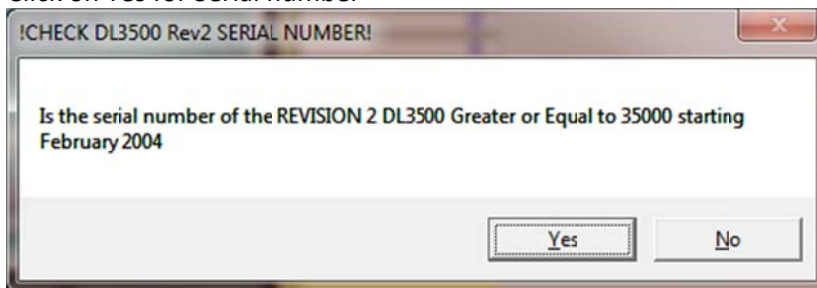


Replace Allen Bradley 1770-KF3 or 1747-UIC-USB with Equustek DL3500 DF1 to DH485 using RSLINX DF1 Driver

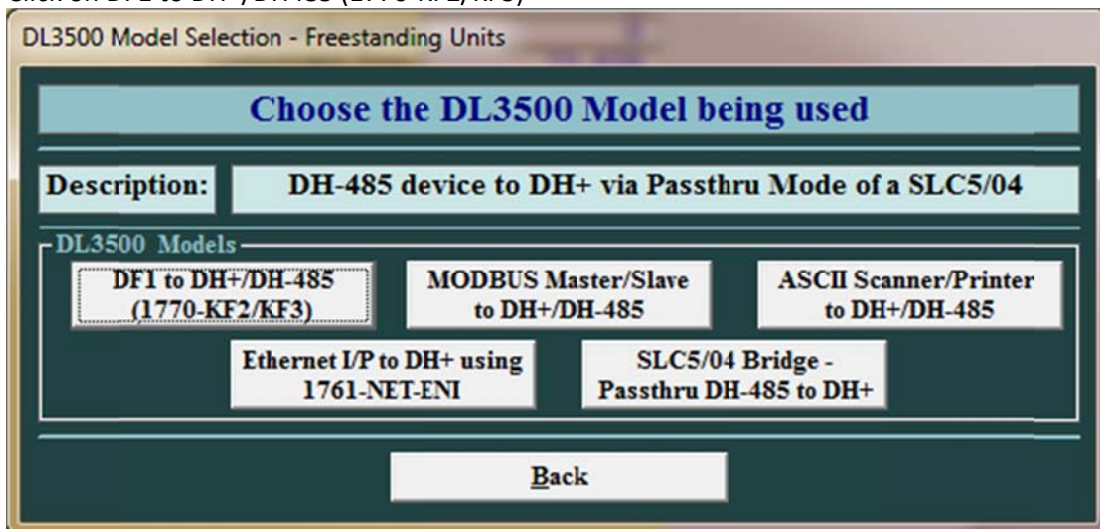
To configure the DL3500 start DL32 configuration software and Select DL3500 Models.



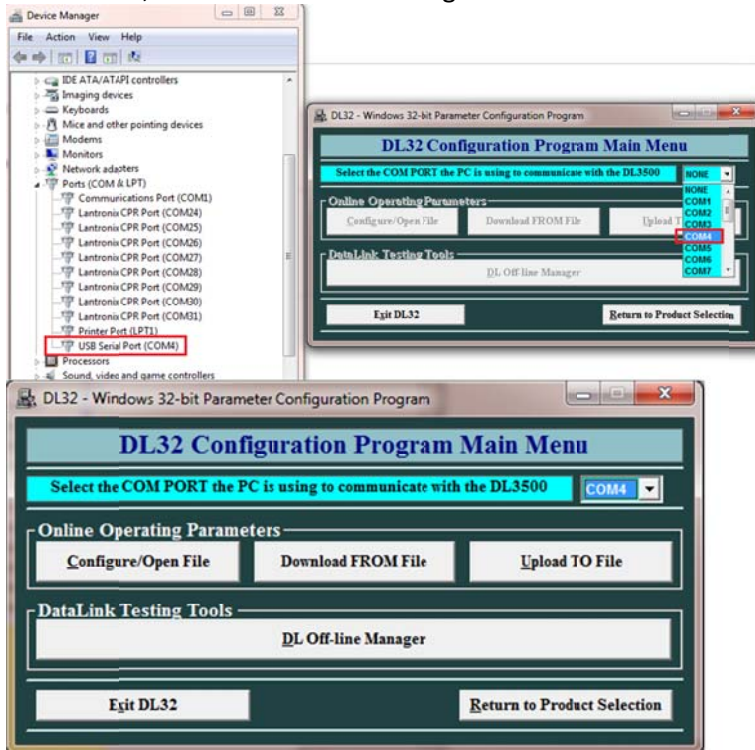
Click on Yes for Serial number



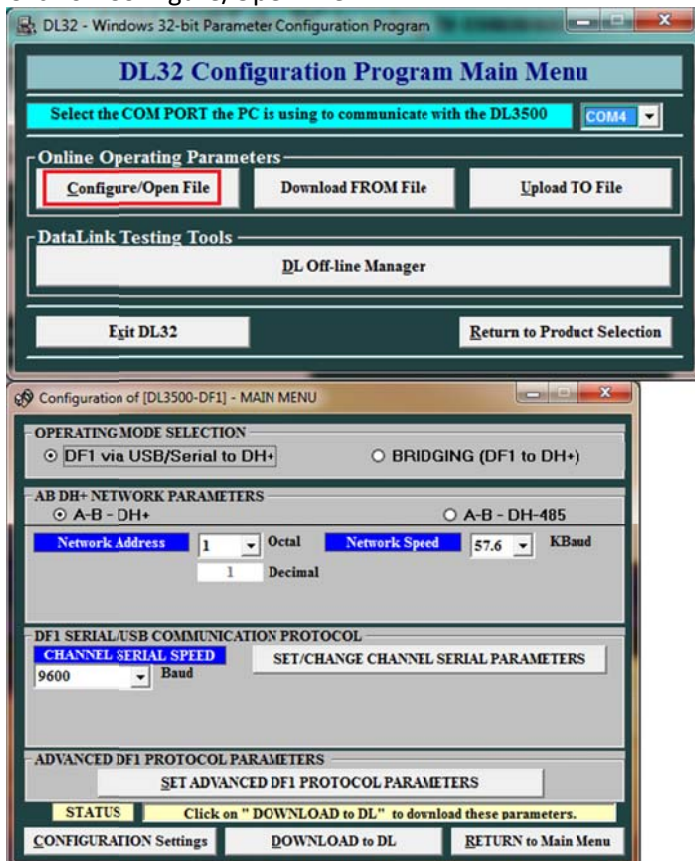
Click on DF1 to DH+/DH485 (1770-KF2/KF3)



If you are not using the RS232 connection, find the USB Com Port the PC is using to communicate with the DL3500, look under device manager and select it from the drop menu in DL32 as shown.



Click on Configure/Open File.



Keep operating mode selection on DF1 Via USB/Serial, then select AB-DH485.

Configuration of [DL3500-DF1] - MAIN MENU

OPERATING MODE SELECTION

☒ DF1 via USB/Serial to DH485 ☐ BRIDGING (DF1 to DH-485)

AB DH-485 NETWORK PARAMETERS

☐ A-B - DH+ ☒ A-B - DH-485

Network Address: 1 (Decimal) Network Speed: 19.2 (KBaud)

DF1 SERIAL/USB COMMUNICATION PROTOCOL

CHANNEL SERIAL SPEED: 9600 (Baud) SET/CHANGE CHANNEL SERIAL PARAMETERS

ADVANCED DF1 PROTOCOL PARAMETERS

SET ADVANCED DF1 PROTOCOL PARAMETERS

STATUS: Click on " DOWNLOAD to DL " to download these parameters.

CONFIGURATION Settings DOWNLOAD to DL RETURN to Main Menu

Form Network Address Drop Menu, select the node address number for the DL3500 on DH485 Network, to avoid duplicate node or address conflict, make sure **not to select** a node that already exist on the DH485 network.

Configuration of [DL3500-DF1] - MAIN MENU

OPERATING MODE SELECTION

☒ DF1 via USB/Serial to DH485 ☐ BRIDGING (DF1 to DH-485)

AB DH-485 NETWORK PARAMETERS

☐ A-B - DH+ ☒ A-B - DH-485

Network Address: 1 (Decimal) Network Speed: 19.2 (KBaud)

DF1 SERIAL/USB COMMUNICATION PROTOCOL

CHANNEL SERIAL SPEED: 9600 (Baud) SET/CHANGE CHANNEL SERIAL PARAMETERS

ADVANCED DF1 PROTOCOL PARAMETERS

SET ADVANCED DF1 PROTOCOL PARAMETERS

STATUS: Click on " DOWNLOAD to DL " to download these parameters.

CONFIGURATION Settings DOWNLOAD to DL RETURN to Main Menu

Select the DH485 baud rate from the drop menu of the Network speed.

Configuration of [DL3500-DF1] - MAIN MENU

OPERATING MODE SELECTION

☒ DF1 via USB/Serial to DH485 ☐ BRIDGING (DF1 to DH-485)

AB DH-485 NETWORK PARAMETERS

☐ A-B - DH+ ☒ A-B - DH-485

Network Address: 1 (Decimal) Network Speed: 19.2 (KBaud)

DF1 SERIAL/USB COMMUNICATION PROTOCOL

CHANNEL SERIAL SPEED: 9600 (Baud) SET/CHANGE CHANNEL SERIAL PARAMETERS

ADVANCED DF1 PROTOCOL PARAMETERS

SET ADVANCED DF1 PROTOCOL PARAMETERS

STATUS: Click on " DOWNLOAD to DL " to download these parameters.

CONFIGURATION Settings DOWNLOAD to DL RETURN to Main Menu

From Channel Serial Speed drop menu select 115.2 K Baud or any other desired serial baud rate.

Configuration of [DL3500-DF1] - MAIN MENU

OPERATING MODE SELECTION

☒ DF1 via USB/Serial to DH485 ☐ BRIDGING (DF1 to DH-485)

AB DH-485 NETWORK PARAMETERS

☐ A-B - DH+ ☒ A-B - DH-485

Network Address: 1 Octal 19.2 KBaud
1 Decimal

DF1 SERIAL/USB COMMUNICATION PROTOCOL

CHANNEL SERIAL SPEED: 115.2 Baud

SET/CHANGE CHANNEL SERIAL PARAMETERS

ROTOCOL PARAMETERS

SET ADVANCED DF1 PROTOCOL PARAMETERS

Click on "DOWNLOAD to DL" to download these parameters.

CONFIGURATION Settings DOWNLOAD to DL RETURN to Main Menu

Click on Set/Change Channel Serial Parameters.

Configuration of [DL3500-DF1] - MAIN MENU

OPERATING MODE SELECTION

☒ DF1 via USB/Serial to DH485 ☐ BRIDGING (DF1 to DH-485)

AB DH-485 NETWORK PARAMETERS

☐ A-B - DH+ ☒ A-B - DH-485

Network Address: 1 Octal 19.2 KBaud
1 Decimal

DF1 SERIAL/USB COMMUNICATION PROTOCOL

CHANNEL SERIAL SPEED: 115.2 KBaud

SET/CHANGE CHANNEL SERIAL PARAMETERS

ADVANCED DF1 PROTOCOL PARAMETERS

SET ADVANCED DF1 PROTOCOL PARAMETERS

STATUS Click on "DOWNLOAD to DL" to download these parameters.

CONFIGURATION Settings DOWNLOAD to DL RETURN to Main Menu

Select settings as shown below, or any other desired settings, and click on Accept.

DF1 SERIAL/USB PARAMETERS

PRESS BUTTONS TO TOGGLE THE FOLLOWING OPTIONS:

PARITY: NONE YES

DATA BITS: 8 7

STOP BITS: 1 2

HANDSHAKING: IGNORE ACTIVE

SERIAL CONNECTION: RS-232C RS422/485

ACCEPT

Click Set Advanced DF1 Protocol Parameters.

Configuration of [DL3500-DF1] - MAIN MENU

OPERATING MODE SELECTION
☒ DF1 via USB/Serial to DH485 ☐ BRIDGING (DF1 to DH-485)

AB DH-485 NETWORK PARAMETERS
☐ A-B - DH+ ☒ A-B - DH-485

Network Address: 1 Octal 1 Decimal
Network Speed: 19.2 KBaud

DF1 SERIAL/USB COMMUNICATION PROTOCOL
CHANNEL SERIAL SPEED: 115.2 Kbaud
SET/CHANGE CHANNEL SERIAL PARAMETERS

ADVANCED DF1 PROTOCOL PARAMETERS
SET ADVANCED DF1 PROTOCOL PARAMETERS

STATUS: Click on "DOWNLOAD to DL" to download these parameters.

CONFIGURATION Settings DOWNLOAD to DL RETURN to Main Menu

Select these settings shown below or your desired settings and click on accept.

DF1 ADVANCED PARAMETERS

PRESS BUTTONS TO TOGGLE THE FOLLOWING OPTIONS:

MESSAGE CHECK
☒ BCC ☐ CRC

DUPLICATE MESSAGE
☒ IGNORE ☐ ACCEPT

EMBEDDED RESPONSES
☒ NONE ☐ EXECUTE

DIAGNOSTICS
☒ EXECUTE ☐ PASS

DF1 CHANNEL CONFIGURATION
☒ POINT-POINT / FULL DUPLEX
☐ MULTI-DROP / HALF DUPLEX

ACCEPT

Click on Download to DL

Configuration of [DL3500-DF1] - MAIN MENU

OPERATING MODE SELECTION
☒ DF1 via USB/Serial to DH485 ☐ BRIDGING (DF1 to DH-485)

AB DH-485 NETWORK PARAMETERS
☐ A-B - DH+ ☒ A-B - DH-485

Network Address: 1 Octal 1 Decimal
Network Speed: 19.2 KBaud

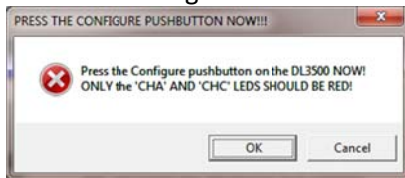
DF1 SERIAL/USB COMMUNICATION PROTOCOL
CHANNEL SERIAL SPEED: 115.2 Kbaud
SET/CHANGE CHANNEL SERIAL PARAMETERS

ADVANCED DF1 PROTOCOL PARAMETERS
SET ADVANCED DF1 PROTOCOL PARAMETERS

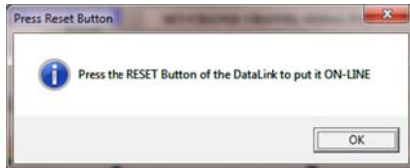
STATUS: Click on "DOWNLOAD to DL" to download these parameters.

CONFIGURATION Settings **DOWNLOAD to DL** RETURN to Main Menu

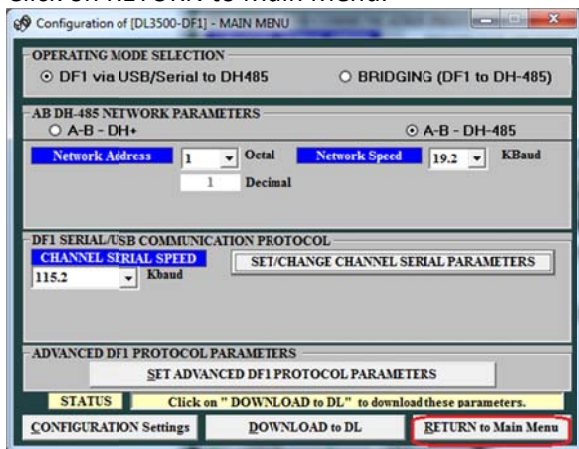
Press the Configure Push Button Switch on right hand side of the DL3500 then click on OK.



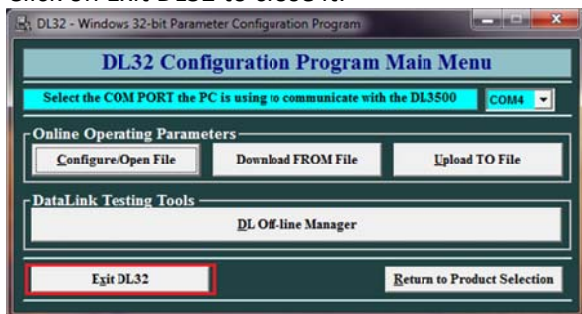
Once the file is downloaded click on Ok, then press the RESET Push button switch on the left hand side of the DL3500.



Click on RETURN to Main Menu.



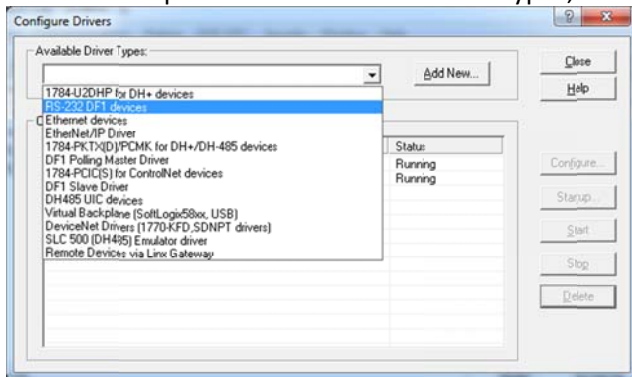
Click on Exit DL32 to close it.



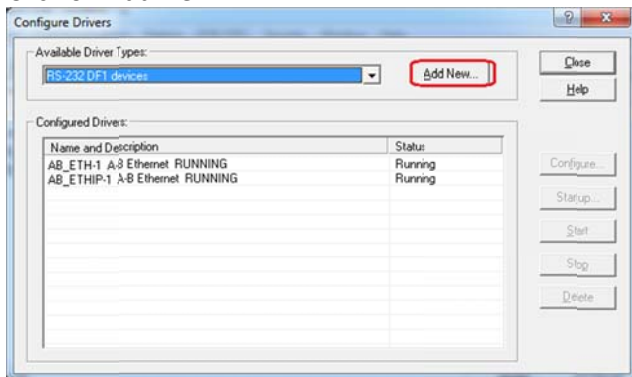
Start Allen Bradley RSLINX and click on Configure Driver icon.



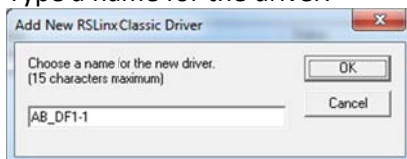
From the drop menu of Available Drivers Types, Select RS232 DF1 devices.



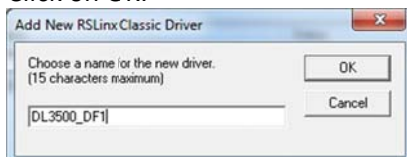
Click on Add New



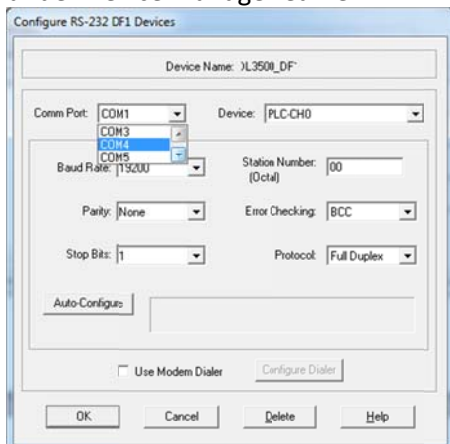
Type a name for the driver.



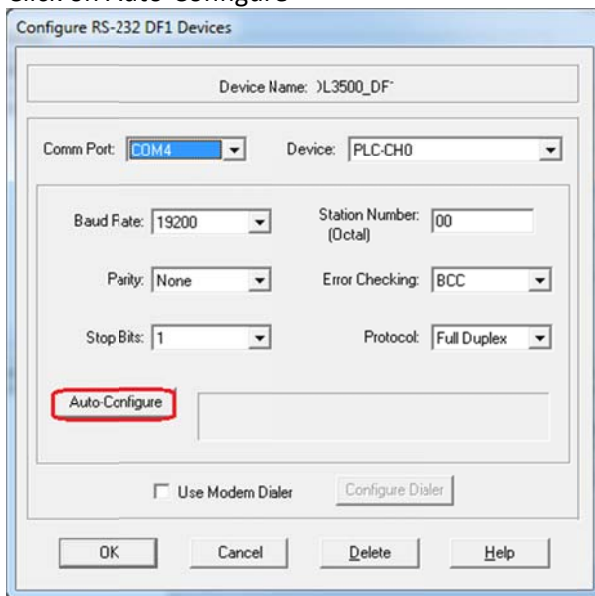
Click on OK.



Select the Comm Port, remember this is the same Com port you used to configure the DL3500, found under Device manager earlier.



Click on Auto-Configure



Configure RS-232 DF1 Devices

Device Name: \L3500_DF

Comm Port: COM4 Device: PLC-CH0

Baud Rate: 19200 Station Number: 00 (Octal)

Parity: None Error Checking: BCC

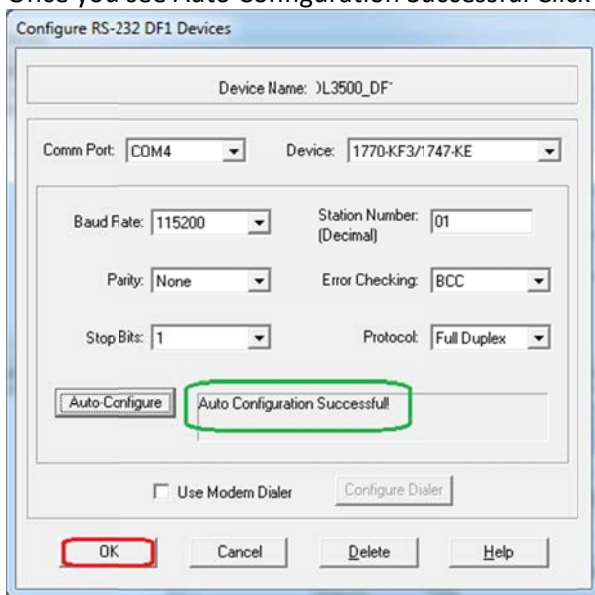
Stop Bits: 1 Protocol: Full Duplex

Auto-Configure

☐ Use Modem Dialer Configure Dialer

OK Cancel Delete Help

Once you see Auto Configuration Successful Click on Ok.



Configure RS-232 DF1 Devices

Device Name: \L3500_DF

Comm Port: COM4 Device: 1770-KF3/747-KE

Baud Rate: 115200 Station Number: 01 (Decimal)

Parity: None Error Checking: BCC

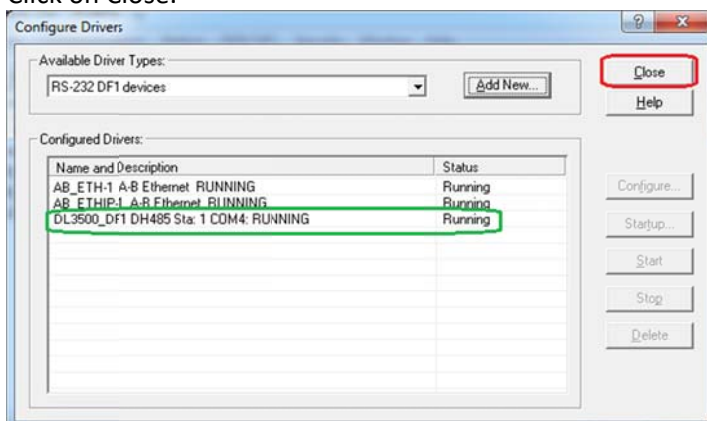
Stop Bits: 1 Protocol: Full Duplex

Auto-Configure Auto Configuration Successful

☐ Use Modem Dialer Configure Dialer

OK Cancel Delete Help

Click on Close.



Configure Drivers

Available Driver Types: RS-232 DF1 devices Add New...

Close Help

Configured Drivers:

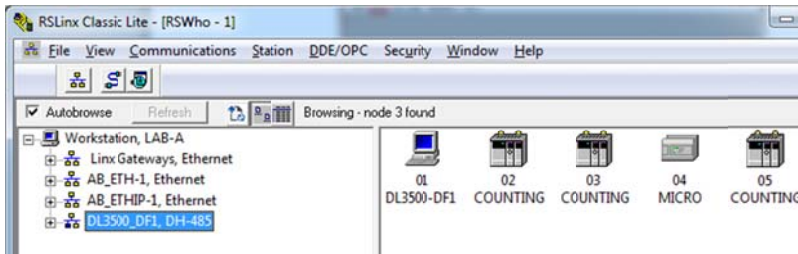
Name and Description	Status
AB_ETH-1 A-B Ethernet RUNNING	Running
AB_ETHIP-1 A-B Ethernet RUNNING	Running
DL3500_DF1 DH485 Sta: 1 COM4: RUNNING	Running

Configure... Startup... Start Stop Delete

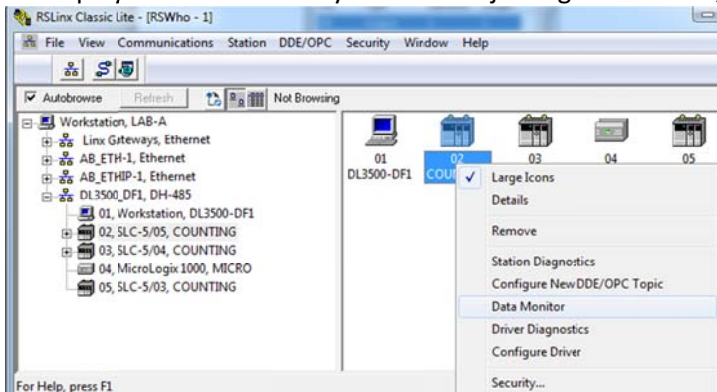
Click on RSWHO icon to open RSWHO.



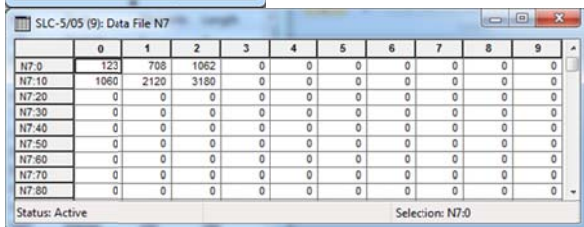
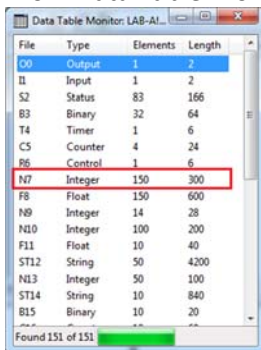
Click on the Driver that was just created and check mark auto brows to see all the DH485 nodes on the DH485 network.



To display Data file from any of the PLCs just right click on it, then click on Data Monitor.



From Data Table Monitor windows double click on the file you want to monitor or display the data from.



To go online with any of the SLCs or the Micrologix start RSLOGIX 500 and click on System Comms under Comms tab as shown below.



Click on the DF1 driver that was created in RSLINX to display all nodes, then click on the PLC that you need to go online with, and click on Online.

