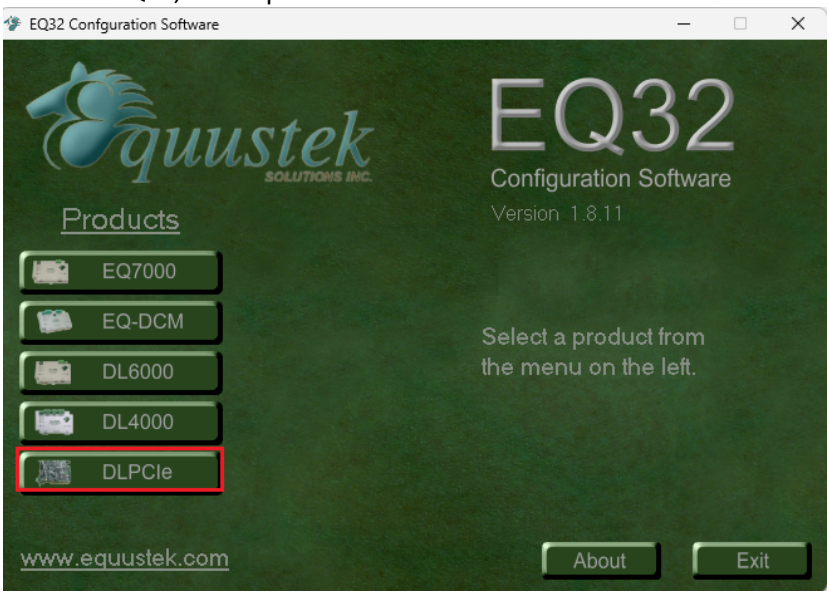
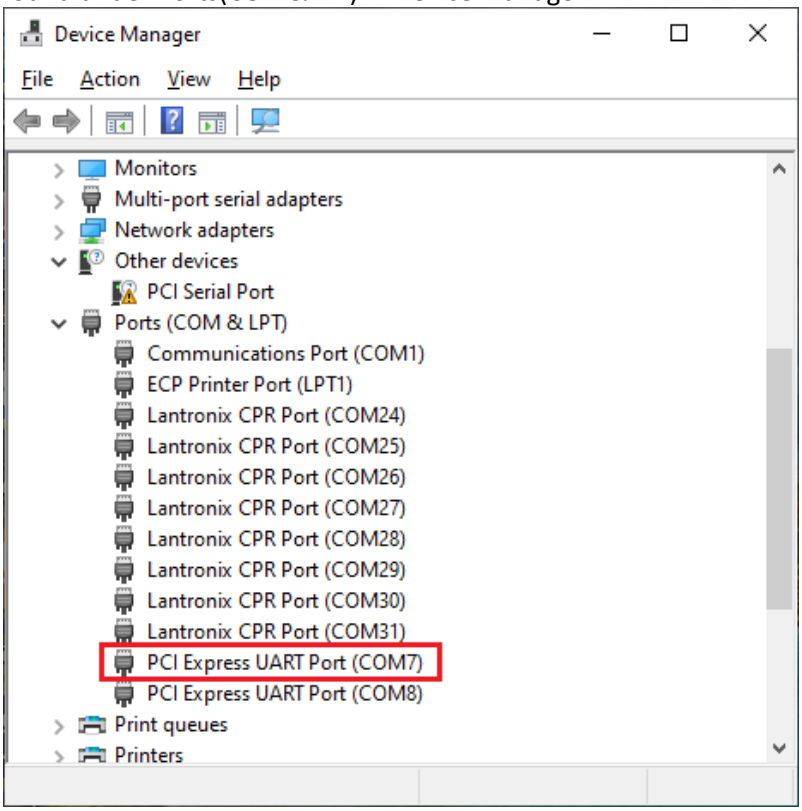
FactoryTalk & DLPCIe card DF1 RSLinx OPC Server used to access PLC5 & SLC504 on DH+

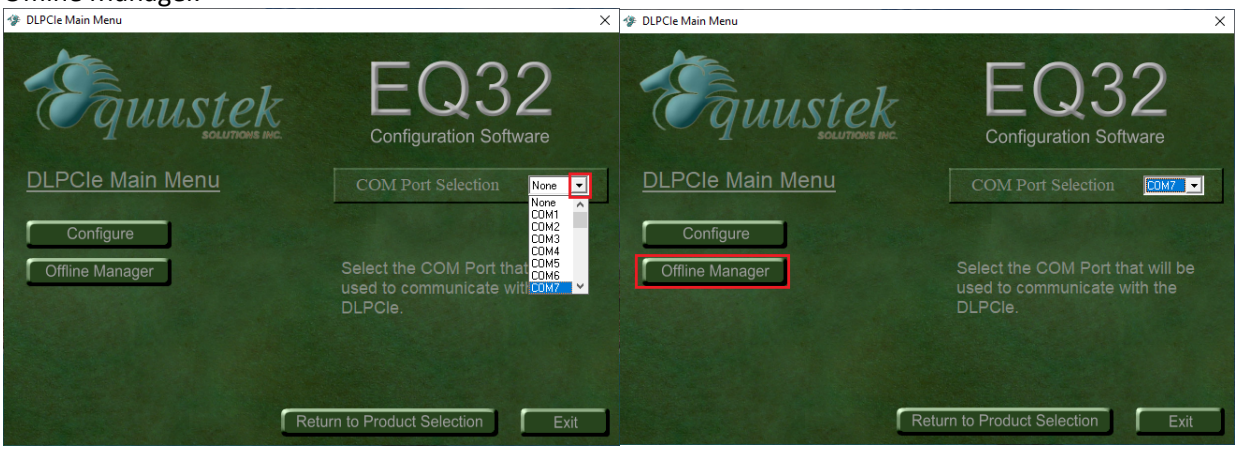
Start with configuring the DLPCIe-DF1/DH+ card using Equustek Solutions EQ32 Configuration software, press the configure push button switch on the card to put it in offline and configuration mode, once you start the EQ32, under products click on DLPCIe.



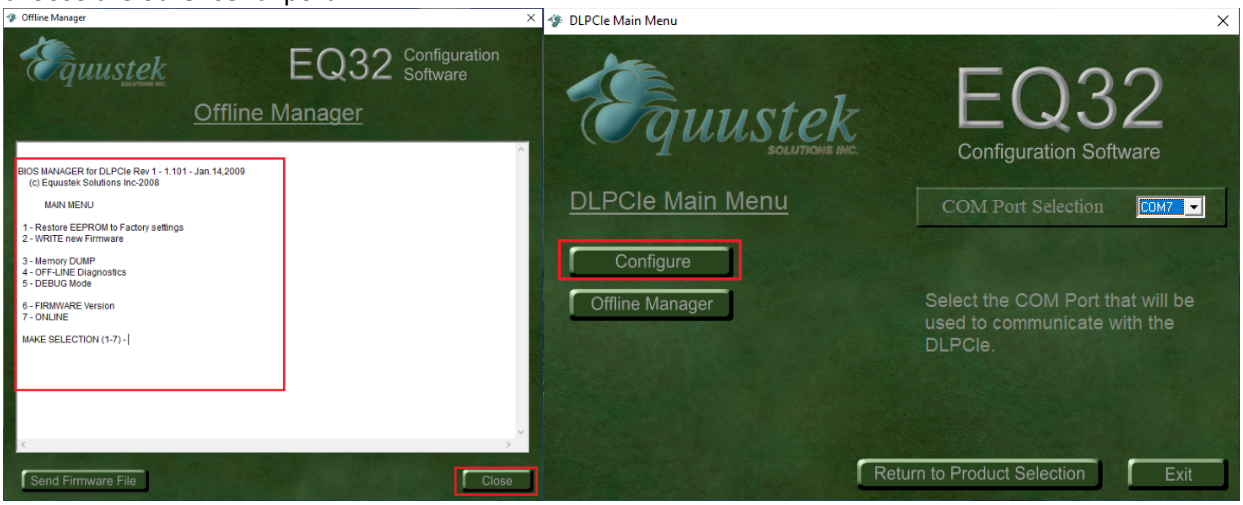
Once the DLPCIe card is installed in any desktop PC it will occupy 2 serial ports one of them is just an extra serial port for the PC while the other one is the serial port that will be used for the serial communications with the card using Allen Bradley serial RS232 DF1 protocol, both those ports can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



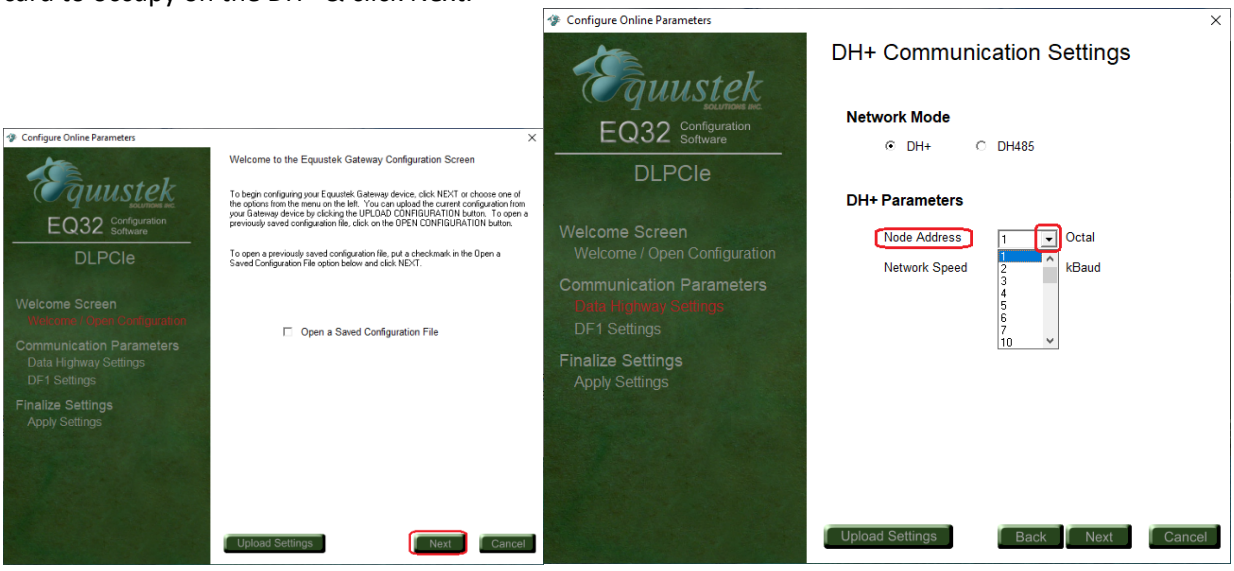
Select one of the serial ports previously found under device manager from the drop menu & click on Offline Manager.



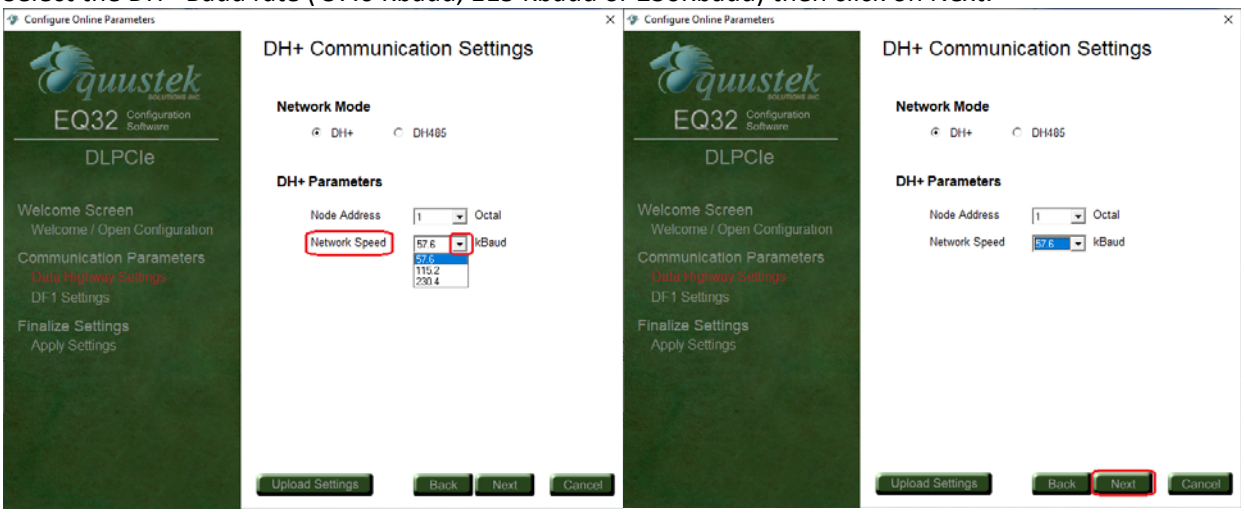
If you see the menu shown below click on Close then click on Configure, but if you don't see the menu choose the other serial port.



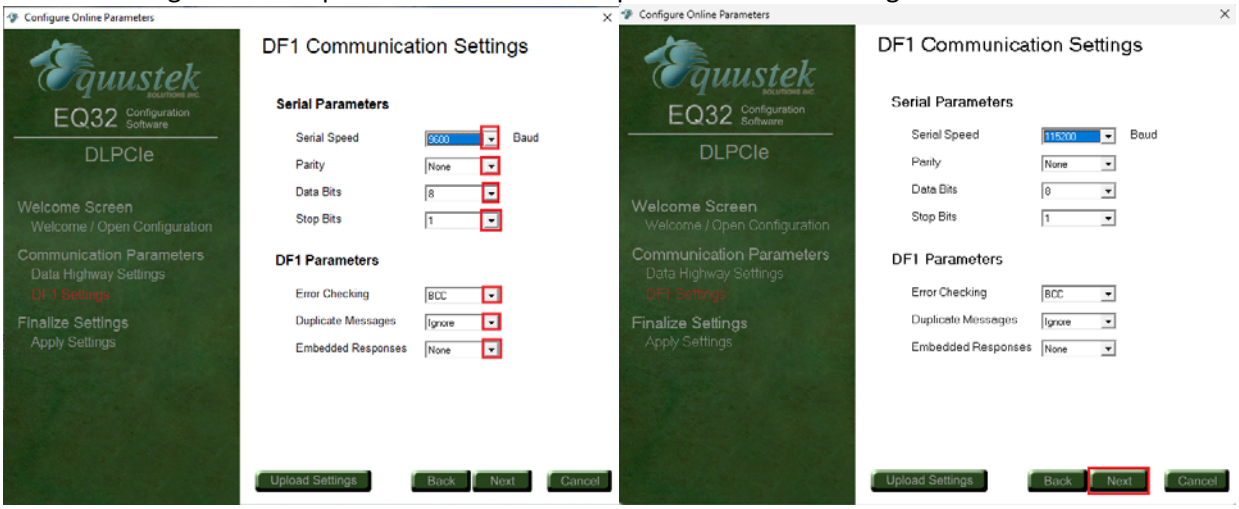
Click on Next. For Network Mode select DH+ & from the drop menu select a unique node address for the card to occupy on the DH+ & click Next.



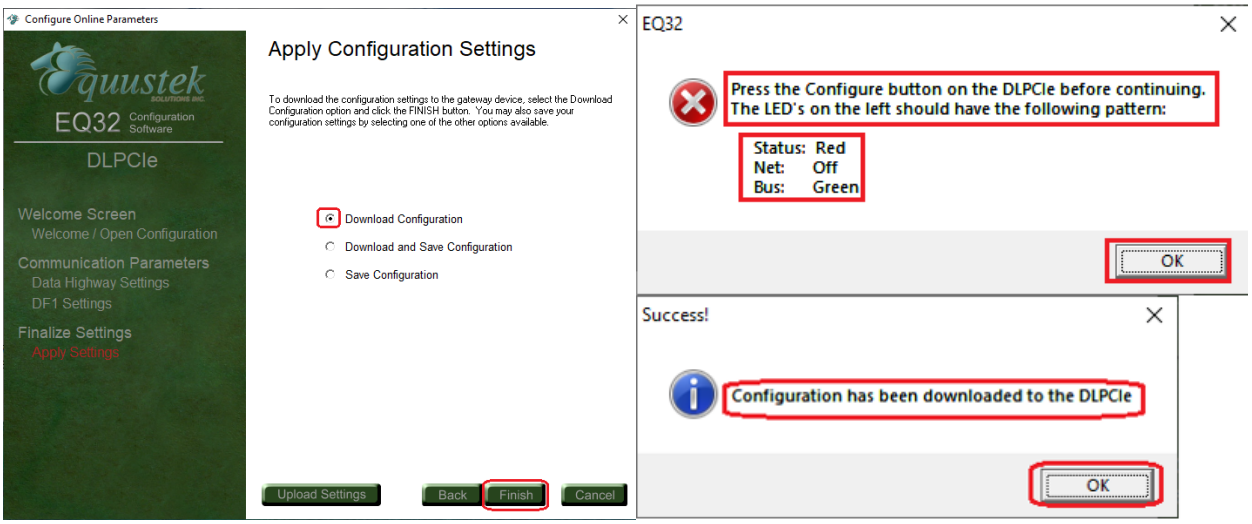
Select the DH+ Baud rate (57.6 Kbaud, 115 Kbaud or 230Kbaud) then click on Next.



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

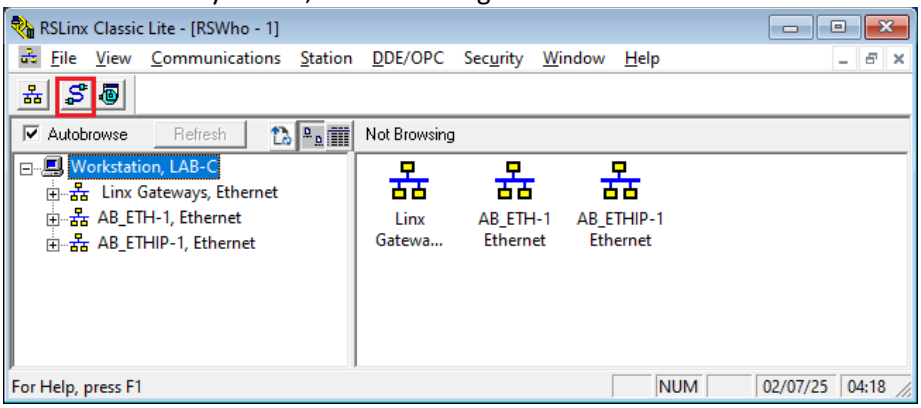


Click Finish, make sure card is in offline mode, click OK, wait until you get the Success message & click ok.

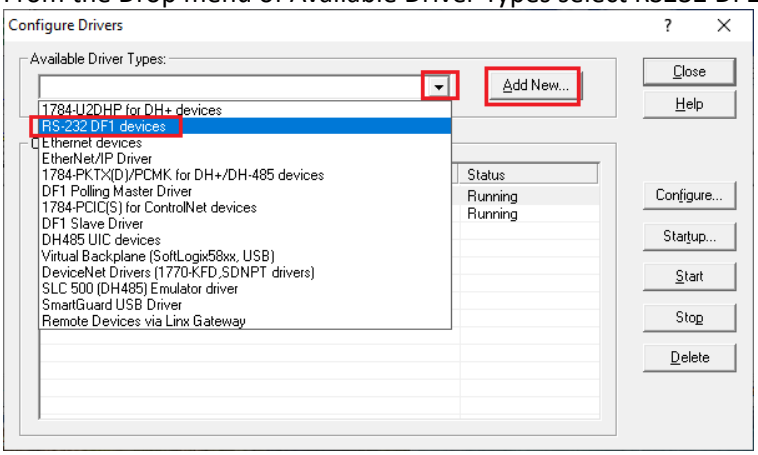


Click on Exit to close EQ32.

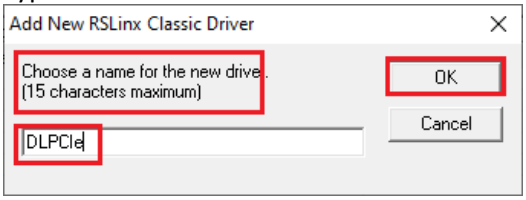
Start Allen Bradley RSLinx, click on Configure Driver icon.



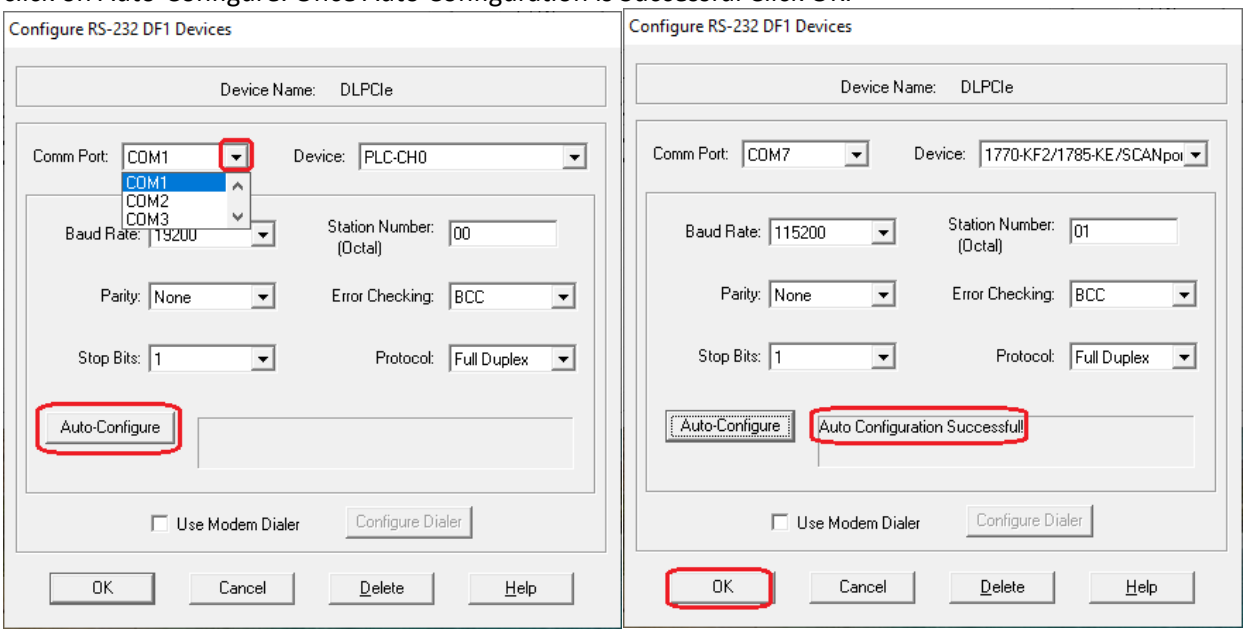
From the Drop menu of Available Driver Types select RS232 DF1 devices then click on Add New.



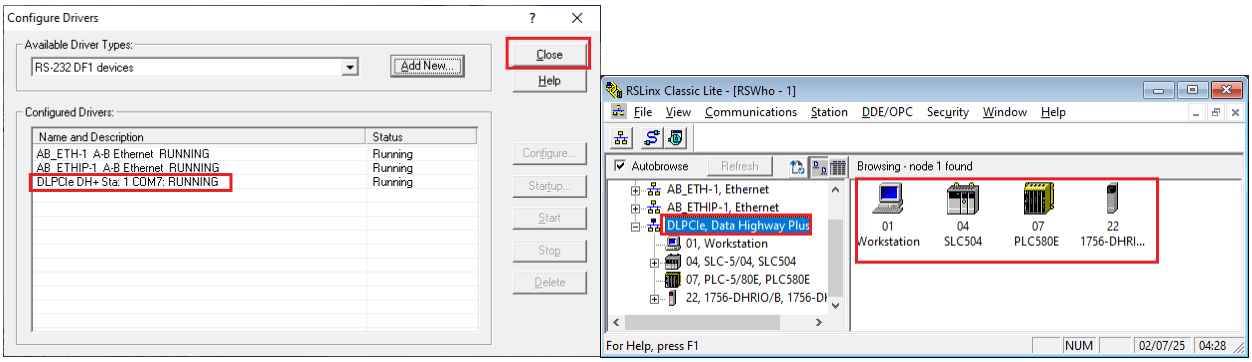
Type a name for the Driver & click OK.



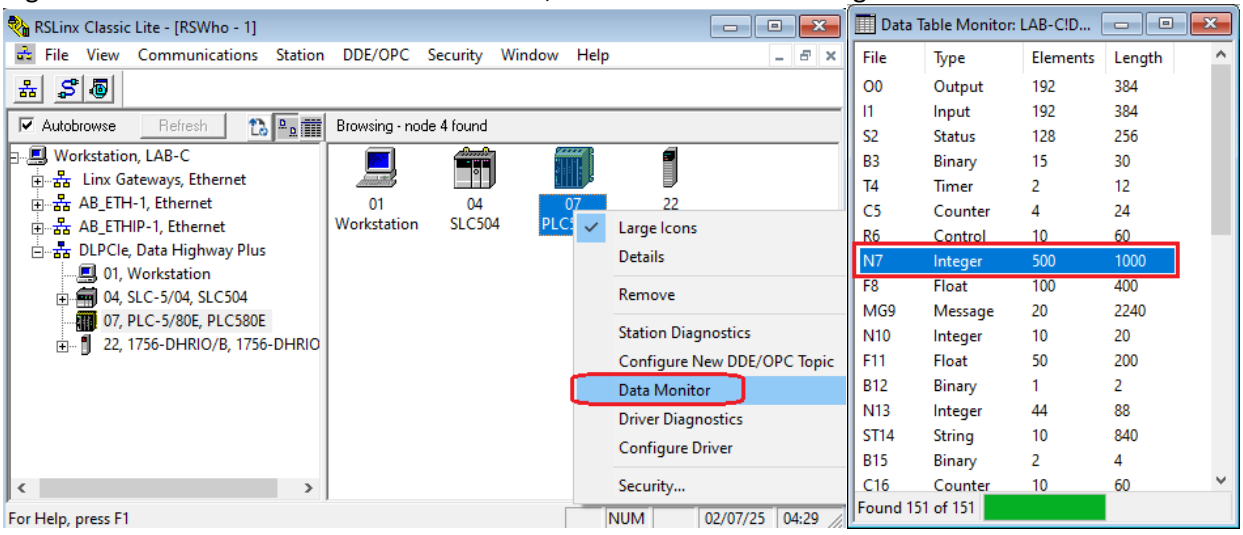
From the Comm Port drop menu, select the serial port of the DLPCIe which we found in Device Manager, click on Auto-Configure. Once Auto Configuration is Successful Click OK.

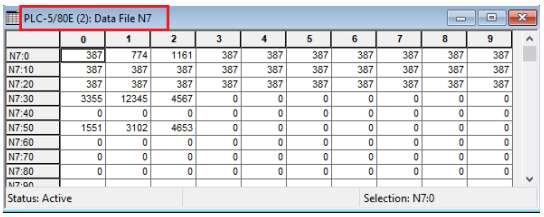


Click on Close and open RSWHO in RSLinx to browse and see devices, PLC5, SLC504 & CLX on DH+ network.

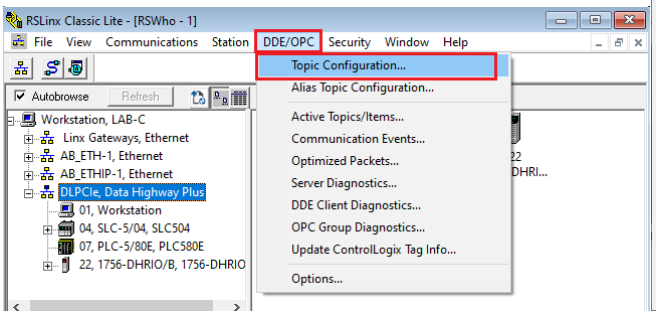


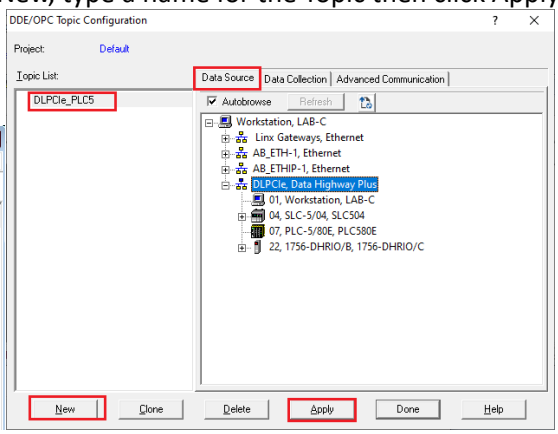
Right click on PLC5 then click on Data Monitor, then double click on integer file N7 to monitor it's data.



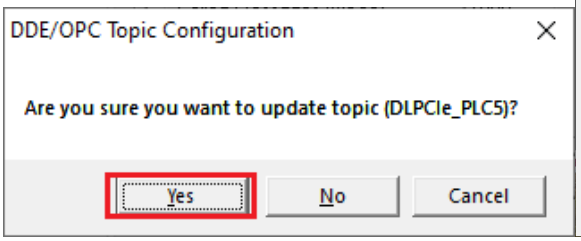


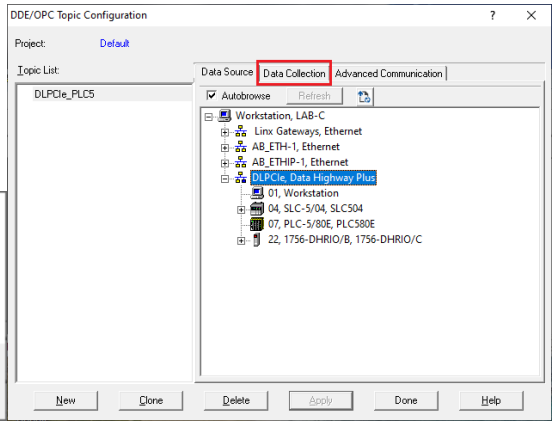
Under DDE/OPC click on Topic Configuration. Click on New, type a name for the Topic then click Apply.



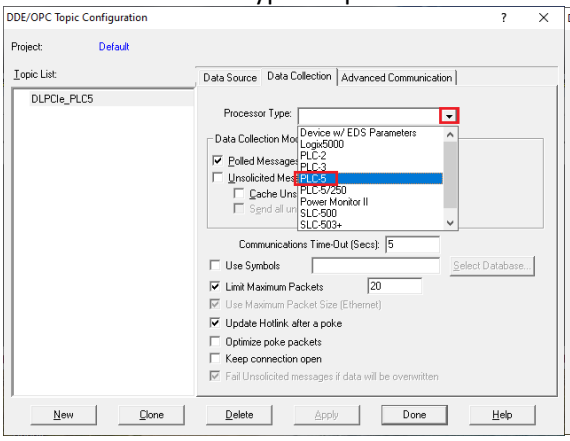


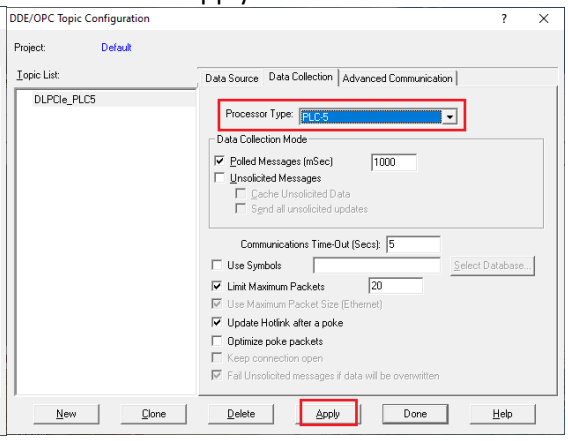
Click on Yes to confirm, then click on Data Colelction tab.



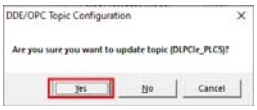


From the Processor Type drop Menu select PLC5 then click on Apply

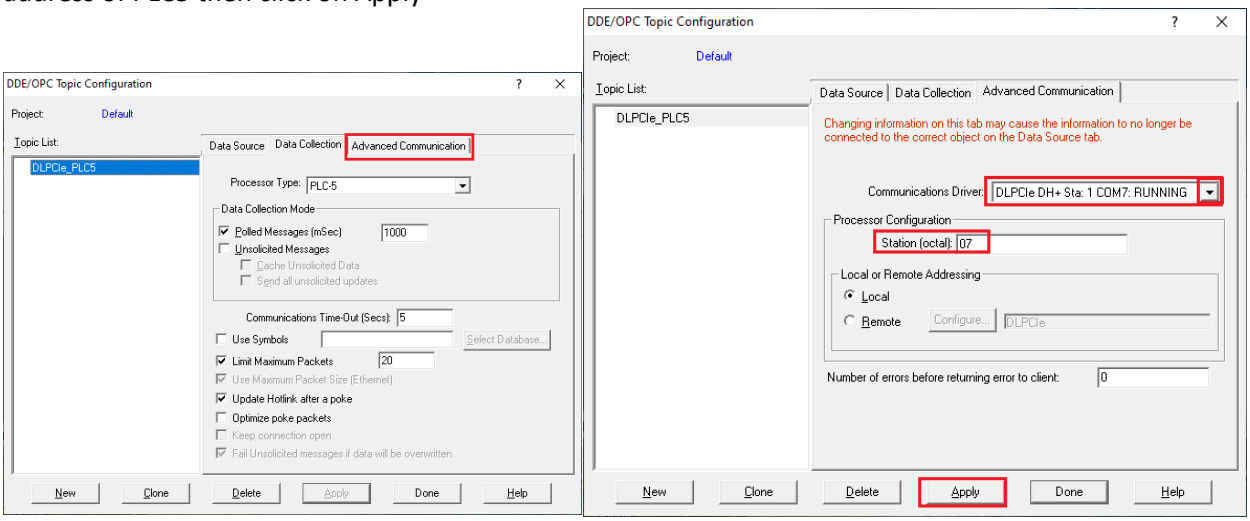




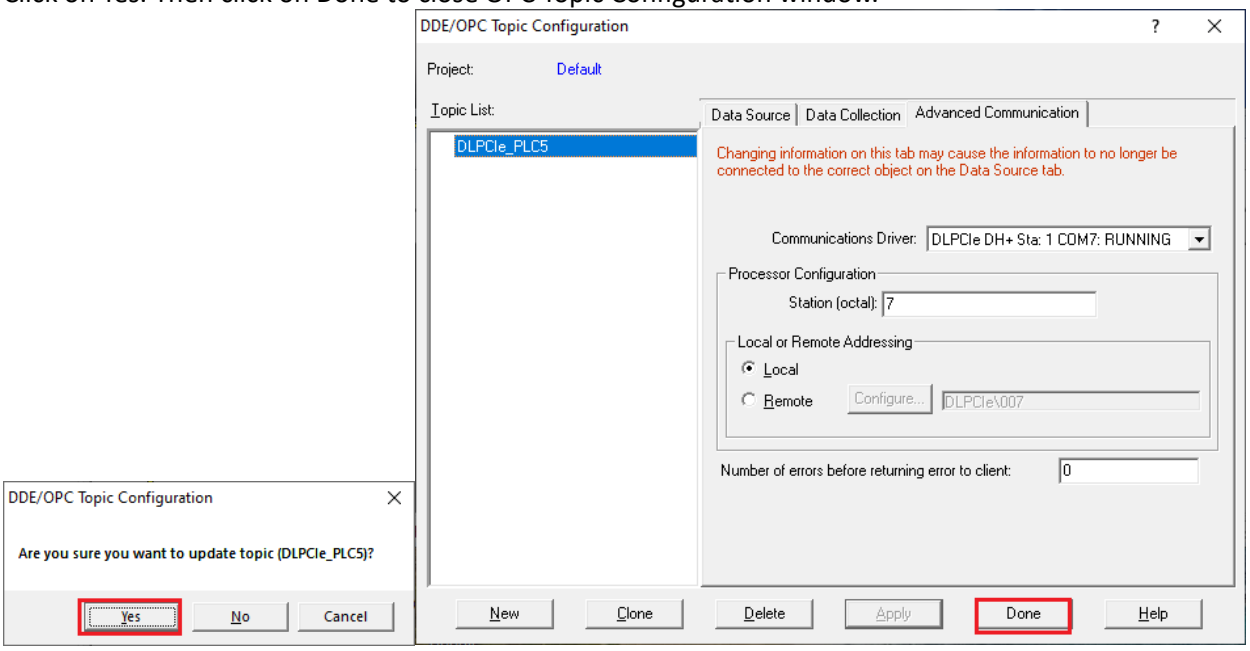
Click on Yes.



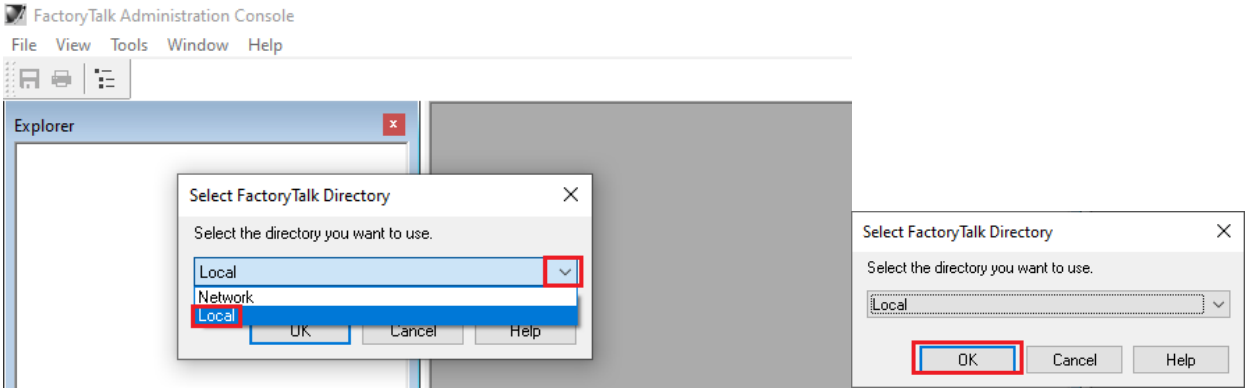
Click on Advanced Communication tab. Make sure DLPCIe DH+ driver is selected and type in the Node address of PLC5 then click on Apply



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

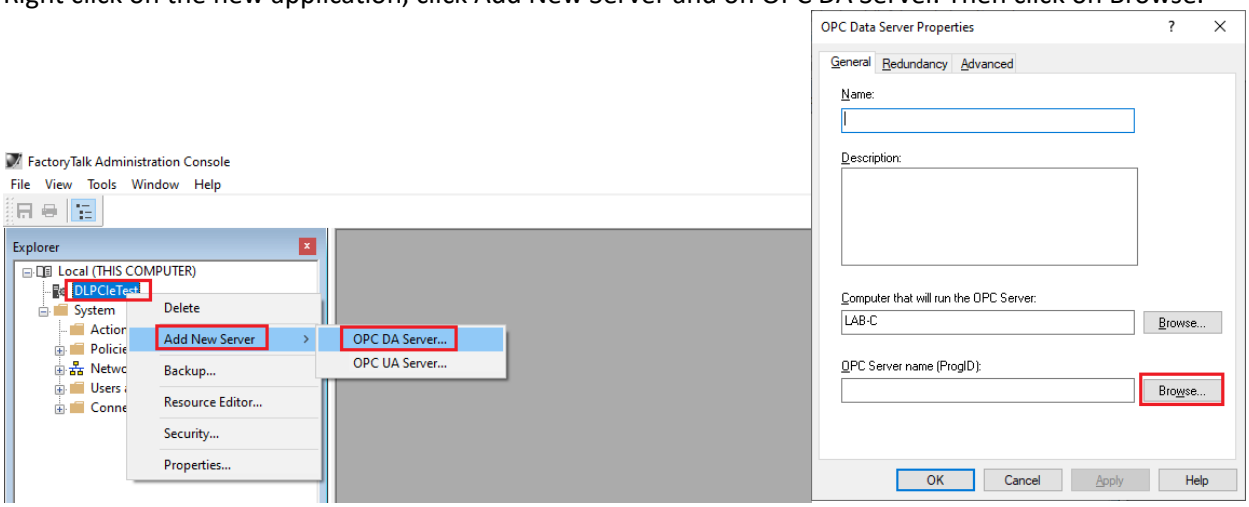


Start Allen Bradley FactoryTalk select Local from the drop menu then click on OK.

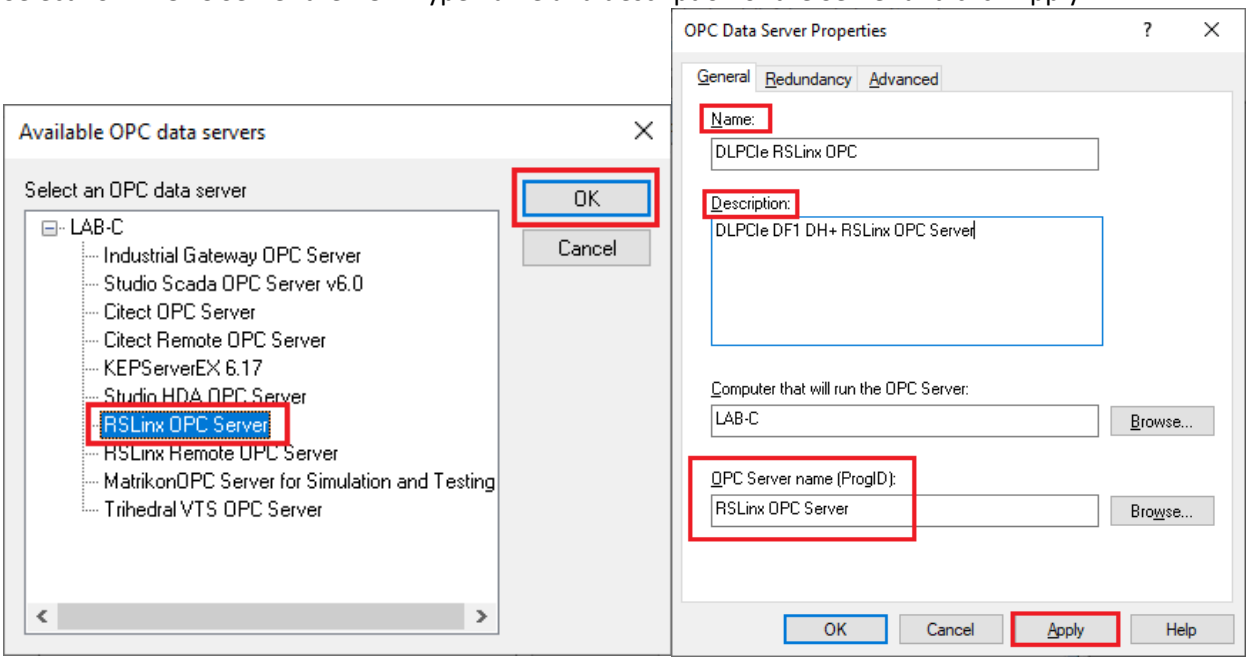


Right click on Local Computer to create a new application. Type a Name and Description then click OK.

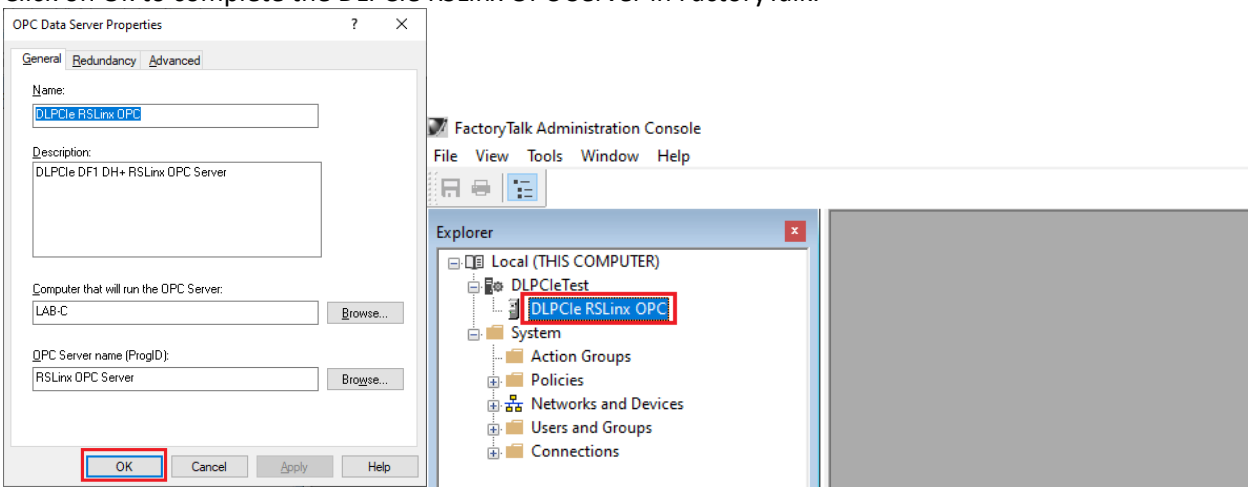
Right click on the new application, click Add New Server and on OPC DA Server. Then click on Browse.



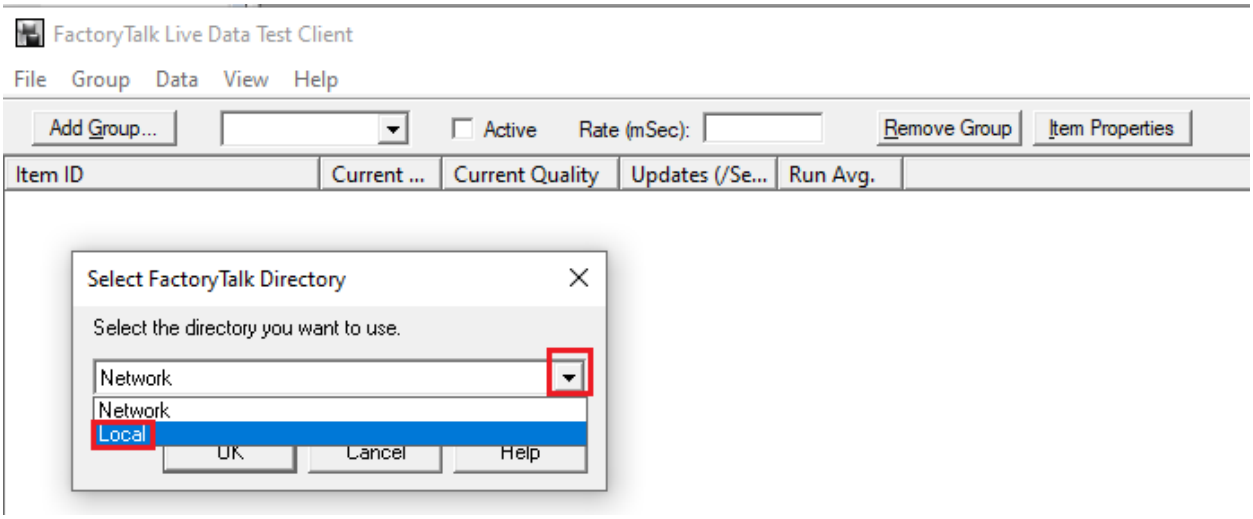
Select RSLinx OPC Server then OK. Type name and description of the Server and click Apply.



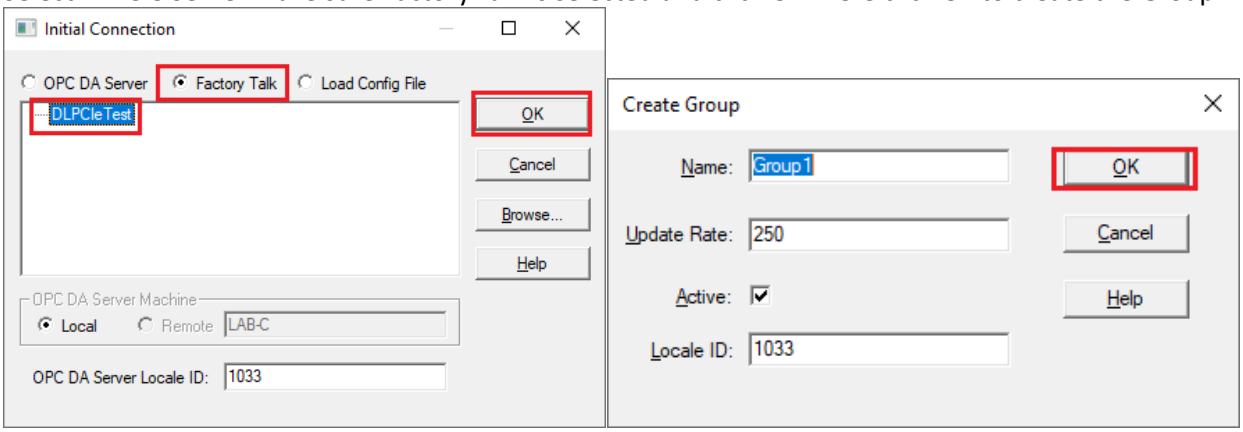
Click on Ok to complete the DLPCIe RSLinx OPC Server in FactoryTalk.



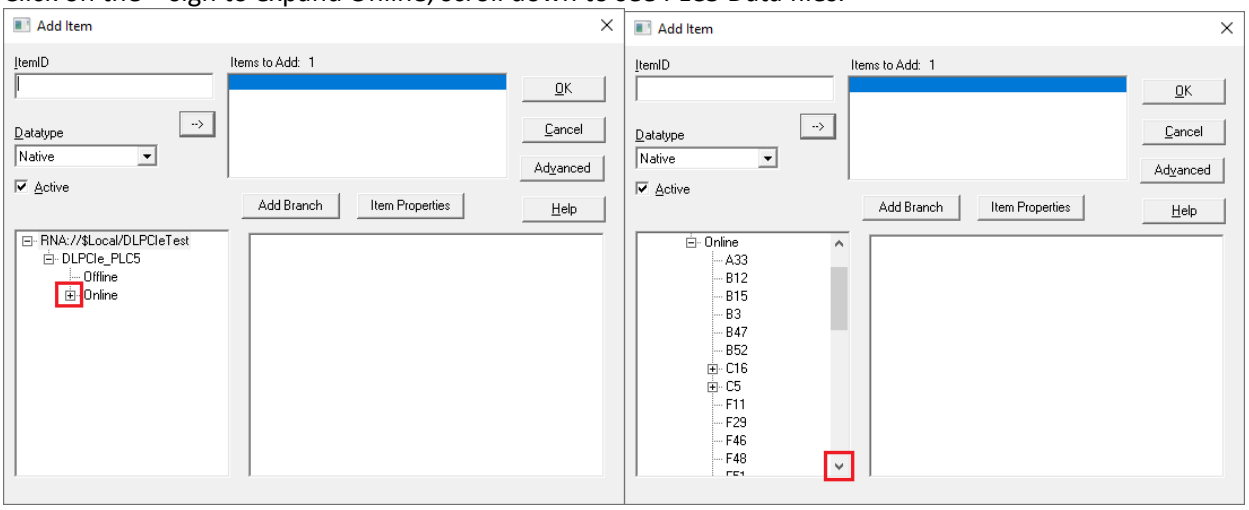
To show that we can access the PLC5 Open FactoryTalk Live Data Test Client, select Local from the drop menu and click ok.



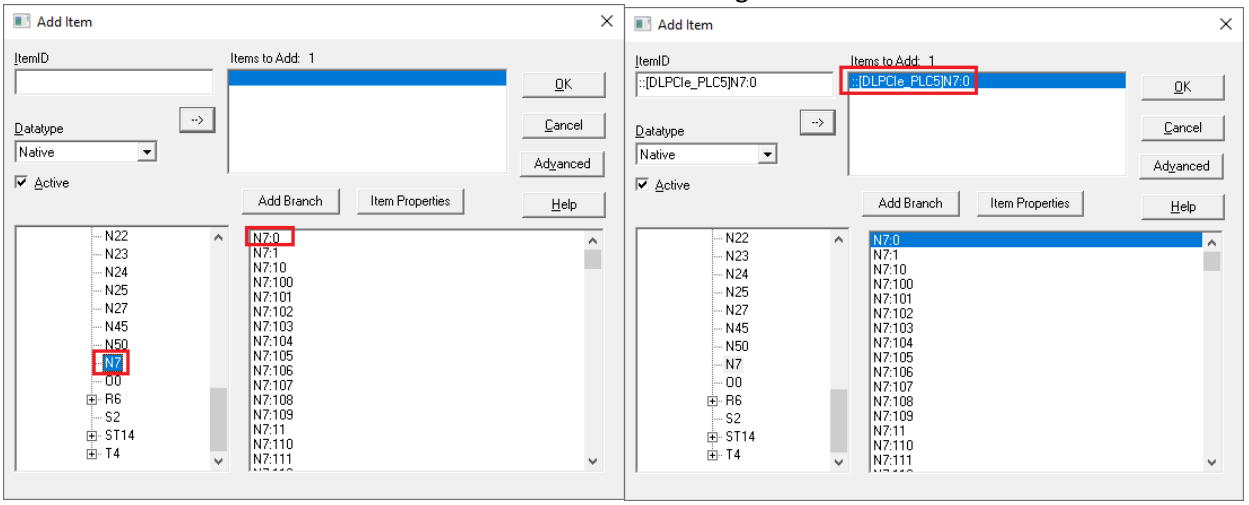
Select DLPCIe Server make sure Factory Talk is selected and click OK. Here click Ok to create the Group.



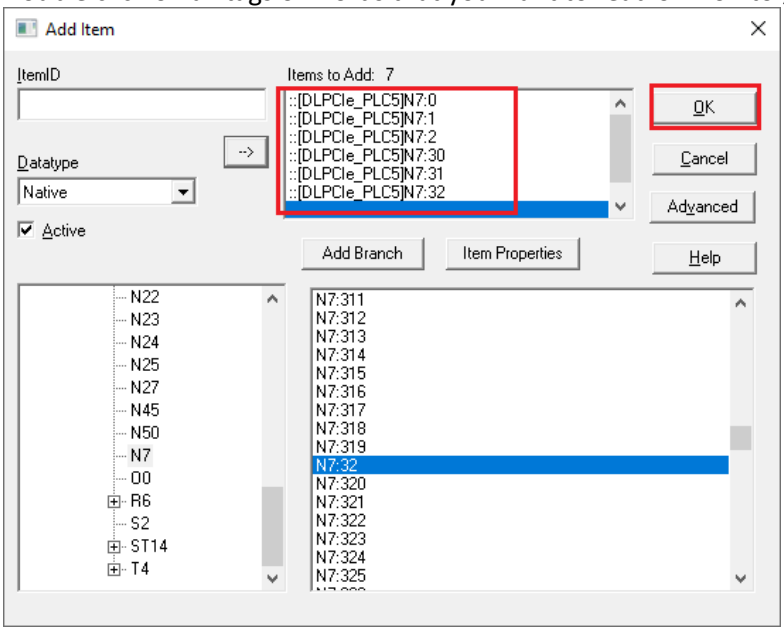
Click on the + sign to expand Online, scroll down to see PLC5 Data files.



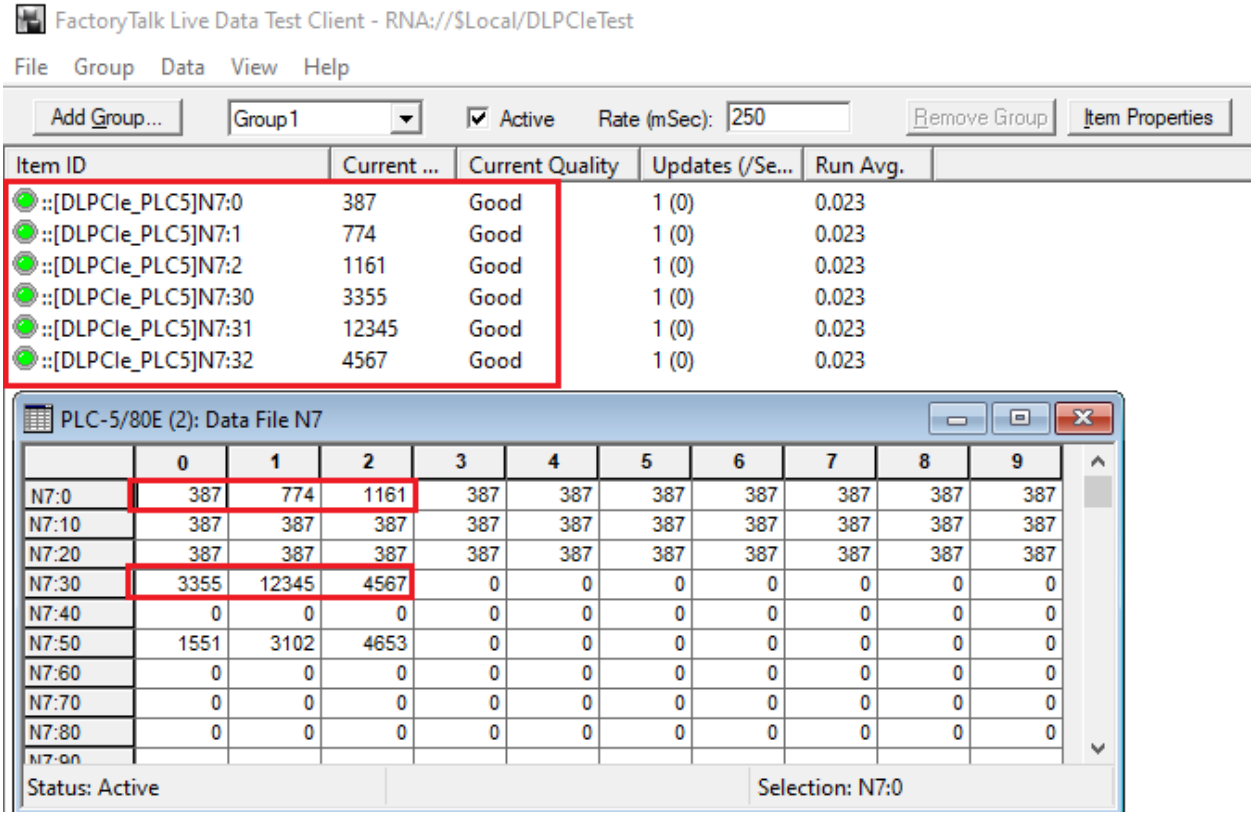
Click on N7 then double click on N7:0 to add word 0 from integer file N7.



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.



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