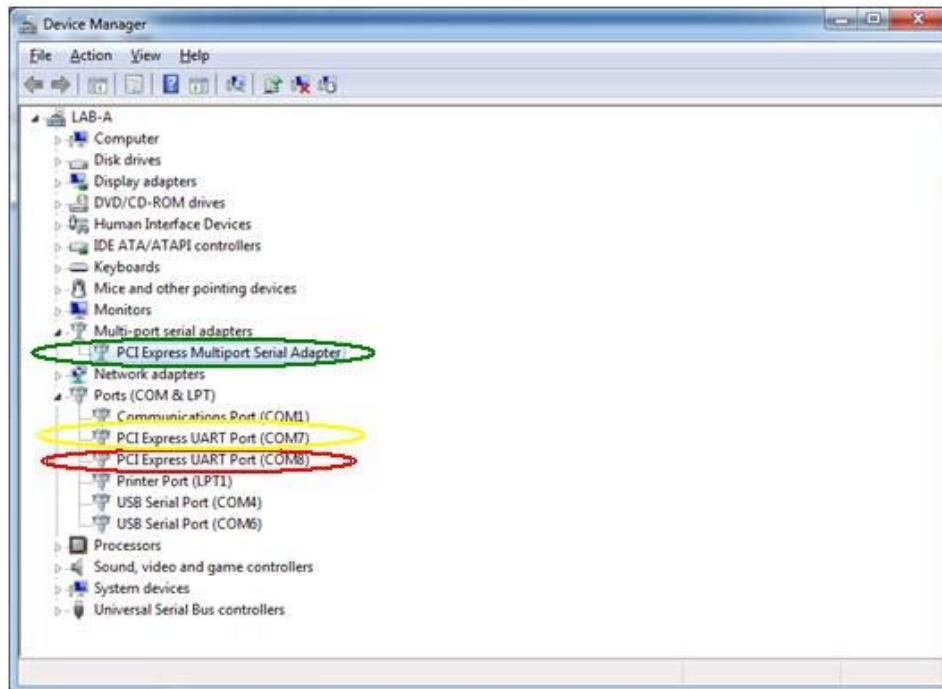


Equustek DLPCle (Allen BradleyDF1 to DH+ / DH485) PCI Express Bus Card using GE IGS

Once done with the driver installation, there are two serial port numbers and will differ from one PC to another and you can change the number to your desired available one.



Please note that in Win7 the second port is used for setting up the DF1 drive, later on and for WinXP is the 1st one.

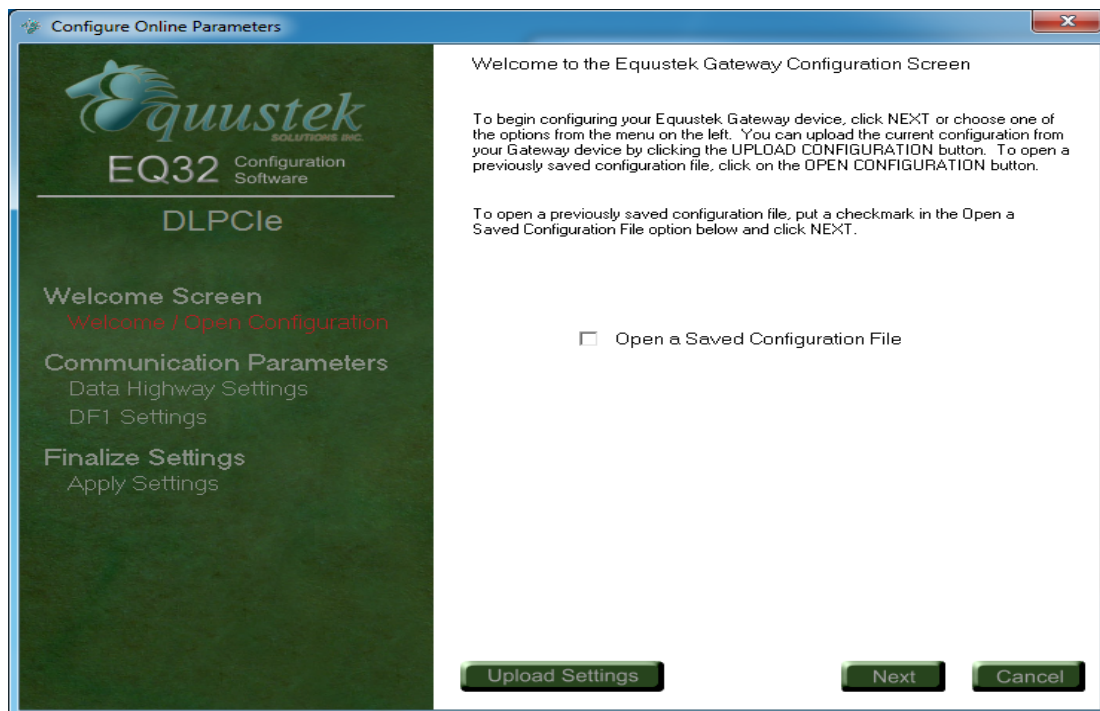
To configure the card using EEPROM settings, start the EQ32 configuration software and select DLPCle



Select the COM port number you see in your PC's device manager in our example COM8 and click on configure.



Click on next if you do not have a previous configuration file saved to open.



Select the Network type(DH+ or DH485)and the station number, in this example set to 15 octal.

The screenshot shows the 'Configure Online Parameters' window for 'quustek SOLUTIONS INC. EQ32 Configuration Software'. The left sidebar contains a navigation menu with 'Welcome Screen', 'Communication Parameters' (highlighted), and 'Finalize Settings'. The main area is titled 'DH+ Communication Settings'. Under 'Network Mode', the 'DH+' radio button is selected. Under 'DH+ Parameters', the 'Node Address' is set to '1' (Octal) and the 'Network Speed' is set to '1' (kBaud). At the bottom are buttons for 'Upload Settings', 'Back', 'Next', and 'Cancel'.

Configure Online Parameters

quustek SOLUTIONS INC.

EQ32 Configuration Software

DLPCle

Welcome Screen
Welcome / Open Configuration

Communication Parameters
Data Highway Settings
DF1 Settings

Finalize Settings
Apply Settings

DH+ Communication Settings

Network Mode
☒ DH+ ☐ DH485

DH+ Parameters

Node Address: 1 Octal

Network Speed: 1 kBaud

Upload Settings Back Next Cancel

Select your DH+ baud rate.

This screenshot is similar to the first one, but the 'Network Speed' dropdown menu is open, showing the following options: 57.6, 115.2, and 230.4. The '57.6' option is currently selected. All other settings and the window layout remain the same.

Configure Online Parameters

quustek SOLUTIONS INC.

EQ32 Configuration Software

DLPCle

Welcome Screen
Welcome / Open Configuration

Communication Parameters
Data Highway Settings
DF1 Settings

Finalize Settings
Apply Settings

DH+ Communication Settings

Network Mode
☒ DH+ ☐ DH485

DH+ Parameters

Node Address: 1 Octal

Network Speed: 57.6 kBaud

Upload Settings Back Next Cancel

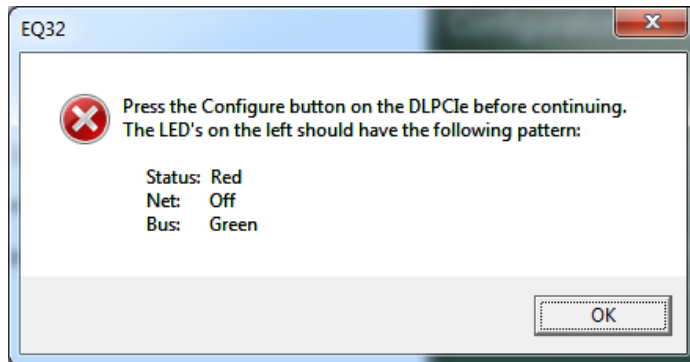
Now you need to set up DF1 parameters.

The screenshot shows the 'Configure Online Parameters' window with the 'DF1 Communication Settings' tab selected. The left sidebar contains the Quustek logo, 'EQ32 Configuration Software', 'DLPCle', and a navigation menu with 'Welcome Screen', 'Communication Parameters', and 'Finalize Settings'. The 'Communication Parameters' section is expanded, showing 'Data Highway Settings', 'DF1 Settings' (highlighted in red), and 'Apply Settings'. The main area displays 'Serial Parameters' (Serial Speed: 115200 Baud, Parity: None, Data Bits: 8, Stop Bits: 1) and 'DF1 Parameters' (Error Checking: BCC, Duplicate Messages: Ignore, Embedded Responses: None). At the bottom are buttons for 'Upload Settings', 'Back', 'Next', and 'Cancel'.

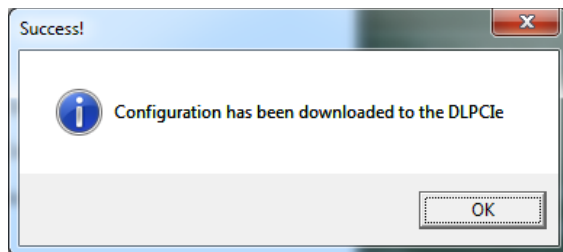
Here you can download your configuration to the DLPCle, and also an option of saving it for future use.

The screenshot shows the 'Configure Online Parameters' window with the 'Apply Configuration Settings' tab selected. The left sidebar is identical to the previous screenshot, but the 'DF1 Settings' option in the navigation menu is no longer highlighted. The main area contains a text block explaining the download process and three radio button options: 'Download Configuration' (selected), 'Download and Save Configuration', and 'Save Configuration'. At the bottom are buttons for 'Upload Settings', 'Back', 'Finish', and 'Cancel'.

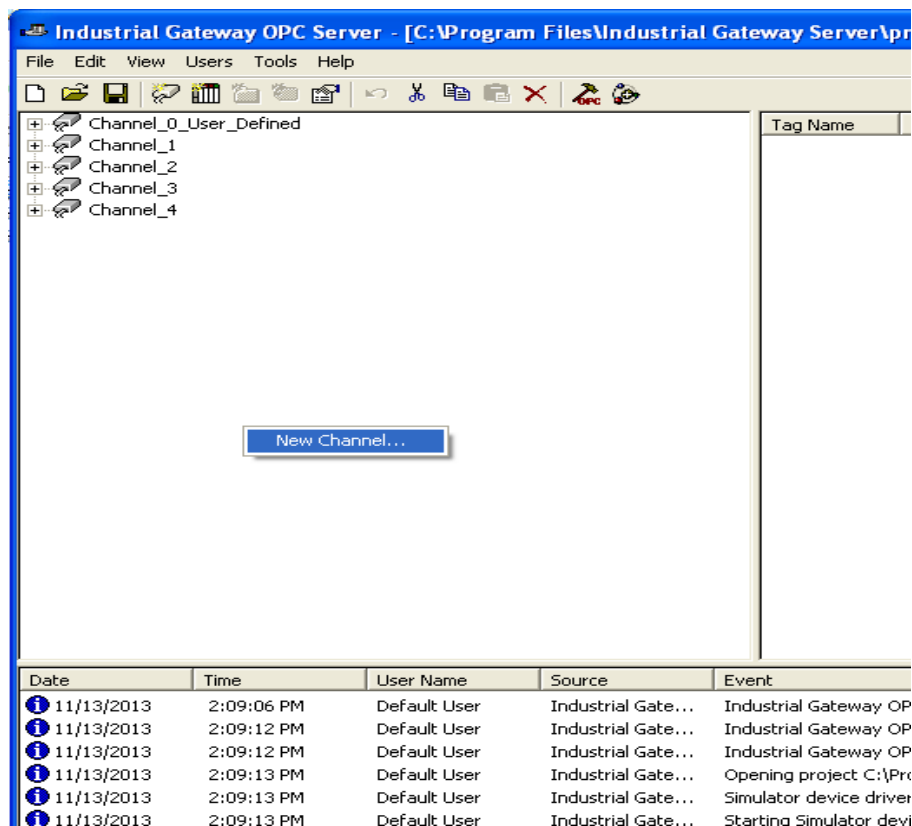
Put the DLPCle in configuration mode by pressing the configuration push button switch on the DLPCle



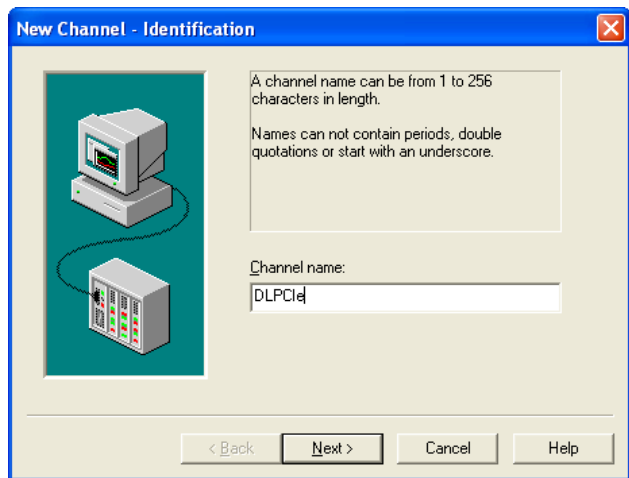
Once downloaded successfully, close the EQ32 configuration software and restart your PC.



Now to use with GE IGS start the IGS right click and add a new channel.



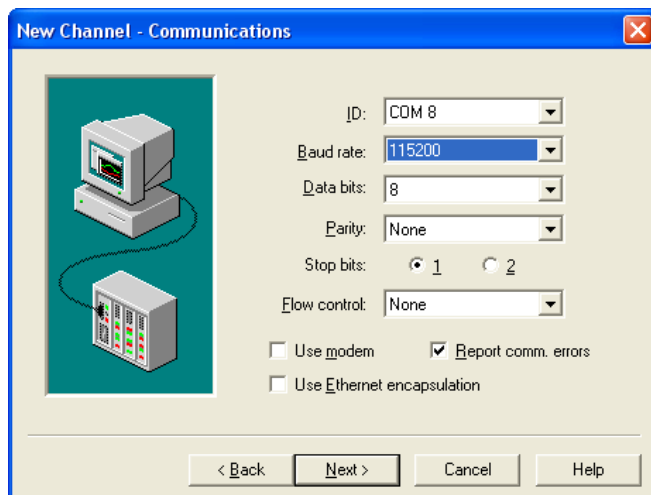
Give a name to your new channel and click on next.



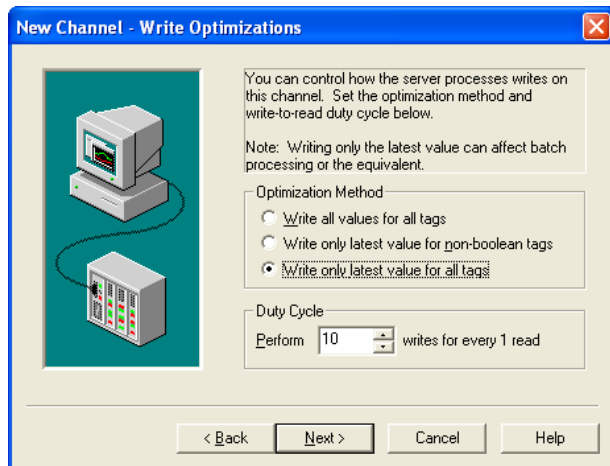
Under Device driver select DF1 and click on next.



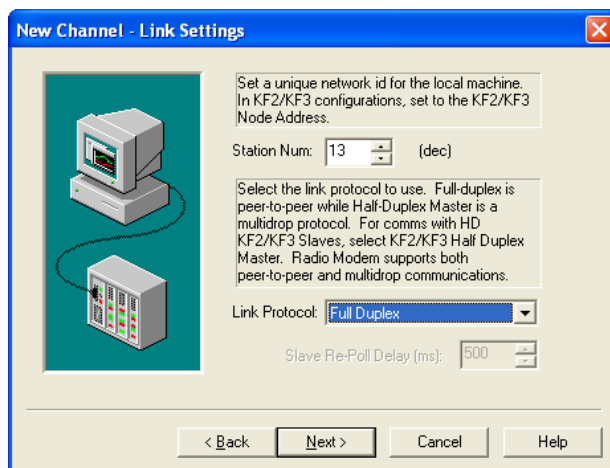
Select the serial port and its setting same as the one you configured the card as and click next.



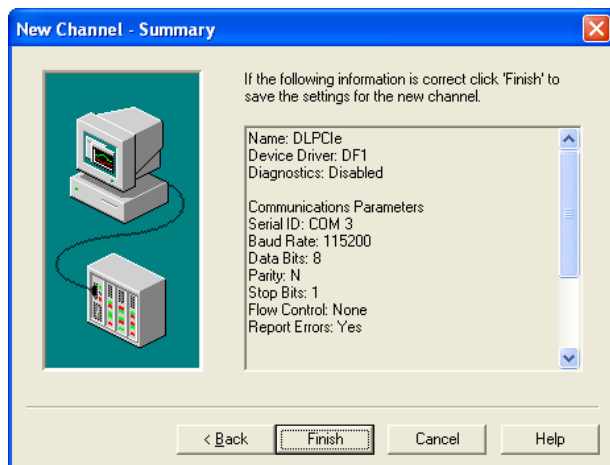
Select the way you want the server to process data.



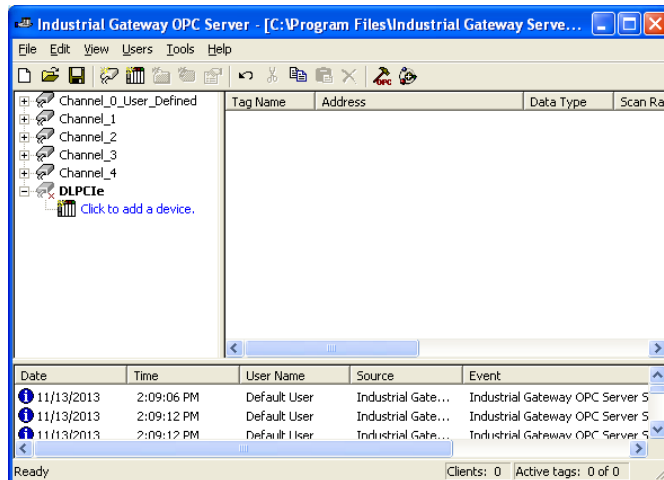
Set station number to card node address, but please note that here, it is decimal 13, since octal was 15 and link protocol to FULL DUPLEX and click on next.



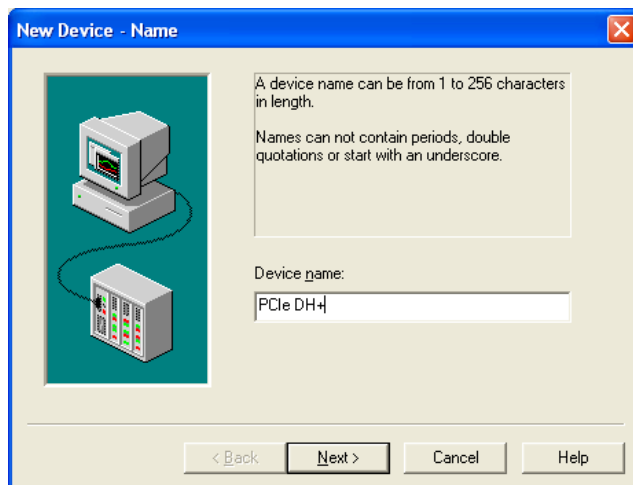
Here you can see all your channel settings click on finish.



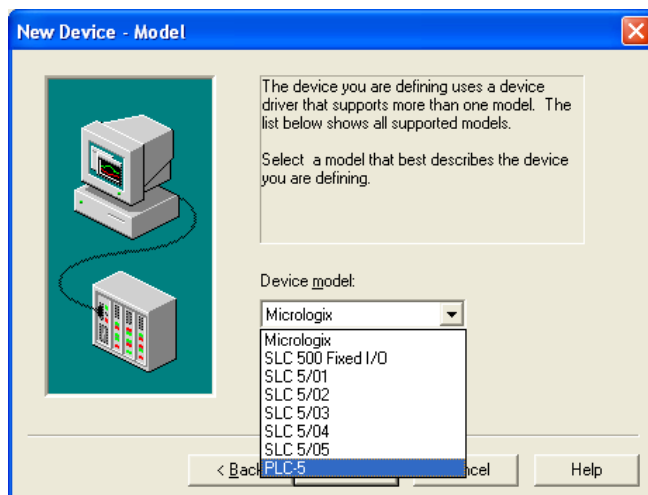
Click on add a device click as shown.



Name the device.

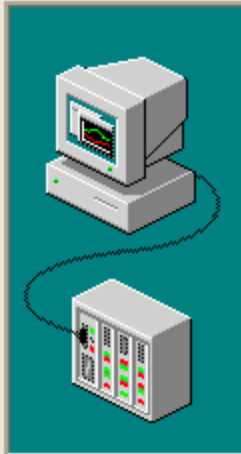


Under device model select the PLC type.



Select Device ID (Node address of the PLC on DH+) please again notice it is in decimal not octal.

New Device - ID



The device you are defining may be multidropped as part of a network of devices. In order to communicate with the device, it must be assigned a unique ID.

Your documentation for the device may refer to this as a "Network ID" or "Network Address."

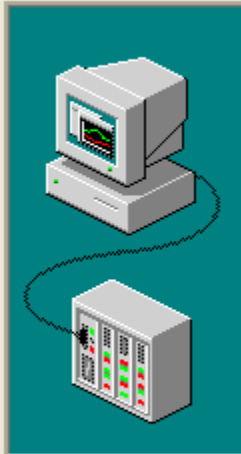
Device ID:

17 Decimal

< Back Next > Cancel Help

Select the device timing and click on next.

New Device - Timing



The device you are defining has communications timing parameters that you can configure.

Connect timeout: 3 seconds

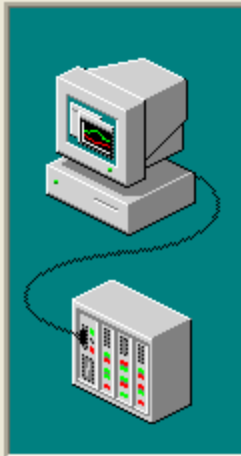
Request timeout: 1000 milliseconds

Fail after 3 successive timeouts

Inter-request delay: 0 milliseconds

< Back Next > Cancel Help

New Device - Auto-Demotion



You can demote a device for a specific period upon communications failures. During this time no read request (writes if applicable) will be sent to the device. Demoting a failed device will prevent stalling communications with other devices on the channel.

☐ Enable auto device demotion on communication failures

Demote after successive failures

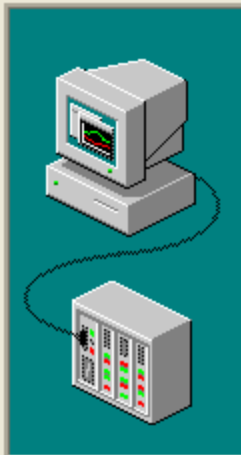
Demote for milliseconds

☐ Discard write requests during the demotion period

< Back Next > Cancel Help

Select the Error checking method make sure it is the same as the one set in the DLPCle card.

New Device - Protocol Settings



Select the appropriate error checking method for the driver to use. For PLC-5 users, select whether floats should be word swapped. A-B PLC-5 devices swap words. Some devices may not swap float words. Select request size to maximize communications speed.

Error Checking Method

☐ CRC ☒ BCC

Swap PLC-5 Float Words?

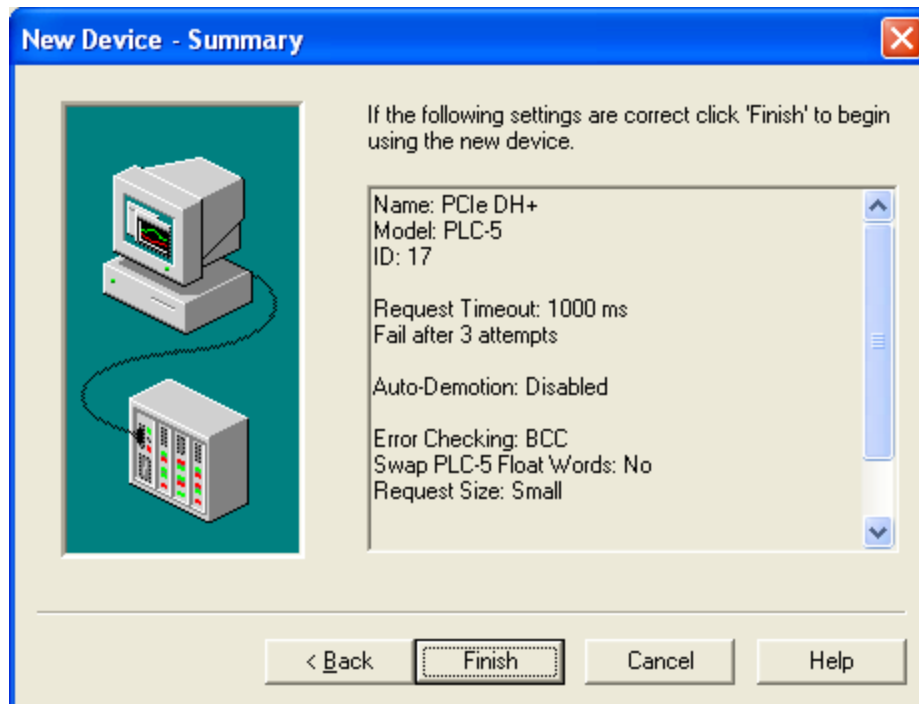
☐ Yes ☒ No

Request Size

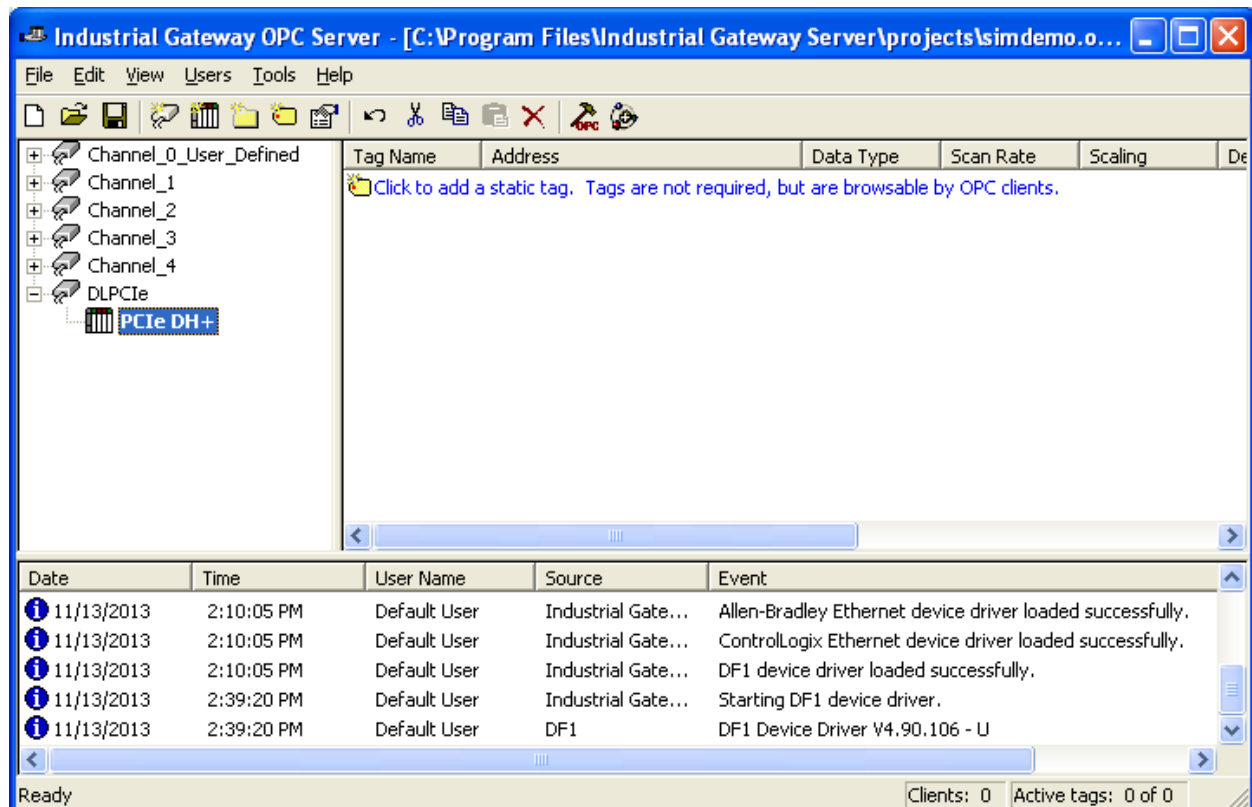
☐ Large ☒ Small

< Back Next > Cancel Help

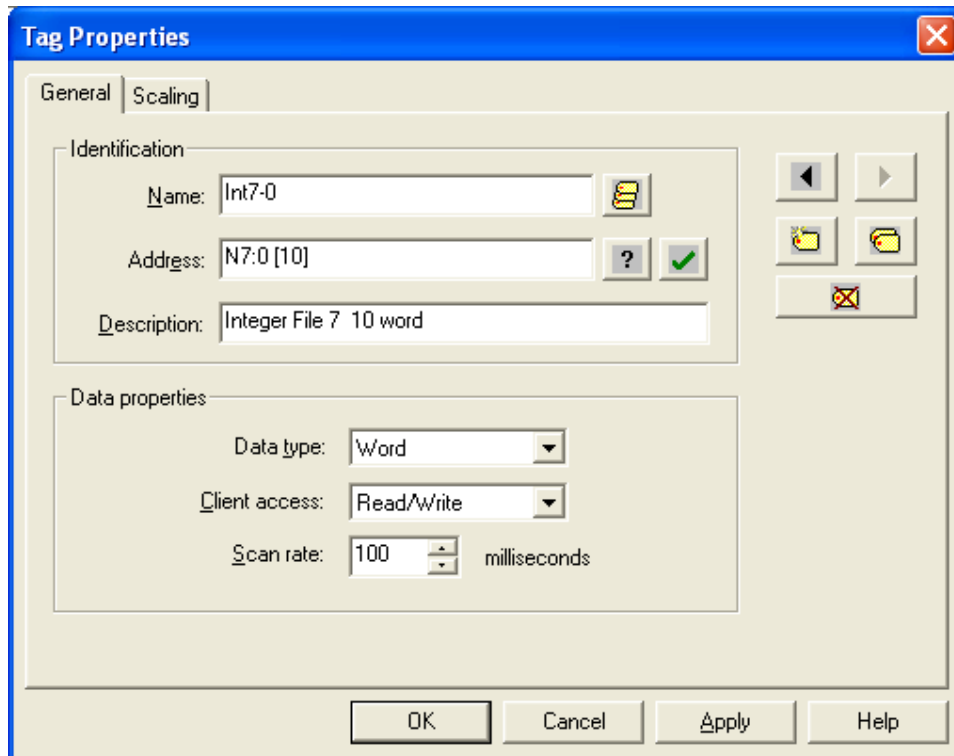
Click on Finish.



Add Tags



Here we are trying to read 10 words from Integer file 7 starting at word 0



The 'Tag Properties' dialog box is shown with the 'General' tab selected. It contains two main sections: 'Identification' and 'Data properties'. In the 'Identification' section, the 'Name' field is 'Int7-0', the 'Address' is 'N7:0 [10]', and the 'Description' is 'Integer File 7 10 word'. In the 'Data properties' section, the 'Data type' is 'Word', 'Client access' is 'Read/Write', and 'Scan rate' is '100 milliseconds'. On the right side, there are navigation buttons: a left arrow, a right arrow, a 'Find' button (magnifying glass), a 'New' button (document with plus), and a 'Delete' button (document with X). At the bottom are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

Tag Properties

General | Scaling

Identification

Name: Int7-0

Address: N7:0 [10]

Description: Integer File 7 10 word

Data properties

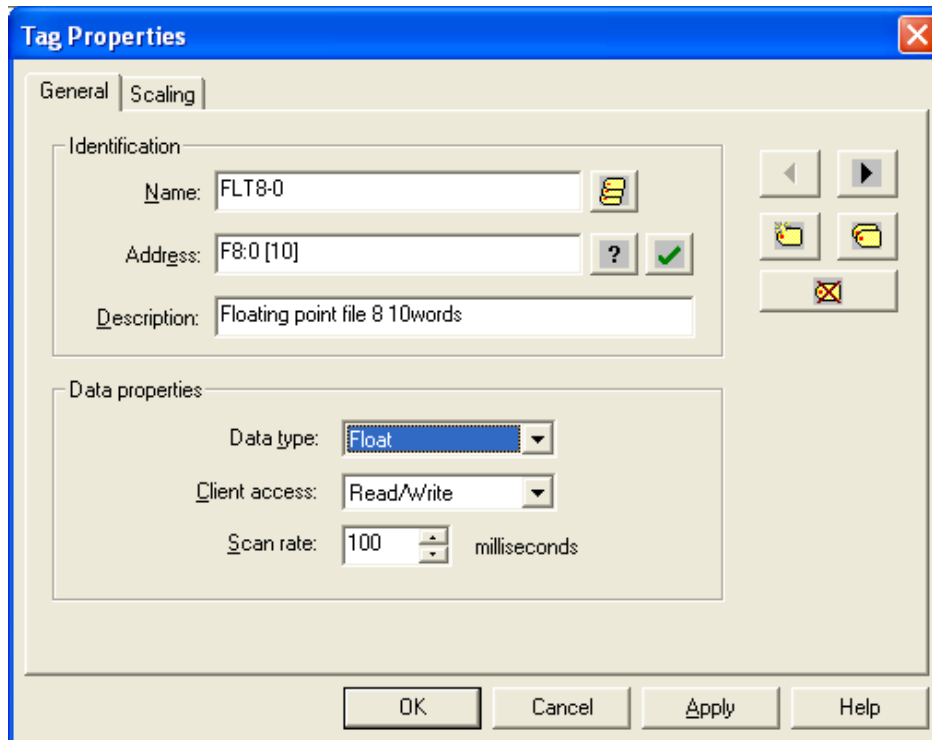
Data type: Word

Client access: Read/Write

Scan rate: 100 milliseconds

OK Cancel Apply Help

Next tag Floating point file F8 starting at word0 .



The 'Tag Properties' dialog box is shown with the 'General' tab selected. It contains two main sections: 'Identification' and 'Data properties'. In the 'Identification' section, the 'Name' field is 'FLT8-0', the 'Address' is 'F8:0 [10]', and the 'Description' is 'Floating point file 8 10words'. In the 'Data properties' section, the 'Data type' is 'Float', 'Client access' is 'Read/Write', and 'Scan rate' is '100 milliseconds'. On the right side, there are navigation buttons: a left arrow, a right arrow, a 'Find' button (magnifying glass), a 'New' button (document with plus), and a 'Delete' button (document with X). At the bottom are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

Tag Properties

General | Scaling

Identification

Name: FLT8-0

Address: F8:0 [10]

Description: Floating point file 8 10words

Data properties

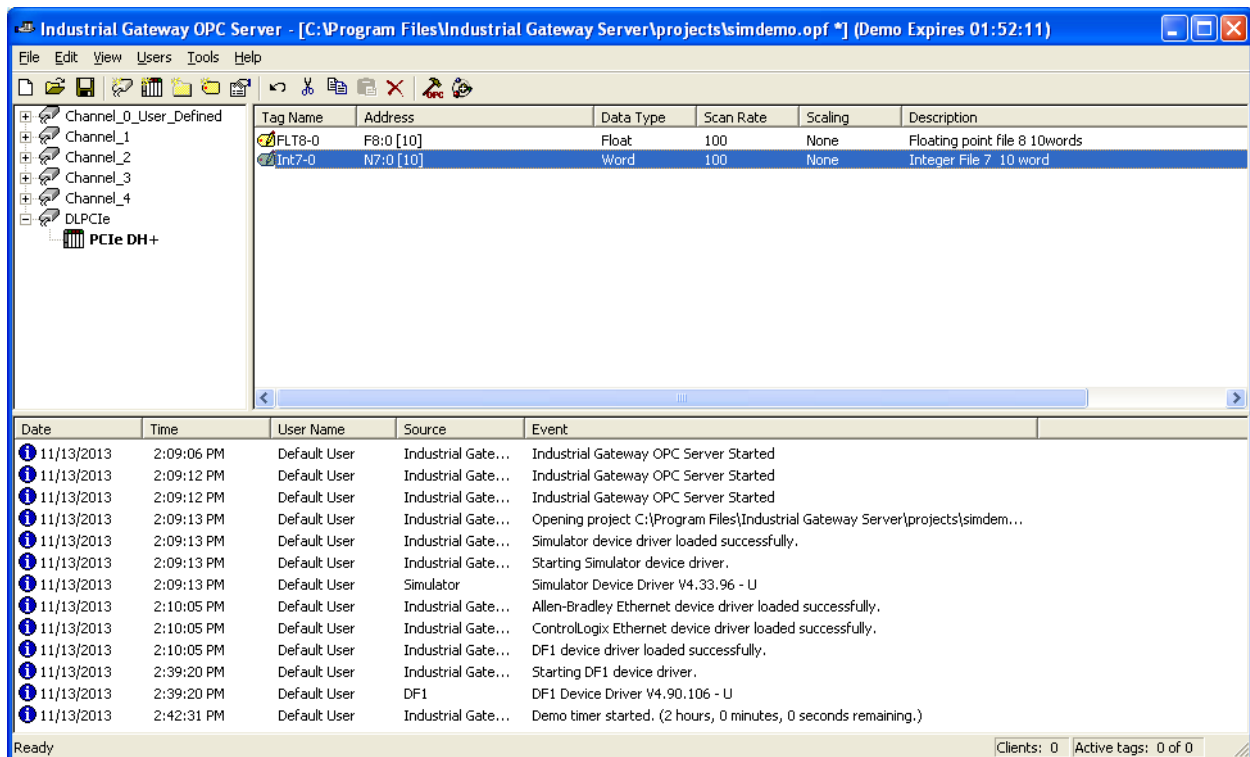
Data type: Float

Client access: Read/Write

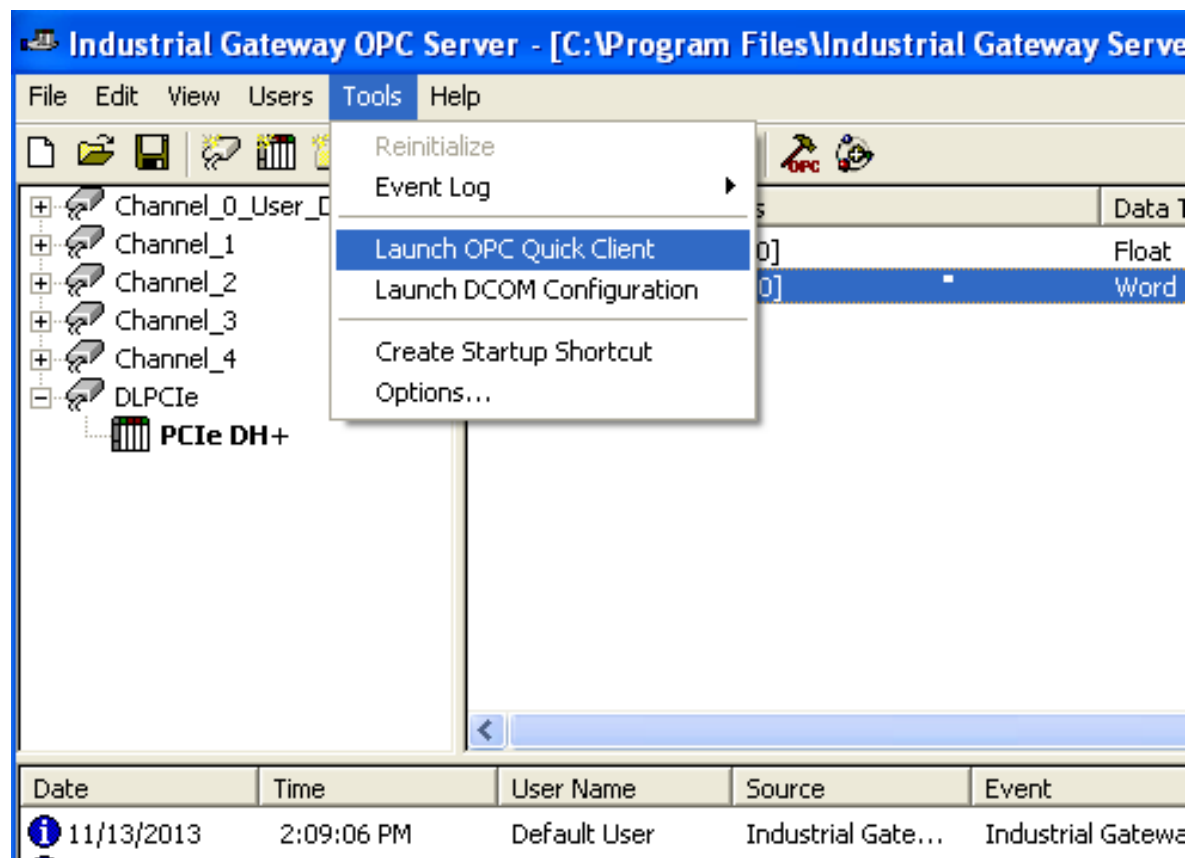
Scan rate: 100 milliseconds

OK Cancel Apply Help

Click on apply.



Under Tools click on lunch OPC Client.



As you can see below we are able to read the N7 and F8

OPC Quick Client - Untitled *

File Edit View Tools Help

Item ID	Data Type	Value	Timestamp	Qua...	Update Cour
DLPCIe.PCIe DH+.FLT...	Float Array	[3.2604E+038, 3.26043E+038, -0.688626, 3.26045E+...	14:51:42:281	Good	1
DLPCIe.PCIe DH+.Int7-0	Word Array	[850, 1700, 2550, 850, 850, 850, 850, 850, 850, 850]	14:51:42:343	Good	1

Date	Time	Event
11/13/2013	2:51:42 PM	Added group 'Chan...
11/13/2013	2:51:42 PM	Added 5 items to gr...
11/13/2013	2:51:42 PM	Added 5 items to gr...

Ready

Item Count: 165



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