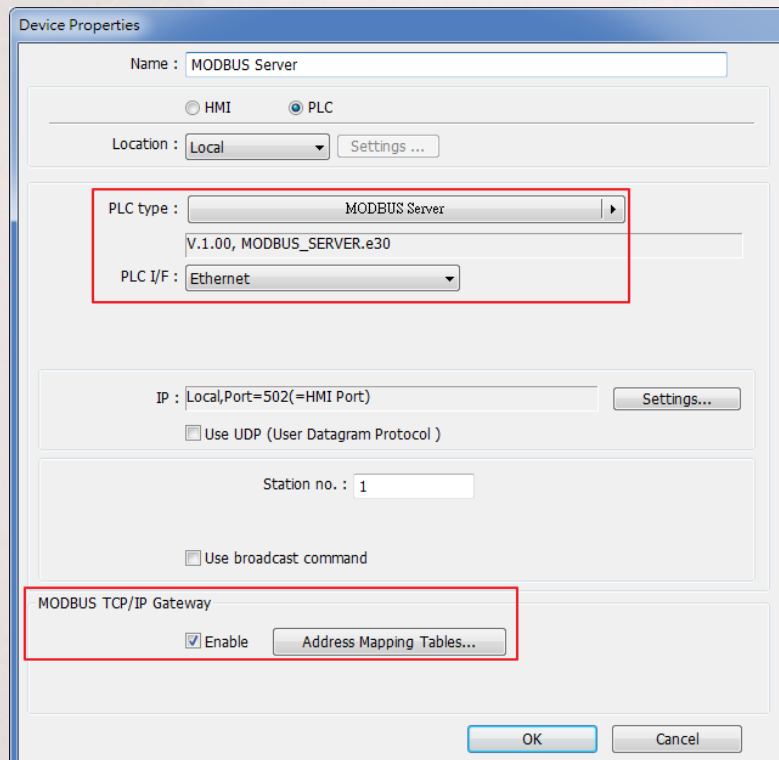


Release Notes

EasyBuilder Pro V3.00.05 Build 2013.08.06

New Features

1. By adding [MODBUS Server] with [Ethernet] interface, the [MODBUS TCP/IP Gateway] feature can be enabled by selecting the [Enable] checkbox.



This feature allows the SCADA (Supervisory Control and Data Acquisition) software to use the MODBUS TCP/IP protocol to read from or write in the PLC data via HMI.



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The following shows two easy steps to enable the SCADA to directly control the Mitsubishi FX2N PLC (Assumed Mitsubishi FX2N PLC is included in the [Device list]).

Step 1

Add a [MODBUS TCP/IP Server] PLC device with [Ethernet] interface and select the [Enable] checkbox of the [MODBUS TCP/IP Gateway].

Device list :

No.	Name	Location	Device type	Interface
Local HMI	Local HMI	Local	eMT3070 (800 ...	-
Local PLC 1	Mitsubishi FX2N	Local	Mitsubishi FX2N	COM 1 (19200,E...
▶ Local Server	MODBUS Server	Local	MODBUS Server	Ethernet (IP=Loc...

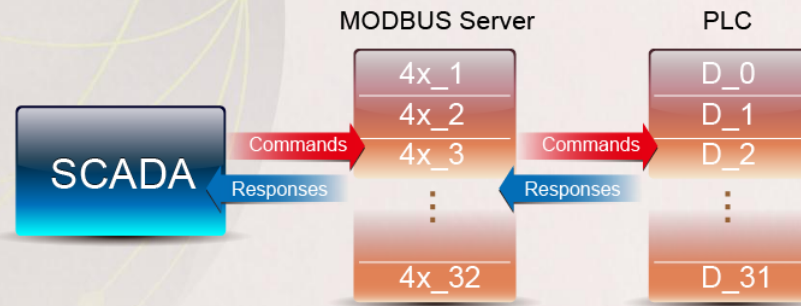
Step 2

Configure the Address Mapping Table. To read from or write in the data in the 16 consecutive registers starting at M-0 and the 32 consecutive registers starting at D-0 by using SCADA, respectively. The content of the [Address Mapping Table] is shown in the following figure:

Table	Description	MODBUS Address		PLC Name	Mapped PLC Address	Table Size	Read/Write
1	Read/Write M	0x-1	<==>	Mitsubishi FX2N	M-0	16 Bit(s)	Read/Write
2	Read/Write D	4x-1	<==>	Mitsubishi FX2N	D-0	32 Word(s)	Read/Write

The above figure shows that the MODBUS Server addresses started from 0x-1 to 0x-16 are mapped to the PLC addresses from M-0 to M-15; the MODBUS Server addresses started from 4x-1 to 4x-32 are mapped to the PLC addresses from D-0 to D-31.

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Then, the SCADA can use the MODBUS TCP/IP protocol to read from or write in the addresses started from 0x-1 to 0x-16 to directly control the addresses from M-0 to M-15. Similarly, sending the read / write command to the addresses started from 4x-1 to 4x-32 can directly control the addresses from D-0 to D-31.

Note the following two points when enabling the [MODBUS TCP/IP Gateway]:

- a. The original mapping between the MODBUS Server and the HMI address will be canceled, which includes:
 - i. 0x, 1x mapped to LB
 - ii. 3x, 4x mapped to RW or LW

Therefore, **to read data from the LB or the LW by using 0x, 1x, 3x, and 4x, the mapping must be defined in advance in the Address Mapping Table, as shown in the following figure.**

Table	Description	MODBUS Address		PLC Name	Mapped PLC Address	Table Size	Read/Write
1	0x <==> LB	0x-1	<==>	Local HMI	LB-0	12096 Bit(s)	Read/Write
2	1x <==> LB	1x-1	<==	Local HMI	LB-0	12096 Bit(s)	Read only
3	3x <==> LW	3x-1	<==	Local HMI	LW-0	9999 Word(s)	Read only
4	4x <==> LW	4x-1	<==>	Local HMI	LW-0	9999 Word(s)	Read/Write
5	3x <==> RW	3x-10000	<==	Local HMI	RW-0	55536 Word(s)	Read only
6	4x <==> RW	4x-10000	<==>	Local HMI	RW-0	55536 Word(s)	Read/Write

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- b. The SCADA cannot read from or write in the addresses defined in different Address Mapping Table at one time.

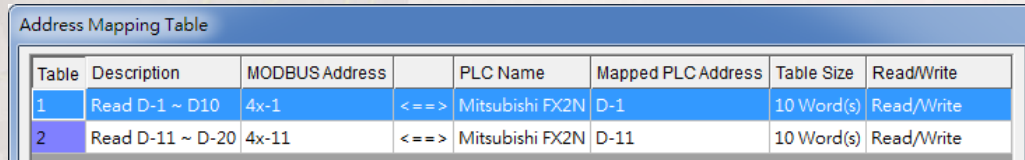
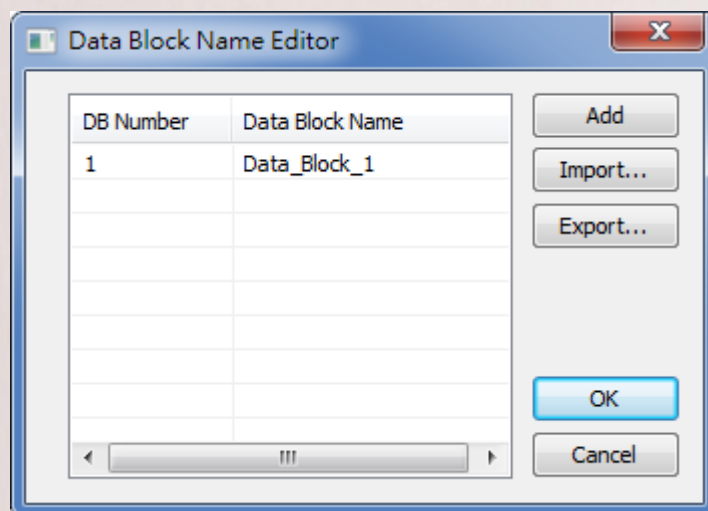


Table	Description	MODBUS Address		PLC Name	Mapped PLC Address	Table Size	Read/Write
1	Read D-1 ~ D10	4x-1	<==>	Mitsubishi FX2N	D-1	10 Word(s)	Read/Write
2	Read D-11 ~ D-20	4x-11	<==>	Mitsubishi FX2N	D-11	10 Word(s)	Read/Write

As shown in the above figure, the addresses started from 4x-1 to 4x-20 are separately defined in Table 1 and Table 2 (Divided into 4x-1 to 4x-10 and 4x-11 to 4x-20, respectively. The size for each table is 10 words).

If the SCADA sends a command to read the addresses from 4x-1, 20 words in total, since these addresses are defined in different Address Mapping Tables, the command will not be accepted. Thus, the Error Code 2 will be set to the LW-9288 register to remind the user that the reading address range is not in the range defined in Table 1.

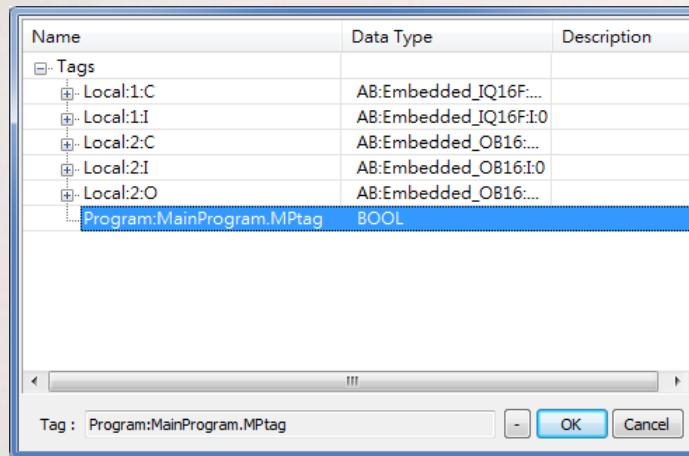
2. When importing the tags of Siemens S7-1200 (Ethernet) driver, the name of the Data Block can be entered manually or named as the exported file from the S7-1200. It is recommended to manually enter the name if your project file is integrated with the TIA Portal Step7 V11 or previous versions.



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- When importing the Free tags of Rockwell Free Tag Names driver, the Main Program Tags are automatically imported. It is not necessary to build the tags manually by using Structure Editor. For example, MPtag will be available to use in your project file after importing the Main Program.

TYPE	SCOPE	NAME	DESCRIPTION	DATATYPE	SPECIFIER
TAG	MainProgram	MPTag		BOOL	



- When failing to download the project file by using Utility Manager, the error message will be displayed due to the incorrect password or unconnected USB cable.

```
download eMT3000 SERIES data
connecting HMI and checking password
error : please check password
```

```
download eMT3000 SERIES data
connecting HMI and checking password
error : please check USB cable
```

- The Free Tag CSV file includes the language information exported from Rockwell RSLogix editor software. This CSV file can be imported by Rockwell Free Tag Names driver.
- The EDE file used by BACnet/IP driver can be imported.

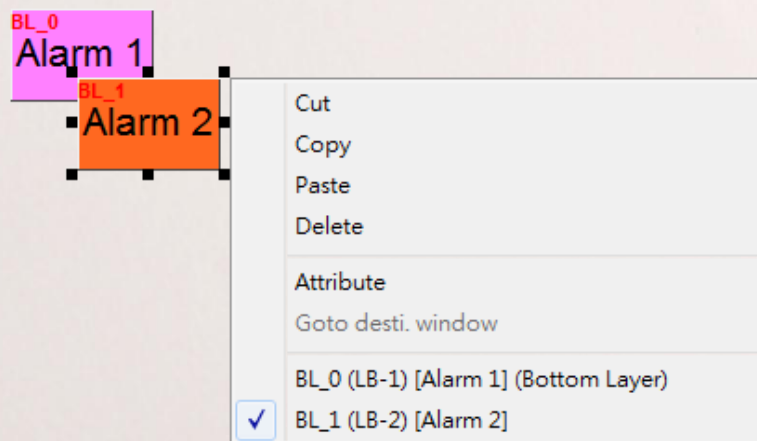
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7. After exporting the Event Log or the Label Tag Library to the EXCEL file, the first row of the table will show the description of each column.

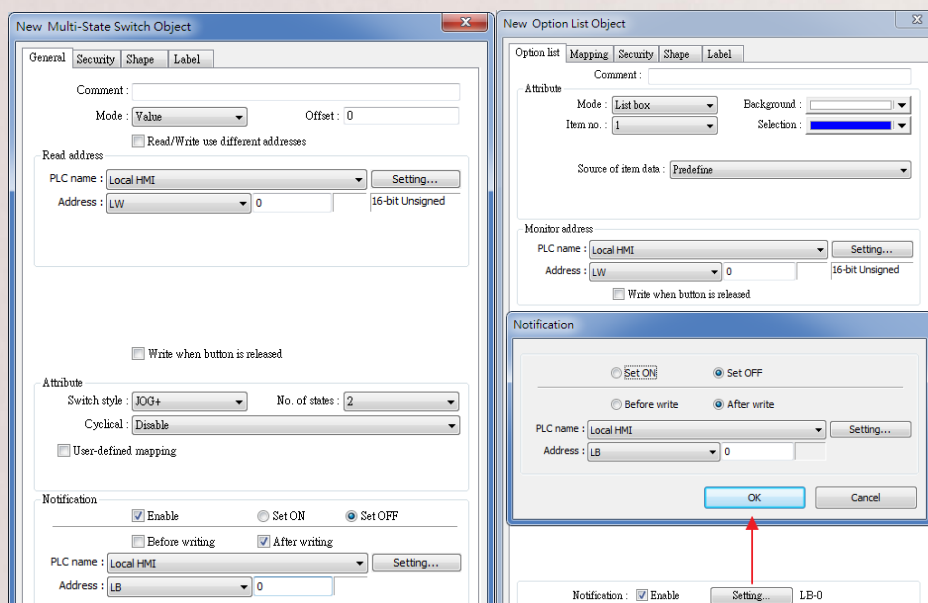
	A	B	C	D	E	F	G
1	Category	Priority	Address Type	PLC Name (Read)	Device Type (Read)	System Tag (Read)	User-defined Tag (Read)
2	0	Low	Bit	Local HMI	LB	False	False

	A	B	C	D	E
1	Label tag name	Language 1, State 0	Language 2, State 0	Language 3, State 0	Language 4, State 0
2	Label_0	Language1	Language2	Language3	Language4

8. When selecting an object and right-clicking the mouse button, the ID number, remark, and the displayed text of the object will be shown as below.

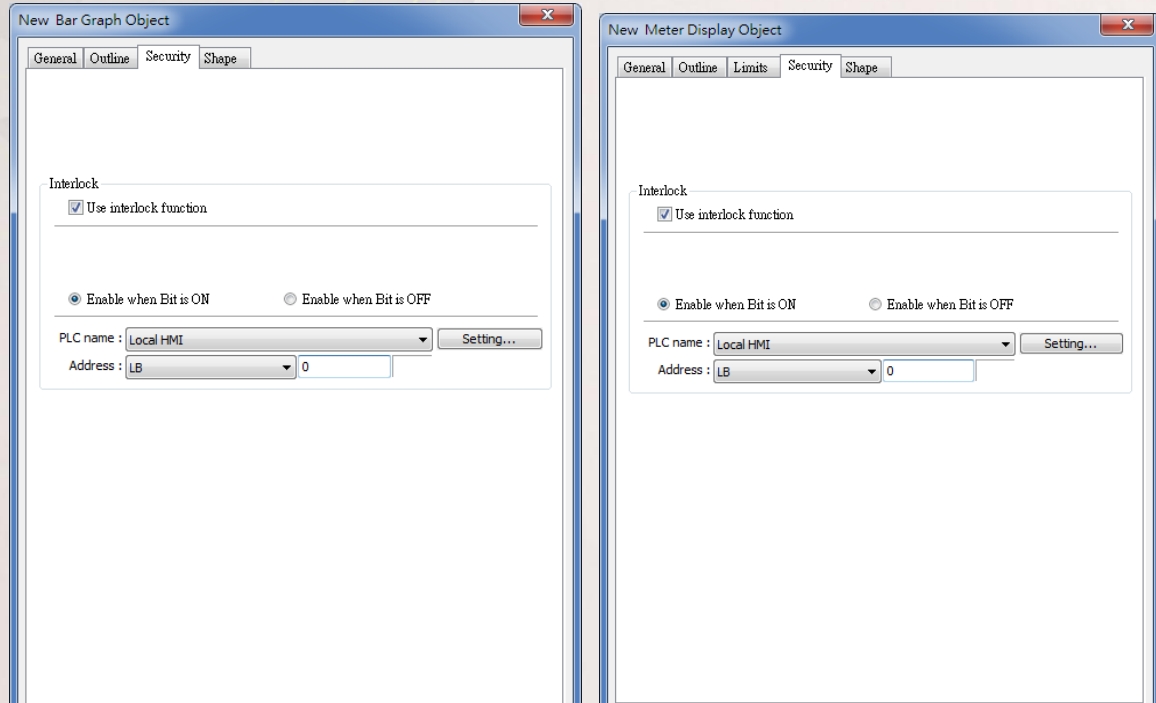


9. The [Notification] group box is added to the property setting of the Multi-State Switch object and the Option List object. The notification will be sent after successfully writing data to PLC.

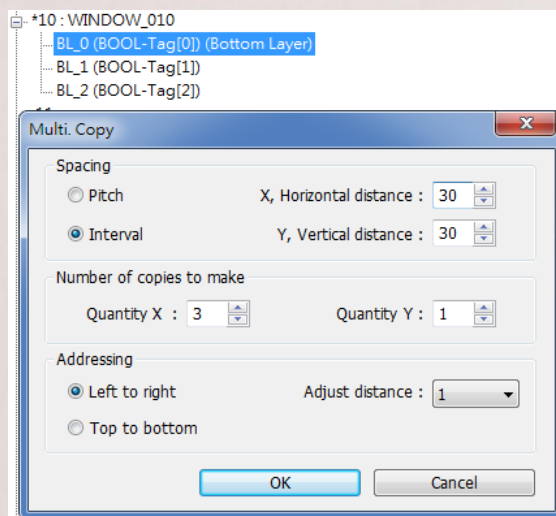


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10. The [Interlock] feature is added to the property setting of the Bar Graph object and the Meter Display object. This feature can be used to show or hide the object.



11. When using the [Multi. Copy] feature for duplicating an object with the array-based tag address, the index value of the array will be automatically incrementing or decrementing according to the setting. For example. The index value of the BOOL-Tag[0] address will be automatically incrementing according to the setting.



Release Notes

- 12.** The MT8000iE Series HMI can support the VNC connection. (OS version 20130719 or later versions)
- 13.** The system register LB-12089 is added to the eMT Series and the MT8000iE Series HMI for the password requirement for logging into VNC. When the state of this register is ON, the password is not required when logging into VNC. After setting the LB-12089 register, please restart the VNC Server to update the setting. The LB-12092 can be used to restart the VNC Server.
- 14.** To view the history record of the current date by using the Event Display object, Trend Display object (both in history mode) or the History Data Display object, the display record will be automatically updated every 10 seconds.

Release Notes

Corrections

1. Fixed bug where the contents of the Fast Selection Window and the System Setting Toolbar would not correctly display when using Screen Capture function.
2. Fixed bug where all the line numbers "LN" of the Macro TRACE function would display 0 in EasyDiagnoser.
3. Fixed bug where the Macros would not support the **BACnet/IP** driver.
4. Fixed bug where the data in the PLC registers would not be modified when using the Run Mode on PLC in the **OMRON C/CQM1 Series** driver.
5. Fixed problem where the **SIEMENS S7-200 PPI** driver would not recover from the interruption.

Release Notes

Drivers Additions

1. The MT8000iE Series can support **Mitsubishi Q00UJ/QnU/QnUD/QnUDH/QnUDEH/L (mini USB)** drivers.
2. The **YASKAWA MP Series SIO (Extension)** driver is added.
3. The **Siemens SMART PPI** driver can support the interconnection to the multiple HMIs.
4. The **Rockwell DF1** device type **STfn** is added.