

Software Version : EasyBuilder Pro V5.00.01

New Features

EasyBuilder Pro

1. Added “Label position tracking” setting in Tools Toolbar. The setting can enable or disable tracking feature of an object’s label.



Corrections

EasyBuilder Pro

1. Fixed the problem where the address grid disappears when changing the size of EasyBuilder Pro editing window.
2. Fixed the problem where macro function FLOAT2ASCII may do incorrect conversion.
3. Fixed the problem where the text cannot be displayed when [Convert labels to bitmap images (Use bitmap font)] check box is selected in Combo Button object settings dialog box.
4. Fixed the problem where the channels are displayed in wrong color when [Use title] is not selected in History Data Display object settings dialog box.
5. Fixed the problem where the address tags with [Conversion (Use macro)] feature enabled cannot be correctly imported.
6. Fixed the problem where historical data backup may fail if serial number is enabled in Backup object settings dialog box.
7. Fixed the problem where wait_time is misread as array size in INPORT2 macro function.

8. Fixed the problem where VNC server will be closed when eMT/iE/XE models that use [VNC Multi connection] are repeatedly connected and disconnected.
9. Fixed the problem where the periodically executed macro may stop running after continuously run for several weeks.

Drivers

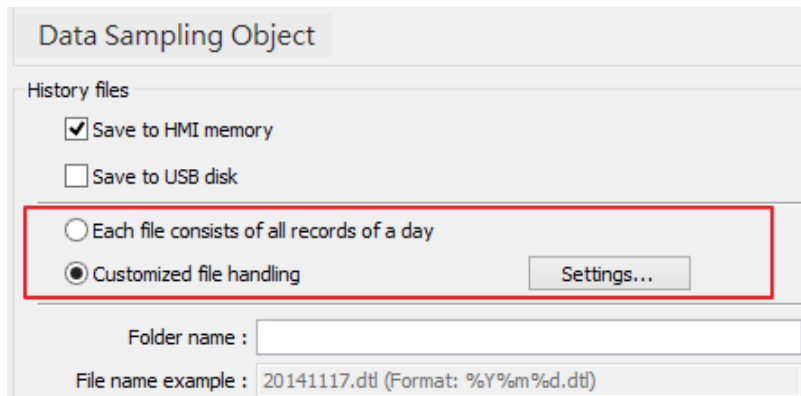
1. **Modbus RTU** driver device types 0x_single_bit and 1x_single_bit are added.
2. Added support for multiple CPU connection for **Rockwell EtherNet/IP (ControlLogix) - Free Tag Name** driver.
3. Fixed the problem where communication with **Siemens S7-1200** Firmware V3 and previous versions fails.
4. Fixed the problem where **PATLITE** driver cannot write to a bit register in Off-line simulation mode.
5. Fixed the problem where 32-bit data is incorrectly displayed when using cMT-SVR and **Siemens T1505** driver.
6. Fixed the problem where the existing tag in Address Tag Library may be erased when importing *.scl file in **Siemens S7-1500** driver.
7. Improve the interference resistance of **Mitsubishi Q00/Q00UJ/Q01/QJ71** driver. Fixed the problem where it will take a while to connect to the device after powered on, or it will lose connection occasionally if there exists signal interference.

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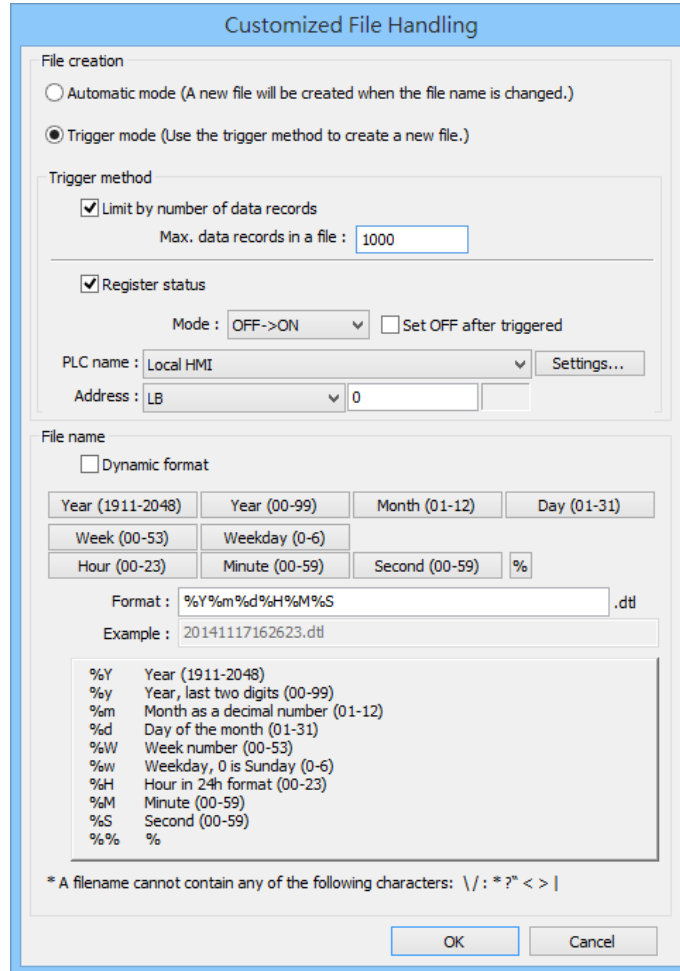
New Features

EasyBuilder Pro

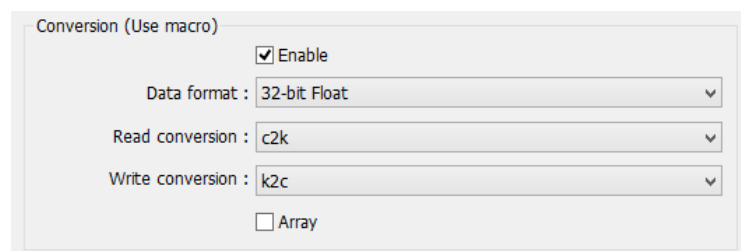
1. Added "Customized File Handling" setting in Data Sampling settings dialog box. This feature can be used to customize naming and management of data sampling files. This feature provides the following two ways to manage the files:
 - Automatic mode: A new file will be created when the file name is changed. This mode is suitable for file management by a fixed time interval.
 - Trigger mode: A new file will be created when the number of data sampling records reaches the specified "Max. data records in a file", or when the status of a designated Bit address meets the specified condition. This mode allows more flexibility in file management.



The screenshot shows the 'Data Sampling Object' settings dialog box. It has a title bar 'Data Sampling Object' and a section 'History files'. Under 'History files', there are two checkboxes: 'Save to HMI memory' (checked) and 'Save to USB disk' (unchecked). Below these, there are two radio button options: 'Each file consists of all records of a day' (unselected) and 'Customized file handling' (selected). A red rectangular box highlights the 'Customized file handling' radio button and the 'Settings...' button next to it. At the bottom, there is a 'Folder name' text box and a 'File name example' text box containing '20141117.dtl (Format: %Y%m%d.dtl)'.



2. Added “Conversion (Use macro)” feature for setting address tags. The address tags with this feature enabled will automatically do data conversion.



The following lists the objects that support “Conversion (Use macro)” address tags:

Word Lamp, Multi-State Switch, Animation, Moving Shape, Option List

Indirect Window, Numeric, Combo Button, Meter Display, Bar Graph, Slider

3. Added array bound checking feature in macro.

- a.** As shown in the following example, when the array index is invalid, an error message will be reported during macro compilation.

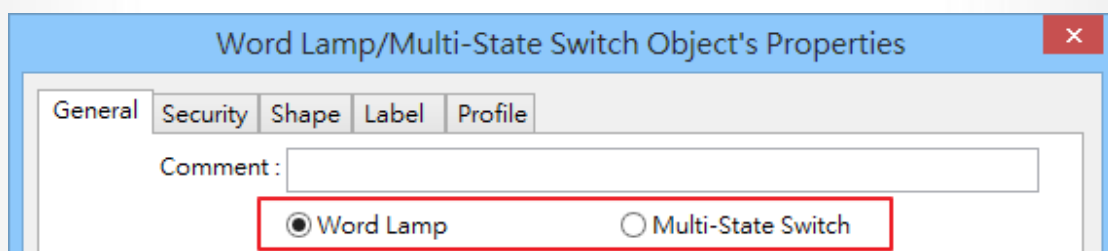
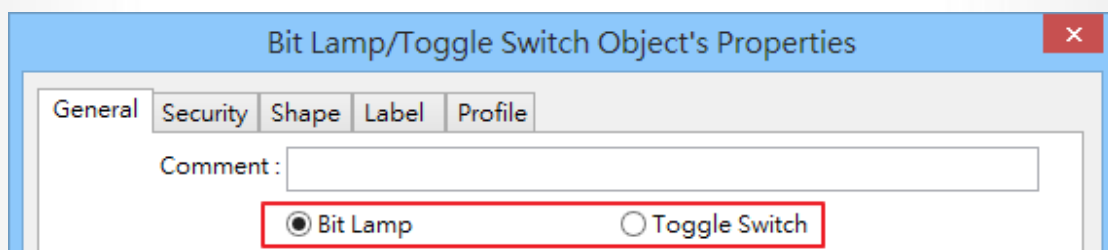
```
macro_command main()  
  
short a[10]  
  
a[20] = 1 //invalid array index  
  
end macro_command
```

```
error C70 : exceeds array size.  
-1 error(s)
```

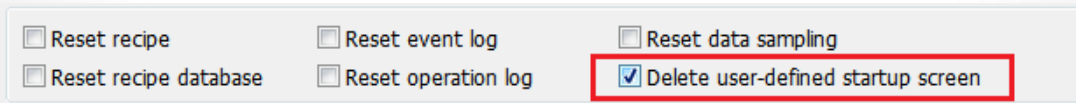
- b.** When running GetData() and SetData() functions to read or write an array, if the array size exceeds the declared range, the system will automatically change it to a valid size.
- c.** If the array index exceeds the valid range, macro will stop running in order to prevent incorrect result. When this occurs, the status of the stopped macro indicated in LW10900 to LW-11154 registers will be set to 32.

```
LW-10900 (16bit) : macro 0 status (0:ready, 3:executing, 5:waiting response, 9:waiting sync, 17:delay, 32:abnormal end (exceed array size))  
LW-10901 (16bit) : macro 1 status (0:ready, 3:executing, 5:waiting response, 9:waiting sync, 17:delay, 32:abnormal end (exceed array size))  
LW-10902 (16bit) : macro 2 status (0:ready, 3:executing, 5:waiting response, 9:waiting sync, 17:delay, 32:abnormal end (exceed array size))  
LW-10903 (16bit) : macro 3 status (0:ready, 3:executing, 5:waiting response, 9:waiting sync, 17:delay, 32:abnormal end (exceed array size))
```

4. Combined Set Bit object with Toggle Switch object, and Set Word object with Multi-State Switch object. The change setting is located in the object settings dialog box.

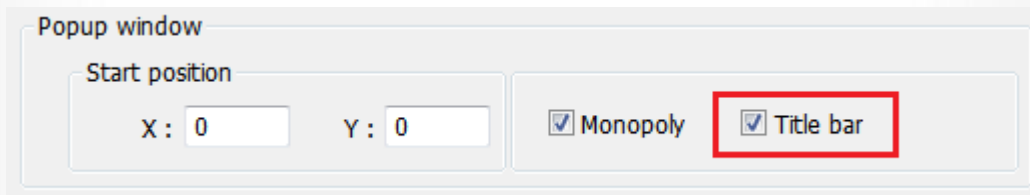


5. Added “Delete user-defined startup screen” setting in the Download dialog box.



Reset recipe Reset event log Reset data sampling
 Reset recipe database Reset operation log Delete user-defined startup screen

6. Added [Title bar] check box for setting whether to show a title bar on a system message window. (Window no. 5 to no. 8)



Popup window

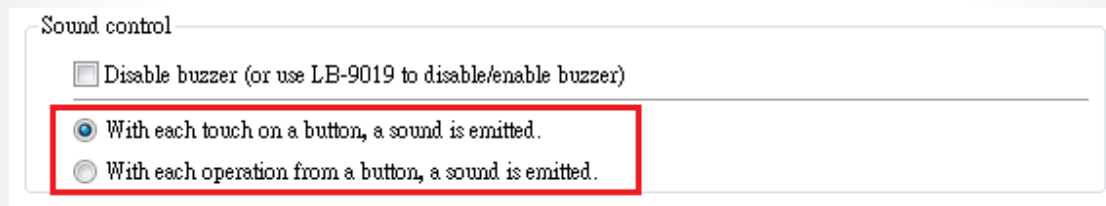
Start position

X : 0 Y : 0

Monopoly Title bar

7. Added the following two options in System Parameter Settings sound control:
- With each touch on a button, a sound is emitted.
 - With each operation from a button, a sound is emitted.

When the [Min. press time] is specified, there may be a time gap between touching the object and the action of the object. This setting can control the timing to emit a sound.

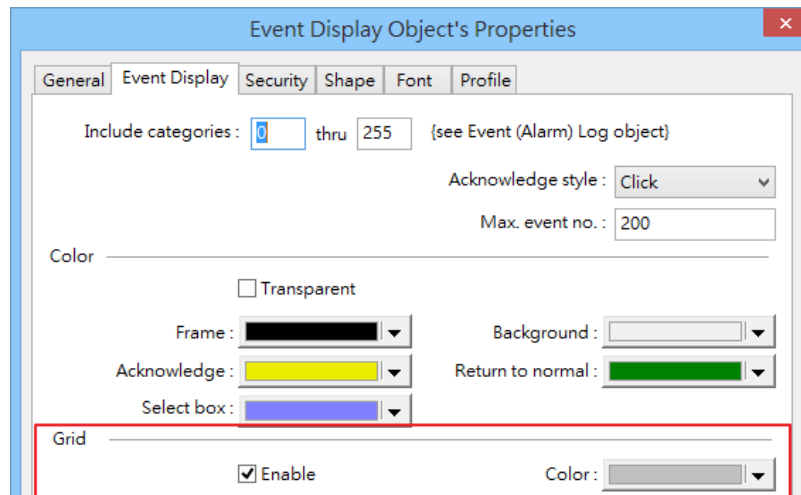


Sound control

Disable buzzer (or use LB-9019 to disable/enable buzzer)

With each touch on a button, a sound is emitted.
 With each operation from a button, a sound is emitted.

8. Added grid attribute setting to Event Display and Alarm Display objects.

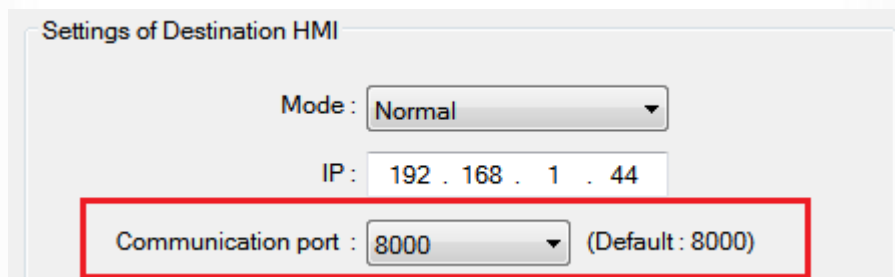


9. Macro names can be passed to SYNC_TRIG_MACRO() and ASYNC_TRIG_MACRO() as arguments, as shown in the following example.

```
ASYNC_TRIG_MACRO ("macro_1")
```

Pass-through

1. Added "Communication port" setting in the Ethernet settings dialog box.



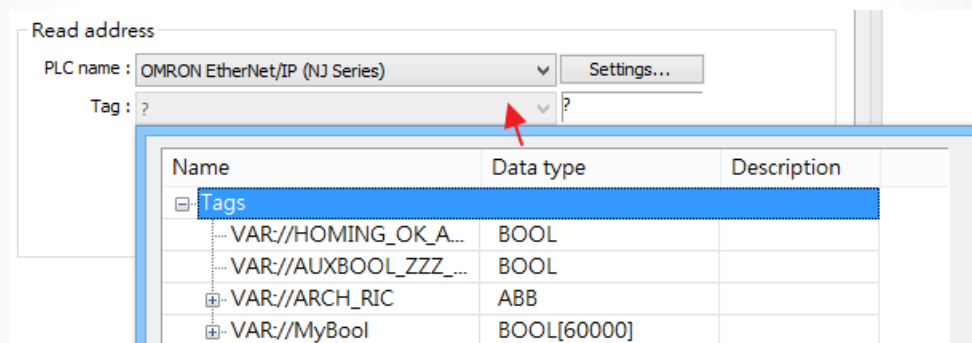
2. Added COM2 setting for iE Series models.

Corrections

EasyBuilder Pro

1. Fixed the problem where the addresses of Siemens S7-1500 PLC tags may be incorrect after import.
2. Fixed the problem where interlaced PNG graphics cannot be correctly displayed.
3. Fixed the problem where displaying larger array can make opening tag address selection window sluggish.

As shown in the following figure, VAR: //MyBool is a larger array, which slows the opening the Tags window. This release corrected this problem.



4. Fixed the problem where the sound output does not work properly when connecting HMI with an Ethernet PLC but the Ethernet cable is not connected.
5. Fixed the problem where Macro Function Library cannot be exported into a folder with a non-ASCII name.
6. Fixed the problem where the tags after an empty string in the Excel file cannot be imported into the Address Tag Library.
7. Fixed the problem where in a Meter Display object in the project editing window, the position of the digits does not match the tick mark.
8. Fixed the problem where an Indirect Window cannot be displayed in the correct position in another Indirect Window.

9. Fixed the problem where barcode device cannot be used when using Siemens S7-300 MPI driver.
10. Fixed the problem where the data in Struct may be incorrectly combined into the same DB item when importing Siemens S7-1200 address tags.
11. Fixed the problem where Data Transfer object cannot use broadcast addresses.

EasyConverter

1. Fixed the problem where EasyConverter may crash when backup is triggered with the EXCEL file open. This may happen if “convert2csv.def” is selected when using Backup object to back up the historical data into a remote server.

Pass-through

1. Fixed the problem where the register: [LW-9902: Pass-through destination COM port] cannot be correctly set in Pass-through mode.

Drivers

1. **Bosch Rexroth** driver is added.
2. **Rockwell Micro850 (Ethernet) – Free Tag Name** driver is added.
3. **ABB TOTALFLOW FCU** driver is added.
4. **Mitsubishi Q** series driver device types ZR_Bit and ZR_Dec_Bit are added.
5. Extended the range of **Trio MODBUS RTU, TCP/IP** device type VR to 4096.
6. Fixed the problem where the slave HMI cannot communicate with PLC in **Modbus RTU** master-slave mode.
7. Fixed the problem where **Koyo Click** device type TXT with address over 500 cannot be used.
8. Fixed the problem where **Rockwell CompactLogix - Free Tag Names** Bit registers cannot work properly.
9. Fixed the problem where the communication may fail when the IP address of TwinCAT PLC does not match that of AMS NetID.
10. Fixed read and write error of **Beckhoff Twincat 3 ADS/AMS (Ethernet)** driver.
11. Fixed the problem where **S7-200 SMART PPI** device types T, C, Timer, and Counter cannot communicate correctly.
12. Fixed the problem where **Rockwell EtherNet/IP (CompactLogix) – Free Tag Names** and **Rockwell EtherNet/IP (ControlLogix) – Free Tag Names** cannot communicate with String tags correctly.
13. Added automatic scan for BACnet/IP communication parameters, and support for BACnet router communication.