

Release Notes

EasyBuilder Pro V4.10.01 Build 2014.1.29

New Features

1. Added [Scroll bar] feature in [System Parameter Settings] » [Model] tab. This feature can be applied to objects that allow vertical scroll bar such as Alarm Display, Event Display, History Data Display, and Option List.



Scroll bar

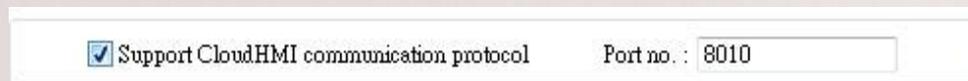
Default

Width : Small Middle Large

The styles are shown in the following figures:

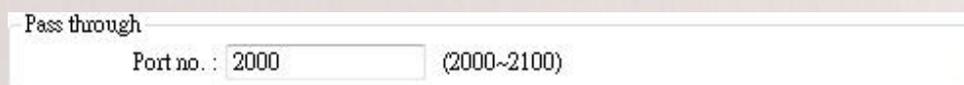


2. By selecting [Support CloudHMI communication protocol] checkbox in [System Parameter Settings] » [Model] tab, the eMT, iE, XE, mTV-100 Series models can be connected with cMT-SVR.



Support CloudHMI communication protocol Port no. : 8010

3. The Pass-through port number can be specified in [System Parameter Settings] » [Model] tab.

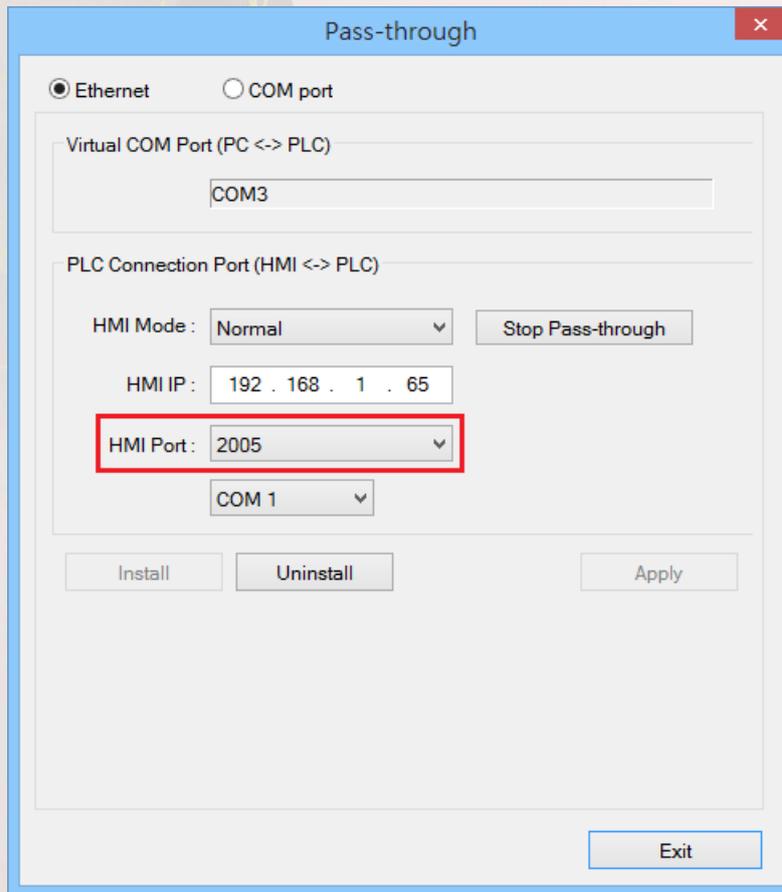


Pass through

Port no. : 2000 (2000~2100)

If the port number is changed, to run Pass-through mode, please change the [HMI Port] in Utility Manager Pass-through setting accordingly.

Release Notes



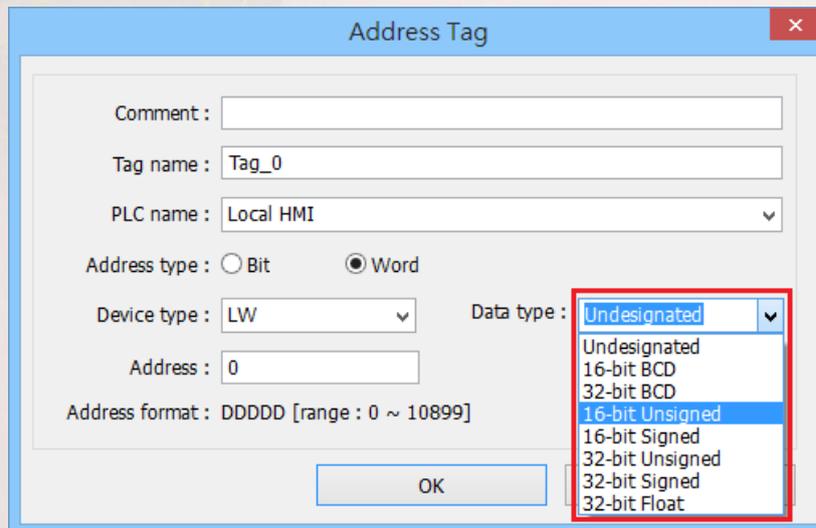
4. The HMI connected via VNC server can be restricted to monitor-only by selecting the [Monitor mode] checkbox in [System Parameter Settings] » [System Setting] tab.



5. Added new system registers:
- [LB-12050: SD card status (exists when ON)]
 - [LB-12088: enable VNC monitor mode (when ON)]: Use LB-12092 to restart VNC Server to update a new setting.
 - [LW-10804 to LW-10807: HMI ethernet domain name system (DNS) server IP]: Supported by OS 20131106 or later versions.
 - [LW-10812: obtain an IP address automatically (DHCP => 0 : off, 1 : on)]

Release Notes

- The [Data type] can be specified when creating an address tag and select [Word] in [Address type]. If the [Data type] is specified, when using this tag, the system will automatically restrict the data format to the selected one.

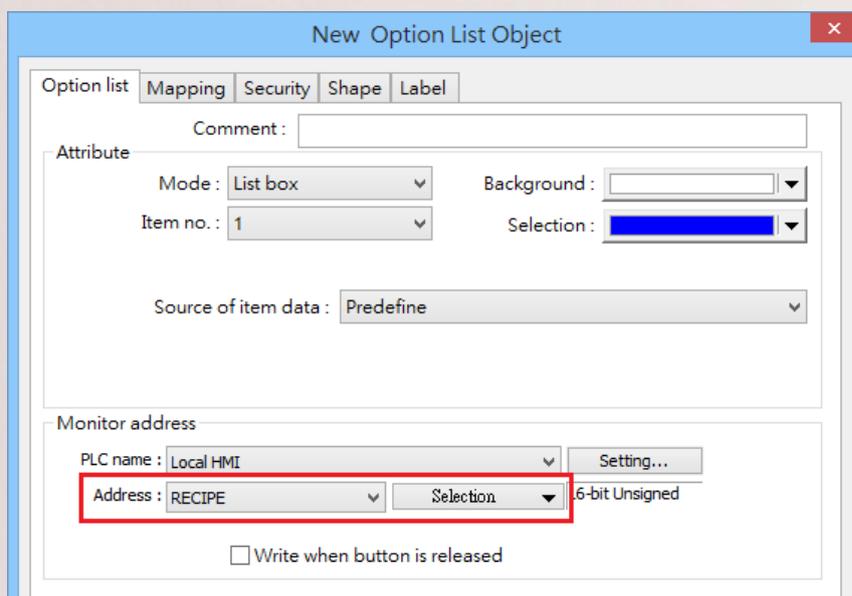


The screenshot shows the 'Address Tag' dialog box with the following fields and settings:

- Comment: [Empty]
- Tag name: Tag_0
- PLC name: Local HMI
- Address type: Word
- Device type: LW
- Data type: Undesignated (dropdown menu is open, showing options: Undesignated, 16-bit BCD, 32-bit BCD, 16-bit Unsigned, 16-bit Signed, 32-bit Unsigned, 32-bit Signed, 32-bit Float)
- Address: 0
- Address format: DDDDD [range : 0 ~ 10899]
- OK button

- The eMT3070A supports Video In (USB Camera) function. The difference from the previous Video In function is that the brightness and contrast ratio cannot be adjusted.
- The item data of Recipe Records can be imported to Option List object.

Step 1. Create an Option List object and select [RECIPE] and [Selection].

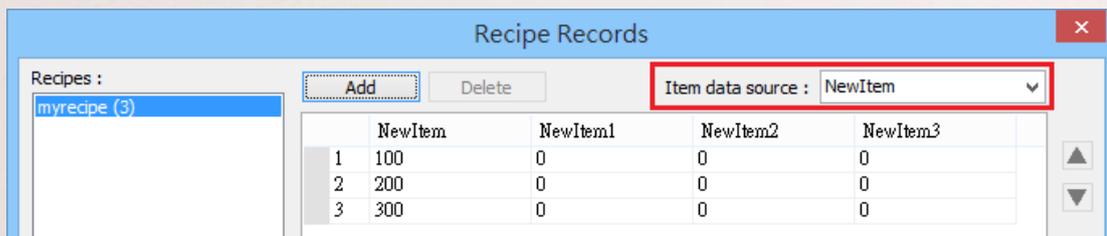
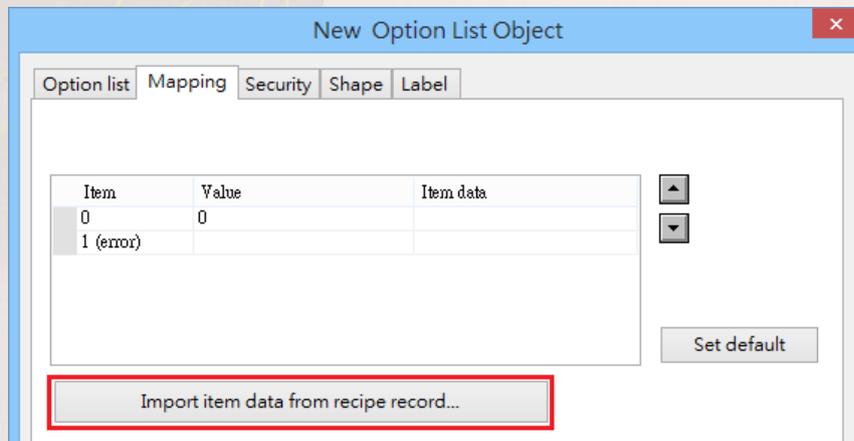


The screenshot shows the 'New Option List Object' dialog box with the following fields and settings:

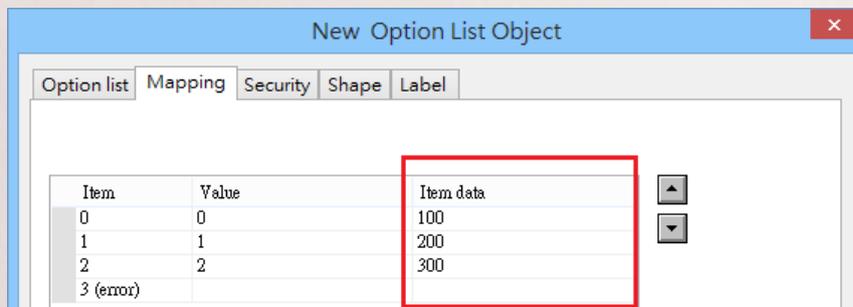
- Option list: Mapping, Security, Shape, Label
- Attribute:
 - Mode: List box
 - Background: [Empty]
 - Item no.: 1
 - Selection: [Blue bar]
 - Source of item data: Predefine
- Monitor address:
 - PLC name: Local HMI
 - Address: RECIPE
 - Selection: Selection
 - 16-bit Unsigned
- Write when button is released

Release Notes

- Step 2.** On Mapping tab, select [Import item data from recipe record] and choose the item data source.

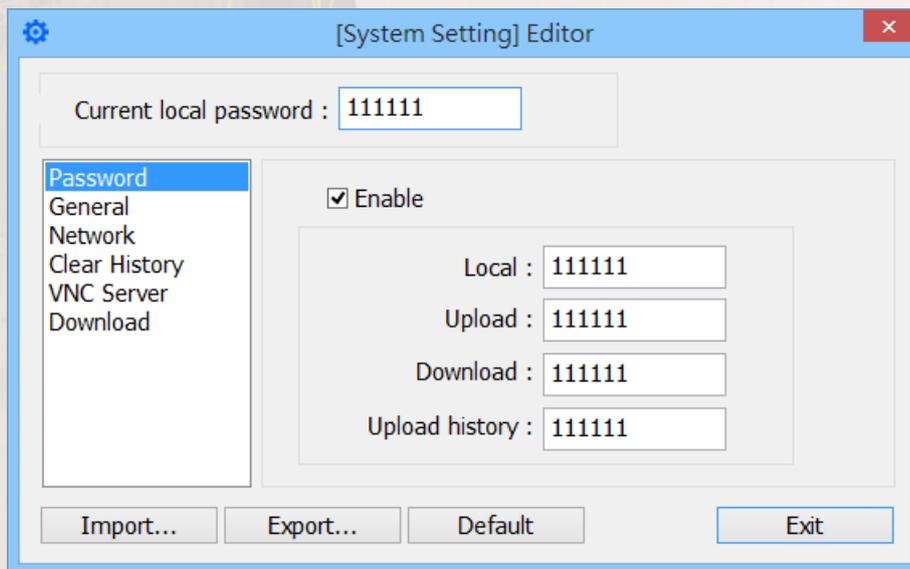


- Step 3.** The items are imported to Option List object.

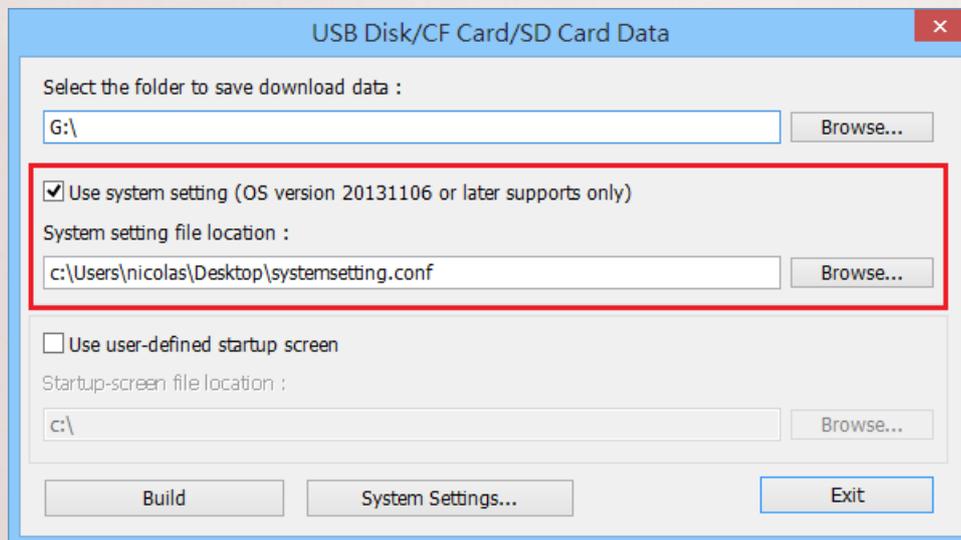


- 9.** System Setting Editor allows exporting the configured HMI system settings as "systemsetting.conf" file. The file can be downloaded to HMI by using SD card or USB disk. The feature is available for HMI OS version 20131106 or later versions.

Release Notes

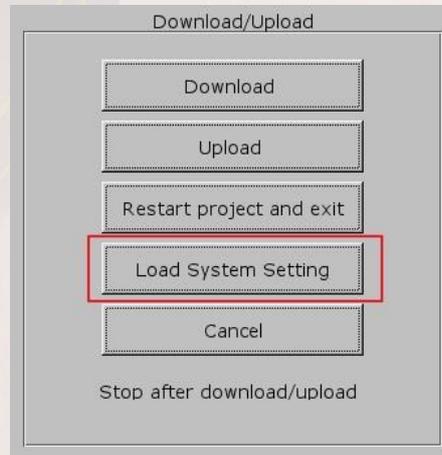


- Step 1.** On EasyBuilder Pro toolbar, click [Tools] » [Build Data for USB Disk or SD Card Download], and then select [Use system setting] checkbox. Browse for the systemsetting.conf file and then click [Build] button to generate the download file into SD card or USB drive.



Release Notes

- Step 2.** Insert the storage device and then select [Load System Setting] to update the system setting.



- 10.** The following new features are added to the toolbar.



Display Common Window:

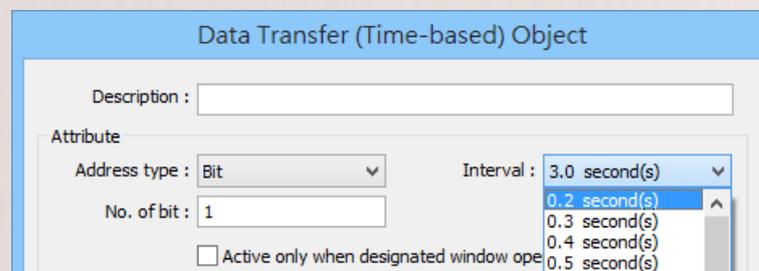
Displays the contents of Common Window in base window.



Display Underlay Window:

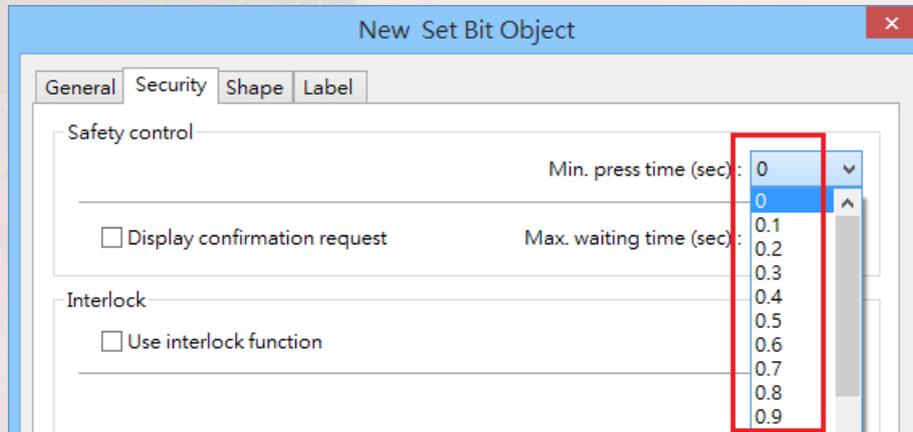
Displays the contents of the selected underlay windows in base window.

- 11.** The smallest time interval of [Data Transfer (Time-based)] object is shortened to 0.2 seconds.

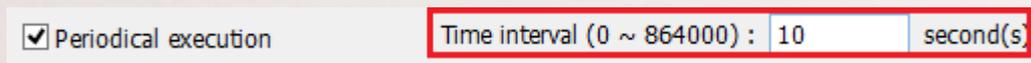


Release Notes

12. The 0.1 through 0.9 (sec) options are added in [Min press time (sec)] setting of the object [Security] tab.



13. In Macro editor the time unit of [Periodical execution] is changed from "second (s)" to "100ms" to provide higher frequency.



Release Notes

Corrections

1. Fixed the problem where “The text will exceed the size” message window cannot be closed. This window appears when attempting to use a font size that exceeds the size of a pinned object.
2. Fixed the problem where address type is incorrectly mapping after importing **Beckhoff Twincat 3** tags.
3. Fixed the problem where an extra menu is displayed after right-clicking on a window thumbnail in Window Tree.
4. Fixed the problem where [Binary Access] feature in Structure Editor does not work properly.
5. Fixed the problem where incorrect font filenames are generated during compile time if a dot (.) is included in the project file name.
6. Fixed the problem where message window no. 8 (Storage Space Insufficient) does not pop up when the external storage device is not inserted and Data Sampling or Event Log is generated within five seconds after switching on the HMI.
7. Fixed the problem where Window Tree does not work properly when [Print Preview] feature is disabled.
8. Fixed the problem where Shape cannot be used for Set Word object in the following modes: Cyclic JOG+, Cyclic JOG-, Press and hold increment (JOG++), Press and hold decrement (JOG--).
9. Fixed the problem where historical data (Event Log / Data Log) and the updated RW data are not saved due to the HMI being frequently powered ON/OFF.

Release Notes

10. The response time of *ASCII Server* is reduced to 6ms.
11. Fixed the problem where [Data Transfer (Time-based)] object cannot transfer data to the remote HMI due to the unstable network.
12. Fixed the problem where the float variable cannot be initialized with integers, as shown in the following figure.

```
macro_command main()  
  
float var1[2] = {1, 2} // error  
float var2[2] = {1.0, 2.0} // OK
```

Release Notes

Drivers

1. The [Maximum number of segments accepted], [Maximum ADPU length accepted], and [Ultimate destination MAC layer address] settings are added to **BACnet/IP** driver.

IP Address Settings

IP address : 192 . 168 . 1 . 100

Port no. : 47808

Mode : [BACnet/IP to MS/TP] Adapter

Maximum number of segments accepted : Unlimited

Maximum ADPU length accepted : 480 (fits ARCNET frame)

Ultimate destination MAC layer address : 131

Timeout (sec) : 1.0

Turn around delay (ms) : 0

Send ACK delay (ms) : 0

HMI port no. : 47808

Device ID : 342566

Network number : 0

The number of resending commands : 0

OK Cancel

2. [Pass-Through Settings] feature is added to **Siemens S7-200 PPI** and **Siemens S7-300 MPI** drivers. To use PPI, MPI pass-through feature, please install virtual COM port driver Ver. 2.00.0000 or later on the computer terminal.

SIEMENS PLC Pass-Through Settings

Disable pass-through

Designate client IP

IP address : 192 . 168 . 1 . 10

OK Cancel

Interval of block pack (words) : 5

Max. read-command size (words) : 32

Max. write-command size (words) : 32

Pass-Through Settings...

[Designate client IP]: In Pass-through mode designate the client IP address to connect HMI. The “client” usually refers to Siemens Step 7 application.

Release Notes

The following lists the system registers relevant to **Siemens S7-200 PPI** and Siemens **S7-300 MPI** Pass-through feature.

- [LW-10850: disable/enable (0 : disable, 1 : normal, 2 : IP limited) (siemens pass-through)]
- [LW-10851: destination COM port (siemens pass-through)]: Generally refers to the COM port connected with PLC.
- [LW-10852: destination PLC station no. (siemens pass-through)]
- [LW-10853: communication protocol (0 : invalid, 1 : PPI, 2 : MPI) (siemens pass-through)]
- [LW-10854 to LW-10857: IP of connecting client (siemens pass-through)]: Displays current client IP address connected with HMI.
- [LW-10858 to LW-10861: IP of designated client (siemens pass-through)]: If LW-10850 is set to 1, the system registers can be used to designate the client IP connected with HMI.
- [LW-10862: connection status (0 : ready, 1 : client connecting) (siemens pass-through)]
- [LW-10863: execution status (0 : normal, 1 : error) (siemens pass-through)]
- [LW-10864: the last error code (siemens pass-through)]

The following table lists the error codes, the description of each code, and the possible reasons.

Release Notes

Error Code	Description	Possible Reason
0	Successfully executed	
1	Prohibit client from connecting HMI	HMI is already running pass-through and won't accept any request from other client.
2	Prohibit client from connecting HMI	When LW-10850 is set to 1, the client IP for connecting HMI is different from the IP specified in LW-10858 ~ LW-10861.
3	Invalid communication protocol	Invalid setting in LW-10853.
4	Invalid PLC station number	The PLC station number specified in LW-10852 does not exist.
5	Delayed communication	PLC connection failure.
6	Busy communication	PLC does not accept pass-through request, please confirm PLC settings.
7	Invalid pass-through request	Environment setup failure.

3. **Mitsubishi L6ADP** driver is added.
4. Fixed the problem where **HUST H4X** driver cannot communicate with **HUST H6C** controller.
5. Fixed the problem where **OMRON EtherNet/IP (NJ Series)** driver cannot communicate if the number of addresses designated in the project reaches certain quantities.
6. Fixed the problem where macro SetData function cannot be used on a Tag that belongs to MainTask in **Rockwell Free Tag** driver.
7. Fixed the problem where only the first macro SetData function but not the rest functions is carried out in **SSTC SSD Series** driver.
8. The **Siemens S7-300 (ISO Ethernet)** driver is added.

Release Notes

9. Fixed **Beckhoff Twincat 3 ADS/AMS (Ethernet)**, **Beckhoff ADS/AMS (Ethernet)**, and **Beckhoff Embedded PC** drivers:
 - Unnecessary data such as log and alarm data can be ignored to keep the communication stable.
 - Added the AMS Net Id setting, the format of which is 6 bytes: xxx.xxx.xxx.xxx.xxx.xxx. The default is the IP address plus “.1.1”.
10. Fixed the problem where **Siemens TI505** driver cannot read or write the XY address type mapped to **Remote IO**.
11. Fixed the problem where **OMRON EtherNet/IP (NJ Series)** driver cannot connect to **NJ301** Series PLC.
12. The **Mitsubishi Q00UJ/QnU/QnUD/QnUDH/QnUDEH/L (mini USB)** driver can detect and eliminate incorrect data to keep the communication stable.
13. The **BACnet/IP** driver supports **[BACnet/IP to MS/TP] Adapter** and **[BACnet/IP] Server**.
14. **CANopen Slave** driver supports user-defined NMT START command.

The screenshot shows the 'CANopen Settings' dialog box. It contains several configuration fields: 'Protocol' (CAN Bus 2.0a), 'Node ID (HEX)' (1), 'Baud rate' (250K), 'Timeout (sec)' (1.0), and 'Turn around delay (ms)' (0). Below these fields, there are three radio button options for 'Send NMT START command': 'Send NMT START command' (checked), 'Use default command', and 'Use user-defined command'. The 'Use user-defined command' option is selected, and its 'Command' field is set to '0 0'. At the bottom, there are 'Setting...', 'OK', and 'Cancel' buttons.

Release Notes

15. Siemens S7-300 (ISO-Ethernet) driver is added.

[Accessible Nodes...]: Searches and lists devices available on the network and their MAC address.

