CXpro^{HD} v1.02.00

Issue Date: 06 November 2019

Product: CXpro^{HD}

Product Version: 1.02.00

Summary

CXpro^{HD} v1.02.00 adds support for the new CBT-4T4-2U1R controller, up to 5 FLX on CBXi controllers, and the powerful Equation module on CBXi, CBX, CBT, and CBV ranges.

Background

This update is made to support new features on Cylon's controllers, and also to address customer feedback.

Features and Installation

Note: **CXpro**^{HD} **1.02.00** is compatible with **Windows 10** Professional 64-bit and **Windows 7*** Professional / Enterprise / Ultimate 64-bit.

*Windows 7 will be made EOL (discontinued) by Microsoft in January 2020

The minimum configuration to run this application is: Core 2 Duo E6300, 1Gb RAM, 80Gb hard drive.

The recommended configuration is: Core 2 Duo E6600, 2Gb RAM, 160Gb hard drive.

Note: Please be aware that Anti-Virus software can occasionally interfere with the installation process for **CXpro**^{HD}, and perhaps consider disabling Anti-Virus software temporarily when installing **CXpro**^{HD}.

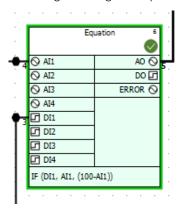
New Features

The "Strategy Engine" used in the CBXi range of IP controllers and CBT, CBV and CBX ranges of BACnet® Controllers has been enhanced with the addition of a new Equation Module and enhancements to the existing Meter and Runtime modules. CXproHD 1.02 supports these enhancements.



New: Equation Module

The **Equation** module provides a method to create complex mathematical equations, Boolean equations or a combination of both. Up to 4 analog inputs and 4 digital inputs can be combined through an equation to produce an analog and a digital output.

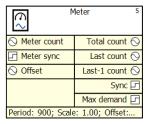


For details of this new module, see **CXpro^{HD}** modules help (available from within **CXpro^{HD}**).

Updated: Meter Module

The Meter Module has been enhanced with the addition of an offset input and an offset constant.

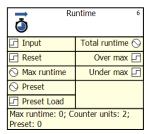
The **Total Count** output of the **Meter** Module can now be adjusted by an amount defined either in an internal setup constant within the module or by an optional analog input. Negative values are allowed, but the output will be limited to positive values.



Updated: Runtime Module

The Runtime Module has been enhanced with the addition of a Preset input and a Preset constant.

The Total Runtime output of the Runtime Module can be set to a "pre-set" value when a reset (Preset Load) signal is detected, i.e. there is a "rising edge" $(0 \rightarrow 1)$ on the Preset Load input. The value loaded into the Total Runtime output is defined either in an internal setup constant within the module or by an optional analog input. Values less than zero are ignored.





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Extended IO

The number of supported **FLX** modules on a **CBXi** controller has been increased to 5, allowing for up to a 96 I/O points. Cylon's soon-to-be-released **FLX-PS24** (a 20 V power supply) is required to power additional two **FLX** controllers.

To support the extended I/O the number of points and modules allowed in a strategy has been increased to 2000. The number of Trend Log has been increased to 144.

CBT-4T4-2U1R

CXpro^{HD} 1.02 includes support for the **CBT-4T4-2U1R** unitary controller.

Resolved Issues

Engineering Tool

- ST-6880 Fixed issue where ET was crashing if connection was lost to a controller while live log was open
- ST-6742 Staging module now working correctly in simulation mode
- ST-6542 Fixed issue where invalid errors were being generated when importing V7 sites
- ST-6504 Analog set points now show precision when viewed in live log
- **ST-6342** Font size for Text modules now saved correctly
- ST-6881 Updated to Broadcast RX Default value from 9.0 to 0.0
- ST-6871 Digital set point change dialog now retrieves the correct value when first opened
- ST-6859 Improved renaming of trend logs following renaming of connected point
- **ST-6858** Limits for unexposed set points are not checked when downloading to CBXi, as this is not applicable to this controller
- ST-6857 Now possible to check / uncheck multiple export flags in the BACnet configuration dialog
- ST-6855 If we have an error message from failing to manually add a block, display it to the user
- **ST-6835** Set Runtime 'Initial Offset' parameter as obsolete. Improved handling of obsolete parameters if connected
- ST-6851 Obsolete modules are now set to read only instead of being deleted when opening a strategy
- ST-6848 Set point values are now saved in the strategy after changing them via the change dialog
- **ST-6824** Display supported firmware versions in module property window automatically add the supported firmware versions for modules and parameters when building help html file
- ST-6805 Fixed copy and paste issues (paste location, pasting named modules, pasting HW and set points).
- **ST-6756** Ensure module block is uploaded for synchronization check when switching selection quickly between modules
- **ST-6757** If attempting to download a module to a controller that is end of life, warn user and prompt them to use different modules or a different controller type
- ST-6789 Fixed issue with reading lines that was causing conflicts when open a strategy
- ST-6783 Force user to make selection when commissioning tool cannot reconcile controller type
- **ST-6781** Added an option to the BACnet analog and binary modules for COV and interval selection at the same time.



- ST-6738 Fixed issue where modules were being disabled incorrectly when copying a strategy
- ST-6699 Prevent modules in macros being counted twice when pasting
- ST-6701 Display the number of modules servicing in the setup block correctly
- ST-6702 Number of used Trend Logs now shown correctly in the engineering tool resources view
- **ST-6073** Corrected sensor type list. The VAV sensors did not belong with the regular sensors and should only be used with VAV points
- ST-6480 Improve site connection/disconnection messages in the engineering tool
- ST-5689 Warn user if no Modbus devices are configured when adding a Modbus Analog or Modbus Digital module Modbus Analog and Modbus Digital modules are disabled when added, until a device has been selected
- ST-6639 Prevent the BACnet point info being downloaded for disabled hardware modules
- ST-6303 Disable the "BACnet Units" button if no strategy is open
- ST-6616 Fixed issue opening/saving strategies if directory names contain a '.' character
- **ST-6635** Fixed issue with importing V7 sites
- **ST-6535** If an Analog Input module has an invalid sensor type configured, the user will be informed and the module will be disabled.
- ST-6566 Allow BACnet commissioning tool to be launched without first opening a strategy or connecting to the site
- ST-6569 Prevent user from connecting the same point/line to multiple BACnet alarm modules
 - Check if **BACnet** alarms are connected to same point when opening strategy and warn user these may not work correctly if downloaded
- **ST-6554** Automatically set all input points to BACnet alarm modules as BACnet exposed to stop warning message when strategy is opened
- ST-6575 Prevent " Save As " dialog displaying multiple times
- ST-6539 Disabled modules are not now downloaded
- ST-6538 Added the ability to show all lines for a specific point on a strategy in a different colour
- ST-6554 Fixed all warning messages when opening the strategies on the sample apps site
- ST-6512 Prevent 'units' BACnet property being added multiple times for analog point objects
- **ST-6423** In commissioning tool, if unable to match the uploaded controller type, allow user to select the type from a dropdown menu before reconciling
- **ST-6432** Insert company name into the text box in the strategy footers dialog
- ST-6435 Hide MODBUS controls in resource dialog when controller type does not support Modbus
- **ST-6505** Prevent crash when selecting connector after macro creation
- ST-6436 Corrected issue with opening strategies containing some macros containing virtuals and connectors
- ST-6502 Fixed issue where analog inputs on CBV controllers could show differently in compare following a download

Site Discovery

- ST-6640 Not now possible to launch discovery until the previous discovery operation has finished
- ST-6533 Set the controller type to "Virtual Ctrl (Modbus) " for any virtual or 3rd party BACnet controllers discovered



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Licensing

ST-6779 Improved MAC address selection to create licence information.

Site Organiser

- ST-6754 Added support to the site organiser for upgrading the firmware on the CBT-4T4-2U1R controller
- ST-6694 Corrected some issues with strategy and point download from the site organiser
- **ST-6462** Site organiser will not now attempt to download keypad instruction if target controller does not support them

Configuration

ST-6697 Adding correct dip-switch image for FLX module address 4

Database Interface

ST-6830 Fixed **FLX** hardware point number issue when exporting EDE data, and when copying point information in database interface

Keypad

ST-6396 Added default values for min, max and increment to analog set points exported to the site guide

General

- ST-6846 Bring CXproHD to the foreground when a strategy is launched from Aspect or INTEGRA
- **ST-5994** Store **Modbus** and **FLX** module list separator in site.ini file so site backups will work on different regional PCs
- ST-6545 Inform the user when the connection fails due to the BACnet port being used by another application.
- **ST-6479** Removed default site info and messages when starting up the software. Ensure the **BACnet** channel is started to avoid later delays in the first connection.

Removed the old controller names "(CBT11)", "(CBT12)" and "(CBT14)" from the controller labels

Customer Impact

Any customer wishing to use **CBXi** controllers must upgrade to this version of **CXpro^{HD}**. Other users who are affected by issues listed in this document should upgrade when practical.

