

Chapter 13 MITSUBISHI: MELSEC-FX PLC

13.1 PLC List

InfoU is able to connect to MELSEC-FX PLC.

PLC Type	CPU Module	Connection Mode	Communication Mode	Connection Module
MELSEC-FX	FX _{1N} FX _{2N} FX _{1NC} FX _{2NC} FX _{0N} FX _{1S} FX ₂ FX _{2C}	Link Mode	RS-232C	FX _{1N} -232-BD FX _{2N} -232-BD FX _{0N} -232ADP FX _{2NC} -232ADP FX _{0N} -232ADP + FX _{1N} -CNV-BD FX _{0N} -232ADP + FX _{2N} -CNV-BD FX _{2NC} -232ADP + FX _{1N} -CNV-BD FX _{2NC} -232ADP + FX _{2N} -CNV-BD FX-232ADP
		Link Mode	RS-422/485	FX _{1N} -485-BD FX _{2N} -485-BD FX _{2NC} -485ADP FX _{0N} -485ADP FX-485ADP

Notice

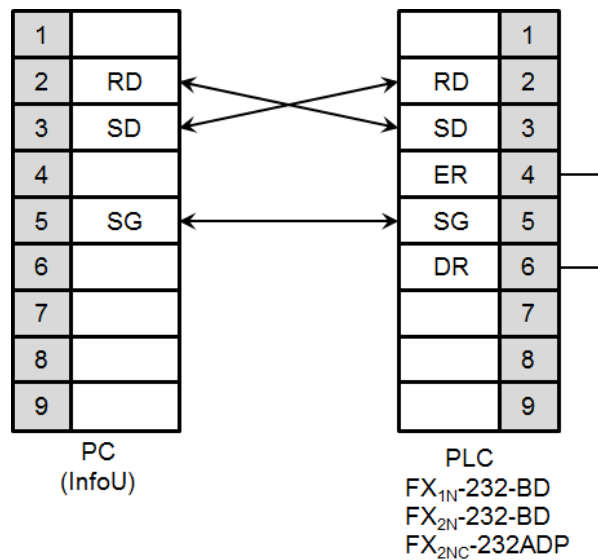
1. Not available PLC
- ☞ CPU module direct connection(Loader) is not available.
2. Term Description
- ☞ Link: Indicate the communication with PLC communication module.
3. Suggestions
- ☞ For more details, refer to MELSEC-FX manual and be noted that the particulars can be changed by MITSUBISHI with being irrelevant of this item.

13.2 Wiring Diagram

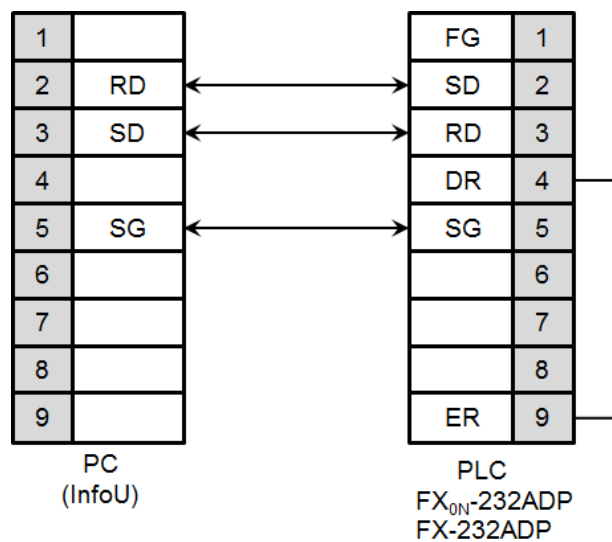
13.2.1 Link method: Serial

The communication type is divided into for RS-232C and RS-422/485.

The calculator link of Mitsubishi MELSEC-FX that adopts RS-232C has two connector types.
The below is the wiring for 9 pins connector.



The below is the wiring for 20 pins connector.

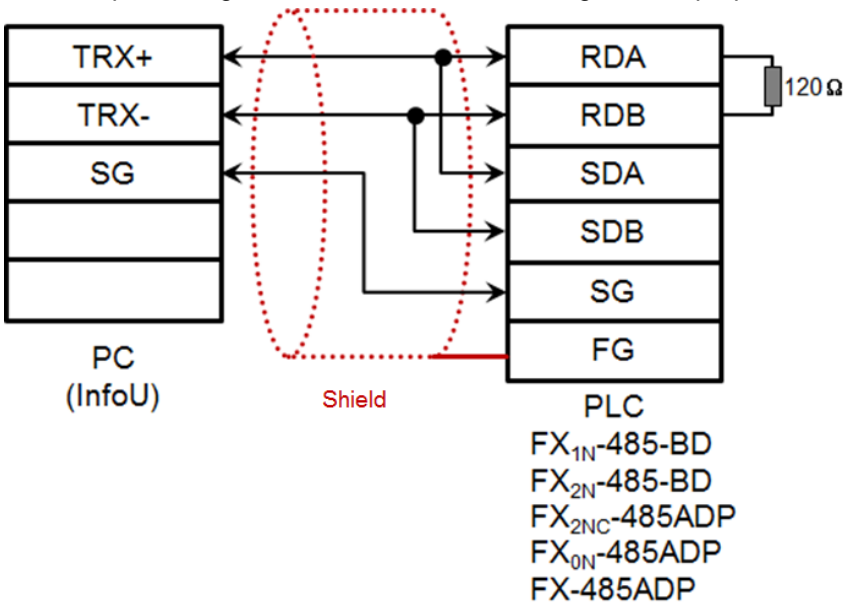


Notice

- MELSEC-FX adopts flow control so if the above wiring is not fulfilled, communication does not work properly.
- A shielded wire proposed by Mitsubishi is recommended for stable communication. For shield wiring, refer to the MELSEC-FX manual.

The below is the wiring for RS-422/485.

Mitsubishi recommends 1-line pair wiring so in this case, RS-485 wiring is more proper than RS-422.



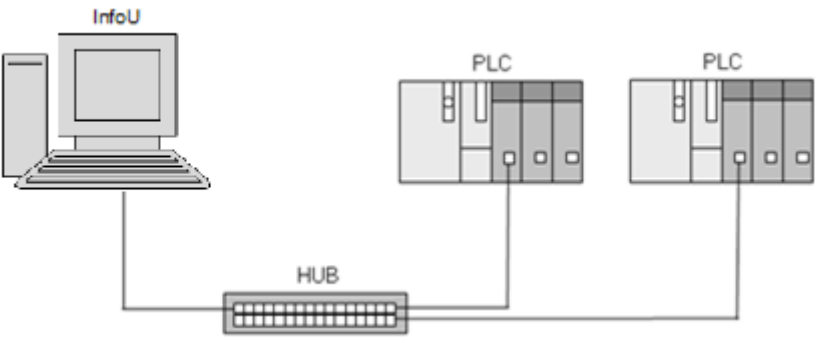
Notice

- ☞ The array of connector and pin may be different depending on the PLC type.
- ☞ RS-485 is recommended rather than RS-422.
- ☞ A shielded wire is recommended for stable communication. For shield wiring, refer to the MELSEC-FX manual.

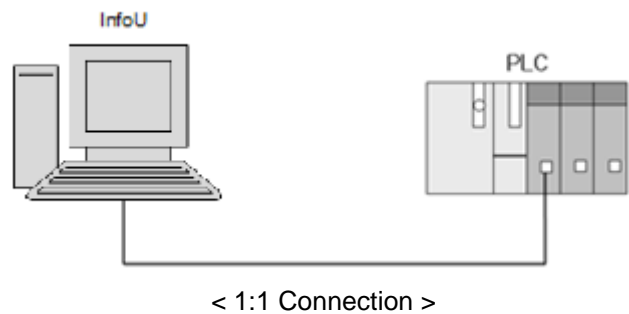
13.2.2 Link method: Ethernet

(1) Ethernet specification

Ethernet can be connected in 2 ways as below figure.



<Hub – Node Connection >



Notice

When connecting hub-node, direct cable has to be used and cross cable has to be used when connecting 1:1.

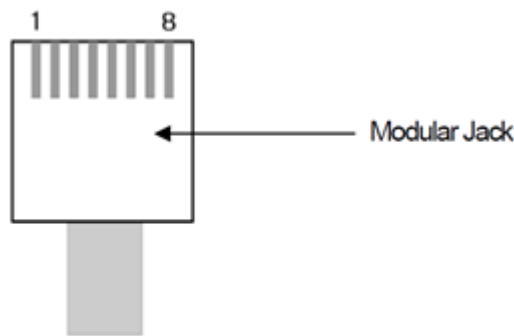
(1) Ethernet cable

Ethernet cable gets specified into 2 cables according to its type.

When communicating through LAN, connected to network equipment like a hub, direct cable is used. (In case of hub-node connection) Direct connection is available among equipments and in this case, cross cable is used.

Method for wiring a direct cable is as follows.

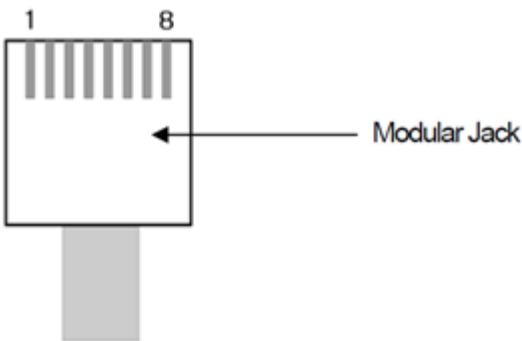
1	White-oragne	↔	White-oragne	1
2	Orange	↔	Orange	2
3	White-green	↔	White-green	3
4	Blue	↔	Blue	4
5	White-blue	↔	White-blue	5
6	Green	↔	Green	6
7	White-brown	↔	White-brown	7
8	Brown	↔	Brown	8



‘White-yellow’, ‘White-green’, ‘White-blue’, ‘White-brown’ from above figure is indicated on the coating of the cable. For example, ‘white-blue’ has blue stripes on white coating.

Method for wiring of cross cable is as follows.

1	White-orange	↔	White-green	1
2	Orange	↔	Green	2
3	White-green	↔	White-orange	3
4	Blue	↔	Blue	4
5	White-blue	↔	White-blue	5
6	Green	↔	Orange	6
7	White-brown	↔	White-brown	7
8	Brown	↔	Brown	8

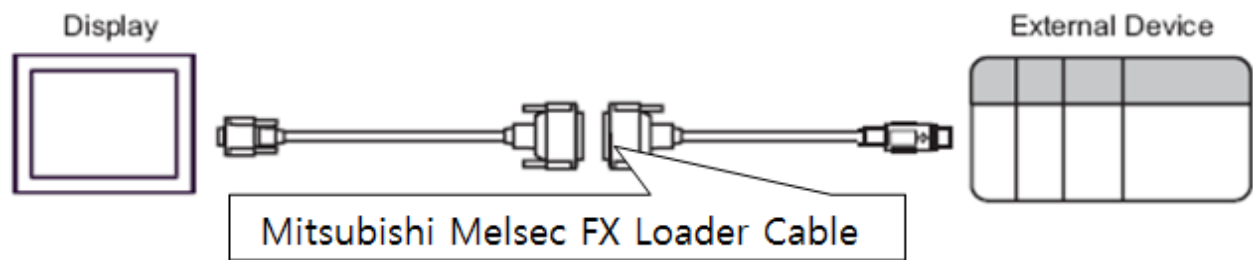


Notice

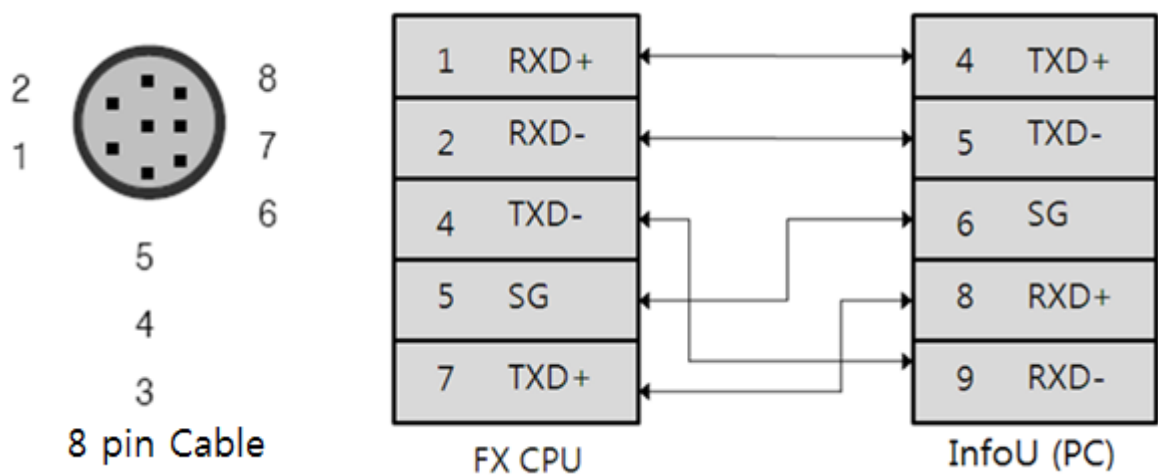
- ☞ Use according to the connection method.
- ☞ Wire the cable by using a modular tool. Bad connection may occur.
- ☞ If the lock part of the modular jack gets damaged, it may not get fixed to the RJ45 connector (Ethernet connector) and bad connection may occur.
- ☞ The UTP cable is made out of solid wire material. Therefore, it may break when heavily bent or shaken.
- ☞ It is advisory to use a plug cover when wiring cables.

13.2.3 Link method: Loader (CPU)

- (1) RS-232C communication method
- 1:1 The wiring on the RS-232C communication method is done using the dedicated loader cable provided by MITSUBISHI as shown below.
- In the case of the MELSEC FX FX2N, only MW-500A and Mitsubishi PLC FX Series Program Control I/F Cable (25pin-8 pin) are used.



- (2) RS-422 (4wire) communication method
- The connection of the RS-422 (4wire) communication method is as follows.



Notice

The shielded wire is recommended for stable communication.

- (3) Communication parameter (MITSUBISHI MELSEC FX CPU)

Parameter	Composition
Communication speed	9600 bps
Parity Bit	EVEN
Data Bit	7Bit
Stop Bit	1Bit

13.3 I/O Driver Setting

13.3.1 Link method: Serial

(1) PLC Setting

You can see the communication parameter of MELSEC-FX PLC at GX Developer S/W. For more details, refer to MITSUBISHI communication manual.

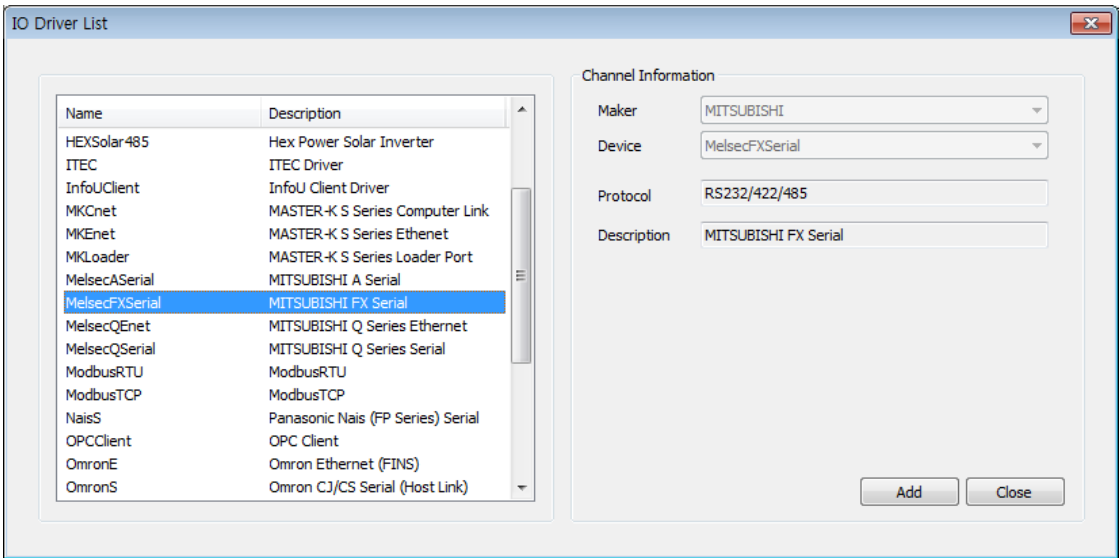
- (1) After executing GX Developer, select Parameter -> PLC Parameter -> PLC System(2) at a project screen.
- (2) Activate Communication Operation Setting.
- (3) Select the private protocol to set calculator link. InfoU Use Exclusive communication Mode 1
- (4) Select the basic communication parameters (transmission speed/data length/parity/ stop bit). Select the communication type.
- (5) If you have wrong setting details, the proper communication with InfoU can not be expected.
- (6) Select the unit No.

Notice

For setting, make sure to refer to MITSUBISHI manual.

(2) InfoU Setting

1) Add Channel



Select “MelsecFX Serial” from the I/O driver list and press “Add”.

- Channel Name: Input a channel name.
- Description: Input some information on the channel.
- Baud Rate: Select a communication speed.
- Parity Bit: Select a parity bit.
- Data Bit: Select a data bit.
- Stop Bit: Select a stop bit.
- Time Out : It refers to a certain time period during which any response to the request for data is not made and after passing such a time period, the system will declare timeout to move on to the next process. The time period to be set will be a base to judge communication errors.
- Retry: Set up the number of times to retry when communication fails.
- Use RIS: Check ☒ in the box only when using Channel 485 and 422.
- Delay Time (Before): Information used only in Channel 485 and 422. The delay time right before requesting Data to PLC
- Delay Time (After): Information used only in Channel 485 and 422. The delay time right after requesting Data to PLC.
- Save: If 'Save' button is pressed, Channel information will be saved and the saved information will add to the left "Configuration Information" tree.

MelsecFXSerial Configuration Information

Configuration Information

- Melsec FX Serial Driver Configuration Information
 - [New Channel]
 - MelsecFX**
 - [New Station]

Channel Information

Channel Name: MelsecFX
 Description:

☐ Line Redundancy ☐ Device Redundancy

COM Port #1: COM1
 COM Port #2:
 COM Port #3:
 COM Port #4:

Baud Rate: 9600
 Parity Bit: No Parity
 Data Bit: 8
 Stop Bit: 1

Timeout: 2000 msec [1000 ~ 3000]
 Retry: 3 [1 ~ 5]

☐ Use RTS

Delay Time (Before): 0 msec
 Delay Time (After): 15 msec

Save **Close**

2) Add Station

MelsecFXSerial Configuration Information

Configuration Information

- Melsec FX Serial Driver Configuration Information
 - [New Channel]
 - MelsecFX
 - [New Station]**

Station Information

Station Name:
 Description:

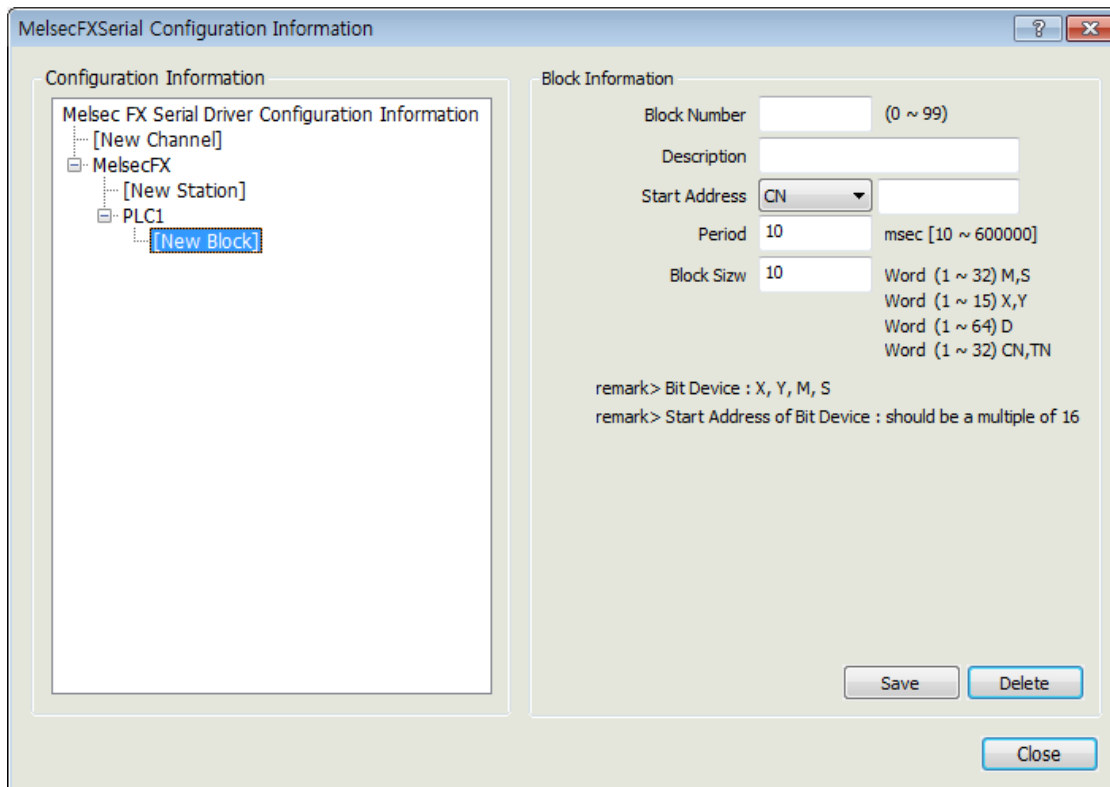
PLC CPU Type: FX0N
 Station Number: 0 (0 ~ 15)
☐ Use CheckSum

Save **Close**

- Select [New Station] from "Configuration Information" tree
- Station Name: Input a station name.

- Description: Input some information on the station.
- PLC CPU Type: Select a PLC CPU type.
- Station Number: Input the number of PLC Cnet Module.
- Save: If 'Save' button is pressed, Station information will be saved and the saved information will add to the left "Configuration Information" tree.

3) Add Block



- Select [New Block] from "Configuration Information" tree.
- Block Number: This number is a unique code of the block. The user needs to designate a different code to each block.
- Description: Input some information on the block.
- Start Address: Input the Block's Start Address.
 - X, Y, M and S are device memories in Bit unit and load reading in word unit.

Ex 1) X and Y are Bit memories in octal unit. Their addresses are expressed in X10 after X7. "Start Address" shall be multiples of 8 because of they are octal. That is, X0 (0th bit), X10 (8th bit), X20 (18th bit), X30 (24th bit)...

In addition, Block Size is in Word unit. If the user wants to load 16 points, he/she shall input 1.

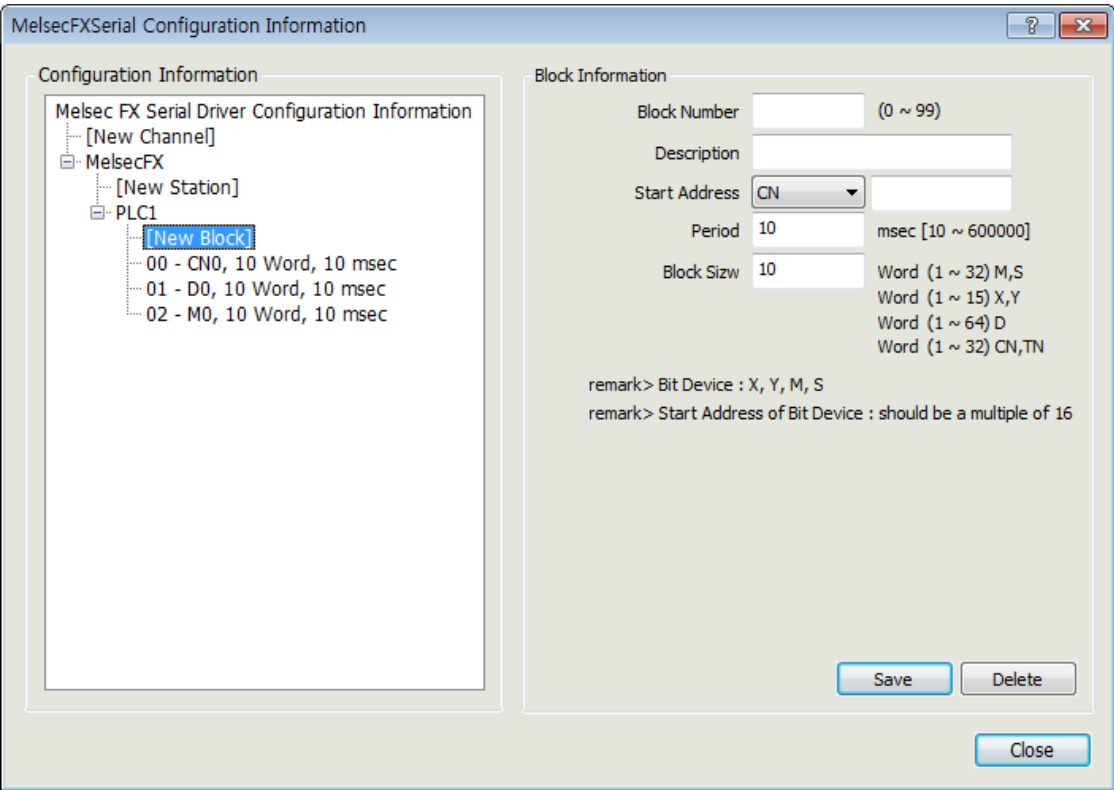
If X0 is set up for "Start Address" and 2 is inputted for "Block Size," this system will load 32Bit of X0~X7, X10~X17, X20~X27 and X30~X37.

Ex 2) M and S are Bit memories in decimal unit and their addresses are expressed in M10 after M9. “Start Address” shall be multiples of 8 because of they are decimal. That is, M0 (0th bit), M8 (8th bit), M16 (18th bit), M24 (24th bit)...

In addition, Block Size is in Word unit. If the user wants to load 16 points, he/she shall input 1. If M0 is set up for “Start Address” and 2 is inputted for “Block Size,” this system will load 32Bit of M0 through M31.

-D, T,C, CN and TN are device memories in Word unit.
If D10 is set up for “Start Address” and 10 is inputted for “Block Size,” this system will load 10 word values D10 through D19.

- Period: Input an interval to collect data of the relevant block (unit: msec).
- Block Size: A number to read for each corresponding delimiter.
- Save: If ‘Save’ button is pressed, Block information will be saved and the saved information will add to the left “Configuration Information” tree.
- Delete: If “Delete” button is pressed, the currently selected Block will be deleted.



4) I/O Address

- Available I/O address

Area	Size	Bit contact	Word data	Remarks
X	256 points	X000 ~ X377	X000 ~ X360	Octal

Y	256 points	Y000 ~ Y377	Y000 ~ Y360	Octal
M	7680 points	M0000 ~ M7679	M0000 ~ M7664	Decimal
	512 points	M8000 ~ M8511	M9000 ~ M8496	Decimal
S	4096 points	S0000 ~ S4095	S0000 ~ S4080	Decimal
TN	-	-	TN000 ~ TN511	Decimal
CN	-	-	CN000 ~ CN199	Decimal
	-	-	CN200 ~ CN255	
D	-	-	D0000 ~ D7999	Decimal
	-	-	D8000 ~ D8511	

13.3.2 Link method: Ethernet

(1) PLC setting

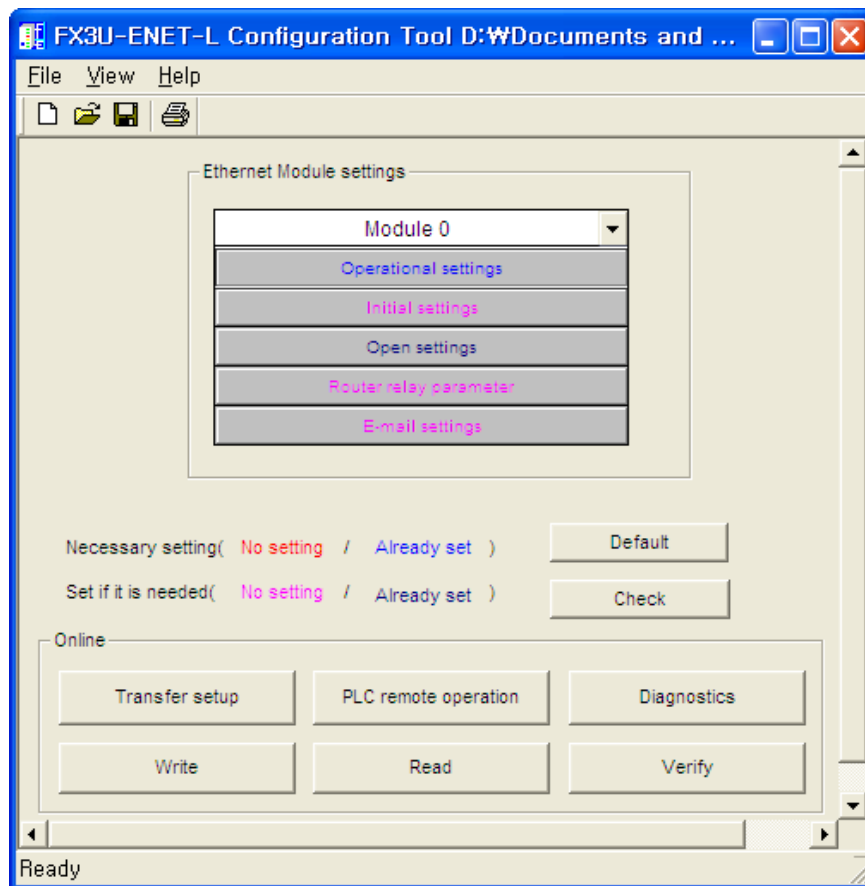
You must set the IP Address and Port number on the PLC Ethernet card. IP Address and Port number settings are set using GX Developer and FX3U-ENET-L Configuration Tool.

- Step 1: Install the GX Developer program and then set up the FX3U-Enet-L Configuration Tool, and the disabled menu will be enabled as follows.

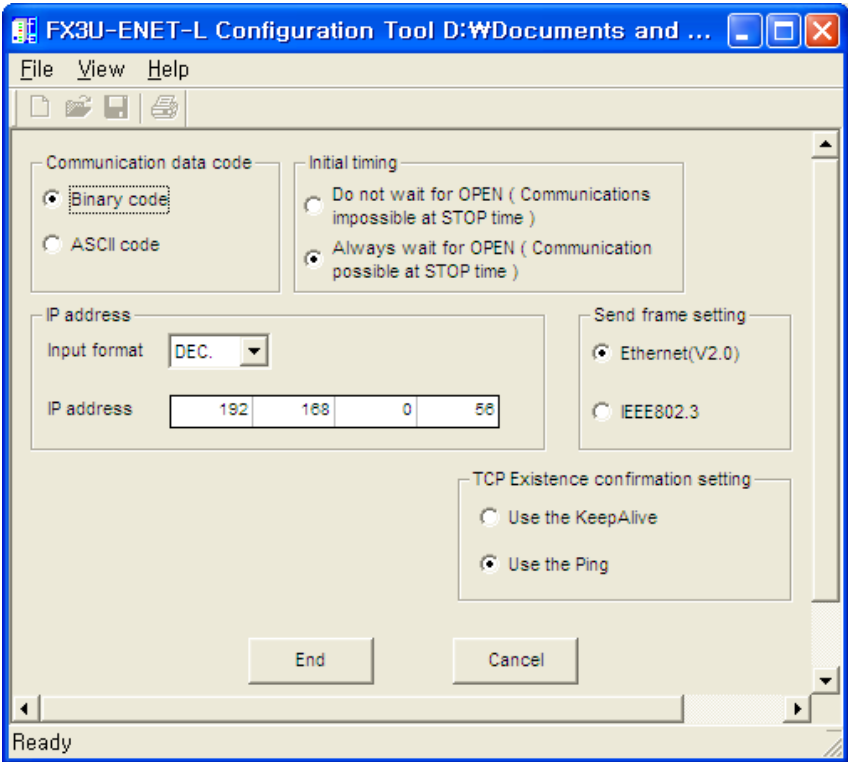
[Menu]-[Tools]-[FX special function utility]-[FX3U-ENET-L Configuration Tool]



- Step 2: Run the FX3U-ENET-L Configuration Tool, and the window through which the Ethernet module can be set will appear. First, select the module position where the Ethernet module is. Number 0 is followed by CPU.



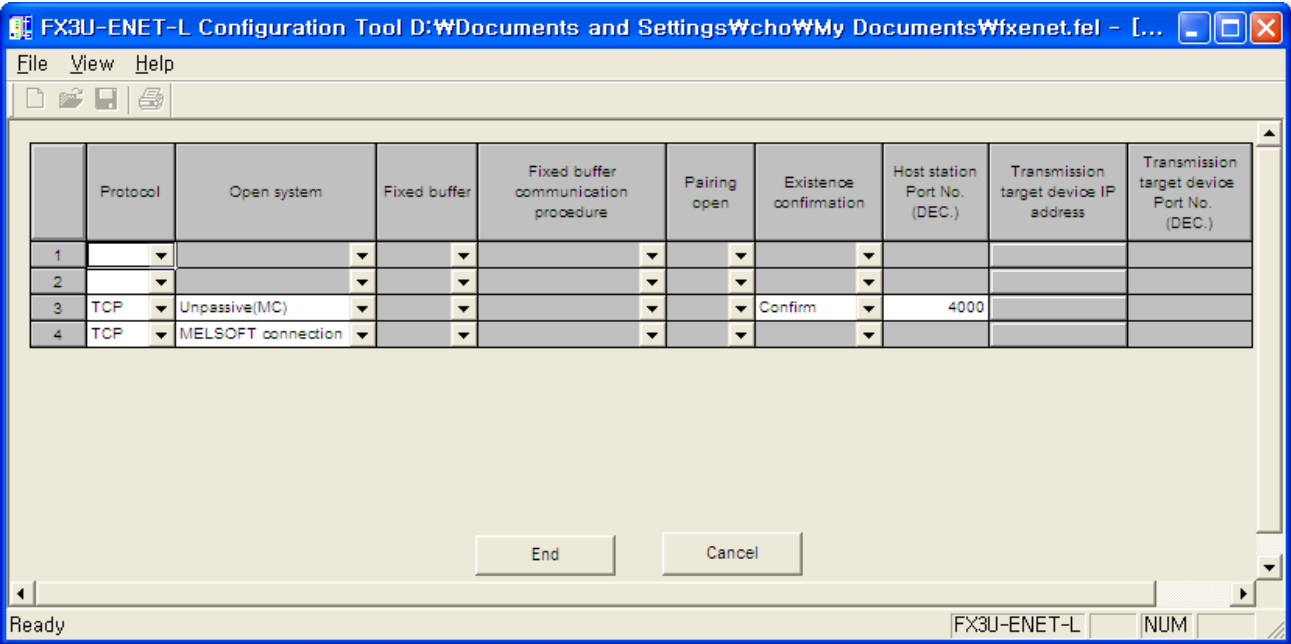
- Step 3: After completing the module selection, you can set the IP Address by selecting Operational settings.



- Step 4: Select Open settings and set the Port number. You must use number 3 or number 4. Port numbers can be set to 1025-65534. The following is an example of TCP/IP and UDP/IP settings.

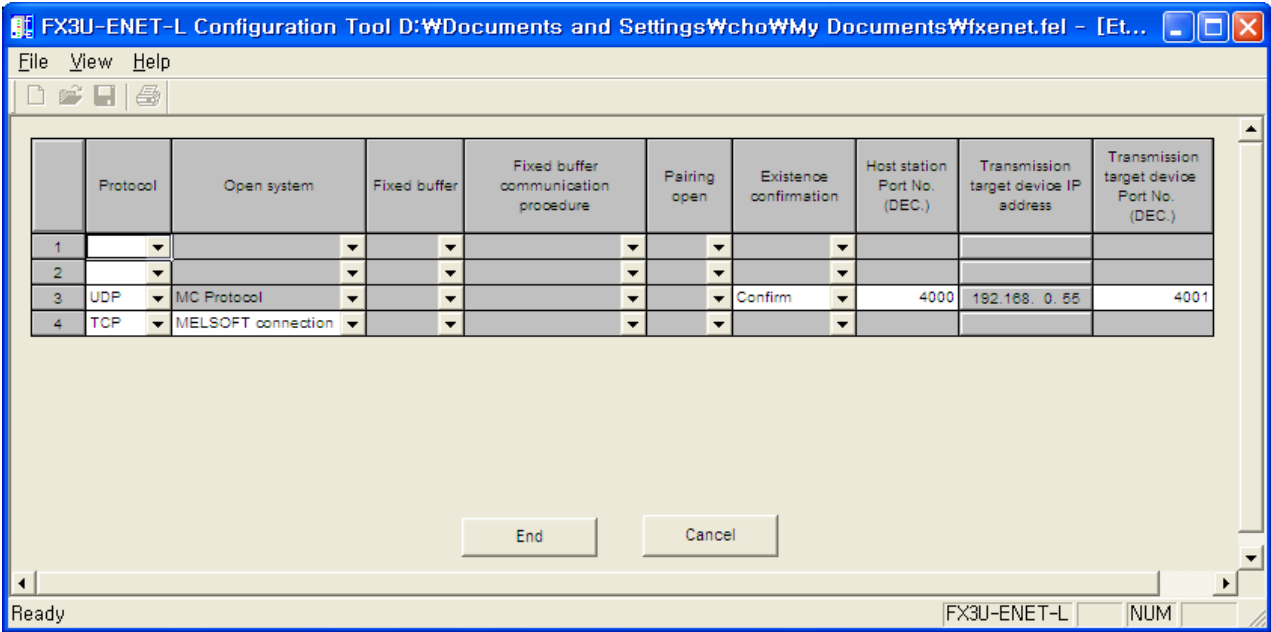
<TCP/IP setting>

In number 3, Unpassive (MC) is selected, and the Port number is set to 4000.
 The content set in number 4 is set when communicating with MELSOFT (GX Developer).



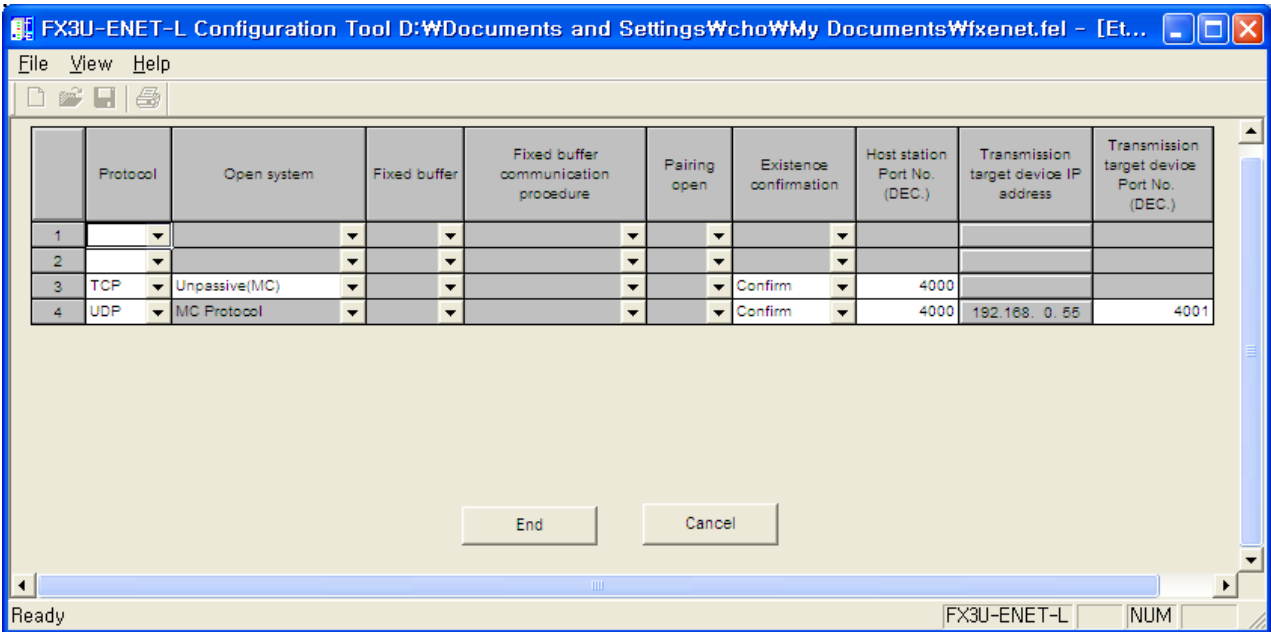
<UDP/IP setting>

In number 3, UDP protocol is selected, the Port number is set to 4000, and the InfoU(PC) Port number is set to 4001(local port number set in the InfoU).
The content set in number 4 is set when communicating with MELSOFT (GX Developer).

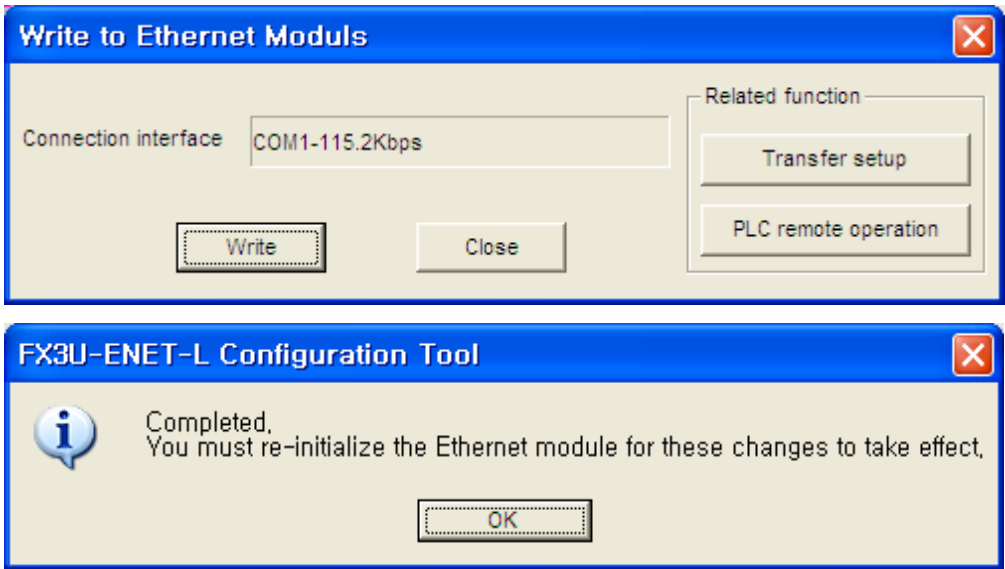


<TCP/IP, UDP/IP setting>

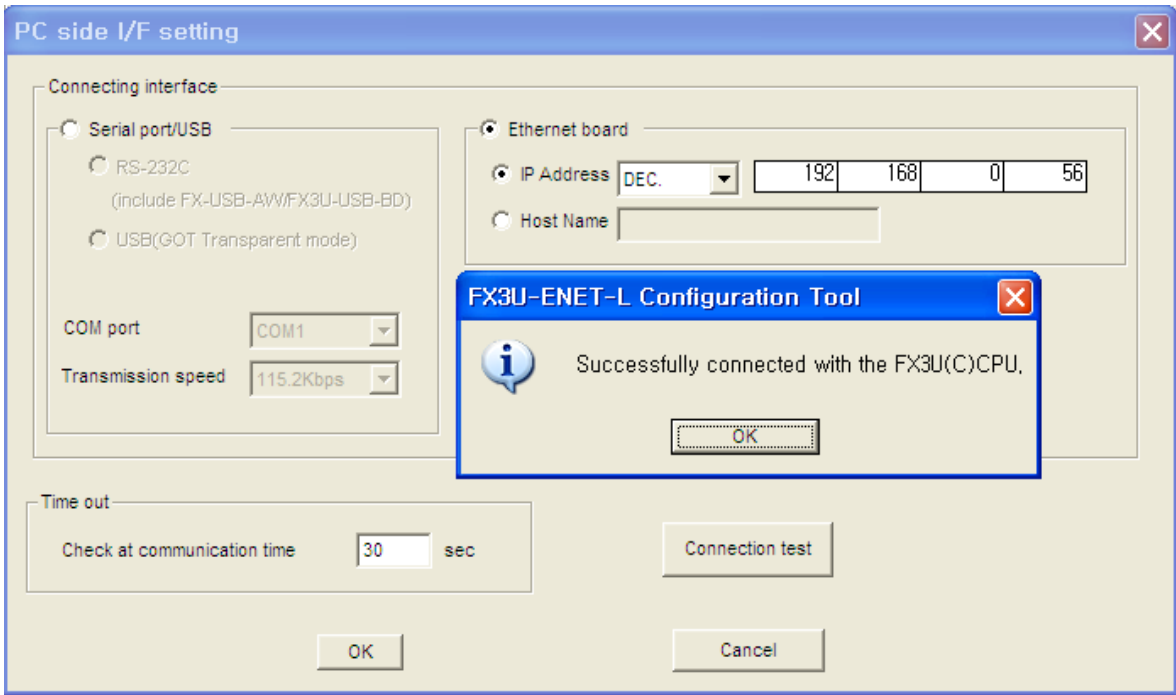
If communication setting with the MELSOFT (GX Developer) is not set, and UDP is enabled, the communication with MELSOFT is not available.



- Step 5: Write the set content in PLC. Since the Ethernet module is not set, the loader cable is used to write.



- Step 6: If the connection test is performed with Transfer setup, and the following message pops up, the Ethernet module setting is completed. (The communication connection with the MELSOFT is to be successful, the MELSOFT connection should be set as in 4 steps of the Open settings)

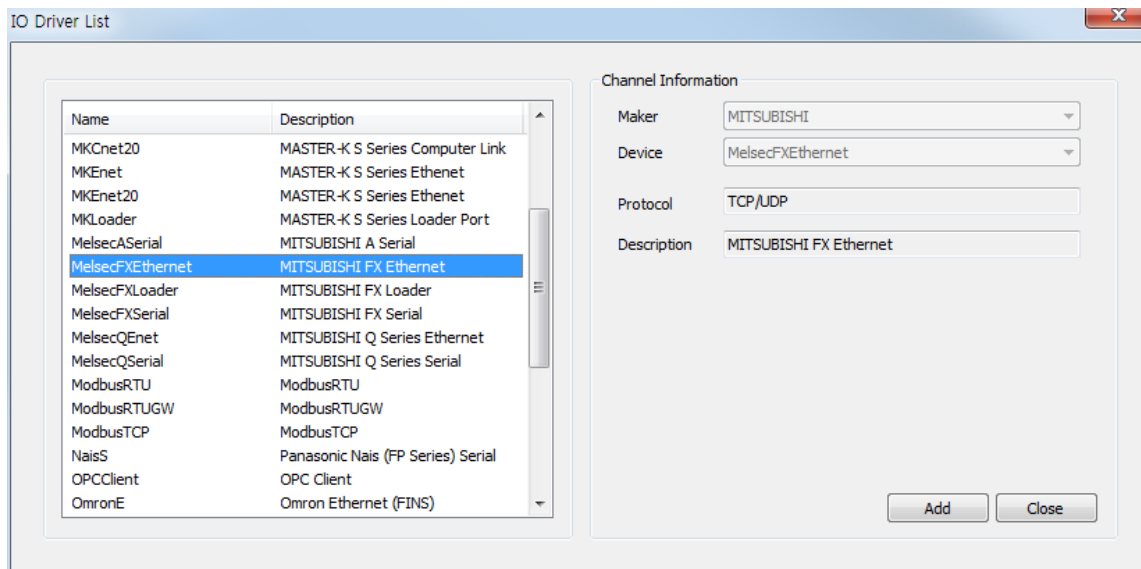


Notice

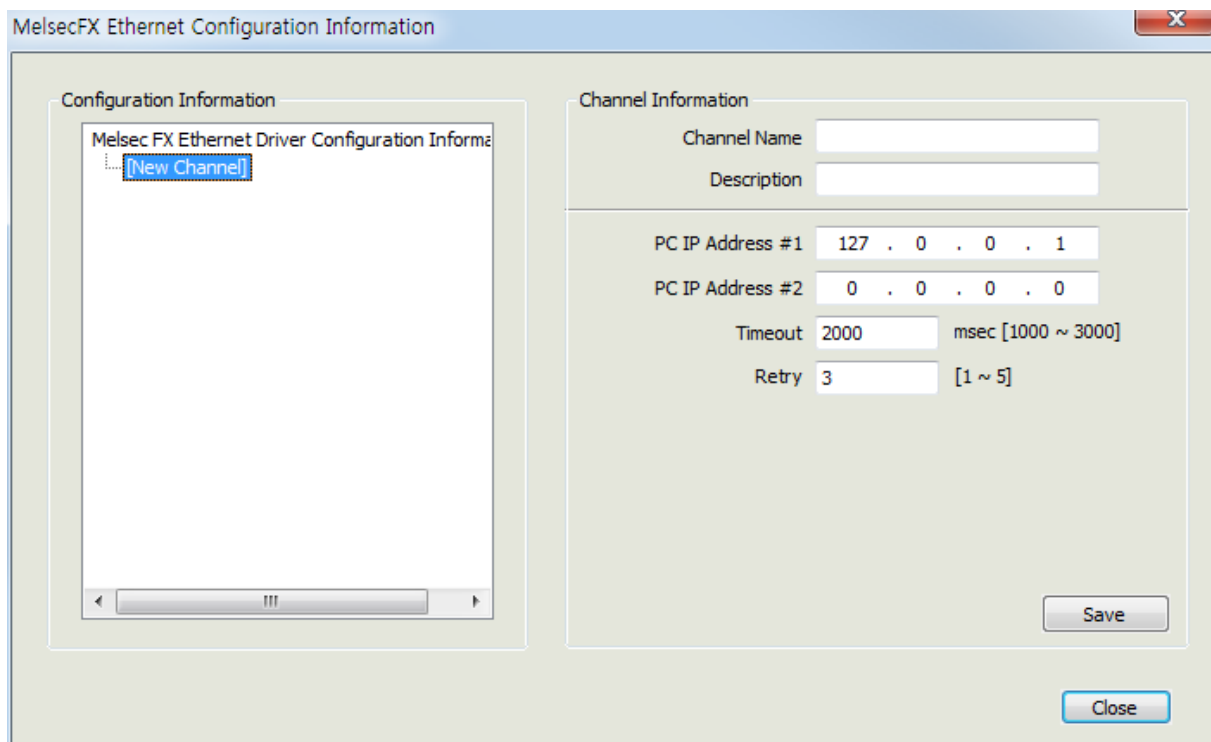
Programming tool
GX Developer, FX3U-ENET-L Configuration Tool.

(2) InfoU Setting

1) Add Channel



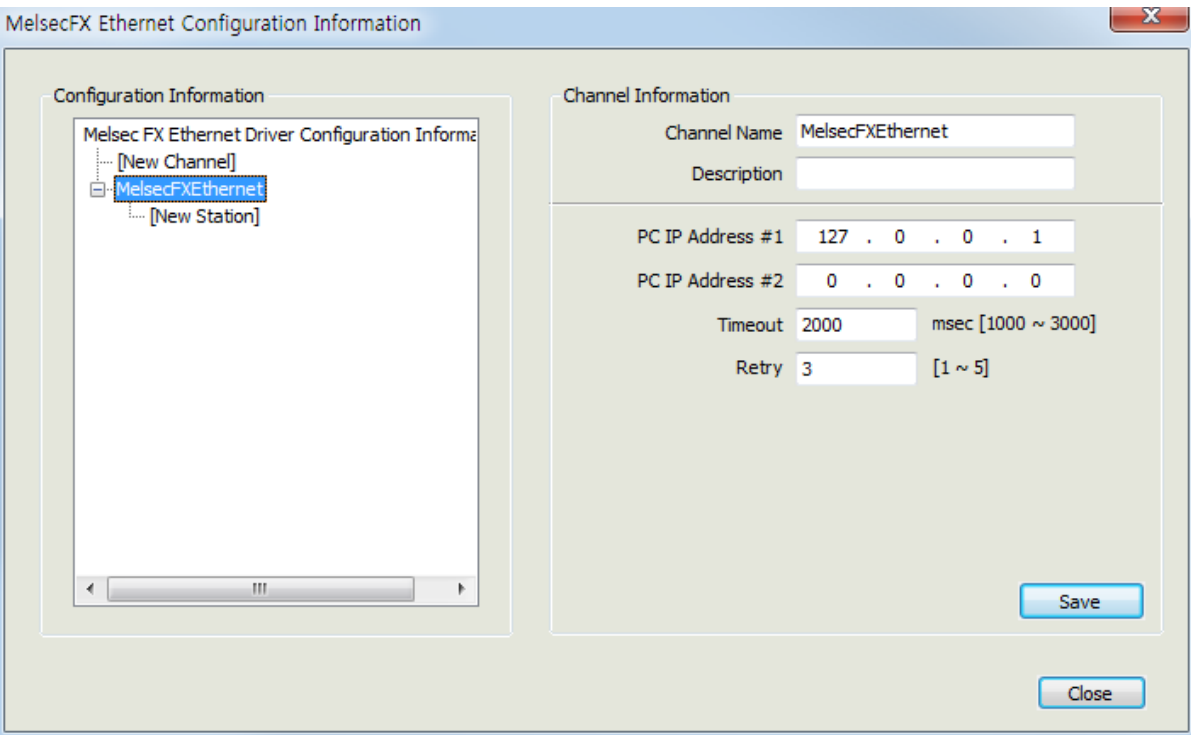
Select “MelsecFXEthernet” from the I/O driver list and press “Add”.



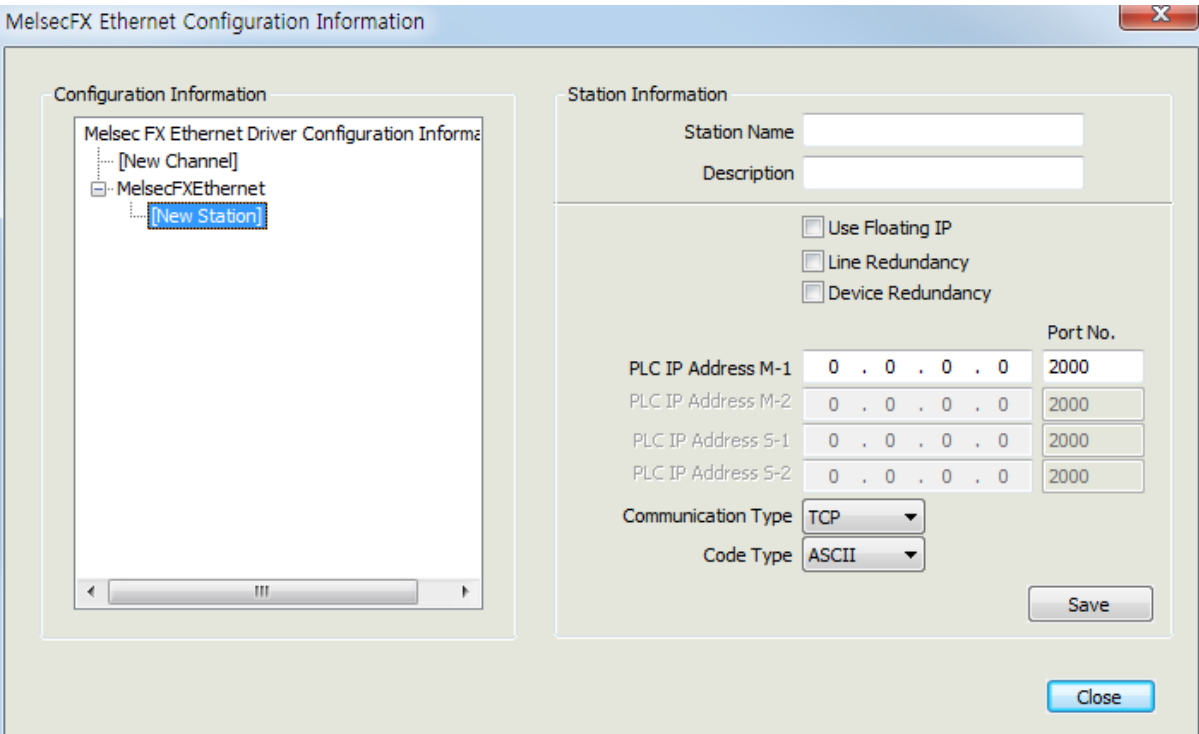
- Channel Name: Input a channel name.
- Description: Input some information on the channel.
- Serve IPAddress #1: Input PC's IP Address.
- Server IP Address #2: If Line Redundancy will be used, input the second IP Address to be used.
- Time Out : It refers to a certain time period during which any response to the request for data is not made and after passing such a time period, the system will declare timeout to move on to the next

process. The time period to be set will be a base to judge communication errors.

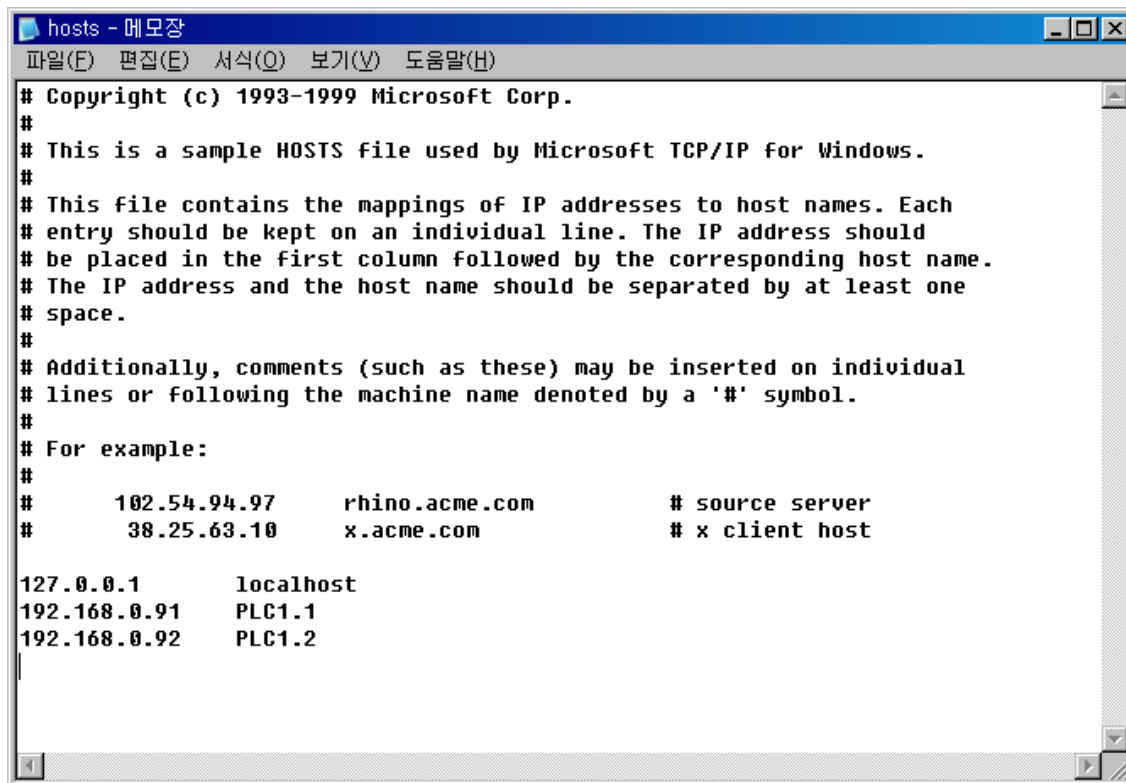
- Retry: Set up the number of times to retry when communication fails.
- Save: If 'Save' button is pressed, Station information will be saved and the saved information will add to the left "Configuration Information" tree.



2) Add Station

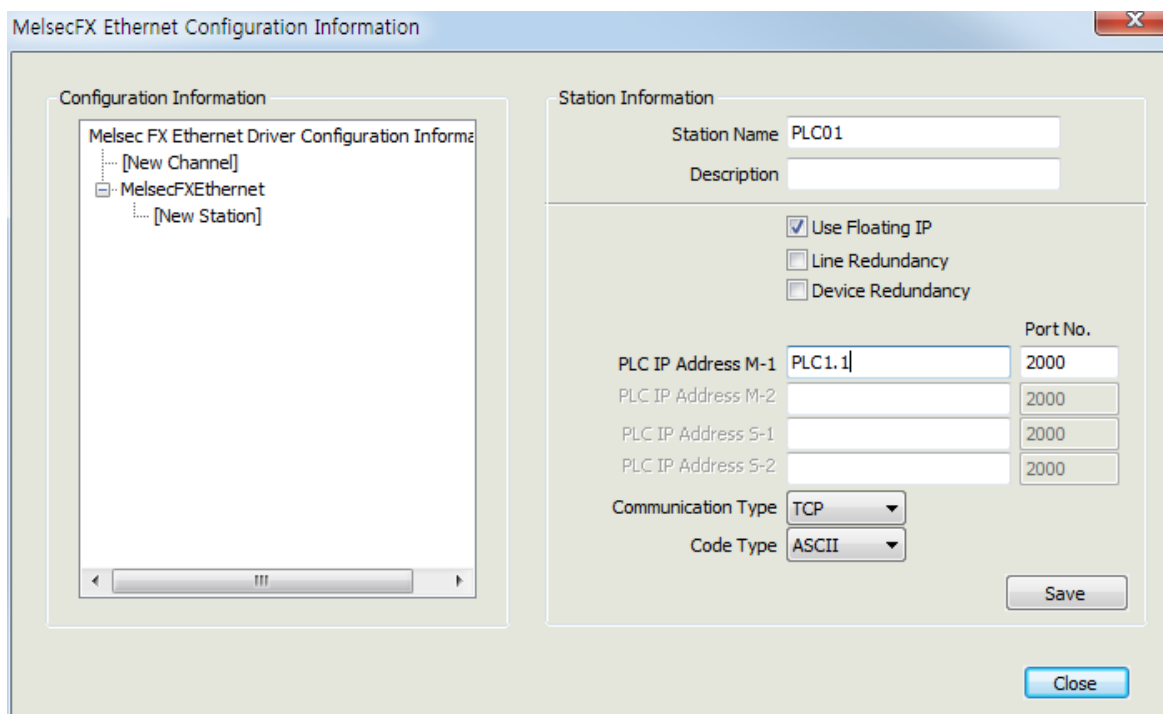


- Select [New Station] from “Configuration Information” tree.
- Station Name: Input a station name.
- Description: Input some information on the station.
- Use Floating IP: Check the following if the user wants to use a flexible IP. A flexible IP uses hosts files to communicate and they are located in C:\WINDOWS\system32\drivers\etc. Once they are saved as follow, set up a flexible IP according to the inst



```
# Copyright (c) 1993-1999 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97       rhino.acme.com          # source server
#       38.25.63.10       x.acme.com              # x client host

127.0.0.1       localhost
192.168.0.91    PLC1.1
192.168.0.92    PLC1.2
```



MelsecFX Ethernet Configuration Information

Configuration Information

- Melsec FX Ethernet Driver Configuration Information
 - [New Channel]
 - MelsecFXEthernet
 - [New Station]

Station Information

Station Name:

Description:

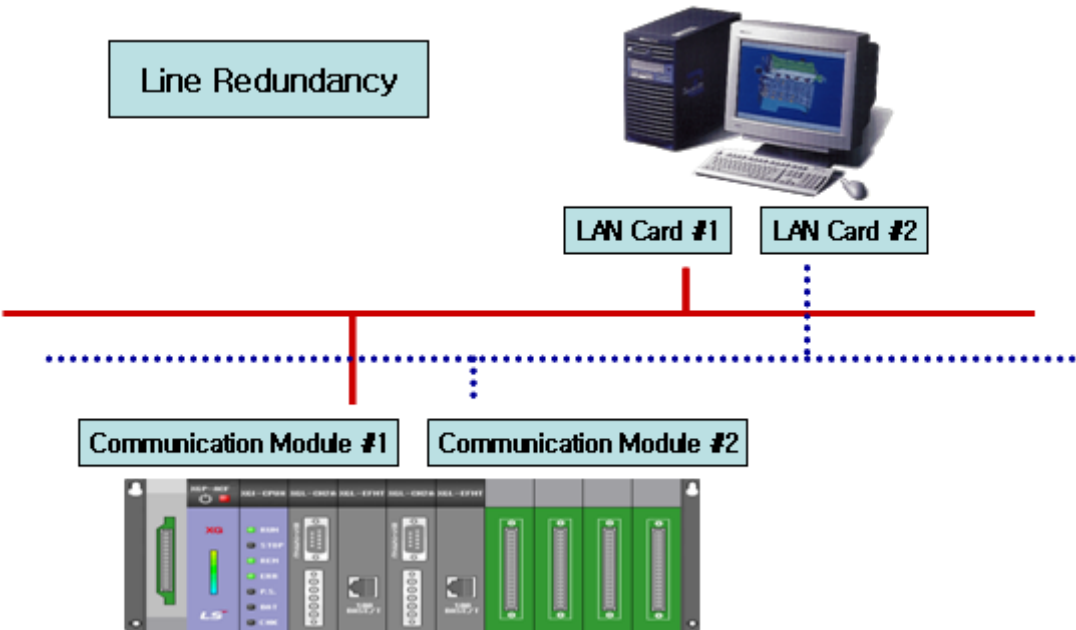
☒ Use Floating IP
☐ Line Redundancy
☐ Device Redundancy

PLC IP Address	Port No.
PLC IP Address M-1: <input type="text" value="PLC1.1"/>	<input type="text" value="2000"/>
PLC IP Address M-2: <input type="text"/>	<input type="text" value="2000"/>
PLC IP Address S-1: <input type="text"/>	<input type="text" value="2000"/>
PLC IP Address S-2: <input type="text"/>	<input type="text" value="2000"/>

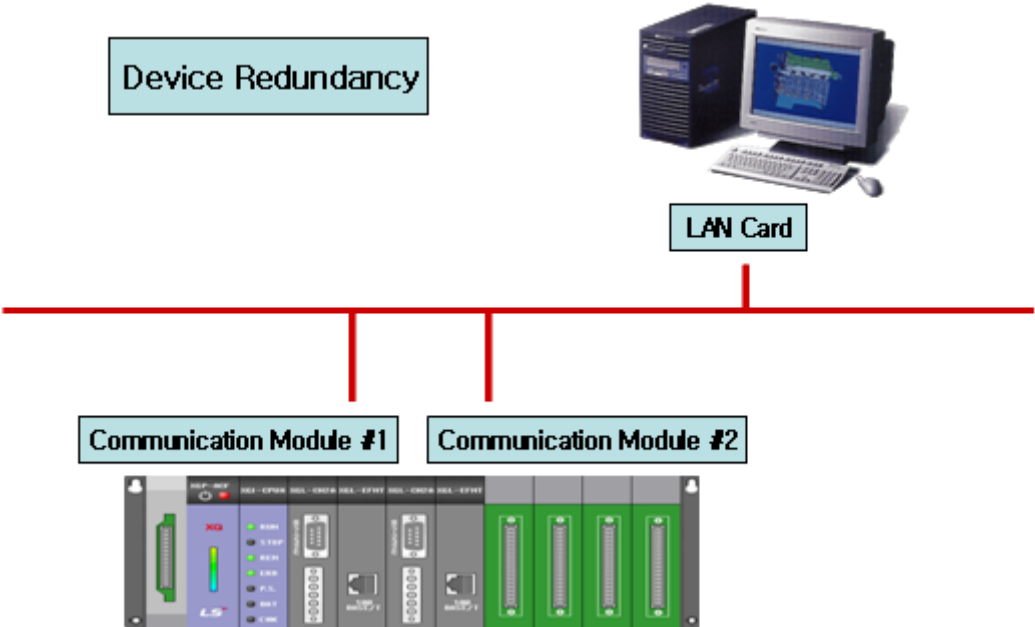
Communication Type:

Code Type:

- Line Redundancy: Check ☒ in the box to use Line Redundancy. It is used when the network is intended to be separated and communicated as seen in the figure below by installing two LAN cards on the computer and two Enet communication modules on PLC. It is a redundancy option for any failure in the network line.



- Device Redundancy: Check ☒ in the box to use Device Redundancy. It is used when the communication module is separated as seen in the figure below by installing one LAN card on the computer and two Enet communication modules on PLC. It is a redundancy option for any failure in the PLC communication module.



- PLC IP Address #1-1: Input PLC's IP Address.
- PLC IP Address #1-2: Input PLC's IP Address. Input the address when using Device Redundancy.

- PLC IP Address #2-1: Input PLC's IP Address. Input the address when using Device Redundancy.
 - PLC IP Address #2-2: Input PLC's IP Address. Input the address when using Line Redundancy along with Device Redundancy.
 - Communication Type: Select either TCP or UDP.
 - Port: The port number is automatically inputted according to the selected communication type.
 - Code Type: Select either Binary or ASCII. (Must be same InfoU - PLCsetting)
- Save: If 'Save' button is pressed, Station information will be saved and the saved information will add to the left "Configuration Information" tree.

MelsecFX Ethernet Configuration Information

Configuration Information

- Melsec FX Ethernet Driver Configuration Information
 - [New Channel]
 - MelsecFXEthernet
 - [New Station]
 - STA
 - [New Block]

Station Information

Station Name: STA

Description:

☐ Use Floating IP
☐ Line Redundancy
☐ Device Redundancy

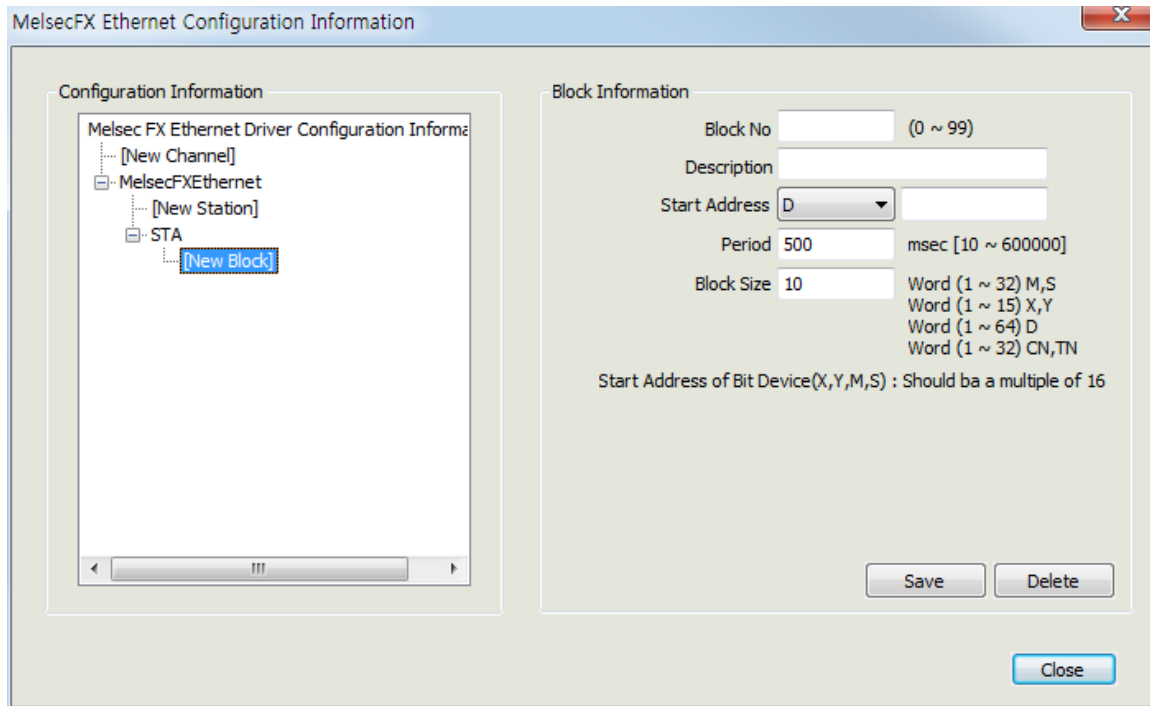
	PLC IP Address	Port No.
PLC IP Address M-1	192 . 168 . 111 . 70	4000
PLC IP Address M-2	0 . 0 . 0 . 0	2000
PLC IP Address S-1	0 . 0 . 0 . 0	2000
PLC IP Address S-2	0 . 0 . 0 . 0	2000

Communication Type: TCP

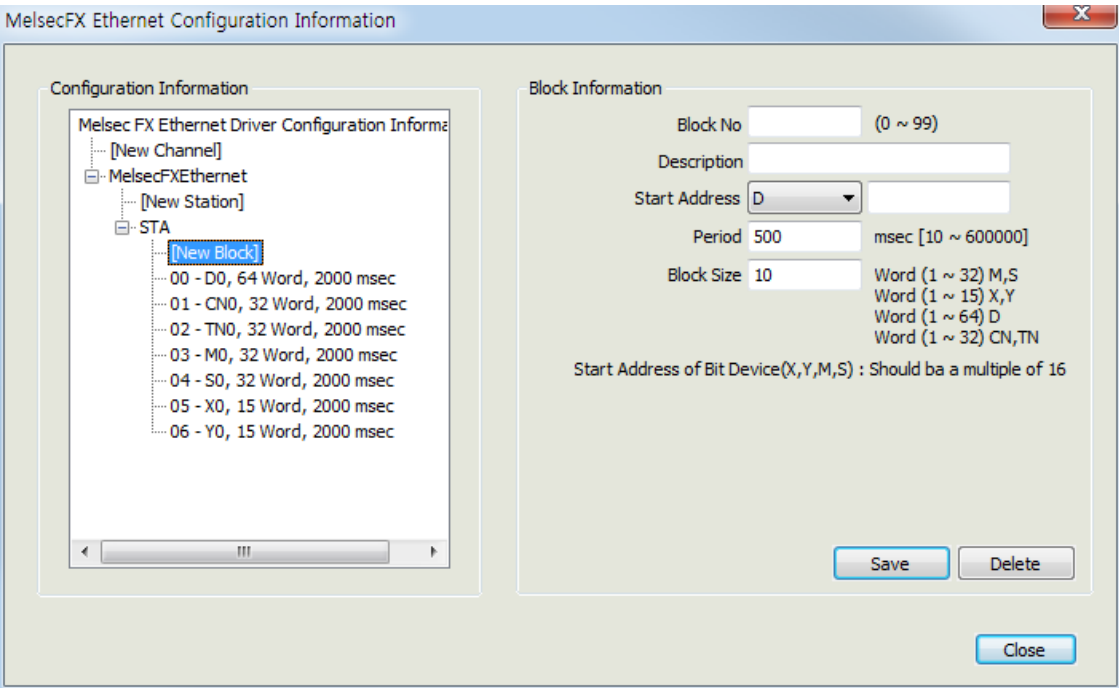
Code Type: ASCII

Save Close

3) Add Block



- Select [New Block] from “Configuration Information” tree.
- Block Number: This number is a unique code of the block. The user needs to designate a different code to each block.
- Description: Input some information on the block.
- Start Address: Input the Block’s Start Address.
- Period: Input an interval to collect data of the relevant block (unit: msec).
- Block Size: Input a block size of the relevant block (unit: Word (2 byte)).
- Save: If ‘Save’ button is pressed, Block information will be saved and the saved information will add to the left “Configuration Information” tree.
- Delete: If “Delete” button is pressed, the currently selected Block will be deleted.



4) I/O Address

●Available I/O Address

Device	Size	Bit contact	Word data	Read/Write	Remarks
X	256 points	X000~X377	X000~X360	Read	Octal
Y	256 points	Y000~Y377	Y000~Y360	Read	Octal
M	8192 points	M0000~M7679	M0000~M7664	Read/Write	Decimal
		M8000~M8511	M8000~M8496	Read/Write	
S	4096 points	S0000~S4095	S0000~S4080	Read/Write	Decimal
TN	512 points	—	TN000~TN511	Read/Write	Decimal
CN	256 points	—	CN000~CN199	Read/Write	Decimal
			CN200~CN255	Read/Write	
D	8512 points	—	D0000~D7999	Read/Write	Decimal
			D8000~D8511	Read/Write	

- X, Y are octal numbers. (Bit device)
Bit contact (use the octal number system).
Example) X000~X007, X010~X017, X020~X027, X070~X077, X100~X107, X110~X117.....
Word contact (set in multiples of 16Bit).
Example) X000, X020, X040, X060, X100, X120,
- M, S are decimal numbers. (Bit device)
Bit contact (use the decimal number system).
Example) M0000~M0009, M0010~M0019, M020~M029,
Word contact (set in multiples of 16Bit)
Example) M0000, M0016, S032, S048, S064.....
※ M0000 -M7679 and M8000 -D8511 are different device areas.
- The size of M000-M7679 may vary depending on the CPU type. Refer to the Mitsubishi FX ENET PLC manual.
- TN, CN are decimal numbers. (Word device)
Word contact
Example) TN000~TN511, CN000~CN255
※ Since CN0-CN199(16Bit) and CN200-CN255(32 Bit) are different device areas,
- CN199 cannot be used as 32bit device. (CN199 + CN200 are different devices)
- CN0-CN199 area and CN200-CN255 area cannot be used consecutively. (That is, if continuous data (logging, data list view, recipe, etc.) is used from CN190 to CN210, it shall be divided into two areas like

CN190-CN199, and CN200-CN210.

※ When using CN200-CN255, select 32Bit from the Numeric Display and Numeric Input and then conduct “Continuous Copy”, and CN200, CN202, CN204.....are created. Since it is 31bit device from CN200, the address should be incremented by 1. That is, you must revise it as CN200, CN201, CN202, CN203.....

▪ D is a decimal number. (Word device)

Word contact

Example) D0000~D7999, D8000~D8511

※ Since D0000-D7999 and D8000-D8511 are different device areas,

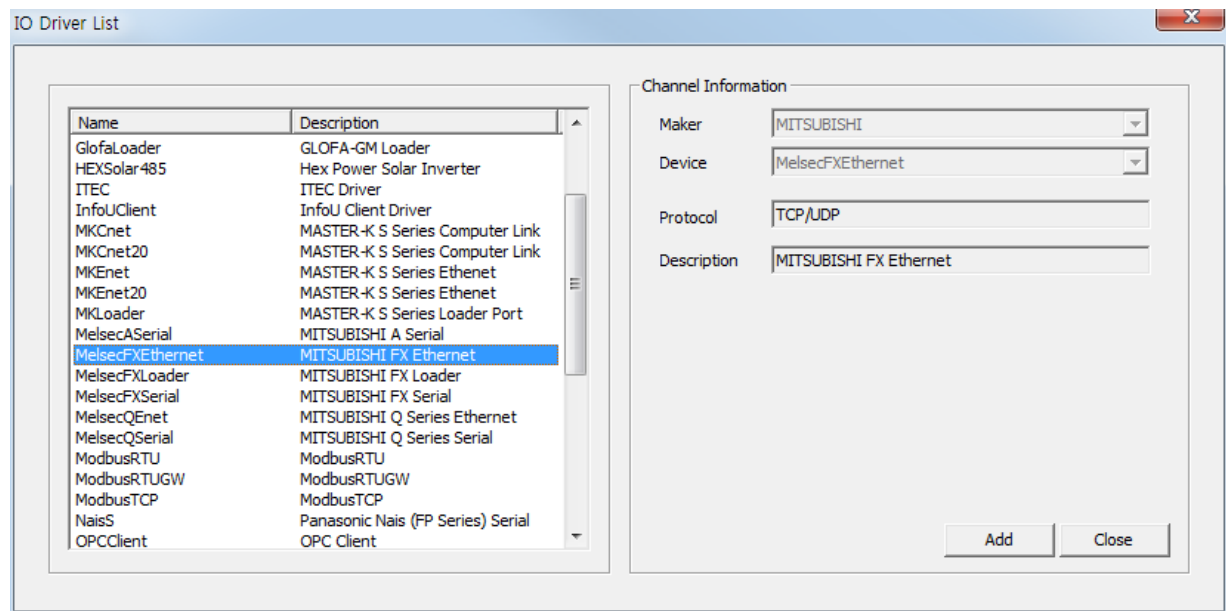
- D7999 cannot be used as 32 Bit device. (CN199 + CN200 are different devices)

- D0-D7999 area and D8000-D8496 area cannot be used consecutively. (That is, if continuous data (logging, data list view, recipe, etc.) is used from D7990 to D8010, it shall be divided into two areas like D7990-D7999, and D8000-D8010.

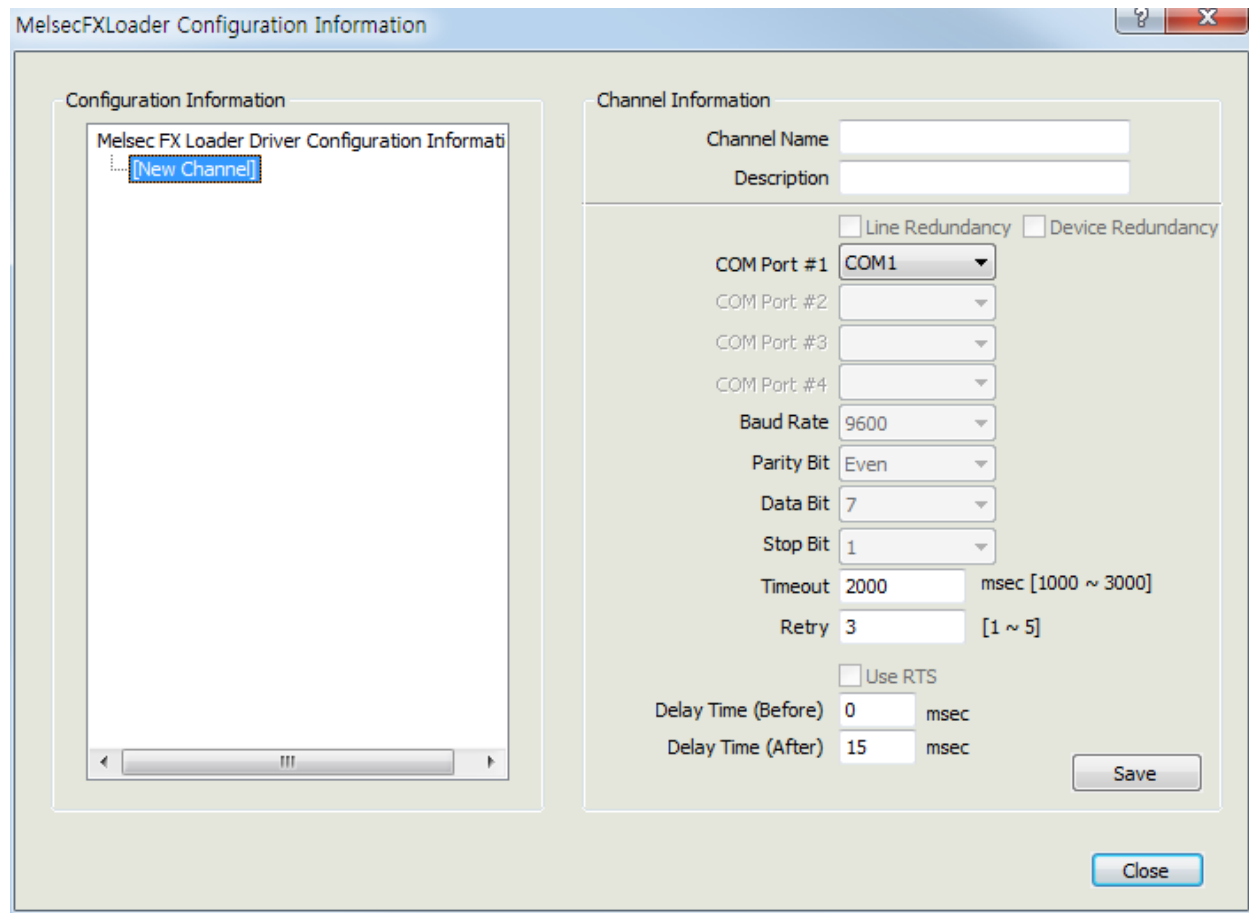
※ The memory of M8000 ~ and D8000 ~ is a special area and can be used by the system. In addition, this area contains the no-write region. Therefore, in order to use this area, please refer to the Mitsubishi FX ENET PLC manual.

13.3.3 Link method: Loader (CPU)

- (1) InfoU Setting
 - 1) Add Channel



Select“MelsecFXLoader”from the I/O driver list and press “Add”.



- Channel Name: Input a channel name.
- Description: Input some information on the channel.
- COM Port #1: Select a communication port.
- Baud Rate: Select a communication speed.
- Parity Bit: Select a parity bit.
- Data Bit: Select a data bit.
- Stop Bit: Select a stop bit.
- Time Out : It refers to a certain time period during which any response to the request for data is not made and after passing such a time period, the system will declare timeout to move on to the next process. The time period to be set will be a base to judge communication errors.
- Retry: Set up the number of times to retry when communication fails.
- Use RTS: Check ☒ in the box only when using Channel 485 and 422.
- Delay Time (Before): Information used only in Channel 485 and 422. The delay time right before requesting Data to PLC.
- Delay Time (After): Information used only in Channel 485 and 422. The delay time right after requesting Data to PLC.
- Save: If 'Save' button is pressed, Channel information will be saved and the saved information will add to the left "Configuration Information" tree.

MelsecFXLoader Configuration Information

Configuration Information

- Melsec FX Loader Driver Configuration Information
 - [New Channel]
 - MelsecFXLoader**
 - [New Station]

Channel Information

Channel Name: MelsecFXLoader

Description:

☐ Line Redundancy ☐ Device Redundancy

COM Port #1: COM2

COM Port #2:

COM Port #3:

COM Port #4:

Baud Rate: 9600

Parity Bit: Even

Data Bit: 7

Stop Bit: 1

Timeout: 2000 msec [1000 ~ 3000]

Retry: 3 [1 ~ 5]

☐ Use RTS

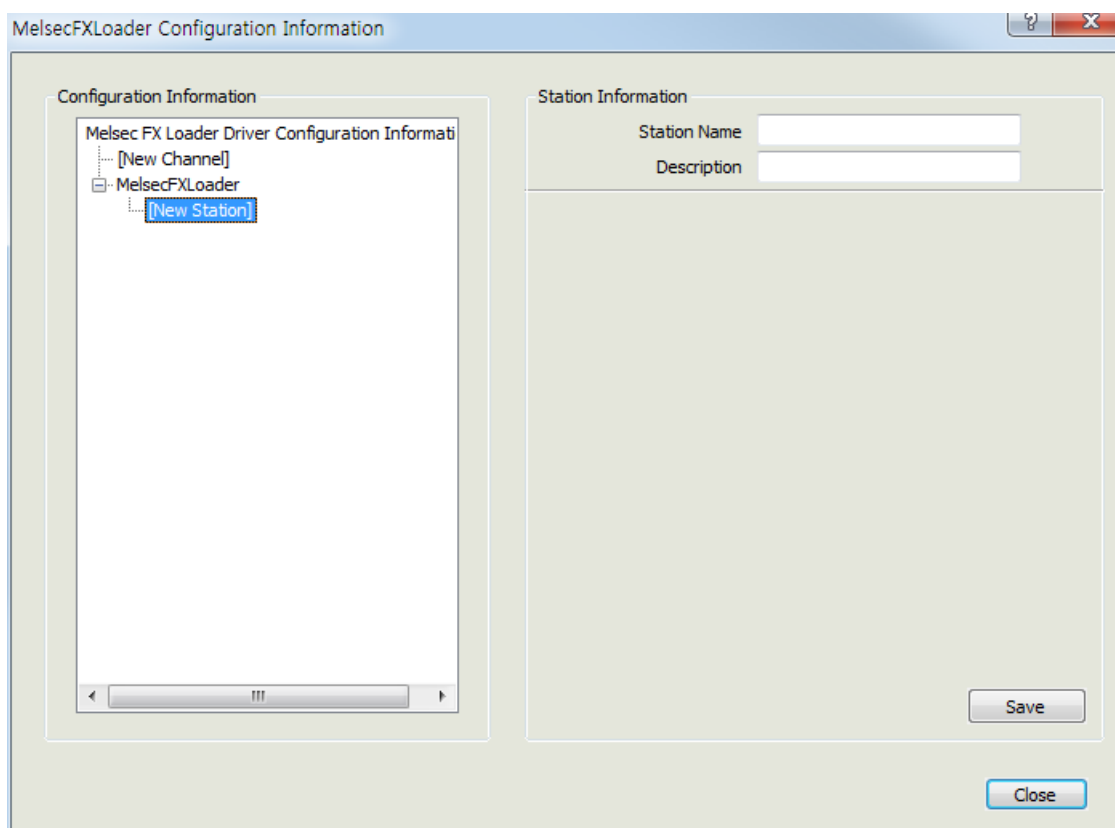
Delay Time (Before): 0 msec

Delay Time (After): 15 msec

Save

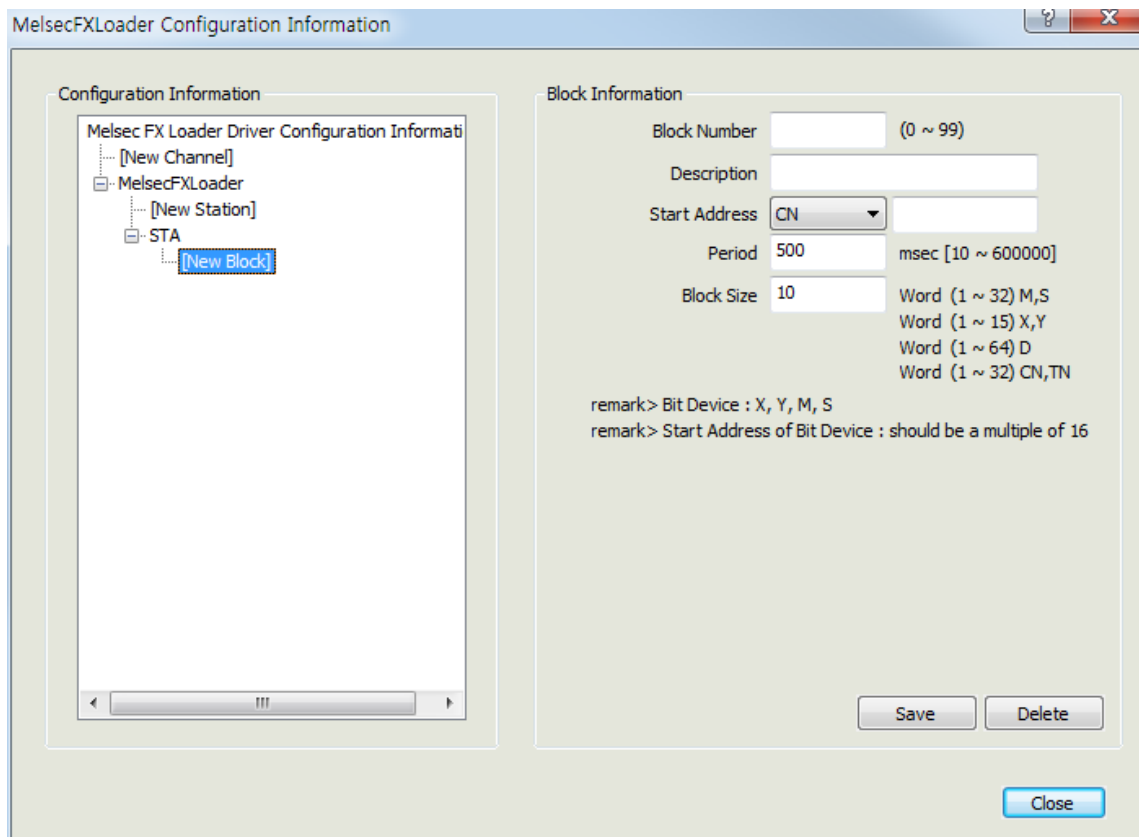
Close

2) Add Station

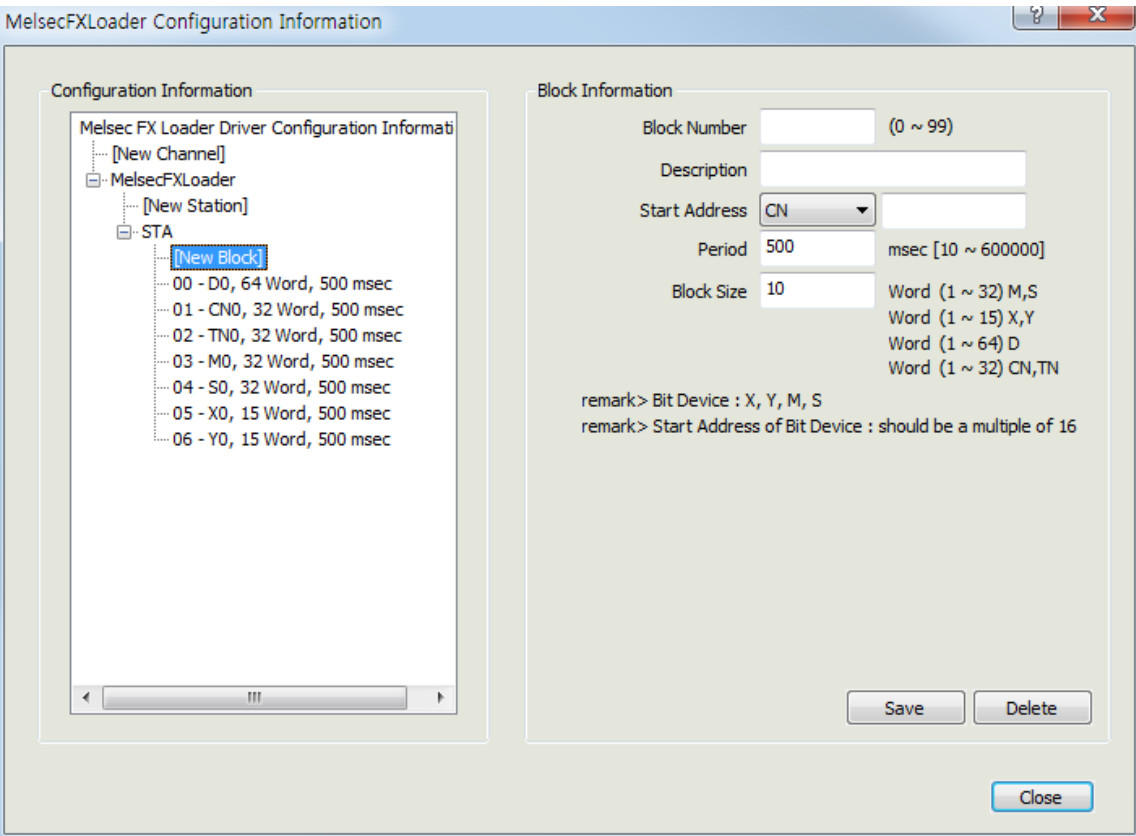


- Select [New Station] from "Configuration Information" tree.
- Station Name: Input a station name.
- Description: Input some information on the station.
- Save: If 'Save' button is pressed, Station information will be saved and the saved information will add to the left "Configuration Information" tree.

3) Add Block



- Select [New Block] from “Configuration Information” tree.
- Block Number: This number is a unique code of the block. The user needs to designate a different code to each block.
- Description: Input some information on the block.
- Start Address: Input the Block’s Start Address.
- Period: Input an interval to collect data of the relevant block (unit: msec).
- Block Size: Input a block size of the relevant block (unit: Word (2 byte)).
- Save: If ‘Save’ button is pressed, Block information will be saved and the saved information will add to the left “Configuration Information” tree.
- Delete: If “Delete” button is pressed, the currently selected Block will be deleted.



4) I/O Address

●Available I/O Address

Device	Bit contact	Word data	Read/Write	Remarks
X	X000~X377	X000~X360	Read	Octal
Y	Y000~Y377	Y000~Y360	Read	Octal
M	M0000~M7679	M0000~M7664	Read/Write	Decimal
	M8000~M8511	M8000~M8496	Read/Write	
S	S0000~S4095	S0000~S4080	Read/Write	Decimal
TN	—	TN000~TN511	Read/Write	Decimal
CN	—	CN000~CN199	Read/Write	Decimal
		CN200~CN255	Read/Write	
D	—	D0000~D7999	Read/Write	Decimal
		D8000~D8511	Read/Write	

- X, Y are octal numbers. (Bit device)

Bit contact (use the octal number system).

Example) X000~X007, X010~X017, X020~X027, X070~X077, X100~X107, X110~X117.....

Word contact (set in multiples of 16Bit).

Example) X000, X020, X040, X060, X100, X120,
- M, S are decimal numbers. (Bit device)

Bit contact (use the decimal number system).

Example) M0000~M0009, M0010~M0019, M020~M029,

Word contact (set in multiples of 16Bit)

Example) M0000, M0016, S032, S048, S064.....

※ M0000~M7679 and M8000~D8511 are different device areas.

- The size of M0000~M7679 may vary depending on the CPU type. Refer to the Mitsubishi FX ENET PLC manual.
- TN, CN are decimal numbers. (Word device)

Word contact

Example) TN000~TN511, CN000~CN255

※ Since CN0~CN199(16Bit) and CN200~CN255(32 Bit) are different device areas,

- CN199 cannot be used as 32bit device. (CN199 + CN200 are different devices)

- CN0~CN199 area and CN200~CN255 area cannot be used consecutively. (That is, if continuous data (logging, data list view, recipe, etc.) is used from CN190 to CN210, it shall be divided into two areas like CN190~CN199, and CN200~CN210.

※ When using CN200~CN255, select 32Bit from the Numeric Display and Numeric Input and then conduct

“Continuous Copy”, and CN200, CN202, CN204.....are created. Since it is 31bit device from CN200, the address should be incremented by 1. That is, you must revise it as CN200, CN201, CN202, CN203.....

▪D is a decimal number. (Word device)

Word contact

Example) D0000~D7999, D8000~D8511

- ※ Since D0000-D7999 and D8000-D8511 are different device areas,
 - D7999 cannot be used as 32 Bit device. (CN199 + CN200 are different devices)
 - D0~D7999 area and D8000-D8496 area cannot be used consecutively. (That is, if continuous data (logging, data list view, recipe, etc.) is used from D7990 to D8010, it shall be divided into two areas like D7990-D7999, and D8000-D8010.

※The memory of M8000 ~ and D8000 ~ is a special area and can be used by the system. In addition, this area contains the no-write region. Therefore, in order to use this area, please refer to the Mitsubishi FX ENET PLC manual.

13.4 Available Device

For available devices in InfoU, please refer to the I/O Address of the communication driver.

Notice

- ☞ Be sure to use within the range of the device area.
- ☞ The range of the device may be different depending on the CPU module.