

## [Tech Note 1033](#)

# Using the Border Animation Feature in System Platform 2014 for InTouch Alarms

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## Introduction

This *Tech Note* documents a procedure you can use to provide Alarm Border Animation with InTouch Alarms.

## Application Versions

- Wonderware Application Server 5.5 (2014) and later
- InTouch 11.0
- Windows 2008 R2 Server SP1
- Windows 7 SP1

## Alarm Border Animations Feature for InTouch Tag-Related Alarms

Please refer to page 50 of the [Wonderware System Platform 2014 New Features Guide](#) for the Alarm Border Animations feature introduced in system platform 2014.

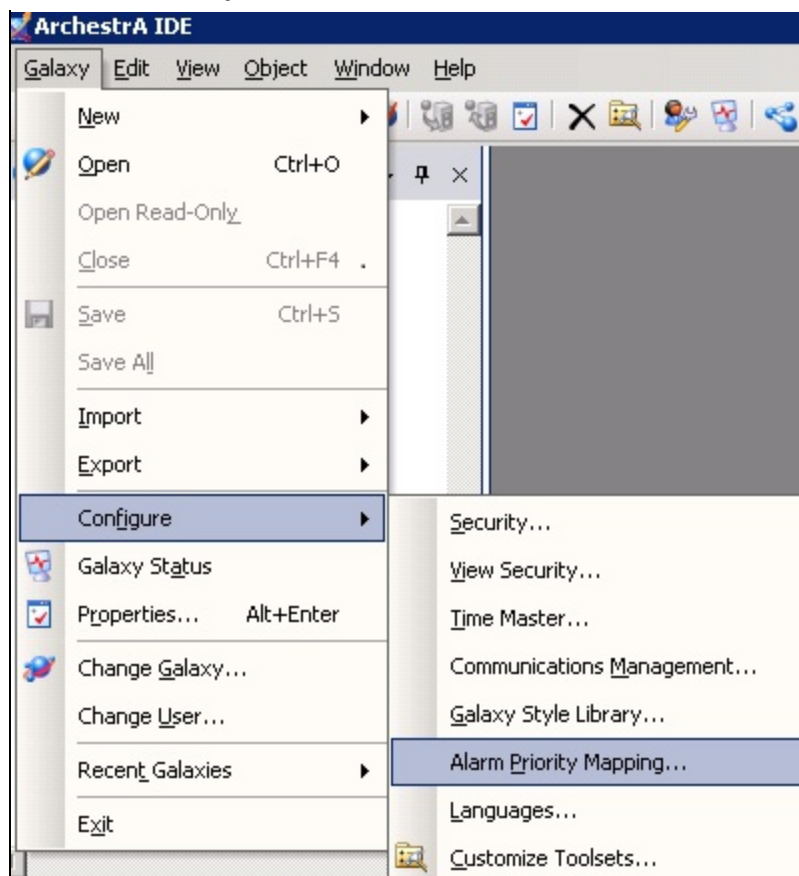
This feature is designed for Application Server Alarms, but you can tailor it to take advantage of the A<sup>2</sup> Graphic Symbols, and partially implement alarm border animation for InTouch tags. Doing this requires some additional manual steps.

This *Tech Note* and sample application will demonstrate an example.

**Note:** A separate *Tech Note* is planned to explain using this feature with Application Server Alarms.

## Alarm Border Icons

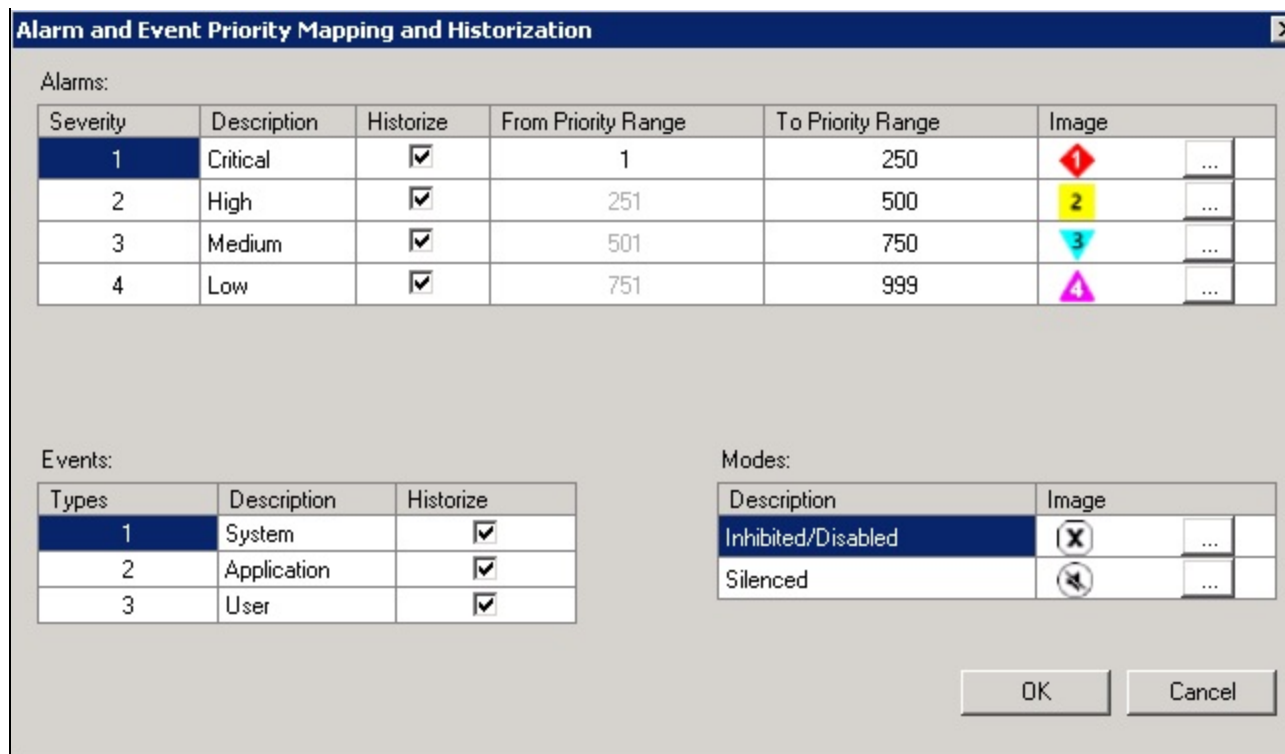
1. In the IDE, click **Galaxy/Configure/Alarm Priority Mapping** (Figure 1 below).



**FIGURE 1: ALARM PRIORITY MAPPING**

The images are also globally defined and can be changed by substituting a 24 x 24 pixel PNG image.

**Note:** There are four Severities available in the table (as shown below).



**FIGURE 2: ALARM SEVERITY WINDOW**

- In IDE click **Galaxy/Configure/Galaxy Style Library**.

Alarm border colors are globally defined in the style library from Galaxy Style Library.

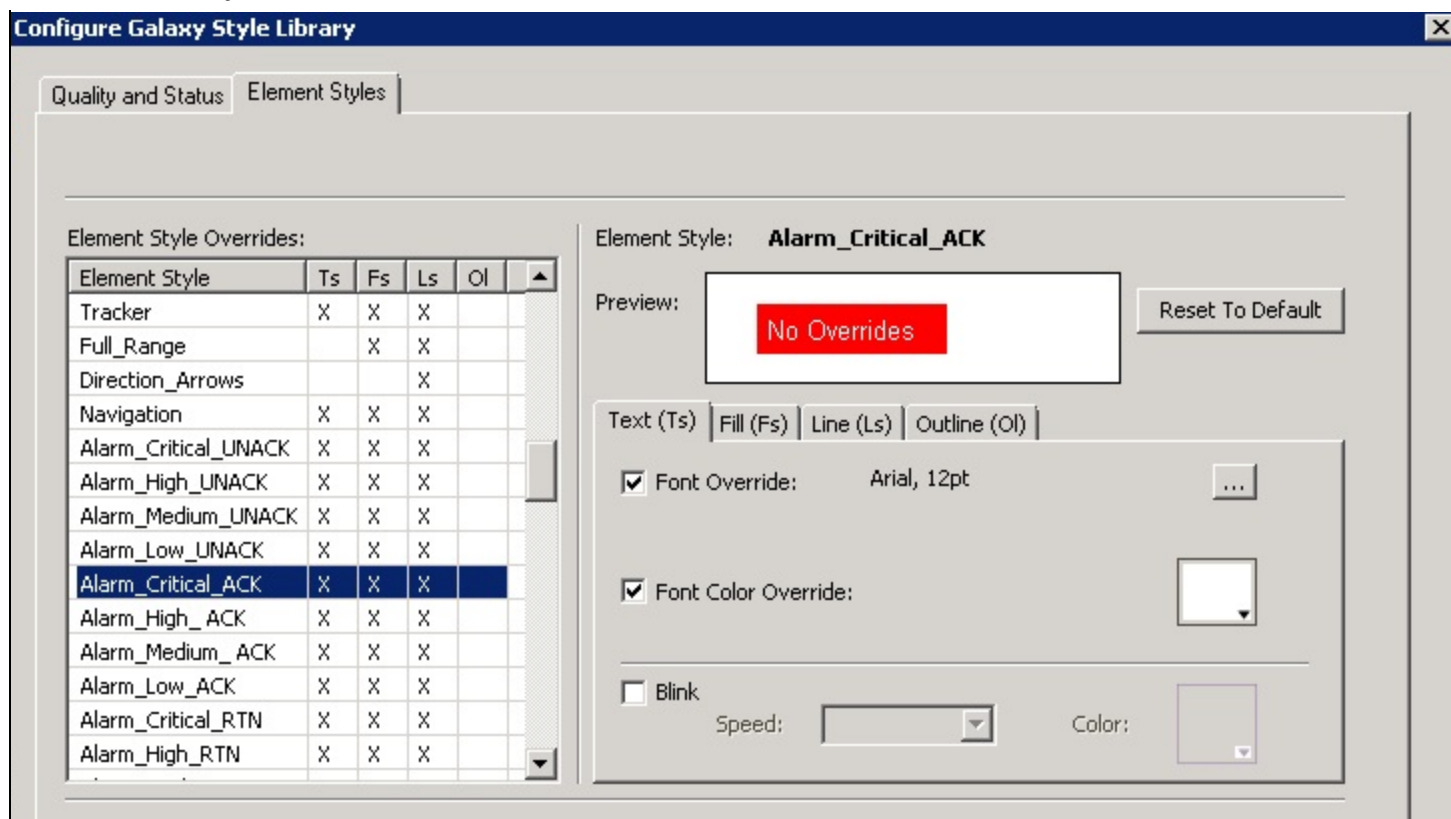


FIGURE 3: GALAXY STYLE LIBRARY

## Requirements for Alarm Border Animations

You can apply Alarm border animation to most Symbols, except for embedded Symbols and nested groups. You can also apply Alarm border animation to Symbol elements and element groups.

Alarm Border animation is displayed on a Symbol, and is based on the current state of the symbol's aggregated alarm attributes. The appearance of the alarm border itself reflects the current alarm state and the user's interaction with the alarm. If the user does not override the Outline property of the assigned Element Style, the default Alarm Border outline is rendered.

This *Tech Note* provides an example of configuring this feature for InTouch alarms.

**Note:** This feature has limited functionality, because alarms in InTouch do not have the same attributes as Application Server objects.

## Configuring an Alarm Border Animation

The Alarm Border animation dialog box contains mutually-exclusive fields to set the referenced attributes for aggregate or individual alarms.

For aggregation alarms, you specify Alarm Border animation by providing an attribute or object name in the **Use Standard Alarm-**

**Urgency References** field of the Alarm Border dialog box.

The selected object attributes map to the following aggregation alarm attributes:

- AlarmMostUrgentAcked
- AlarmMostUrgentInAlarm
- AlarmMostUrgentMode
- AlarmMostUrgentSeverity

To set Alarm Border animation for individual alarms, you specify references to the following alarm attributes or tags:

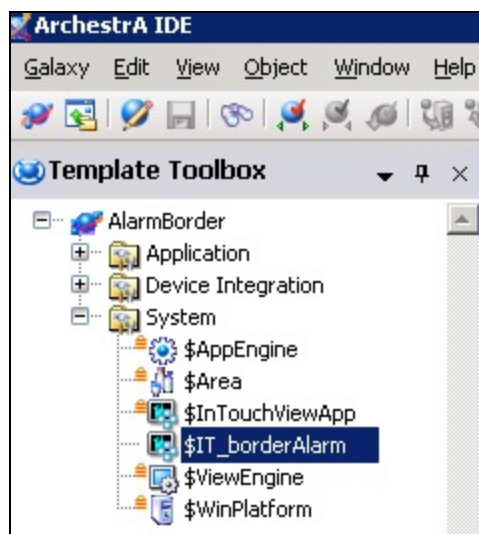
- In Alarm Attribute
- Acked Attribute
- Mode Attribute
- Severity Attribute

Alarm Border animation subscribes to these attributes. Based on the alarm state of these attributes, Alarm Border animation is applied to the graphic element in Runtime.

**Note:** For InTouch tags to take advantage of this feature some manual steps are required.

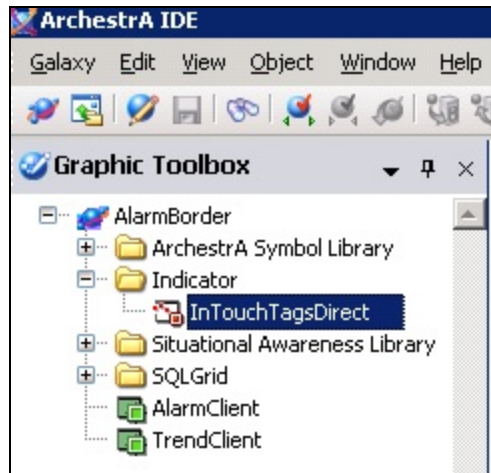
## Configuring an Alarm Border Animation for InTouch Tags

1. Download and extract the [\\$IT\\_borderAlarm\\_application.aaPKG object file](#).
2. Import and locate the **\$IT\_borderAlarm** in the System template after importing the object into your Galaxy (Figure 4 below).



**FIGURE 4: \$IT\_BORDERALARM OBJECT**

The InTouch application is using **InTouchTagsDirect** Symbol under **Indicator** Graphic toolset (in the Graphic Toolbox) (Figure 5 below).



**FIGURE 5: INTouchTAGSDIRECT SYMBOL**

The Symbol uses **Alarm Border** Animation (Figure 6 below).

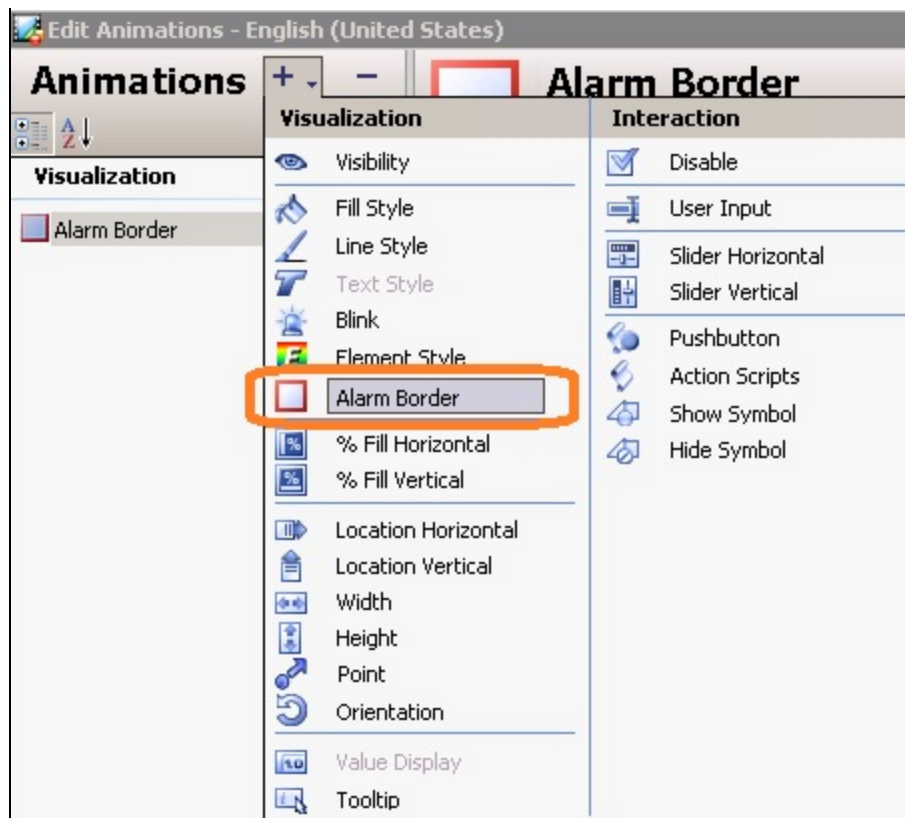


FIGURE 6: ALARM BORDER ANIMATION

- The Rectangle in the Symbol is configured with the **Use Customize Alarm-Urgency References** option in the Border Animation, which points to the Symbol's Custom property (Figure 7 below).

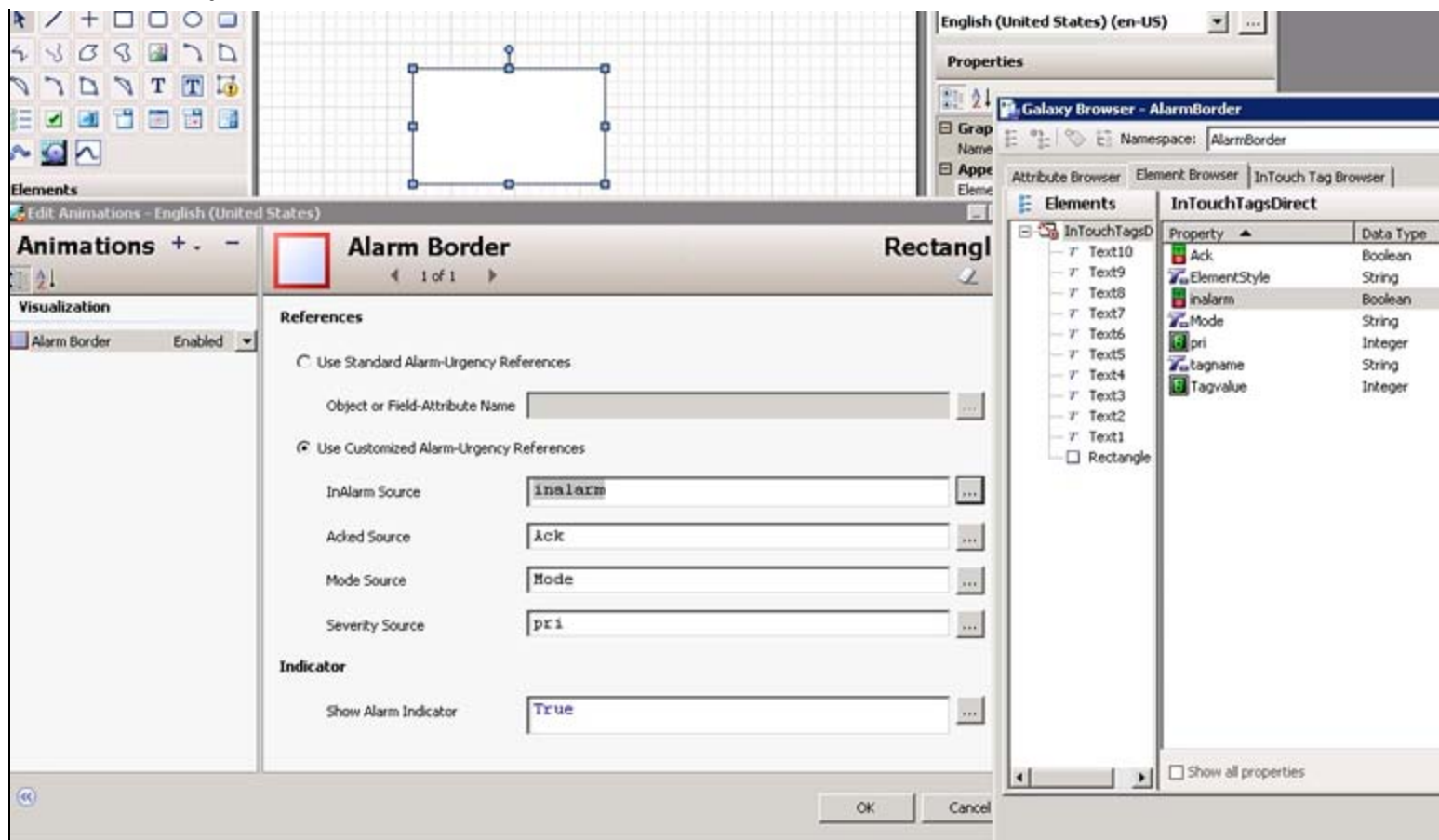
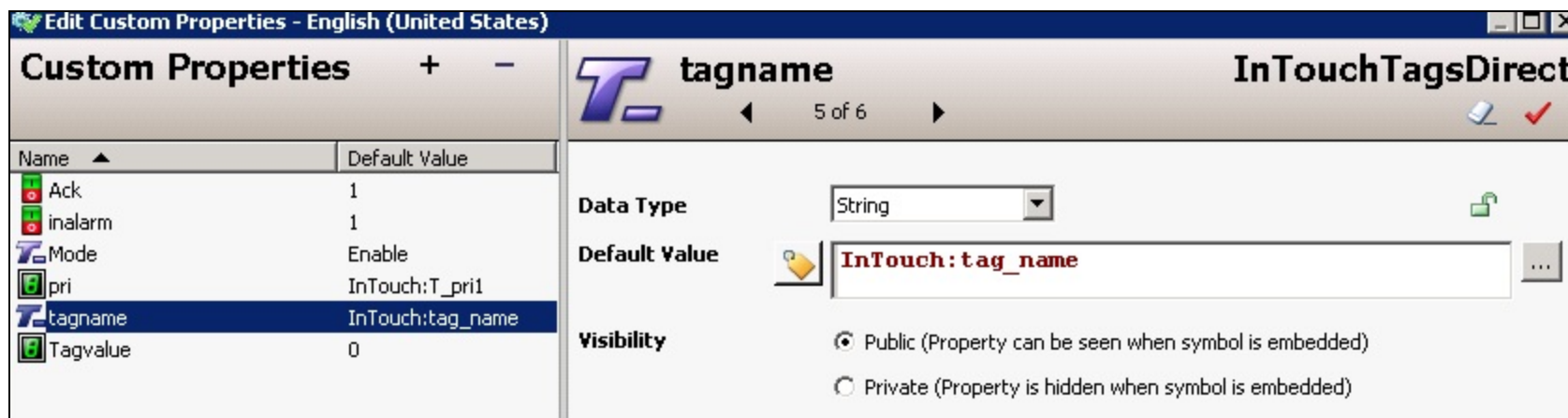


FIGURE 7: USE CUSTOMIZE ALARM-URGENCY REFERENCES OPTION

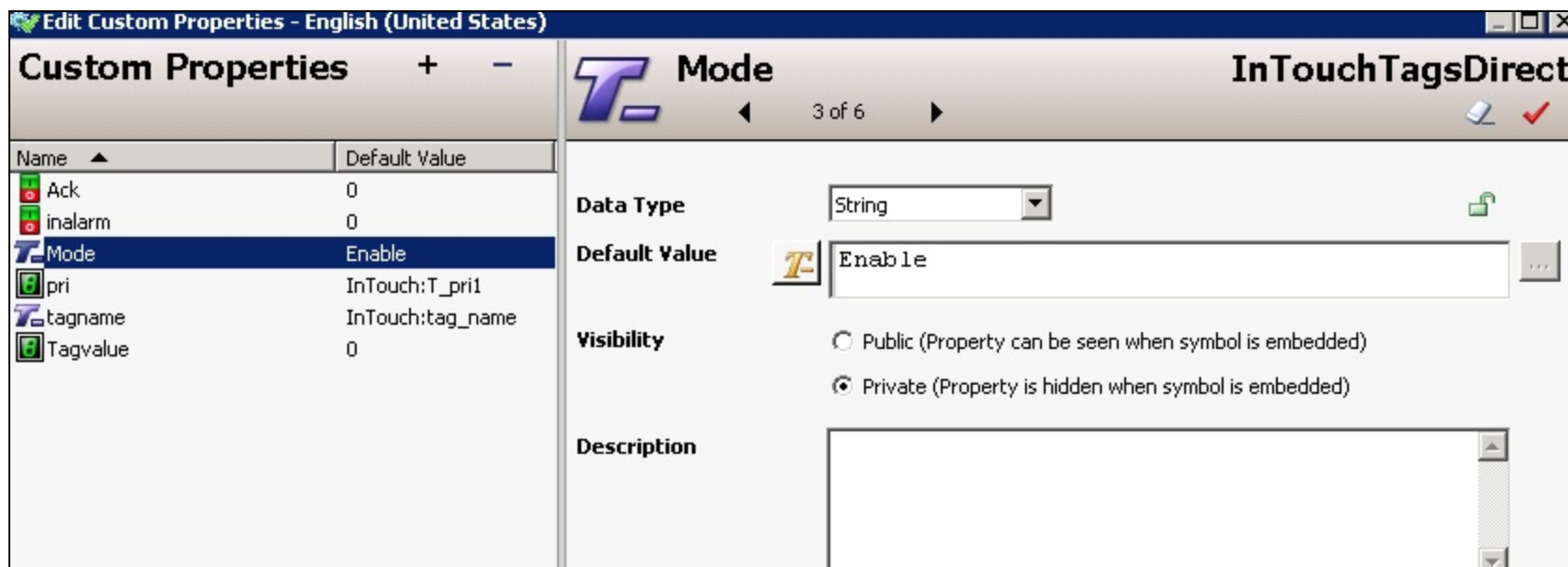
The Tagname Custom property points to a String Tag in InTouch called **tag\_name**. This way you can change the InTouch tag name in your InTouch application and pass the value to the Symbol (Figure 8 below).





**FIGURE 8: CUSTOM PROPERTIES TAG REFERENCE**

- The **Enable Constant** string is passed to Mode Custom property (Figure 9 below).

**FIGURE 9: ENABLE STRING MODE CUSTOM PROPERTY**

**Note:** It is also possible to programmatically change the Mode Custom property using the **Tag.alarmEnabled** Dot Field from InTouch.

Scripting in the Symbol passes the tag Dot Fields to the proper Custom properties of the Symbol (Figure 10 below).

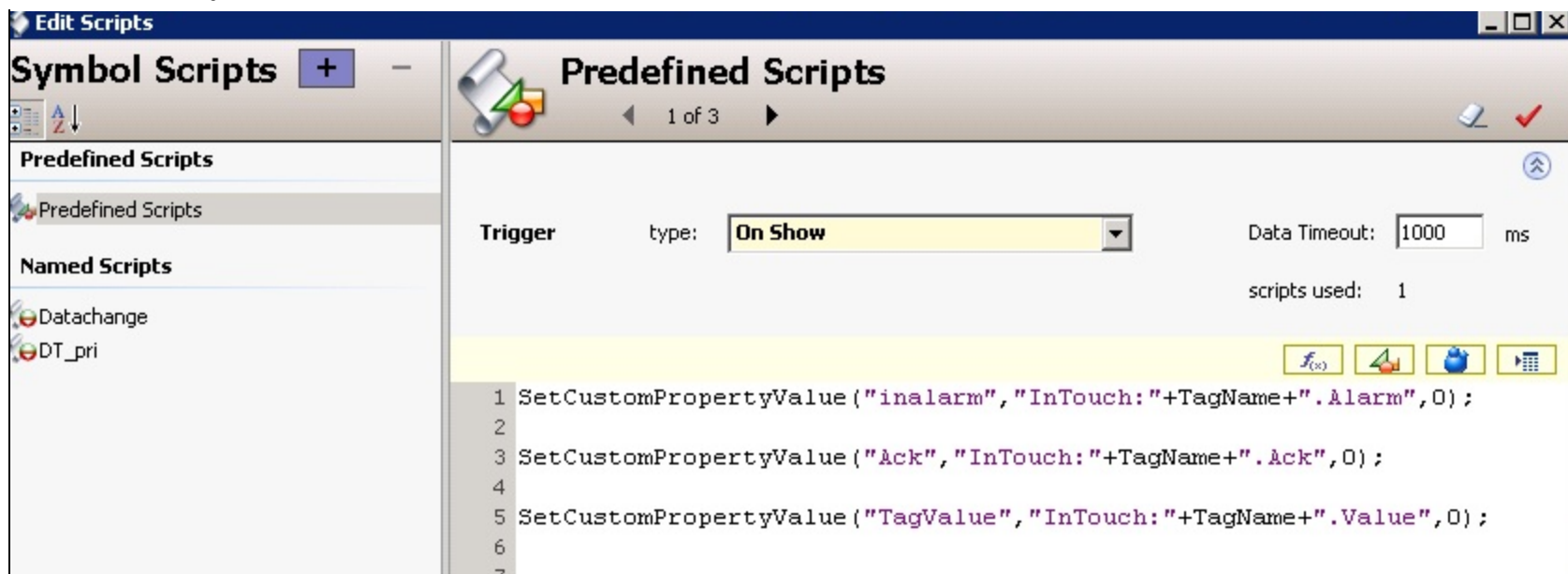


FIGURE 10: SCRIPTING FOR THE SYMBOL

```
SetCustomPropertyValue("inalarm", "InTouch:"+TagName+".Alarm", 0);
SetCustomPropertyValue("Ack", "InTouch:"+TagName+".Ack", 0);
SetCustomPropertyValue("TagValue", "InTouch:"+TagName+".Value", 0);
```

## Testing the InTouch Application Demo

In this application the **RTN implies ACK** option is checked.

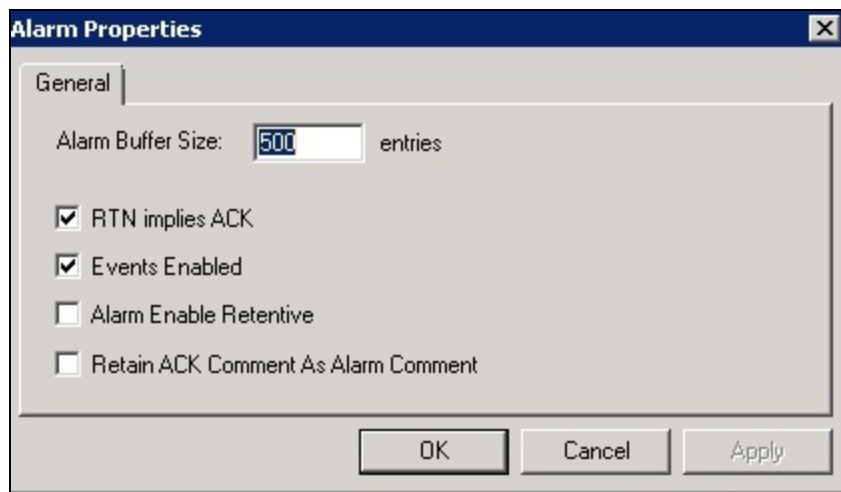


FIGURE 11: RTN IMPLIES ACK OPTION

When the **Tag2** is not in alarm condition and the previous alarm is acknowledged, there is no Border Animation displayed (as shown below).

- Tag.alarm = **OFF**
- Tag.ack = **ON**
- Severity = **1**

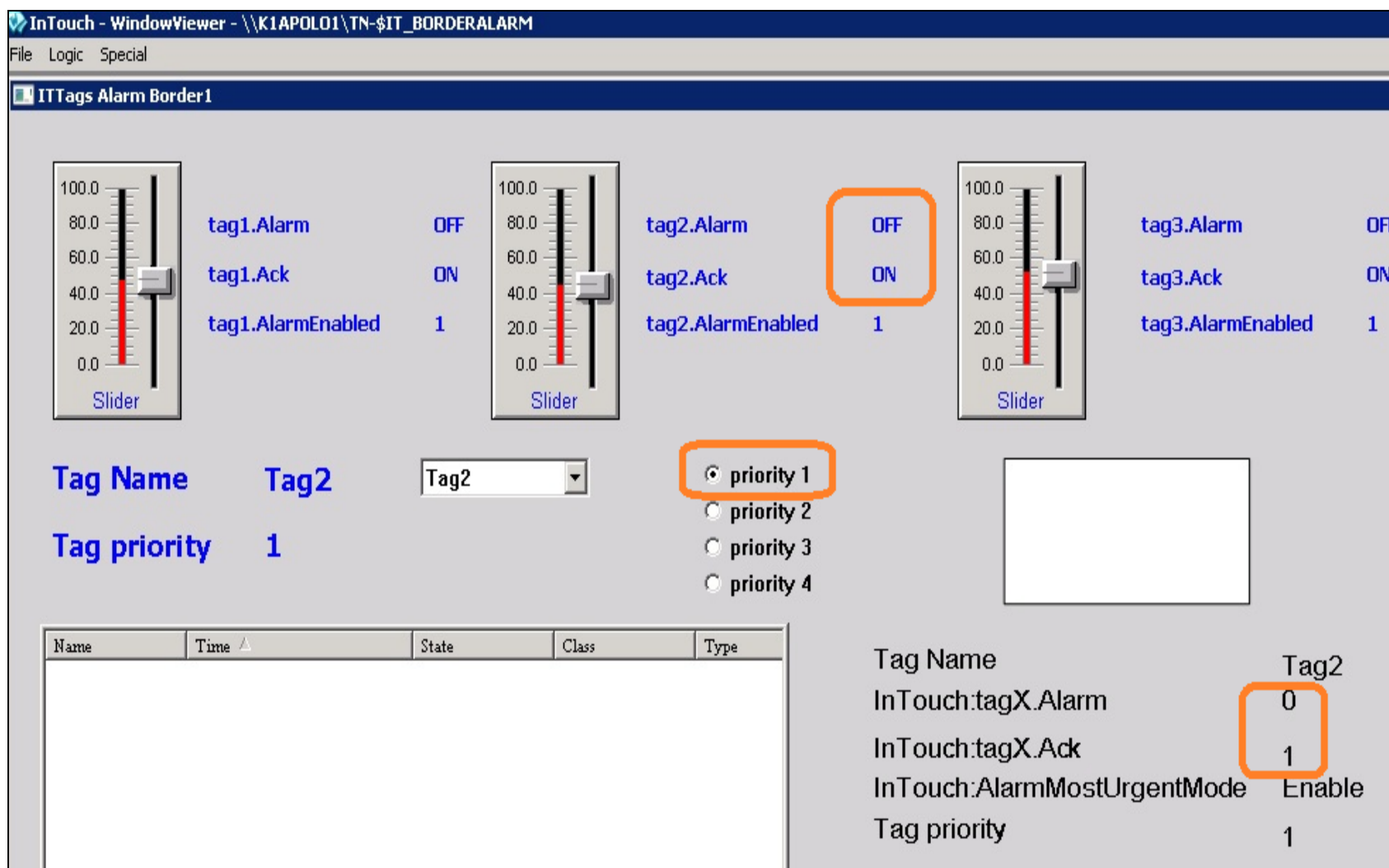


FIGURE 12: TAG ALARM PROPERTIES AND ANIMATION

When **Tag2** is in alarm condition and the alarm is not acknowledged, a red blinking diamond indicator appears for Border Animation (for Severities one as shown below).

- Tag.alarm = **ON**
- Tag.ack = **OFF**
- Severity = **1**

**Note:** The Color is based on Severities that is changed in **Screen by Priority** check box.

tag1.Alarm OFF  
tag1.Ack ON  
tag1.AlarmEnabled 1

tag2.Alarm ON  
tag2.Ack OFF  
tag2.AlarmEnabled 1

tag3.Alarm OFF  
tag3.Ack ON  
tag3.AlarmEnabled 1

Tag Name Tag2  
Tag priority 1

priority 1  
priority 2  
priority 3  
priority 4

Name	Time	State	Class	Type
tag2	03/03/2014 11:08:47 AM	UNACK	VALUE	LOLO

Tag Name Tag2  
InTouch:tagX.Alarm 1  
InTouch:tagX.Ack 0  
InTouch:AlarmMostUrgentMode Enable  
Tag priority 1

**FIGURE 13:**

When **Tag2** is in alarm condition and the alarm is acknowledged, a solid red line appears for Border Animation (Figure 14 below).

- Tag.alarm = **ON**
- Tag.ack = **ON**
- Severity = **1**

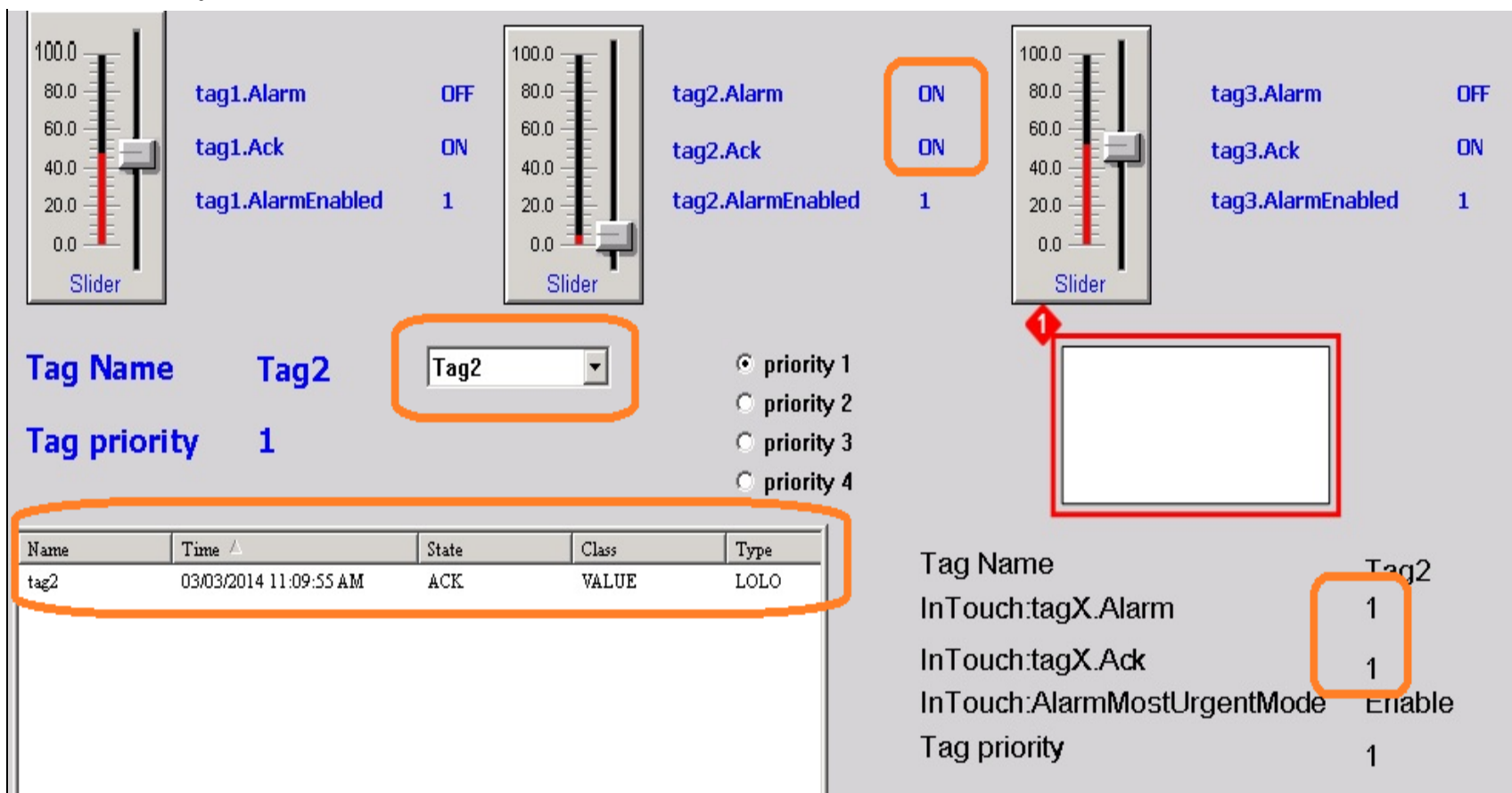


FIGURE 14: SOLID REDLINE AROUND ACKNOWLEDGMENT

When the **Tag2** is in alarm condition and alarm is acknowledged, a solid yellow line appears for Border Animation (for Severities Two as shown below).

- Tag.alarm = **ON**
- Tag.ack = **ON**
- Severity = **2**

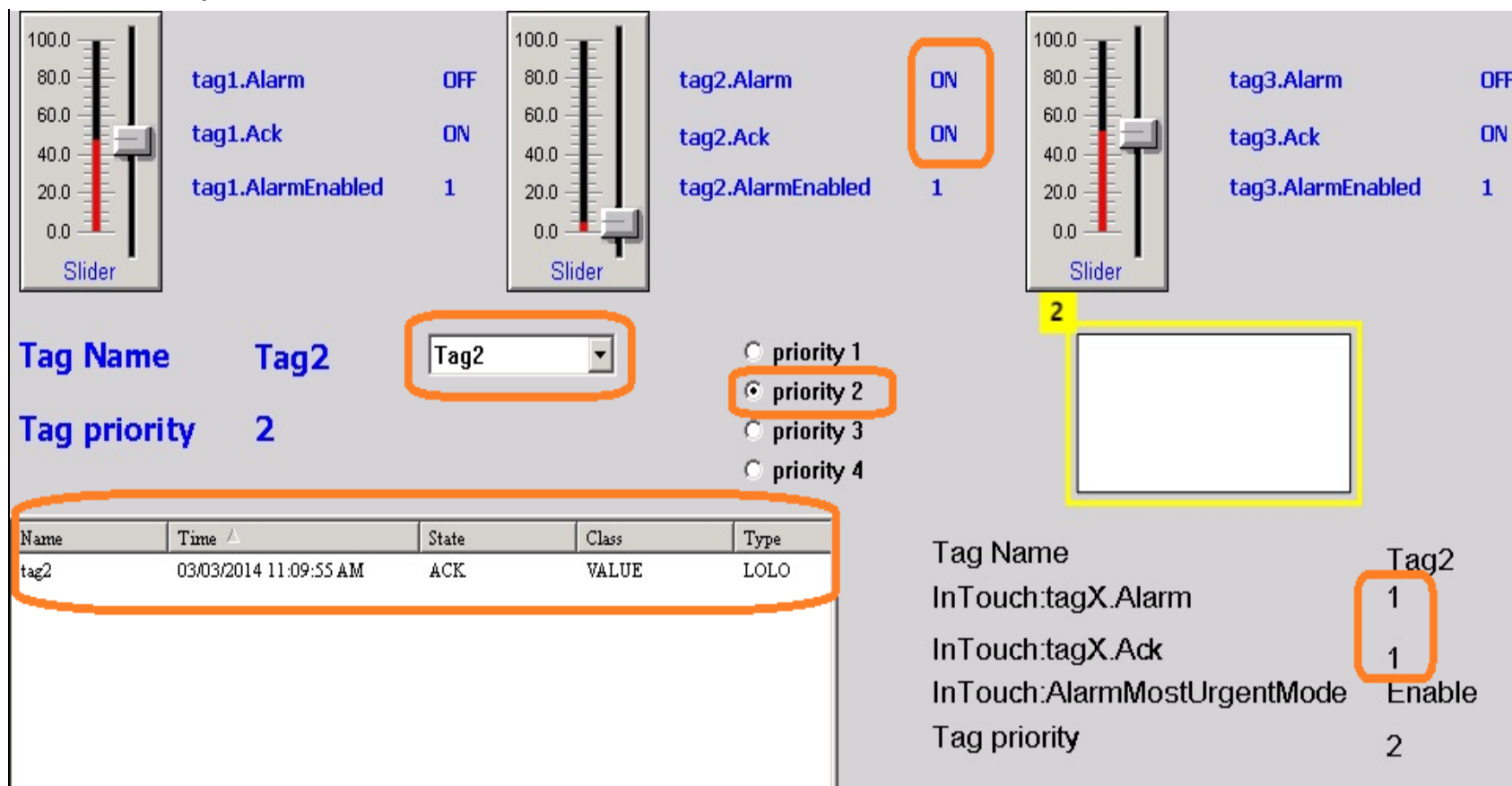


FIGURE 15: YELLOW LINE AND INDICATOR

When **Tag2** is not in alarm condition and alarm is not acknowledged, a dotted red line appears for Border Animation (for Severities One as shown below).

- Tag.alarm = **OFF**
- Tag.ack = **OFF**
- Severity = **1**

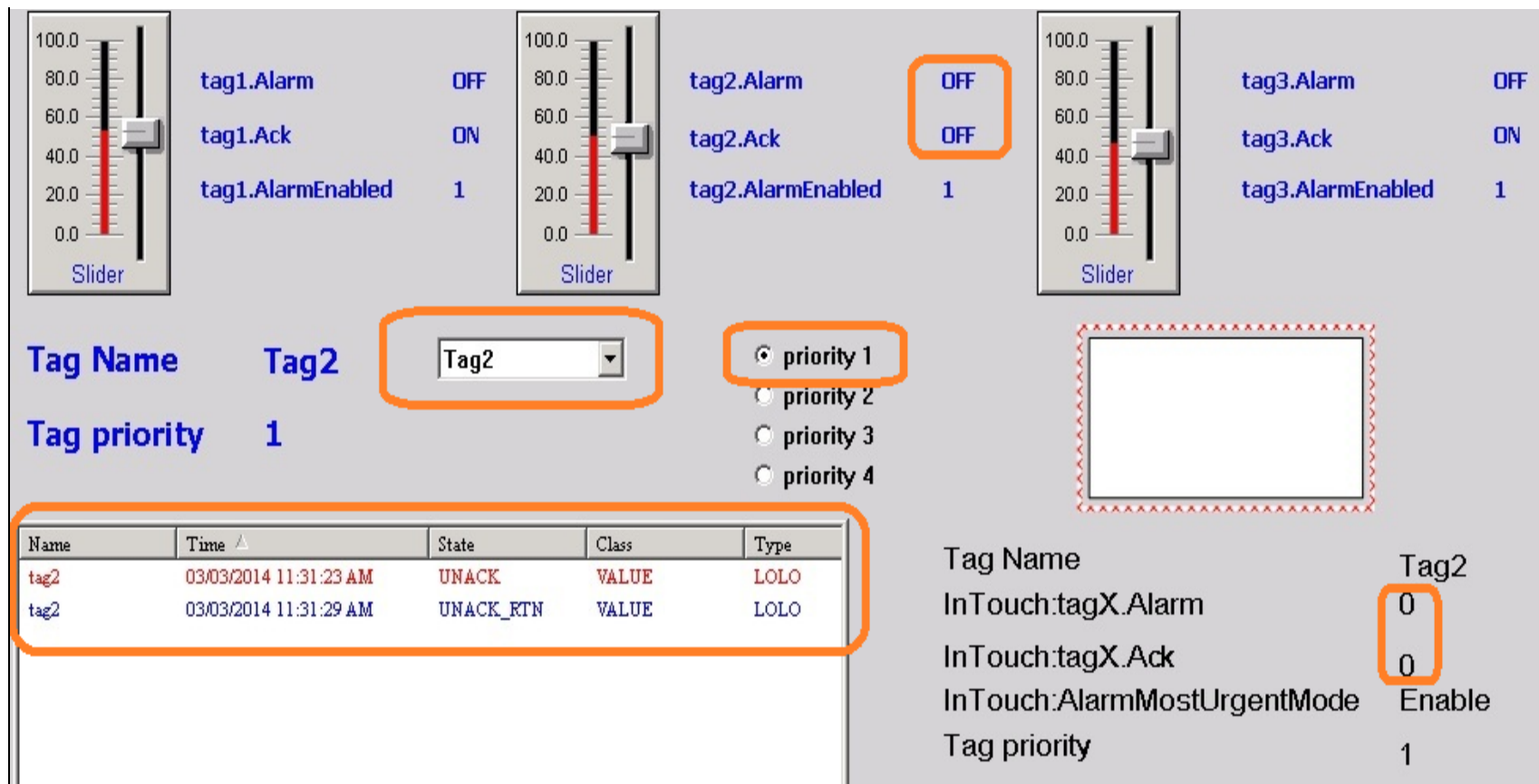


FIGURE 16: DOTTED LINE ALARM CONDITION

When **Tag1** is in alarm condition and alarm is acknowledged, a solid cyan line appears (for Severities Three as shown below).

- Tag.alarm = **ON**
- Tag.ack = **ON**
- Severity = **3**



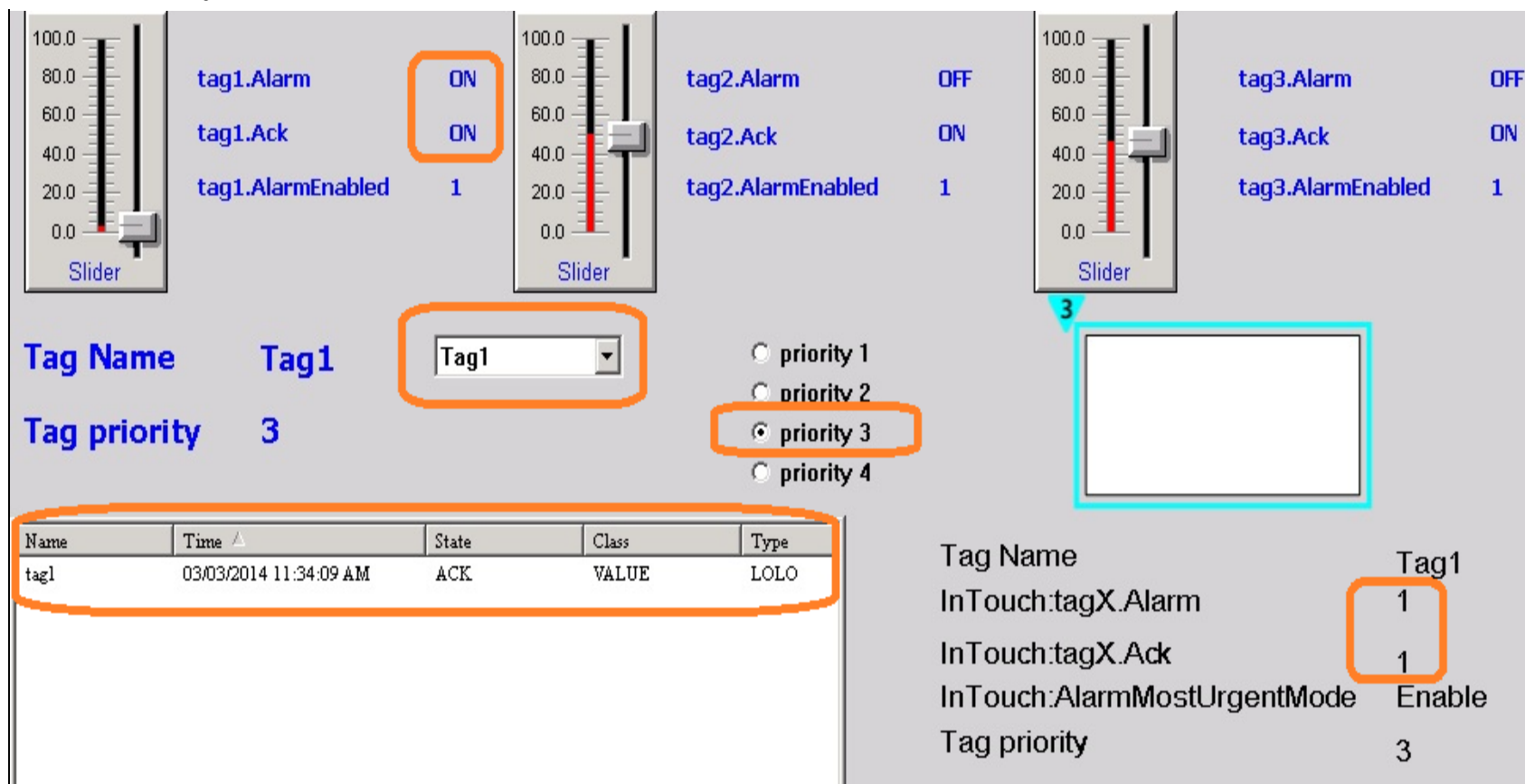


FIGURE 17: SOLID CYAN LINE AND INDICATOR

When the **Tag3** is in alarm condition and alarm is acknowledged, a solid purple line appears (for Severities Four as shown below).

- Tag.alarm = **ON**
- Tag.ack = **ON**
- Severity = **4**



The screenshot displays three alarm tags in a row. Each tag has a vertical slider on the left and status indicators on the right. Tag 1 and Tag 2 are in an 'OFF' state, while Tag 3 is in an 'ON' state. The 'tag3.Alarm' and 'tag3.Ack' indicators are circled in orange. Below the sliders, the 'Tag Name' is set to 'Tag3' and 'Tag priority' is set to '4'. The 'priority 4' radio button is selected and circled in orange. A table below shows the tag's details, and a summary panel on the right lists tag properties.

Name	Time	State	Class	Type
tag3	03/03/2014 11:35:30 AM	ACK	VALUE	LOLO

Summary Panel:

- Tag Name: Tag3
- InTouch.tagX.Alarm: 1
- InTouch.tagX.Ack: 1
- InTouch:AlarmMostUrgentMode: Enable
- Tag priority: 4

**FIGURE 18: SOLID PURPLE LINE AND INDICATOR**

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