

## Schneider SoMachine M Series (Ethernet)

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

### HMI Setting:

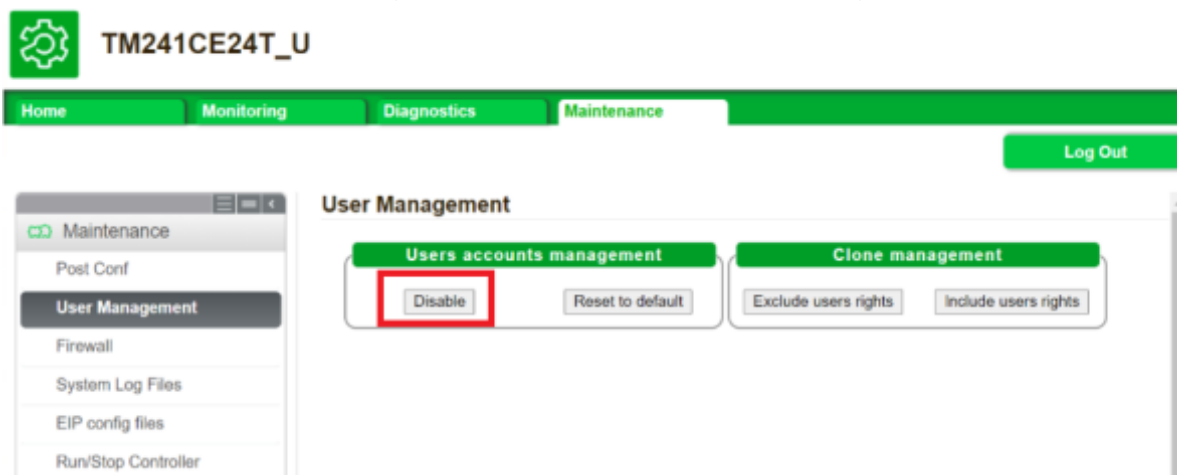
Parameters	Recommended	Options	Notes
PLC type	Schneider SoMachine M Series (Ethernet)		
PLC I/F	Ethernet		Use UDP
Port no.	1740		
Source port no.	1742	1740/1742	M258: 1740 Other: 1742
Protocol	Nodename(UDP)	Nodename(UDP) IP Address (Fast TCP)	
User name, Passowrd			

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

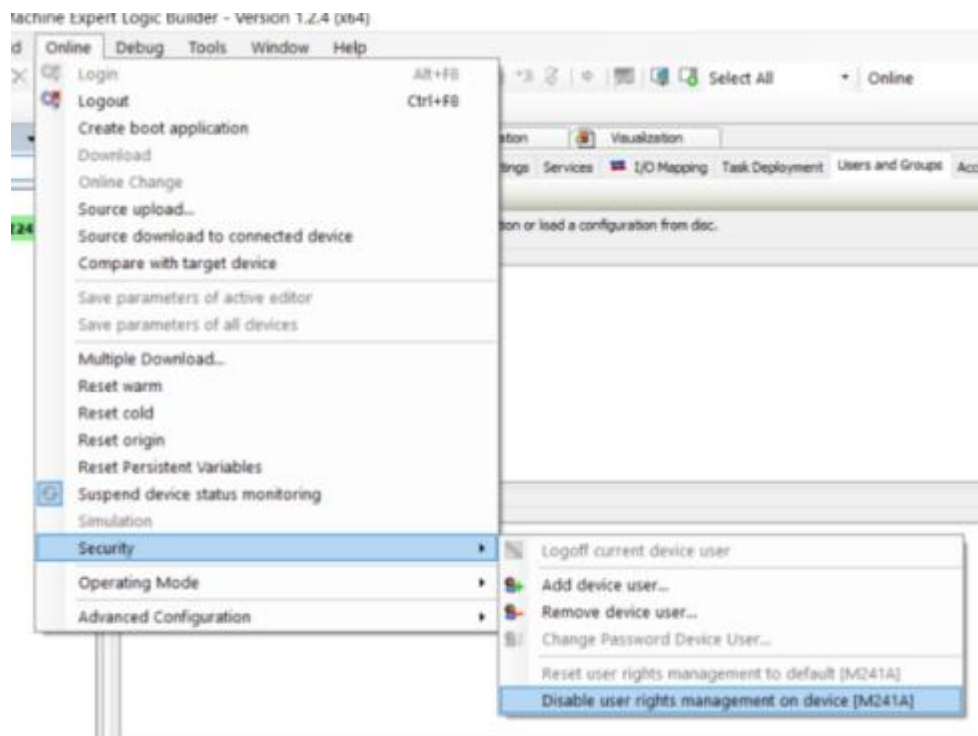
### PLC Setting:

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

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

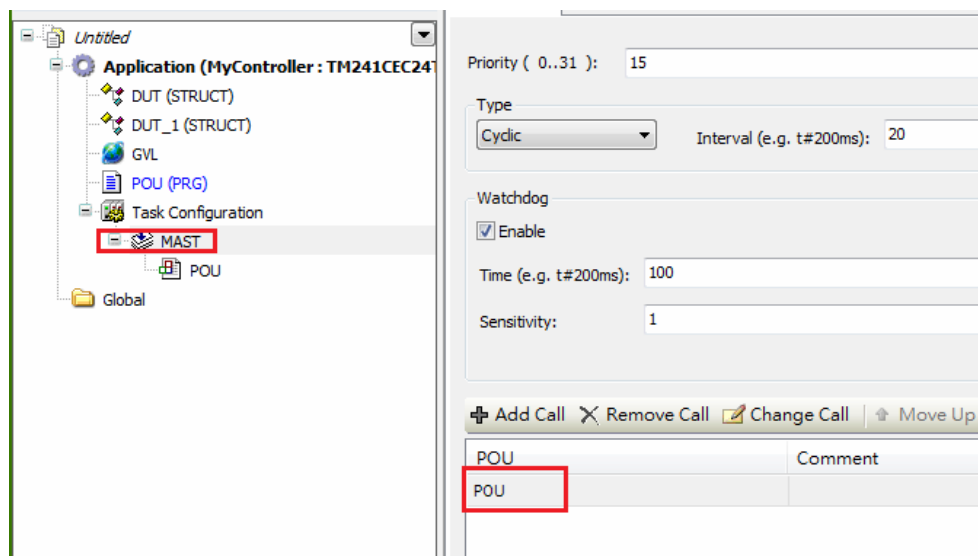


## 2. Online -> Security -> Disable user rights management on device.

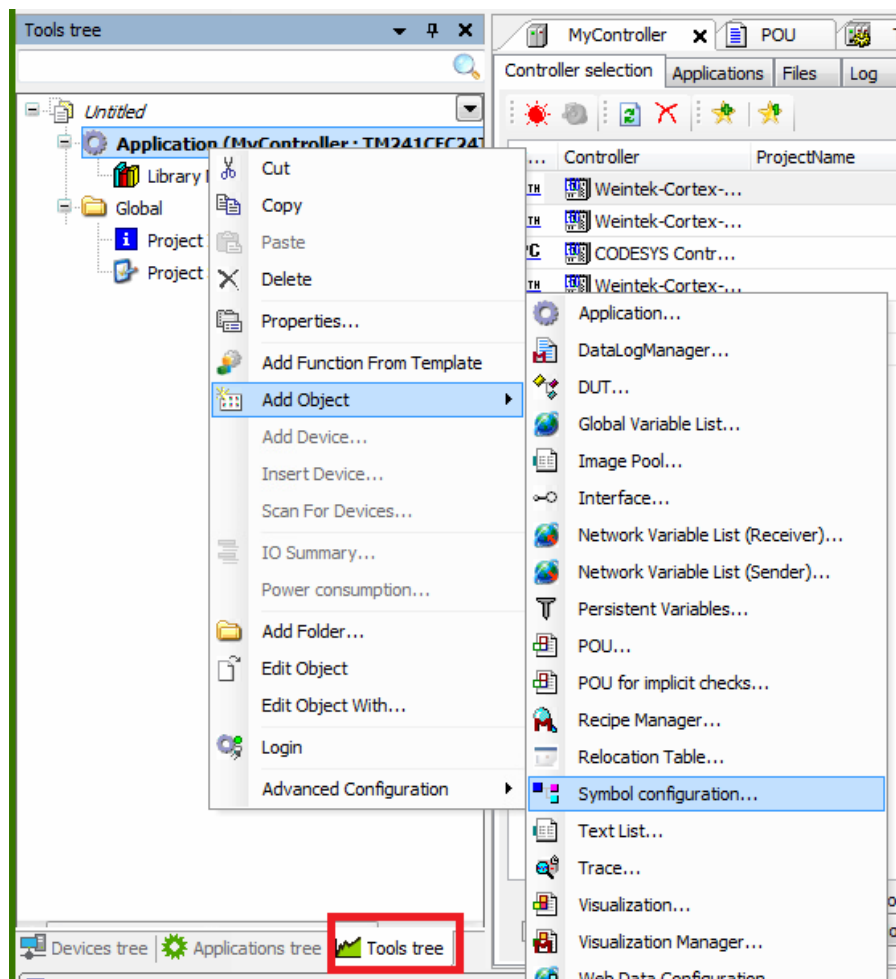


## How to import tags and scan the network:

### 1. Under "MAST" set POU.



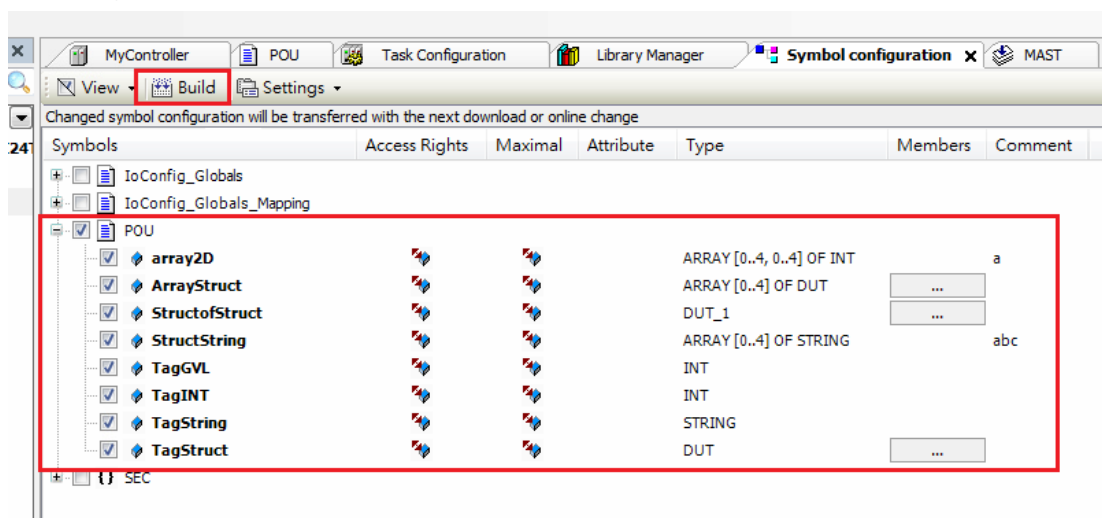
## 2. Tool tree -> Application -> Add Object -> Symbol configuration.

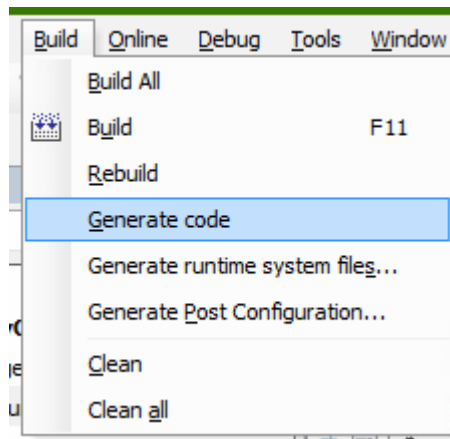


## 3. Select PLC\_PRG and its tag information is shown, build the project.

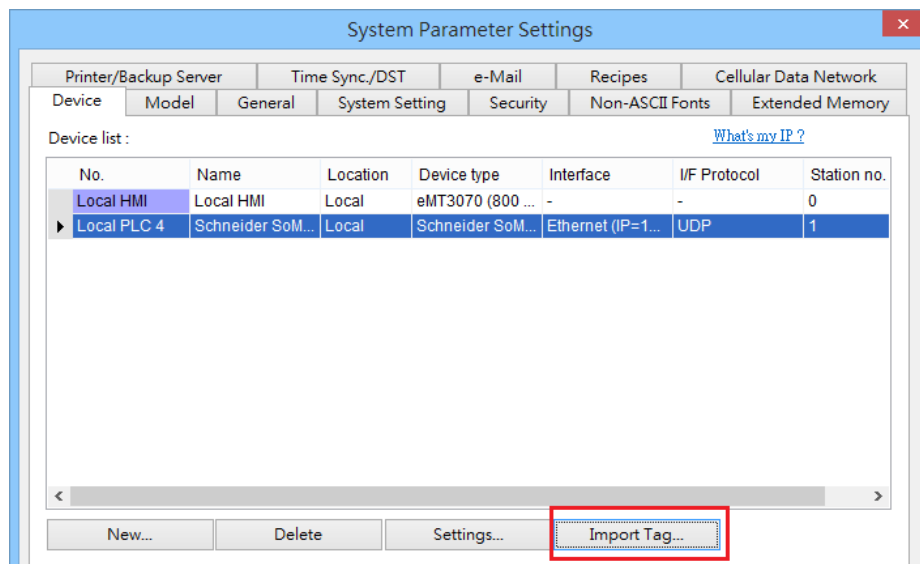
**[build] -> [Generate Code]**

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

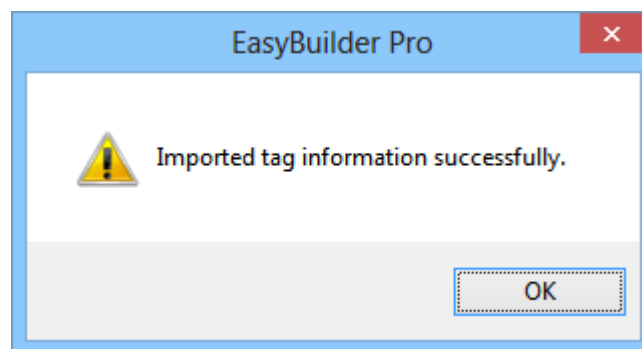




4. In EasyBuilderPro -> **[System Parameter Settings]** click **[New]** to add Schneider SoMachine M Series driver into the device list and then click **[Import Tag]**.

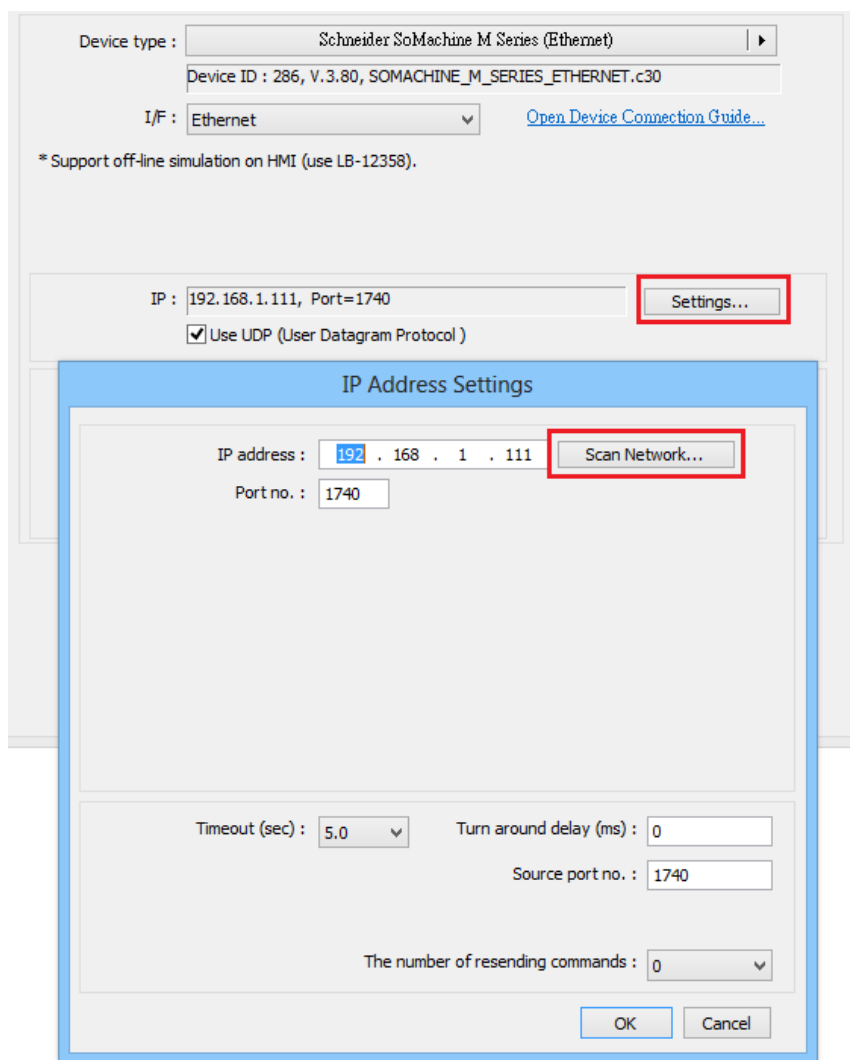


5. Import successful dialog.

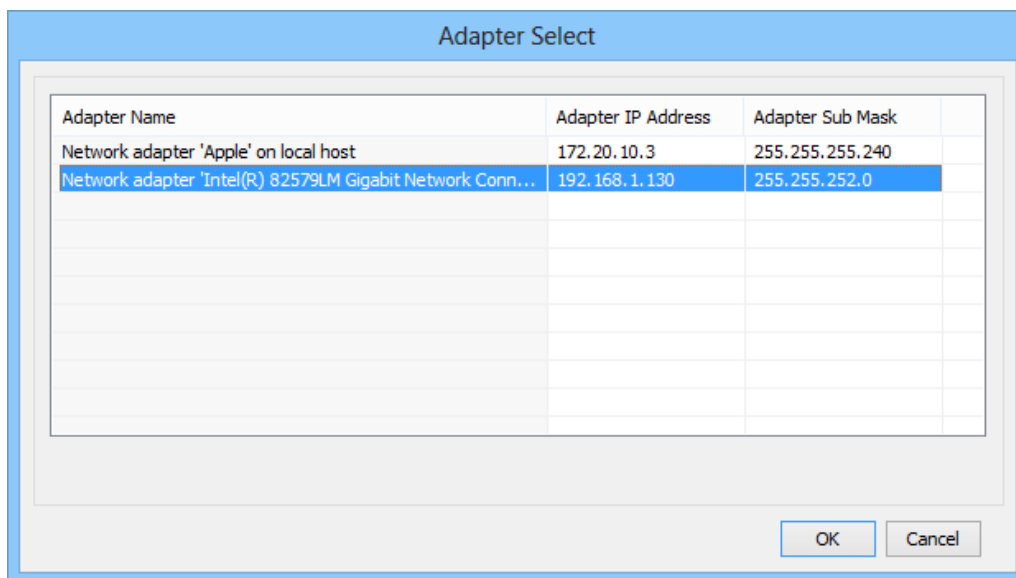


Note: **[Get Tag Info]** The obtained address may be incomplete, it is recommended to use the **[Import Tags]** function.

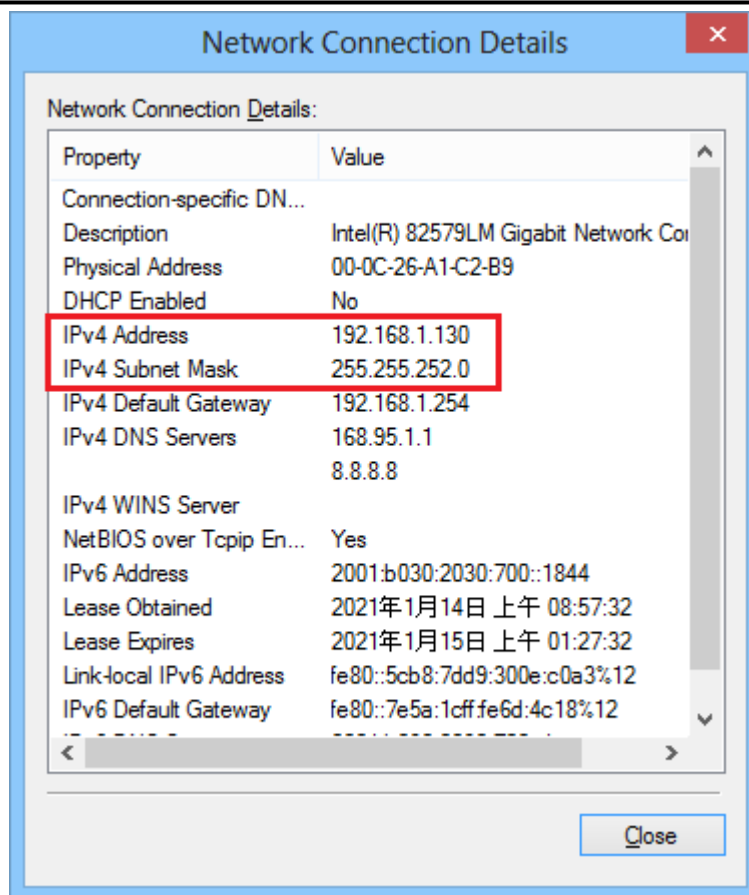
6. Click **[Scan Network]** in the driver settings.



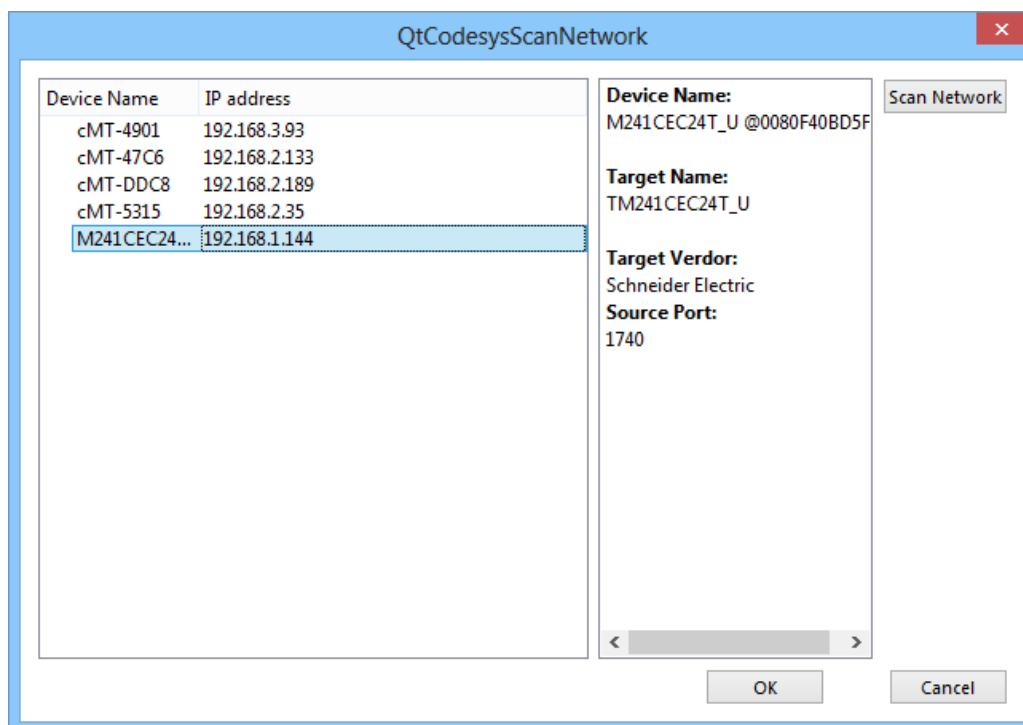
7. Adapter Select.



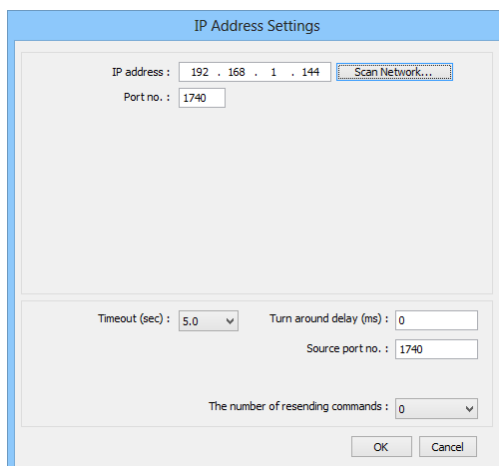
**Note:** Confirm whether the PLC and PC network settings are the same. If the settings are different, the network may not be scanned successfully



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.



The image shows a screenshot of the 'IP Address Settings' dialog box. It contains the following fields and controls:

- IP address:** A text box containing '192 . 168 . 1 . 144' and a 'Scan Network...' button.
- Port no.:** A text box containing '1740'.
- Timeout (sec):** A dropdown menu set to '5.0'.
- Turn around delay (ms):** A text box containing '0'.
- Source port no.:** A text box containing '1740'.
- The number of resending commands:** A dropdown menu set to '0'.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

## 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.

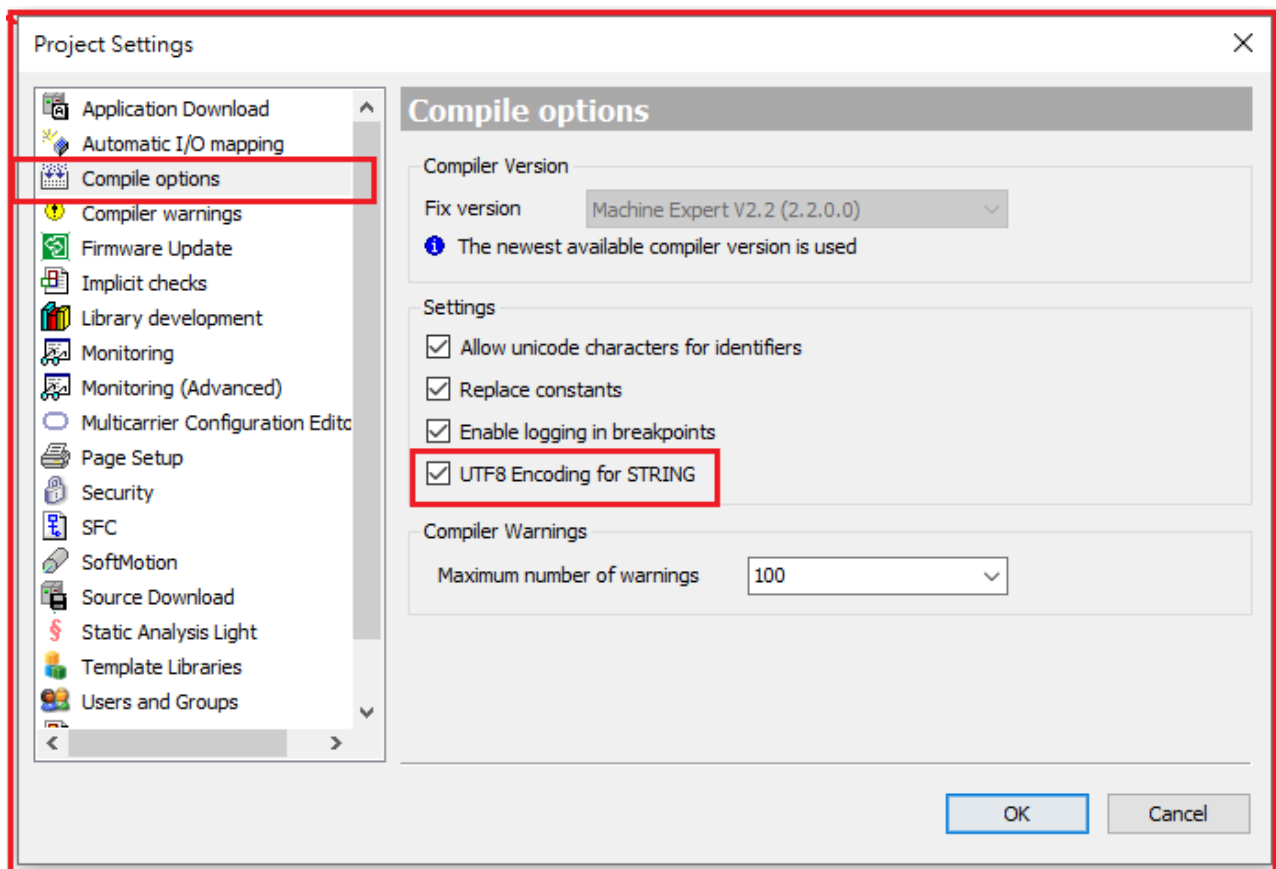
**Note2:** EasyBuilderPro V6.03.02 or later supports 64 bits data type (**cMT Series only**), but please note that the address limit range is 48 bits in maximum.

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

**Note4:** EasyBuilderPro V6.09.01.514 and later versions support communication with MachineExpert 2.2.

**Note5:** Array of Struct [Array] is not supported.

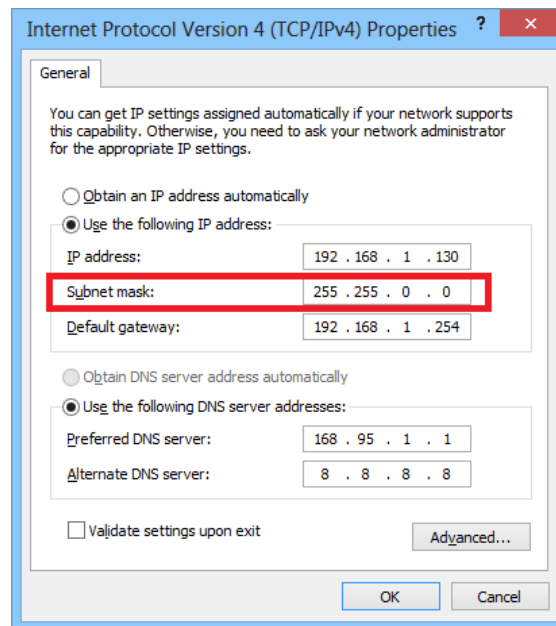
**Note6:** Support UTF8 Encoding for STRING.



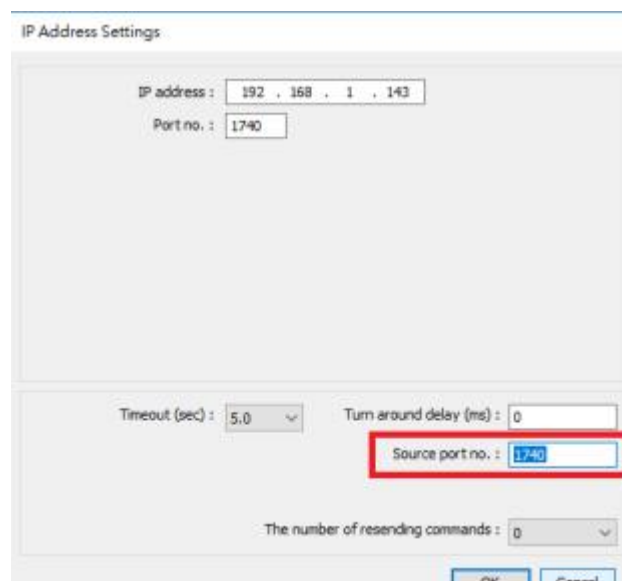


## How to use subnet mask 255.255.0.0 communication

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.

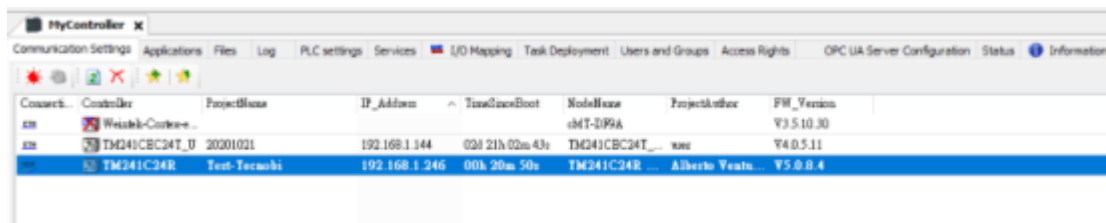
1. Use Nodename via NAT (Remote TCP), enter the actual PLC IP address and Port 1105 of the NAT Address



2. Click the refresh button.



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



Connect	Controller	ProjectName	IP_Address	TimeToConnect	NodeName	ProjectAuthor	FW_Version
ATX	Wieltek-Controller...				cMT-DPSA		V3.5.10.30
ATX	TM241C24T_U	20001021	192.168.1.244	02h 21h 02m 43s	TM241C24T_...	...	V4.0.5.11
ATX	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:

