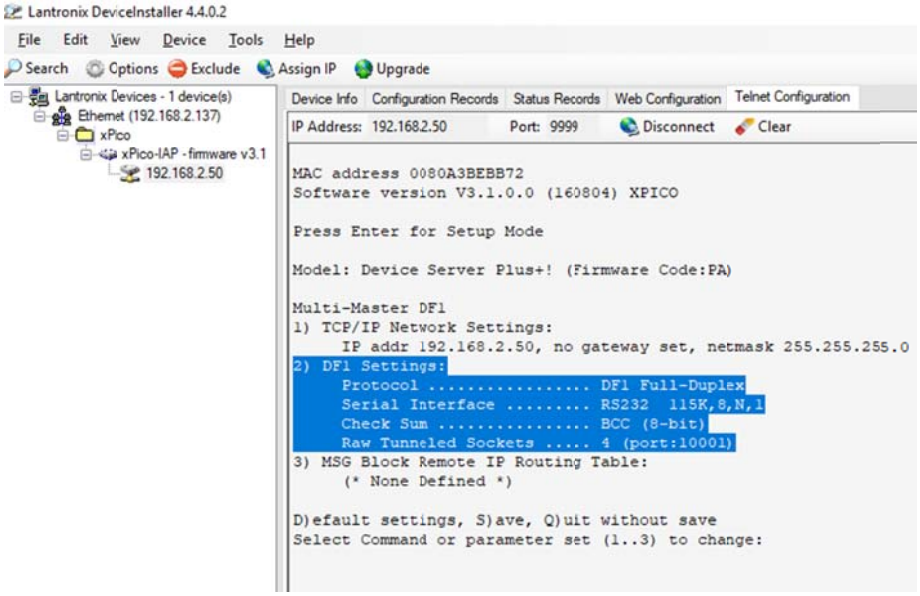
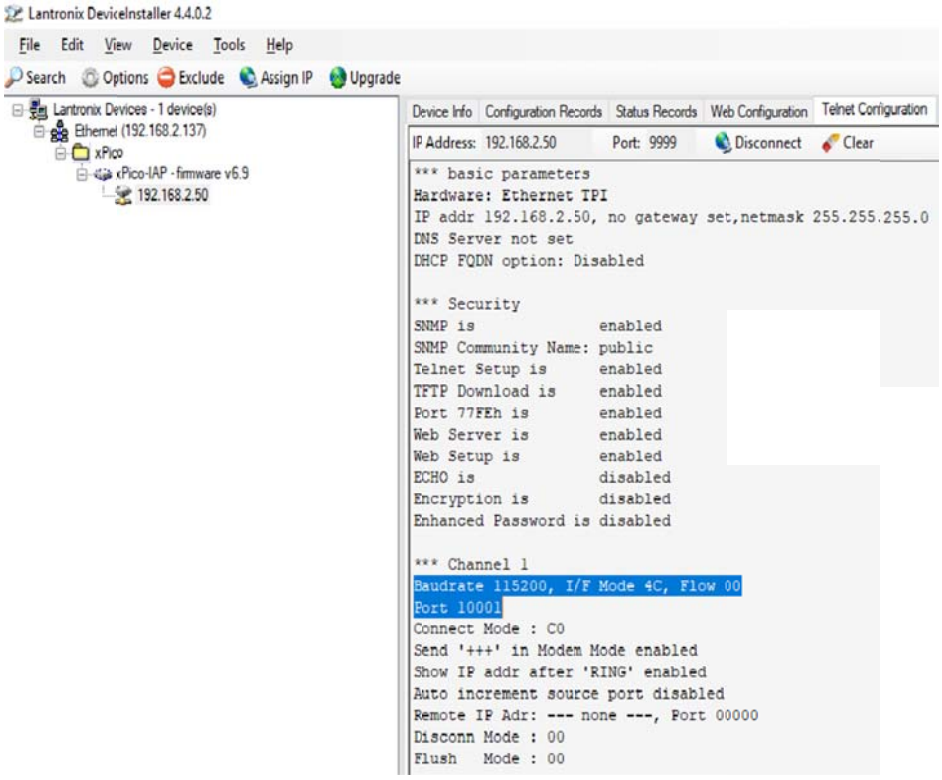
Trihedral VTSCADA setup with DL4500-EDH+ using Allen Bradley Encapsulated DF1 Driver (Tunneled DF1 under Ethernet TCP/IP) With no need to use Lantronix Comport Redirector

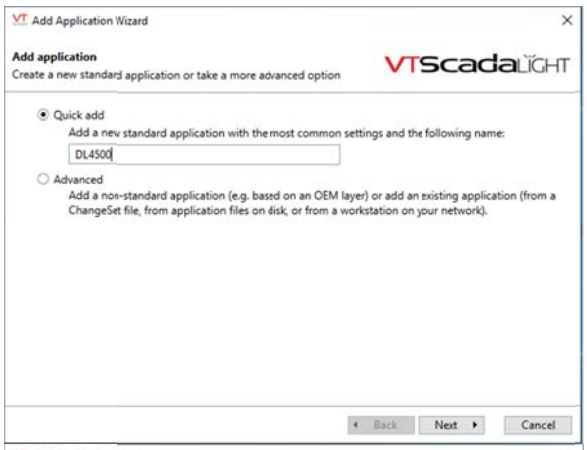
Using Lantronix Device installer, Telnet to the DL4500 and make sure you have set up your DL4500 IP address, If you have a multi master it should look like similar to those seen below, please make sure the DF1 setting highlighted be exactly same.

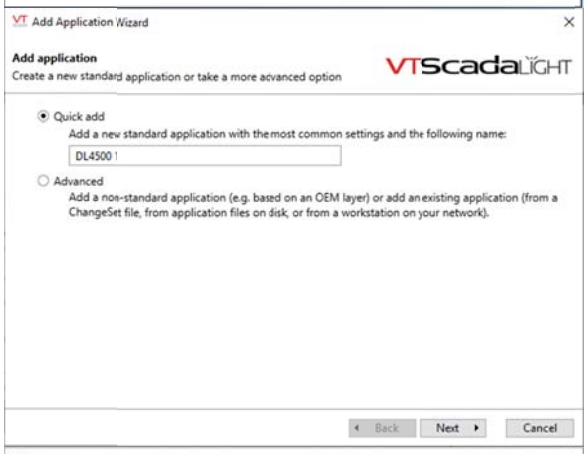


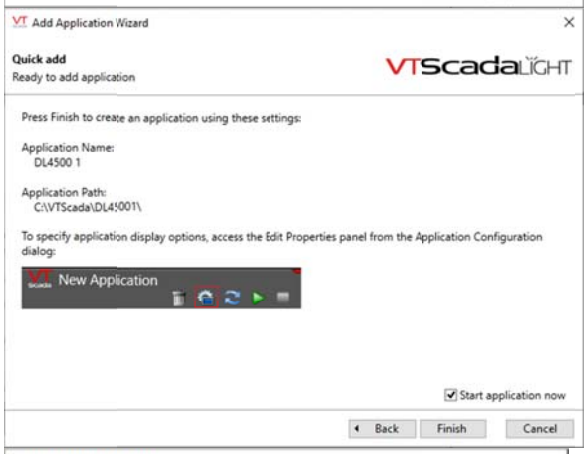
If you have a Standard Tunnel, it should look like similar to those seen below, again please make sure the DF1 setting highlighted to be exactly same.

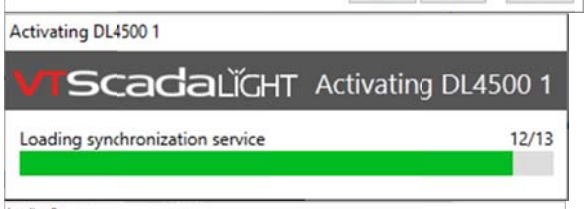


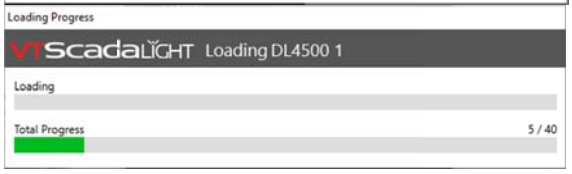
Start Trihedral VTSCADA software and add a new application and type the desired name.



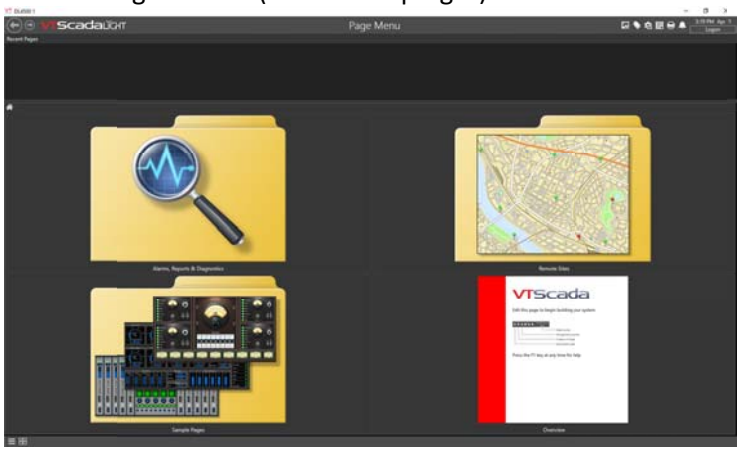




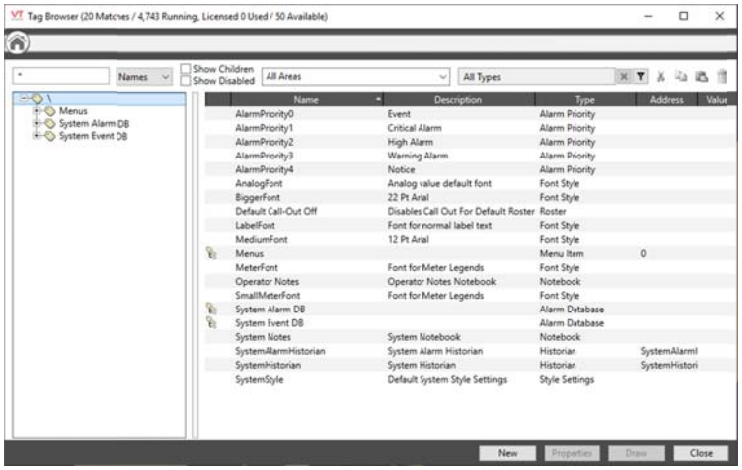




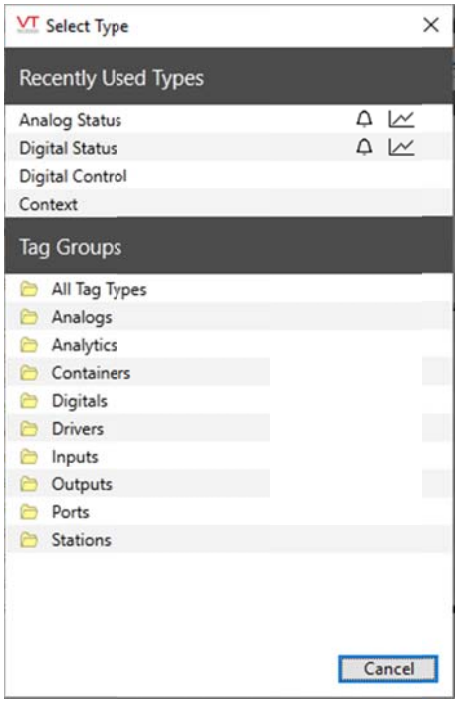
Click on Tag Browser (2nd icon top right)



Click on New

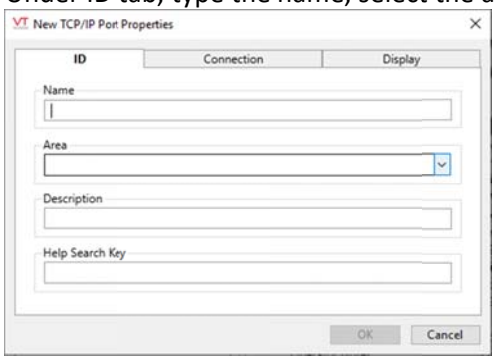


Click on Ports

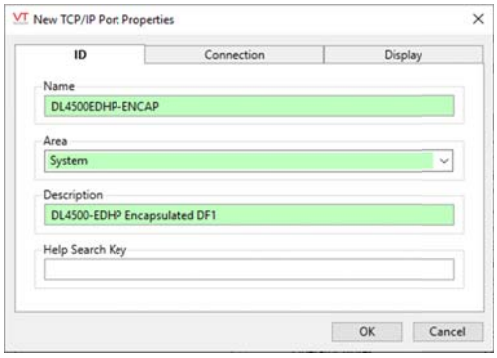


Click on TCP/IP Port

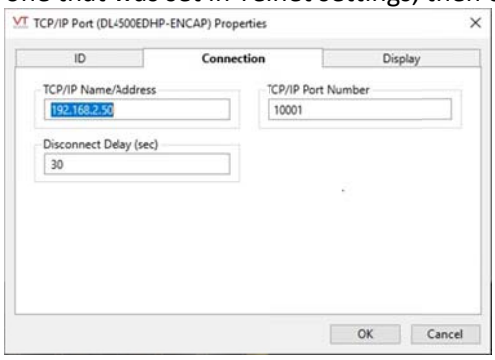
Under ID tab, type the name, select the area and type the description of the port.



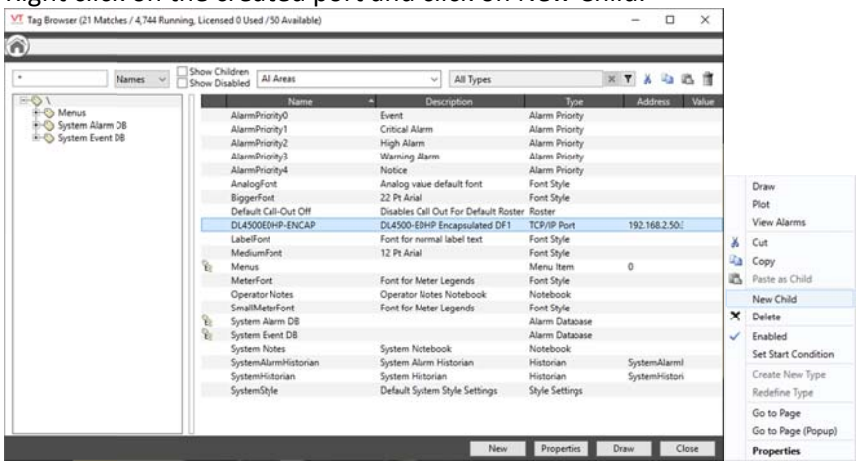
Click on OK



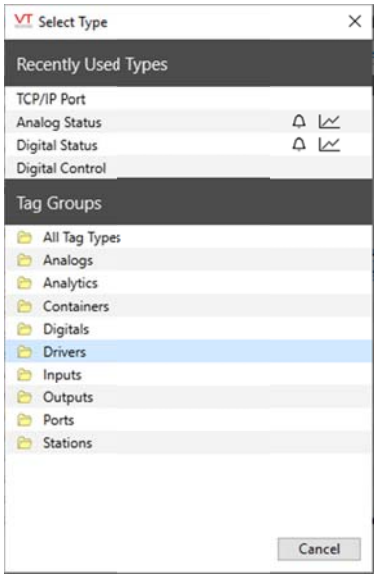
Under Connection tab, enter the DL4500 IP address and change the TCP/IP port to 10001 same to the one that was set in Telnet settings, then click on OK.



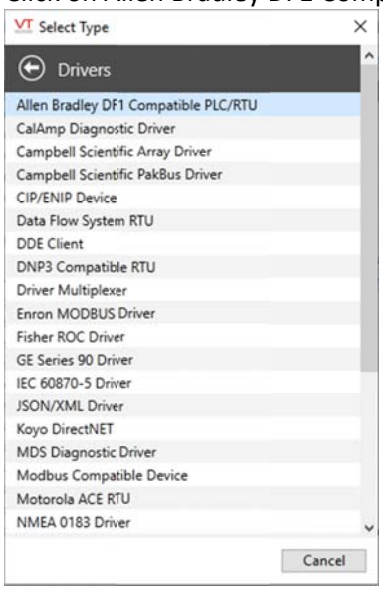
Right click on the created port and click on New Child.



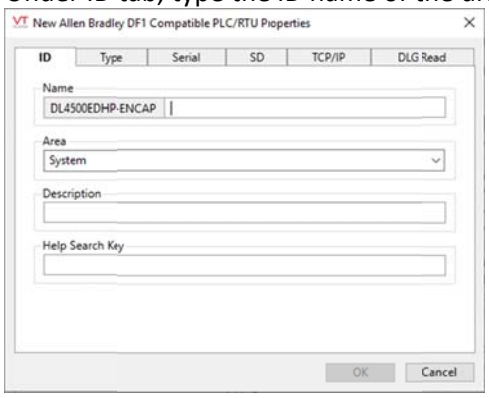
Click on Drivers



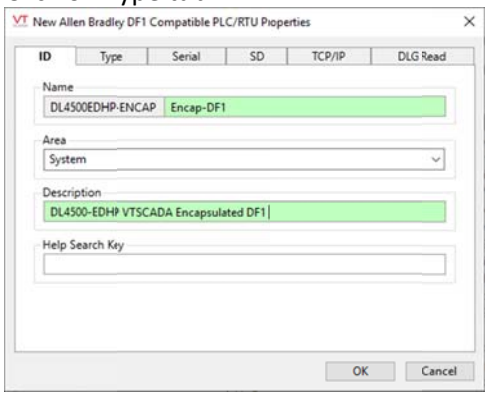
Click on Allen Bradley DF1 Compatible PLC/RTU to select the DF1 driver.



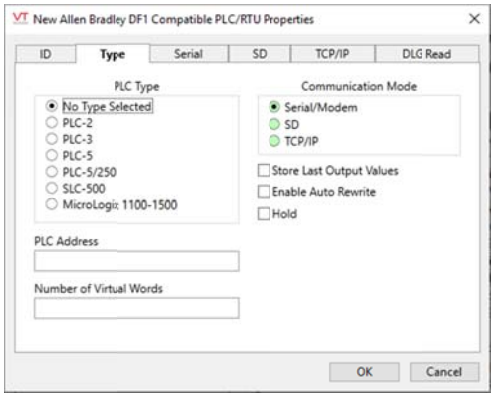
Under ID tab, type the ID name of the driver, select the area and type the description.



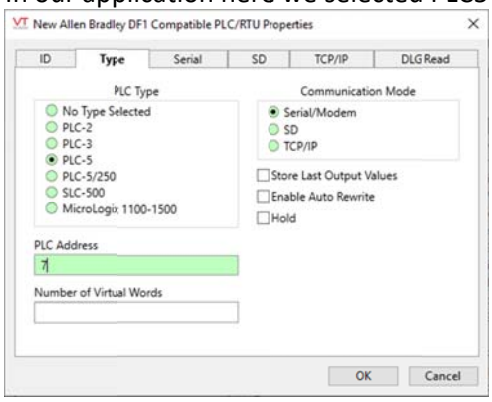
Click on Type tab



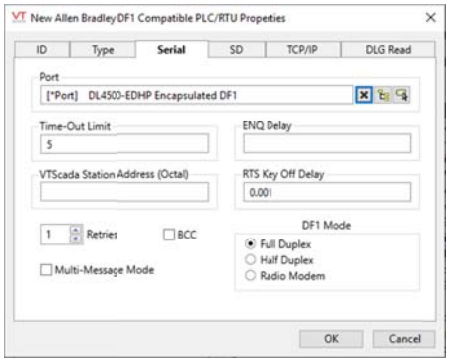
Under Type tab, select your PLC type, for Communication mode select Serial/Modem, and enter the PLC node address number in Octal.



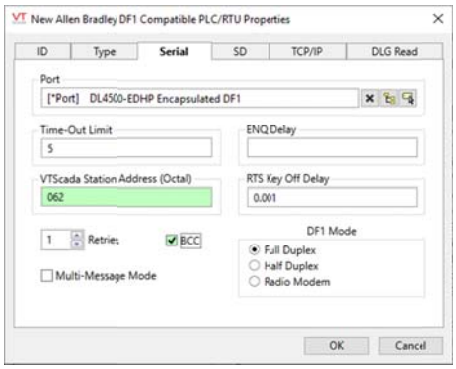
In our application here we selected PLC5 whose node address is 7, then click serial tab.



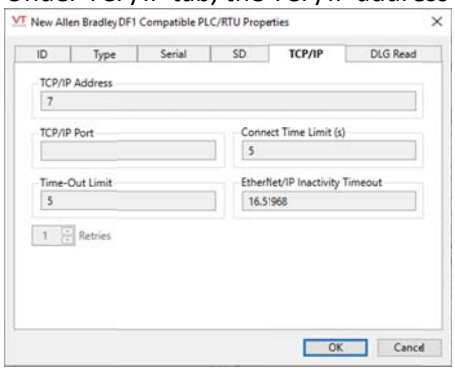
Under Serial tab, make sure to check mark BCC, enter the DL4500 node address number in Octal (which is the last octet of the IP address, refer to DL4500 manual for details) and select the Full Duplex for DF1 mode.



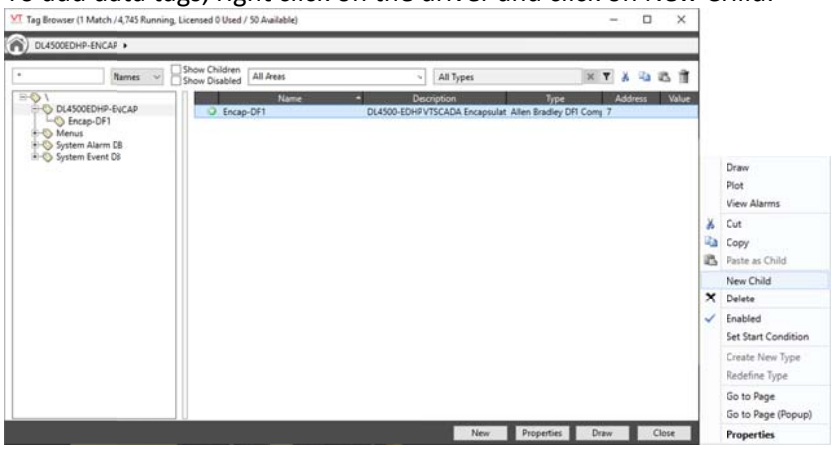
Our DL4500 last octet is 50 Decimal=62 octal, that would be VTSCADA Station address, click on TCP/IP.



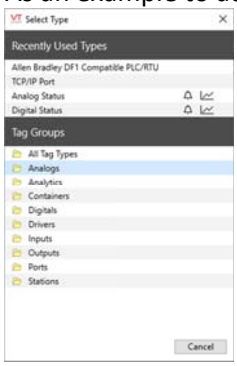
Under TCP/IP tab, the TCP/IP address should come same as the PLC node address number.



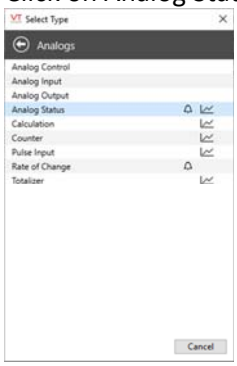
To add data tags, right click on the driver and click on New Child.



As an example to add the 1st word of integer file N7, click on Analogs.



Click on Analog Status.



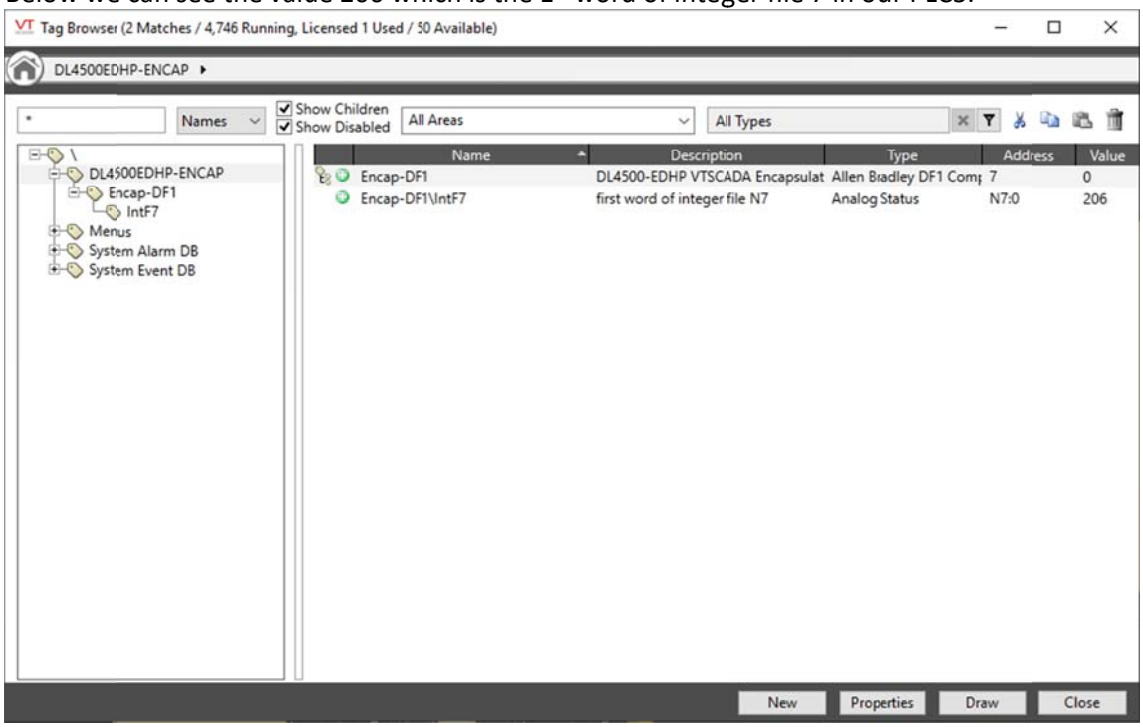
Type an ID name for the tag and description.

Under I/O tab, type the address of the tag.

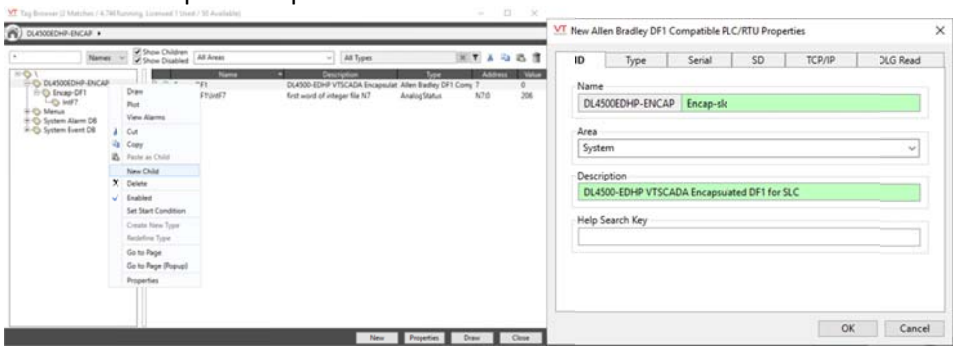
Click on Scaling tab.

Enter desired scaling for your tag then click ok.

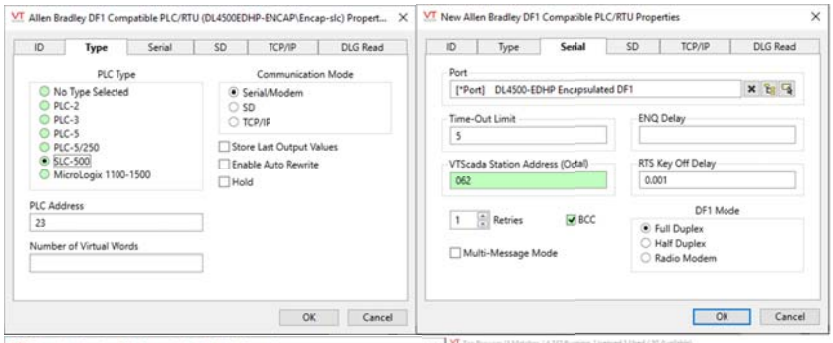
Below we can see the value 206 which is the 1st word of integer file 7 in our PLC5.

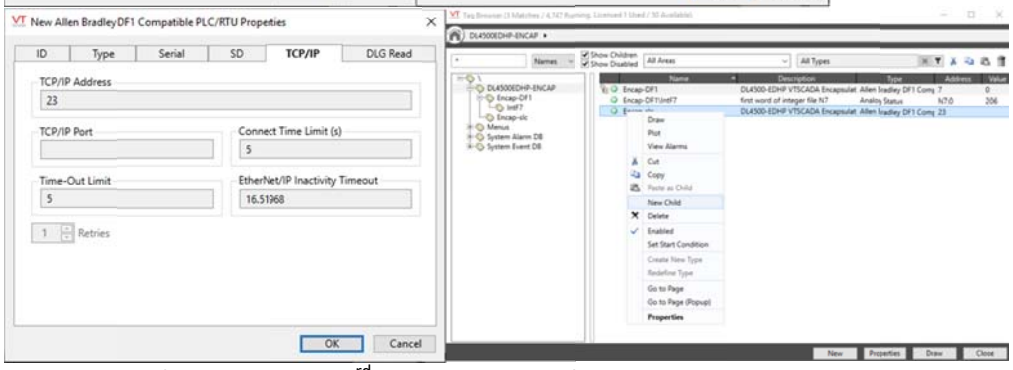


Here we will repeat the process for the SLC504

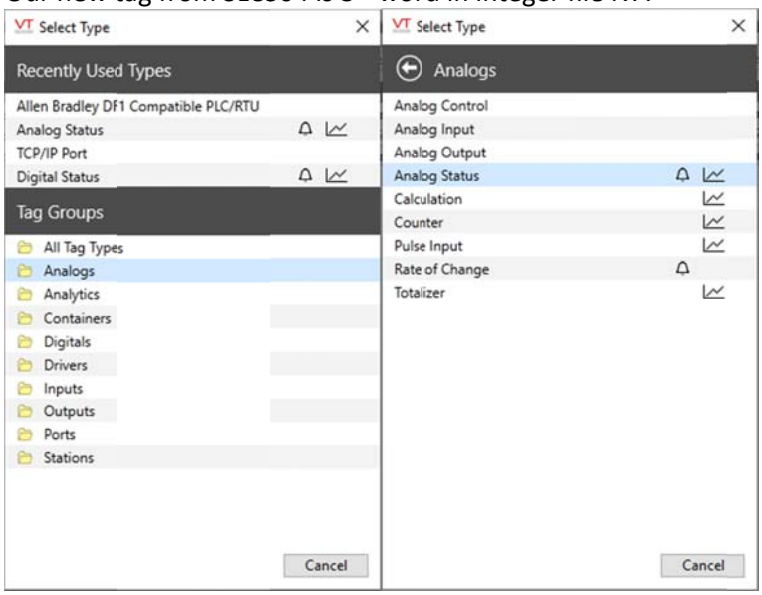


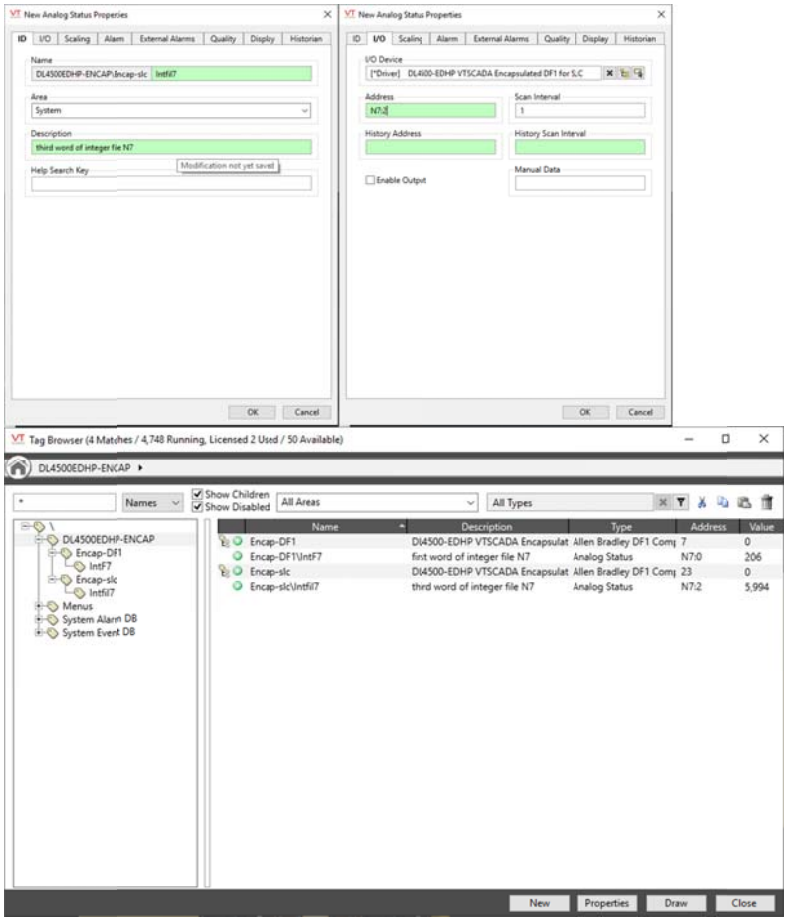
Our SLC504 DH+ node address number is 23 Octal.





Our new tag from SLC504 is 3rd word in integer file N7.





Those two values are confirmed here by monitoring data N7 of PLC5 & SLC504 in RSLINX.