

Schneider SoMachine M Series (Ethernet)

Supported series: Schneider SoMachine M238/M241/M251/M258

HMI Setting:

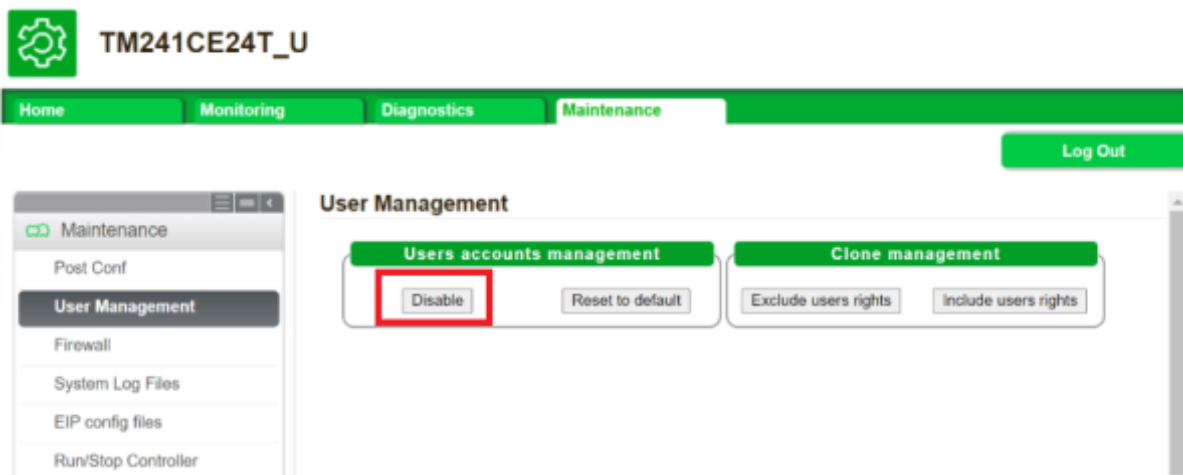
| Parameters | Recommended | Options | Notes |
|---------------------|------------------------------|-----------|---------------------------|
| PLC type | Schneider SoMachine M Series | | |
| PLC I/F | Ethernet | | Use UDP |
| Port no. | 1740 | | |
| Source port no. | 1742 | 1740/1742 | M258: 1740 Other: 1742 |
| User name, Passowrd | | | |

PLC will randomly allocate UDP Port: 1740~1743, users can use **Scan Network** to get the correct port number.

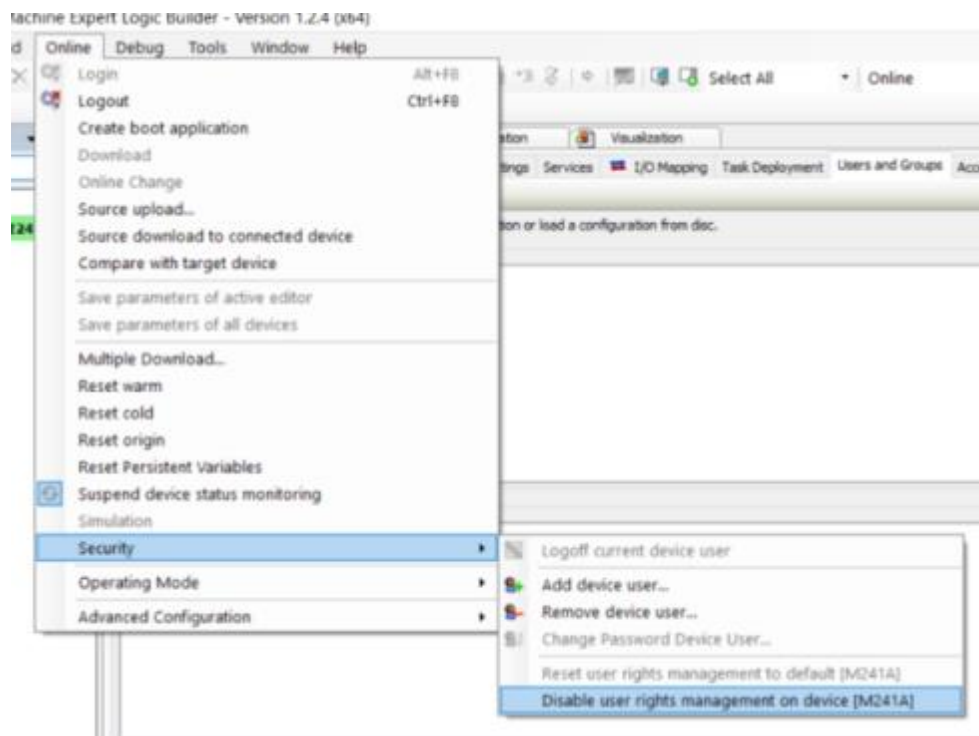
PLC Setting:

Schneider EcoStructure Machine Expert software needs to cancel user restriction, there are two ways.

1. Maintenance -> User Management -> Users accounts management -> Disable

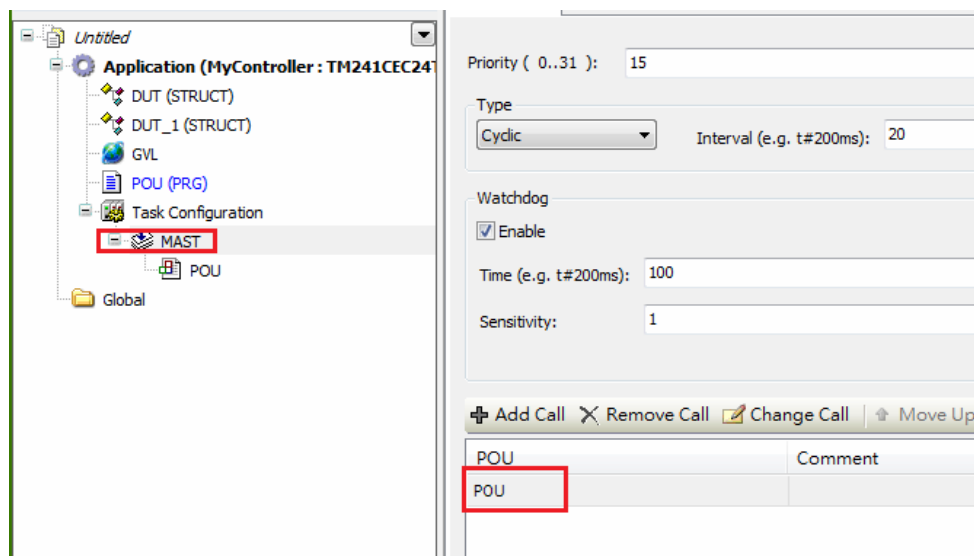


2. Online -> Security -> Disable user rights management on device.

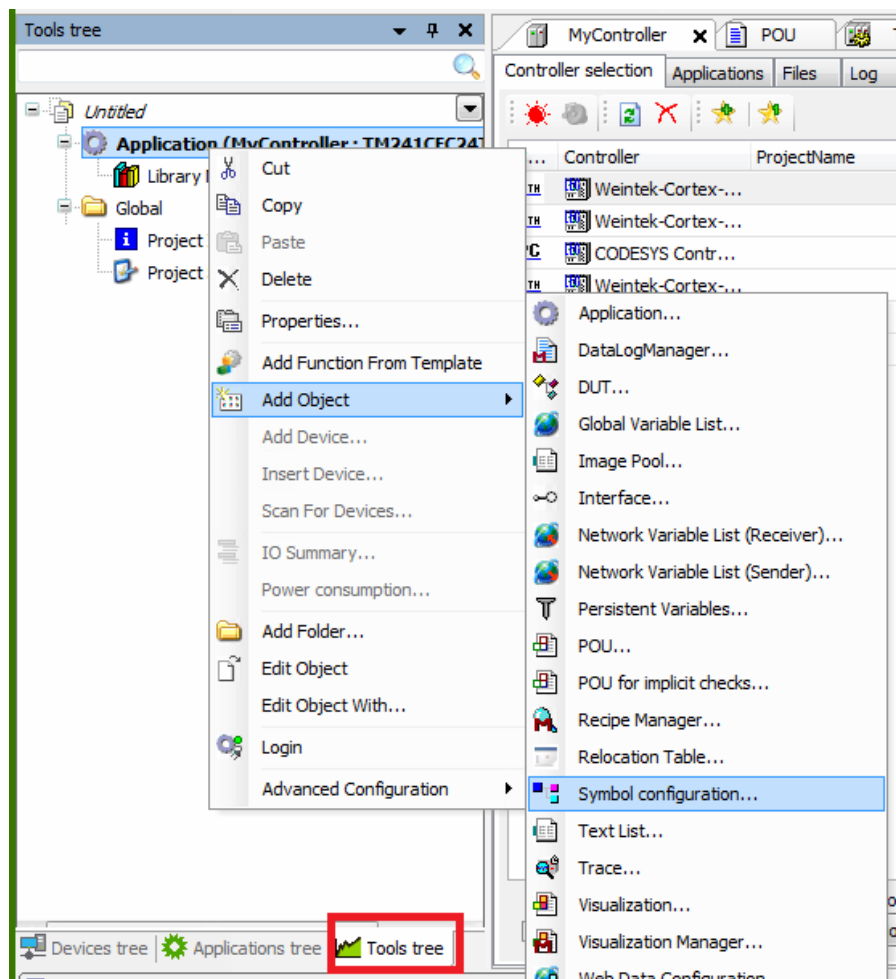


How to import tags and scan the network:

1. Under "MAST" set POU.



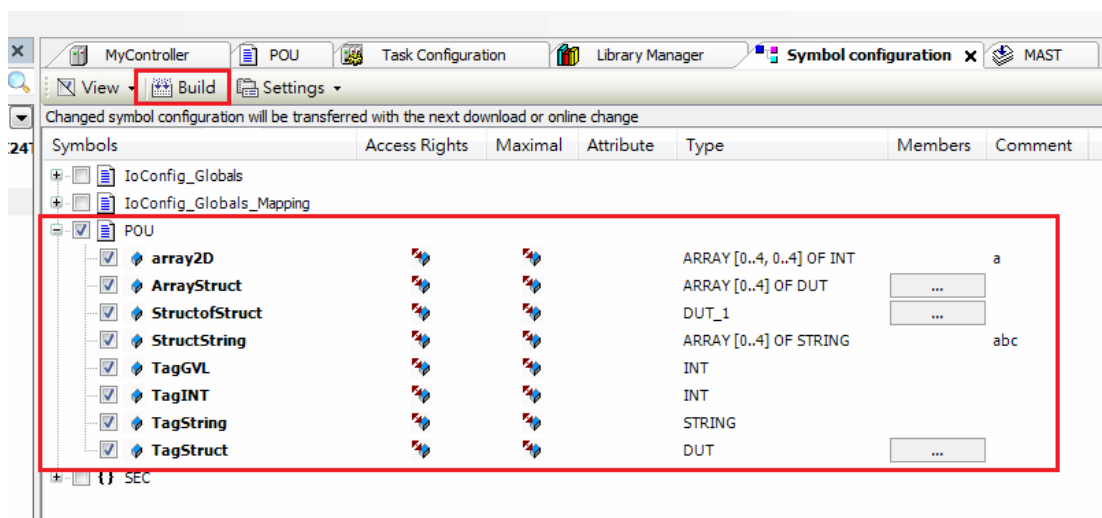
2. Tool tree -> Application -> Add Object -> Symbol configuration.

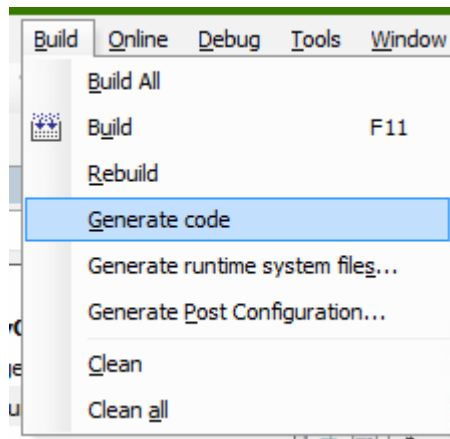


3. Select PLC_PRG and its tag information is shown, build the project.

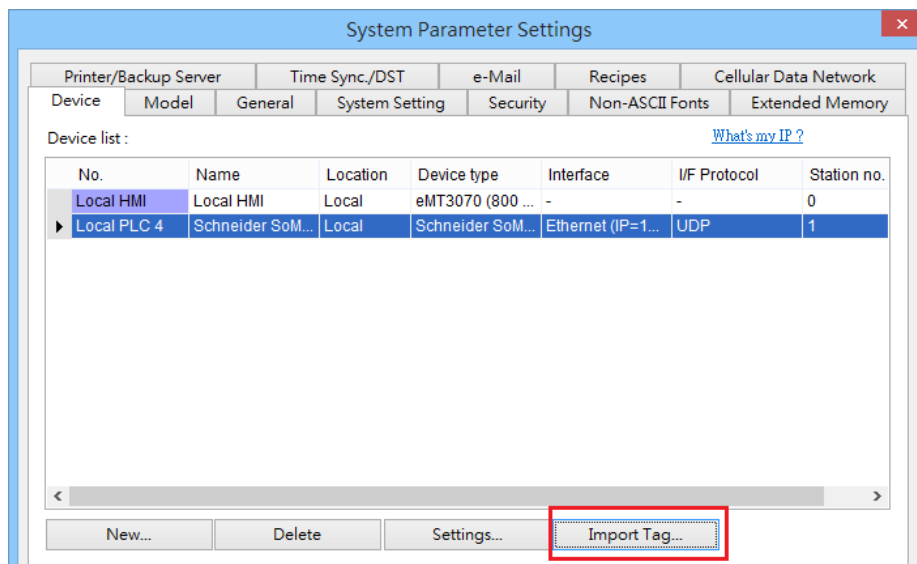
[build] -> [Generate Code]

*.xml file is generated in the directory of the project.

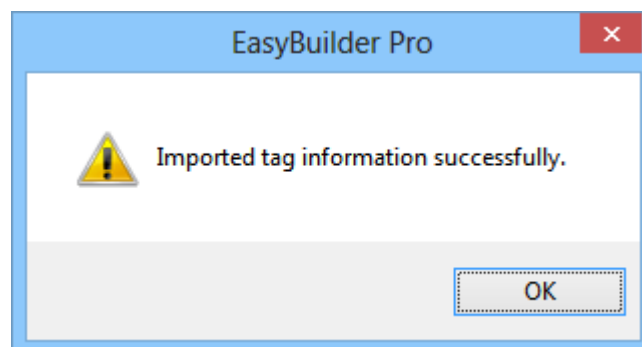




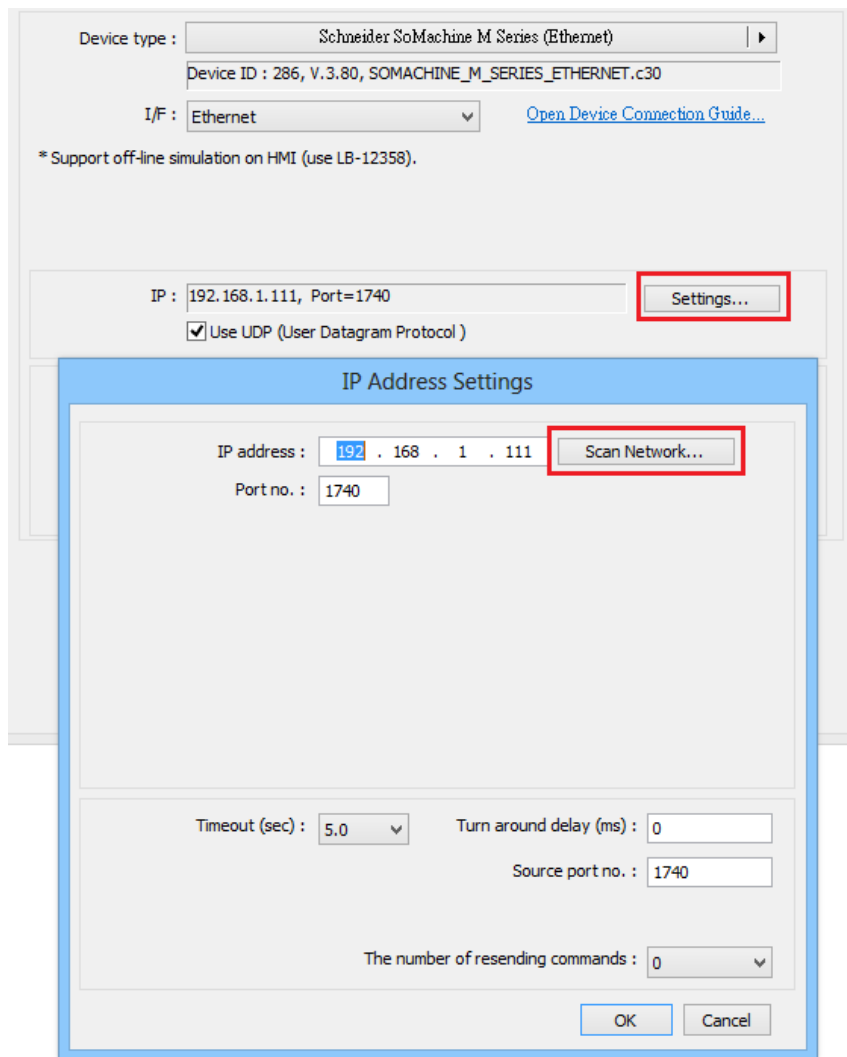
4. In EasyBuilderPro -> **[System Parameter Settings]** click **[New]** to add Schneider SoMachine M Series driver into the device list and then click **[Import Tag]**.



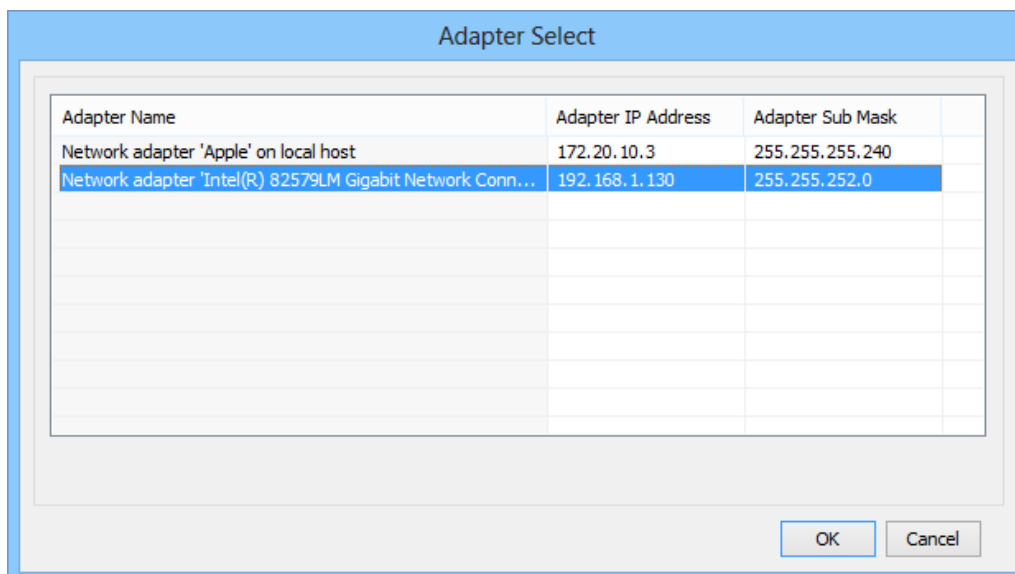
5. Import successful dialog.



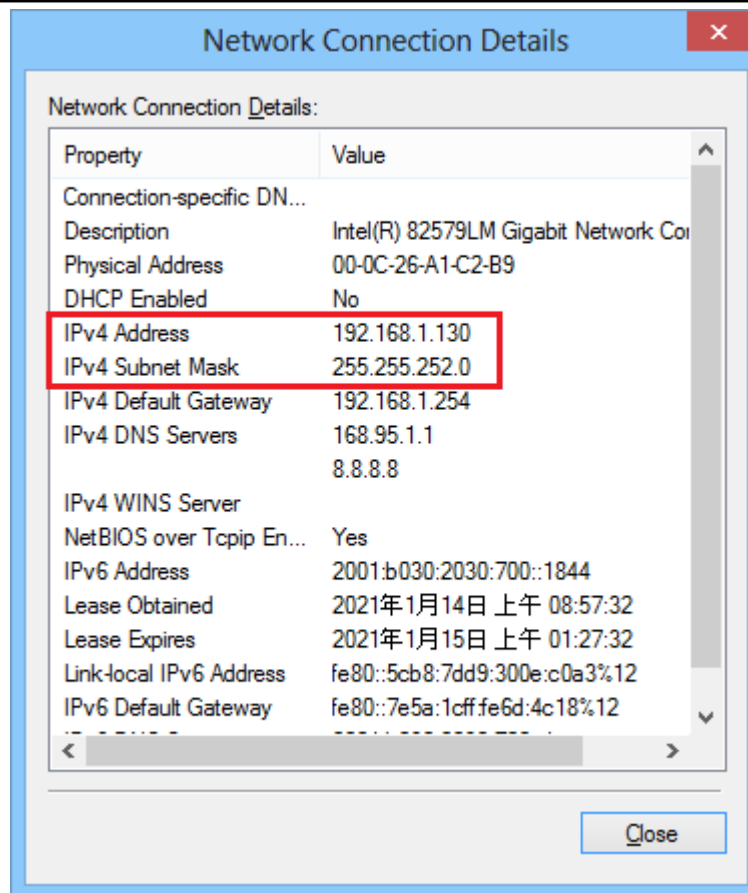
6. Click **[Scan Network]** in the driver settings.



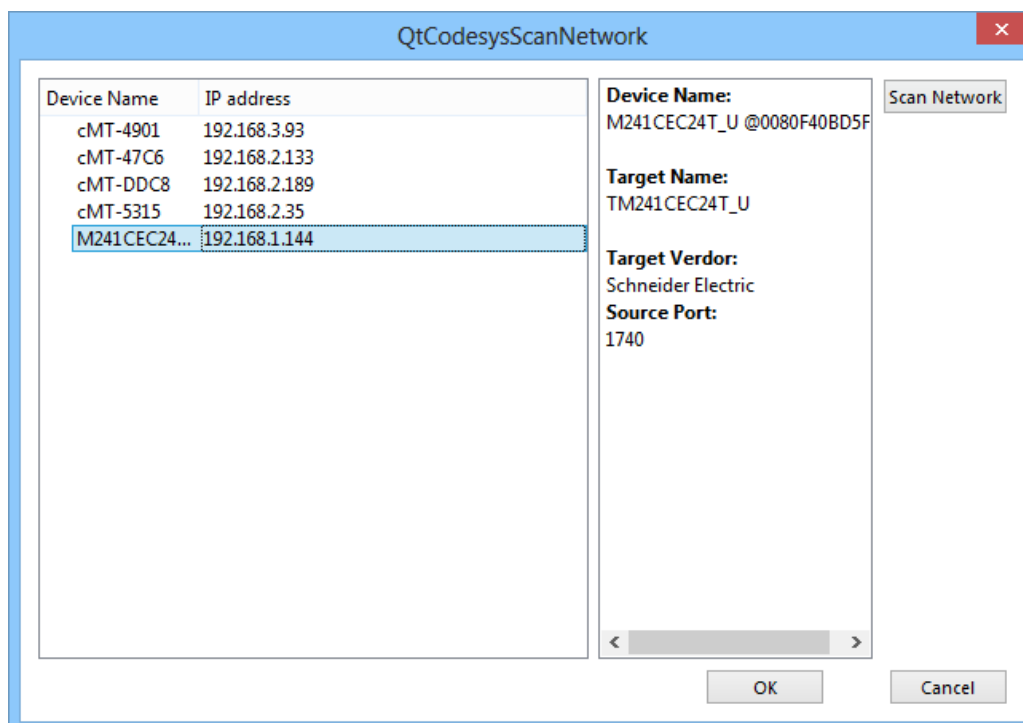
7. Adapter Select.



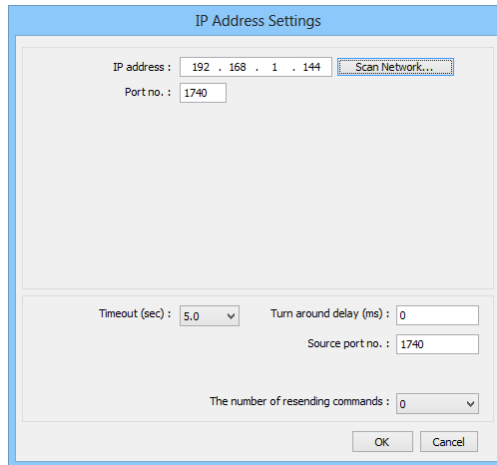
Note: Confirm whether the PLC and PC network settings are the same. If the settings are different, the network may not be scanned successfully



8. The devices scanned on the network will be listed, select the device you want to connect and click ok.



9. After confirming the communication parameters, click ok.



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 |
| TIME | 32-bit BCD, Hex, Binary, Unsigned | 32-bit |
| TIME_OF_DAY | 32-bit BCD, Hex, Binary, Unsigned | 32-bit |
| DATE | 32-bit BCD, Hex, Binary, Unsigned | 32-bit |
| DATE_AND_TIME | 32-bit BCD, Hex, Binary, Unsigned | 32-bit |
| LInt | 64-bit Signed | 64-bit |
| ULInt | 64-bit Unsigned | 64-bit |
| LWord | 64-bit Unsigned | 64-bit |
| Double | 64-bit Float | 64-bit |

| Data type | EasyBuilder data format | Memo |
|-----------|--|-------------|
| String | Word array for ASCII input and display | Length=word |

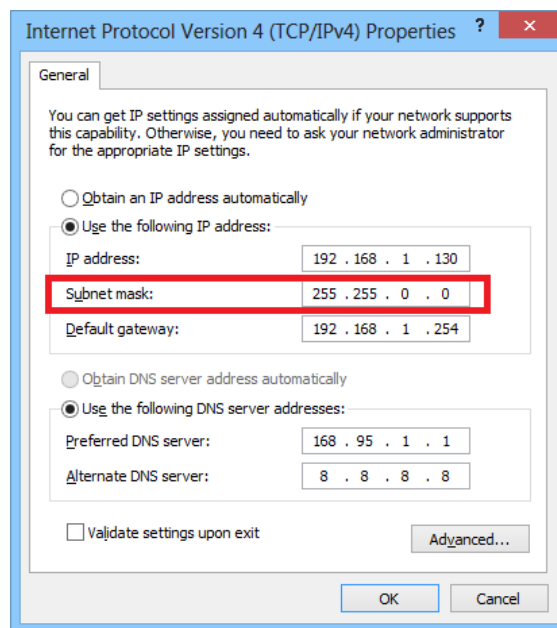
Note1: String length must be set identical to the length in software.

Note2: 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.

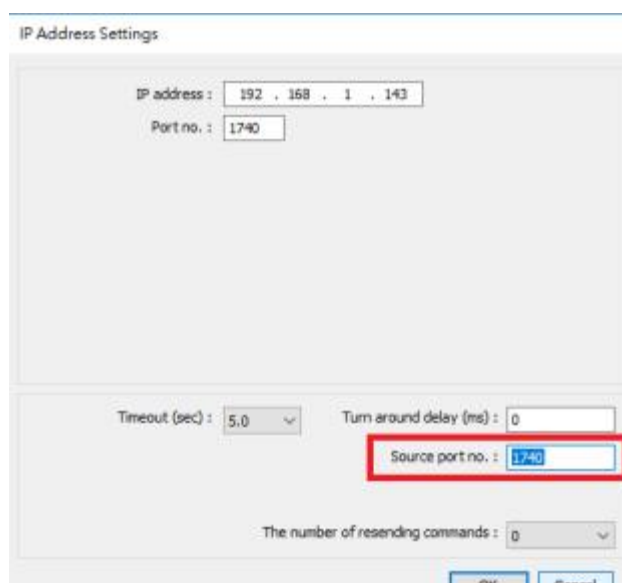
Note3: Tag name does not support more than 80 char.

How to use subnet mask 255.255.0.0 communication

1. Confirm that the subnet mask of the network environment is 255.255.0.0 (PC,HMI / PLC)



2. Source port no. set 1740.



EasyAccess2.0 PassThrough:

How to use [**Schneider Somachine**] -> [**Machine Expert**] for EasyAccess 2.0 PassThrough.

1. Use Nodename via NAT (Remote TCP), enter the actual PLC IP address and Port 1105 of the NAT Address



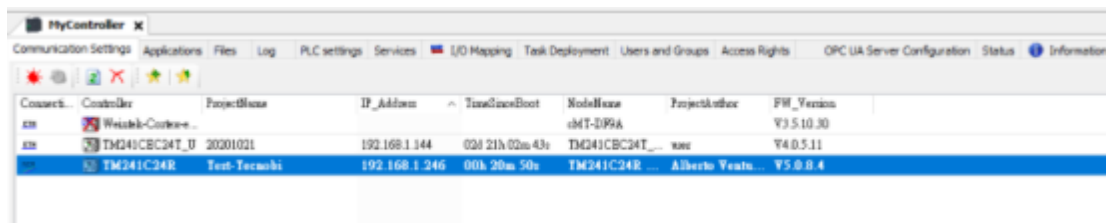
Connection Mode: Nodename via NAT (Remote TCP) NAT Address/Port: 192.168.1.246 / 1105

2. Click the refresh button.



Connection Mode: Nodename via NAT (Remote TCP) NAT Address/Port: 192.168.1.246 / 1105

3. After reading the device list, click the device on the list.



| Connect | Controller | ProjectName | IP_Address | TimeZoneBoot | Nodename | ProjectAuthor | FW_Version |
|---------|------------------|-------------|---------------|-----------------|-----------------|------------------|------------|
| ... | Wielki-Corkne... | | | | ... | | V3.5.10.30 |
| ... | TM241CBC24T_U | 20001021 | 192.168.1.244 | 02h 21h 02m 43s | TM241CBC24T_... | ... | V4.0.5.11 |
| ... | TM241C24R | Test_Tecnoh | 192.168.1.246 | 00h 20m 50s | TM241C24R ... | Alberto Vento... | V5.0.0.4 |

4. Select the machine found, enter nodename, online => login

Wiring Diagram:

Ethernet cable:

