

Lab Exercise – Insert an Alarm Window Control (Optional)

57311302L
11/99

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Revision 01 Date 11/99**

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This module supports **TotalPlant** Solution (TPS) system network.

TPS is the evolution of TDC 3000^X.

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Lab Exercise

Introduction

The following concept lab exercise has you insert the Alarm Window control (not the Alarm Summary.pct in the RAC folder!) into a GUS display and use it as an OCX.

The alarm window OCX provides a way for you add a window that displays alarm activity to your operator. You should note, however, that the alarm window is not intended to replace an Alarm Summary display; rather it is just one of the many tools that you have to provide your operator a window to your process.

Objectives

At the end of the lab exercise, you will be able to do the following:

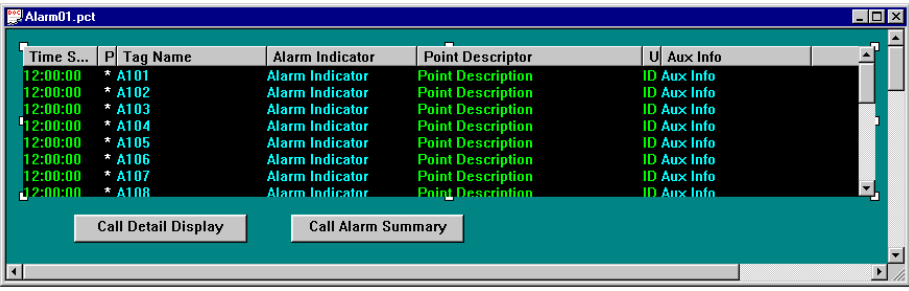
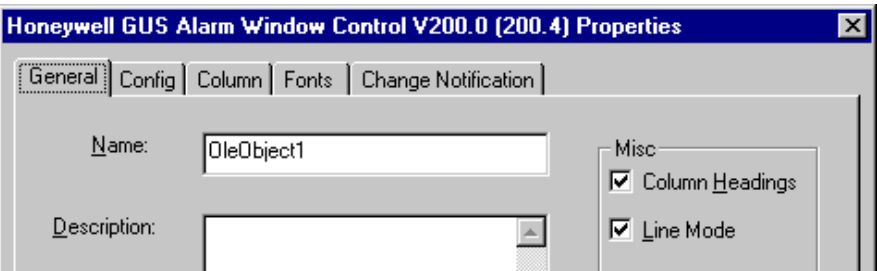
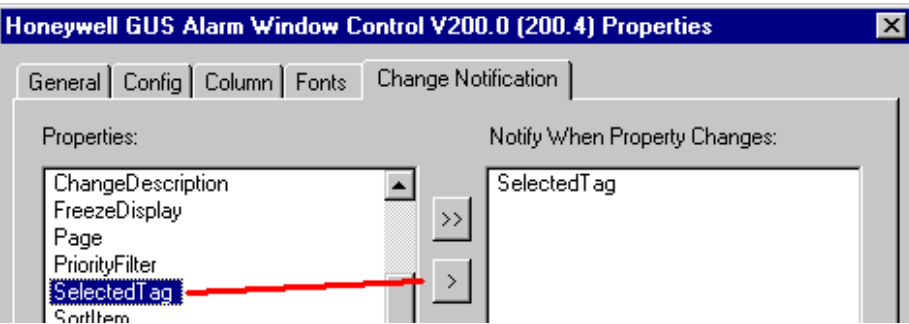
- Insert an alarm window control into a GUS display.
- Add display objects that support operator interaction with the alarm window control.

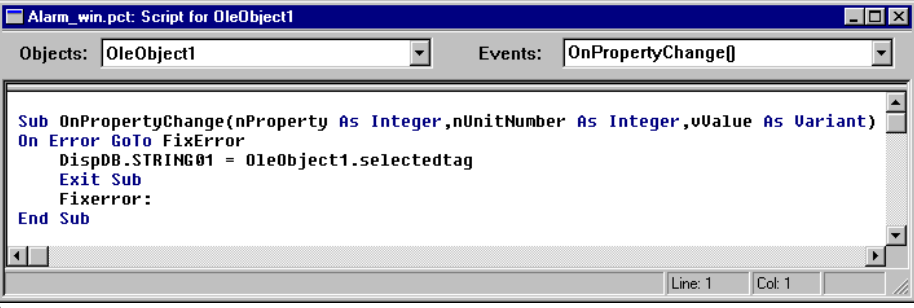
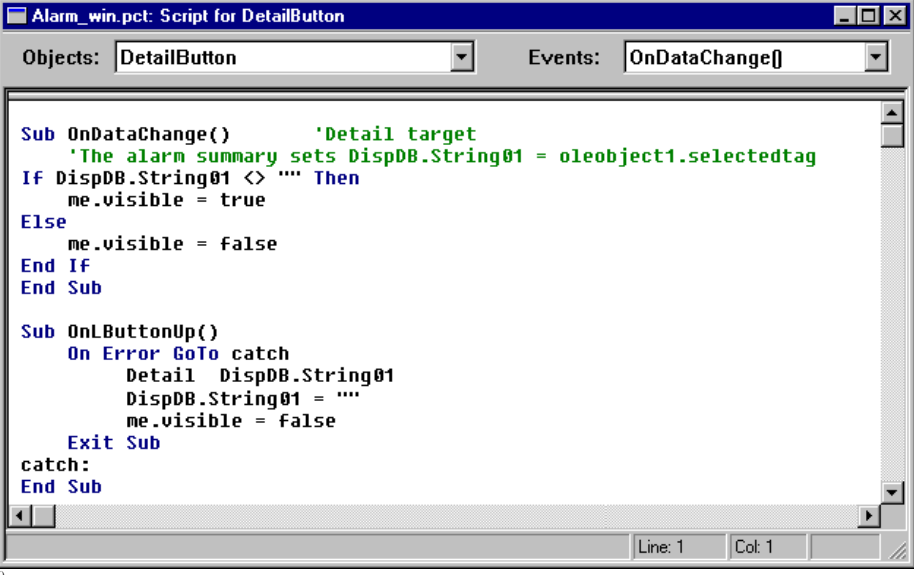
Design Criteria

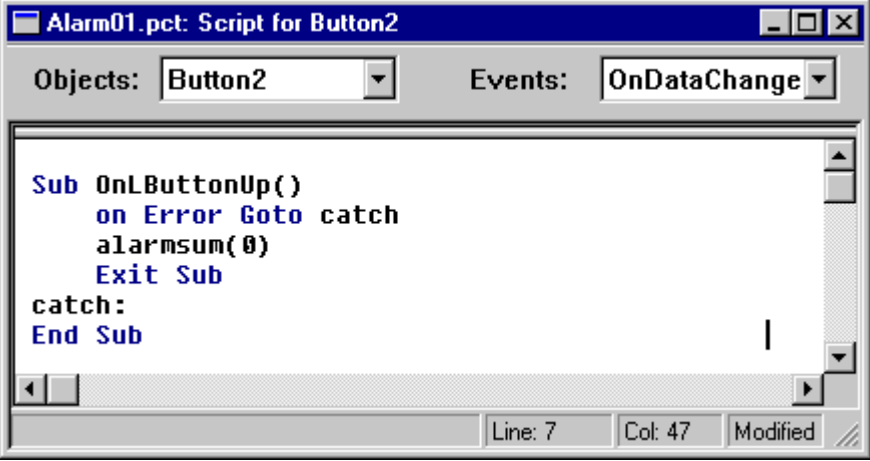
The lab exercise shows you how to insert and provide the Alarm Window OCX with operator interactivity; to do this you need to add script and related display objects to support the necessary operator interaction. In the lab exercise, the amount of interaction that you add is minimal, just

- Add a button that calls up a Detail display for the selected tagname that is in alarm, and
- Add a button that calls up the Native Window's Alarm Summary display, as the alarm window control is not intended to replace the Alarm Summary display.

Lab Procedure

Step	Action
1.	Using your GUS Display Builder, open a new GUS display.
2.	Choose Insert>Control>Honeywell GUS Alarm Window Control to insert an alarm window control into your display. Note: Be sure that you insert the alarm window control, and NOT the Alarm Summary that resides in the RAC folder. Result: The Alarm Window Control appears as a small rectangle.
3.	<p>Resize the alarm window control so that five to ten tagnames that are in alarm can appear in the control itself.</p> 
4.	<p>From the alarm window property dialog, be sure that "Line Mode" is enabled from the General property page, otherwise your Detail button will not work.</p> <p>Comment: When your alarm window is running, Line Mode causes the selected line to turn blue and store the tagname to the Selected Tag property.</p> 
5.	<p>Click on the Change Notification tab to open that property page.</p> <p>Make sure the Selected Tag property is highlighted, then click the ">" button to put it into the "Notify When Property Changes" list.</p> <p>Note: This allows you to use the OnPropertyChange event in a script you will soon enter for the Alarm Window control.</p> 
6.	Click the OK button to close the property pages.

Step	Action
7.	<p>Add script to the Alarm Window control that stores the tagname into DispDB.STRING01 when a tagname is selected in the alarm window control.</p> <p>Here is an example of the script (be sure to use the OnPropertyChange event).</p> 
8.	Close the script window when finished.
9.	<p>Add a button that can call up a Detail display (see step 3 graphic). Your script should make the button remain invisible until a tagname is selected in the alarm window control. The button script uses the Detail actor to call up the selected line's tagname.</p> <p>Here is an example of the script you will add to your Detail Display button.</p> 
10.	Close the script window when finished.

Step	Action
11.	<p>Add another button that can call up an Alarm Summary display (see step 3 graphic). This button will remain visible at all times. The button script uses the AlarmSum actor to call up the Alarm Summary displays.</p> <p>Here is an example of the script you will add to your Alarm Summary button.</p> 
12.	Close the script window when finished.
13.	Validate and Save your display as Alarm_win.pct in your Student folder.
14.	<p>Run your display.</p> <p>Expected results:</p> <p>[1.] Your alarm window control should display points from your partition that are in alarm. Note: If they do not, be sure that your Area Database unit assignments are correct for your GUS.</p> <p>[2.] The Detail Display button is not visible, but the Alarm Summary button is.</p>
15.	<p>Select a tagname from the alarm window.</p> <p>Expected results:</p> <p>[1.] The selected line turns blue (If it doesn't, make sure the "Line Mode" is enabled on the Alarm Window property page).</p> <p>[2.] Your Detail Display button appears because the tagname is stored into DispDB.STRING01, causing execution of the OnDataChange script on the Detail button to make it visible.</p>
16.	<p>Click the button to call up a Detail display.</p> <p>Expected results:</p> <p>[1.] The selected tagname's Detail display appears in a Native Window.</p> <p>[2.] The button disappears from the GUS display because the tagname is cleared in DispDB.STRING01.</p>
17.	<p>Click the Alarm Summary button to call up a Native Window Alarm Summary display.</p> <p>Expected results:</p> <p>[1.] The Alarm Summary button remains visible.</p> <p>[2.] The Native Window's Alarm Summary display appears.</p>

Step	Action
18.	CHALLENGE STEP (Optional, skip this step if you wish.): Add script that automatically sizes the Native Window Detail Display to a fixed size that you determine in your script code. [Hint: "Winsize"]
19.	Select another tagname from the alarm window. Expected result: [1.] The selected line turns blue and the Detail Display button re-appears.
20.	Click the button to call up a Detail display. Expected results: [1.] The button disappears and the Detail display is shown in the Native Window. [2.] (Optionally) The Native Window resizes per your instructions.

End of Lab Exercise

Last Page