

Eaton's EIP-Assist I/O Tag Generation Tool

EIP-Assist I/O Tag Generation Tool



Platform
Version 1.0.1

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ETHERNET/IP CONFIGURATOR

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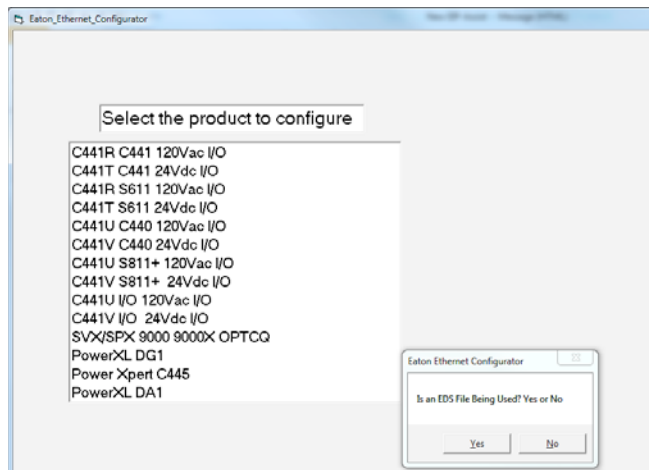
Overview

This manual describes the function of the Eaton EtherNet/IP I/O Tag Generation tool.

The EtherNet/IP I/O Tag Generation software tool is designed to allow the user to select specific Eaton EtherNet/IP products and create a CSV file containing all I/O tags for these selected devices. This file can then be imported into RSLogix™ 5000, where these tags are then aliased to generic tags previously created for these devices. What links the specific product I/O tags to the generic tags is the name provided for each device in both RSLogix 5000 and this software tool. These names must be identical.

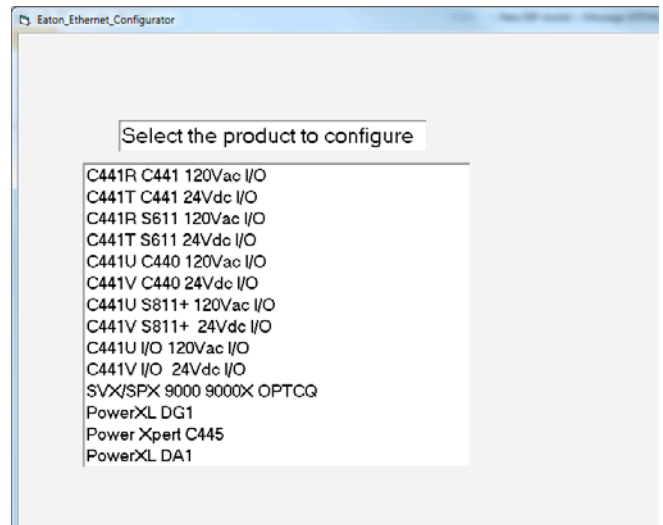
Operation and procedure

The first screen after the EtherNet/IP software is started is the splash screen, which identifies the product and the current revision level. The splash screen will be displayed for approximately 30 seconds. Next, the following screen will be displayed.

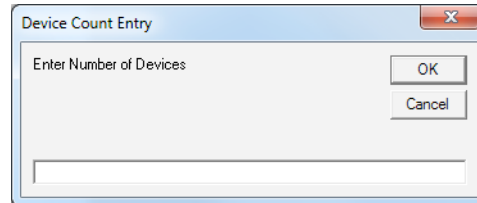


The first question asked is if an EDS file is being used. “Yes” signifies that the user is using an EDS file in RSLogix 5000 for the Eaton device. “No” signifies that the user is using a Generic Ethernet Module in RSLogix 5000 for the Eaton device. Different output formats are generated based on whether an EDS file or Generic Ethernet Module is being used. This is required because RSLogix 5000 creates slightly different generic tags when using the EDS file for each device or for the Generic Ethernet Module. Beginning with revision 20 of RSLogix 5000, an EDS hardware installation tool was added, which allows EDS files to be installed into the software.

Once this selection is made, the user can select a product from a list.

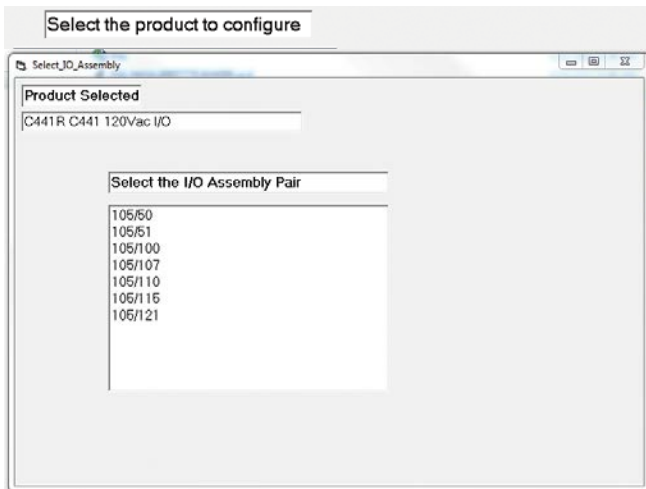


After the product type is selected, the user can enter the quantity for this device type. This means that the user will only be required to add a unique name for each of these same device types, provided the same I/O assembly pairs are used for each of them.

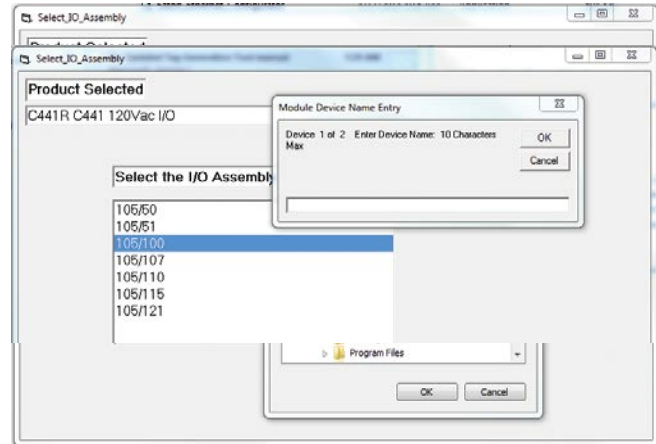


Operation and procedure

The user must enter a value of 1 or greater. If the quantity selected is greater than 1, they will be asked if they wish to apply the same I/O pair for all of these devices. If “Yes” is the answer, then the software will prompt the user to choose one of the I/O assembly pairs available and apply it to all of this device type. If “No” is the answer, then an I/O assembly pair will need to be selected for each of the number of devices entered for this device type.



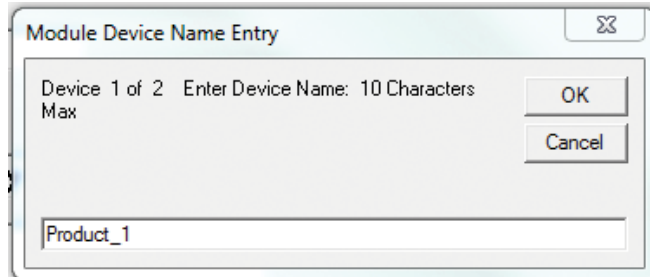
Immediately following the selection of the first I/O assembly pair, the configurator will prompt the user to browse for the folder to save the CSV file, then for a file name for the CSV file that will be generated for this project.



Next, the software will prompt the user for a unique name for each device based on the quantity selected, along with a different I/O assembly pair if the same I/O assembly pair is not being used for each of the same device type. Each name must exactly match the name given for the same device added to the EtherNet/IP network in RSLogix 5000. This is what is used when the CSV file is imported into RSLogix 5000 to alias the descriptive tags in the CSV file to the generic tags for each device. This operation works the same if an EDS file is used for the Eaton products or the Generic Ethernet Module.

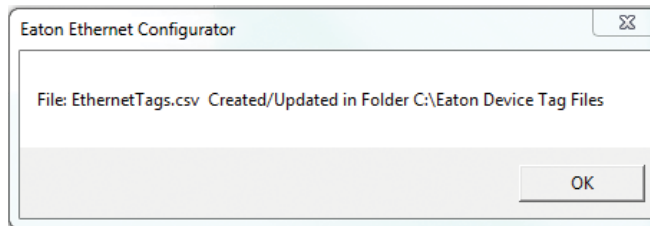
Typically, the same I/O assembly pairs are used for all of each device type. But each device must have a unique name.

The software will display a screen to enter a unique device name for each device based on the quantity selected.



Finally, the user will be asked if they want to configure more products. They can select "Yes" if they have additional devices in their system to add to the same CSV file, or "No" if they have entered the last of the devices in their system.

If "No" is selected, the following message, including the file name and the folder it will be saved in, is displayed.

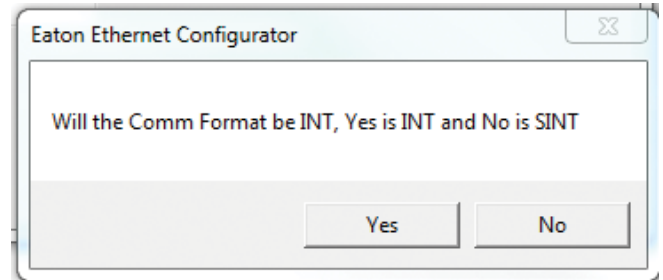


If "Yes" is selected, then the user must repeat the previous steps for the next device type. They will not be prompted for a file name again, only the additional devices, I/O assemblies, and a name for each device they want to add to the project.

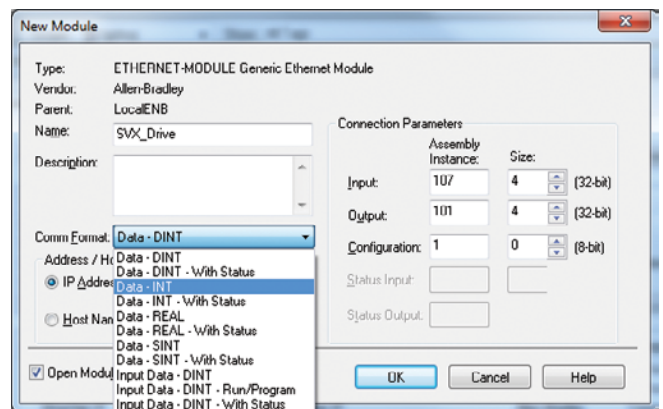
Note that the software tool is limited to 100 devices per CSV file. If there are more than 100 devices, the user must run this tool again and create another CSV with another name and import it into RSLogix 5000 as well.

Also note that the "Comm Format" must be "Data-SINT" for all devices anytime an input or output assembly contains an odd number of bytes. If both the input and output assembly of the I/O assembly pair chosen contain an even number of bytes, then the "Data-INT" Comm Format may be selected.

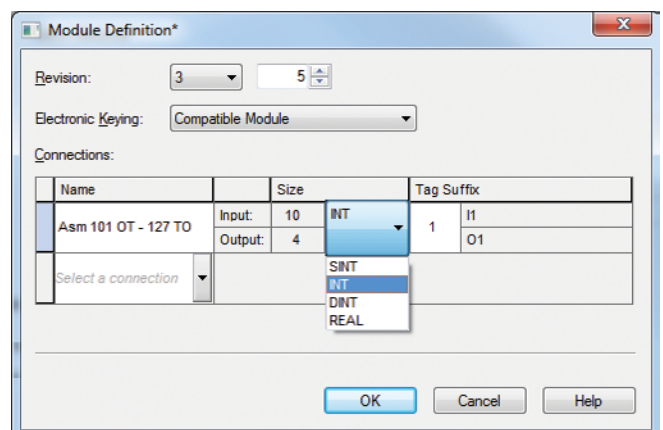
The "Comm Format" chosen must match in both software packages for each Eaton device. Below are the "Comm Format" choices. Select "Yes" for the "Data-INT" Comm Format.



The following screen shot shows the Generic Ethernet Module.



The following screen shot shows the Module Definition screen when using an EDS File.



Operation and procedure

An example of a portion of the output produced by the Tag Generation software tool is as follows. In this case, the file name is: EthernetDevices.csv, and the device names are: Prod1Device1, Prod1Device2.

Name	Alias For	Base Tag	Data Type	Description
Local1C			AB-Embedd	
Local1I			AB-Embedd	
Local2C			AB-Embedd	
Local2I			AB-Embedd	
Local2O			AB-Embedd	
Product_1I1			_0044.C44.	
Product_1O1			_0044.C44.	
Product_1_DeviceStatusTip	Product_1I1.Data[0]0	Product_1I1.Data[0]0	BOOL	Tip
Product_1_DeviceStatusWarn	Product_1I1.Data[0]1	Product_1I1.Data[0]1	BOOL	Warn
Product_1_DeviceStatusOutput1	Product_1I1.Data[0]2	Product_1I1.Data[0]2	BOOL	Output 1
Product_1_DeviceStatusOutput2	Product_1I1.Data[0]3	Product_1I1.Data[0]3	BOOL	Output 2
Product_1_DeviceStatusInput1	Product_1I1.Data[0]4	Product_1I1.Data[0]4	BOOL	Input 1
Product_1_DeviceStatusInput2	Product_1I1.Data[0]5	Product_1I1.Data[0]5	BOOL	Input 2
Product_1_DeviceStatusInput3	Product_1I1.Data[0]6	Product_1I1.Data[0]6	BOOL	Input 3
Product_1_DeviceStatusInput4	Product_1I1.Data[0]7	Product_1I1.Data[0]7	BOOL	Input 4
Product_1_DeviceStatusOverPowerLost	Product_1I1.Data[1]0	Product_1I1.Data[1]0	BOOL	Overload Power Lost
Product_1_DeviceStatusCommAdapterLowVolt	Product_1I1.Data[1]1	Product_1I1.Data[1]1	BOOL	Comm Adapter Low Voltage
Product_1_Current1L	Product_1I1.Data[2]	Product_1I1.Data[2]	SINT	Phase A RMS Current
Product_1_Current1H	Product_1I1.Data[3]	Product_1I1.Data[3]	SINT	Phase A RMS Current
Product_1_Current2L	Product_1I1.Data[4]	Product_1I1.Data[4]	SINT	Phase B RMS Current
Product_1_Current2H	Product_1I1.Data[5]	Product_1I1.Data[5]	SINT	Phase B RMS Current
Product_1_Current3L	Product_1I1.Data[6]	Product_1I1.Data[6]	SINT	Phase C RMS Current
Product_1_Current3H	Product_1I1.Data[7]	Product_1I1.Data[7]	SINT	Phase C RMS Current
Product_1_BasicOverloadWRelayRelayOut1	Product_1O1.Data[0]0	Product_1O1.Data[0]0	BOOL	Relay Output 1
Product_1_BasicOverloadWRelayRelayOut2	Product_1O1.Data[0]1	Product_1O1.Data[0]1	BOOL	Relay Output 2
Product_1_BasicOverloadWRelayFt_Reset	Product_1O1.Data[0]2	Product_1O1.Data[0]2	BOOL	Fail Reset
Product_1_BasicOverloadWRelayFcp_Reset	Product_1O1.Data[0]3	Product_1O1.Data[0]3	BOOL	Fail Reset (CP Only)
Product_1_BasicOverloadWRelayFtTestTip	Product_1O1.Data[0]5	Product_1O1.Data[0]5	BOOL	Test Tip

Monitor Tags Edit Tags

Errors: 0 comments deleted on collision
Complete - 0 errors, 0 warnings

All supported products and their I/O assemblies

The products that can be configured are as follows.

Select the product to configure
C441R C441 120Vac I/O
C441T C441 24Vdc I/O
C441R S611 120Vac I/O
C441T S611 24Vdc I/O
C441U C440 120Vac I/O
C441V C440 24Vdc I/O
C441U S811+ 120Vac I/O
C441V S811+ 24Vdc I/O
C441U I/O 120Vac I/O
C441V I/O 24Vdc I/O
SVX/SPX 9000 9000X OPTCQ
PowerXL DG1
Power Xpert C445
PowerXL DA1

Valid I/O assembly pairs for product C441R C441 120 Vac I/O.

105/50
105/51
105/100
105/107
105/110
105/115
105/121

Valid I/O assembly pairs for product C441T C441 24 Vdc I/O.

105/50
105/51
105/100
105/107
105/110
105/115
105/121

Valid I/O assembly pairs for product C441R S611 120 Vac I/O.

105/60
105/100
105/107
105/108
105/121
105/131
105/133
106/60
106/100
106/107
106/108
106/121
106/131
106/133

Valid I/O assembly pairs for product C441T S611 24 Vdc I/O.

105/60
105/100
105/107
105/108
105/121
105/131
105/133
106/60
106/100
106/107
106/108
106/121
106/131
106/133

Valid I/O assembly pairs for product C441U C440 120 Vac I/O.

105/60
105/107
105/120
105/130

Valid I/O assembly pairs for product C441V C440 24 Vdc I/O.

105/60
105/107
105/120
105/130

Valid I/O assembly pairs for product C441U S811+ 120 Vac I/O.

101/61
101/102
101/110
101/111
101/120
101/121
101/130
101/131
101/140
101/141
101/150

Valid I/O assembly pairs for product C441V S811+ 24 Vdc I/O.

101/61
101/102
101/110
101/111
101/120
101/121
101/130
101/131
101/140
101/141
101/150

All supported products and their I/O assemblies

Valid I/O assembly pairs for product C441U I/O 120 Vac I/O.

32/3
32/107

Valid I/O assembly pairs for product C441V I/O 24 Vdc I/O.

32/3
32/107

Valid I/O assembly pairs for product SVX/SPX 9000X OPTCO.

21/71
23/73
25/76
101/127
111/127

Valid I/O assembly pairs for product PowerXL DG1 drive.

20/70
20/71
20/73
20/107
20/117
20/127
21/70
21/71
21/73
21/107
21/117
21/127
23/70
23/71
23/73
23/107
23/117
23/127
101/70
101/71
101/73
101/107
101/117
101/127
111/70
111/71
111/73
111/107
111/117
111/127

Valid I/O assembly pairs for product Power Xpert C445 drive.

2/50
2/51
2/52
2/54
2/100
2/107
2/110
2/116
2/121
3/50
3/51
3/52
3/54
3/100
3/107
3/110
3/116
3/121
5/50
5/51
5/52
5/54
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