

# User Instructions:

## ME 1756 ControlLogix I/O Faceplates with Descriptions

11/07 Rev 1

The "ME 1756 ControlLogix I/O Faceplates" files allow you to quickly load, configure, and use preconfigured status and diagnostic displays or "faceplates" for ControlLogix 1756 Analog and Digital I/O using RSView or FactoryTalk View Machine Edition.

The example below shows a ControlLogix system chassis object group that may be added to your specific hardware system display. The system chassis object group includes preconfigured I/O Goto display buttons that can launch the on-top status and diagnostic displays or "faceplates" for the particular I/O modules they represent. These faceplates give users the option of adding I/O text descriptions next to each discrete I/O point or analog channel.

Example of Goto Button display launching a digital and analog faceplate



# System Compatibility

The faceplate files are compatible with:  
RSLogix5000 V15 or later  
RSView or FactoryTalk View Machine Edition 4.0 or later.

Before using faceplate files, if using RSView Studio Machine Edition Version 4.0, please upgrade with the patches posted on or after 01/01/07 and upgrade your PanelView Plus / VersaView CE terminals with Machine Edition firmware version 4.00.09 or later.

The latest RSView Studio Machine Edition 4.0 patches may be found within the Rockwell Automation Knowledgebase at the following website/ Answer ID:  
<http://www.rockwellautomation.com/knowledgebase>  
Answer ID: 35779

The PanelView Plus / VersaView CE terminal firmware supporting version 4.00.09 or later, may be accessed and downloaded from the following website:  
<http://support.rockwellautomation.com/ControlFlash/FUW.asp>

**NOTE: These instructions are for local I/O or distributed I/O on EtherNet/IP and ControlNet but not DeviceNet.**

The following modules are compatible with these instructions:

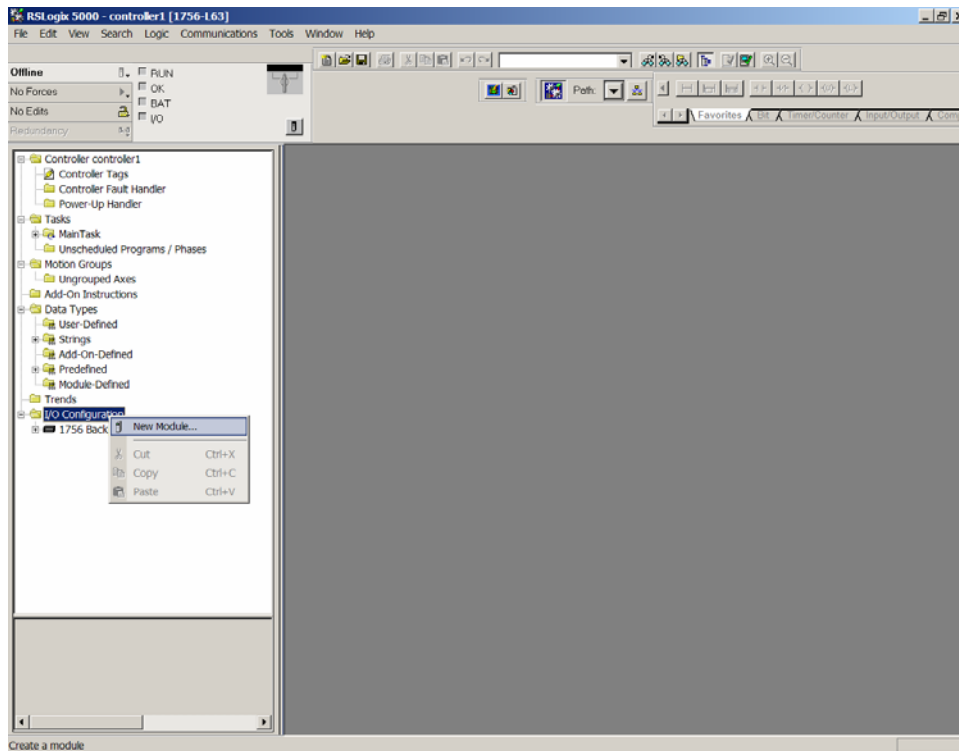
<u>Digital</u>	<u>Analog</u>
1756-IA16	
1756-IA16I	1756-IF4FXOF2F
1756-IB16	1756-IF6CIS
1756-IB16I	1756-IF6I
1756-IB32/A	1756-IF8
1756-IB32/B	1756-IR6I
1756-IC16	1756-IT6I
1756-IG16/A	1756-IT6I2
1756-IH16I	1756-OF4
1756-IM16I	1756-OF6CI
1756-IN16	1756-OF6VI
1756-IV16/A	1756-OF8
1756-IV32/A	
1756-OA16	
1756-OA16I	
1756-OA8	
1756-OA8E	
1756-OB16E	
1756-OB16I	
1756-OB32	
1756-OB8	
1756-OB8EI	
1756-OC8	
1756-OG16A	
1756-OH8I	
1756-ON8	
1756-OV16E/A	
1756-OV32E/A	
1756-OW16I	
1756-OX8I	

## General Setup

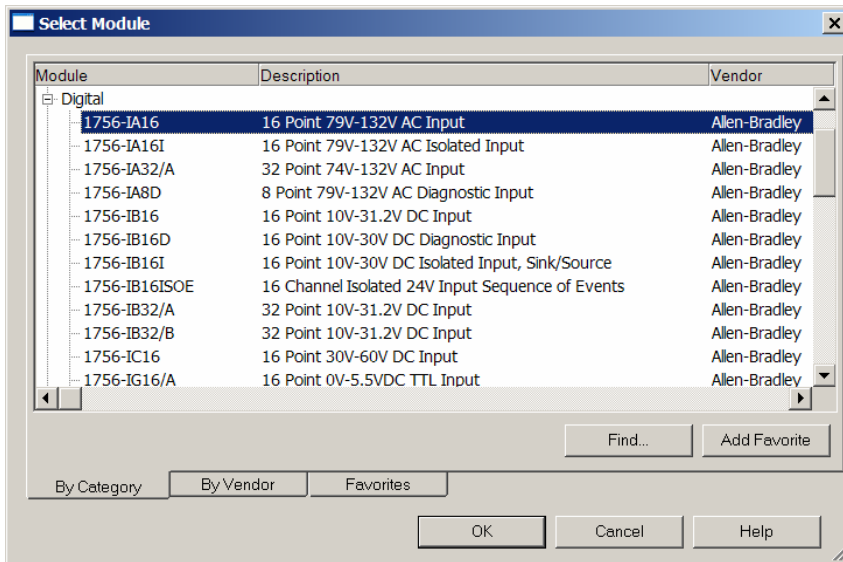
- 1) After downloading your file, the following folders will be created :  
“ME\_1756\_Digital&Analog\_Faceplate\_Files” folder containing the 1756 digital and analog I/O faceplate and parameter files and a “ME\_1756\_Goto Buttons” folder containing pre-created 1756 module Goto buttons that can be used on your display.

## Logix Configuration

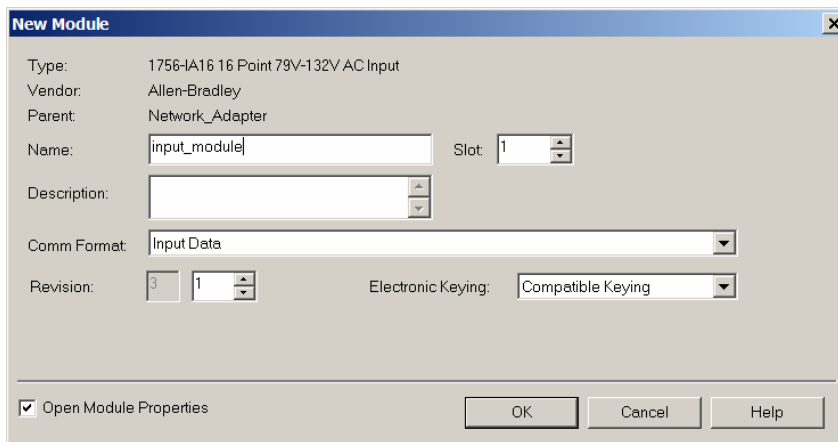
- 1) Open existing Logix file with RSLogix5000
- 2) Add and configure the desired ControlLogix I/O modules. (Skip to step 2e for distributed I/O).
  - a. For **Local I/O**, right click on your 1756 I/O Bus and select “New Module”.



- b. Select the appropriate I/O module from the available listing.

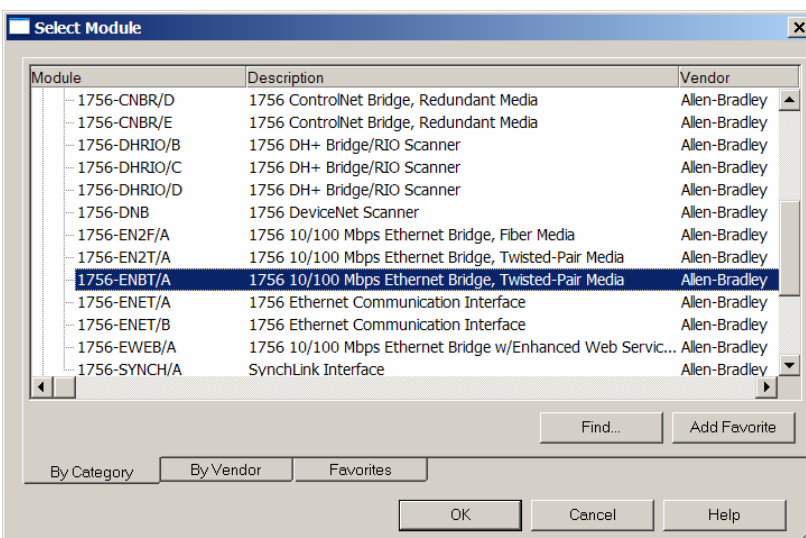


c. Enter a distinct module name and description.

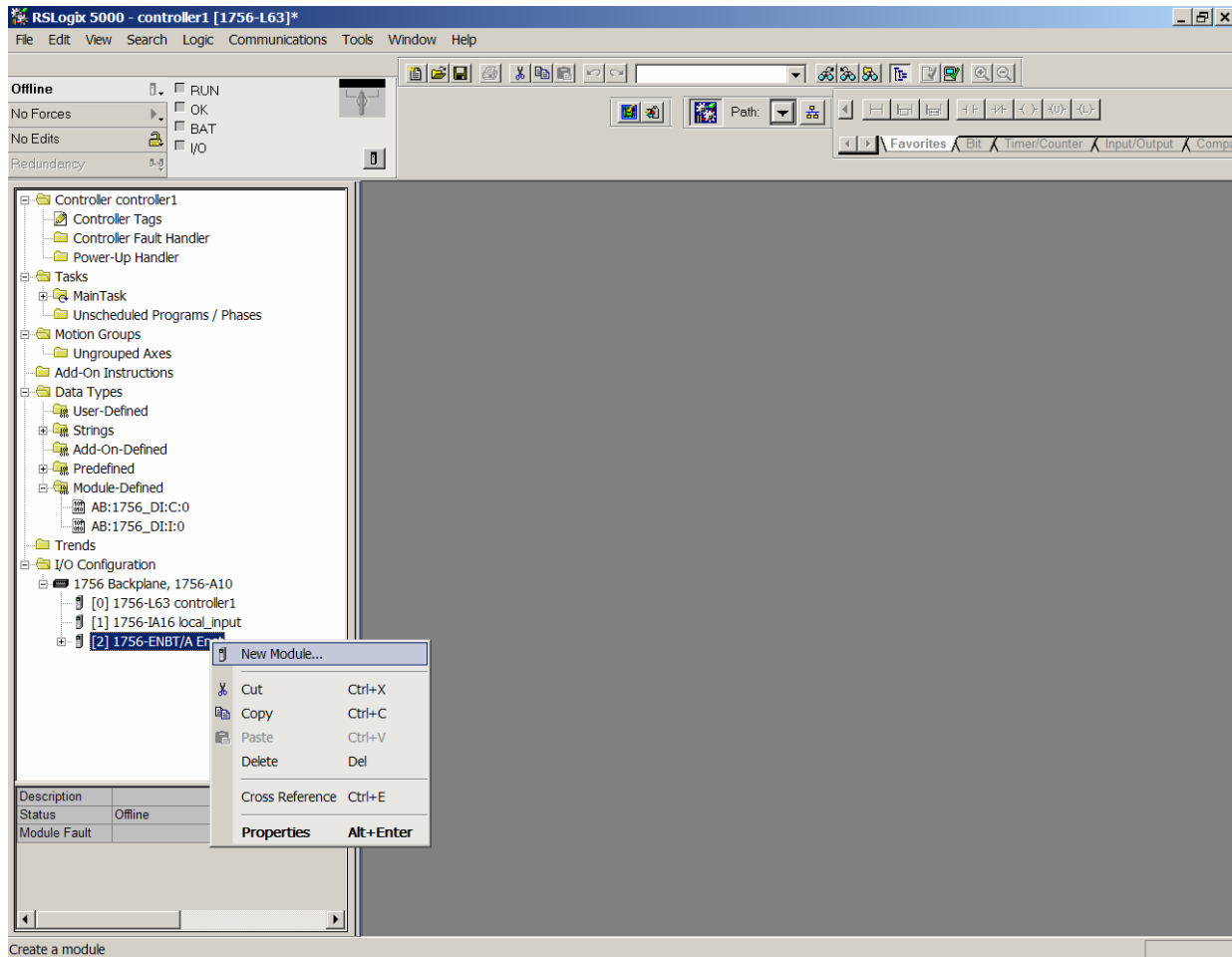


d. Repeat step 2a-2c for all local input and output ControlLogix I/O modules.

e. For **distributed ControlLogix I/O**, right click 1756 I/O Bus and select "New Module". Then select the appropriate 1756 EtherNet/IP or ControlNet Communications module.



- f. Give the new Communications module a name, a description and enter the correct chassis size. For an ENBT give the IP address. For a CNB give the node number.
- g. Right click the Communication module you just configured and select “New Module” to add the appropriate network adapter.



- h. Select the appropriate adapter module for the distributed I/O you are using.
- i. Give the new module a name, description, an IP address, and choose a chassis size.

**NOTE: Do not set the Comm Format to Rack Optimization for these faceplates.**

**Module Properties: enet:0 (1756-ENET/B 2.1)**

General | Connection | Module Info | Port Configuration | Port Diagnostics | Backplane

Type: 1756-ENET/B 1756 Ethernet Communication Interface  
 Vendor: Allen-Bradley  
 Parent: enet  
 Name: Network\_Adapter  
 Description:   
 Comm Format: None  
 Slot: 0 Chassis Size: 17  
 Revision: 2 1  
 Electronic Keying: Compatible Keying

Address / Host Name  
☒ IP Address: 30 . 30 . 30 . 30  
☐ Host Name:   
 Status: Offline

OK Cancel Apply Help

- j. Right click on the network adapter and select “New Module”. Add the appropriate I/O module for your system.

**Select Module**

Module	Description	Vendor
1756-IA16	16 Point 79V-132V AC Input	Allen-Bradley
1756-IA16I	16 Point 79V-132V AC Isolated Input	Allen-Bradley
1756-IA32/A	32 Point 74V-132V AC Input	Allen-Bradley
1756-IA8D	8 Point 79V-132V AC Diagnostic Input	Allen-Bradley
1756-IB16	16 Point 10V-31.2V DC Input	Allen-Bradley
1756-IB16D	16 Point 10V-30V DC Diagnostic Input	Allen-Bradley
1756-IB16I	16 Point 10V-30V DC Isolated Input, Sink/Source	Allen-Bradley
1756-IB16ISOE	16 Channel Isolated 24V Input Sequence of Events	Allen-Bradley
1756-IB32/A	32 Point 10V-31.2V DC Input	Allen-Bradley
1756-IB32/B	32 Point 10V-31.2V DC Input	Allen-Bradley
1756-IC16	16 Point 30V-60V DC Input	Allen-Bradley
1756-IG16/A	16 Point 0V-5.5VDC TTL Input	Allen-Bradley

Find... Add Favorite

By Category By Vendor Favorites

OK Cancel Help

- k. Enter a distinct module name and description.

**New Module**

Type: 1756-IA16 16 Point 79V-132V AC Input  
 Vendor: Allen-Bradley  
 Parent: Network\_Adapter  
 Name: input\_module Slot: 1  
 Description:   
 Comm Format: Input Data  
 Revision: 3 1  
 Electronic Keying: Compatible Keying

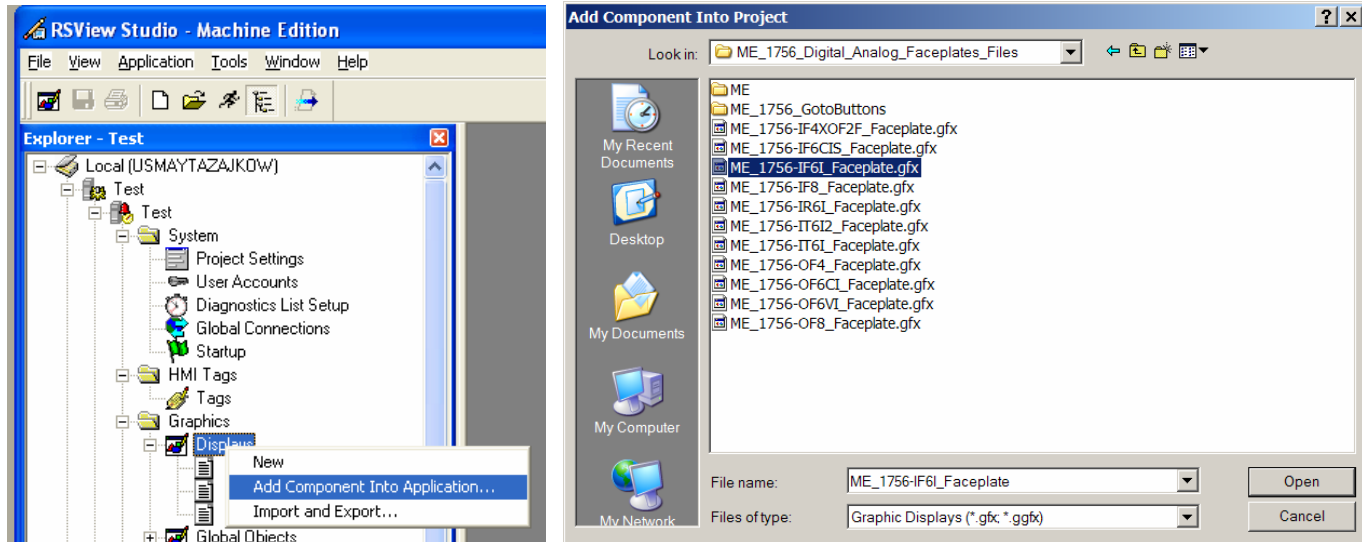
☒ Open Module Properties

OK Cancel Help

- l. Repeat step 2j-2k for all distributed input and output ControlLogix I/O modules.

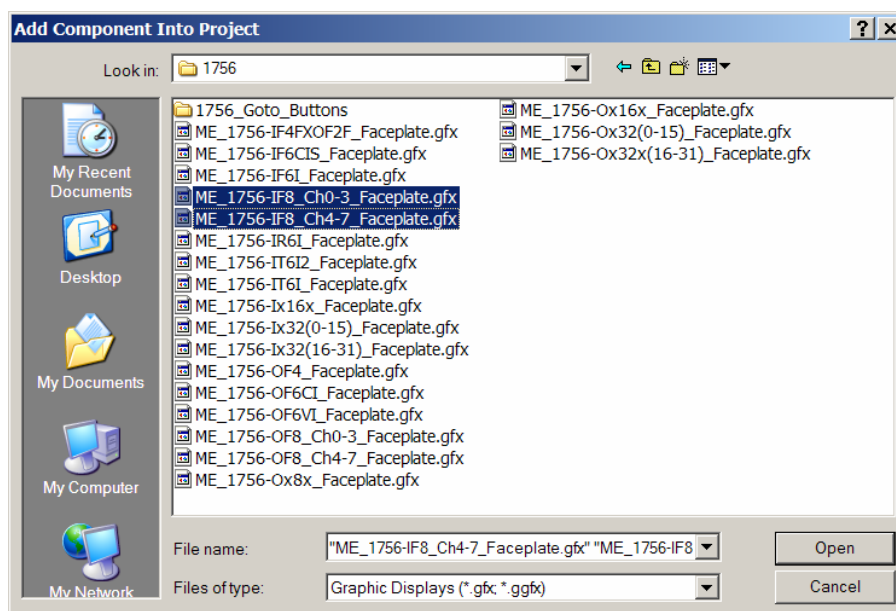
# RSView ME Configuration

- 1) Open your existing RSView ME application that you wish to add the ControlLogix I/O faceplate to.
- 2) Add the appropriate ME\_1756-Ixx\_Faceplate.gfx or ME\_1756-Oxx\_Faceplate.gfx file to your displays.
  - a. Right-click on Displays, and select 'Add Component Into Application'. Browse to the ME\_1756\_Digital&Analog\_Faceplate\_Files folder and select the faceplate gfx file that matches the module you wish to create a faceplate for.



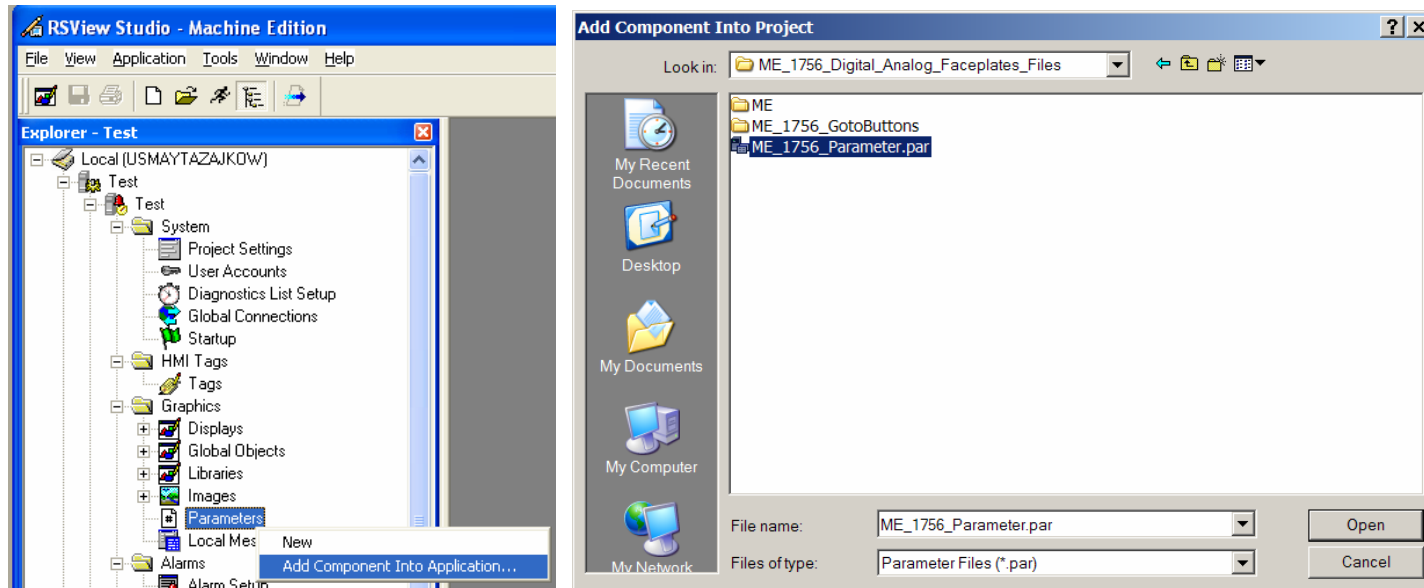
(Note- Revision 2 of the Device Faceplates support text descriptions that can be added next to each discrete I/O point or analog channel. Because the faceplate size has been increased, 32 point discrete modules and analog modules with 8 or more channels have been split into two separate faceplates. Be sure to add both faceplate files for each of these modules to your application.)

The example below shows the selection of the 8 channel 1756-IF8 module, which now requires two faceplates, one which displays channels 0 thru 3, and the other channels 4 thru 7.)



3) Add the faceplate parameter file, ME\_1756\_Parameter.par to your RSViewME application.

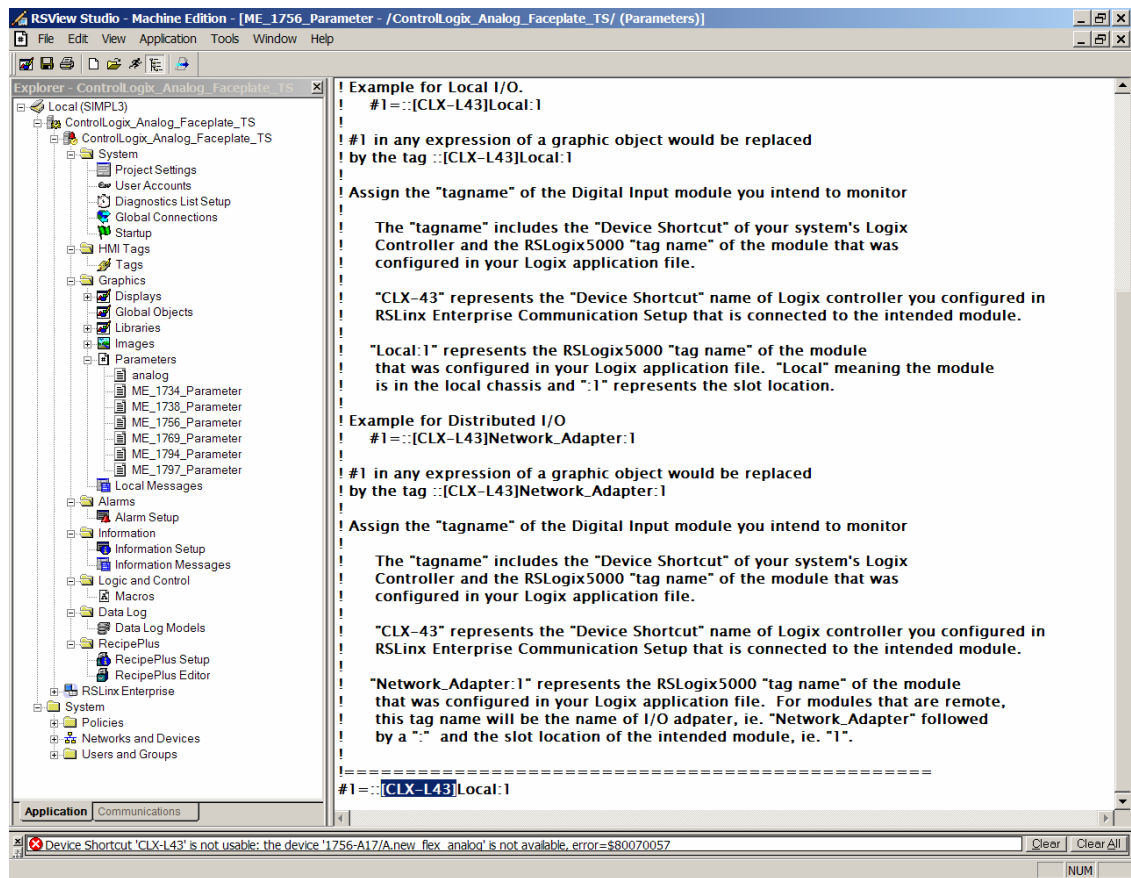
- a. Right-click on Parameters, and select 'Add component Into application'. Browse to the ME\_1756\_Digital&Analog\_Faceplate\_Files folder and select the ME\_1756\_Parameter.par file and rename as you would like see it in your application and click the Open button.



- b. Now open the parameter that was just added and edit the “parameter tagname” to match your application. The “parameter tagname” needs to include the RSLinx Enterprise “Device Shortcut” name of your systems controller and the Logix “tag name” of the intended ControlLogix I/O module you wish to monitor .
  - i. Double-click on the faceplate parameter file, and edit the “Device Shortcut” name, (in this example it is CLX-L43) to match the Logix controller that was previously configured in your RSLinx Enterprise Communication Setup.

#1 = ::[CLX-L43]Local:1





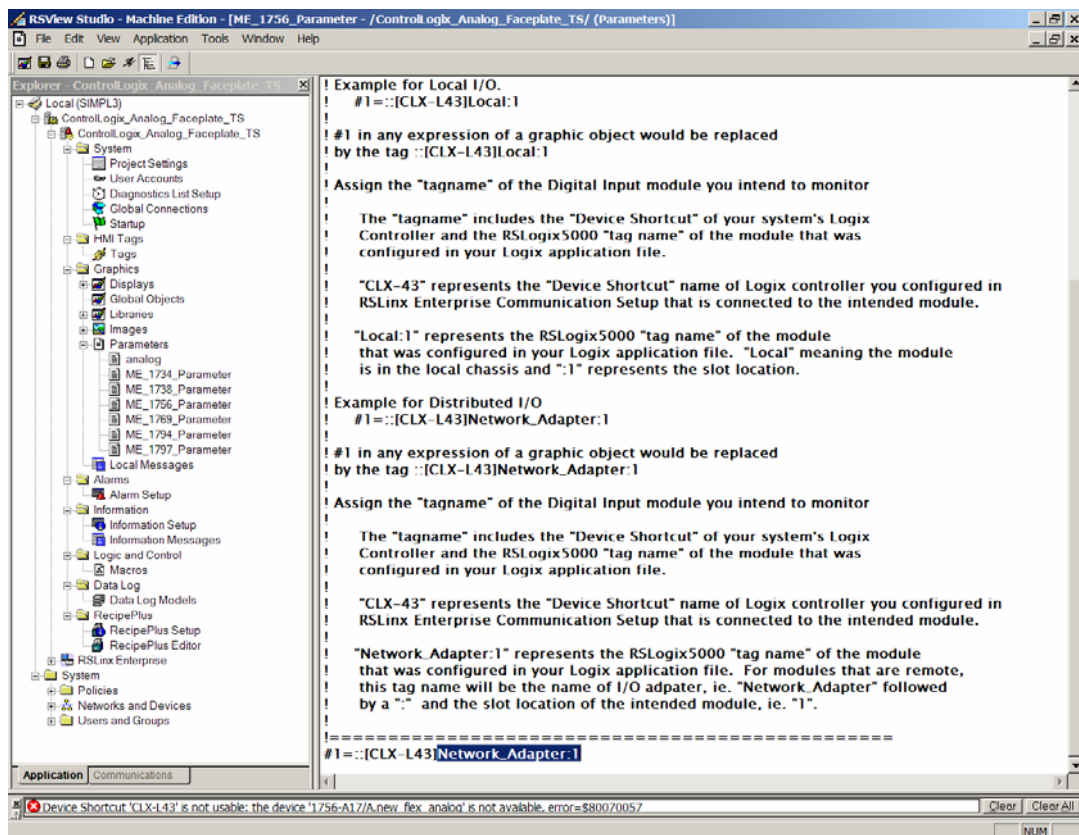
- ii. Enter the Logix “tag name” of the intended ControlLogix I/O module to monitor.

For modules that are **local**, this tag name will be the name “Local” followed by a “.” and the slot location of the module, ie., Local:1

**#1 = ::[CLX-L43]Local:1**

For modules that are **distributed**, this tag name will be the name of your adapter you added in step 2h, followed by a “.” and the slot location of the module, ie. Network\_Adapter:1

**#1 = ::[CLX-L43]Network\_Adapter:1**



Close and Save changes.

To add parameter files for additional ControlLogix I/O modules, simply repeat steps a. and b above, creating a unique parameter name by assigning the associated “Device Shortcut” and Logix “tag name” for each module.

For modules that are local, change only the slot location of the tag name,  
Example. #1=[CLX-L43]Local:2 represents a module in slot 2.

For modules that are distributed, this tag name will be the name of the additional I/O adapters, followed by a “:” and the slot location of the module.

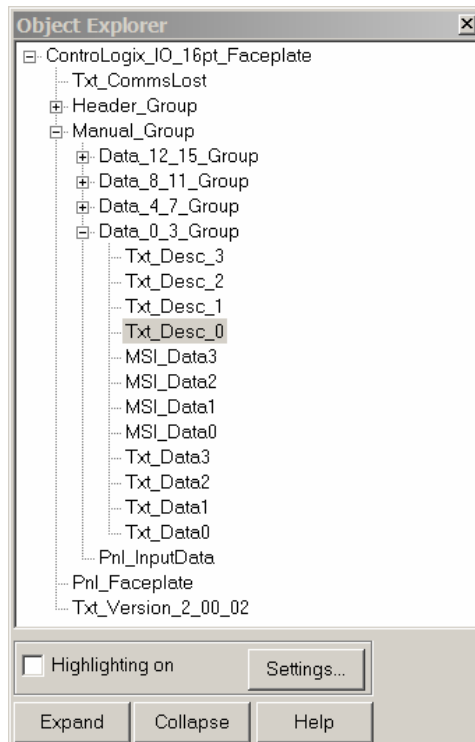
Example: #1=[CLX-L43]Network\_Adapter\_2:1 (“Network\_Adapter\_2” represents another unique name for an I/O adapter on the network and “:1” represents the module in slot 1.)

#### 4) Add text descriptions to the Device Faceplate I/O.

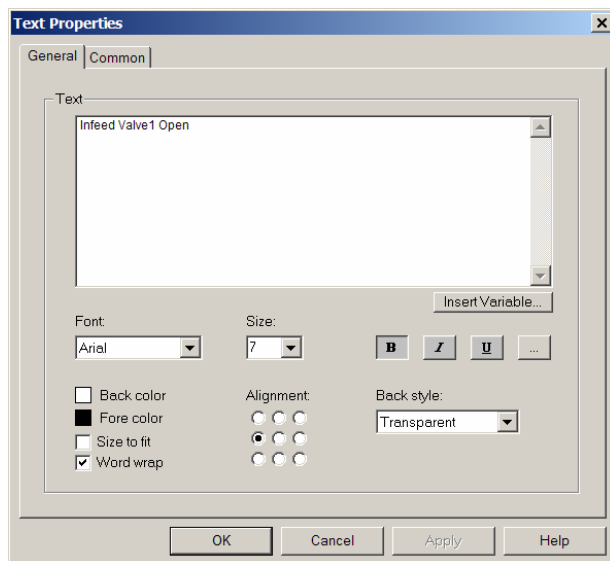
Revision 2 of the Device Faceplates has been designed to allow users to add optional text descriptions next to each discrete I/O point or analog channel on the faceplate.

- Open your display you wish to add I/O descriptions to.
- Right click on the display and open the “Object Explorer”.
- Browse under the “Manual\_Group” to find each group of I/O data, called “Data\_x\_x\_Group”. (For analog or low count I/O modules, the grouping or data group name may be slightly different.)

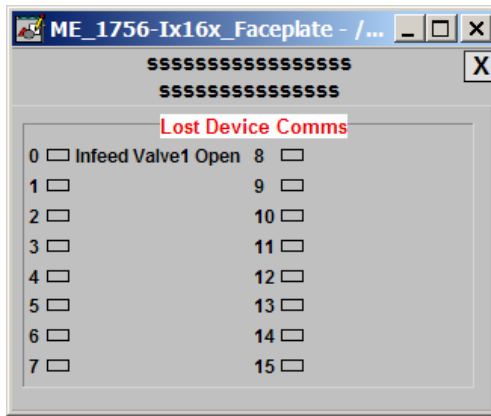
d. Find the “Txt\_Desc\_x” text object for the desired I/O you wish to add a text description to.



e. Double click to open the Text Properties box and enter your description.



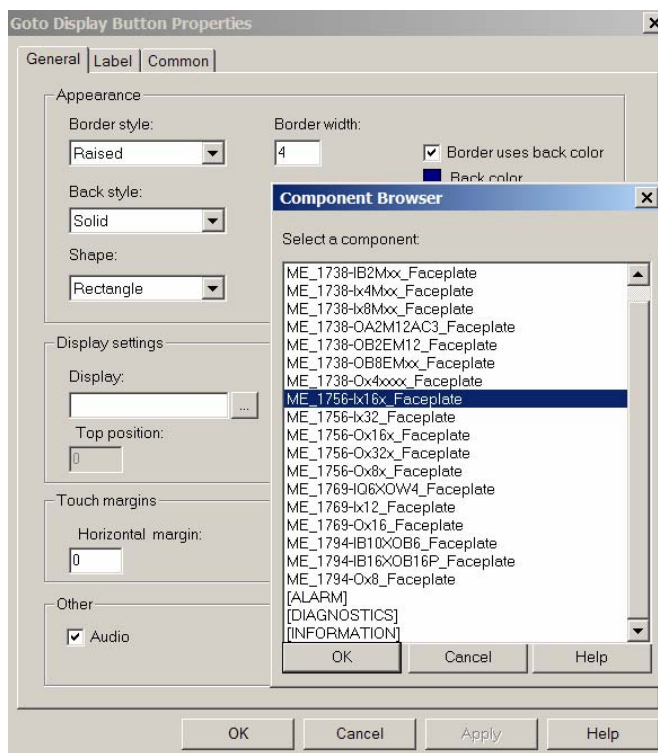
f. Click OK to complete. Verify your text appears as desired.



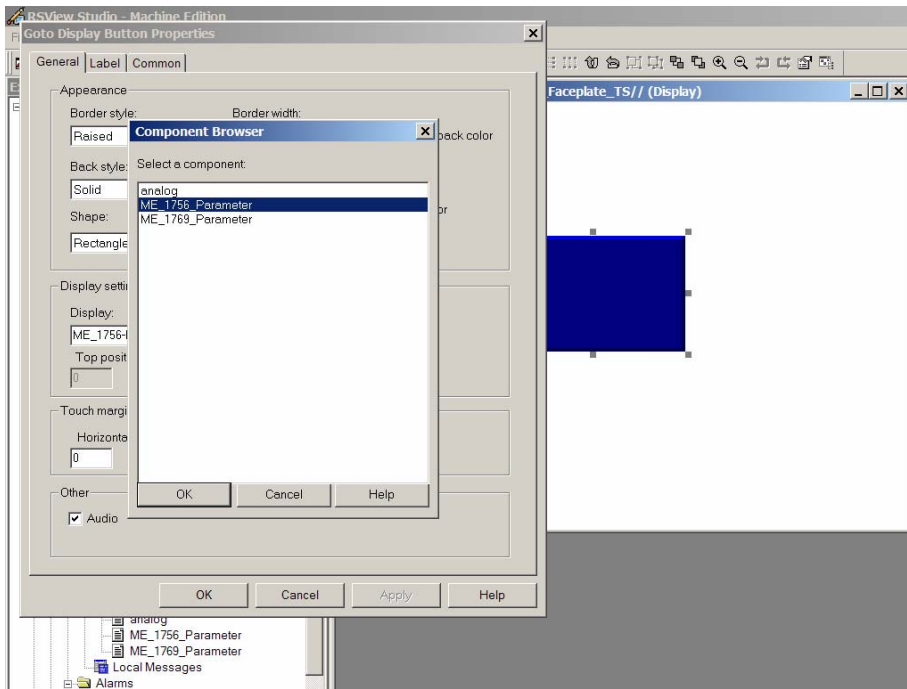
g. Repeat steps 4c-4f for each I/O point or channel.

5) Create the display navigation to open the 1756 I/O Faceplates at runtime. (To use the Pre-created 1756 Module Goto Buttons, skip to pg 13, **Configuration Steps for using Pre-Created Goto Buttons.**)

- On a desired graphic display, create a new transparent Goto display navigation button for each I/O module.
- Double-click the Goto button to display its object properties and configure its "Display settings". Select the browse button along side of the Display field and assign the Faceplate display.



- Select the browse button along side of the Parameter file field and assign the ControlLogix I/O parameter file you created earlier for this intended I/O module. Be sure to click the OK button of the Goto Display Button Properties dialog to save your configuration.

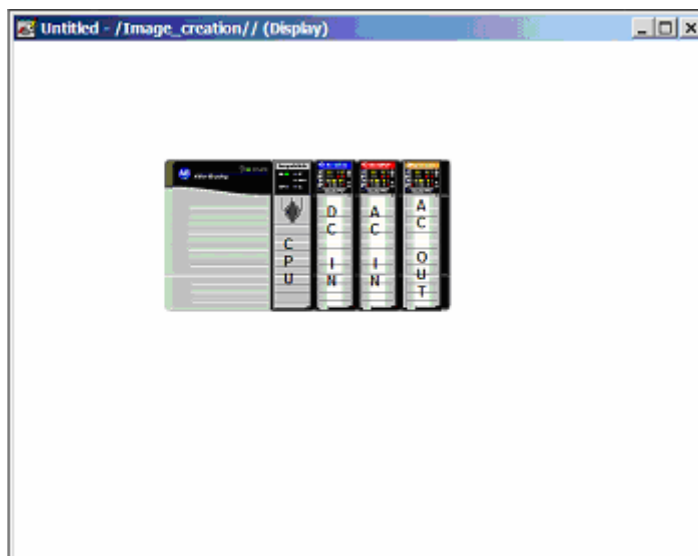


- d. To support additional ControlLogix I/O modules, simply create a new Goto display navigation button, assign the appropriate ControlLogix I/O display, and assign a unique parameter file associated with the additional I/O module.

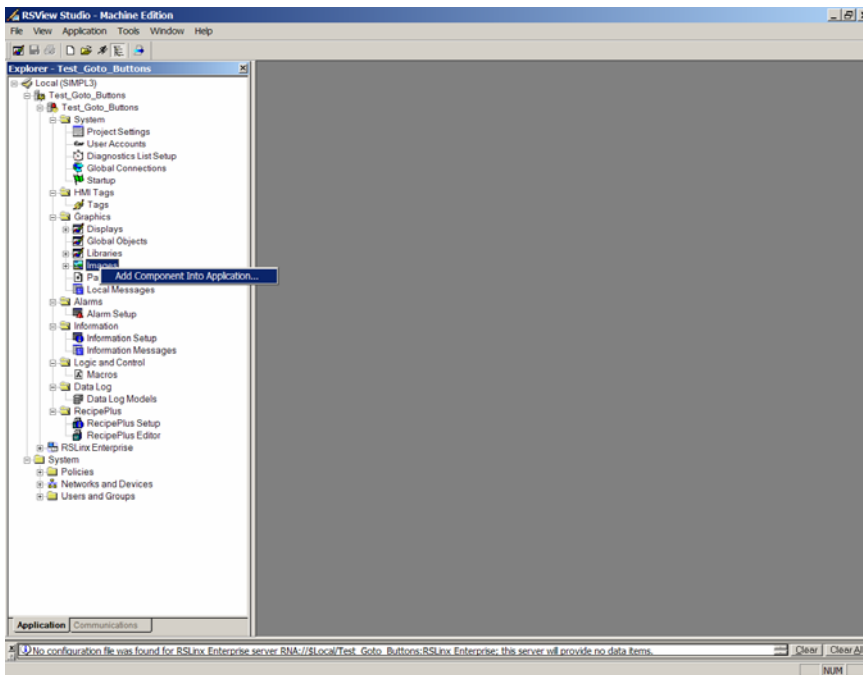
5) Now, you can save and create a runtime file to test your display.

## Configuration Steps for using Pre-Created Goto Buttons

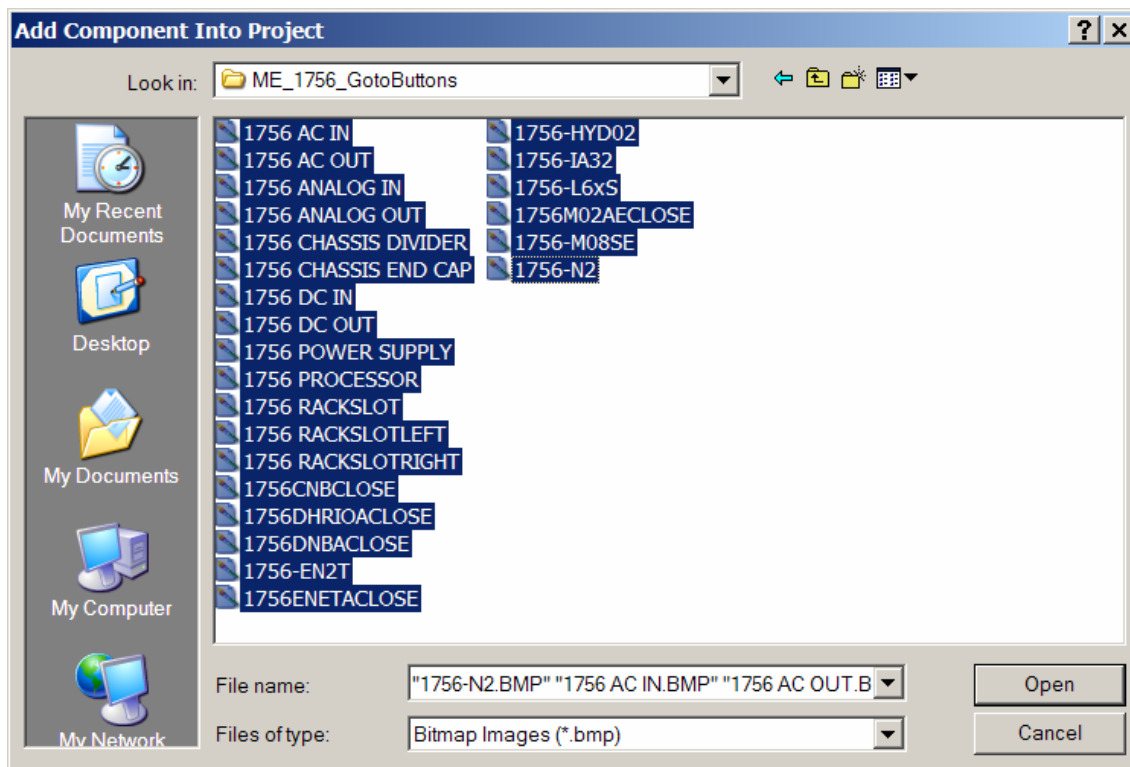
If you desire a hardware system view as shown below, with each module in the chassis configured as a goto button that can launch individual ControlLogix faceplates, follow these instructions.



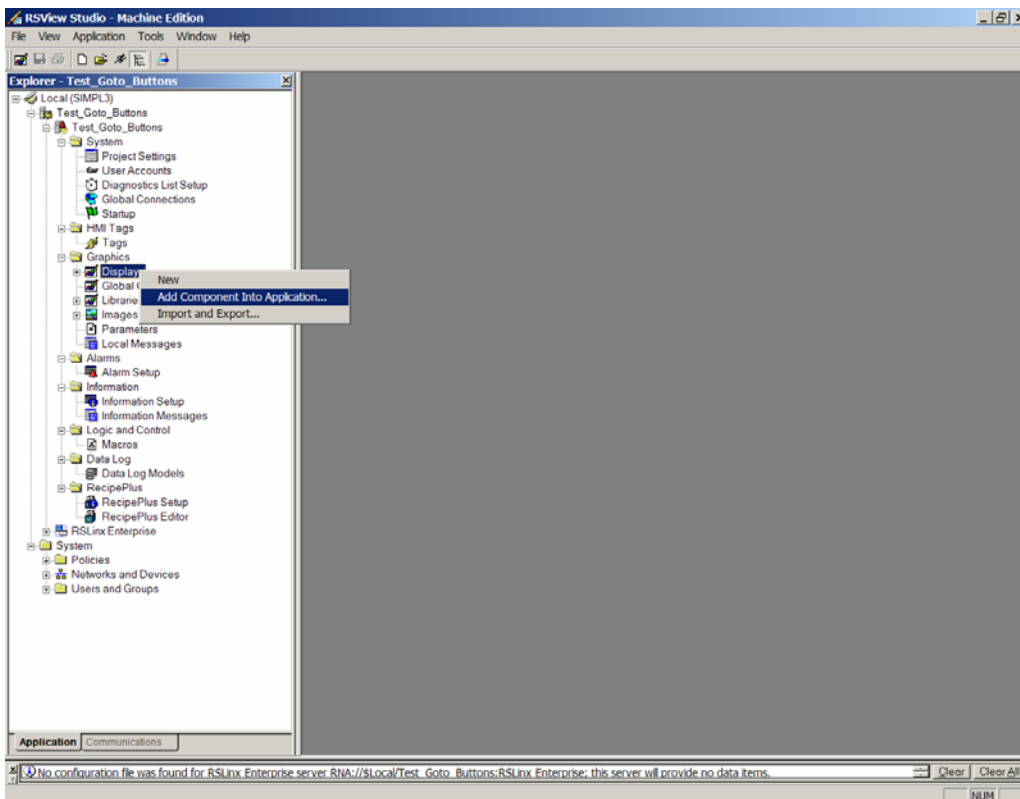
- 1) Add the 1756 bitmap images into your RSView application by right clicking onto the Image folder in the system tree and choosing "Add Component into Application."



- 2) Browse to your “ME\_1756\_Goto Buttons” folder that was created in step 1. Select all the 1756 Bitmaps images. Click Open.



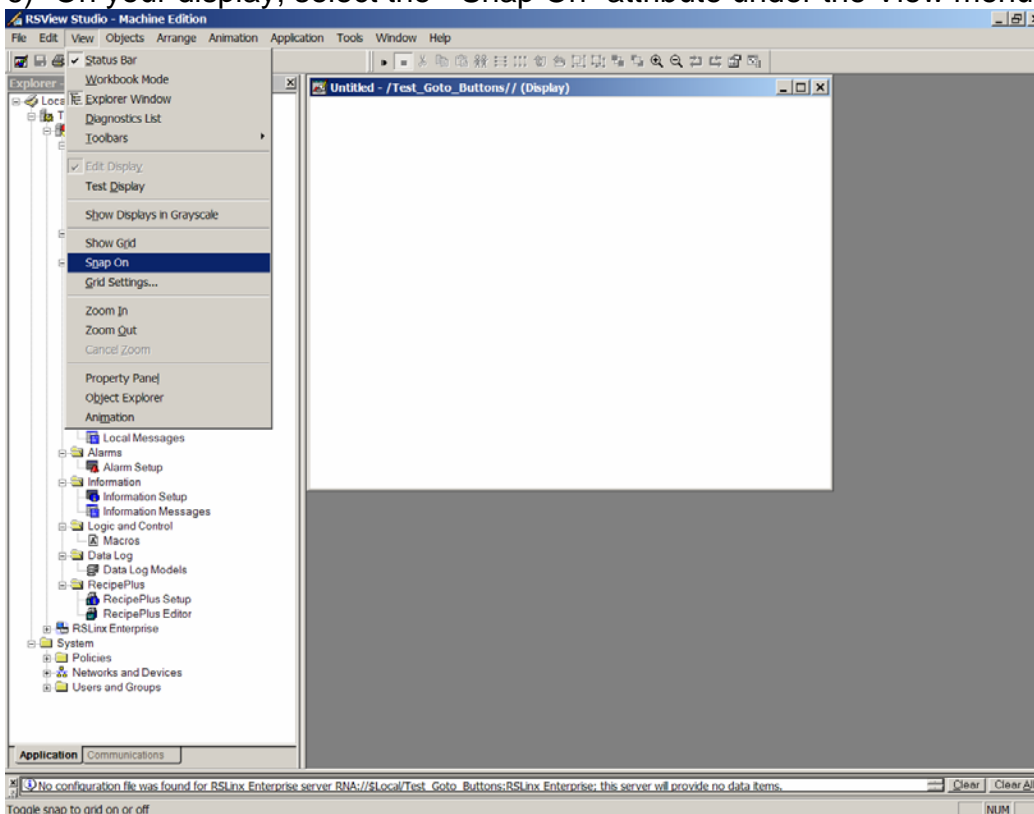
- 3) Next, add the 1756 Goto Displays files into your RSView Application by right clicking on the Display folder in the system tree and by selecting “Add Component into Application.”



4) Browse to your “ME\_1756\_Goto Buttons” folder and select all the “Goto” .gfx files. Click Open. Verify the Goto displays appear under Displays in your system tree.

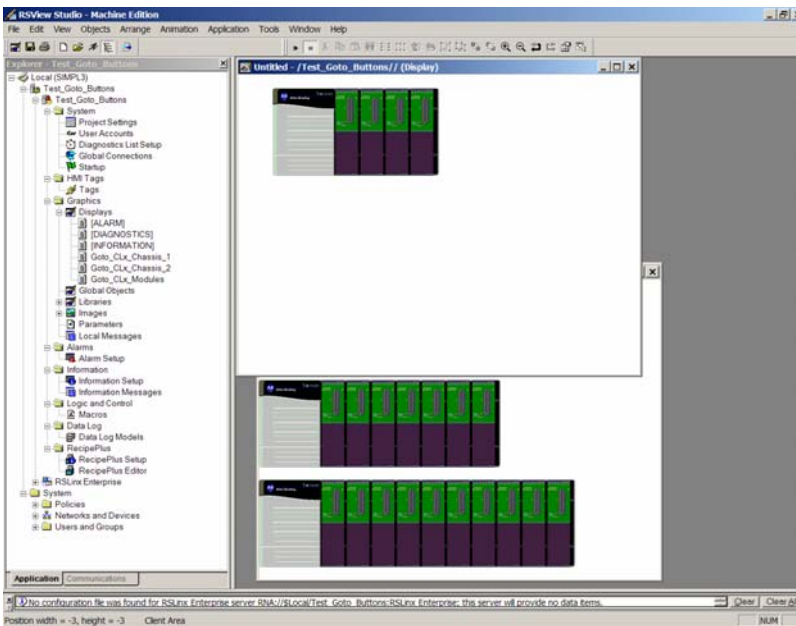
5) Create a new Display or open your own system display to copy the Goto Buttons to.

6) On your display, select the "Snap On" attribute under the View menu

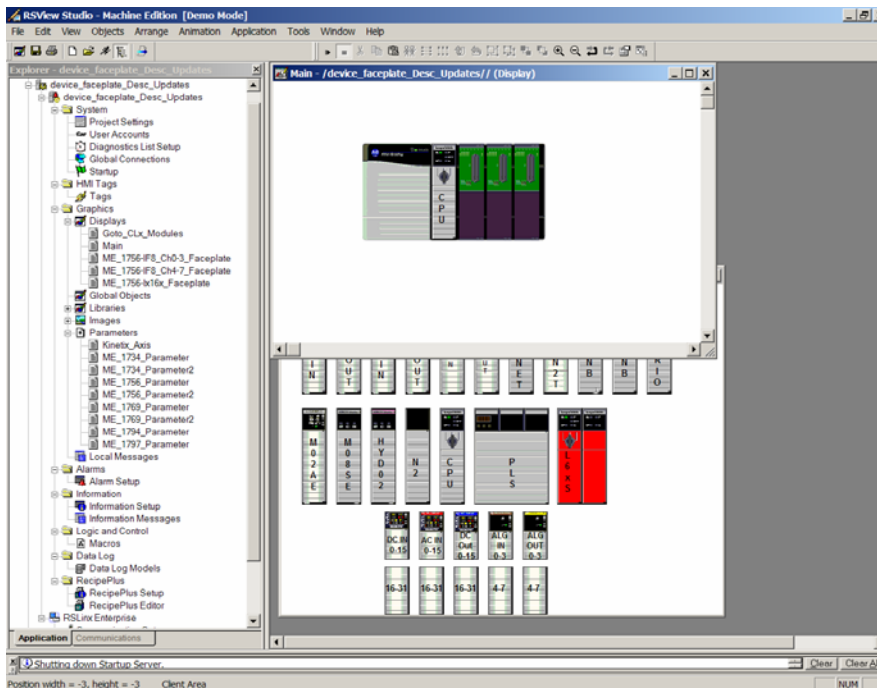




7) Open one of the “Goto\_CLx\_Chassis” displays and copy (or drag and drop) your desired Chassis graphic objects onto your system display.



8) Open the “Goto\_CLx\_Modules” display and copy (or drag and drop) your desired module Goto button onto one of the Chassis slots.



**(Note for Rev. 2 faceplates, any 32 point or analog modules greater than 8 channels will require 2 goto buttons to launch each faceplate I/O set- these button pairs have already been created for you. Be sure to copy and configure both sets.)**

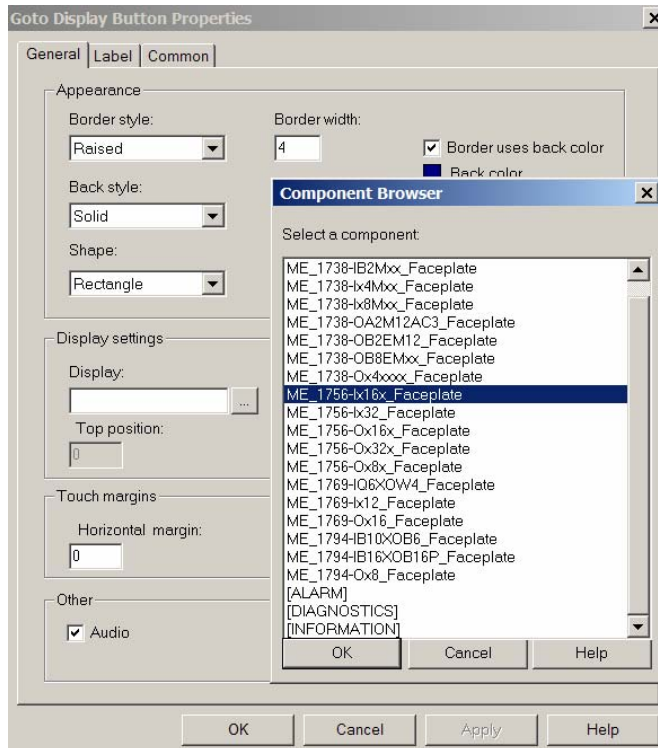
9) Repeat step 8 until all the modules needed have been copied onto the chassis.

10) Open each module Goto Display button by double clicking on the object. (Be sure to click near the top of the object to open the Goto Buttons properties and not the “text” object properties.

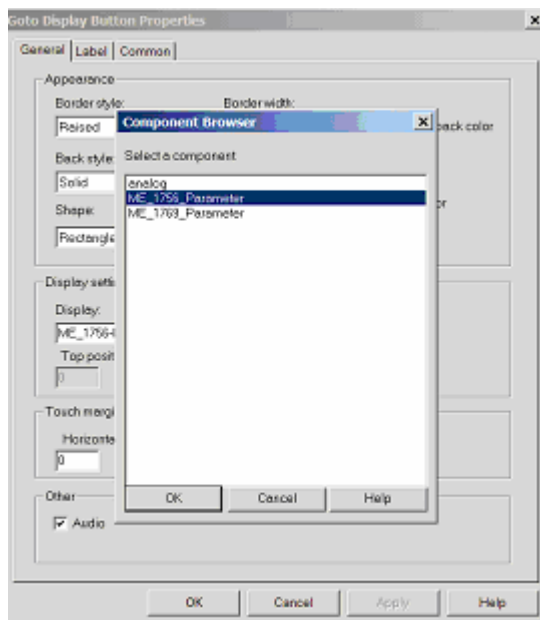


11) On the “General” tab, assign the Faceplate and Parameter File associated with specific Logix module name or tag.

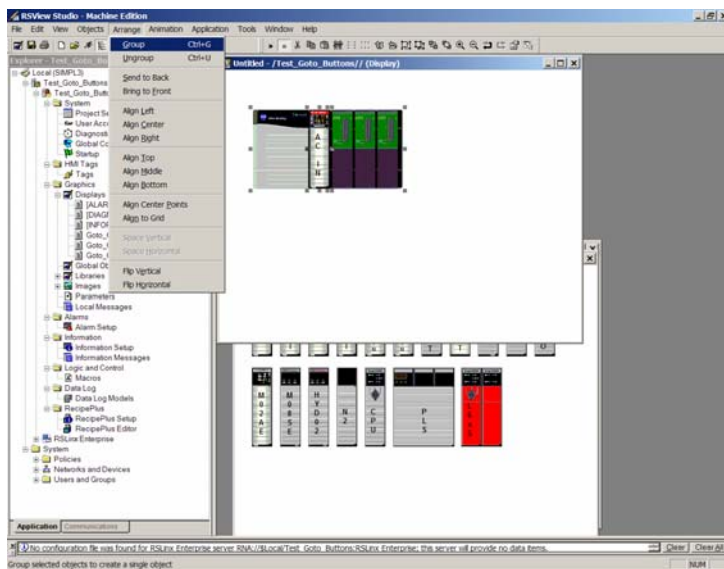
- a. Select the browse button along side of the Display field and assign the Faceplate display.



- b. Select the browse button along side of the Parameter file field and assign the ControlLogix I/O parameter file you created earlier for this intended I/O module. Be sure to click the OK button of the Goto Display Button Properties dialog to save your configuration.



12) In order to resize the chassis and modules to a smaller size, group all the objects by drawing a box around them with mouse to select all the objects and then from the menu choose Arrange > Group. Using your mouse you can resize your chassis.



13) Once all desired 1756 objects have been copied into application, the “Goto\_CLx” displays may be deleted from application.

- a. In the system tree on the left, right click on the “Goto” display under Displays and choose delete.
- b. Click “Yes” to the prompt to “Remove file from the application and delete it from disk”.

14) Now, you can save and create a runtime file to test your display.