DH485 Router/B

FTView (SE and ME) to SLC setup

Technical Application Note

A-DH485R

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1. PREFACE

1.1. PURPOSE OF THIS DOCUMENT

This document will assist the user to setup the DH485 Router/B (referred to as DH485 Router in this document) to allow an FTView / PanelView Plus application to communicate to an SLC device's DH485 port via EtherNet/IP.

1.2. ADDITIONAL INFORMATION

The following resources contain additional information that can assist the user with the module installation and operation.

Resource	Link
Slate Installation	http://www.aparian.com/software/slate
DH485 Router/B User Manual	
DH485 Router/B Datasheet	https://www.aparian.com/products/dh/9Eroutorh
Application Notes	https://www.aparlan.com/products/un485routerb
Example Code & UDTs	
Ethornot wiring standard	www.cisco.com/c/en/us/td/docs/video/cds/cde/cde205 220_420/install
Ethernet wiring standard	ation/guide/cde205_220_420_hig/Connectors.html
CIP Routing	The CIP Networks Library, Volume 1, Appendix C:Data Management

1.3. SUPPORT

Technical support will be provided via the Web (in the form of user manuals, FAQ, datasheets etc.) to assist with installation, operation, and diagnostics.

For additional support the user can use either of the following:

	ŭ
Contact Us web link	www.aparian.com/contact-us
Support email	support@aparian.com

2. APPLICATION DESCRIPTION

The Aparian DH485 Router can be used to enable multiple modern Ethernet devices to communicate to legacy SLC500 devices via their DH485 ports. In the application example below, an FTView SE application and two PanelView Plus terminals can read and write data to an SLC500.



FIGURE 2.1. - EXAMPLE OF A TYPICAL NETWORK SETUP

3. SETUP

The following sections will describe the installation and configuration of all the required devices to assist the user with the initial setup.

3.1. MODULE LAYOUT

The module has two ports at the bottom and two ethernet ports on the front of the enclosure as shown in the figure below. The ports are used for Ethernet, RS232 or RS485 serial, and power. The power port uses a three-way connector which is used for the DC power supply positive and negative (or ground) voltage as well as the earth connection.

The Ethernet cable must be wired according to industry standards which can be found in the additional information section of this document.



FIGURE 3.1. - DH485 ROUTER/B SIDE AND FRONT VIEW

3.2. SERIAL CABLE WIRING

The serial cable pinout is shown in the figure below:











FIGURE 3.4. – SERIAL CABLE PINOUT – MICROLOGIX 1100 / 1400



FIGURE 3.5. - SERIAL CABLE PINOUT - SLC5/04 (RS232)



FIGURE 3.6. – SERIAL CABLE PINOUT – MICROLOGIX 1500 (RS232)

All RS485 networks need to be terminated at the extremities (start and end point) of the communication conductor. The termination is done by placing a resistor between the positive and negative communication conductor. The value of the resistor will depend on the characteristic impedance of the cable chosen, but generally ranges from 100 Ohm to 150 Ohm.

The DH485 Ground Bridge should be enabled and the user can also enable the DH485 Router internal RS485 terminator in the module configuration in Slate (see below):

DH485Router - Configurat	ion			- - ×
General Serial - DH485 Trai	nsparent PCCC Reactive Tag (Disabled)	Scheduled Tag (Disabled)	Advanced	
Physical Port	DH485 - Standard (RS485) V			
Node Address	0 ~	Retry Limit	3	[0-10]
Max Scan Address	31 ~	Message Timeout	20	[1-100] (x 50ms)
BAUD Rate	19200 ~	Response Timeout	5	[1-100] (ms)
	✓ Terminate DH485	Reply Msg Wait	5	[1-100] (ms)
	✓ DH485 Ground Bridge			
	Ok Apply	Cancel	Help	

FIGURE 3.7. – INTERNAL RS485 TERMINATION

3.3. NET-ENI (CIP ENCAPSULATED PCCC) METHOD3.3.1. DH485 ROUTER SETUP

The DH485 Router must be configured in Transparent PCCC mode, as shown below.

DH485Router - Configuration		_ D ×
General Serial - DH485 Transparent PCC	CC Reactive Tag (Disabled) Scheduled Tag (Disabled) Advanced	
Instance Name DH485Router		
Description		
IP Address 192 _ 168	. 1 . 224 Major Revision 1 V	
ENIP Retry Limit 5 [()-5]	
ENIP TimeOut 1000 m	IS	
Mapping Mode		
Transparent - PCCC	Maps device initiated DH485 PCCC to Logix PLC 2,3,5 mapping. Supports remote programming	
O Reactive Tag	Maps device initiated DH485 PCCC to Logix Tag.	
O Scheduled Tag	DH485 Router initiated scheduled transfer between device and Logix.	
O Unscheduled	Routes Logix Msg to DH485 Device.	
	Translates DH485 to RS232	
	Ok Apply Cancel	

FIGURE 3.8. – DH485 GENERAL CONFIGURATION

In the Serial-DH485 settings, the BAUD Rate must match that of the SLC device (as configured using RSLogix 500).

S DH485Router - Confi <u>c</u>	juration				- • • ×
General Serial - DH485	Transparent PCCC	Reactive Tag (Disabled)	Scheduled Tag (Disabled)	Advanced	
Physical Port	DH485 - Stan	dard (RS485) ∨			
Node Address	0	\sim	Retry Limit	3	[0-10]
Max Scan Addres	ss 31	\sim	Message Timeout	20	[1-100] (x 50ms)
BAUD Rate	19200	\sim	Response Timeout	5	[1-100] (ms)
	🗸 Terminate	∍ DH485	Reply Msg Wait	5] [1-100] (ms)
	🗹 DH485 G	round Bridge			
	C	Ok Apply	Cancel	Help	

FIGURE 3.9. – DH485 SERIAL CONFIGURATION



NOTE: The physical port selected would depend on to which device the module is connected. See the Serial Cabling section for more details.



NOTE: At least one transparent mapped item must be added for the SLC500 programming to work on DH485. If the DH485 Router is used purely for communicating to the PanelView then the user can add a DH485 Node of zero with a IP address matching the PanelView connected. The reason for this is because the DH485 Router requires a node on the network.

neral	Serial - Di	-1485	Transp	parent PC	CC F	Reactiv	re Tag	(Disab	led) S	Schedul	ed Tag (Disabled) Ad	dvanced		
	_ Enable F	2000	Direct								General			
N	Иар 1 1	Node	\sim	0	F	0 0	P Add	ress	0		PCCC Node	1	\sim	
	2 2		\sim	0	-	0	. ()	0					
	3 3		\sim	0		0	(
DH4	185 / Ethern DH485	et Cor Node	ntroller	r Mapping	g (max	0 4. of 20) items) _ .)	0 Control	ller Path	Logix Connection	n Class3	Browse	
DH4	485 / Ethern DH485 0	iet Cor	ntroller	Mapping	g (max	c. of 20) items) _ .) (0 Control	ller Path	Logix Connection	n Class3	Browse	
DH4	485 / Ethern DH485 0	et Cor Node	ntroller	Mapping	g (max 3.1.22	c. of 20) items	.)	0 Control	ller Path	Logix Connection	n Class3	Browse	
DH4	485 / Ethern DH485 0	iet Cor	ntroller •	192.168	g (max	. of 20) items	.)	0 Control	ller Path	Logix Connection	n <u>Class3</u>	Browse	
DH4	485 / Etherr DH485 0	net Cor	ntroller •	Mapping	g (max	. of 20) items	.)	Control	ller Path	Logix Connection	n <u>Class3</u>	Browse	
DH4	185 / Etherr DH485 0	Node	ntroller •	Mapping 192.168	g (max	21) items	.)	Control	ller Path	Logix Connection	n <u>Class3</u>	Browse	
DH4	485 / Etherr DH485 0	Node	ntroller ·	r Mapping 192.168	3.1.22	:1) items	.)	Control	ller Path	Logix Connection	n <u>Class3</u>	Browse	

FIGURE 3.10. - TRANSPARENT PCCC CONFIGURATION

The PCCC Node allows the user to force the destination address of the DF1 message which is routed via the CIP embedded PCCC message.

NOTE: The RSLinx Enterprise driver does not allow the user to set the destination address to which the PanelView will communicate. The PCCC Node allows the user to set this address. The user can then have various PanelViews communicating to different SLC5xx controllers.

3.3.2. RSLOGIX 500 SETUP

Using RSLogix500, the DH485 port must be configured to match that of the DH485 Router's serial port settings with respect to BAUD rate.

3.3.3. FTVIEW SETUP

Open FTView Studio and create a new FTView project (SE or ME). The project explorer tree will appear on the left-hand side. Right-click on the newly created project and select the **Add New Server** option, followed by the *RSLinx Enterprise* option.

1

🔁 FactoryTalk View Studio - View Site Ed	ition (Local Station)
File View Settings Tools Window Image:	Help
Explorer - SLCDF1	
Run Delete	
Add New Server	Rockwell Automation Device Server (RSLinx Enterprise)
G Security	OPC Data Server Tag Alarm and Event Server
H Properties Logic and control Data Log	

FIGURE 3.11. – FACTORY TALK SERVER ADD

The RSLinx Enterprise Server properties window will open. Select Ok.

RSLinx Enterprise Server Properties
General Alarms and Events
Name
RSLinx Enterprise
Description
Computer hosting the RSLinx Enterprise server:
localhost
OK Cancel Apply Help

FIGURE 3.12. – FACTORY TALK SERVER GENERAL

The RSLinx Enterprise server will now appear in the project explorer tree. Double-click on the Communication Setup option below the RSLinx Enterprise server item.



FIGURE 3.13. - FACTORY TALK COMMUNICATION SETUP

The DH485 Router will now be added using the NET ENI driver.



NOTE: It is recommended that the Ethernet cable be disconnect from your PC at this point. Otherwise the Ethernet driver will automatically detect and add the DH485 Router as an EtherNet/IP device.

In the Communication Setup window, right-click on the Ethernet driver and select Add Device.

z Communication Setup - RNA://\$Local/SLCDF1/RSLinx Enterprise	
Device Shortcuts	Primary
Add Remove Apply	RSLinx Enterprise, WIN-G3FQKJL09H3 T 789-A17, Backplane Add Device Delete Show All Devices Stop Browsing Properties
	Mode: Onli Browse cycled: Ethernet
Offline Tag File	Browse
Shortcut Type Processor	×
	OK Cancel Verify Help

FIGURE 3.14. – FACTORY TALK RSLINX COMMUNICATION SETUP

In the Add Device Selection window, expand the NetENI-connected PCCC devices. Below that, expand the SLC and MicroLogix Processors. Select the 1747-L541 SLC 5/03.

Add Device Selection	×
Available Devices	
GenericDevice, Generic Device From EDS File	
🗉 🛅 Ethernet PLC devices	
🗄 🔚 Ethernet SLC devices	Ξ
🖮 🛅 NetENI-connected PCCC devices	
🗄 📹 PLC-2 Family Processors	
🗄 📹 PLC-3 Family Processors	
🗄 📹 PLC-5 Family Processors	
🗄 📹 PLC-5250 Processors	
🗄 📹 SLC and MicroLogix Processors	
1747-L553P, 1747-L553P ProSet 200 version of SLC5/05 64k	
1747-L552P, 1747-L552P ProSet 200 version of SLC5/05 32k	
	-
✓ III →	
EDS File:	
OK Cancel Help	

FIGURE 3.15. - FACTORY TALK DEVICE SELECTION



FIGURE 3.16. - FACTORY TALK DEVICE SELECTION

In the Device Properties window, enter the **IP Address of the DH485 Router** module and select Ok.

Device Properties	×
General	
Name SLC-5/03 Processor 3	
Address 192 . 168 . 1 . 224	
OK Cancel Apply	Help

FIGURE 3.17. – FACTORY TALK DEVICE PROPERTIES

The newly added device will now appear in the Communication Setup tree under Ethernet devices. On the left side of the window, under Device Shortcuts, select the Add button and create a shortcut and give it a suitable name. Then select the SLC device on the right-hand side and select the Apply button (near the top under Device Shortcuts,) to associate the shortcut to the device.

2 Communication Setup - RNA://\$Local/SLCDF1R/RSLinx Enterprise		
Device Shortcuts	Design (Local) Runtime (Target)	
1 Add Remove Apply 4		Copy from Design to Runtime
MysLC 2	■ ■ RSLinx Enterprise, WIN-G3FQKJL09H3 ■ ■ 7789-A17, Backplane ■ ■ # ■ 74485, DH485 ■ ■ ■ 192168.159, 1747-1551E, SLC-5/05 Processor w/1 ■ ■ ■ 192168.1.95, Ethernet Bridge (1769-L32E), Ethernet ■ ■ 192168.1.102, 1756-EN2TR/A 1756-EN2TR/A ■ ■ 192168.1.102, 1756-EN2TR/A 1756-EN2TR/A ■ 7 192168.1.174, 1747-L551E, SLC-5/05 Processor w/1 ■ 192168.1.74, 1747-L551E, SLC-5/05 Processor w/1 ■ 192168.1.211, DNP3 Router 4 - 7 192168.1.211, DNP3 Router 3 - 7 192168.1.212, DNP3 Router 5 3 ● ■ 192168.1.224, 1747-L532, SLC-5/03 Processor 3 ● 192168.1.224, 0.7474-L532, SLC-5/03 Processor 3 ● 192168.1.224, 0.7474-L532, SLC-5/03 Processor 2 - 7 192168.1.224, 0.7474-L532, SLC-5/03 Processor 2 - 7 192168.1.237, Modbus Router 2 - 7 192168.1.237, Modbus Router 1	SK t Bridge (1769-L32E) 54K 1
Offline Tag File		Browse
Shortcut Type Processor		•
Prace Apply bythos to accion colored path to this shortruit		
i ress Appy vottori to dasign selected pour to tills shortcut.		OK Cancel Verify Help

FIGURE 3.18. – FACTORY TALK RSLINX SETUP

The association will need to be confirmed by selecting **Yes** in the dialog window below.



FIGURE 3.19. – FACTORY TALK RSLINX SETUP

The Communication Setup changes can then be accepted by selecting the **Ok** button at the bottom of the window.



NOTE: If the Ethernet cable was disconnected in the previous step, this would be a good time to reconnect it.

To test the communication, a new display can be created. Using the project explorer tree, under the *Graphics* section, right-click on the *Display* option and select *New*.



Using the toolbar, add a Numeric Display object to the window.



FIGURE 3.21. – FACTORY TALK NUMERIC DISPLAY

In the *Numeric Display Properties* window, select the *Tags* option.

Numeric Display Properties	×
General Common	
Expression	-
If Logical Relational Arithmetic Bitwise Functions Check	Tags
Field Length: 4 Format Decimal Leading Character Decimal Places: 0 Overflow: Show exponent Show exponent	r 💿 Right
OK Cancel Apply	Help

FIGURE 3.22. – FACTORY TALK DISPLAY PROPERTIES

The Tag Browser window will open. Since this is the first time the Tag Browser has been opened since the addition of the SLC device the tags must be refreshed. This is achieved by right-clicking at the folder tree and selecting the *Refresh All Folders* option.

Select Tag				
Folders		Contents of '/'		
B- 🖷 SLCDF:		L	Access Rights	Description
÷ i syste	Refresh Folder		· · · · · · · · · · · · · · · · · · ·	
	Refresh All Folder			
	Show Server Nam	es		
	New HMI Tag Fol	der		

FIGURE 3.23 – FACTORY TALK TAG BROWSER

All the SLC data files will now be listed and can be selected for animation.

💣 Tag Browser				? ×
Folders		Contents of '/:	:MySLC/Online/N10'	
E 🖷 SLCDF1		Name	Access Rights	Description 🔺
⊡-⊡ MySLC		& N10:0	ReadWrite	=
Diagnostics		🔗 N10:1	ReadWrite	
		🔗 N10:10	ReadWrite	
E C5		🔗 N10:11	ReadWrite	
in - ⊂ 5 in - ⊂ F8		🔗 N10:12	ReadWrite	
i ⊞. 🖘 N10		🔗 N10:13	ReadWrite	
🖶 🗀 N7		🔗 N10:14	ReadWrite	
🖶 🧰 R6		🔗 N10:15	ReadWrite	
⊞ 🛅 S2		🔗 N10:16	ReadWrite	
⊕. 🚞 T4		🔗 N10:17	ReadWrite	
⊞- 🛄 system		🧬 N10:18	ReadWrite	
		🔗 N10:19	ReadWrite	
		🔗 N10:2	ReadWrite	
		🔗 N10:20	ReadWrite	
		& N10:21	ReadWrite	-
				4
efresh All Folde Tag filter:	(None>	A		▼
Selected Tag				
::[MySLC]N10:0				
Home area: /				
		ок	Cancel	Help

FIGURE 3.24. – FACTORY TALK FILE SELECTION

3.4. ETHERNET PCCC METHOD3.4.1. DH485 ROUTER SETUP

The DH485 Router must be configured in Transparent PCCC mode, as shown below.

DH485Router - Configuration	
General Serial - DH485 Transparent PC	CC Reactive Tag (Disabled) Scheduled Tag (Disabled) Advanced
Instance Name DH485Router	
IP Address 192 . 16	8 . 1 . 224 Major Revision 1 ∨
ENIP Retry Limit 5	[0-5]
ENIP TimeOut 1000	ms
Mapping Mode	
Transparent - PCCC	Maps device initiated DH485 PCCC to Logix PLC 2,3,5 mapping. Supports remote programming.
O Reactive Tag	Maps device initiated DH485 PCCC to Logix Tag.
O Scheduled Tag	DH485 Router initiated scheduled transfer between device and Logix.
OUnscheduled	Routes Logix Msg to DH485 Device.
	Translates DH485 to RS232
	Ok Apply Cancel

FIGURE 3.25. – DH485 GENERAL CONFIGURATION

In the Serial-DH485 settings, the BAUD Rate must match that of the SLC device (as configured using RSLogix 500).

5 DH485Router - Confi	guration				- • •
General Serial - DH485	Transparent PCCC	Reactive Tag (Disabled)) Scheduled Tag (Disabled)	Advanced	
Physical Port	DH485 - Star	ndard (RS485) V			
Node Address	0	\sim	Retry Limit	3	[0-10]
Max Scan Addre	ass 31	~	Message Timeout	20	[1-100] (x 50ms)
BAUD Rate	19200	~	Response Timeout	5	[1-100] (ms)
	🗹 Terminat	e DH485	Reply Msg Wait	5	[1-100] (ms)
	🗹 DH485 G	around Bridge			
		Ok Apply	Cancel	Help	

FIGURE 3.26. – DH485 SERIAL CONFIGURATION



NOTE: The physical port selected would depend on to which device the module is connected. See the Serial Cabling section for more details.



NOTE: At least one transparent mapped item must be added for the SLC500 programming to work on DH485. If the DH485 Router is used purely for communicating to the PanelView then the user can add a DH485 Node of zero with a IP address matching the PanelView connected. The reason for this is because the DH485 Router requires a node on the network.

ieral Se	erial - DH485	Trans	parent PCCC	Reactive T	ag (Disa	bled) Sch	eduled Tag (Disabled) Adv	anced		
🗹 Er	nable PCCC	Direct					General			
Map 1	Node	~	192 .	PCCC IP A	ddress	225	PCCC Node	1 ~		
2	2	\sim	0_	0.	0.	0		Class?		
3	3	\sim	0.	0.	0.	0	Logix connection	010335		
DH485 /	Ethernet Co DH485 Node	ntrolle e	r Mapping (m	ax. of 20 ite	ems.)	Controller	Path		Browse	
	0	\sim	192.168.1.2	221						
▶₩		\sim								

FIGURE 3.27. – TRANSPARENT PCCC CONFIGURATION

Up to three PCCC IP Address can be configured for the module, each with a matching DH485 node. This will allow the DH485 Router module to connect FTView applications to as many as three different SLC controllers. The *Node* parameter allows the user to force the destination address of the DF1 message sent to the matching IP address which is routed via the PCCC protocol.



NOTE: The RSLinx Enterprise driver does not allow the user to set the destination address to which the PanelView will communicate. The Node for each PCCC IP Address allows the user to set this address. The user can then have various PanelViews communicating to different SLC5/03 controllers.

3.4.2. RSLOGIX 500 SETUP

Using RSLogix500, the DH485 port must be configured to match that of the DH485 Router's serial port settings with respect to BAUD rate.

3.4.3. FTVIEW SETUP

Open FTView Studio and create a new FTView project (SE or ME). The project explorer tree will appear on the left-hand side. Right-click on the newly created project and select the **Add New Server** option, followed by the *RSLinx Enterprise* option.

🔁 FactoryTalk View Studio - View Site Editio	n (Local Station)
File View Settings Tools Window Help	2
Explorer - SLCDF1	
Run Delete	
Add New Server	Rockwell Automation Device Server (RSLinx Enterprise)
H G G G Security	OPC Data Server Tag Alarm and Event Server
H Properties Current Consortion Data Log	

FIGURE 3.28. – FACTORY TALK SERVER ADD

The RSLinx Enterprise Server properties window will open. Select Ok.

RSLinx Enterprise Server Properties
General Alarms and Events
Name RSLinx Enterprise
Description
Computer hosting the RSLinx Enterprise server:
localhost
OK Cancel Apply Help

FIGURE 3.29. – FACTORY TALK SERVER GENERAL

The RSLinx Enterprise server will now appear in the project explorer tree. Double-click on the Communication Setup option below the RSLinx Enterprise server item.



FIGURE 3.30. – FACTORY TALK COMMUNICATION SETUP

The DH485 Router will now be added using the Ethernet SLC driver. In the Communication Setup window, right-click on the Ethernet driver and select **Add Device**.

z Communication Setup - RNA://\$Local/SLCDF1/RSLinx Enterprise	
Device Shortcuts	Primary
Add Remove Apply	RSLinx Enterprise, WIN-G3FQKJL09H3 RSLinx Enterprise, WIN-G3FQKJL09H3 Reference 1789-A17, Backplane Reference Add Device Delete Show All Devices Stop Browsing Properties
	Mode: Onli Browse cycled: Ethernet
Offline Tag File	Browse
Shortcut Type Processor	

FIGURE 3.31. – FACTORY TALK RSLINX COMMUNICATION SETUP

In the Add Device Selection window, expand the *Ethernet SLC devices*. Select the *1747-L551E*, *SLC 5/05 Processor w/16K*.



NOTE: Even if you are using a different SLC controller (e.g., SLC5/03), the 1747-L551E, SLC 5/05 Processor w/16K device needs to be selected.

Add Device Selection	×
Available Devices	
EtherNetIP Devices	
🗉 🔚 Ethernet PLC devices	
🖻 🔚 Ethernet SLC devices	
1747-L553E, SLC-5/05 Processor w/64K	
1763-LEC, MicroLogix 1100 LEC	
1766-L32, MicroLogix 1400	
🔤 1408-ENT, PM1000 EnergyMonitor	
🗄 📹 NetENI-connected PCCC devices	
GenericDevice, Generic Device From EDS File	
EDS File:	-
OK Cancel Help	

FIGURE 3.32. – FACTORY TALK DEVICE SELECTION

In the Device Properties window, enter one of the **PCCC IP Addresses in the PCCC Direct Map** and select Ok.

NOTE: The needed PCCC IP Address will be the one with the DH485 target address matching the desired SLC controller. For example, if the user has three SLCs on the network at DH485 Node address 1,2, and 3 and the mapping is as shown below:

Enable PCCC Direct										
Мар	Node				PCCC	IP A	ddres	ss		
1	1	\sim	192		168	-	1	-	225	
2	2	~	192		168		1		226	
3	3	\sim	192	-	168		1		227	

Then if the FTView application must communicate with the SLC at DH485 node address 2, the IP Address 192.168.1.226 must be entered into the *Address* box of the Driver Device Properties.

1

Device Properties	×
General Name SLC-5/05 Processor w/16K 1 Address 192 . 168 . 1 . 226	
OK Cancel Apply	Help

FIGURE 3.33. – FACTORY TALK DEVICE PROPERTIES

If the FTView application requires to communicate with more than one SLC, then another Device Driver must be added using the PCCC IP Address matching the DH485 node number of the target SLC.

The newly added device will now appear in the Communication Setup tree under Ethernet devices. On the left side of the window, under Device Shortcuts, select the Add button and create a shortcut and give it a suitable name. Then select the SLC device on the right-hand side and select the Apply button (near the top under Device Shortcuts,) to associate the shortcut to the device.

z Communication Setup - RNA://\$L	ocal/DF1Test/RSLinx Enterprise	
Device Shortcuts	Design (Local) Runtime (Target)	
Add Remove Apply		Copy from Design to Runtime
MySLC	-? 192.168.1.173, DF1 Router -? 192.168.1.181, DH485 Router 1 ● 192.168.1.186, PanelView Plus_6 1000, PanelView Plus_6 1000 ● 192.168.1.188, A-CNR, ControlNet Router 2 ● 192.168.1.188, A-CNR, ControlNet Router 2 ● 192.168.1.203, HDLC Router -? 192.168.1.203, HDLC Router -? 192.168.1.203, HDLC Router 1 -? 192.168.1.20, DNP3 Router 5 -? 192.168.1.21, DNP3 Router 4 -? 192.168.1.224, IA74-L542, SLC-5/05 Processor ● 192.168.1.224, IA74-L5542, SLC-5/05 Processor w/16K 1 ● 192.168.1.224, IA74-L5532, SLC-5/05 Processor w/16K 1 ● 192.168.1.224, IA74-L5532, SLC-5/05 Processor w/64K 1 ● 192.168.1.224, IA74-L5532, SLC-5/05 Processor w/64K 1 ● 192.168.1.230, Process Cache -? 192.168.1.231, DNP3 Router 6 ● ● ● 192.168.1.231, DNP3 Router 6 ● ●	ace
Offline Tag File		Browse
Shortcut Type Processor		•



The association will need to be confirmed by selecting **Yes** in the dialog window below.



FIGURE 3.35. - FACTORY TALK RSLINX SETUP

The Communication Setup changes can then be accepted by selecting the **Ok** button at the bottom of the window.



NOTE: If the Ethernet cable was disconnected in the previous step, this would be a good time to reconnect it.

To test the communication, a new display can be created. Using the project explorer tree, under the *Graphics* section, right-click on the *Display* option and select *New*.



Using the toolbar, add a Numeric Display object to the window.



FIGURE 3.37. – FACTORY TALK NUMERIC DISPLAY

In the *Numeric Display Properties* window, select the *Tags* option.

Numeric	Display Prope	rties						×
General	Common							
Exp	If	Logical	Relational	Arithmetic	Bitwise	Functions	F Tags	
Field L Decim	Check Syntax	Format: Overflow:	Decimal Show exponent	 Leadir Blar Zero 	g Character ks ies	Justification	Alarms	

FIGURE 3.38. – FACTORY TALK DISPLAY PROPERTIES

The Tag Browser window will open. Since this is the first time the Tag Browser has been opened since the addition of the SLC device the tags must be refreshed. This is achieved by right-clicking at the folder tree and selecting the *Refresh All Folders* option.



FIGURE 3.39 – FACTORY TALK TAG BROWSER

All the SLC data files will now be listed and can be selected for animation.

🔗 Tag Browser				? 💌		
Select Tag						
Folders		Contents of '/::MySLC/Online/N7'				
🗆 🖷 DF1Test	Name	Access Right	ts Description 📤			
🚔 🛄 MySLC		🧬 N7:0	ReadWrite	=		
🕀 🧰 Diagnostics		🧬 N7:1	ReadWrite			
⊡ ⊡ Online		🔗 N7:10	ReadWrite			
⊞• ⊟ B3		🔗 N7:11	ReadWrite			
⊞• □ C5		🔗 N7:12	ReadWrite			
≣ ⊑ 120		🔗 N7:13	ReadWrite			
⊕ 🖨 N11		🔗 N7:14	ReadWrite			
🖶 🗀 N12		🔗 N7:15	ReadWrite			
tin		🔗 N7:16	ReadWrite			
🖽 🚞 R6		🔗 N7:17	ReadWrite			
🕀 🧰 S2		🔗 N7:18	ReadWrite			
⊞ • 🗀 T4		🔗 N7:19	ReadWrite			
🗄 🛄 system		💣 N7:2	ReadWrite			
		💣 N7:20	ReadWrite			
		🔗 N7:21	ReadWrite	-		
		•		4		
efresh All Folde Tag filter:	<none></none>			▼		
Selected Tag						
[MySLC]N7						
Home area: /						
		ЭК	Cancel	Help		

FIGURE 3.40. – FACTORY TALK FILE SELECTION