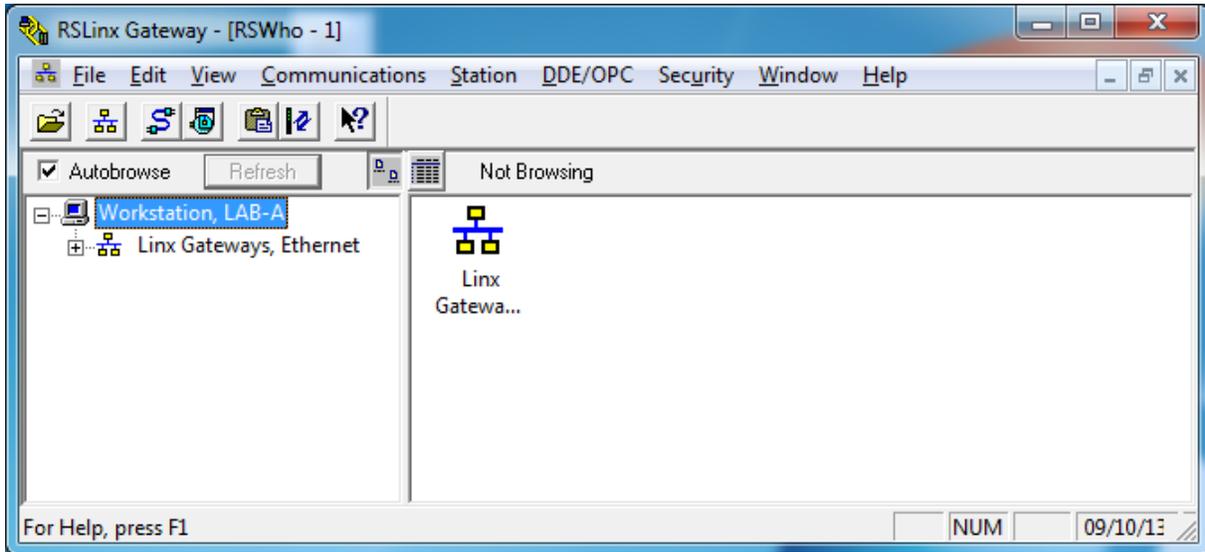


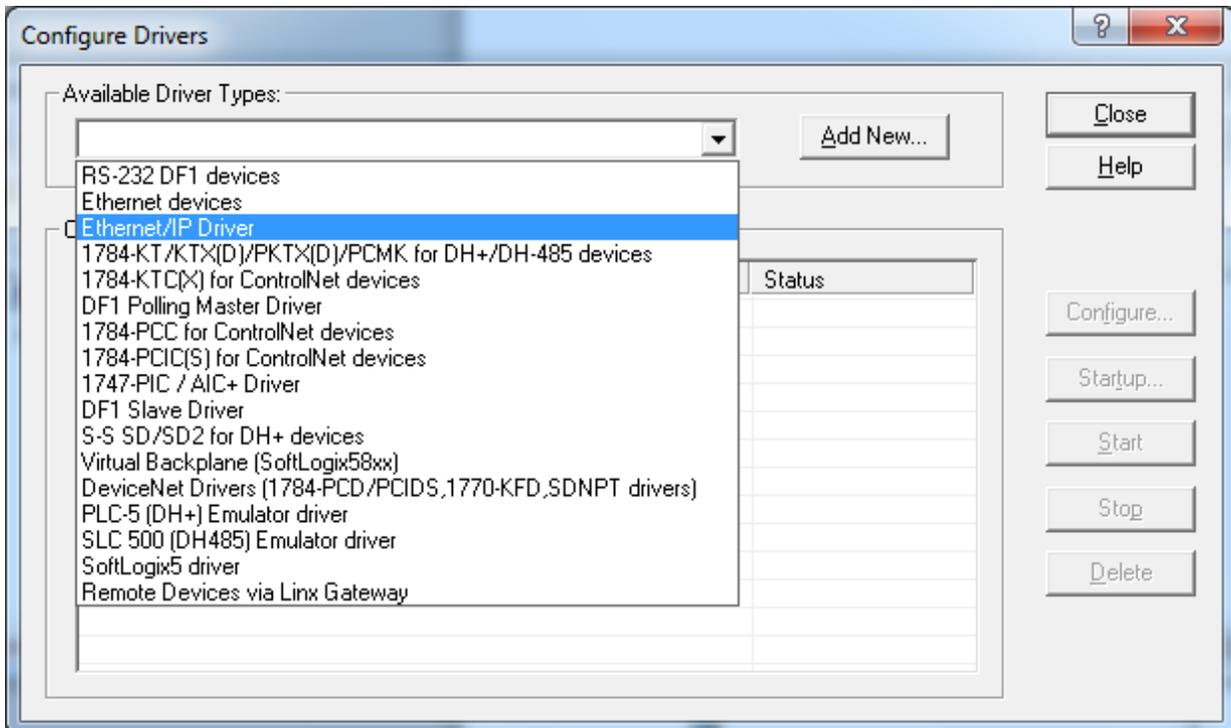
Application note

How to set the Ethernet IP driver in Allen Bradley RSLINX for EQ7000 and OPC topic configuration and OPC test client communicating with Allen Bradley PLC5 DH+ processor.

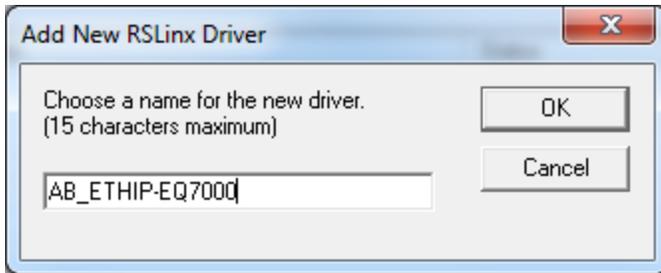
Start RSLINX



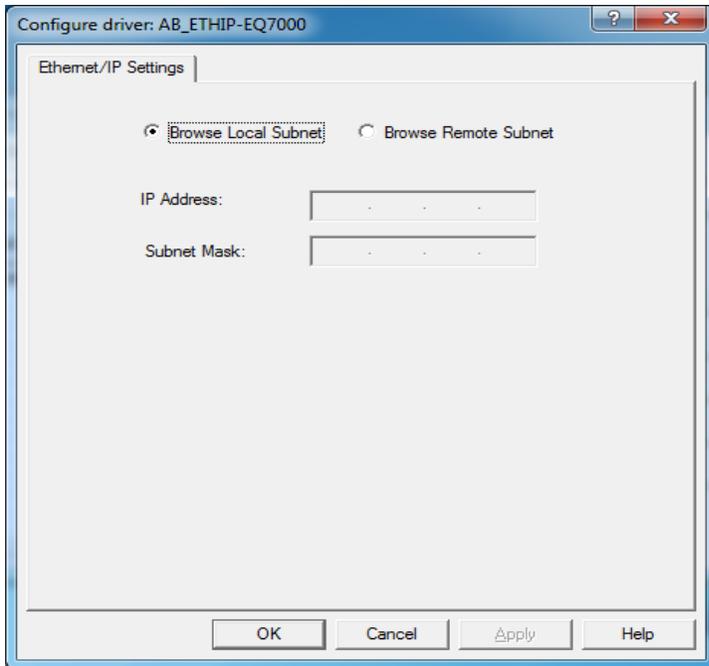
Click configure driver icon the configure driver window should show, select the Ethernet/IP Driver as shown.



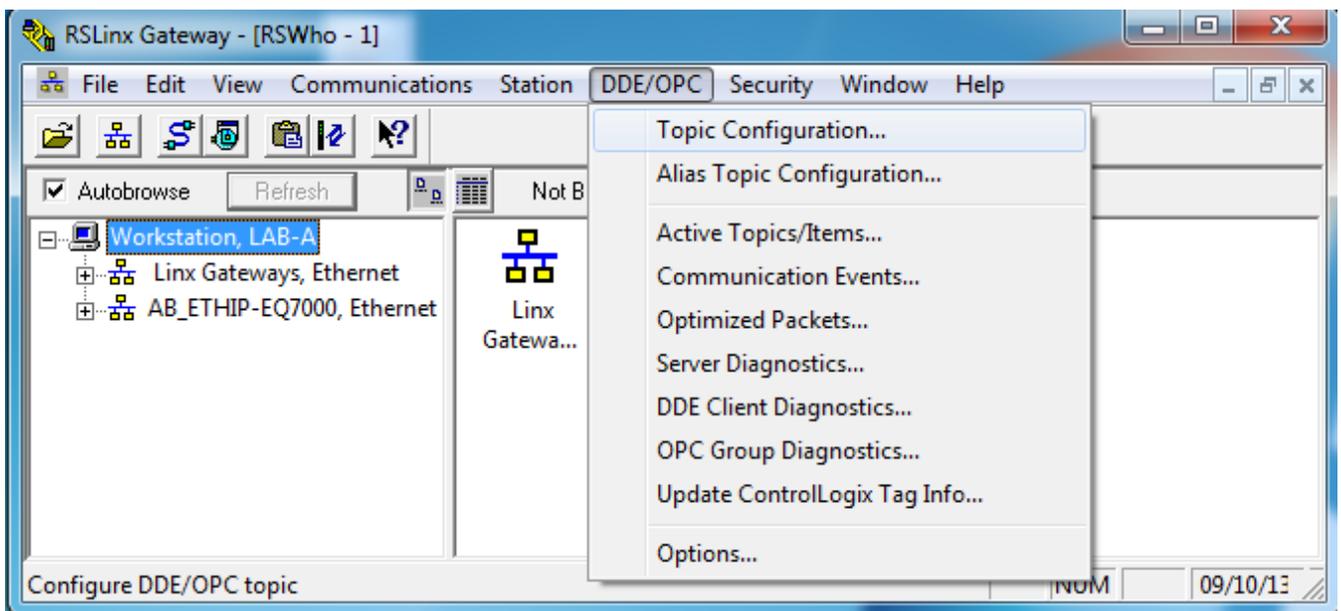
Name the driver any name you want, here we named it AB_ETHIP-EQ7000



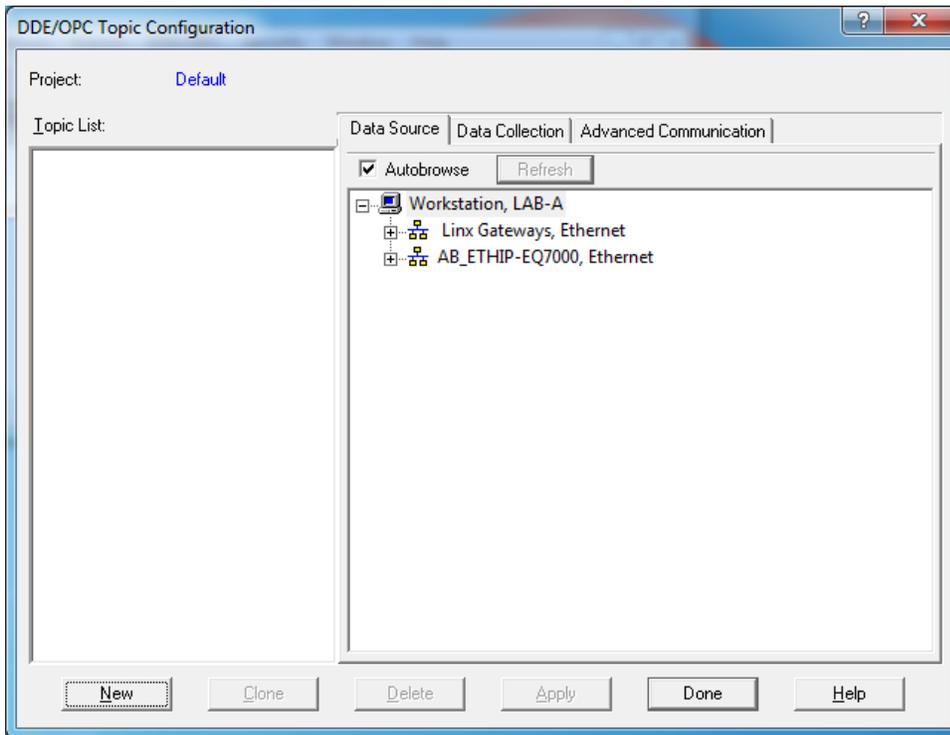
Your configure driver windows with the new names shows up as shown click on OK.



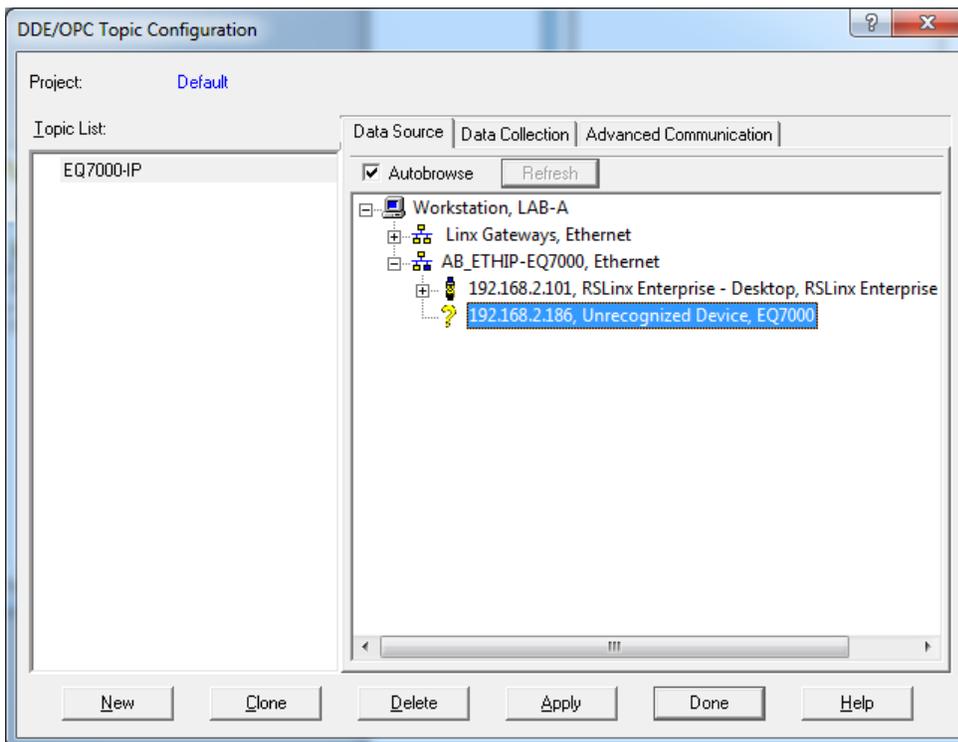
In RSLINX under DDE/OPC click on Topic Configuration as shown below.



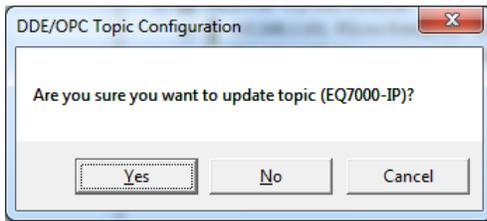
In Topic Configuration window click on New



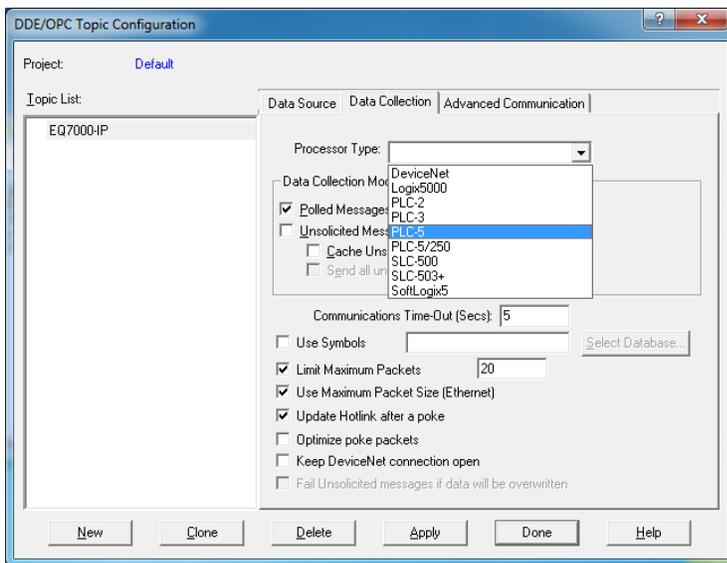
Name it any name you desire, here for example we named it EQ7000-IP, then under Data Source tab browse through the driver and highlight the EQ7000 as shown below, then click on apply.



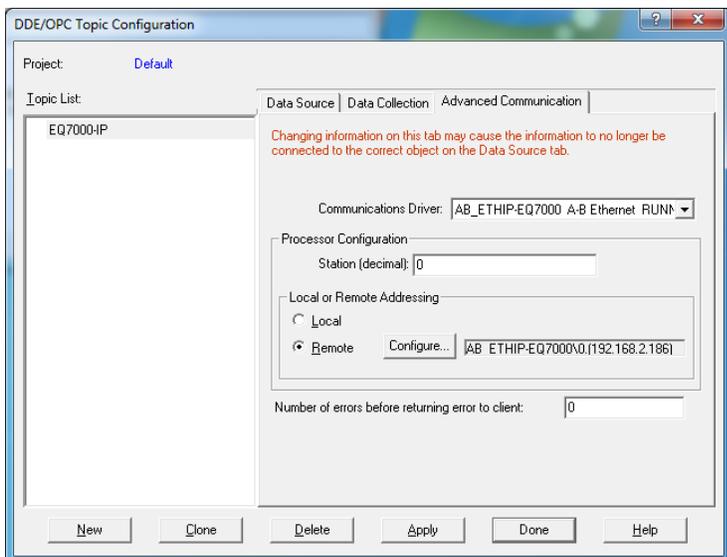
It will ask to confirm update the topic, click on Yes.



Now back to the Topic configuration window click on Data Collection tab and under Processor Type select the type of DH+ processor you want to communicate with, here we selected PLC5.

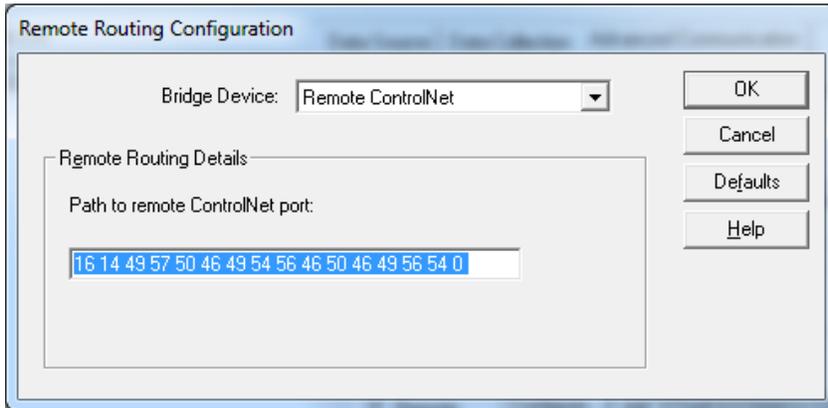


Next click on Advanced Communication tab, beside Communication Driver you should see your driver and beside Configure you should see the driver and IP address of EQ7000 as shown.

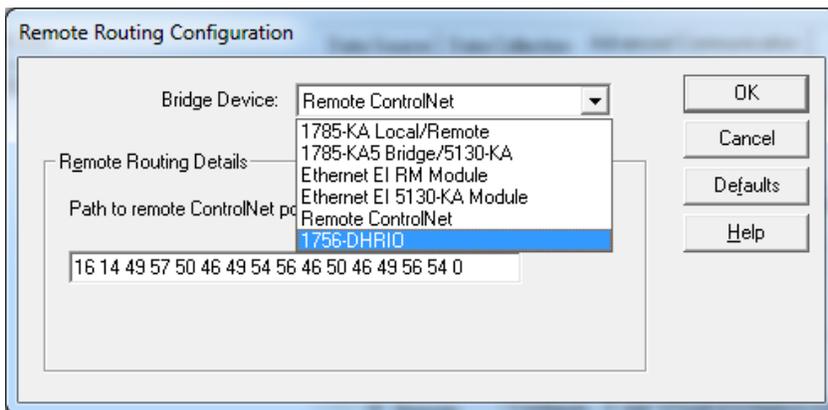


Now click on Configure, it should come up with Remote Routing Configuration window.

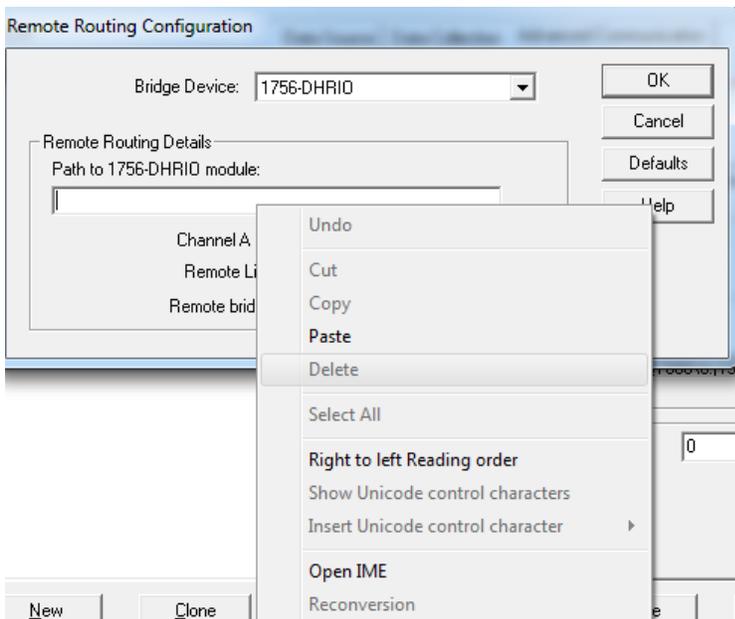
Highlight the path, right click on it and then click on copy.



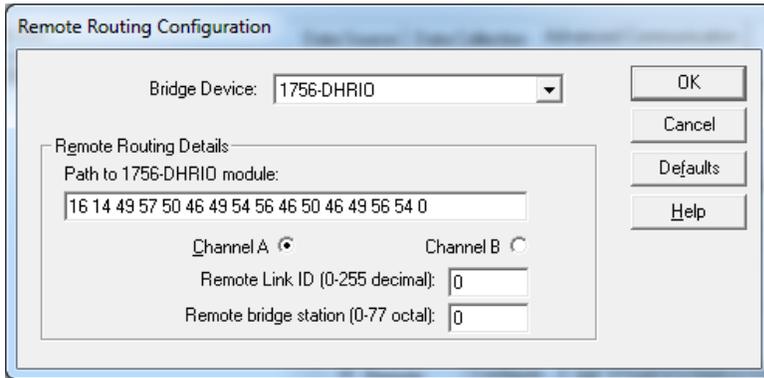
Now under Bridge Device change it to 1765-DHRIO, once you change that the path will become blank.



Right click in the path and click on paste to set the path back.

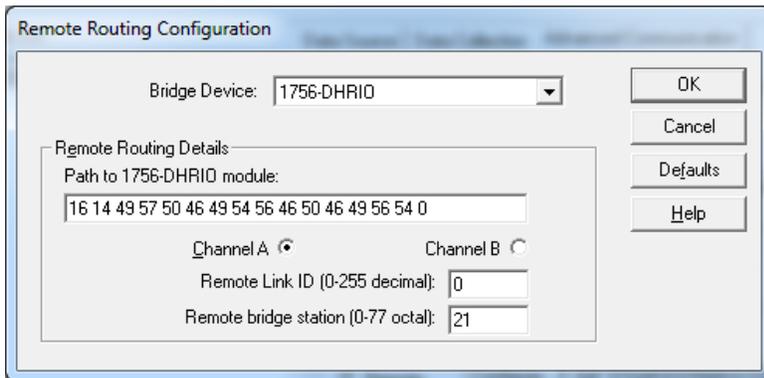


Here you will have the path back as shown



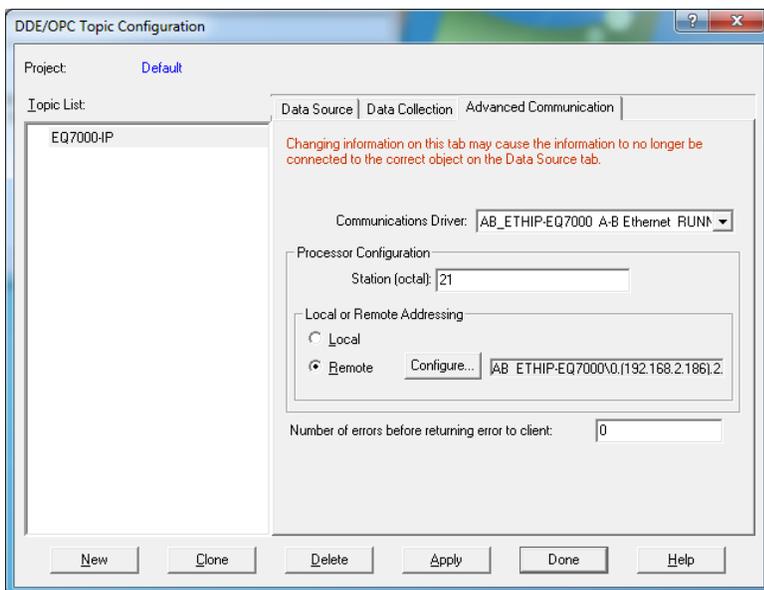
The dialog box is titled "Remote Routing Configuration". It features a "Bridge Device" dropdown menu set to "1756-DHRIO". Below this is a "Remote Routing Details" section containing a "Path to 1756-DHRIO module:" text box with the value "16 14 49 57 50 46 49 54 56 46 50 46 49 56 54 0". There are two radio buttons for "Channel A" (selected) and "Channel B". Below these are two text boxes: "Remote Link ID (0-255 decimal):" with the value "0" and "Remote bridge station (0-77 octal):" with the value "0". On the right side of the dialog, there are buttons for "OK", "Cancel", "Defaults", and "Help".

Enter the node address number of the PLC that you want to communicate with in Remote Bridge station (note it is in octal) also make sure Link ID is 0 and it is on Channel A as shown below, click on OK.



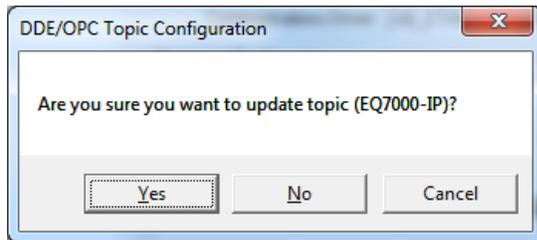
This dialog box is identical to the one above, but the "Remote bridge station (0-77 octal):" text box now contains the value "21".

Now under Advanced Communication tab make sure the station number is same as you set it and click on apply

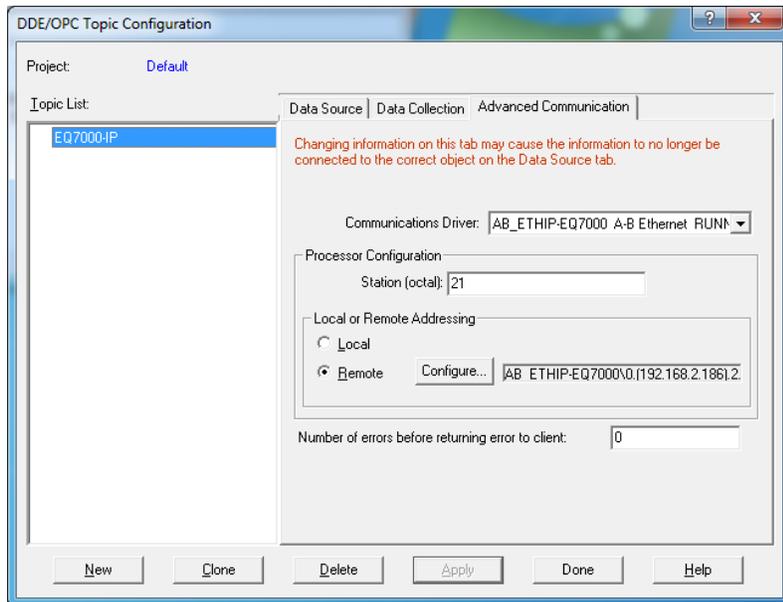


The dialog box is titled "DDE/OPC Topic Configuration" and has three tabs: "Data Source", "Data Collection", and "Advanced Communication". The "Advanced Communication" tab is active. It shows a "Project:" field set to "Default" and a "Topic List:" containing "EQ7000-IP". A red warning message states: "Changing information on this tab may cause the information to no longer be connected to the correct object on the Data Source tab." Below this is a "Communications Driver:" dropdown menu set to "AB_ETHIP-EQ7000 A-B Ethernet RUN". The "Processor Configuration" section includes a "Station (octal):" text box with the value "21". Under "Local or Remote Addressing", the "Remote" radio button is selected, and the "Configure..." button is visible next to the address "AB_ETHIP-EQ7000\0.(192.168.2.186).2". At the bottom, there is a "Number of errors before returning error to client:" text box with the value "0". At the very bottom of the dialog are buttons for "New", "Clone", "Delete", "Apply", "Done", and "Help".

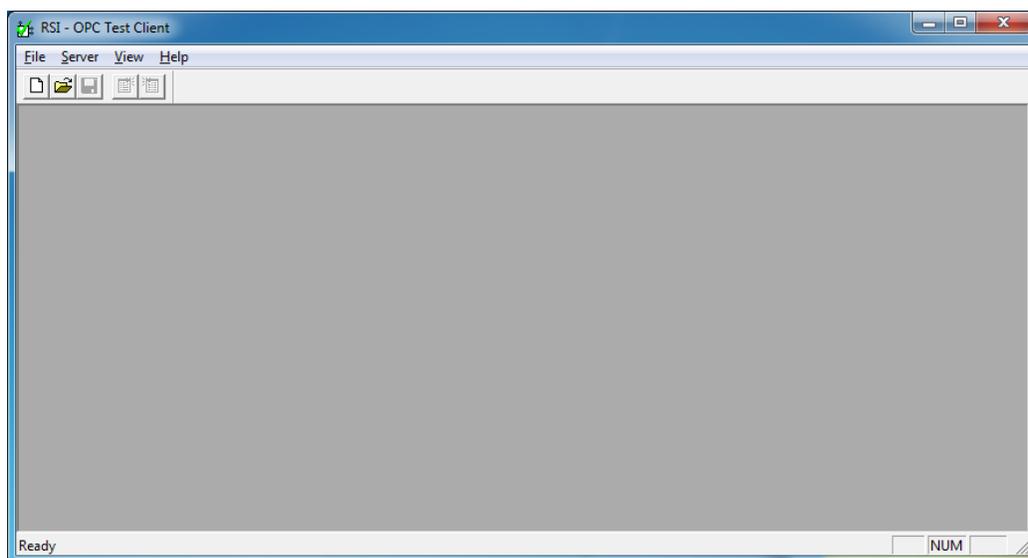
Click on Yes to confirm update the topic.



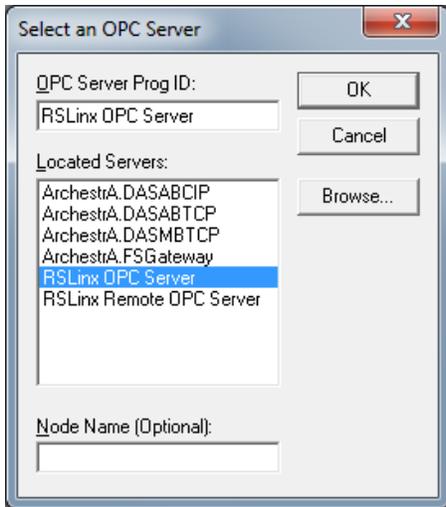
Here click on Done.



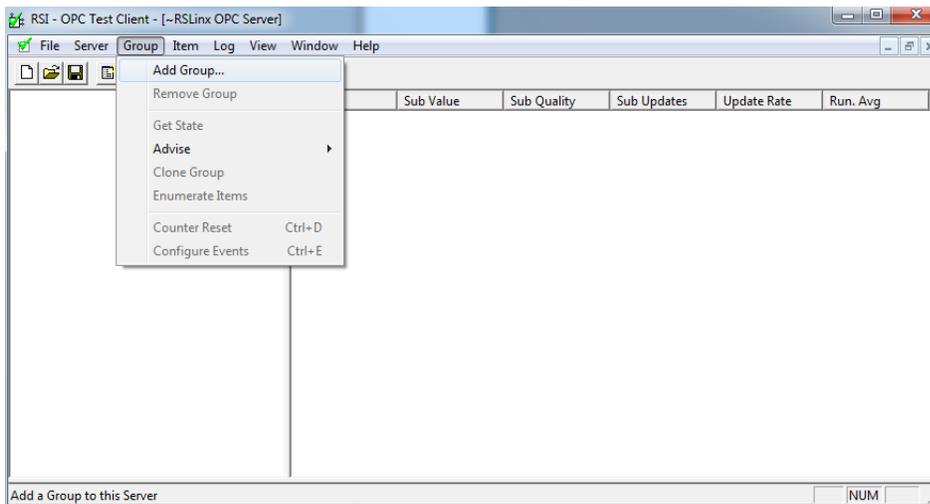
Here you are done with topic configuration now you can start your OPC client and get the data required, here for testing purposes we used the OPC Test Client which is under RSLINX Tools.



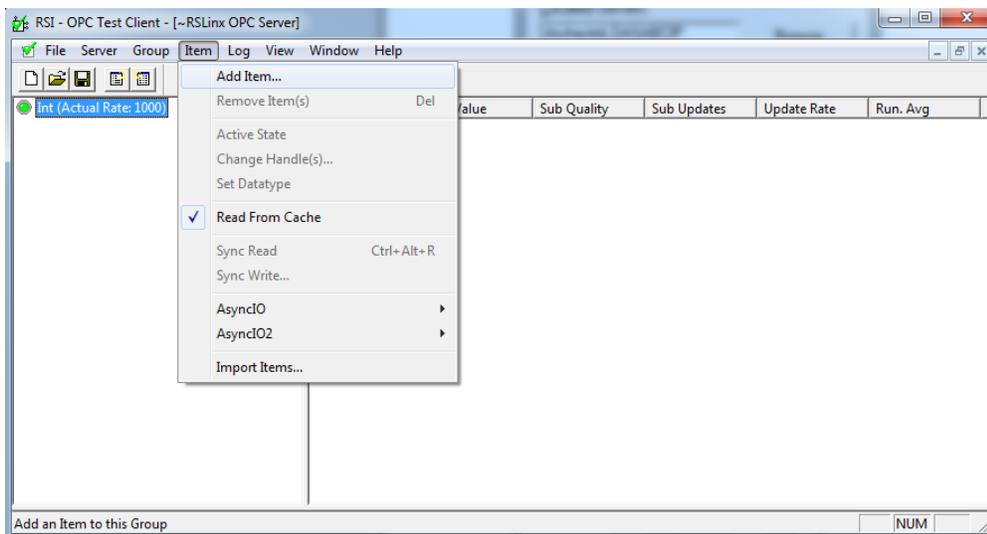
Under file open a new one, then select RSLinx OPC Server and click on OK



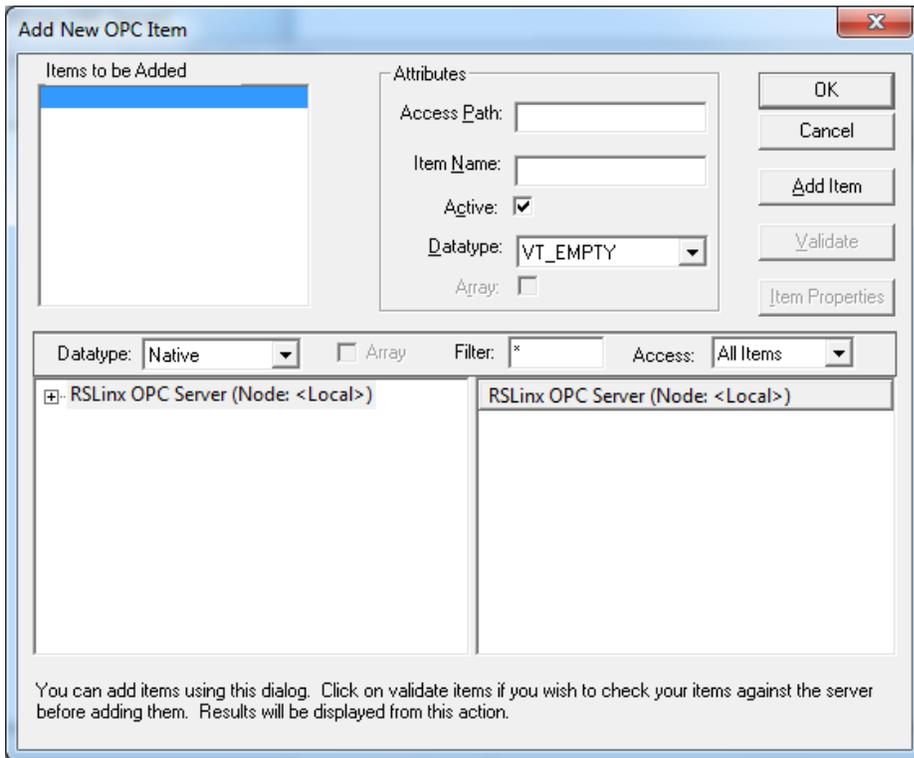
Add a group as shown and name it any name you like.



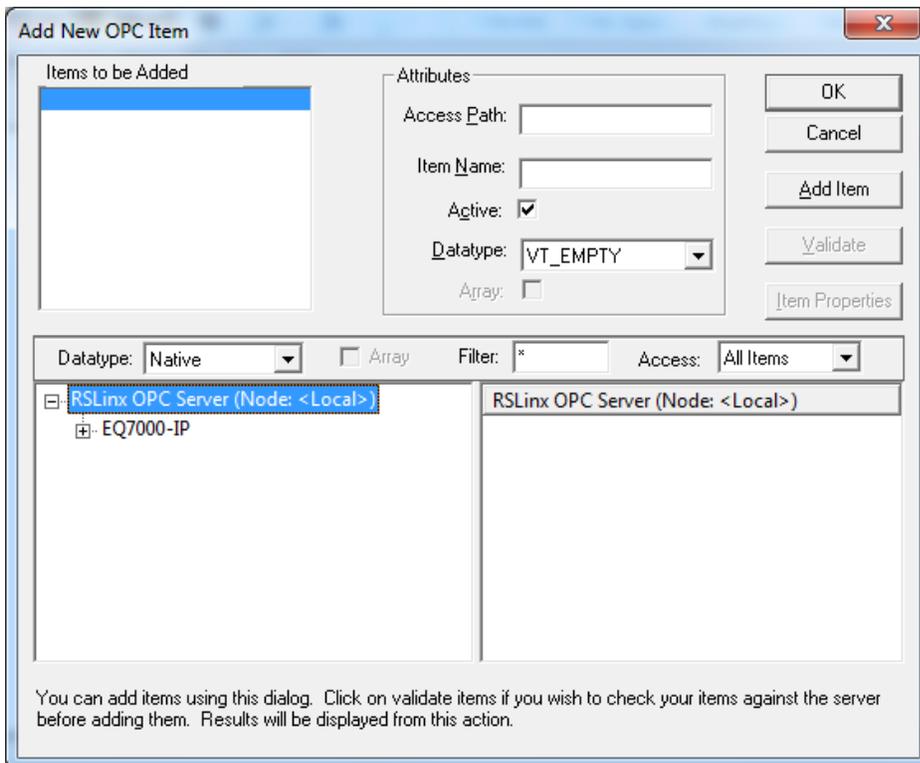
Add an Item as shown



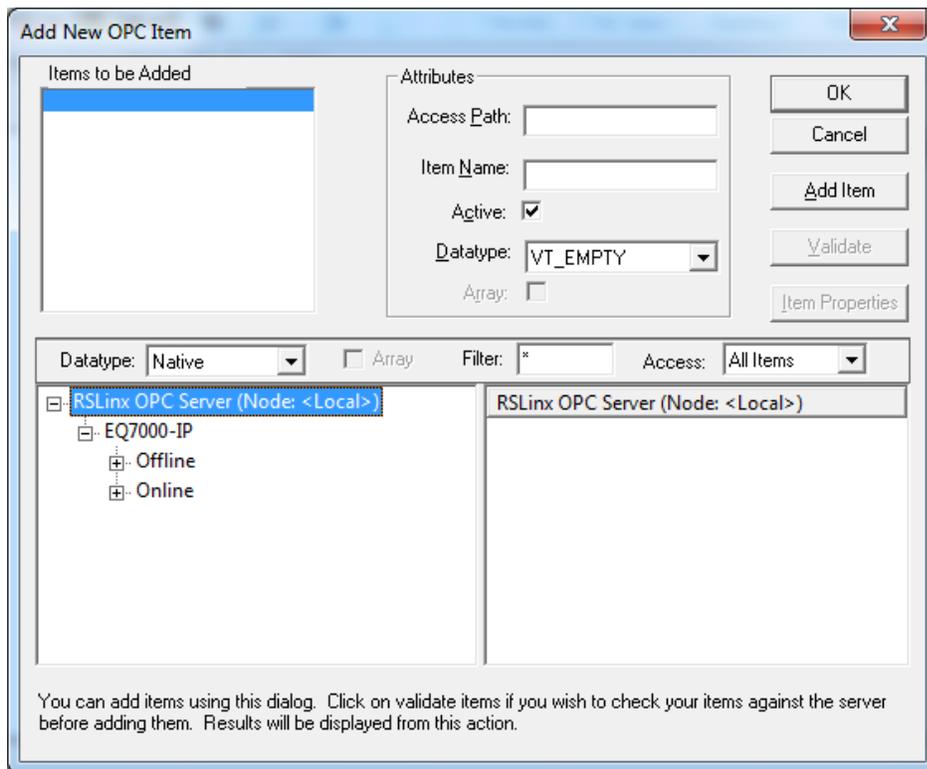
It should come up with Add New OPC Item window.



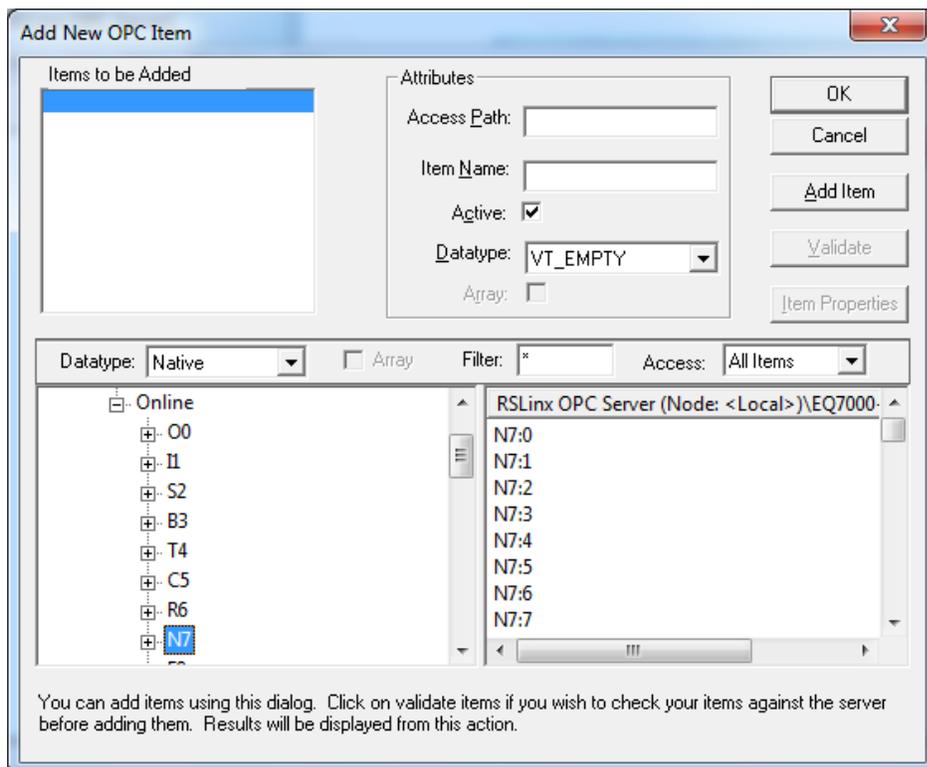
Click on the Plus sign in your RSLINX OPC Server then you should see your topic



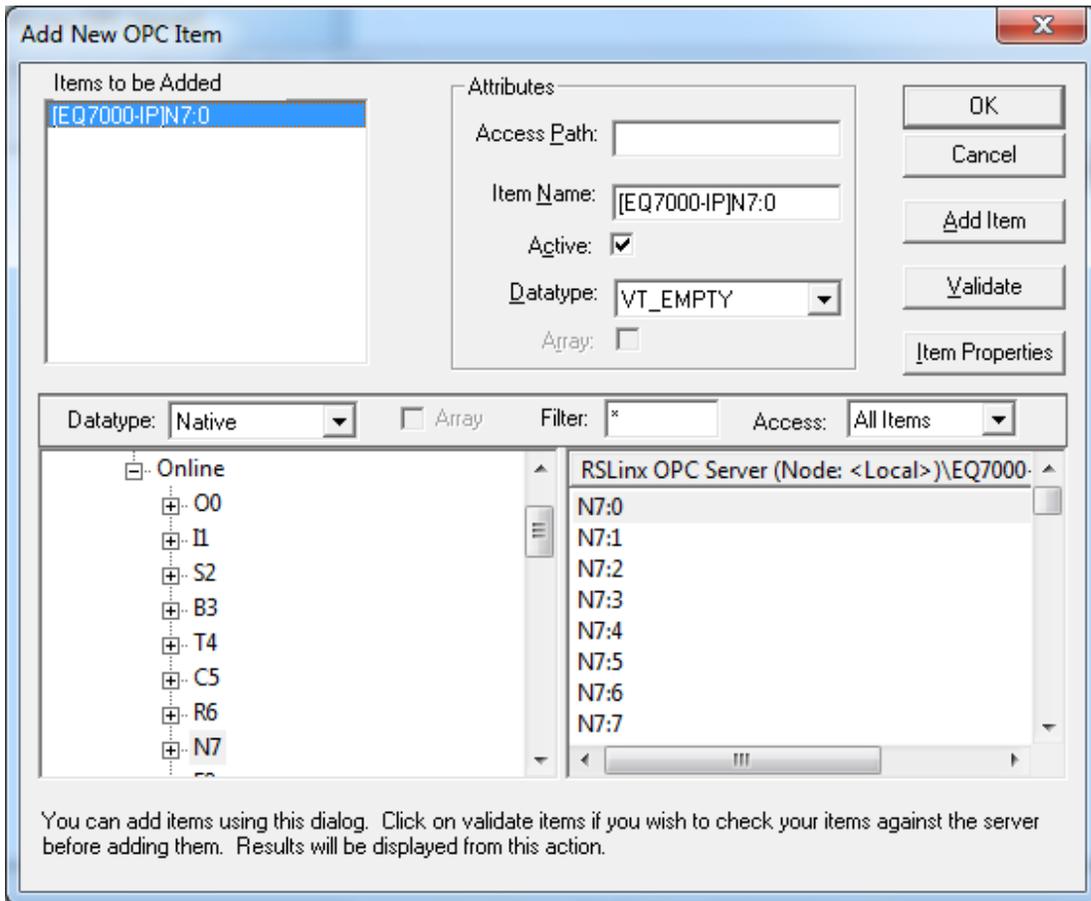
Click on the + sign of the topic here is our EQ7000-IP, then click on Online



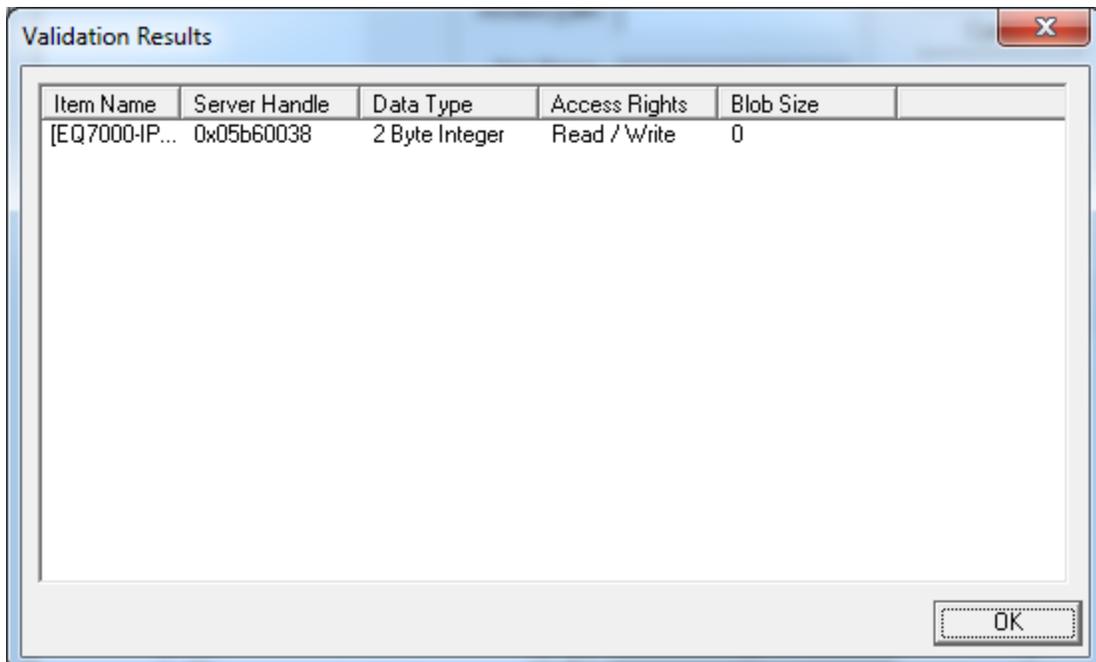
Here you should see all the data files in your PLC, click on any one that you want to access, here for example we selected integer file N7.



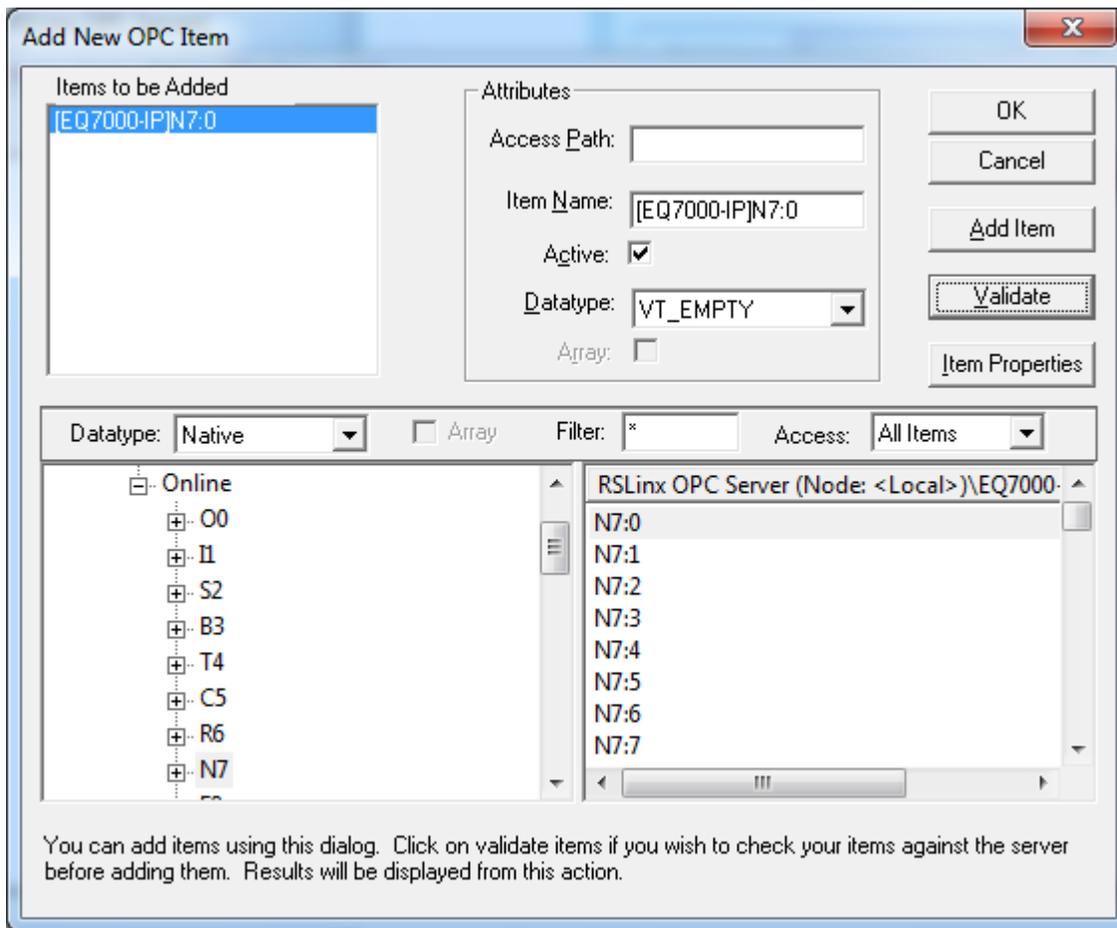
To access the word required click on it like her we did for N7:0 then click on Validate



Your validation should come without error.



Click on OK



You can add groups and item that you want to access from any file that you can see online.

