

Software Version : EasyBuilder Pro V4.10.04

New Features

1. Added Combo Button object to HMI models: iE, eMT, and XE.
2. Added USB Camera support for HMI models: XE. Supported by OS Ver. 20140624 or later.
3. Added new Macro function: Buzzer(). Supported by OS Ver. 20140618 or later.
Buzzer(on_off): When on_off \neq 0, enable buzzer; when on_off=0, disable buzzer.
4. Increased the refresh rate of history data objects to once per second.
5. Increased the downloadable languages to 24 languages.
6. Added new Modbus Server setting. The maximum address range read/written by Modbus Client can be set.

Limit LW maximum read/write address

Max. LW address (0~9999) :

7. Added classifications of system registers. As shown in the following figure, the system registers are classified according to their types.

The screenshot shows the 'Address Tag Library' dialog box with the 'System tags' radio button selected and the 'Classification' checkbox checked. The table below lists 16 system tags, each with a plus sign icon to its left, indicating they are expandable.

Address tag name	PLC name	Adresse...
+ 01. HMI Time		
+ 02. HMI Operation		
+ 03. Touch Position		
+ 04. Local HMI Network Information		
+ 05. Project File Information		
+ 06. Storage Space Management		
+ 07. Recipe and Extended Memory		
+ 08. Data Sampling		
+ 09. Event Log		
+ 10. Station Number Variables		
+ 11. Index Registers		
+ 12. MODBUS Server Communication		
+ 13. Communication Parameter Settings		
+ 14. Communication Status and Control with PLC (COM)		
+ 15. Communication Status and Control with PLC (Ethernet)		
+ 16. Communication Status and Control with PLC (USB)		

In EasyBuilder Pro installation directory, a new file "system_tag.xml" can be found. By modifying the content of this file, the user may customize the classification of system registers, and the classification method is adopted when selecting an address for an object.

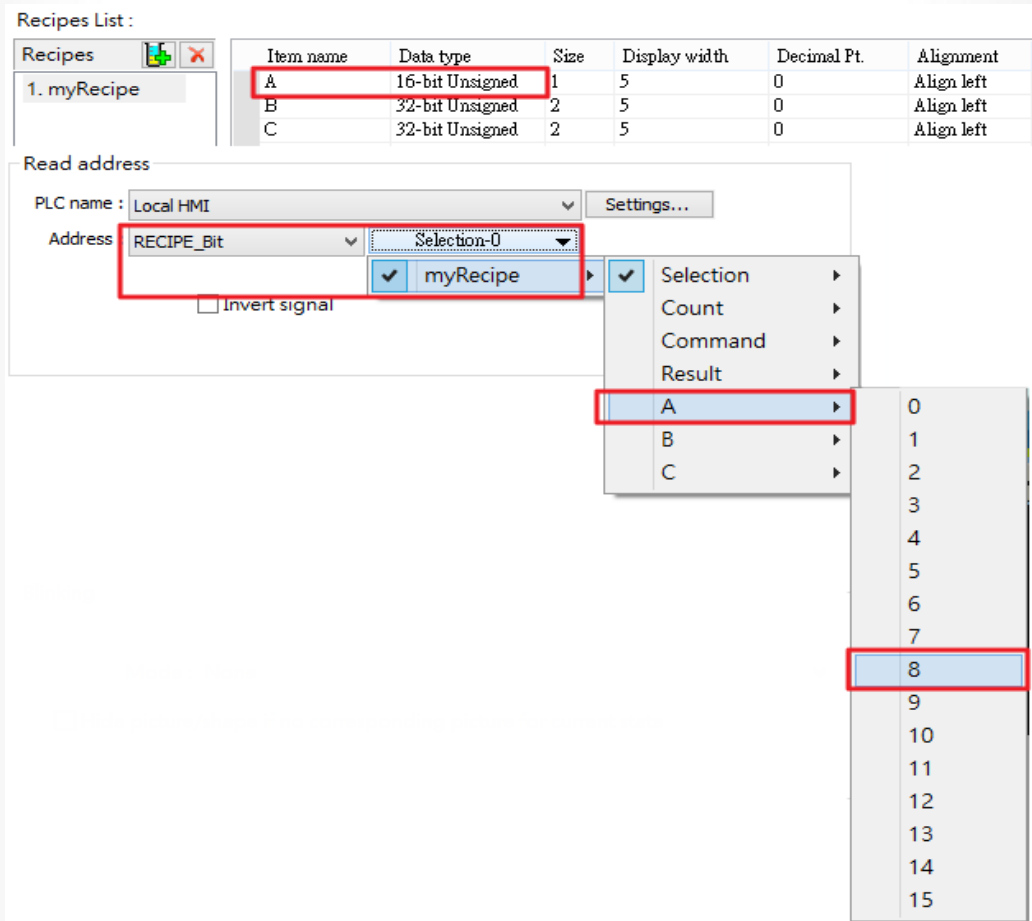
8. Added new system registers:

- [LW-12051: buzzer status (active when ON)]
- [LW-11160: (16bits): start time of USB security key - year]
- [LW-11161: (16bits): start time of USB security key - month]
- [LW-11162: (16bits): start time of USB security key - day]
- [LW-11163: (16bits): start time of USB security key - hour]
- [LW-11164: (16bits): start time of USB security key - minute]
- [LW-11165: (16bits): expiration time of USB security key - year]
- [LW-11166: (16bits): expiration time of USB security key - month]
- [LW-11167: (16bits): expiration time of USB security key - day]
- [LW-11168: (16bits): expiration time of USB security key - hour]
- [LW-11169: (16bits): expiration time of USB security key - minute]

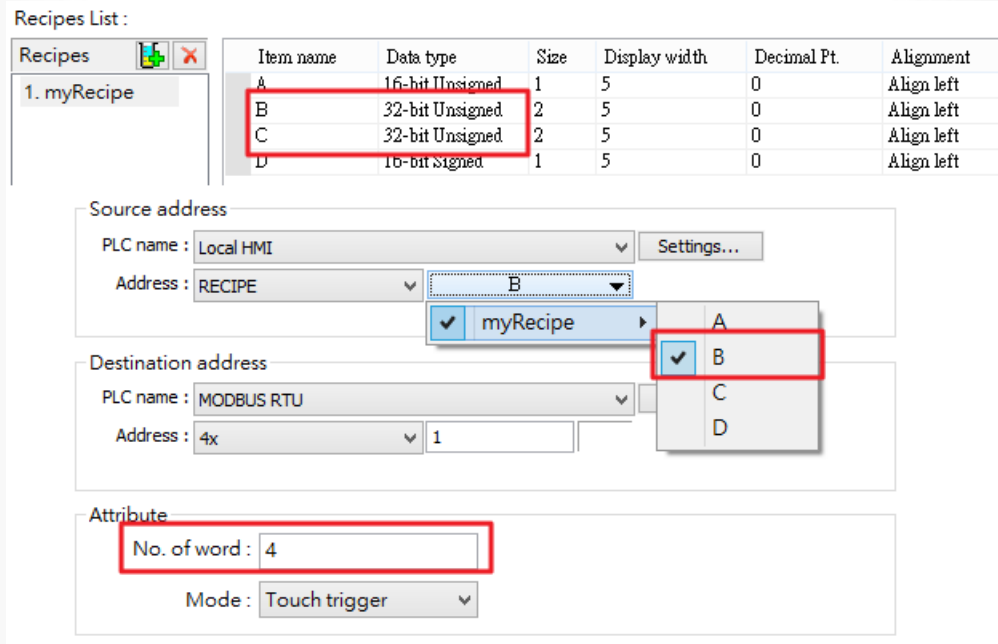
9. Added the following features in Event Log:

- a.** [Delay time for event monitoring when HMI resets] (1~120 seconds): This feature is used to set the delay time of Event Log after HMI resets, in order to avoid false alarm that occurs upon HMI reboot due to uninitialized values. This feature is often used with [Dynamic condition value].
- b.** [Dynamic condition value]: allows online change of the comparison value for trigger condition when the condition is a Word address type.

10. Added Picture View object. This object can be used to view the picture files in an external device (USB drive or SD card) online.
11. Added bit read / write feature to Recipe Database. Select [RECIPE_Bit] for the read address of the Bit object, and point to the target recipe item, the available Bit selections will be displayed.

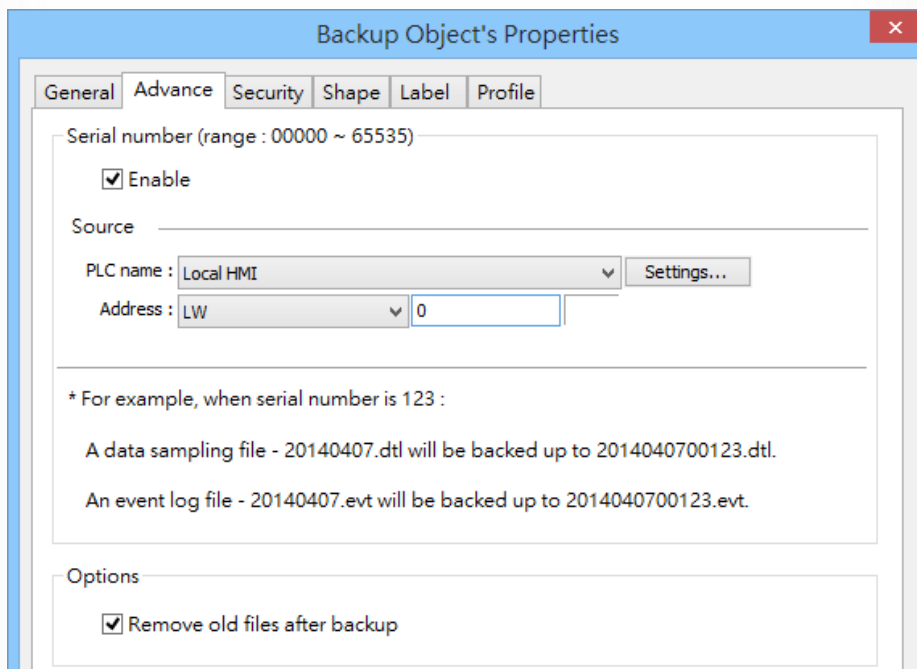


12. When using Data Transfer object, the start item from which to transfer and the length of data to be transferred can be set. As shown in the following figure, B and C (4 words in total) are transferred each time.

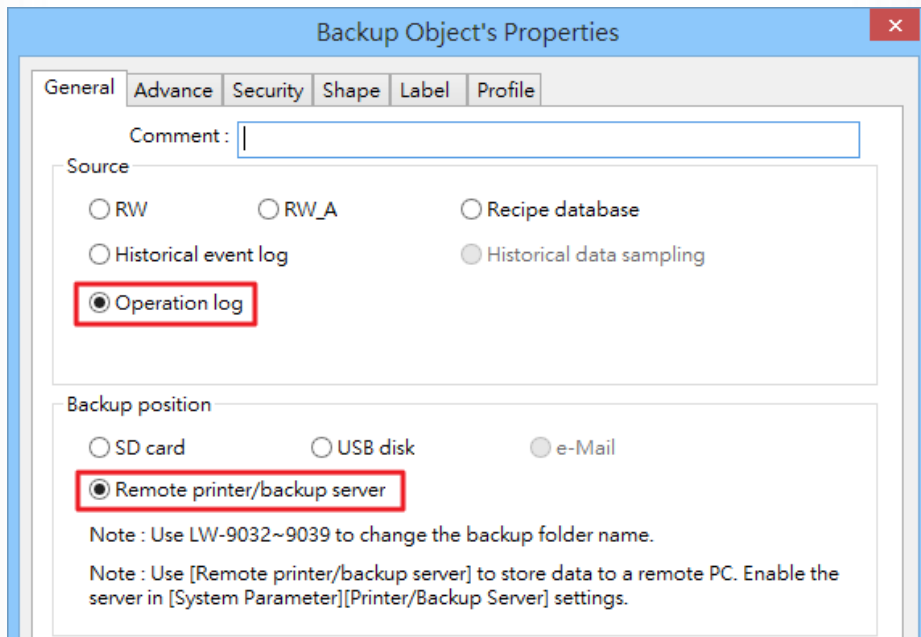


13. Added the following features in Backup object:

- a. A serial number can be appended to the end of the file name of the history data backup.
- b. The old history files can be removed after backup.



- c. Remote printer/backup server can be set as the backup position for Operation Log.



Backup Object's Properties

General Advance Security Shape Label Profile

Comment:

Source

RW RW_A Recipe database

Historical event log Historical data sampling

Operation log

Backup position

SD card USB disk e-Mail

Remote printer/backup server

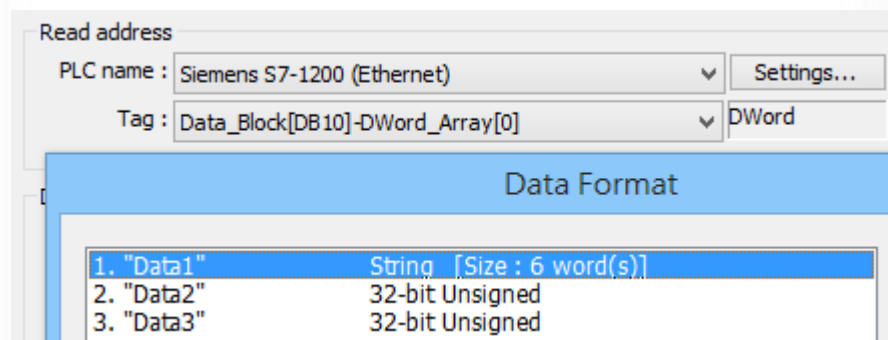
Note : Use LW-9032~9039 to change the backup folder name.

Note : Use [Remote printer/backup server] to store data to a remote PC. Enable the server in [System Parameter][Printer/Backup Server] settings.

Corrections

1. Fixed the problem where Bit address tags in the Excel file cannot be imported to Address Tag Library.
2. Fixed the problem where Printer/Backup Server of EasyPrinter may not work properly when executing Backup object.
3. Fixed the problem where certain Siemens S7-1200 tag information cannot be read successfully.
4. Fixed the problem where Macro security control may fail due to the change of user-defined tag names.
5. Fixed the problem where S7-1200 tag information cannot be collected via VPN.
6. Fixed the problem where the tags of Rockwell - Free Tags driver cannot be selected.
7. Fixed the problem where the data sampling steps following a String data failed when an Array tag was selected as the read address of a Data Sampling object.

As shown in the following figure, since "Data 1" is a String, Data Sampling could only record "Data 1" before this release.



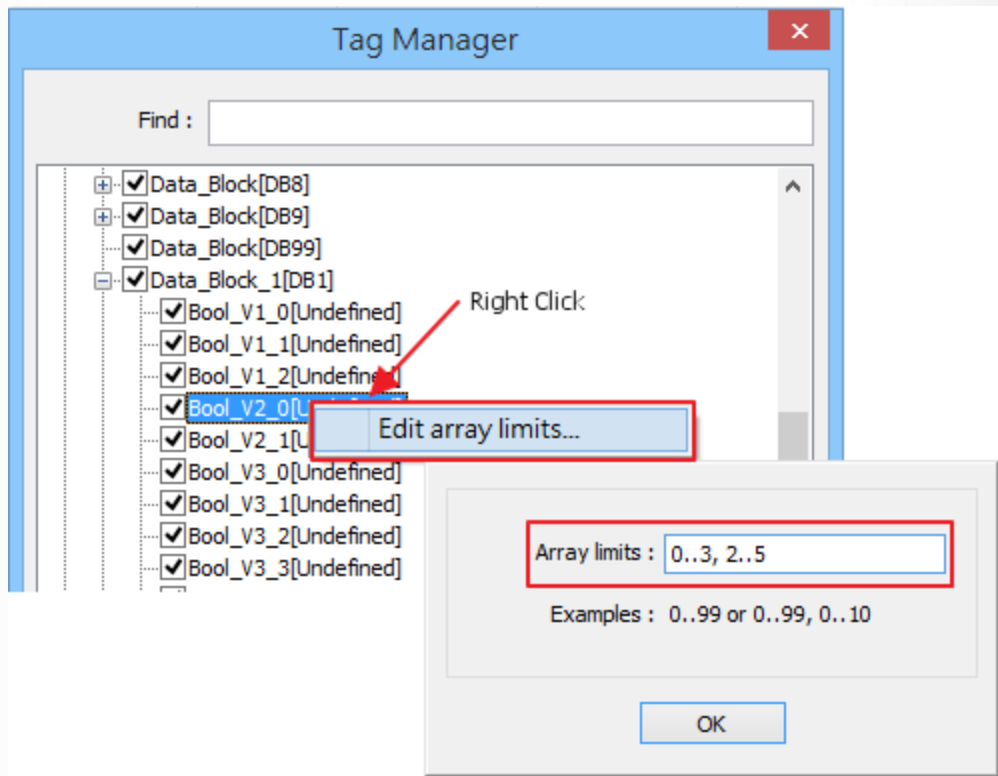
- 8.** The following fixes are related to VNC:
 - a.** Fixed the problem where HMI cannot work properly due to frequent connections/disconnections.
 - b.** Fixed the problem where HMI cannot work properly due to CPU overload when using VNC.
- 9.** Fixed the problem where the Macro function, GetError(), may get incorrect error code during execution.
- 10.** Fixed the problem where history data cannot be deleted when using the control address of an Option List object due to one of the following reasons:
 - a.** The file name prefix is used in Data Sampling
 - b.** The data format is not YYYY/MM/DD
- 11.** Fixed the problem where Event Display object cannot automatically update when the data sampling file is newly created.
- 12.** Fixed the problem where Word Lamp shows incorrect state when offset is a negative value.

Drivers

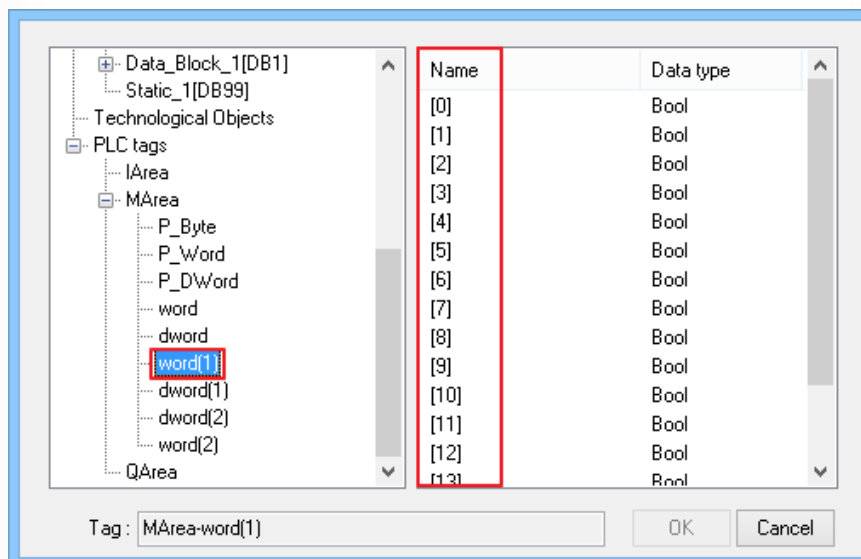
1. Siemens S7-1200 driver supports:

- a. Two-Dimensional and Three-Dimensional arrays.

When importing the tags, right click on the address and define the range.



- b. I, Q, and M devices types that allow binary data such as byte, word, and double word.



2. **KEYENCE KV-3000** driver is added. The driver supports Pass-Through feature.
3. **Rockwell Micro850 (Ethernet) - Free Tag Names** driver is added.
4. Improved the communication speed of **SIEMENS S7-200** and **SIEMENS S7-200 PPI** drivers.
5. **MODBUS RTU** driver:
 - a. The following device types are added: 3x_MAX1W, 3x_MAX2W, 4x_MAX1W, 4x_MAX2W. The MAX1W device type reads one word per packet whereas MAX2W device type reads two words per packet.
 - b. Supports the communication between HMI and PLC under Pass-Through mode.
 - c. In the data replied from PLC to HMI, if the station number does not match the one in the command sent from HMI, the reply will not be accepted.

6. **MODBUS Server** driver supports error codes as follows:

Error Code	Definition	Condition
01	Incorrect function code	The function code is not supported.
02	Incorrect read address	The read address is not within the range.
03	Incorrect data	The data read is incorrect, for example, the data length is 0.

7. The **motrona CT-150** device types are added:
 - a. 32 bit address: An_32Bit, Bn_32Bit, Cn_32Bit
 - b. Parameter address: ERR_CNT, LV_VAL, PRTMARK_ERR, BAT_CNT, WASTE_CNT, LINE_SPD, ACT_CUT_LEN, ACT_CUT_ERR_M, ACT_CUT_ERR_L
8. **Siemens TI505 (Ethernet)** device type VD is added for reading/writing 32 bit data of V register.

9. In **OMRON CP/CS/CP** and **OMRON CJ/CS/CP (Ethernet –FINS/TCP)** drivers, the W_Bit command is changed to Set Bit command instead of Force Bit command.
10. Fixed the communication issue of **OMRON EtherNet/IP (NJ Series)** driver.