

BACnet Addons Library

LIBRARY DESCRIPTION

The BACnet Addons library helps to simplify the implementation of the BACnet protocol into either new or existing projects.

TARGETS

Device	lowest supported BIOS version
EVD	423.26
EVC	477.26
EVP	489.19
Advance	596.6
Advance 4DIN	668.6

PUBLISHER'S INFO

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CHANGE LOG

Release 1.2.5 21 May 2018

AUTHOR: P. Armeli

NOTES:

- This library version adds new functionalities and fixes some bugs.
- This library release has been tested with FreeStudio 3.9.1. Suggested software version: FreeStudio 3.9.1 or later.

CHANGES:

- The BACnet_ObjID_De_store_EE FB and the BACnet_r_ROUND_di, BACnet_r_ROUND_i, BACnet_r_ROUND_udi and BACnet_r_ROUND_ui functions have been added.
- All the "link" type FBs have been modified adding new inputs and outputs. The new key input is the *usiMode*, which is used to define how the prioritization between the BACnet and the IEC side is managed.
- The project sample has been updated with the new functionalities of the library.
- Library Documentation (new version v1.4):
 - the description of the new/modified FB/Fs has been added/updated;
 - the sample chapter has been updated to reflect the changes made to the sample project;
 - the chapter about how the library manages the BACnet Stack (Priority Array vs Relinquish Default) has been added.
- The BACnet Device Object Template has been modified.
- The BACnet Objects Templates have been updated (new version v1.3).

BUG FIXES:

- During the initialization procedure, the default value of the Relinquish Default is copied into the EEPROM, overwriting the EEPROM parameter's value. This unwanted behavior has been fixed.
- The FB used to set the PV of a Binary Input now clears the Priority Array when the input value changes. An option to clear always the PrArr when the PV is different from the input has been added.

Release 1.1.0 15 Mar 2018

AUTHOR: P. Armeli

NOTES:

- This library version adds new functionalities and solves some minor issues.
- This library release has been tested with FreeStudio 3.8.0. Suggested software version: FreeStudio 3.8.0 or later.

CHANGES:

- The BACnet_Objects_EEPROM_Space_Calculator_v1.0 has been added to the library package.
- Added the ability to manage the Schedule BACnet Object value as REAL through the following new functions/function block:
 - BACnet_UdAsReal_read & BACnet_UdAsReal_write: ability to read and write an UDINT value as REAL.
 - BACnet_udiValue_link_rEE: ability to link an EEPROM parameter to any UDINT attribute of any BACnet Object (supports REAL).
- The project sample has been updated with the new functionalities of the library.
- Library Documentation (new version v1.1): the description of the new Fs/FBs has been added, the sample chapter has been updated to reflect the changes made to the sample project, some minor corrections have been made.
- Added the HowTo 7-in-1 Video Documentation.

BUG FIXES:

- The wStatus output is now being valorized correctly to 16#1 if the operation of the function block is "OK", even when the xEn input doesn't switch from FALSE to TRUE.
- The conversion of a REAL value into a integer value has a truncation issue, which brings the integer value to be rounded to the lower integer. It has impact on the Present Value calculation of the FBs which provide an integer Present Value as output. The following data formats belonging to the integer family were affected: INT, DINT, UDINT, USINT, UINT. It has been solved in this release.
- The MSI BACnet Object template had the Relinquish_Default attribute set in EEPROM, which is not used in this type of Object.
- The *Schedule with Exceptions* Object Template had some wrong default values on the Exceptions section, which led to a malfunction of the BACnet Object.

Release 1.0.0 26 Feb 2018

AUTHOR: P. Armeli

NOTES:

- This is the first release of the library.
- This library release has been tested with FreeStudio 3.8.0. Suggested software version: FreeStudio 3.8.0 or later.