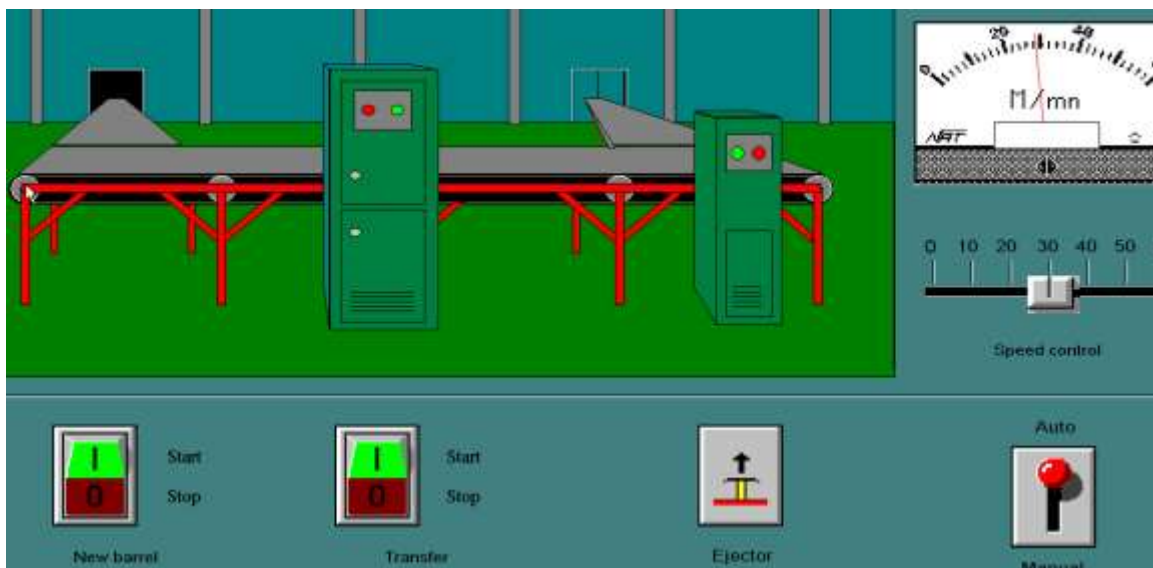


## Module 7 - InTouch HMI



## PLC220 M7 Student Lesson 3

### Tagname Dictionary

## Tagname Dictionary

### Lesson Objective

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

1. Open the Tagname Dictionary
2. Assign new tags in the dictionary.
3. View tags information in the Tagname Dictionary.
4. Cross Reference InTouch tags

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Exercise for Lesson A3.....	14

## **Introduction to InTouch Tagname Dictionary**

### Creating / Viewing / Search InTouch Tags

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

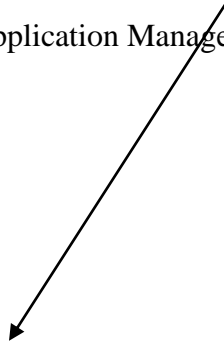




Figure 2-A

Note: Clicking on the WindowMaker icon on the desktop will open the last application that was used in WindowMaker.

1. The WindowMaker Interface opens.

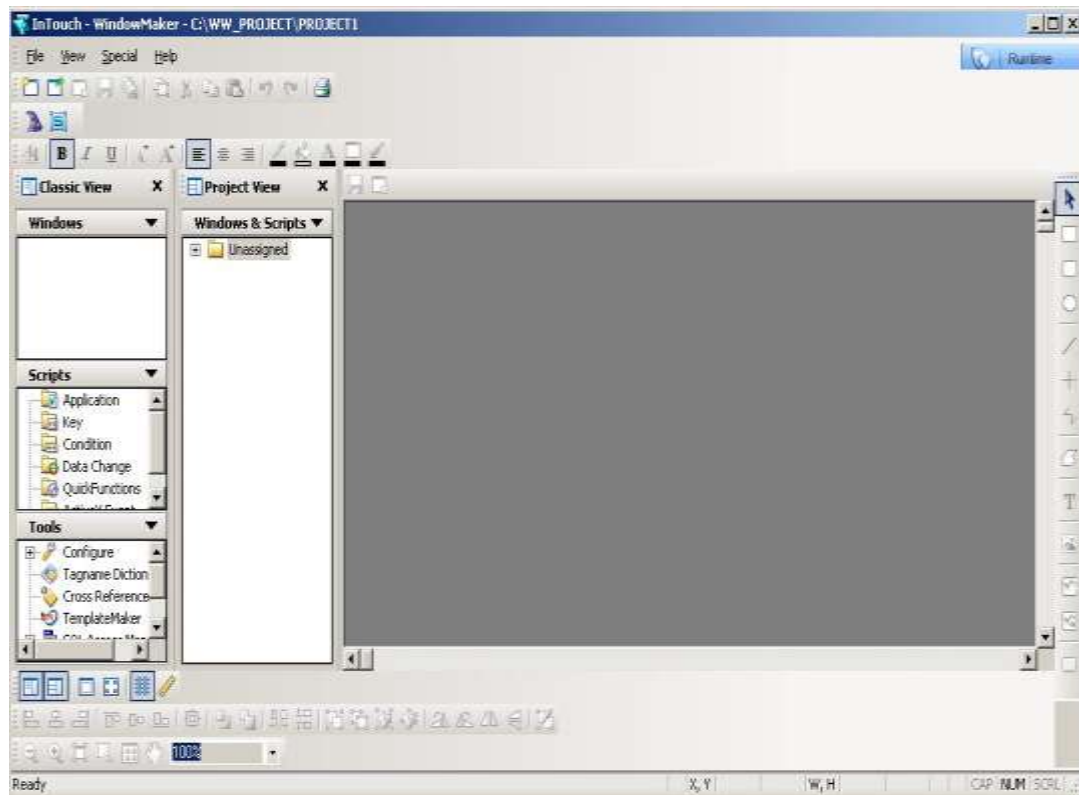


Figure 3-A

3. The Tagname Dictionary can be accessed in a variety of ways

- Using quick-key CTRL-T
- Classic View -> Tools – Tagname Dictionary



Figure 4-A

- Classic View -> Script - open a Scripts window - double click white-space on the Scripts window

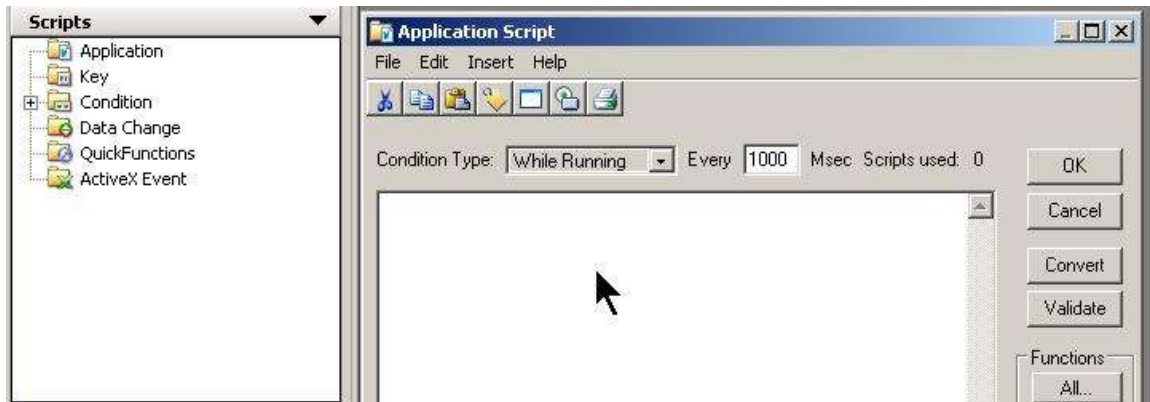


Figure 5-A

- From WindowMaker Menu Bar -> Special -> Tagname Dictionary



Figure 6-A

- Double click on the Tagname or Expression selection box of an object.

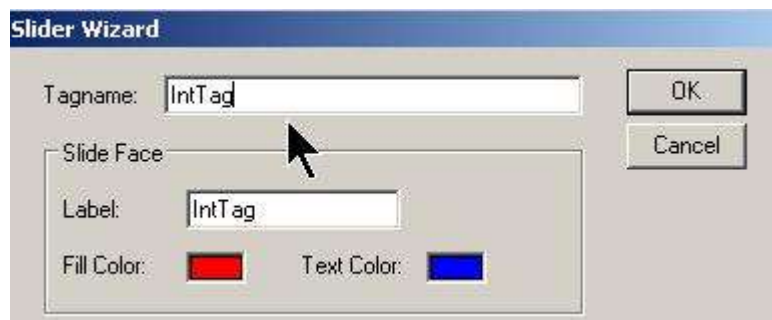


Figure 7-A

4. From the Tagname Dictionary screen – Click the Select Button to open the Select Tag screen – Figure 9-A.

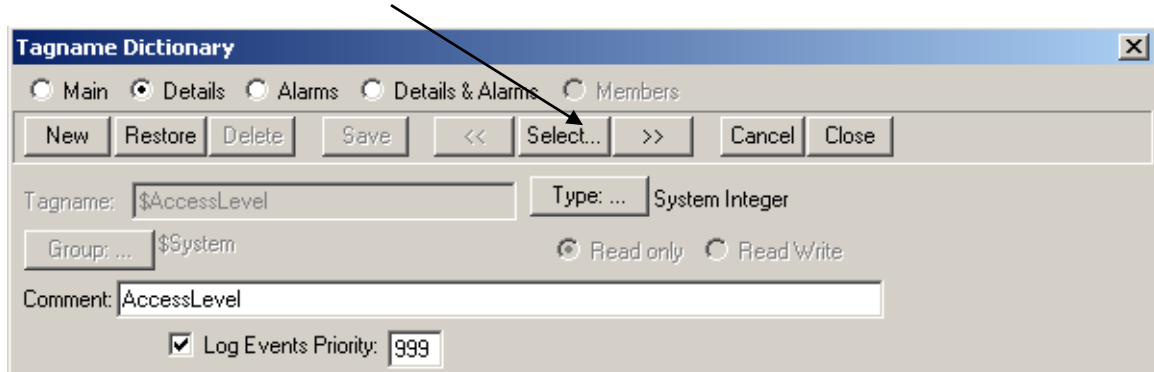


Figure 8-A

The Select Tag screen shows application tags.  
Double click on a tag to show Tagname Dictionary screen – Figure 8-A.

Tags starting with a \$ are predefined system tags.

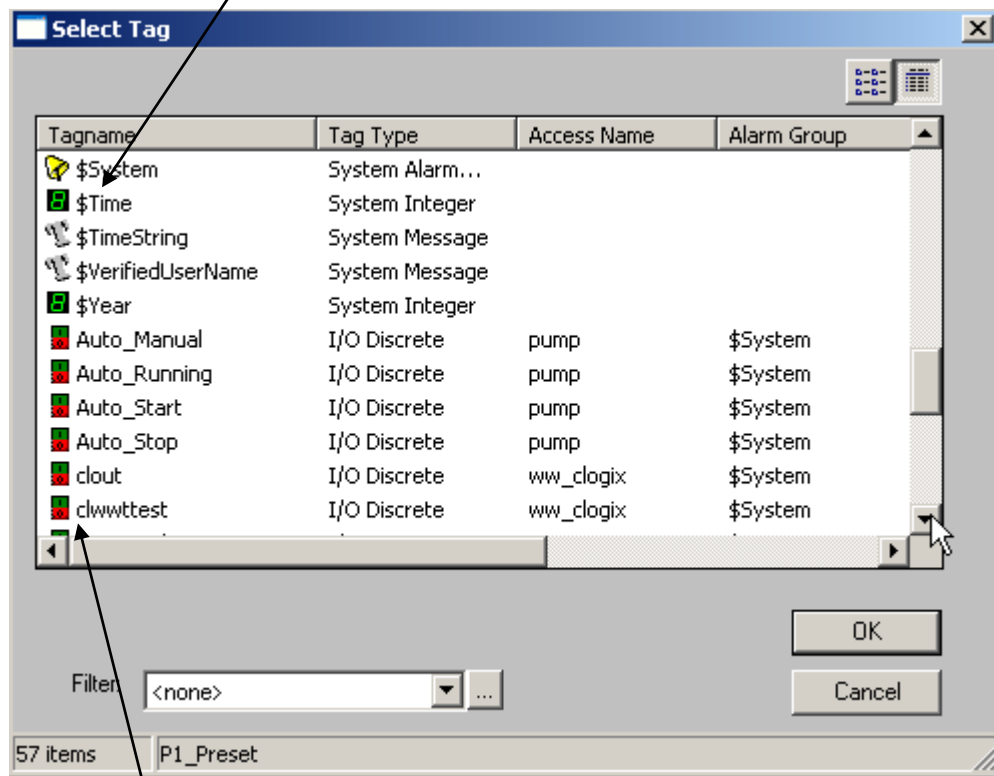


Figure 9-A

Tags without a \$ are tags defined for the specific application.

- To create a new tag open the Tagname Dictionary screen. (Steps 4 – 5).

Figure 10-A

The Main, Details, Alarms or Details & Alarms radio buttons shows different views of the Tagname Dictionary window.

Select the New button to define a new tag.

- A blank Tag Dictionary screen opens.

Figure 11-A

Enter a Tag Name. Tag name can be up to 32 characters  
Valid remaining characters are A-Z, a-z, 0-9, !, @, -,  
?, #, \$, %, \_, \ and &.

Select the Type button.



7. From the Tag Type window, choose the category for the tag.

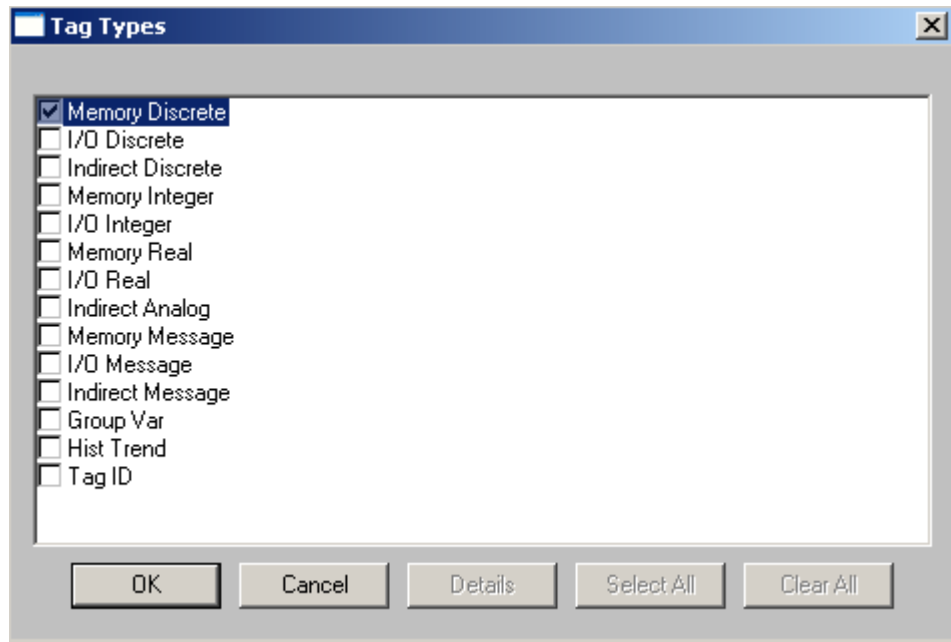


Figure 12-A

Memory types of tags are used internally in the Wonderware application. I/O types of tags are used to read or write values to external devices such as PLCs. Other types of tags are Group Var (used for Alarming), Hist Trend and Tag ID (used for historical trending), and Indirect tags (used to have one tag value influence multiple tag values).

The Memory tag types can have the following values.

- Memory Discrete 0 and 1 (ON / OFF, True / False, High / Low)
- Memory Integer – 32-bit signed integer +2,147,483,647 and -2,147,483,647.
- Memory Real  $-3.4e^{38}$  and  $3.4e^{38}$
- Memory Message – 131 character long text string

The I/O tag types can have the following values.

- I/O Discrete 0 and 1 (ON / OFF, True / False, High / Low)
- I/O Integer – 32-bit signed integer +2,147,483,647 and -2,147,483,647.
- I/O Real  $-3.4e^{38}$  and  $3.4e^{38}$
- I/O Message – 131 character long text string

8. Tagname Dictionary window for Integer tag. – Detail & Alarm view

The screenshot shows the 'Tagname Dictionary' dialog box with the following configuration:

- Tab:** Details & Alarms
- Buttons:** New, Restore, Delete, Save, <<, Select..., >>, Cancel, Close
- Tagname:** Tank1\_Level
- Type:** Memory Integer
- Group:** Tank1
- Access:** Read/Write (selected)
- Comment:** AccessLevel
- Log Data:** ☐ **Log Events:** ☐ **Retentive Value:** ☐ **Retentive Parameters:** ☐
- Initial Value:** 0 **Min Value:** -32768 **Deadband:** 0
- Eng Units:**  **Max Value:** 32767 **Log Deadband:** 0
- ACK Model:** Condition (selected), Event Oriented, Expanded Summary
- Alarm Comment:**
- Alarm Settings:**
  - LoLo:** ☐ Alarm Value: 0, Priority: 1, Alarm Inhibitor: ☐
  - Low:** ☐ Alarm Value: 0, Priority: 1, Alarm Inhibitor: ☐
  - High:** ☐ Alarm Value: 0, Priority: 1, Alarm Inhibitor: ☐ Value Deadband: 0
  - HiHi:** ☐ Alarm Value: 0, Priority: 1, Alarm Inhibitor: ☐
- % Deviation:**
  - Minor Deviation:** ☐ % Deviation: 0, Target: 0, Priority: 1, Alarm Inhibitor: ☐ Deviation Deadband %: 0
  - Major Deviation:** ☐ % Deviation: 0, Target: 0, Priority: 1, Alarm Inhibitor: ☐
- Rate of Change:** ☐ % per: ☐ Sec ☒ Min ☐ Hr, Priority: 1, Alarm Inhibitor: ☐

Figure 13-A

## Tag Cross Reference

8. The Cross Reference utility shows tag usage within an InTouch application.

The Cross Reference can be accessed by:

- Classic View -> Tools – Cross Reference

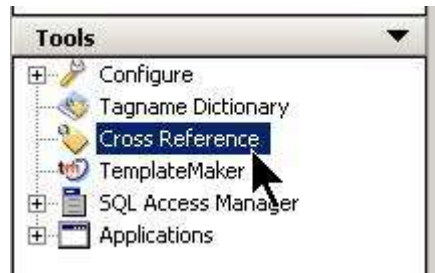


Figure 14-A

- From WindowMaker Menu Bar -> Special -> Cross Reference

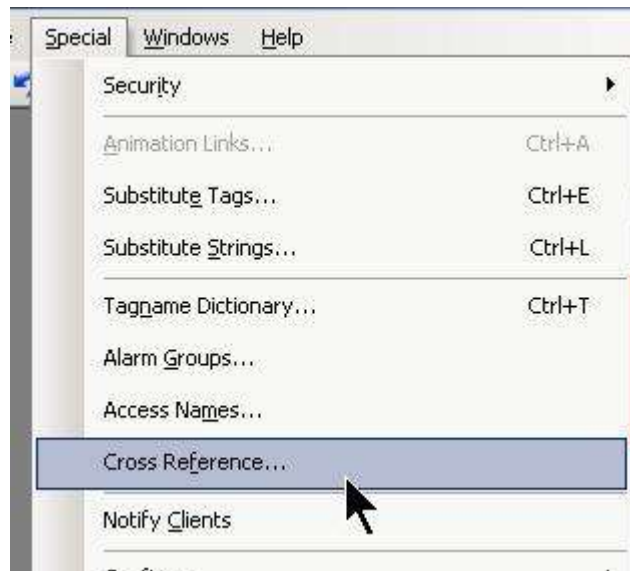


Figure 15-A

The InTouch Cross Reference Search Criteria window opens  
See Figure 16-A

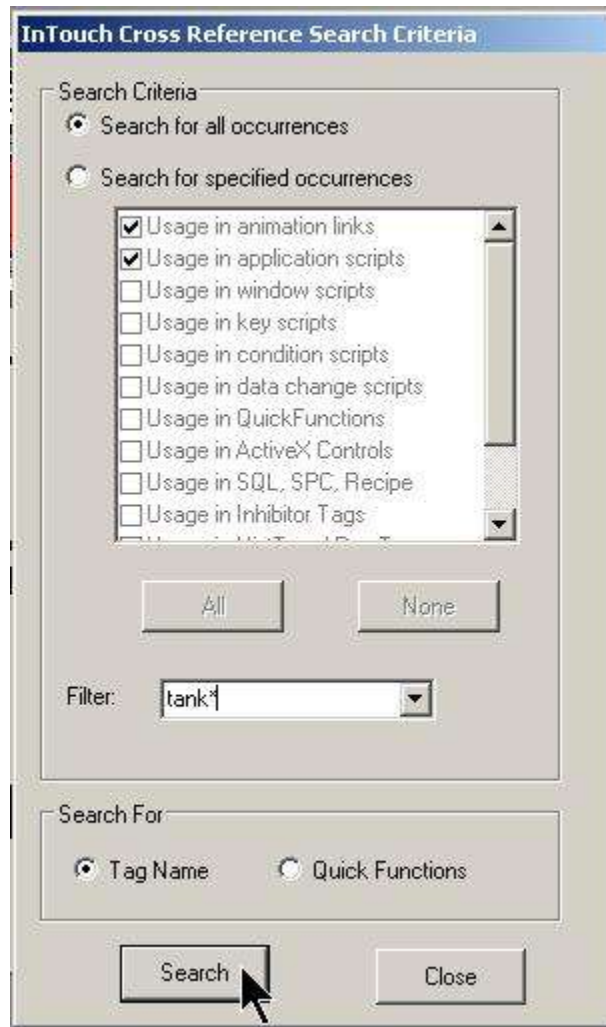


Figure 16-A

Type a tagname in the Filter selection box – Click Search

Search wildcard characters let you specify a more generalized search for tag names that match only a portion of the search string.

Use an asterisk (\*) in the string to search for all tags whose names match those characters before and/or after the asterisk. For example, the search string Tank\* finds Tank1, Tank1\_Level and other tags that begin with Tank.

Use a question mark (?) in the search string for a single character replacement. For example, the search string Pump? finds Pump1 and Pump2.

The InTouch Cross Reference window opens – See Figure 17-A

The window lists the name of the window where the tag is defined and the window coordinates of all objects linked to a tag.

The report also allows you to view any Scripts locations that use the tag.

It also list tags that are in the Tagname Dictionary but are not used in the InTouch Application.

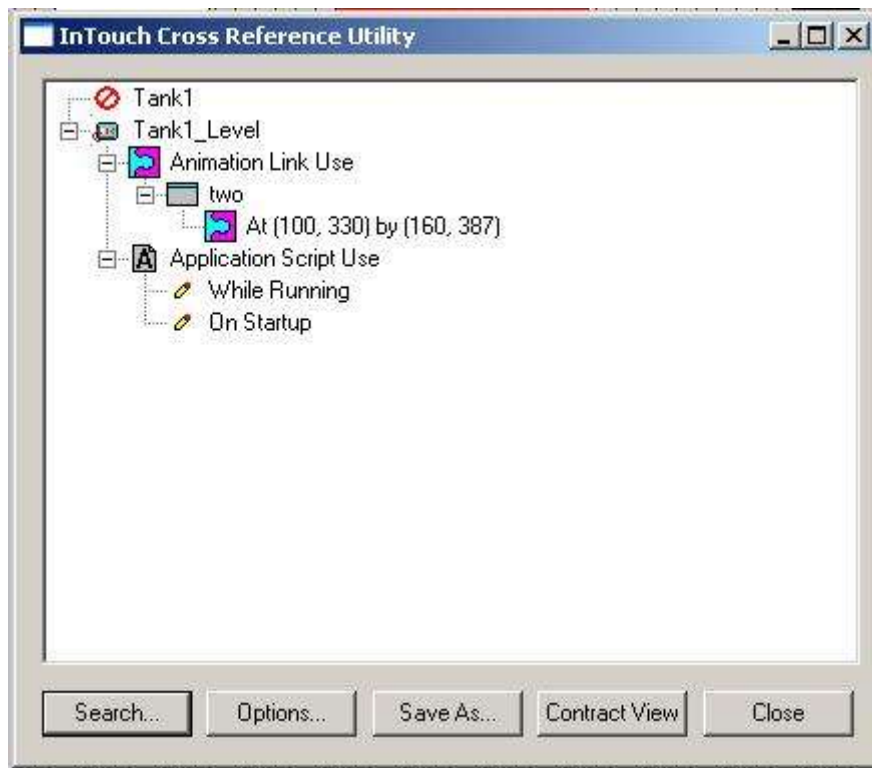


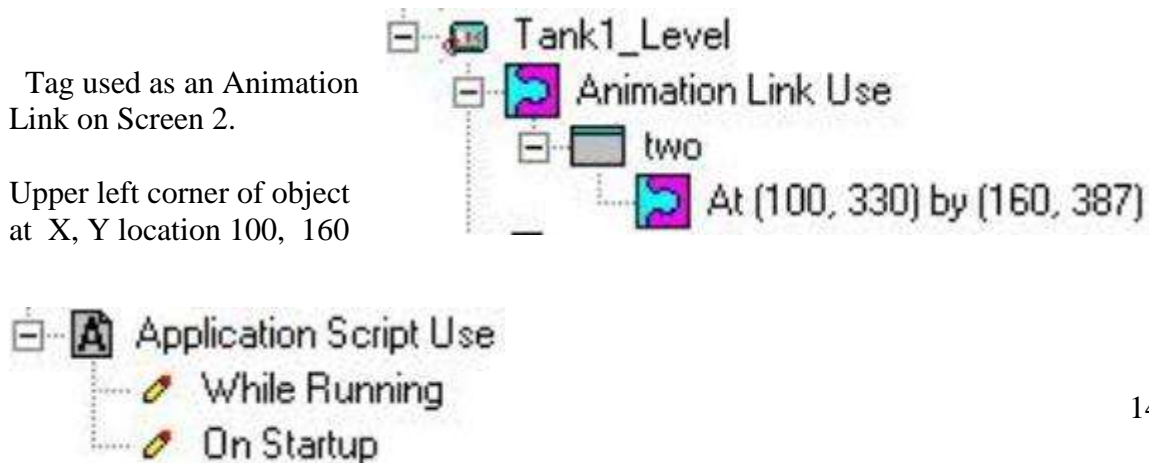
Figure 17-A

Icons appear in the InTouch Cross Reference Utility window to show status and usage.

 Tank1 - Tag not used

Tag used as an Animation Link on Screen 2.

Upper left corner of object at X, Y location 100, 160



Tag used in Application Script in both the  
While Running and On Startup Conditions

## Exercise for A3 Lesson

### Tagname Dictionary

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

1. Open an InTouch application from the Application Manager.
2. Navigate to the Tagname Dictionary window – Click the New button
3. Create a tag called Tag1 - Type – Memory Discrete – Click Save
4. Create a tag called Tag2 - Type – Memory Integer – Click Save
5. Click Select to open the Select Tag window
6. View Tag1 and Tag2 in the Tagname Dictionary list.
7. Double click Tag2 to reopen the Tagname Dictionary window.
8. Using the radio buttons at the top of the windows note the information on the screen views,
9. Click Select to open the Select Tag window
10. Navigate to Tag1
11. Double click Tag1 to reopen the Tagname Dictionary window.
12. Using the radio buttons at the top of the windows note the information on the screen views,
13. Compare information on Tagname Dictionary screens base on tag Type – Memory Integer vs. Memory Discrete.

## Review Questions

1. T F Internal tags in InTouch are I/O Type Tags
2. A system tag is identified by:
  - a) System:Tagname – where Tagname is the name of the Tag
  - b) SYS:Tagname– where Tagname is the name of the Tag
  - c) \$Tagname – where Tagname is the name of the Tag
  - d) InTouch does not use System tags
3. Tags used to monitor / receive data from external devices are of which Type?
  - a) Memory
  - b) External
  - c) I/O
  - d) Indirect
4. T F The \* character is a valid wildcard character for cross-referencing
5. Integer tags in Wonderware InTouch are:
  - a) 8 bit tags
  - b) 16 bit tags
  - c) 1 Byte tags



- d) Discrete tags
  - e) 32 bit tags
6. T F 120.7 is a valid integer tag value

### Review Question Answers

- 1) F
- 2) c
- 3) c
- 4) T
- 5) e
- 6) F



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