

OMRON EtherNet/IP (NJ/NX Series)

Supported Series: OMRON EtherNet/IP NJ / NX1P Series PLC

Website: <http://www.omron.com/>

HMI Setting:

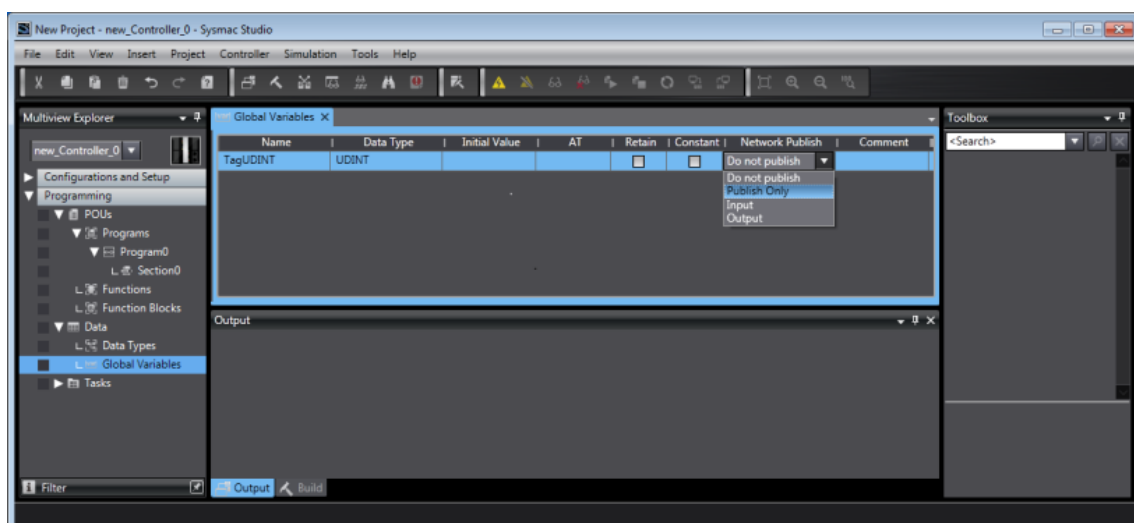
| Parameters | Recommended | Options | Notes |
|--------------|-------------------------------|---------|-------|
| PLC type | OMRON EtherNet/IP (NJ Series) | | |
| PLC I/F | Ethernet | | |
| Port no. | 44818 | | |
| PLC sta. no. | 1 | | |

| | | | |
|--------------------------|-----|--------------------------|-----|
| On-line simulator | Yes | Multi-HMI connect | Yes |
|--------------------------|-----|--------------------------|-----|

Instructions:

Note:

1. In Sysmac Studio, please select **[Publish Only]** for **[Network Publish]** when setting address tag.
2. When **[Do not publish]** is selected for a tag, different import methods may lead to different results. When import tags by **[Get Tags from Device]**, the tag will be eliminated. If **[Import tags]** is selected, the tags will be imported, but the communication will not succeed.

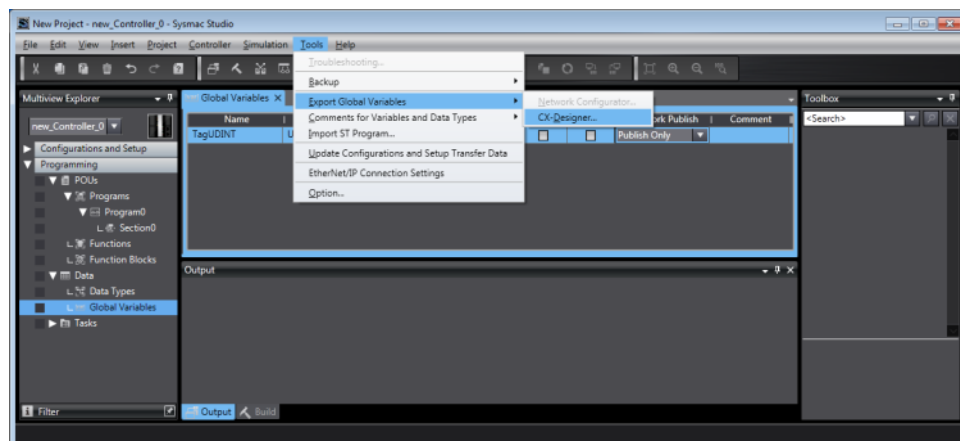


3. Bool data type cannot be mapped to contiguous memory addresses. To use this function, you need to allocate one word for each bool type variable. In the following case, please respectively set to **%W10.0**, **%W11.0**, **%W12.0**.

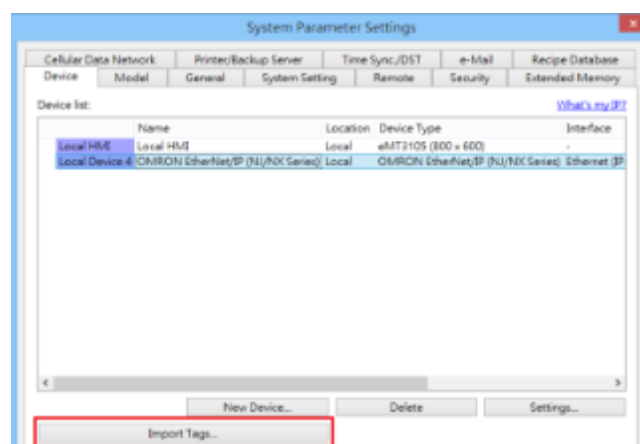
| Name | Data Type | Initial Value | AT |
|------|-----------|---------------|--------|
| A_W | BOOL | | %W10.0 |
| B_W | BOOL | | %W10.1 |
| C_W | BOOL | | %W10.2 |
| A | BOOL | | |
| B | BOOL | | |
| C | BOOL | | |

Export Tags from Sysmac Studio

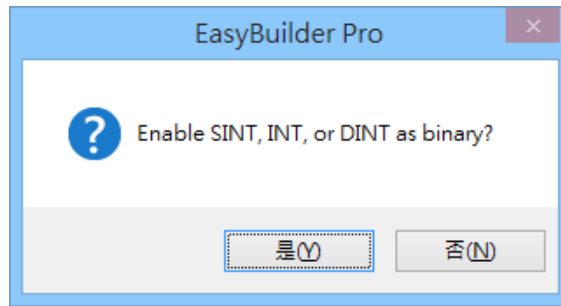
1. Launch Sysmac Studio, under Global Variables create the address tags, and then select **[Tools]** » **[Export Global Variables]** » **[CX-Designer]**, it copies to clipboard.



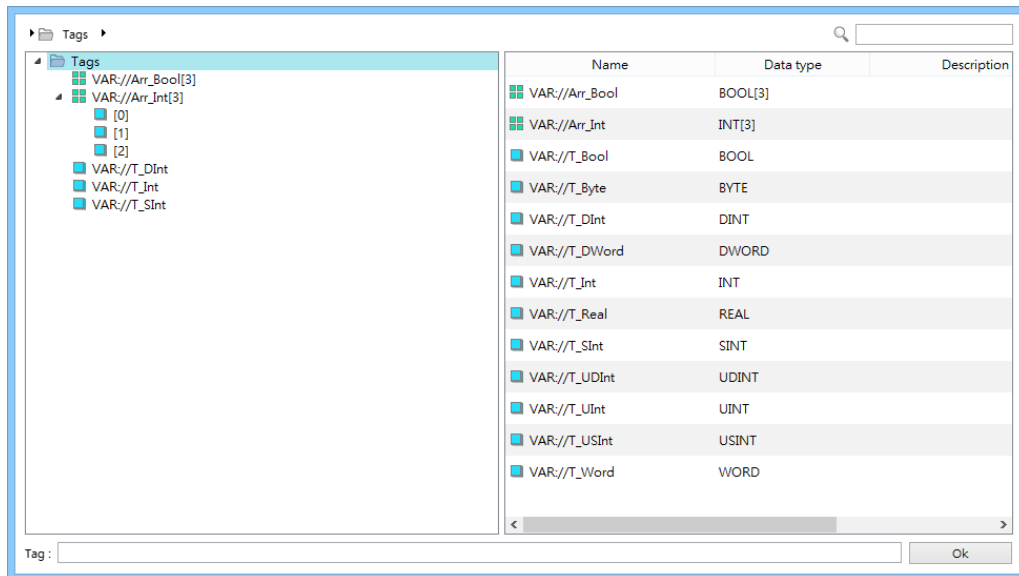
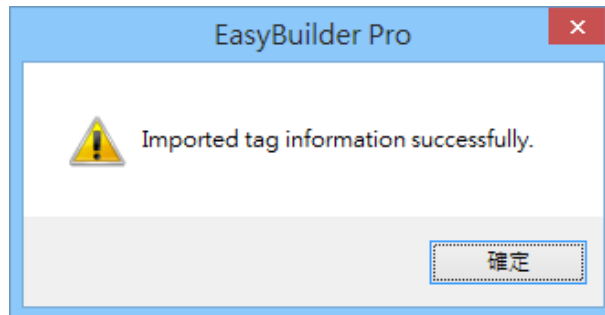
2. Open Notepad, paste the content and save as *.txt.
3. Launch EasyBuilder, in System Parameter Settings add **Omron EtherNet/IP (NJ/NX series)**.
4. Click **[Import Tags]** and select the txt file to be imported.



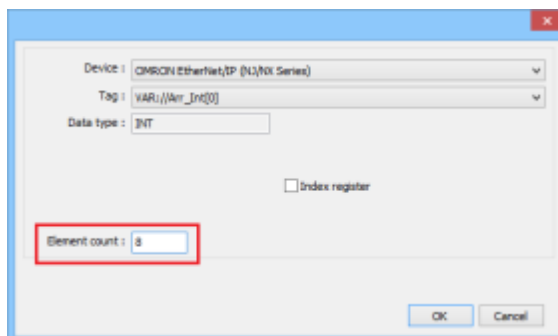
5. Enable SINT, INT or DINT as binary?



6. The following message is displayed when the import has succeed.



- Supported data types include: BOOL, SINT, BYTE, USINT, INT, WORD, UINT, DINT, REAL, UDINT and DWORD. These data types support multiple dimensional array (Array index must start from 0).
- String length must be set to even.



Support Device Type:

| Data type | EasyBuilder data format | Memo |
|-----------|-----------------------------------|--------|
| Bool | bit | |
| Byte | 16-bit BCD, Hex, Binary, Unsigned | 8-bit |
| SInt | 16-bit BCD, Hex, Binary, Signed | 8-bit |
| USInt | 16-bit BCD, Hex, Binary, Unsigned | 8-bit |
| Word | 16-bit BCD, Hex, Binary, Unsigned | 16-bit |
| Int | 16-bit BCD, Hex, Binary, Signed | 16-bit |
| UInt | 16-bit BCD, Hex, Binary, Unsigned | 16-bit |
| DWord | 32-bit BCD, Hex, Binary, Unsigned | 32-bit |
| DInt | 32-bit BCD, Hex, Binary, Signed | 32-bit |
| Real | 32-bit Float | 32-bit |
| UDInt | 32-bit BCD, Hex, Binary, Unsigned | 32-bit |
| LInt | 64-bit Signed | 64-bit |
| ULInt | 64-bit USigned | 64-bit |
| LWord | 64-bit USigned | 64-bit |
| Double | 64-bit Float | 64-bit |
| Array | All of the above types | |

Note: EBPro V6.03.02 or later supports 64 bits data type (**cMT Series only**), but please note that the address limit range is 48 bits in maximum..

Wiring Diagram:

Ethernet cable:

