# Trihedral VTSCADA Accessing Allen Bradley SLC 500 & PLC5 on DH+ Network with Equustek EQ7000 using AB Ethernet/IP Driver

Setup for this application note, had a PLC5 & SLC/504 on DH+ network with Equustek EQ7000-EDH+ connected to a PC running Trihedral VTSCADA & Rslinx.



# PC Running VTSCADA & RsLinx

In this application we included configuring the EQ7000-EDH+ & Allen Bradley RSLINX setup to show that data read from PLC5 & SLC504 in both the RSLINX and VTSCADA IP driver are same.

Power up the EQ7000, connect to the PC using USB cable, then look in Device Manager under Ports (COM & LPT) find out the USB Serial Port, in our case here is COM3.

Press the configure push button switch on the right-hand side of the EQ7000 to put it in configuration mode (Make sure the MOD STATUS LED is flashing green).



For COM Port Selection, select the USB comport previously found under the Device Manager, then click on Offline Manager to confirm that you can communicate with the unit.



Seeing the offline manager menu confirms that your USB connection is OK, click on Close. Click on Configure.



Cance

Back Next Cance

Upload Settings

For Node Address select a node address for the EQ7000, any node address that doesn't exist on DH+. Select the DH+ Baud rate of the Data Highway Plus network (Network Speed), then click on Next

Configure Online Parameters	×	Configure Online Parameters	×
Equustek	Data Highway Communication Settings	Equustek Rotarios ac	Data Highway Communication Settings
EQ32 Configuration Software EQ7000	Network Type DH+ 💌	EQ32 Configuration Software EQ7000	Network Type DH+ -
Welcome Screen Welcome / Open Configuration	Node Address 1  Octal Network Speed 2 KBaud	Welcome Screen Welcome / Open Configuration	Node Address 1  Octal Network Speed 57.6  KBaud
Communication Parameters Date Highway Settings Ethernet Settings	4 5 6 7 10	Communication Parameters Date Highway Settings Ethernet Settings	27.6 17.5 230.4
Finalize Settings Apply Settings		Finalize Settings Apply Settings	
	Upload Settings Back Next Cancel		Upload Settings Back Next Cancel

Type the IP address for the EQ7000, Subnet Mask and the Default Gateway & click Next.

Configure Online Parameters	X	Sontigure Unline Parameters	X
Equustek	Data Highway Communication Settings	Equustek Ecurrose Bac	Ethernet Communication Settings
EQ32 Configuration Software	Natural Trans	EQ32 Configuration Software	DHCP Disabled •
EQ7000	Network Type DH+ •	EQ7000	IP Address 192.168.2.50 Subnet Mask 255.255.255.0
Welcome Screen Welcome / Open Configuration	Node Address 1 Octal	Welcome Screen Welcome / Open Configuration	Default Gateway 192168.2.1
Communication Parameters Data Highway Settings Ethernet Settings	Hatwork Shean 1974 A	Communication Parameters Data Highway Settings Ethelmet Settings	Speed Auto Detect I
Finalize Settings Apply Settings		Finalize Settings Apply Settings	
		7	
	Upload Settings Back Cancel		Upload Settings Back Next Cancel

Select Download Configuration and click on Finish. Warning message will ask to press the configure push button, you don't need to, since it was done earlier, just click on OK Once you see the Success message click on OK.

Configure Online Parameters	×	E032	×
10	Apply Configuration Settings		
quustek	To download the configuration settings to the gateway device, select the Download	6	Fress the Configure button on the EQ7000 before continuing. The LED/c as the left charded base the following a stream
EQ32 Configuration Software	Configuration option and click the FINISH button. You may also save your configuration settings by selecting one of the other options available.	•	Not Styles 24
EQ7000			DH Network: Off Mod Status: Flashing Green
Welcome Screen Welcome / Open Configuration	Download Configuration		-
Communication Parameters	C Download and Save Configuration		OK
Data Highway Settings Ethernet Settings	C Save Configuration	Success!	X
Finalize Settings			
Appy Soungs		0	Configuration has been downloaded to the EQ7000
	Upload Settings Back Finish Cancel		ОК

In case you encounter any error message, press the RESET push button switch on left hand side of the EQ7000 then press the Configure push button switch on the right-hand side of EQ7000 and click on Finish again in EQ32.

After Successfully configuring the unit, Click Exit to close EQ32, then press the Reset push button switch on the EQ7000 to put it in online operating mode.



### Start Trihedral VTSCADA, click to Add New Application



Type the name of the project, click on Next, then check mark Start application & click on Finish.

Madd Application Wizard X	Madd Application Wizard X
Add application Create a new standard application or take a more advanced option	Quick add Ready to add application
Quick add     Add a new standard application with the most common settings and the following name:     [EQ7000EIP2DHP]     Advanced     Add a non-standard application (e.g. based on an OEM layer) or add an existing application (from a     ChangeSet file, from application files on disk, or from a workstation on your network).	Press Finish to create an application using these settings: Application Name: EQ7000EIP2DHP Application Path: CVTScadalEQ7000EIP2DHP\ To specify application display options, access the Edit Properties panel from the Application Configuration dialog: New Application  To Secret Application  T
Back Next      Cancel	Back Finish Cancel

Wait for loading.



Click on Tag Browser.

Page Menu	EQ7000EIP2DHP		– 🗆 X
Recent Pages         Tog Browse         Tog Browse           Image:	(+) ⊕ VTScadalĭGHT	Page Menu	🖾 💽 🔁 🛃 🍸 🖶 🌲 03:11 PM May 26
Image: Single Page         Image: Single Page           Image: Single Page         Image: Single Page	Recent Pages		Tag Browser
Image: Single Ages       Image: Single Ages			
Image: state in the second state in	<b>*</b> >		
Alrms, Reports & Diagnostics       Remote Sites         Image: Site Site Site Site Site Site Site Site			
Alarms, Reports & Diagnostics     Remote Sites       Image: Constraint of the data provided in the data prov			
Sample Pages       Overview	Alarms, Reports & Diagnostics		Remote Sites
Sample Pages Overview			Constraints     Constrain
	Sample Pages		Overview

,,	ning lags   u	Jsing 0 of 50 Licensed Tags				-	Ц
Search					T. Show	w Children 🐰	Ъ <b>В</b>
> \		Name	<ul> <li>Description</li> </ul>	Туре	Equipmen	t Type Addr	ess Value
-📎 Menus		AlarmPriority0	Event	Alarm Priority			
-📎 System Alarm DB		AlarmPriority1	Critical Alarm	Alarm Priority			
- System Event DB		AlarmPriority2	High Alarm	Alarm Priority			
		AlarmPriority3	Warning Alarm	Alarm Priority			
Systeministonan		AlarmPriority4	Notice	Alarm Priority			
		AnalogFont	Analog value default font	Font Style			
		BiggerFont	22 Pt Arial	Font Style			
		Default Call-Out Off	Disables Call Out For Default Roster	r Roster			Activ
		LabelFont	Font for normal label text	Font Style			
		MediumFont	12 Pt Arial	Font Style			
	2	Menus		Menu Item		0	
		MeterFont	Font for Meter Legends	Font Style			
		Operator Notes	Operator Notes	Notebook			
		SmallMeterFont	Font for Meter Legends	Font Style			
	2	System Alarm DB	System Alarm DB	Alarm Database			
		System Event DB	System Event DB	Alarm Database			
		System Notes	System Notebook	Notebook			
		SystemAlarmHistorian	System Alarm Historian	Historian		SystemAla	mHistor
	2	SystemHistorian	System Historian	Historian		SystemH	istorian
		SystemStyle	Default System Style Settings	Style Settings			
			Im	nort New	Properties	Draw	Clor
				new	Properties	Diaw	Clos

#### Distant dist н. . . . . . • •



### Click on Ports then click on TCP/IP Port

M Select Type	×	M Select Type		Х
Recently Used Types		Ports		
Context		Serial Port		
I/O and Calculations	$\Diamond \bowtie$	TCP/IP Port		
TCP/IP Port		UDP/IP Port		
Style Settings				
Tag Groups				
🗀 All Tag Types				
🗁 Analogs				
🗁 Analytics				
🗁 Containers				
🗁 Digitals				
🗁 Drivers				
🗁 Inputs				
🗁 Memory				
🗁 Outputs				
🗁 Ports				
🗁 Stations				
🗁 Strings				
🗀 [Legacy Drivers]				
[Legacy I/O and Calculations]				
	Cancel		Cancel	

For ID Connection tab, Type the name of the port, it's description & click on Apply, then click on Connection tab & type EQ7000 IP address under TCP/IP Name/Address, as for TCP/IP Port Number, type 44818 which is used for Ethernet/IP, click on Apply then OK.

Mew TCP/IP Po	ort Properties			×	2	TCP/IP Port (EC	Q7000EIPDH+) Properties			×
ID Name	Connection	TLS	Displa	зу	[	ID TCP/IP Name/A	Connection	TLS	Display	
EQ7000EIPDH	ł+					192.168.2.50		44818		
Area System Description EQ7000 Ethe Help Search K	rnet IP to DH+			<ul> <li>.</li> <li>.</li> </ul>		Disconnect Del 30 Echo	lay (sec)	b 🛓 Maxim	um connections	
	[	OK	Cancel	Apply				OK	Cancel Apply	

Right Click on the created port & click on New Child.



Select Type	×	M Select Type	×	
Recently Used Types		• Drivers	^	•
TCP/IP Port		MDS Diagnostic Driver		
Context		Mitsubishi Driver		
I/O and Calculations	$\land \lor$	Modbus Compatible Device		
Style Settings		Motorola ACE RTU		
		MQTT Client Driver		
lag Groups		NMEA 0183 Driver		
🗁 All Tag Types		Omron FINS Driver		
Analogs		Omron Host Link PLC		
Analytics		OPC Client		
Containers		OPC UA Client Driver		
🗁 Digitals		Opto22 Mux Driver		
🗁 Drivers		Polling Driver		
🗁 Inputs		Rockwell Driver (Allen Bradley Devices)		
🗁 Memory		Siemens S7 PLC		
Cutputs		SNMP Managed Device		
🗁 Ports		SQL Data Query Driver		
🗁 Stations		TI505 Device		
🗁 Strings		Transaction Logger	$\sim$	
[Legacy Drivers]		Veeder Root Driver		
[Legacy I/O and Calculations]		WorkStation Driver	~	,
	Cancel		Cancel	

Click on Drivers then click Rockwell Driver (Allen Bradley Devices)

Type a name for the driver and it's description, in our application, we have EQ7000 EIP to PLC5 on DH+, click on Apply then click on Configuration tab.

Mew Rockwell Driver (Allen Bradley Devices) Properties	×	X     Rockwell Driver (Allen Bradley Devices) (EQ7000EIPDH+\EQ7000EDHP2PLC5) Pro ×
ID Configuration Communications PCCC/DF	1	ID Configuration Communications PCCC/DF1
Name	_	PLC Mode
EQ7000EIPDH+ EQ7000EDHP2PLC5		CompactLogix/ControlLogix (Logical Addressing)
Area		Port Segment Path [Port #,Link Address][Port,Addr]
System	$\sim$	[1,0]
Description		CIP Connection Target
EQ7000 EIP to PLC5 on DH+		Message Router, Connection Point 1 $$ $$ $$ $$ $$ $$ $$ $$
Server List		Check for PLC Changes Maximum Number of CIP Sessions
	~	30 s 1
Help Search Key		Use unconnected messages on the PLC tag upload
OK Cancel Aj	oply	OK Cancel Apply

For PLC mode select DH+ routed through Logix PLC/DHRIO card (data File Addressing). Port Segment Path doesn't matter since the EQ7000 doesn't care for it, set maximum number of CIP Sessions.

X     Rockwell Driver (Allen Bradley Devices) (EQ7000EIPDH+\EQ7000EDHP2PLC5) Pro ×	X Rockwell Driver (Allen Bradley Devices) (EQ7000EIPDH+\EQ7000EDHP2PLC5) Pro ×
ID Configuration Communications PCCC/DF1	ID Configuration Communications PCCC/DF1
PLC Mode	PLC Mode
DH+ routed through Logix PLC/DHRIO card (Data File Addressing) $\qquad \qquad \lor$	DH+ routed through Logix PLC/DHRIO card (Data File Addressing) V
Port Segment Path to DHRIO Card [Port #,Link Address][Port,Addr] [0,0]	Port Segment Path to DHRIO Card [Port #,Link Address][Port,Addr] [0,0]
CIP Connection Target	CIP Connection Target
DH+ Interface, Channel A 🗸	DH+ Interface, Channel A 🗸 🗸
Check for PLC Changes Maximum Number of CIP Sessions	Check for PLC Changes Maximum Number of CIP Sessions
30 s 1	30 s 1
Use unconnected messages on the PLC tag upload	Use unconnected messages on the PLC tag upload
OK Cancel Apply	OK Cancel Apply

Click on Communication tab, make sure port is set properly, click Apply.

Click PCCC/DF1 tab here select PLC5 & enter its node address number in octal, our PLC5 node was 7, click Apply then click on OK

☑ Rockwell Driver (Allen Bradley Devices) (EQ7000EIPDH+\EQ7000EDHP2PLC5) Pro… ×	☑ Rockwell Driver (Allen Bradley Devices) (EQ7000EIPDH+\EQ7000EDHP2PLC5) Pro ×
ID Configuration Communications PCCC/DF1	ID Configuration Communications PCCC/DF1
Port [*Port] EQ7000 Ethernet IP to DH+ Operation Timeout CIP Session Timeout 10 s 0 Retries	PLC Type       DF1 Mode         Image: Starting state of the state of
Hold Store Last Output Values Enable Auto Rewrite High Priority Messaging	PLC Address (Octal)     ENQ Delay       07     0       Data Logging Queue     Length of Records from Queue (chars)       Queue 0     80
OK Cancel Apply	OK Cancel Apply

## Right click on the device created & click on New Child.

💹 Tag Browser: Showing 1 of 5,046 Running Tags | Using 0 of 50 Licensed Tags

#### EQ7000EIPDH+ > Show Children Search **T**, አ 🗈 🛍 🃺 --♡ \ Equipment Type Address Value Name Description Туре EQ7000EIPDH+ [0,0]->A:01 EO7000 EIP to PLC5 on DH+ Rockwell Driver (Allen Bradley Dev Draw Plot System Alarm DB System Event DB SystemAlarmHistorian SystemHistorian View Alarms Operate Ж Cut 🗎 Сору Paste as Child New Child X Delete ~ Enabled Set Start Condition Create New Type

 $\times$ 

Click on Analogs, then click I/O and Calculations (Analogs).

<section-header> Select Type</section-header>	×	💹 Select Type	×
Recently Used Types		<ul> <li>Analogs</li> </ul>	
Rockwell Driver (Allen Bradley Devices)		Counter	$\sim$
TCP/IP Port		I/O and Calculations (Analogs)	$\Diamond \bowtie$
Context		Pulse Input	$\sim$
I/O and Calculations	$\land \bowtie$	Rate of Change	<u>ب</u>
Tag Groups		Recipe Ingredient	
		Selector Switch	Ċ.
🗁 All Tag Types		Totalizer	$\sim$
🗁 Analogs			
Analytics			
🗁 Containers			
🗁 Digitals			
🗁 Drivers			
🗁 Inputs			
🗁 Memory			
🗁 Outputs			
🗁 Ports			
🗁 Stations			
🗁 Strings			
눧 [Legacy Drivers]			
[Legacy I/O and Calculations]			
	Cancel		Cancel

Type a Name for the word trying to read and its description, here we are trying to read word 0 of integer file N7, click on Apply then click on I/O tab.

Mew I/O and Calculations Properties	I/O and Calculations (EQ7000EIPDH+\EQ7000EDHP2PLC5\Word0Intf7) Properties X
ID I/O Scaling Quality Logging Alarms Display	ID I/O Scaling Quality Logging Alarms Display
Name	Name
EQ7000EIPDH+\EQ7000EDHP2PLC5 Word0Intf7	EQ7000EIPDH+\EQ7000EDHP2PLC5 Word0Intf7
Area	Area
System ~	System ~
Description	Description
Word Integer file 7	Word Integer file 7
Help Search Key	Help Search Key
Data Type	Data Type
Analog V Calculation	Analog ~ Calculation
Equipment Type	Equipment Type
~	×
OK Cancel Apply	OK Cancel Apply

# Entered N7:0 for Read Address then clicked on Apply, continue with other tabs as needed & click on Ok.

I/O and Calculations (EQ7000EIPDH+\EQ	7000EDHP2PLC5\Word0Intf7) Properties	X I/O and Calculat	tions (EQ7000EIPD)	H+\EQ7000EDHP2PLC5	\Word0Intf7) Pr	operties
ID I/O Scaling Quality	Logging Alarms Display	ID I/O	Scaling Q	uality Logging	Alarms	Display
I/O Device		I/O Device				
[*Driver] EQ7000 EIP to PLC5 on DH+	× 😪 🛇	[*Driver] EQ7	7000 EIP to PLC5 or	n DH+		× 🗞 🐼
Read Address	Scan Interval Deadband	Read Address		Scan Interval	Deadban	d
N7:0	1 s 0.1	N7:0		1	s 0.1	
History Address	Scan Interval	History Address	5	Scan Interval		
	60 s			60	s	
Write Address		Write Address				
	]					
Privilege		Privilege				
No Security	~	No Security				~
Publish		Publish				
	OK Cancel Apply			OK	Cancel	Apply

# Here we can see the value of word 0 of integer file N7 from our PLC5 which is 850.

	Tag Browser: Showing 2 of 5,047 Running	lags   Us	ing 1 of 50 Licensed Tag	JS					-			×
C	EQ7000EIPDH+ >											
	P Search						<b>T</b> .	Shov	v Children v Disabled	*		i îÎ
	EQ7000EIPDH+     EQ7000EIPDH+     EQ7000EDHP2PLC5     Menus     Menus	<b>₽</b> ; €	Name EQ7000EDHP2PLC5 .\Word0Intf7	•	Description EQ7000 EIP to PLC5 on DH+ Word Integer file 7	Type Rockwell Driver (Allen Bradley Dev Analog [In]	Equipmen	t Туре	Address [0,0]->A:07 N7:0		/alue 0 850 ?	
	System Alarm DB     System Event DB     SystemAlarmHistorian     SystemHistorian											

# Below all details are shown, EQ7000 IP address, the Ethernet IP port and the value of word 0 in integer file 7.

Tag Browser: Showing 25 of 5,047 Running Tags   Using 1 of 50 Licensed Tags —										
$\bigcirc$										
P Search				Show Child	dren 🐰	6	L İİ			
	Name 🔶	Description	Туре	Equipment Type Ad	ldress	Value				
EQ7000EIPDH+	AlarmPriority0	Event	Alarm Priority							
EQ7000EDHP2PLC5	AlarmPriority1	Critical Alarm	Alarm Priority							
+ Sustem Alarm DR	AlarmPriority2	High Alarm	Alarm Priority							
+	AlarmPriority3	Warning Alarm	Alarm Priority							
System Alarm Historian	AlarmPriority4	Notice	Alarm Priority							
±-🚫 SystemHistorian	AnalogFont	Analog value default font	Font Style							
	BiggerFont	22 Pt Arial	Font Style							
	Default Call-Out Off	Disables Call Out For Default Roster	r Roster			Active				
	EQ7000EIPDH+	EQ7000 Ethernet IP to DH+	TCP/IP Port	192.16	3.2.50:44818	0				
	№ ③ .\EQ7000EDHP2PLC5	EQ7000 EIP to PLC5 on DH+	Rockwell Driver (Allen Bradley Dev	[0,0]-:	>A:07	0				
	\Word0Intf7	Word Integer file 7	Analog [In]	N7:0		850 ?	2			
	LabelFont	Font for normal label text	Font Style							
	MediumFont	12 Pt Arial	Font Style							
	MeterFont	Font for Meter Legends	Font Style							

# Now we can repeat same procedure of adding a new device, adding a SLC504 node address 3.

Tag Browser: Showing 2 of 5,047 Runr	ing 1	fags   Using 1 of 50 Licens	ed Tags				_			×
EQ7000EIPDH+ •										
P Search						Ţ.	Show Children	X 🗈	ß	Î
Constant System Alarm DB     System Alarm Historian     System Historian	× •	Draw Plot View Alarms Operate Cut Copy Paste as Child New Child	► ▲ PLC5	Description EQ7000 EIP to PLC5 on DH+ Word Integer file 7	Type Rockwell Driver (Allen Bradley Dev Analog [In]	Equipme	nt Type Address [0,0]->A:07 N7:0	Value 0 850	?	
	×	Delete								

# Add new Driver, select Rockwell Driver (Allen Bradley Devices).

⊻ Select Type ×	Select Type	×
Recently Used Types		^
Rockwell Driver (Allen Bradley Devices)	MDS Diagnostic Driver	
TCP/IP Port	Modbus Compatible Device	
Context	Motorola ACE RTU	
	MOTT Client Driver	
Tag Groups	NMEA 0183 Driver	
🗁 All Tag Types	Omron FINS Driver	
🗁 Analogs	Omron Host Link PLC	
Analytics	OPC Client	
🗁 Containers	OPC UA Client Driver	
🗁 Digitals	Opto22 Mux Driver	
🗁 Drivers	Polling Driver	
🗁 Inputs	Rockwell Driver (Allen Bradle	ey Devices)
🗁 Memory	Siemens S7 PLC	
🗁 Outputs	SNMP Managed Device	
🗁 Ports	SQL Data Query Driver	
🗁 Stations	TI505 Device	
🗁 Strings	Transaction Logger	
[Legacy Drivers]	Veeder Root Driver	
[Legacy I/O and Calculations]	WorkStation Driver	~
Cancel		Cancel
M New Rockwell Driver (Allen Bradley Devices) Properties	×	Rockwell Driver (Allen Bradley Devices) (EQ7000FIPDH+\EQ7000FIP2SI C504) Prop X
Configuration Communicati	ons PCCC/DFT	ID Configuration Communications PCCC/DF1
Name		PLC Mode
EQ7000EIPDH+ EQ7000EIP2SLC504		DH+ routed through Logix PLC/DHRIO card (Data File Addressing)
Area		Duck Successful Dath As DUDIO Courd (Duck # Link Address)(Duck Addre
System		Port Segment Path to DHRIO Card [Port #,Link Address][Port,Addr]
Description		CIP Connection Target
EQ70000 EIP to SLC504 on DH+		DH+ Interface, Channel A
Server List		Check for PLC Changes Maximum Number of CIP Sessions
	~	30 s 1
Help Search Key		Use unconnected messages on the PLC tag upload
ОК	Cancel Apply	OK Cancel Apply
Rockwell Driver (Allen Bradley Devices) (FO7000FIPDH+)	EO7000EIP2SLC504) Prop X	Rockwell Driver (Allen Bradley Devices) (EO7000EIDDH+\EO7000EID2SLC50/\Bran
	Percent A	
ID Configuration Communicati	PCCC/DF1	ID Contiguration Communications PCCC/DF1
Port		PLC Type DF1 Mode
[*Port] EQ7000 Ethernet IP to DH+	× 🗞 🐼	PIC-5     Full Duplex (Serial)
Operation Timeout CIP Service 1	imeout	Half Duplex (Serial)
	r.codt	WilcroLogix 1100-1500     Kadio Modem (Serial)     Multi-message Full Duplex (Serial)
	2	VTScada Station Address (Octal) CSP Socket (TCP/IP)
0 Retries		00
✓ Hold		PLC Address (Octal) ENQ Delay
Store Last Output Values		0 BCC
Enable Auto Rewrite		Data Longing Queue
High Priority Messaging		Oueue 0
		du du
	$ \longrightarrow $	
ОК	Cancel Apply	OK Cancel Apply

M. EQ7000EIP2DHP		
🕣 🛛 🗸 TScadalì́GHT	Page Menu	
Recent Pages		
Tag Browser: Showing 0 of 5,048 Running Tags   Using 1 of 50 Licensed Tags		– 🗆 X
EQ7000EIPDH+ > EQ7000EIP2SLC504		
P Search	▼. Sho	/w Children 🐰 🗈 🛍 🏦 w Disabled
EQ7000EIPDH+ Name	<ul> <li>Description</li> <li>Type</li> <li>Equipment Type</li> </ul>	Address Value
COTOODEDH22LC5     COTOODEH22LC504     COTOODEH22LC504     Down	There are no tags that match the current selection	
System Alarm DB Plot		
System Historian     Operate		
& Cut		
Copy		
New Child		
X Delete	]	]
∑ Select Type ×	💹 Select Type	×
Pasanthy Lload Tunas		
Recently Osed Types	Analogs	
Rockwell Driver (Allen Bradley Devices)	Counter	~
I/O and Calculations 🗘 📈	I/O and Calculations (Analogs)	
TCP/IP Port	Pulse Input	$\sim$
Context	Rate of Change	Ċ
Tag Groups	Recipe Ingredient	
	Selector Switch	Д.
All Tag Types	Totalizer	
Analogs		
Analytics		
Containers		
Memory		
Coutputs		
Ports		
🗁 Stations		
🗁 Strings		
🗁 [Legacy Drivers]		
[Legacy I/O and Calculations]		
		Canad
Cancel		Cancel

⊻ New I/O and Calculations Properties ×	│ ⊻ I/O and Calculations (EQ7000EIPDH+\EQ7000EIP2SLC504\W0Intf7) Properties ×
New I/O and Calculations Properties     X      ID     I/O     Scaling     Quality     Logging     Alarms     Display     Name     EQ7000EIPDH+\EQ7000EIP2SLC504     W0Intf7     Area     System     V     Description     Word 0 of Integer File N7     Help Search Key     Data Type     Analog     Calculation     Equipment Type     V	ID       IVO       Scaling       Quality       Logging       Alarms       Display         IVO       Device       [1"Driver]       EQ70000 EIP to SLC504 on DH+       Image: Scaling       Deadband         N7:0       1       s       0.1       Image: Scaling       Deadband         History Address       Scan Interval       Deadband       60       s         Privilege       No Security       v       Publish
OK Cancel Apply	OK Cancel Apply

Tag Browser: Showing 1 of 5,049 Run	nning Tags   Using 2 of 50 Licens	ed Tags		-	n x
EQ7000EIPDH+ > EQ7000EIP2SL	LC504 🕨				
P Search				Show Children	x 🖻 🖻 前
EQ7000EIPDH+ CQ7000EDHP2PLC5 EQ7000EIP2SLC504 W0Intf7	Same Name Wolntf7	e A Description Word 0 of Integer File N7	Type Analog [In]	Equipment Type Address N7:0	Value 1,998 ?

# Below we can see word 0 of integer file N7 for both PLC5 & SLC504

Tag Browser: Showing 4 of 5,049 Running Tags   Using 2 of 50 Licensed Tags – 🗆											
EQ7000EIPDH+ •											
P Search						<b>₹.</b> Sho	w Children w Disabled	X 🗈	e i		
□-♡\\		Name		Description	Type	Fauinment Type	Address	Value			
EQ7000EIPDH+	20	EQ7000EDHP2PLC5		EQ7000 EIP to PLC5 on DH+	Rockwell Driver (Allen Bradley Dev		[0,0]->A:07	0			
EQ7000EDHP2PLC5	0	.\Word0Intf7		Word Integer file 7	Analog [In]		N7:0	850	2		
EPO EQ/000EIP2SLC504	20	EQ7000EIP2SLC504		EQ70000 EIP to SLC504 on DH+	Rockwell Driver (Allen Bradley Dev		[0,0]->A:03	0			
Henus	0	.\W0Intf7		Word 0 of Integer File N7	Analog [In]		N7:0	1,998	<u>}</u>		

Now to show that we are reading the correct values, start RSLINX and click on Configure Drivers icon

c Lite - [RSWho - 1]					
<u>Communications</u>	<u>S</u> tation	DDE/OPC	Sec <u>u</u> rity	<u>W</u> indow	<u>H</u> elp
Refresh 🗈	₽_	Not Browsing	,		
ion, LAB-D-PC			2	<b>P</b>	<b>P</b>
Gateways, Ethernet		-   B	<u> </u>	<u>66</u>	
H-1, Ethernet		Li	nx A	B_ETH-1	AB_ETHIP-1
HIP-1, Ethernet		Gate	wa	Ethernet	Ethernet
	C Lite - [RSWho - 1] <u>C</u> ommunications Refresh On, LAB-D-PC Gateways, Ethernet TH-1, Ethernet THIP-1, Ethernet	c Lite - [RSWho - 1] <u>Communications</u> <u>Station</u> <u>Refresh</u> <u>Station</u> <u>on, LAB-D-PC</u> Gateways, Ethernet TH-1, Ethernet THIP-1, Ethernet	c Lite - [RSWho - 1]         Communications       Station       DDE/OPC         Befresh       Damin       Not Browsing         on, LAB-D-PC       Gateways, Ethernet       Li         H-1, Ethernet       Li       Gateways	c Lite - [RSWho - 1]         Communications       Station       DDE/OPC       Security         Befresh       Image: Communication state       Not Browsing         on, LAB-D-PC       Sateways, Ethernet       Linx       A         H-1, Ethernet       Linx       A       Gatewa       A	c Lite - [RSWho - 1]         Communications       Station       DDE/OPC       Security       Window         Refresh       Image: Station       DDE/OPC       Security       Window         on, LAB-D-PC       Image: Station       Image: Station

### Select Ethernet Devices Driver from the drop menu of Available Driver Types. And click on Add New.

Configure Drivers	? ×	Configure Drivers		? ×
Available Driver Types: 1784-U2DHP for DH+ devices RC 3220 El devices	New	Available Driver Types: Ethernet devices	Add New	<u>C</u> lose <u>H</u> elp
Elitimate seaso           Traductory Drawn           DF Soling Matter Driver           Dynaed USB Driver           Remote Devices via Linx Gateway	Configure Statup Stat Stop Delete	Configured Drivers: Name and Description AB_ETHI AB Ethemet FUNNING AB_ETHIP-1 AB Ethemet RUNNING	Status Running Running	Configure Statup Stop Delete

## Type a name for the driver and click Ok.

	^
Choose a name for the new driver.	ОК
EQ7000	Cancel

Type the Node address numbers of the SLC504 & PLC5 under Station in decimal and the IP address of the EQ7000 under the Host name, as for Driver enter the node address number of the EQ7000 under Station. Click on Apply, then click Apply, OK then Click on close.

c	onfigure Drivers		? ×
Add <u>N</u> ew	Available Driver Types:	▼ Add New	<u>C</u> lose <u>H</u> elp
	Name and Description           AB_ETH-1 A-B Ethernet RUNNING           AB_ETHP-1 A-B Ethernet RUNNING           EQ7000 A-B Ethernet RUNNING	Status Running Running Running	Configure Startup Start Stop Delete
	Add New Delete	Add New       Available Driver Types:         Pelete       Ethernet devices         Configured Drivers:       Name and Description         AB_ETH-1 A-B Ethernet RUNNING       AB_ETHIP-1 A-B Ethernet RUNNING         EQ7000 A-B Ethernet RUNNING       EQ7000 A-B Ethernet RUNNING	Add New       Available Drivers         Available Driver Types:       Ethernet devices         Ethernet devices       Image: Configured Drivers:         Configured Drivers:       Mame and Description         AB_ETH-1 A-B Ethernet RUNNING       Running         AB_ETHIP-1 A-B Ethernet RUNNING       Running         EQ7000 A-B Ethernet RUNNING       Running

Open RSWHO in RSLINX, right click on the driver that was created and click on Properties. Click on Advanced Browse settings tab and check mark Force network type to ? X

EO7000 Properties

	Browse Addresses Advanced Browse Settings
RSLinx Classic Lite - [RSWho - 1]         File View Communications Station DDE/OPC Security Window Help         S	Trect serial connection to device -
✓ Autobrowse       Pefresh       12       10       1	Tuning       Poil timeout (msec):       3000         Poil rate for known stations (msec):       2000         Maximum concurrent packets to this network:       32         Reset

r						
EQ7000 Properties	?	× EQ	7000 Properties		?	×
Browse Addresses Advanced Browse Settin	gs		rowse Addresses	Advanced Browse Settings		1
Eorce network type to:     Direct se     Direct se	rial connection to device ial connection to device way Plus et et or slave)		Force net	work type to: Data Highway	Plus	•
ControlLo	gix backplane		runing			
Poll timeout (m:	sec): 3000			Poll timeout (msec):	3000	
Poll rate for known stations (m	sec): 2000		Poll	rate for known stations (msec):	2000	
Maximum concurrent packets to netv	this vork: 32		Maxir	mum concurrent packets to this network:	32	
	Reset				Reset	
OK Cancel	Apply Help			OK Cancel	Apply I	Help

### Select DH+ from the drop menu, Click on Apply then on Ok.

In RSLinx RSWho click on the driver that was created to browse the DH+ network. Here you can see SLC504, and the PLC5. Right click on SLC504 later on PLC5 and click on Data Monitor then double click on integer file N7 to see both files.

₹\	RSLin	x Classi	c Lite - [RSWho - 1]						🔲 Data	Table Monit	or: LAB-D-P		×
	File	View	Communications	Station	DDE/OPC	Security	Window	Help	File	Туре	Elements	Length	^
	1.110	*10.00	communications	Station	000/010	occurry	window	ricip	S2	Status	164	328	
									B3	Binary	100	200	
l i	FI S	101							T4	Timer	1	6	
									C5	Counter	4	24	
				In Intel	. ·	1 40 14			R6	Control	1	6	
I I ≤	Autob	rowse	Ketresh 🚺 🚺		Browsing - no	ode 40 not fo	ound		N7	Integer	256	512	1
									F8	Float	10	40	
	🗖 W	orkstati	on, LAB-B			Correction of the second			N9	Integer	14	28	
1									N10	Integer	100	200	
	÷	Linx (	Gateways, Ethernet		dimension of the second second second second second second second second second second second second second se			i	F11	Float	10	40	
	1 0								B12	Binary	100	200	
	+··· 66	AR_FI	H-I, Ethernet		01	03	07		N13	Integer	50	100	
	<u> </u>		LID 1 Ethernet		EO7000	SLC504	PLC5TE	т	N14	Integer	200	400	
	±	AB_EI	HIP-1, Ethernet		LQ1000	320304	FLOJIL	51	N15	Integer	100	200	
	- 📥 💻	EO700	0 Data Highway Dlu	10					N25	Integer	50	100	
		202100	o, Data Filghway Pit						N26	Integer	30	60	
									F29	Float	100	400	~
									Found 30	0 of 30			

## Both Values 850 and 1998 are seen similar to those for VTSCADA

## PLC-5/8	80E (21): Da	ata File N7	7								23
	0	1	2	3	4	5	6	7	8	9	^
N7:0	850	1700	2550	850	850	850	850	850	850	850	
N7:10	850	850	850	850	850	850	850	850	850	850	
N7:20	850	850	850	850	850	850	850	850	850	850	
N7:30	0	0	0	0	0	0	0	0	0	0	
N7:40	0	0	0	0	0	0	0	0	0	0	
N7:50	1551	3102	4653	0	0	0	0	0	0	0	
N7:60	0	0	0	0	0	0	0	0	0	0	
N7:70	0	0	0	0	0	0	0	0	0	0	
N7:80	0	0	0	0	0	0	0	0	0	0	
Status: Acti	ive						Sel	ection: N	7:0		
	04 (16): Dat	ta File N7								, •	х
<u></u>	04 (16): Dat	ta File N7 1	2	3	4	5	6	7	8	9	×
N7:0	04 (16): Dat 0 1998	ta File N7 1 3996	<b>2</b> 5994	3	4	5	<b>6</b> 0	7	8	9	×
N7:0 N7:10	04 (16): Dat 0 1998 1060	ta File N7 1 3996 2120	<b>2</b> 5994 3180	3 0 0	<b>4</b> 0	5 0 0	6 0	7 0 0	8 0 0	9 9 0	×
N7:0 N7:10 N7:20	04 (16): Dat 0 1998 1060 0	ta File N7 1 3996 2120 0	2 5994 3180 0	3 0 0 0	4 0 0	5 0 0	6 0 0	7 0 0	8 0 0 0	9 0 0 0	×
N7:0 N7:10 N7:20 N7:30	04 (16): Dat 0 1998 1060 0 0	ta File N7 1 3996 2120 0 0	2 5994 3180 0 0	3 0 0 3333	4 0 0 0 0	5 0 0 0 0	6 0 0 6654	7 0 0 0 0	8 0 0 0 0	9 9 0 0 0	×
N7:0 N7:10 N7:20 N7:30 N7:40	04 (16): Dat 0 1998 1060 0 0 0 0	ta File N7 1 3996 2120 0 0 0	2 5994 3180 0 0 0	3 0 0 3333 0	4 0 0 0 0 0	5 0 0 0 0	6 0 0 6654 0	7 0 0 0 0 0	8 0 0 0 0 0 0	9 0 0 0 0 0 0 0	×
N7:0 N7:10 N7:20 N7:30 N7:40 N7:50	04 (16): Dat 1998 1060 0 0 0 0 0 0	ta File N7 1 3996 2120 0 0 0 0 0 0 0 0 0 0	2 5994 3180 0 0 0 0	3 0 0 3333 0 0 0	4 0 0 0 0 0 0	5 0 0 0 0 0 0	6 0 0 6654 0 0	7 0 0 0 0 0 0	8 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0	*
N7:0 N7:10 N7:20 N7:30 N7:40 N7:50 N7:60	04 (16): Dat 1998 1060 0 0 0 0 0 0 0 0 0 0 0 0	ta File N7 1 3996 2120 0 0 0 0 0 0 0 0 0 0 0 0 0	2 5994 3180 0 0 0 0 0 0 0	3 0 0 3333 0 0 0 0	4 0 0 0 0 0 0 0 0 0	5 0 0 0 0 0 0 0 0 0	6 0 0 6654 0 0 0	7 0 0 0 0 0 0 0 0	8 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0 0 0	×
N7:0 N7:10 N7:20 N7:30 N7:40 N7:50 N7:60 N7:70	04 (16): Dat 1998 1060 0 0 0 0 0 0 0 0 0 0 0 0 0	ta File N7 1 3996 2120 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 5994 3180 0 0 0 0 0 0 0 0 0	3 0 0 3333 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0 0	5 0 0 0 0 0 0 0 0 0 0	6 0 0 6654 0 0 0 0 0	7 0 0 0 0 0 0 0 0 0 0	8 0 0 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0	*
N7:0 N7:10 N7:20 N7:30 N7:40 N7:50 N7:60 N7:60 N7:70 N7:80	04 (16): Dat 1998 1060 0 0 0 0 0 0 0 0 0 0 0 0 0	ta File N7	2 5994 3180 0 0 0 0 0 0 0 0 0 0 0	3 0 0 3333 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0 0 0	5 0 0 0 0 0 0 0 0 0 0 0	6 0 0 6654 0 0 0 0 0 0	7 0 0 0 0 0 0 0 0 0 0 0	8 0 0 0 0 0 0 0 0 0 0 0 0	9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	×