Alarm Status Table

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Alarm Status Table

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Description

The alarm status table displays the current state of the alarm system. It can be configured to show active, unacknowledged, cleared, and acknowledged alarms. By default it shows all non-cleared/non-ack'ed alarms.

Acknowledgement is handled by selecting (checking) alarms and pressing the "Acknowledge" button. If any of the selected alarms require acknowledge notes, then a small text area will be presented in which the operator must add notes to the acknowledgement.

Shelving is supported by pressing the "Shelve" button when an alarm is selected. This will temporarily remove the alarm from the entire alarm system (not just the local client). When the time is up, if the alarm is still active, it will pop back into the alarm system. The times shown to the user are customizable by editing the values inside the "Shelving Times" dataset property. The alarms that have been shelved can be un-shelved by pushing the shelf management button in the lower right-hand side of the component.

If a more simplified alarm status table is needed, many of the features of the status table can be removed, for example, the header, footer, and multi-selection checkboxes. If a very short alarm status table is needed, turn on the "Marquee Mode" option, which will automatically scroll through any alarms if there is not enough vertical space to show all of them at once.

To change the columns that are displayed, the order of the columns, and/or the column width, put the Designer into preview mode. Then right-click on the table header to show/hide columns. Click and drag to re-order columns, and drag the margins of the columns to resize their width. No further action is necessary - the column configuration will remain in place after the window is saved.

For alarms that originate from Tags that have Tag history turned on, users can see an automatic ad-hoc chart for the value of the source Tag by pressing the chart button.

An Example of configuring the Alarm Status Table can be found on the Alarm Status Table Component page.

Properties

Name	Description	Property Type	Scripting	Category
Antialias	Draw the component with antialias on. This makes text look smoother	boolean	.antialias	Appearance
Border	The border surrounding this component. NOTE that the border is unaffected by rotation.	Border	.border	Common
Chart Resolution	The resolution for the ad-hoc tag historian chart.	int	.chartResolution	Behavior
Data Quality	The data quality code for any tag bindings on this component.	int	.dataQuality	Data
Date Format	A date format pattern used to format dates in the table. If blank, the default format for the locale is used.	String	.dateFormat	Appearance

Display Path Filter	Filter alarms by alarm display path, falling back to the source path if a custom display path isn't set. Specify multiple paths by separating them with commas. This field supports the wildcard "*" to match any number of characters.	String	.displayPathFilter	Filters
Duration Format	This feature is new in Ignition version **7.9.12** Click here to check out the other new features Format for the time units on the Active Duration column: Long, Short, Compact, and Abbreviated.			
Enabled	If disabled, a component cannot be used.	boolean	.componentEnabled	Common
Flash Interval	The time interval to use for flashing row styles.	int	.flashInterval	Appearance
Journal Name	The name of the alarm journal to query for the chart's annotations. Leave this blank to automatically pick the journal if there is only one.	String	.alarmJournalName	Behavior
Marquee Mode	Turn the table into a scrolling marquee	boolean	.marqueeMode	Behavior
Min Priority	The minimum priority alarm to be displayed by this table.	int	.minPriority	Filters
Multi Select	Allow multi select. Will show/hide the checkbox column.	boolean	.multiSelect	Behavior
Name	The name of this component.	String	.name	Common
Notes Area Border	The border surrounding the notes area.	Border	.notesAreaBorder	Appearance
Notes Area Font	The font for the notes area.	Font	.notesAreaFont	Appearance
Notes Area Location	The location of the notes display area	int	.notesAreaLocation	Appearance
Notes Area Size	The size of the notes area, in pixels.	int	.notesAreaSize	Appearance
Number Format	A number format string to control the format of the value column.	String	.numberFormat	Appearance
Refresh Rate	The rate at which this table will poll changes to the alarm status, in milliseconds.	long	.refreshRate	Behavior
Row Height	The height, in pixels, for each row of the table.	int	.rowHeight	Appearance
Row Styles	A dataset containing the different styles configured for different alarm states.	Dataset	.rowStyles	Appearance
Scroll Delay	The time (in mSec) to wait between performing each step in a scroll	int	.scrollDelay	Behavior
Selected Alarms	A dataset containing each selected alarm. (Read-only)	Dataset	.selectedAlarms	Data
Selection Color	The color of the selection border	Color	.selectionColor	Appearance
Selection Thickness	The size of the selection border	int	.selectionThickness	Appearance
Shelving Times	This dataset holds the times that are suggested when shelving an alarm. Allowable units are "second", "minute", or "hour".	Dataset	.shelvingTimes	Data

Show Ack Button	Show the acknowledge button on the footer panel.	boolean	.showAck	Appearance
Show Active and Acked	Show alarms that are active and acknowledged.	boolean	.activeAndAcked	Filters
Show Active and Unacked	Show alarms that are active and unacknowledged.	boolean	.activeAndUnacked	Filters
Show Chart Button	Show the chart button on the footer panel.	boolean	.showChart	Appearance
Show Clear and Acked	Show alarms that are cleared and acknowledged.	boolean	.clearAndAcked	Filters
Show Clear and Unacked	Show alarms that are cleared and unacknowledged.	boolean	.clearAndUnacked	Filters
Show Details Button	Show the view details button on the footer panel.	boolean	.showDetails	Appearance
Show Footer	Show a footer with acknowledge and shelf functions below the alarms.	boolean	.showFooterPanel	Appearance
Show Header Popup	Toggles the table header's built-in column selection popup menu.	boolean	.showTableHeaderPopup	Appearance
Show Manage Shelf Button	Show the manage shelf button on the footer panel.	boolean	.showManageShelf	Appearance
Show Shelve Button	Show the shelve button on the footer panel.	boolean	.showShelve	Appearance
Show Table Header	Toggles visibility of the table's header.	boolean	.showTableHeader	Appearance
Sort Oldest First	Sort times by oldest first.	boolean	.sortOldestFirst	Behavior
Sort Order	The default sort order for alarms in the status table.	int	.sortOrder	Behavior
Source Filter	Filter alarms by alarm source path. Specify multiple paths by separating them with commas. This field supports the wildcard "*" to match any number of characters.	String	.sourceFilter	Filters
Stay Delay	The time (in mSec) to wait between scrolls	int	.stayDelay	Behavior
Table Background	The background of the alarm table.	Color	.tableBackground	Appearance
Table Header Font	The font for the table header.	Font	.tableHeaderFont	Appearance
Touchscreen Mode	Controls when this input component responds if touchscreen mode is enabled.	int	.touchscreenMode	Behavior
Visible	If disabled, the component will be hidden.	boolean	.visible	Common

Scripting

Scripting Functions

.print(fitWidth, headerFormat, footerFormat, showDialog, landscape)

- Description

  This specialized print function will paginate the table onto multiple pages. This function accepts keyword-style invocation.

- Keyword Args

  boolean fitWidth - If true, the table's width will be stretched to fit across one page's width. Rows will still paginate normally. If false, thetable will paginate columns onto extra pages. (default = true) [optional]

  string headerFormat - A string to use as the table's page header. The substring "{0}" will be replaced with the current page number. (default = None) [optional]

  string footerFormat - A string to use as the table's page footer. The substring "{0}" will be replaced with the current page number. (default = "Page {0}") [optional]

  boolean showDialog - Whether or not the print dialog should be shown to the user. Default is true. [optional]

  boolean landscape - Used to specify portrait (0) or landscape (1) mode. Default is portrait (0). [optional]

- Return

  Boolean- True if the print job was successful.

- Scope

  Client

.getAlarms()

> This feature is new in Ignition version **7.9.7**
> Click here to check out the other new features

- Description

  Returns a dataset of the alarms currently displayed in the Alarm Status Table component. The columns will be: EventId, Source, DisplayPath, EventTime, State, and Priority.

- Keyword Args

  None

- Return

  Dataset - A dataset of alarms.

- Scope

  Client

Extension Functions

- createPopupMenu
  - Description

    Returns a popup menu that will be displayed when the user triggers a popup menu (right click) in the table. Use *system.gui.PopupMenu()* to create the popup menu.

  - Parameters

    Component self- A reference to the component that is invoking this function.

    List selectedAlarmEvents - The alarm events selected on the Alarm Status Table. For an individual alarm Event, call *alarmEvent.get('propertyName')* to inspect. Common properties: 'name', 'source', 'priority'.

  - Return

    Object - the popup menu.

  - Scope

    Client

- filterAlarm
  - Description

    Called for each event loaded into the alarm status table. Return false to hide this event from the table. This code is executed in a background thread.

  - Parameters

    Component self- A reference to the component that is invoking this function.

    Alarm Event alarmEvent - The alarm event itself. Call alarmEvent.get('propertyName') to inspect. Common properties: 'name', 'source','priority'.

  - Return

    Boolean- Returns true or false for every alarm event in the table. True will show the alarm. False will not show the alarm.

  - Scope

    Client

- isAcknowledgeEnabled
  - Description

    Returns a boolean that represents whether the selected alarm can be acknowledged

  - Parameters

    Component self- A reference to the component that is invoking this function.

    List selectedAlarmEvents - The alarm events selected on the Alarm Status Table. For an individual alarmEvent, call alarmEvent.get('propertyName') to inspect. Common properties: 'name','source','priority'.

  - Return

    Boolean- Returns true or false for every alarm event in the table.

  - Scope

    Client

- ⌄ isShelvedEnabled
  - • Description

    Returns a boolean that represents whether the selected alarm can be shelved.

  - • Parameters

    [Component] self- A reference to the component that is invoking this function.

    [List] selectedAlarmEvents - The alarm events selected on the Alarm Status Table. For an individual alarmEvent, call alarmEvent.get('propertyName') to inspect. Common properties: 'name', 'source', 'priority'.

  - • Return

    [Boolean]- Returns true or false for every alarm event in the table.

  - • Scope

    Client

- ⌄ onDoubleClicked
  - • Description

    Called when an alarm is double-clicked on to provide custom functionality.

  - • Parameters

    [Component] self- A reference to the component that is invoking this function.

    [Alarm Event] alarmEvent - The alarm event that was double clicked. For an individual alarmEvent, call alarmEvent.get('propertyName') to inspect. Common properties: 'name', 'source', 'priority'.

  - • Return

    Nothing

  - • Scope

    Client

- ⌄ onAcknowledge
  - • Description

    Called when the Acknowledge button is pressed; the script runs before the ack happens. Return False to abort the acknowledgement, return True to continue as normal.

  - • Parameters

    [Component] self- A reference to the component that is invoking this function.

    [List] alarms - A list of the alarms to be acknowledged.

  - • Return

    [Boolean]- Returns true or false for every alarm event that is selected.

  - • Scope

    Client

Event Handlers

propertyChange
> propertyChange
>> Fires whenever a bindable property of the source component changes. This works for standard and custom (dynamic) properties.

.source	The component that fired this event
.newValue	The new value that this property changed to.
.oldValue	The value that this property was before it changed. Note that not all components include an accurate oldValue in their events.
.propertyName	The name of the property that changed. NOTE: remember to always filter out these events for the property that you are looking for! Components often have many properties that change.

Customizers

Alarm Row Styles

The Alarm Status Table has a customizer.

- Component Customizers

Examples

Code Snippet

```
#The following code is an example of the filter alarm expression function.
#The function results in advanced filtering for the alarm table.
#In this example the alarm table will only show alarms with a name that matches the value of
the "AreaName" property located on the container the Alarm Status Table resides in.

name = self.parent.AreaName
if name == alarmEvent.get('name'):
 return True
else:
 return False
```

Gallery

Alarm Status Table with a Single Alarm

	Active Time	Display Path	Current State	Priority
☐	1/20/15 8:26 AM	London	Active, Unacknowledged	Low

Acknowledge   Shelve