AVEVA™ Alarm Client Control Guide

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Chapter 1

About the Alarm Client Control

Working with the Alarm Client Control

The Alarm Client Control is a graphical element you can use in your Industrial Graphics to show current and historical alarms and events.

The Alarm Client Control replaces the Alarm Viewer control and Alarm DB View control in the InTouch® HMI and extends alarm visualization to the Industrial graphics environment.

You can place the Alarm Client Control directly from the **Tools** panel in the **Industrial Graphic Editor** onto the canvas. You can customize it to your needs by adding further graphics, interactions, and scripts.

You can deploy a managed InTouch application containing Alarm Client Controls to a remote node and visualize and interact with alarms at run time with InTouch WindowViewer.

For this documentation, the Alarm Client Control is simply referred to as "Alarm Control."

We recommend you have a basic understanding of the InTouch Alarm system before continuing. For more information, see the InTouch HMI Alarms and Events Guide.

Client Modes

The Alarm Control supports five different client modes, which can be grouped depending on their data source. The Alarm Control supports an ArchestrA Database (A2ALMDB), and the Historian History Blocks.

InTouch Alarm Manager

The Alarm Control manages currently active alarms (summary alarms) and recent alarms (historical alarms). These types of alarms are saved to internal alarm memory.

Current Alarms

When the Alarm Control is showing alarms in "Current Alarms" mode, it is showing currently active alarms directly from the Alarm Manager.

Recent Alarms and Events

When the Alarm Control is showing alarms in "Recent Alarms and Events" mode, it is showing historical alarms and events stored in Alarm Manager.

Unlike the "Current Alarms" mode, the "Recent Alarms and Events mode" shows time point data, such as alarm transitions and events, instead of continuous conditions.

Alarm and Event Storage

Alarms and events can be stored to the ArchestrA alarm database (A2ALMDB) or the Historian history blocks.

When the Alarm Control is configured in "Historical Alarms" mode, only alarms stored in the Alarm Database are shown.

When the Alarm Control is configured in "Historical Events" mode, only events stored in the Alarm Database are shown.

When the Alarm Control is configured in "Historical Alarms and Events" mode, both alarms and events stored in the Alarm Database are shown.

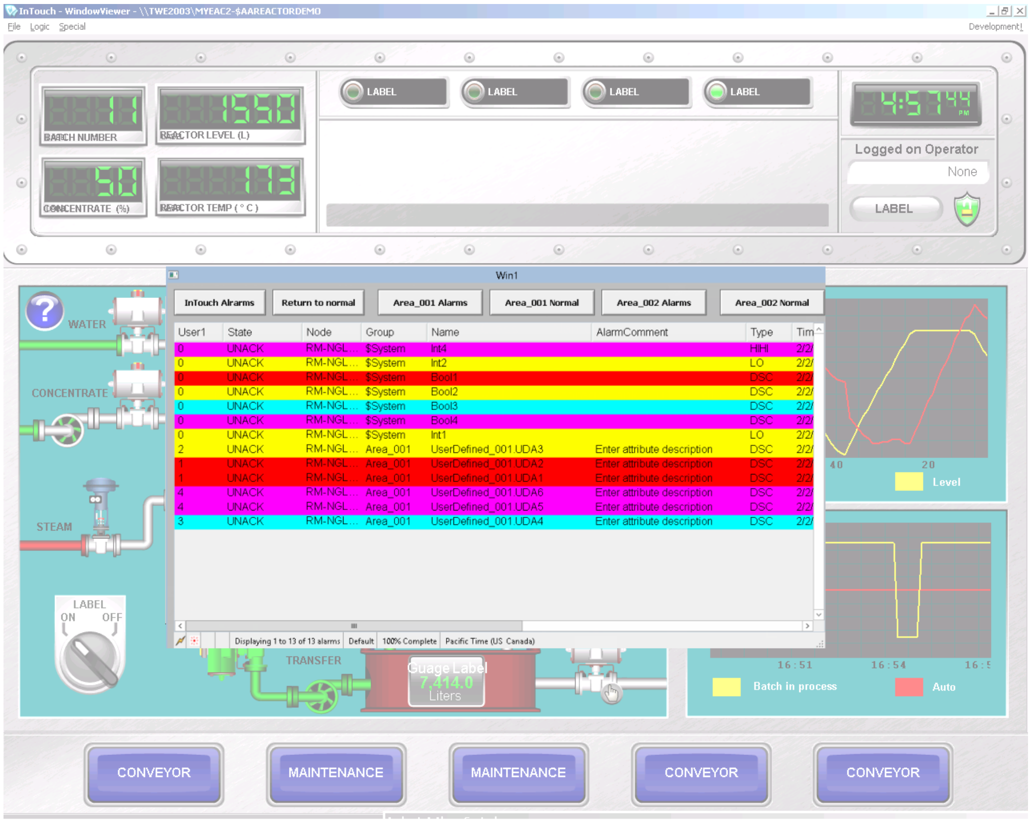
Switching Between Client Modes

The client mode and many other features are controlled by properties and methods.

By default, the Alarm Control is set to show current alarms. You can also change the client mode at run time by using the Alarm Control properties.

Using the Alarm Control in Industrial Graphics

You can use the Alarm Client Control as a faceplate so that when the operator clicks an icon, an Alarm Client Control showing a specific alarm area opens.



User1	State	Node	Group	Name	AlarmComment	Type	Tim
0	UNACK	RM-NGL...	$System	Int4		HIHI	2/2/
0	UNACK	RM-NGL...	$System	Int2		LO	2/2/
0	UNACK	RM-NGL...	$System	Bool1		DSC	2/2/
0	UNACK	RM-NGL...	$System	Bool2		DSC	2/2/
0	UNACK	RM-NGL...	$System	Bool3		DSC	2/2/
0	UNACK	RM-NGL...	$System	Bool4		DSC	2/2/
0	UNACK	RM-NGL...	$System	Int1		LO	2/2/
2	UNACK	RM-NGL...	Area_001	UserDefined_001.UDA3	Enter attribute description	DSC	2/2/
1	UNACK	RM-NGL...	Area_001	UserDefined_001.UDA2	Enter attribute description	DSC	2/2/
1	UNACK	RM-NGL...	Area_001	UserDefined_001.UDA1	Enter attribute description	DSC	2/2/
4	UNACK	RM-NGL...	Area_001	UserDefined_001.UDA6	Enter attribute description	DSC	2/2/
4	UNACK	RM-NGL...	Area_001	UserDefined_001.UDA5	Enter attribute description	DSC	2/2/
3	UNACK	RM-NGL...	Area_001	UserDefined_001.UDA4	Enter attribute description	DSC	2/2/

Displaying 1 to 13 of 13 alarms | Default | 100% Complete | Pacific Time (US Canada)

You can also configure the Alarm Client Control to interact with the Galaxy namespace and other Industrial graphics by mapping its properties to application server attributes and symbol elements.

The Alarm Control can be placed into Industrial Graphics hosted by Automation Object templates and instances. You can configure them to retrieve alarms from their hosting Area object or their hosting Automation object.

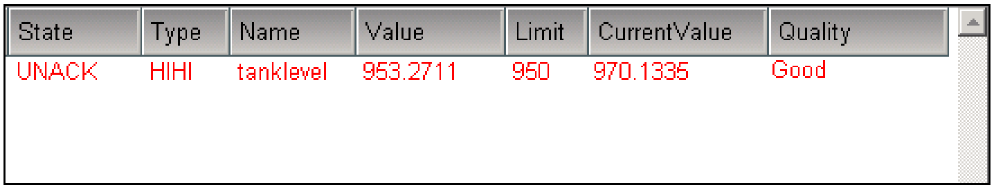
Alarm Acknowledgement

You can configure the Alarm Control to require an alarm to be acknowledged even if the condition causing the alarm has passed. This ensures that an operator is aware of events that caused a temporary alarm state but have returned to normal.

You acknowledge alarms at run time using a shortcut menu or through script methods.

Current Value and Quality Display

The Alarm Control in one of the current client modes shows continuously the current value and quality of a tag or attribute in alarm state.



State	Type	Name	Value	Limit	CurrentValue	Quality
UNACK	HIHI	tanklevel	953.2711	950	970.1335	Good

You can see the current value and quality of tags or attributes in alarm from:

- InTouch running on the local computer
- Galaxy namespace

Note: You cannot see current value and quality data from InTouch tags running on a remote computer.

Working With Alarm Queries and Filters

Queries and filters are two methods to retrieve data at **RunTime**, with queries being a superset of filters. You can run a query at run time to retrieve data, then run another query to narrow the search criteria without re-running the query or retrieving the same data. This allows the Alarm Control to use data from a current subscription without re-subscribing. For more information, see *Filtering Alarms* on page 38.

Alarm Queries

The Alarm control supports standard Galaxy alarm query formats, such as:

```
\galaxy!Area_001
```

Alarm query syntax is the same for both Current Alarms Mode and Recent Alarms and Events Mode. Queries in Historical Alarms, Historical Events, and Historical Alarms and Events Modes are actually Alarm Database queries, which follow rules and syntax for SQL Server database queries.

The alarm query syntax changes when you use the run-time alarm comment language switching feature. For more information, see *Alarm Query Syntax when Register Using Galaxy_<GalaxyName> is Enabled* on page 15.

The Alarm control also supports relative references for Galaxy alarms in alarm queries. For all alarm modes, relative references are resolved at run time at the point of query to the Alarm Manager or Alarm Database.

You must put the reference part of the alarm query between less-than (<) and greater-than (>) characters.

The following table shows examples of alarm queries.

Alarm Query	Description
\provider!group	Shows all alarms from the given provider and group. For example: `\intouch!Group_A`

Alarm Query	Description
\provider!group!tagname	Shows all alarms from the given provider, group and tag. For example: \galaxy!Mixing_Area!RotorCtrl
\\node\provider!group	Shows all alarms from the given provider and group from a given node. For example: `\\remote\intouch!Group_B`
\\node\provider!group!tagname	Shows all alarms from the given provider, group and tag from a given node. For example: `\\grnode\galaxy!Packaging_Area!Wrapper1`
HotBackupName	Shows all alarms from primary or backup alarm provider as configured in the Hot Backup Manager.
\galaxy!<me.Area>!<me.tagname>.*	Shows all alarms from the Automation Object. Alarms from other Automation Objects in the same area are ignored.
\galaxy!<myArea.tagname> or \galaxy!<me.Area>	Shows all alarms from the Area object hosting the Automation Object
\galaxy!<myPlatform.tagname>	Shows all alarms from the Winplatform object hosting the Automation Object.
\galaxy!<me.area>!<myContainer.tagname>.*	Shows all alarms from the container Automation Object. At run-time the Alarm Control resolves the Container attribute to detect the container.
\galaxy!<myEngine.tagname>	Shows all alarms from the AppEngine object hosting the Automation Object. At run-time the Alarm Control resolves the MyEngine attribute to detect the host.

Alarm Query Syntax when Register Using Galaxy_<GalaxyName> is Enabled

The run-time alarm comment language switching feature requires slightly different alarm query syntax. In the WinPlatform object, when you enable InTouch alarm provider, you can enable **Register using Galaxy_<GalaxyName>** instead of Galaxy.

This option will register the platform to the alarm subsystem using the Galaxy name preferred by "Galaxy_" instead of just the word "Galaxy". This allows an InTouch application to monitor alarms from multiple Galaxies and avoid name conflicts.

Syntax changes slightly when Galaxy_GalaxyName is enabled:

- Use \\ for computer name
- Use \ for Galaxy or Galaxy_<GalaxyName>
- Use ! for Area

For example: \\Galaxy\MyGalaxy!Area001

If Galaxy_GalaxyName is not enabled in WinPlatform, then the default behavior described in *Alarm Queries* on page 14 applies.

You can determine if Galaxy_<GalaxyName> has been enabled by monitoring the run-time attribute of the platform ITAlarmProvider.ProviderNameAsGalaxyNameEnabled.

Alarm Filtering

The Query Favorites of InTouch Alarm Viewer control define a set of alarm provider, alarm group, an optional node name, and a priority range under one name. The alarm provider, alarm group, and the node name are used for subscribing to a specific alarm group. The priority range on the other hand is used to filter the alarms from the given alarm group.

The Filter Favorites of InTouch Alarm DB View control define a set of any number of criteria you want to filter from the Alarm Database under one name.

In summary, Filter Favorites fulfill a purely filtering function whereas Query Favorites fulfill a subscription and a filtering function at the same time.

The Alarm Control filtering feature unites both these concepts by exclusively using filter conditions and subscribing to the necessary alarm providers on demand.

Filters can be saved and used in both run time and historical modes.

The filter conditions can be re-used between different client modes. For example, if you define node name, provider name, alarm group, and a priority range for the current alarms, you can also use this filter to retrieve the historized alarm data of the same source from the Alarm Database instead.

Filter definitions will be saved per user so operators working on the same server can access different saved filters.

Alarm Queries to Filters Translation

You can define queries for current alarms in the \\node\provider!group format, but they are translated by the Alarm Control to a filter after you save.

For example, the query string \\GRNode\galaxy!MixingArea is translated to the following filter string:

Node = ‘GRNode’ AND Provider=’galaxy’ AND Group=’MixingArea’

You can modify the filter in a tree to query only alarms in the priority range 1 to 250, such as:

```
AND
```

```
Node = ‘GRNode’
Provider = ‘Galaxy’
Group = ‘MixingArea’
Priority >= ‘1’
Priority <= ‘250’
```

Alarm Shelving

Operators can temporarily shelve selected alarms from the list of an Alarm Control’s active alarms. A shelved alarm is suppressed and removed from the list of active alarms. Typically, operators shelve lower severity nuisance alarms because they provide little diagnostic value and interfere with the operator’s ability to manage a plant process.

An alarm is shelved for a specified period. After the period ends, alarms are automatically unshelved and appear again in the list of active alarms. Operators can also manually unshelve an alarm before the end of the specified shelved period.

By default, Medium and Low severity alarms are enabled for shelving. Critical and High severity alarms are not because of the potential risk of shelving and ignoring alarms that represent serious operating states. For more information about enabling shelving based on alarm severity, see "Configuring Alarm Severity to Priority Mapping" in the *Application Server User Guide*.

Shelving Alarms During Run Time

When shelving an alarm from the Alarm Control, operators set an associated time period in which the alarm remains shelved and enter a mandatory comment. Operators can select from a list of Alarm Control Context commands during run-time to:

- Shelve one or more selected alarms
- Shelve all alarms
- Shelve only those alarms visible in the Alarm Control
- Shelve all alarms within the same alarm group as an alarm selected from the Alarm Control
- Shelve alarms by selected tags or attributes
- Shelve alarms by selected alarm priorities
- Shelve all alarms that have the same severity as an alarm selected from the Alarm Control

For more information about configuring shelve Context commands, see *Configuring the Run-Time Shortcut Menu* on page 55.

When application security is used, alarms can be shelved and unshelved only by operators with proper authorization. For more information about setting shelving authorization, see *Configuring the Alarm Control to Require a SHELVE Signature* on page 54.

Unshelving Alarms During Run Time

Alarms are unshelved automatically at the end of the shelving time period. An unshelved alarm reappears in the Alarm Control active list and resumes its state at the time it was shelved. Operators can manually unshelve a shelved alarm before the end of the shelved period and enter an optional comment.

Alarm Hiding

The "hiding" and "unhiding" of alarm records is known in the corresponding InTouch alarm controls as "suppressing" and "unsuppressing".

When the Alarm Control is hiding alarms, it ignores certain alarms. If an alarm matches the exclusion criteria, it is not visible.

The actual alarm generation is completely unaffected by hiding. Alarm records are still logged into the alarm history.

As in the InTouch HMI, you can unhide specific alarms and also use properties and methods to interact with the alarm hiding feature at run time.

Alarm Control Grid Freezing

You can freeze the Alarm Control to prevent the Alarm control tree from being updated with any further changes.

For example, if new alarms occur while the Alarm Control is frozen, the new alarms are only shown after you unfreeze the Alarm Control.

You can configure a time period after which the Alarm Control automatically unfreezes to avoid the Alarm Control being unknowingly frozen. For example, the operator leaves the workstation and returns without realizing that the Alarm Control is still frozen.

The Alarm Control unfreezes automatically if one of the following changes:

- Alarm Mode
- Alarm Query
- Filter

Alarm Sorting

Like InTouch alarm controls, you can sort the alarms in ascending or descending direction for selected columns.

The Alarm Control supports alarm sorting for up to four columns at design time and run time. At run-time, the operator can configure sorting of even more columns by clicking on the column headers of the Alarm Control while pressing the Shift key.

Support for a Redundant Historian Server

A Historian may be configured to have a symmetrical "partner" Historian that can be used as a backup if the primary, or main, historian is not available. This is known as a "redundant historian" setup. No control configuration is required to take advantage of a redundant historian.

When the primary historian is unavailable, the Alarm Control automatically switches over to the configured partner historian. The control remains connected to the partner historian, even when the primary historian becomes available again. The Alarm Control switches back to an available primary historian if it fails to connect to the partner or during a new attempt to connect to the primary historian. One example of this would be restarting the Trend Control, which initiates a new connection to the primary historian. For a redundant historian setup, both historians must be configured to store events to the same location, either to history blocks or the A2ALMDB database.

When the Alarm Control successfully connects to either the primary historian or its partner, the following columns are updated with the connected historian server name in the tags list of the selected tags:

- Server
- I/O Address

The historian name shown in the Tag Picker is always the name of the primary historian, even when the control is connected to the partner.

There is no automatic synchronization built in to the redundant historian setup; it is up to the historian server administrator to make sure that the two historians in the pair are symmetrical and synchronized.

If the SQL Server Service is running while Historian Service is not running, this is not recognized by the Alarm Control as a scenario in which the Historian Server is unavailable.

Status Bar

The status bar of the Alarm Control resembles the status bars of the InTouch alarm controls, with the following differences:

- Alarm Control also shows the alarm client time zone
- Alarm Control querying the Alarm Database has a Requery button to more easily retrieve data from the Alarm Database
- Alarm Control shows the current client mode as an icon

Chapter 2

Configure the Alarm Client Control

This section shows you how to place an Alarm Client Control onto the canvas and configure it. You can configure it either with the Edit Animations dialog box, or by changing individual properties in the Properties Editor.

About Configuring the Alarm Control

After placing the Alarm Control onto the canvas, you can configure the:

- Client Mode to show current alarms, recent alarms and events, or historical alarms and/or events.
- Colors for the Alarm Control grid, window, heading, and alarm records.
- Order and width of the grid columns and their headers.
- Sorting order of alarm records.
- Filtering for alarm records and save the filters as favorites for re-use.
- Time format and zone for the alarm record time stamps.
- Run-time behavior for the Alarm Control, such as:
    - If the operator can resize columns or select multiple records at run time.
    - Access to specified options of the shortcut menu at run time.

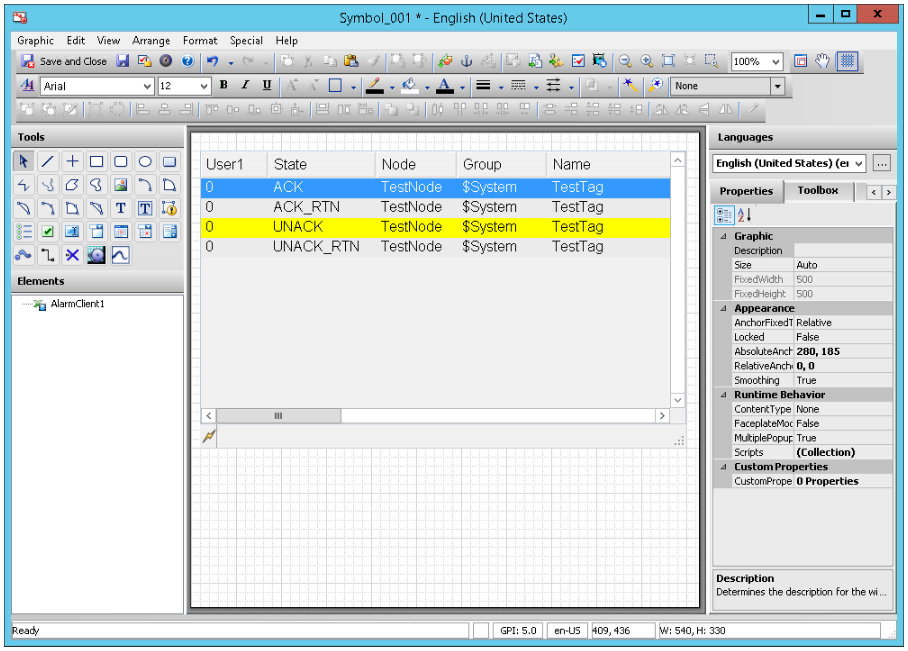
Placing the Alarm Control into an Industrial Graphic

You can easily place the Alarm Control into an Industrial Graphic by placing it onto the canvas.

To place the Alarm Control into an Industrial Graphic

1. Open the Industrial graphic in the **Industrial Graphic Editor**.
2. On the **Tools** panel, click the **Alarm Client** icon. The cursor appears in insert mode.

3. Click the canvas where you want to place the Alarm Control.



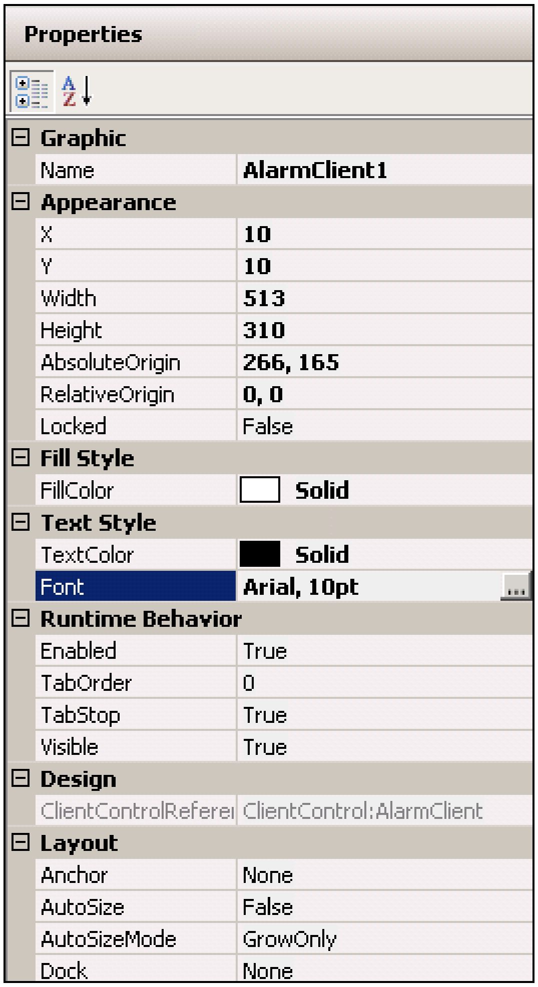
User1	State	Node	Group	Name
0	ACK	TestNode	$System	TestTag
0	ACK_RTN	TestNode	$System	TestTag
0	UNACK	TestNode	$System	TestTag
0	UNACK_RTN	TestNode	$System	TestTag

Graphic	
Description	
Size	Auto
FixedWidth	500
FixedHeight	500
Appearance	
AnchorFixedT	Relative
Locked	False
AbsoluteAnch	**280, 185**
RelativeAnch	**0, 0**
Smoothing	True
Runtime Behavior	
ContentType	None
FaceplateMoc	False
MultiplePopup	True
Scripts	**(Collection)**
Custom Properties	
CustomPrope	**0 Properties**

Description
Determines the description for the wi...

Setting Alarm Control Properties

Like all other graphical objects in the Industrial Graphic Editor, you can set some of the properties of the selected Alarm Control directly in the Properties Editor.



Properties

⊟ **Graphic**	
Name	**AlarmClient1**
⊟ **Appearance**	
X	**10**
Y	**10**
Width	**513**
Height	**310**
AbsoluteOrigin	**266, 165**
RelativeOrigin	**0, 0**
Locked	False
⊟ **Fill Style**	
FillColor	□ **Solid**
⊟ **Text Style**	
TextColor	■ **Solid**
Font	**Arial, 10pt** ...
⊟ **Runtime Behavior**	
Enabled	True
TabOrder	0
TabStop	True
Visible	True
⊟ **Design**	
ClientControlReferei	ClientControl:AlarmClient
⊟ **Layout**	
Anchor	None
AutoSize	False
AutoSizeMode	GrowOnly
Dock	None

We recommend you configure the Alarm Control with the **Edit Animations** dialog box and only use the **Properties Editor** to edit the configuration afterward.

Showing Current Alarms or Recent Alarms and Events

You can set the Alarm Control to show either of the following:

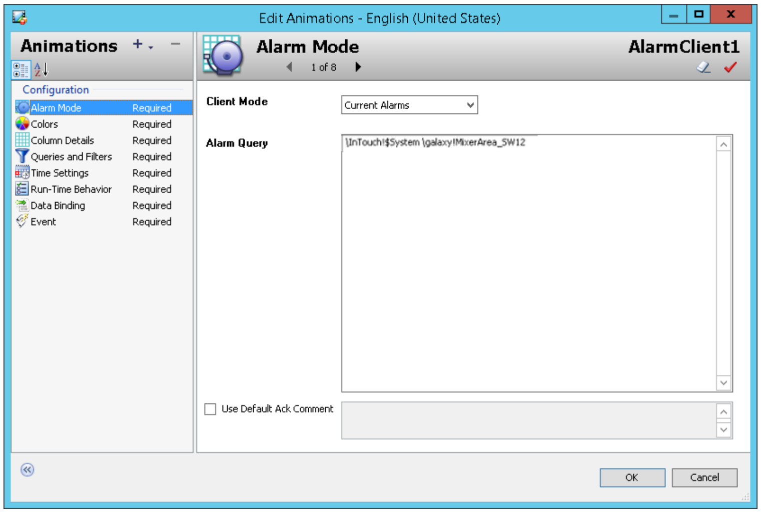
- Current alarms
- Recent alarms and events

You use the ClientMode Property integer property in scripting to switch the Alarm Control to show current alarms or recent alarms and events at run time.

You can also configure a comment to use when alarms are acknowledged at run time. Use the AckComment.UseDefault Property Boolean property and AckComment.DefaultValue Property string property in scripting to use a default acknowledgement comment at run time.

To show current alarms

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.

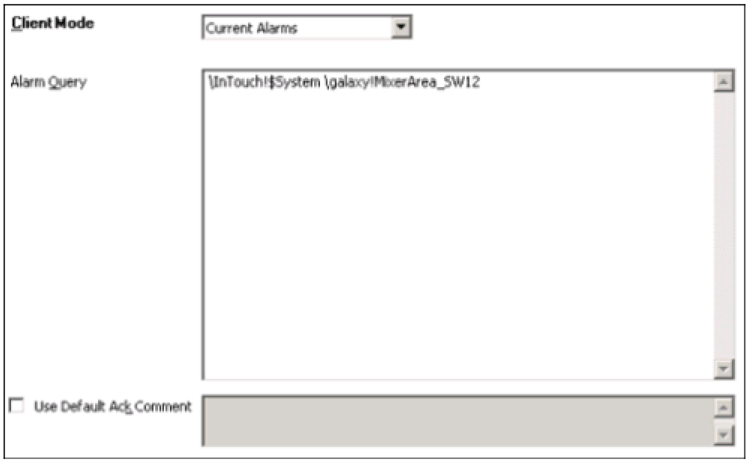


Client Mode: Current Alarms

Alarm Query: \InTouch!$System \galaxy!MixerArea_SW12

□ Use Default Ack Comment

2. If necessary, click **Alarm Mode**. The **Alarm Mode** page appears.



Client Mode: Current Alarms

Alarm Query: \InTouch!$System \galaxy!MixerArea_SW12

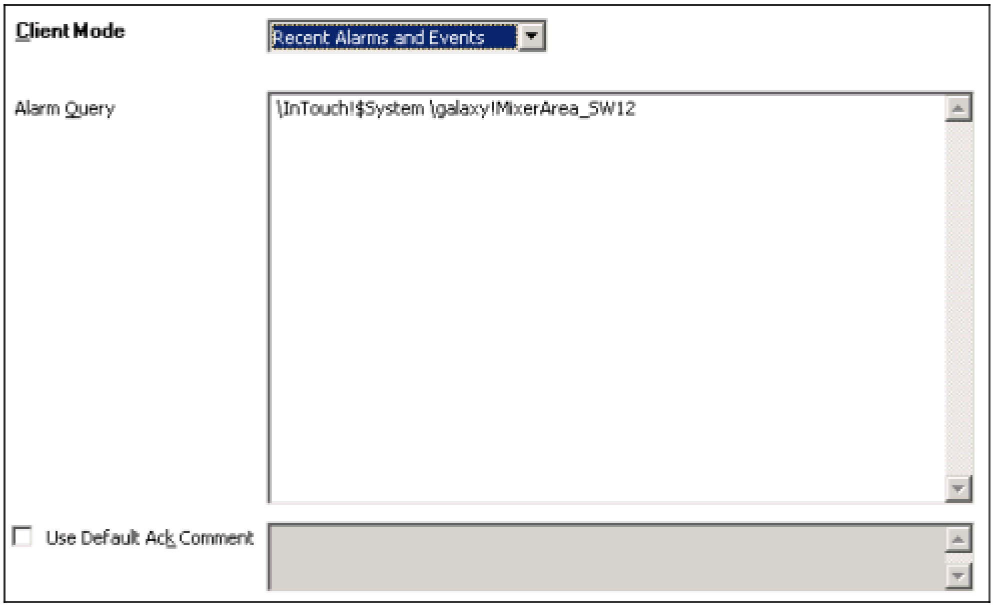
□ Use Default Ack Comment

3. In the **Client Mode** list, click **Current Alarms**.
4. In the **Alarm Query** box, type the alarm query. To create a new line in the Alarm Query box, press **Ctrl + Enter**. For more information on the valid syntax, see *Alarm Queries* on page 14.
5. If you want to use a default acknowledgement comment, select the **Use Default Ack Comment** check box and type a comment in the text box.
6. Click **OK**.

To show recent alarms and events

1. Double-click Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Alarm Mode**. The **Alarm Mode** page appears.

3. In the **Client Mode** list, click **Recent Alarms and Events**.



Client Mode: Recent Alarms and Events

Alarm Query: \InTouch!$System \galaxy!MixerArea_SW12

☐ Use Default Ack Comment

4. In the **Alarm Query** box, type the alarm query. To create a new line in the **Alarm Query** box, press **Ctrl + Enter**.

   The alarm query must follow one of the following syntax:

   - \\node\provider!group
   - \provider!group
   - HotBackupName

   For example:

   ```
   \galaxy!Area_001
   ```

   For Alarm Controls hosted by Automation Object templates or instances, you can specify one of the following alarm queries:

   - \galaxy!<myArea.Tagname> to retrieve alarms and events from the Area object hosting the Automation Object template or instance.
   - \galaxy!<me.Area>!<me.Tagname>.* to retrieve alarms and events from the Automation Object template or instance.

   For more information on alarm queries, see *Alarm Queries* on page 14.

5. If you want to use a default acknowledgement comment, select the **Use Default Ack Comment** check box and type a comment in the text box.

6. Click **OK**.

Showing Historical Alarms and/or Events

You can set the Alarm Control to show one of the following:

- Historical alarms from the Alarm Database

- Historical events from the Alarm Database
- Historical alarms and events from the Alarm Database
- Historical events from History Blocks
- Historical alarms from History Blocks
- Historical alarms and events from History Blocks

When you configure the Alarm Control to show historical alarms and/or events, you also configure the following:

- Server name hosting the Alarm Database
- Authentication information to connect to the Alarm Database
- Maximum number of records to retrieve from the Alarm Database
- Time range or duration to show in the Alarm Control
- If the Alarm Control should update to the current client time

Alarm Control works with both the ArchestrA Database (A2ALMDB) and with History Blocks.

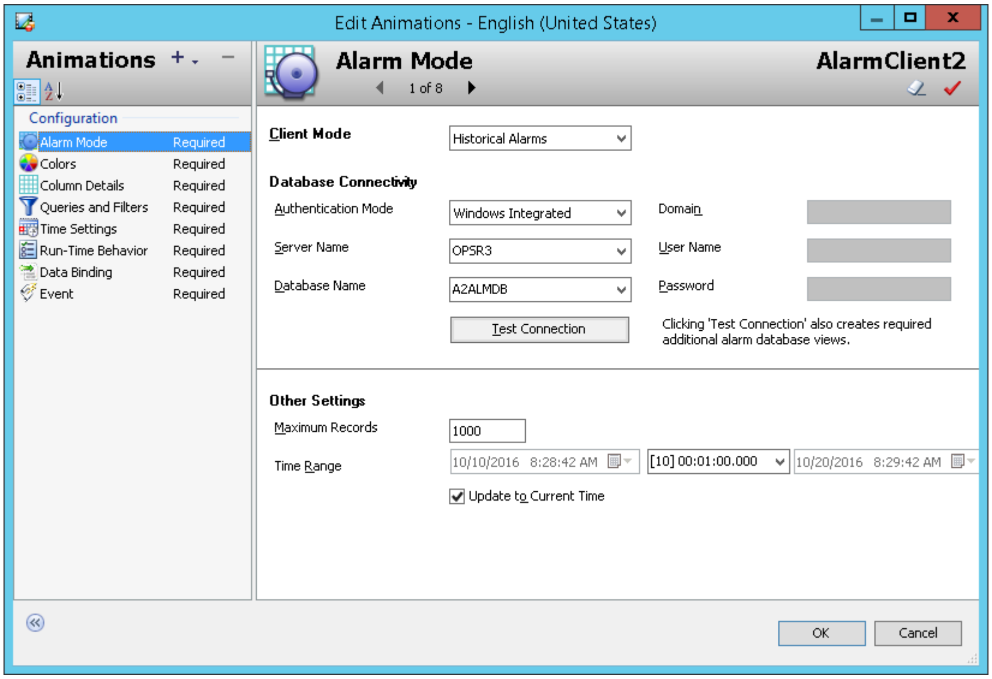
Use the following properties in scripting to switch the client mode and configure the database connection, such as:

- *ClientMode Property* on page 91
- *Database.Authentication Property* on page 104
- *Database.Name Property* on page 105
- *Database.Password Property* on page 105
- *Database.ServerName Property* on page 105
- *Database.UserID Property* on page 105
- *Domain Property* on page 106

To show historical alarms and/or events

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Alarm Mode**. The **Alarm Mode** page appears.
3. In the **Client Mode** list, click:
   - **Historical Alarms** to only show alarms from the Alarm Database. No events are shown
   - **Historical Events** to only show events from the Alarm Database. No alarms are shown

- **Historical Alarms and Events** to show both alarms and events from the Alarm Database



Edit Animations - English (United States)

Animations

Alarm Mode 1 of 8 AlarmClient2

Configuration

Alarm Mode	Required
Colors	Required
Column Details	Required
Queries and Filters	Required
Time Settings	Required
Run-Time Behavior	Required
Data Binding	Required
Event	Required

Client Mode: Historical Alarms

Database Connectivity

Authentication Mode: Windows Integrated

Server Name: OPSR3

Database Name: A2ALMDB

Domain

User Name

Password

Test Connection

Clicking 'Test Connection' also creates required additional alarm database views.

Other Settings

Maximum Records: 1000

Time Range: 10/10/2016 8:28:42 AM [10] 00:01:00.000 10/20/2016 8:29:42 AM

☑ Update to Current Time

OK Cancel

4. In the **Authentication Mode** list, click one of the following:
   - **Windows Integrated** to use the authentication of the currently logged-on Windows user
   - **Windows Account** to use a given Windows user authentication
   - **SQL Server** to use SQL Server authentication mode
5. In the **Server Name** list, either select or type the name of the server hosting the Alarm Database.

   Provide the port number with the server name when connecting to a non-default port. For example: <servername>,23646. The port number can be changed in the Configurator.
6. In the **Database Name** box, type the name of the Alarm Database. For the ArchestrA Database, enter A2ALMDB, and for Historian block storage enter History Blocks.

   For the History Blocks option to function correctly, the REST Details > HTTP port (Default 32569) and HTTPS port (Default 32573) on the Historian Server needs to be opened in the firewall, and configured for both inbound and outbound traffic. For more information, see the Configuring Databases and Data File Locations in the System Platform Installation Guide.

   Note: For History Blocks, select Windows Integrated or Windows Account as the authentication mode.
7. If you are using **Windows Account** authentication mode, type the domain, user name, and password in the **Domain**, **User Name** and **Password** boxes.
8. If you are using **SQL Server** authentication mode, type user name and password in the **User Name** and **Password** boxes.
9. Click **Test Connection**. The connection to the Alarm Database is tested and a result message appears. If necessary, check your authentication information.

If the Historian requires a secure connection and the client is not configured with the correct certificates, then an error message is displayed.

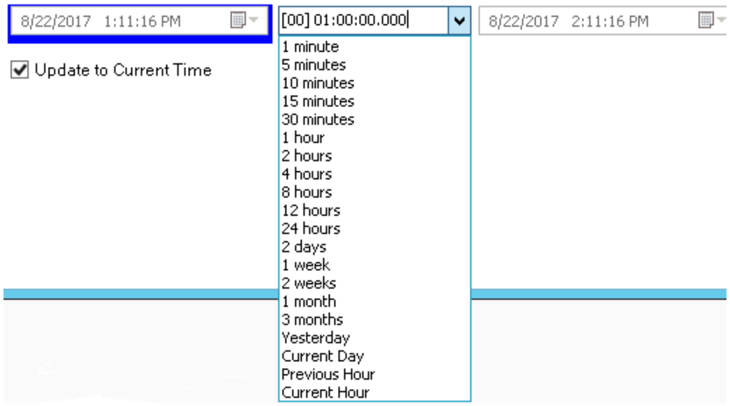
10. Click **OK**.

To set maximum records and time range

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Alarm Mode**. The **Alarm Mode** page appears.
3. Make sure the **Client Mode** is set to **Historical Alarms**, **Historical Events**, or **Historical Alarms and Events**.
4. In the **Maximum Records** box, type the number of records to view from the control at one instance. The valid range of maximum records is from 1 to 32766.

   You can also use the MaxDatabaseRecords Property in scripting to set the maximum records at run time.

5. To use a pre-defined time interval, select an interval from the middle list of the **Time Range** pickers.



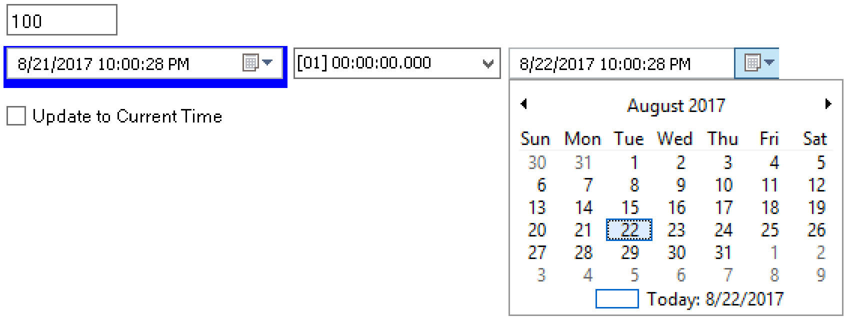
8/22/2017 1:11:16 PM

[00] 01:00:00.000

8/22/2017 2:11:16 PM

☑ Update to Current Time

6. To use a specific start time and end time, clear **Update to Current Time**, and select the start time from the list at the left and the end time from the list at the right of the **Time Range** pickers.



100

8/21/2017 10:00:28 PM

[01] 00:00:00.000

8/22/2017 10:00:28 PM

□ Update to Current Time

August 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today: 8/22/2017

   You can also use the **TimeSelector.*** methods and properties in scripting to set the start date, end date, or duration at run time. For more information, see *TimeSelector* on page 150.

7. Click **OK**.

Set Alarm Control Colors

You can show different types of alarm records with different colors to more easily identify certain types of alarms.

You can configure the Alarm Control with priority breakpoints to show alarm records within the resulting priority ranges in different colors.

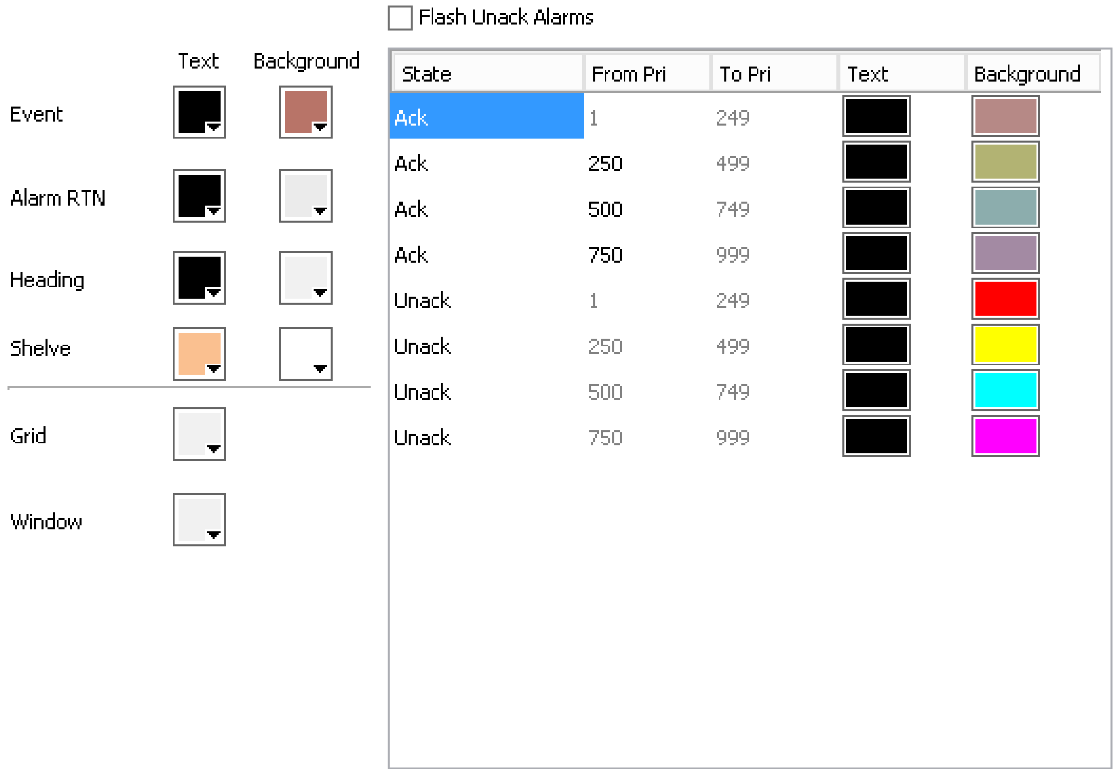
You can also configure the control background color, the grid color, and the heading colors.

Set Event Record Colors

You can set text color and background color for event records. Use the EventColor.ForeGround Property and EventColor.BackGround Property properties in scripting to set the event alarm record text color and background color at run time.

To set text and background colors for event records

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click the **Colors**. The **Colors** page appears.



	Text	Background
Event	■	🟫
Alarm RTN	■	□
Heading	■	□
Shelve	🟧	□
Grid	□	
Window	□	

☐ Flash Unack Alarms

State	From Pri	To Pri	Text	Background
Ack	1	249	■	🟫
Ack	250	499	■	🟨
Ack	500	749	■	🟦
Ack	750	999	■	🟪
Unack	1	249	■	🟥
Unack	250	499	■	🟨
Unack	500	749	■	🟦
Unack	750	999	■	🟪

3. Configure the event record text color. Do the following:
   a. Click the color field next to **Event** and under **Text**. The color picker appears.
   b. Select a color and click **OK**.
4. Configure the event record background color. Do the following:
   a. Click the color field next to **Event** and under **Background**. The color picker appears.
   b. Select a color and click **OK**.
5. Click **OK**.

Set Alarm Return To Normal Record Colors

You can set text color and background color for "return to normal" alarm records. Use the AlarmColor.Ack.RTN.ForeGround Property and AlarmColor.Ack.RTN.BackGround Property properties in scripting to set the "return to normal" alarm record text color and background color at run time.

To set text and background colors for "return to normal" records

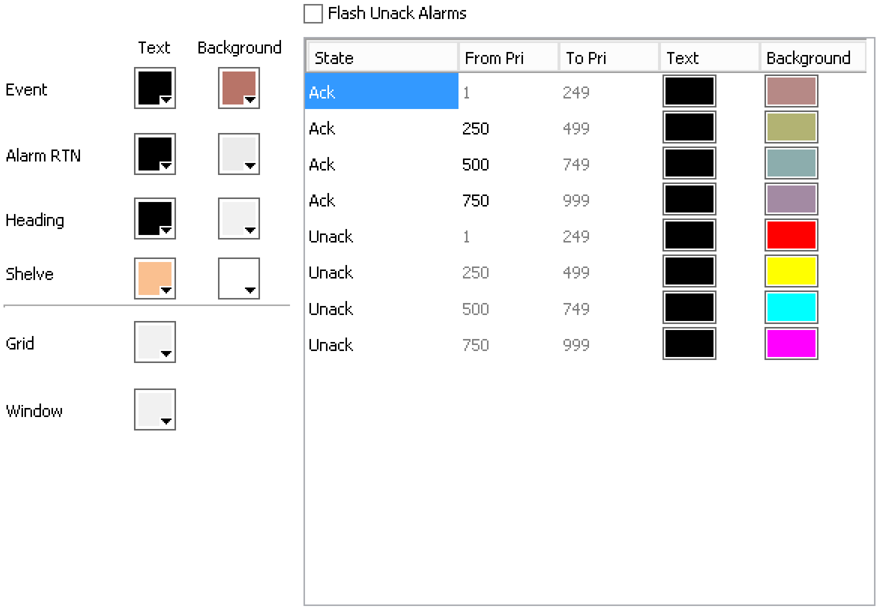
1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Colors**. The **Colors** page appears.
3. Configure the "return to normal" record text color. Do the following:
    a. Click the color field next to **Alarm RTN** and under **Text**. The color picker appears.
    b. Select a color and click **OK**.
4. Configure the "return to normal" record background color. Do the following:
    a. Click the color field next to **Alarm RTN** and under **Background**. The color picker appears.
    b. Select a color and click **OK**.
5. Click **OK**.

Set Heading, Grid, and Window Color

You can set text color and background color for the heading, the grid color, and the Alarm Control window color. Use the corresponding HeadingColor.ForeGround Property, HeadingColor.BackGround Property, GridColor Property, and WindowColor Property properties in scripting to set the colors for heading, grid, and window.

To set heading, grid, and window color for the Alarm Control

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Colors**. The **Colors** page appears.



	Text	Background
Event	■	■
Alarm RTN	■	□
Heading	■	□
Shelve	■	□
Grid	□	
Window	□	

□ Flash Unack Alarms

State	From Pri	To Pri	Text	Background
Ack	1	249	■	■
Ack	250	499	■	■
Ack	500	749	■	■
Ack	750	999	■	■
Unack	1	249	■	■
Unack	250	499	■	■
Unack	500	749	■	■
Unack	750	999	■	■

3. Do one of the following:
    a. Configure the heading text color by clicking the color box next to **Heading** and under **Text**. If the color box does not open, you need to select the **Show Heading** option on the **Run-Time Behavior** page first.
    b. Configure the heading background color by clicking the color box next to **Heading** and under **Background.** If the color box does not open, you need to select the **Show Heading** option on the **Run-Time Behavior** page first.
    c. Configure the grid color by clicking the color box next to **Grid**. If the color box does not open, you need to select the **Show Grid** option on the **Run-Time Behavior** page first.
    d. Configure the window color by clicking the color box next to **Window.**

Set Alarm Shelving Colors

You can set text color and background color for alarms that are temporarily shelved.

To set alarm shelved colors

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Colors**. The **Colors** page appears.
3. Configure the shelve record text color. Do the following:
    a. Click the color field next to **Shelve** and under **Text**. The color picker appears.
    b. Select a color and click **OK**.
4. Configure the shelve record background color. Do the following:
    a. Click the color field next to **Shelve** and under **Background**. The color picker appears.
    b. Select a color and click **OK**.
5. Click **OK**.

Set Priority Ranges for Alarm Records

You can use alarm priority ranges to filter alarms. The Alarm Control can show alarms within a given range with a different text and background color. Use the AlarmColor.Range Property group in scripting to set the breakpoints at run time.

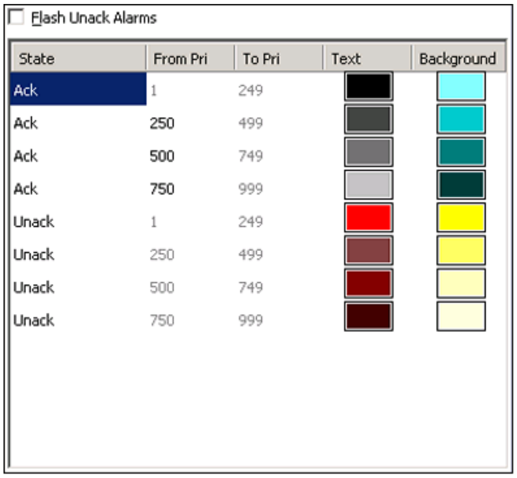
The Alarm Control supports four alarm ranges defined by three breakpoints:

1 < breakpoint 1 < breakpoint 2 < breakpoint 3 < 999

To set priority ranges for alarm records

1. Double-click the Alarm Control on the canvas. The Edit Animations dialog box appears.
2. Click **Colors**. The **Colors** page appears.
3. In the **From Pri** column in the list at the right, locate the break point you want to change. These are values except 1 or 999.

4. Click the value and type a new value in the range between the previous breakpoint and the next breakpoint.



□ Flash Unack Alarms

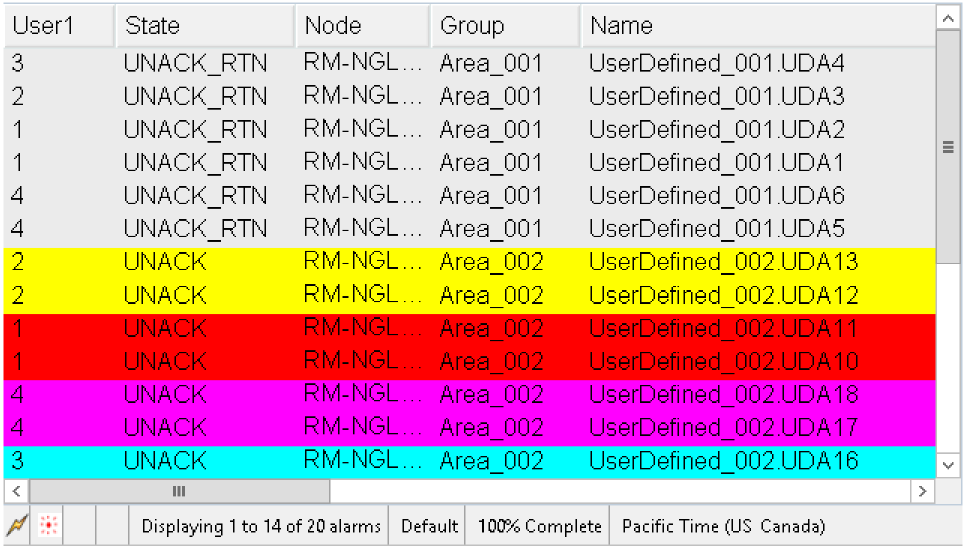
State	From Pri	To Pri	Text	Background
Ack	1	249	⬛	🟦
Ack	250	499	⬛	🟦
Ack	500	749	⬛	🟦
Ack	750	999	⬜	⬛
Unack	1	249	🟥	🟨
Unack	250	499	🟫	🟨
Unack	500	749	🟫	🟨
Unack	750	999	🟫	🟨

5. Press **Enter**. All priority values in the list are updated.

6. Click **OK**.

Example

If you use the color configuration in the procedure above, the Alarm Control at run time could have following appearance:



User1	State	Node	Group	Name
3	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA4
2	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA3
1	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA2
1	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA1
4	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA6
4	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA5
2	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA13
2	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA12
1	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA11
1	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA10
4	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA18
4	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA17
3	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA16

Displaying 1 to 14 of 20 alarms | Default | 100% Complete | Pacific Time (US Canada)

Set Colors for Acknowledged Alarms

You can set the text and background colors for records of acknowledged alarms. For each of the priority ranges, you can set a text color and a background color. Use the AlarmColor.Ack.ForeGround Property and AlarmColor.Ack.BackGround Property property groups in scripting to set the text color and background color for acknowledged alarms in each priority range at run time.

To set colors for acknowledged alarm records

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.

2. Click **Colors**. The **Colors** page appears.
3. In the list at the right, locate the **Ack** record and priority range for which you want to change the text or background color.
4. Click the color box in the **Text** or **Background** column of the line. The color picker appears.
5. Select a color and click **OK**.
6. Click **OK**.

Set Colors for Unacknowledged Alarms

You can set the text and background colors for records of unacknowledged alarms. For each of the priority ranges, you can set a text color and a background color. Use the AlarmColor.UnAck.ForeGround Property and AlarmColor.UnAck.BackGround Property property groups in scripting to set the text color and background color for unacknowledged alarms in each priority range at run time.

To set colors for unacknowledged alarm records

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Colors**. The **Colors** page appears.
3. In the list at the right, locate the **Unack** record and priority range for which you want to change the text or background color.
4. Click the color box in the **Text** or **Background** column of the line. The color picker appears.
5. Select a color and click **OK**.

Set Unacknowledged Alarms to Flash

Instead of showing unacknowledged alarm records in predefined constant text and background color, you can configure the Alarm Control to flash unacknowledged alarms in another text and background colors.

Note: The Flash Unack Alarms setting is checked by default for instances of the Alarm Control that are embedded in Situational Awareness Library symbols.

The unacknowledged alarm records flash between the colors of the Unack alarms and the colors of the Flash Unack alarms. Use the FlashUnAckAlarms Property Boolean property in scripting to set unacknowledged alarm records to flash at run time.

Use the AlarmColor.UnAck.Flash.ForeGround Property and AlarmColor.UnAck.Flash.BackGround Property property groups in scripting to set the text color and background color for flashing unacknowledged alarms in each priority range at run time.

To set flashing and colors for unacknowledged alarm records

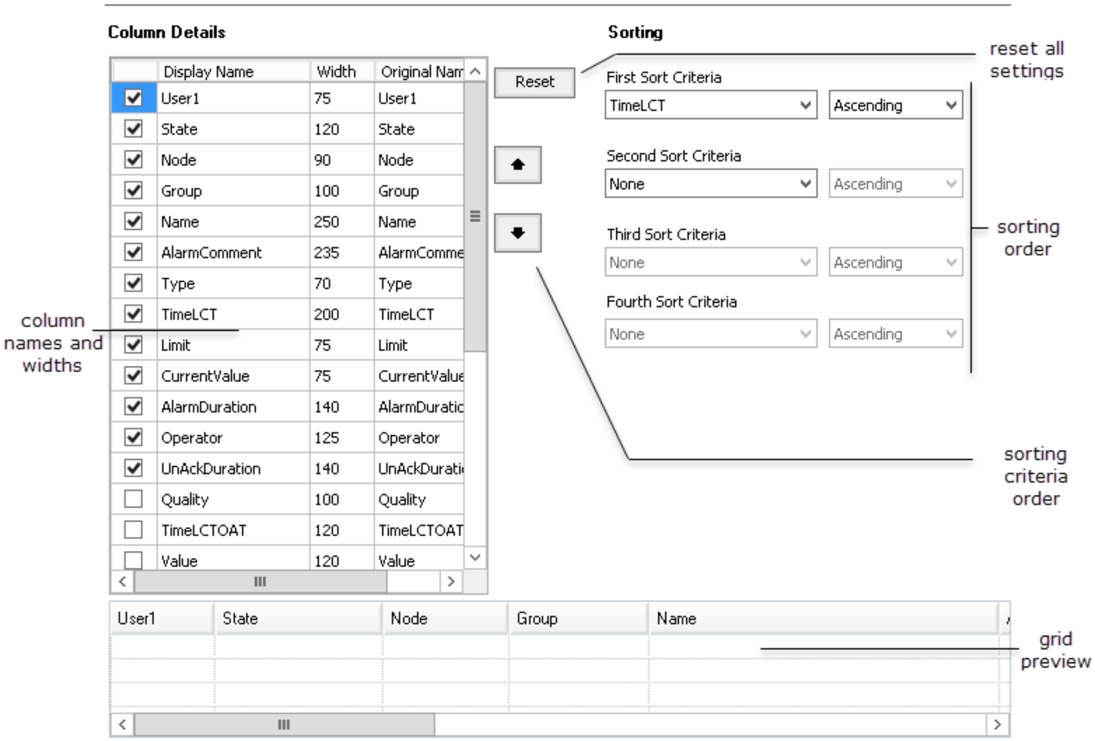
1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Colors**. The **Colors** page appears.
3. Select the **Flash Unack Alarms** check box.

   Note: You cannot select the **Flash UnAck Alarms** check box if the client mode is set to one of the historical modes.

4. In the list on the right, locate the **Unack** record and priority range for which you want to change the text or background color. Do the following:
   a. Click the color box in the **Text** or **Background** column of the line. The color picker appears.
   b. Select a color and click **OK**.
5. Locate the **Flash Unack** record and priority range for which you want to change the text or background color. Do the following:
   a. Click the color box in the **Text** or **Background** column of the line. The color picker appears.
   b. Select a color and click **OK**.
6. Click **OK**.

Rename, Resize, and Reorder Column Headers

You can rename, resize, and change the order of column headers in the Alarm Control.



Column Details

	Display Name	Width	Original Nam
☑	User1	75	User1
☑	State	120	State
☑	Node	90	Node
☑	Group	100	Group
☑	Name	250	Name
☑	AlarmComment	235	AlarmComme
☑	Type	70	Type
☑	TimeLCT	200	TimeLCT
☑	Limit	75	Limit
☑	CurrentValue	75	CurrentValue
☑	AlarmDuration	140	AlarmDuratic
☑	Operator	125	Operator
☑	UnAckDuration	140	UnAckDurati
□	Quality	100	Quality
□	TimeLCTOAT	120	TimeLCTOAT
□	Value	120	Value

Sorting

First Sort Criteria: TimeLCT, Ascending
Second Sort Criteria: None, Ascending
Third Sort Criteria: None, Ascending
Fourth Sort Criteria: None, Ascending

User1	State	Node	Group	Name

All changes you make in the Column Details list are shown in the grid preview.

You can also use the grid preview to resize columns or change their order with the pointer.

Column headers can be localized along with other symbol text when you export, translate, and reimport language files. The translated language files must be imported to the InTouch HMI for run-time language switching. For further information, see Chapter 11 *Working with Languages* in the *Application Server User's Guide*.

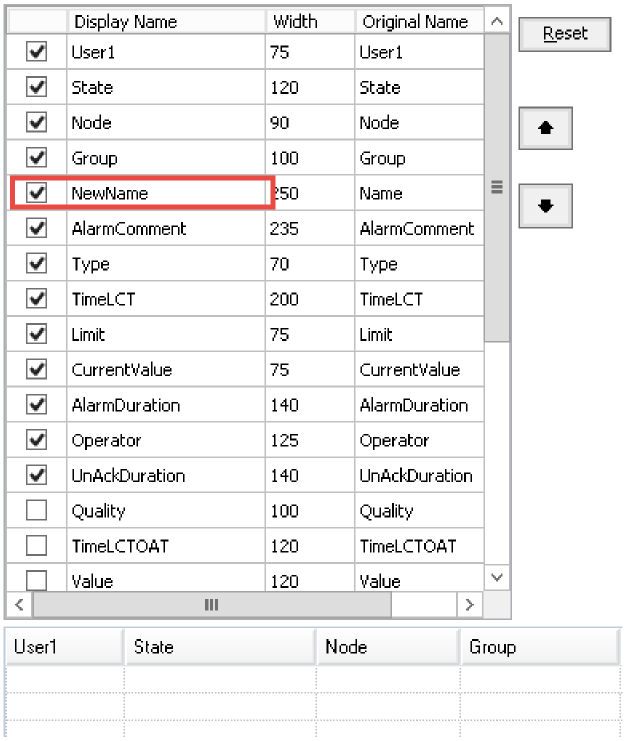
Important: If you rename or reorder column headers, you must repeat the symbol text translation procedures. If you do not, your changes will not be available for run-time language switching.

Rename Column Headers

You can rename the column headers in the Alarm Control.

To rename column headers

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Column Details** tab. The **Column Details** page appears.
3. In the **Column Details** list, locate the column header you want to rename and click on it.
4. Type a new name and press **Enter**. The **Column Details** list and the grid preview are updated with the new name.



	Display Name	Width	Original Name
☑	User1	75	User1
☑	State	120	State
☑	Node	90	Node
☑	Group	100	Group
☑	NewName	250	Name
☑	AlarmComment	235	AlarmComment
☑	Type	70	Type
☑	TimeLCT	200	TimeLCT
☑	Limit	75	Limit
☑	CurrentValue	75	CurrentValue
☑	AlarmDuration	140	AlarmDuration
☑	Operator	125	Operator
☑	UnAckDuration	140	UnAckDuration
□	Quality	100	Quality
□	TimeLCTOAT	120	TimeLCTOAT
□	Value	120	Value

User1	State	Node	Group

5. Click **OK**.

Resize Columns

You can resize the column headers in the Alarm Control either by:

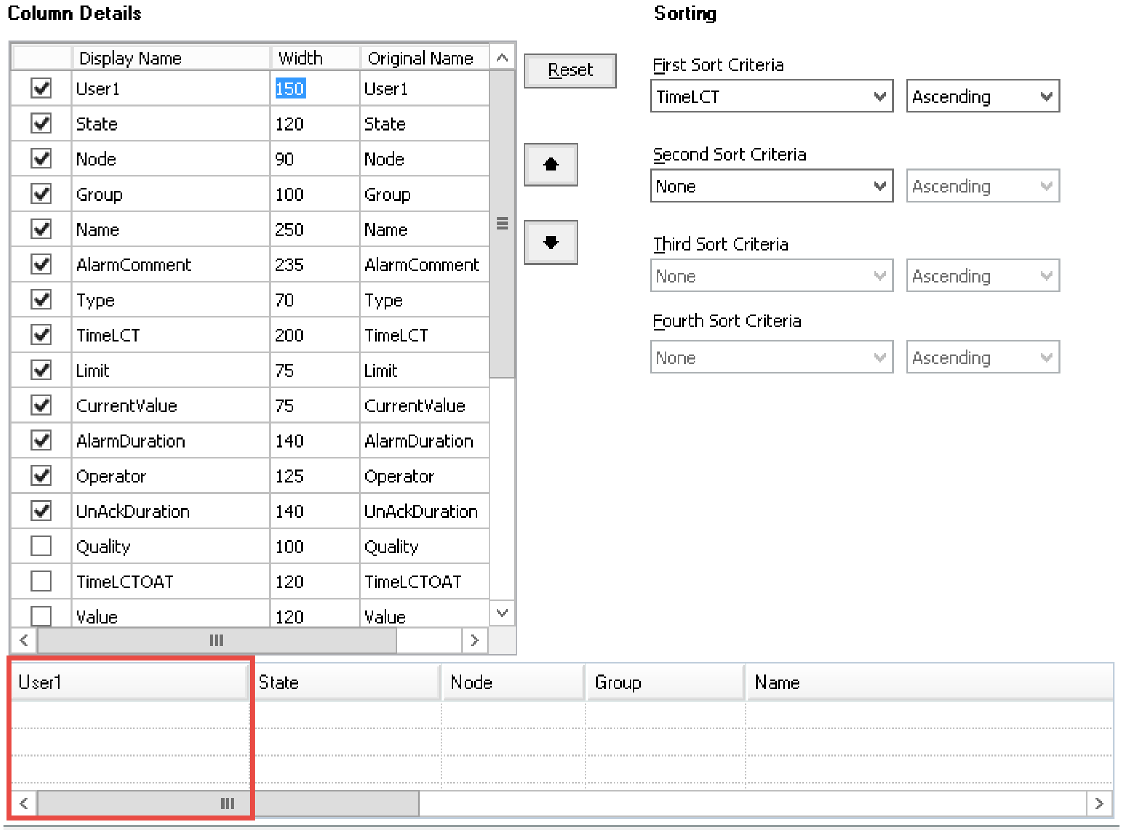
- Typing in a numeric value
- Dragging the column header boundary width with the pointer in the grid preview

To resize the column numerically

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Column Details**. The **Column Details** page appears.

3. In the **Column Details** list, locate the name of the column you want to resize and click on the **Width** value in the row.

4. Type a new width in pixels and press **Enter**. The **Column Details** list and the grid preview are updated.



Column Details

	Display Name	Width	Original Name
☑	User1	150	User1
☑	State	120	State
☑	Node	90	Node
☑	Group	100	Group
☑	Name	250	Name
☑	AlarmComment	235	AlarmComment
☑	Type	70	Type
☑	TimeLCT	200	TimeLCT
☑	Limit	75	Limit
☑	CurrentValue	75	CurrentValue
☑	AlarmDuration	140	AlarmDuration
☑	Operator	125	Operator
☑	UnAckDuration	140	UnAckDuration
□	Quality	100	Quality
□	TimeLCTOAT	120	TimeLCTOAT
□	Value	120	Value

Sorting

First Sort Criteria: TimeLCT, Ascending

Second Sort Criteria: None, Ascending

Third Sort Criteria: None, Ascending

Fourth Sort Criteria: None, Ascending

User1	State	Node	Group	Name

5. Click **OK**.

To resize the column graphically

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.

2. Click **Column Details**. The **Column Details** page appears.

3. In the grid preview, locate the column you want to resize and drag the column boundary to resize the column. The width value of the **Column Details** list is updated.

4. Click **OK**.

Change the Order of Columns

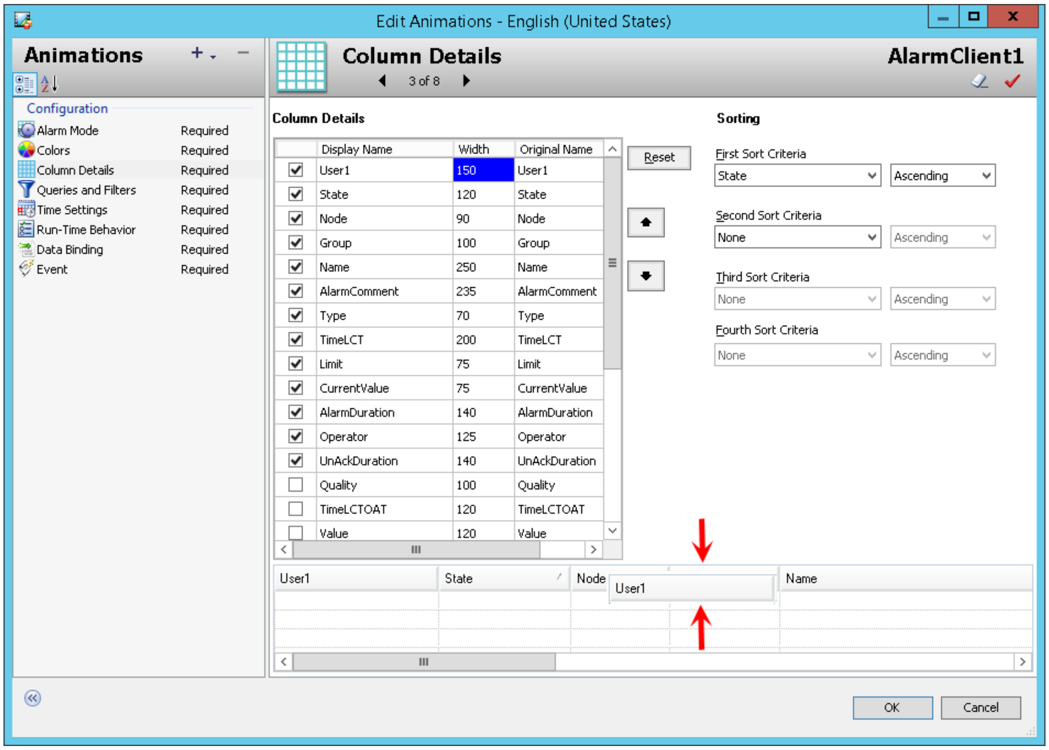
You can change the order of the columns in the Alarm Control by:

- Moving column names up and down in the **Column Details** list using buttons
- Dragging the column header with the pointer in the grid preview

You also can reset the column widths and order to their default values. Resetting the column widths and order also resets the names to their default values.

To change the column order

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Column Details**. The **Column Details** page appears.
3. Do one of the following:
   - Click arrow up and arrow down to reposition the columns
   - In the grid preview, drag the name of the column you want to reposition and drop it to the left of another column to reposition it



Edit Animations - English (United States)

Animations

Configuration

Alarm Mode	Required
Colors	Required
Column Details	Required
Queries and Filters	Required
Time Settings	Required
Run-Time Behavior	Required
Data Binding	Required
Event	Required

Column Details 3 of 8 **AlarmClient1**

Column Details

	Display Name	Width	Original Name
☑	User1	150	User1
☑	State	120	State
☑	Node	90	Node
☑	Group	100	Group
☑	Name	250	Name
☑	AlarmComment	235	AlarmComment
☑	Type	70	Type
☑	TimeLCT	200	TimeLCT
☑	Limit	75	Limit
☑	CurrentValue	75	CurrentValue
☑	AlarmDuration	140	AlarmDuration
☑	Operator	125	Operator
☑	UnAckDuration	140	UnAckDuration
☐	Quality	100	Quality
☐	TimeLCTOAT	120	TimeLCTOAT
☐	Value	120	Value

Sorting

First Sort Criteria: State, Ascending

Second Sort Criteria: None, Ascending

Third Sort Criteria: None, Ascending

Fourth Sort Criteria: None, Ascending

The grid preview and the **Column Details** list shows the new column order.

4. Click **OK**.

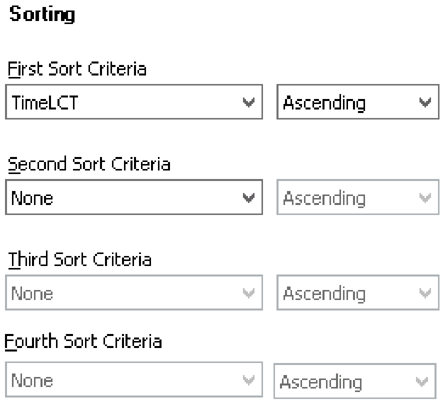
To reset column widths and order

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Column Details**. The **Column Details** page appears.
3. Click **Reset**. The column widths, names, and order are reset to their default values.
4. Click **OK**.

Sort Alarms

You can configure how the Alarm Control sorts alarm records at run time. By default, the Alarm Control lists alarm records by time in ascending order.

You can sort alarm records in ascending or descending order based on a first sort criteria, an optional second sort criteria, an optional third sort criteria, and and optional fourth sort criteria.



Sorting

First Sort Criteria: TimeLCT — Ascending

Second Sort Criteria: None — Ascending

Third Sort Criteria: None — Ascending

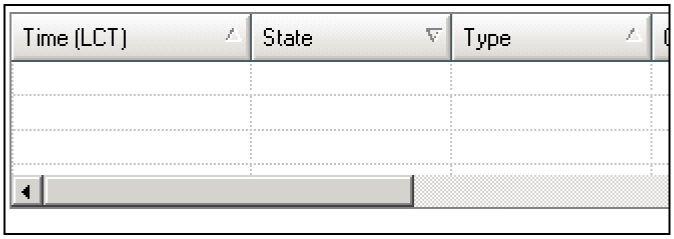
Fourth Sort Criteria: None — Ascending

You can configure the sorting columns and directions either in lists or with the grid preview. Use the SortColumn.First Property, SortColumn.Second Property, and SortColumn.Third Property properties in scripting to set the columns to be sorted at run time. Use the SortOrder.First Property, SortOrder.Second Property, and SortOrder.Third Property properties in scripting to set the sort direction for each at run time.

To set sorting columns and directions with lists

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Column Details**. The **Column Details** page appears.
3. In the **Sorting** area, do the following:
    a. Select the primary sort column in the **First Sort Column** list and a sorting direction in the list to its right.
    b. Optionally, select the secondary sort column in the **Second Sort Column** list and a sorting direction in the list to its right.
    c. If you set the **Second Sort Column**, optionally select the tertiary sort column in the **Third Sort Column** list and a sorting direction in the list to its right.

    The grid preview is updated and shows arrows for the sorted columns and their sort directions.



Time (LCT)	State	Type

To set sorting columns and directions with the grid preview

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Column Details**. The **Column Details** page appears.
3. In the grid preview, click on a column to select it for sorting. An arrow appears on the column header and the change is also shown in the **Sorting** area lists.

4. To change the sorting direction, click on the column header again. The arrow changes on the column header and the change is also shown in the **Sorting** area lists.

   Note: If you click on a column header after releasing the **Shift** key, all sorting information is lost and the selected column is the new primary sorting criteria.

5. To set second, third, and fourth sorting, hold the **Shift** key and repeat from step 3.
6. Release the **Shift** key.
7. Click **OK**.

Filter Alarms

You can filter current and historical alarms by using queries and filters. Queries and filters are collections of filter criteria in a logical construct.

For example, you can filter alarms by defining a query or a filter that only shows alarms with priorities larger than 500 and smaller than 750.

You can re-use the filters and queries you define for historical alarms for current alarms and vice versa. You can also re-use filters and queries you define at design time at run time and vice versa.

Important: Queries and filters for current alarms and recent alarms and events require at least a **Provider** and **Group** as filter criteria. These must use the equals sign or a message asking for those fields will appear.

When you use TimeLCT, TimeOAT, or TimeLCTOAT as filter criteria for historical alarm modes, you need make sure that the TimeSelector.StartDate and TimeSelector.EndDate properties do not limit the query. Otherwise the Alarm Control can possibly not return all alarm and event records.

Set the TimeSelector.StartDate property earlier than any time filtering requirement, and the TimeSelector.EndDate later than any time filtering requirement.

Using Wildcards in Queries

In current alarm queries, you can use wildcards only in the Tagname part of the query and not in the Provider, Group, or Node part of the query. A valid example is:

```
\galaxy!Mixing!RotorBlade*
```

In query filters that are used for current queries, the same restrictions apply.

In query filters that are used for historical queries, you must convert the operator and wildcard to SQL syntax according to the following table:

	Current Query	Historical Query
Operator	=	Like
Wildcard	*	%

For example:

```
Provider = ‘galaxy’ AND Group = ‘Mixing’
AND Name Like ‘RotorBlade%’
```

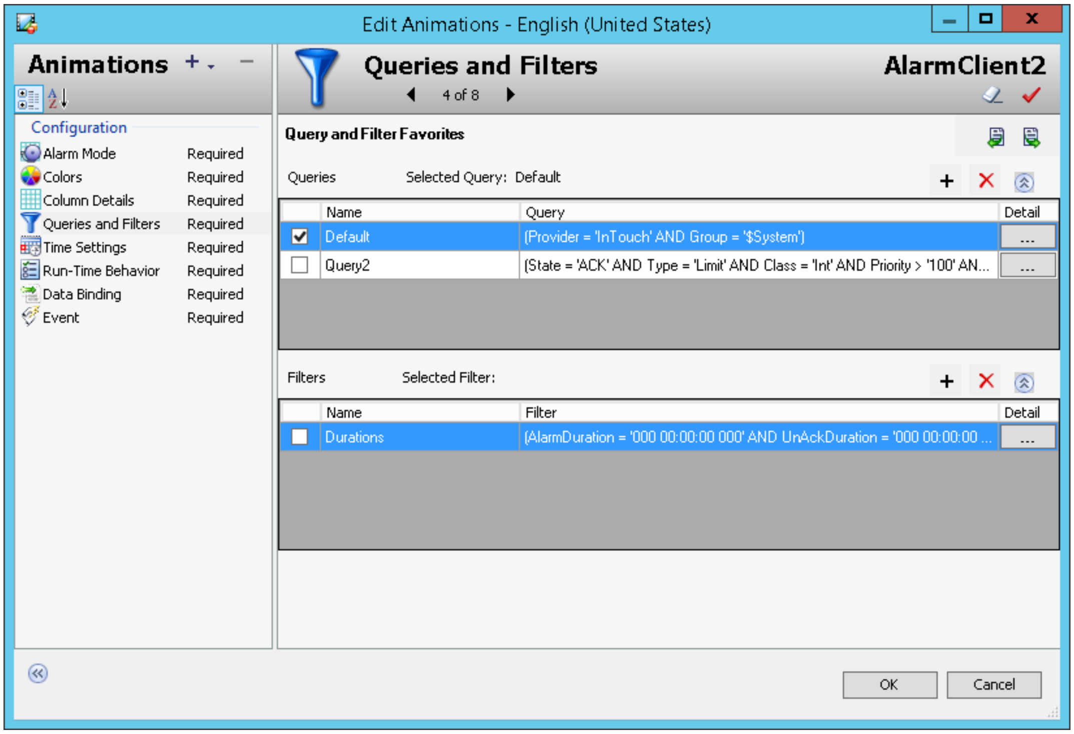
If you want to use a query filter containing a wildcard for a current query and a historical query, create two separate query filters. If a column contains null data, it cannot be retrieved using the Like operator.

Use an Existing Query or Filter

You can use an existing query filter to filter the alarms shown in the Alarm Client Control. You can also use the Favorite Property string property in scripting to switch to an existing query filter at run-time.

To use an existing query filter

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Queries and Filters**. The **Query and Filter Favorites** page appears.
3. In the **Query and Filter Favorites** list, select a query or filter by clicking the check box before each query or filter name.



Edit Animations - English (United States)

Animations

Configuration

Alarm Mode	Required
Colors	Required
Column Details	Required
Queries and Filters	Required
Time Settings	Required
Run-Time Behavior	Required
Data Binding	Required
Event	Required

Queries and Filters
4 of 8
AlarmClient2

Query and Filter Favorites

Queries   Selected Query: Default

	Name	Query	Detail
☑	Default	(Provider = 'InTouch' AND Group = '$System')	...
□	Query2	(State = 'ACK' AND Type = 'Limit' AND Class = 'Int' AND Priority > '100' AN...	...

Filters   Selected Filter:

	Name	Filter	Detail
□	Durations	(AlarmDuration = '000 00:00:00 000' AND UnAckDuration = '000 00:00:00 ...	...

4. Click **OK**.

Note: In Current Alarms mode, if you try to proceed from **Queries and Filters** page with no query or filter selected, you will be prompted with a message to confirm you want to continue. Upon click of Yes the default query will be selected and you can continue. Upon click of No, you will be returned to the Queries and Filters page. If a query is selected but no filter, no message will display.

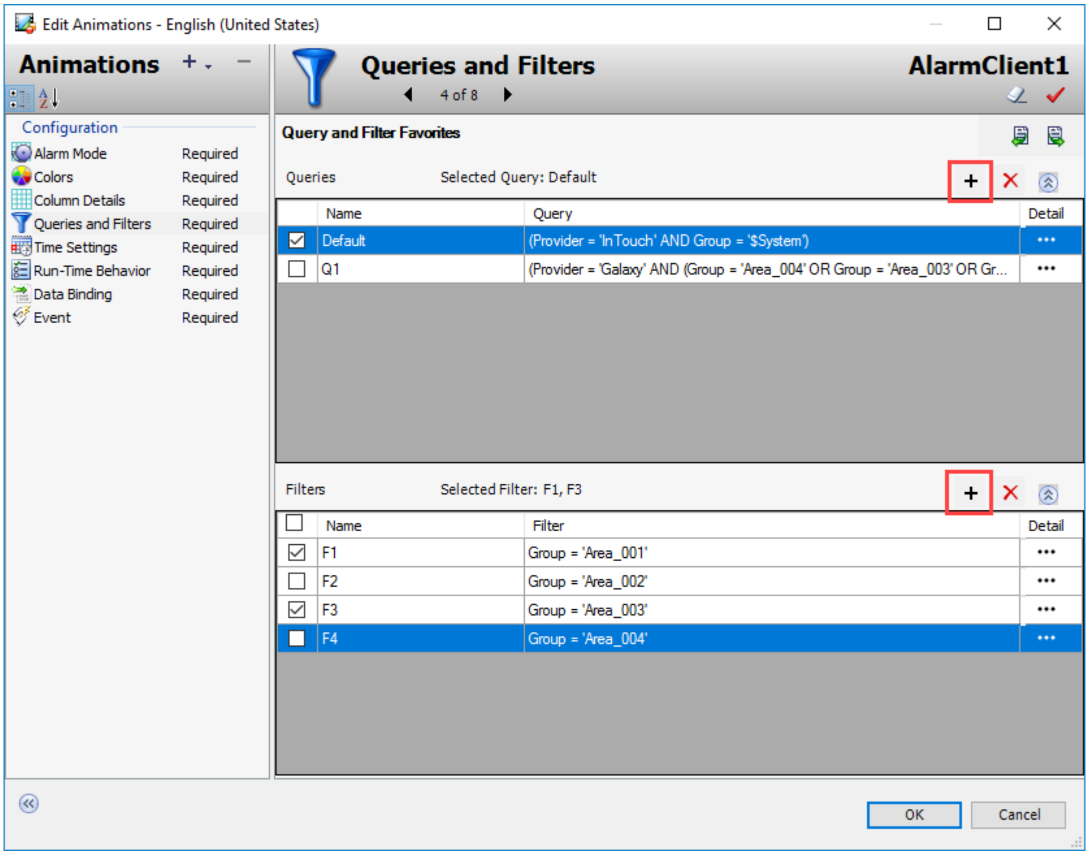
In Historical Alarms mode, if you proceed without a query selected but have selected a filter, the filter will be applied. If neither query nor filter is selected, you will be prompted with the same message.

Add a New Query or Filter

You can define a new query filter to filter the alarms shown in the Alarm Client Control. The new query filter is saved as a favorite in the **Query Filter Favorites** list.

To add a new query filter

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Queries and Filters**. The **Query and Filter Favorites** page appears.


Edit Animations - English (United States)
Animations
Queries and Filters
4 of 8
AlarmClient1
Query and Filter Favorites
OK
Cancel

Configuration

Alarm Mode	Required
Colors	Required
Column Details	Required
Queries and Filters	Required
Time Settings	Required
Run-Time Behavior	Required
Data Binding	Required
Event	Required

Queries   Selected Query: Default

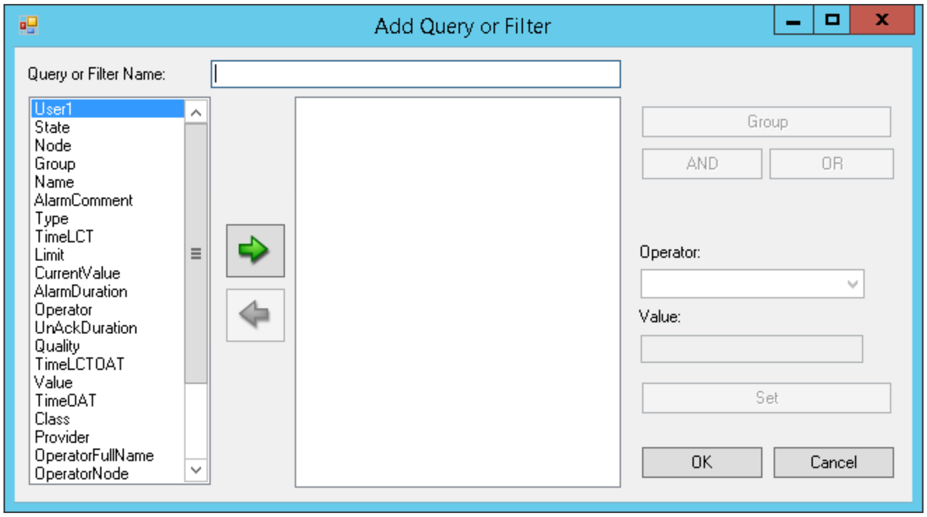
	Name	Query	Detail
☑	Default	(Provider = 'InTouch' AND Group = '$System')	•••
☐	Q1	(Provider = 'Galaxy' AND (Group = 'Area_004' OR Group = 'Area_003' OR Gr...	•••

Filters   Selected Filter: F1, F3

☐	Name	Filter	Detail
☑	F1	Group = 'Area_001'	•••
☐	F2	Group = 'Area_002'	•••
☑	F3	Group = 'Area_003'	•••
☐	F4	Group = 'Area_004'	•••

3. Click the **Add New Query** button above the saved query favorites box or click the **Add New Filter** button above the saved filter favorites box.

The **Add Query or Filter** dialog box appears.



4. Construct queries or filters as needed.

   For more information, see *Construct Filters* on page 41.

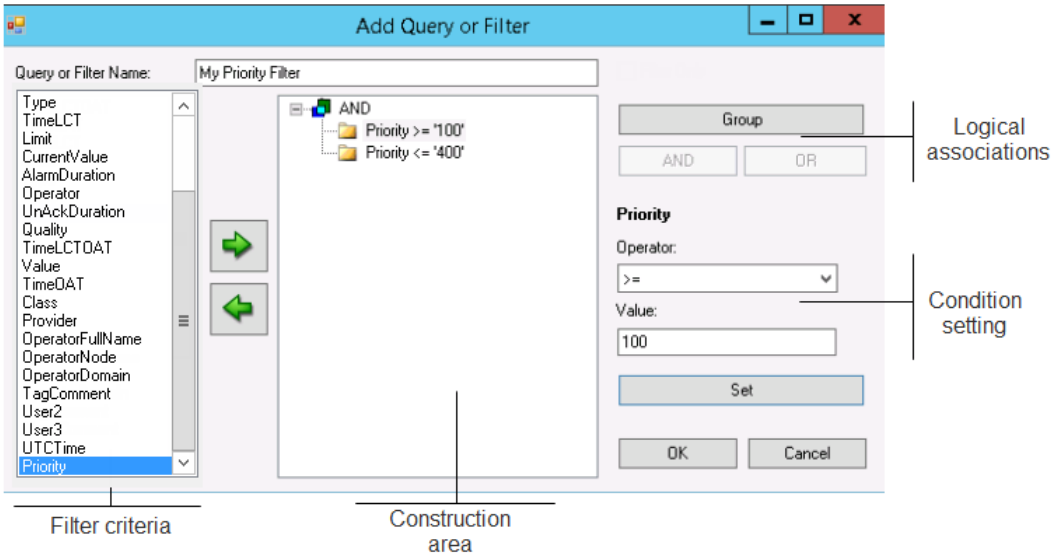
1. You can configure and select more than one filter for any selected query. For example, “F1” and “F3”.

   The “Selected Filter” label will display the selected filters using comma separator.

2. To select all filters, click the **Select All** checkbox. If the Select All checkbox is unchecked, all filters will be unselected.

Construct Filters

You use the **Add Query or Filter** dialog box to create or edit a filter graphically.



Query or Filter Name: My Priority Filter

Priority >= '100'

Priority <= '400'

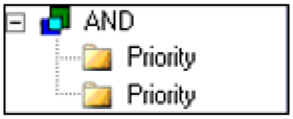
Operator: >=

Value: 100

To construct a filter

1. If you want to change the filter name, type a new unique name in the **Filter Name** box.

2. Add filter criteria to the construction area by selecting a column name on the left and clicking the right arrow button. When you add filter criteria to the construction area, they are automatically logically connected by AND.



AND
- Priority
- Priority

3. If necessary, remove filter criteria by selecting them in the filter construction area and clicking the left arrow button.

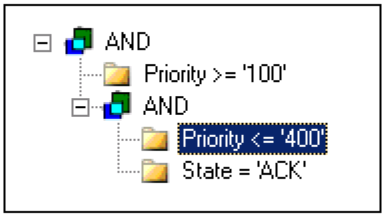
4. To change the logical operator, select it in the filter construction area, and then either:

   - Click **AND** or **OR**
   - Right-click and select **AND** or **OR** from the shortcut menu

5. To group filter criteria logically, either:

   - Drag a filter criteria in the construction area over another filter criteria
   - Select one filter criteria, click **Group**, and then click the other filter criteria

   By default, the filter criteria are logically grouped with AND. If necessary, you can select the **AND** item in the tree and click **OR** to change it to an OR grouping.



AND
- Priority >= '100'
- AND
  - Priority <= '400'
  - State = 'ACK'

6. Assign values to filter criteria.

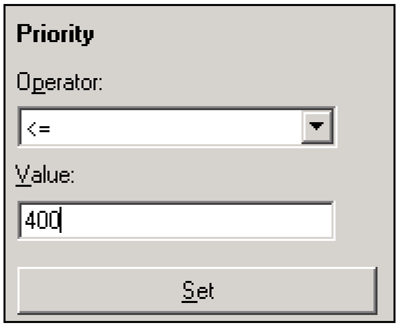
Note: If you are using the Value column as a filter criteria, you may get unexpected results at run time. The items in the Value column are sorted alphabetically, not numerically. This is because the Value column can contain strings.

Do the following:

a. Select a filter criteria in the construction area.

b. Select an operator from the **Operator** list.

c. Type or select a value in the **Value** box.



Priority

Operator: <=

Value: 400

d. Click **Set**. The filter criteria is updated in the construction area.

7. To cut, copy, or paste individual filter criteria or filter criteria branches, right-click on the filter criteria and select the appropriate option from the shortcut menu.

8. When you are done, click **OK**.

Modify an Existing Query or Filter

You can modify an existing query or filter using the **Modify Query or Filter** dialog box.

To modify an existing query or filter

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.

2. Click **Queries and Filters**. The **Queries and Filters** page appears.

3. Select an existing query or filter in the **Query and Filter Favorites** list by clicking on the check box before each query or filter name.

4. Click the ellipsis button. The **Modify Query or Filter** dialog box appears. For more information, see *Construct Filters* on page 41.

5. Click **OK**.

Delete a Query or Filter Favorite

You can delete any non-default query or filter favorite.

To delete a query or filter favorite

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.

2. Click **Queries and Filters**. The **Queries and Filters** page appears.

3. Select an existing query or filter in the **Queries and Filter Favorites** list by clicking on the check box before each query or filter name.

4. Click the **Delete selected query** button or click the **Delete selected filter** button.

5. When a message appears, click **Yes**.

Export Query and Filter Favorites

You can export the query and filter favorites lists to an XML file. The XML file containing the query and filter favorites can be imported to other Alarm Control in design time or run time. Do not edit this file directly. The default query is also exported to the XML file.

To export the query and filter favorites lists

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.

2. Click **Queries and Filters**. The **Queries and Filters** page appears.

3. Select an existing query or filter in the **Query and Filter Favorites** list by selecting the check box before each query or filter name.

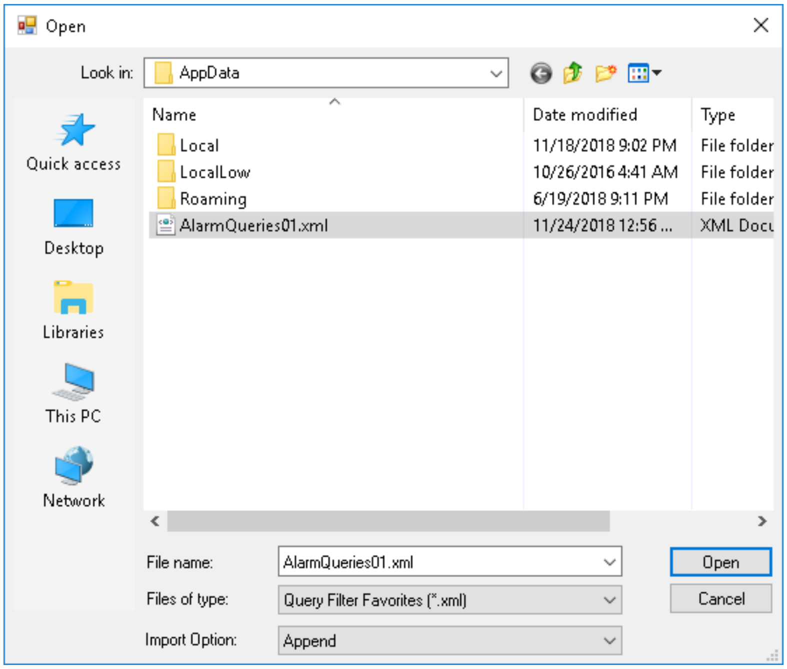
4. Click the **Export** button. Select a location and a name for the XML file and click **Save**.

Import Query and Filter Favorites

You can import the query filter favorites list from an XML file.

To import the query filter favorites list

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Queries and Filters**. The **Queries and Filters** page appears.
3. Click **Import**. Navigate to the XML file you want to import.



Look in: AppData

Name	Date modified	Type
Local	11/18/2018 9:02 PM	File folder
LocalLow	10/26/2016 4:41 AM	File folder
Roaming	6/19/2018 9:11 PM	File folder
AlarmQueries01.xml	11/24/2018 12:56 ...	XML Docu

File name: AlarmQueries01.xml

Files of type: Query Filter Favorites (*.xml)

Import Option: Append

4. In the **Import Option** list, click either:
   - ○ **Append** to append the imported query filters to the existing query filters. If query filter names in the imported XML conflict with existing query filters, you are prompted to confirm the import for each filter
   - ○ **Overwrite** to replace all existing query filters with the imported query filters
5. Select the XML file and click **Open**.

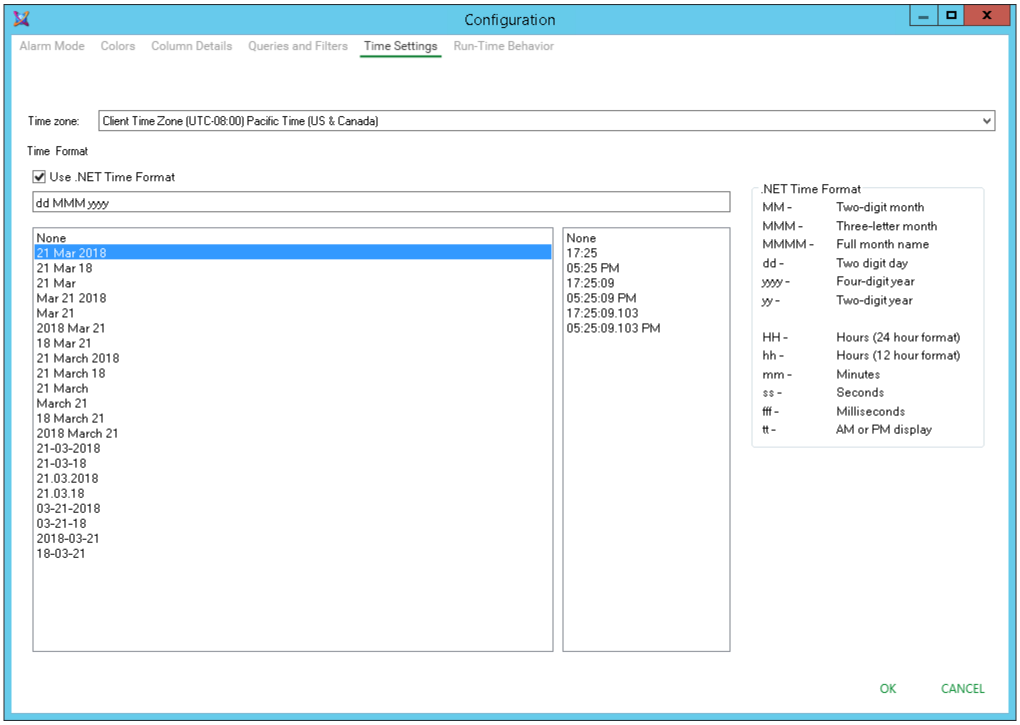
Setting Time Zone and Format

You can set the time zone in which the client shows the alarm and event records. By default, the time zone is set to the client computer’s current time zone at design time. Use the TimeZone.TimeZone Property, Time.Type Property, and Time.Format Property properties in scripting to set the time zone, time type, and time format at run time.

You can also set the time format of the alarm and event records. You can select between two different time format sets:

- Default Time Format: same as the InTouch Alarm Viewer control and InTouch Alarm DB View control of InTouch version 10.0 and later

- .NET Time Format: defined by Microsoft .NET Framework time format conventions



Time zone: Client Time Zone (UTC-08:00) Pacific Time (US & Canada)

Time Format

☑ Use .NET Time Format

dd MMM yyyy

None
21 Mar 2018
21 Mar 18
21 Mar
Mar 21 2018
Mar 21
2018 Mar 21
18 Mar 21
21 March 2018
21 March 18
21 March
March 21
18 March 21
2018 March 21
21-03-2018
21-03-18
21.03.2018
21.03.18
03-21-2018
03-21-18
2018-03-21
18-03-21

None
17:25
05:25 PM
17:25:09
05:25:09 PM
17:25:09.103
05:25:09.103 PM

.NET Time Format

MM -	Two-digit month
MMM -	Three-letter month
MMMM -	Full month name
dd -	Two digit day
yyyy -	Four-digit year
yy -	Two-digit year
HH -	Hours (24 hour format)
hh -	Hours (12 hour format)
mm -	Minutes
ss -	Seconds
fff -	Milliseconds
tt -	AM or PM display

Set the Time Zone

You can set the time zone in which the Alarm Control shows the alarm and event records.

You can either set the time display to a predefined time zone, or to the client time zone. The client time zone is the time zone of the computer on which the Alarm Control is running.

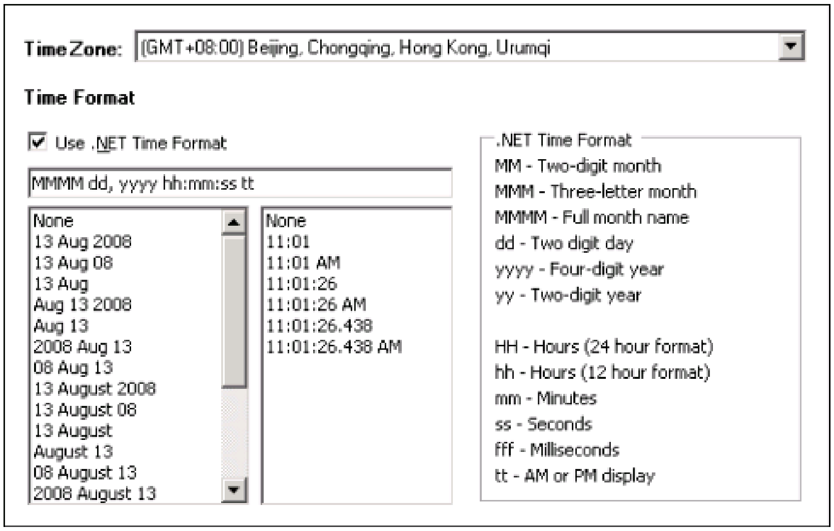
The **Client Time Zone** setting is useful if you are deploying an application using the Alarm Control to a different time zone.

For example, if you develop your application in the Pacific Time zone and deploy it to two computers in the time zones Central Time and Eastern Time, you can ensure the Alarm Control shows the local time for each deployment by setting the time zone to **Client Time Zone**.

To set the time zone

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Time Settings**. The **Time Settings** page appears.

3. In the **Time Zone** list, select a time zone.



Time Zone: (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi

Time Format

☑ Use .NET Time Format

MMMM dd, yyyy hh:mm:ss tt

.NET Time Format
MM - Two-digit month
MMM - Three-letter month
MMMM - Full month name
dd - Two digit day
yyyy - Four-digit year
yy - Two-digit year

HH - Hours (24 hour format)
hh - Hours (12 hour format)
mm - Minutes
ss - Seconds
fff - Milliseconds
tt - AM or PM display

4. Click **OK**.

Set a Time Format

You can set the time format in which the Alarm Control shows the alarm and event records. You can either use a predefined datetime format, or compose one.

To set the time format

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Select **Time Settings**.
3. In the **Time Format** area, do the following:
    a. Make sure **Use .NET Time Format** is cleared.
    b. Select date format codes from the list at the right. The equivalent date format code appears in the box above.
    c. Select time format codes from the list at the right. The equivalent time format code is appended to the date format string.
4. If you want to customize the datetime format, modify the codes in the box as follows:

Code	Purpose	Example
%m	Two-digit month	03
%b	Three-letter month	Mar
%B	Full month name	March
%d	Two-digit day	17
%Y	Four-digit year	2008

Code	Purpose	Example
%y	Two-digit year	08
%#x	Full day and date	Tuesday, March 11, 2008
%H	Hours in 24 hour format	14
%I	Hours in 12 hour format	2
%M	Minutes	55
%S	Seconds	34
%s	Milliseconds	223
%p	AM or PM	PM

5. Click **OK**.

Set a .NET DateTime Format

You can set the .NET DateTime format in which the Alarm Control shows the alarm and event records. You can either use a predefined DateTime format, or compose one. The predefined date format is based on the short date format setting of the operating system and may vary from computer to computer.

To set the .NET DateTime format

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Time Settings**. The **Time Settings** page appears.
3. In the **Time Format** area, do the following:
   a. Select the **Use .NET Time Format** check box.
   b. Select date format codes from the list at the right. The equivalent date format code appears in the box above.
   c. Select time format codes from the list at the right. The equivalent time format code is appended to the time format string.
4. If you want to customize the DateTime format, modify the codes in the box as in the table below. For more information, see the Microsoft Knowledge database on .NET DateTime formats.

Code	Purpose	Example
M	Single-digit month	9
MM	Two-digit month	09
MMM	Three-letter month	Sep
MMMM	Full month name	September

Code	Purpose	Example
d	Single-digit day	8
dd	Two-digit day	08
ddd	Abbreviated day of the week	Mon.
dddd	Day of the week	Monday
yyyy	Four-digit year	2008
yy	Two-digit year	08
HH	Hours in 24 hour format	14
hh	Hours in 12 hour format	2
mm	Minutes	55
ss	Seconds	34
fff	Milliseconds	223
tt	AM or PM	PM

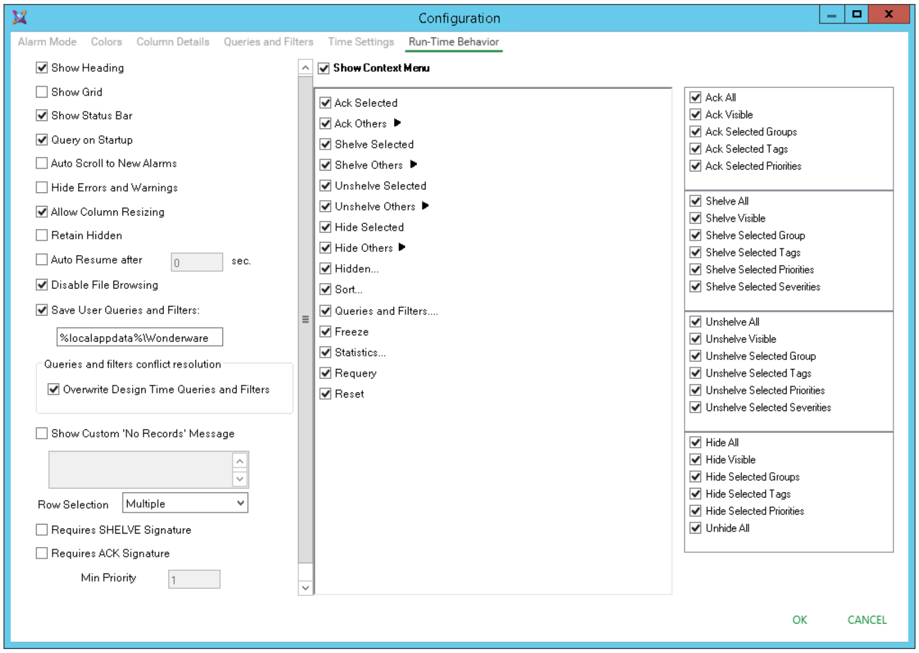
5. Click **OK**.

Configuring Run-Time Behavior

You can configure the behavior and appearance of the Alarm Control at run time, for example:

- Showing and Hiding parts of the Alarm Control
- Specifying if the Alarm Control queries the alarm database when it starts up
- Scrolling to new alarms
- Hiding warnings, errors, and messages
- Restricting operator access to parts of the Alarm Control
- Specifying Alarm Control freeze behavior
- Customizing the "no records" message
- Configuring alarms to require an ACK signature
- Configuring alarms to require a SHELVE signature

- Customizing the run-time shortcut menu



☑ Show Heading
□ Show Grid
☑ Show Status Bar
☑ Query on Startup
□ Auto Scroll to New Alarms
□ Hide Errors and Warnings
☑ Allow Column Resizing
□ Retain Hidden
□ Auto Resume after 0 sec.
☑ Disable File Browsing
☑ Save User Queries and Filters: %localappdata%\Wonderware

Queries and filters conflict resolution
☑ Overwrite Design Time Queries and Filters

□ Show Custom 'No Records' Message

Row Selection: Multiple
□ Requires SHELVE Signature
□ Requires ACK Signature
Min Priority 1

☑ **Show Context Menu**

☑ Ack Selected
☑ Ack Others ▶
☑ Shelve Selected
☑ Shelve Others ▶
☑ Unshelve Selected
☑ Unshelve Others ▶
☑ Hide Selected
☑ Hide Others ▶
☑ Hidden...
☑ Sort...
☑ Queries and Filters....
☑ Freeze
☑ Statistics...
☑ Requery
☑ Reset

☑ Ack All
☑ Ack Visible
☑ Ack Selected Groups
☑ Ack Selected Tags
☑ Ack Selected Priorities

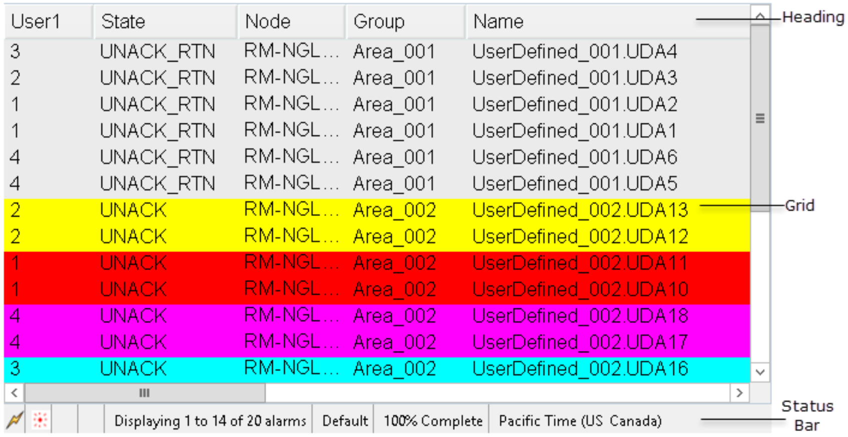
☑ Shelve All
☑ Shelve Visible
☑ Shelve Selected Group
☑ Shelve Selected Tags
☑ Shelve Selected Priorities
☑ Shelve Selected Severities

☑ Unshelve All
☑ Unshelve Visible
☑ Unshelve Selected Group
☑ Unshelve Selected Tags
☑ Unshelve Selected Priorities
☑ Unshelve Selected Severities

☑ Hide All
☑ Hide Visible
☑ Hide Selected Groups
☑ Hide Selected Tags
☑ Hide Selected Priorities
☑ Unhide All

Show Heading, Grid, or Status Bar

You can show and hide parts of the Alarm Control at run time, such as the heading, grid, or status bar. Use the ShowHeading Property, ShowGrid Property, and ShowStatusBar Property properties in scripts to show or hide the heading, grid, and status bar at run time.



User1	State	Node	Group	Name
3	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA4
2	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA3
1	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA2
1	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA1
4	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA6
4	UNACK_RTN	RM-NGL...	Area_001	UserDefined_001.UDA5
2	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA13
2	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA12
1	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA11
1	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA10
4	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA18
4	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA17
3	UNACK	RM-NGL...	Area_002	UserDefined_002.UDA16

Displaying 1 to 14 of 20 alarms | Default | 100% Complete | Pacific Time (US Canada)

To show the heading, grid, or status bar at run time

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. To show or hide parts of the Alarm Control during run time, do any of the following:
    - Select the **Show Heading** check box to show the heading at run time, or clear it to hide the heading at run time.

- Select the **Show Grid** check box to show the grid at run time, or clear it to hide the grid at run time.
- Select the **Show Status Bar** check box to show the status bar at run time, or clear it to hide the status bar at run time.

Caution: If you hide the status bar, you will not be able to see important indicators, such as the New Alarms, Hidden Alarms, and Frozen Grid indicators.

4. Click **OK**.

Automatic Query for Alarms on Start Up

You can configure the Alarm Control to automatically query the Alarm Database when the control starts up at run time. Use the QueryStartup Property in scripts to control query behavior when the Alarm Control starts.

By default, current alarms and recent alarms and events are automatically queried when the Alarm Control starts at run time. You can disable the automatic query if the Alarm Control is:

- Configured to mainly use query filters
- Controlled mainly by scripts

To query the Alarm Database automatically on start up

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Select the **Query on Startup** check box.
4. Click **OK**.

Scroll Automatically to New Alarms

If an operator views multiple pages of alarms, new alarms may go unnoticed. You can configure the Alarm Control to scroll automatically to show new alarms. Use the AutoScroll Boolean property in scripts to scroll automatically to new alarms.

However, if the Alarm Control scrolls automatically to new alarms, it may be hard for the operator to view and analyze older alarms if new alarms occur. If the Alarm Control is frozen, it will not scroll automatically to new alarms.

To scroll automatically to new alarms

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Select the **Auto Scroll to New Alarms** check box.
4. Click **OK**.

Hide Errors, Warnings, and Status Messages

You can prevent a message dialog box from opening when errors, warnings, or status messages occur in the Alarm Control. Even if you hide errors, warnings and status messages are sent to the Logger. Use the HideErrors property in scripts to hide error, warning, and status messages at run time.

To hide error and warning messages

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Select the **Hide Errors and Warnings** check box.
4. Click **OK**.

Restrict User Access to Rows and Columns

You can prevent the operator from:

- Resizing columns
- Selecting rows
- Selecting multiple rows

Use this feature for interfaces where it is easy to accidentally resize columns or select rows. For example, if the Alarm Control is running on a small display, use the AllowColumnResize Property and RowSelection Property properties in scripting to control the ability to resize columns and select rows at run time.

To prevent the operator from resizing columns

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Clear the **Allow Column Resizing** check box.
4. Click **OK**.

To prevent the operator from selecting rows

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. In the **Row Selection** list, click:
    - **No** to prevent operator from selecting rows
    - **Single** to allow operator to only select one row
    - **Multiple** to allow operator select multiple rows
4. Click **OK**.

Retain Hiding when Changing Alarm Query Filter

You can configure the Alarm Control to hide alarms even if the alarm query filter changes. Use the RetainHidden Property in scripts to retain the hiding of alarms at run time.

To retain hiding when change the alarm query filter

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.

3. Select the **Retain Hidden** check box.

4. Click **OK**.

Override the Frozen Grid

You can configure the Alarm Control to unfreeze the grid after a given time in seconds. Use this option to make sure that new alarms appear on the grid after a specified time. Use the AutoResumeDuration Property in scripts to unfreeze the Alarm Control after a certain duration at run time.

The Alarm Control also unfreezes if you change one of the following:

- Alarm Mode
- Alarm Query
- Query Filter

To override the frozen grid

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Select the **Auto Resume after** check box and type the number of seconds after which the grid unfreezes.
4. Click **OK**.

Customize the "No Records" Message

You can customize the message that appears when there are no records to show in the grid. Use the NoRecordsMessage.Enabled Property and NoRecordsMessage.Message Property in scriptw to customize the "no records" message at run time.

To customize the "no records" message

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Select the **Show Custom 'No Records' Message** check box and type a message you want to show in the Alarm Control when there are no alarm records.
4. Click **OK**.

Changing the Language of the "No Records" Message

You can change the language of the message that appears when there are no records to show in the Alarm Control grid.

To change the language of the "No Records" Message

1. Right-click on the canvas and click **Scripts**. The **Edit Scripts** dialog box appears.
2. Click the Add icon and give the script a name, for example ChangeLanguage.
3. In the **Expression** box, type:

```
intouch:$Language
```

4. In the **Trigger** list, click **DataChange**.

5. In the script area, type the following:

```
If intouch:$Language == 1033 then ' Switch to English
AlarmClient1.NoRecordsMessage.Message = "No Records";
    else If intouch:$Language == 1031 then ' Switch to German
    AlarmClient1.NoRecordsMessage.Message = "Keine Einträge";
        else if intouch:$Language == 1036 then ' Switch to French
        AlarmClient1.NoRecordsMessage.Message = "Aucun enregistrement";
        endif;
    endif;
endif;
```

6. Click **OK**.

Configure the Alarm Control to Require an ACK Signature

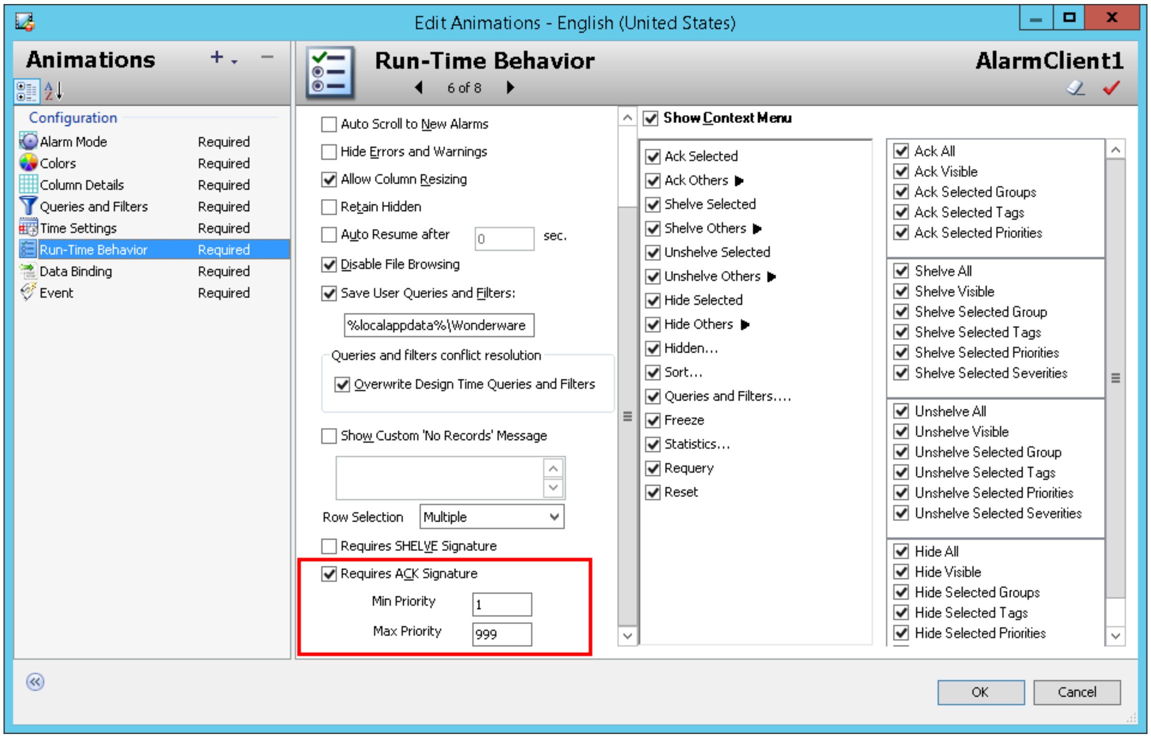
Even if you are logged into the InTouch application, acknowledging the alarms that fall within a specific priority range may need to be authenticated by you if required by your company or industry. You can configure the Alarm Control to provide such functionality by selecting the **Requires ACK Signature** check box in the **Object Properties** dialog of the Alarm Control.

After the Alarm Control has been configured to require a signature for acknowledgement, you need to set its minimum and maximum priority values. The valid range of the minimum and maximum priority values is 1 to 999.

To configure the Alarm Control to require ACK signature

1. Place an Alarm Control in the drawing canvas.

2. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.



Edit Animations - English (United States)

Animations

Configuration

Alarm Mode	Required
Colors	Required
Column Details	Required
Queries and Filters	Required
Time Settings	Required
Run-Time Behavior	Required
Data Binding	Required
Event	Required

Run-Time Behavior — 6 of 8 — AlarmClient1

□ Auto Scroll to New Alarms
□ Hide Errors and Warnings
☑ Allow Column Resizing
□ Retain Hidden
□ Auto Resume after 0 sec.
☑ Disable File Browsing
☑ Save User Queries and Filters: %localappdata%\Wonderware

Queries and filters conflict resolution
☑ Overwrite Design Time Queries and Filters

□ Show Custom 'No Records' Message

Row Selection: Multiple

□ Requires SHELVE Signature
☑ Requires ACK Signature
Min Priority: 1
Max Priority: 999

☑ Show Context Menu

☑ Ack Selected
☑ Ack Others
☑ Shelve Selected
☑ Shelve Others
☑ Unshelve Selected
☑ Unshelve Others
☑ Hide Selected
☑ Hide Others
☑ Hidden...
☑ Sort...
☑ Queries and Filters....
☑ Freeze
☑ Statistics...
☑ Requery
☑ Reset

☑ Ack All
☑ Ack Visible
☑ Ack Selected Groups
☑ Ack Selected Tags
☑ Ack Selected Priorities

☑ Shelve All
☑ Shelve Visible
☑ Shelve Selected Group
☑ Shelve Selected Tags
☑ Shelve Selected Priorities
☑ Shelve Selected Severities

☑ Unshelve All
☑ Unshelve Visible
☑ Unshelve Selected Group
☑ Unshelve Selected Tags
☑ Unshelve Selected Priorities
☑ Unshelve Selected Severities

☑ Hide All
☑ Hide Visible
☑ Hide Selected Groups
☑ Hide Selected Tags
☑ Hide Selected Priorities

3. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
4. Select the **Requires ACK Signature** check box. The **Min Priority** and **Max Priority** boxes are enabled.
5. Enter the minimum and maximum priority values for the alarm range that will require authentication.
6. Click **OK**.

You can configure the alarm signature requirement as well as the minimum and maximum values in run time using the **Object Editor**. For more information about using the **Object Editor**, see the Application Server User's Guide, Chapter 3, Working with Objects.

For more information about configuring the Alarm Control in run time to require an alarm acknowledgement signature, see the "SignedAlarmAck() Applied Examples" topic in the Creating and Managing Industrial Graphics User's Guide.

Note: If your computer supports Smart Cards, you can use them for alarm authentication at run time. You need to have the Smart Card mapped to your user account in the domain. If the Smart Card is already in the reader and you enter the correct PIN, the system will allow you to acknowledge the alarms.

Configuring the Alarm Control to Require a SHELVE Signature

Operators can temporarily shelve selected alarms from the list of an Alarm Control's active alarms. A shelved alarm is suppressed and removed from the list of active alarms. Typically, operators shelve lower severity nuisance alarms because they provide little diagnostic value and interfere with the operator's ability to manage a plant process.

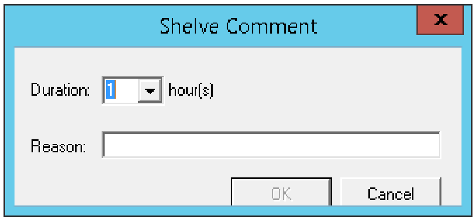
An alarm is shelved for a specified period. After the period ends, alarms are automatically unshelved and appear again in the list of active alarms. Operators can also manually unshelve an alarm before the end of the specified shelved period.

By default, Medium and Low severity alarms are enabled for shelving. Critical and High severity alarms are not because of the potential risk of shelving and ignoring alarms that represent serious operating states. For more information about enabling shelving based on alarm severity, see "Configuring Alarm Severity to Priority Mapping" in the *Application Server User Guide*.

The Alarm Control provides a configuration option to restrict alarm shelving only to operators authorized by application security. When an operator selects one or more alarms and attempts to shelve them, the Alarm Control verifies if a shelve signature is required.

- If no SHELVE signature is required

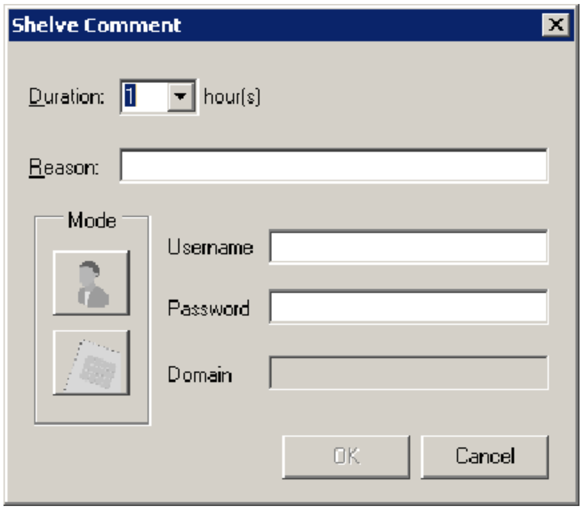
  The Alarm Control shows a simple **Shelve Comment** dialog box with a **Duration** field to select the number of hours (1, 2, 4, 8, 12) to shelve the alarm and a **Reason** field to enter a mandatory comment.



Duration: 1

- If a SHELVE signature is required and application security is active

The Alarm Control shows a **Shelve Comment** dialog box with fields for the operator to enter user credentials (name, password, domain) in addition to selecting a shelve duration and entering a mandatory comment.



By default, the logged-in user appears in the **Username** field. If the application security type is **ArchestrA,** then ArchestrA appears in the **Domain** field and cannot be edited. If the credentials are valid, the Alarm Control attempts to shelve the selected alarms.

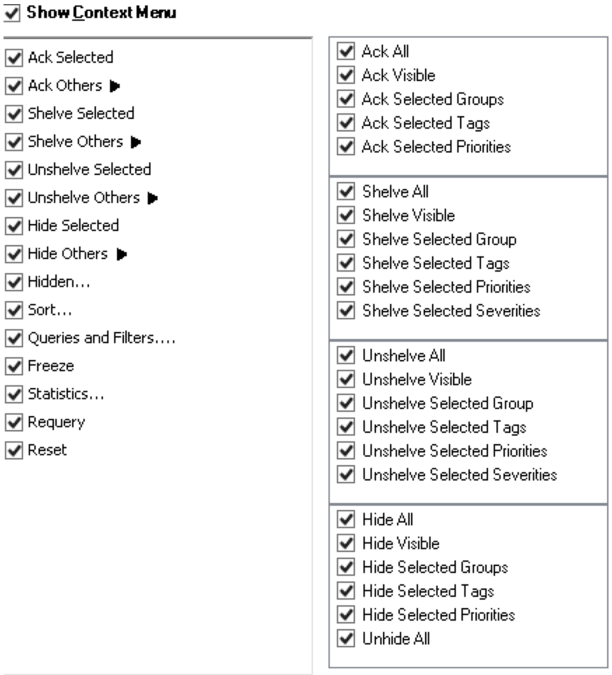
The Alarm Control shows an error message if the operator enters invalid credentials. When the operator clicks **OK** on the error message, the **Shelve Comment** dialog appears again with the entered user name, comment, and duration. The Password (or PIN) is blank. The operator can attempt to authenticate again or cancel.

To configure the Alarm Control to require a SHELVE signature

1. Place an Alarm Control in the drawing canvas.
2. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
3. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
4. Select or clear **Requires SHELVE Signature** based on whether operators need to enter their credentials to shelve alarms or not.
5. Click **OK**.

Configuring the Run-Time Shortcut Menu

You can configure the Alarm Control's shortcut menu to show only selected options at run time. The shortcut menus showing historical alarms (or events) and current alarms (or recent alarms and events) are different.



☑ Show Context Menu

☑ Ack Selected
☑ Ack Others ▶
☑ Shelve Selected
☑ Shelve Others ▶
☑ Unshelve Selected
☑ Unshelve Others ▶
☑ Hide Selected
☑ Hide Others ▶
☑ Hidden...
☑ Sort...
☑ Queries and Filters....
☑ Freeze
☑ Statistics...
☑ Requery
☑ Reset

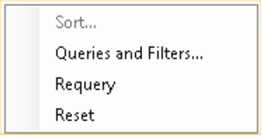
☑ Ack All
☑ Ack Visible
☑ Ack Selected Groups
☑ Ack Selected Tags
☑ Ack Selected Priorities

☑ Shelve All
☑ Shelve Visible
☑ Shelve Selected Group
☑ Shelve Selected Tags
☑ Shelve Selected Priorities
☑ Shelve Selected Severities

☑ Unshelve All
☑ Unshelve Visible
☑ Unshelve Selected Group
☑ Unshelve Selected Tags
☑ Unshelve Selected Priorities
☑ Unshelve Selected Severities

☑ Hide All
☑ Hide Visible
☑ Hide Selected Groups
☑ Hide Selected Tags
☑ Hide Selected Priorities
☑ Unhide All

Current alarms mode



Historical alarms mode

For the current alarms Context menu, you can also show or hide entire shortcut submenus. Use the ContextMenu and the ShowContextMenu Property in scripting to control if shortcut menu items appear or not at run time.

To hide the Context menu

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Clear the **Show Context Menu** check box.
4. Click **OK**.

To show or hide Context menu options

1. Double-click the Alarm Control on the canvas. The **Edit Animations** dialog box appears.
2. Click **Run-Time Behavior**. The **Run-Time Behavior** page appears.
3. Make sure the **Show Context Menu** check box is selected.In the shortcut menu lists, do the following:
   a. Select the options you want to appear on the run-time Context menu (if applicable for the selected client mode).
   b. Clear the options you want to hide from the operator on the run-time Context menu.
4. Click **OK**.

Chapter 3

Use the Alarm Control at Run Time

During run time, users can show a shortcut menu containing options to monitor and manage alarms. Also, other options enable users to sort and filter alarms shown by the Alarm control.

Refresh the Alarm Control Grid

You can refresh the Alarm Control grid at run time. The Alarm Control retrieves alarm record data based on the Alarm Database time range settings.

To refresh the alarm control

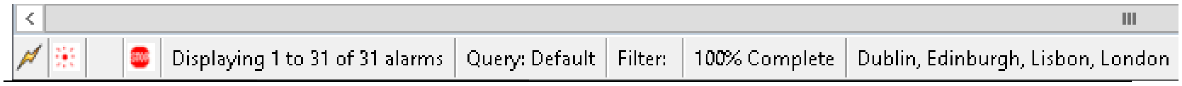
1. Right-click the Alarm Control grid at run time. The shortcut menu appears.
2. Click **Requery**.

View Status Bar Information

The status bar shows you information about the current Alarm Control grid. Depending on the client mode, the status bar information shows different information.

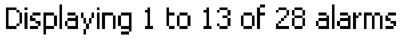
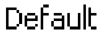
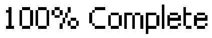
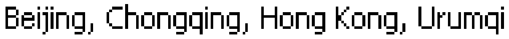
Using Status Bar Information of Current Modes

If the Alarm Control is showing current alarms or recent alarms and events, the status bar shows the following:



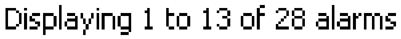
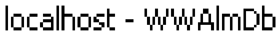
Displaying 1 to 31 of 31 alarms | Query: Default | Filter: | 100% Complete | Dublin, Edinburgh, Lisbon, London

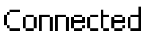
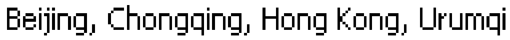
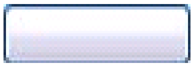
Element	Icon(s)	Description
Client Mode	⚡	Indicates the Alarm Control is showing current alarms (or recent alarms and events).
New Alarms	☼	Appears if new alarms have occurred. If you move the pointer over the indicator, the tooltip shows how many alarms are unacknowledged.
Hidden Alarms	!	Appears if any alarms are currently hidden. If you move the pointer over the indicator, the tooltip shows how many alarms are hidden.

Element	Icon(s)	Description
Frozen Grid	STOP	Appears if the Alarm Control is currently frozen.
Alarm Records		 Displaying 1 to 13 of 28 alarms Shows the total number of alarm records and which alarms are currently shown.
Query Filter		 Default Shows the name of the current query filter favorite.
Retrieval		 100% Complete Shows the percentage of alarms retrieved from all alarm providers. If this percentage is less than 100%, not all alarm providers are providing alarm data. Use the **Alarm Statistics** dialog box to detect which alarm providers are not providing alarm data.
Time Zone		 Beijing, Chongqing, Hong Kong, Urumqi Shows the current time zone of the Alarm Control. Move the pointer over the time zone to show the full information in a tool tip.

Using Status Bar Information of Historical Modes

If the Alarm Control shows historical alarms or events, the status bar shows the following fields:

Element	Description
Client Mode	Indicates the Alarm Control is showing historical alarms and/or events.
Alarm Records	 Displaying 1 to 13 of 28 alarms Shows the total number of alarm records and the number of alarms shown by the Alarm Control.
Alarm Database	 localhost - WWAlmDb Shows the name of the server hosting the Alarm Database and the Alarm Database name.

Element	Description
Connection Status	 Connected Shows the connection status to the Alarm Database.
Time Zone	 Beijing, Chongqing, Hong Kong, Urumqi Shows the current time zone of the Alarm Control. Move the pointer over the time zone to show complete time zone information in a tool tip.
Requery	 Click this button to retrieve latest alarm records from the Alarm Database.

Acknowledge Alarms

You can configure the Alarm Control to require an alarm to be acknowledged even if the condition causing the alarm has passed. This ensures that an operator is aware of events that caused a temporary alarm state, but have returned to normal. You acknowledge alarms at run time using a shortcut menu or by script methods.

You can acknowledge alarm records directly from the Alarm Control. You can acknowledge:

- One or more selected alarms
- All alarms, including alarms not visible due to the limited space of the Alarm Control
- All visible alarms
- All alarms with common values, such as provider names, group names, priority ranges, and tag names. You can simplify alarm acknowledgement for the operator by using methods in scripting. For more information, see the *Ack.All() Method* on page 127.

To acknowledge selected alarms using the Alarm Control grid

1. Select one or more alarms in alarm state.
2. Right-click on an alarm shown in the Alarm Control and click **Ack Selected**.

   If no default acknowledgement statement is configured for the Alarm Control, the **Ack Comment** dialog box appears.
3. Type an alarm acknowledgement comment and click **OK**.

To acknowledge other alarms using the Alarm Control grid

1. Select one or more alarms in alarm state.
2. Right-click the Alarm Control grid, point to **Ack Others**, and click one of the following:
   - **Ack All** to acknowledge all alarms in alarm state
   - **Ack Visible** to acknowledge all visible alarms

  - **Ack Selected Group** to acknowledge alarms with the same provider names and group names of one or more selected alarms in alarm state.
  - **Ack Selected Tag** to acknowledge alarms with the same provider names, group names, and tag names within the priority ranges of one or more selected alarms in alarm state.
  - **Ack Selected Priority** to acknowledge alarms with the same provider names, group names, and within the priority ranges of one or more selected alarms in alarm state.

3. If no default acknowledgement statement is configured for the Alarm Control, the **Ack Comment** dialog box appears.
4. Type an alarm acknowledgement comment and click **OK**.

Provide a Signature to Acknowledge Alarms

You must provide your signature in the **Ack Alarms** dialog box to acknowledge alarms. A signature is required when the **Require ACK Signature** check box is selected and any of the selected alarms falls within the configured priority range, or if no one is logged on to the InTouch application. You are not required to be logged on to the InTouch application to acknowledge alarms. However, if you are logged on, the **Username** box displays the username.

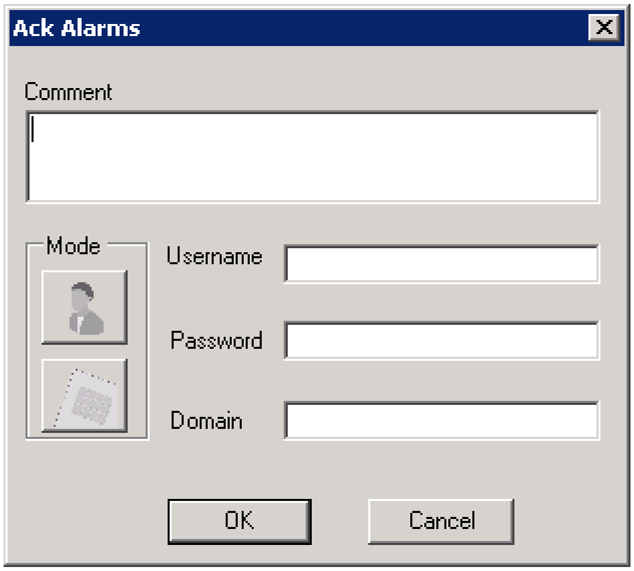
When you select the **Require ACK Signature** check box, the acknowledgment comment is prefixed in the updated Alarm Record. If one or more of the selected alarms falls within the configured priority range, the comment is prefixed with "Signed ACK -" indicating that it is a signed acknowledgment. Otherwise, it is prefixed with "Std ACK -" indicating that it is a standard acknowledgment.

Note: If the selected alarms do not require a signature, then the **Ack Alarms** dialog box displays the Comment box. You can enter a comment before acknowledging the alarm.

To provide a signature to acknowledge alarms with user name

1. Select one or more alarms in the alarm state.
2. Right-click the **Alarm Control** grid and click **Ack Selected**.

3. If the selected alarms require a signature, or if you are not logged on to InTouch, then the **Ack Alarms** dialog box appears. If the Smart Card authentication system is not configured on your computer, the following dialog appears:



4. In the **Comment** box, enter or modify the alarm comment.
5. In the **Username** box, enter your user name.
6. In the **Password** box, enter your password.
7. In the **Domain** box, enter the domain and click **OK**.

Note: If you enter invalid credentials, the Alarm Control displays an error message. When you click **OK**, the **ACK Alarms** dialog box appears again with the user name and the comment you had provided. You must enter the correct password.

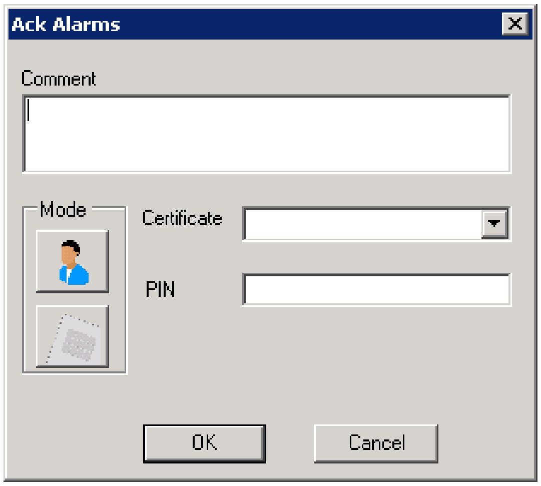
Providing a Signature to Acknowledge Alarms Using Smart Cards

You can use a Smart Card to provide the authentication to acknowledge alarms if your computer supports Smart Card authentication. In that case, the Alarm Control displays the **Ack Alarms** dialog box with the Smart Card authentication dialog. You must have the Smart Card inserted in the Smart Card reader attached to your computer.

To provide a signature to acknowledge alarms using Smart Cards

1. Select one or more alarms in an alarm state.
2. Right-click the Alarm Control grid and click **Ack Selected**.

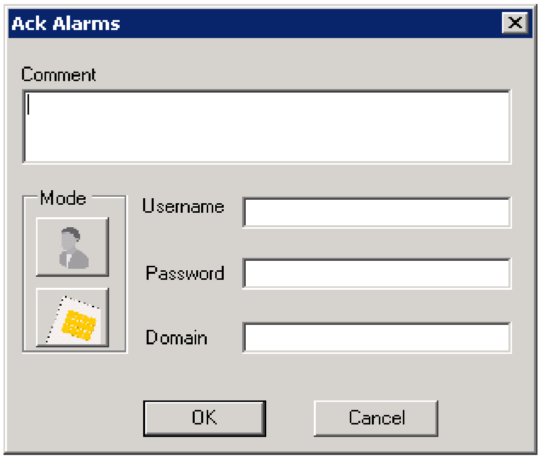
3. If the selected alarms are configured to require a signature and if Smart Card Authentication is selected in InTouch, the **Ack Alarms** dialog box appears where the **Smart Card** button under **Mode** is disabled.



4. In the **Comment** box, enter or modify the comment.
5. From the **Certificate** list, select the Smart Card currently inserted into the reader in your system.

Note: If a card is newly-inserted or removed from the reader, you can update the list of cards by selecting the appropriate Smart Card from the **Certificate** list.

6. In the **PIN** box, enter the personal identification number and click **OK**.
   a. If you enter an invalid **PIN**, the system displays an error message. When you click **OK**, the **ACK Alarms** dialog box appears again with the user credential and the comment you had provided. You must enter the correct **PIN**.
   b. If you need to provide your log on credentials instead of the Smart Card details to verify your signature, click the **User Name Authentication** button under **Mode**. A different version of the **Ack Alarms** dialog box appears where the **Smart Card** button under **Mode** is enabled.



Shelve and Unshelve Alarms at Run Time

Operators can shelve alarms to temporarily suppress them for a fixed period. Shelving an alarm means temporarily removing it from the Alarm Control's main alarm list and placing it on a shelved list. Shelving is normally controlled by an operator to handle irrelevant nuisance alarms that have not been caught by filtering or alarm suppression mechanisms.

When shelving an alarm from the Alarm Control, operators set an associated time period in which the alarm remains shelved and enter a mandatory comment. Operators can select from a list of Alarm Control Context commands during run time to:

- Shelve one or more selected alarms
- Shelve all alarms
- Shelve only those alarms visible in the Alarm Control
- Shelve all alarms within the same alarm group as an alarm selected from the Alarm Control
- Shelve alarms by selected tags or attributes
- Shelve alarms by selected alarm priorities
- Shelve all alarms that have the same severity as an alarm selected from the Alarm Control

When application security is used, alarms can be shelved and unshelved only by operators with proper authorization. For more information about setting shelving authorization, see *Configuring the Alarm Control to Require a SHELVE Signature* on page 54.

Shelved alarms are automatically unshelved at the end of the specified time period.Operators can also manually unshelve alarms and return them to an active state. Alarms are unshelved automatically at the end of the shelving time period. An unshelved alarm reappears in the Alarm Control active list and resumes its state at the time it was shelved. Operators can manually unshelve a shelved alarm before the end of the shelved period and enter an optional comment.

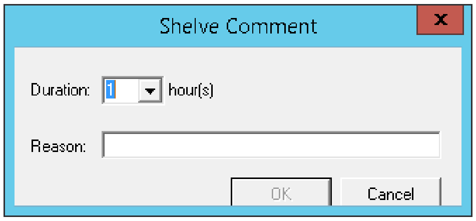
Shelving Alarms

You can shelve alarms directly from the Alarm Control by selecting commands from the Alarm Control's Context menu.

To shelve selected alarms using the Alarm Control

1. Select one or more alarms in alarm state.
2. Right-click the Alarm Control grid and click **Shelve Selected** from the shortcut menu.

   The **Shelve Comment** dialog box appears to set a shelf duration and enter a comment.



Shelve Comment

Duration: 1 hour(s)

Reason:

Note: If the application runs under security and the Alarm Control has been configured to require a SHELVE signature, operators must authenticate themselves. The **Shelve Comment** dialog box includes additional fields for an operator to enter a username, password, and domain.

3. Select an alarm shelving duration from the **Duration** field.
4. Type a mandatory alarm shelving comment in the **Reason** field and click **OK**.

To shelve other alarms using the Alarm Control

1. Select one or more alarms in alarm state.
2. Right-click the Alarm Control, point to **Shelve Others**, and click one of the following shortcut commands:
    - **Shelve All** to shelve all alarms in alarm state
    - **Shelve Visible** to shelve all visible alarms
    - **Shelve Selected Groups** to shelve alarms with the same provider names and group names of one or more selected active alarms
    - **Shelve Selected Tags** to shelve alarms with the same provider names, group names, and tag names of one or more selected active alarms
    - **Shelve Selected Priorities** to shelve alarms with the same provider names, group names, and within the same priority ranges of one or more selected active alarms
    - **Shelve Selected Severities** to shelve alarms with the same provider names, group names, and within the same severity ranges of one or more selected active alarms

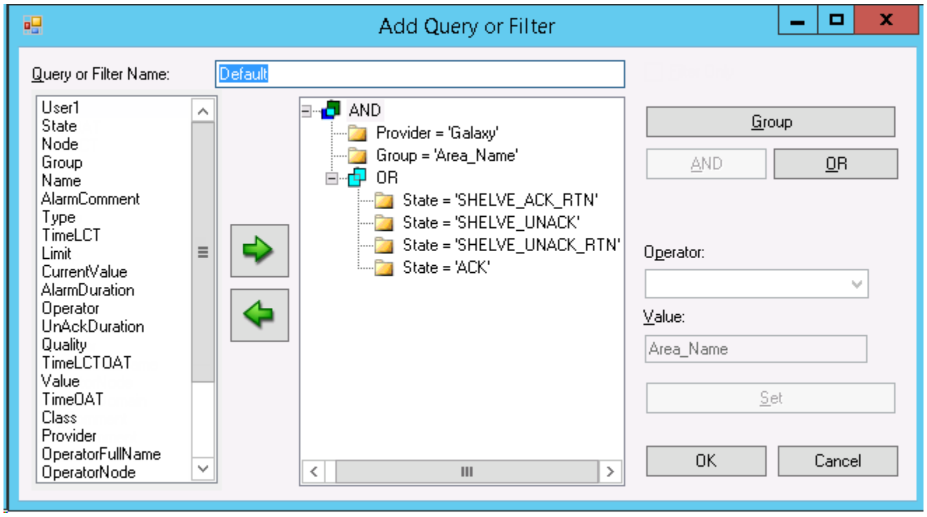
    The **Shelve Comment** dialog box appears with fields to set a shelf duration and enter a comment.
3. Select an alarm shelving duration from the **Duration** field.
4. Type an alarm shelving comment in the **Reason** field and click **OK**.

Show Shelved Alarms

After alarms are shelved, they no longer appear as active alarms in an Alarm Control. Filters only filter active alarms, so applying only a filter will not return shelved alarms. To show shelved alarms, you must use a query and apply a filter that is configured for shelved alarms.

For example:

(Provider = 'Galaxy' AND Group = 'Area_Name' AND (State = 'SHELVE_ACK_RTN' OR State = 'SHELVE_UNACK' OR State = 'SHELVE_UNACK_RTN' OR State = 'SHELVE_ACK'))"



Query or Filter Name: Default

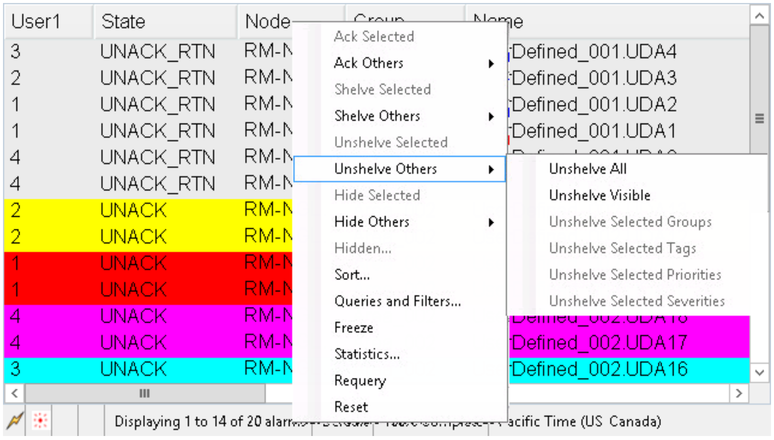
```
AND
  Provider = 'Galaxy'
  Group = 'Area_Name'
  OR
    State = 'SHELVE_ACK_RTN'
    State = 'SHELVE_UNACK'
    State = 'SHELVE_UNACK_RTN'
    State = 'ACK'
```

Value: Area_Name

For more information about configuring queries to filter alarms, see *Filter Alarms* on page 38.

Unshelve Alarms

Manually unshelving alarms follows a similar sequence of steps to shelve alarms using Context menu commands. You should have created a query that shows the current shelved alarms.



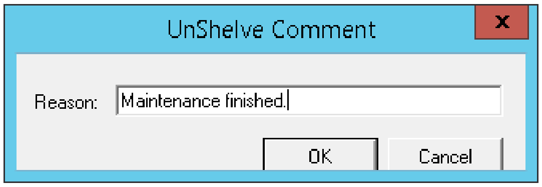
User1	State	Node	Group	Name
3	UNACK_RTN	RM-N		Defined_001.UDA4
2	UNACK_RTN	RM-N		Defined_001.UDA3
1	UNACK_RTN	RM-N		Defined_001.UDA2
1	UNACK_RTN	RM-N		Defined_001.UDA1
4	UNACK_RTN	RM-N		
4	UNACK_RTN	RM-N		
2	UNACK	RM-N		
2	UNACK	RM-N		
1	UNACK	RM-N		
1	UNACK	RM-N		
4	UNACK	RM-N		
4	UNACK	RM-N		Defined_002.UDA17
3	UNACK	RM-N		Defined_002.UDA16

Displaying 1 to 14 of 20 alarms ... acific Time (US Canada)

To unshelve selected alarms using the Alarm Control

1. Select one or more shelved alarms.
2. Right-click the Alarm Control grid and click **Unshelve Selected** from the Context menu.

   The **Unshelve Comment** dialog box appears.



Reason: Maintenance finished.

3. Type an optional alarm unshelving comment in the **Reason** field and click **OK**.

To unshelve other alarms using the Alarm Control

1. Select one or more alarms in alarm state.
2. Right-click the Alarm Control, point to **Unshelve Others**, and click one of the following shortcut commands:
    - **Unshelve All** to unshelve all shelved alarms
    - **Unshelve Visible** to unshelve all visible shelved alarms
    - **Unshelve Selected Groups** to unshelve alarms with the same provider names and group names of one or more selected shelved alarms
    - **Unshelve Selected Tags** to unshelve alarms with the same provider names, group names, and tag names of one or more selected shelved alarms
    - **Unshelve Selected Priorities** to unshelve alarms with the same provider names, group names, and within the same priority ranges of one or more selected shelved alarms
    - **Unshelve Selected Severities** to unshelve alarms with the same provider names, group names, and within the same severity ranges of one or more selected shelved alarms

    The **Unshelve Comment** dialog box appears.
3. Type an optional alarm unshelving comment in the **Reason** field and click **OK**.

Sort Alarms at Run Time

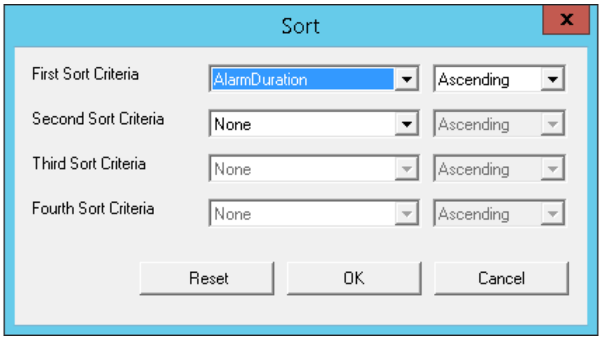
The Alarm Control supports alarm sorting for up to three columns at design time and run time. At run time, operators can configure sorting of even more columns by clicking on the column headers of the Alarm Control. You can sort alarms in ascending or descending direction for selected columns.

You can sort alarms at run time in similar way as design time. Any changes you make to the sorting at run time are lost when you switch back to design time.

Note: If you are sorting by the Value column, the items in the column are sorted alphabetically, not numerically. This is because the Value column can contain strings.

To set sorting columns and directions with lists at run time

1. Right-click the **Alarm Control** grid and click **Sort**. The **Sort** dialog box appears.



2. In the **First Sort Criteria** list, select the first sort column and a sorting direction in the list to its right.

3. Optionally, select the second sort column in the **Second Sort Criteria** list and a sorting direction in the list to its right.
4. If you set the **Second Sort Column**, optionally select the third sort column in the **Third Sort Criteria** list and a sorting direction in the list to its right.
5. Click **OK**.

To set sorting columns and directions in the grid at run time

1. In the Alarm Control grid, click on a column header to set sorting for the column. An arrow appears on the column header.
2. To change the sorting direction, click on the column header again. The arrow changes direction on the header.

   Note: If you click on a column header after releasing the **Shift** key, all sorting information is lost and the selected column is the new primary sorting criteria.

3. To set sorting for second and third columns, repeat step 3 while pressing the **Shift** key.
4. Release the **Shift** key.

Filter Alarms at Run Time

You can filter alarms at run time by using the filters you defined at design time.

If you did not define a filter according to your needs at design time, you can still create new filters at run time, or modify existing filters.

If you saved filters to an XML file, you can load them from a file at run time.

Filters you define at run-time are not saved for use at design-time. To re-use filters you create or modify at run-time, export the filter list to an XML file, and import the XML file at design-time.

Naming conflicts may occur between the run-time and design-time XML lists. To resolve naming conflicts between the XML files, leave the **Overwrite design time queries and filters** option checked in the **Run-Time Behaviors** tab of the **Edit Animations** dialog box. The run-time query or filter list will overwrite the design-time list and resolve the naming conflict.

If you are showing historical alarms or events, you can use the filtering mechanism provided by the grid technology instead of using filter favorites.

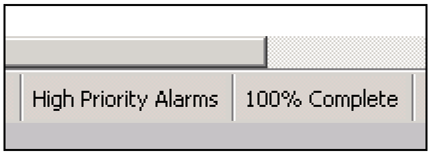
Use an Existing Query Filter

At run time, you can use any filter you defined at design time, regardless if you defined it for the current modes or historical modes. You can also use scripting to switch to an existing query filter. For more information, see *Favorite Property* on page 107.

To use an existing query filter

1. Right-click the Alarm Control grid and click **Queries and Filters**. The **Queries and Filters** dialog box appears.

2. Select the filter from the list and click **OK**. The alarm records are filtered and the current filter name appears in the status bar.



High Priority Alarms | 100% Complete

Adding a New Query or Filter at Run Time

At run time, you can create new queries or filters to limit the number of alarm records.

New queries or filters are saved and can be reused for future sessions.Upon close and restart of either the Alarm Control window or WindowViewer, added queries or filters will be available. For details see *Saving Run-Time Modifications to Queries and Filters* on page 69.

To add a new query or filter at run time

1. Right-click the Alarm Control grid and click **Queries and Filters**. The **Queries and Filters** dialog box appears.
2. The configuration is the same as in design time. For more information, see *Adding a New Query or Filter* on page 40.

Modifying an Existing Query or Filter at Run Time

At run time, you can modify a query filter.

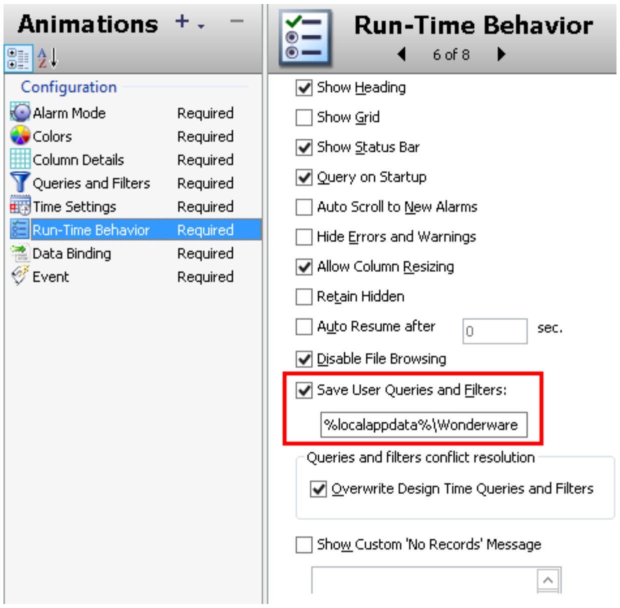
The modification of query filters is not saved for future use and is only valid for the current session. If you want to save the modifications, you must also export the query filters to an XML file. For more information, see *Exporting Query and Filter Favorites at Runtime* on page 70.

To modify an existing query filter

1. Right-click the Alarm Control grid and click **Query Filters**. The **Query Filters** dialog box appears.
2. The configuration is the same as in design time. For more information, see *Modify an Existing Query or Filter* on page 43.

Saving Run-Time Modifications to Queries and Filters

You can save modifications made to queries and filters at run time. There is an option to save user queries and filters in the Run-Time Behavior tab of the **Edit Animations** dialog box. It is selected by default, as shown below:



Alarm Mode	Required
Colors	Required
Column Details	Required
Queries and Filters	Required
Time Settings	Required
Run-Time Behavior	Required
Data Binding	Required
Event	Required

☑ Show Heading
□ Show Grid
☑ Show Status Bar
☑ Query on Startup
□ Auto Scroll to New Alarms
□ Hide Errors and Warnings
☑ Allow Column Resizing
□ Retain Hidden
□ Auto Resume after 0 sec.
☑ Disable File Browsing
☑ Save User Queries and Filters:
%localappdata%\Wonderware

Queries and filters conflict resolution
☑ Overwrite Design Time Queries and Filters

□ Show Custom 'No Records' Message

When this option is selected, modifications made to queries or filters at run-time are saved on a per user and alarm control instance to a XML file. For example, a saved query will save as UserQueryFilter_001.xml.

Modifications are saved in the following default directory:

```
C:\Users\<OS Login Name>\AppData\Local\Wonderware
```

The map between the Alarm Control instance and the above XML file is saved in a map file, "InstancesMap.dat".

Modified queries and filters will be available upon closing and restarting the alarm control window or WindowViewer.

If you uncheck the **Save User Queries and Filters** option, updates made to queries and filters during run-time will not be saved.

Note: When the **Save User Queries and Filter** option is checked, the **Overwrite Design Time Queries and Filters** option is enabled and checked by default. When checked, this option resolves naming conflicts between design-time queries and filters and run-time queries and filters loaded from the XML file. Naming conflicts will be resolved by overwriting the design time queries and filters.

Deleting a Query or Filter at Run Time

At run time, you can delete a query filter.

After you delete a query or filter at run time, it is only deleted for the current session. If you want to save the list of query filters without the deleted query filter, you must export the query filters to an XML file. For more information, see *Export Query and Filter Favorites* on page 43.

To delete an existing query or filter at RunTime

1. Right-click the Alarm Control grid and click **Queries and Filters**. The **Queries and Filters** dialog box appears.

2. The configuration is the same as in design time. For more information, see *Delete a Query or Filter Favorite* on page 43.

Importing Query and Filter Favorites at Runtime

At run time, you can import the list of query filters from an XML file.

To import Query Filter Favorites

1. Right-click the Alarm Control grid and click **Query and Filters**. The **Query and Filters** dialog box appears.
2. The configuration is the same as in design time. For more information, see *Import Query and Filter Favorites* on page 44.

Exporting Query and Filter Favorites at Runtime

At run time, you can export the list of query filters to an XML file for future use. After exporting, you can import the query filter from the XML into design time.

Note: The default query filter favorite is not exported to the XML file.

To export Query Filter Favorites

1. Right-click the Alarm Control grid and click **Query and Filters**. The **Query and Filters** dialog box appears.
2. The configuration is the same as in design time. For more information, see *Export Query and Filter Favorites* on page 43.

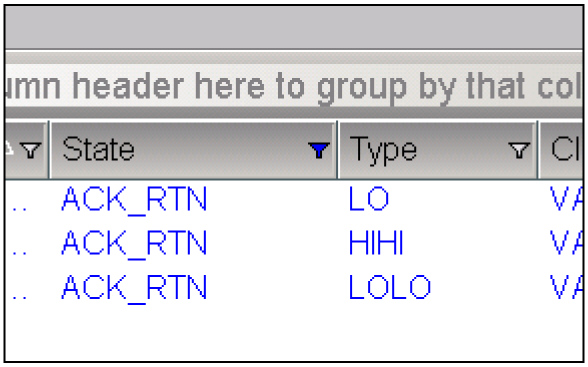
Filtering Alarms with Client-Based Filtering

The grid technology used in the Alarm Control enables you to filter the grid contents after the data has been retrieved from the data source.

You can filter historical alarms and/or events in the following ways for any selected column:

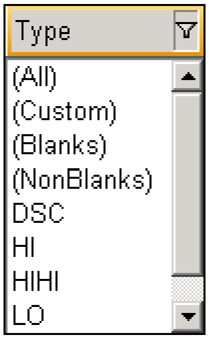
Filter	Description
(All)	No filtering, all records are shown for the selected column.
(Custom)	Lets you configure a more complex filter for the selected column, for example a filter that can compare values of different columns.
(Blanks)	Filters by showing blank values only.
(NonBlanks)	Filters by showing non blank values only.
Values	Filters by the selected value.

If a filter is applied to any column in the Alarm Control, the filter icon in the column header appears in blue.



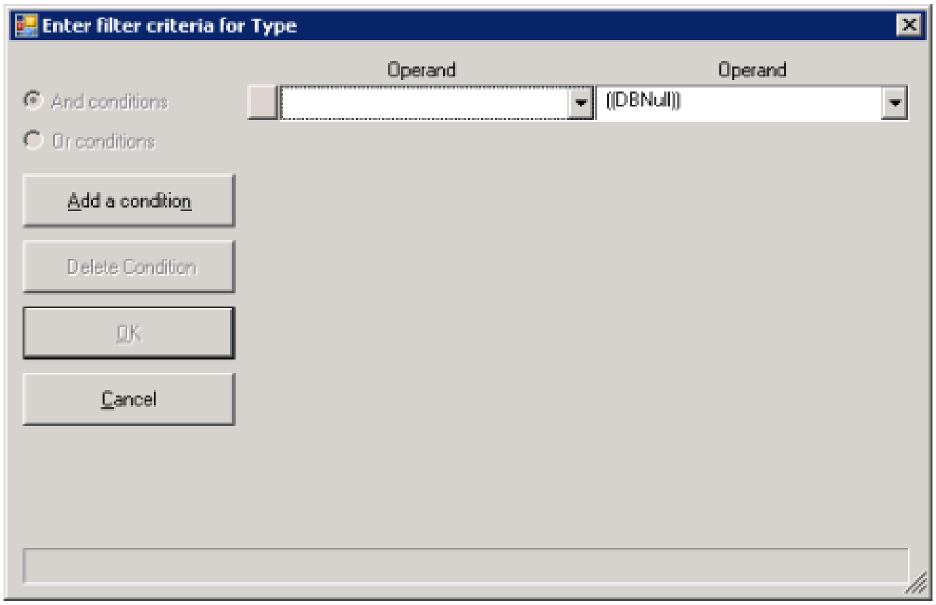
To filter alarms with client-based filtering

1. Click the filter icon on the column you want to filter by. A menu appears.



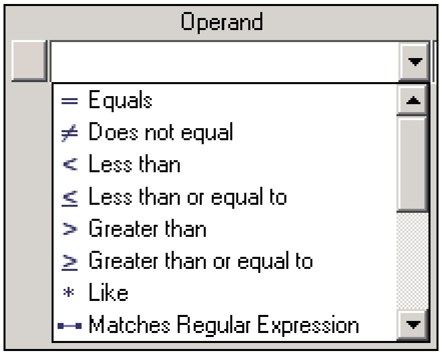
2. Select one of the following:
   - **(All)** to switch off filtering
   - **(Custom)** to define a more complex filter
   - **(Blanks)** to filter by blank values
   - **(NonBlanks)** to filter by non blank values
   - A value to filter by the value

If you selected **(Custom)**, a dialog box appears.



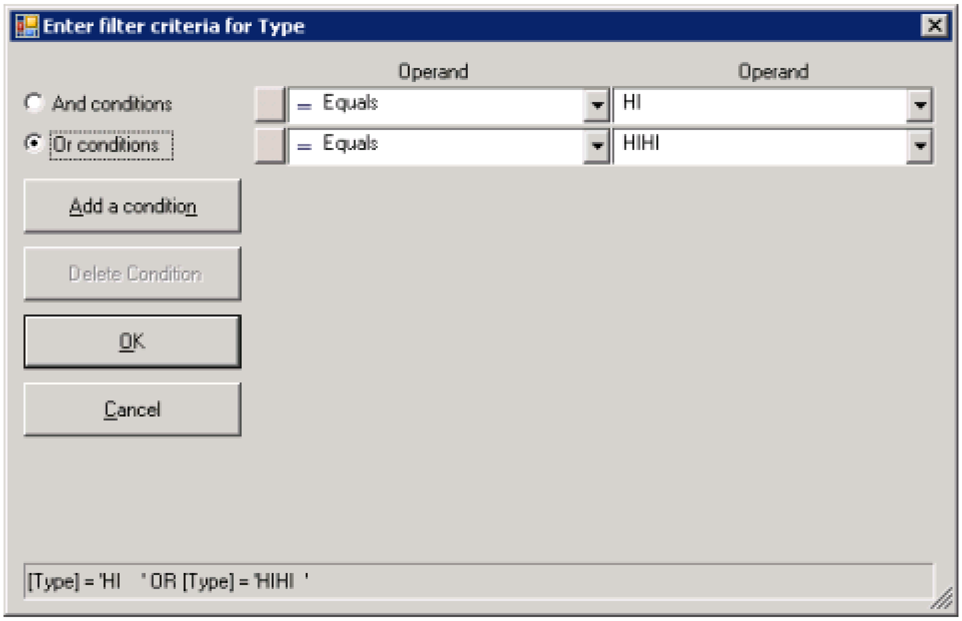
3. Do one of the following:

   ○ Select a different operator for the current condition



   ○ Type or select a different operand for the current condition. The operand can be a value, or the value of a different column in the same row

- Click **Add a condition** to add more conditions to the filter



● Or conditions

Operand	Operand
= Equals	HI
= Equals	HIHI

[Type] = 'HI   ' OR [Type] = 'HIHI '

- Click **Delete Condition** to delete one or more selected conditions (You can mark the condition by clicking on the button to the left of each condition.)

4. Click **OK**.

Reset the Grid

You can reset the Alarm Control's column widths, column order, and names to their last design-time values. When you reset the grid, the query filter is also reset to its default. You can also reset the grid by using the *Reset() Method* on page 137 in scripting.

To reset the grid

- Right-click the Alarm Control grid and click **Reset**

Hide Alarms

The "hiding" and "unhiding" of alarm records is known in the corresponding InTouch alarm controls as "suppressing" and "unsuppressing".

When the Alarm Control is hiding alarms, it ignores certain alarms. If an alarm matches the exclusion criteria, it is not visible.

The actual alarm generation is completely unaffected by hiding. Alarm records are still logged into the alarm history.

You can hide:

- All alarms, including alarms not visible due to the limited space of the Alarm Control
- All visible alarms

- One or more selected alarms
- All alarms with the same provider names and group names of one or more selected alarms
- All alarms with the same provider names, group names, and within the priority ranges of one or more selected alarms
- All alarms with the same provider names, group names, and tag names within the priority ranges of one or more selected alarms

You can also view which alarms are hidden and unhide them.

To hide all alarms

- Right-click the Alarm Control grid, point to **Hide Others**, and click **Hide All**

To hide all visible alarms

- Right-click the Alarm Control grid, point to **Hide Others**, and click **Hide Visible**

To hide selected alarms

1. Select one or more alarms in alarm state.
2. Right-click the Alarm Control grid and click **Hide Selected**.

To hide alarms with common parameters

1. Select one or more alarms.
2. Right-click the Alarm Control grid, point to **Hide Others**, and click one of the following:
    - **Hide Selected Groups** to hide alarms with the same provider names and group names of one or more selected alarms
    - **Hide Selected Tags** to hide alarms with the same provider names, group names, and tag names within the priority ranges of one or more selected alarms
    - **Hide Selected Priorities** to hide alarms with the same provider names, group names, and within the priority ranges of one or more selected alarms

To unhide alarms

1. Right-click the Alarm Control grid and click **Hidden**. The **Hidden Alarms** dialog box appears.
2. Select the alarms you want to unhide and click **Unhide**.
3. Click **Close**.

Freeze and Unfreeze the Alarm Control Grid

You can freeze the Alarm Control to prevent the Alarm control tree from being updated with any further changes.

For example, if new alarms occur while the Alarm Control is frozen, the new alarms are only shown after you unfreeze the Alarm Control.

You can configure a time period after which the Alarm Control automatically unfreezes to avoid the Alarm Control being unknowingly frozen. For example, the operator leaves the workstation and returns without realizing that the Alarm Control is still frozen.

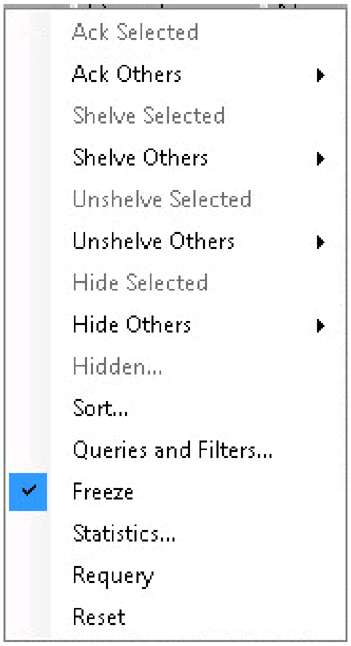
The Alarm Control unfreezes automatically if one of the following changes:

- Alarm Mode
- Alarm Query
- Query Filter

After you unfreeze the Alarm Control, the grid updates with the new alarm records and any other updates while the grid was frozen. You can also use scripting to freeze and unfreeze the Alarm Control grid at run time. For more information, see *FreezeDisplay() Method* on page 131.

To freeze or unfreeze the Alarm Control grid

1. Right-click the Alarm Control grid. The shortcut menu appears.



A check mark next to the **Freeze** option indicates if the grid is currently frozen.

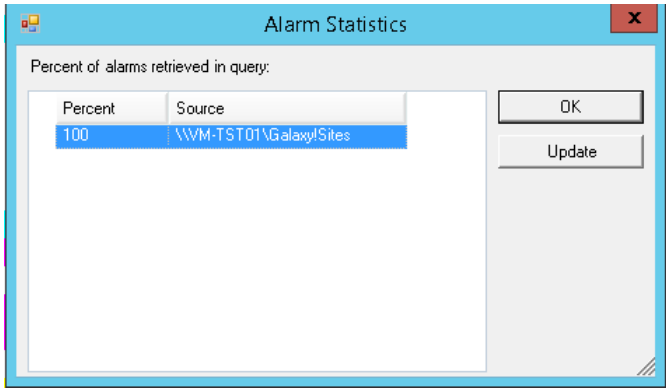
2. Click **Freeze**. The Alarm Control grid is either frozen or unfrozen.

Show Alarm Statistics

You can view alarm statistics at run time to see which alarm providers are providing the alarm data. For more information, see *Show.Statistics() Method* on page 150.

To show alarm statistics

1. Right-click the Alarm Control grid and click **Statistics**. The **Alarm Statistics** dialog box appears.



Percent of alarms retrieved in query:

Percent	Source
100	\\VM-TST01\Galaxy!Sites

2. If you use an Alarm Hotbackup name as alarm query, you can expand the Hotbackup name in the **Alarm Statistics** dialog box to show the individual percentages of retrieval for the configured primary and backup alarm provider.
3. Click **Update** to update the statistics.
4. Click **Close**.

Switching between Client Modes

You can switch between client modes at run time by changing the Alarm Control ClientMode property. The easiest way to do this, is to configure an application server script to interact with the Alarm Control ClientMode property at design time.

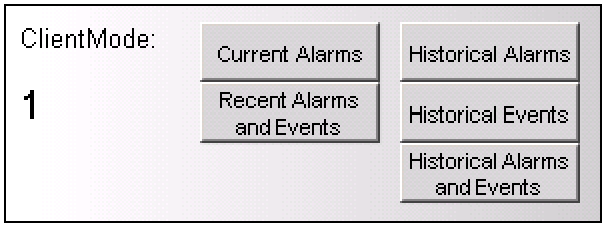
To switch between client modes

1. Place the Alarm Control on the Industrial graphic.
2. Paste a button on the canvas and change its caption to **Current Alarms**.
3. Double-click the button and configure it with the following action script:
```
AlarmControlGrid1.ClientMode = 1;
```
4. Click **OK**.
5. Repeat steps 2 to 4 for the following buttons:

Button Caption	Action script
Recent Alarms and Events	`AlarmControlGrid1.ClientMode = 2;`
Historical Alarms	`AlarmControlGrid1.ClientMode = 3;`
Historical Events	`AlarmControlGrid1.ClientMode = 4;`
Historical Alarms and Events	`AlarmControlGrid1.ClientMode = 5;`

6. Save and close the Industrial graphic.
7. Create a new managed InTouch application and open it in WindowMaker.

8. Place the Industrial graphic on a new InTouch window.
9. Switch to WindowViewer to test your application.



10. Click **Historical Alarms** to show historical alarms instead of current alarms.

By default, the Alarm Control tries to connect to the alarm database (either the InTouch Database called WWALMDB or the ArchestrA Database called A2ALMDB) on the local computer using the currently logged on user. If you are using a different configuration, you can use value input links or action script to set the following properties:

- Database.ServerName Property
- Database.UserID Property
- Database.Password Property
- Domain Property
- Database.Name Property
- Database.Authentication Property

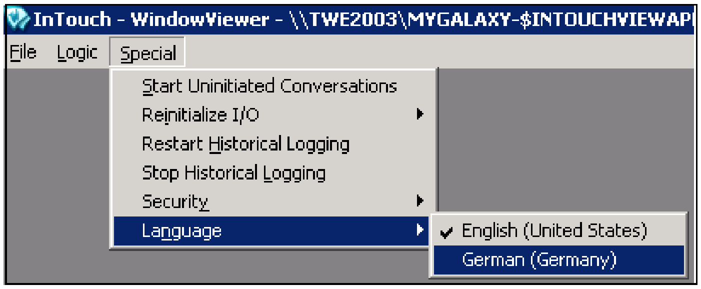
Switching Run-Time Languages

You can switch the language of the Alarm Control in the same way as other parts of your InTouch application. When you switch language, the alarm state, alarm class, alarm type, the various alarm comment fields, and the column headers are switched to the selected language.

To switch the language

Do one of the following:

- ○ In WindowViewer on the **Special** menu, point to **Languages**, and then click the language you want to switch to


InTouch - WindowViewer - \\TWE2003\MYGALAXY-$INTOUCHVIEWAP
File
Logic
Special
Start Uninitiated Conversations
Reinitialize I/O
Restart Historical Logging
Stop Historical Logging
Security
Language
✓ English (United States)
German (Germany)

- ○ In WindowMaker, use the InTouch QuickScript **SwitchDisplayLanguage** in a button action script to switch the language. At run time, click the button to switch the language

- In WindowMaker, use the system tag $Language in a button action script and assign it to the language code you want to switch to. At run time, click the button to switch the language

For more information about run-time language switching, see Chapter 11, *Working with Languages*, in the *Application Server User's Guide*.

Important: If you rename or reorder column headers, you must repeat the symbol text translation procedures. If you do not, your changes will not be available for run-time language switching.

Chapter 4

Scripting the Alarm Control

This section describes the script properties, methods, and events of the Alarm Control.

Alarm Control Properties

This section describes the properties available for scripting in the Alarm Control.

AckComment.DefaultValue Property

The AckComment.DefaultValue property is a read-write string property that gets or sets the default acknowledgement comment when the AckComment.UseDefault property is TRUE.

Syntax

```
result = AlarmClient.AckComment.DefaultValue;
AlarmClient.AckComment.DefaultValue = ackComment;
```

Example

```
AlarmClient1.AckComment.UseDefault = 1;
AlarmClient1.AckComment.DefaultValue = "This alarm is acknowledged by John Smith";
```

Remarks

For more information, see *Showing Current Alarms or Recent Alarms and Events* on page 22.

AckComment.UseDefault Property

The AckComment.UseDefault property is a read-write Boolean property that gets or sets the usage of the default acknowledgement comment.

Syntax

```
result = AlarmClient.AckComment.UseDefault;
AlarmClient.AckComment.UseDefault = useComment;
```

Example

```
AlarmClient1.AckComment.UseDefault = 1;
AlarmClient1.AckComment.DefaultValue = "This alarm is acknowledged by John Smith";
```

Remarks

For more information, see *Showing Current Alarms or Recent Alarms and Events* on page 22.

AckSignature.MaxPriority Property

The AckSignature.MaxPriority property is a read-write integer property, which gets or sets the maximum priority value for alarms that require a signature to be acknowledged. The value must range between 1 and 999, and must be greater than or equal to the AckSignature.MinPriority value. The default value of AckSignature.MaxPriority is 999.

Syntax

```
To Set:
<EAC instance name>.<Property Name> = <integer value>;
```

Example

```
AlarmClient1.AckSignature.MaxPriority = 500;
```

Syntax:

```
To Get:
integer <variable name> = <EAC instance name>.<Property Name>;
```

Example

```
dim iMax as integer;
iMax = AlarmClient1.AckSignature.MaxPriority;
```

Remarks

For more information, see *Provide a Signature to Acknowledge Alarms* on page 60.

AckSignature.MinPriority Property

The AckSignature.MinPriority property is a read-write integer property, which gets or sets the minimum priority value for alarms that require a signature to be acknowledged. The value must range between 1 and 999, and must be less than or equal to the AckSignature.MaxPriority value. The default value of AckSignature.MinPriority is 1.

Syntax

```
To Set:
<EAC instance name>.<Property Name> = <integer value>;
```

Example

```
AlarmClient1.AckSignature.MinPriority = 100;
```

Syntax

```
To Get:
To Get:
integer <variable name> = <EAC instance name>.<Property Name>;
```

Example

```
dim iMin as integer;
iMin = AlarmClient1.AckSignature.MinPriority;
```

Remarks

For more information, see *Provide a Signature to Acknowledge Alarms* on page 60.

AckSignature.Required Property

The AckSignature.Required property is a read-write Boolean property, indicating whether a signature is required for acknowledging the alarms. The default value of AckSignature.MinPriority is True.

Syntax

```
To Set:
<EAC instance name>.<Property Name> = <boolean value>;
```

Example

```
AlarmClient1.AckSignature.Required = true;
```

Syntax

```
To Get:
boolean <variable name> = <EAC instance name>.<Property Name>;
```

Example

```
dim bIsACKSigned as boolean;
bIsACKSigned  = AlarmClient1.AckSignature.Required;
```

Remarks

For more information, see *Configuring the Alarm Control to Require a SHELVE Signature* on page 54.

AlarmColor.Ack.BackGround Property

The AlarmColor.Ack.BackGround property is an array of read-write integer properties that get or set the background colors of all acknowledged alarm records.

Index	Purpose
0	Sets the background color of all acknowledged alarm records in all priority ranges.
1	Gets or sets the background color of acknowledged alarm records in the priority range 1 to AlarmColor.Range[1].
2	Gets or sets the background color of acknowledged alarm records in the priority range AlarmColor.Range[1] to AlarmColor.Range[2].
3	Gets or sets the background color of acknowledged alarm records in the priority range AlarmColor.Range[2] to AlarmColor.Range[3].
4	Gets or sets the background color of acknowledged alarm records in the priority range AlarmColor.Range[3] to 999.

Syntax

```
Color = AlarmClient.AlarmColor.Ack.BackGround[n];
AlarmClient.AlarmColor.Ack.BackGround[n] = Color;
```

Parameters

n
Index from 0 to 4.

Color
Color of background.

Examples

```
AlarmClient1.AlarmColor.Ack.BackGround[0] = Color.Red;
AlarmClient1.AlarmColor.Ack.BackGround[1] = Color.FromARGB(0,128,0);
AlarmClient1.AlarmColor.Ack.BackGround[2] = Color.Grey;
AlarmClient1.AlarmColor.Ack.BackGround[3] = Color.Yellow;
AlarmClient1.AlarmColor.Ack.BackGround[4] = Color.Black;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.Ack.ForeGround Property

The AlarmColor.Ack.ForeGround property is an array of read-write integer properties that get or set the text colors of all acknowledged alarm records.

Index	Purpose
0	Sets the text color of all acknowledged alarm records in all priority ranges.
1	Gets or sets the text color of acknowledged alarm records in the priority range 1 to AlarmColor.Range[1].
2	Gets or sets the text color of acknowledged alarm records in the priority range AlarmColor.Range[1] to AlarmColor.Range[2].
3	Gets or sets the text color of acknowledged alarm records in the priority range AlarmColor.Range[2] to AlarmColor.Range[3].
4	Gets or sets the text color of acknowledged alarm records in the priority range AlarmColor.Range[3] to 999.

Syntax

```
Color = AlarmClient.AlarmColor.Ack.ForeGround[n];
AlarmClient.AlarmColor.Ack.ForeGround[n] = Color;
```

Parameters

n
Index from 0 to 4.

Color
Color of text.

Examples

```
AlarmClient1.AlarmColor.Ack.ForeGround[0] = Color.Black;
AlarmClient1.AlarmColor.Ack.ForeGround[1] = Color.Blue;
AlarmClient1.AlarmColor.Ack.ForeGround[2] = Color.Green;
```

```
AlarmClient1.AlarmColor.Ack.ForeGround[3] = Color.Yellow;
AlarmClient1.AlarmColor.Ack.ForeGround[4] = Color.FromARGB(0,128,0);
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.Ack.RTN.BackGround Property

The AlarmColor.Ack.RTN.BackGround property is a read-write color property that gets or sets the background color of acknowledged alarm records that "return to normal" (ACK_RTN).

Syntax

```
Color = AlarmClient.AlarmColor.Ack.RTN.BackGround;
AlarmClient.AlarmColor.Ack.RTN.BackGround = Color;
```

Parameters

Color
Color of background.

Return Value

Returns the background color of acknowledged alarms that "return to normal".

Example

```
AlarmClient1.AlarmColor.Ack.RTN.BackGround = Color.Blue;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.Ack.RTN.ForeGround Property

The AlarmColor.Ack.RTN.ForeGround property is a read-write color property that gets or sets the text color of acknowledged alarm records that "return to normal" (ACK_RTN).

Syntax

```
Color = AlarmClient.AlarmColor.Ack.RTN.ForeGround;
AlarmClient.AlarmColor.Ack.RTN.ForeGround = Color;
```

Parameters

Color
Color of text.

Example

```
AlarmClient1.AlarmColor.Ack.RTN.ForeGround = Color.Black;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.Range Property

The AlarmColor.Range property is an array of read-write integer properties that get or set the boundaries of the priority ranges.

You can use priority ranges to classify, group, and emphasize alarms and events belonging to a certain priority range.

The boundaries must fulfill the following condition:

1 < Range[1] < Range[2] < Range[3] < 999

By default, the boundaries are set as follows:

• AlarmColor.Range[1]	250
• AlarmColor.Range[2]	500
• AlarmColor.Range[3]	750

Syntax

```
RangeN = AlarmClient.AlarmColor.Range[N];
AlarmClient.AlarmColor.Range[1] = RangeN;
```

Parameters

N
Range index 1, 2, or 3.

Example

The following example defines four priority ranges (1 to 50, 51 to 600, 601 to 800, and 801 to 999):

```
AlarmClient1.AlarmColor.Range[1] = 50;
AlarmClient1.AlarmColor.Range[2] = 600;
AlarmClient1.AlarmColor.Range[3] = 800;
```

Remarks

For more information, see *Setting Priority Ranges for Alarm Records* on page 30.

AlarmColor.RTN.BackGround Property

The AlarmColor.RTN.BackGround property is a read-write color property that gets or sets the background color of alarm records that "return to normal" (ACK_RTN and UNACK_RTN).

Syntax

```
Color = AlarmClient.AlarmColor.RTN.BackGround;
AlarmClient.AlarmColor.RTN.BackGround = Color;
```

Parameters

Color

Color of background.

Example

```
AlarmClient1.AlarmColor.RTN.BackGround = Color.Blue;
```

Remarks

For more information, see *Setting Return To Normal Record Colors* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.RTN.ForeGround Property

The AlarmColor.RTN.ForeGround property is a read-write color property that gets or sets the text color of alarm records that "return to normal" (ACK_RTN and UNACK_RTN).

Syntax

```
Color = AlarmClient.AlarmColor.RTN.ForeGround;
AlarmClient.AlarmColor.RTN.ForeGround = Color;
```

Parameters

Color
Color of text.

Example

```
AlarmClient1.AlarmColor.RTN.ForeGround = Color.Yellow;
```

Remarks

For more information, see *Setting Return To Normal Record Colors* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.UnAck.BackGround Property

The AlarmColor.UnAck.BackGround property is an array of read-write integer properties that get or set the background colors of all unacknowledged alarm records.

Index	Purpose
0	Sets the background color of all unacknowledged alarm records in all priority ranges.
1	Gets or sets the background color of unacknowledged alarm records in the priority range 1 to AlarmColor.Range[1].
2	Gets or sets the background color of unacknowledged alarm records in the priority range AlarmColor.Range[1] to AlarmColor.Range[2].
3	Gets or sets the background color of unacknowledged alarm records in the priority range AlarmColor.Range[2] to AlarmColor.Range[3].
4	Gets or sets the background color of unacknowledged alarm records in the priority range AlarmColor.Range[3] to 999.

Syntax

```
Color = AlarmClient.AlarmColor.UnAck.BackGround[n];
AlarmClient.AlarmColor.UnAck.BackGround[n] = Color;
```

Parameters

n
Index from 0 to 4.

Color
Color of background.

Example

```
AlarmClient1.AlarmColor.UnAck.BackGround[0] = Color.Blue;
AlarmClient1.AlarmColor.UnAck.BackGround[1] = Color.ARGB(223,113,76);
AlarmClient1.AlarmColor.UnAck.BackGround[2] = Color.Yellow;
AlarmClient1.AlarmColor.UnAck.BackGround[3] = Color.Green;
AlarmClient1.AlarmColor.UnAck.BackGround[4] = Color.White;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.UnAck.Flash.BackGround Property

The AlarmColor.UnAck.Flash.BackGround property is an array of read-write color properties that get or set the background colors of all flashing unacknowledged alarm records.

Index	Purpose
0	Sets the background color of all flashing unacknowledged alarm records in all priority ranges.

Index	Purpose
1	Gets or sets the background color of flashing unacknowledged alarm records in the priority range 1 to AlarmColor.Range[1].
2	Gets or sets the background color of flashing unacknowledged alarm records in the priority range AlarmColor.Range[1] to AlarmColor.Range[2].
3	Gets or sets the background color of flashing unacknowledged alarm records in the priority range AlarmColor.Range[2] to AlarmColor.Range[3].
4	Gets or sets the background color of flashing unacknowledged alarm records in the priority range AlarmColor.Range[3] to 999.

Syntax

```
Color = AlarmClient.AlarmColor.UnAck.Flash.BackGround[n];
AlarmClient.AlarmColor.UnAck.Flash.BackGround[n] = Color;
```

Parameters

n
Index from 1 to 4.

Color
Color of background.

Example

```
AlarmClient1.AlarmColor.UnAck.Flash.BackGround[1] = Color.ARGB(223,113,76);
AlarmClient1.AlarmColor.UnAck.Flash.BackGround[2] = Color.Yellow;
AlarmClient1.AlarmColor.UnAck.Flash.BackGround[3] = Color.Green;
AlarmClient1.AlarmColor.UnAck.Flash.BackGround[4] = Color.White;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.UnAck.Flash.ForeGround Property

The AlarmColor.UnAck.Flash.ForeGround property is an array of read-write color properties that get or set the text colors of all flashing unacknowledged alarm records.

Index	Purpose
0	Sets the text color of all flashing unacknowledged alarm records in all priority ranges.
1	Gets or sets the text color of flashing unacknowledged alarm records in the priority range 1 to AlarmColor.Range[1].

Index	Purpose
2	Gets or sets the text color of flashing unacknowledged alarm records in the priority range AlarmColor.Range[1] to AlarmColor.Range[2].
3	Gets or sets the text color of flashing unacknowledged alarm records in the priority range AlarmColor.Range[2] to AlarmColor.Range[3].
4	Gets or sets the text color of flashing unacknowledged alarm records in the priority range AlarmColor.Range[3] to 999.

Syntax

```
Color = AlarmClient.AlarmColor.UnAck.Flash.ForeGround[n];
AlarmClient.AlarmColor.UnAck.Flash.ForeGround[n] = Color;
```

Parameters

n
Index from 1 to 4.

Color
Color of text.

Examples

```
AlarmClient1.AlarmColor.UnAck.Flash.ForeGround[1] = Color.ARGB(223,113,76);
AlarmClient1.AlarmColor.UnAck.Flash.ForeGround[2] = Color.Yellow;
AlarmClient1.AlarmColor.UnAck.Flash.ForeGround[3] = Color.Green;
AlarmClient1.AlarmColor.UnAck.Flash.ForeGround[4] = Color.White;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.UnAck.ForeGround Property

The AlarmColor.UnAck.ForeGround property is an array of read-write integer properties that get or set the text colors of all unacknowledged alarm records.

Index	Purpose
0	Sets the text color of all unacknowledged alarm records in all priority ranges.
1	Gets or sets the text color of unacknowledged alarm records in the priority range 1 to AlarmColor.Range[1].
2	Gets or sets the text color of unacknowledged alarm records in the priority range AlarmColor.Range[1] to AlarmColor.Range[2].
3	Gets or sets the text color of unacknowledged alarm records in the priority range AlarmColor.Range[2] to AlarmColor.Range[3].

Index	Purpose
4	Gets or sets the text color of unacknowledged alarm records in the priority range AlarmColor.Range[3] to 999.

Syntax

```
Color = AlarmClient.AlarmColor.UnAck.ForeGround[n];
AlarmClient.AlarmColor.UnAck.ForeGround[n] = Color;
```

Parameters

n
Index from 0 to 4.

Color
Color of text.

Example

```
AlarmClient1.AlarmColor.UnAck.ForeGround[0] = Color.Blue;
AlarmClient1.AlarmColor.UnAck.ForeGround[1] = Color.ARGB(223,113,76);
AlarmClient1.AlarmColor.UnAck.ForeGround[2] = Color.Yellow;
AlarmClient1.AlarmColor.UnAck.ForeGround[3] = Color.Green;
AlarmClient1.AlarmColor.UnAck.ForeGround[4] = Color.White;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.UnAck.RTN.BackGround Property

The AlarmColor.UnAck.RTN.BackGround property is a read-write color property that gets or sets the background color of unacknowledged alarm records that "return to normal" (UNACK_RTN).

Syntax

```
Color = AlarmClient.AlarmColor.UnAck.RTN.BackGround;
AlarmClient.AlarmColor.UnAck.RTN.BackGround = Color;
```

Parameters

Color
Color of background.

Example

```
AlarmClient1.AlarmColor.UnAck.RTN.BackGround = Color.Blue;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmColor.UnAck.RTN.ForeGround Property

The AlarmColor.UnAck.RTN.ForeGround property is a read-write color property that gets or sets the text color of unacknowledged alarm records that "return to normal" (UNACK_RTN).

Syntax

```
Color = AlarmClient.AlarmColor.UnAck.RTN.ForeGround;
AlarmClient.AlarmColor.UnAck.RTN.ForeGround = Color;
```

Parameters

Color
Color of text.

Example

```
AlarmClient1.AlarmColor.UnAck.RTN.ForeGround = Color.FromARGB(0,0,0);
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

AlarmQuery Property

The AlarmQuery property is a read-write string property that gets or sets the selected alarm query.

Syntax

```
result = AlarmClient.AlarmQuery;
AlarmClient.AlarmQuery = AlmQry;
```

Parameters

AlmQry
Alarm query string in format \\node\provider!group where node is optional.

Example

```
AlarmClient.AlarmQuery = "\intouch!GroupA";
```

Remarks

When a new query is selected the AlarmQuery property is updated with the selected query. The selected query will be updated if a new query string is written to the AlarmQuery property.

AllowColumnResize Property

The AllowColumnResize property is a read-write Boolean property that gets or sets the ability to resize the columns at run time.

Syntax

```
result = AlarmClient.AllowColumnResize;
AlarmClient.AllowColumnResize = allowColResizing;
```

AutoResumeDuration Property

The AutoResumeDuration property is a read-write integer property that gets or sets the time in seconds after which the grid becomes unfrozen and resumes showing alarms.

Set this value to 0 to disable auto resume.

Syntax

```
result = AlarmClient.AutoResumeDuration;
AlarmClient.AllowColumnResize = timeout;
```

AutoScroll Property

The AutoScroll property is a read-write Boolean property that gets or sets automatic scrolling to new alarms.

Syntax

```
result = AlarmClient.AutoScroll;
AlarmClient.AutoScroll = allowAutoscroll;
```

ClientMode Property

The ClientMode property is a read-write integer property that gets or sets the client mode for the Alarm Control. Use one of the following values:

Value	Client Mode
1	Current Alarms
2	Recent Alarms and Events
3	Historical Alarms
4	Historical Events
5	Historical Alarms and Events

Syntax

```
result = AlarmClient.ClientMode;
AlarmClient.ClientMode = clientMode;
```

Example

```
AlarmClient1.ClientMode = 2;
LogMessage("Alarm client set to Recent Alarms and Events");
```

Remarks

For more information, see *Showing Current Alarms or Recent Alarms and Events* on page 22.

ConnectStatus Property

The ConnectStatus property is a read-only string property that gets the status of the connection to the Alarm Database.

Syntax

```
result = AlarmClient.ConnectStatus;
```

Return Value

Returns the status of the connection to the alarm database. Can be "Connected," "Not connected," or "In progress."

Example

```
alive = AlarmClient1.ConnectStatus;
if alive == "Connected" then
    LogMessage("The Alarm Control is currently connected to the Alarm Database");
else
    LogMessage("The Alarm Control is either currently connecting to the Alarm Database or not
    connected.");
endif;
```

ContextMenu.AckAll Property

The ContextMenu.AckAll property is a read-write Boolean property that gets or sets the appearance of the **Ack All** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.AckAll;
AlarmClient.ContextMenu.AckAll = AckAllVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.AckOthers Property

The ContextMenu.AckOthers property is a read-write Boolean property that gets or sets the appearance of the **Ack Others** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.AckOthers;
AlarmClient.ContextMenu.AckOthers = AckOthersVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.AckSelected Property

The ContextMenu.AckSelected property is a read-write Boolean property that gets or sets the appearance of the **Ack Selected** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.AckSelected;
```

```
AlarmClient.ContextMenu.AckSelected = AckSelectedVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.AckSelectedGroups Property

The ContextMenu.AckSelectedGroups property is a read-write Boolean property that gets or sets the appearance of the **Ack Selected Groups** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.AckSelectedGroups;
AlarmClient.ContextMenu.AckSelectedGroups = AckSelGrpsVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.AckSelectedPriorities Property

The ContextMenu.AckSelectedPriorities property is a read-write Boolean property that gets or sets the appearance of the **Ack Selected Priorities** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.AckSelectedPriorities;
AlarmClient.ContextMenu.AckSelectedPriorities = AckSelPriVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.AckSelectedTags Property

The ContextMenu.AckSelectedTags property is a read-write Boolean property that gets or sets the appearance of the **Ack Selected Tags** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.AckSelectedTags;
AlarmClient.ContextMenu.AckSelectedTags = AckSelTagsVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.AckVisible Property

The ContextMenu.AckVisible property is a read-write Boolean property that gets or sets the appearance of the **Ack Visible** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.AckVisible;
AlarmClient.ContextMenu.AckVisible = AckVisVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.Favorites Property

The ContextMenu.Favorites property is a read-write Boolean property that gets or sets the appearance of the **Query and Filter Favorites** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.Favorites;
AlarmClient.ContextMenu.Favorites = FavsVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.Freeze Property

The ContextMenu.Freeze property is a read-write Boolean property that gets or sets the appearance of the **Freeze** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.Freeze;
AlarmClient.ContextMenu.Freeze = FreezeVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.Hidden Property

The ContextMenu.Hidden property is a read-write Boolean property that gets or sets the appearance of the **Hidden** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.Hidden;
AlarmClient.ContextMenu.Hidden = HiddenVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.HideAll Property

The ContextMenu.HideAll property is a read-write Boolean property that gets or sets the appearance of the **Hide All** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.HideAll;
AlarmClient.ContextMenu.HideAll = HideAllVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.HideOthers Property

The ContextMenu.HideOthers property is a read-write Boolean property that gets or sets the appearance of the **Hide Others** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.HideOthers;
AlarmClient.ContextMenu.HideOthers = HideOthersVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.HideSelected Property

The ContextMenu.HideSelected property is a read-write Boolean property that gets or sets the appearance of the **Hide Selected** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.HideSelected;
AlarmClient.ContextMenu.HideSelected = HideSelVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.HideSelectedGroups Property

The ContextMenu.HideSelectedGroups property is a read-write Boolean property that gets or sets the appearance of the **Hide Selected Groups** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.HideSelectedGroups;
AlarmClient.ContextMenu.HideSelectedGroups = HideSelGrpsVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.HideSelectedPriorities Property

The ContextMenu.HideSelectedPriorities property is a read-write Boolean property that gets or sets the appearance of the **Hide Selected Priorities** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.HideSelectedPriorities;
AlarmClient.ContextMenu.HideSelectedPriorities = HideSelPrisVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.HideSelectedTags Property

The ContextMenu.HideSelectedTags property is a read-write Boolean property that gets or sets the appearance of the **Hide Selected Tags** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.HideSelectedTags;
AlarmClient.ContextMenu.HideSelectedTags = HideSelTagsVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.HideVisible Property

The ContextMenu.HideVisible property is a read-write Boolean property that gets or sets the appearance of the **Hide Visible** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.HideVisible;
AlarmClient.ContextMenu.HideVisible = HideVisVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.Requery Property

The ContextMenu.Requery property is a read-write Boolean property that gets or sets the appearance of the **Requery** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.Requery;
AlarmClient.ContextMenu.Requery = RequeryVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.Reset Property

The ContextMenu.Reset property is a read-write Boolean property that gets or sets the appearance of the **Reset** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.Reset;
AlarmClient.ContextMenu.Reset = ResetVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveAll Property

CntextMenu.ShelveAll is a read-write Boolean property that gets or sets the appearance of the **Shelve All** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveAll = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveAll = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveAll;
```

Example

```
dim ShlvAll as boolean;
ShlvAll = AlarmClient1.ContextMenu.ShelveAll;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveOthers Property

ContextMenu.ShelveOthers is a read-write Boolean property that gets or sets the appearance of the **Shelve Others** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveOthers = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveOthers = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveOthers;
```

Example

```
dim ShlvOthrs as boolean;
ShlvOthrs = AlarmClient1.ContextMenu.ShelveOthers;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveSelected Property

ContextMenu.ShelveSelected is a read-write Boolean property that gets or sets the appearance of the **Shelve Selected** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveSelected = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveSelected = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveSelected;
```

Example

```
dim ShlvSlctd as boolean;
ShlvSlctd = AlarmClient1.ContextMenu.ShelveSelected;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveSelectedGroups Property

ContextMenu.ShelveSelectedGroups is a read-write Boolean property that gets or sets the appearance of the **Shelve Selected Groups** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveSelectedGroups = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveSelectedGroups = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveSelectedGroups;
```

Example

```
dim ShlvSlctdGrp as boolean;
ShlvSlctdGrp = AlarmClient1.ContextMenu.ShelveSelectedGroups;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveSelectedPriorities Property

ContextMenu.ShelveSelectedPriorities is a read-write Boolean property that gets or sets the appearance of the **Shelve Selected Priorities** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveSelectedPriorities = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveSelectedPriorities = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveSelectedPriorities;
```

Example

```
dim ShlvSlctdPri as boolean;
```

```
ShlvSlctdPri = AlarmClient1.ContextMenu.ShelveSelectedPriorities;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveSelectedSeverities Property

ContextMenu.ShelveSelectedSeverities is a read-write Boolean property that gets or sets the appearance of the **Shelve Selected Severities** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveSelectedSeverities = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveSelectedSeverities = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveSelectedSeverities;
```

Example

```
dim ShlvSlctdSev as boolean;
ShlvSlctdSev = AlarmClient1.ContextMenu.ShelveSelectedSeverities;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveSelectedTags Property

ContextMenu.ShelveSelectedTags is a read-write Boolean property that gets or sets the appearance of the **Shelve Selected Tags** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveSelectedTags = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveSelectedTags = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveSelectedTags;
```

Example

```
dim ShlvSlctdTag as boolean;
ShlvSlctdTag = AlarmClient1.ContextMenu.ShelveSelectedTags;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.ShelveVisible Property

ContextMenu.ShelveVisible is a read-write Boolean property that gets or sets the appearance of the **Shelve Visible** option appears in the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.ShelveSelectedVisible = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.ShelveSelectedVisible = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.ShelveSelectedVisible;
```

Example

```
dim ShlvSlctdVis as boolean;
ShlvSlctdVis = AlarmClient1.ContextMenu.ShelveSelectedVisible;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.Sort Property

The ContextMenu.Sort property is a read-write Boolean property that gets or sets the appearance of the **Sort** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.Sort;
AlarmClient.ContextMenu.Sort = SortVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.Statistics Property

The ContextMenu.Statistics property is a read-write Boolean property that gets or sets the appearance of the **Statistics** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.Statistics;
AlarmClient.ContextMenu.Statistics = StatsVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnhideAll Property

The ContextMenu.UnhideAll property is a read-write Boolean property that gets or sets the appearance of the **Unhide All** option on the shortcut menu.

Syntax

```
result = AlarmClient.ContextMenu.UnhideAll;
AlarmClient.ContextMenu.UnhideAll = UnhideAllVis;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveAll Property

ContextMenu.UnshelveAll is read-write Boolean property that gets or sets the appearance of the **Unshelve All** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveAll = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveAll = true;
```

Syntax

```
To Get:
boolean_variable_name = AlarmClient.ContextMenu.UnshelveAll;
```

Example

```
dim ShlvAll as boolean;
ShlvAll = AlarmClient1.ContextMenu.UnshelveAll;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveOthers Property

ContextMenu.UnshelveOthers is read-write Boolean property that gets or sets the appearance of the **Unshelve Others** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveOthers = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveOthers = true;
```

Syntax

```
To Get:
boolean_variable_name = AlarmClient.ContextMenu.UnshelveOthers;
```

Example

```
dim ShlvOthrs as boolean;
ShlvOthrs = AlarmClient1.ContextMenu.UnshelveOthers;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveSelected Property

ContextMenu.UnshelveSelected is read-write Boolean property that gets or sets the appearance of the **Unshelve Selected** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveSelected = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveSelected = true;
```

Syntax

```
To Get:
boolean_variable_name = AlarmClient.ContextMenu.UnshelveSelected;
```

Example

```
dim ShlvSlctd as boolean;
ShlvSlctd = AlarmClient1.ContextMenu.UnshelveSelected;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveSelectedGroups Property

ContextMenu.UnshelveSelectedGroups is read-write Boolean property that gets or sets the appearance of the **Unshelve Selected Groups** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveSelectedGroups = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveSelectedGroups = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.UnshelveSelectedGroups;
```

Example

```
dim UnshlvSlctdGrp as boolean;
UnshlvSlctdGrp = AlarmClient1.ContextMenu.UnshelveSelectedGroups;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveSelectedPriorities Property

ContextMenu.UnshelveSelectedPriorities is read-write Boolean property that gets or sets the appearance of the **Unshelve Selected Priorities** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveSelectedPriorities = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveSelectedPriorities = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.UnshelveSelectedPriorities;
```

Example

```
dim UnshlvSlctdPri as boolean;
UnshlvSlctdPri = AlarmClient1.ContextMenu.UnshelveSelectedPriorities;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveSelectedSeverities Property

ContextMenu.UnshelveSelectedSeverities is read-write Boolean property that gets or sets the appearance of the **Unshelve Selected Severities** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveSelectedSeverities = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveSelectedSeverities = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.UnshelveSelectedSeverities;
```

Example

```
dim UnshlvSlctdSev as boolean;
UnshlvSlctdSev = AlarmClient1.ContextMenu.UnshelveSelectedSeverities;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveSelectedTags Property

ContextMenu.UnshelveSelectedTags is read-write Boolean property that gets or sets the appearance of the **Unshelve Selected Tags** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveSelectedTags = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveSelectedTags = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.UnshelveSelectedTags;
```

Example

```
dim UnshlvSlctdTag as boolean;
```

```
UnshlvSlctdTag = AlarmClient1.ContextMenu.UnshelveSelectedTags;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

ContextMenu.UnshelveVisible Property

ContextMenu.UnshelveVisible is read-write Boolean property that gets or sets the appearance of the **Unshelve Visible** option on the Alarm Control's shortcut menu.

Syntax

```
To Set:
AlarmClient.ContextMenu.UnshelveSelectedVisible = boolean_value;
```

Example

```
AlarmClient1.ContextMenu.UnshelveSelectedVisible = true;
```

Syntax

```
To Get:
boolean_name = AlarmClient.ContextMenu.UnshelveSelectedVisible;
```

Example

```
dim UnshlvSlctdVis as boolean;
UnshlvSlctdVis = AlarmClient1.ContextMenu.UnshelveSelectedVisible;
```

Remarks

For more information, see *Configuring the Run-Time Shortcut Menu* on page 55.

Database.Authentication Property

The Database.Authentication property is a read-write string property that gets or sets the authentication mode to connect to the Alarm Database. Possible values are:

- Windows Integrated
- Windows Account
- SQL Server

The default value is "Windows Integrated".

Syntax

```
result = AlarmClient.Database.Authentication;
AlarmClient.Database.Authentication = AuthMode;
```

Example

```
AlarmClient.Database.Authentication = "Windows Integrated";
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

Database.Name Property

The Database.Name property is a read-write string property that gets or sets the name of the Alarm Database. The default value is "WWALMDB". WWALMDB is the name of the InTouch Database and A2ALMDB is the name of the ArchestrA Database.

If you change the Database.Name property at run time, you need to call the Connect method to connect to the new alarm database.

Syntax

```
result = AlarmClient.Database.Name;
AlarmClient.Database.Name = AlmDBName;
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

Database.Password Property

The Database.Password property is a read-write string property that gets or sets the password associated with the user name to connect to the Alarm Database.

Syntax

```
result = AlarmClient.Database.Password;
AlarmClient.Database.Password = Psswrd;
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

Database.ServerName Property

The Database.ServerName property is a read-write string property that gets or sets the name of the server that hosts the Alarm Database.

Syntax

```
result = AlarmClient.Database.ServerName;
AlarmClient.Database.ServerName = SrvName;
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

Database.UserID Property

The Database.UserID property is a read-write string property that gets or sets the name of user authorized to access the Alarm Database.

Syntax

```
result = AlarmClient.Database.UserID;
AlarmClient.Database.UserID = UserName;
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

DisableFileBrowsing Property

Specify **True** to get/set the option to access the file browser when importing or exporting files.

Syntax

```
result = AlarmClient.DisableFileBrowsing;
AlarmClient.DisableFileBrowsing = boolean_value;
```

Example

```
AlarmClient.DisableFileBrowsing = true;
```

Remarks

Default is **True**.

Domain Property

The Domain property is a read-write string property that gets or sets the domain name of the user to connect to the Alarm Database.

Syntax

```
result = AlarmClient.Domain;
AlarmClient.Domain = DomName;
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

Enabled Property

The Enabled property is a read-write Boolean property that gets or sets the enablement of Alarm Control. When the Alarm Control is disabled, alarm records are still updated, but the operator cannot interact with the control.

The operator can still use scripting to interact with the control.

Syntax

```
result = AlarmClient.Enabled;
AlarmClient.Enabled = EnableFlag;
```

EventColor.BackGround Property

The EventColor.BackGround property is a read-write color property that gets or sets the background color of event records.

Syntax

```
Color = AlarmClient.EventColor.BackGround;
AlarmClient.EventColor.BackGround = Color;
```

Parameters

Color
Color of background.

Example

```
AlarmClient1.EventColor.BackGround = Color.Blue;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

EventColor.ForeGround Property

The EventColor.ForeGround property is a read-write color property that gets or sets the text color of event records.

Syntax

```
Color = AlarmClient.EventColor.ForeGround;
AlarmClient.EventColor.ForeGround = Color;
```

Parameters

Color
Color of text.

Example

```
AlarmClient1.EventColor.ForeGround = Color.Blue;
```

Remarks

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

Favorite Property

The Favorite property is a read-write string property that gets or sets the name of the current query filter favorite.

Syntax

```
QueryFilterName = AlarmClient.Favorite;
AlarmClient.Favorite = QueryFilterName;
```

Parameters

QueryFilterName
The name of a query filter favorite.

Example

The following example sets the current Alarm Control grid to the Query Filter Favorite with the name "All Hi Priority Alarms".

```
AlarmClient1.Favorite = "All Hi Priority Alarms";
```

Remarks

You can also use this property to reset the currently used query filter to its default with the following script:

```
AlarmClient.Favorite = "Default";
```

The Favorite property executes as a query to retain previous release default behavior. If you want to execute the query/filter as a filter only, then use the RunQuery() method.

FlashUnAckAlarms Property

The FlashUnAckAlarms property is a read-write Boolean property that gets or sets the flashing of unacknowledged alarm records.

Syntax

```
result = AlarmClient.FlashUnAckAlarms;
AlarmClient.FlashUnAckAlarms = FlashUnAckRecs;
```

Remarks

For more information, see *Setting Unacknowledged Alarms to Flash* on page 32.

GridColor Property

The GridColor property is a read-write color property that gets or sets the color of the grid lines.

Syntax

```
Color = AlarmClient.GridColor;
AlarmClient.GridColor = Color;
```

Parameters

Color
Color of the grid lines.

Example

```
AlarmClient1.GridColor = Color.Black;
```

Remarks

For more information, see *Setting Heading, Grid, and Window Color* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

HeadingColor.BackGround Property

The HeadingColor.BackGround property is a read-write color property that gets or sets the background color of the heading.

Syntax

```
Color = AlarmClient.HeadingColor.BackGround;
```

```
AlarmClient.HeadingColor.BackGround = Color;
```

Parameters

Color
Color of background.

Example

```
AlarmClient1.HeadingColor.BackGround = Color.Blue;
```

Remarks

For more information, see *Setting Heading, Grid, and Window Color* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

HeadingColor.ForeGround Property

The HeadingColor.ForeGround property is a read-write color property that gets or sets the text color of the heading.

Syntax

```
Color = AlarmClient.HeadingColor.ForeGround;
AlarmClient.HeadingColor.ForeGround = Color;
```

Parameters

Color
Color of text.

Example

```
AlarmClient1.HeadingColor.ForeGround = Color.Blue;
```

Remarks

For more information, see *Setting Heading, Grid, and Window Color* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

Height Property

The Height property is a read-write integer property that gets or sets the height of the Alarm Control in pixels.

Syntax

```
result = AlarmClient.Height;
AlarmClient.Height = Hght;
```

HiddenAlarms Property

The HiddenAlarms property is a read-only integer property that gets the number of hidden alarms.

Syntax

```
Result = AlarmClient.HiddenAlarms;
```

Example

```
LogMessage("There are " + Text(AlarmClient1.HiddenAlarms,"#")+" hidden alarms.");
```

HideErrors Property

The HideErrors property is a read-write Boolean property that gets or sets the Hide Errors option.

- TRUE - Run-time errors, warnings, and status messages are written to the Logger. No pop-ups appear
- FALSE - Run-time errors, warnings, and status messages pop-up and are also written to the Logger

Syntax

```
result = AlarmClient.HideErrors;
AlarmClient.HideErrors = SilentMode;
```

Remarks

For more information, see *Hiding Errors, Warnings, and Status Messages* on page 50.

IsFrozen Property

The IsFrozen property is a read-only Boolean property that can be used to identify whether the alarm client control is in a Frozen mode.

When the value is True, the control is frozen, else the control is not frozen.

Remarks

For more information, see *Freeze and Unfreeze the Alarm Control Grid* on page 74.

Example

```
Dim FR as boolean;
FR = AlarmClient1.IsFrozen;
```

MaxDatabaseRecords Property

The MaxDatabaseRecords property is a read-write integer property that gets or sets the maximum records retrieved from the database that will appear in each page of the Alarm Control Client at one instance. The valid range is 1 to 32766.

Syntax

```
result = AlarmClient.MaxDatabaseRecords;
AlarmClient.MaxDatabaseRecords = MaxRecs;
```

Remarks

This property is for Historical Alarms, Historical Events, or Historical Alarms and Events modes. For more information, see *Showing Historical Alarms and/or Events* on page 24.

MaxTotalRetrievalCount Property

The MaxTotalRetrievalCount property is a read-write integer property that gets or sets the maximum total number of records that will be retrieved from the database.

Syntax

```
result = AlarmClient.MaxTotalRetrievalCount;
AlarmClient.MaxTotalRetrievalCount = MaxRecs;
```

Remarks

This property is for Historical Alarms, Historical Events, or Historical Alarms and Events modes. If the property is set to a positive integer, in historical mode Alarm Client Control will retrieve up to MaxTotalRetrievalCount of alarm records. For example, there are 1000 alarm records in the database. If Set MaxTotalRetrievalCount = 500, then only top 500 alarm records will be returned. If Set MaxTotalRetrievalCount = 2000, then all 1000 alarm records will be returned.

NewAlarmEventMode Property

The NewAlarmEventMode property is an read-write integer property that gets or sets the trigger behavior of the New Alarm event.

Syntax

```
EMode = AlarmClient.NewAlarmEventMode;
AlarmClient.NewAlarmEventMode = EMode;
```

Parameters

EMode

Event mode with following possible values:

Value	Description
0	The NewAlarm event cannot be triggered. (default).
1	The NewAlarm event is triggered only one time the first time a new alarm occurs.
2	The NewAlarm event is triggered every time a new alarm occurs.

NoRecordsMessage.Enabled Property

The NoRecordsMessage.Enabled property is a read-write Boolean property that gets or sets the visibility of a custom message when no alarm records are available.

Syntax

```
result = AlarmClient.NoRecordsMessage.Enabled;
AlarmClient.NoRecordsMessage.Enabled = showMessage;
```

Example

```
AlarmClient1.NoRecordsMessage.Enabled = 1;
```

```
AlarmClient1.NoRecordsMessage.Message = "There are no alarm records available";
```

Remarks

Use this property in combination with the NoRecordsMessage.Message property.

NoRecordsMessage.Message Property

The NoRecordsMessage.Message property is a read-write string property that gets or sets the custom message text when no alarm records are available and the **NoRecordsMessage.Enabled** property value is TRUE.

Syntax

```
result = AlarmClient.NoRecordsMessage.Message;
AlarmClient.NoRecordsMessage.Message = myCustomMessage;
```

Example

```
AlarmClient1.NoRecordsMessage.Enabled = 1;
AlarmClient1.NoRecordsMessage.Message = "There are no alarm records available";
```

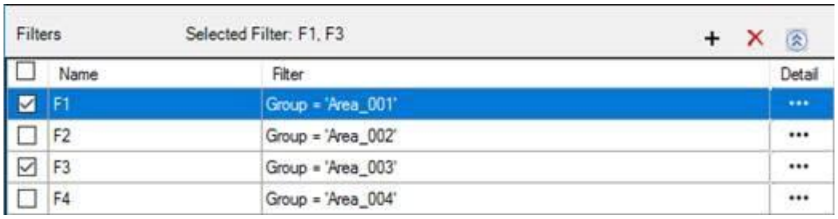
Remarks

Use this property in combination with the NoRecordsMessage.Enabled property.

QueryFilters.SelectedFilters Property

The QueryFilters.SelectedFilters property is a read-only String property used to get the filter selecting status.

For example, an alarm client control with the following filters selected, the QueryFilters.SelectedFilters property will return value of “F1, F3”.



Filters   Selected Filter: F1, F3

□	Name	Filter	Detail
☑	F1	Group = 'Area_001'	•••
□	F2	Group = 'Area_002'	•••
☑	F3	Group = 'Area_003'	•••
□	F4	Group = 'Area_004'	•••

In the property, each filter will be separated using a comma ‘,’.

Example

```
Dim SF as string;
```

SF = AlarmClient1.QueryFilters.SelectedFilters;

QueryStartup Property

The QueryStartup property is a read-write Boolean property that gets or sets or sets the automatic update of the Alarm Control on startup.

Syntax

```
result = AlarmClient.QueryStartup;
AlarmClient.QueryStartup = AutoQry;
```

Remarks

For more information, see *Automatically Querying for Alarms on Start Up* on page 50.

RequiresShelveSignature Property

The RequiresShelveSignature property is a read-write Boolean property to specify if a user signature is required to shelve an alarm.

Syntax

```
To Set:
AlarmClient.RequiresShelveSignature = boolean_value;
```

Example

```
AlarmClient1.RequiresShelveSignature = true;
```

Syntax

```
To Get:
boolean_variable_name> = AlarmClient.RequiresShelveSignature;
```

Example

```
dim bIsShlvSigned as boolean;
bIsShlvSigned = AlarmClient1.RequiresShelveSignature;
```

Remarks

For more information, see *Configuring the Alarm Control to Require a SHELVE Signature* on page 54.

RetainHidden Property

The RetainHidden property is a read-write Boolean property that gets or sets the retention of hidden alarms or events when the alarm query or query filter to retrieve records changes at run time.

Syntax

```
result = AlarmClient.RetainHidden;
AlarmClient.RetainHidden = RetainHddn;
```

Remarks

For more information, see *Retain Hiding when Changing Alarm Query Filter* on page 51.

RowCount Property

The RowCount property is a read-only integer property that gets the number of records shown in the Alarm Control grid.

For current alarms (and recent alarms and events), the **RowCount** property value is always the same as the **TotalRowCount** property value.

For historical alarms, if the Alarm Control retrieves more alarm records than specified by the **MaxDatabaseRecords** property value, it splits these into multiple pages.

The **RowCount** property shows how many alarm records are currently shown on the current page. The RowCount property value is the same as the **MaxDatabaseRecords** property value, with exception of the last page.

Syntax

```
Result = AlarmClient.RowCount;
```

Example

```
NRows = AlarmClient1.RowCount;
LogMessage("There are " + Text(NRows, "#") + " alarm records on the retrieved page.");
```

RowSelection Property

The RowSelection property is a read-write string property that determines if row selection is allowed at run time. The following values are possible:

Value	Description
No	Operator cannot select rows.
Single	Operator can only select one row at a time.
Multiple	Operator can select one or more rows.

The default value is "Multiple".

Syntax

```
Result = AlarmClient.RowSelection;
AlarmClient.RowSelection = RwSel;
```

Example

```
AlarmClient1.RowSelection = "Multiple";
```

Remarks

For more information, see *Restricting User Access to Rows and Columns* on page 51.

SaveUserQueryFilter Property

Gets/Sets the option to save runtime user queries and filters. If false, then user modified queries or filters will not be saved to file. If true, user modification will be saved to file.

Syntax

```
result = AlarmClient.SaveUserQueryFilter;
AlarmClient.SaveUserQueryFilter = boolean_true;
```

Example

```
AlarmClient.SaveUserQueryFilter = true;
```

Remarks

Default is **True**.

SelectedCount Property

The SelectedCount property is a read-only integer property that gets the total number of selected alarm records.

Syntax

```
Result = AlarmClient.SelectedCount;
```

Return Value

Returns the number of selected alarm records.

Example

```
NSelRows = AlarmClient1.SelectedCount;
If NSelRows > 5 Then
   LogMessage("There are more than 5 rows selected.");
Endif;
```

ShelveColor.BackGround Property

ShelveColor.BackGround is an integer property to set the background color of shelved alarm records in the Alarm Control.

Syntax

```
Color= AlarmClient.ShelveColor.Background;
AlarmClient.ShelveColor.BackGround = Color
```

Parameters

Color
Background color of a shelved alarm record.

Example

```
AlarmClient1.ShelveColor.BackGround = Color.FromARGB(255,0,128);
```

Remarks

For more information, see *Setting Heading, Grid, and Window Color* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

ShelveColor.ForeGround Property

ShelveColor.ForeGround is an integer property to set the foreground or text color of shelved alarm records in the Alarm Control.

Syntax

```
Color= AlarmClient.ShelveColor.Foreground;
AlarmClient.ShelveColor.Foreground = Color
```

Parameters

Color
Foreground color of a shelved alarm record.

Example

```
AlarmClient1.ShelveColor.Foreground = Color.FromARGB(255,255,255);
```

Remarks

For more information, see *Setting Heading, Grid, and Window Color* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

ShowContextMenu Property

The ShowContextMenu property is a read-write Boolean property that gets or sets the ability to open the shortcut menu at run time.

Syntax

```
result = AlarmClient.ShowContextMenu;
AlarmClient.ShowContextMenu = ContxtMnuAvail;
```

ShowGrid Property

The ShowGrid property is a read-write Boolean property that gets or sets the appearance of grid lines.

Syntax

```
result = AlarmClient.ShowGrid;
AlarmClient.ShowGrid = showGrid;
```

ShowGroupByHeader Property

The ShowGroupByHeader property is a read-write Boolean property to show or hide the column grouping label at the top of the run-time Alarm Control in the historical mode. Set the ShowGroupByHeader property to true to show the label "Drag a column header here to group by that column".

Syntax

```
result = AlarmClient.ShowGroupByHeader;
AlarmClient.ShowGroupByHeader = ShowGroupByHeader;
```

ShowHeading Property

The ShowHeading property is a read-write Boolean property that gets or sets the visibility of the grid heading at run time.

Syntax

```
result = AlarmClient.ShowHeading;
AlarmClient.ShowHeading = showHeading;
```

ShowStatusBar Property

The ShowStatusBar property is a read-write Boolean property that gets or sets the visibility of the status bar at run time.

Syntax

```
result = AlarmClient.ShowStatusBar;
AlarmClient.ShowStatusBar = showStatusBar;
```

SortColumn.First Property

The SortColumn.First property is a read-write string property that gets or sets the first sort column.

The default value is "Time (LCT)".

Syntax

```
result = AlarmClient.SortColumn.First;
AlarmClient.SortColumn.First = sortByFirst;
```

Example

```
AlarmClient1.SortColumn.First = "Class";
```

Remarks

Use this property in connection with the SortOrder.First to determine the sorting direction.

SortColumn.Second Property

The SortColumn.Second property is a read-write string property that gets or sets the second sort column.

The default value is blank.

Syntax

```
result = AlarmClient.SortColumn.Second;
AlarmClient.SortColumn.Second = sortBySecond;
```

Example

```
AlarmClient1.SortColumn.Second = "Type";
```

Remarks

Use this property in connection with the SortOrder.Second to determine the sorting direction.

SortColumn.Third Property

The SortColumn.Third property is a read-write string property that gets or sets the third sort column.

The default value is blank.

Syntax

```
result = AlarmClient.SortColumn.Third;
AlarmClient.SortColumn.Third = sortByThird;
```

Example

```
AlarmClient1.SortColumn.Third = "State";
```

Remarks

Use this property in connection with the SortOrder.Third to determine the sorting direction.

SortColumn.Fourth Property

The SortColumn.Fourth property is a read-write string property that gets or sets the fourth sort column.

The default value is blank.

Syntax

```
result = AlarmClient.SortColumn.Fourth;
AlarmClient.SortColumn.Fourth = sortByFourth;
```

Example

```
AlarmClient1.SortColumn.Fourth = "Priority";
```

Remarks

Use this property in connection with the SortOrder.Fourth to determine the sorting direction.

SortOrder.First Property

The SortOrder.First property is a read-write Boolean property that gets or sets the sorting direction of the first sort column. The following values are possible:

Value	Description
FALSE	Ascending sorting direction
TRUE	Descending sorting direction

The default value is FALSE (Ascending).

Syntax

```
result = AlarmClient.SortOrder.First;
AlarmClient.SortOrder.First = sortDirFirst;
```

Remarks

Use this property in connection with the SortColumn.First to determine which column is sorted.

SortOrder.Second Property

The SortOrder.Second property is a read-write Boolean property that gets or sets the sorting direction of the second sort column. The following values are possible:

Value	Description
FALSE	Ascending sorting direction
TRUE	Descending sorting direction

The default value is FALSE (Ascending).

Syntax

```
result = AlarmClient.SortOrder.Second;
AlarmClient.SortOrder.Second = sortDirSecond;
```

Remarks

Use this property in connection with the SortColumn.Second to determine which column is sorted.

SortOrder.Third Property

The SortOrder.Third property is a read-write Boolean property that gets or sets the sorting direction of the third sort column. The following values are possible:

Value	Description
FALSE	Ascending sorting direction
TRUE	Descending sorting direction

The default value is FALSE (Ascending).

Syntax

```
result = AlarmClient.SortOrder.Third;
AlarmClient.SortOrder.Third = sortDirThird;
```

Remarks

Use this property in connection with the SortColumn.Third to determine which column is sorted.

SortOrder.Fourth Property

The SortOrder.Fourth property is a read-write Boolean property that gets or sets the sorting direction of the fourth sort column. The following values are possible:

Value	Description
FALSE	Ascending sorting direction
TRUE	Descending sorting direction

The default value is FALSE (Ascending).

Syntax

```
result = AlarmClient.SortOrder.Fourth;
AlarmClient.SortOrder.Fourth = sortDirFourth;
```

Remarks

Use this property in connection with the SortColumn. Fourth to determine which column is sorted.

Time.Format Property

The Time.Format property is a read-write string property that gets or sets the date and time formats of the alarm records in the Alarm Control.

You can either use the .NET time format or the default format. Set the Time.Type property to determine which time format type to use.

Syntax

```
result = AlarmClient.Time.Format;
AlarmClient.Time.Format = TmFormat;
```

Example

This example shows the time format in French format (day/month/year) using the .NET datetime type.

```
AlarmClient1.Time.Type = 1;
AlarmClient1.Time.Format = "dd/MM/yyyy";
```

Remarks

For more information about the .NET time format, see *Setting the .NET Datetime Format* on page 47.

For more information about the default time format, see *Setting the Time Format* on page 46.

Time.Type Property

The Time.Type property is a read-write Boolean property that gets or sets the time format type of the alarm records. The following values are possible:

Value	Description
FALSE	Default time format
TRUE	.NET time format (default)

Syntax

```
result = AlarmClient.Time.Type;
AlarmClient.Time.Type = TmType;
```

Example

This example shows the time format in German format (day.month.year) using the default datetime type.

```
AlarmClient1.Time.Type = 0;
AlarmClient1.Time.Format = "%d.%m.%Y %H:%M:%S";
```

Remarks

For more information about the .NET time format, see *Setting the .NET Datetime Format* on page 47.

For more information about the default time format, see *Setting the Time Format* on page 46.

TimeSelector Property

The TimeSelector property gets the Time Range Picker object used in the Alarm Control. You can use it in scripting to shorten the code using its properties and methods.

For the individual properties and methods, see the following properties, or the methods starting at *TimeSelector.GetStartAndEndTimes() Method* on page 150.

Example 1

```
dim TRP as object;
TRP = AlarmClient1.TimeSelector;
Timeselect = TRP;
StartDate = TRP.StartDate;
```

```
EndDate = TRP.EndDate;
duration = TRP.TimeDuration;
```

Example 2

```
dim TRP as object;
TRP = AlarmClient1.TimeSelector;
TRP.SetStartAndEndTimes(StartDate, EndDate, Duration);
```

TimeSelector.DurationMS Property

The TimeSelector.DurationMS property is a read-write integer property that gets the time duration measured in milliseconds.

The start time of the Alarm control (TimeSelector.StartDate) is calculated as the end time (TimeSelector.EndDate) minus the new time duration (TimeSelector.DurationMS).

When you set the value of the TimeSelector.DurationMS property, the TimeSelector.TimeDuration property is set to 0.

The default value is 3600000.

Syntax

```
result = AlarmClient.TimeSelector.DurationMS;
AlarmClient.TimeSelector.DurationMS = Value;
```

Example

```
AlarmClient1.TimeSelector.DurationMS = 1800000;
// The Alarm Control now retrieves alarms from the last 30 minutes.
```

TimeSelector.EndDate Property

The TimeSelector.EndDate property is a read-only string property that gets the end date and time of the Alarm Control.

The default value is the time the Alarm Control is placed on the canvas. If the **Update to Current Time** option is enabled, the TimeSelector.EndDate property is updated with the current time.

Note: To set the end date and time of the Alarm Control, use the *TimeSelector.GetStartAndEndTimes() Method* on page 150.

Syntax

```
result = AlarmClient.TimeSelector.EndDate;
```

Example

```
LogMessage(AlarmClient1.TimeSelector.EndDate);
```

TimeSelector.StartDate Property

The TimeSelector.StartDate property is a read-only string property that gets the start date and time of the Alarm Control.

The default value is the time the Alarm Control is placed on the canvas. If the **Update to Current Time** option is enabled, the TimeSelector.StartDate property is updated as current time minus duration.

Note: To set the start date and time of the Alarm Control, use the *TimeSelector.SetStartAndEndTimes() Method* on page 151.

Syntax

```
result = AlarmClient.TimeSelector.StartDate;
```

Example

```
LogMessage(AlarmClient1.TimeSelector.StartDate);
```

TimeSelector.TimeDuration Property

The TimeSelector.TimeDuration property is a read-write integer property that gets or sets the time duration. The start time of the Alarm control (TimeSelector.StartDate) is calculated as the end time (TimeSelector.EndDate) minus the new time duration.

The TimeSelector.TimeDuration can have one of the following values:

Value	Description
0	Custom
1	The last minute.
2	The last five minutes.
3	The last ten minutes.
4	The last 15 minutes.
5	The last 30 minutes.
6	The last hour.
7	The last two hours.
8	The last four hours.
9	The last eight hours.
10	The last 12 hours.
11	The last 24 hours.
12	The last two days.
13	The last week.
14	The last two weeks.
15	The last month.
16	The last three months.
17	One minute.

Value	Description
18	Five minutes.
19	Ten minutes.
20	15 minutes.
21	30 minutes.
22	One hour.
23	Two hours.
24	Four hours.
25	Eight hours.
26	12 hours.
27	24 hours.
28	Two days.
29	One week.
30	Two weeks.
31	One month.
32	Three months.
33	Yesterday: 0:00:00 of the previous day to 0:00:00 of the current day.
34	Current day: 0:00:00 of the current day to the current time.
35	Previous hour: The start of the previous hour to the start of the current hour.
36	Current hour: The start of the current hour to the current time.

The default value is 6 (Last Hour).

Syntax

```
result = AlarmClient.TimeSelector.TimeDuration;
AlarmClient.TimeSelector.TimeDuration = Value;
```

Example

```
AlarmClient1.TimeSelector.TimeDuration = 5;
// The Alarm Control now retrieves alarms from the last 30 minutes.
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

TimeZone.TimeZone Property

The TimeZone.TimeZone property is a read-write string property that gets or sets the time zone of the Alarm Control.

The default value depends on the current setting of the operating system.

If you want to show time stamps using the local time of the computer, set the TimeZone.TimeZone property to an empty string.

Syntax

```
result = AlarmClient.TimeZone.TimeZone;
AlarmClient.TimeZone.TimeZone = TimeZone;
```

Example

```
AlarmClient1.TimeZone.TimeZone = "(GMT-09:00) Alaska";
```

Remarks

For more information, see *Setting Time Zone and Format* on page 44.

TotalRowCount Property

The TotalRowCount property is a read-only integer property that gets the total number of alarm records in the Alarm Control.

For current alarms (and recent alarms and events), the **RowCount** property value is always the same as the **TotalRowCount** property value.

For historical alarms, if the Alarm Control retrieves more alarm records than specified by the **MaxDatabaseRecords** property value, it splits these into multiple pages.

The **RowCount** property value shows how many alarm records are currently shown on the current page, whereas the **TotalRowCount** property value shows how many alarm records are retrieved from the alarm database.

Syntax

```
Result = AlarmClient.TotalRowCount;
```

Return Value

Returns the end date and time of the Alarm Control in historical mode.

Example

```
NTRows = AlarmClient1.TotalRowCount;
If (NTRows > 1000) then
   LogMessage("More than 1000 records are currently in the Alarm Control");
Endif;
```

UnAckAlarms Property

The UnAckAlarms property is a read-only integer property that gets the number of unacknowledged alarm records in the Alarm Control.

Syntax

```
Result = AlarmClient.UnackAlarms;
```

Return Value

Returns the number of unacknowledged alarm records in the Alarm Control.

Example

```
NUnack = AlarmClient1.UnAckAlarms;
If NUnack > 10 Then
   LogMessage("There are more than 10 unacknowledged alarms in the grid!");
Endif;
```

UpdateToCurrentTime Property

The UpdateToCurrentTime property is a read-write Boolean property that gets or sets the **Update to Current Time** option.

If you set this property to TRUE, the Alarm Control end time is set to the current time and the start time is calculated as the difference of end time and duration. Whenever you refresh the Alarm Control, the end time is set as current time.

If you set this property to FALSE, the Alarm Control uses the end time, duration, and start time as defined by the Time Range Picker control.

The default value is TRUE.

Syntax

```
result = AlarmClient.UpdateToCurrentTime;
AlarmClient.UpdateToCurrentTime = UpdToCurrTime;
```

Example

```
AlarmClient1.UpdateToCurrentTime = 1;
AlarmClient1.Requery();
```

Remarks

For more information, see *Showing Historical Alarms and/or Events* on page 24.

UserQueryFilterFilePath Property

Gets/Sets the file path of the runtime user queries and filters. The file path excludes the file name.

Syntax

```
result = AlarmClient.UserQueryFilterFilePath;
AlarmClient.UserQueryFilterFilePath = myUserQueryFilterFilePath;
```

Example

```
AlarmClient1.UserQueryFilterFilePath = "C:\Users\Public\AppData\Wonderware";
```

Remarks

```
Default is %Userprofile%\Wonderware;
```

Visible Property

The Visible property is a read-write Boolean property that gets or sets the visibility of the Alarm Control.

Syntax

```
result = AlarmClient.Visible;
AlarmClient.Visible = Boolean;
```

Width Property

The Width property is a read-write integer property that gets or sets the width of the Alarm Control in pixels.

Syntax

```
result = AlarmClient.Width;
AlarmClient.Width = Wdth;
```

WindowColor Property

The WindowColor property is a read-write color property that gets or sets the color of the Alarm Control background.

Syntax

```
Color = AlarmClient.WindowColor;
AlarmClient.WindowColor = Color;
```

Parameters

Color
Color of background.

Example

```
AlarmClient1.WindowColor = Color.FromARGB(240,200,198);
```

Remarks

For more information, see *Setting Heading, Grid, and Window Color* on page 29.

Color is a .NET Framework data type. You can use various Color methods to set the color, such as a predefined color name, FromARGB(), FromKnownColor(), and FromName().

For a list of the .NET color names and the hexadecimal codes, see *.NET Colors* on page 160.

For more information on the color methods, see the online Microsoft documentation for .NET Framework Development.

X Property

The X property is a read-write integer property that gets or sets the horizontal position of the Alarm Control in relation to the left edge of the InTouch window in which it appears.

Syntax

```
result = AlarmClient.X;
```

```
AlarmClient.X = LeftPos;
```

Y Property

The Y property is a read-write integer property that gets or sets the vertical position of the Alarm Control in relation to the top edge of the InTouch window in which it appears.

Syntax

```
result = AlarmClient.Y;
AlarmClient.Y = TopPos;
```

Alarm Control Methods

This section describes the scripting methods available for the Alarm Control.

AboutBox() Method

The AboutBox method shows the **About** dialog box of the Alarm Control.

Syntax

```
AlarmClient.AboutBox();
```

Ack.All() Method

The Ack.All method acknowledges all alarms in the Alarm Control, including those not shown.

Syntax

```
AlarmClient.Ack.All(AckComment);
```

Parameters

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AlarmClient1.Ack.All("Alarm is acknowledged");
```

Ack.Group() Method

The Ack.Group method acknowledges all alarms for a given alarm source and group.

The alarm source and group names are case-insensitive.

Syntax

```
AlarmClient.Ack.Group(AlarmSource, Group, AckComment);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AlarmClient1.Ack.Group("\\machine1\galaxy", "Area_001", "All alarms in Area_001
acknowledged");
```

Ack.Priority() Method

The Ack.Priority method acknowledges all alarms for a given alarm source, group, and priority range.

The alarm source and group names are case-insensitive.

Syntax

```
AlarmClient.Ack.Priority(AlarmSource, Group, FromPriority, ToPriority, AckComment);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

FromPriority
Starting priority of alarms. For example, 100.

ToPriority
End priority of alarms. For example, 900.

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
GrpName = "ValveGroup";
AlarmClient1.Ack.Priority("\intouch", GrpName, 250, 500, "All local InTouch alarms in the
ValveGroup alarm group with priorities from 250 to 500 are now acknowledged.");
```

Ack.Selected() Method

The Ack.Selected method acknowledges all selected alarms.

Syntax

```
AlarmClient.Ack.Selected(AckComment);
```

Parameters

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AlarmClient1.Ack.Selected("This selected alarm is acknowledged");
```

Ack.SelectedGroup() Method

The Ack.SelectedGroup method acknowledges all alarms that have the same alarm sources and groups as one or more selected alarms.

Syntax

```
AlarmClient.Ack.SelectedGroup(AckComment);
```

Parameters

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AlarmClient1.Ack.SelectedGroup("Alarm acknowledged");
```

Ack.SelectedPriority () Method

The Ack.SelectedPriority method acknowledges all alarms that have the same alarm sources, groups, and within the priority ranges as one or more selected alarms.

Syntax

```
AlarmClient.Ack.SelectedPriority(AckComment);
```

Parameters

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AlarmClient1.Ack.SelectedPriority("Alarm acknowledged");
```

Ack.SelectedTag() Method

The Ack.SelectedTag method acknowledges all alarms that have the same alarm sources, groups, tags, and within the priority ranges as one or more selected alarms.

Syntax

```
AlarmClient.Ack.SelectedTag(AckComment);
```

Parameters

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AlarmClient1.Ack.SelectedTag("Alarm acknowledged");
```

Ack.Tag() Method

The Ack.Tag method acknowledges all alarms for a given alarm source, group, tag name, and priority range.

The alarm source, group names, and tag names are case-insensitive.

Syntax

```
AlarmClient.Ack.Tag(AlarmSource, Group, Tag, FromPriority, ToPriority, AckComment);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

Tag
The name of the alarm tag. For example, ValveTag1.

FromPriority
Starting priority of alarms. For example, 100.

ToPriority
End priority of alarms. For example, 900.

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AckComment = "All alarm client records of the attribute Valve17 in the group (area) Vessel_25B
of the galaxy on machine25 with priorities from 1 to 99 are now acknowledged.";
AlarmClient1.Ack.Tag("\\machine25\galaxy", "Vessel_25B", "Valve17", 1, 99, AckComment);
```

Ack.Visible() Method

The Ack.Visible method acknowledges all alarms currently visible in the Alarm Control.

Syntax

```
AlarmClient.Ack.Visible(AckComment);
```

Parameters

AckComment
A string indicating the alarm acknowledgement comment.

Example

```
AlarmClient1.Ack.Visible("Alarm acknowledged");
```

Connect() Method

The Connect method connects the Alarm Control to the Alarm Database.

Syntax

```
AlarmClient.Connect();
```

Disconnect() Method

The Disconnect method disconnects the Alarm Control from the Alarm Database.

Syntax

```
AlarmClient.Disconnect();
```

Favorites.Export() Method

The Favorites.Export method exports the list of query and filter favorites list to an XML file.

Syntax

```
AlarmClient.Favorites.Export(FilePath, FileName);
```

Parameters

FilePath
Name of the path to export the query and filter favorites file.

FileName
Name of the query and filter favorites file to export.

Example

```
AlarmClient1.Favorites.Export("c:\", "MyFavorites.xml");
```

Favorites.Import() Method

The Favorites.Import method imports the list of query and filter favorites list from an XML file. You can either overwrite the existing query and filter favorites with the new favorites, or append them.

Syntax

```
AlarmClient.Favorites.Import(FilePath, FileName, OverwriteAppend);
```

Parameters

FilePath
Name of the path to the query and filter favorites file to import.

FileName
Name of the query and filter favorites file to import.

OverwriteAppend
String determining if the import of the query filter favorites overwrites existing favorites, or appends to existing favorites. Set to one of the following:

- Overwrite to overwrite existing query filter favorites
- Append to append to existing query filter favorites. If a query filter with the same name already exists, it is not overwritten by the query filter in the file

Example

```
AlarmClient1.Favorites.Import("c:\MyFavs\", "Favs.xml", "Overwrite");
```

FreezeDisplay() Method

The FreezeDisplay method freezes or unfreezes the Alarm Control. The following values are possible:

Value	Description
TRUE	Freezes the Alarm Control.
FALSE	Unfreezes the Alarm Control.

Syntax

```
AlarmClient.FreezeDisplay(FreezeFlag);
```

Parameters

FreezeFlag
Boolean value or expression (TRUE = freeze control, FALSE = unfreeze control)

Example

```
AlarmClient1.FreezeDisplay($hour > 17 OR $hour<9 );
LogMessage("The Alarm Control is frozen between 6 PM and 8 AM.");
```

GetItem() Method

The GetItem method returns the data at the given row and column. The row is given as a zero-based index. You need to specify 0 to retrieve data from the 1st row. The column name can either be the original column name, or the displayed column name.

Syntax

```
Result = AlarmClient.GetItem(RowNumber, ColumnName);
```

Parameters

RowNumber
An integer row number for the alarm record containing the value you want to fetch.

ColumnName
Name of the column.

Return Value

Returns the data at the given row and column as a string value.

Example

```
Data1 = AlarmClient1.GetItem(5, "Current Value");
LogMessage("The current value of the 6th alarm record is " + Data1);
```

Remarks

To get alarm record data from the currently selected row in a given column name, use the **GetSelectedItem** method.

GetLastError() Method

The GetLastError method returns the last error message. This is useful if the Hide Errors option is selected.

Syntax

```
ErrMsg = AlarmClient.GetLastError();
```

Return Value

Returns the last error message.

Example

```
ErrMsg = AlarmClient1.GetLastError();
ComboBox1.AddItem(ErrMsg);
```

GetSelectedItem() Method

The GetSelectedItem method returns the data at the currently selected row and specified column. The column name can either be the original column name, or the displayed column name.

Syntax

```
Result = AlarmClient.GetSelectedItem(ColumnName);
```

Parameters

ColumnName
Name of the column.

Return Value

Returns the data in the currently selected row and specified column as a string value.

Example

```
Data2 = AlarmClient1.GetSelectedItem ("State");
LogMessage("The current state of the selected alarm record is " + Data2);
```

Remarks

To get alarm record data from a given column name and row index, use the **GetItem** method.

Hide.All() Method

The Hide.All method hides all current alarms in the Alarm Control, including future alarms.

Syntax

```
AlarmClient.Hide.All();
```

Hide.Group() Method

The Hide.Group method hides all alarms for a given alarm source and group.

The alarm source and group names are case-insensitive.

Syntax

```
AlarmClient.Hide.Group(AlarmSource, Group);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

Example

```
AlarmClient1.Hide.Group("\\machine1\galaxy", "Area_001");
LogMessage("All alarms in Area_001 hidden.");
```

Hide.Priority() Method

The Hide.Priority method hides all alarms for a given alarm source, group, and priority range.

The alarm source and group names are case-insensitive.

Syntax

```
AlarmClient.Hide.Priority(AlarmSource, Group, FromPriority, ToPriority);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

FromPriority
Starting priority of alarms. For example, 100.

ToPriority
End priority of alarms. For example, 900.

Example

```
GrpName = "ValveGroup";
AlarmClient1.Hide.Priority("\intouch", GrpName, 250, 500);
LogMessage("All local InTouch alarms in the ValveGroup alarm group with priorities from 250 to
500 are now hidden.");
```

Hide.Selected() Method

The Hide.Selected method hides all selected alarms.

Syntax

```
AlarmClient.Hide.Selected();
```

Hide.SelectedGroup() Method

The Hide.SelectedGroup method hides all alarms that have the same alarm sources and groups as one or more selected alarms.

Syntax

```
AlarmClient.Hide.SelectedGroup();
```

Hide.SelectedPriority() Method

The Hide.SelectedPriority method hides all alarms that have the same alarm sources, groups, and within the priority ranges as one or more selected alarms.

Syntax

```
AlarmClient.Hide.SelectedPriority();
```

Hide.SelectedTag() Method

The Hide.SelectedTag method hides all alarms that have the same alarm sources, groups, tag names, and within the priority ranges as one or more selected alarms.

Syntax

```
AlarmClient.Hide.SelectedTag();
```

Remarks

None

Hide.Tag() Method

The Hide.Tag method hides all alarms for a given alarm source, group, tag name, and priority range.

The alarm source, group name, and tag names are case-insensitive.

Syntax

```
AlarmClient.Hide.Tag(AlarmSource, Group, Tag, FromPriority, ToPriority);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

Tag
The name of the alarm tag. For example, ValveTag1.

FromPriority
Starting priority of alarms. For example, 100.

ToPriority
End priority of alarms. For example, 900.

Example

```
AlarmClient1.Hide.Tag("\\machine25\galaxy", "Vessel_25B", "Valve17", 1, 99);
LogMessage("All alarm client records of the attribute Valve17 in the group (area) Vessel_25B
of the galaxy on machine25 with priorities from 1 to 99 are now hidden.");
```

Hide.Visible() Method

The Hide.Visible method hides all alarms currently shown in the Alarm Control.

Syntax

```
AlarmClient.Hide.Visible();
```

LoadQueryFilterFile

Load from an xml file with query and filter favorites entries with different override options. Return false for any error.

Syntax

```
AlarmClient.LoadQueryFilterFile(FilePath, OverrideOption);
```

Parameters

FilePath

Name of the path to the query filter favorites file to import.

OverrideOption

- **Append:** Add to the query and filter favorites. If a duplicate entry is already present, it will not append.
- **Overwrite:** Delete all current query and filter favorite entries and add the new entries from the file.
- **Replace:** Append and replace any duplicated entries with the contents from the file.

Example

```
AlarmClient. LoadQueryFilterFile("c:\users\public\file1.xml","Append")
```

MoveWindow() Method

The MoveWindow method scrolls the alarm records in the control in a given direction.

Syntax

```
AlarmClient.MoveWindow(ScrollDir, Repeat);
```

Parameters

ScrollDir

String indicating the direction to scroll. This parameter is case-insensitive. See the following table.

ScrollDir	Description
LineDn	Line down. The Repeat parameter controls the number of lines to be scrolled.
LineUp	Line up. The Repeat parameter controls the number of lines to be scrolled.
PageDn	Page down. The Repeat parameter controls the number of pages to be scrolled.
PageUp	Page up. The Repeat parameter controls the number of pages to be scrolled.

ScrollDir	Description
Top	To the top of the control
Bottom	To the bottom of the control.
PageRt	Page to the right. The Repeat parameter controls the number of pages to be scrolled.
PageLf	Page to the left. The Repeat parameter controls the number of pages to be scrolled.
Right	Scrolls right. The Repeat parameter controls the number of columns to be scrolled.
Left	Scrolls left. The Repeat parameter controls the number of columns to be scrolled.
Home	Scrolls to the top row and left most column of the control.

Repeat
Number of times to repeat the scroll action.

Example

```
AlarmClient1.MoveWindow("Bottom", 0);
```

Requery() Method

The Requery method refreshes the alarm records in the Alarm Control.

For current alarms and recent alarms and events, the control requeries the Alarm Manager. For historical alarms or events, the control retrieves alarm records from the Alarm Database.

Syntax

```
AlarmClient.Requery();
```

Reset() Method

The Reset method resets column widths and the column order to their last known design-time settings. The Reset method also resets the current query filter to the default query.

Syntax

```
AlarmClient.Reset();
```

ResetSortCriteria() Method

Reset the sorting criteria back to the design time settings and apply the sorting criteria.

Syntax

```
AlarmClient.ResetSortCriteria();
```

RunQuery() Method

Execute the query or filter available on the Alarm Client Control by name. If the ApplyAsFilter option is true, then execute the query as a filter only. Note the following behaviors:

- If ApplyAsFilter is true, the parameter QueryName needs to be a valid Filter.
- If ApplyAsFilter is false, the parameter QueryName needs to be a valid Query.
- In all other scenarios, the RunQuery() will not execute.

Syntax

```
AlarmClient.RunQuery(QueryName, ApplyAsFilter);
```

Parameters

QueryName

The name of the query or filter available on the Alarm Client Control.

ApplyAsFilter

Specify **True** to execute a query as a filter using the filter criteria and retain the existing alarm subscription.

Example

```
AlarmClient.RunQuery("High Alarms", true);
```

RunQueryFromFile() Method

Execute the query or filter by name defined in a file. This does not impact the current list of queries and filters. If ApplyAsFilter option is true, then execute the query as filter only. Note the following behaviors:

- If ApplyAsFilter is true, the parameter QueryName needs to be a valid Filter.
- If ApplyAsFilter is false, the parameter QueryName needs to be a valid Query.
- In all other scenarios, the RunQuery() will not execute.

Syntax

```
AlarmClient.RunQueryFromFile(FilePath, QueryName, ApplyAsFilter);
```

Parameters

FilePath

The file path to the query filter favorites file to execute.

QueryName

The name of the query or filter defined in the user provided file.

ApplyAsFilter

Specify **True** to execute a query as a filter using the filter criteria and retain the existing alarm subscription.

Example

```
AlarmClient.RunQueryFromFile("C:\UserQueryFilter.xml", "User High Alarms", true);
```

SelectFilters() Method

The SelectFilters() script function will apply filters to the alarm records basing on the list of filter names in the parameter FilterNames, where each filter name is separate by comma. If FilterNames is empty, no filter will be applied to the alarm records. Invalid filter name will be ignored.

Syntax

```
AlarmClient.SelectFilters(FilterNames);
```

Parameters

FilterNames
The name of the filters which are stored in the filter list. It can be a string constant or a string type reference.

Example

```
AlarmClient1.SelectFilters("F1, F3, F5");
```

AlarmClient1.SelectFilters(" ");

Select.All() Method

The Select.All method selects all alarms in the Alarm Control.

Syntax

```
AlarmClient.Select.All();
```

Select.Group() Method

The Select.Group method selects all alarms for a given provider and group.

Syntax

```
AlarmClient.Select.Group(AlarmSource, Group);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

Example

```
AlarmClient1.Select.Group("\\machine1\galaxy", "Area_001");
LogMessage("All galaxy alarms of group Area_001 from machine1 are now selected.");
```

Select.Item() Method

The Select.Item method selects an alarm record at a given zero-based row number.

Syntax

```
AlarmClient.Select.Item(RowNumber);
```

Parameters

RowNumber
An integer row number for the alarm record to select. The first row in the control is 0.

Example

```
AlarmClient1.Select.Item(5);
LogMessage("The alarm record in the 6th row (index 5) is now selected.");
```

Select.Priority() Method

The Select.Priority method selects all alarms for a given alarm source, group, and priority range.

Syntax

```
AlarmClient.Select.Priority(AlarmSource, Group, FromPriority, ToPriority);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

FromPriority
Starting priority of alarms. For example, 100.

ToPriority
End priority of alarms. For example, 900.

Example

```
GrpName = "ValveGroup";
AlarmClient1.Select.Priority("\intouch", GrpName, 250, 500);
LogMessage("All local InTouch alarms in the ValveGroup alarm group with priorities from 250 to
500 are now selected.");
```

Select.Tag() Method

The Select.Tag method selects all alarms for a given alarm source, group, tag name, and priority range.

Syntax

```
AlarmClient.Select.Tag(AlarmSource, Group, Tag, FromPriority, ToPriority);
```

Parameters

AlarmSource
The name of the provider and optionally node providing alarms including backslash. For example:

```
\\node1\galaxy
\intouch
```

Group
The name of the alarm group. For example, $system.

Tag
The name of the alarm tag. For example, ValveTag1.

FromPriority
Starting priority of alarms. For example, 100.

ToPriority
End priority of alarms. For example, 900.

Example

```
AlarmClient1.Select.Tag("\\machine25\galaxy", "Vessel_25B", "Valve17", 1, 99);
LogMessage("All alarm client records of the attribute Valve17 in the group (area) Vessel_25B
of the galaxy on machine25 with priorities from 1 to 99 are now selected.");
```

SetSort() Method

The SetSort method sets the level of sorting according to the defined sort columns and sort orders.

Syntax

```
AlarmClient.SetSort(Level);
```

Parameters

Level
The level of sorting:

Value	Description
1	Only use the first sort column.
2	Use first and second sort columns.
3	Use first, second, and third sort columns.
4	Use first, second, third, and fourth sort columns.

Example

```
AlarmClient1.SetSort(2);
```

Remarks

Use the **Show.Sort** method to open the **Sort** dialog box instead.

SetSortCriteria() Method

Set the sorting criteria by supplying a string of which columns to sort and their order. Then apply the sort criteria. Return false if any error.

Syntax

```
AlarmClient.SetSortCriteria(SortCriteriaString);
```

Parameters

SortCriteriaString

The string containing the sorting criteria to be executed.

```
The syntax of the sort criteria string is: [CriteriaName]:[1|-1];
```

where:

CriteriaName is the name of the sorting criteria

Colon is separator for sort order integer

Use 1 for Ascending order

Use -1 for Descending order

Semicolon is separator for the next sorting criteria

If ordering integer is not supplied, then default to ascending order

Example

```
Example1: Sort by time ascending order and then by Priority ascending order
AlarmClient.SetSortCriteria("TimeLCT:1; Priority:1");

Example2: Sort by time ascending order using default value and then by Priority descending order
AlarmClient.SetSortCriteria("TimeLCT; Priority:-1");
```

```
Example3: Sort by ascending order in sequence of InAlarm, AckState, Priority, and Time.
AlarmClient.SetSortCriteria("InAlarm;AckState;Priority;TimeLCT");
```

Shelve.All() Method

The Shelve.All() method shelves all active alarms shown in the Alarm Control.

Syntax

```
AlarmClient.Shelve.All(Duration=Duration;Reason="Reason");
```

Parameters

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

```
Duration=0.5
```

Reason
Explanation up to 200 characters for shelving all active alarms shown in the Alarm Control.
An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient1.Shelve.All("Duration=0.1;Reason=’Shelve all alarms’;");
```

Remarks

For more information about shelving alarms, see *Shelving Alarms* on page 63.

Shelve.Group() Method

The Shelve.Group() method shelves all alarms belonging to a specified provider and alarm group.

Syntax

```
AlarmClient.Shelve.Group("ProviderName", "GroupName",Duration=Duration;Reason="Reason");
```

Parameters

ProviderName
Node and provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

```
Duration=0.5
```

Reason
Explanation up to 200 characters for shelving alarms by groups shown in the Alarm Control.
An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Examples

```
AlarmClient1.Shelve.Group("\\TankServer1\Galaxy","Area_001", Duration=0.1;Reason=" + """" +
"Shelved"+ """" + ";");
AlarmClient1.Shelve.Group("\Galaxy","Area_001",Duration=0.1; Reason=" + """" + "Shelved"+ """"
+ ";");
```

Remarks

For more information about specifying provider and group names, see *Alarm Queries* on page 14.

Shelve.Priority() Method

The Shelve.Priority() method shelves all active alarms within a specified alarm priority range that belong to the same specified provider and alarm group.

Syntax

```
AlarmClient.Shelve.Priority("ProviderName","GroupName",
FromPriority,ToPriority,Duration=Duration;Reason="Reason");
```

Parameters

ProviderName
Node and provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

FromPriority
Starting point of the alarm priority range (1-999). The `FromPriority` value must be less than the `ToPriority` value.

ToPriority
Three-digit end point of the alarm priority range (2-999). The `ToPriority` value must be greater than the `FromPriority` value.

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

```
Duration=0.5
```

Reason
Explanation up to 200 characters for shelving alarms by priority range that are shown in the Alarm Control. An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient1.Shelve.Priority("\Galaxy","Area_001",100,600, Duration=0.1;Reason=" + """" +
"Shelved"+ """" + ";");
```

Remarks

For more information about setting an alarm priority range, see *Setting Priority Ranges for Alarm Records* on page 30.

Shelve.Selected() Method

The Shelve.Selected() method shelves one or more active alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Shelve.Selected(Duration=Duration;Reason="Reason");
```

Parameters

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

```
Duration=0.5
```

Reason
Explanation up to 200 characters for shelving active alarms selected by the user from the Alarm Control. An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient.Shelve.Selected(Duration=1.0;Reason="Nuisance alarms");
```

Remarks

For more information about selecting alarms to shelve, see *Shelving Alarms* on page 63.

Shelve.SelectedGroup() Method

The Shelve.Selected.Group method shelves all active alarms that belong to the same alarm groups as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Shelve.SelectedGroup(Duration=Duration;
Reason="Reason");
```

Parameters

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

```
Duration=0.5
```

Reason
Explanation up to 200 characters for shelving alarms in the same group as the alarms selected by the user from the Alarm Control.
An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient.Shelve.SelectedGroup(Duration=1.0;Reason="Low severity nuisance alarms");
```

Remarks

For more information about selecting alarms to shelve, see *Shelving Alarms* on page 63.

Shelve.SelectedPriority() Method

The Shelve.SelectedPriority method shelves all active alarms that belong to the same alarm priority as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Shelve.SelectedPriority(Duration=Duration;
Reason="Reason");
```

Parameters

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

```
Duration=0.5
```

Reason
Explanation up to 200 characters for shelving alarms in the same priority range as the alarms selected by the user from the Alarm Control.
An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient.Shelve.SelectedPriority(Duration=1.0;Reason="Low priority nuisance alarms");
```

Remarks

For more information about selecting alarms to shelve, see *Shelving Alarms* on page 63.

Shelve.SelectedSeverity() Method

The Shelve.Selected.Severity method shelves all active alarms for a given alarm group, tag name, and severity as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Shelve.SelectedSeverity(Duration=Duration;
Reason="Reason");
```

Parameters

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

Duration=0.5

Reason
Explanation up to 200 characters for shelving alarms at the same severity as the alarms selected by the user from the Alarm Control.
An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient.Shelve.SelectedSeverity(Duration=1.0;Reason="Low severity nuisance alarms");
```

Remarks

For more information about selecting alarms to shelve, see *Shelving Alarms* on page 63.

Shelve.SelectedTag() Method

The Shelve.SelectedTag method shelves all active alarms all active alarms for a given provider, alarm group, and tag name as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Shelve.SelectedTag(Duration=Duration;
Reason="Reason");
```

Parameters

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

Duration=0.5

Reason
Explanation up to 200 characters for shelving alarms from the same tags as the alarms selected by the user from the Alarm Control.
An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient.Shelve.SelectedTag(Duration=1.0;Reason="Nuisance alarms");
```

Remarks

For more information about selecting alarms to shelve, see *Shelving Alarms* on page 63.

Shelve.Severity() Method

The Shelve.Severity() method shelves all active alarms of a specified alarm severity that belong to the same specified provider and alarm group.

Syntax

```
AlarmClient.Shelve.Severity("ProviderName","GroupName",
Severity,Duration=Duration;Reason="Reason");
```

Parameters

ProviderName
Node and provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

Severity
Single-digit (1-4) alarm severity.

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

Duration=0.5

Reason
Explanation up to 200 characters for shelving alarms at a specified severity from the Alarm Control. An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient1.Shelve.Severity("\Galaxy","Area_001",3,
Duration=0.1;Reason=" + """" + "Shelved"+ """" + ";");
```

Remarks

For more information about selecting alarms to shelve, see *Shelving Alarms* on page 63.

Shelve.Tag() Method

The Shelve.tag() method shelves all active alarms that originate from the same tag and belong to the same provider and alarm group within the same alarm priority range.

Syntax

```
AlarmClient.Shelve.Tag("ProviderName","GroupName","Tag"
FromPriority,ToPriority,Duration=Duration;Reason="Reason");
```

Parameters

ProviderName
Node and provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

Tag
Name of the tag whose active alarms have been selected to be shelved.

FromPriority
Starting point of the alarm priority range (1-998). The `FromPriority` value must be less than the `ToPriority` value.

ToPriority
End point of the alarm priority range (2-999). The `ToPriority` value must be greater than the `FromPriority` value.

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

Duration=0.5

Reason
Explanation up to 200 characters for shelving alarms from the same tags.

An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Example

```
AlarmClient1.Shelve.Tag("\Galaxy","Area_002",
"UserDefined_002.Analog_003",1,999,"Duration=1.5;Reason=" + """" + "Shelved"+ """" + ";");
```

Remarks

For more information about selecting alarms to shelve, see *Shelving Alarms* on page 63.

Shelve.Visible() Method

The Shelve.Visible() method shelves only those alarms that are currently visible from the Alarm Control.

Syntax

```
AlarmClient.Shelve.Visible("Duration=<Duration
Hrs>;Reason="+"<Reason>"+"Shelved"+"<Description>"+";");
```

Parameters

Duration
Length of time in hours that selected alarms are shelved. Duration can be specified as an integer or a floating point number greater than 0.

Example:

Duration=0.5

Reason
Explanation up to 200 characters for shelving all alarms that are visible from the Alarm Control.
An explanation can be delimited by double or single quotation marks. Quotation marks and back slashes (\) can appear within the text of an explanation. If an explanation is delimited by double quotation marks, a single quotation mark is simply a character in the string. If an explanation is delimited by single quotation marks, a double quotation mark is simply a character in the string.

Examples

```
AlarmClient1.Shelve.Visible("Duration=1.0;
Reason="+""""+"Shelved"+""""+";");
```

Remarks

For more information about selecting alarms to shelve, see *"Shelving Alarms" on page 74* on page 63.

Show.Context() Method

The Show.Context method opens the shortcut menu at run time. This method ignores the ShowContextMenu property setting and always shows the context menu.

Syntax

```
AlarmClient.Show.Context();
```

Show.Favorite() Method

The Show.Favorite method opens the **Query Filters** dialog box.

Syntax

```
AlarmClient.Show.Favorite();
```

Show.Hidden() Method

The Show.Hidden method opens the **Hidden Alarms** dialog box.

Syntax

```
AlarmClient.Show.Hidden();
```

Show.Sort() Method

The Show.Sort method opens the **Sort** dialog box.

Syntax

```
AlarmClient.Show.Sort();
```

Show.Statistics() Method

The Show.Statistics method opens the **Alarm Statistics** dialog box.

Syntax

```
AlarmClient.Show.Statistics();
```

TimeSelector.GetStartAndEndTimes() Method

The TimeSelector.GetStartAndEndTimes method gets the start and end times for the query.

Syntax

```
AlarmClient.GetStartAndEndTimes(StartTime, EndTime);
```

Parameters

StartTime
String attribute, custom property, or element property to retrieve the start time.

EndTime
String attribute, custom property, or element property to retrieve the end time.

Example

```
dim SDate as string;
dim EDate as string;
AlarmClient1.TimeSelector.GetStartAndEndTimes(SDate, EDate);
StartDate = SDate;
EndDate = EDate;
```

TimeSelector.RefreshTimes() Method

The TimeSelector.RefreshTimes method sets the time period for the query by updating the end time to current time and recalculates the start time based on the new end time and duration.

If you set the Boolean parameter to TRUE, the OnChange event is triggered if the time is updated.

Only use this method, if the **Update to Current Time** option is cleared or the **UpdateToCurrentTime** property is FALSE.

Note: This method does not work if the **UpdatetoCurrentTime** property value is TRUE.

Syntax

```
AlarmClient.TimeSelector.RefreshTimes(TriggerEvent);
```

Example

```
dtag = 1;
AlarmClient.TimeSelector.RefreshTimes(dtag);
```

TimeSelector.SetStartAndEndTimes() Method

The TimeSelector.SetStartAndEndTimes method sets the start and end times for a query.

To customize start time, duration, and end time you must set the **UpdateToCurrentTime** property to FALSE and specify one of the following parameter combinations:

- Start time and end time. Set the Duration parameter to 0.
- Start time and duration. Set the EndTime parameter to "".
- End time and duration. Set the StartTime parameter to "".
- Start time, duration, and end time. The Alarm Control shows an error message if start time plus duration is not equal to end time.

Syntax

```
AlarmClient.SetStartAndEndTimes(StartTime, EndTime, Duration);
```

Parameters

StartTime
String value or expression indicating the start time.

EndTime
String value or expression indicating the end time.

Duration
Duration enum. For more information on possible values, see *TimeSelector.TimeDuration Property* page 122.

Example

```
AlarmClient1.TimeSelector.SetStartAndEndTimes("08/31/2008 15:33:43","09/01/2009
15:33:43",0);
```

Toggle.All() Method

The Toggle.All method reverses the selection of all alarm records. Selected alarms are cleared, and unselected alarms are selected.

Syntax

```
AlarmClient.Toggle.All();
```

Toggle.Item() Method

The Toggle.Item method reverses the selection of a given alarm record. If the given alarm record is selected, the selection is cleared; otherwise, it is selected.

Syntax

```
AlarmClient.Toggle.Item(RowNumber);
```

Parameters

RowNumber
An integer row number for the alarm record to reverse the selection. The first row in the control is 0.

Example

```
AlarmClient1.Toggle.Item(5);
LogMessage("The selection of the alarm record in the 6th row (index 5) is now reversed.");
```

UnhideAll() Method

The UnhideAll method unhides all hidden alarms.

Syntax

```
AlarmClient.UnhideAll();
```

UnSelectAll() Method

The UnSelectAll method unselects all alarm records.

Syntax

```
AlarmClient.UnSelectAll();
```

Unshelve.All() Method

The Unshelve.All() method unshelves all alarms that are currently shelved.

Syntax

```
AlarmClient.Unshelve.All(Duration=0;Reason="Reason");
```

Parameters

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving all alarms.

An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient1.Unshelve.All(Duration=0;Reason="");
```

Remarks

For more information about unshelving alarms, see *Unshelving Alarms* on page 65.

Unshelve.Group() Method

The Unshelve.Group() method unshelves all currently shelved alarms belonging to a specified provider and alarm group.

Syntax

```
AlarmClient.Unshelve.Group("ProviderName","GroupName",
Duration=0;Reason="Reason");
```

Parameters

ProviderName
Node and or provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving all alarms belonging to a specified group and provider. An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Examples

```
AlarmClient1.Unshelve.Group("\\TankServer1\Galaxy","Area_001",
Reason=" + """" + "Shelved"+ """" + ";");
AlarmClient1.Unshelve.Group("\Galaxy","Area_001",Reason=" + """" + "Shelved"+ """" + ";");
```

Remarks

For more information about specifying provider and group names, see *Alarm Queries* on page 14.

Unshelve.Priority() Method

The Unshelve.Priority() method unshelves currently shelved alarms within a specified alarm priority range that belong to the same specified provider and alarm group.

Syntax

```
AlarmClient.Unshelve.Priority("ProviderName","GroupName",FromPriority,ToPriority,"Duration=
<Duration>;Reason="+"<Reason>"+"UnShelved"+"<Description>"+";");
```

Parameters

ProviderName
Node and provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

FromPriority
Three-digit starting point of the alarm priority range. The `FromPriority` value must be less than the `ToPriority` value.

ToPriority
Three-digit end point of the alarm priority range. The `ToPriority` value must be greater than the `FromPriority` value.

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving all alarms belonging to a specified alarm priority range.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient1.Unshelve.Priority("\Galaxy","Area_001",100,600,"Duration=0;Reason="+""""+"UnSh
elved"+""""+";");
```

Remarks

For more information about unshelving alarms, see *"Unshelving Alarms"* on page 65.

Unshelve.Selected() Method

The Unshelve.Selected() method unshelves currently shelved alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Unshelve.Selected(Duration=0;Reason="Reason");
```

Parameters

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving alarms selected by the user.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient.Unshelve.Selected(Duration=0;Reason="Maintenance finished");
```

Remarks

For more information about unshelving alarms, see *Unshelving Alarms* on page 65.

Unshelve.SelectedGroup() Method

The Unshelve.SelectedGroup() method unshelves all alarms that belong to the same provider and alarm groups as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Unshelve.SelectedGroup(Duration=0;Reason="Reason");
```

Parameters

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving alarms that belong to the same alarm groups as the alarms selected by the user.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient.Unshelve.SelectedGroup(Duration=0;Reason="");
```

Remarks

For more information about unshelving alarms, see *Unshelving Alarms* on page 65.

Unshelve.SelectedPriority() Method

The Unshelve.SelectedPriority method unshelves all alarms within the same alarm priority range as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Unshelve.SelectedPriority(Duration=0;Reason="Reason");
```

Parameters

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving the alarms within the same alarm priority range as the alarms selected by the user.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient.Unshelve.SelectedPriority(Duration=0;
Reason="Maintenance finished");
```

Remarks

For more information about unshelving alarms, see *Unshelving Alarms* on page 65.

Unshelve.SelectedSeverity() Method

The Unshelve.SelectedSeverity method unshelves all shelved alarms within the same alarm severities as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Unshelve.SelectedSeverity(Duration=0;Reason="Reason");
```

Parameters

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving the shelved alarms that belong to the same alarm severities as the alarms selected by the user.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient.Unshelve.SelectedSeverity(Duration=0;Reason="Low severity alarms");
```

Remarks

For more information about unshelving alarms, see *Unshelving Alarms* on page 65.

Unshelve.SelectedTag() Method

The Unshelve.SelectedTag method unshelves all shelved alarms that originate from the same tags as the alarms selected by the user from the Alarm Control.

Syntax

```
AlarmClient.Unshelve.SelectedTag(Duration=0;Reason="Reason");
```

Parameters

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving the active alarms from the same tags as the alarms selected by the user.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient.Unshelve.SelectedTag(Duration=0;Reason="");
```

Remarks

For more information about unshelving alarms, see *Unshelving Alarms* on page 65.

Unshelve.Severity() Method

The Unshelve.Severity() method unshelves all shelved alarms of a specified alarm severity that belong to the same specified provider and alarm group.

Syntax

```
AlarmClient.Unshelve.Severity("ProviderName","GroupName",Severity,"Duration=<Duration>;Reas
on="+"<Reason>"+"UnShelved"+"<Description>"+";");
```

Parameters

ProviderName
Node and provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

Severity
Single-digit (1-4) alarm severity.

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving the active alarms of the specified severity.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient1.Unshelve.Severity("\Galaxy","Area_001",3,"Duration=0;Reason="+""""+"UnShelved"
+""""+";");
```

Remarks

For more information about unshelving alarms, see *"Unshelving Alarms"* on page 65.

Unshelve.Tag() Method

The Unshelve.Tag() method unshelves all shelved alarms that have the same tag names from the same provider and alarm groups and are within the same priority range.

Syntax

```
AlarmClient.UnShelve.Tag("ProviderName","GroupName","Tag",FromPriority,ToPriority,"Duration
=<Duration>;Reason="+"<Reason>"+"UnShelved"+"<Description>"+";");
```

Parameters

ProviderName
Node and provider name combination that specifies the origin of alarm monitoring.

GroupName
Alarm group or area name whose alarms are monitored by the Alarm Control.

Tag
Name of the tag whose active alarms have been selected to be unshelved.

FromPriority
Three-digit starting point of the alarm priority range. The `FromPriority` value must be less than the `ToPriority` value.

ToPriority
Three-digit end point of the alarm priority range. The `ToPriority` value must be greater than the `FromPriority` value.

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for shelving the active alarms that belong to the same alarm severities as the alarms selected by the user.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as `Reason=""` to indicate a null explanation.

Example

```
AlarmClient1.UnShelve.Tag("\Galaxy","Area_001","User_Defined_001.Attribute004.LoLo",1,999,"
Duration=0;Reason="+""""+"UnShelved"+""""+";");
```

Remarks

For more information about unshelving alarms, see *"Unshelving Alarms"* on page 65.

Unshelve.Visible() Method

Th Unshelve.Visible() method unshelves only those alarms that are currently visible from the Alarm Control.

Syntax

```
AlarmClient.Unshelve.Visible("Duration=<Duration>;Reason="+"<Reason>"+"UnShelved"+"<Descrip
tion>"+";");
```

Parameters

Duration
Duration must be set to 0 to unshelve alarms.

Reason
Explanation up to 200 characters for unshelving the alarms currently shown from the Alarm Control.
An explanation is optional to unshelve alarms and the Reason parameter can be specified as Reason="" to indicate a null explanation.

Example

```
AlarmClient1.Unshelve.Visible("Duration=0;Reason="+""""+"UnShelved"+""""+";");
```

Remarks

For more information about unshelving alarms, see *"Unshelving Alarms"* on page 65.

Configuring Events

You can execute an action script when the Alarm Control triggers an event. Examples of basic events are:

- Click: The user clicks the Alarm Control

- DoubleClick: The user double-clicks the Alarm Control
- Startup: The Alarm Control opens at run time
- Shutdown: The Alarm Control closes at run time

The Click, Double Click, Start up, and Shutdown events are standard for all .NET client controls. For more information, see the Creating and Managing Industrial Graphics Users Guide.

The Alarm Control has one event of its own that is triggered when a new alarm occurs, the NewAlarm event.

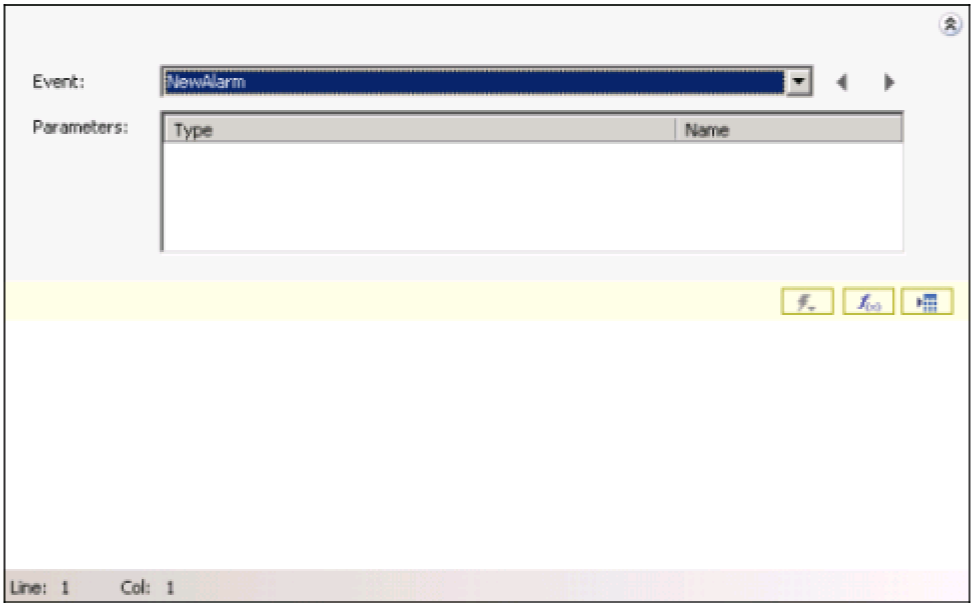
Configuring the NewAlarm Event

You can configure the NewAlarm event to execute an Industrial graphic script whenever a new alarm occurs.

You can control the trigger behavior with the NewAlarmEventMode property. For more information, see *NewAlarmEventMode Property* on page 111.

To configure the NewAlarm event

1. Double-click the Alarm Control. The **Edit Animations** dialog box appears.
2. Click **Event**. The **Event** page appears.
3. In the **Event** list, click **NewAlarm**.



Event: NewAlarm

4. In the script area, type the script you want to execute when a new alarm occurs, for example:

```
AlertIcon.Visible = true;
```

5. You must also set the NewAlarmEventMode property to 1 or 2 to enable the NewAlarm event trigger. Do the following:
   a. On the **Special** menu, click **Scripts**. The **Edit Scripts** dialog box appears.
   b. Make sure **Trigger type** is set to **On Show**.
   c. In the script area, type the following:

```
AlarmClient1.NewAlarmEventMode = 1;
```

d. If you want the script to be executed every time a new alarm occurs, set the NewAlarmEventMode property to 2 instead.

e. Click **OK**.

.NET Colors

The following table is an overview of the .NET color names with hexadecimal code.

Color with Hex Code	Color with Hex Code	Color with Hex Code
AliceBlue #F0F8FF	AntiqueWhite #FAEBD7	Aqua #00FFFF
Aquamarine #7FFFD4	Azure #F0FFFF	Beige #F5F5DC
Bisque #FFE4C4	Black #000000	BlanchedAlmond #FFEBCD
Blue #0000FF	BlueViolet #8A2BE2	Brown #A52A2A
BurlyWood #DEB887	CadetBlue #5F9EA0	Chartreuse #7FFF00
Chocolate #D2691E	Coral #FF7F50	CornflowerBlue #6495ED
Cornsilk #FFF8DC	Crimson #DC143C	Cyan #00FFFF
DarkBlue #00008B	DarkCyan #008B8B	DarkGoldenrod #B8860B
DarkGray #A9A9A9	DarkGreen #006400	DarkKhaki #BDB76B
DarkMagenta #8B008B	DarkOliveGreen #556B2F	DarkOrange #FF8C00
DarkOrchid #9932CC	DarkRed #8B0000	DarkSalmon #E9967A
DarkSeaGreen #8FBC8B	DarkSlateBlue #483D8B	DarkSlateGray #2F4F4F
DarkTurquoise #00CED1	DarkViolet #9400D3	DeepPink #FF1493
DeepSkyBlue #00BFFF	DimGray #696969	DodgerBlue #1E90FF
Firebrick #B22222	FloralWhite #FFFAF0	ForestGreen #228B22
Fuchsia #FF00FF	Gainsboro #DCDCDC	GhostWhite #F8F8FF
Gold #FFD700	Goldenrod #DAA520	Gray #808080
Green #008000	GreenYellow #ADFF2F	Honeydew #F0FFF0
HotPink #FF69B4	IndianRed #CD5C5C	Indigo #4B0082
Ivory #FFFFF0	Khaki #F0E68C	Lavender #E6E6FA
LavenderBlush #FFF0F5	LawnGreen #7CFC00	LemonChiffon #FFFACD

Color with Hex Code	Color with Hex Code	Color with Hex Code
LightBlue #ADD8E6	LightCoral #F08080	LightCyan #E0FFFF
LightGoldenrodYellow #FAFAD2	LightGray #D3D3D3	LightGreen #90EE90
LightPink #FFB6C1	LightSalmon #FFA07A	LightSeaGreen #20B2AA
LightSkyBlue #87CEFA	LightSlateGray #778899	LightSteelBlue #B0C4DE
LightYellow #FFFFE0	Lime #00FF00	LimeGreen #32CD32
Linen #FAF0E6	Magenta #FF00FF	Maroon #800000
MediumAquamarine #66CDAA	MediumBlue #0000CD	MediumOrchid #BA55D3
MediumPurple #9370DB	MediumSeaGreen #3CB371	MediumSlateBlue #7B68EE
MediumSpringGreen #00FA9A	MediumTurquoise #48D1CC	MediumVioletRed #C71585
MidnightBlue #191970	MintCream #F5FFFA	MistyRose #FFE4E1
Moccasin #FFE4B5	NavajoWhite #FFDEAD	Navy #000080
OldLace #FDF5E6	Olive #808000	OliveDrab #6B8E23
Orange #FFA500	OrangeRed #FF4500	Orchid #DA70D6
PaleGoldenrod #EEE8AA	PaleGreen #98FB98	PaleTurquoise #AFEEEE
PaleVioletRed #DB7093	PapayaWhip #FFEFD5	PeachPuff #FFDAB9
Peru #CD853F	Pink #FFC0CB	Plum #DDA0DD
PowderBlue #B0E0E6	Purple #800080	Red #FF0000
RosyBrown #BC8F8F	RoyalBlue #4169E1	SaddleBrown #8B4513
Salmon #FA8072	SandyBrown #F4A460	SeaGreen #2E8B57
SeaShell #FFF5EE	Sienna #A0522D	Silver #C0C0C0
SkyBlue #87CEEB	SlateBlue #6A5ACD	SlateGray #708090
Snow #FFFAFA	SpringGreen #00FF7F	SteelBlue #4682B4
Tan #D2B48C	Teal #008080	Thistle #D8BFD8
Tomato #FF6347	Transparent #FFFFFF	Turquoise #40E0D0

Color with Hex Code	Color with Hex Code	Color with Hex Code
Violet #EE82EE	Wheat #F5DEB3	White #FFFFFF
WhiteSmoke #F5F5F5	Yellow #FFFF00	YellowGreen #9ACD32

Chapter 5

Transferring Alarm Configuration from InTouch

You can transfer the configuration of the InTouch Alarm Viewer control and the InTouch Alarm DB View control to the configuration of the Alarm Client Control.

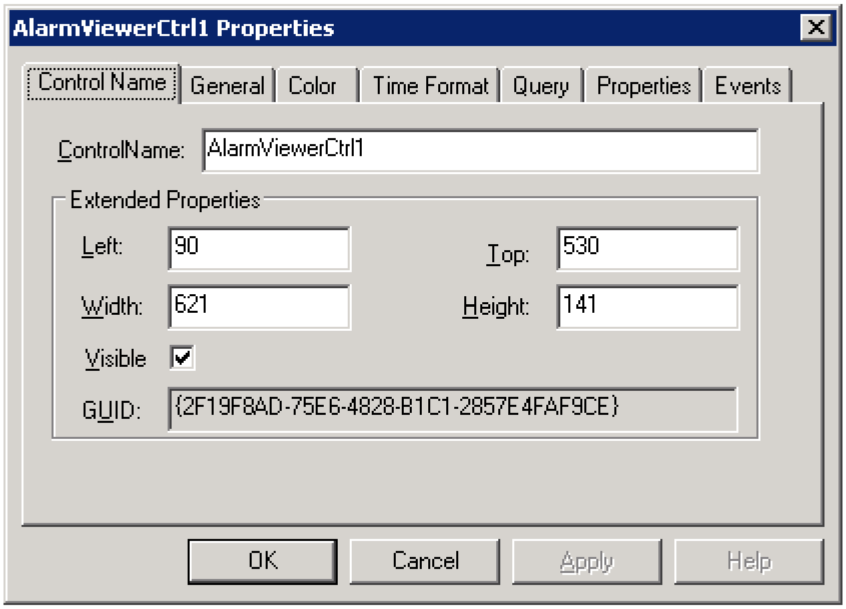
You can also map the InTouch alarm control properties and methods to the properties and methods of the Alarm Client Control.

Transferring the InTouch Alarm Viewer Control Configuration

You can transfer the configuration of the InTouch Alarm Viewer control tabs options to the Alarm Client Control.

Transferring Configuration of the Control Name Tab

You can transfer the configuration of the **Control Name** tab options of the InTouch Alarm Viewer control to the Alarm Client Control.


AlarmViewerCtrl1 Properties

ControlName: AlarmViewerCtrl1

Extended Properties

Left: 90

Top: 530

Width: 621

Height: 141

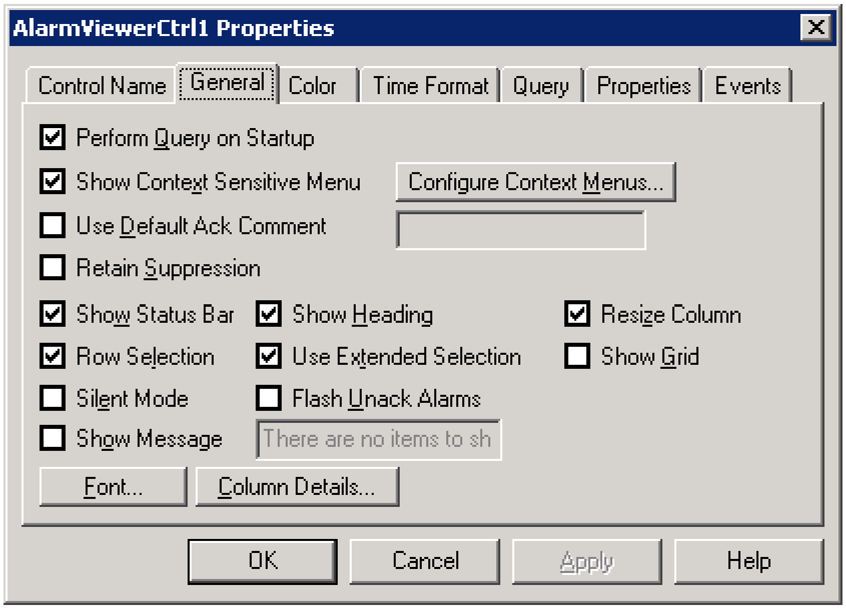
Visible ☑

GUID: {2F19F8AD-75E6-4828-B1C1-2857E4FAF9CE}

InTouch option	Alarm Control option
ControlName	You can rename the Alarm Client Control the same way as any other elements on the canvas. For more information, see the Creating and Managing Industrial Graphics User’s Guide.
Left, Top, Width, and Height	You can directly edit the positioning options in the same way as any other element on the canvas. Edit the following properties in the Properties Editor: **X**, **Y**, **Width**, and **Height**.
Visible	You can directly edit the visibility option in the same way as any other element on the canvas. In the Properties Editor, edit the **Visible** property.
GUID	This option has no meaning in the Alarm Client Control.

Transferring Configuration of the General Tab

You can transfer the configuration of the **General** tab options of the InTouch Alarm Viewer control to the Alarm Client Control.



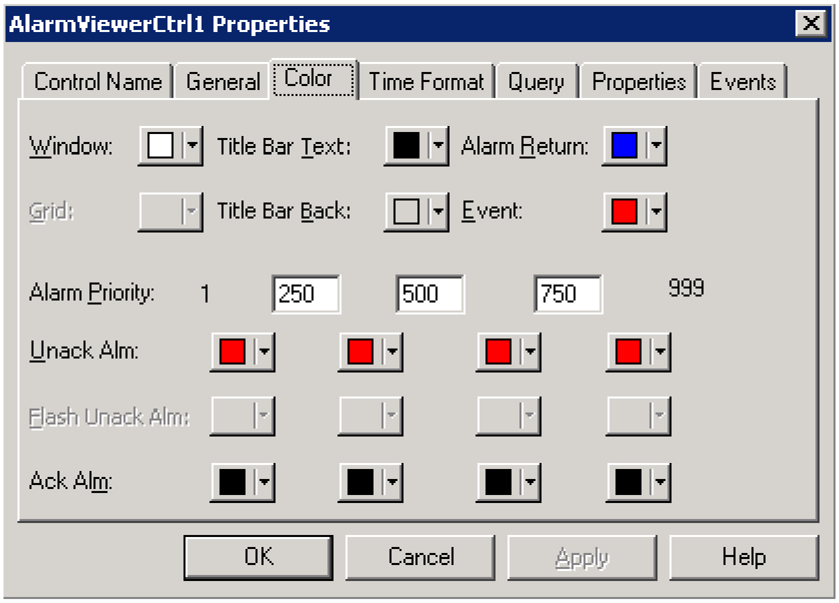
☑ Perform Query on Startup
☑ Show Context Sensitive Menu
☐ Use Default Ack Comment
☐ Retain Suppression
☑ Show Status Bar ☑ Show Heading ☑ Resize Column
☑ Row Selection ☑ Use Extended Selection ☐ Show Grid
☐ Silent Mode ☐ Flash Unack Alarms
☐ Show Message There are no items to sh

InTouch option	Alarm Control option
Perform Query on Startup	In the Alarm Client Control, this option is called **Query on Startup.** You can configure this option on the **Run-Time Behavior** page.
Show Context Sensitive Menu	In the Alarm Client Control, this option is called **Show Context Menu**. You can configure this option on the **Run-Time Behavior** page.

InTouch option	Alarm Control option
Configure Context Menus	In the Alarm Client Control, you can configure the availability of individual shortcut menu options at run-time directly on the **Run-Time Behavior** page.
Use Default Ack Comment	In the Alarm Client Control, you can configure the availability of the **Query Filters** shortcut menu option on the **Run-Time Behavior** page.
Retain Suppression	In the Alarm Client Control, this option is called **Retain Hidden**. You can configure it on the **Run-Time Behavior** page.
Show Status Bar	In the Alarm Client Control, you can configure the **Show Grid** option on the **Run-Time Behavior** page.
Show Heading	In the Alarm Client Control, you can configure the **Show Status Bar** option on the **Run-Time Behavior** page.
Row Selection	In the Alarm Client Control, this option is called **Row Selection**. You can configure it on the **Run-Time Behavior** page.
Use Extended Selection	In the Alarm Client Control, this option is called **Row Selection**. You can configure it on the **Run-Time Behavior** page.
Show Grid	In the Alarm Client Control, you can configure the **Show Grid** option on the **Run-Time Behavior** page.
Retrieve Buttons	In the Alarm Client Control, the retrieve buttons are not available. The underlying grid technology handles the alarm retrieval from the alarm database.
Silent Mode	In the Alarm Client Control, this option is called **Hide Errors and Warnings**. You can configure it on the **Run-Time Behavior** page.
Flash Unack Alarms	In the Alarm Client Control, you can configure the **Flash Unack Alarms** option on the **Colors** page.
Show Message	In the Alarm Client Control, this option is called **Show Custom ‘No Records’ Message**. You can configure it on the **Run-Time Behavior** page.
Font	You can configure this option from the Industrial Graphic Editor page. Select the Alarm Client Control on the canvas and select an appropriate font type, size, and style on the menu bars.
Column Details	In Alarm Client Control, you can configure the column details directly on the **Column Details** page.

Transferring Configuration of the Color Tab

You can transfer the configuration of the **Color** tab options of the InTouch Alarm Viewer control to the Alarm Client Control.



Alarm Priority: 1 250 500 750 999

All the options of the **Color** tab in the InTouch Alarm Viewer control can be set on the **Colors** page of the Alarm Client Control.

The following table shows you some minor differences in wording:

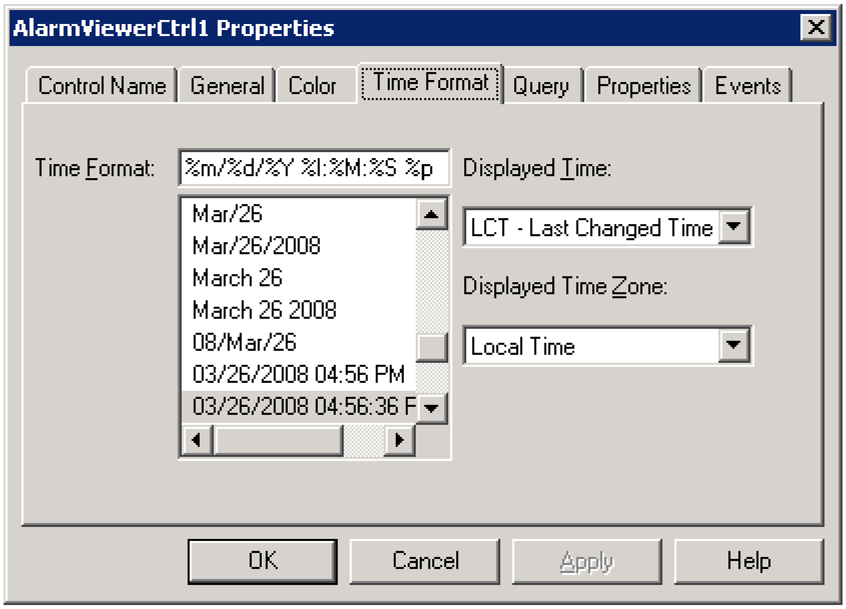
InTouch Alarm View control	Alarm Client Control
Title Bar Text	Heading Text
Title Bar Back	Heading Background
Alarm Return	Alarm RTN

you can also set he background color in addition to the text color for most of the alarm records.

You can set the alarm priority range breakpoints directly in the table in the **From Pri** column.

Transferring Configuration of the Time Format Tab

You can transfer the configuration of the **Time Format** tab options of the InTouch Alarm Viewer control to the Alarm Client Control.



AlarmViewerCtrl1 Properties

Control Name | General | Color | Time Format | Query | Properties | Events

Time Format: %m/%d/%Y %I:%M:%S %p

Mar/26
Mar/26/2008
March 26
March 26 2008
08/Mar/26
03/26/2008 04:56 PM
03/26/2008 04:56:36 F

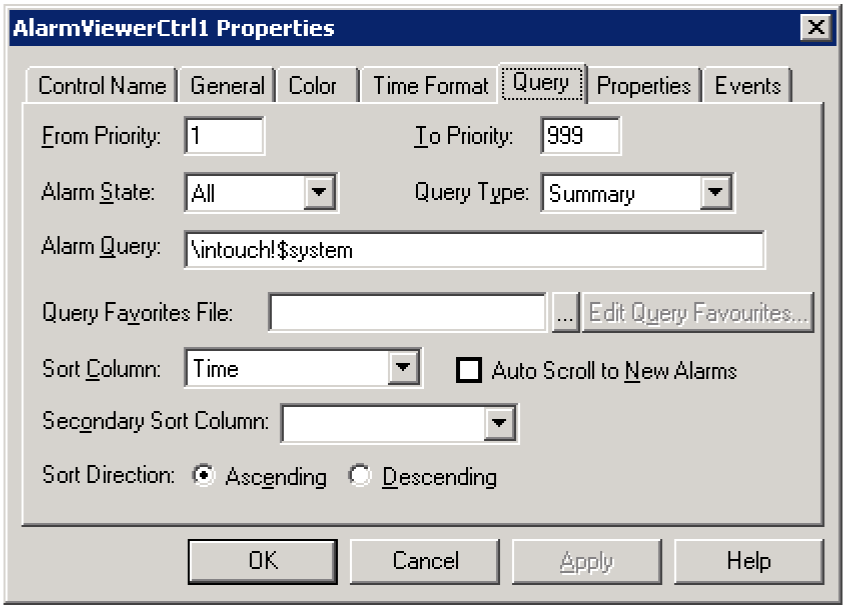
Displayed Time: LCT - Last Changed Time

Displayed Time Zone: Local Time

InTouch option	Alarm Control option
Time Format	In the Alarm Client Control, you can configure the **Time Format** option on the **Time Settings** page.
Displayed Time	This option has no meaning in the Alarm Client Control. All alarm records are shown with the following time stamps in the Alarm Control grid: • **Time (OAT)**: Original Alarm Time • **Time (LCT)**: Last Changed Time • **Time (LCT, OAT)**: Last Changed Time, but Original Alarm Time if the alarm record is unacknowledged
Displayed Time Zone	In the Alarm Client Control, this option is called **Time Zone**. You can configure it on the **Time Settings** page. You need to explicitly configure the time zone for the correct time stamp.

Transferring Configuration of the Query Tab

You can transfer the configuration of the **Query** tab options of the InTouch Alarm Viewer control to the Alarm Client Control.



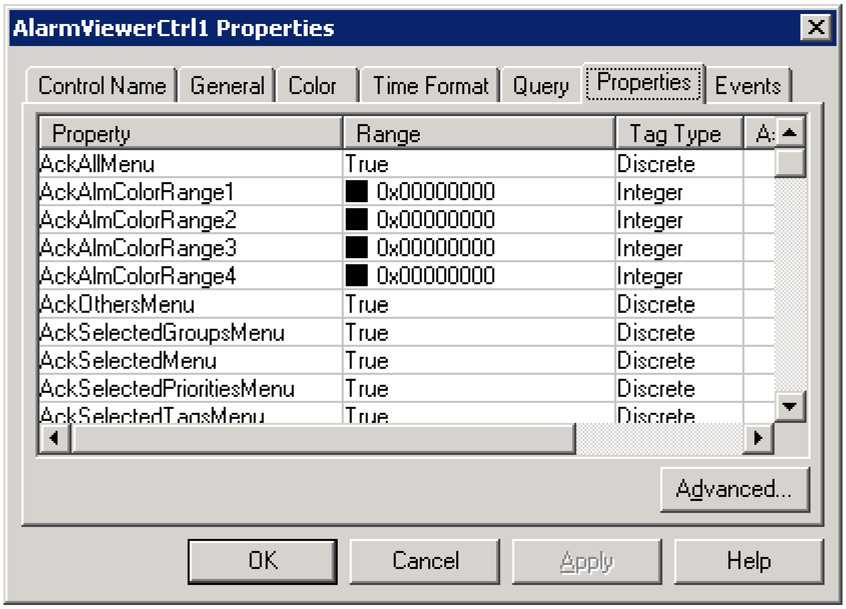
From Priority: 1
To Priority: 999
Alarm State: All
Query Type: Summary
Alarm Query: \intouch!$system
Query Favorites File:
Sort Column: Time
☐ Auto Scroll to New Alarms
Secondary Sort Column:
Sort Direction: ● Ascending ○ Descending

InTouch option	Alarm Client Control option
From Priority, To Priority	In the Alarm Client Control, you can only set the priority limits as part of a query filter on the **Query Filters** page. For more information, see "Filtering Alarms" on page 46.
Alarm State	In the Alarm Client Control, you can only set the alarm state limitation as part of a query filter on the **Query Filters** page. for more information, see "Filtering Alarms" on page 37.
Query Type	In the Alarm Client Control, you can set the **Client Mode** option on the **Alarm Mode** page as follow: • For query type "Summery", set the client mode to **Current Alarms** • For query type "Historical", set the client mode to **Recent Alarms and Events**
Alarm Query	In the Alarm Client Control, you can configure the **Alarm Query** option on the **Alarm Mode** page.
Query Favorites File, Edit Query Favorites	In the Alarm Client Control, all query favorites and filter favorites are managed on one page and are interchangeable between different client modes. To access the Query Filter Favorites, open the **Query Filters** page.

InTouch option	Alarm Client Control option
Sort Column	In the Alarm Client Control, you can configure the sorting of alarm records on the **Column Details** page.
Auto Scroll to New Alarms	In the Alarm Client Control, you can configure the **Auto Scroll to New Alarms** on the **Run-Time Behavior** page.
Secondary Sort Column, Sort Direction	In the Alarm Client Control, you can configure the sorting of alarm records on the **Column Details** page.

Transferring Configuration of the Properties Tab

You can set the properties of the Alarm Client Control in the **Properties Editor** when the Alarm Control is selected on the canvas.



AlarmViewerCtrl1 Properties

Property	Range	Tag Type	A:
AckAllMenu	True	Discrete	
AckAlmColorRange1	■ 0x00000000	Integer	
AckAlmColorRange2	■ 0x00000000	Integer	
AckAlmColorRange3	■ 0x00000000	Integer	
AckAlmColorRange4	■ 0x00000000	Integer	
AckOthersMenu	True	Discrete	
AckSelectedGroupsMenu	True	Discrete	
AckSelectedMenu	True	Discrete	
AckSelectedPrioritiesMenu	True	Discrete	
AckSelectedTagsMenu	True	Discrete	

For more information on the exact mapping between the InTouch Alarm Viewer control properties and Alarm Client Control properties, see *Mapping Properties and Methods* on page 179.

The advanced property filtering feature does not exist in the Alarm Client Control. However, when you browse for properties of the Alarm Client Control from other elements with the **Galaxy Browser**, you can filter the properties. Also, the properties of the Alarm Client Control are logically grouped in the Properties Editor.

Transferring Script Configuration on the Events Tab

You can configure scripts for events of the Alarm Client Control on the **Event** animation page. The events are the same as the events for the InTouch Alarm Viewer Control:

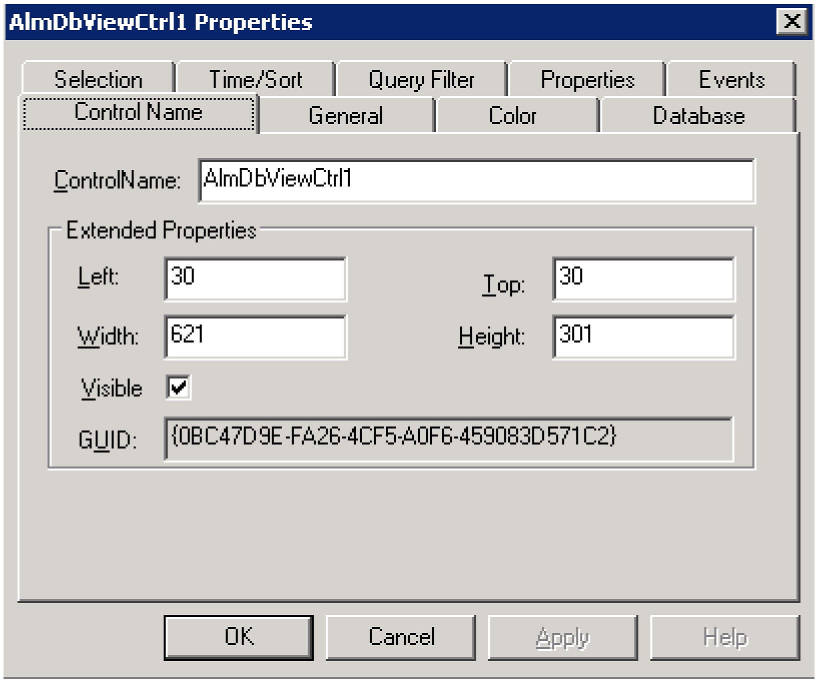
- Click
- DoubleClick
- New Alarm
- Shutdown
- StartUp

Transferring the InTouch Alarm DB View Control Configuration

You can transfer the configuration of the InTouch Alarm DB View control tabs options to the Alarm Client Control.

Transferring Configuration of the Alarm DB View Control Name Tab

You can transfer the configuration of the **Control Name** tab options of the InTouch Alarm DB View control to the Alarm Client Control.



ControlName: AlmDbViewCtrl1

Left: 30

Top: 30

Width: 621

Height: 301

Visible ☑

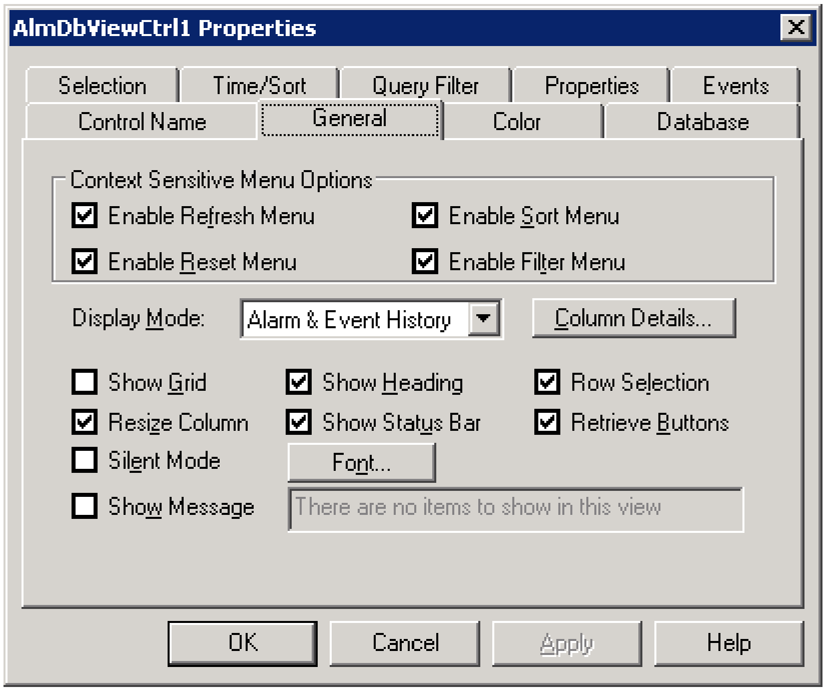
GUID: {0BC47D9E-FA26-4CF5-A0F6-459083D571C2}

InTouch option	Alarm Control option
ControlName	You can rename the Alarm Client Control the same way as any other elements on the canvas. For more information, see the Creating and Managing Industrial Graphics User's Guide.

InTouch option	Alarm Control option
Left, Top, Width, and Height	You can directly edit the positioning options in the same way as any other element on the canvas. Edit the following properties in the Properties Editor: **X**, **Y**, **Width**, and **Height**.
Visible	You can directly edit the visibility option in the same way as any other element on the canvas. In the Properties Editor, edit the **Visible** property.
GUID	This option has no meaning in the Alarm Client Control.

Transferring Configuration of the InTouch Alarm DB View General Tab

You can transfer the configuration of the **General** tab options of the InTouch Alarm DB View control to the Alarm Client Control.



Context Sensitive Menu Options

☑ Enable Refresh Menu ☑ Enable Sort Menu

☑ Enable Reset Menu ☑ Enable Filter Menu

Display Mode: Alarm & Event History

□ Show Grid ☑ Show Heading ☑ Row Selection

☑ Resize Column ☑ Show Status Bar ☑ Retrieve Buttons

□ Silent Mode

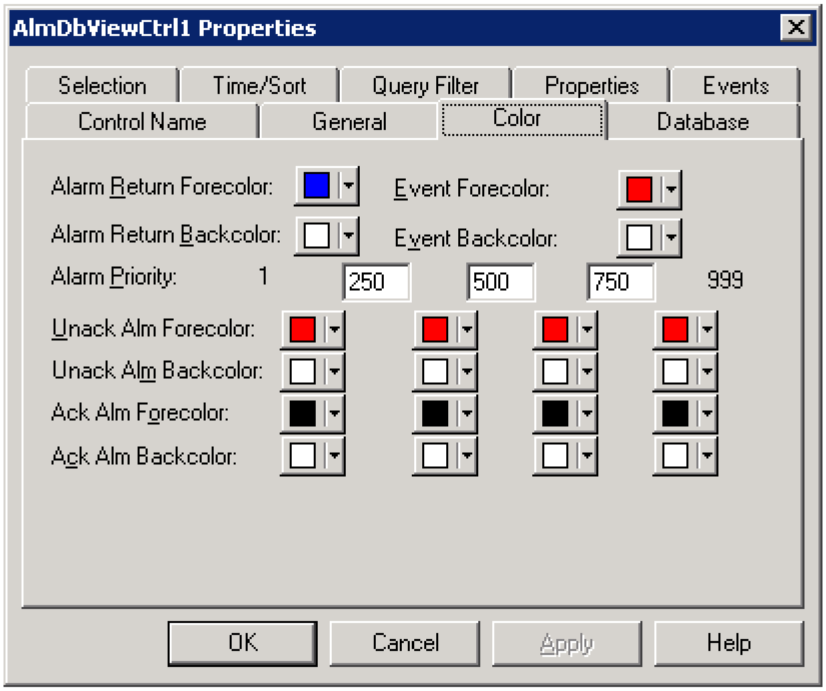
□ Show Message There are no items to show in this view

InTouch option	Alarm Control option
Enable Refresh Menu	In the Alarm Client Control, you can configure the availability of the **Requery** shortcut menu option on the **Run-Time Behavior** page.
Enable Sort Menu	In the Alarm Client Control, you can configure the availability of the **Sort** shortcut menu option on the **Run-Time Behavior** page.
Enabled Reset Menu	In the Alarm Client Control, you can configure the availability of the **Reset** shortcut menu option on the **Run-Time Behavior** page.

InTouch option	Alarm Control option
Enabled Filter Menu	In the Alarm Client Control, you can configure the availability of the **Query Filters** shortcut menu option on the **Run-Time Behavior** page.
Display Mode	In the Alarm Client Control, set the **Client Mode** on the **Alarm Mode** page to the same setting as the **Display Mode** setting in the InTouch Alarm DB View control.
Column Details	In the Alarm Client Control, you can configure the column details directly on the **Column Details** page.
Show Grid	In the Alarm Client Control, you can configure the **Show Grid** option on the **Run-Time Behavior** page.
Show Heading	In the Alarm Client Control, you can configure the **Show Heading** option on the **Run-Time Behavior** page.
Row Selection	In the Alarm Client Control, this option is called **Row Selection**. You can configure it on the **Run-Time Behavior** page.
Resize Column	In the Alarm Client Control, this option is called **Allow Column Resizing**. You can configure it on the **Run-Time Behavior** page.
Show Status Bar	In the Alarm Client Control, you can configure the **Show Status Bar** option on the **Run-Time Behavior** page.
Retrieve Buttons	In the Alarm Client Control, the retrieve buttons are not available. The underlying grid technology handles the alarm retrieval from the alarm database.
Silent Mode	In the Alarm Client Control, this option is called **Hide Errors and Warnings**. You can configure it on the **Run-Time Behavior** page.
Font	You can configure this option from the Industrial Graphic Editor page. Select the Alarm Client Control on the canvas and select an appropriate font type, size, and style on the menu bars.
Show Message	In the Alarm Client Control, this option is called **Show Custom 'No Records' Message**. You can configure it on the **Run-Time Behavior** page.

Transferring Configuration of the InTouch Alarm DB View Color Tab

You can transfer the configuration of the **Color** tab options of the InTouch Alarm DB View control to the Alarm Client Control.



Alarm Return Forecolor: 🟦 Event Forecolor: 🟥

Alarm Return Backcolor: ⬜ Event Backcolor: ⬜

Alarm Priority:	1	250	500	750	999
Unack Alm Forecolor:	🟥	🟥	🟥	🟥	
Unack Alm Backcolor:	⬜	⬜	⬜	⬜	
Ack Alm Forecolor:	⬛	⬛	⬛	⬛	
Ack Alm Backcolor:	⬜	⬜	⬜	⬜	

All the options of the **Color** tab in the InTouch Alarm DB View control can be set on the **Colors** page of the Alarm Client Control.

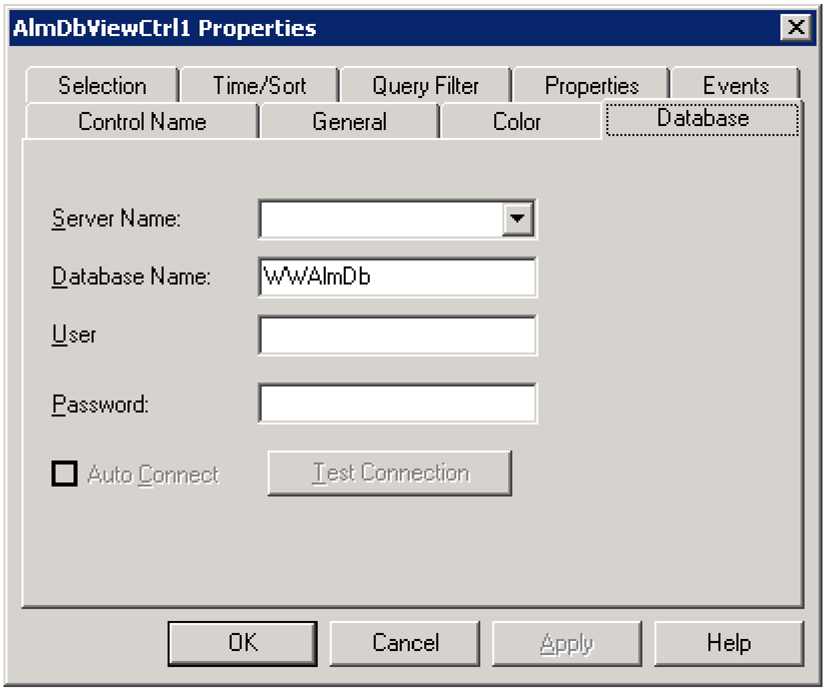
The following table shows you some minor differences in wording:

InTouch Alarm DB View control	Alarm Client Control
Forecolor	Text
Backcolor	Background
Alm	n/a
Return	RTN

You can set the alarm priority range breakpoints directly in the table in the **From Pri** column.

Transferring Configuration of the Database Tab

You can transfer the configuration of the **Database** tab options of the InTouch Alarm DB View control to the Alarm Client Control.



Server Name:
Database Name: WWAlmDb
User
Password:
□ Auto Connect

In the Alarm Client Control, you can configure the following options on the **Alarm Mode** page:

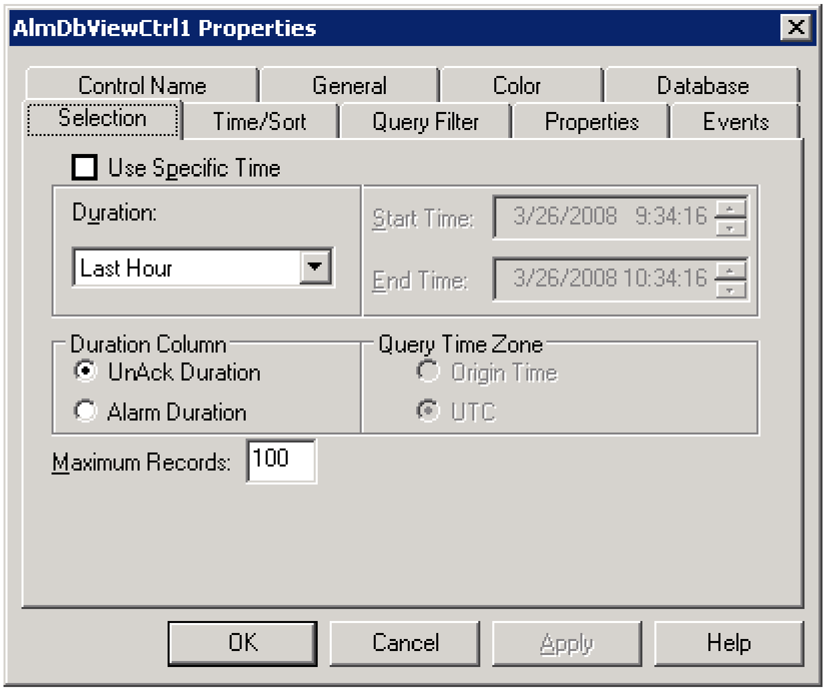
- **Server Name**
- **Database Name**
- **User**
- **Password**
- **Test Connection**

In the Alarm Client Control, the **Auto Connect** option is called **Query on Startup**. You can configure it on the **Run-Time Behavior** page.

The configuration for the Alarm Database only appears if the **Client Mode** is set to **Historical Alarms**, **Historical Events**, or **Historical Alarms and Events**.

Transferring Configuration of the Selection Tab

You can transfer the configuration of the **Selection** tab options of the InTouch Alarm DB View control to the Alarm Client Control.



☐ Use Specific Time

Duration: Last Hour

Start Time: 3/26/2008 9:34:16

End Time: 3/26/2008 10:34:16

Duration Column: ● UnAck Duration ○ Alarm Duration

Query Time Zone: ○ Origin Time ● UTC

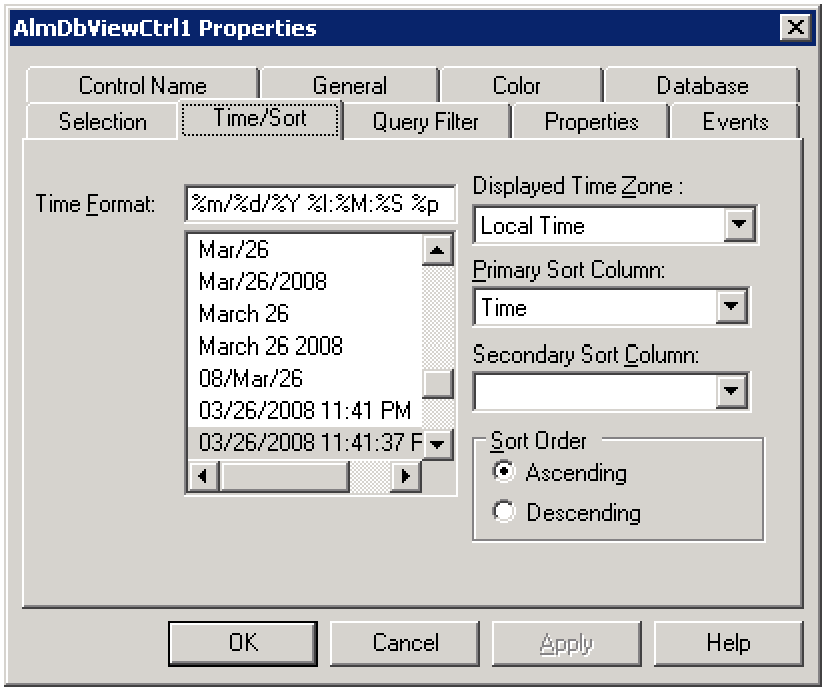
Maximum Records: 100

InTouch option	Alarm Control option
Use Specific Time, Start Time, End Time	In the Alarm Client Control, you can set these options directly in the Time Range Picker control on the **Alarm Mode** page. When you select a time from either the start time or end time part of the Time Range Picker control, the Alarm Control is automatically set to use a specific time. To keep the specific start and end time, you must also clear **Update to Current Time**. When you refresh the Alarm Control grid at run time, the time range stays fixed to the given start and end time.
Duration	In the Alarm Client Control, you can set this option directly in the Time Range Picker control on the **Alarm Mode** page. When you select a duration from the center part of the Time Range Picker control, the Alarm Control is automatically set to use a time offset. To keep the duration, you must also select the **Update to Current Time** check box. When you refresh the Alarm Control grid at run time, the end time is set to the current time and the Alarm Control shows the

InTouch option	Alarm Control option
	alarms within the set duration.
UnAck Duration, Alarm Duration	In the Alarm Client Control, you cannot configure the Unack Duration and Alarm Duration settings. The Alarm Control grid shows both UnAck Duration and Alarm Duration in separate columns.
Query Time Zone	In the Alarm Client Control, you can configure the **Time Zone** setting on the **Time Settings** page.
Maximum Records	In the Alarm Client Control, you can configure the **Maximum Records** setting on the **Alarm Mode** page.

Transferring Configuration of the Time/Sort Tab

You can transfer the configuration of the **Time/Sort** tab options of the InTouch Alarm DB View control to the Alarm Client Control.


AlmDbViewCtrl1 Properties

Time Format: %m/%d/%Y %I:%M:%S %p

Mar/26
Mar/26/2008
March 26
March 26 2008
08/Mar/26
03/26/2008 11:41 PM
03/26/2008 11:41:37 F

Displayed Time Zone : Local Time

Primary Sort Column: Time

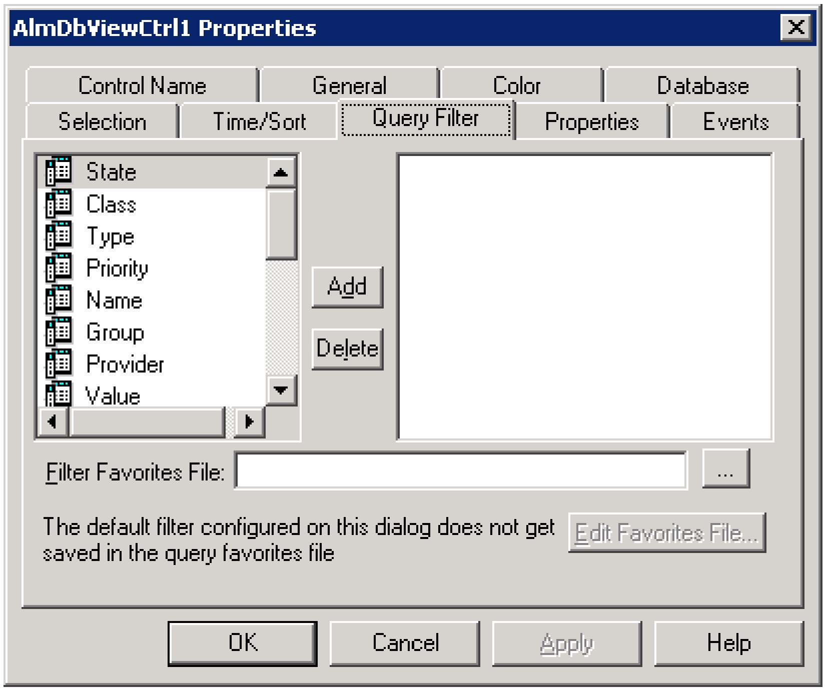
Secondary Sort Column:

Sort Order
● Ascending
○ Descending

InTouch option	Alarm Control option
Time Format	In the Alarm Client Control, you can configure the **Time Format** setting on the **Time Settings** page.
Displayed Time Zone	In the Alarm Client Control, you can configure the **Time Zone** setting on the **Time Settings** page.
Primary Sort Column, Secondary Sort Column, Sort Order	In the Alarm Client Control, you can configure the sorting options on the **Column Details** page.

Transferring Configuration of the Query Filter Tab

You can transfer the configuration of the **Query Filter** tab options of the InTouch Alarm DB View control to the Alarm Client Control.

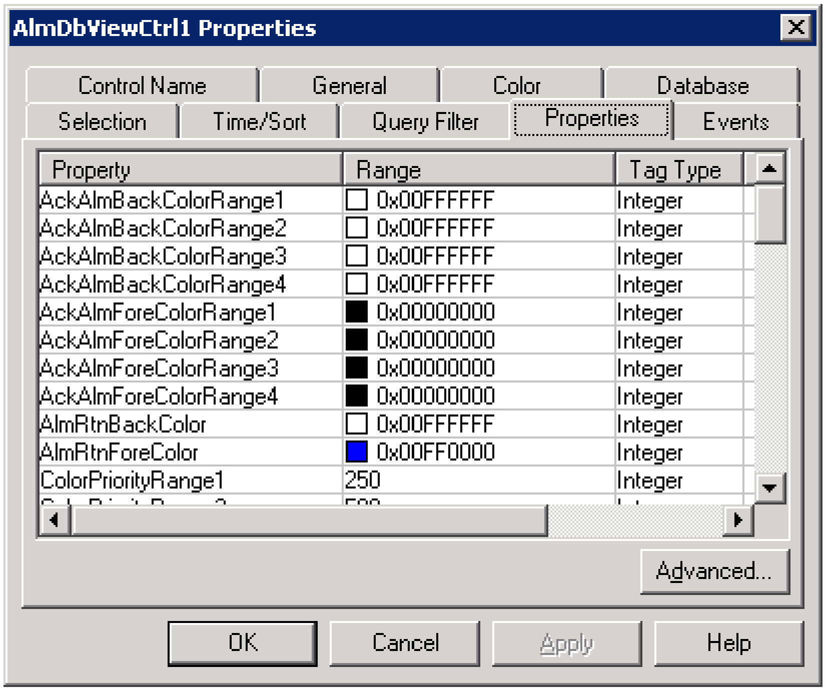


The default filter configured on this dialog does not get saved in the query favorites file

In the Alarm Client Control, all query favorites and filter favorites are managed on one page and are interchangeable between different client modes. To access the Query Filter Favorites, open the **Query Filters** page.

Transferring Configuration of the InTouch Alarm DB View Properties Tab

You can set the properties of the Alarm Client Control in the **Properties Editor** when the Alarm Control is selected on the canvas.



Property	Range	Tag Type
AckAlmBackColorRange1	□ 0x00FFFFFF	Integer
AckAlmBackColorRange2	□ 0x00FFFFFF	Integer
AckAlmBackColorRange3	□ 0x00FFFFFF	Integer
AckAlmBackColorRange4	□ 0x00FFFFFF	Integer
AckAlmForeColorRange1	■ 0x00000000	Integer
AckAlmForeColorRange2	■ 0x00000000	Integer
AckAlmForeColorRange3	■ 0x00000000	Integer
AckAlmForeColorRange4	■ 0x00000000	Integer
AlmRtnBackColor	□ 0x00FFFFFF	Integer
AlmRtnForeColor	🟦 0x00FF0000	Integer
ColorPriorityRange1	250	Integer

For more information on the exact mapping between the InTouch Alarm DB View control properties and Alarm Client Control properties, see *Mapping Properties and Methods* on page 179.

The advanced property filtering feature does not exist in the Alarm Client Control. However, when you browse for properties of the Alarm Client Control from other elements with the **Galaxy Browser**, you can filter the properties. Also, the properties of the Alarm Client Control are logically grouped in the Properties Editor.

Transferring Scripts Configuration on the Events Tab

You can configure scripts for events of the Alarm Client Control on the **Event** animation page. The events are the same as the events for the InTouch Alarm DB View control:

- Click
- DoubleClick
- NewAlarm
- Shutdown
- StartUp

For more information, see *Configuring Events* on page 158.

Transferring Query Favorites Configuration

You can only transfer query favorites configuration from InTouch to the Alarm Client Control by recreating the filters on the Query Filters page.

If you intend to use a the query filter in one of the current client modes, make sure you also include **Provider** and **Group** as filter criteria.

Mapping Properties and Methods

The following table shows all properties and methods of the InTouch Alarm Viewer control and InTouch Alarm DB View controls and their corresponding properties and methods of the Alarm Client Control.

InTouch alarm control property or method	**Alarm Client Control property or method**
AboutBox()	*AboutBox() Method* on page 127
AckAll()	*Ack.All() Method* on page 127
AckAllMenu	*ContextMenu.AckAll Property* on page 92
AckAlmBackColor	*AlarmColor.Ack.BackGround Property* on page 81
AckAlmBackColorRange1	*AlarmColor.Ack.BackGround Propert* on page 81
AckAlmBackColorRange2	*AlarmColor.Ack.BackGround Property* on page 81
AckAlmBackColorRange3	*AlarmColor.Ack.BackGround Property* on page 81
AckAlmBackColorRange4	*AlarmColor.Ack.BackGround Property* on page 81
AckAlmColorRange1	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmColorRange2	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmColorRange3	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmColorRange4	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmForeColor	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmForeColorRange1	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmForeColorRange2	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmForeColorRange3	*AlarmColor.Ack.ForeGround Property* on page 82
AckAlmForeColorRange4	*AlarmColor.Ack.ForeGround Property* on page 82
AckGroup()	*Ack.Group() Method* on page 127
AckOthersMenu	*ContextMenu.AckOthers Property* on page 92
AckPriority()	*Ack.Priority() Method* on page 128
AckRtnBackColor	*AlarmColor.RTN.BackGround Property* on page 84
AckRtnForeColor	*AlarmColor.RTN.ForeGround Property* on page 85
AckSelected()	*Ack.Selected() Method* on page 128
AckSelectedGroup()	*Ack.SelectedGroup() Method* on page 129

InTouch alarm control property or method	**Alarm Client Control property or method**
AckSelectedGroupsMenu	*ContextMenu.AckSelectedGroups Property* on page 93
AckSelectedMenu	*ContextMenu.AckSelected Property* on page 92
AckSelectedPrioritiesMenu	*ContextMenu.AckSelectedPriorities Property* on page 93
AckSelectedPriority()	*Ack.SelectedPriority () Method* on page 129
AckSelectedTag()	*Ack.SelectedTag() Method* on page 129
AckSelectedTagsMenu	*ContextMenu.AckSelectedTags Property* on page 93
AckTag()	*Ack.Tag() Method* on page 129
AckVisible()	*Ack.Visible() Method* on page 130
AckVisibleMenu	*ContextMenu.AckVisible Property* on page 93
AlarmQuery	*AlarmQuery Property* on page 90
AlarmState	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite property. For more information, see *Favorite Property* on page 107
AlmRtnBackColor	*AlarmColor.RTN.BackGround Property* on page 84
AlmRtnColor	*AlarmColor.RTN.ForeGround Property* on page 85
AlmRtnForeColor	*AlarmColor.RTN.ForeGround Property* on page 85
ApplyDefaultQuery()	*Favorite Property* on page 107
ApplyQuery()	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite property. For more information, see *Favorite Property* on page 107.
AutoConnect	*QueryStartup Property* on page 112
AutoScroll	*AutoScroll Property* on page 91
ColorPriorityRange1	*AlarmColor.Range Property* on page 84
ColorPriorityRange2	*AlarmColor.Range Property* on page 84
ColorPriorityRange3	*AlarmColor.Range Property* on page 84
ColumnResize	*AllowColumnResize Property* on page 90
Connect()	*Connect() Method* on page 130
ConnectStatus	*ConnectStatus Property* on page 92
CustomMessage	*NoRecordsMessage.Message Property* on page 112

InTouch alarm control property or method	Alarm Client Control property or method
DefaultAckComment	*AckComment.DefaultValue Property* on page 79
DisplayedTime	This option has no meaning in the Alarm Client Control. All three times are shown in the Alarm Control: Original Alarm Time Last Changed Time Last Changed Time, but Original Alarm Time for unacknowledged alarms
DisplayedTimeZone	*TimeZone.TimeZone Property* on page 124
DisplayMode	*ClientMode Property* on page 91
Duration	*TimeSelector.TimeDuration Property* page 122
EndTime	*TimeSelector.EndDate Property* on page 121
EventBackColor	*EventColor.BackGround Property* on page 106
EventColor	*EventColor.ForeGround Property* on page 107
EventForeColor	*EventColor.ForeGround Property* on page 107
ExtendedSelection	*RowSelection Property* on page 114
FilterFavoritesFile	No corresponding property. The file name is used as a parameter for the *Favorites.Export() Method* on page 131 and *Favorites.Import() Method* on page 131 methods.
FilterMenu	*ContextMenu.Favorites Property* on page 94
FilterName	*Favorite Property* on page 107
FlashUnackAlarms	*FlashUnAckAlarms Property* on page 108
FlashUnAckAlmColorRange1	*AlarmColor.UnAck.Flash.ForeGround Property* on page 87
FlashUnAckAlmColorRange2	*AlarmColor.UnAck.Flash.ForeGround Property* on page 87
FlashUnAckAlmColorRange3	*AlarmColor.UnAck.Flash.ForeGround Property* on page 87
FlashUnAckAlmColorRange4	*AlarmColor.UnAck.Flash.ForeGround Property* on page 87
Font	You can only set the font at design time, not at run time.
FreezeDisplay()	*FreezeDisplay() Method* on page 131

InTouch alarm control property or method	**Alarm Client Control property or method**
FreezeMenu	*ContextMenu.Freeze Property* on page 94
FromPriority	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite property. For more information, see *Favorite Property* on page 107.
GetItem()	*GetItem() Method* on page 132
GetLastError()	*GetLastError() Method* on page 132
GetNext()	No corresponding property. Alarm records are retrieved one by one from the Alarm Database after the initial set of alarm records is retrieved. The initial set is defined by the **Maximum Records** setting.
GetPrevious()	No corresponding property. Alarm records are retrieved one by one from the Alarm Database after the initial set of alarm records is retrieved. The initial set is defined by the **Maximum Records** setting.
GetSelectedItem()	*GetSelectedItem() Method* on page 133
GridColor	*GridColor Property* on page 108
GroupExactMatch	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite property. For more information, see *Favorite Property* on page 107.
GroupName	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite property. For more information, see *Favorite Property* on page 107.
MaxRecords	*MaxDatabaseRecords Property*
MoveWindow()	*MoveWindow() Method* on page 136
NewAlarmEventMode	*NewAlarmEventMode Property* on page 111
Password	*Database.Authentication Property* on page 104
PrimarySort	*SortOrder.First Property* on page 118
ProviderExactMatch	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite property. For more information, see *Favorite Property* on page 107.
ProviderName	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite

InTouch alarm control property or method	Alarm Client Control property or method
	property. For more information, see *Favorite Property* on page 107.
QueryFavoritesFile	No corresponding property. The file name is used as a parameter for the *Favorites.Export() Method* on page 131 and *Favorites.Import() Method* on page 131 methods.
QueryFavoritesMenu	*ContextMenu.Favorites Property* on page 94
QueryName	*Favorite Property* on page 107
QueryStartup	*QueryStartup Property* on page 112
QueryTimeZone	*TimeZone.TimeZone Property* on page 124
QueryType	*ClientMode Property* on page 91
Refresh()	*Requery() Method* on page 137
RefreshMenu	*ContextMenu.Requery Property* on page 96
Requery()	*Requery() Method* on page 137
RequeryMenu	*ContextMenu.Requery Property* on page 96
Reset()	*Reset() Method* on page 137
ResetMenu	*ContextMenu.Reset Property* on page 96
RetainSuppression	*RetainHidden Property* on page 113
RowCount	*RowCount Property* on page 113
RowSelection	*RowSelection Property* on page 114
SecondarySort	*SortColumn.Second Property* on page 117
SecondarySortColumn	*SortColumn.Second Property* on page 117
SelectAll()	To select all records, see *Select.All() Method* on page 139. To reverse the selection of all records, see *Toggle.All() Method* on page 152.
SelectedCount	*SelectedCount Property* on page 114
SelectGroup()	*Select.Group() Method* on page 139
SelectItem()	To select a given alarm record, see *Select.Item() Method* on page 139. To reverse the selection of a given alarm record, see *Toggle.Item() Method* on page 152.

InTouch alarm control property or method	Alarm Client Control property or method
SelectPriority()	*Select.Priority() Method* on page 140
SelectQuery()	*Favorite Property* on page 107
SelectTag()	*Select.Tag() Method* on page 140
ServerName	*Database.ServerName Property* on page 105
SetQueryByName	*Favorite Property* on page 107
SetSort()	*SetSort() Method* on page 141
ShowContext()	*Show.Context() Method* on page 149
ShowContextMenu	*ShowContextMenu Property* on page 116
ShowDate	There is no equivalent functionality in the Alarm Client Control.
ShowFetch	No corresponding property. The buttons for retrieving sets of alarm records from the Alarm Database do not exist in the Alarm Client Control.
ShowFilter()	*Show.Favorite() Method* on page 150
ShowGrid	*ShowGrid Property* on page 116
ShowHeading	*ShowHeading Property* on page 116
ShowMessage	*NoRecordsMessage.Enabled Property* on page 111
ShowQueryFavorites()	*Show.Favorite() Method* on page 150
ShowSort()	*Show.Sort() Method* on page 150
ShowStatistics()	*Show.Statistics() Method* on page 150
ShowStatusBar	*ShowStatusBar Property* on page 116
ShowSuppression()	*Show.Hidden() Method* on page 150
SilentMode	*HideErrors Property* on page 110
SortColumn	You can set three sort columns in the Alarm Client Control. To set the first column, see *SortColumn.First Property* on page 117.
SortMenu	*ContextMenu.Sort Property* on page 100
SortOnCol()	To set the first sort column, see *SortColumn.First Property* on page 117. To set the sort order of the first sort column, see *SortOrder.First Property* on page 118.

InTouch alarm control property or method	Alarm Client Control property or method
SortOrder	*SortOrder.First Property* on page 118
SpecificTime	*UpdateToCurrentTime Property* on page 125
StartTime	*TimeSelector.EndDate Property* on page 121
StatsMenu	*ContextMenu.Statistics Property* on page 100
SuppressAll()	*Hide.All() Method* on page 133
SuppressAllMenu	*ContextMenu.HideAll Property* on page 94
SuppressedAlarms	*HiddenAlarms Property* on page 110
SuppressGroup()	*Hide.Group() Method* on page 133
SuppressionMenu	*ContextMenu.Hidden Property* on page 94
SuppressOthersMenu	*ContextMenu.HideOthers Property* on page 95
SuppressPriority()	*Hide.Priority() Method* on page 134
SuppressSelected()	*Hide.Selected() Method* on page 134
SuppressSelectedGroup()	*Hide.SelectedGroup() Method* on page 134
SuppressSelectedGroupsMenu	*ContextMenu.HideSelectedGroups Property* on page 95
SuppressSelectedMenu	*ContextMenu.HideSelected Property* on page 95
SuppressSelectedPrioritiesMenu	*ContextMenu.HideSelectedPriorities Property* on page 95
SuppressSelectedPriority()	*Hide.SelectedPriority() Method* on page 135
SuppressSelectedTagsMenu	*ContextMenu.HideSelectedTags Property* on page 96
SuppressSelectedTag()	*Hide.SelectedTag() Method* on page 135
SuppressTag()	*Hide.Tag() Method* on page 135
SuppressVisible()	*Hide.Visible() Method* on page 136
SuppressVisibleMenu	*ContextMenu.HideVisible Property* on page 96
Time	*Time.Type Property* on page 120 and *Time.Format Property* on page 119
TimeFormat	*Time.Format Property* on page 119 and *Time.Type Property* on page 120
TitleBackColor	*HeadingColor.BackGround Property* on page 108
TitleForeColor	*HeadingColor.ForeGround Property* on page 109

InTouch alarm control property or method	Alarm Client Control property or method
ToPriority	No corresponding property. Configure a Query Filter favorite at design time instead and use the Favorite Property. For more information, see *Favorite Property* on page 107.
TotalAlarms	*TotalRowCount Property* on page 124
TotalRowCount	*TotalRowCount Property* on page 124
UnAckAlarms	*UnAckAlarms Property* on page 125
UnAckAlmBackColor	*AlarmColor.UnAck.BackGround Property* on page 85
UnAckAlmBackColorRange1	*AlarmColor.UnAck.BackGround Property* on page 85
UnAckAlmBackColorRange2	*AlarmColor.UnAck.BackGround Property* on page 85
UnAckAlmBackColorRange3	*AlarmColor.UnAck.BackGround Property* on page 85
UnAckAlmBackColorRange4	*AlarmColor.UnAck.BackGround Property* on page 85
UnAckAlmColorRange1	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmColorRange2	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmColorRange3	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmColorRange4	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmForeColor	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmForeColorRange1	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmForeColorRange2	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmForeColorRange3	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckAlmForeColorRange4	*AlarmColor.UnAck.ForeGround Property* on page 88
UnAckOrAlarmDuration	No corresponding property. UnAck Duration and Alarm Duration are shown in the Alarm Control grid.
UnSelectAll()	*UnSelectAll() Method* on page 152
UnSuppressAll()	*UnhideAll() Method* on page 152
UnsuppressAllMenu	*ContextMenu.UnhideAll Property* on page 100
UseDefaultAckComment	*AckComment.UseDefault Property* on page 79
UserID	*Database.UserID Property* on page 105
Visible	*Visible Property* on page 126
WindowColor	*WindowColor Property* on page 126

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