# 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.

Allen-Bradley PLC
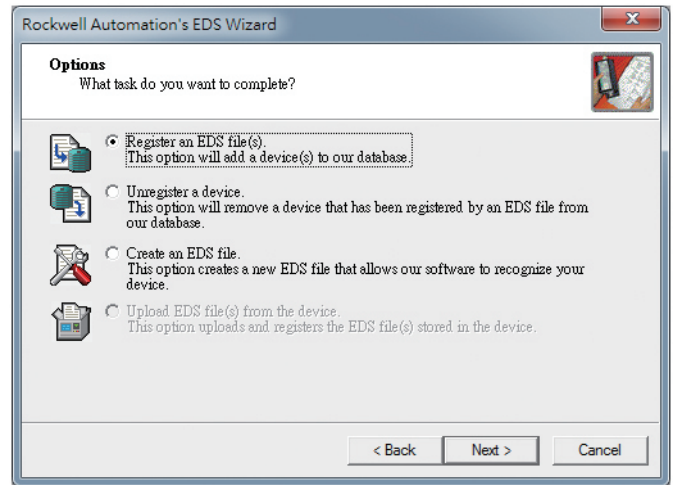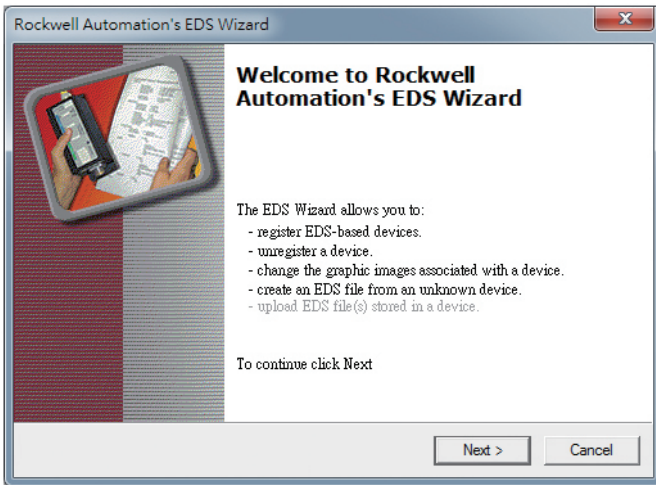IP: 192.168.108.200

ioLogik E1212
IP: 192.168.108.52
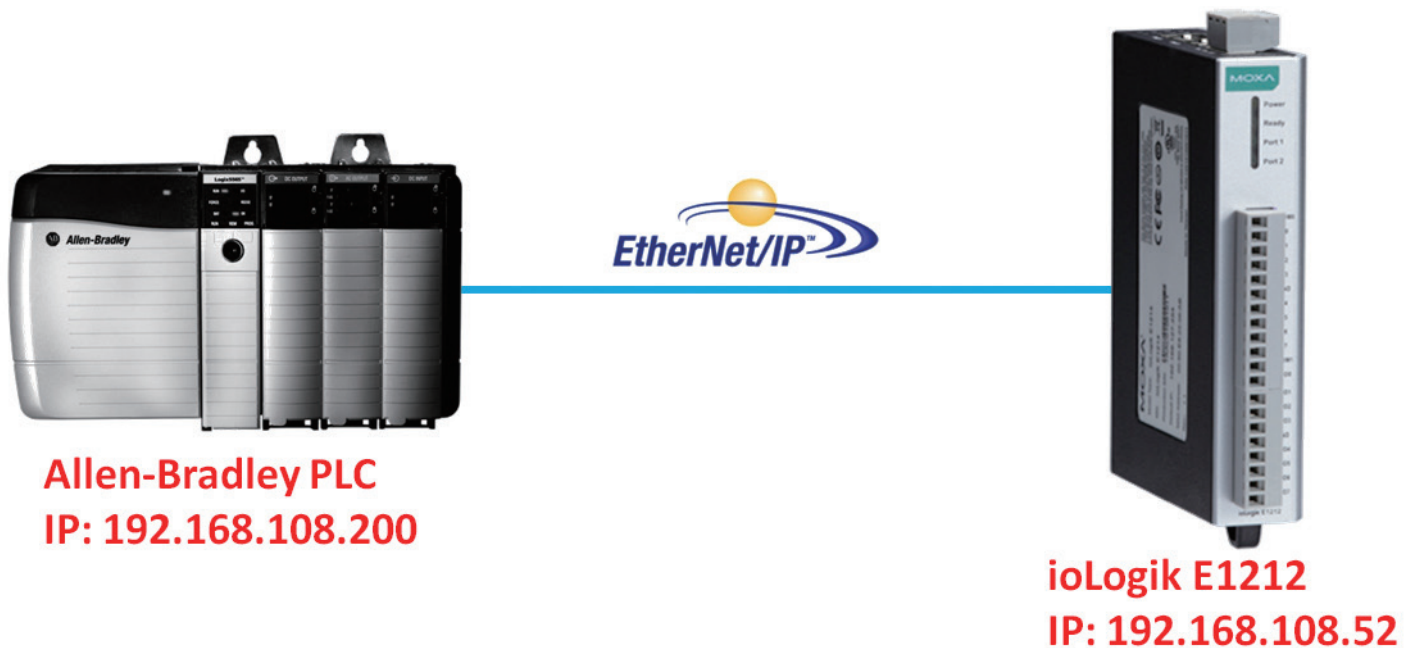
EDS Installation for ioLogik E1200 series in Rockwell Software RSLogix 5000

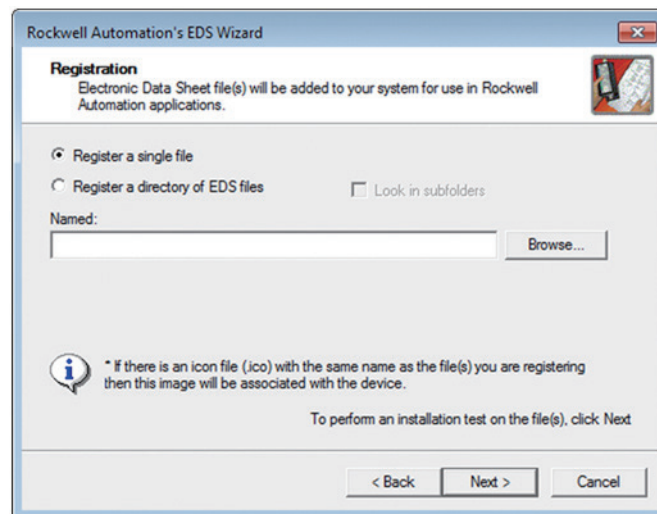1. Start the RSLogix 5000 and open the EDS Hardware Installation Tool in **Tools → EDS Hardware Installation Tool**.
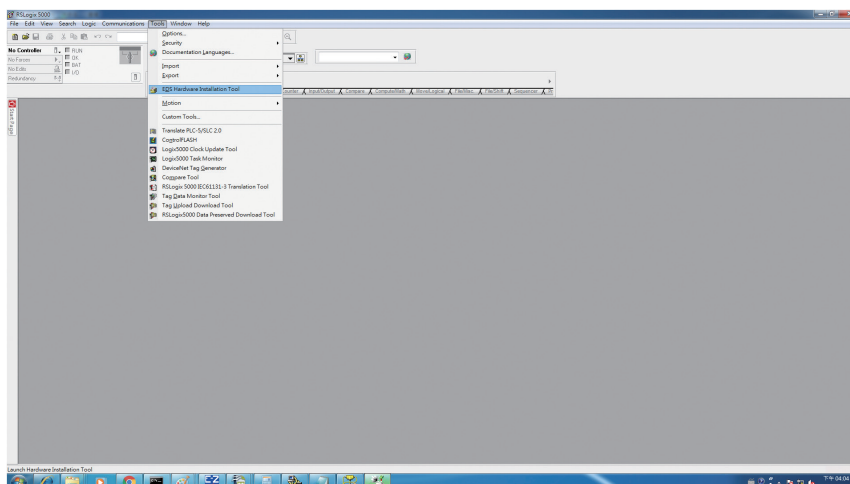
2. The wizard will start and the following window will pop out, click **Next** and then select Register an EDS file(s), followed by **Next.**

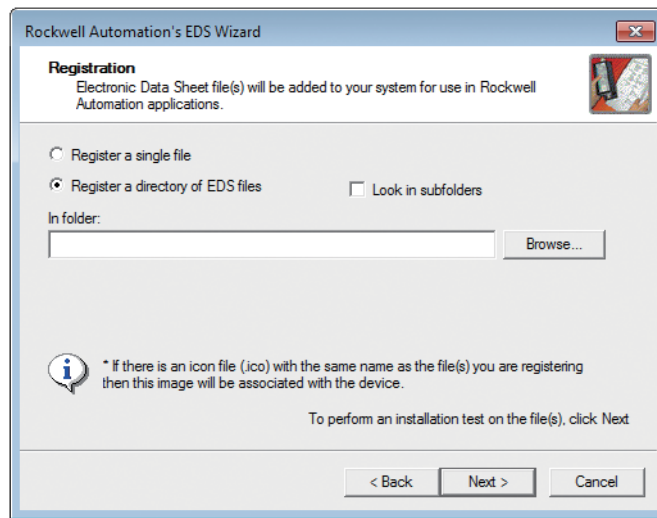

3. There are two ways to register the EDS files. The first is to register a single file, and the second is to register the EDS files by a folder.

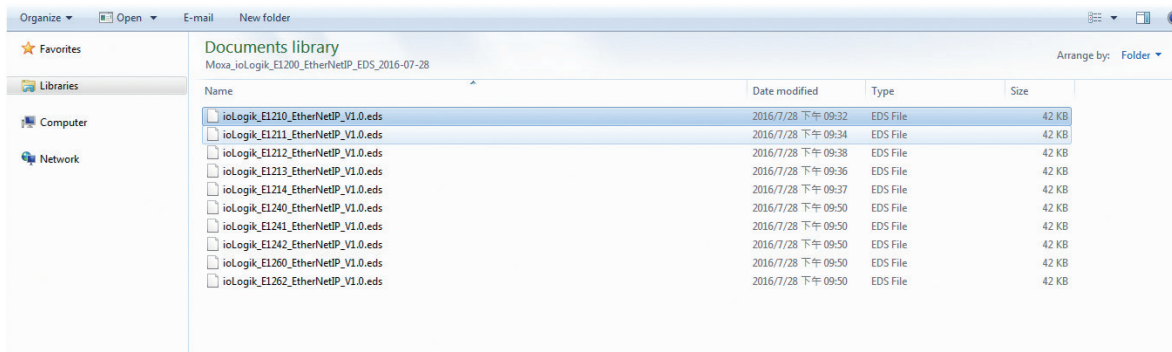   A. If you want to register one EDS file, select **Register a single file** and then click **Browse**.

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**.
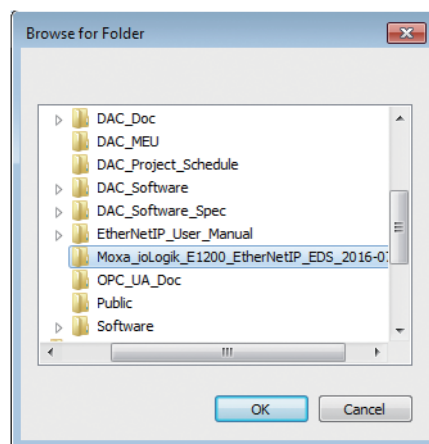

4. Select EDS files and click **Open**, then it will go back to the wizard. Please click **Next** to finish the EDS file selection.
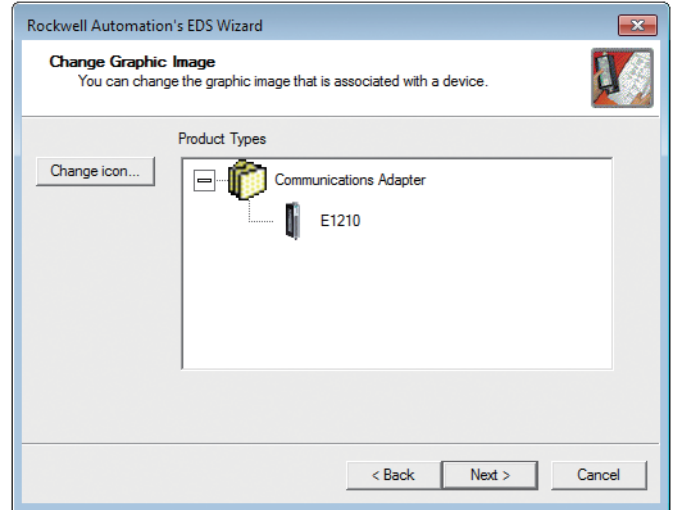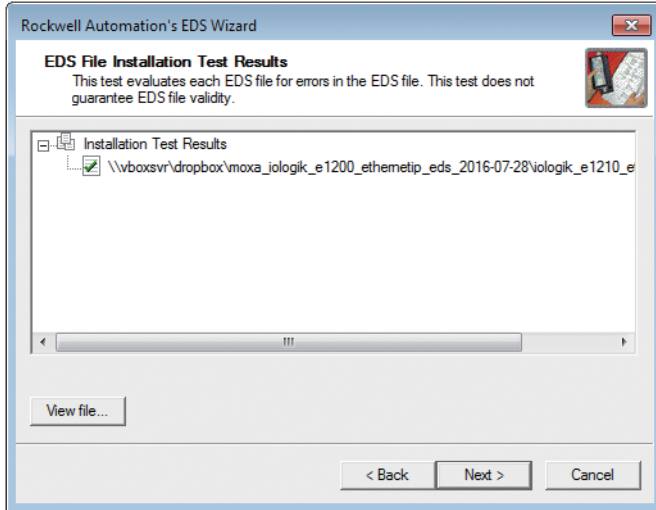
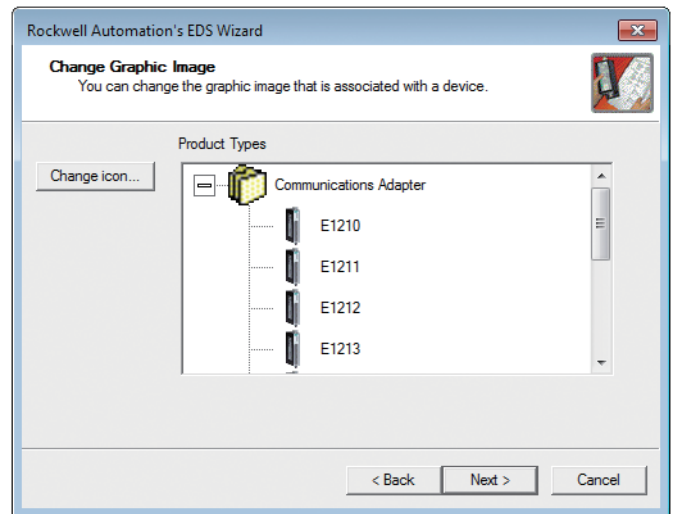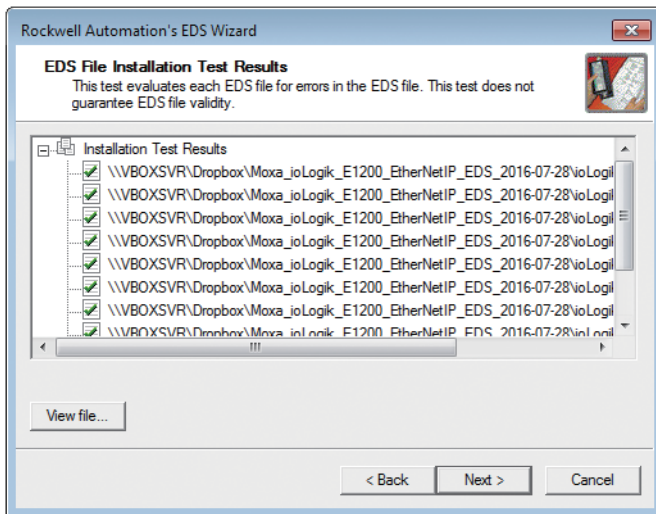A. Single EDS file

B. Select EDS file folder

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**.
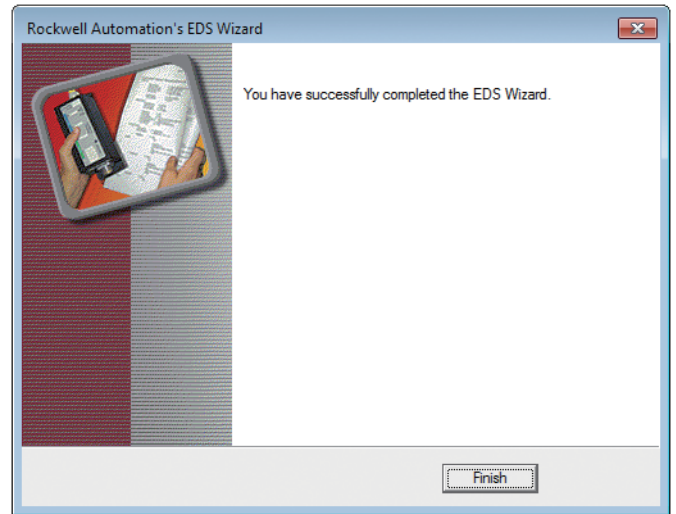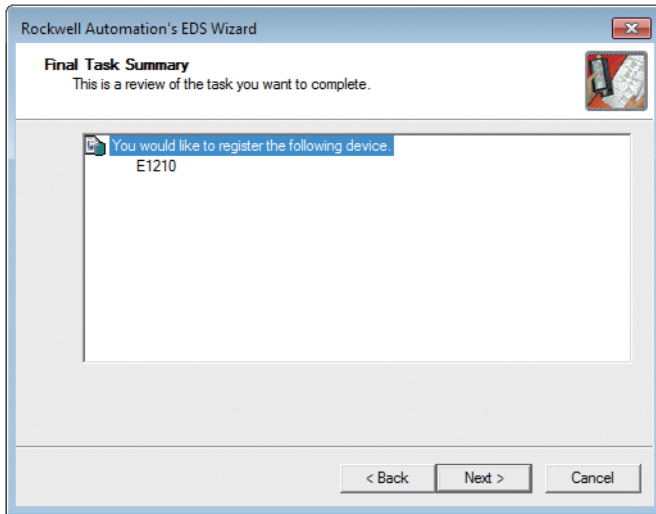
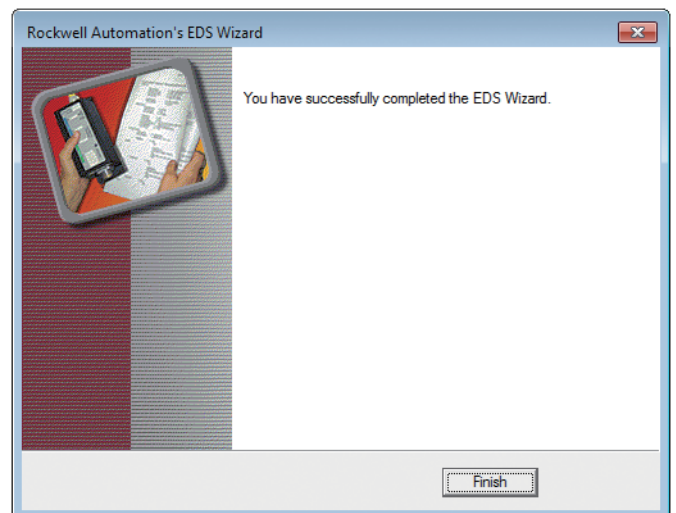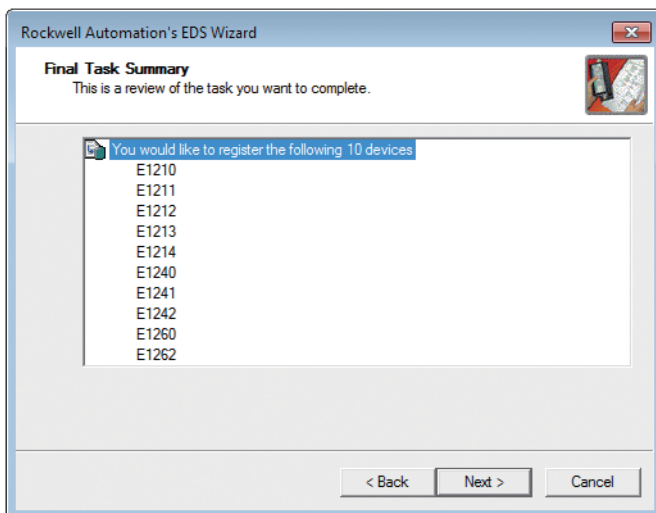A. Single EDS file

B. EDS files folder

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

A. Single EDS file
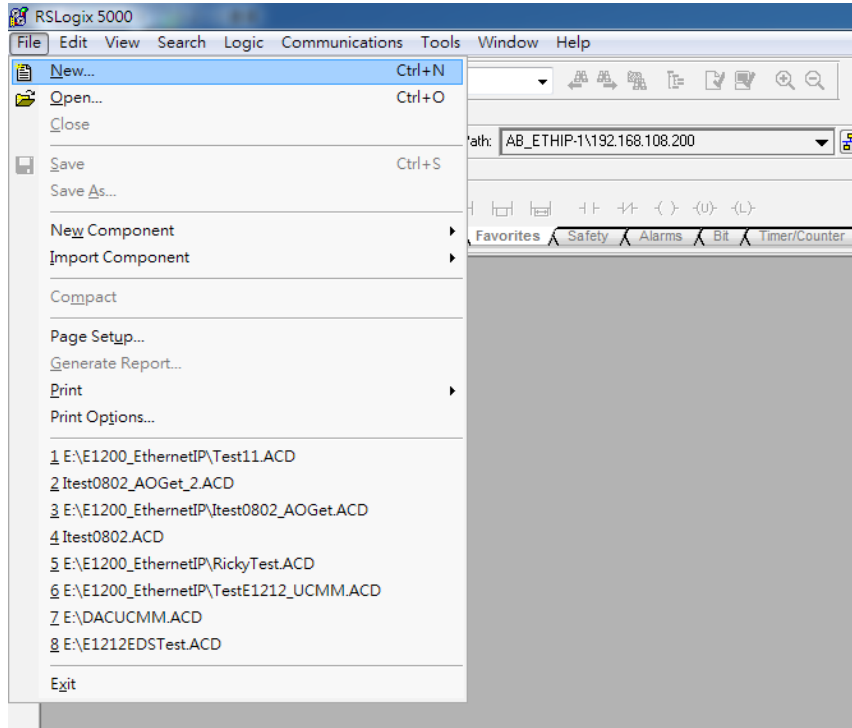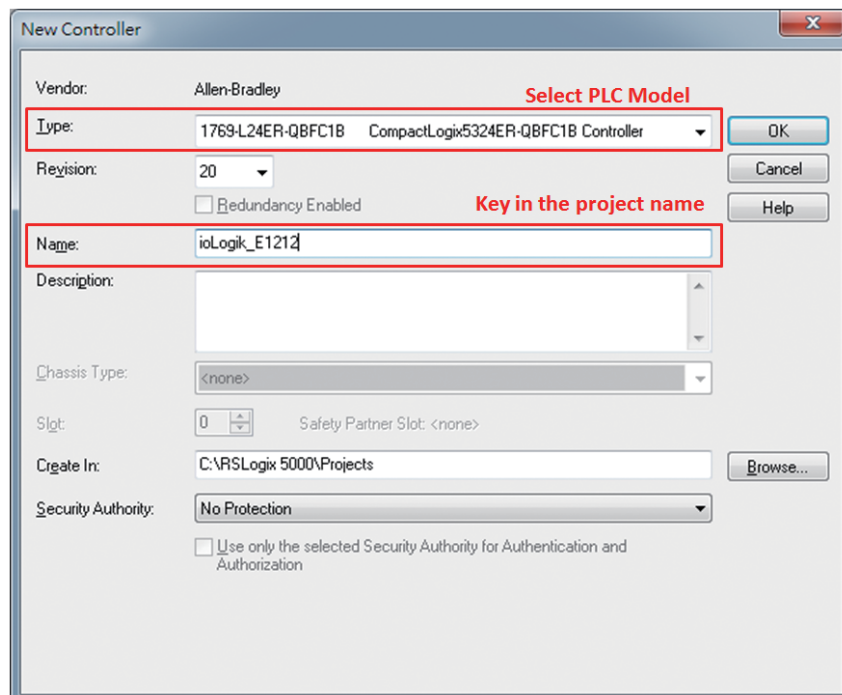

B. EDS files folder

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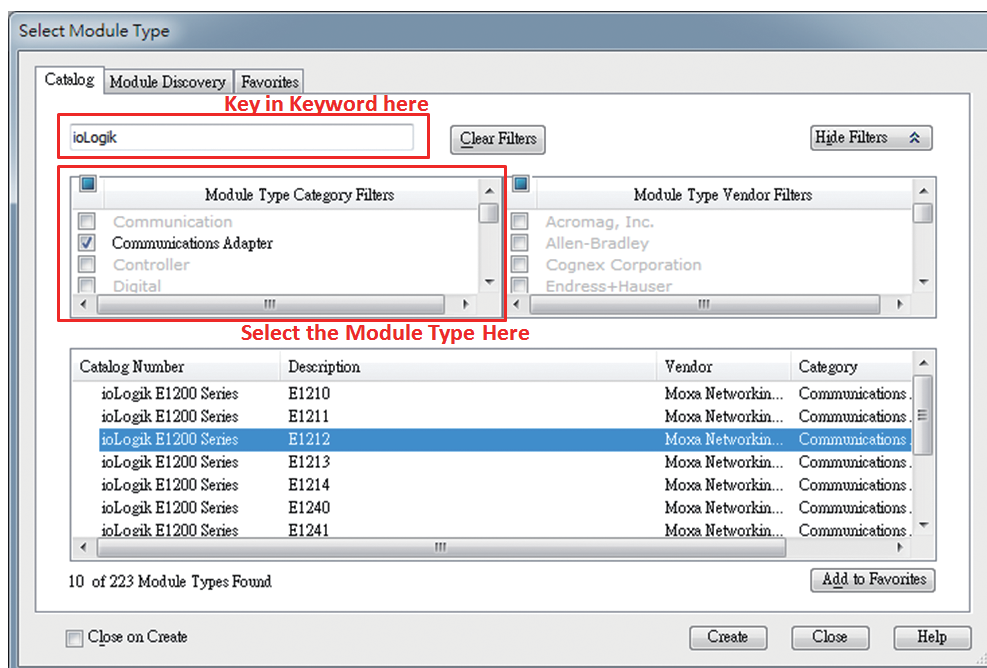
3. After the project creation, you can see the project information in the left window. Right click **Ethernet** and then select **New Module** and the ioLogik E1200 module can be added into the project.
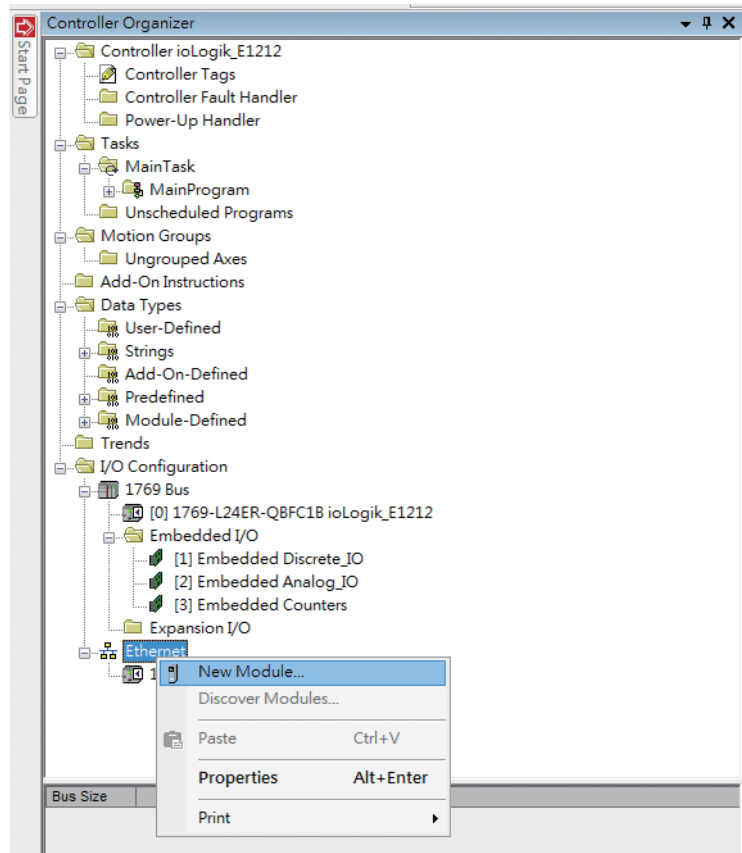

4. In the Select Module Type window, choose the ioLogik E1200 model you want to add. You can use a key word and select the module type to speed up the search. The ioLogik E1212 is used here as an example.

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.
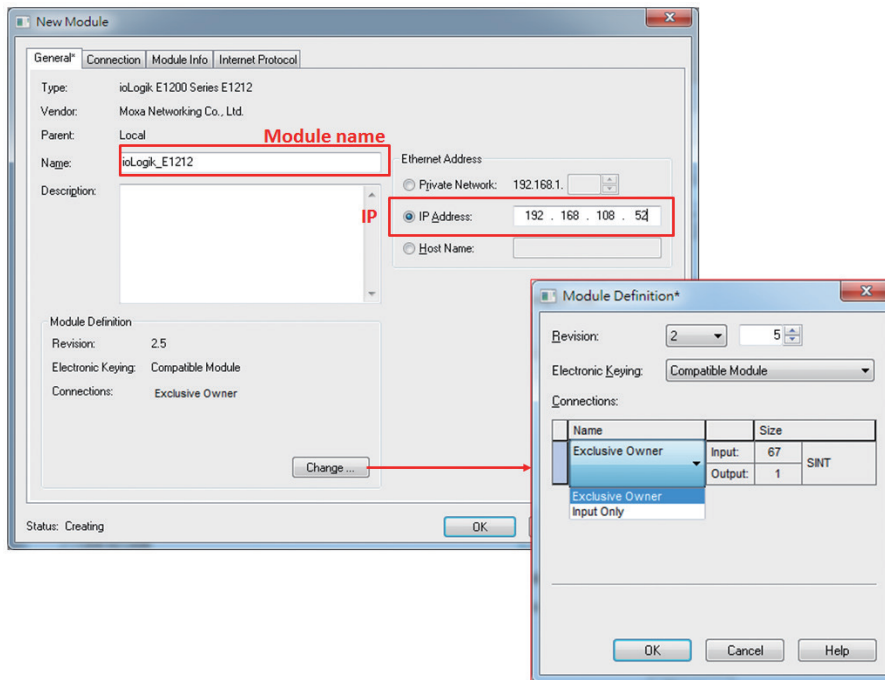
6. Key in the Requested Packet Interval settings on the connection panel. To avoid an I/O connection timeout, we recommend setting the requested packet interval (RPI) value for the ioLogik E1200 Series to a number greater than or equal to 100 ms..
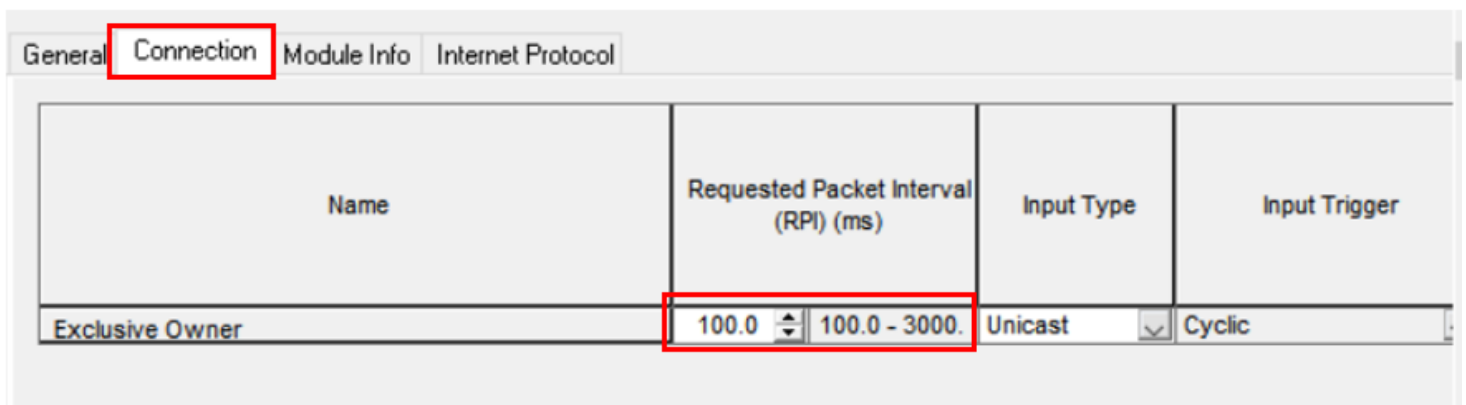

NOTE: The ioLogik E1200 Series is mainly used for data acquisition and remote monitoring, such as recording the ambient temperature and monitoring machine status. The optimal request packet interval (RPI) setting for the ioLogik E1200 Series is 100 ms, which is suitable for the above data acquisition and monitoring requirements.
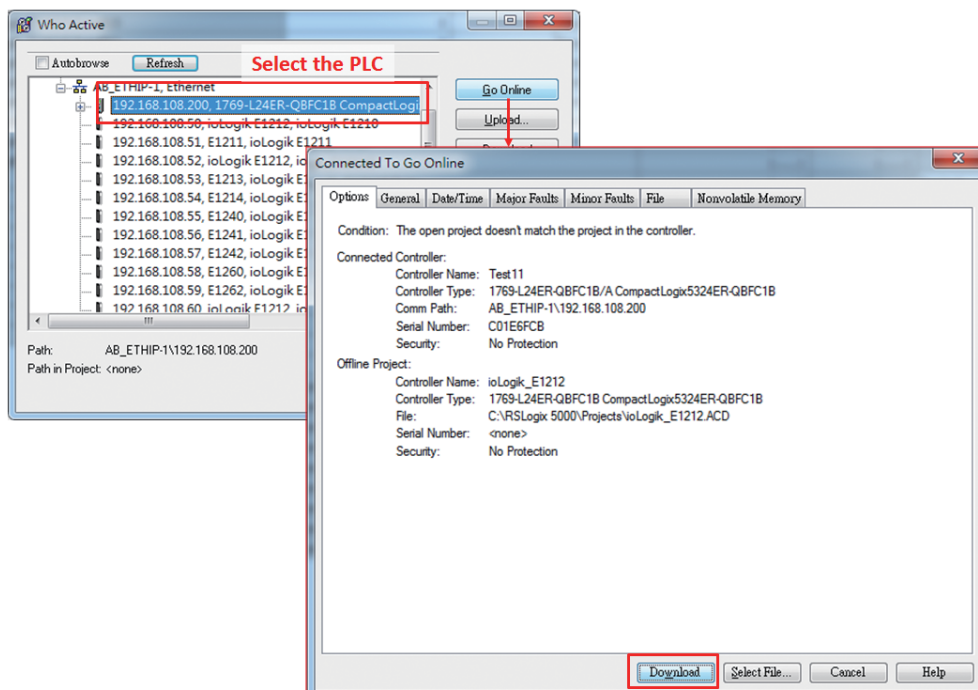
7. RSLogix 5000 will recognize and create the ioLogik E1212 tags automatically. You can check the tag structure in the window.

8. To download the tag structure to the Allen-Bradley PLC, please go to **Communications → Who Active** to select the active PLC.
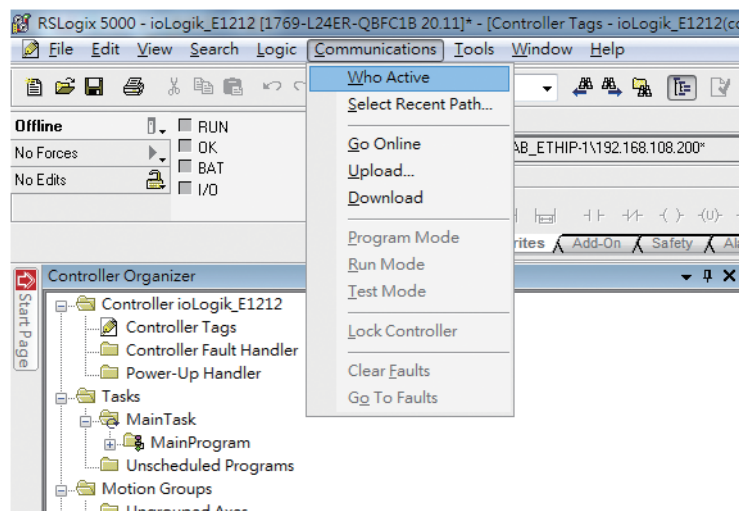
9. Select the PLC in Who Active and then click the **Go Online**, followed by **Download**. The RSLogix 5000 will display a pop up message to inform you the download is complete.

10.   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.