

515RTAENI-N34

Use Cases

Revision 3.1

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Overview

This documentation is for the most common use cases. This will not go through all the configurable parameters within the 515RTAENI, please refer to the 515RTAENI user guide found at www.rtautomation.com/515rtaenisupport/.

The following use cases are for the 515RTAENI-N34

(Eth) = Ethernet connection

(DF1) = Serial DF1 connection

For Peer to Peer messaging the first protocol is where the message instruction is in the application.

Ex. SLC (DF1) to CompactLogix (Eth). The SLC would have the message command.

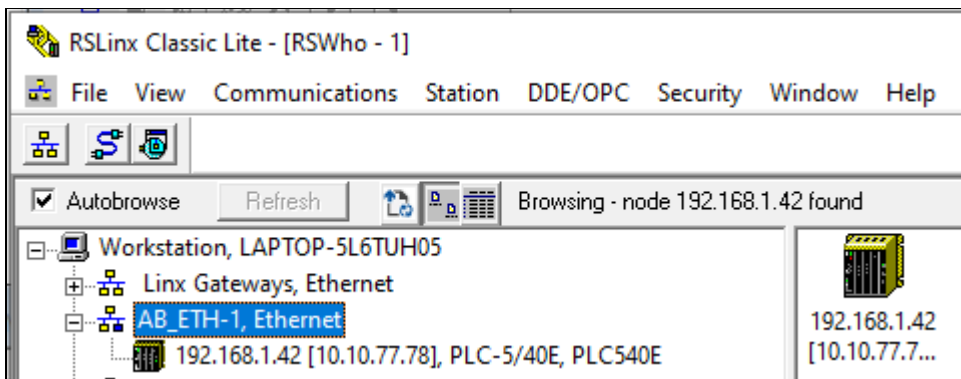
RSLogix 5:

PLC5 (DF1)

1. Verify the serial settings in the “Network” tab of the 515RTAENI matches the DF1 serial settings for your PLC5.
 - a. To verify your PLC DF1 serial setting refer to “PLC Serial Setting” section of this guide.
2. Make sure using Allen-Bradley 1784-CP10 Cable (DB9 to DB25) when connecting 515RTAENI to PLC5
3. Load the latest EDS file.
 - a. You can load the latest EDS from the Utility tab on the Web based configuration. (Refer to How to load EDS file section of this guide if you need help.)
4. Create “Ethernet Device” driver in RSLinx
 - a. Use the IP Address of the 515RTAENI

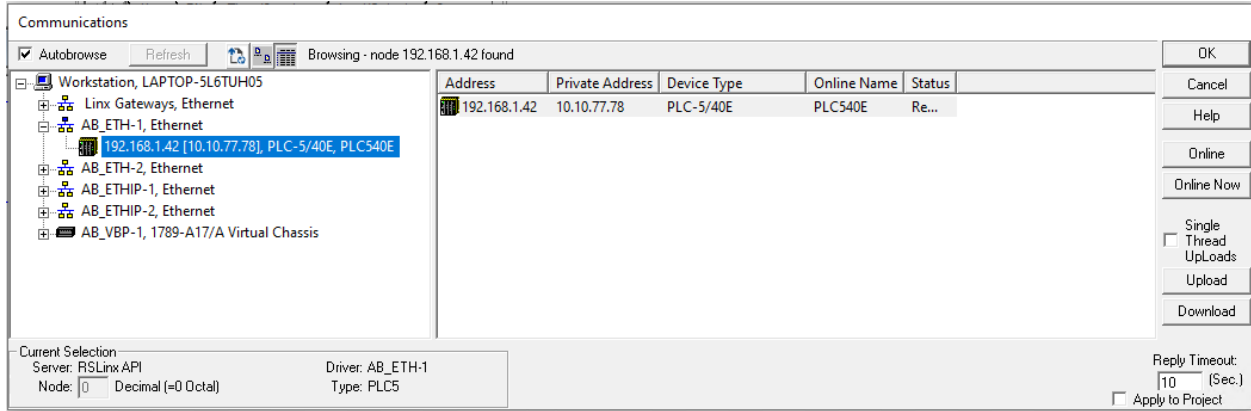
**Note: Use Ethernet Devices Drivers in RSLinx.
PLC5’s don’t work with the Ethernet/IP Driver.**

- b. Verify your PLC5 can be found in RSLinx:



Open RSLogix5

Select Comms -> System Comms -> Select your driver and the 515RTAENI -> Download, Upload or Online



RSLogix 500:

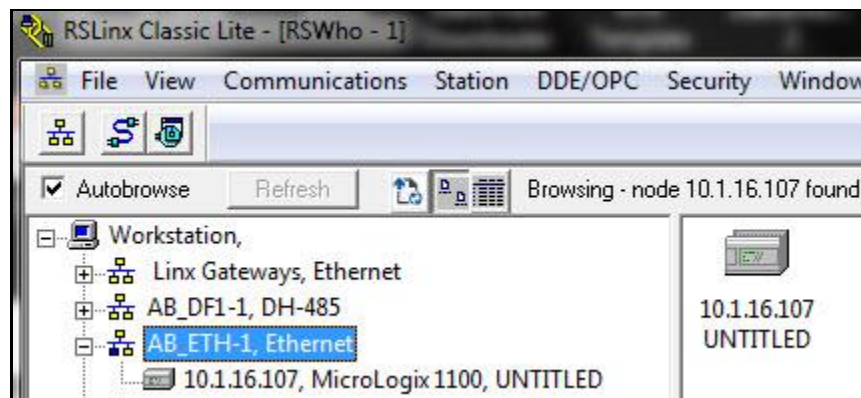
MicroLogix (DF1)

1. Verify the serial setting in the “Network” tab of the 515RTAENI match the DF1 serial settings for your MicroLogix PLC.
 - a. To verify your PLC DF1 serial setting refer to “PLC Serial Setting” section of this guide.
2. Make sure using Allen-Bradley 1756-CP3 Cable (DB9 to DB9) or Allen-Bradley 1761-CBL-PM02 Ser. C (Mini din to DB9).
3. Load the latest EDS file.
 - a. You can load the latest EDS from the Utility tab on the Web based configuration. (Refer to How to load EDS file section of this guide if you need help.)
4. Create “Ethernet Device” driver in RSLinx
 - a. Use the IP Address of the 515RTAENI

Note: Use Ethernet Devices Drivers in RSLinx.

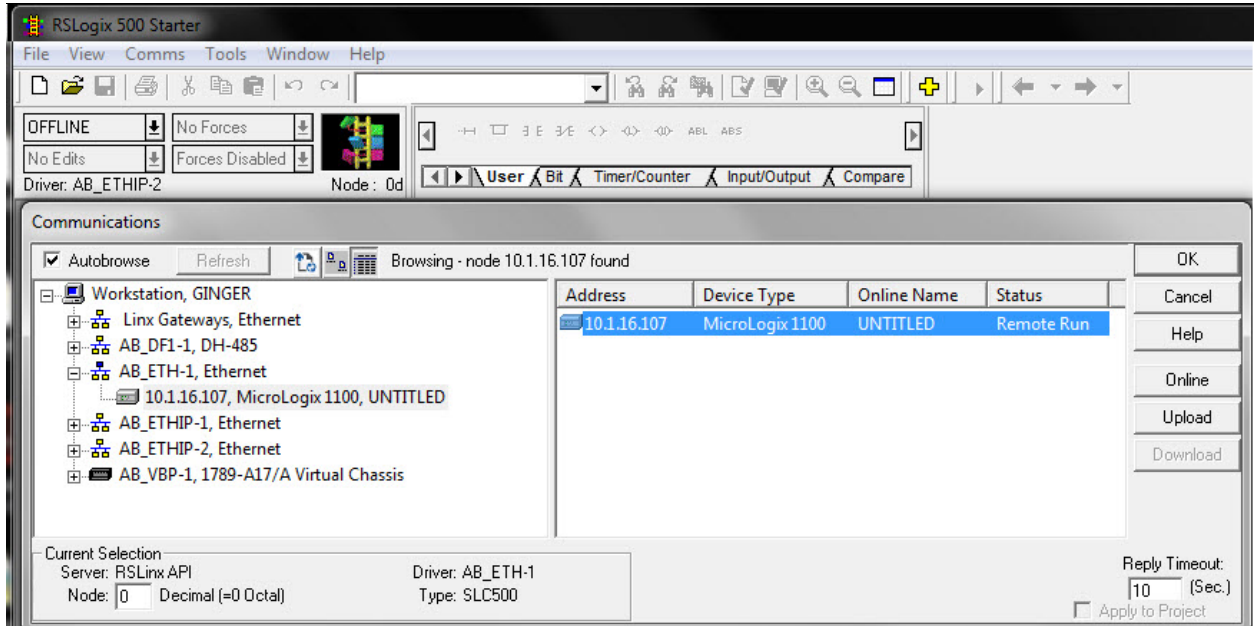
SLC and MicroLogix will only show up as the 515RTAENI with the Ethernet/IP Driver. You can still use it for communications, but RTA recommends the Ethernet Devices Driver for all communications.

- b. Verify your MicroLogix can be found in RSLinx:



Open RSLogix 500

Select Comms -> System Comms -> Select your driver and the 515RTAENI -> Download, Upload or Online



SLC 5/03, 04, 05 (DF1)

1. Verify the serial setting in the “Network” tab of the 515RTAENI match the DF1 serial settings for your SLC PLC.
 - a. To verify your PLC DF1 Serial setting refer to PLC serial setting section of this guide.
2. Make sure using Allen-Bradley 1756-CP3 cable (DB9 to DB9)

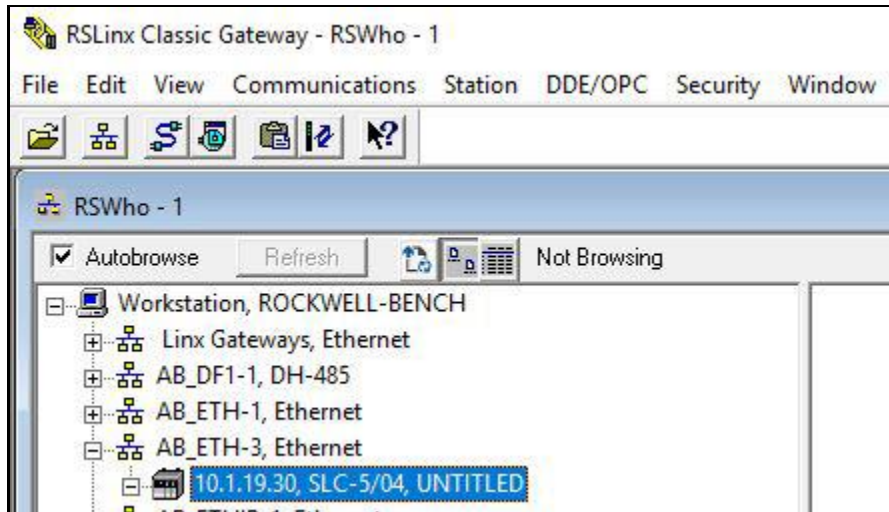
Note: Don't use an Allen-Bradley 1761-CBL-PM02 Ser. C (Mini din to DB9) with a SLC 5/04. Channel 1 is used for DH+. It sends +- 14 volts on some pins, thus will result in hardware failure.

3. Load the latest EDS file.
 - a. You can load the latest EDS from the Utility tab on the Web based configuration. (Refer to How to load EDS file section of this guide if you need help.)
4. Create “Ethernet Device” driver in RSLinx
 - a. Use IP Address of the 515RTAENI

Note: Use Ethernet Devices Drivers in RSLinx.

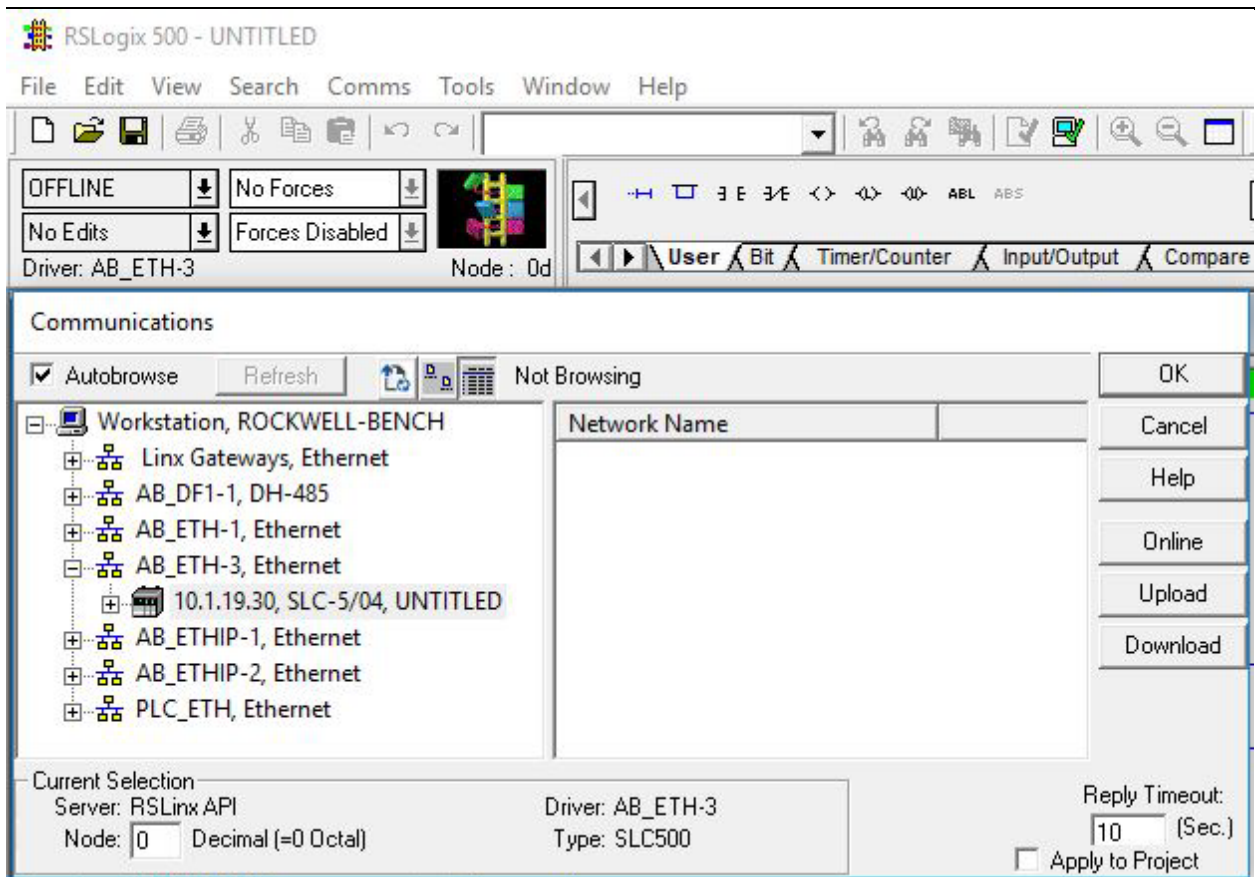
SLC and MicroLogix will only show up as the 515RTAENI with the Ethernet/IP Driver. You can still use it for communications, but RTA recommends the Ethernet Devices Driver for all communications.

Verify your SLC can be found in RSLinx:



Open RSLogix 500

Select Comms -> System Comms -> Select your driver and the 515RTAENI -> Download, Upload or Online



RSLogix 5000:

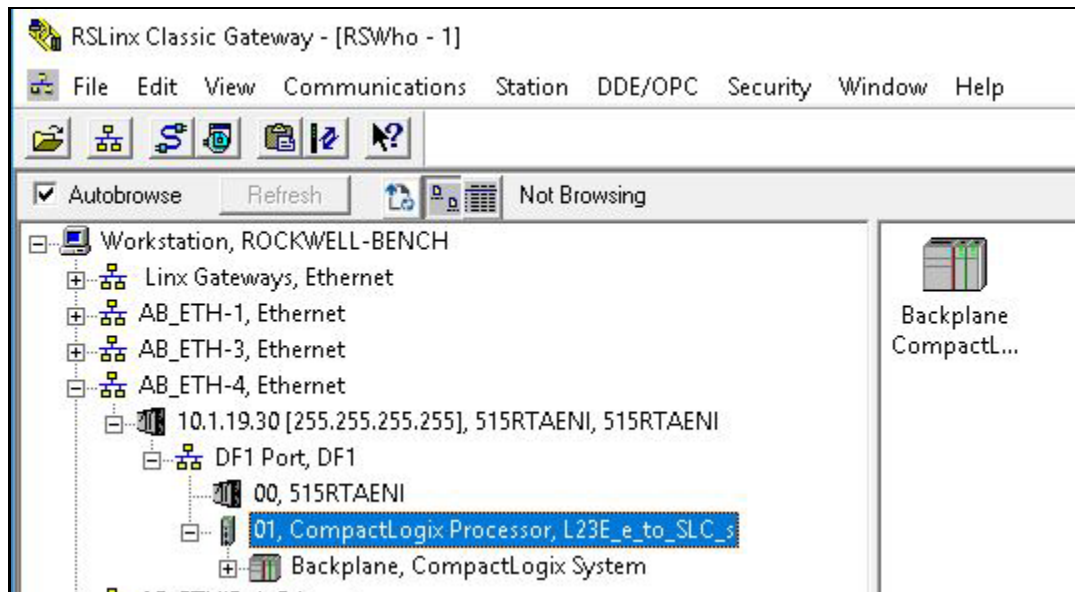
CompactLogix (DF1) (L32E), ControlLogix (DF1) FlexLogix (DF1)

1. Verify the serial setting in the “Network” tab of the 515RTAENI match the DF1 serial settings for your PLC.
 - a. To verify your PLC DF1 serial setting refer to PLC Serial Setting section of this guide.

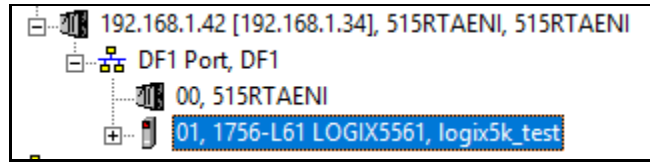
Note: By Default, the L32E CompactLogix serial port is set to BCC.

1. Make sure using Allen-Bradley 1756-CP3 cable (DB9 to DB9)
2. Load the latest EDS file.
 - a. You can load the latest EDS from the Utility tab on the Web based configuration. (Refer to How to load EDS file section of this guide if you need help.)
3. Create “Ethernet Device” driver in RSLinx.
 - a. Use IP Address of the 515RTAENI.

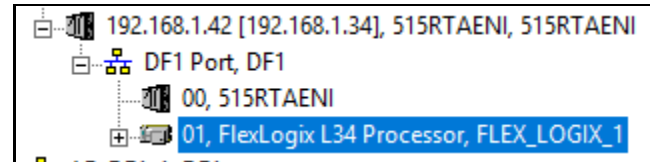
CompactLogix:



ControlLogix:

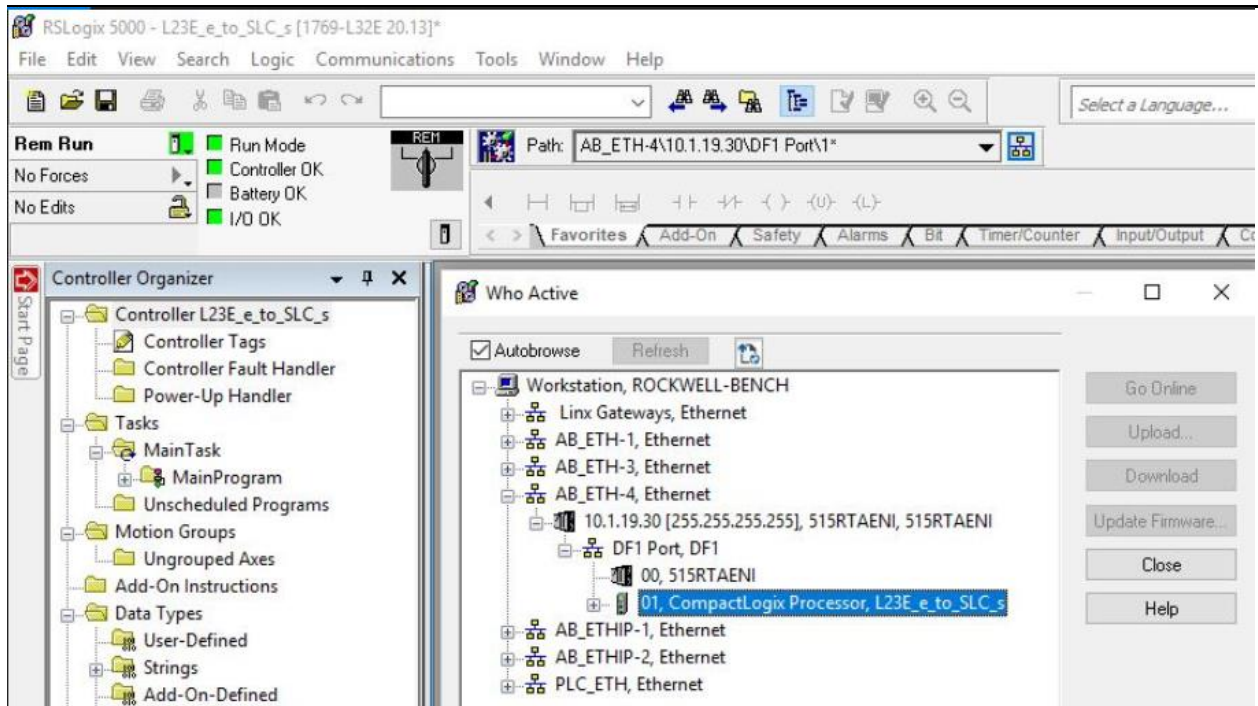


FlexLogix:



Open RSLogix 5000

Select Communications -> Who Active-> Select your driver and drill through the 515RTAENI to the 01, CompactLogix -> Download, Upload or Online.



Peer to Peer MSG:

MicroLogix (Eth) to SLC 5/03, 04, 05, MicroLogix (DF1)

Load up RSLogix 500 (Eth),

Create new program or modify program for MicroLogix (Eth).

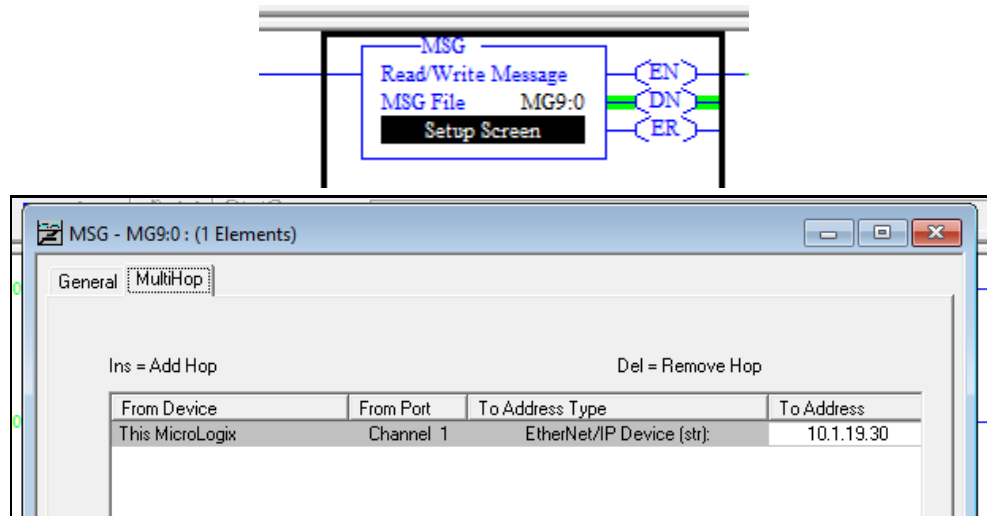
Files to create:

MG9 Elements 1

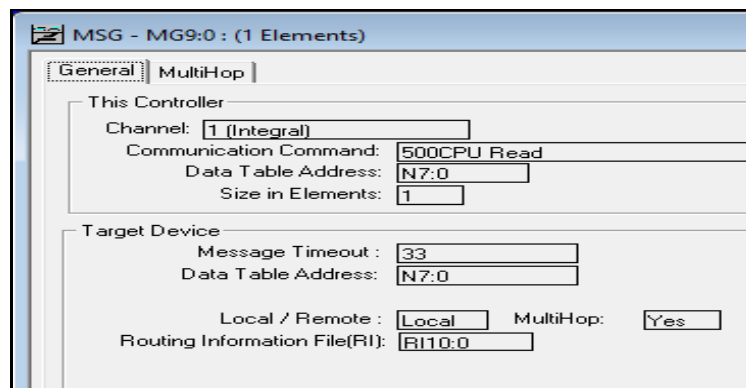
RI10 Elements 1

Note: How to Create Files: While offline Right Click Data Files and Add New.

Message Instruction:



Read Setup:



Write Setup:

MSG - MG9:0 : (1 Elements)

General | MultiHop

This Controller

Channel: 1 (Integral)

Communication Command: 500CPU Write

Data Table Address: N7:0

Size in Elements: 1

Target Device

Message Timeout : 33

Data Table Address: N7:0

Local / Remote : Local MultiHop: Yes

Routing Information File(RI): R110:0

Select Comms -> System Comms -> Select your driver and the MicroLogix PLC -> Download

Load up a different RSLogix 500 for the serial PLC (DF1).

Make sure you have the target device data table address in your serial PLC, in the example that is "N7:0"

Select Comms -> System Comms -> Select your driver and the 515RTAENI -> Download

Note: Make sure all PLC are in Run mode

CompactLogix (Eth) to SLC 5/03, 04, 05, MicroLogix (DF1)

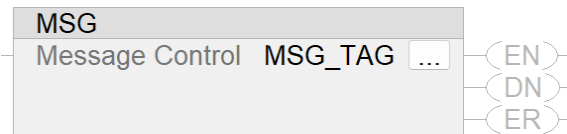
Load up RSLogix / Studio 5000 (CompactLogix)

Create new program or modify existing program for your CompactLogix (Eth).

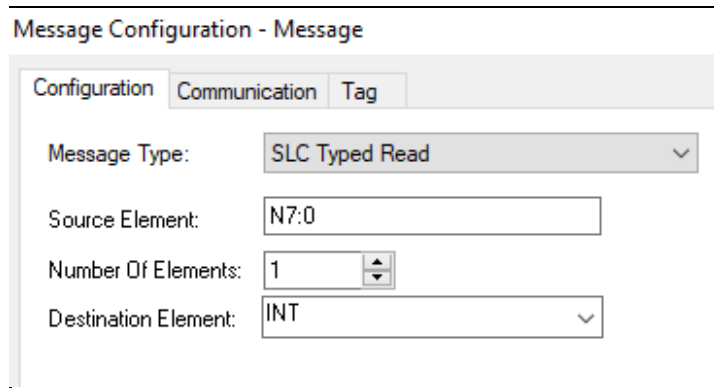
Controller Scope Tags:

Add a tag for your message instruction and a tag for your data.

Message Instruction:

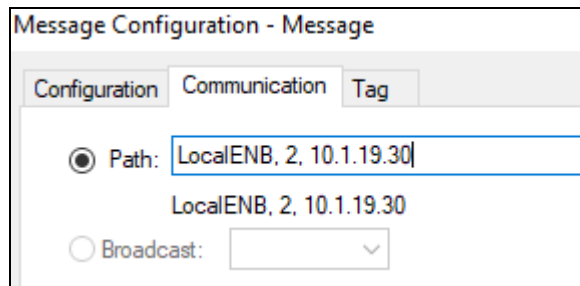


Read setup:



The dialog box is titled "Message Configuration - Message" and has three tabs: "Configuration", "Communication", and "Tag". The "Configuration" tab is selected. It contains the following fields:

- Message Type: SLC Typed Read (dropdown menu)
- Source Element: N7:0 (text input)
- Number Of Elements: 1 (spin button)
- Destination Element: INT (dropdown menu)

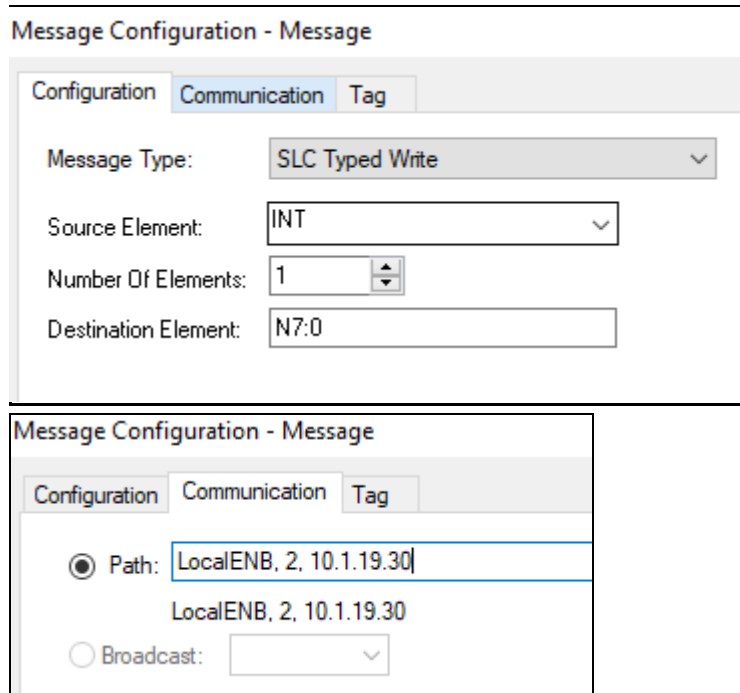


The dialog box is titled "Message Configuration - Message" and has three tabs: "Configuration", "Communication", and "Tag". The "Communication" tab is selected. It contains the following fields:

- Path: LocalENB, 2, 10.1.19.30 (radio button selected, text input)
- LocalENB, 2, 10.1.19.30 (text input)
- Broadcast: (radio button unselected, dropdown menu)

Use "1,1,2,<Ip Address of Gateway>" ex. 1,1,2,192.168.0.100

Write Setup:



Use "1,1,2,<Ip Address of Gateway>" ex. 1,1,2,192.168.0.100

Note: 1,1 will automatically convert into LocalENB in L32E PLC, L24ER will display Discrete IO and ignore the 1,1 portion. Path Breakdown section [Message Instruction Path](#)

Download to PLC

Select Communications -> Who Active-> Select your driver and drill through the CompactLogix till you get to the 01, CompactLogix ... -> Download.

Note: Make sure your SLC 5/03, 04, 05, MicroLogix (DF1) is in run mode.

ControlLogix (Eth) to SLC 5/03, 04, 05, MicroLogix (DF1)

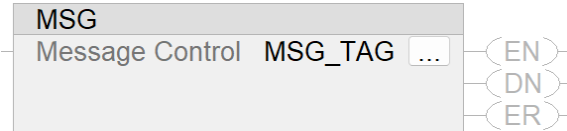
Load up RSLogix / Studio 5000 (ControlLogix)

Create new program or modify existing program for your ControlLogix (Eth).

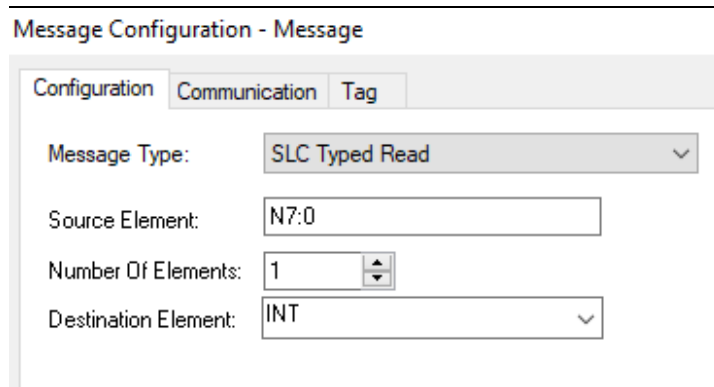
Controller Scope Tags:

Add a tag for your message instruction and a tag for your data.

Message Instruction:

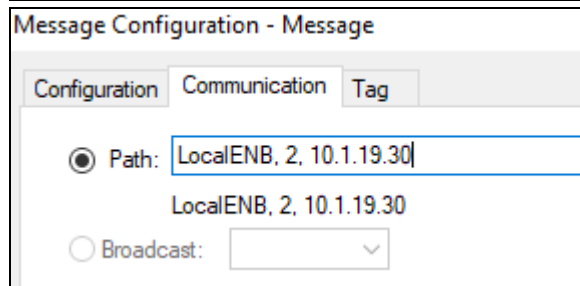


Read setup:



The screenshot shows the 'Message Configuration - Message' dialog box with the 'Configuration' tab selected. The settings are as follows:

- Message Type: SLC Typed Read
- Source Element: N7:0
- Number Of Elements: 1
- Destination Element: INT

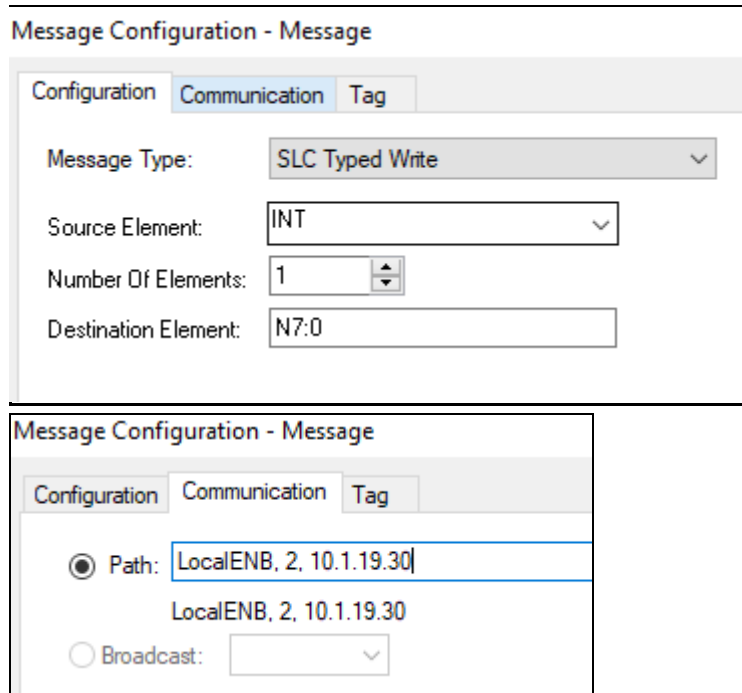


The screenshot shows the 'Message Configuration - Message' dialog box with the 'Communication' tab selected. The settings are as follows:

- Path: LocalENB, 2, 10.1.19.30
- Broadcast: (empty dropdown)

Use "1,1,2,<Ip Address of Gateway>" ex. 1,1,2,192.168.0.100

Write Setup:



Use "1,1,2,<Ip Address of Gateway>" ex. 1,1,2,192.168.0.100

Note: 1,1 will automatically convert into LocalENB in L32E PLC, L24ER will display Discrete IO and ignore the 1,1 portion. Path Breakdown section [Message Instruction Path](#)

Download to PLC

Select Communications -> Who Active-> Select your driver and drill through the CompactLogix till you get to the 01, CompactLogix ... -> Download.

Note: Make sure your SLC 5/03, 04, 05, MicroLogix (DF1) is in run mode.

SLC (DF1) to MicroLogix (Eth)

Load up RSLogix 500 (SLC),

Create new program or modify existing program.

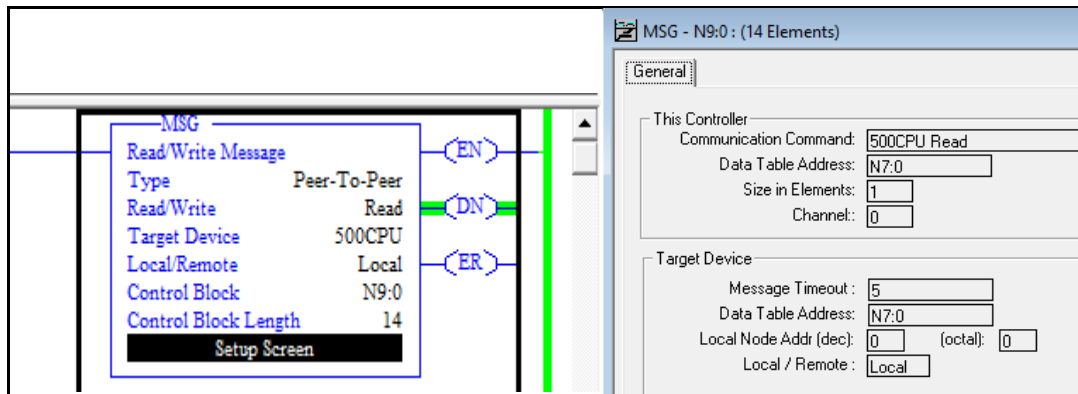
Files to create / verify:

N9 elements 10

Note: How to Create Files: While offline, Right Click Data Files and Add New.

Message Instruction:

Read Setup:



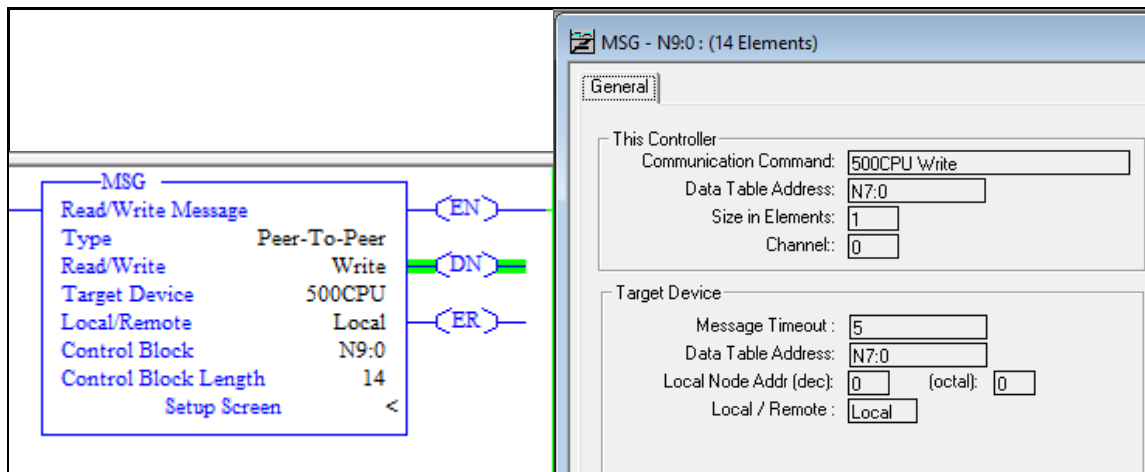
The screenshot shows a 'MSG' instruction in a ladder logic diagram. The instruction is configured as follows:

- Read/Write Message: Read
- Type: Peer-To-Peer
- Read/Write: Read
- Target Device: 500CPU
- Local/Remote: Local
- Control Block: N9:0
- Control Block Length: 14

The configuration window for 'MSG - N9:0 : (14 Elements)' is shown on the right, with the following settings:

- This Controller:
 - Communication Command: 500CPU Read
 - Data Table Address: N7:0
 - Size in Elements: 1
 - Channel: 0
- Target Device:
 - Message Timeout: 5
 - Data Table Address: N7:0
 - Local Node Addr (dec): 0 (octal): 0
 - Local / Remote: Local

Write Setup:



The screenshot shows a 'MSG' instruction in a ladder logic diagram. The instruction is configured as follows:

- Read/Write Message: Write
- Type: Peer-To-Peer
- Read/Write: Write
- Target Device: 500CPU
- Local/Remote: Local
- Control Block: N9:0
- Control Block Length: 14

The configuration window for 'MSG - N9:0 : (14 Elements)' is shown on the right, with the following settings:

- This Controller:
 - Communication Command: 500CPU Write
 - Data Table Address: N7:0
 - Size in Elements: 1
 - Channel: 0
- Target Device:
 - Message Timeout: 5
 - Data Table Address: N7:0
 - Local Node Addr (dec): 0 (octal): 0
 - Local / Remote: Local

Note: In Message Instruction, you can use any Node to talk to the MicroLogix

Load up RSLogix 500 (MicroLogix)

Create new program or modify existing program.

Make sure you have the target device data table address in your PLC, in the example that is “N7:0”.

SLC (DF1) to CompactLogix (Eth)

Load up RSLogix 500 (SLC),

Create new program or modify existing program.

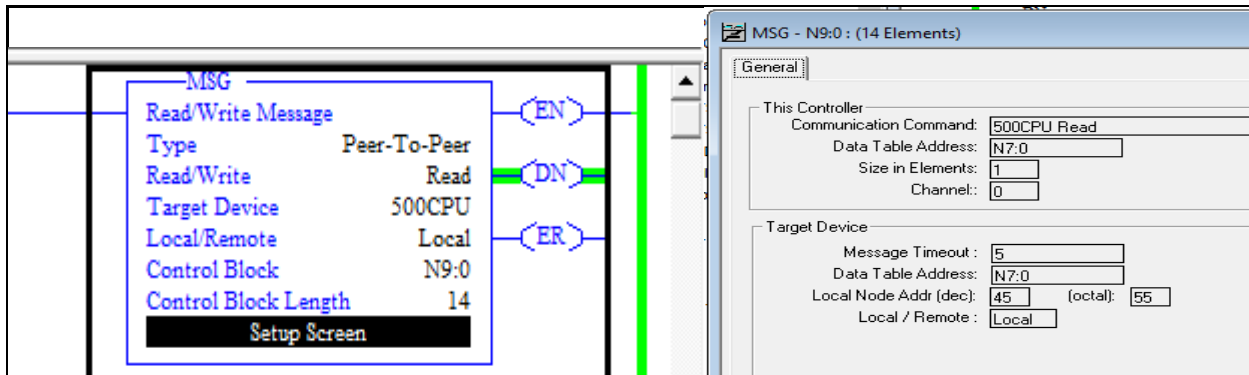
Files to create / verify:

N9 elements 10

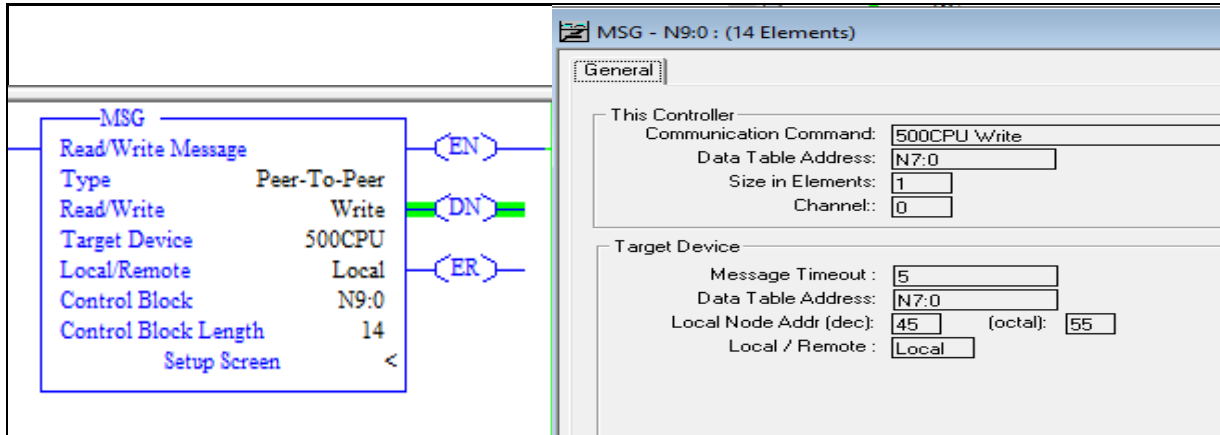
Note: How to Create Files: While offline, Right Click Data Files and Add New.

Message Instruction:

Read Setup:



Write Setup:



The screenshot displays the 'Write Setup' configuration for a message instruction. On the left, a summary table shows the following details:

MSG	
Read/Write Message	
Type	Peer-To-Peer
Read/Write	Write
Target Device	500CPU
Local/Remote	Local
Control Block	N9:0
Control Block Length	14
Setup Screen	<

On the right, the 'MSG - N9:0 : (14 Elements)' configuration window is shown with the following settings:

- General**
 - This Controller
 - Communication Command: 500CPU write
 - Data Table Address: N7:0
 - Size in Elements: 1
 - Channel: 0
 - Target Device
 - Message Timeout: 5
 - Data Table Address: N7:0
 - Local Node Addr (dec): 45 (octal): 55
 - Local / Remote: Local

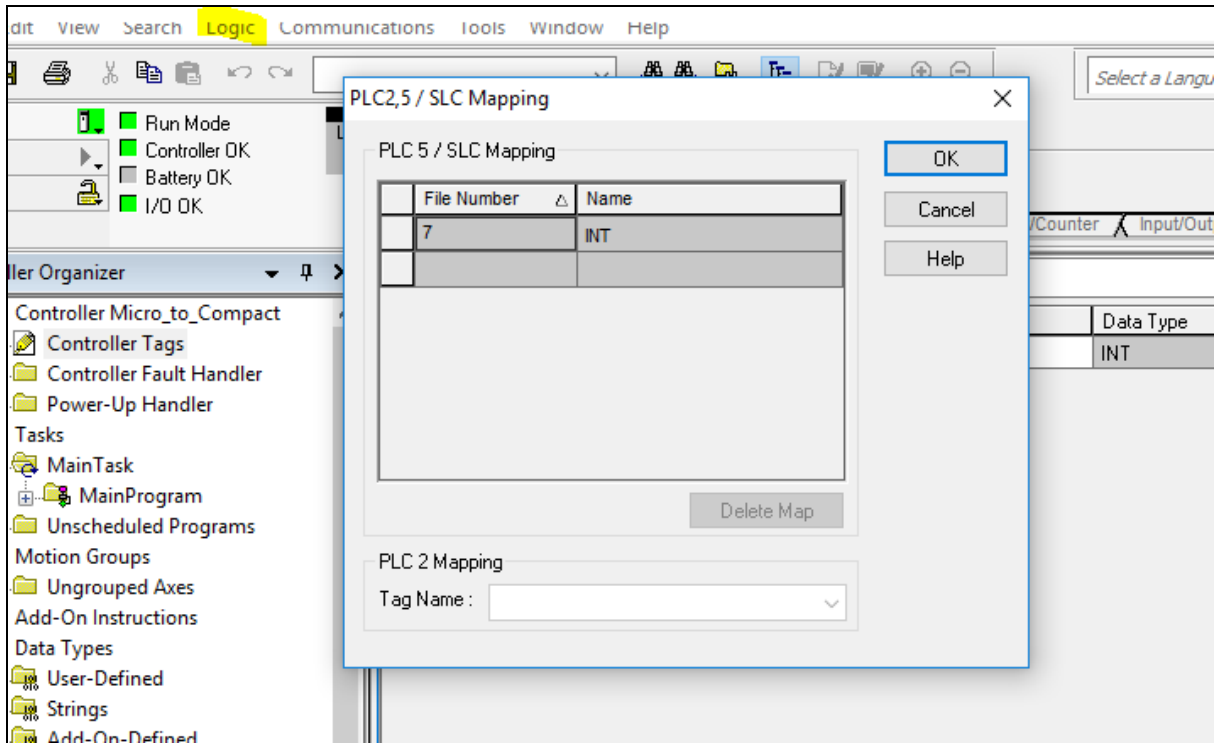
Note: In Message Instruction, you can only use node 45-49 to talk to the CompactLogix

Load up RSLogix 5000 (CompactLogix)

Create new program or modify existing program.

Make sure you have the target device data table address in your PLC, in the example that is "N7:0"

Note: To link a File to Tag "Logic -> Map PLC/SLC Messages -> *select File you want to use* and * Tag you made*"



PLC5 (DF1) to MicroLogix (Eth)

Load up RSLogix 5 (PLC5),

Create new program or modify existing program.

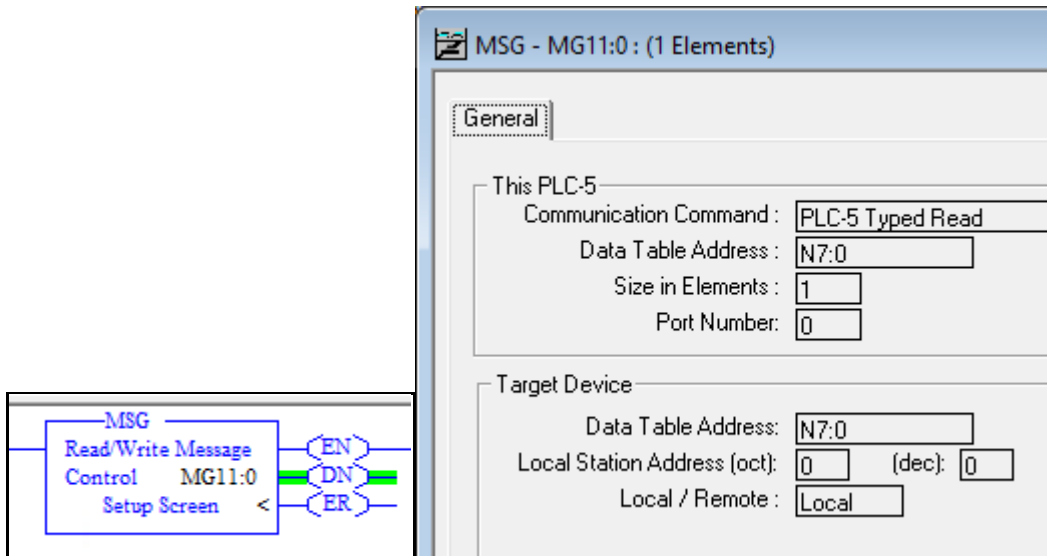
Files to create / verify:

MG11 elements 1

Note: How to Create Files: While offline, Right Click Data Files and Add New.

Message Instruction:

Read Setup:



MSG - MG11:0 : (1 Elements)

General

This PLC-5

Communication Command :

Data Table Address :

Size in Elements :

Port Number :

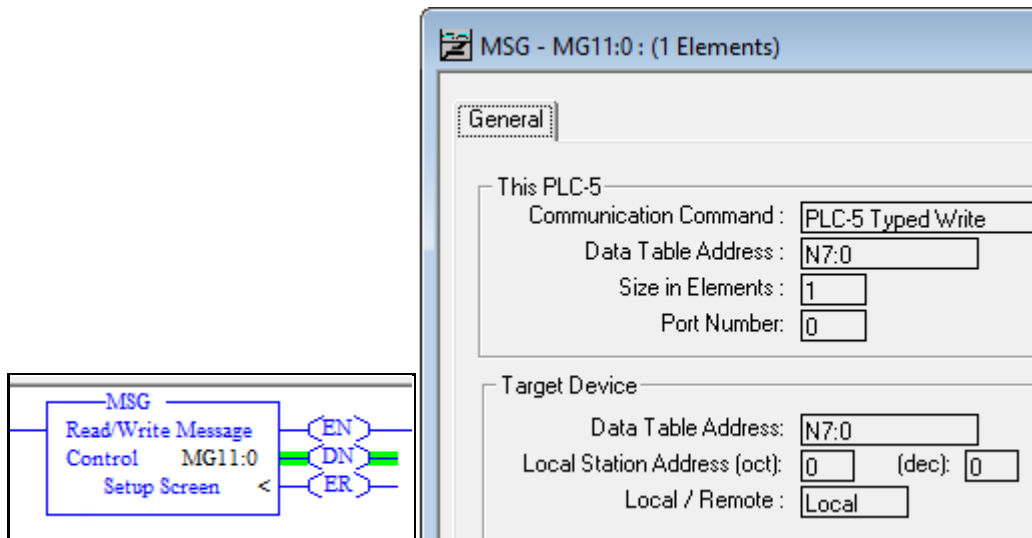
Target Device

Data Table Address :

Local Station Address (oct) : (dec) :

Local / Remote :

Write Setup:



MSG - MG11:0 : (1 Elements)

General

This PLC-5

Communication Command :

Data Table Address :

Size in Elements :

Port Number :

Target Device

Data Table Address :

Local Station Address (oct) : (dec) :

Local / Remote :

Note: In Message Instruction, you can use any Node to talk to the MicroLogix

Load up RSLogix 500 (MicroLogix)

Create new program or modify existing program.

Make sure you have the target device data table address in your PLC, in the example that is "N7:0".

PLC5 (DF1) to CompactLogix (Eth)

Load up RSLogix 5 (PLC5),

Create new program or modify existing program.

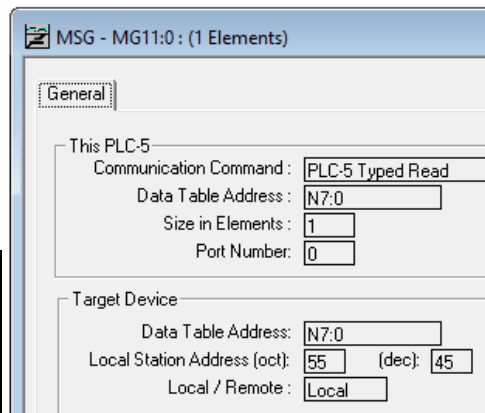
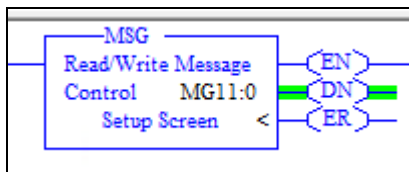
Files to create / verify:

MG11 elements 1

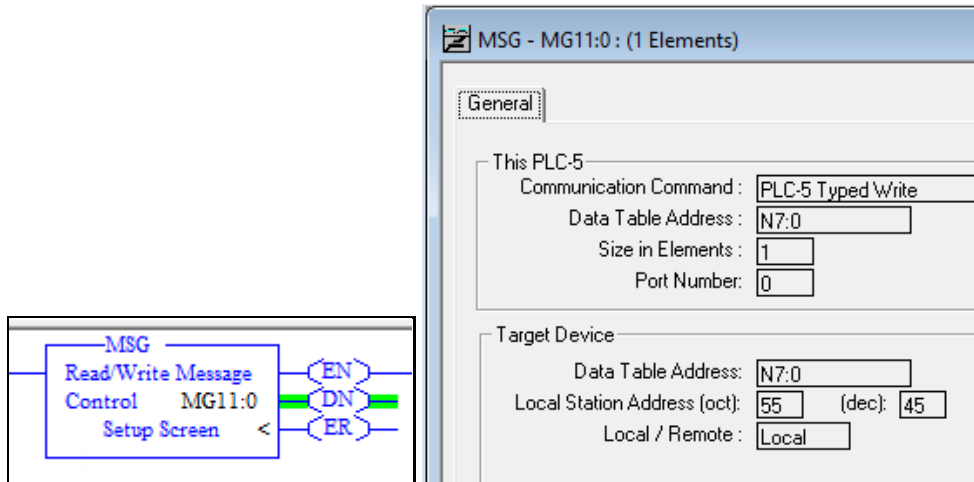
Note: How to Create Files: While offline, Right Click Data Files and Add New.

Message Instruction:

Read Setup:



Write Setup:



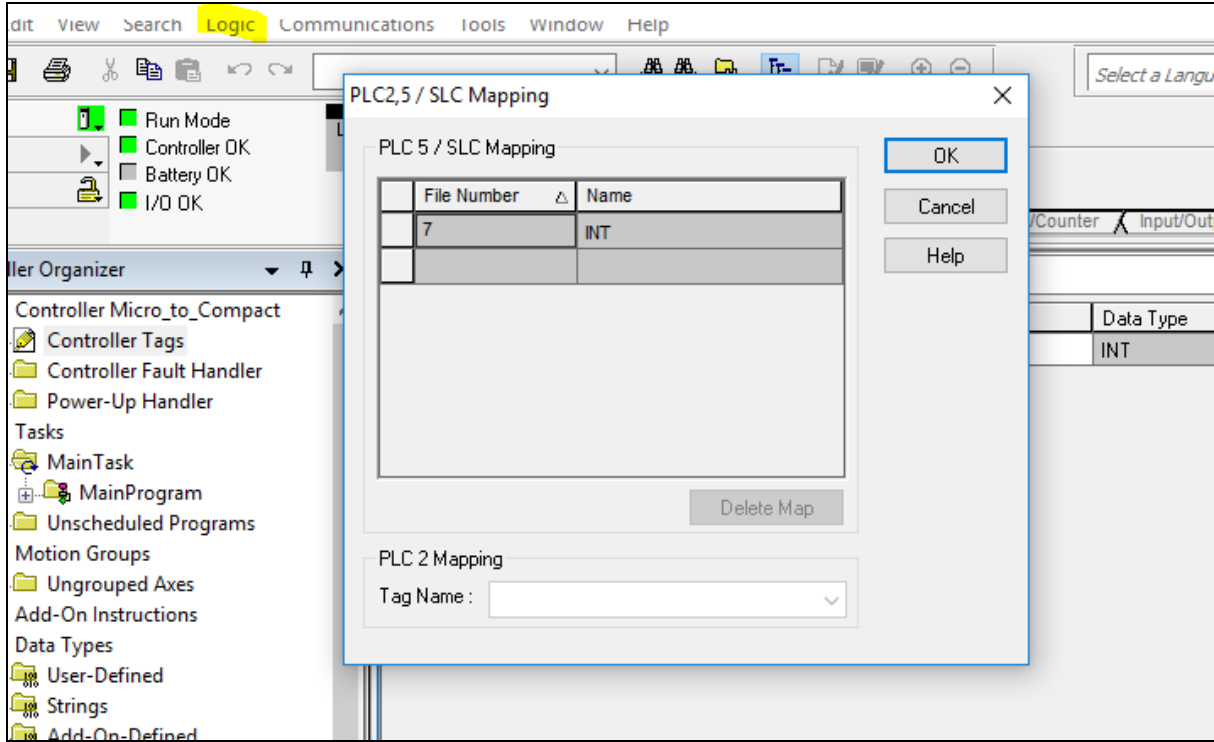
Note: In Message Instruction, you can only use node 45-49 to talk to the CompactLogix

Load up RSLogix/Studio 5000 (CompactLogix)

Create new program or modify existing program.

Make sure you have the target device data table address in your PLC, in the example that is "N7:0"

Note: To link a File to Tag "Logic -> Map PLC/SLC Messages -> *select File Number you want to use* and * Tag you made*"



Message Instruction Path

When it comes to CompactLogix and ControlLogix PLC the Message instruction has a path that is required to be filled in.

The Path tells how the message will get routed to the RTA unit through the PLC.

There is a breakdown on how the format should be for Port, followed by Next_Address, (if using a backplane then do that again so it would be Backplane, slot, port, EtherNet/IP:

Where	Is	
	For this network	Type
Port	Backplane	1
	DF1 (serial, serial channel 0)	2
	ControlNet	
	EtherNet/IP	
	DH+ channel A	
	DH+ channel B	3
	DF1 channel 1 (serial channel 1)	
Next_address	Backplane	Slot number of the module
	DF1 (serial)	Station address (0-254)
	ControlNet	Node number (1-99 decimal)
	DH+	8# followed by the node number (1-77 octal) For example, to specify the octal node address of 37, type 8#37.
	EtherNet/IP	Specify a module on an EtherNet/IP network by using any of these formats: <ul style="list-style-type: none"> • IP address. For example, 10.10.10.10 • IP address:Port. For example, 10.10.10.10:24 • DNS name. For example, tanks • DNS name:Port. For example, tanks:24

For example, if using a Compact Logix with built in Ethernet port the Path would be 2 for EtherNet/IP then IP address of 515RTAENI-N34 which would look like this: 2,192.168.1.100

For example, if using a Control Logix with Ethernet Card on the Backplane the Path would be 1 for Backplane, followed by the Slot number, next would be 2 for the EtherNet/IP, then IP address of 515RTAENI-N34 which could look like this: 1,3,2,192.168.1.100

As with all Allen Bradley PLC things may vary based on PLC. For example, the L32ER You will need to use 1 for back plane, 1 for slot 1, 2 for EtherNet/IP, IP address. So 1,1,2,192.168.1.100 even though the PLC is a compact Logix and doesn't have a typical backplane to slot in cards like a Control Logix.

Note that for the processors that have 2 Independent Ethernet ports (A1 and A2). For talking out of A1 use path 3,<ipaddress>. for A2 use 4,<ipaddress>.

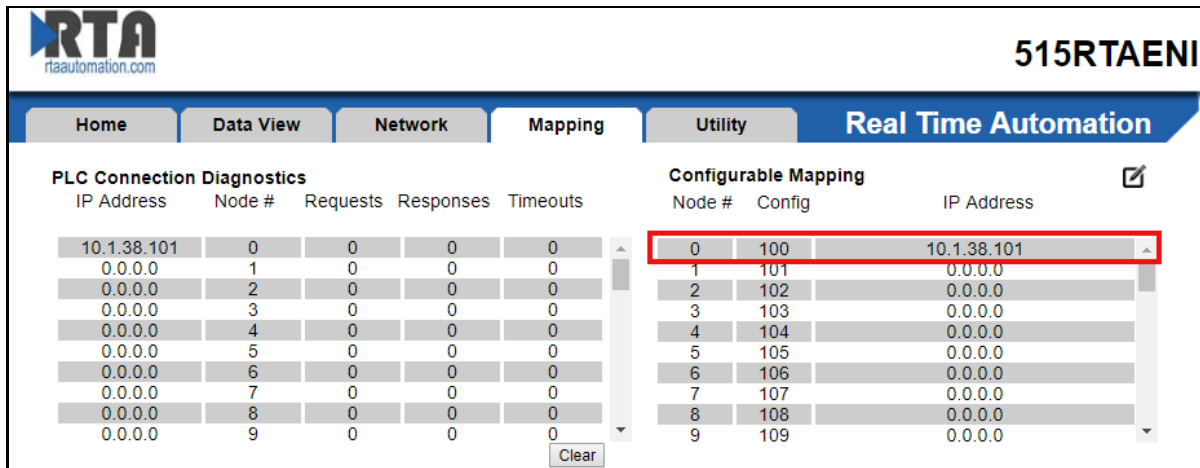
Message Routing

How to setup 515RTAENI Node to IP Address Routing

Load the 515RTAENI's web-based configuration.

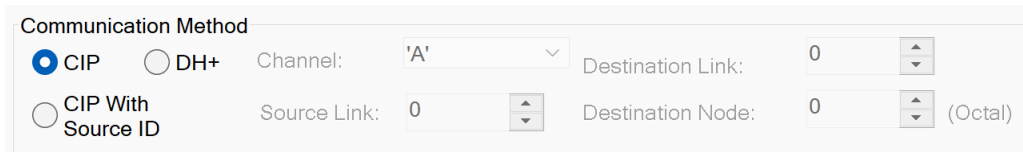
Navigate to the “Mapping” tab

Select the “Edit” icon on the right side, select the node you want add IP Address of the end device then “Save”.



PLC Connection Diagnostics					Configurable Mapping		
IP Address	Node #	Requests	Responses	Timeouts	Node #	Config	IP Address
10.1.38.101	0	0	0	0	0	100	10.138.101
0.0.0.0	1	0	0	0	1	101	0.0.0.0
0.0.0.0	2	0	0	0	2	102	0.0.0.0
0.0.0.0	3	0	0	0	3	103	0.0.0.0
0.0.0.0	4	0	0	0	4	104	0.0.0.0
0.0.0.0	5	0	0	0	5	105	0.0.0.0
0.0.0.0	6	0	0	0	6	106	0.0.0.0
0.0.0.0	7	0	0	0	7	107	0.0.0.0
0.0.0.0	8	0	0	0	8	108	0.0.0.0
0.0.0.0	9	0	0	0	9	109	0.0.0.0

When using a MSG instruction in a CompactLogix or ControlLogix the CIP Communication Method will always use Node 1.

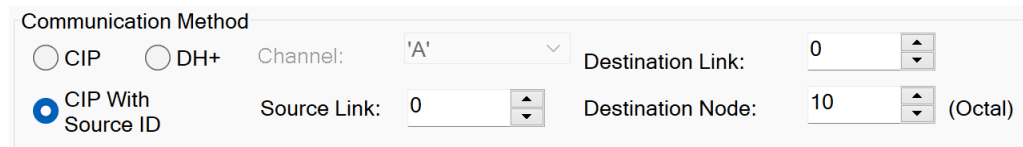


Communication Method

CIP DH+ Channel: 'A' Destination Link: 0

CIP With Source ID Source Link: 0 Destination Node: 0 (Octal)

If application requires a different node number such as 8(dec) then CIP with Source ID should be used. Just modify the Destination Node number and all will be good. Just remember that the Node here is octal not decimal.



Communication Method

CIP DH+ Channel: 'A' Destination Link: 0

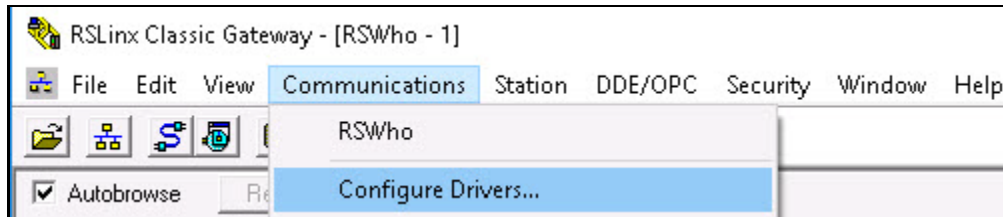
CIP With Source ID Source Link: 0 Destination Node: 10 (Octal)

Note: Make sure all PLC are in run mode

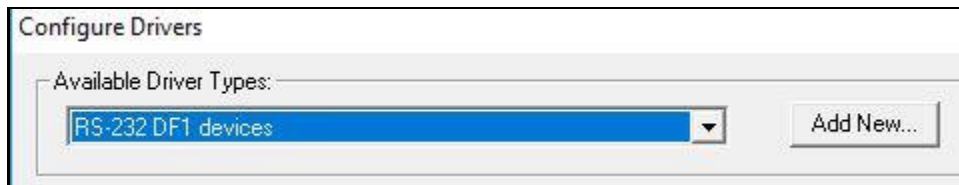
PLC Serial setting

Verify the Serial settings of your Serial PLC.

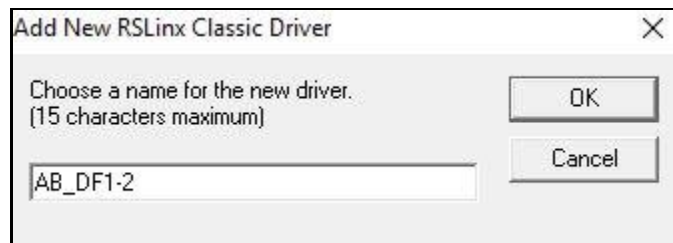
1. Connect a null modem cable from your PC to your PLC.
2. Open RSLinx and navigate to Communications -> Configure Drivers.



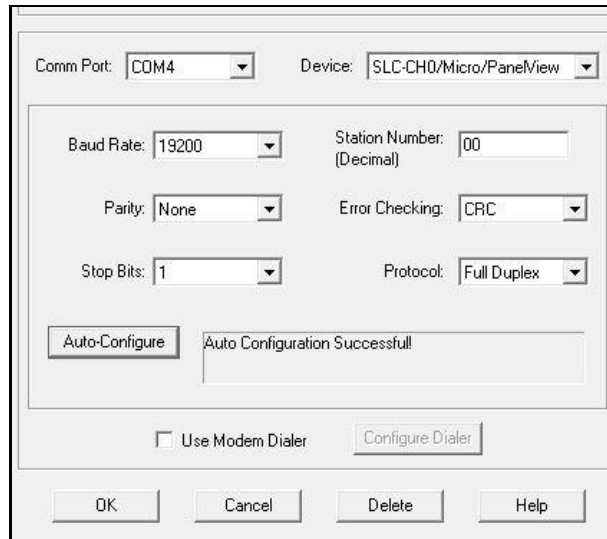
3. In the Dropdown select RS-232 DF1 devices then "Add New".



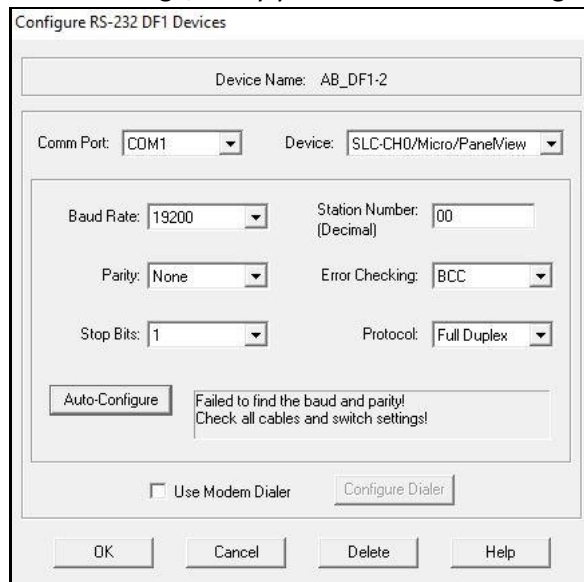
4. Name your driver and select "OK"



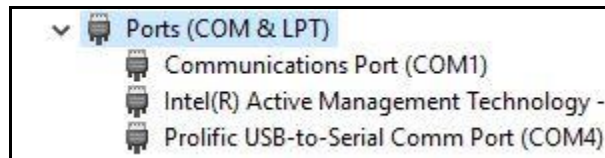
5. Then select the correct “Comm Port” of your PC, click “Auto-Configure”.



6. If you did not get a successful message, verify your “Comm Port” using device manager.



7. PC device manager - Ports.

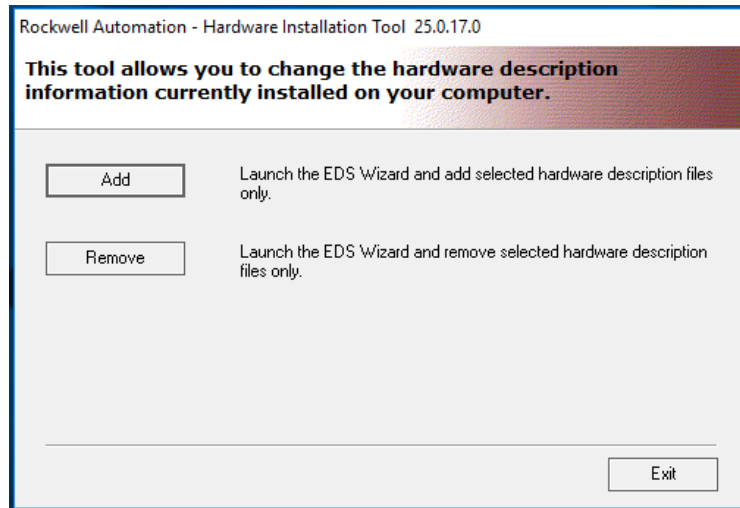


If still having issues verify you are using a null modem cable, if using an adapter verify that it is working or swap it out.

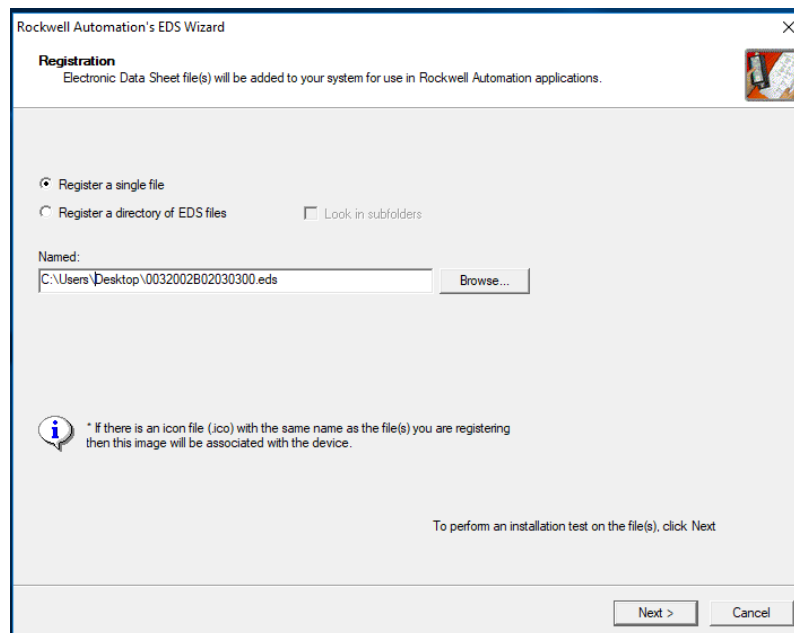
How to Load EDS File:

EDS Hardware Installation Tool

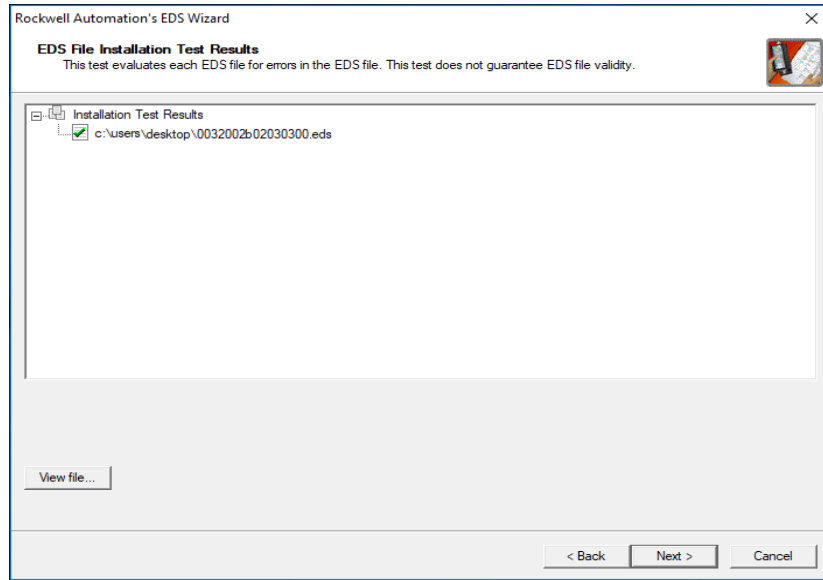
1. Move EDS File to desktop.
 - a. EDS files can be found on the web-based configuration of the 515RTAENI, located on the “Utility” tab (Right click save .eds link as).
2. Launch Allen-Bradley’s EDS Hardware Installation Tool. (Might need to run as administrator)



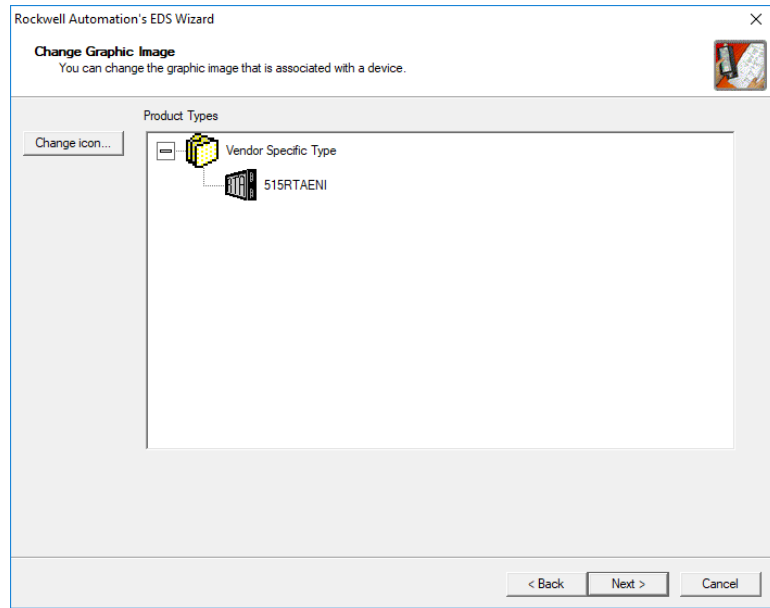
3. Select “Add”
4. Select “Browse” and navigate to the desktop where you saved off the EDS file in step 1. Then select “Next”



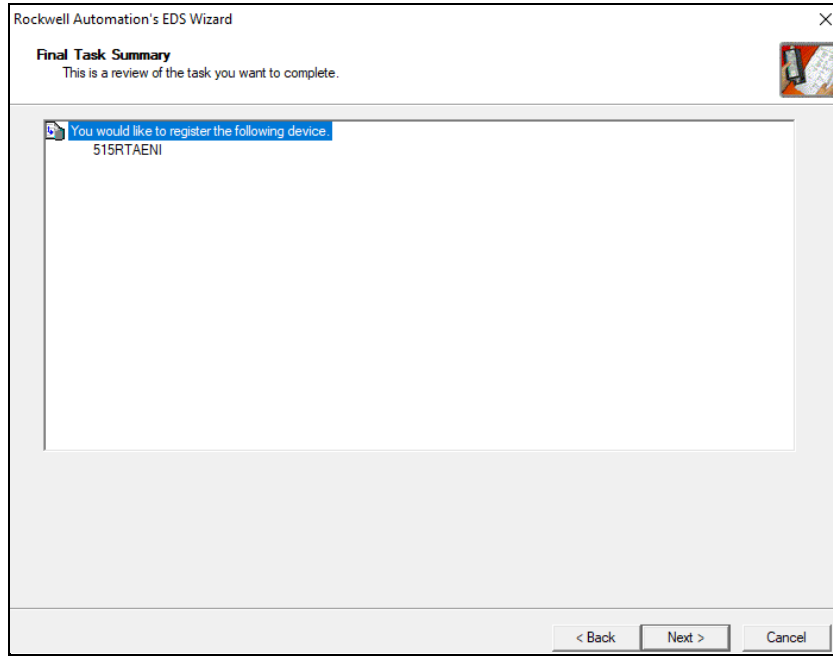
5. Verify that the path is correct. Select “Next”



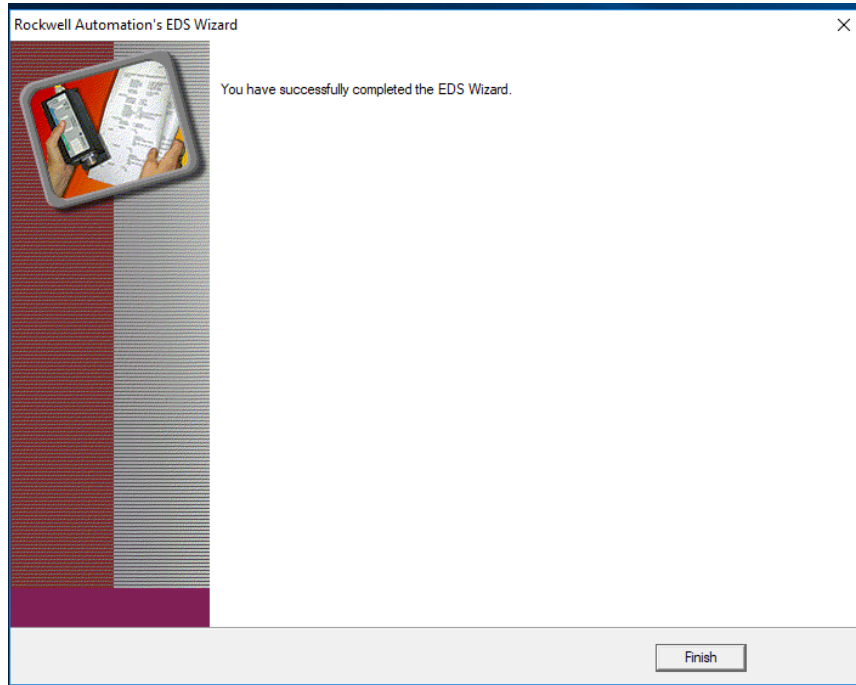
6. Verify that the graphic is correct. Select “Next”



7. Verify task. Select “Next”



8. You have now installed the EDS file successfully. Select “Finish”.

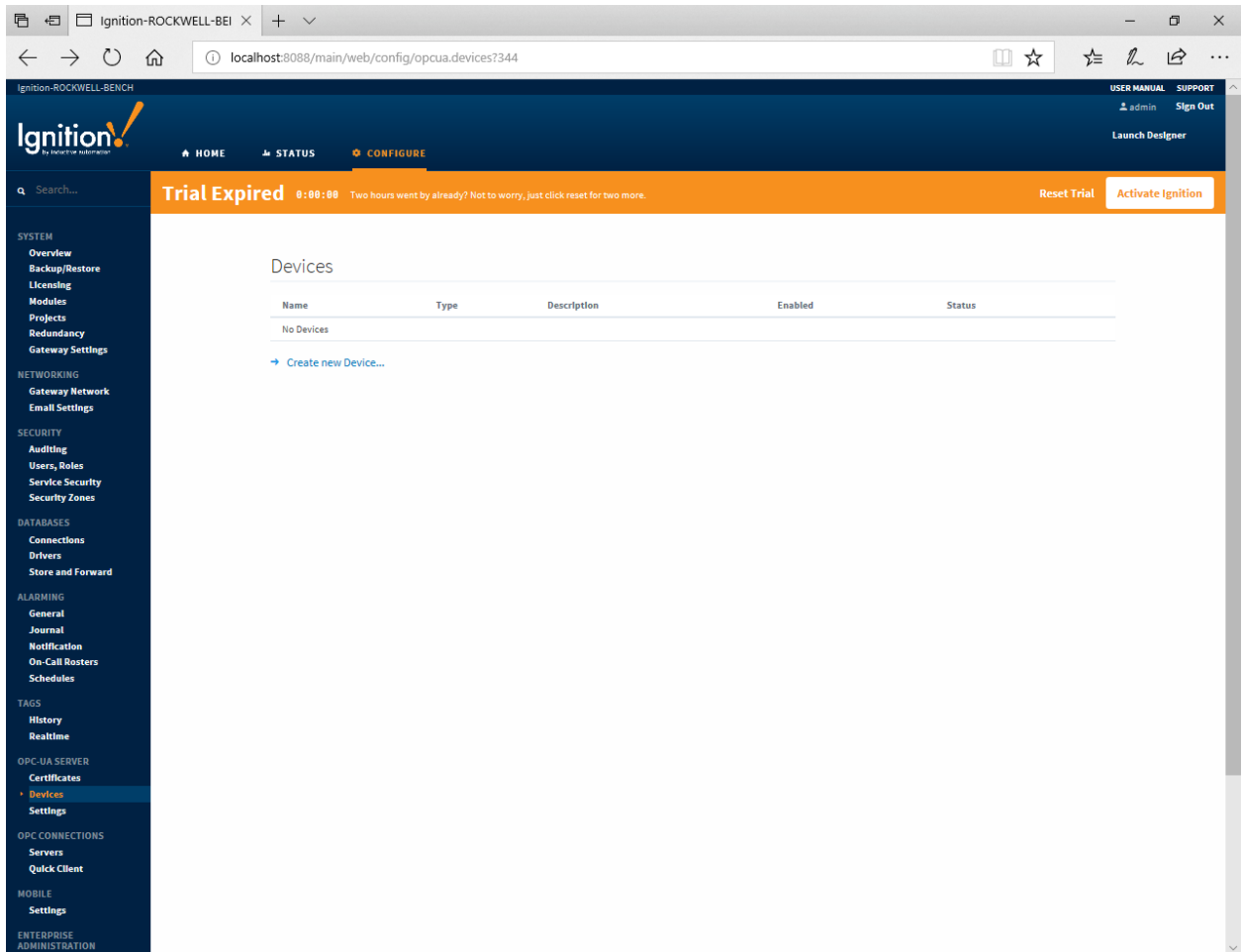


How to Discover Legacy PLC in Scada

Ignition

1. MicroLogix / SLC

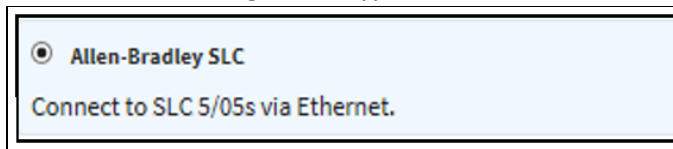
1. Create new device:



a. MicroLogix use the following device type.



b. SLC use the following device type.



2. Device Setup: Fill in the "Name" and "Hostname" (IP address of the 515RTAENI) Connection Path of "1,0".

General	
Name	515RTAENI
Description	
Enabled	<input checked="" type="checkbox"/> (default: true)

Connectivity	
Hostname	192.168.1.173
Local Address	Address of network adapter to connect from. (default:)
Timeout	2000 (default: 2,000)
Browse Cache Timeout	240000 (default: 240,000)
Connection Path	1,0

3. Connection: Status should say "Connected: Protocol EIP"

Devices

✓ Successfully created new Device "515RTAENI"

Name	Type	Description	Enabled	Status
515RTAENI	Allen-Bradley SLC		true	Connected: Protocol: EIP

More edit

2. CompactLogix/ControlLogix

1. Create new device:

Name	Type	Description	Enabled	Status
No Devices				

→ Create new Device...

a. Compact Logix uses the following device type.

Allen-Bradley CompactLogix (Legacy)
Connect to CompactLogix firmware v20 and prior processors.

Or

Allen-Bradley Logix Driver
Connect to Allen-Bradley Logix family devices, including devices with firmware v21+.

b. ControlLogix use the following device type.

Allen-Bradley ControlLogix (Legacy)

Connect to ControlLogix firmware v20 and prior processors.

Or

Allen-Bradley Logix Driver

Connect to Allen-Bradley Logix family devices, including devices with firmware v21+.

2. Device Setup: Fill in the “Name”, “Hostname” (IP address of the 515RTAENI), and “Connection Path” = “1,2”.

General	
Name	<input type="text" value="515RTAENI_L32E"/>
Description	<input type="text"/>
Enabled	<input checked="" type="checkbox"/> (default: true)

Connectivity	
Hostname	<input type="text" value="192.168.1.156"/>
Timeout	<input type="text" value="2000"/> (default: 2,000)
Connection Path	<input type="text" value="1,2"/> (default:)
Concurrent Requests	<input type="text" value="2"/> (default: 2)

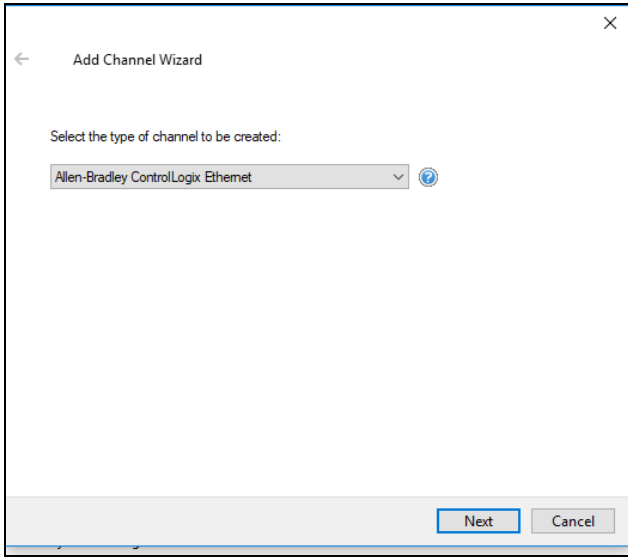
3. Connection: Status should say “Connected: Protocol EIP – Run Mode”

Name	Type	Description	Enabled	Status	
515RTAENI_L32E	Allen-Bradley CompactLogix (Legacy)		true	Connected: Protocol: EIP - Run Mode	More ▼ edit

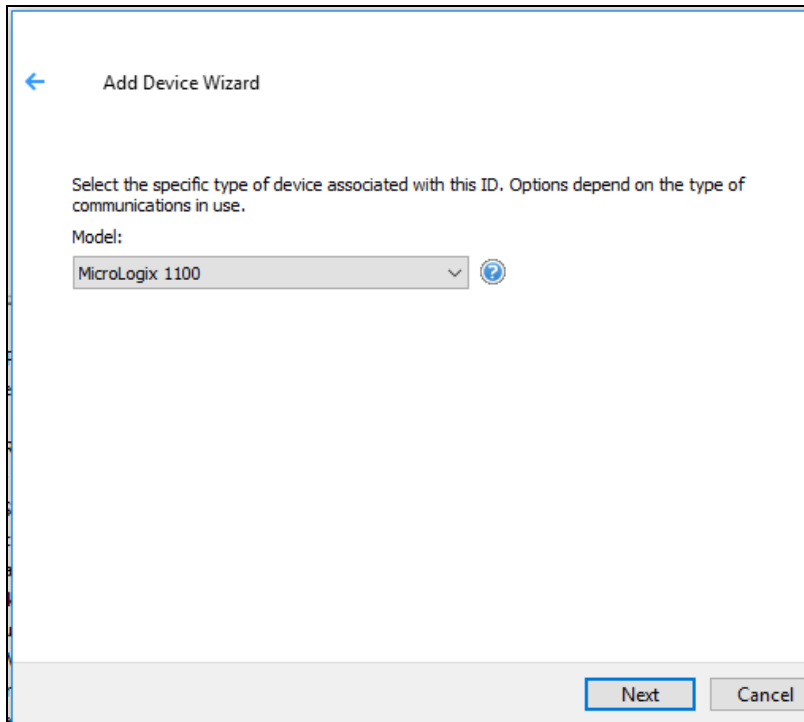
[→ Create new Device...](#)

Kepware Version 6:

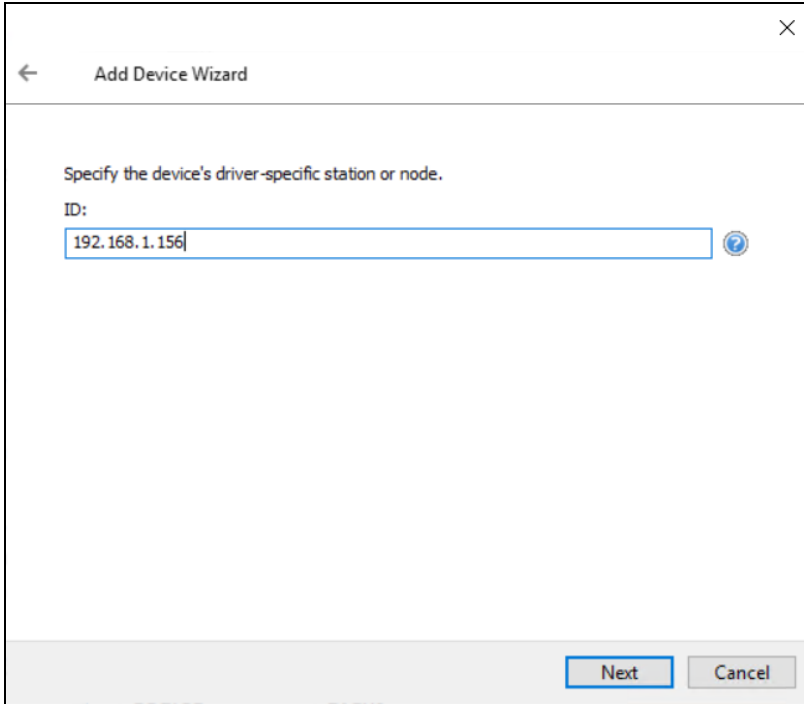
1. Create a channel: Choose Allen-Bradley ControlLogix Ethernet.



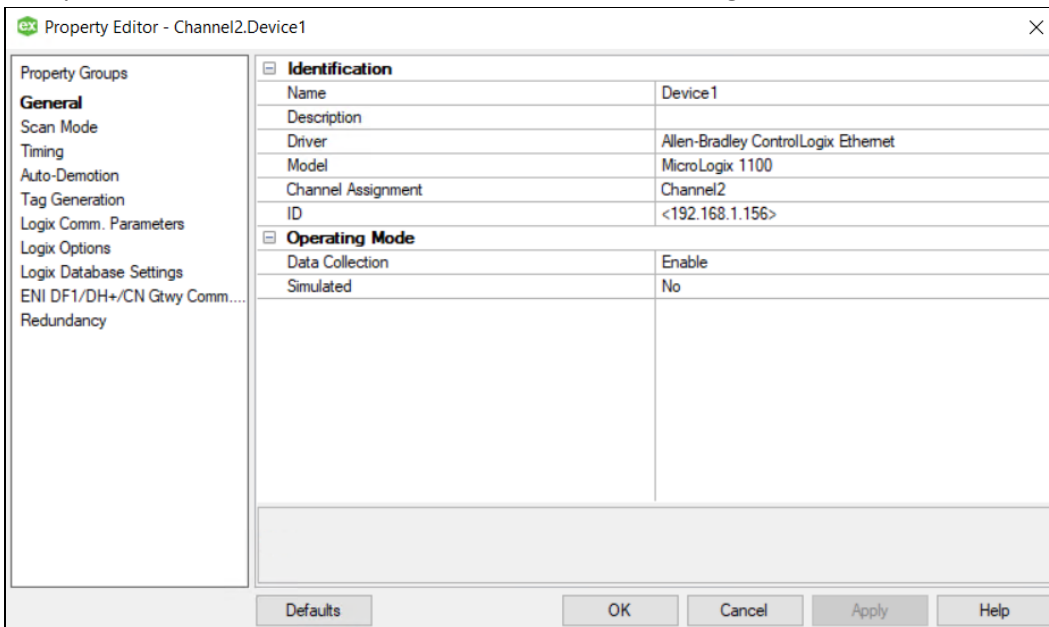
2. Channel Device: For SLC PLC and MicroLogix PLC types, choose MicroLogix 1100



3. Enter in the IP of the 515RTAENI: Navigate through the "Next" till you reach "ID" then fill in the IP address of the 515RTAENI.



4. Verify Driver: Your driver should look like this when reviewing the driver.



5. Tag Generation: Select tag generation then add tag. Fill in your tag you want to read or write. This is an example of reading an integer from a SLC5/03.

Property Editor - Channel2.Device1.N7:0

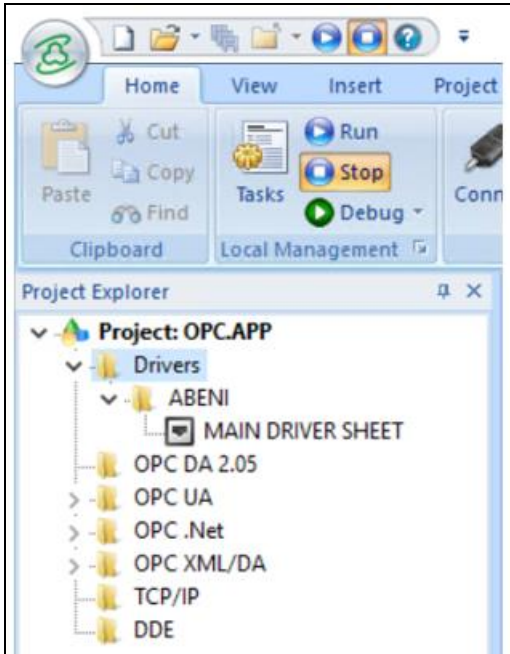
Property Groups
General
Scaling

Identification	
Name	N7:0
Description	
Data Properties	
Address	N7:0
Data Type	Word
Client Access	Read/Write
Scan Rate (ms)	100

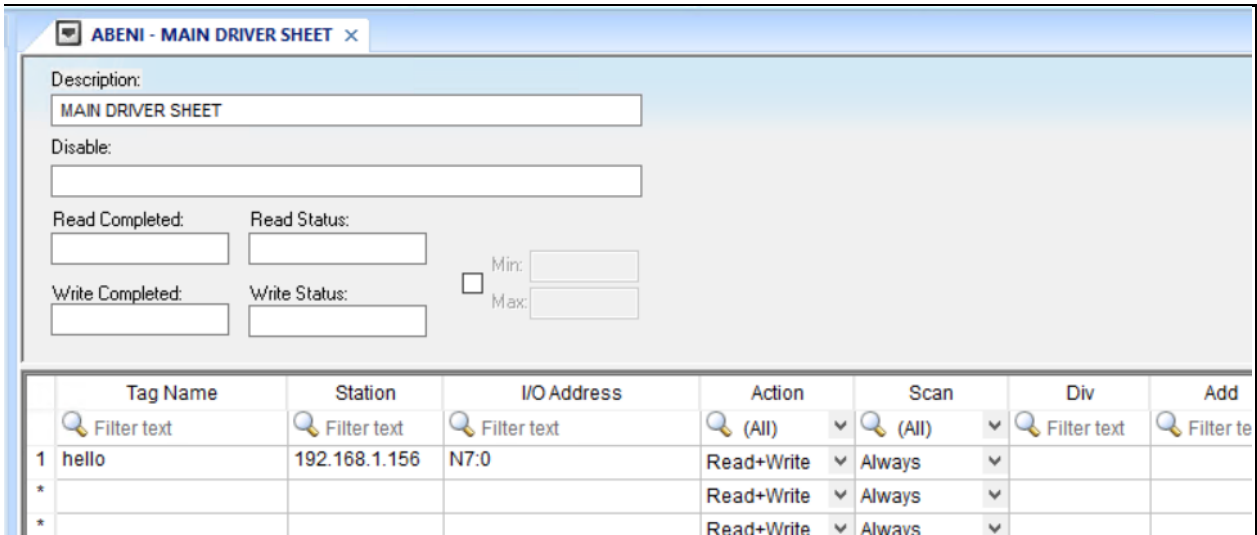
Defaults OK Cancel Apply Help

InduSoft :

1. Driver selection: Navigate to Comm, right click the “Drivers” and add “ABENI” driver.



2. Driver Setup: Fill in a tag name with correct data type. (If you don't have a tag in InduSoft yet, then just fill Tag Name in and one will be generated for you).




3. Database Spy can be used to test out if the tag is getting your data: Just type in the tag you are wanting to verify. Then set InduSoft into “Run mode”.

Database Spy

Tag/Expression	Value	Quality	Continuous
ReadStatus[1]	-2138439680	GOOD	<input checked="" type="checkbox"/>
ReadMessage[1]	Bad - Not Conn...	GOOD	<input checked="" type="checkbox"/>
RTA460BoolTest[0]	0	BAD	<input checked="" type="checkbox"/>
RTA460BoolTest[1]	0	BAD	<input checked="" type="checkbox"/>
hello	1023	GOOD	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

DB 1 DB 2 DB 3 DB 4 Local Stack Frame Tools

<

-  Run
-  Stop
-  Debug ▾

PanelView Plus:

PanelView (Eth) to MicroLogix / SLC (DF1)

The following instructions are for communications setup in RSVIEW. The 515RTAENI EDS file must be installed. Use the Rockwell EDS Hardware Installation Tool to install the EDS file supplied on the product CD. The EDS file may need to first be copied off the CD to your computer for the EDS installation tool to successfully install the file. Once the EDS file is installed and the ethernet and serial settings have been set, you should be able to discover the 515RTAENI gateway in RSLinx.

515RTAENI_N34 EthernetIP-Serial R...	0032002B02030300.eds	10/24/2016 3:10 PM	EDS File	11 KB
EDS	Netburner_64x64.ico	10/24/2016 3:11 PM	Icon	6 KB
Gateway Documents				
Gateway Tools				

Figure xx - 515RTAENI RSLinx EDS file and Icon file

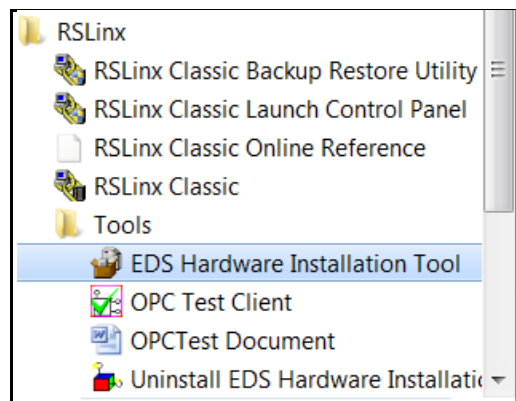
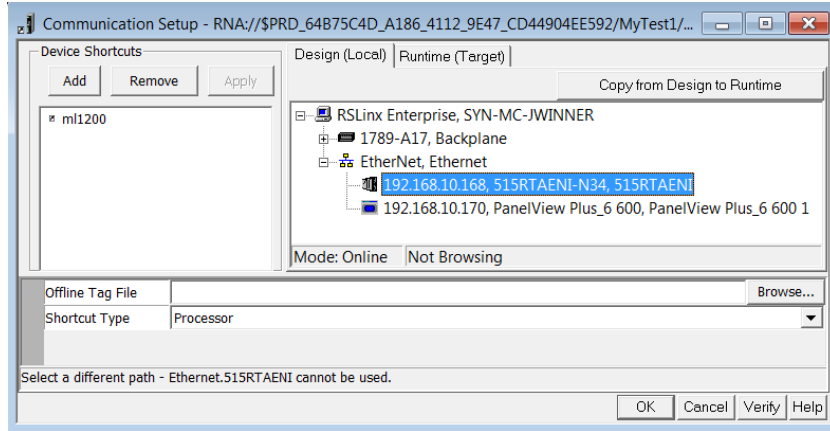
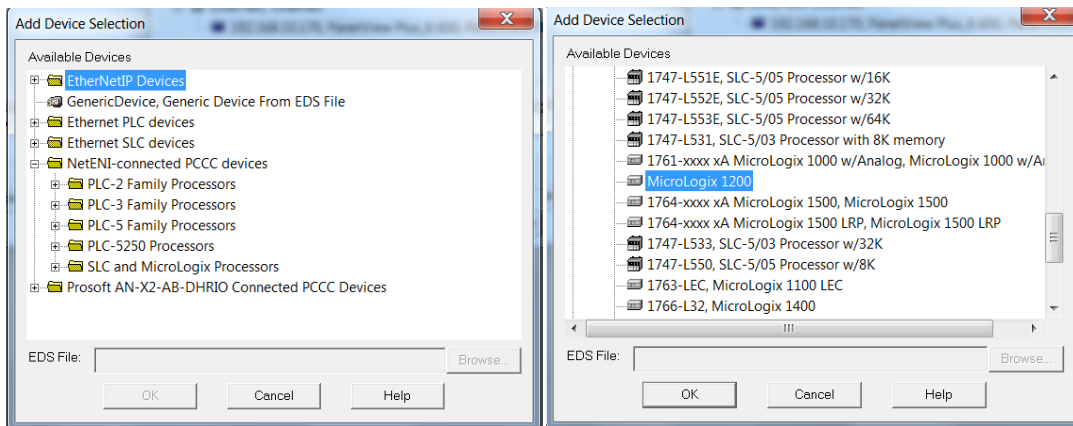


Figure xx - Rockwell RSLinx EDS Hardware Installation Tool

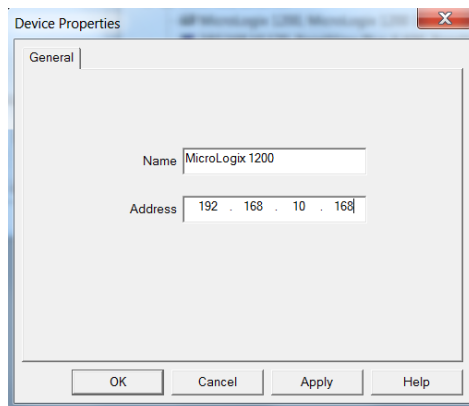
For PanelView Plus communications setup in RSVIEW, verify RSLinx Enterprise finds the 515RTAENI gateway. Unplug the ethernet cable to the 515RTAENI gateway. Right click the unit, and delete it from the communications tree, see the visual below.



Right click the ethernet driver and select “Add Device”. From the Device Selection tool, select the NetENI-connected PCCC devices, select the appropriate processor family folder, and then choose your PLC from the list in the processor folder and press “OK”. The example screens below show the selection of a MicroLogix 1200 controller.



Enter in the IP address assigned to the 515RTAENI gateway, and press “Apply”.



The RSView software should now be able to communicate over ethernet to the serial input of the controller using the 515RTAENI gateway. If this procedure doesn't work the first time, delete the original target and rebuild the comms as described above.

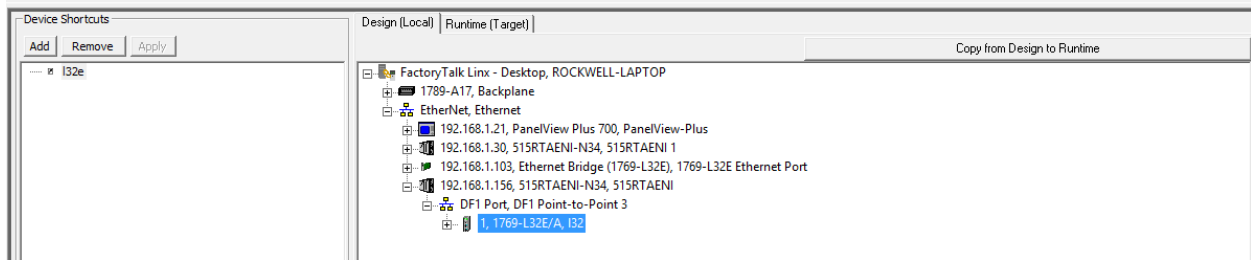
Remember to Copy From Design to Runtime.

❑ IMPORTANT: When using a PanelView Plus terminal the Duplicate Packet Detect option in the serial controller must be DISABLED, otherwise there may be a loss of communications.

PanelView (Eth) to CompactLogix / ControlLogix (DF1)

Make sure the EDS file is installed and the ethernet and serial settings have been set, you should be able to discover the 515RTAENI gateway in RSLinx.

Open your Communication Setup. Expand the EtherNet and drill down through the DF1 Port and select the Processor then your shortcut and Press Apply (if greyed out it is already linked).



Remember to Copy from Design to Runtime.

PanelView (DF1) to PLC (Eth)

The following instructions are for communications setup in RSView. The 515RTAENI EDS file must be installed. Use the Rockwell EDS Hardware Installation Tool to install the EDS file supplied on the product CD. The EDS file may need to first be copied off the CD to your computer for the EDS installation tool to successfully install the file. Once the EDS file is installed and the ethernet and serial settings have been set, you should be able to discover the 515RTAENI gateway in RSLinx.

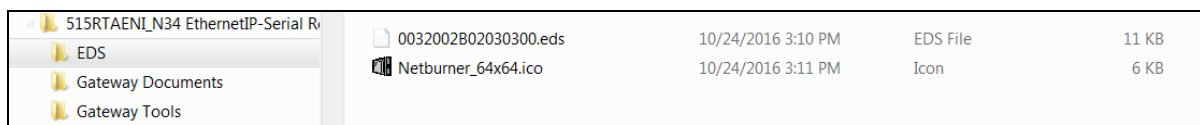


Figure xx - 515RTAENI RSLinx EDS file and Icon file

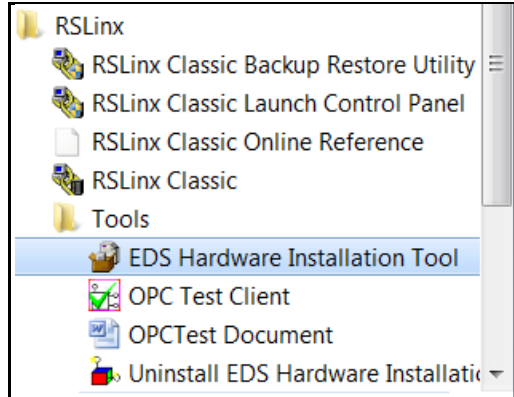
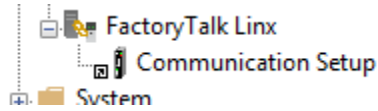


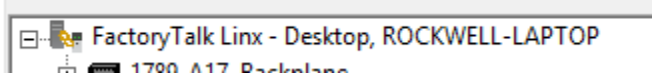
Figure xx - Rockwell RSLinx EDS Hardware Installation Tool

Go to Communication Setup:

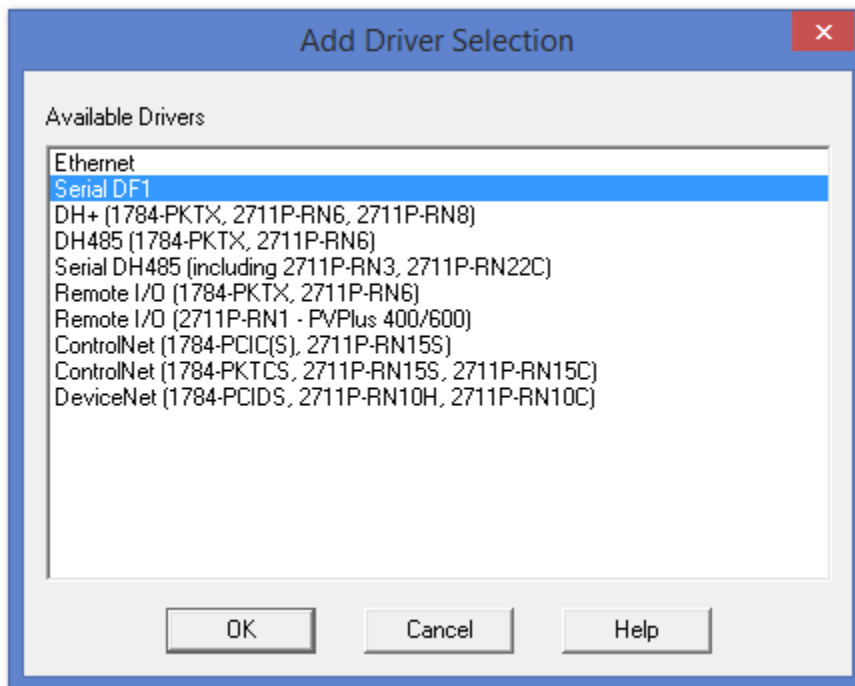


Add a Serial DF1 Driver:

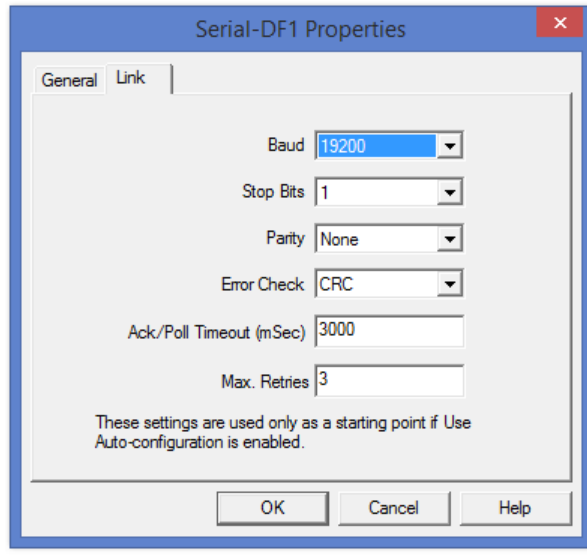
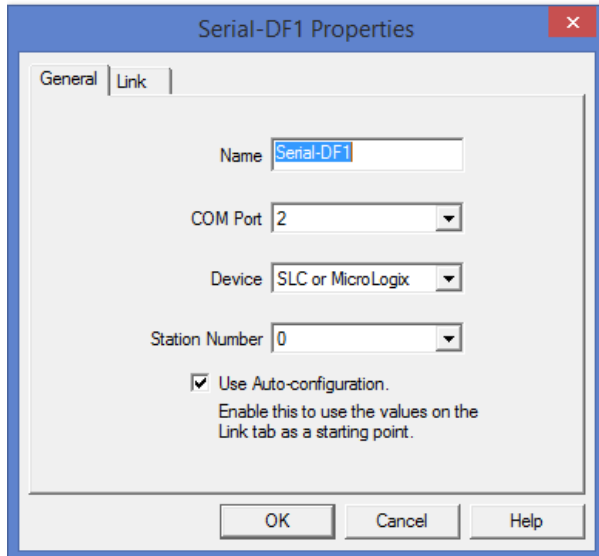
Right click "Factory Talk Linx ..." and press Add Driver



Select Serial DF1 press "OK"



Setup your General and Link Tabs

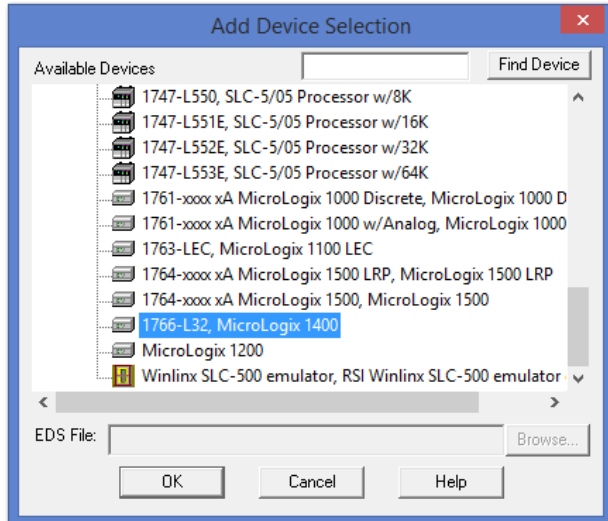
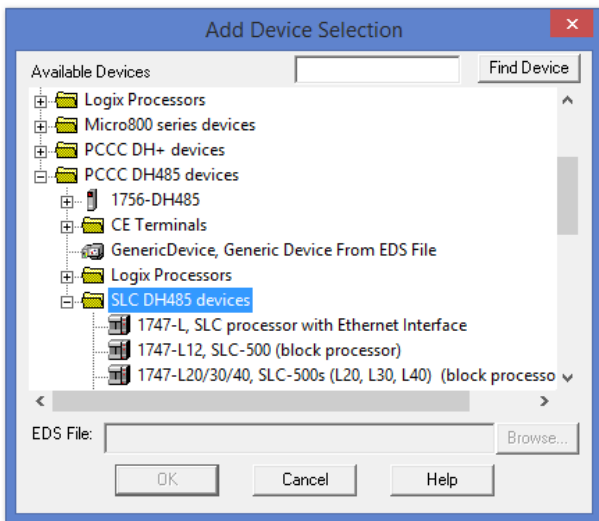


☑ IMPORTANT: When setting up the Driver make sure to check the “Use Auto-configuration” or else you will have issue with setting up Comms.

Add a Device to the Driver:

Right Click Driver and Add Device

I am adding a Micrologix 1400 so my PLC is Located under: PCCC DH485 devices -> SLC DH485 devices -> MicroLogix 1400



In the setup of the device, there is an “Address” this will be used for the message routing in the 515RTAENI.

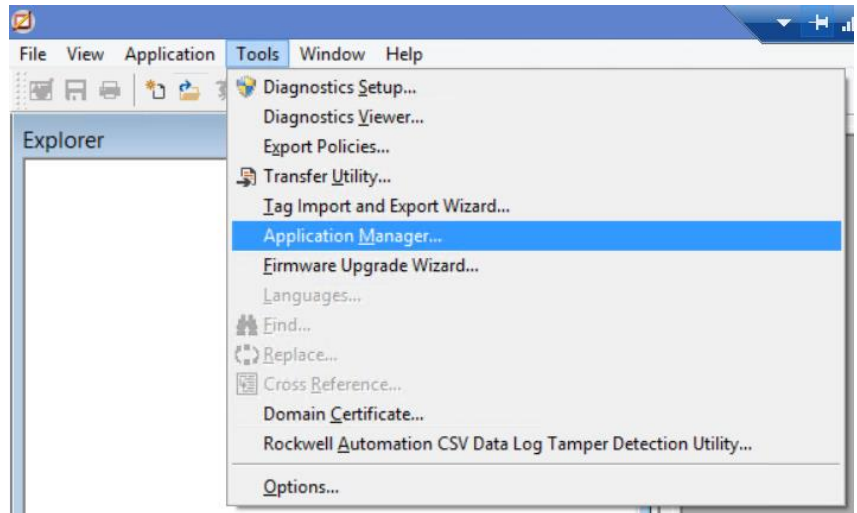
Navigate to the 515RTAENI's Mapping page and fill in the Node number above with the IP address of the PLC you are wanting.

Configurable Mapping			Save
Node #	Config	IP Address	
0	100	0.0.0.0	
1	101	192.168.1.22	
2	102	0.0.0.0	
3	103	0.0.0.0	
4	104	0.0.0.0	
5	105	0.0.0.0	
6	106	0.0.0.0	
7	107	0 0 0 0	

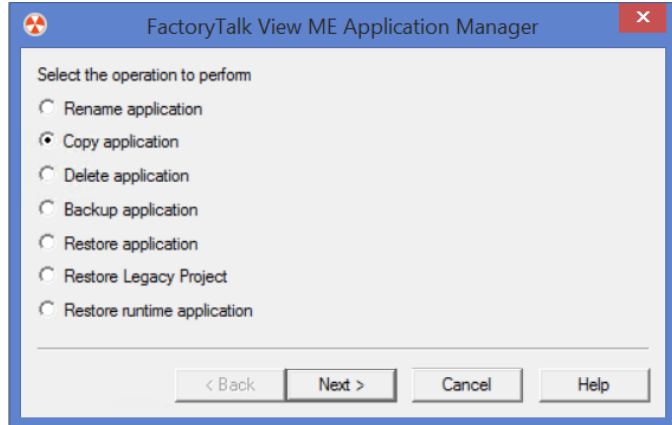
How to Migrate your PanelView 6 Project to 7

Before you begin it is recommended to create a copy of your project before converting. As if you convert to the wrong project size it will cause issues and not load into the New PanelView.

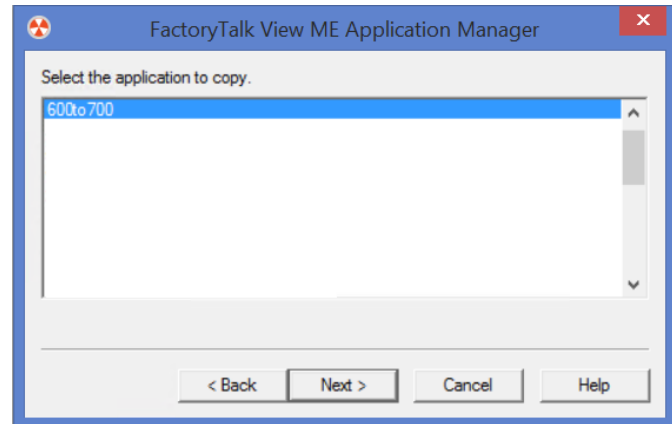
Make sure the Project you want to copy is closed. Then on the top tool bar select "Tools" then Application Manager.



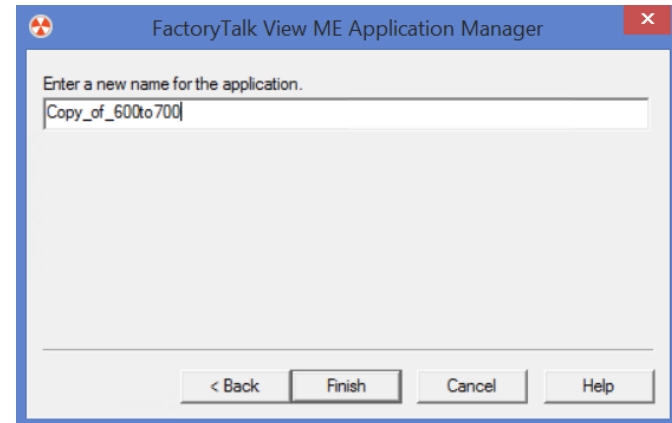
Choose the “Copy application” and press “Next”.



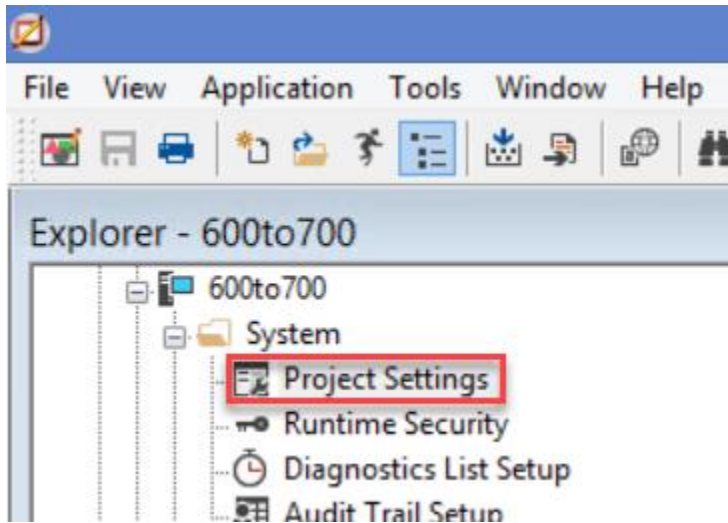
You will be prompted to choose the application to copy, And press “Next”.



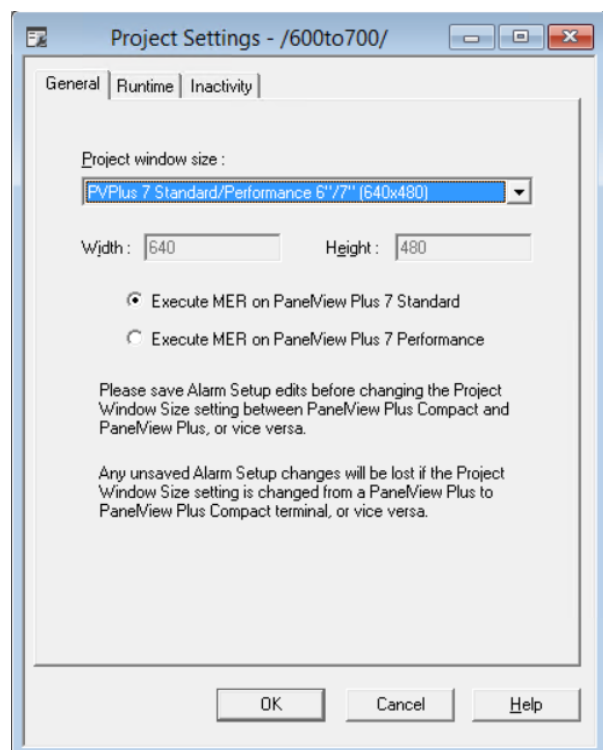
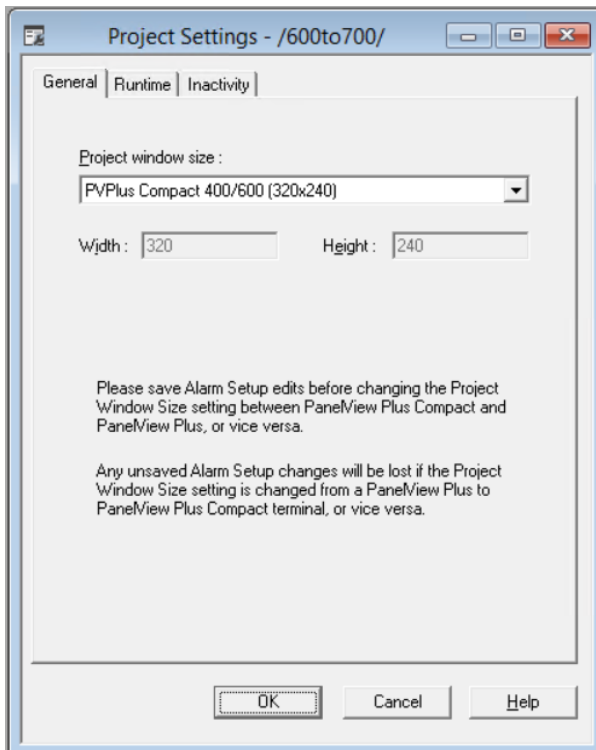
Give the new copy a name and press “Finish”.



Open the copy of the legacy project and navigate through System and select Project Settings.

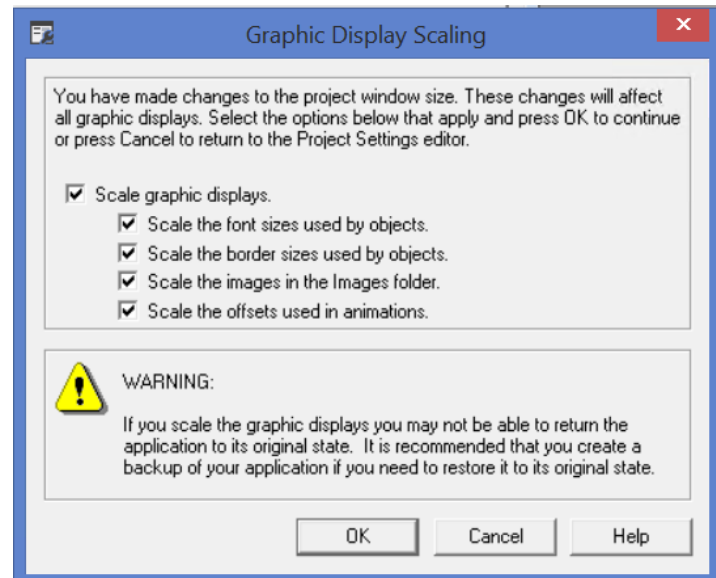


The Window that opens will be on the General tab by default. The Project Window size controls the graphic size for all the screens. Adjusting this from your old PanelView screen size to the new PanelView screen size.



After changing the Project window size and pressing “Ok” you will be prompted with a Graphic Display Scaling. Just keep all checked and press “Ok”.

After you press “Ok” then wait for Factory talk to convert your program.



You have just converted the PanelView project. If the new PanelView has the same ports, then everything should be good to go. If not, will need to reassign the communication setup. See the application setup for your application above for a walkthrough.