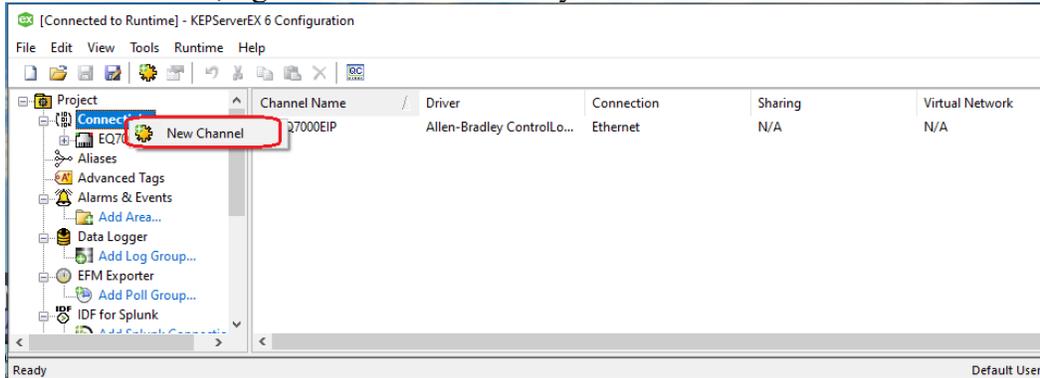
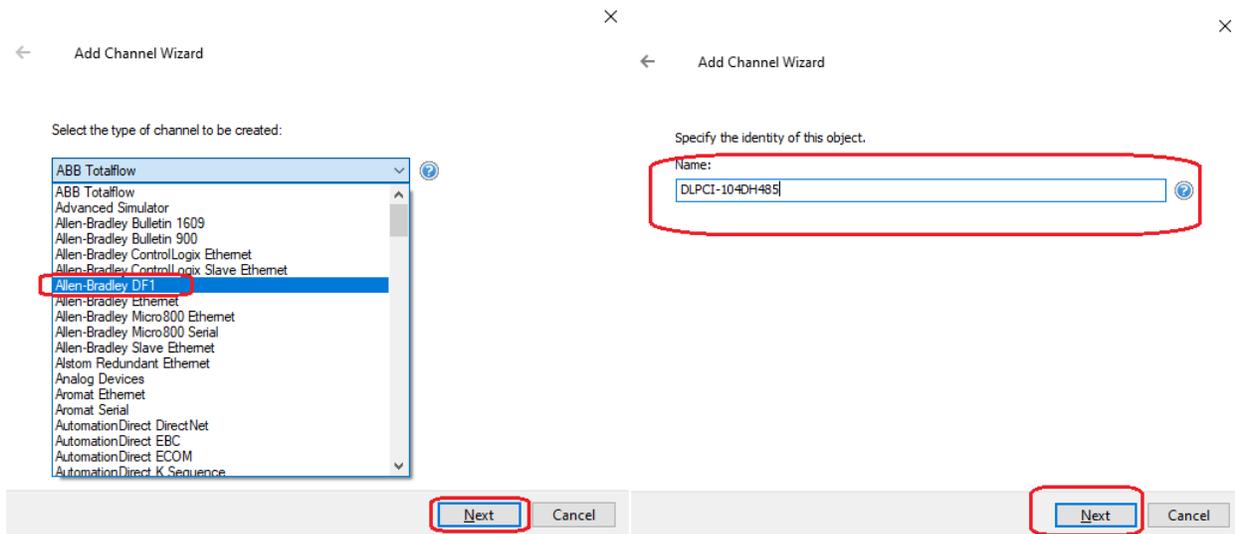


KEPServer accessing data from Allen Bradley SLC503 and Micrologix on DH485 network with Equustek DLPCI/104 DH485 card

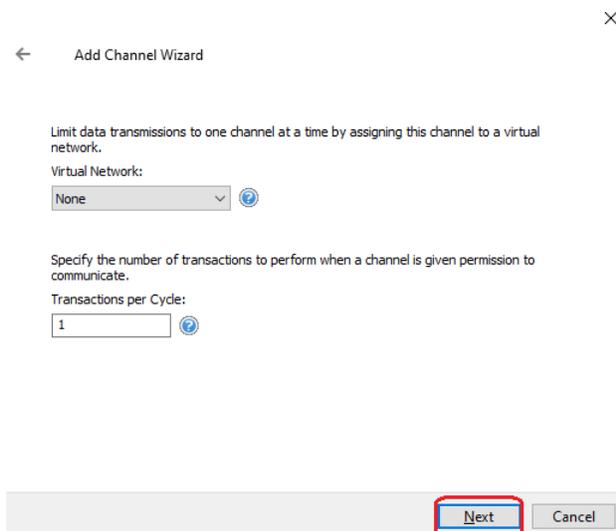
Start KEPServer, right click on Connectivity and click on New Channel.



From Channel type drop menu, select Allen-Bradley DF1, click on Next, then specify the identity of the object and click on Next



Click on Next



Set comport occupied by the DLPCI/104 found in Device Manager as COM ID, also set the DF1 serial setting similar to those that the DLPCI/104 was configured for, then click on 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:

19200 

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

Continue with the rest of the channel setting

← 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

Next Cancel

Set the Station ID same to the node address number of the DLPCI/104 & click on 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

Click on Finish to complete the Channel settings



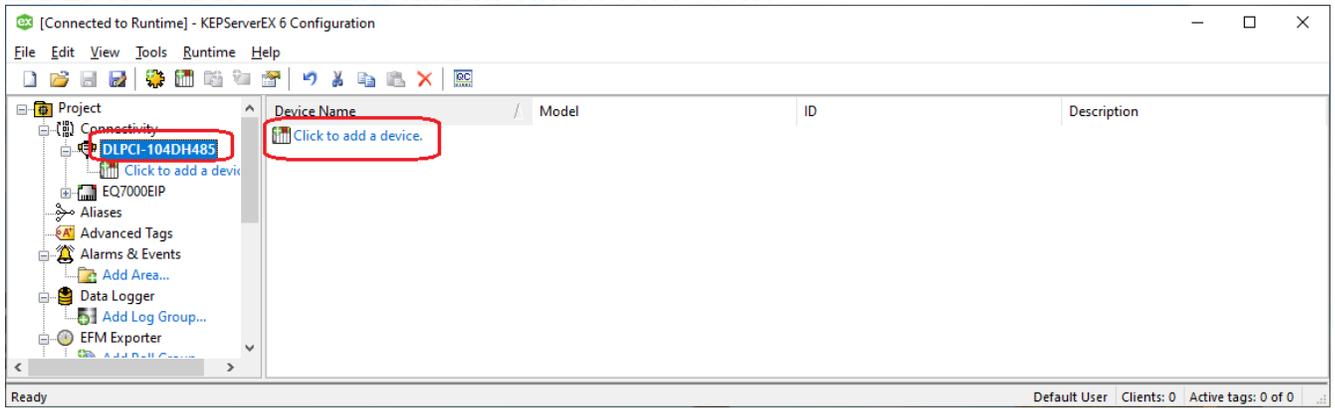
← Add Channel Wizard

Identification	
Name	DLPCI-104DH485
Description	
Driver	Allen-Bradley DF1
Diagnostics	
Diagnostics Capture	Disable
Tag Counts	
Static Tags	0
Connection Type	
Physical Medium	COM Port
Shared	No
Serial Port Settings	
COM ID	3
Baud Rate	19200
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

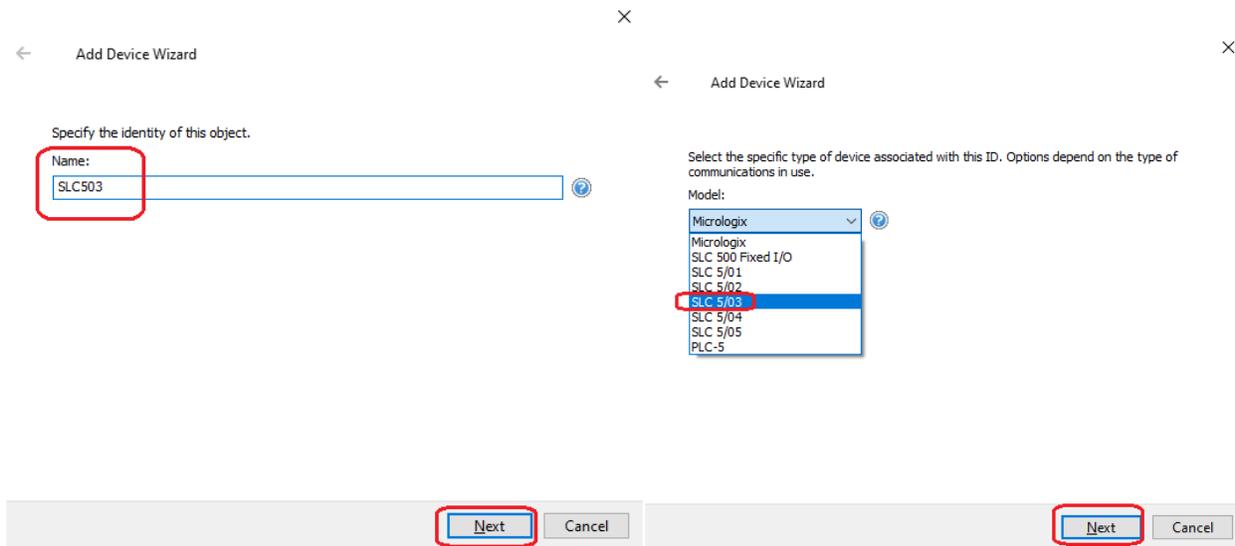
Finish

Cancel

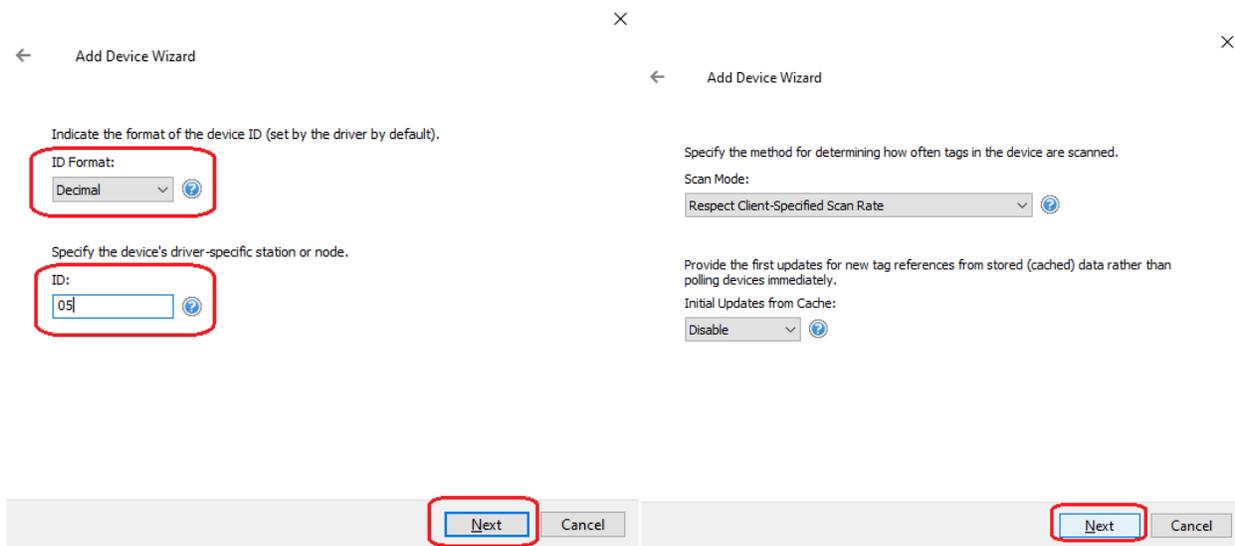
In DLPCI-104DH485 channel click on Click to add a device.



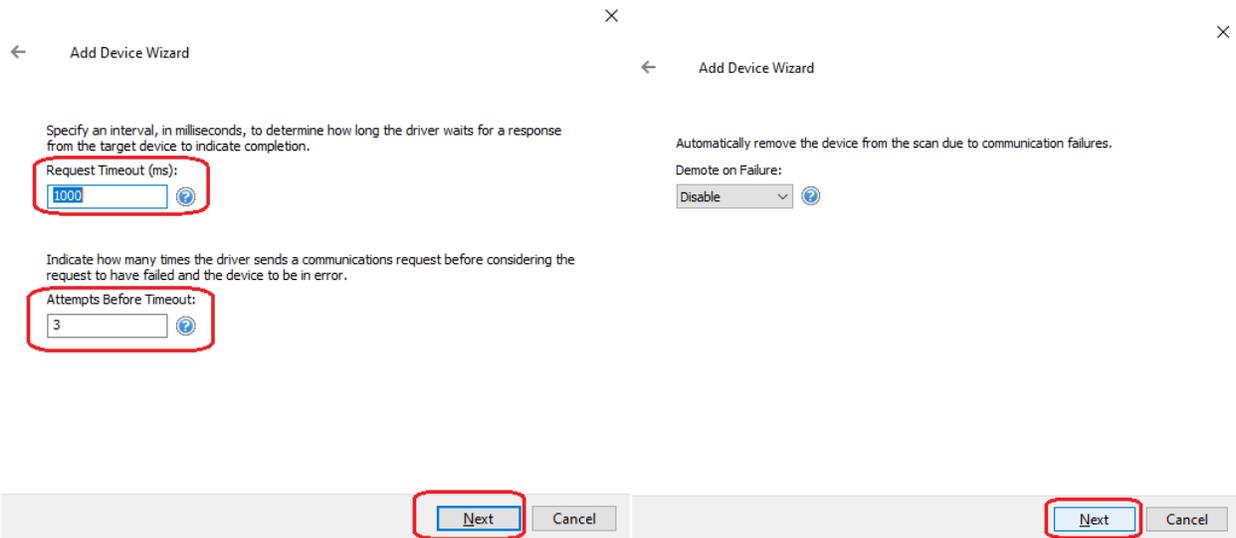
Type a name of the device, here we have the SLC5/03, then click on Next.



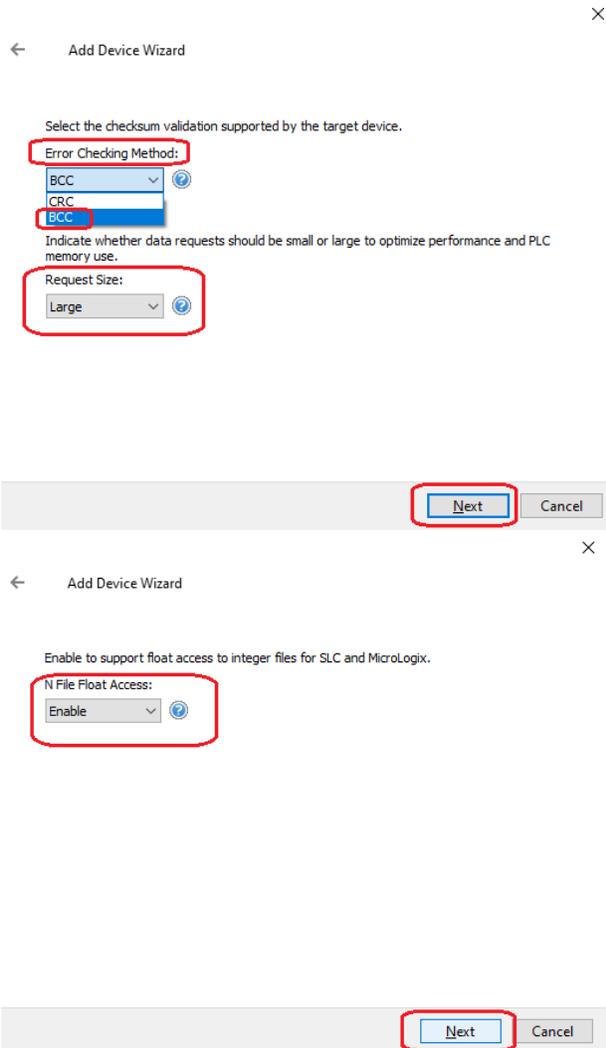
Enter the node address number of the SLC503 here in our setup is set to node 5.



Continue with the rest of the settings.



Make sure Error Checking is same as the DLPCI/104 is set for when it was configured.



Once done with SLC503 settings click on Finish.



← Add Device Wizard

Identification	
Name	SLC503
Description	
Driver	Allen-Bradley DF1
Model	SLC 5/03
Channel Assignment	DLPCI-104DH485
ID Format	Decimal
ID	5
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

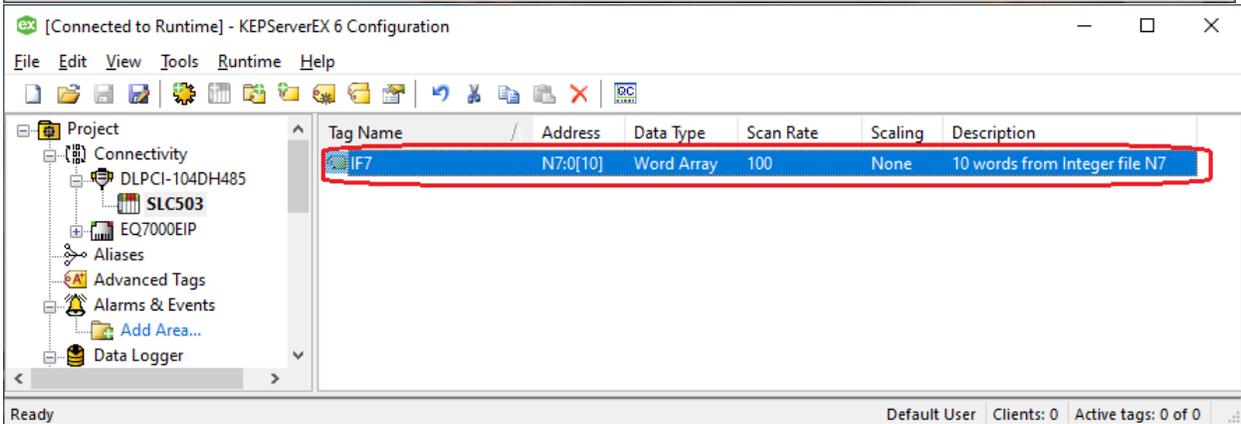
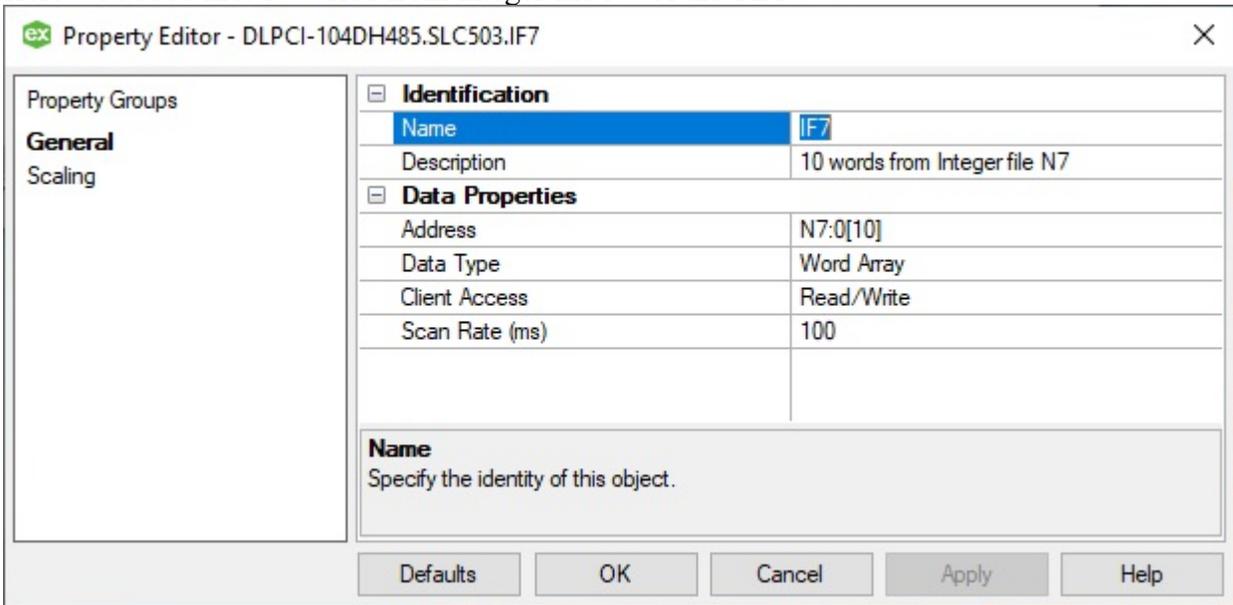
Finish Cancel

Click to add tags as shown.

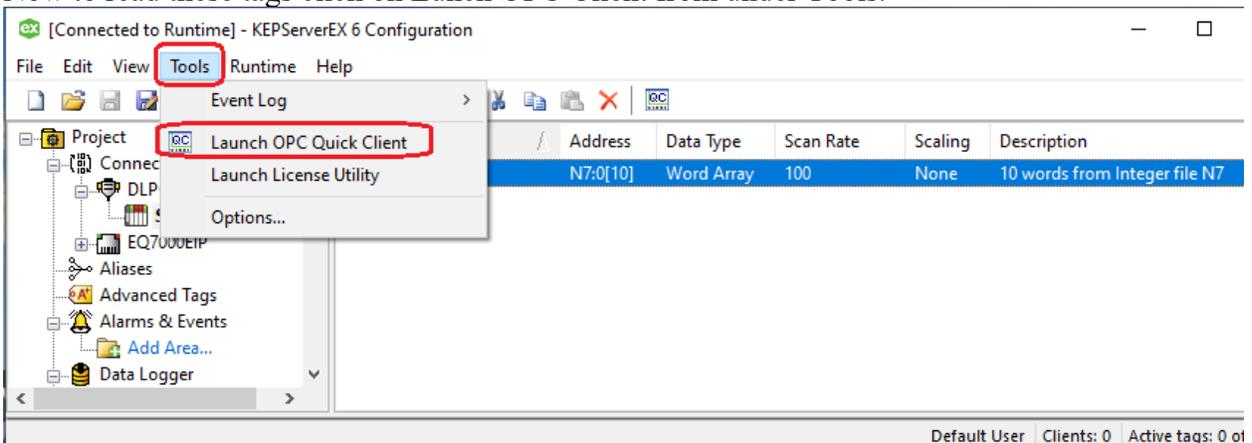
The screenshot shows the KEPServerEX 6 Configuration interface. On the left, the project tree shows the SLC503 device selected under the DLPCI-104DH485 connectivity. The main window displays a table of tags with the following columns: Tag Name, Address, Data Type, Scan Rate, Scaling, and Description. A red box highlights the first row of the table, which contains the text: "Click to add a static tag. Tags are not required, but are browsable by OPC clients."

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

Here we added first 10 words from integer file N7 of the SLC/503.



Now to read these tags click on Lunch OPC Client from under Tools.



OPC Quick Client - Untitled *

File Edit View Tools Help

Item ID	Data Type	Value	Timestamp	Quality	Update Count
DLPCI-104DH485.SLC503.IF7	Word Array	[1978, 5917, 14, 40, 137, 1, 22, 33, 5, 0]	11:55:32.163	Good	1

Those values can be seen here same when read from the same SLC503 using Rslinx.

RSLinx Classic Lite - [RSWho - 1]

File View Communications Station DDE/OPC Security Window Help

Autobrowse Refresh Browsing - node 3 found

Workstation, LAB-D-PC

- Linx Gateways, Ethernet
- AB_ETH-1, Ethernet
- AB_ETHIP-1, Ethernet
- DLPCI-104, DH-485
 - 01, Workstation, DLPCI104-DF
 - 02, SLC-5/05, SLC505
 - 03, SLC-5/04, SLC504
 - 04, MicroLogix 1000, MICROT
 - 05, SLC-5/03, SLC503

SLC-5/03 (13): Data File N7

	0	1	2	3	4	5	6	7	8	9
N7:0	1978	5917	14	40	137	1	22	33	5	0
N7:10	2323	2000	0	0	0	0	0	0	0	0
N7:20	0	0	0	0	0	0	0	0	0	0
N7:30	0	0	0	3333	0	0	6654	0	0	0
N7:40	0	0	0	0	0	0	0	0	0	0

In similar steps we can add an other device here we added AB Micrologix 1000 which is on the same DH485 network.

[Connected to Runtime] - KEPServerEX 6 Configuration

File Edit View Tools Runtime Help

Project

- Connectivity
 - DLPCI-104D
 - EQ7000EIP
- Aliases
- Advanced Tags
- Alarms & Events
- Add Area...
- Data Logger
- Add Log Gro...

Device Name / Model / ID

SLC503	SLC 5/03	5
--------	----------	---

New Device

- Cut Ctrl+X
- Copy Ctrl+C
- Delete Del
- Diagnostics
- Properties...

Create a new device on the selected channel. Default User Cli

← Add Device Wizard

Specify the identity of this object.

Name:

MLX1000

Next Cancel

← Add Device Wizard

Select the specific type of device associated with this ID. Options depend on the type of communications in use.

Model:

Micrologix

Next Cancel

← Add Device Wizard

Indicate the format of the device ID (set by the driver by default).

ID Format:

Decimal

Specify the device's driver-specific station or node.

ID:

04

Next Cancel

Identification	
Name	MLX1000
Description	
Driver	Allen-Bradley DF1
Model	Micrologix
Channel Assignment	DLPCI-104DH485
ID Format	Decimal
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
Function File Options	
Allow Function File Block Writes	Disable

Finish Cancel

