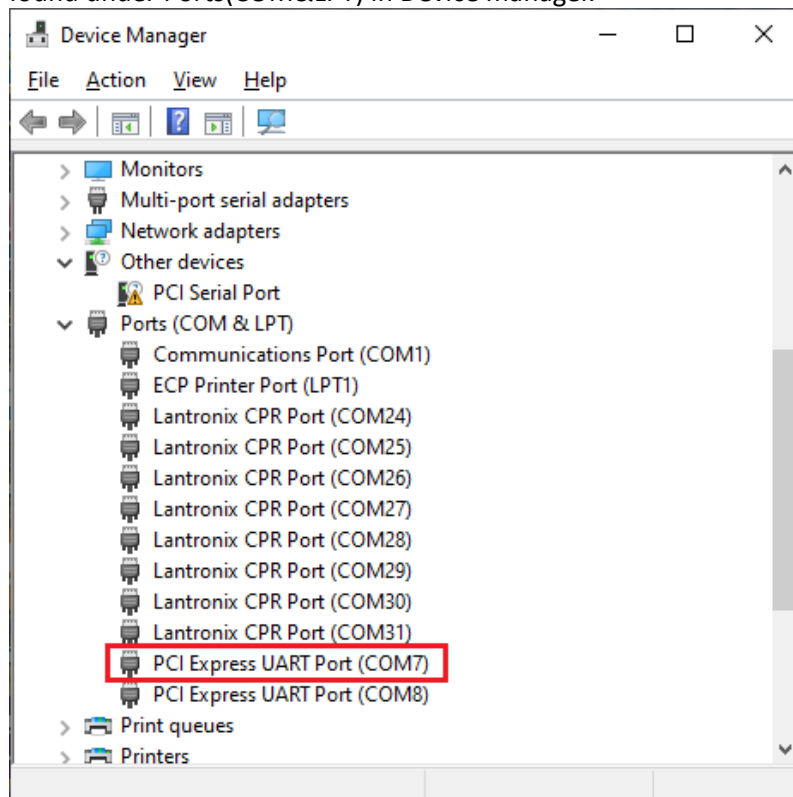


## FactoryTalk & DLPCle card DF1 RSLinx OPC Server used to access PLC5 & SLC504 on DH+

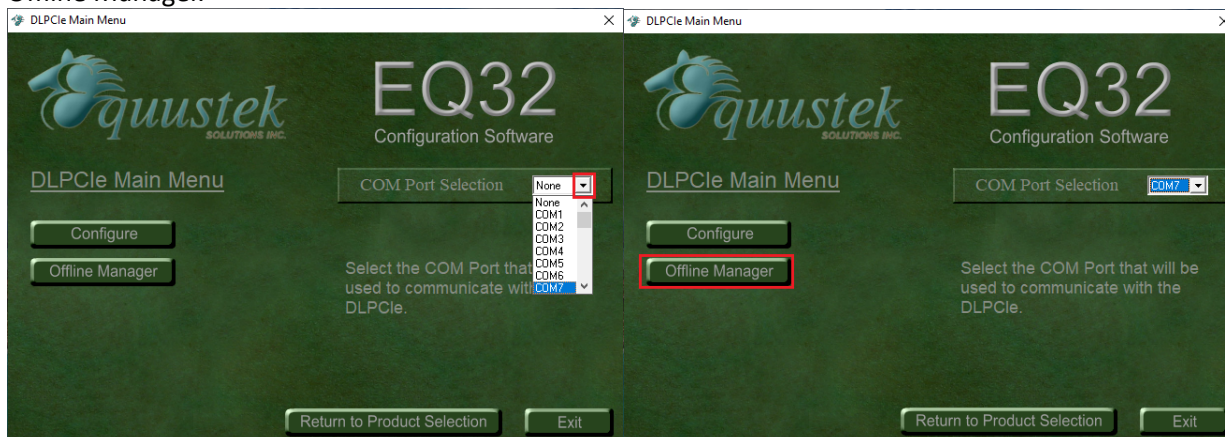
Start with configuring the DLPCle-DF1/DH+ card using Equustek Solutions EQ32 Configuration software, press the configure push button switch on the card to put it in offline and configuration mode, once you start the EQ32, under products click on DLPCle.



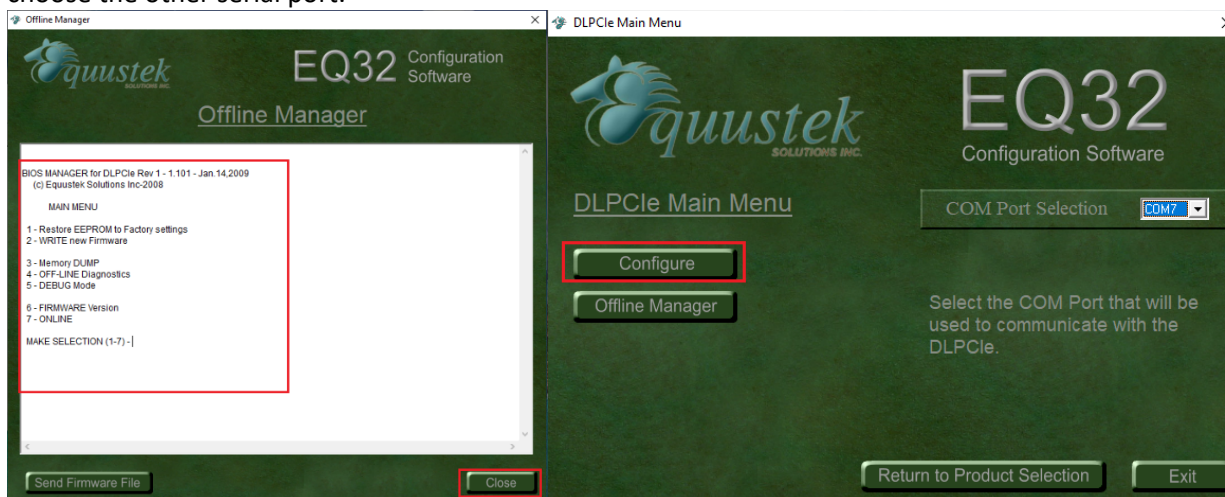
Once the DLPCle card is installed in any desktop PC it will occupy 2 serial ports one of them is just an extra serial port for the PC while the other one is the serial port that will be used for the serial communications with the card using Allen Bradley serial RS232 DF1 protocol, both those ports can be found under Ports(COM&LPT) in Device manager.



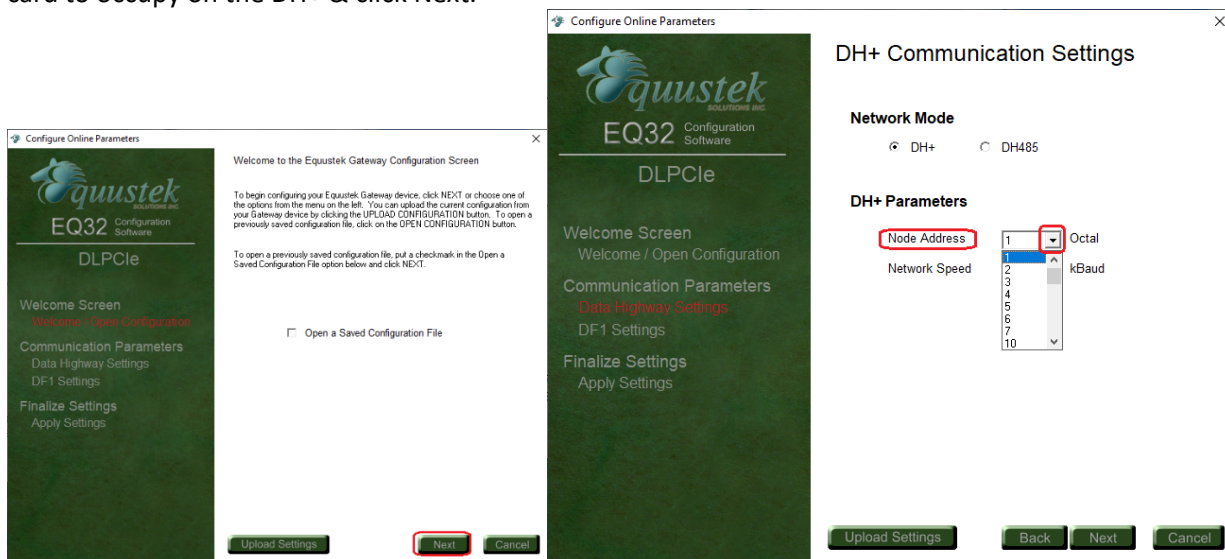
Select one of the serial ports previously found under device manager from the drop menu & click on Offline Manager.



If you see the menu shown below click on Close then click on Configure, but if you don't see the menu choose the other serial port.



Click on Next. For Network Mode select DH+ & from the drop menu select a unique node address for the card to occupy on the DH+ & click Next.



Select the DH+ Baud rate ( 57.6 Kbaud, 115 Kbaud or 230Kbaud) then click on Next.

The image shows two side-by-side screenshots of the 'Configure Online Parameters' window. Both windows display the 'DH+ Communication Settings' screen. The left window has the 'Network Speed' dropdown menu open, showing options: 57.6, 115.2, and 230.4. The right window has the 'Next' button highlighted with a red box.

For DF1 settings select the parameters from the drop menus of each setting and click Next.

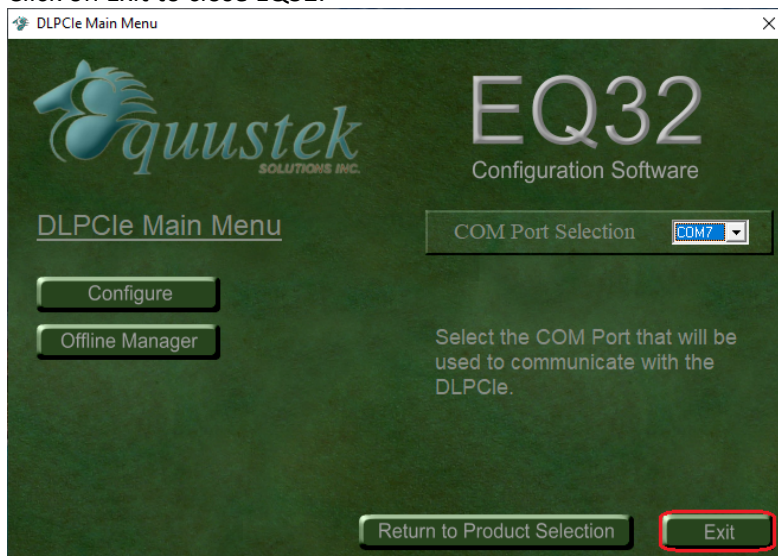
The image shows two side-by-side screenshots of the 'Configure Online Parameters' window. Both windows display the 'DF1 Communication Settings' screen. The left window has the 'Serial Speed' dropdown menu open, showing options: 9600, 19200, 38400, 76800, 115200, and 230400. The right window has the 'Next' button highlighted with a red box.

Click Finish, make sure card is in offline mode, click OK, wait until you get the Success message & click ok.

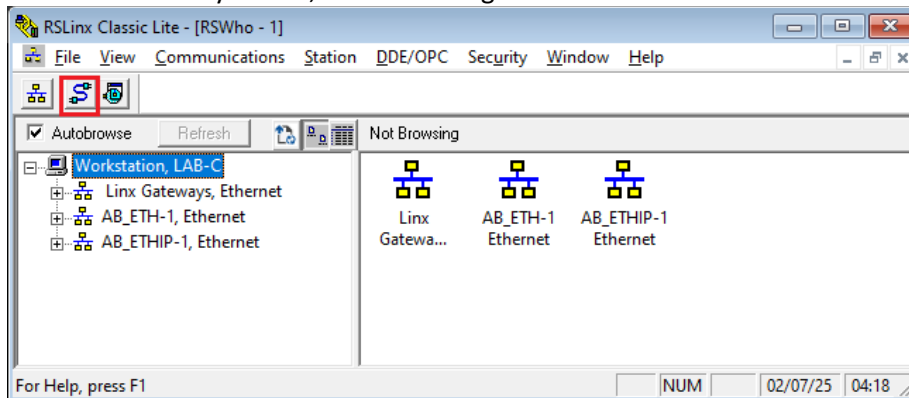
The image shows three screenshots of the configuration process. The first screenshot shows the 'Apply Configuration Settings' screen with the 'Download Configuration' radio button selected. The second screenshot shows a warning message: 'Press the Configure button on the DLPCle before continuing. The LED's on the left should have the following pattern: Status: Red, Net: Off, Bus: Green'. The third screenshot shows a success message: 'Configuration has been downloaded to the DLPCle'.



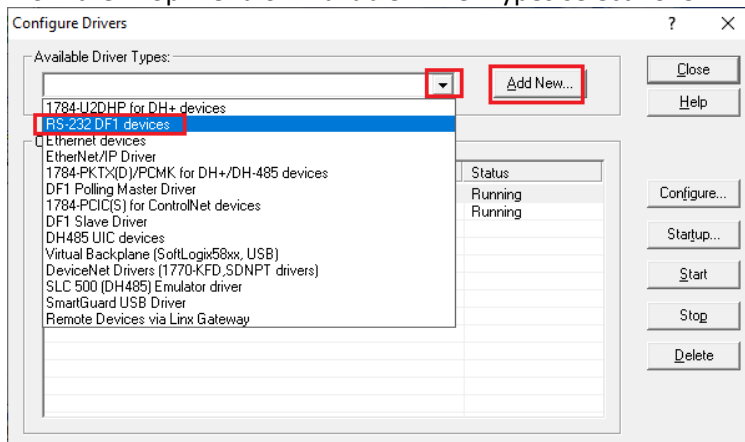
Click on Exit to close EQ32.



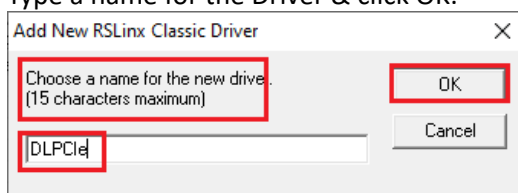
Start Allen Bradley RSLinx, click on Configure Driver icon.



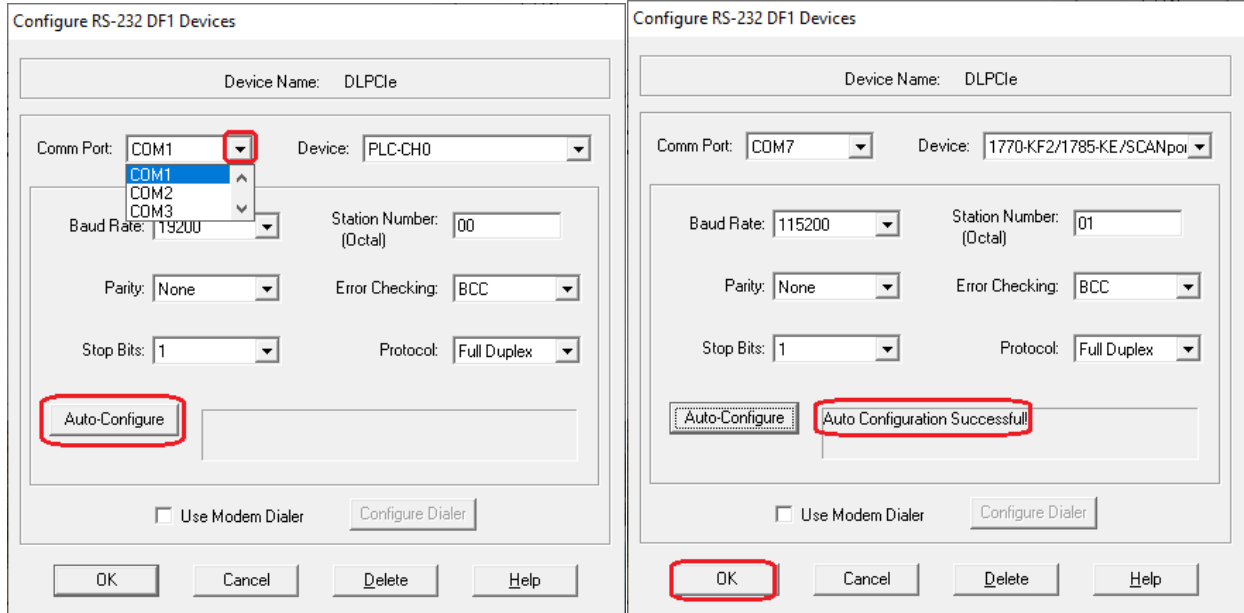
From the Drop menu of Available Driver Types select RS232 DF1 devices then click on Add New.



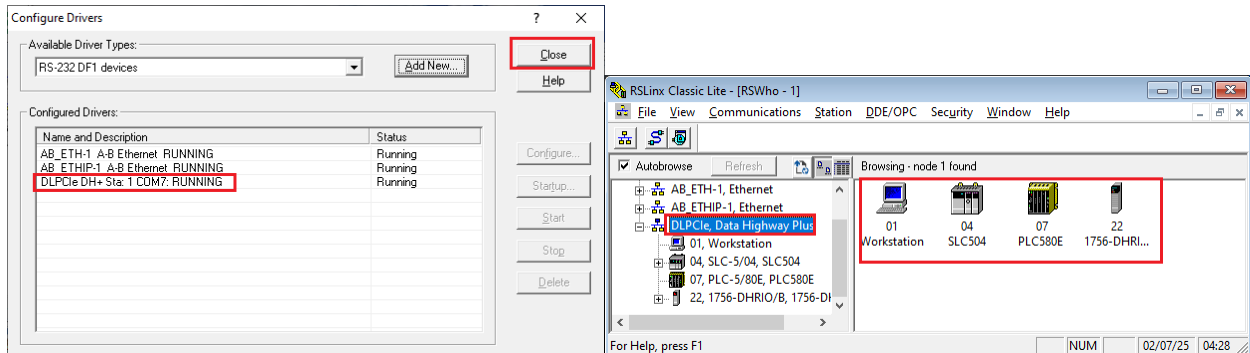
Type a name for the Driver & click OK.



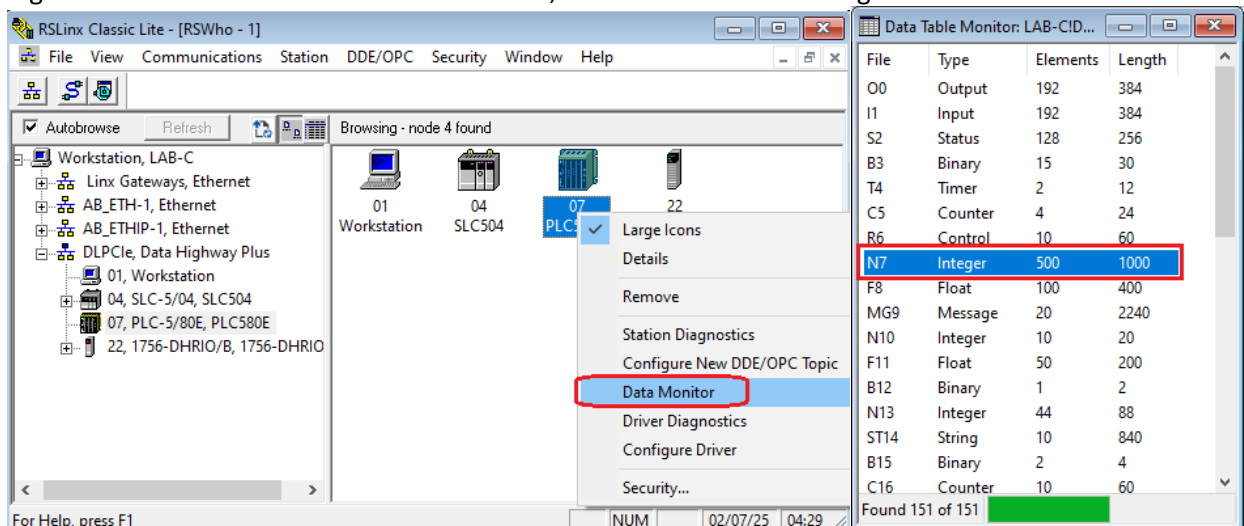
From the Comm Port drop menu, select the serial port of the DLPCle which we found in Device Manager, click on Auto-Configure. Once Auto Configuration is Successful Click OK.



Click on Close and open RSWHO in RSLinx to browse and see devices, PLC5, SLC504 & CLX on DH+ network.



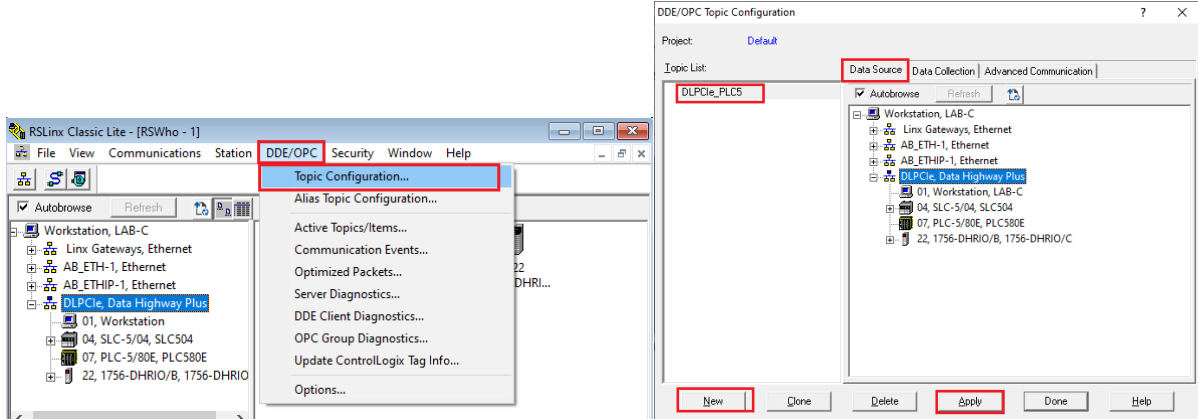
Right click on PLC5 then click on Data Monitor, then double click on integer file N7 to monitor it's data.



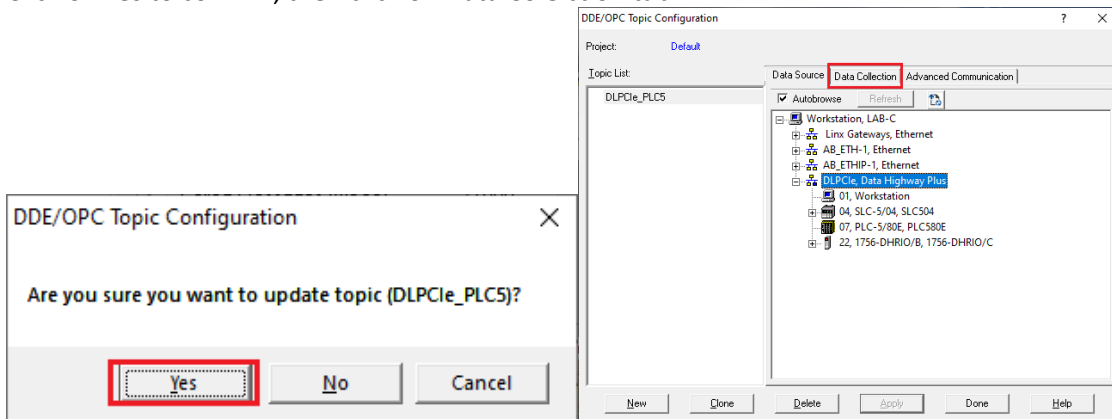
PLC-5/80E (2): Data File N7										
	0	1	2	3	4	5	6	7	8	9
N7:0	387	774	1161	387	387	387	387	387	387	387
N7:10	387	387	387	387	387	387	387	387	387	387
N7:20	387	387	387	387	387	387	387	387	387	387
N7:30	3355	12345	4567	0	0	0	0	0	0	0
N7:40	0	0	0	0	0	0	0	0	0	0
N7:50	1551	3102	4653	0	0	0	0	0	0	0
N7:60	0	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
N7:ON										

Status: Active Selection: N7:0

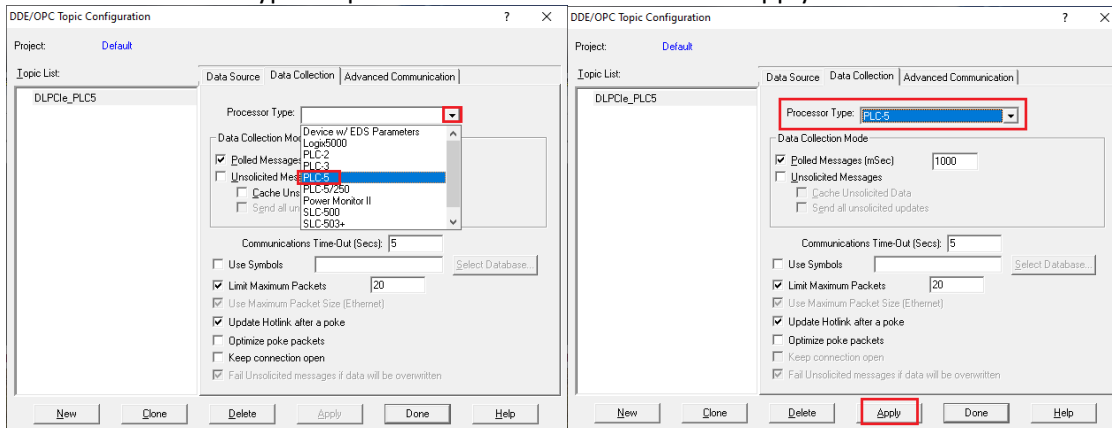
Under DDE/OPC click on Topic Configuration. Click on New, type a name for the Topic then click Apply.



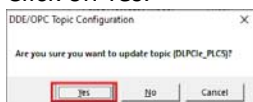
Click on Yes to confirm, then click on Data Colelction tab.



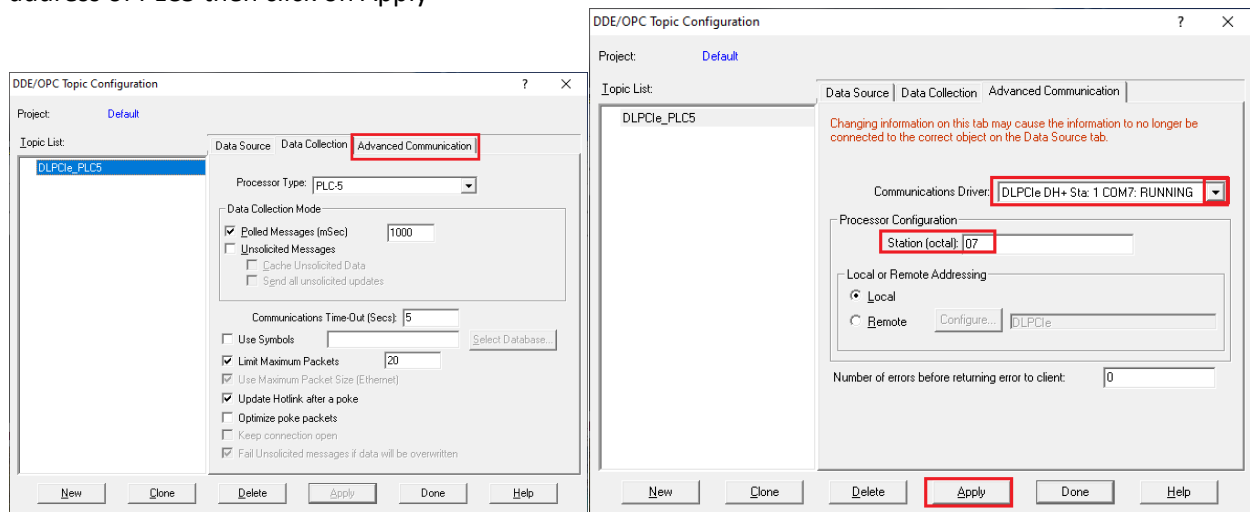
From the Processor Type drop Menu select PLC5 then click on Apply



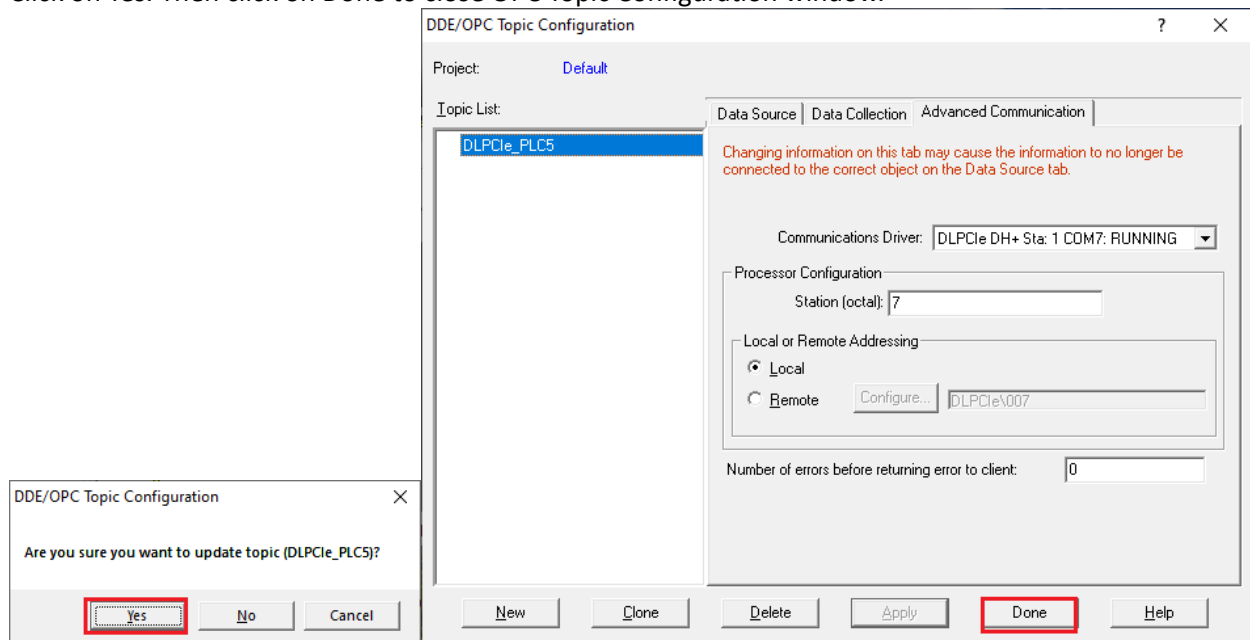
Click on Yes.



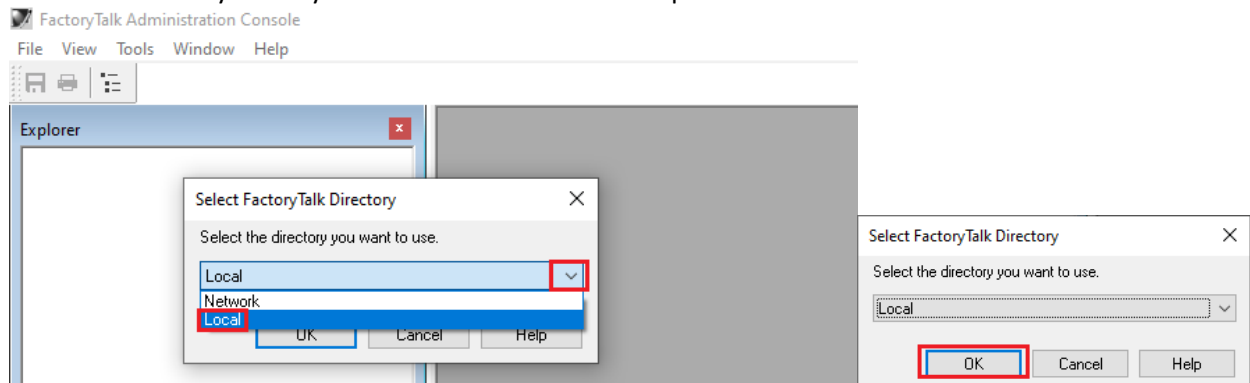
Click on Advanced Communication tab. Make sure DLPCle DH+ driver is selected and type in the Node address of PLC5 then click on Apply



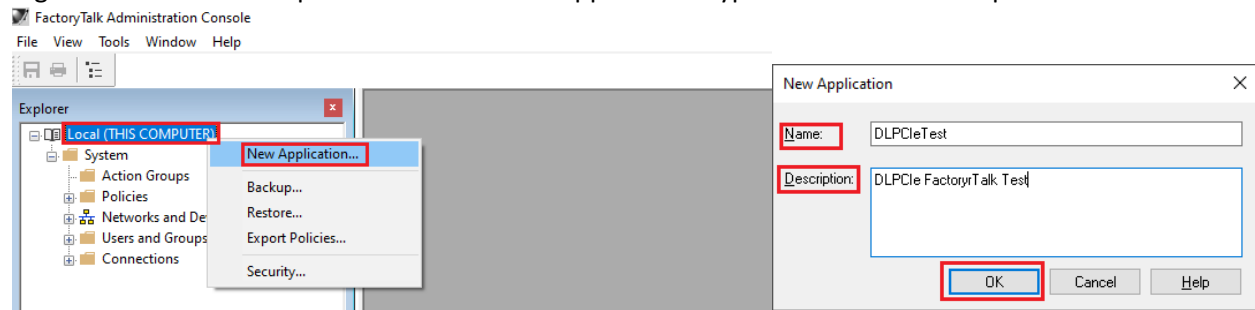
Click on Yes. Then click on Done to close OPC Topic Configuration window.



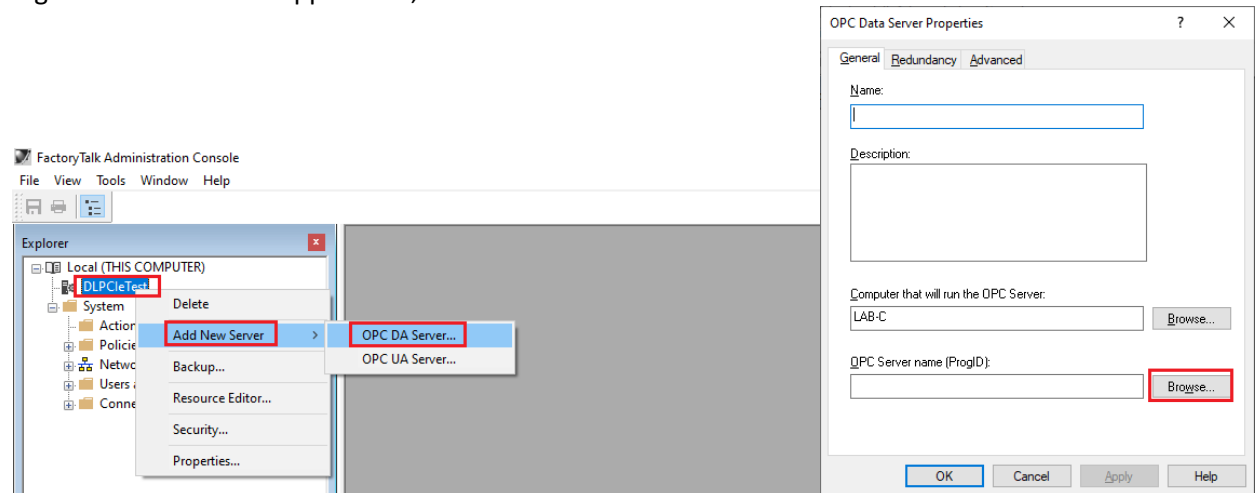
Start Allen Bradley FactoryTalk select Local from the drop menu then click on OK.



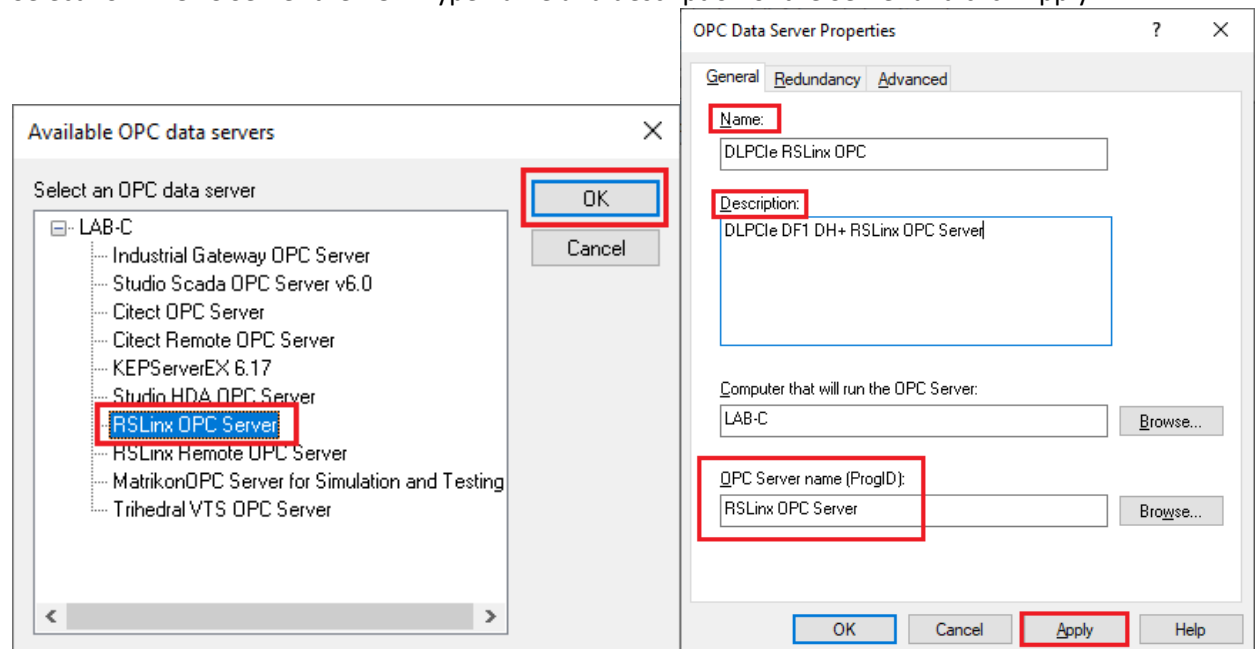
Right click on Local Computer to create a new application. Type a Name and Description then click OK.



Right click on the new application, click Add New Server and on OPC DA Server. Then click on Browse.

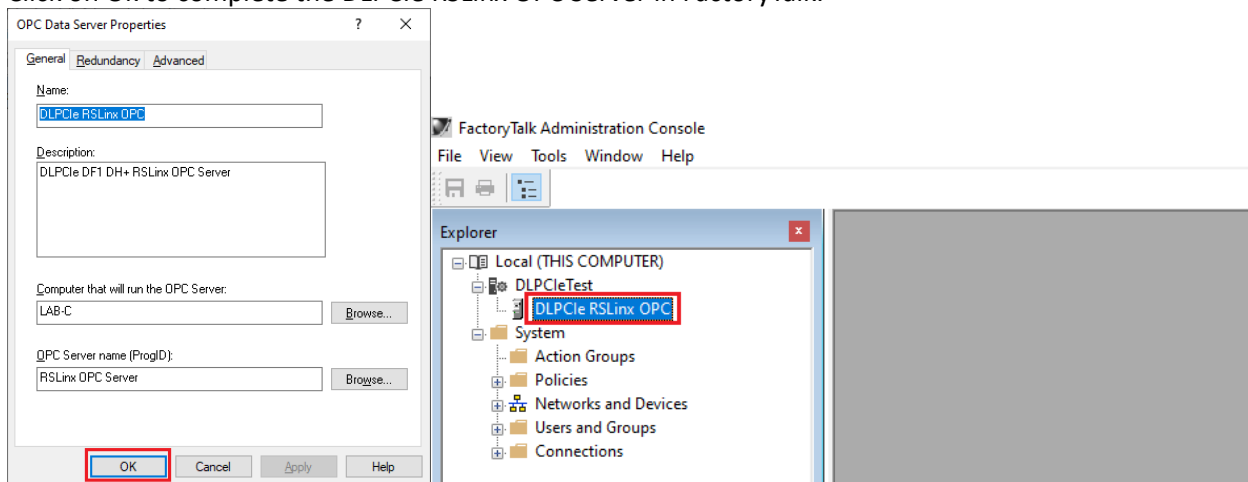


Select RSLinx OPC Server then OK. Type name and description of the Server and click Apply.

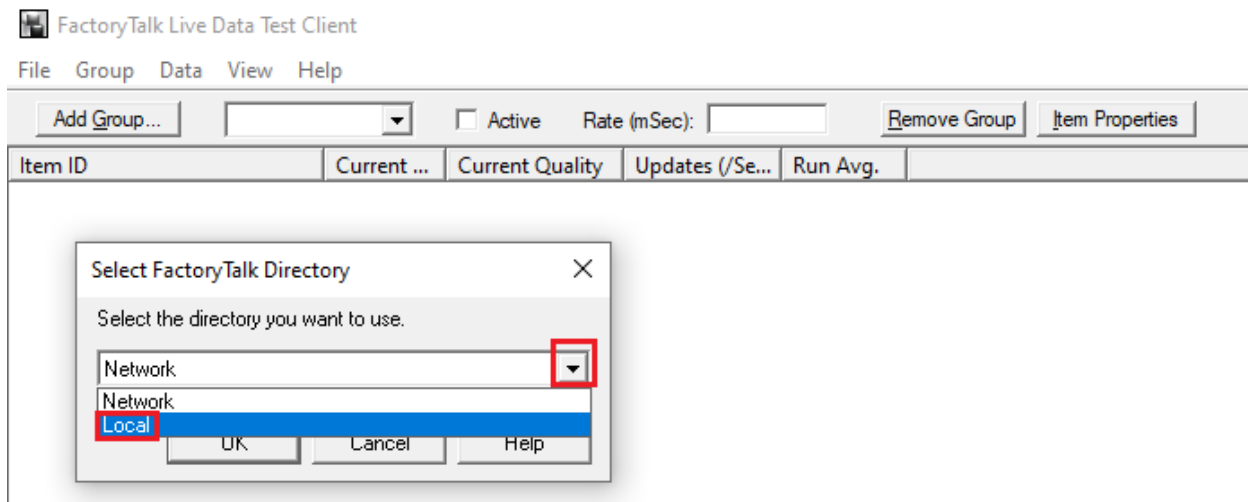




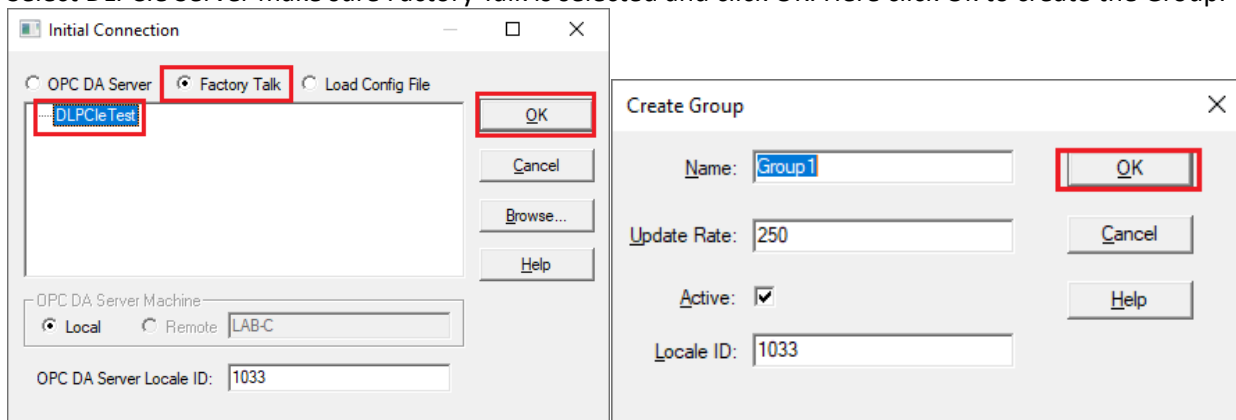
Click on Ok to complete the DLPCle RSLinx OPC Server in FactoryTalk.



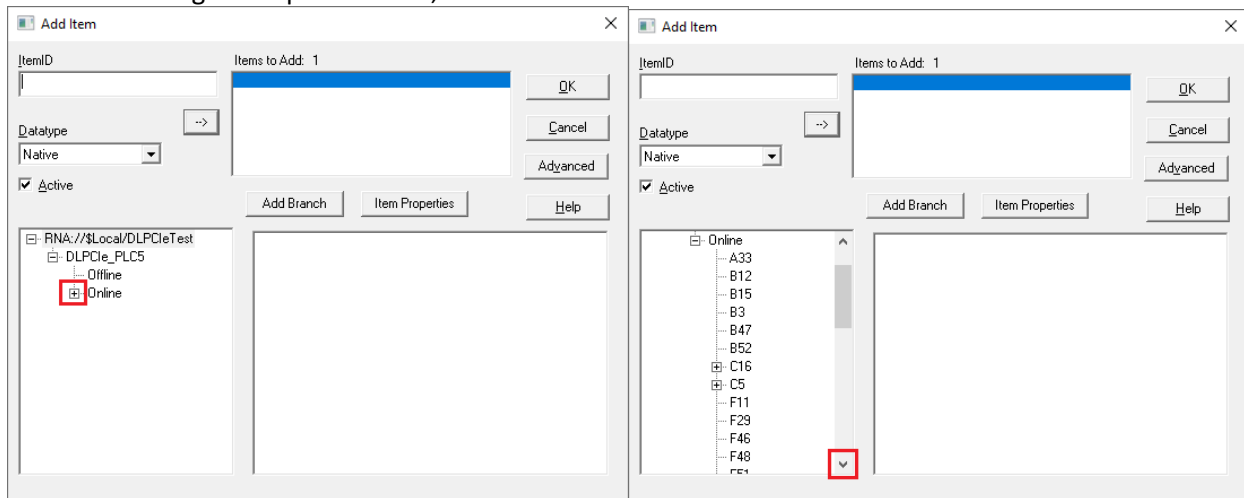
To show that we can access the PLC5 Open FactoryTalk Live Data Test Client, select Local from the drop menu and click ok.



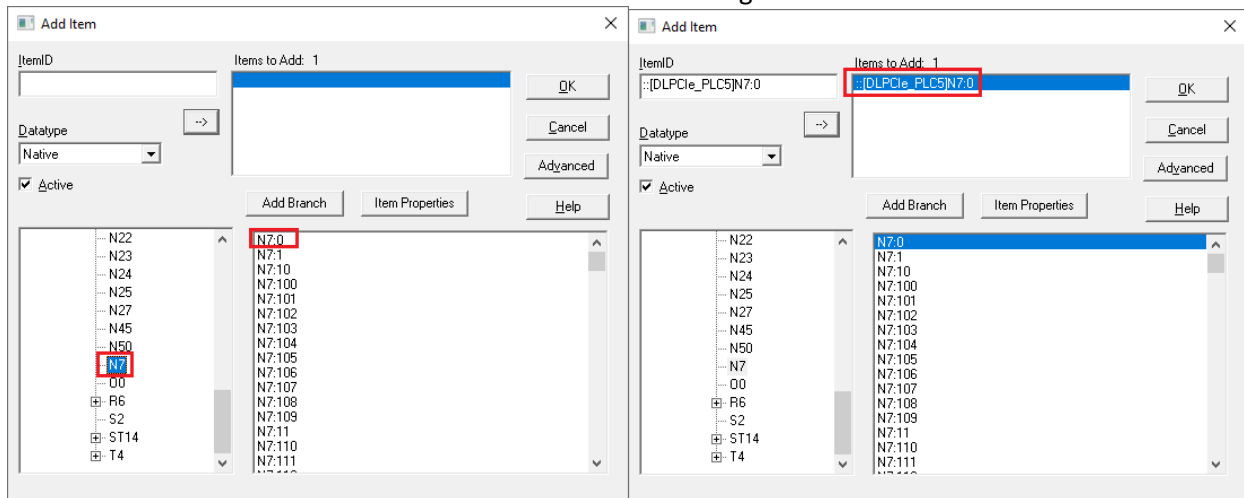
Select DLPCle Server make sure Factory Talk is selected and click OK. Here click Ok to create the Group.



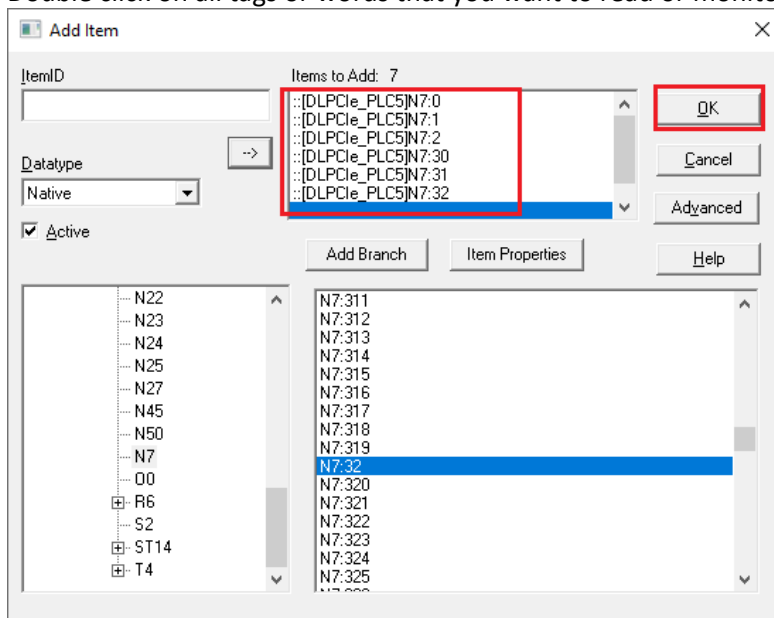
Click on the + sign to expand Online, scroll down to see PLC5 Data files.



Click on N7 then double click on N7:0 to add word 0 from integer file N7.



Double click on all tags or words that you want to read or monitor, then click on OK.



Here we can see all the words that were added similar to those read in RSLinx data monitor.

FactoryTalk Live Data Test Client - RNA://\$Local/DLPCleTest

File Group Data View Help

Add Group... Group1 ☒ Active Rate (mSec): 250 Remove Group Item Properties

Item ID	Current ...	Current Quality	Updates (/Se...	Run Avg.
● ::[DLPCle_PLC5]N7:0	387	Good	1 (0)	0.023
● ::[DLPCle_PLC5]N7:1	774	Good	1 (0)	0.023
● ::[DLPCle_PLC5]N7:2	1161	Good	1 (0)	0.023
● ::[DLPCle_PLC5]N7:30	3355	Good	1 (0)	0.023
● ::[DLPCle_PLC5]N7:31	12345	Good	1 (0)	0.023
● ::[DLPCle_PLC5]N7:32	4567	Good	1 (0)	0.023

PLC-5/80E (2): Data File N7

	0	1	2	3	4	5	6	7	8	9
N7:0	387	774	1161	387	387	387	387	387	387	387
N7:10	387	387	387	387	387	387	387	387	387	387
N7:20	387	387	387	387	387	387	387	387	387	387
N7:30	3355	12345	4567	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
N7:90										

Status: Active Selection: N7:0

Same procedure can be done to add the SLC504 or any other DH+ PLC on the DH+ with the DLPCle card.