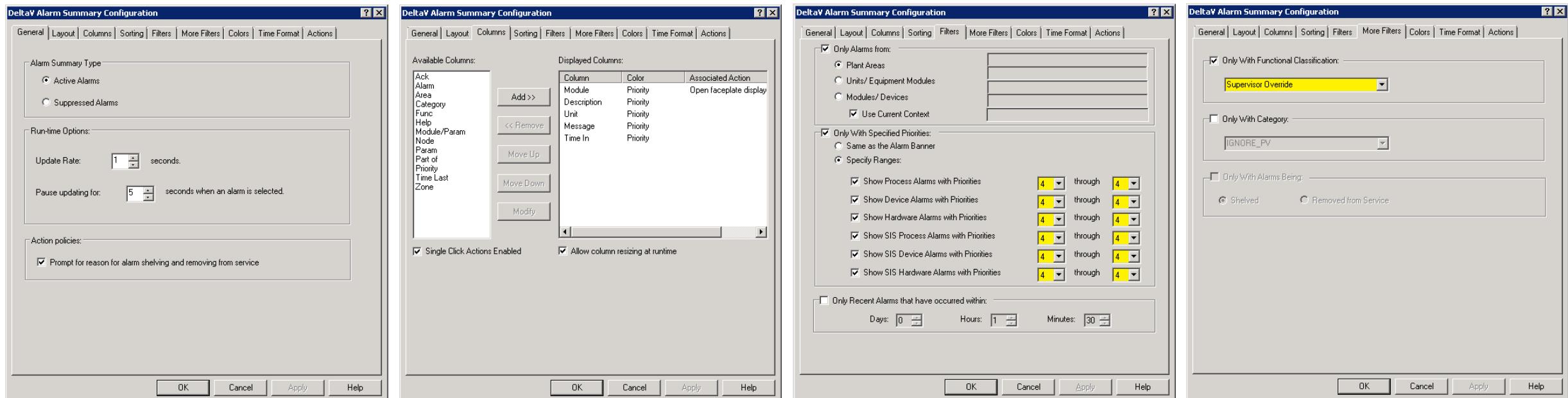


The screenshot shows a software interface with a toolbar at the top containing various icons for file operations, navigation, and system status. The main title bar reads "Active Prompts Summary". Below the title bar is a table with the following data:

Module	Description	Unit	Message	Time In
EM_OAR3	Prompt Module		Operator Prompt	6/25/2015 2:32:48 PM
EM_OAR2	Prompt Module		Operator Prompt	6/25/2015 2:32:48 PM

# Example 5 – Supervisor Overrides Summary

- Configure Graphic with DeltaV Alarm Summary with below options

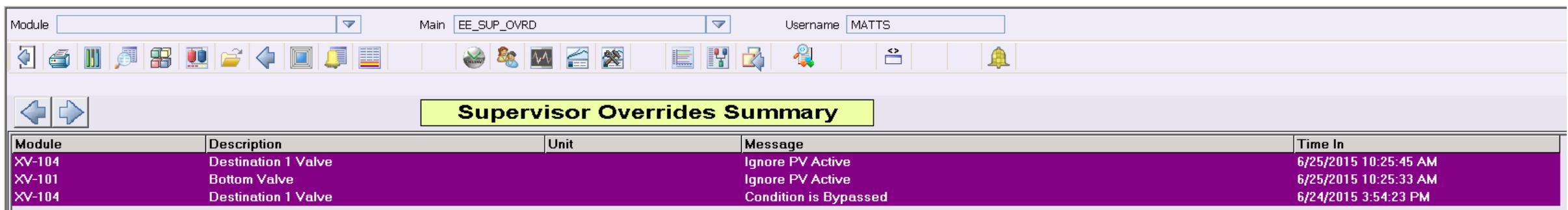


The image displays four side-by-side screenshots of the DeltaV Alarm Summary Configuration dialog box, showing different tabs and their settings:

- General Tab:**
  - Alarm Summary Type:** Active Alarms (selected).
  - Run-time Options:**
    - Update Rate: 1 seconds.
    - Pause updating for: 5 seconds when an alarm is selected.
  - Action policies:** Prompt for reason for alarm shelving and removing from service.
- Layout Tab:**
  - Available Columns:** A list of columns including Ack, Alarm, Area, Category, Func, Help, Module/Param, Node, Param, Part of Priority, Time Last, Zone.
  - Displayed Columns:** A list of columns currently displayed: Column, Color, Associated Action. The associated action is "Open faceplate display".
  - Buttons:** Add >>, << Remove, Move Up, Move Down, Modify.
  - Checkboxes:** Single Click Actions Enabled, Allow column resizing at runtime.
- Columns Tab:**
  - Only Alarms from:**
    - Plant Areas (radio button selected).
    - Units/ Equipment Modules.
    - Modules/ Devices.
    - Use Current Context (checkbox checked).
  - Only With Specified Priorities:**
    - Same as the Alarm Banner (radio button selected).
    - Specify Ranges (radio button selected).
    - Checkboxes for Show Process Alarms with Priorities through priority 4, Show Device Alarms with Priorities through priority 4, Show Hardware Alarms with Priorities through priority 4, Show SIS Process Alarms with Priorities through priority 4, Show SIS Device Alarms with Priorities through priority 4, Show SIS Hardware Alarms with Priorities through priority 4.
  - Only Recent Alarms that have occurred within:** Days: 0, Hours: 1, Minutes: 30.
- Filters Tab:**
  - Only With Functional Classification:** Supervisor Override (selected).
  - Only With Category:** IGNORE\_PV.
  - Only With Alarms Being:** Shelved, Removed from Service.

# Example 5 – Supervisor Overrides Summary

- Open graphic in Run mode to see results



The screenshot shows the Emerson Graphics software interface. At the top, there is a toolbar with various icons for file operations, zooming, and system management. Below the toolbar, the title bar displays "Supervisor Overrides Summary". The main area is a table titled "Supervisor Overrides Summary" with the following data:

Module	Description	Unit	Message	Time In
XV-104	Destination 1 Valve		Ignore PV Active	6/25/2015 10:25:45 AM
XV-101	Bottom Valve		Ignore PV Active	6/25/2015 10:25:33 AM
XV-104	Destination 1 Valve		Condition is Bypassed	6/24/2015 3:54:23 PM