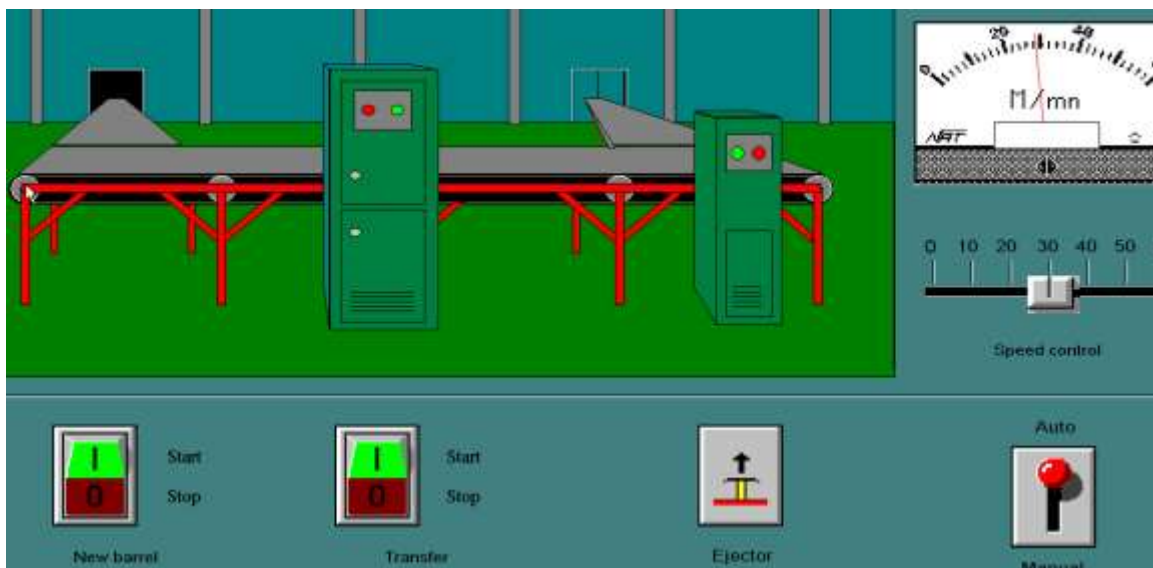


Module 7 - InTouch HMI



PLC220 M7 Student Lesson 5

Working with Drawing Bar Objects

Animation Links

Working with Drawing Bar Objects

Lesson Objective

By the end of this session, students should be able to:

1. Work with Drawing Bar Objects
2. Change attributes of an object.
3. Add Animation Links to Objects
4. Assign a tag to an Object. Animation Link(s)

	<u>Page</u>
Open an Application / Screen.....	3
Add a Drawing Bar Object to a Screen	6
Assigning color to an Object.....	8
Assigning Animation Links to an Object.....	9
Assigning a Tag to the Object.....	10
Exersice for Lesson 5.....	13
Review Questions.....	15

Working with Drawing Bar Objects

WindowMaker creates the visual interface used by operators to view and manage your manufacturing processes.

An InTouch interface shows data from and writes data back to the production environment.

You can configure the following interface elements of your InTouch applications with WindowMaker:

- Basic objects are simple graphical elements, such as rectangles, circles, lines, and text
- User-defined complex objects consist of one or more basic objects that represent elements such as valves and tanks
- Pre-defined complex objects perform specific functions, such as alarming and historical trending.

Icons for basic objects are found on the Draw Object Tool Bar.

Animation links are properties of simple and complex objects to change their appearance based on tag value data changes.

1. Select InTouch to open Application Manager from the computer desktop.

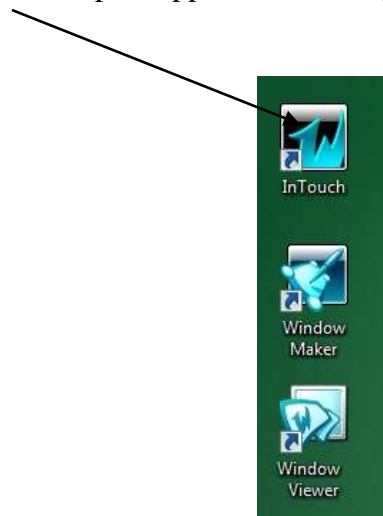


Figure 1-A

2. From Application Manager double click on the application to be opened



Figure 2-A

3. The WindowMaker Interface opens.

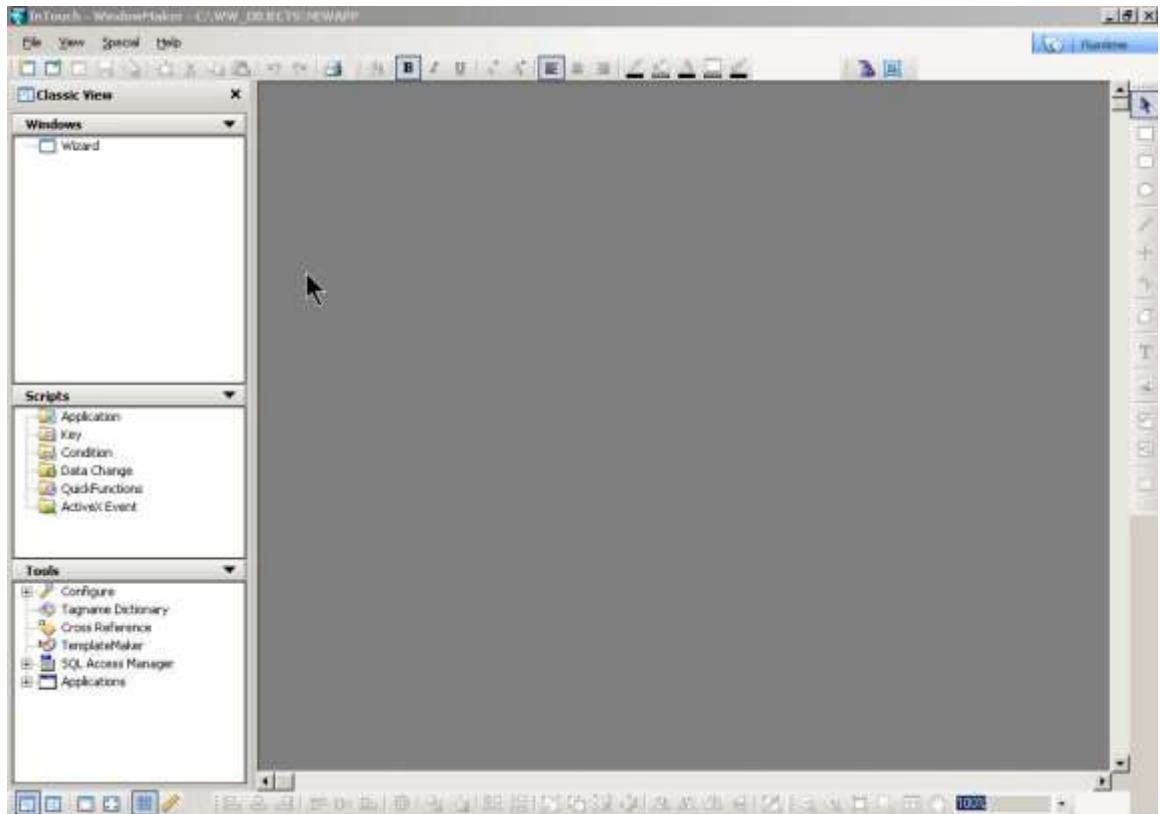


Figure 3-A

4. From Classic View -> Window - right click to add a new application window.

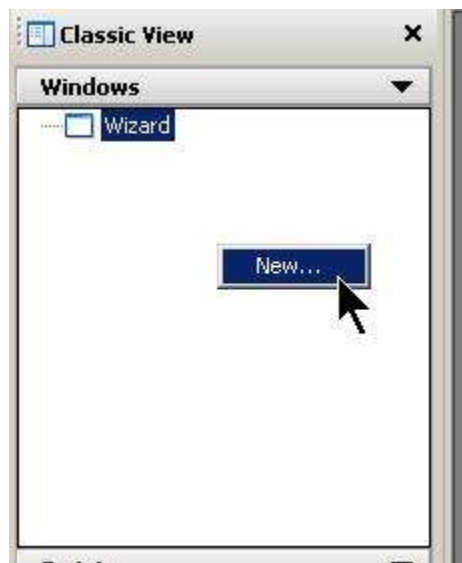


Figure 4-A

Complete the New Window Property Sheet.

Give the new window a name, comment (opt), background color and location/ size.

Figure 5-A

Window Type, Frame Style and appearance and size controls can be modified to fit particular application requirements.

Click the OK button.

A new application window (screen) opens in WindowMaker

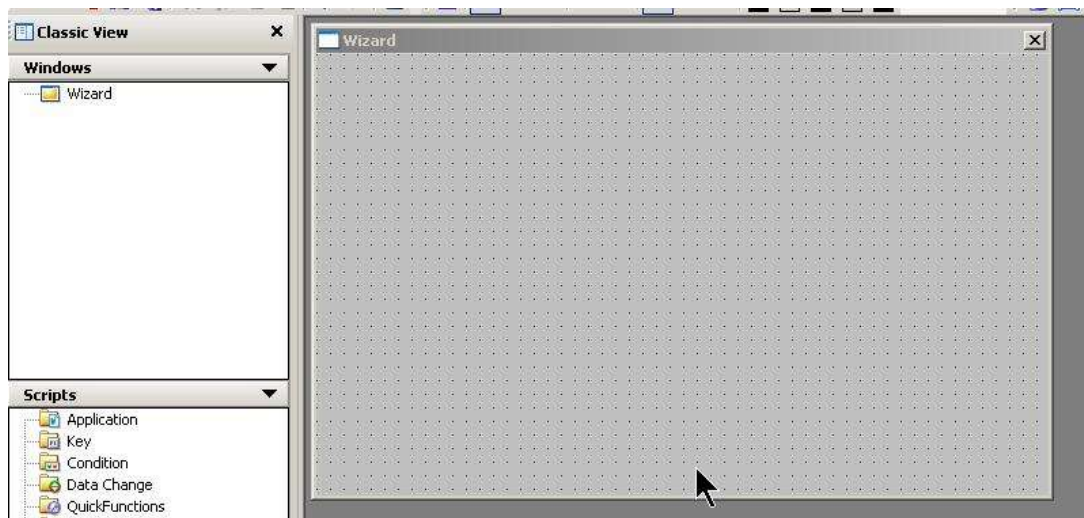



Figure 6-A

5. The Wizards Tool Bar  and the Drawing Tool Bar can be used to add objects to application windows.

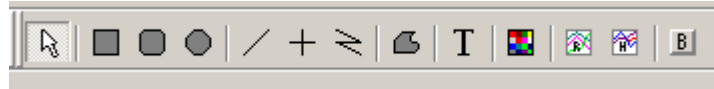


Figure 7-A

6. To add an object from the Drawing Tool Bar, click an icon to open a tool.














Icon Name	Icon	Description
Selector Mode		Selector mode used to select objects in the window.
Rectangle Tool		Rectangle tool used to draw rectangles or squares.
Rounded Rectangle Tool		Rounded rectangle tool used to draw rectangles or squares with rounded corners.
Ellipse Tool		Ellipse tool used to draw ellipses or circles.
Line Tool 1		Line tool used to draw lines at any angle.
Line Tool 2		Line tool used to draw horizontal or vertical lines.
Line Tool 3		Line tool used to draw polylines.
Polygon Tool		Polygon tool used to draw polygon objects.
Text Tool		Text tool used to type text objects.
Bitmap Tool		Bitmap tool used to draw a bitmap container for pasting a bitmap directly from the Windows Clipboard or one of the following: .bmp, .jpg, .pcx or .tga.
Real Time Trend Tool		Real time trend tool used to draw real time trend objects.
Historical Trend Tool		Historical trend tool used to draw historical trend objects.
Button Tool		Button tool used to draw a 3-dimensional button with a label.

Figure 8-A

The following example will use the rectangle tool to create a pushbutton.

7. Click on the rectangle tool. Move the mouse cursor to the application screen. Hold down the left mouse button to size the object. The dashed outline will show the size and position of the new object.

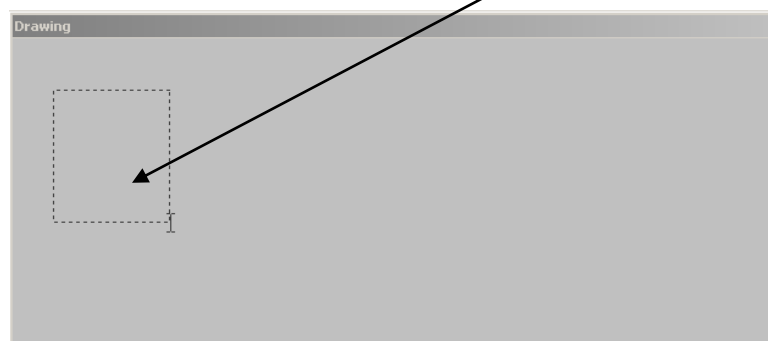


Figure 9-A

8. Release the left mouse button and the object will be displayed with handles and the last used fill color.

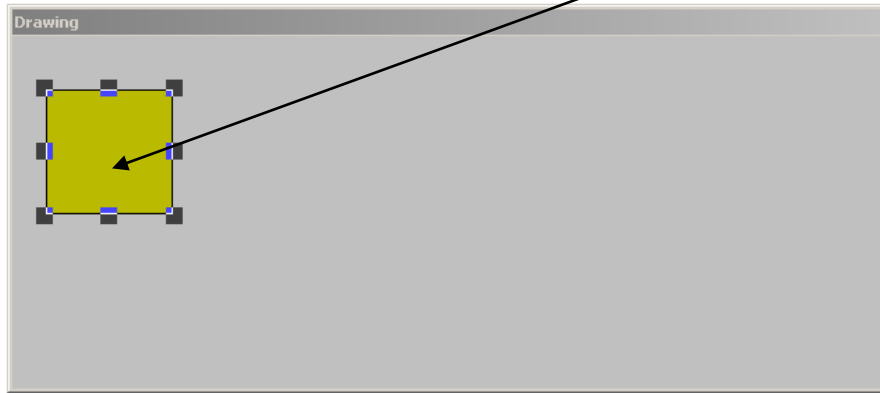


Figure 10-A

- Click the center of the object, hold down the left mouse button and drag the object to reposition the object on the screen.

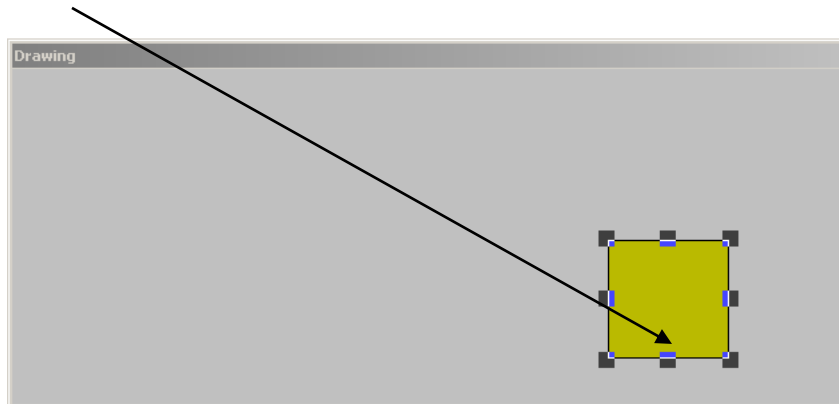
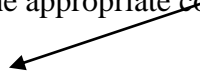


Figure 11-A

9. Change the fill color by selecting the Fill Color icon on the Format Tool Bar. The color palette opens. Select the appropriate color.



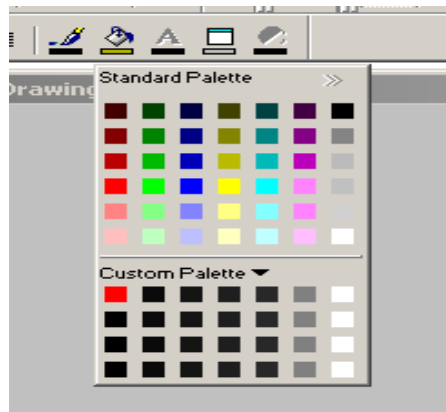


Figure 12-A

10. To add animation to the object, right click on the object and choose Animation Link from the drop down menu or double-click on the object

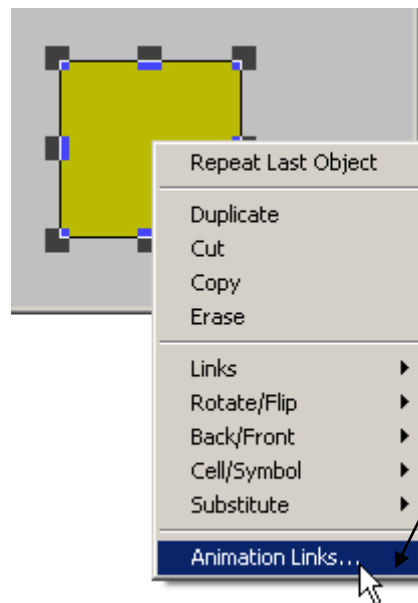


Figure 13-A

11. The Animation Link screen opens. The type of drawing tool used to create the object type appears on the upper left portion of the animation window.

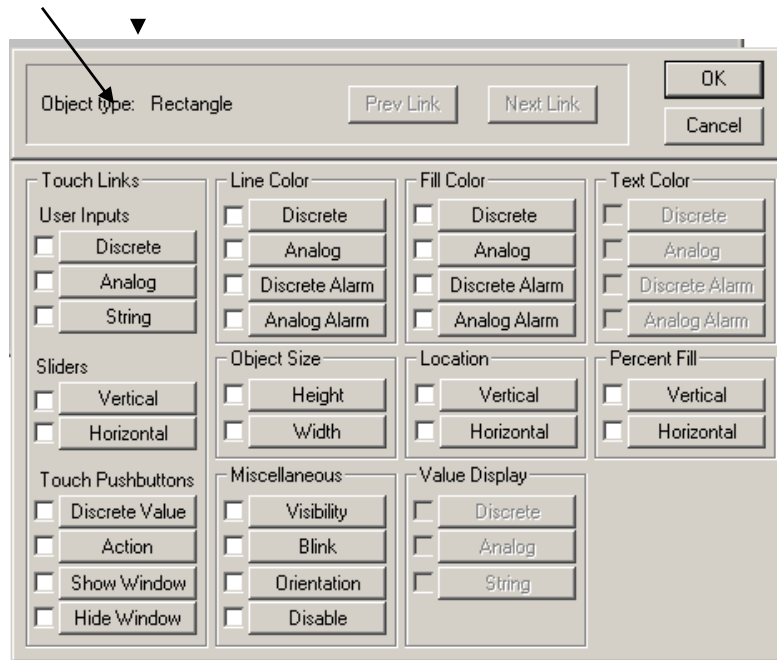


Figure 14-A

Depending on the drawing tool used to create the object, certain links will be activate or inactive.

12. To create an animation link to the object, click the check box, then click the button to the right of the check box.

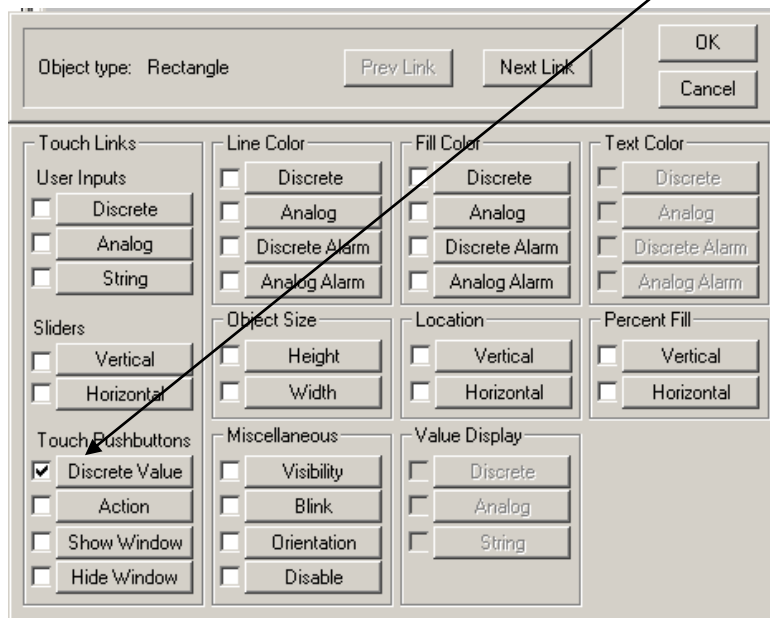


Figure 15-A

Note: More than one (1) animation link can be configured per object, but only one per category. For example using Figure 15-A a link has already been configured from the Touch Link category. Addition links may be configured from any of the other available categories.

Object type: Rectangle

Prev Link Next Link OK Cancel

Touch Links

User Inputs

☐ Discrete

☐ Analog

☐ String

Sliders

☐ Vertical

☐ Horizontal

Touch Pushbuttons

☒ Discrete Value

☐ Action

☐ Show Window

☐ Hide Window

Line Color

☐ Discrete

☐ Analog

☐ Discrete Alarm

☐ Analog Alarm

Fill Color

☒ Discrete

☐ Analog

☐ Discrete Alarm

☐ Analog Alarm

Text Color

☐ Discrete

☐ Analog

☐ Discrete Alarm

☐ Analog Alarm

Object Size

☐ Height

☐ Width

Location

☐ Vertical

☐ Horizontal

Percent Fill

☐ Vertical

☐ Horizontal

Miscellaneous

☐ Visibility

☐ Blink

☐ Orientation

☐ Disable

Value Display

☐ Discrete

☐ Analog

☐ String

Figure 16-A

13. Clicking the button to the right of the check box, opens the Tag Entry screen.

Object type: Rectangle

Prev Link Next Link OK Cancel

Pushbutton -> Discrete Value

Tagname: DiscTag1

Key equivalent

☐ Ctrl ☐ Shift Key... None

Action

☒ Direct ☐ Reverse ☐ Toggle ☐ Reset ☐ Set

OK Cancel Clear

Figure 17-A

If a tag for the object has previously been defined in the TagName Dictionary, enter a tag name and click either of the OK buttons.

To modify tag attributes, double click on the Tagname entry box.
The TagName Dictionary screen opens.

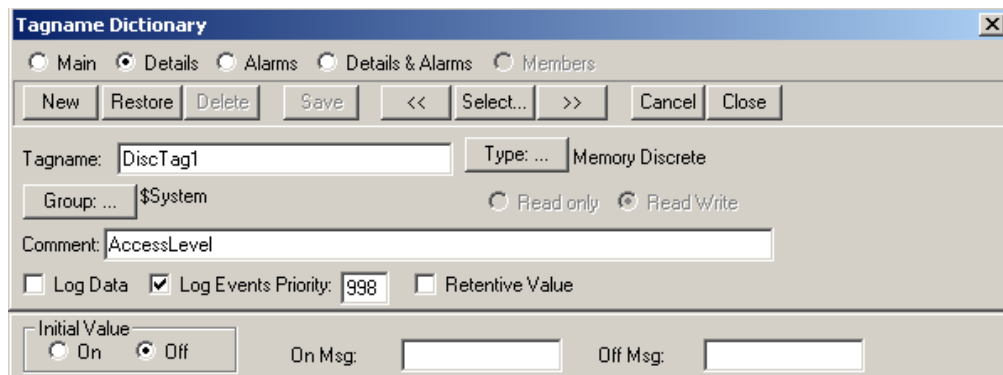


Figure 18-A

See TagName Dictionary handout to work with tags

14. Assign a new tag to an object by entering the tag name in the entry box.

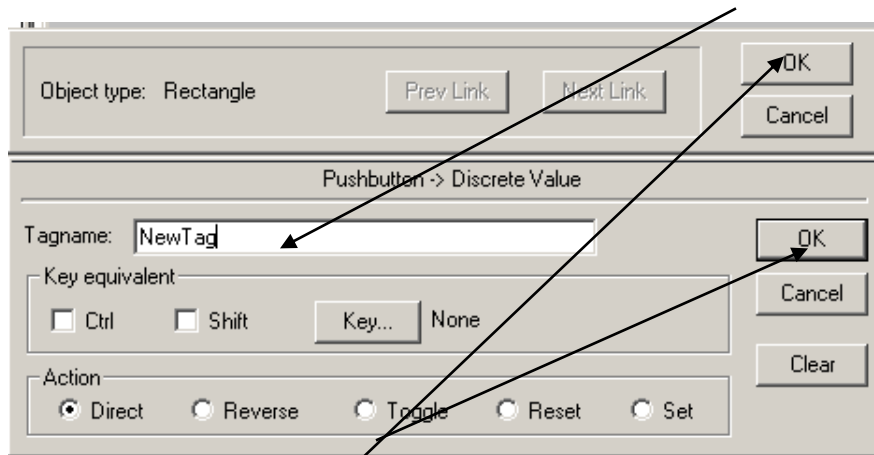


Figure 19-A

Click either of the OK buttons.
The Tagname Undefined window opens.

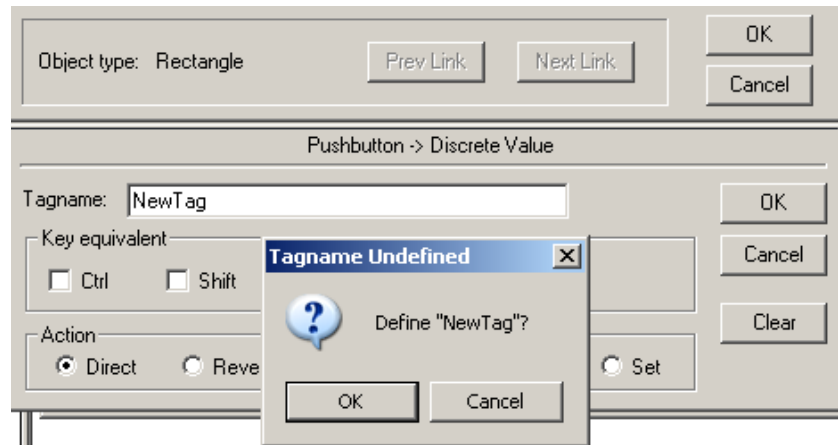


Figure 20-A

Click OK to open the TagName Dictionary window.

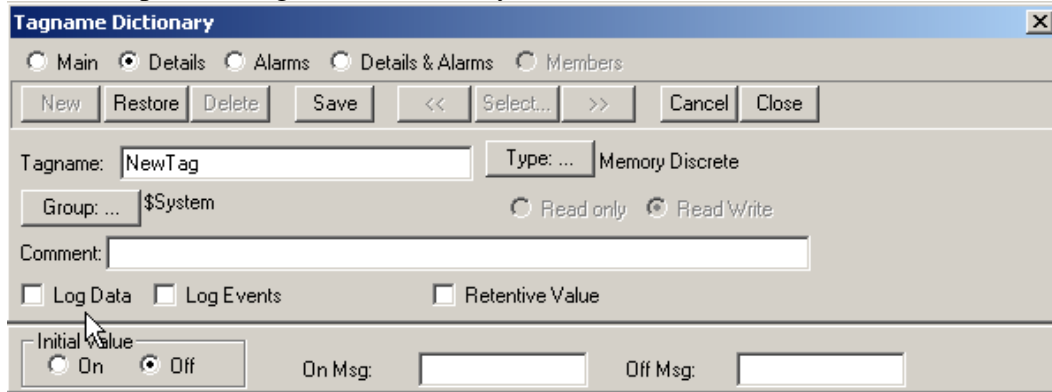


Figure 21-A

See TagName Dictionary handout to complete the window.

15. Equivalent Keys (Hot Keys) can be assigned to drawing objects. Use check boxes to assign Ctrl and/or Shift key(s). Click the Key button to assign a particular key.

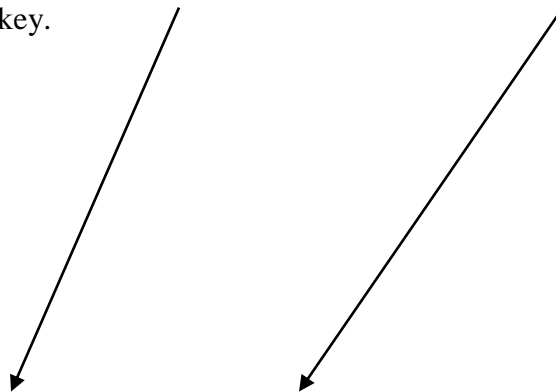


Figure 22-A

Choose Key window opens.

Figure 23-A

Select a key for assignment.

On the attribute screen the chosen key appears to the right of the Key button.

Figure 24-A

16. The Action area define how the object will react to a mouse click or if defined equivalent keys.

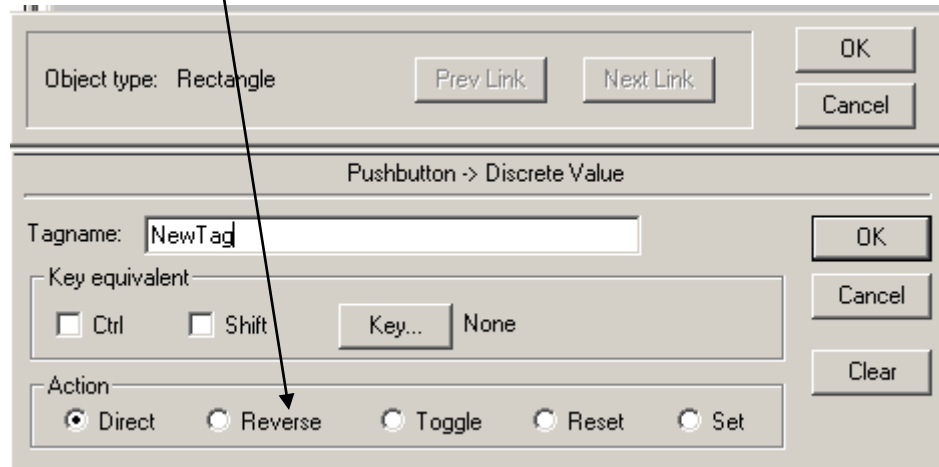


Figure 25-A

Direct: As long as the button is held down tag value = 1.

Reverse: As long as the button is held down tag value = 0.

Toggle: Reverse the state of a discrete tag. If tag is 1, then it is reset and vice-versa.

Reset: Tag value = 0 when pressed.

Set: Tag value = 1 when pressed.

17, Click OK button

Exercise for A5 Lesson

Drawing Bar Objects

The purpose of this lab is to reinforce the material taught in this lesson.

1. Using the InTouch Wonderware Application installed on the computer, open the Application Manager using the InTouch icon on the desktop.
2. Choose the application started in Lesson A1.

3. In WindowMaker, create a new window (screen). Name the window - Drawing
4. Using the Draw Object Toolbar → Rectangle icon. Add the object to the screen.
From the Format Tool change the Fill Color to blue

Assign an Animation Link to the Rectangle

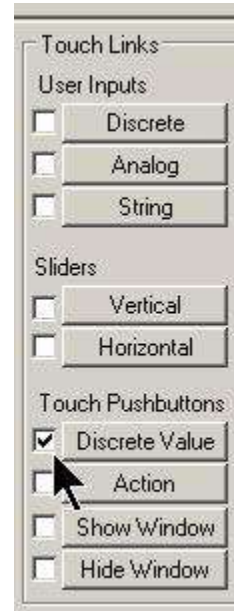
Object -

Touch Links-> Touch Pushbuttons ->
Discrete Value

Tagname – Digital_Tag1 –Click OK
Define-Digital_Tag1

From the Tagname Dictionary window –assign
Type as Memory Discrete – Click Save,
Click Close on Tagname Dictionary window

On the Object Type: Rectangle
Assign Key Equivalent as - Ctrl T
Assign Action as Toggle
Click OK button



5. Using the Draw Object Toolbar → Rectangle icon. Add a second rectangle object to the screen.

Note: The default is now Blue – the last color chosen for Fill Color

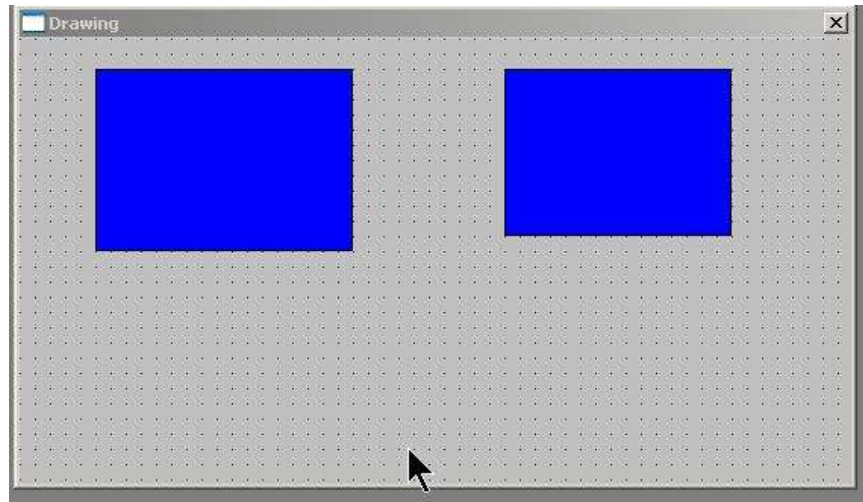
Assign an Animation Link to the
Rectangle Object -
Fill Color -> Discrete

On the Object Type Rectangle window
Assign Expression as Digital_Tag1
Colors – True – Green
False – Red

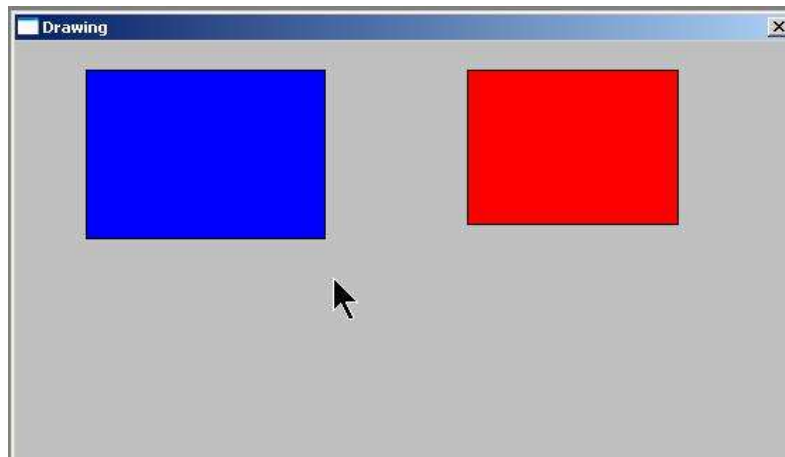
Click the OK button



6. .Screen for Wizard Objects



8. Go to WindowViewer - Runtime to test objects



Clicking the blue rectangle – will toggle the second rectangle from red to green
Ctrl-T keys - will toggle the second rectangle from red to green

Review Questions

1. T F A Draw Object Toolbar object can have only one Animation Link
2. The Draw Object Toolbar includes which object's icons?
 - a) Polygon

- b) Line
 - c) Rectangle
 - d) Rocker Switch
3. A rectangle Drawing Toolbar object can simulate which type of Pushbutton control?
- a) Momentary with NC contact
 - b) Momentary with NO contact
 - c) Maintained
 - d) None of the Above
4. T F A rectangle Drawing Toolbar object can simulate a switch.
5. A rectangle object can be assigned which Animation Links?
- a) Value Display
 - b) Line Color
 - c) Fill Color
 - d) Percent Fill
 - e) All the above
6. T F Draw Toolbar objects must have Animation Links assigned

Review Question Answers

- 1) F
- 2) a, b, c
- 3) a, b, c
- 4) T
- 5) b, c, d
- 6) F



DOL DISCLAIMER:

The document was originally created under "I AM iSTAR" a DOL funded project and used in this SCC project. "This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it."



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).