Accessing AB DH485 Devices with EQ7000-EDH485 using Allen Bradley Ethernet Driver in Kepware KEPServerEX

Start EQ32 software to configure the EQ7000 DH485, from products select EQ7000.

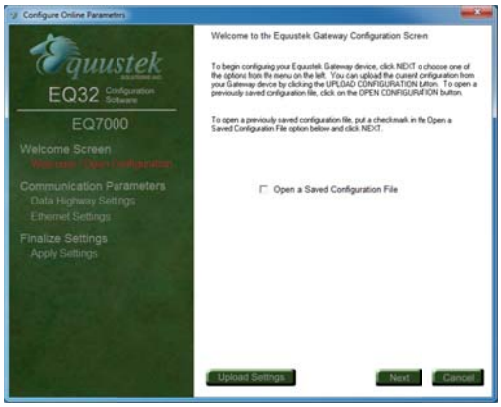
Select the COM Port that was installed when connecting the EQ7000 to your PCs USB, port number can be found under Device Manager.

Press the Configure push button switch on the right hand side of the unit, then click on Offline manager.

You should have the menu shown below, type 5 to show firmware version that will confirm communications with the EQ7000, once you see the firmware version click on Close.

Click on Configure

Click on Next

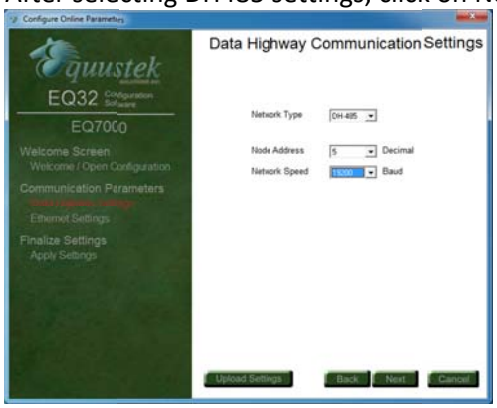


Network Type: Select DH485

Select the EQ7000 DH485 Node Address, please make sure it does not exist in order not to have address conflict.

Select Network Speed (DH485 baud rate).

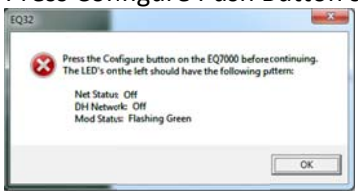
After selecting DH485 settings, click on Next.



Enter your Ethernet communication settings.

Click on Finish to Download the configuration settings.

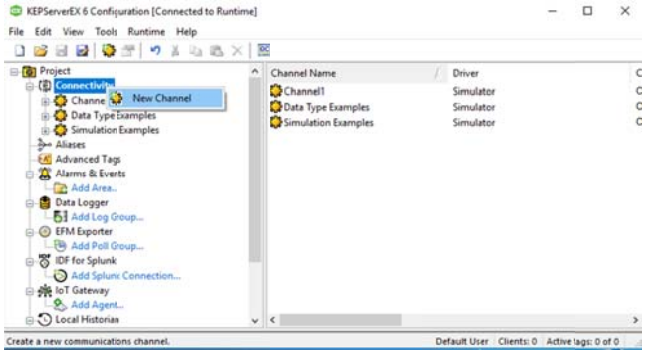
Press Configure Push Button switch on the right hand side of the EQ7000.



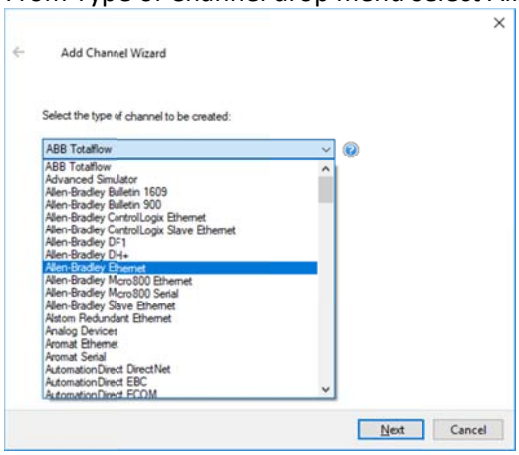
You should get the message shown below, if you get an error message, press the RESET Push Button Switch on et left hand side of the EQ7000, later press the configuration Push Button Switch, then click on Finish to download the configuration settings, Once you get the message below then click on Ok

Click on Exit to close the EQ32 configuration software.

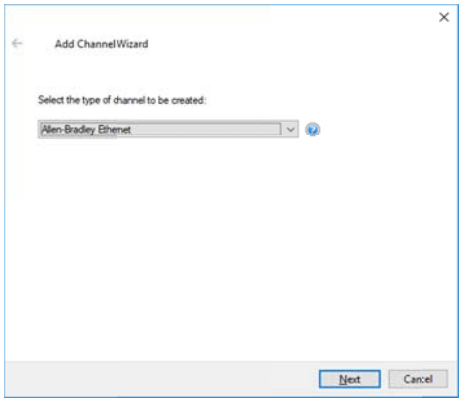
Open Kepware KEPserverEX configuration and click as shown to add new channel.



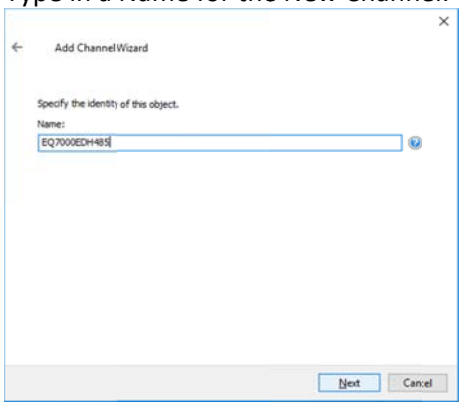
From Type of Channel drop menu select Allen Bradley Ethernet as shown.



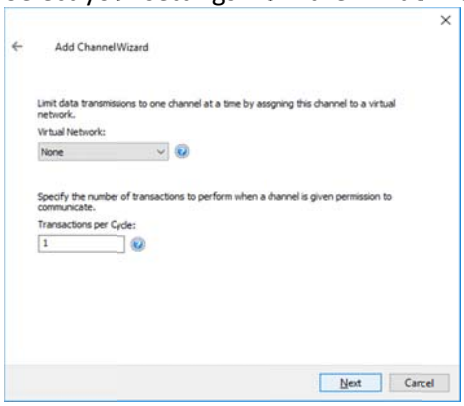
Click on Next.



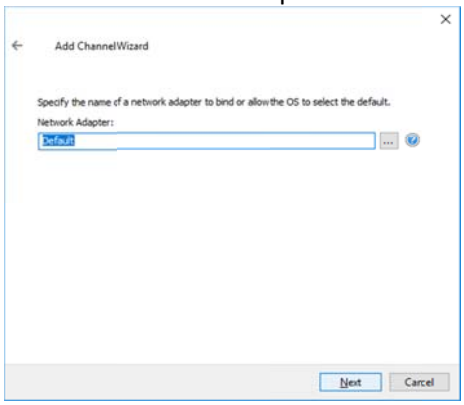
Type in a Name for the New Channel.



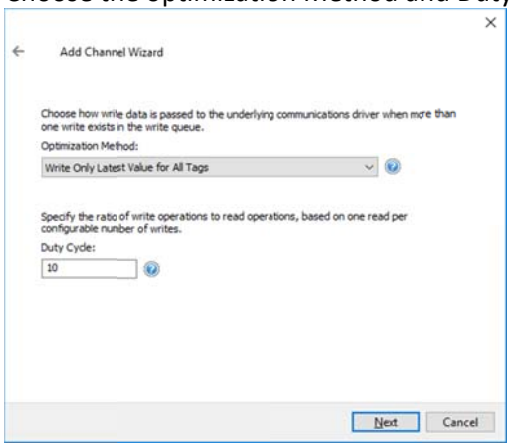
Select your settings from the window below and click on Next.



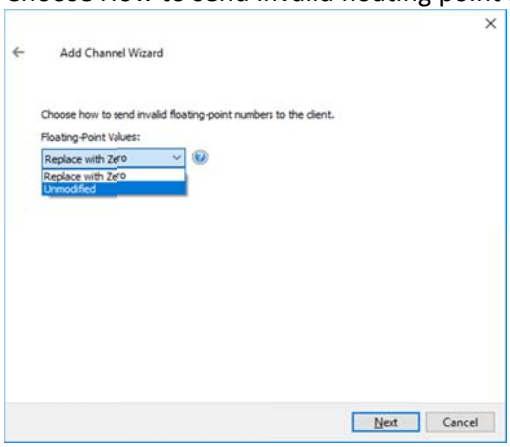
Select the network adapter then click on Next.



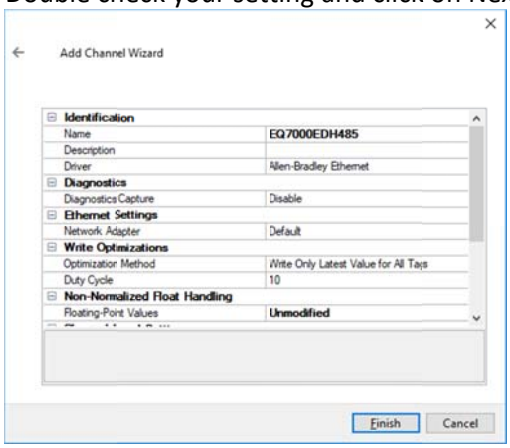
Choose the optimization Method and Duty Cycle then click on Next.



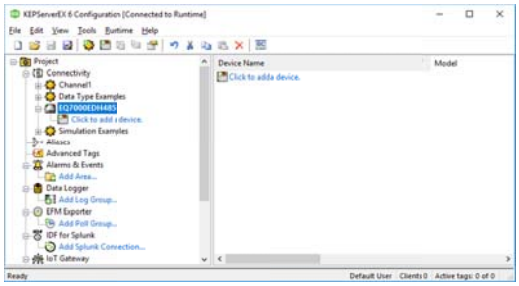
Choose How to send invalid floating point numbers to the client and click on Next.



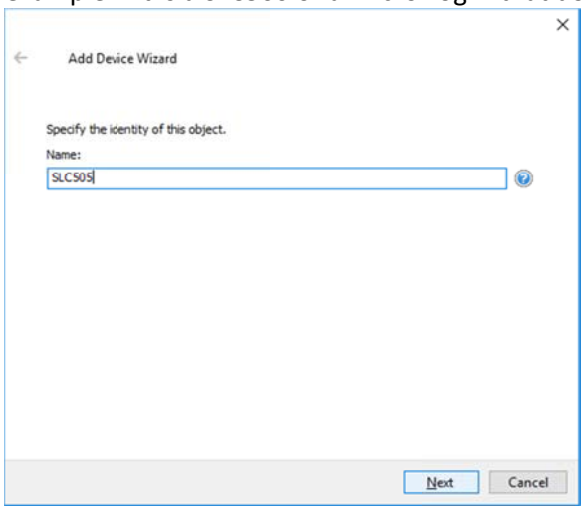
Double check your setting and click on Next.



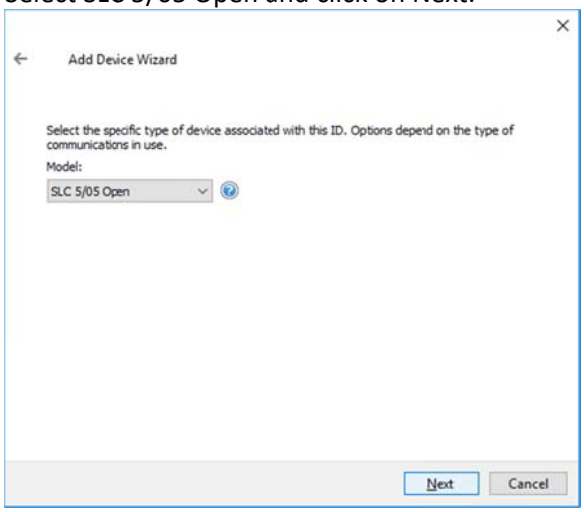
Click on add device.



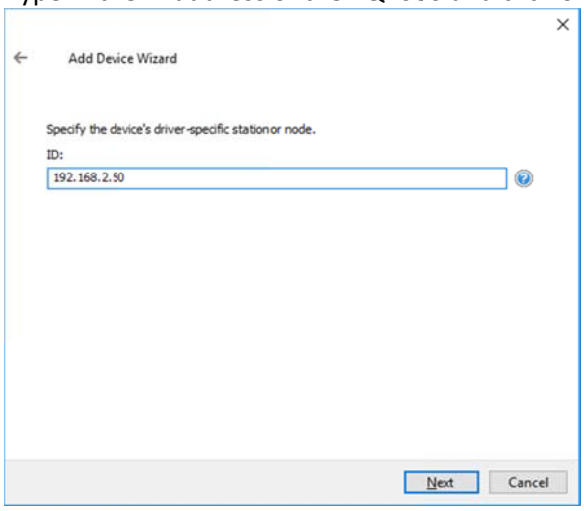
Type a name for your device, in our example here, we have CH0 of a SLC 5/05 connected to a 1761-NET-AIC to DH485 network which is connected to the EQ7000 DH485 and we are accessing the SLC5/05 through the EQ7000 although the SLC5/05 has an Ethernet port, but here we are just demonstrate an example if it is a SLC500 or a Micro Logix that does not have an Ethernet port.



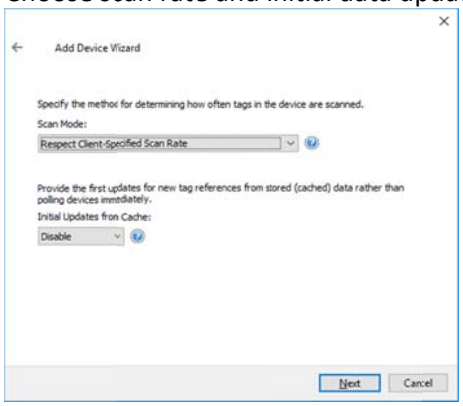
Select SLC 5/05 Open and click on Next.



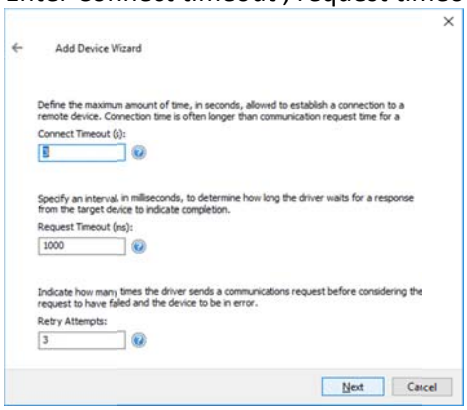
Type in the IP address of the EQ7000 and click on Next.



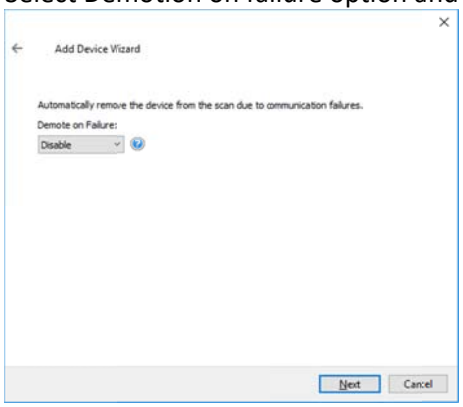
Choose scan rate and initial data update and click on Next.



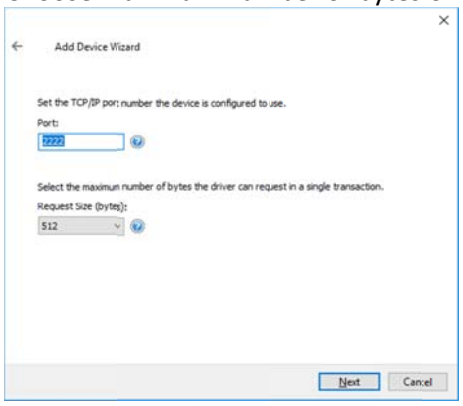
Enter Connect timeout , request timeout and retry attempts values and click on Next.



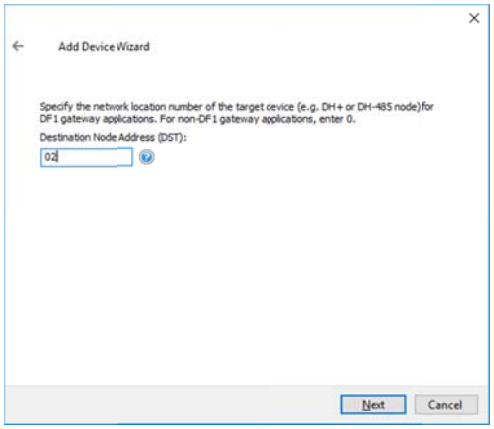
Select Demotion on failure option and click on Next.



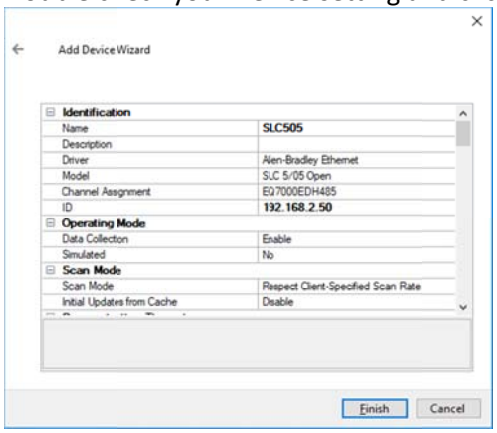
Choose maximum number of bytes on a single transaction and click on Next.



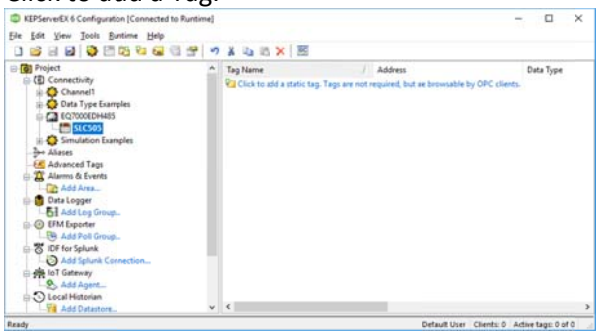
Enter the DH485 node address number of the Device that you are trying to access and click on Next.



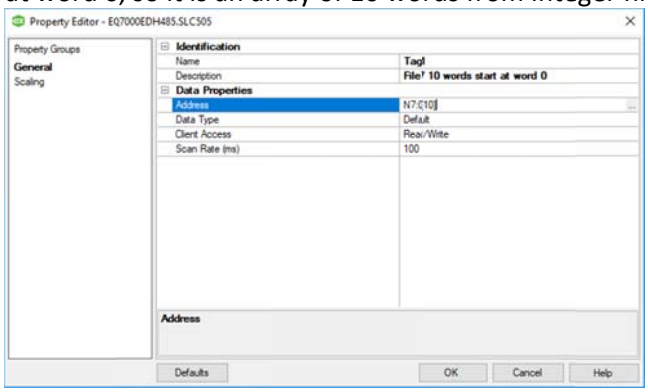
Double check your Device setting and click on Finish.



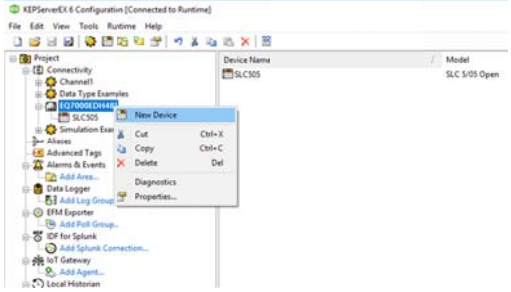
Click to add a Tag.



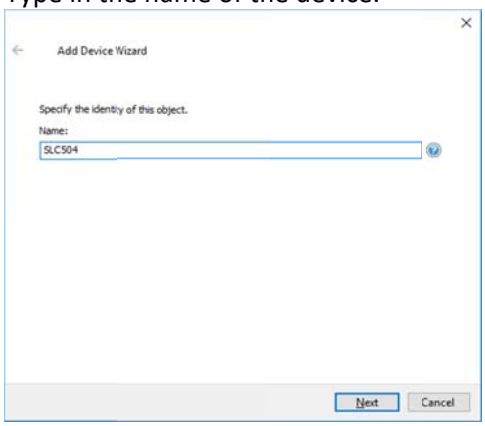
Enter the Tag Identification and properties, here is our example we have integer file 7 10 words starting at word 0, so it is an array of 10 words from Integer file 7.



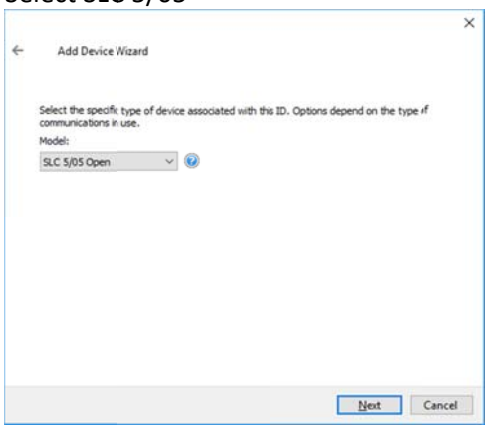
Repeat same steps for another device here in our example we used the SLC 5/04 that has 1761-NET_AIC on its CH0 configured for DH485 which is connected to the EQ7000 DH485 side.



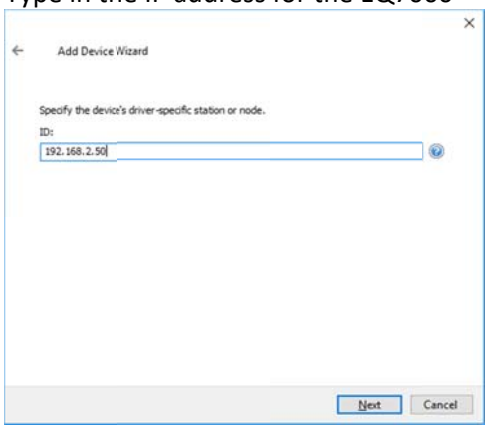
Type in the name of the device.



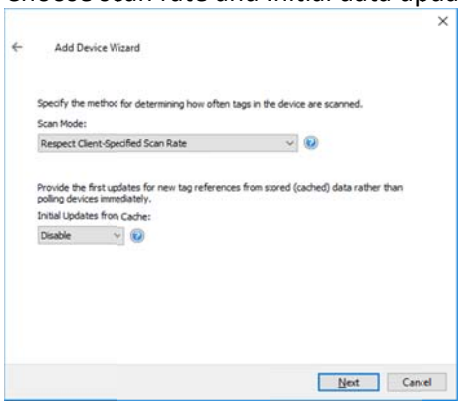
Select SLC 5/05



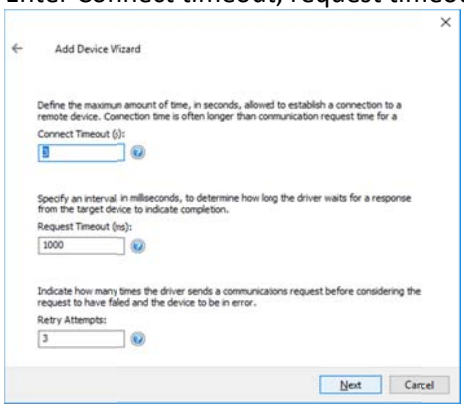
Type in the IP address for the EQ7000



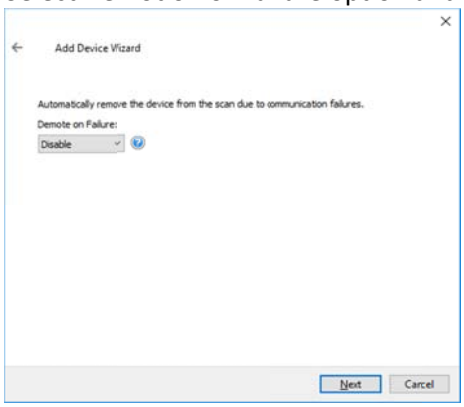
Choose scan rate and initial data update and click on Next.



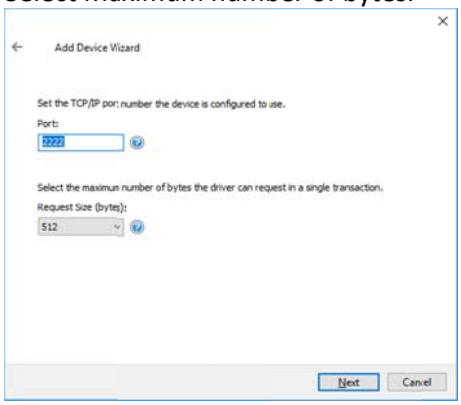
Enter Connect timeout, request timeout and retry attempts and then click on Next.



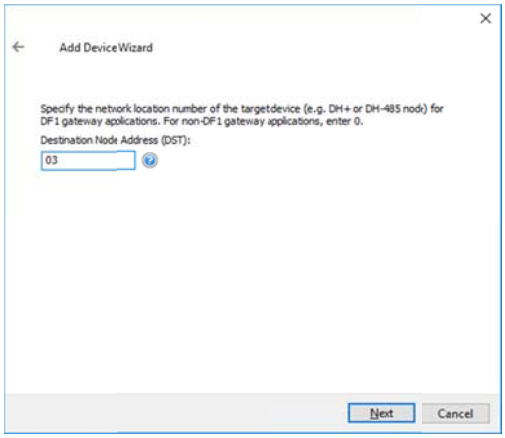
Select Demotion on failure option and click on Next.



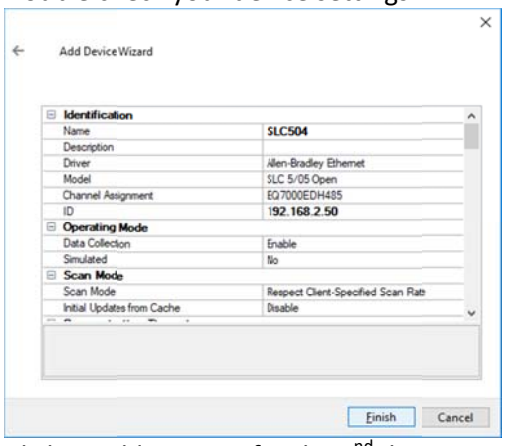
Select Maximum number of bytes.



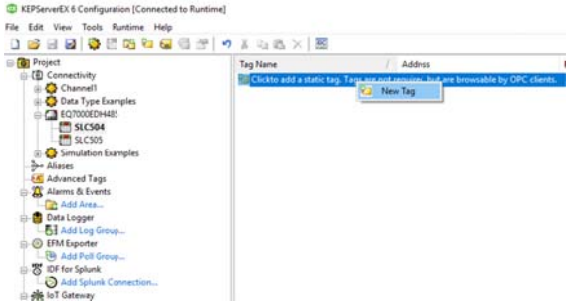
Enter the DH485 node address number of the device.



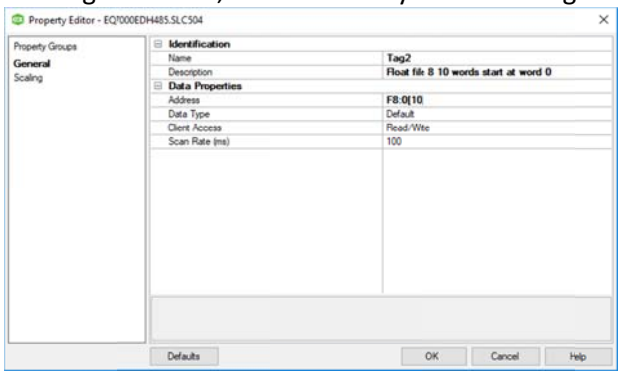
Double check your device settings.



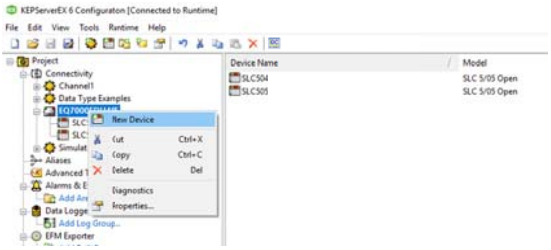
Click to add new tag for the 2nd device.



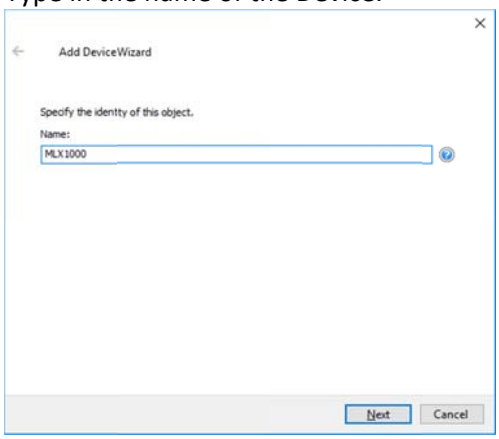
Enter the Tag Identification and properties, here is our example we have Floating point file 8, 10 words starting at word 0, so it is an array from Floating file F8.



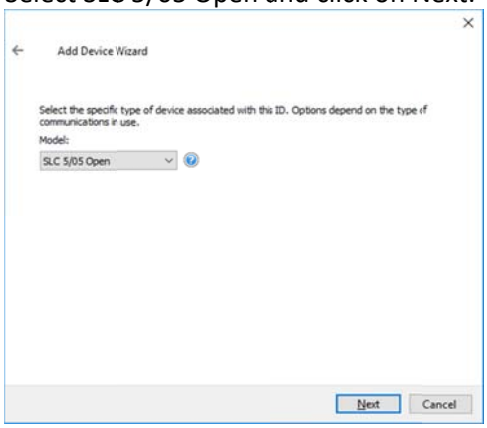
Repeating the same procedure for adding a device, this time we are adding the Allen Bradley Micro Logix that has it CH0 connected to 1761-NET-AIC for DH485, which in our application is connected to the DH485 side of the EQ7000.



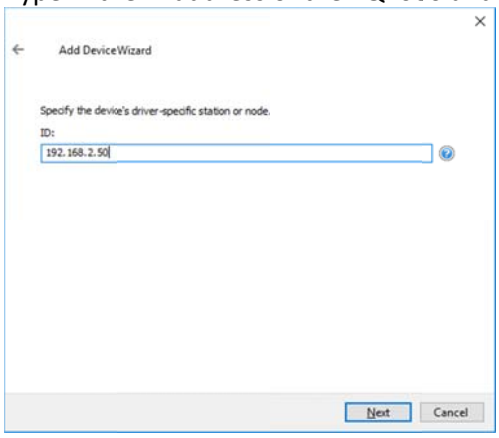
Type in the name of the Device.



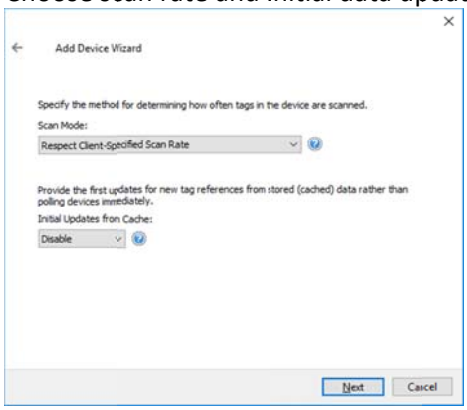
Select SLC 5/05 Open and click on Next.



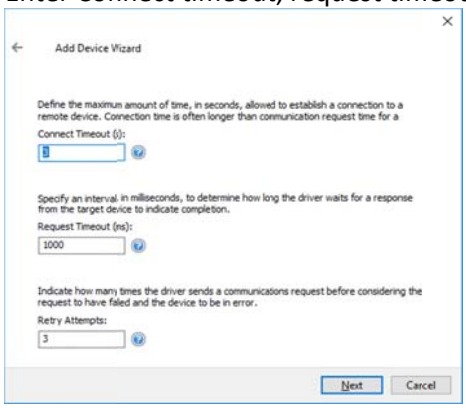
Type in the IP address of the EQ7000 and click on Next.



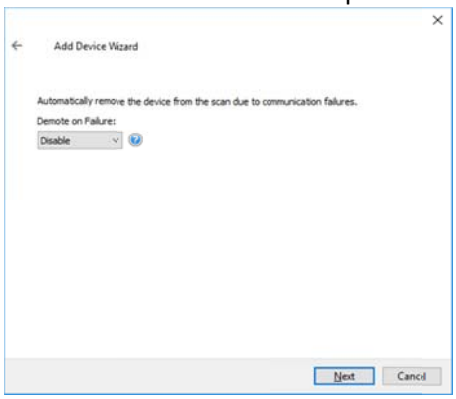
Choose scan rate and initial data update and click on Next.



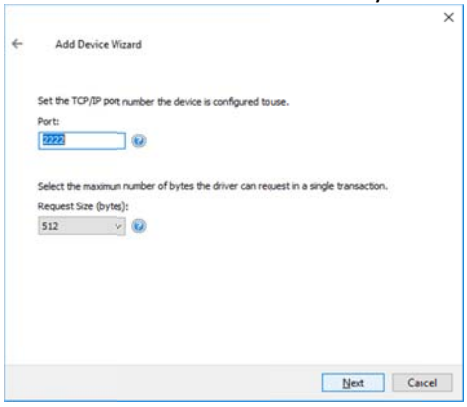
Enter Connect timeout, request timeout and retry attempts and then click on Next.



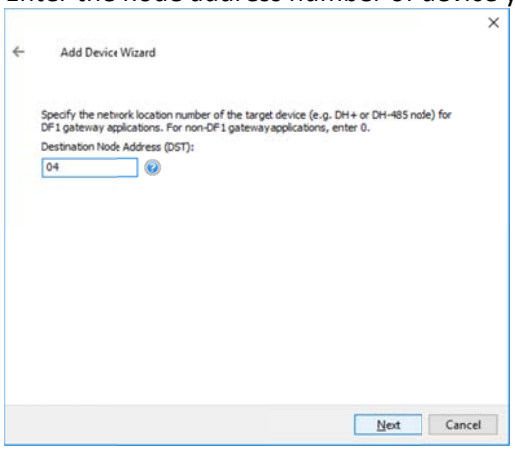
Select Demotion on failure option and click on Next.



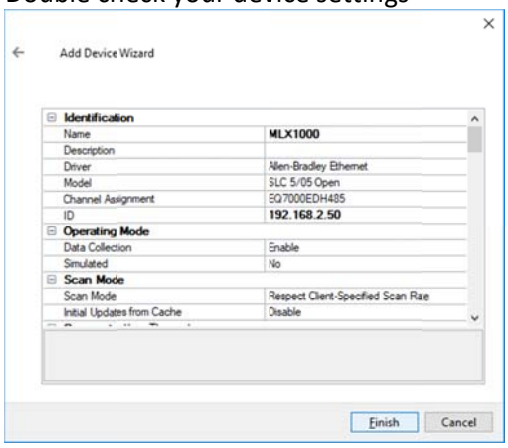
Choose maximum number of bytes.



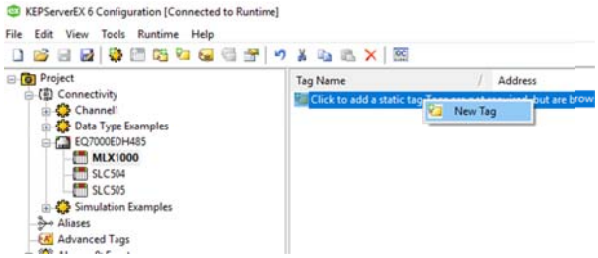
Enter the node address number of device you are trying to access.



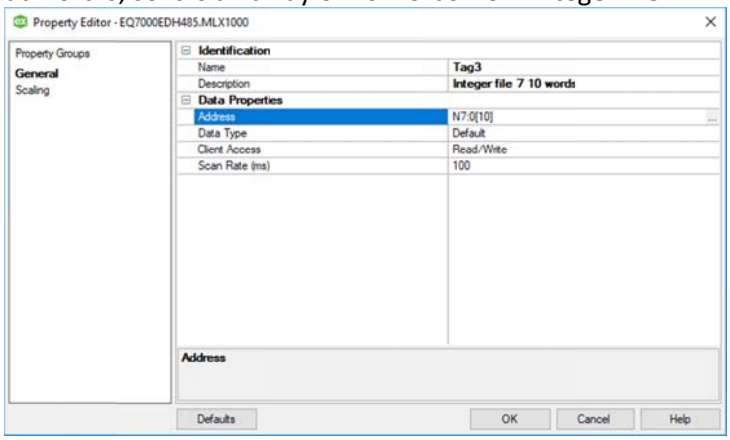
Double check your device settings



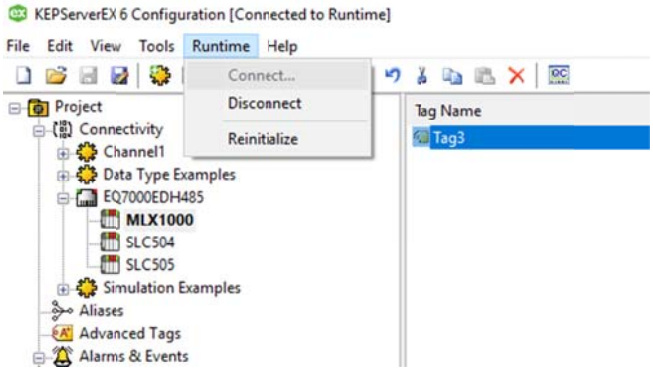
Click to add new tag for the 3rd device.



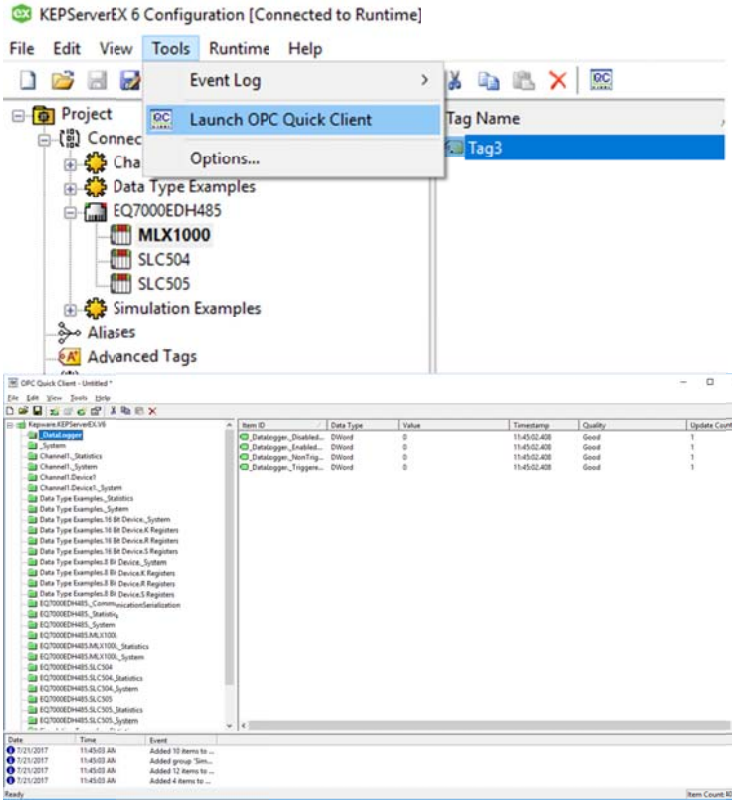
Enter the Tag Identification and properties, here is our example we have integer file 7 10 words starting at word 0, so it is an array of 10 words from Integer file 7.



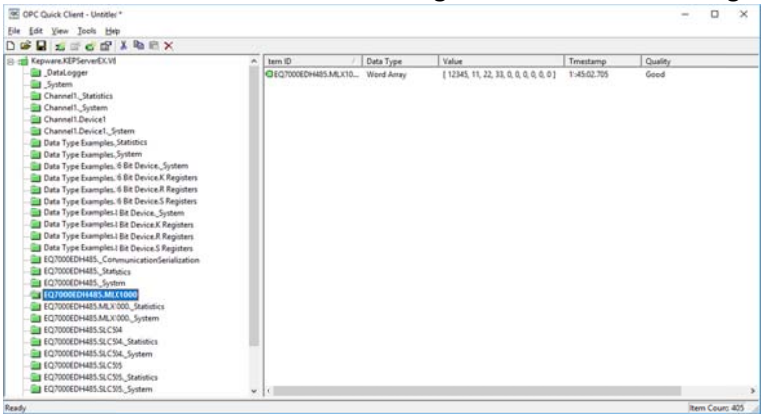
Under Runtime connect.



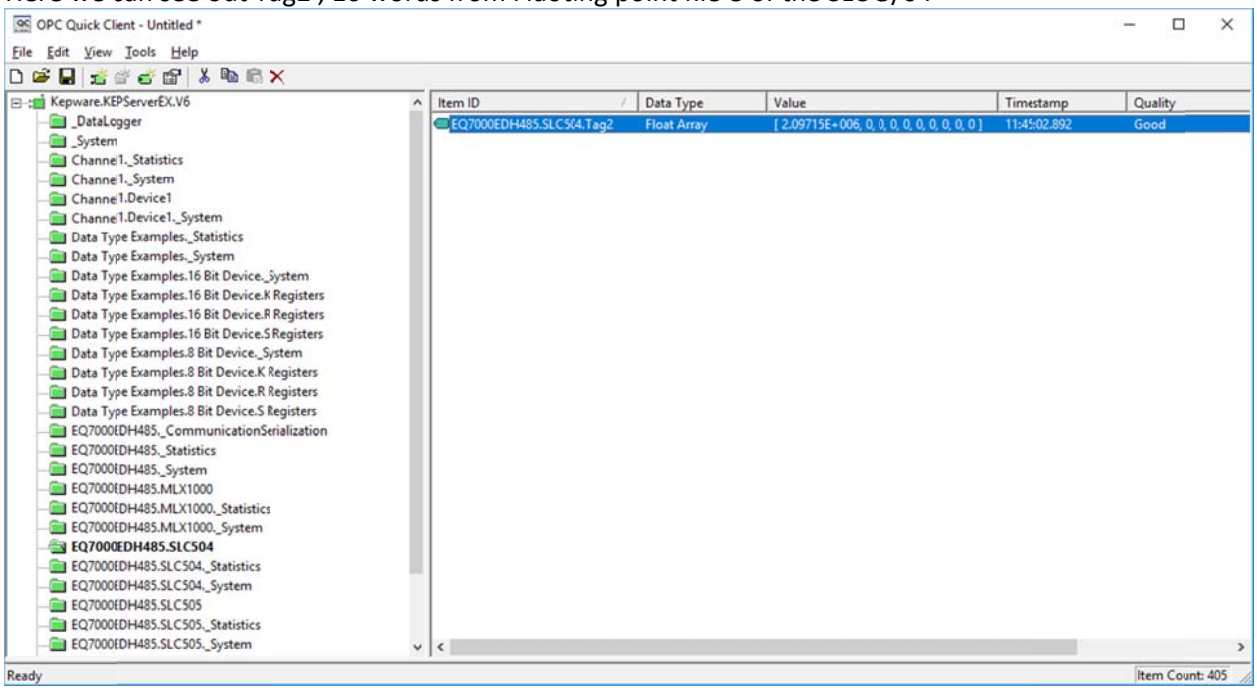
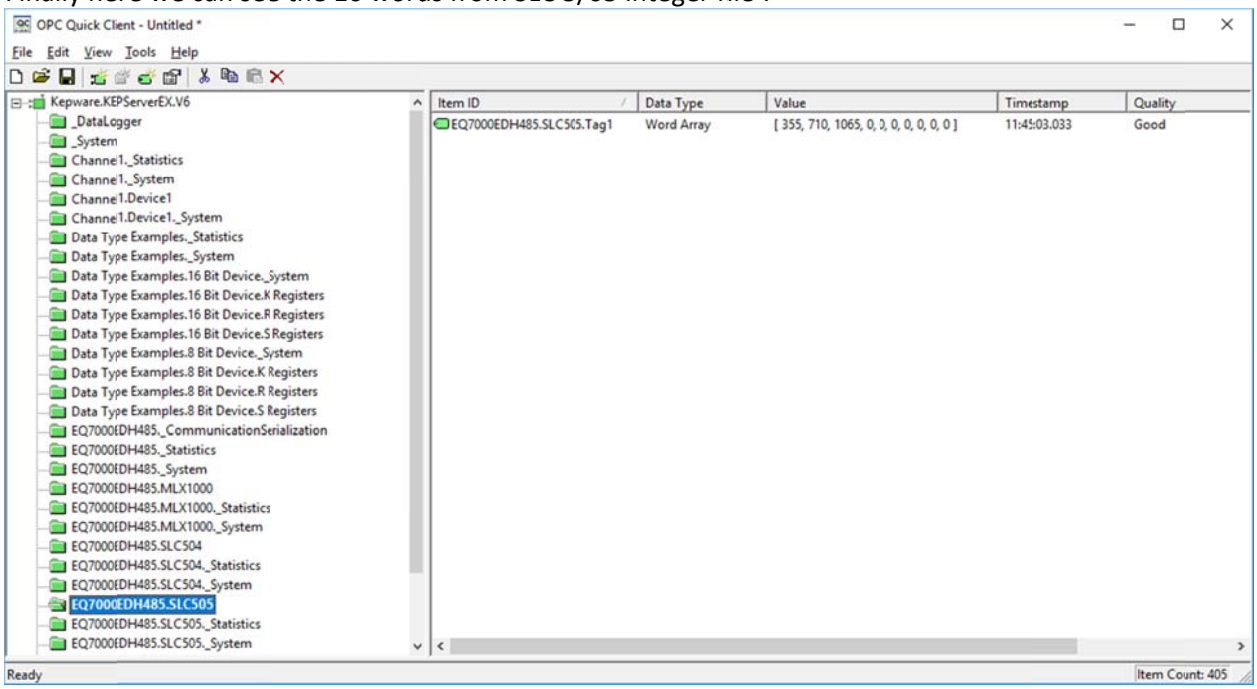
Under tools Click on Launch OPC Quick Client to get the data and confirm that communications through the EQ7000 are A Ok.



Here we can see 10 words from integer file 7 of the Micro Logix 1000



Here we can see out Tag2 , 10 words from Flaoting point file 8 of the SLC 5/04



Finally here we can see the 10 words from SLC 5/05 integer file 7