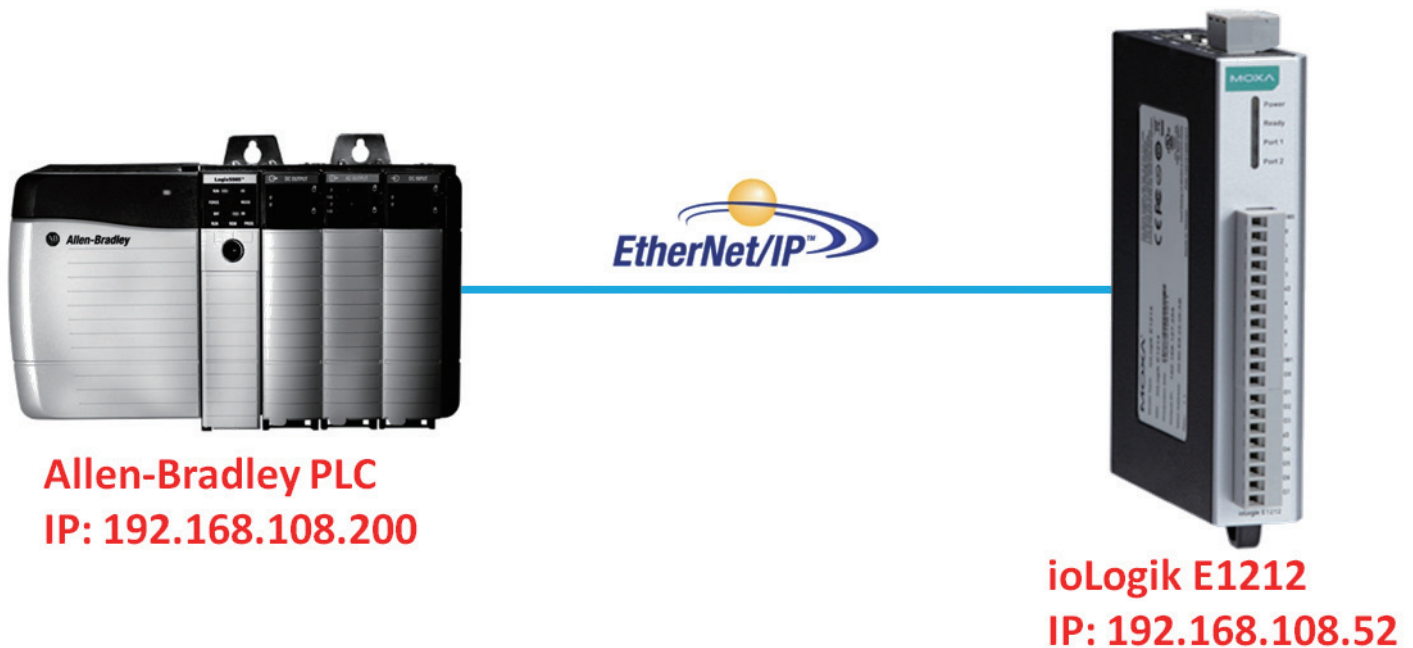


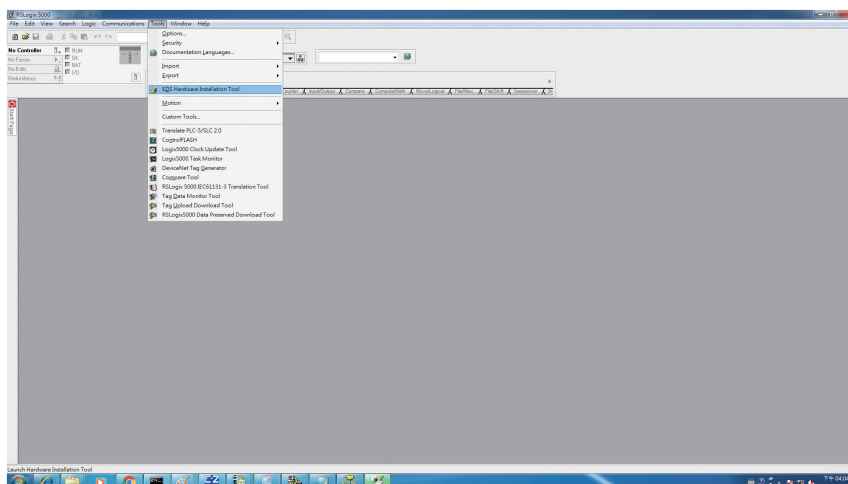
# How to Connect the ioLogik E1200 to an Allen-Bradley PLC

The purpose of this note is to provide a step-by-step example of how to connect the ioLogik E1200 series device with an Allen-Bradley PLC by EtherNet/IP protocol. In this example, the Allen-Bradley PLC is the EtherNet/IP Scanner and the ioLogik E1200 is the adapter. The system architecture is displayed below. There are two sections in this document. The first section explains how to install the ioLogik E1200 series' EDS files in the RSLogix 5000, and the second section explains how to connect the ioLogik E1200 with the Allen-Bradley PLC.



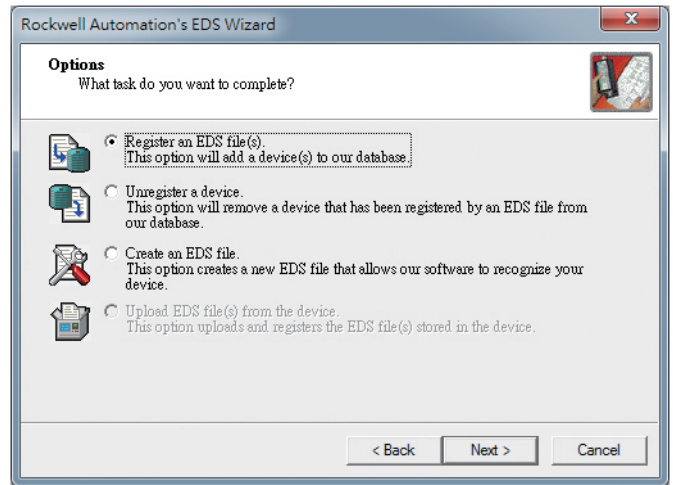
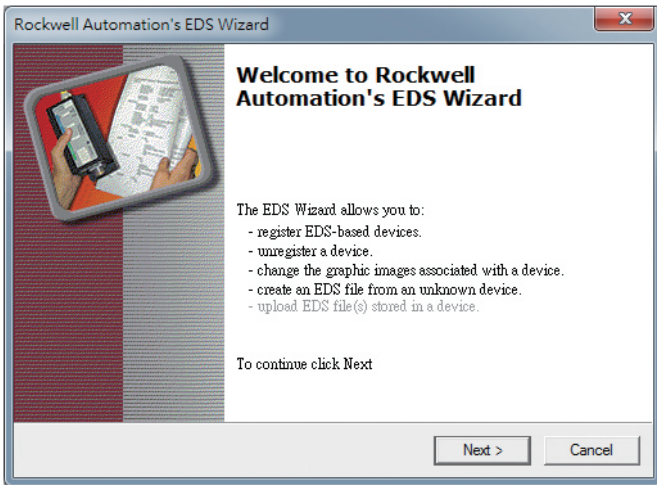
## EDS Installation for ioLogik E1200 series in Rockwell Software RSLogix 5000

1. Start the RSLogix 5000 and open the EDS Hardware Installation Tool in **Tools** → **EDS Hardware Installation Tool**.



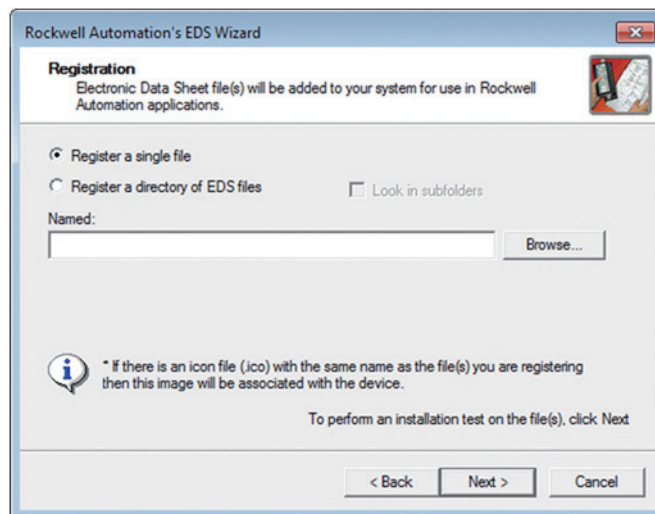
## Technical Note

2. The wizard will start and the following window will pop out, click **Next** and then select Register an EDS file(s), followed by **Next**.



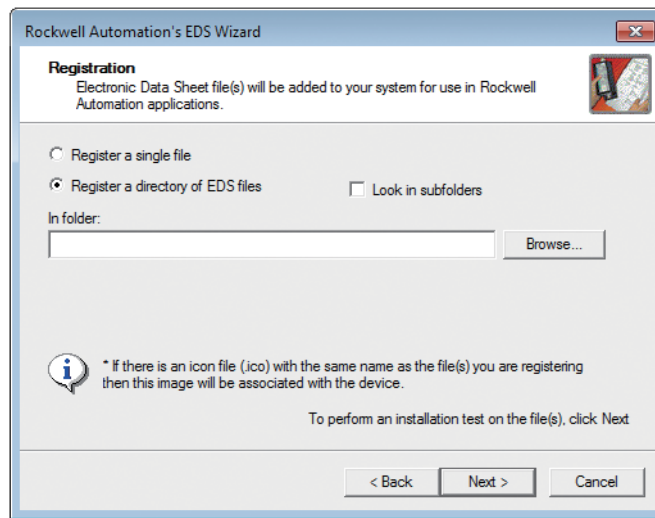
3. There are two ways to register the EDS files. The first is to register a single file, and the second is to register the EDS files by a folder.

- A. If you want to register one EDS file, select **Register a single file** and then click **Browse**.



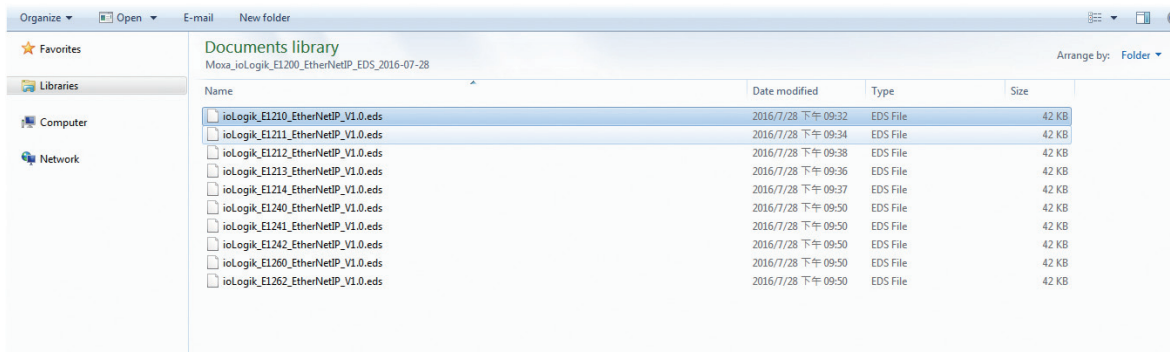
## Technical Note

B. If you want to register several EDS files, put all the EDS files in one folder, select **Register a directory of EDS files** and then click **Browse**.

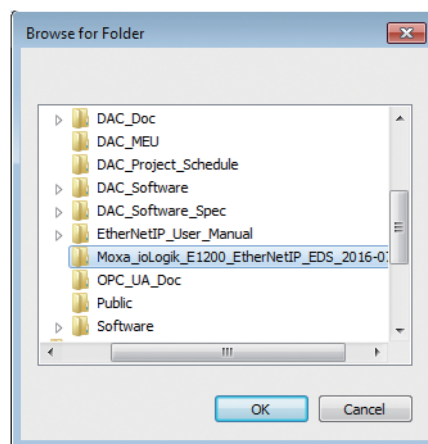


4. Select EDS files and click **Open**, then it will go back to the wizard. Please click **Next** to finish the EDS file selection.

A. Single EDS file



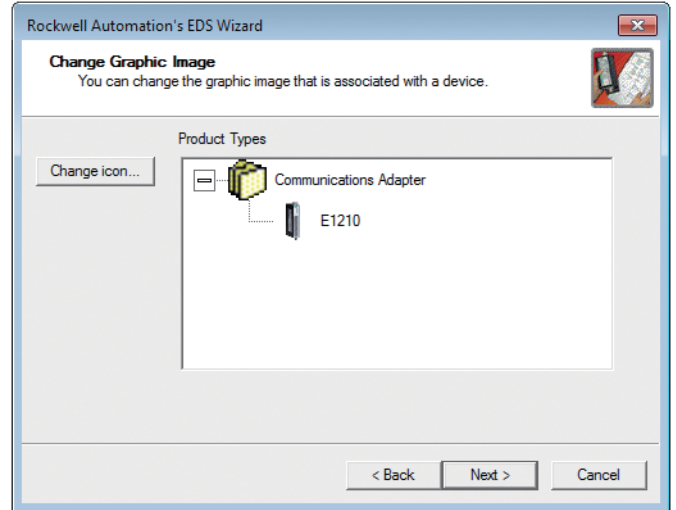
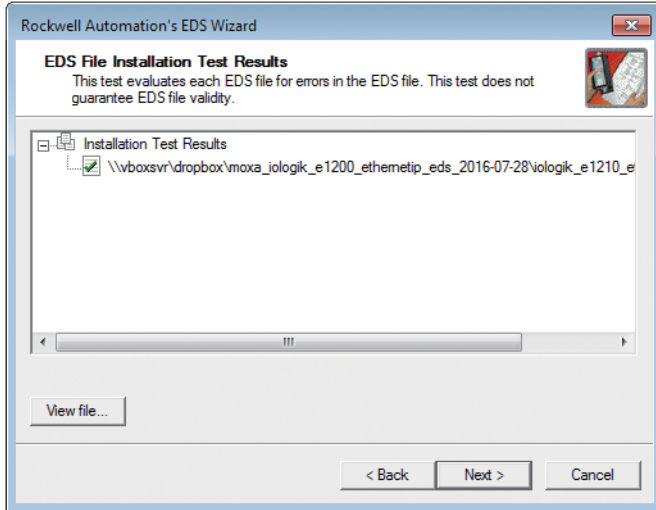
B. Select EDS file folder



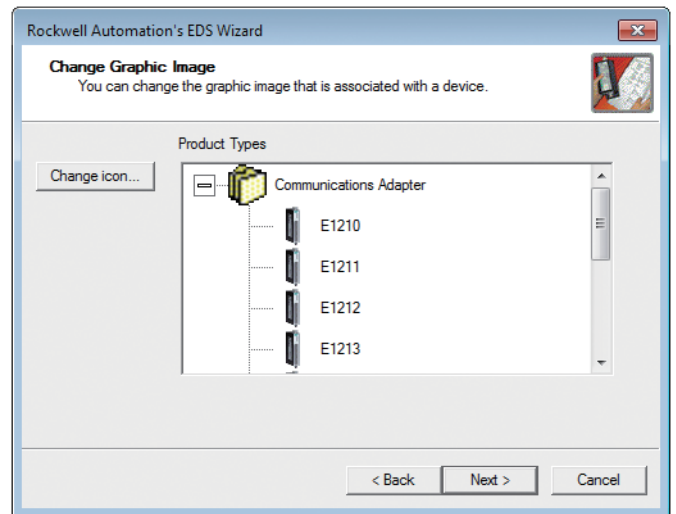
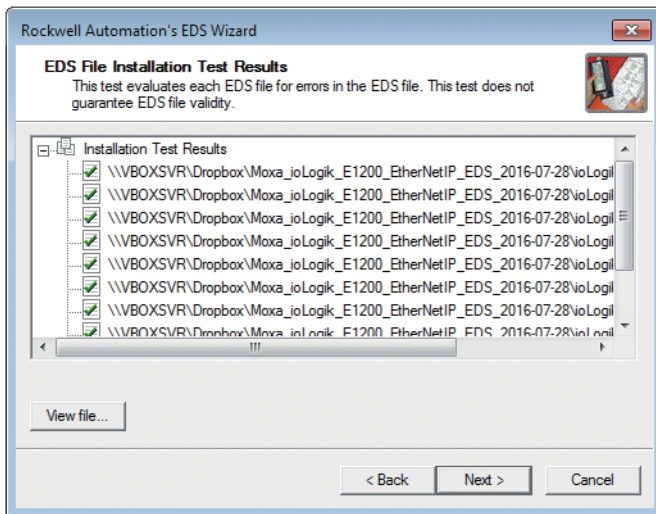
## Technical Note

5. The EDS Wizard will evaluate the EDS file you selected and display the result, then click **Next**. In the following window, you can change the device image. If you do not intend to change the image, please click **Next**.

### A. Single EDS file



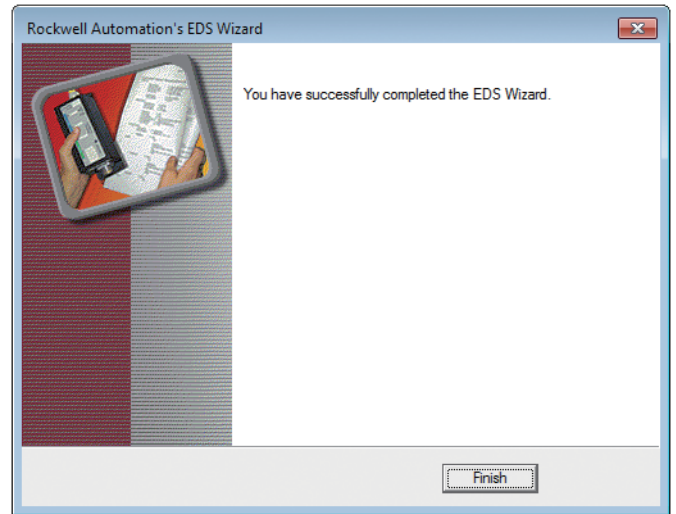
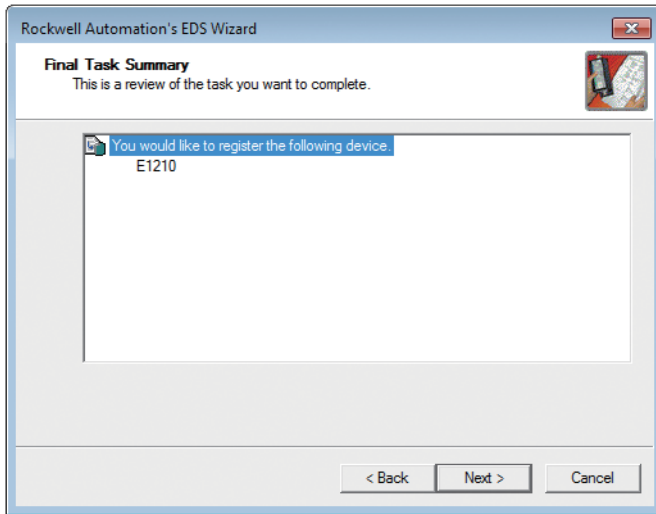
### B. EDS files folder



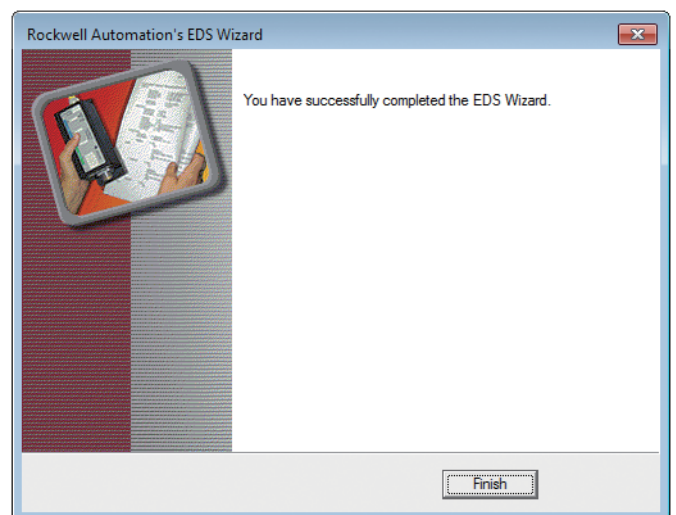
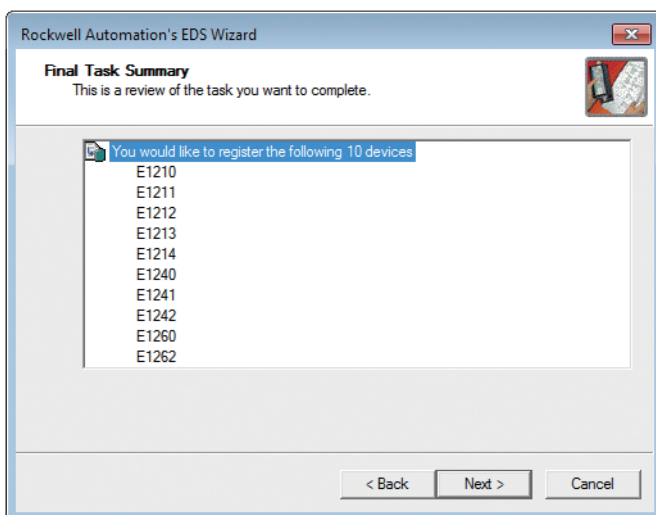
## Technical Note

6. Complete the final step of the EDS Wizard by clicking Next and then Finish.

### A. Single EDS file



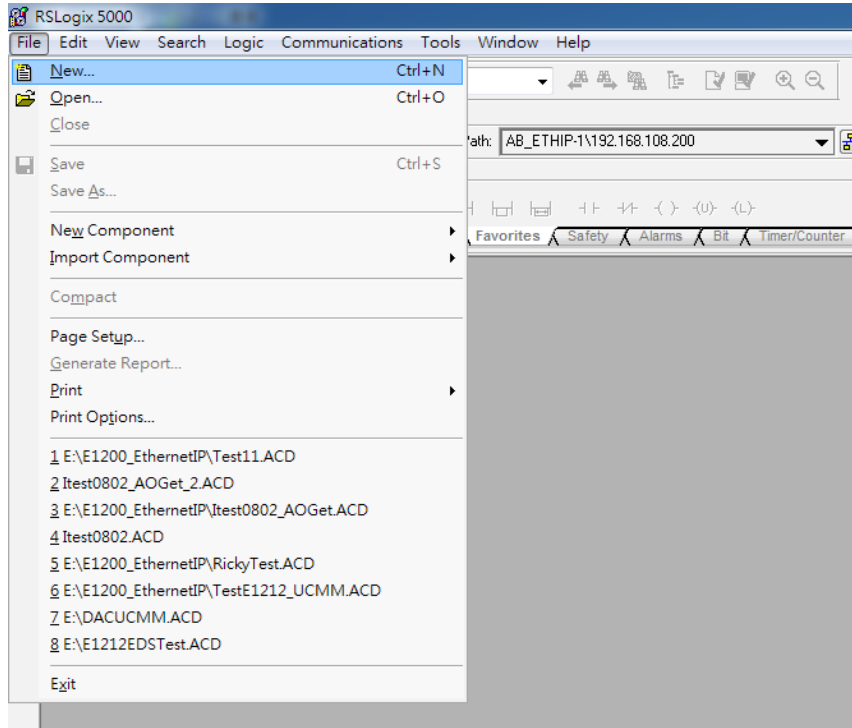
### B. EDS files folder



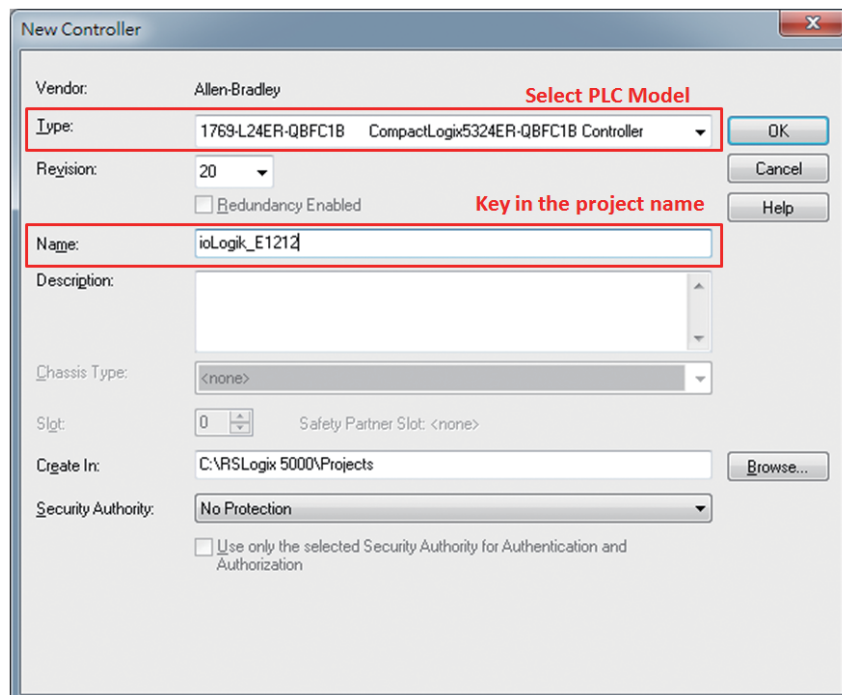
## Technical Note

### Establishing communication between the ioLogik E1200 device and the Allen-Bradley PLC

1. Open the RSLogix 5000 and then open a new project by pressing **File → New**.

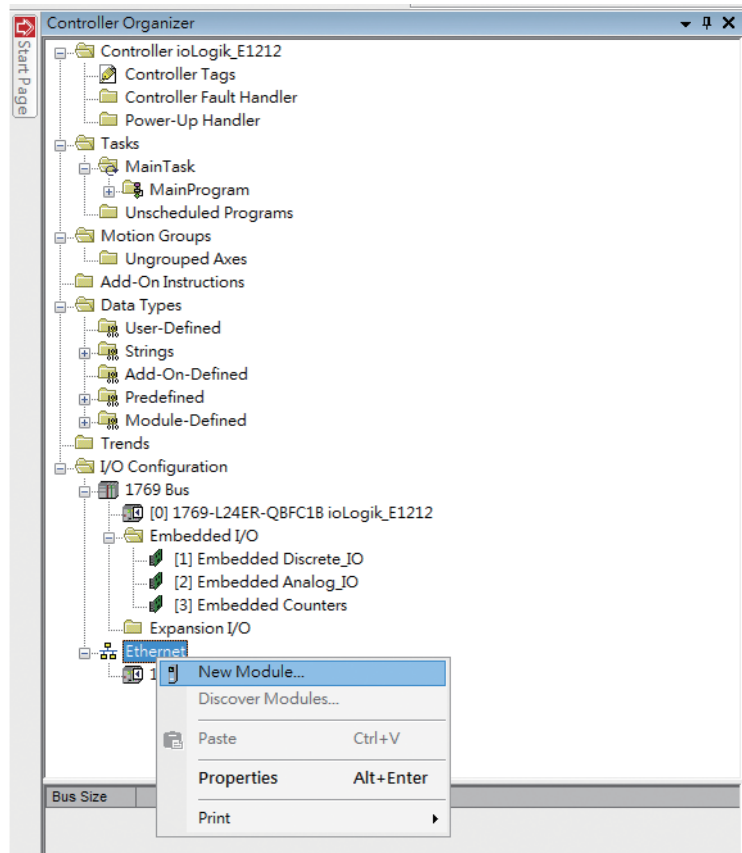


2. Select your PLC model under **Type** and key in the project name in the window.  
The CompactLogix5324ER-QBFC1B will be used as an example.

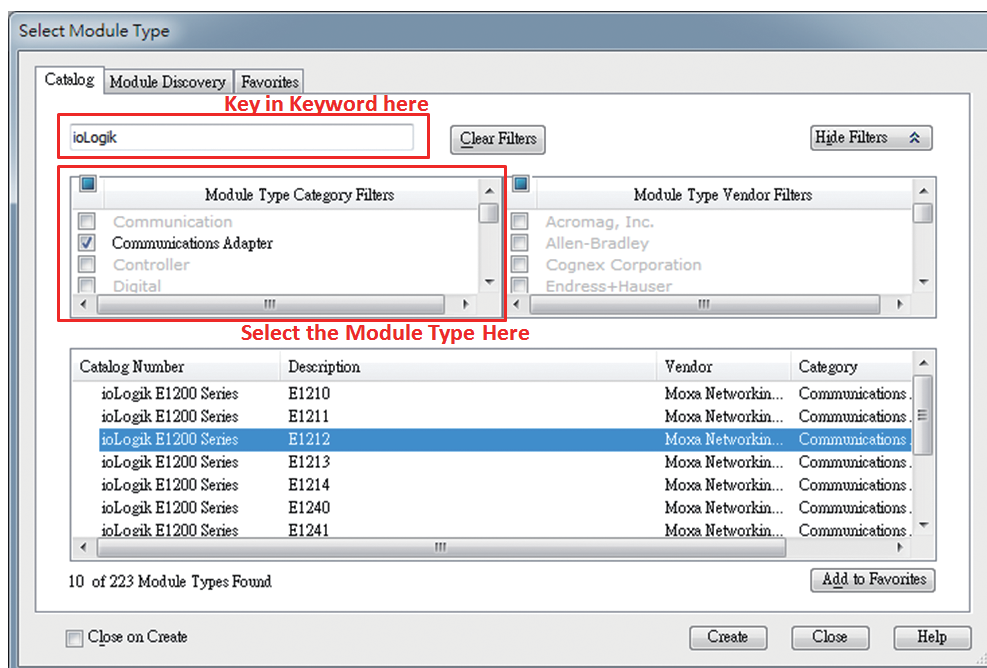


## Technical Note

3. After the project creation, you can see the project information in the left window. Right click **Ethernet** and then select **New Module** and the ioLogik E1200 module can be added into the project.

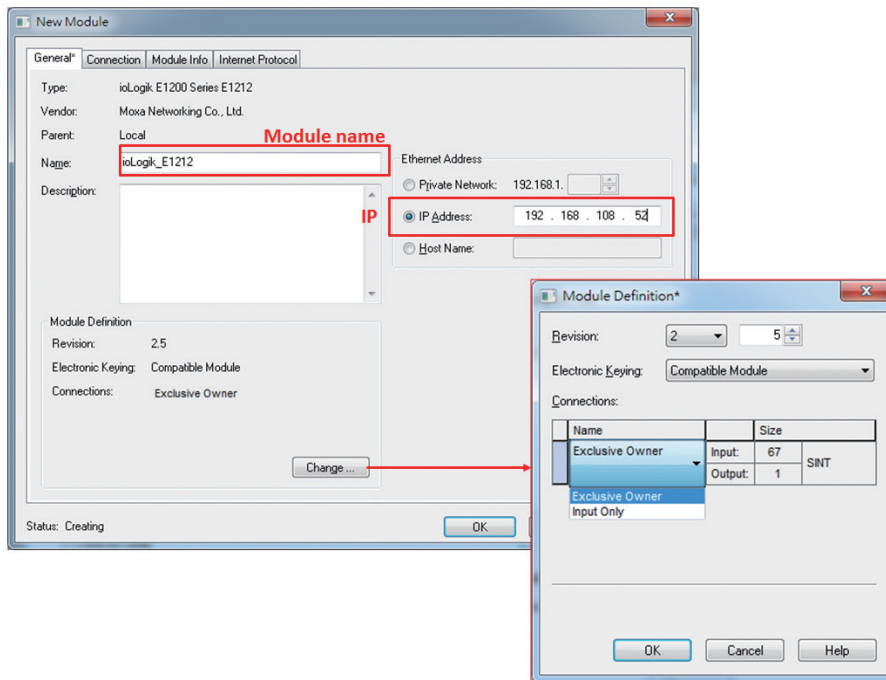


4. In the Select Module Type window, choose the ioLogik E1200 model you want to add. You can use a key word and select the module type to speed up the search. The ioLogik E1212 is used here as an example.



# Technical Note

5. In the New Module window, key in the module name and module IP. The default module definition is Exclusive Owner. If you want to change it, click change and then choose another type.



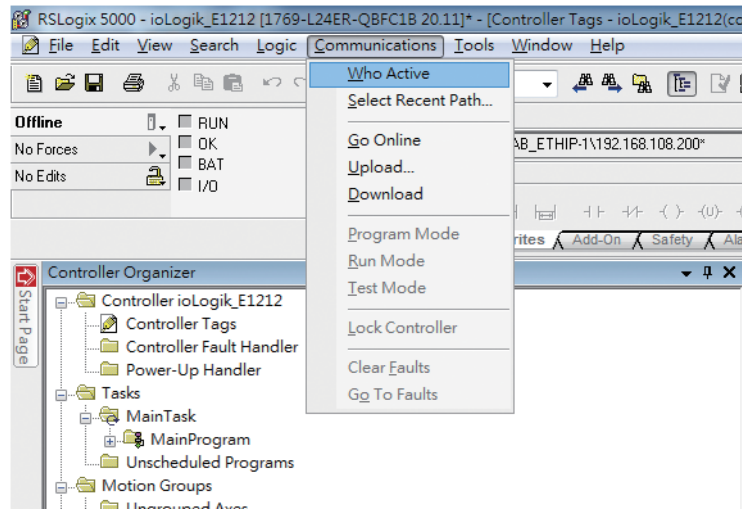
6. RSLogix 5000 will recognize and create the ioLogik E1212 tags automatically. You can check the tag structure in the window.

Name	Value	Force Mask	Style	Data Type	Description	Constant
+ ioLogik_E1212	{...}	{...}				
+ ioLogik_E1212.0	{...}	{...}		03DF:ioLogikE1...		
+ Local.1.C	{...}	{...}		AB:Embedded_Di...		
+ Local.1.I	{...}	{...}		AB:Embedded_Di...		
+ Local.1.O	{...}	{...}		AB:Embedded_Di...		
+ Local.2.C	{...}	{...}		AB:Embedded_A...		
+ Local.2.I	{...}	{...}		AB:Embedded_A...		
+ Local.2.O	{...}	{...}		AB:Embedded_A...		
+ Local.3.C	{...}	{...}		AB:Embedded_H...		
+ Local.3.I	{...}	{...}		AB:Embedded_H...		
+ Local.3.O	{...}	{...}		AB:Embedded_H...		

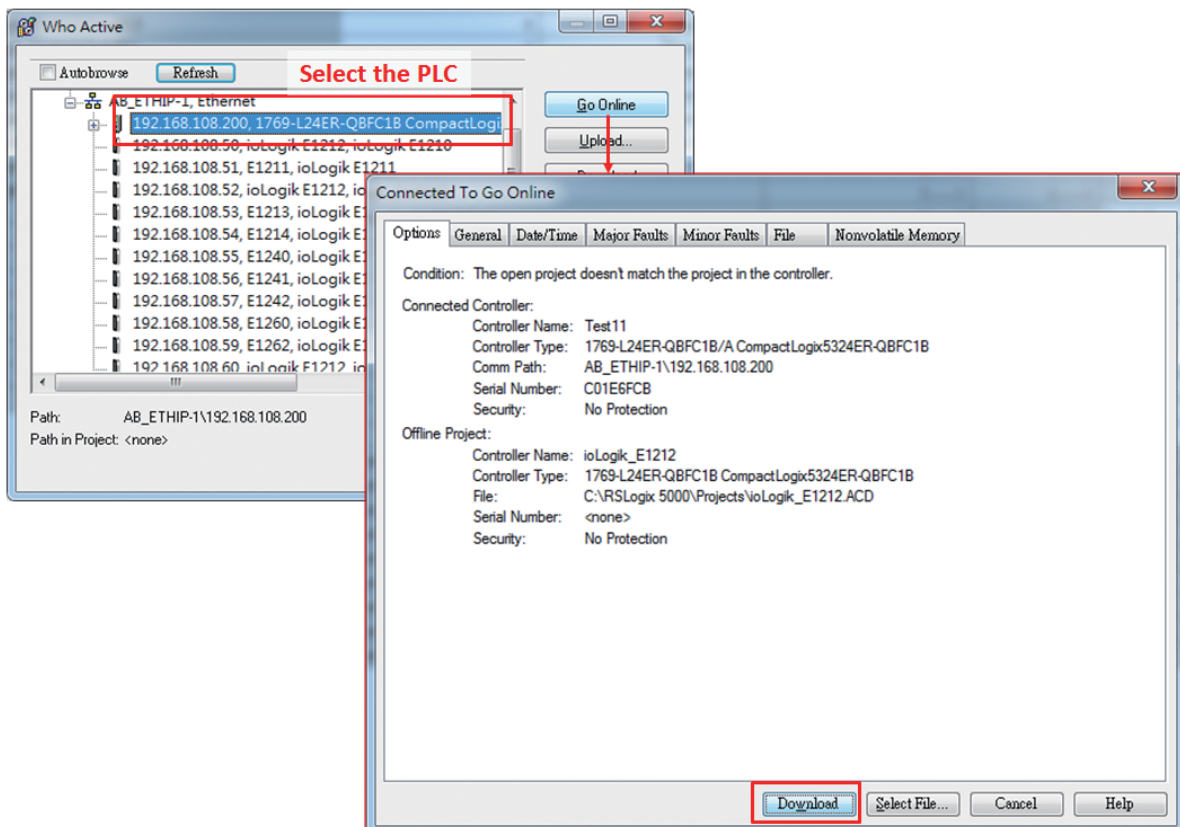


## Technical Note

7. To download the tag structure to the Allen-Bradley PLC, please go to **Communications** → **Who Active** to select the active PLC.



8. Select the PLC in Who Active and then click the **Go Online**, followed by **Download**. The RSLogix 5000 will display a pop up message to inform you the download is complete.



# Technical Note

9. Change the **ioLogik\_E1212.O.Data[0].4** status from 0 to 1 in RSLogix 5000 and the DO-04 status will change from OFF to ON. The ioLogik E1200 will now be successfully connected to the Allen-Bradley PLC.

The screenshot displays the RSLogix 5000 software interface. The top part shows a tag table for 'ioLogik\_E1212'. The table has columns for Name, Value, Force Mask, Style, and Data Type. The row for 'ioLogik\_E1212.O.Data[0].4' is highlighted with a red box, and its value is '1'. A red arrow points from this row to the 'I/O Status' table below. The 'I/O Status' table has columns for DI Channel, Mode, and Status. The row for 'DO-04' is highlighted with a red box, and its status is 'ON'.

Name	Value	Force Mask	Style	Data Type
ioLogik_E1212.I	{...}	{...}		_03DF:ioLogikE1...
ioLogik_E1212.O	{...}	{...}		_03DF:ioLogikE1...
ioLogik_E1212.O.Data	{...}	{...}	Decimal	SINT[1]
ioLogik_E1212.O.Data[0]	0		Decimal	BOOL
ioLogik_E1212.O.Data[0].0	0		Decimal	BOOL
ioLogik_E1212.O.Data[0].1	0		Decimal	BOOL
ioLogik_E1212.O.Data[0].2	0		Decimal	BOOL
ioLogik_E1212.O.Data[0].3	0		Decimal	BOOL
ioLogik_E1212.O.Data[0].4	1		Decimal	BOOL
ioLogik_E1212.O.Data[0].5	0		Decimal	BOOL
ioLogik_E1212.O.Data[0].6	0		Decimal	BOOL
ioLogik_E1212.O.Data[0].7	0		Decimal	BOOL

DI Channel	Mode	Status
DI-00	DI	OFF
DI-01	DI	OFF
DI-02	DI	OFF
DI-03	DI	OFF
DI-04	DI	OFF
DI-05	DI	OFF
DI-06	DI	OFF
DI-07	DI	OFF
DO Channel	Mode	Status
DO-00	DO	OFF
DO-01	DO	OFF
DO-02	DO	OFF
DO-03	DO	OFF
DO-04	DO	ON
DO-05	DO	OFF
DO-06	DO	OFF
DO-07	DO	OFF