

CTW E5 EIP Comms Configuration EDS Installation

CONTROL/COMPACTLOGIX COMMS

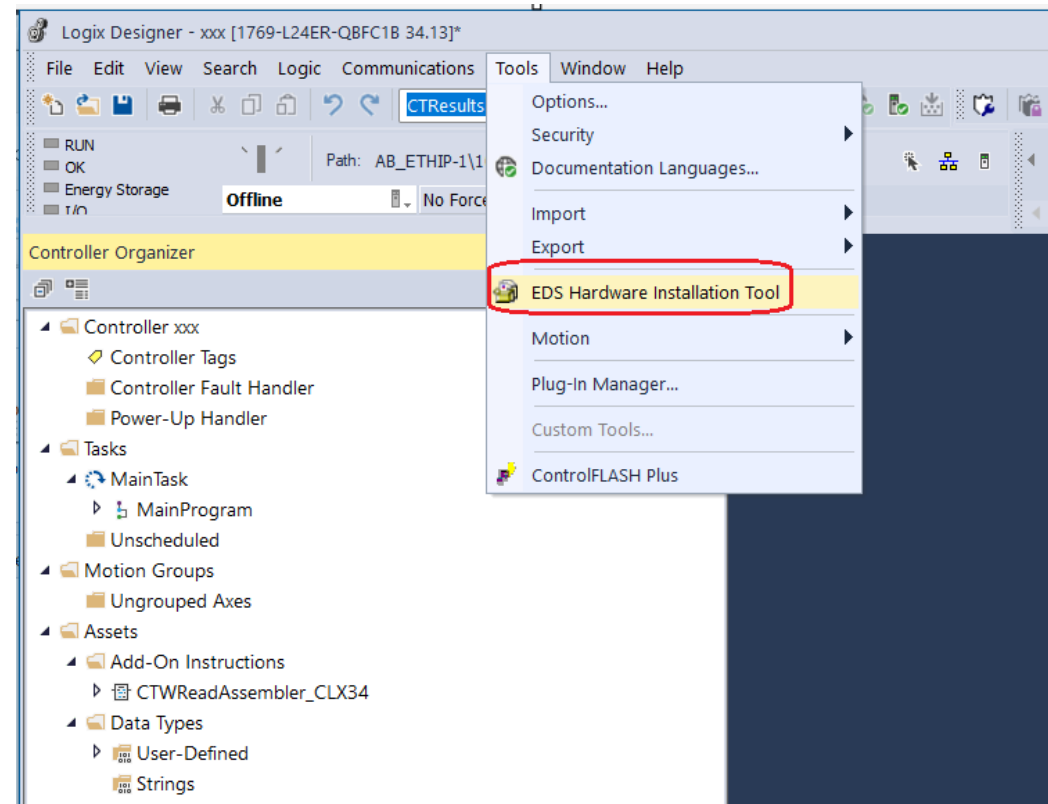
GMCCUTCHEON NOTES 10/30/2025

Files and Hardware

- This example uses a CompactLogix 1769-L24ER-QBFC1B (v36) and Studio 5000 Logix Designer Mini Edition to show how to connect a CasTemp Wireless E5 with an Anybus M40 EtherNet/IP option module to the PLC.
- The Anybus ABCC CompactCom 40 EtherNet/IP EDS File '005A002B00370100.eds' for EIP communication.
 - [Anybus CompactCom M40 EDS File 005A002B00370100.zip](#)
 - Download the EDS file from the link above.
 - Unzip the file to a convenient location for installation as Studio5000 will need to import this file.

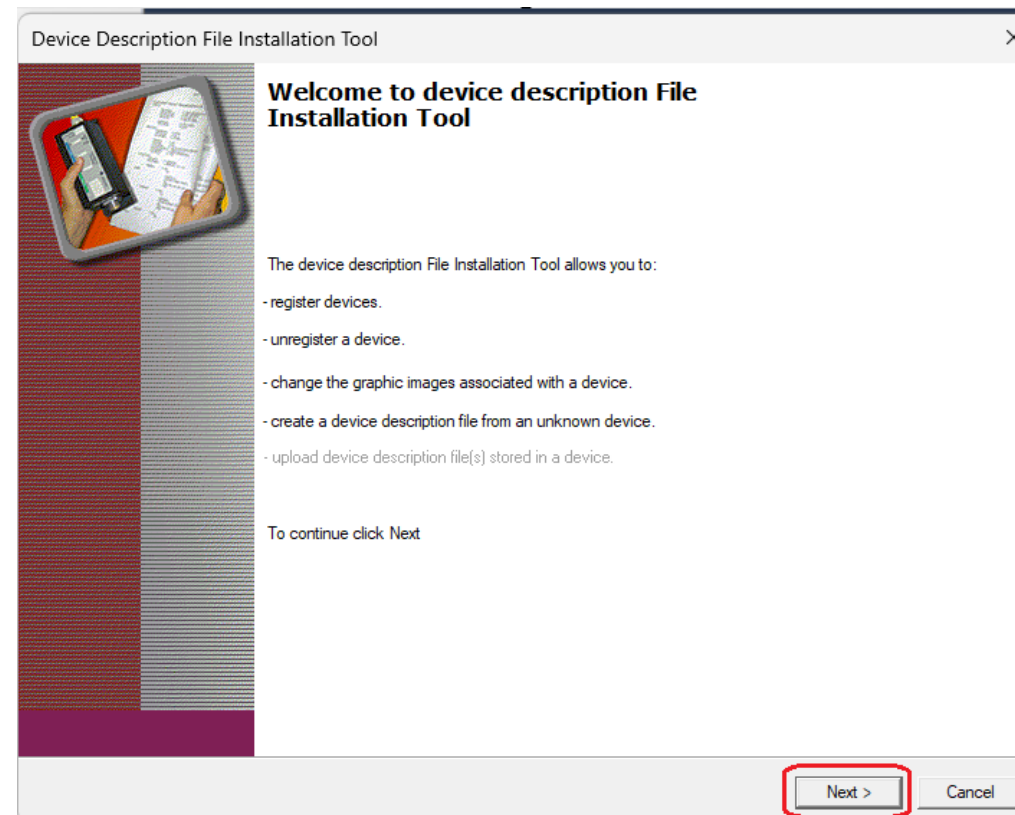
EIP Hardware Installation Tool

- In Studio5000, open the 'EIP Hardware Installation Tool' menu item from the 'Tools' menu.



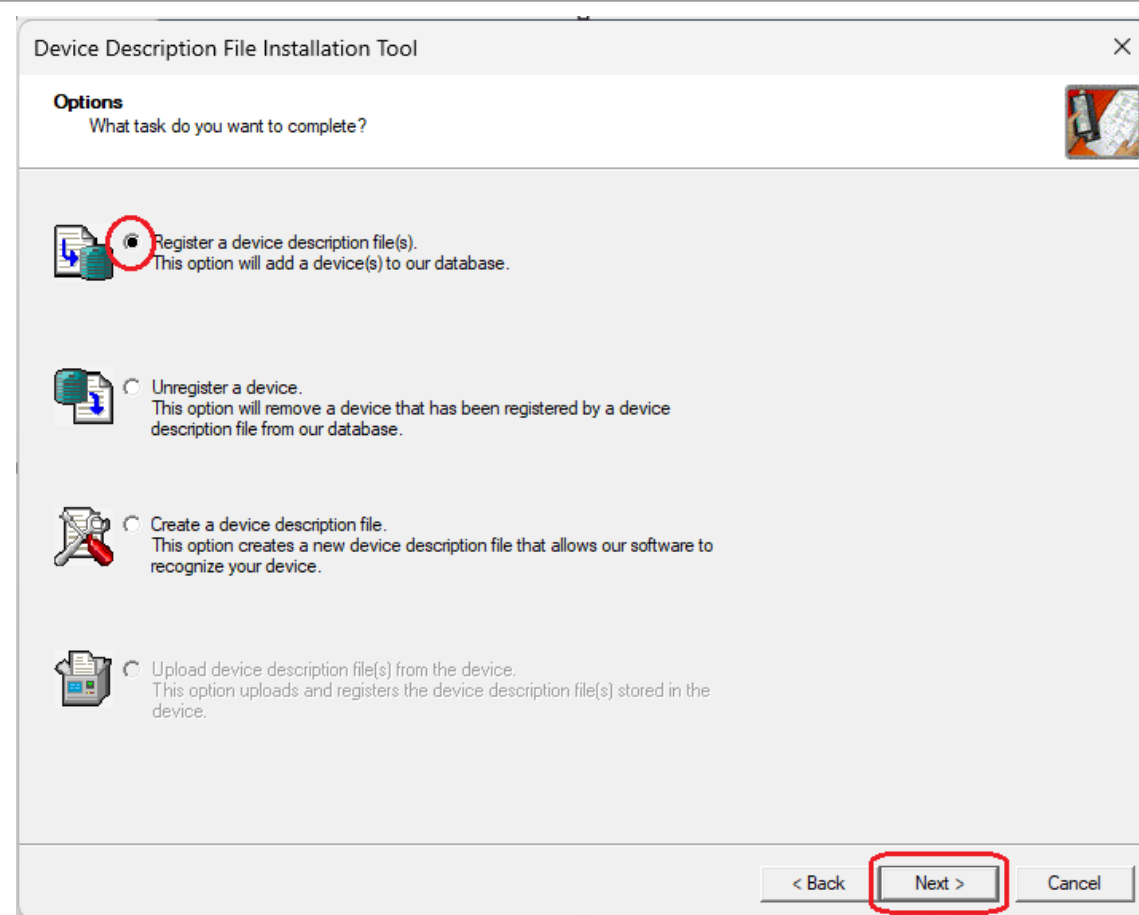
EIP Hardware Installation Tool

- Once the 'Welcome Screen' opens, click <Next>.



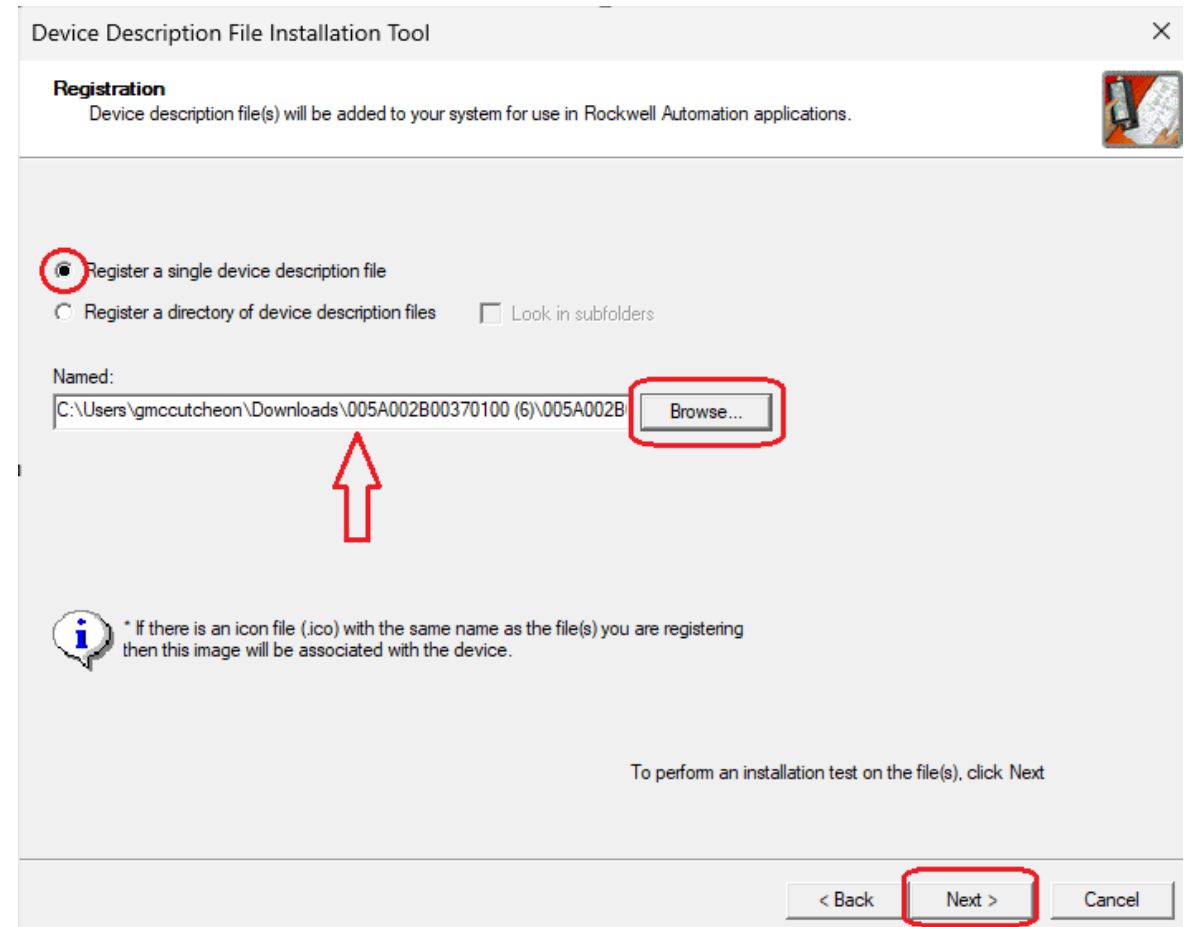
EIP Hardware Installation Tool

- Select 'Register a device description file(s).'
- then click <Next>.



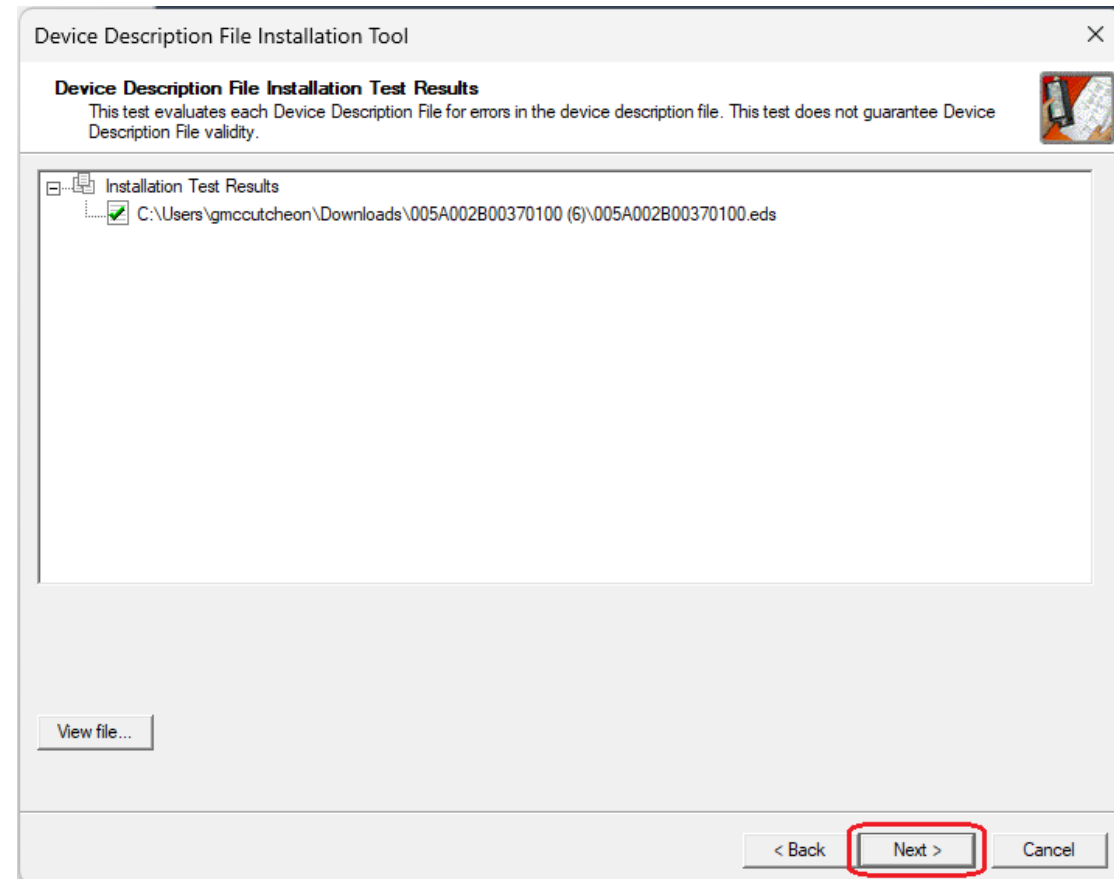
EIP Hardware Installation Tool

- Select 'Register a single device description file'.
- Click <Browse>.
- Navigate to and select the .EDS file.
- Click <Next>.



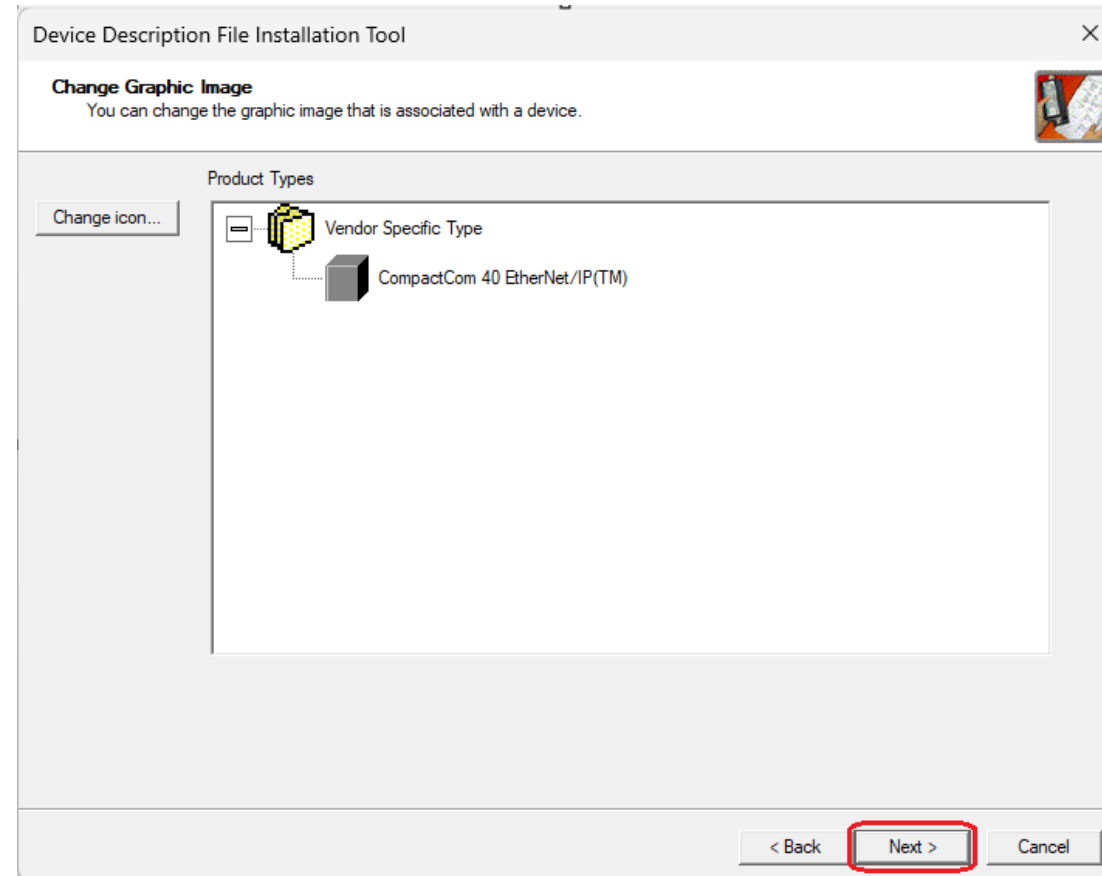
EIP Hardware Installation Tool

- Click <Next>.



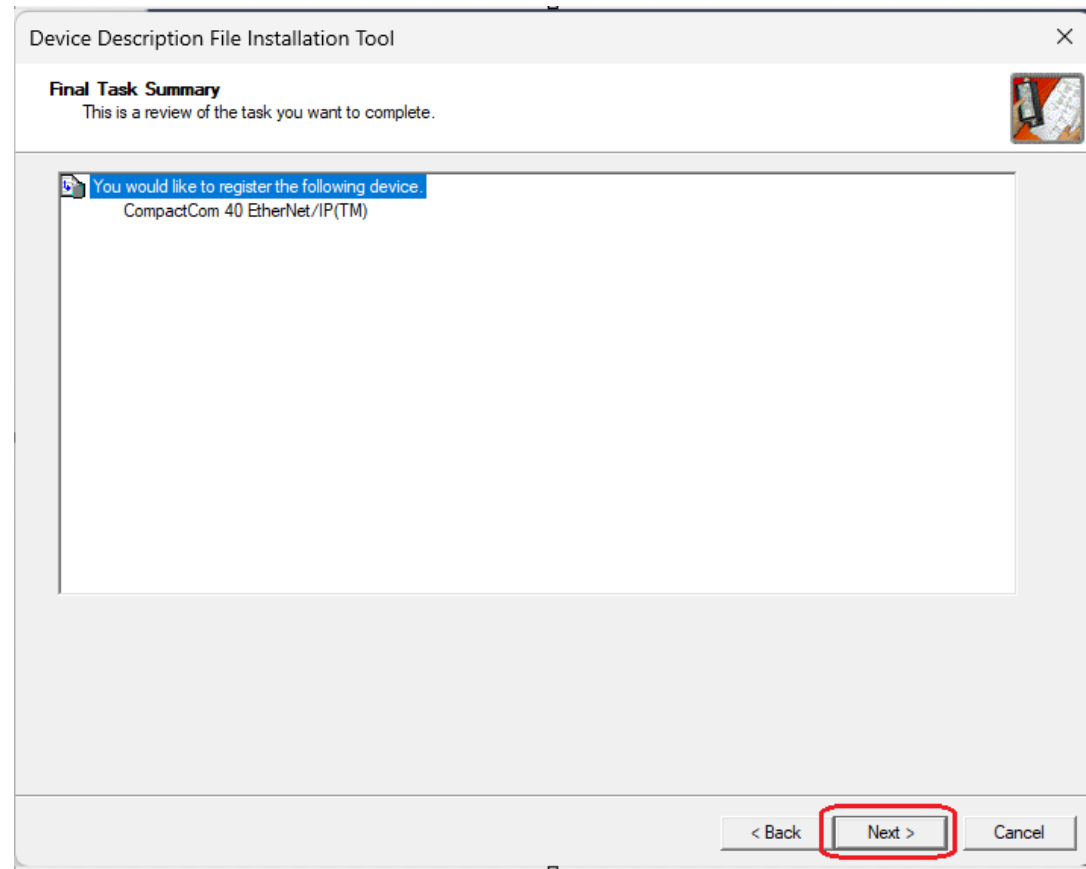
EIP Hardware Installation Tool

- Click <Next>.



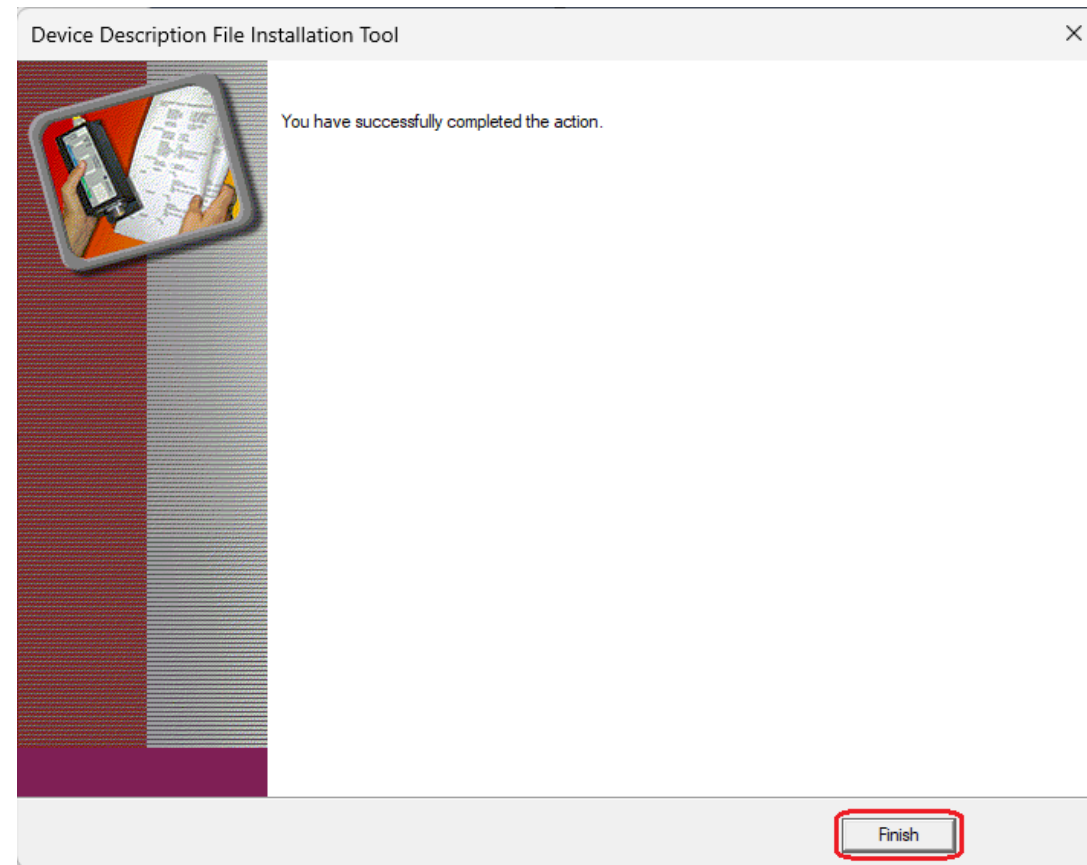
EIP Hardware Installation Tool

- Click <Next>.



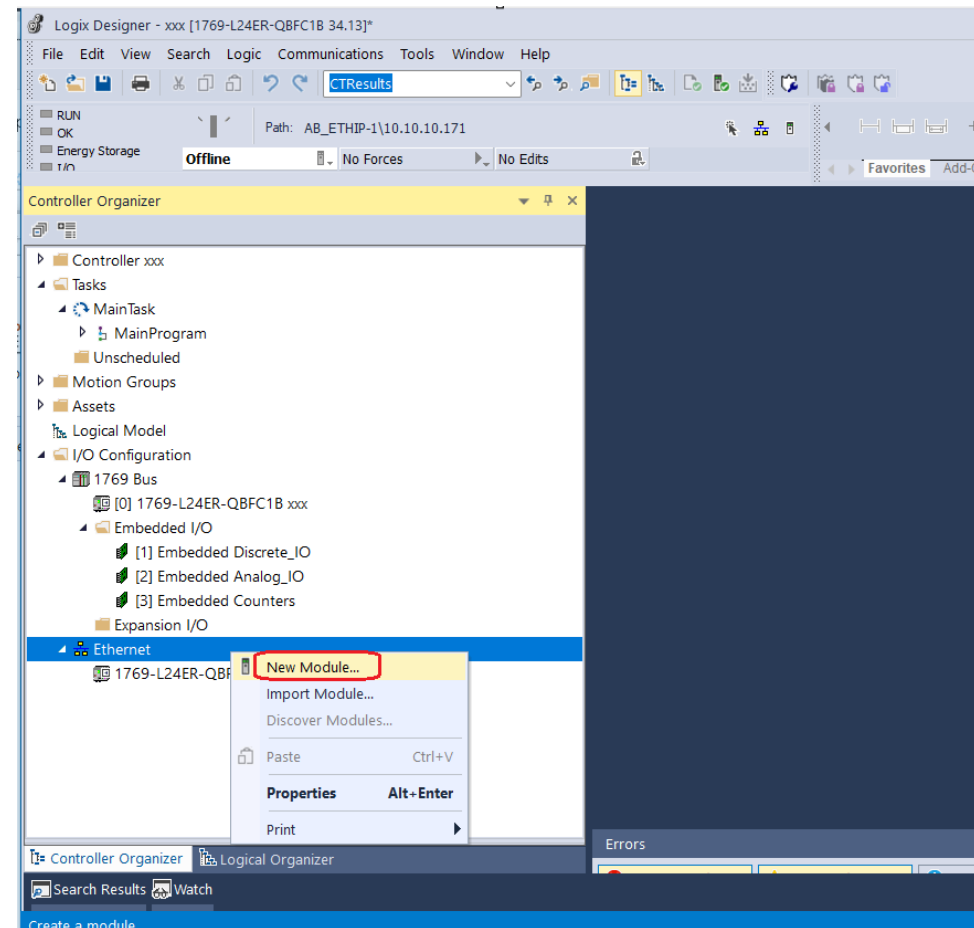
EIP Hardware Installation Tool

- Click <Finish>.



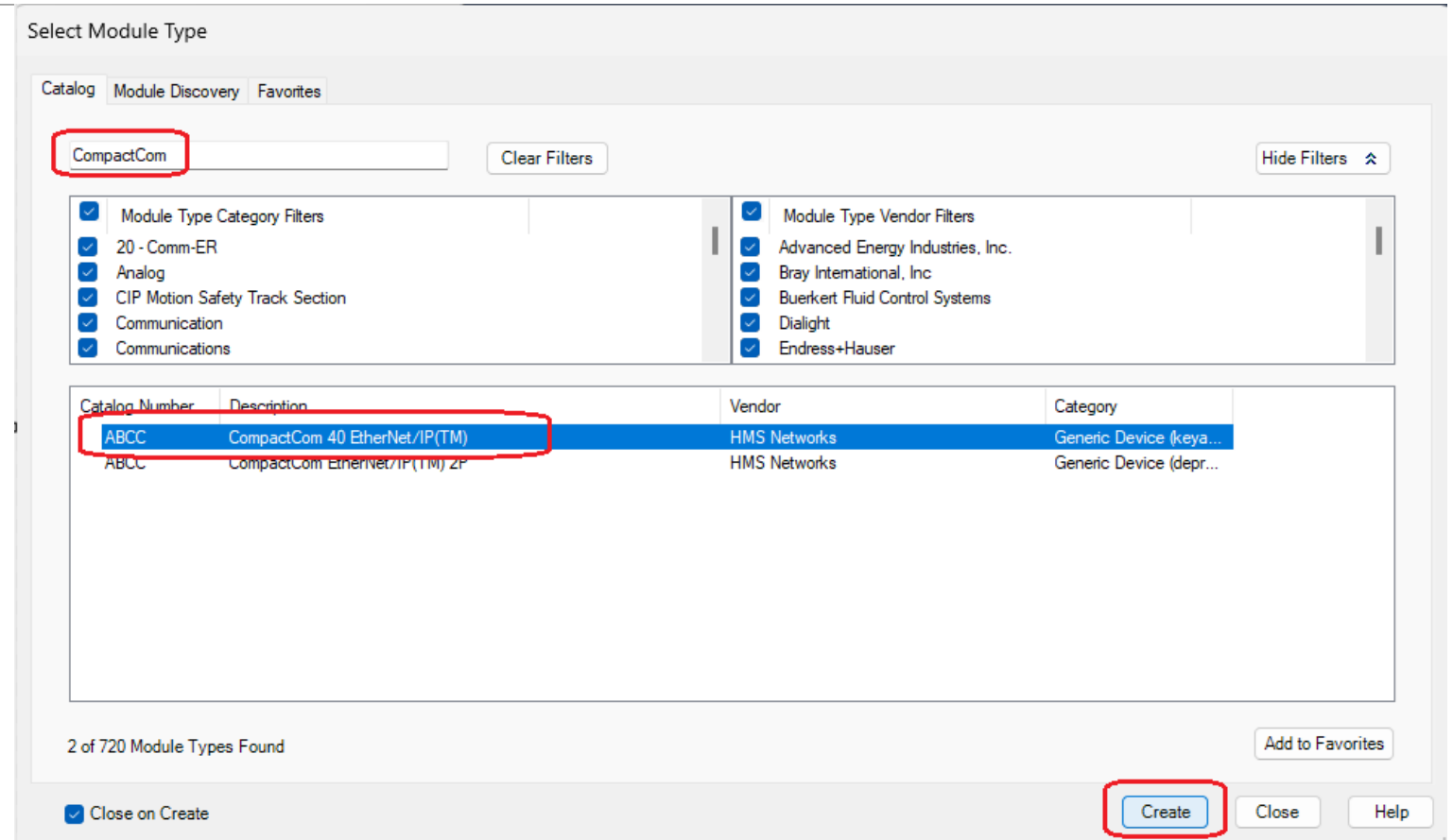
Module Creation and Configuration

- Right-click 'Ethernet' in the Studio5000 Controller Organizer.
- Select the 'New Module' menu item



Module Creation and Configuration

- Type “CompactCom” into the search textbox.
- Select “CompactCom 40 EtherNet/IP(TM)”.
- Click <Create>



Module Creation and Configuration

- Add the EIP IP address for the Celox Lab E4.
 - In this example '10.10.10.169' .
- Name the module.
 - In this example 'CTWE5'.
 - The controller tags created to manage the data from this module will use this name (ie CTWE5 :I.Data).
- Click <Change>

The screenshot shows the 'New Module' dialog box with the following details:

- General Tab:**
 - Type: ABCC CompactCom 40 EtherNet/IP(TM)
 - Vendor: HMS Networks
 - Parent: Local
 - Name: CTWE5
 - Description: (empty text area)
- Ethemet Address:**
 - Private Network: 192.168.1. (disabled)
 - IP Address: 10 . 10 . 10 . 169 (selected)
 - Host Name: (disabled)
- Module Definition:**
 - Revision: 1.052
 - Electronic Keying: Compatible Module
 - Connections: Exclusive Owner
- Buttons:** OK, Cancel, Help, and a highlighted 'Change ...' button.
- Status:** Creating

Module Creation and Configuration

- Set the Input Assembly size to 128
- Set the Output Assembly size to 64.
- Set the data type to SINT.
- Click <OK>.

Module Definition*

Revision: 1 052

Electronic Keying: Compatible Module

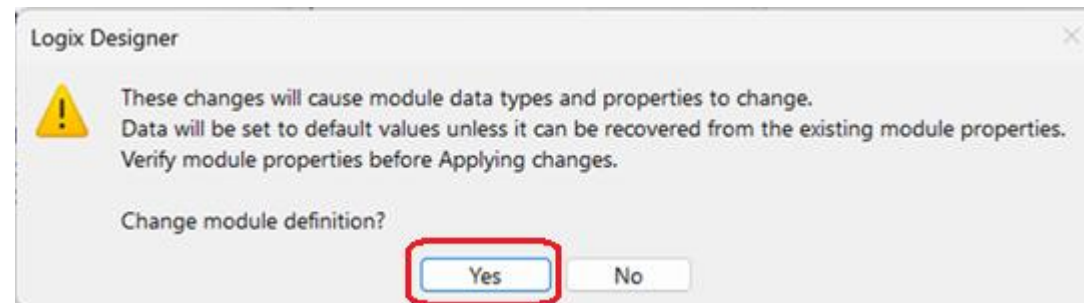
Connections:

Name	Size
Exclusive Owner	Input: 128 Output: 64 SINT

OK Cancel Help

Module Creation and Configuration

- A warning window will come up.
- Click <Yes> then <OK> to Close the New Module window.
- The module creation is completed.
- In most cases the program must be uploaded to the PLC at this point.



Controller Tags

- Open the 'Controller Tags' window and find the Input and output tags associated with the module that was created.
 - In this case:
 - CTWE5:I
 - CTWE5:O
 - Use the ConnectionFaulted input BOOL to monitor communications status with the CasTemp Wireless E5
 - CTWE5:I.Data is the 128-byte SINT array that carries data from the CasTemp Wireless E5 into the PLC.

Logix Designer - CasTemp_AOI_EDS in CasTemp_E5_AOI_v34.ACD [1769-L24ER-QBFC1B 34.13]

File Edit View Search Logic Communications Tools Window Help

Run Mode
Controller OK
Energy Storage OK
1/3 Not Responding

Path: AB_ETHIP-1\10.10.10.171

Rem Run No Forces No Edits

Controller Organizer

Module Properties: Local (ABCC 1.052) **Controller Tags - CasTemp_AOI_EDS(controller)**

Scope: CasTemp_AOI_I Show: All Tags Enter Name Filter...

Name	Value	Force	Style	Data Type	Description
cHeatNum	'ABCD1234'			STRING	Con
constErrMax	-9999.0		Float	REAL	
CTW_GEN:C				AB:ETHERNET_MODULE:C...	
CTW_GEN:I				AB:ETHERNET_MODULE_...	
CTW_GEN:O				AB:ETHERNET_MODULE_...	
CTW_TimeSync_Str	'30102025115307'			STRING	
CTW5				CTW5ResultsDataSet	
CTW5Parser1				HEN_CTWE5Parser_CLX34	Par
CTW5Results				CTW5ResultsDataSet	
CTW5SINT:I				_005A:ABCC_81EA6AAD:I...	
CTW5SINT:O				_005A:ABCC_4DBB4234:...	
CTWE5:I				_005A:HEN_M40_81EA6A...	
CTWE5:I.ConnectionFaulted	0		Decimal	BOOL	
CTWE5:I.Data			Decimal	SINT[128]	
CTWE5:I.Data[0]	0		Decimal	SINT	
CTWE5:I.Data[1]	0		Decimal	SINT	
CTWE5:I.Data[2]	0		Decimal	SINT	
CTWE5:I.Data[3]	0		Decimal	SINT	
CTWE5:I.Data[4]	0		Decimal	SINT	

Monitor Tags / Edit Tags /

Errors

Controller Organizer Logical Organizer

Search Results Watch

Ready

Communication Software: FactoryTalk Linx