

LINAK EtherNet/IP Actuator commissioning with Allen-Bradley PLC through EtherNet/IP

This application note provides a detailed procedure for integrating a LINAK EtherNet/IP Actuator with an Allen-Bradley Controller within an Ethernet network. It also includes instructions for configuring the actuator using Actuator Connect.

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1 LINAK EtherNet/IP Actuator

1.1 Introduction to LINAK EtherNet/IP Add-On Instructions (LINAK_EIP_AOI)

The primary purpose of this application note is to describe the communication process between a LINAK EtherNet/IP Actuator and an Allen-Bradley controller over an EtherNet/IP network. The function block provided is used to issue Position control command, Run commands, Stop command, Clear error command, Set Actuator configuration parameters & Actuator status feedback.

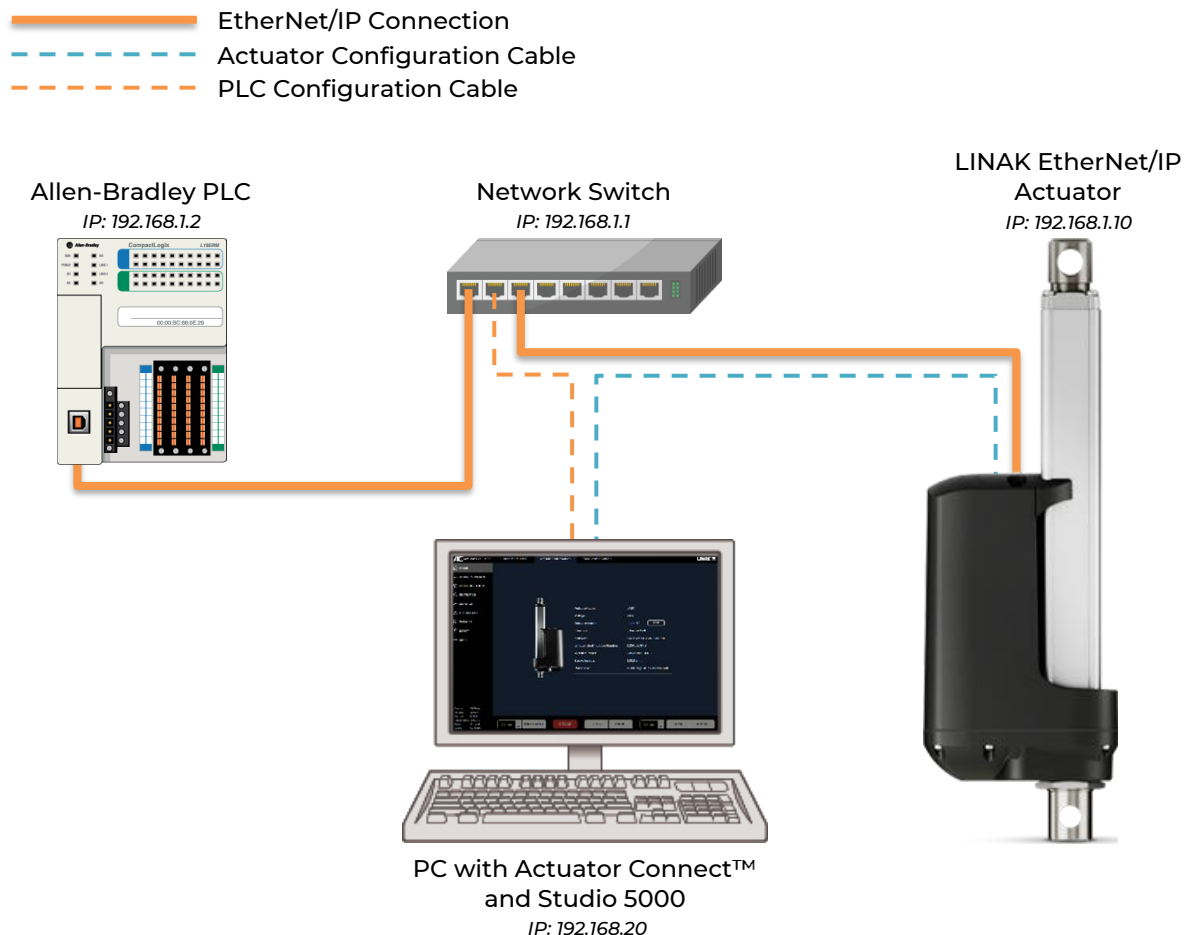
LINAK_EIP		
LINAK_EIP	?	...
Actuator_Assembly_Input_Data	?	—(Input_Error)—
Actuator_Assembly_Output_Data	?	
ConnectionFaulted	?	—(Endstop_In)—
	??	
Set_Run_To_Position	??	—(Endstop_Out)—
Run_To_Position	??	
Clear_Error	??	—(Overcurrent)—
Run_Out	??	
Run_In	??	—(Running_In)—
Stop	??	
Recovery_Run_Out	??	—(Running_Out)—
Recovery_Run_In	??	
Set_Current	??	—(Actuator_Error)—
Set_Speed	??	
Set_Soft_Start	??	
Set_Soft_Stop	??	
Actual_Position	??	
Actual_Speed	??	
Actual_Current	??	
Actual_Status_Flags	??	
Actual_Error_Code	??	
Actual_AUX_Inputs	??	
Position_Lost	??	
Parallel_Error_Source	??	
Parallel_Error_Group	??	
Parallel_Status_Flags	??	

1.2 Hardware & Software Requirements

LINAK EtherNet/IP Actuator
 Actuator Signal cable (for ethernet)
 Actuator Power cable
 Actuator configuration cable
 Ethernet cable M12 to RJ45
 Power supply capable of powering the actuator at desired load
 Actuator Connect™
 LINAK EiP Library for AB-Rockwell

Allen-Bradley PLC
 Rockwell Studio 5000
 USB Type A to USB Type B 2.0 cable

1.3 Communication Architecture



2 Hardware Configuration

This chapter details the hardware configurations for the PLC & LINAK EtherNet/IP Actuator.

2.1 IP Address Configuration of Allen-Bradley PLC Using USB cable via RSLinx Classic

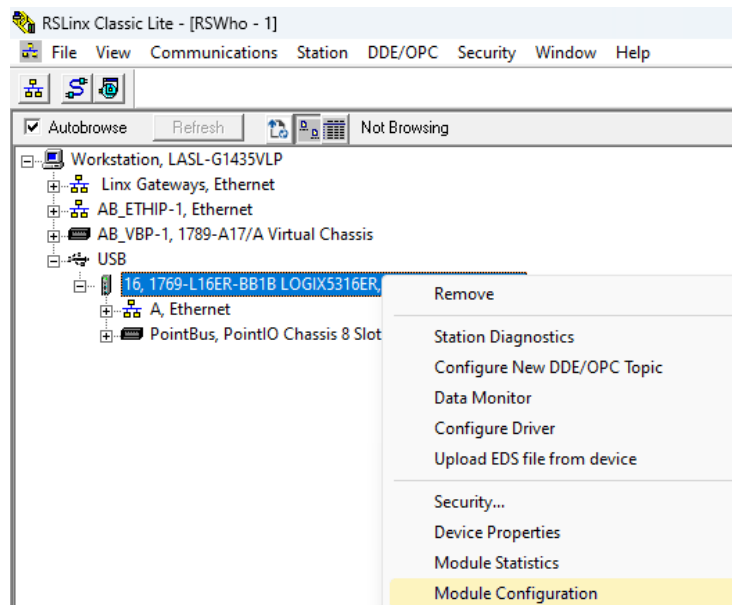
This section explains how to configure the IP address of an Allen-Bradley PLC using the RSLINX Classic Tool.

Note:

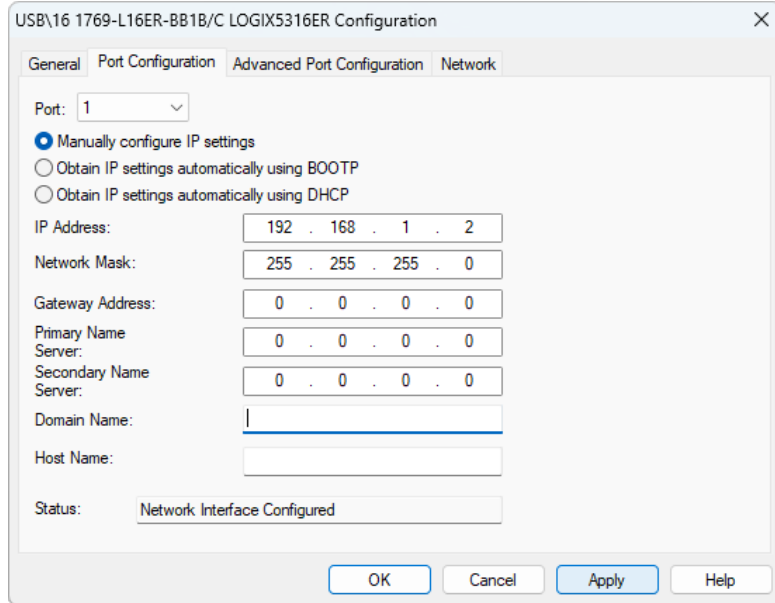
- A USB Type A to USB Type B 2.0 cable is needed to configure the IP address of the Allen-Bradley PLC.

Before configuring the IP address on the Allen-Bradley controller, ensure a USB serial cable is connected between the PLC and the PC. Then, open the "**RSLinx Classic**" software.

1. Launch the "**RSLinx Classic**" application on the PC.
Open the "**USB**" module.
Right-click the connected PLC and select "**Module Configuration**".



2. Navigate to the **"Port Configuration"** tab.
Select **"Manually configure IP settings"**.
Then enter the desired **"IP Address"** and **"Network Mask"** for the controller.
Click **"Apply"** and then **"OK"**.



The screenshot shows the "USB\16 1769-L16ER-BB1B/C LOGIX5316ER Configuration" dialog box with the "Port Configuration" tab selected. The "Port" dropdown is set to "1". Under "Manually configure IP settings", the "IP Address" is set to "192 . 168 . 1 . 2" and the "Network Mask" is set to "255 . 255 . 255 . 0". Other fields like "Gateway Address", "Primary Name Server", "Secondary Name Server", "Domain Name", and "Host Name" are empty. The "Status" field shows "Network Interface Configured". The "Apply" button is highlighted.

3. Once the configuration is complete, restart the PLC to ensure the settings have been applied correctly.

2.2 IP Address Configuration of LINAK EtherNet/IP Actuator Using Actuator Connect

This chapter explains how to configure the IP address of an LINAK EtherNet/IP Actuator using the Actuator Connect™ Tool.

Note:

- The default IP address of the LINAK EtherNet/IP Actuator is 192.168.1.10.
- The IP address can only be configured using the Actuator Connect tool.
- The Actuator Connect Tool can be downloaded from the LINAK website using the link below:
<https://www.linak.com/products/digital-solutions/actuator-connect-configurator/>
- A separate configuration cable, bought separately, is needed to access the LINAK EtherNet/IP Actuator with the Actuator Connect Tool.

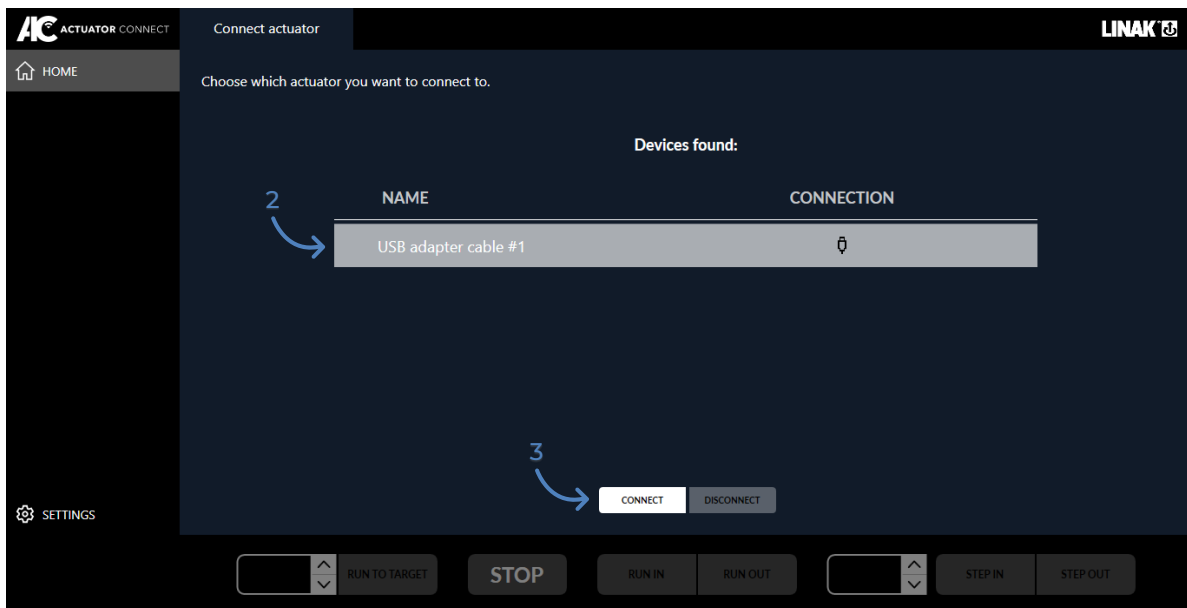
Hardware connection:

- Connect the configuration cable to the Actuator Power and Signal ports.
- Connect the BROWN wire of the configuration cable to the positive terminal of a power supply.
- Connect the BLUE wire of the configuration cable to the negative terminal of a power supply.
- Connect the RJ45 connector of the USB2LIN cable to the RJ45 port of the configuration cable.
- Connect the USB connector of the USB2LIN cable to the PC.

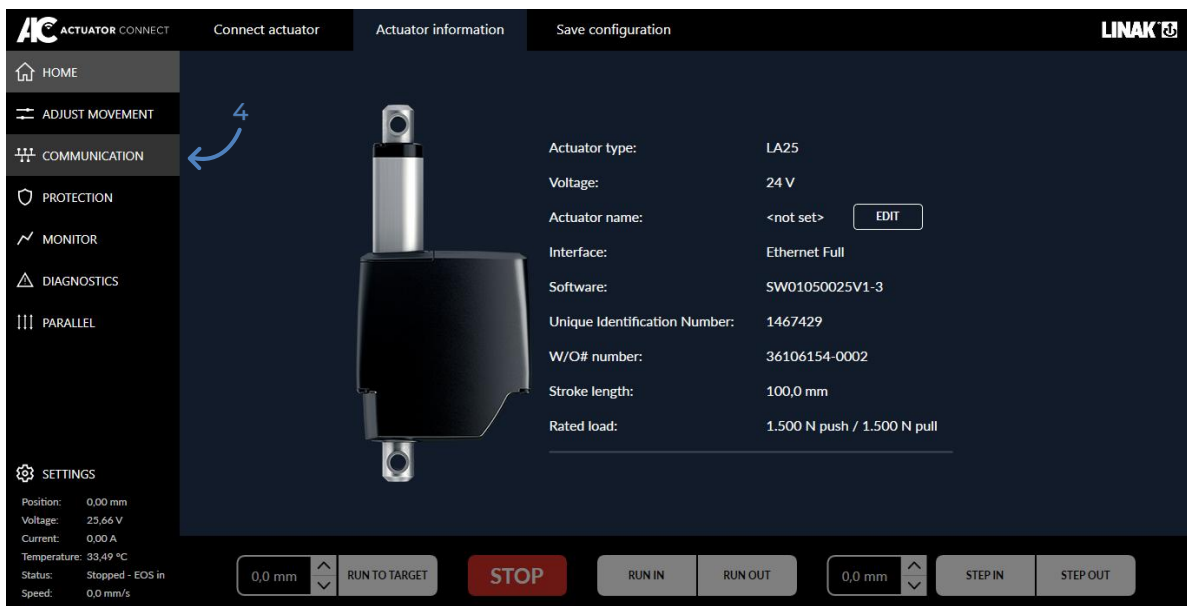
Actuator Connect™

Note:

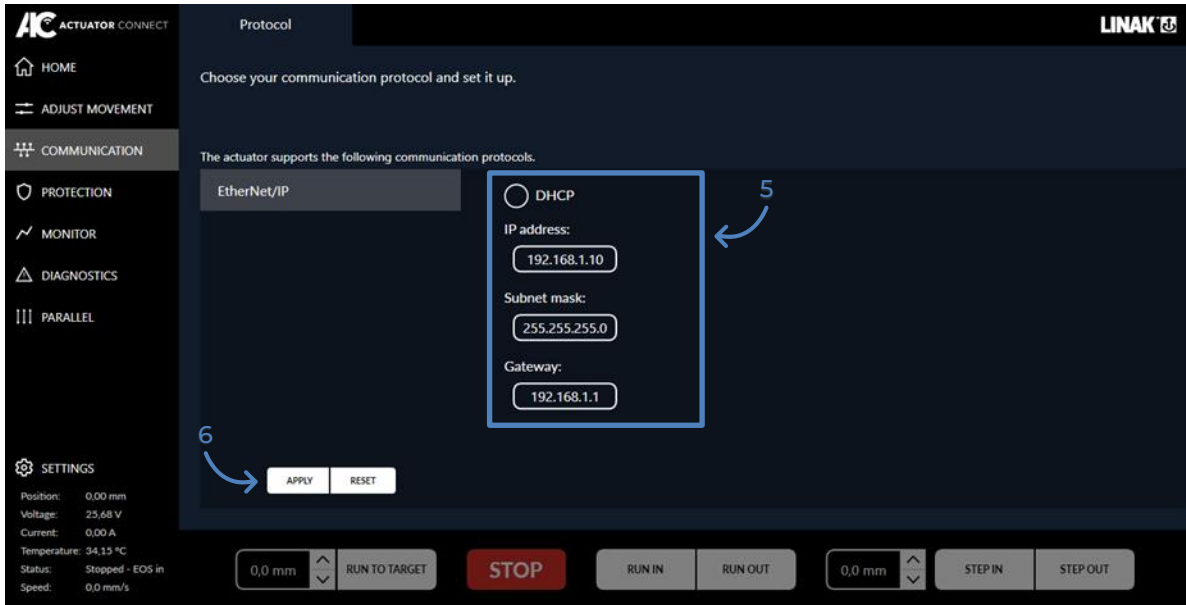
- If the device does not appear, ensure that the LINAK Actuator is correctly connected to the PC and that the power supply is turned on.
1. Open the “**Actuator Connect**” software tool.
 2. Mark the device called “**USB adapter cable**” under “**Devices found**”.
 3. Click “**Connect**” to access the LINAK Actuator.



4. Once the device is loaded, navigate to the “**Communication**” tab on the left side.



5. Adjust the settings and address to fit the local network.
6. When finished, click “Apply”.



3 Software Configurations for LINAK EtherNet/IP Actuator

This chapter details the software configurations necessary for the LINAK EtherNet/IP Actuator, including the import of the AOI in Studio 5000, the import of the LINAK_EiP EDS file, the addition of a Generic Ethernet Module, the integration of the LINAK_EiP AOI (Add-On Instruction) into the program, and the configuration of input and output tags for the AOI.

Note:

The LINAK EtherNetIP EDS file is available for download at:

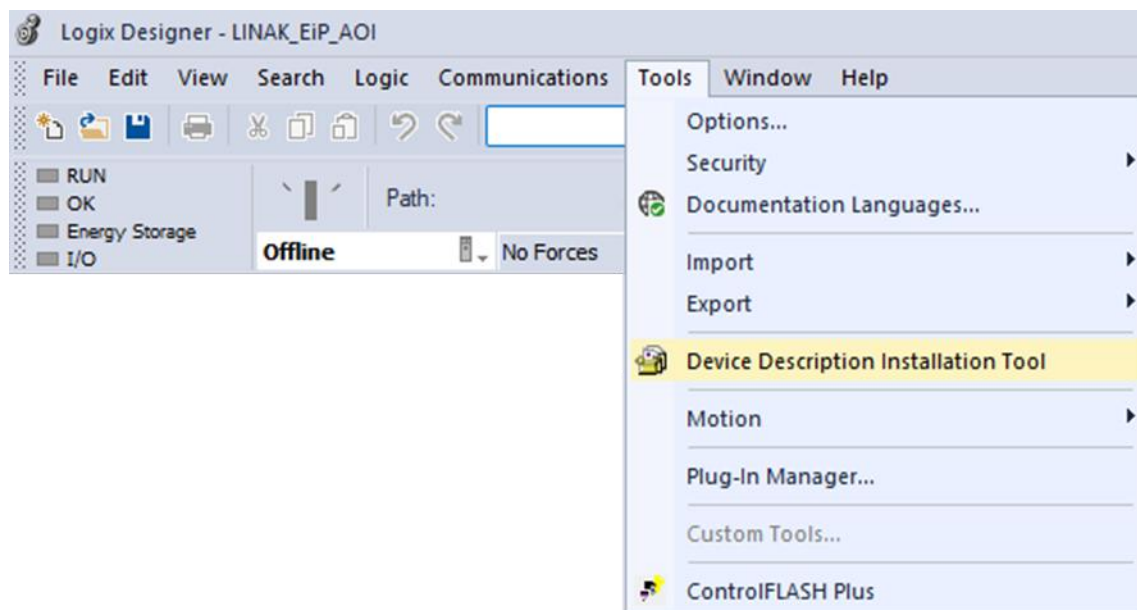
[ODVA's marketplace](https://www.odva.com/marketplace)

www.LINAK.com

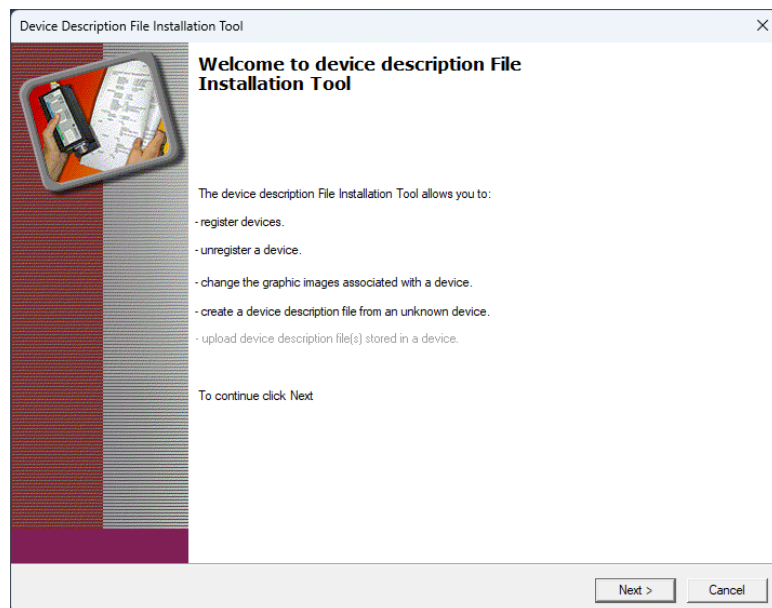
3.1 Installing the LINAK_EiP EDS File in Studio 5000

This chapter outlines the process of adding the LINAK_EiP EDS file in Studio 5000 using the Device Description Installation Tool.

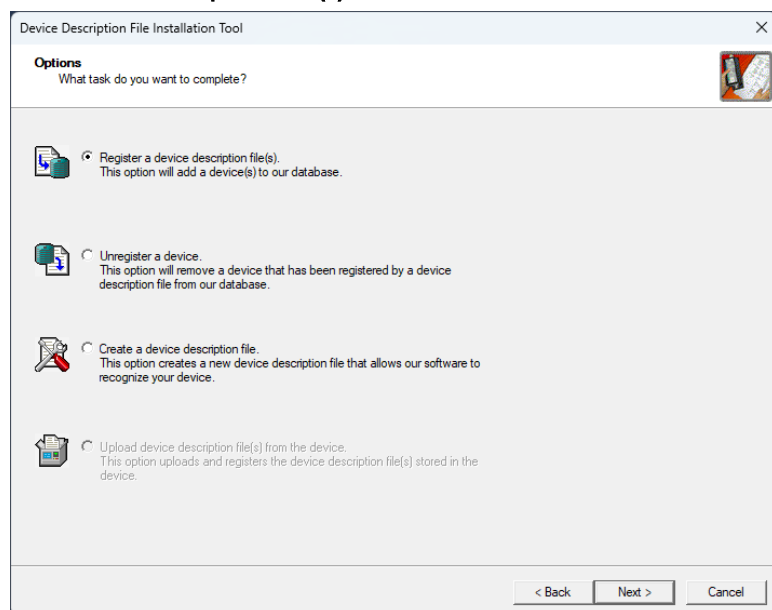
1. Open the “**Studio 5000**” software and navigate to the “**Device Description Installation Tool**” found in the “**Tools**” tab.



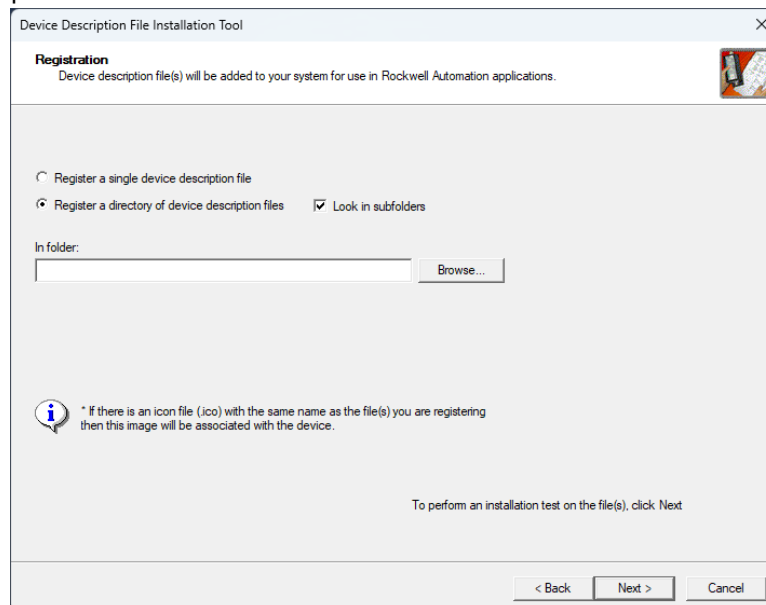
2. When the “Device Description File Installation Tool” opens, click “Next”.



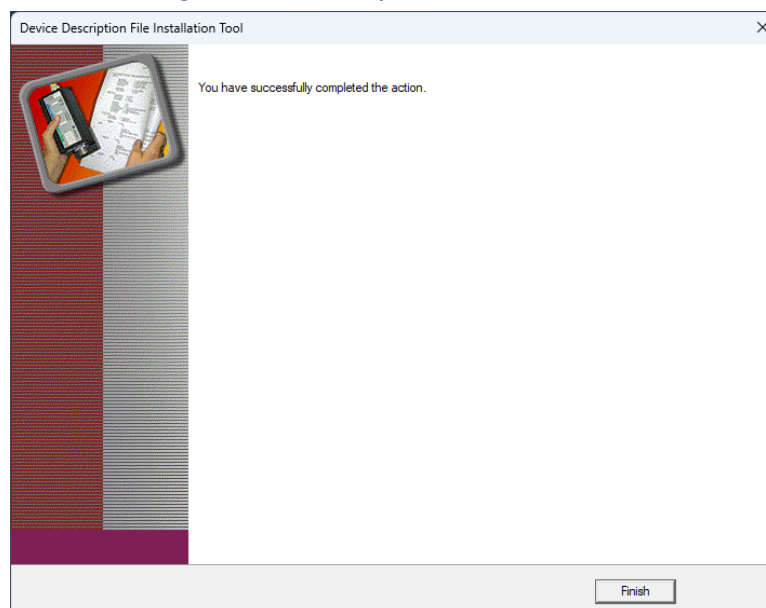
3. Select “Register a device description file(s)” and click “Next”.



4. Choose “**Register a directory of device description files**” check “**Look in subfolders**” then click “**Browse**” to select the folder holding the LINAK_EiP EDS files.
Click “**Next**” to perform the installation test on the files.



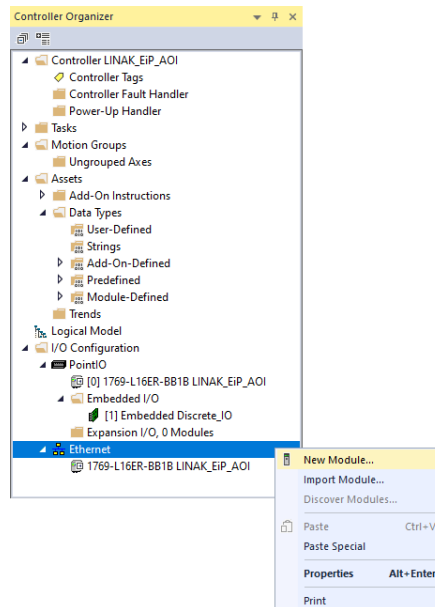
5. Click “**Next**” for the remaining installation steps, and then click “**Finish**” to complete the process.



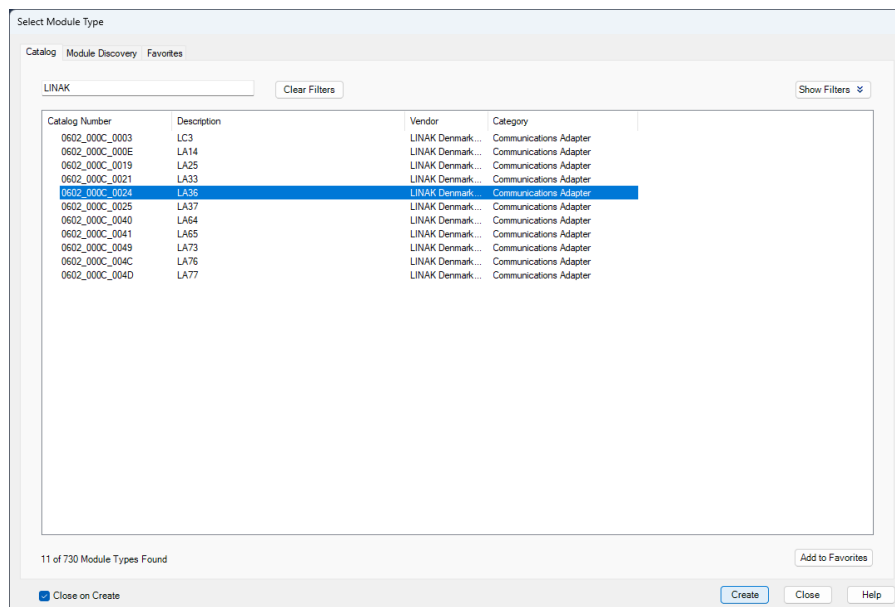
3.2 Adding the LINAK_EiP Module to the I/O Configuration in Controller Organizer for Studio 5000

This chapter outlines the steps to add the LINAK_EiP communication module in Studio 5000.

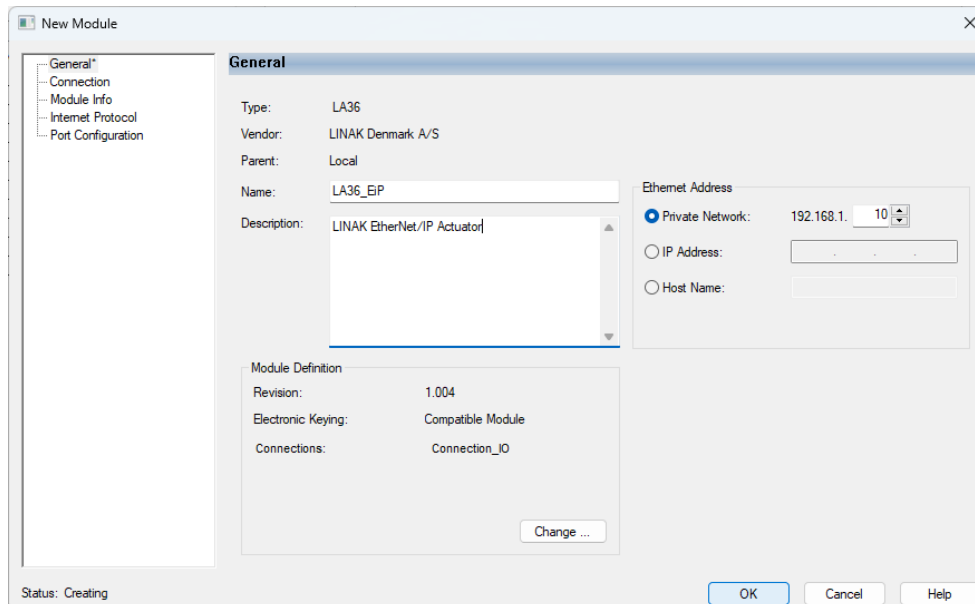
1. Right-click on **"Ethernet"** found under the **"I/O Configuration"** folder in the **"Controller Organizer"** and select **"New Module"**.



2. Search for **"LINAK"** and select the device that matches your product. In this example, **"LA36"** is being used. Click **"Create"**.



3. Assign a **"Name"** to the module and configure the **"IP address"** of the device, using the same IP address as configured in section 2.2.
The default IP address of LINAK EtherNet/IP Actuators is 192.168.1.10.
Click **"OK"** to confirm and complete the configuration.



The screenshot shows the 'New Module' configuration window with the 'General' tab selected. The window has a sidebar on the left with a tree view containing 'General', 'Connection', 'Module Info', 'Internet Protocol', and 'Port Configuration'. The main area is divided into several sections:

- General:**
 - Type: LA36
 - Vendor: LINAK Denmark A/S
 - Parent: Local
 - Name: LA36_EIP
 - Description: LINAK EtherNet/IP Actuator
- Ethernet Address:**
 - ☒ Private Network: 192.168.1. 10
 - ☐ IP Address: [Empty field]
 - ☐ Host Name: [Empty field]
- Module Definition:**
 - Revision: 1.004
 - Electronic Keying: Compatible Module
 - Connections: Connection_IO
 - [Change ... button]

At the bottom left, the status is 'Status: Creating'. At the bottom right, there are 'OK', 'Cancel', and 'Help' buttons.

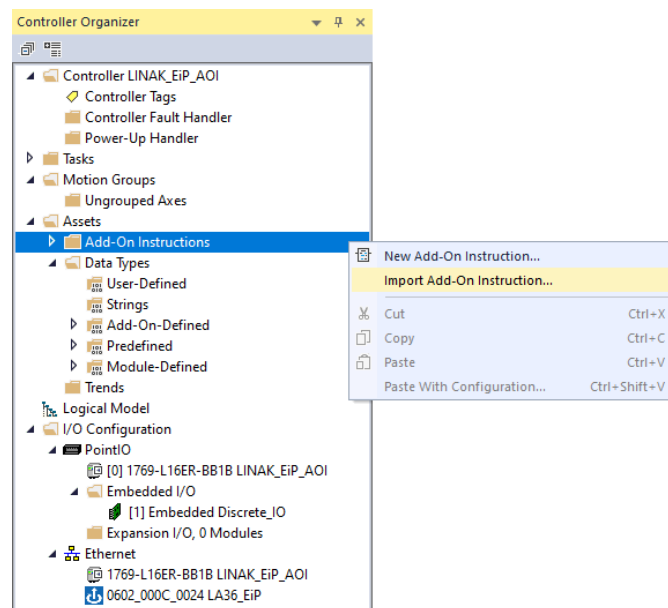
3.3 Importing LINAK_EiP AOI into Studio 5000

This chapter outlines the process of importing the LINAK_EiP AOI file into the PLC program.

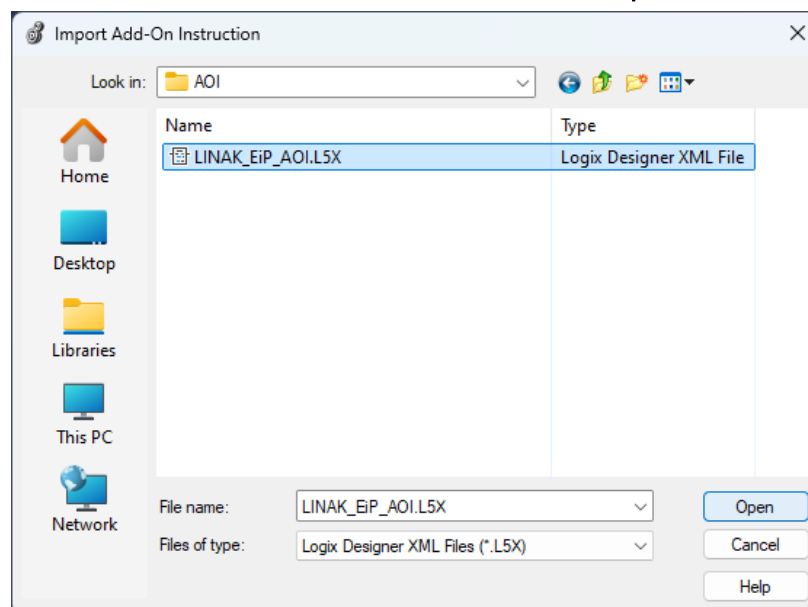
Note:

The LINAK_EiP AOI is available for download at:
www.LINAK.com

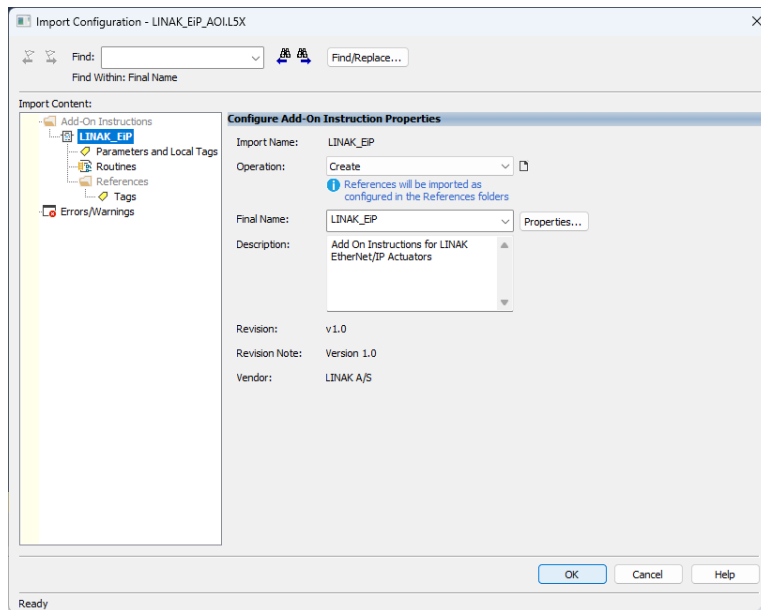
1. Right-click on “Add-On Instructions” found under the “Assets” folder in the “Controller Organizer” and select “Import Add-On Instruction”.



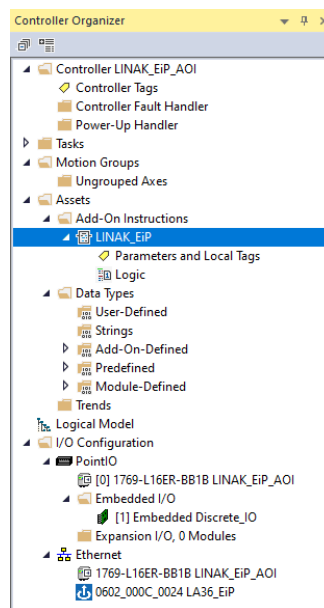
2. Browse to find and select the “LINAK_EiP_AOI” file, then click “Open”.



3. Confirm the “Import Configuration” by clicking “OK”.



4. Once the AOI is successfully imported, it will appear under the “**Assets**” folder within “**Add-On Instructions**” as illustrated in the image below.



3.4 Adding LINAK_EiP_AOI to the PLC Program

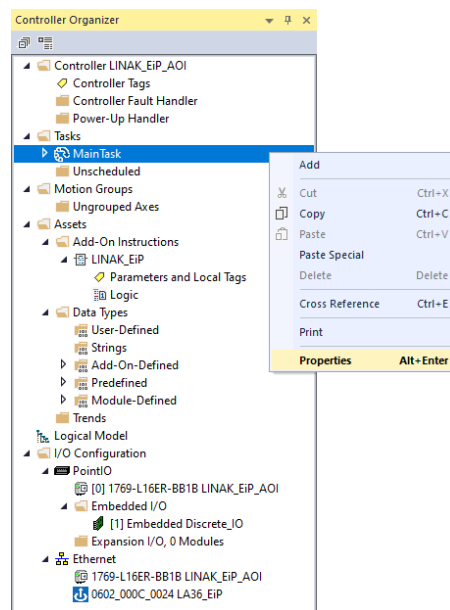
This chapter outlines the process of incorporating the Add-On Instruction (AOI) into your program and assigning the necessary input and output tags.

Note:

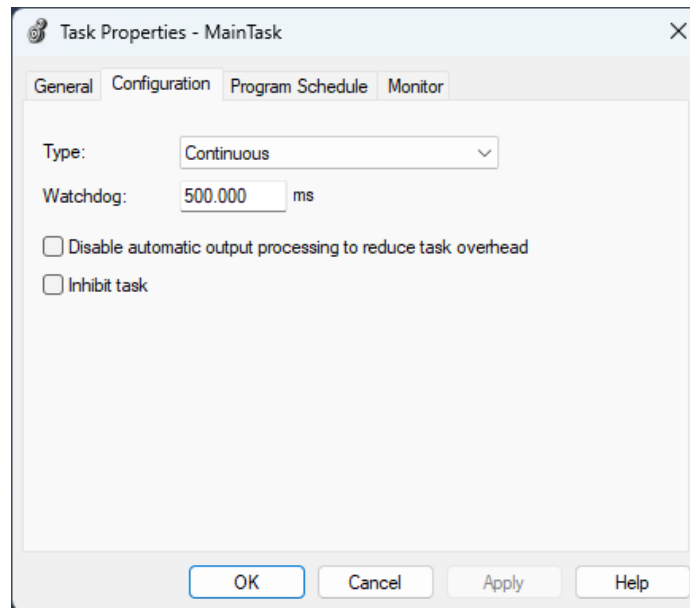
Each LINAK EtherNet/IP Actuator integrated into the user program must have its own separate instance of the AOI, which should be called cyclically. Multiple instances of the same device cannot be used simultaneously.

To ensure proper execution, the “LINAK_EiP” Add-On must be executed from a “Routine” within a “Task” configured as “Continuous.” Follow the steps below to achieve this:

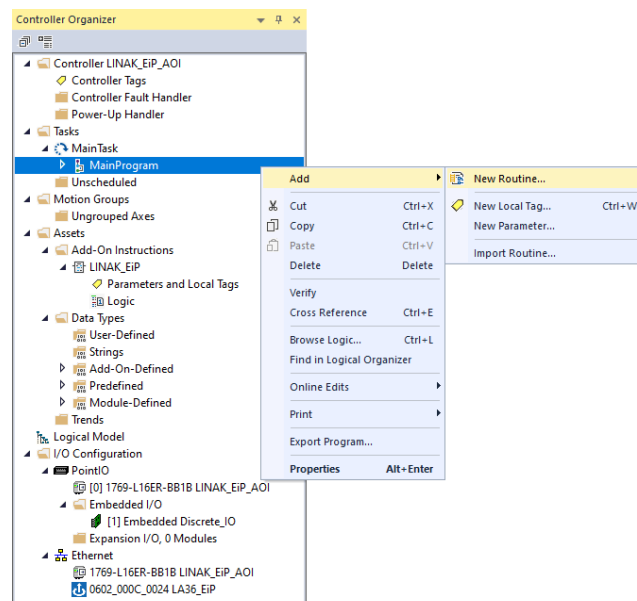
1. Right-click on the “**Task**” that will hold the “**Routine**” with the “**LINAK_EiP**” Add-On, and select “**Properties**” In this example, it will be placed in “**MainTask**”



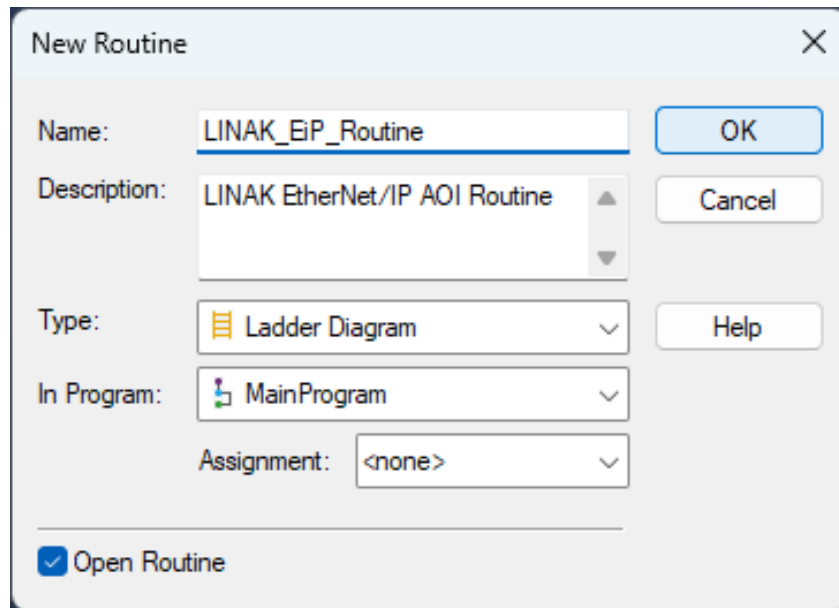
2. Navigate to the **“Configuration”** tab, ensure the **“Type”** is set to **“Continuous”** and click **“OK”**.



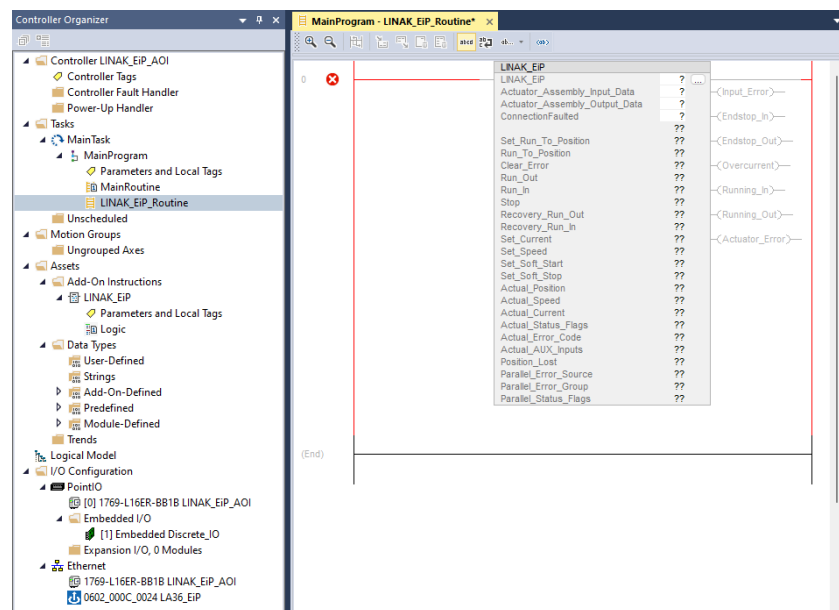
3. Right-click on **“MainProgram”** and select **“Add New Routine”**.



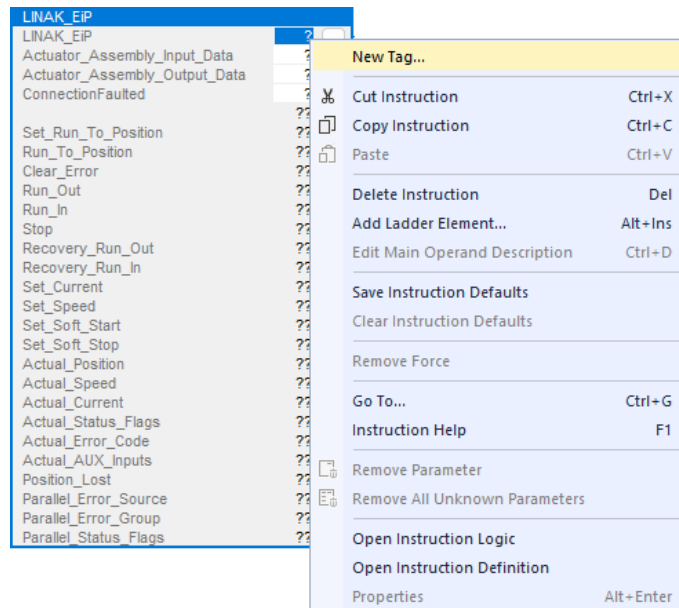
- Assign a name to the **“Routine”** and click **“OK”**.



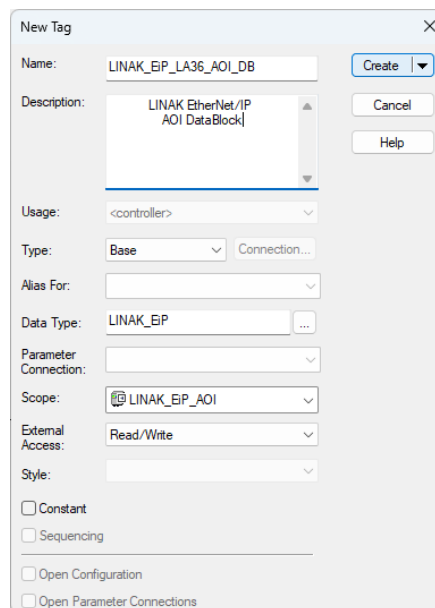
- Open the newly created **“Routine”** and drag the **“LINAK_EiP”** AOI from the **“Controller Organizer”** to the **“Rung”**.



- Right-click on the placeholder for the “LINAK_EiP” AOI name and select “New Tag”.

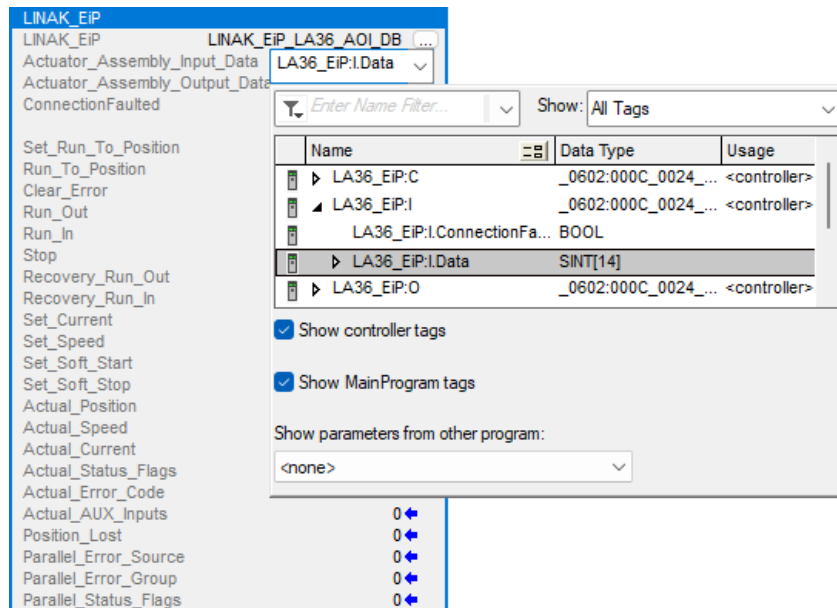


- Provide a name for the “New Tag” and click the “Create” button.



The screenshot shows the 'New Tag' dialog box. The 'Name' field is set to 'LINAK_EiP_LA36_AOI_DB'. The 'Description' field is set to 'LINAK EtherNet/IP AOI DataBlock'. The 'Usage' dropdown is set to '<controller>'. The 'Type' dropdown is set to 'Base'. The 'Alias For' field is empty. The 'Data Type' dropdown is set to 'LINAK_EiP'. The 'Parameter Connection' dropdown is empty. The 'Scope' dropdown is set to 'LINAK_EiP_AOI'. The 'External Access' dropdown is set to 'Read/Write'. The 'Style' dropdown is empty. There are checkboxes for 'Constant', 'Sequencing', 'Open Configuration', and 'Open Parameter Connections', all of which are currently unchecked. The 'Create' button is highlighted.

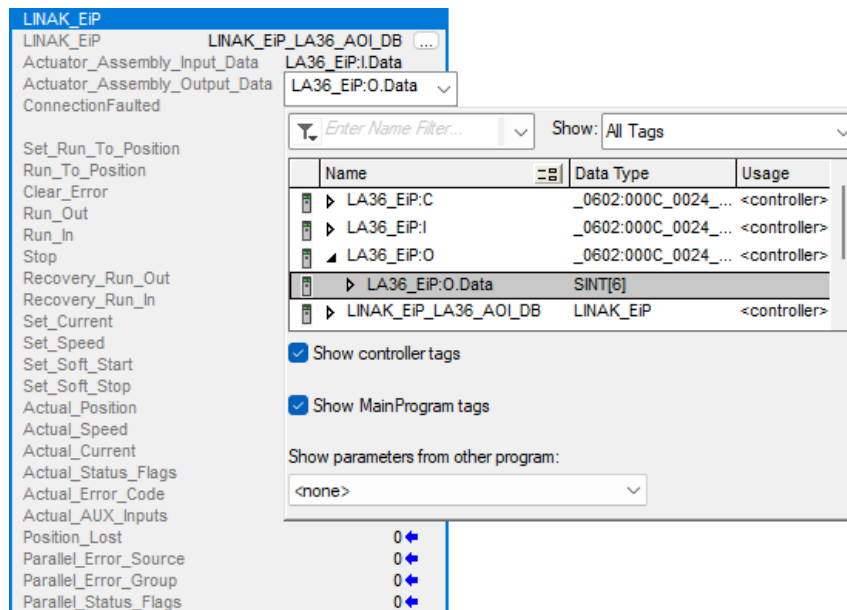
8. Assign the “SINT[14]” input assembly data from the LINAK EtherNet/IP Actuator tags to the “Actuator_Assembly_Input_Data” field of the “LINAK_EiP” AOI.



The screenshot shows the LINAK_EiP configuration window. The left pane lists various fields, with 'Actuator_Assembly_Input_Data' selected. The right pane shows a list of tags with columns for Name, Data Type, and Usage. The tag 'LA36_EiP:I.Data' is highlighted, showing a Data Type of 'SINT[14]'. Below the tag list, the 'Show controller tags' and 'Show MainProgram tags' checkboxes are checked. The 'Show parameters from other program' dropdown is set to '<none>'. At the bottom, there are five status indicators, each with a blue arrow pointing right.

Name	Data Type	Usage
LA36_EiP:C	_0602:000C_0024_...	<controller>
LA36_EiP:I	_0602:000C_0024_...	<controller>
LA36_EiP:I.ConnectionFa...	BOOL	
LA36_EiP:I.Data	SINT[14]	
LA36_EiP:O	_0602:000C_0024_...	<controller>

9. Assign the “SINT[6]” output assembly data from the LINAK EtherNet/IP Actuator tags to the “Actuator_Assembly_Output_Data” field of the “LINAK_EiP” AOI.



The screenshot shows the LINAK_EiP configuration window. The left pane lists various fields, with 'Actuator_Assembly_Output_Data' selected. The right pane shows a list of tags with columns for Name, Data Type, and Usage. The tag 'LA36_EiP:O.Data' is highlighted, showing a Data Type of 'SINT[6]'. Below the tag list, the 'Show controller tags' and 'Show MainProgram tags' checkboxes are checked. The 'Show parameters from other program' dropdown is set to '<none>'. At the bottom, there are five status indicators, each with a blue arrow pointing right.

Name	Data Type	Usage
LA36_EiP:C	_0602:000C_0024_...	<controller>
LA36_EiP:I	_0602:000C_0024_...	<controller>
LA36_EiP:O	_0602:000C_0024_...	<controller>
LA36_EiP:O.Data	SINT[6]	
LINAK_EiP_LA36_AOI_DB	LINAK_EiP	<controller>

10. Assign the “**ConnectionFaulted**” output from the LINAK EtherNet/IP Actuator tags to the “**ConnectionFaulted**” field of the “**LINAK_EiP**” AOI.

LINAK_EiP

LINAK_EiP LINAK_EiP_LA36_AOI_DB ...

Actuator_Assembly_Input_Data LA36_EiP:I.Data

Actuator_Assembly_Output_Data LA36_EiP:O.Data

ConnectionFaulted LA36_EiP:I.ConnectionFaulted

Set_Run_To_Position Enter Name Filter... Show: All Tags

Run_To_Position

Clear_Error

Run_Out

Run_In

Stop

Recovery_Run_Out

Recovery_Run_In

Set_Current

Set_Speed

Set_Soft_Start

Set_Soft_Stop

Actual_Position

Actual_Speed

Actual_Current

Actual_Status_Flag

Actual_Error_Code

Actual_AUX_Inputs

Position_Lost

Parallel_Error_Source 0

Parallel_Error_Group 0

Parallel_Status_Flags 0

Name	Data Type	Usage
LA36_EiP:C	_0602:000C_0024_...	<controller>
LA36_EiP:I	_0602:000C_0024_...	<controller>
LA36_EiP:I.ConnectionFa...	BOOL	
LA36_EiP:I.Data	SINT[14]	
LA36_EiP:O	_0602:000C_0024_...	<controller>

☒ Show controller tags

☒ Show MainProgram tags

Show parameters from other program:

<none>

4 LINAK_EiP AOI

This chapter describes about LINAK_EiP AOI Input, Output tags details & AOI behaviour.

4.1 Introduction of LINAK_EiP AOI

LINAK_EiP		
LINAK_EiP	?	...
Actuator_Assembly_Input_Data	?	—(Input_Error)—
Actuator_Assembly_Output_Data	?	
ConnectionFaulted	?	—(Endstop_In)—
Set_Run_To_Position	??	
Run_To_Position	??	—(Endstop_Out)—
Clear_Error	??	—(Overcurrent)—
Run_Out	??	
Run_In	??	—(Running_In)—
Stop	??	
Recovery_Run_Out	??	—(Running_Out)—
Recovery_Run_In	??	
Set_Current	??	—(Actuator_Error)—
Set_Speed	??	
Set_Soft_Start	??	
Set_Soft_Stop	??	
Actual_Position	??	
Actual_Speed	??	
Actual_Current	??	
Actual_Status_Flags	??	
Actual_Error_Code	??	
Actual_AUX_Inputs	??	
Position_Lost	??	
Parallel_Error_Source	??	
Parallel_Error_Group	??	
Parallel_Status_Flags	??	

4.2 Assembly Data Tag Details

AOI Tag	Data Type	Function Description
Actuator_Assembly_Input_Data	SINT[14] - Array	Actuator Feedback
Actuator_Assembly_Output_Data	SINT[6] - Array	Actuator RunCommand

4.3 RunCommand Area Tag Details

AOI Tag	Data Type	Function Description
Set_Run_To_Position	REAL	Specifies the target position for the actuator to move to, measured in millimetres (mm). Valid range: 0.0 - 1500.0
Run_To_Position	BOOL	Commands the actuator to move to the position specified in "Set_Run_To_Position".
Clear_Error	BOOL	Clears any errors shown in "Actual_Error_Code" and "Actuator_Error".
Run_Out	BOOL	Commands the actuator to extend outward.
Run_In	BOOL	Commands the actuator to retract inward.
Stop	BOOL	Commands the actuator to stop movement.
Recovery_Run_Out	BOOL	Forces the actuator to extend outward, regardless of its current state.
Recovery_Run_In	BOOL	Forces the actuator to retract inward, regardless of its current state.
Set_Current	REAL	Sets the current limit for the actuator's next movement, measured in amperes (A). Valid range: 0.0 - 251.0 Default current limit: 251.0
Set_Speed	REAL	Sets the speed for the actuator's next movement, expressed as a percentage (%). Valid range: 0.0 - 251.0 Default speed: 251.0
Set_Soft_Start	REAL	Sets the ramp-up time for the actuator's next movement, measured in seconds. Valid range: 0.0 - 251.0 Default ramp-up time: 251.0
Set_Soft_Stop	REAL	Sets the ramp-down time for the actuator's next movement, measured in seconds. Valid range: 0.0 - 251.0 Default ramp-down time: 251.0

4.4 Feedback Area Tag Details

AOI Tag	Data Type	Function Description
Input_Error	BOOL	Indicates if any values in the "RunCommand Area Tags" are outside their acceptable range.
Actual_Position	REAL	The current position of the actuator, measured in millimetres (mm).
Actual_Speed	REAL	The current speed of the actuator, measured in millimetres per second (mm/s).
Actual_Current	REAL	The current electrical draw of the actuator, measured in amperes (A).
Actual_Status_Flags	INT	Represents the status flags of the actuator. Bitwise. See a detailed list of Status Flags in the interface manual at www.LINAK.com
Actual_Error_Code	INT	Represents the current error code of the actuator. See a detailed list of all Error Codes in the interface manual at www.LINAK.com
Actual_AUX_Inputs	INT	Represents the status of the auxiliary inputs.
Position_Lost	BOOL	Indicates if the actuator is in a position lost state.
Endstop_In	BOOL	Indicates if the actuator is at its most inward position.
Endstop_Out	BOOL	Indicates if the actuator is at its most outward position.
Overcurrent	BOOL	Indicates if the actuator has experienced an overcurrent condition.
Running_In	BOOL	Indicates if the actuator is currently moving inward.
Running_Out	BOOL	Indicates if the actuator is currently moving outward.

AOI Tag	Data Type	Function Description
Heartbeat_Needed	BOOL	Indicates if the heartbeat signal is not being sent to the actuator.
Outside_Nominal_Conditions	BOOL	Indicates if the actuator is operating outside nominal conditions.
Actuator_Error	BOOL	Indicates if there is an active error in the actuator.

4.5 Parallel Feedback Area Tag Details

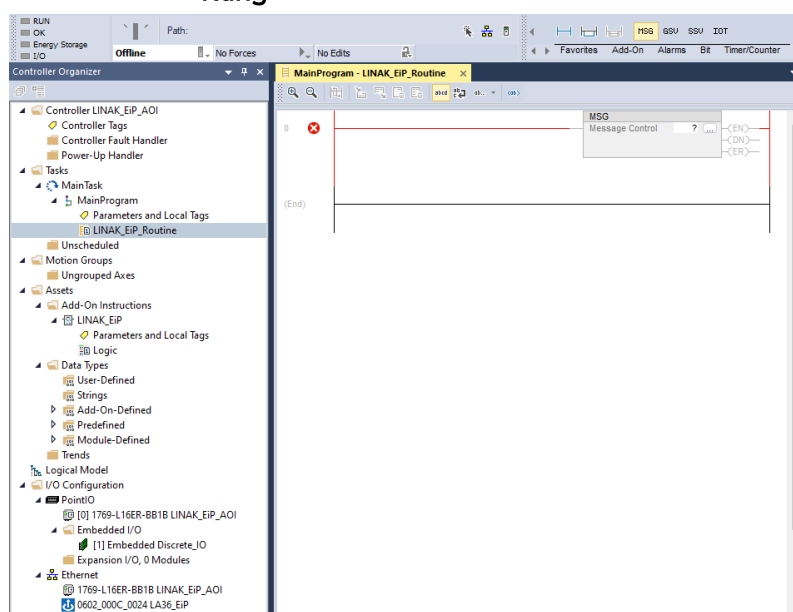
AOI Tag	Data Type	Function Description
Parallel_Error_Source	DINT	Represents the IP address of the parallel actuator with the highest priority error.
Parallel_Error_Code	INT	Represents the error code of the parallel actuator with an error. See a detailed list of all Parallel Error Codes in the interface manual at www.LINAK.com
Parallel_Status_Flags	INT	Represents the status flags of the parallel actuator with an error. Bitwise. See a detailed list of Parallel Status Flags in the interface manual at www.LINAK.com

5 Configuration and Diagnostic parameters

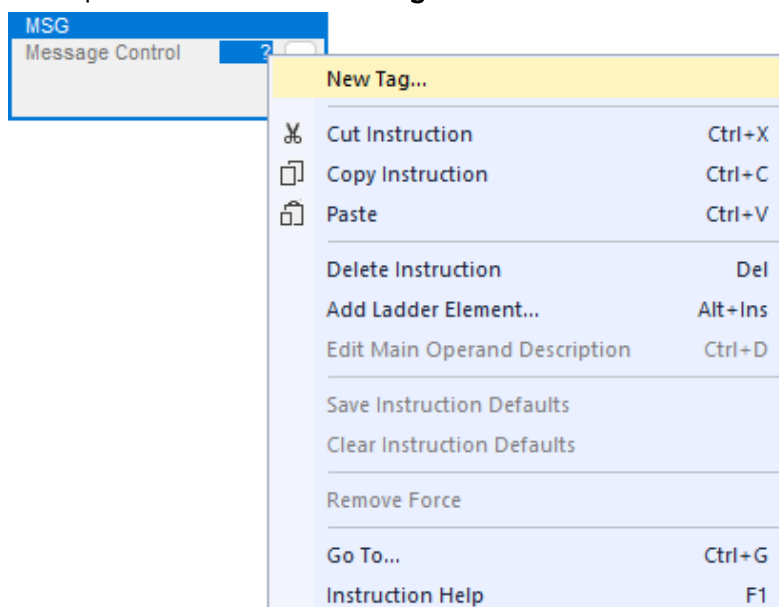
This chapter explains the configuration and diagnostic parameters for the LINAK_EiP device and how to read and write them.

5.1 Reading LINAK_EiP parameters in the PLC Program

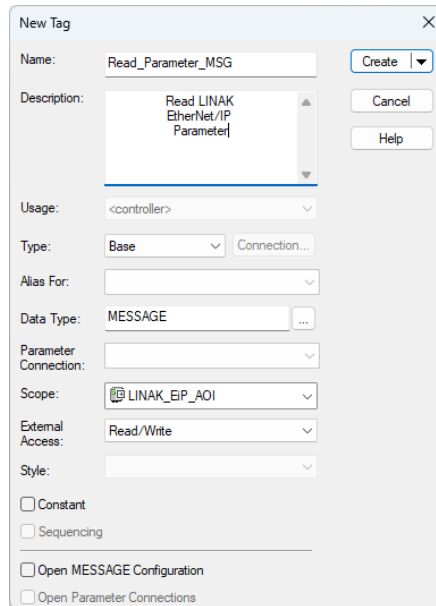
1. Add a “MSG” function to the “Rung”.



2. Right-click on the placeholder for the “Message Control” and select “New Tag”.

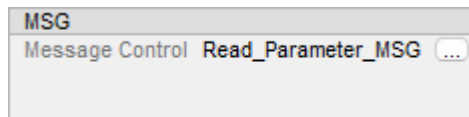


3. Provide a name for the **"New Tag"** and click the **"Create"** button.



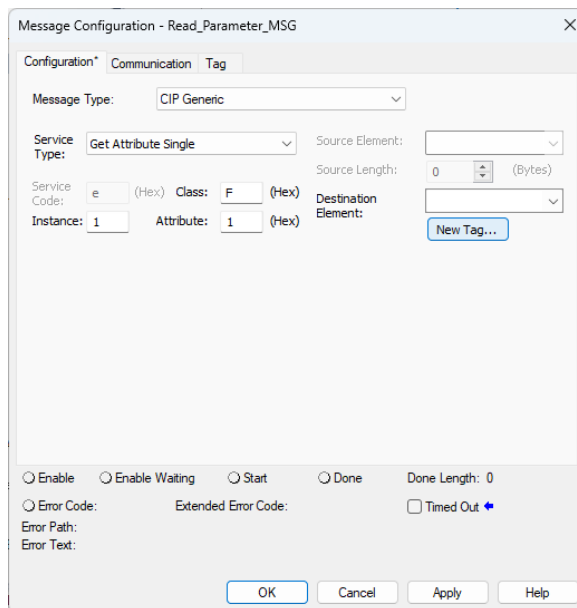
The "New Tag" dialog box is shown. The "Name" field is set to "Read_Parameter_MSG". The "Description" field contains "Read LINAK EtherNet/IP Parameter". The "Usage" dropdown is set to "<controller>". The "Type" dropdown is set to "Base". The "Data Type" dropdown is set to "MESSAGE". The "Scope" dropdown is set to "LINAK_EIP_AOI". The "External Access" dropdown is set to "Read/Write". The "Style" dropdown is set to "Base". There are checkboxes for "Constant", "Sequencing", "Open MESSAGE Configuration", and "Open Parameter Connections". Buttons for "Create", "Cancel", and "Help" are visible.

4. Click on the **"..."** button of the **"MSG"** function to configure it.



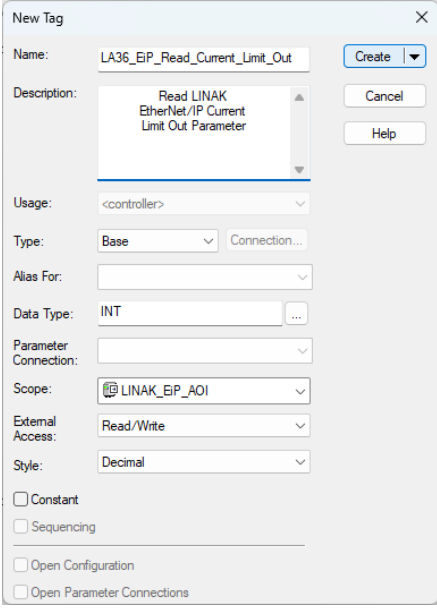
The "MSG" function configuration button is shown. It displays "Message Control Read_Parameter_MSG" and a button with three dots "..." to the right.

5. Ensure the following settings:
- Set **"Message Type"** to **"CIP Generic"**.
 - Set **"Service Type"** to **"Get Attribute Single"**.
 - Set **"Class"** to **"0xF"**.
 - Set **"Attribute"** to **"0x1"**.
 - The **"Instance"** should refer to the index of the parameter you want to read. For example, use **"0x1"** for **"Current Limit Out"**.
6. Create a **"New Tag"** for the **"Destination Element"** that will store the value being read.

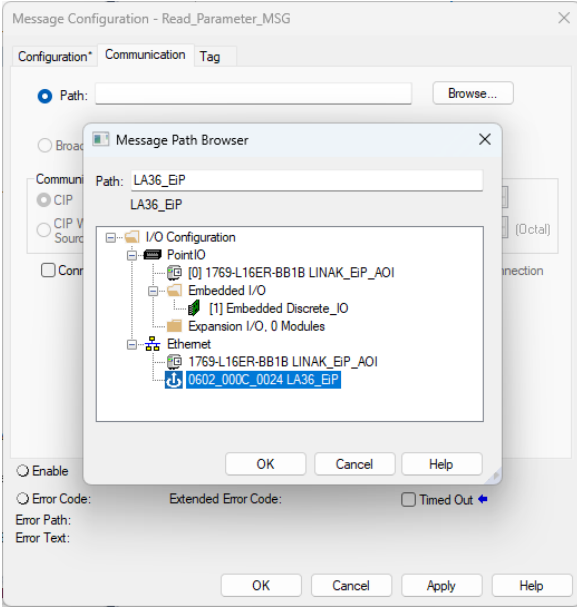


The "Message Configuration - Read_Parameter_MSG" dialog box is shown. The "Configuration" tab is selected. The "Message Type" dropdown is set to "CIP Generic". The "Service Type" dropdown is set to "Get Attribute Single". The "Source Element" dropdown is empty. The "Source Length" is set to 0 (Bytes). The "Service Code" is set to "e" (Hex). The "Class" is set to "F" (Hex). The "Destination Element" dropdown is empty. The "Instance" is set to 1. The "Attribute" is set to 1 (Hex). There is a "New Tag..." button next to the "Destination Element" dropdown. At the bottom, there are radio buttons for "Enable", "Enable Waiting", "Start", and "Done". There are also checkboxes for "Error Code", "Extended Error Code", and "Timed Out". Buttons for "OK", "Cancel", "Apply", and "Help" are visible.

7. Provide a name for the **"New Tag"** and ensure the **"Data Type"** is sufficient to hold the data. Then, click the **"Create"** Button.



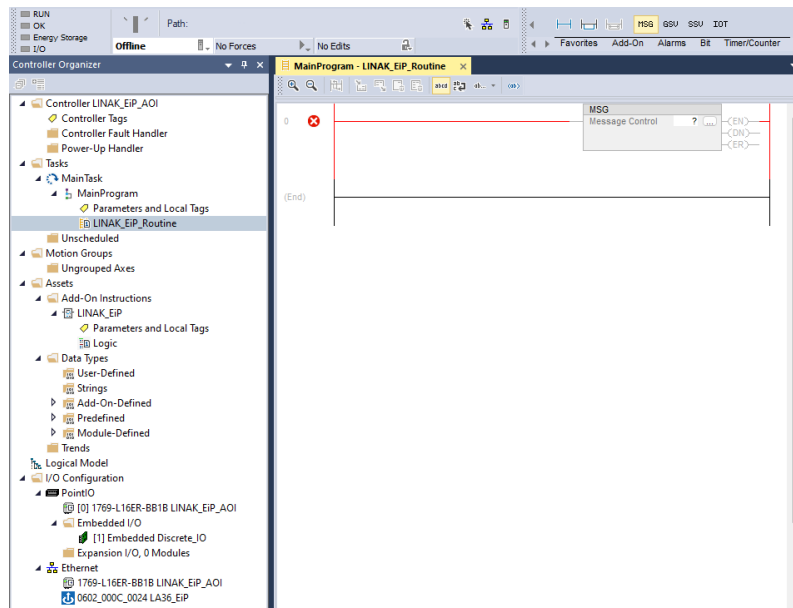
8. Navigate to the **"Communication"** Tab and **"Browse"** for the LINAK_EiP communication module. Click **"OK"** and **"Apply"** then close the configuration window by clicking **"OK"**.



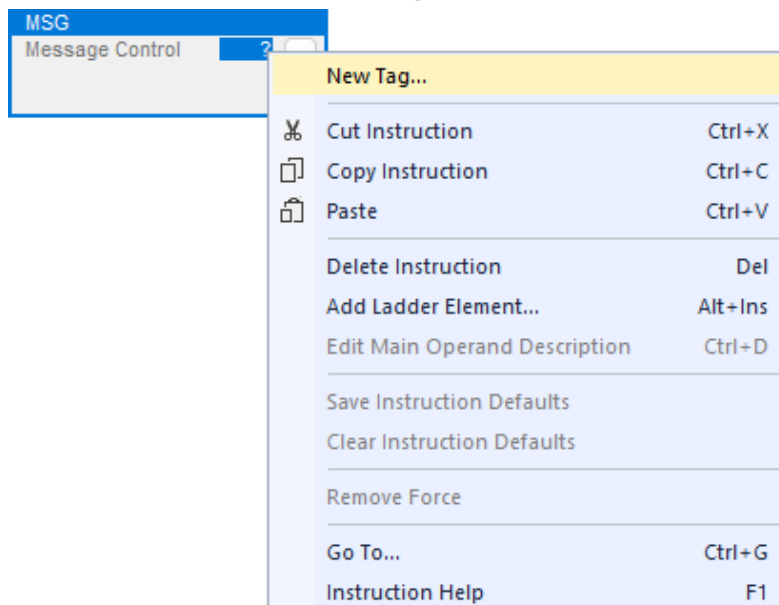
The **"MSG"** function is now set up to read the parameter value from the LINAK EtherNet/IP Actuator.

5.2 Writing LINAK_EiP parameter in the PLC Program

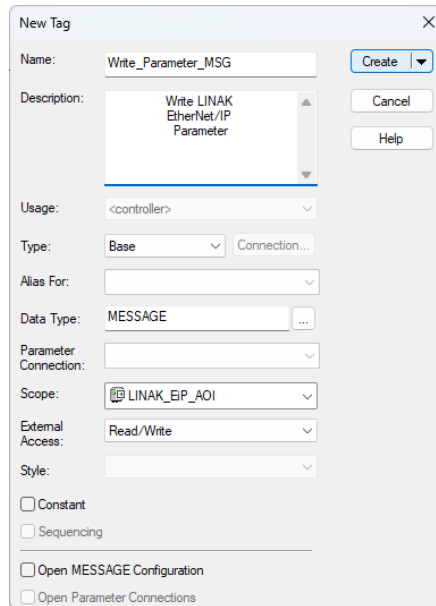
1. Add a “MSG” function to the “Rung”.



2. Right-click on the placeholder for the “Message Control” and select “New Tag”.



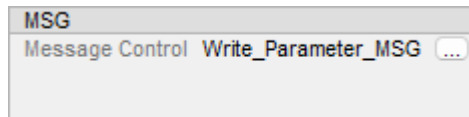
3. Provide a name for the **"New Tag"** and click the **"Create"** button.



The "New Tag" dialog box is shown with the following fields and values:

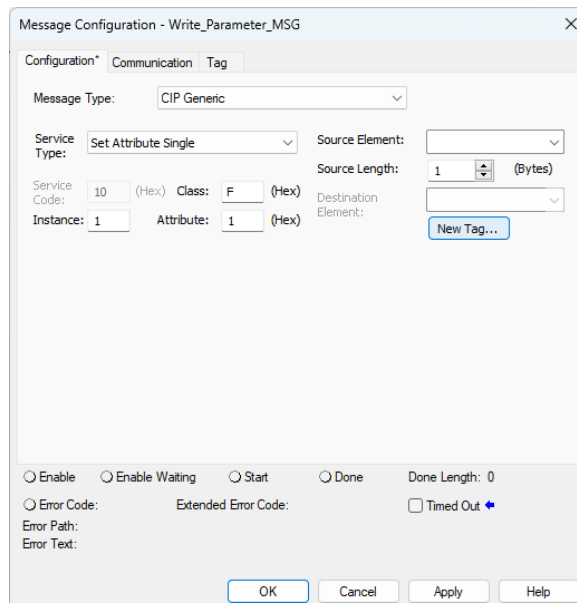
- Name: Write_Parameter_MSG
- Description: Write LINAK EtherNet/IP Parameter
- Usage: <controller>
- Type: Base
- Alias For:
- Data Type: MESSAGE
- Parameter Connection:
- Scope: LINAK_EIP_AOI
- External Access: Read/Write
- Style:
- Constant: ☐
- Sequencing: ☐
- Open MESSAGE Configuration: ☐
- Open Parameter Connections: ☐

4. Click on the **"..."** button of the **"MSG"** function to configure it.



The "MSG" function button is shown with the text "Message Control Write_Parameter_MSG ..." and a small "..." button to its right.

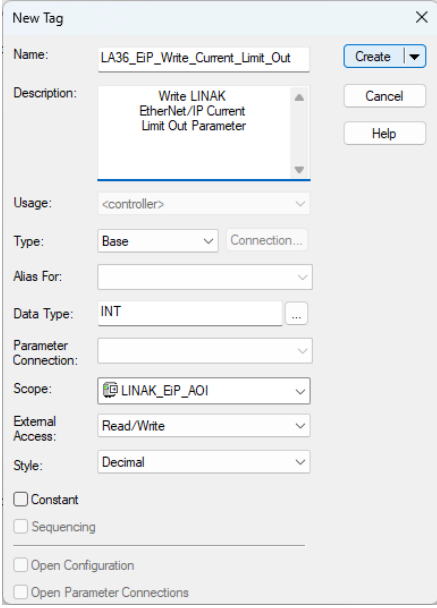
5. Ensure the following settings:
 - Set **"Message Type"** to **"CIP Generic"**.
 - Set **"Service Type"** to **"Set Attribute Single"**.
 - Set **"Class"** to **"0xF"**
 - Set **"Attribute"** to **"0x1"**
 - The **"Instance"** should refer to the index of the parameter you want to write. For example, use **"0x1"** for **"Current Limit Out"**.
 - Ensure **"Source Length"** matches the length of the element being written.
6. Create a **"New Tag"** for the **"Source Element"** that will store the value being written.



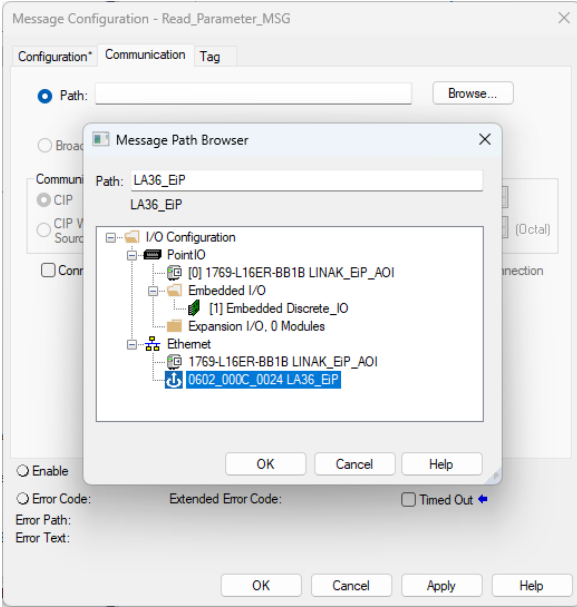
The "Message Configuration - Write_Parameter_MSG" dialog box is shown with the following settings:

- Configuration* Communication Tag
- Message Type: CIP Generic
- Service Type: Set Attribute Single
- Source Element:
- Source Length: 1 (Bytes)
- Service Code: 10 (Hex)
- Class: F (Hex)
- Destination Element:
- Instance: 1
- Attribute: 1 (Hex)
- New Tag...
- Enable: ☐ Enable Waiting: ☐ Start: ☐ Done: ☐ Done Length: 0
- Error Code: ☐ Extended Error Code: ☐ Timed Out: ☐
- Error Path:
- Error Text:

7. Provide a name for the **"New Tag"**, make sure the **"Data Type"** is large enough to hold the data. Then, click the **"Create"** button.



8. Navigate to the **"Communication"** Tab and **"Browse"** for the LINAK_EiP communication module. Click **"OK"** and **"Apply"** then close the configuration window by clicking **"OK"**.



9. The **"MSG"** function is now set up to write the parameter value to the LINAK EtherNet/IP Actuator.

5.3 Configuration Parameter Details

You can find a detailed list of all the Configuration Parameters in the Interface manual at www.LINAK.com

5.4 Diagnostic Parameter Details

You can find a detailed list of all the Diagnostic Parameters in the Interface manual at www.LINAK.com