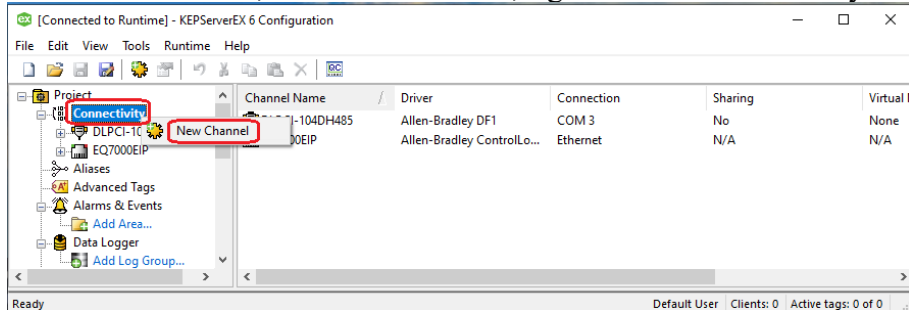
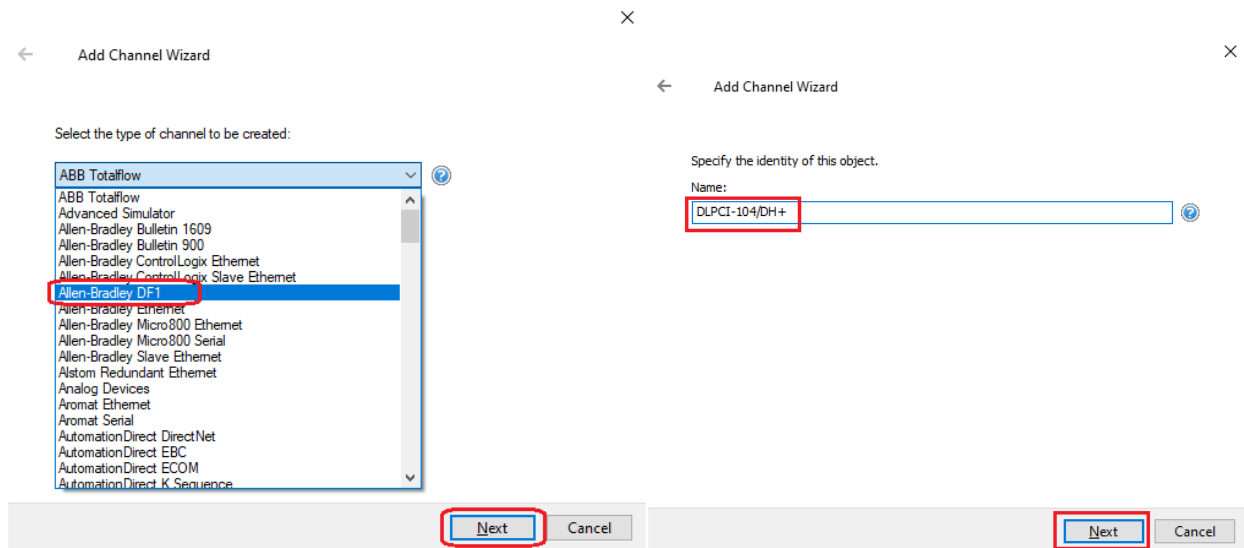


Equustek DLPCI/104 DF1-DH+ getting data from Allen Bradley PLC5 & SLC504 using PTC KEPServerEX

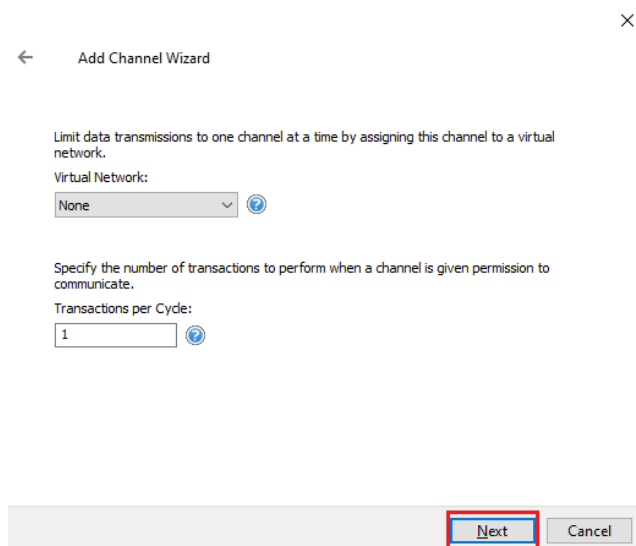
Start KEPServerEX, to create a channel, right click on connectivity then click on New Channel.



To select the driver from the drop menu, click on Allen Bradley DF1, click on Next, then type a name for the channel & click on Next.



Click on Next



Set COM port currently assigned to the DLPCI/104 in Device Manager as the COM ID, adjust the DF1 serial settings to match those previously configured for the DLPCI/104, and then proceed by clicking Next.

×

← Add Channel Wizard

Select the hardware device type for data communications (or None).

Physical Medium:

COM Port

Specify the physical port number.

COM ID:

3

Select the communications speed of the hardware in bits per second.

Baud Rate:

115200

Select the number of data bits per word.

Data Bits:

8

Indicate if the data parity for this communication is Odd, Even, or None.

Parity:

None

Specify the number of stop bits that indicate the end of a data transmission.

Stop Bits:

1

Select the Flow Control required by the target device (for control line utilization).

Flow Control:

None

Next

Cancel

Proceed by clicking Next to continue with the rest of the channel settings.

← Add Channel Wizard

Choose whether or not low-level communication errors are posted to the event log. Request failures and other errors are reported regardless.

Report Communication Errors:
Enable

Choose whether or not COM port connections are terminated when inactive.

Close Idle Connection:
Enable

Define the time, in seconds, a connection can be inactive before being terminated.

Idle Time to Close (s):
15

Choose how write data is passed to the underlying communications driver when more than one write exists in the write queue.

Optimization Method:
Write Only Latest Value for All Tags

Specify the ratio of write operations to read operations, based on one read per configurable number of writes.

Duty Cycle:
10

Next Cancel

← Add Channel Wizard

Choose how to send invalid floating-point numbers to the client.

Floating-Point Values:
Replace with Zero
Replace with Zero
Unmodified

Next Cancel

Proceed by setting Station ID to match the node address number of the DLPCI/104 & click Next.

← Add Channel Wizard

Set a unique network ID for the local machine or converter. In KF2/KF3 configurations, set to the KF2/KF3 node address. The Station ID must not conflict with any Device ID within the channel.

Station ID (decimal):
01

Select the standard for communication on this connection. Device model can dictate protocols supported. Protocol determines master and slave ratios, update rates, sink and source behavior, and attempt limits.

Link Protocol:
Full Duplex

Enable to only accept responses for the station indicated in the Station ID field.

Ignore Responses for other Stations:
Disable

Next Cancel

To finalize the channel settings, go ahead and click on Finish



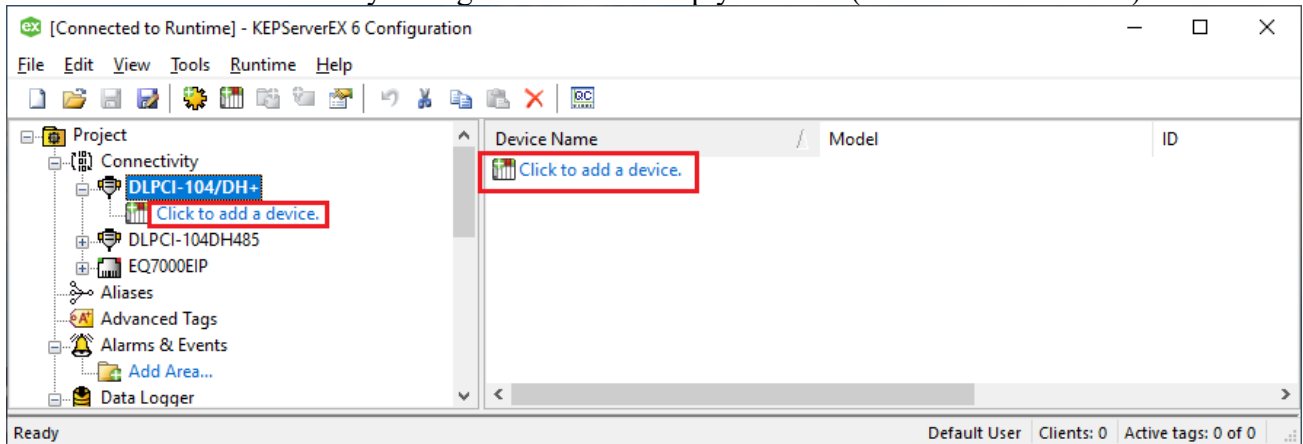
← Add Channel Wizard

Identification	
Name	DLPCI-104/DH+
Description	
Driver	Allen-Bradley DF1
Diagnostics	
Diagnostics Capture	Disable
Tag Counts	
Static Tags	0
Connection Type	
Physical Medium	COM Port
Shared	Yes
Serial Port Settings	
COM ID	3
Baud Rate	115200
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None
Operational Behavior	
Report Communication Errors	Enable
Close Idle Connection	Enable
Idle Time to Close (s)	15
Write Optimizations	
Optimization Method	Write Only Latest Value for All Tags
Duty Cycle	10
Non-Normalized Float Handling	
Floating-Point Values	Unmodified
Channel-Level Settings	
Virtual Network	None
Transactions per Cycle	1
Global Settings	
Network Mode	Load Balanced
Link Settings	
Station ID (decimal)	1
Link Protocol	Full Duplex
Ignore Responses for other Stations	Disable

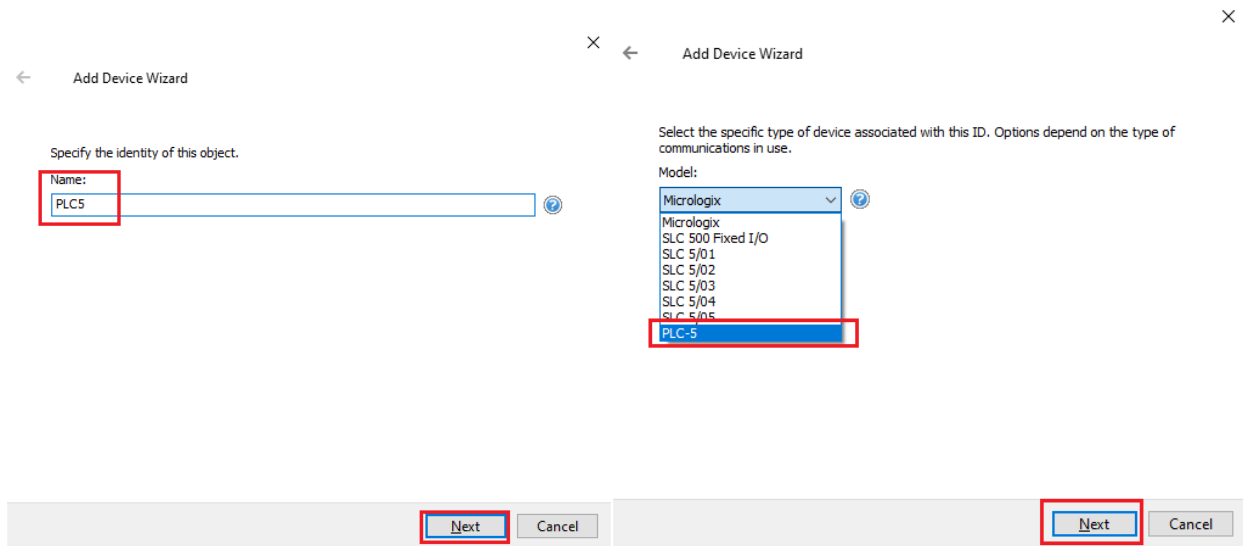
Finish

Cancel

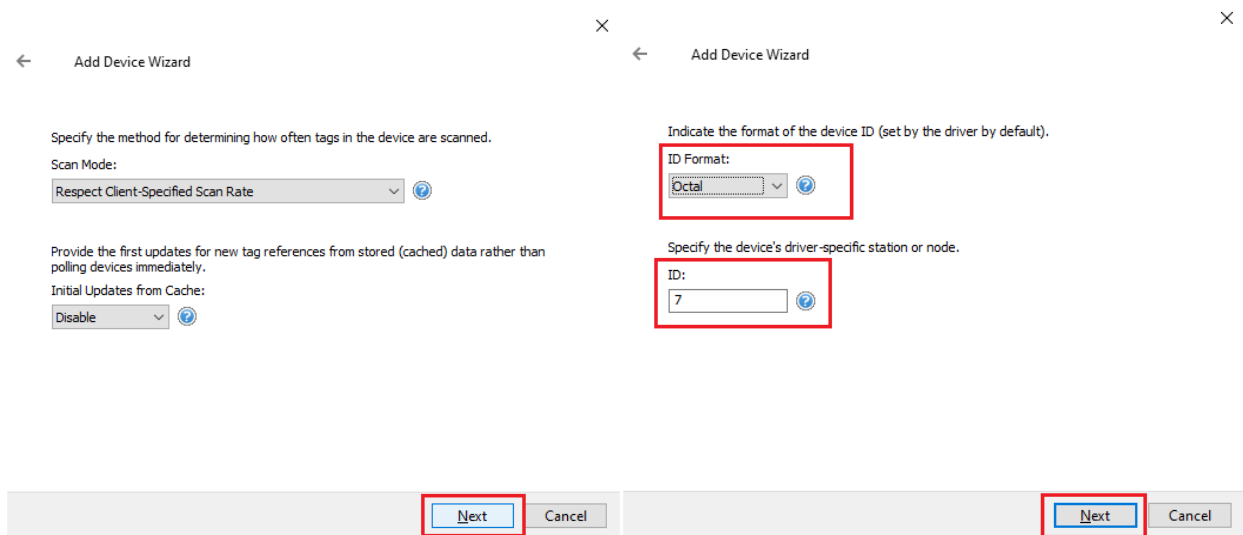
To add a Device to the newly configured channel simply click on (Click to add a device).



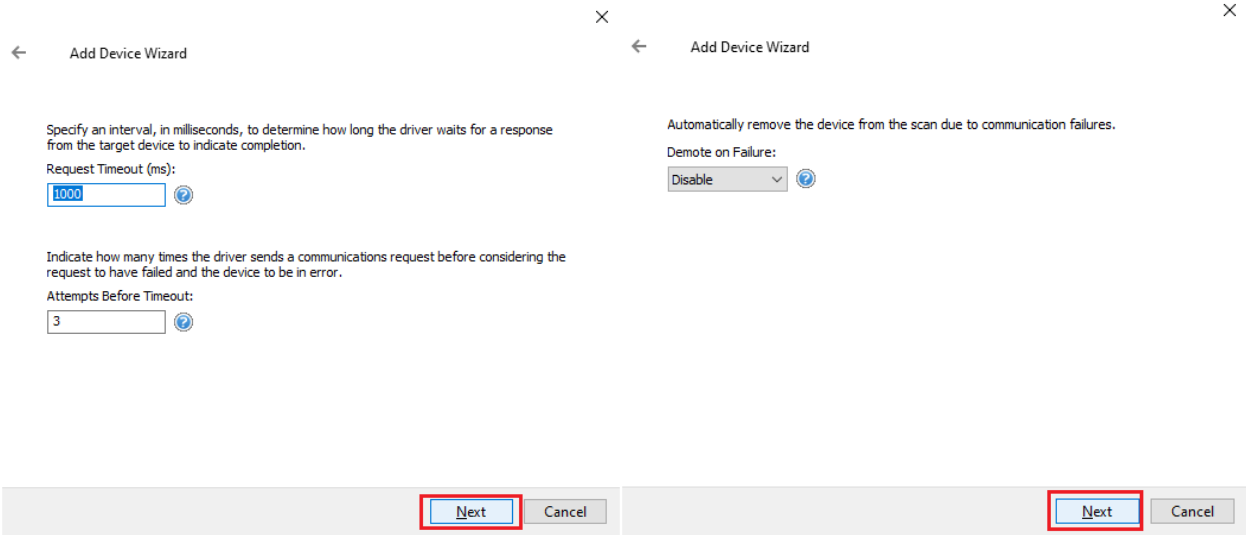
Specify device name as PLC5, & from the drop-down menu, select PLC5 then click on Next



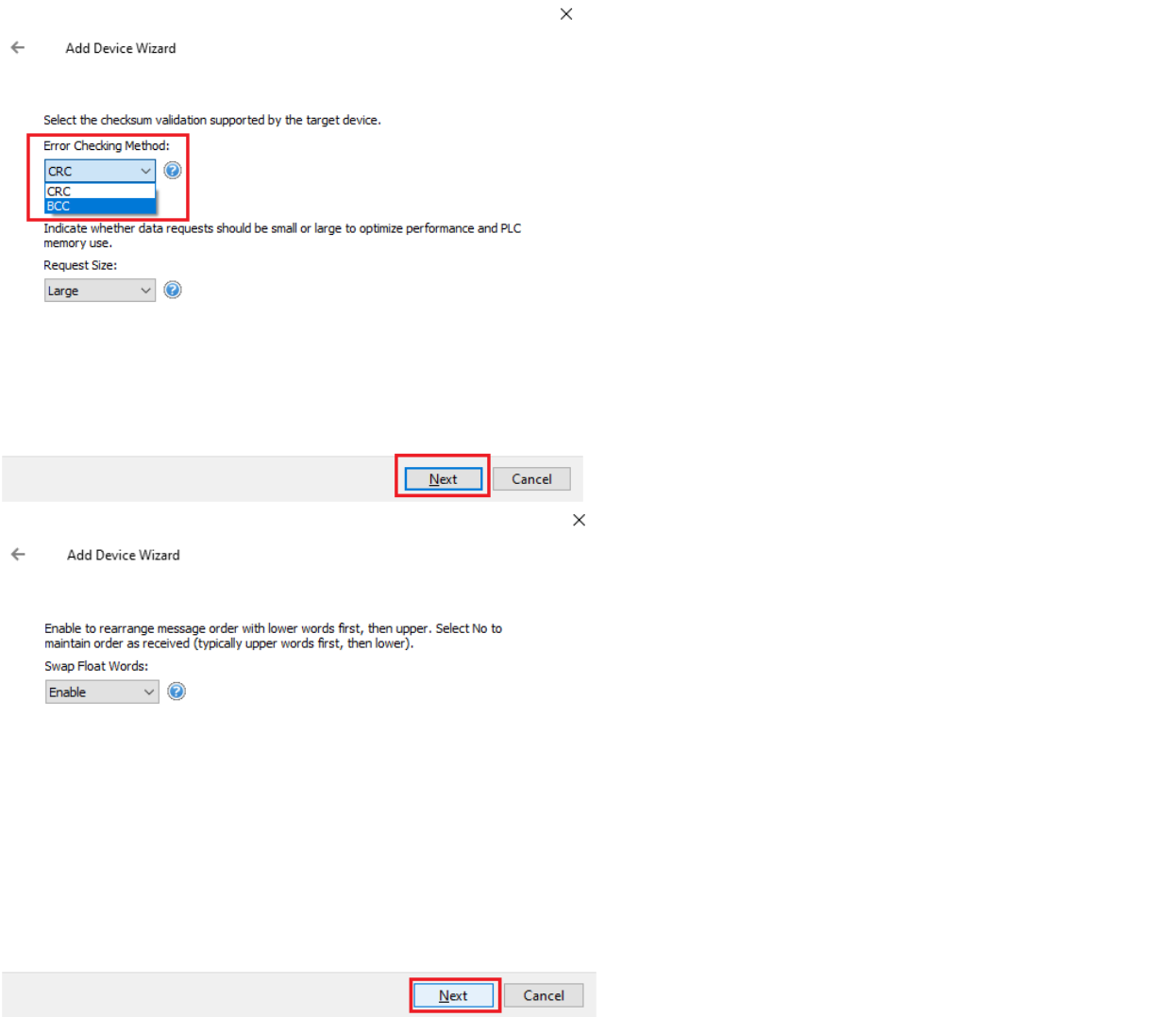
Enter the node address number of the PLC5. In our setup, it is set to node 7 then click Next.



Proceed with the rest of the Device settings.



Ensure the Error Checking matches the one set for the DLPCI/104 during its configuration.



When done with configuring the settings of the PLC5, click on Finish.

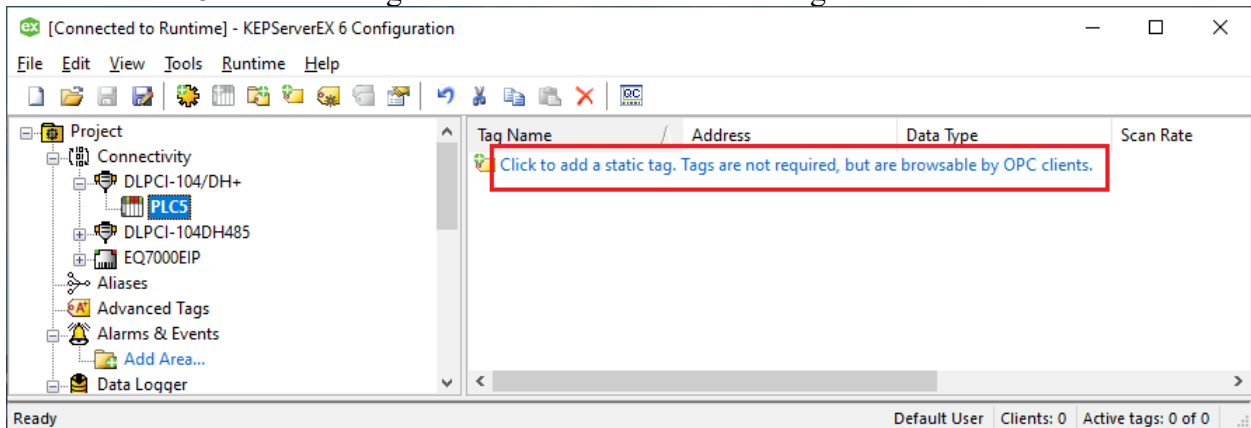


← Add Device Wizard

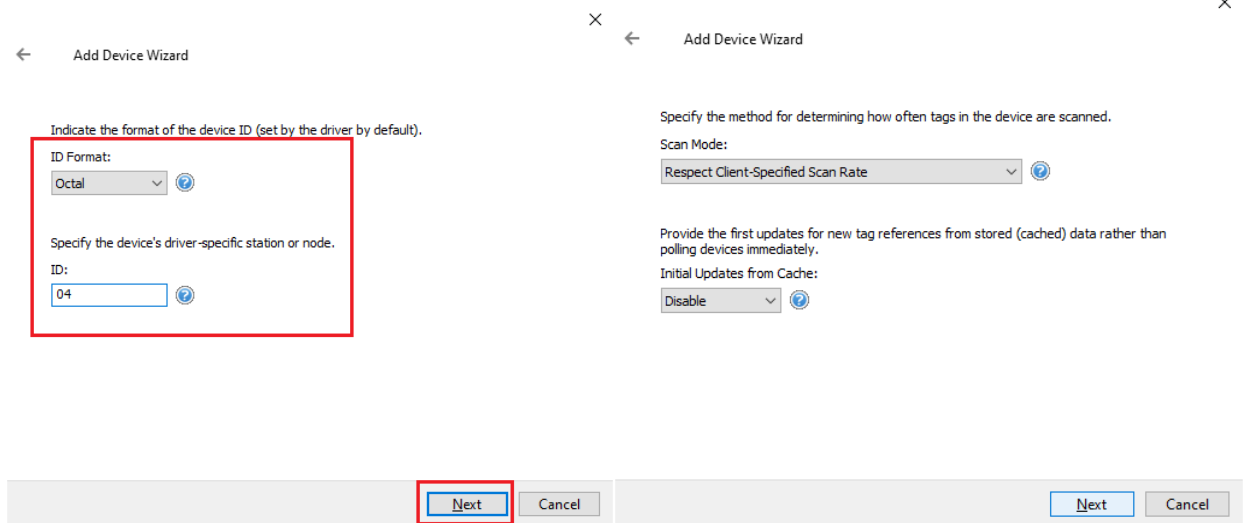
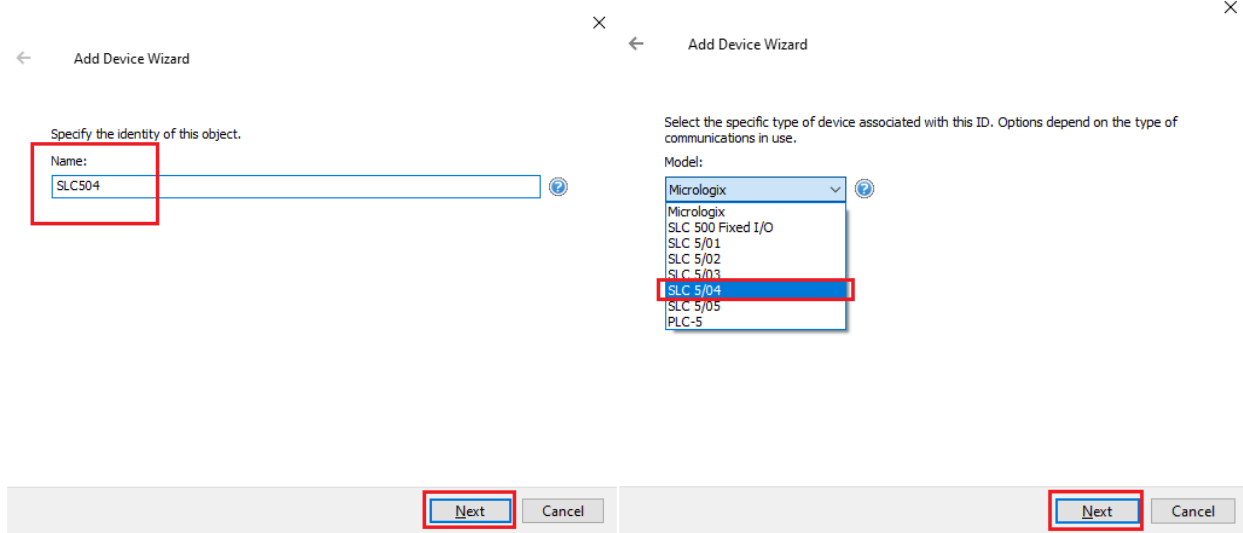
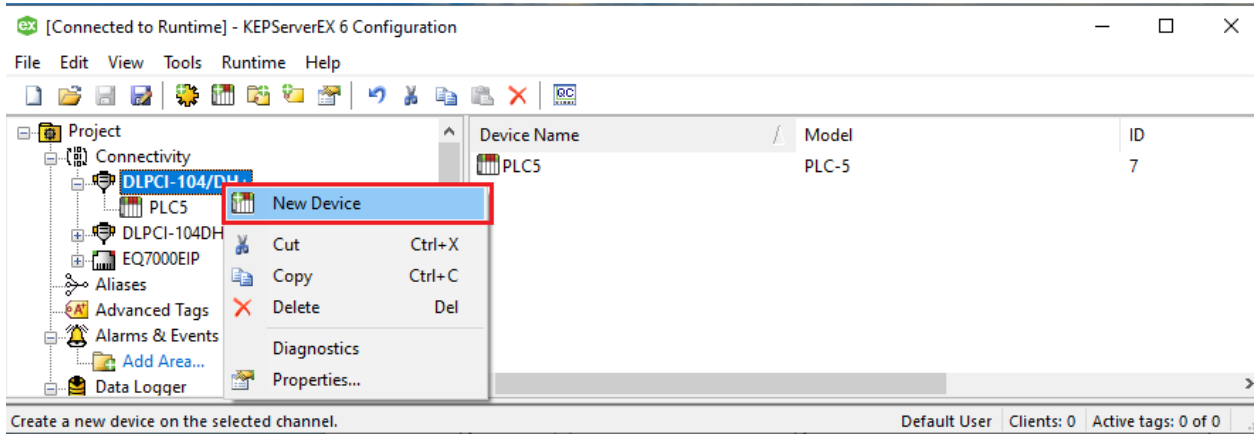
Identification	
Name	PLC5
Description	
Driver	Allen-Bradley DF1
Model	PLC-5
Channel Assignment	DLPCI-104/DH+
ID Format	Octal
ID	7
Operating Mode	
Data Collection	Enable
Simulated	No
Tag Counts	
Static Tags	0
Scan Mode	
Scan Mode	Respect Client-Specified Scan Rate
Initial Updates from Cache	Disable
Communication Timeouts	
Request Timeout (ms)	1000
Attempts Before Timeout	3
Auto-Demotion	
Demote on Failure	Disable
Protocol Settings	
Error Checking Method	BCC
Swap Float Words	Enable
Request Size	Large



Select the PLC5 and to add tags click on “Click to add static tags”.



In similar steps we can add another device here, we added AB SLC5/04 which is on the same DH+ network.



← Add Device Wizard ×

Specify an interval, in milliseconds, to determine how long the driver waits for a response from the target device to indicate completion.

Request Timeout (ms):

Indicate how many times the driver sends a communications request before considering the request to have failed and the device to be in error.

Attempts Before Timeout:

Automatically remove the device from the scan due to communication failures.

Demote on Failure:

← Add Device Wizard ×

Select the checksum validation supported by the target device.

Error Checking Method:

Indicate whether data requests should be small or large to optimize performance and PLC memory use.

Request Size:

← Add Device Wizard ×

Enable to support float access to integer files for SLC and MicroLogix.

N File Float Access:



← Add Device Wizard

Identification	
Name	SLC504
Description	
Driver	Allen-Bradley DF1
Model	SLC 5/04
Channel Assignment	DLPCI-104/DH+
ID Format	Octal
ID	4
Operating Mode	
Data Collection	Enable
Simulated	No
Tag Counts	
Static Tags	0
Scan Mode	
Scan Mode	Respect Client-Specified Scan Rate
Initial Updates from Cache	Disable
Communication Timeouts	
Request Timeout (ms)	1000
Attempts Before Timeout	3
Auto-Demotion	
Demote on Failure	Disable
Protocol Settings	
Error Checking Method	BCC
Request Size	Large
N File Float Access	Enable

Finish

Cancel

[Connected to Runtime] - KEPServerEX 6 Configuration

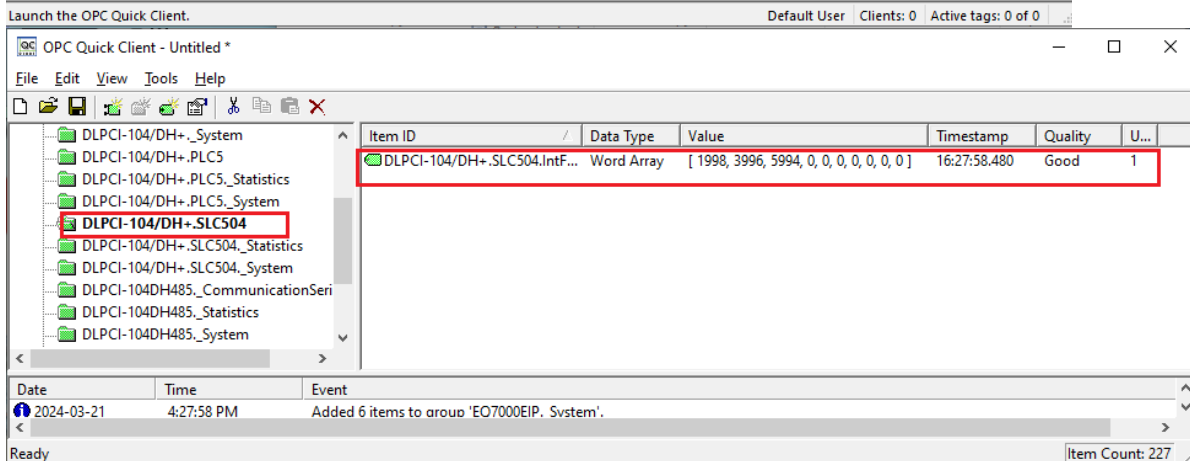
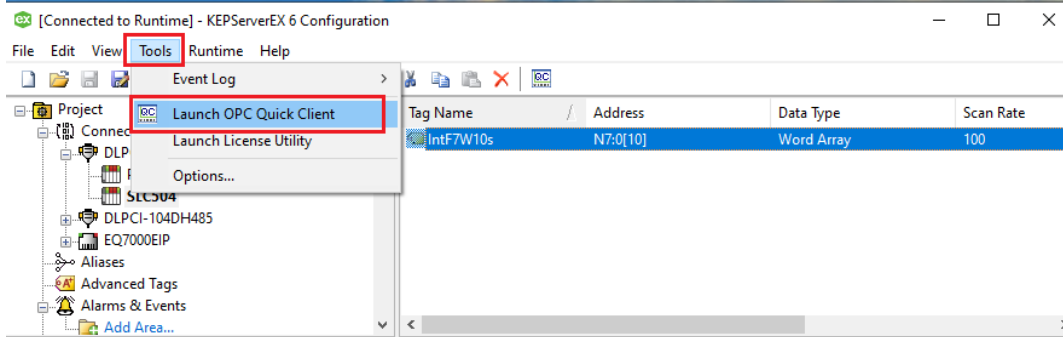
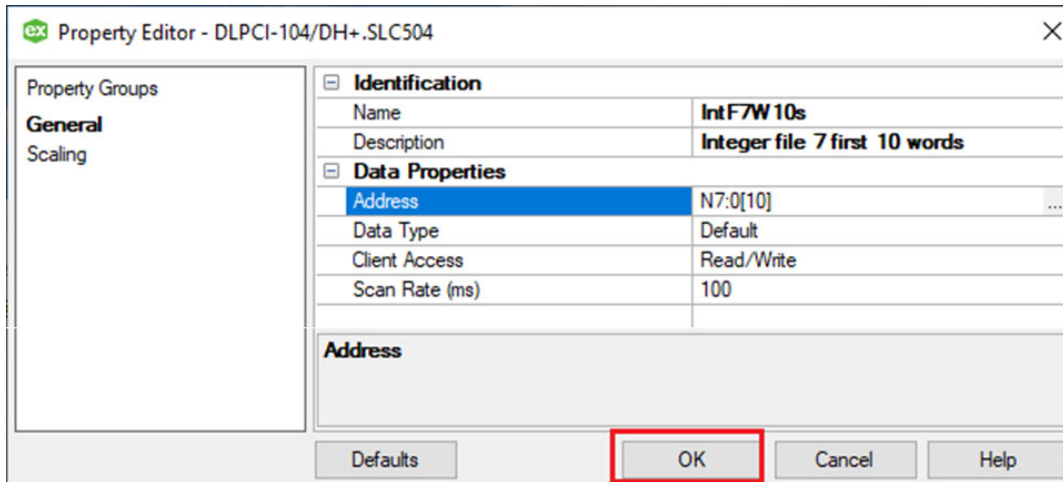
File Edit View Tools Runtime Help

Project

- Connectivity
 - DLPCI-104/DH+
 - PLC5
 - SLC504**
 - DLPCI-104DH485
 - EQ7000EIP
 - Aliases
 - Advanced Tags
 - Alarms & Events
 - Add Area...

Tag Name	Address	Data Type	Scan Rate
Click to add a static tag. Tags are not required, but are browsable by OPC clients.			

Ready Default User Clients: 0 Active tags: 0 of 0



Here Also can be shown that tag values are same as those read in Rslinx from the SLC504.

