

Mitsubishi iQ-R Series - Binary Mode (Symbolic Addressing) (Ethernet)

Supported Series: Mitsubishi

R00/R01/R02/R04/R08/R16/R32/R120/R04EN/R08EN/R16EN/R32EN/R120EN/R08P/R16P/R32P/R120P/R08SF/R16SF/R32SF/R120SF/R08PSF/R16PSF/R32PSF/R120PSF

CPU Ethernet Module, M80 CNC Controller

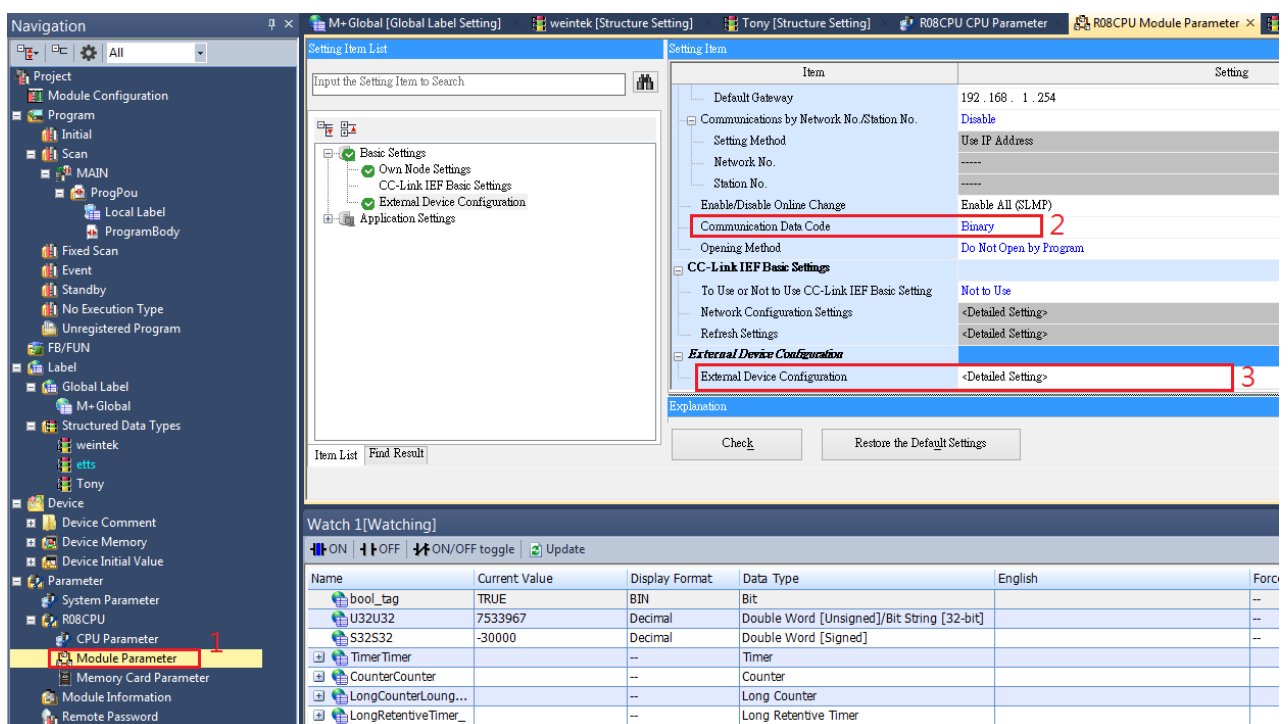
Website: <http://www.mitsubishi-automation.com>

HMI Settings:

Parameters	Recommended	Options	Notes
PLC type	Mitsubishi iQ-R Series - Binary Mode (Symbolic Addressing) (Ethernet)		
PLC I/F	Ethernet		
Port no.	4999		
Station No.	255		
Network number	0	0 ~ 999	

PLC Settings:

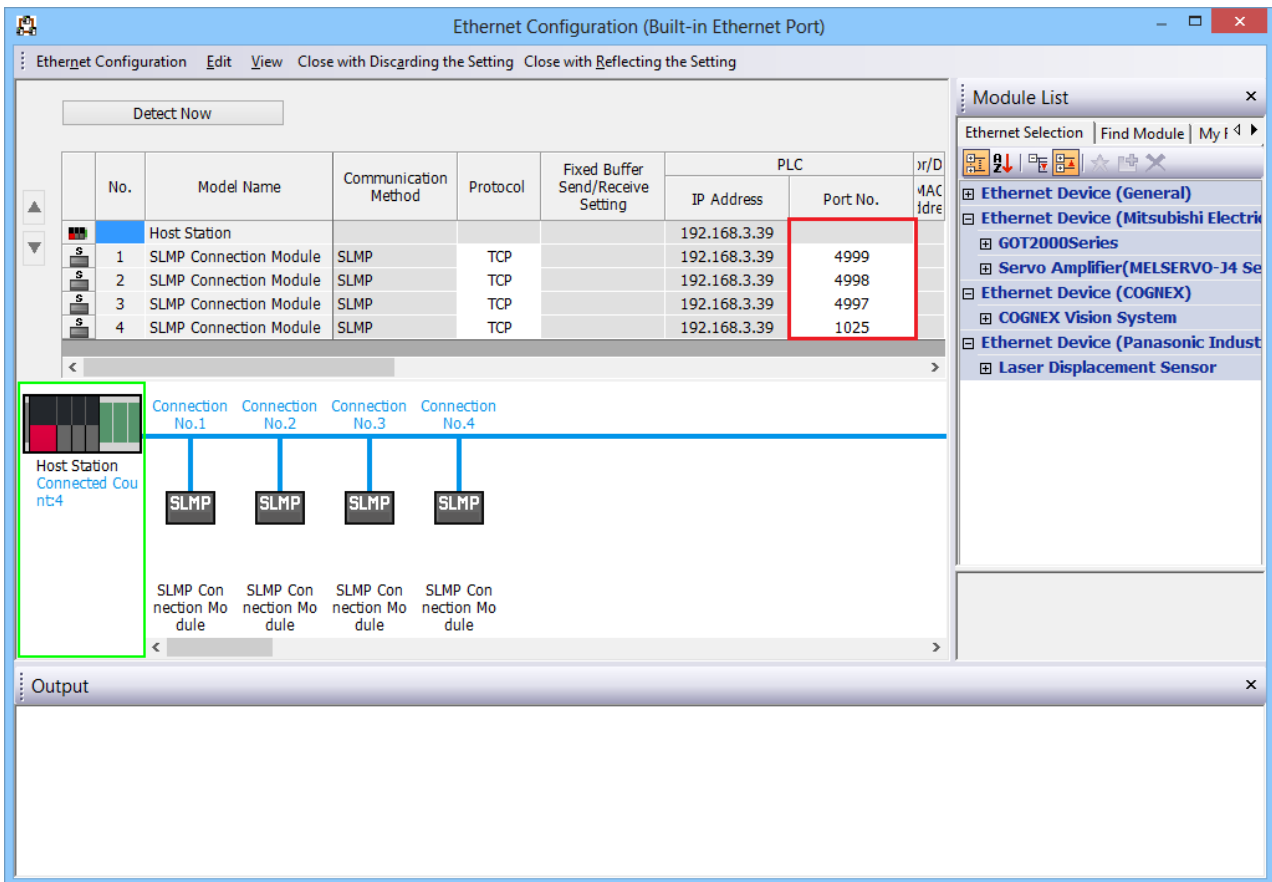
Communication Data Code	Binary
-------------------------	--------



The screenshot shows the WEINTEK software interface with the 'Module Parameter' window open. The 'Communication Data Code' is set to 'Binary' (indicated by a red box and a '2'). The 'External Device Configuration' is set to '<Detailed Setting>' (indicated by a red box and a '3'). The 'Watch' window at the bottom shows a list of variables and their current values.

Name	Current Value	Display Format	Data Type	English	Forc
bool_tag	TRUE	BIN	Bit		--
U32U32	7533967	Decimal	Double Word [Unsigned]/Bit String [32-bit]		--
S32S32	-30000	Decimal	Double Word [Signed]		--
TimerTimer	--	--	Timer		--
CounterCounter	--	--	Counter		--
LongCounterLong...	--	--	Long Counter		--
LongRetentiveTimer	--	--	Long Retentive Timer		--

External Device Configuration -> Added SLMP Connection Module, and set different port numbers to use when multiple HMIs communicate at the same time.



Ethernet Configuration (Built-in Ethernet Port)

Detect Now

No.	Model Name	Communication Method	Protocol	Fixed Buffer Send/Receive Setting	PLC		MAC Address
					IP Address	Port No.	
	Host Station				192.168.3.39		
1	SLMP Connection Module	SLMP	TCP		192.168.3.39	4999	
2	SLMP Connection Module	SLMP	TCP		192.168.3.39	4998	
3	SLMP Connection Module	SLMP	TCP		192.168.3.39	4997	
4	SLMP Connection Module	SLMP	TCP		192.168.3.39	1025	

Host Station Connected Count: 4

Connection No.1 Connection No.2 Connection No.3 Connection No.4

SLMP SLMP SLMP SLMP

SLMP Connection Module SLMP Connection Module SLMP Connection Module SLMP Connection Module

Module List

Ethernet Selection Find Module My f

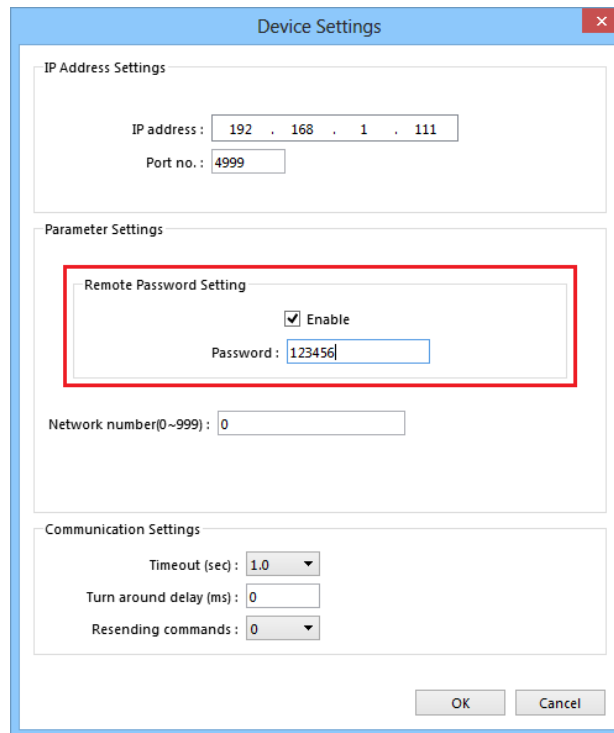
- Ethernet Device (General)
- Ethernet Device (Mitsubishi Electric)
 - GOT2000Series
 - Servo Amplifier(MELSERVO-J4 Series)
- Ethernet Device (COGNEX)
 - COGNEX Vision System
- Ethernet Device (Panasonic Industrial)
- Laser Displacement Sensor

Output

Remote Password Setting:

Set a remote password and a target connection in the engineering tool, and write the data to the CPU module.

Navigation Window => **[System Parameter]** => **[Device]** => **[Driver Settings]** => **[Remote Password Setting]**

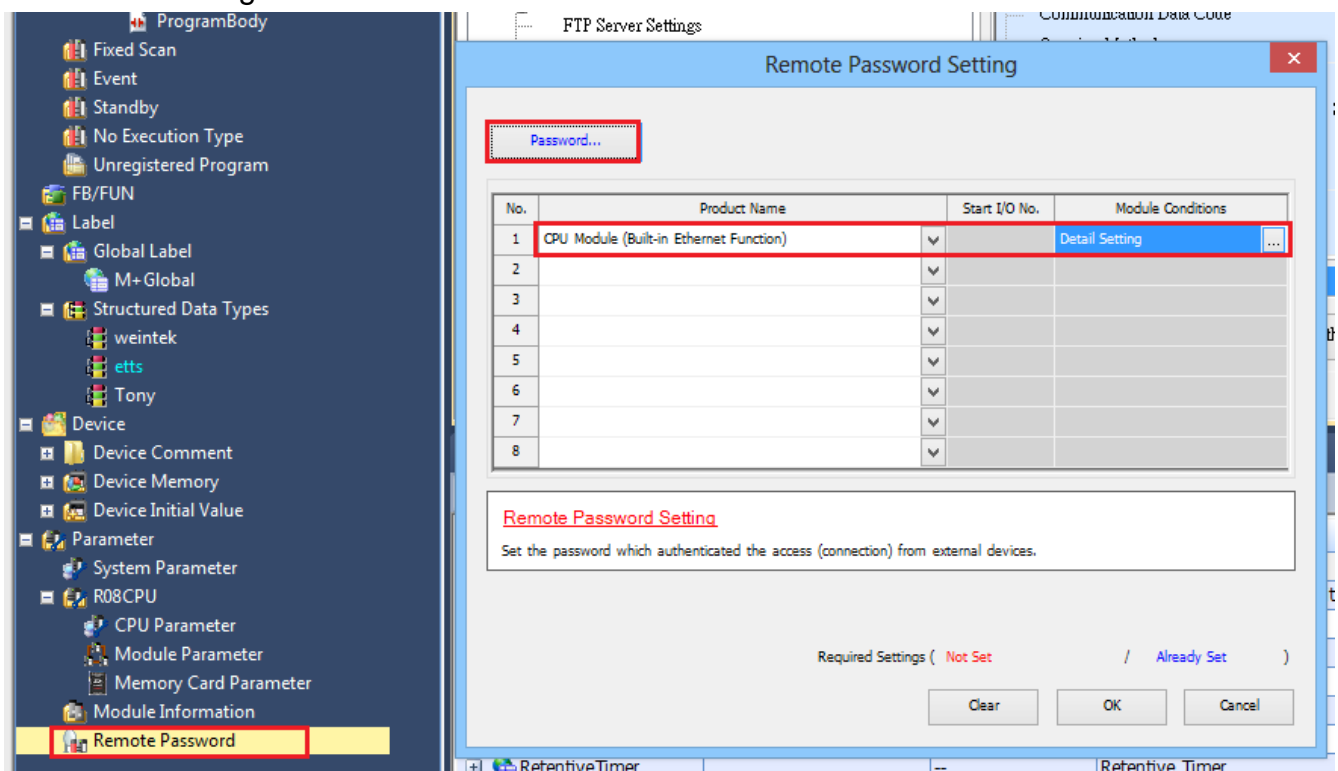


The 'Device Settings' dialog box is shown with the following sections:

- IP Address Settings:**
 - IP address: 192 . 168 . 1 . 111
 - Port no.: 4999
- Parameter Settings:**
 - Remote Password Setting:** (highlighted with a red box)
 - ☒ Enable
 - Password: 123456
 - Network number(0~999): 0
- Communication Settings:**
 - Timeout (sec): 1.0
 - Turn around delay (ms): 0
 - Resending commands: 0

Buttons: OK, Cancel

GX Work3 setting screen:



The GX Work3 interface shows the 'Remote Password Setting' dialog box. The left sidebar has 'Remote Password' highlighted. The dialog box contains:

- Password...** (highlighted with a red box)
- Table:**

No.	Product Name	Start I/O No.	Module Conditions
1	CPU Module (Built-in Ethernet Function)	▼	Detail Setting ...
2		▼	
3		▼	
4		▼	
5		▼	
6		▼	
7		▼	
8		▼	

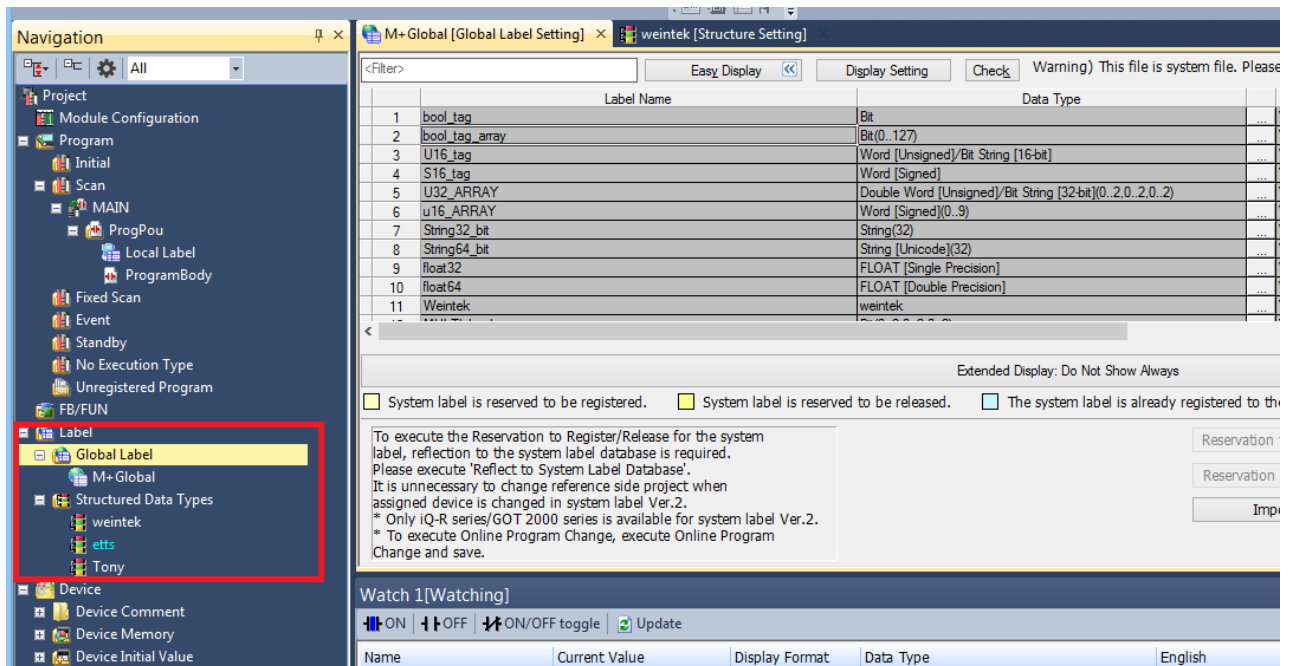
Remote Password Setting
Set the password which authenticated the access (connection) from external devices.

Required Settings (Not Set / Already Set)

Buttons: Clear, OK, Cancel

Import Tags:

1. Create data in **Global Label** and **Structured Data Types**.



Label Name	Data Type
1 bool_tag	Bit
2 bool_tag_array	Bit(0..127)
3 U16_tag	Word [Unsigned]/Bit String [16-bit]
4 S16_tag	Word [Signed]
5 U32_ARRAY	Double Word [Unsigned]/Bit String [32-bit](0..2.0..2.0..2)
6 u16_ARRAY	Word [Signed](0..9)
7 String32_bit	String(32)
8 String64_bit	String [Unicode](32)
9 float32	FLOAT [Single Precision]
10 float64	FLOAT [Double Precision]
11 weintek	weintek

Extended Display: Do Not Show Always

☐ System label is reserved to be registered. ☐ System label is reserved to be released. ☐ The system label is already registered to the system label database.

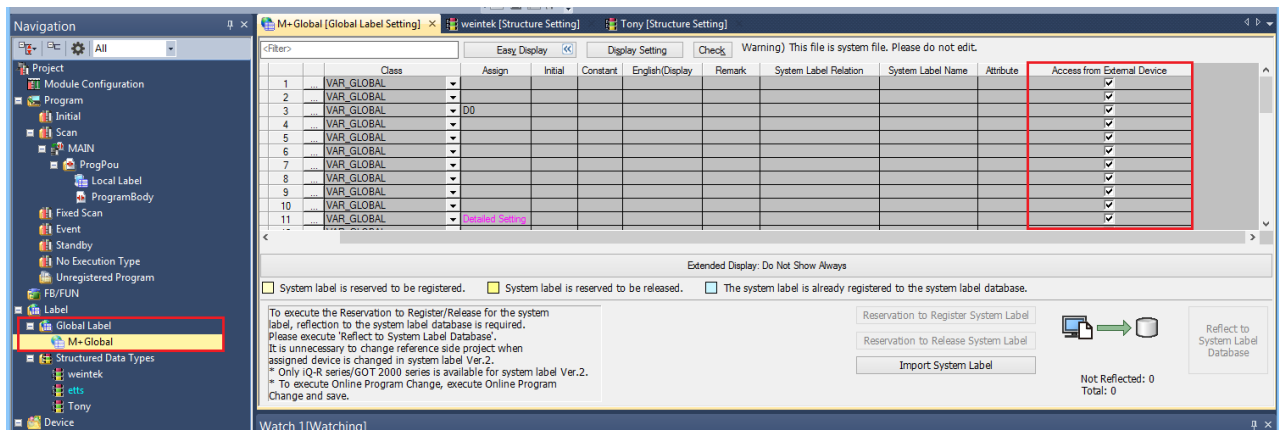
To execute the Reservation to Register/Release for the system label, reflection to the system label database is required. Please execute 'Reflect to System Label Database'. It is unnecessary to change reference side project when assigned device is changed in system label Ver.2. * Only iQ-R series/GOT 2000 series is available for system label Ver.2. * To execute Online Program Change, execute Online Program Change and save.

Watch 1[Watching]

☐ ON ☐ OFF ☐ ON/OFF toggle ☐ Update

Name	Current Value	Display Format	Data Type	English
------	---------------	----------------	-----------	---------

2. **Global Label -> Access from External Device** setting must be checked to be able to communicate with PLC.



Class	Assign	Initial	Constant	English(Display)	Remark	System Label Relation	System Label Name	Attribute	Access from External Device
1 VAR_GLOBAL									<input checked="" type="checkbox"/>
2 VAR_GLOBAL									<input checked="" type="checkbox"/>
3 VAR_GLOBAL	D0								<input checked="" type="checkbox"/>
4 VAR_GLOBAL									<input checked="" type="checkbox"/>
5 VAR_GLOBAL									<input checked="" type="checkbox"/>
6 VAR_GLOBAL									<input checked="" type="checkbox"/>
7 VAR_GLOBAL									<input checked="" type="checkbox"/>
8 VAR_GLOBAL									<input checked="" type="checkbox"/>
9 VAR_GLOBAL									<input checked="" type="checkbox"/>
10 VAR_GLOBAL									<input checked="" type="checkbox"/>
11 VAR_GLOBAL	Unlabeled Setting								<input checked="" type="checkbox"/>

Extended Display: Do Not Show Always

☐ System label is reserved to be registered. ☐ System label is reserved to be released. ☐ The system label is already registered to the system label database.

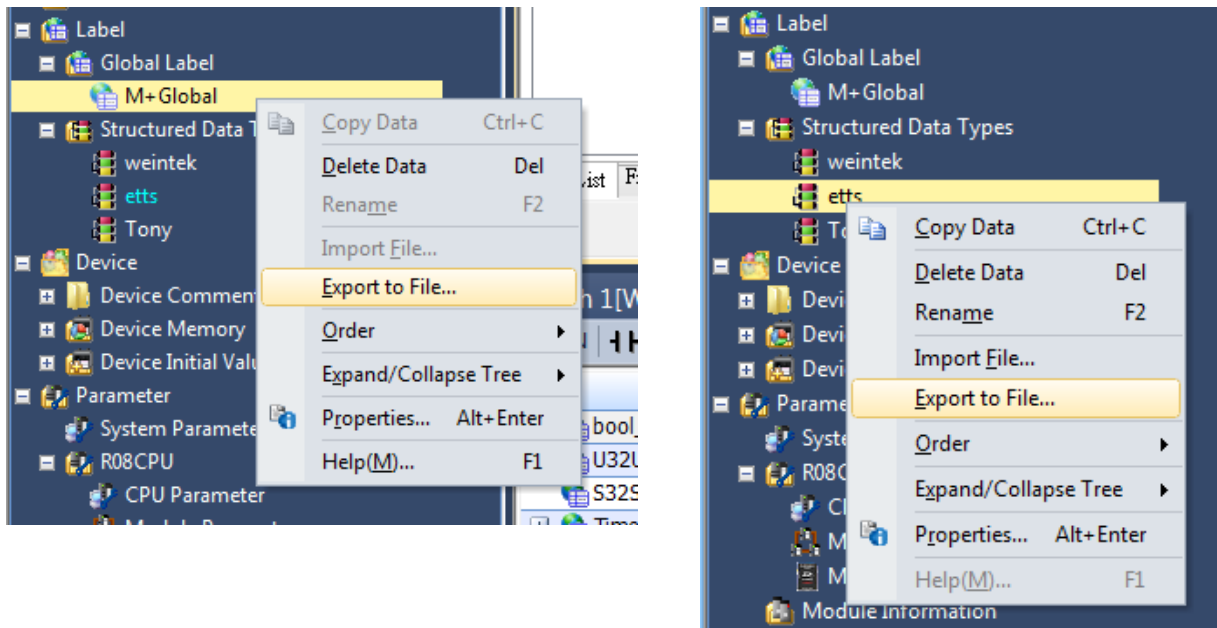
To execute the Reservation to Register/Release for the system label, reflection to the system label database is required. Please execute 'Reflect to System Label Database'. It is unnecessary to change reference side project when assigned device is changed in system label Ver.2. * Only iQ-R series/GOT 2000 series is available for system label Ver.2. * To execute Online Program Change, execute Online Program Change and save.

Reservation to Register System Label
Reservation to Release System Label
Import System Label
Reflect to System Label Database

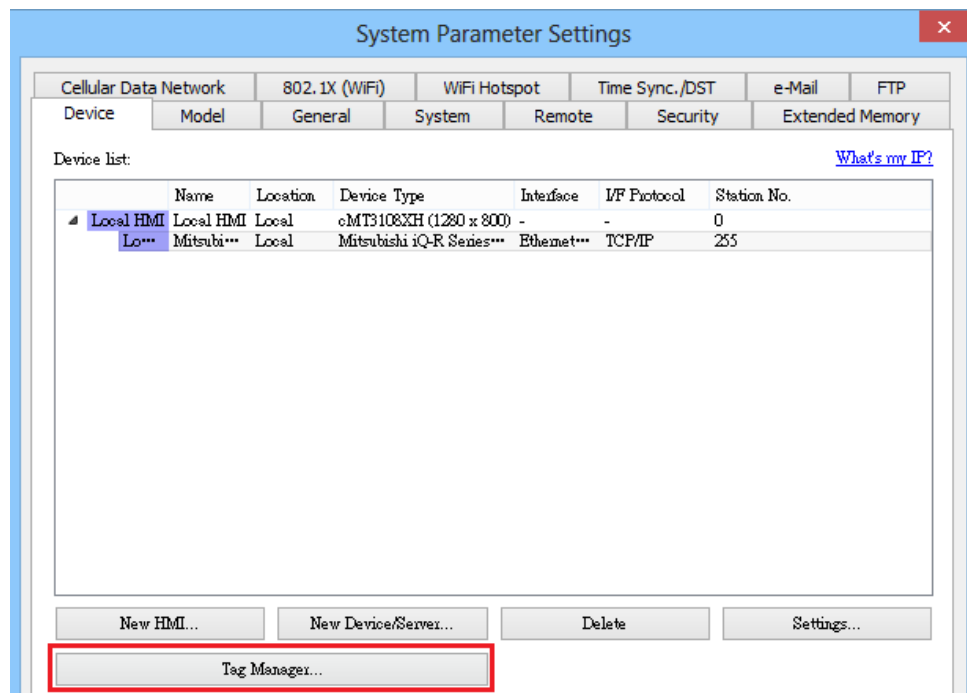
Not Reflected: 0
Total: 0

Watch 1[Watching]

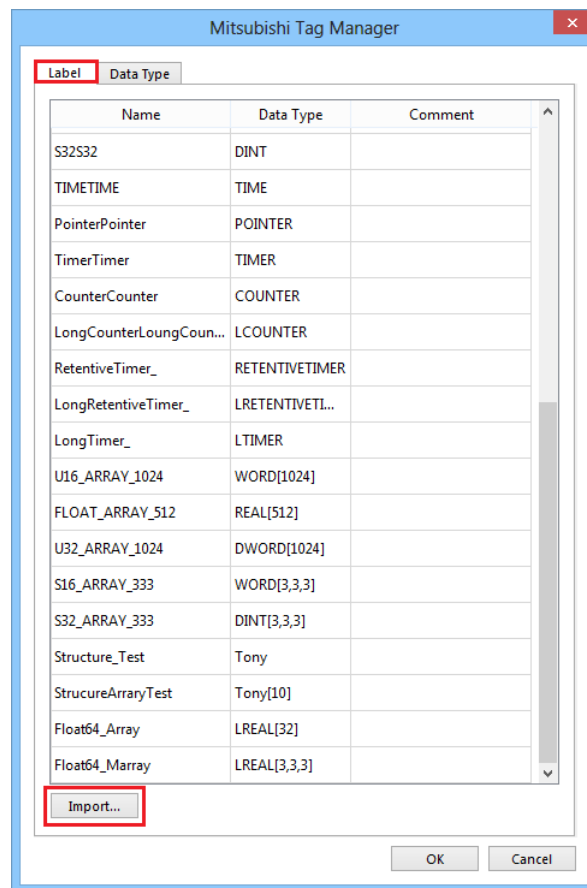
3. Global Label and Structured Data Types export label files separately.



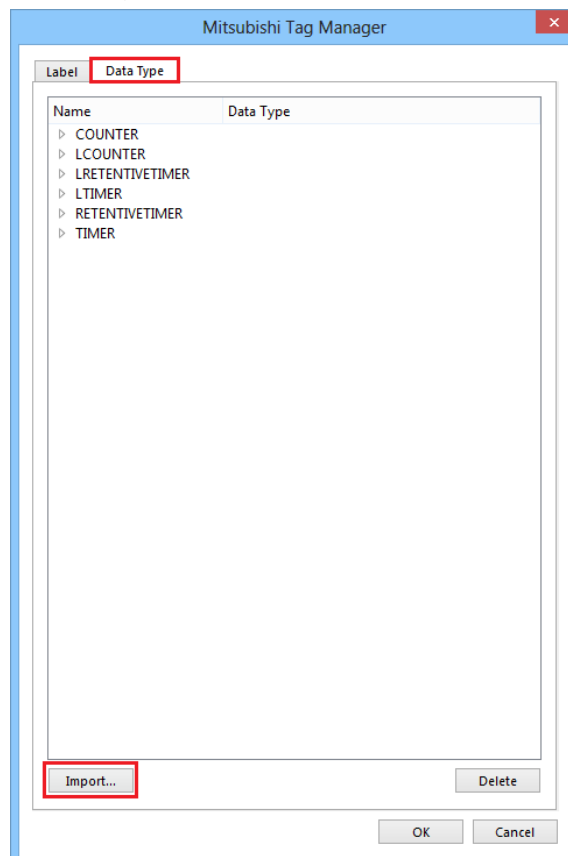
4. After adding a driver in EasyBuilder Pro, click **[Tag Manager]**.



5. Import Global Label. (single file)



6. Import Structure Data Type tags (import multiple files at the same time)



Support Device Type:

Data type	EasyBuilder data format	Memo
Bit	bit	
Word [Unsigned]	16-bit BCD, Hex, Binary, Unsigned	16-bit
Word [Signed]	16-bit BCD, Hex, Binary, Signed	16-bit
Double Word [Unsigned]	32-bit BCD, Hex, Binary, Unsigned	32-bit
Double Word [Signed]	32-bit BCD, Hex, Binary, Signed	32-bit
Float [Single Precision]	32-bit Float	32-bit
Float [Double Precision]	64-bit Double	64-bit
String (32)		*Note1
Timer		
Counter		
Long Counter		
Retentive Timer		
Long Retentive Timer		
Long Timer		

*Note1: String (32) arrays are not supported.

*Note2: Tag name length cannot exceed 30 characters.

*Note3: String[Unicode](32), Time and Pointer are not supported

Wiring Diagram:

Ethernet cable:

