TECHNICAL DATA SHEET
SWDS0011 rev 22

Cylon® CXpro^{HD}

DESCRIPTION

CXpro^{HD} is a suite of software applications that allows all facets of Cylon's **CB Line** of BACnet® controllers to be designed, engineered, programmed, configured, tested, commissioned and maintained with minimal engineering effort. **CXpro^{HD}** puts you in control of delivering energy-efficient systems.

When connected to Cylon's FLXeon and CB Line controllers, CXpro^{HD} can provide:

- System configuration
- Macros Support
- Backup and Restore
- BACnet® Properties
- Mass Device Commissioning
- Easy Discovery and Configuration of Cylon's CB IP Controllers
- System Monitoring
- Real-time Point Scanning
- Modbus® (TCP and RTU) device integration.

CXpro^{HD} enables you to integrate with Cylon's **ASPECT®** and **INTEGRA™** databases, saving you time and effort in deploying energy management solutions. With additional points that come with FLXeon controllers, CXpro^{HD} makes it even easier to add or change points when in a strategy.

APPLICATION

CXpro^{HD} offers a graphical programming interface that enables you to visually assemble building blocks as necessary to create a custom control sequence for any HVAC/building automation application. Set up and configure datalogs, alarms, and time schedules easily and quickly. Strategy simulation allows offline development and testing, real-time data scanning helps verify system behavior and online programming mode allows a site to be engineered in real-time and changes to become instantly effective.

Easy to use programming tool

- Reduced time to develop project programming
- Ribbon bar and property panes
- Page key legend
- Equation module allows for the creation of complex equations

Incorporate complex logic with digital inputs and 'IF' statements

Comprehensive libraries

- Extensive color-coded block library

Comprehensive template library

Reduced time to develop projects

Cleaner more consistent strategies and graphics

Reduced commissioning time and faster training

- Native Support of BACnet® Properties

Commission many devices easily with the touch of a button

Quickly integrates with ASPECT® and INTEGRA™

Simulation and online programming of controllers

Supports integration of Modbus® devices and points

USER INTERFACE

RIBBON COMMAND BAR

Located at the top of the CXpro^HD User Interface, the Ribbon Command Bar, also called the Ribbon is similar to many Windows applications. The Ribbon allows access to the majority of CXpro^HD features. The feature options are grouped into tabs each of which contains a different set of options and commands.

QUICK ACCESS TOOLBAR

If there are specific Ribbon feature options that you use often, you can add them to the Quick Access Toolbar where they will be accessible at all times.

SITE LIST

This gives an overview of all configured Sites, allowing specific controllers to be selected for configuration.
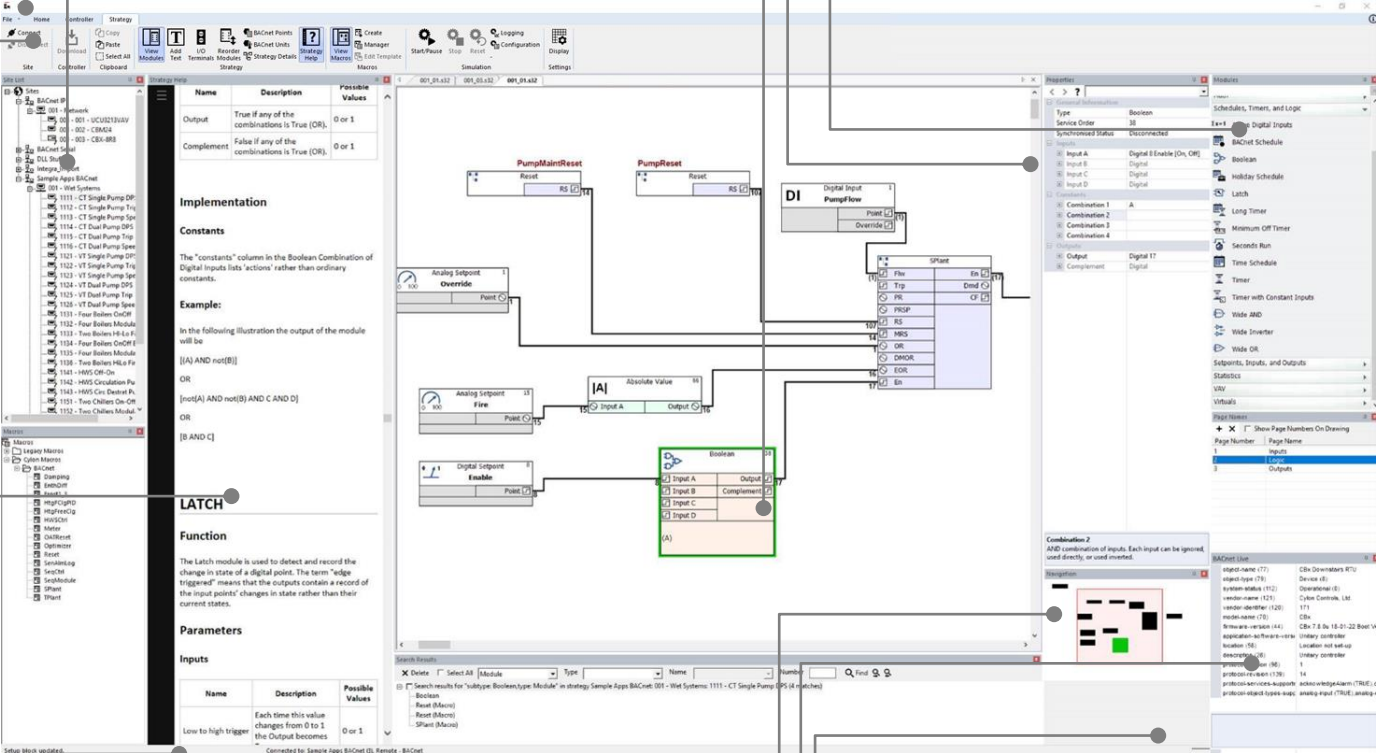
STRATEGY DRAWING WINDOW

This part of the UI shows the modules and points in the current Strategy, and the connections between them, including live data when connected to a CB Series controller.

MODULE PROPERTY EDITOR

View and configure properties of the selected module.

MODULES LIBRARY PANEL

Select Inputs, Outputs, Trend Logs, Alarms and function modules for use in the Strategy.

STATUS BAR

Shows information about the current activity of CXpro^HD.

CONTEXT-SENSITIVE INLINE HELP

Details of module parameters and applications can be docked in the CXpro^HD UI for instant access.

ZOOM CONTROLS

Display controls are accessible directly here.
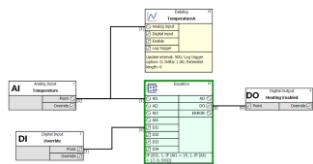
BACNET PROPERTIES

View and edit BACnet properties of the selected module, point or device.

PAGE NAVIGATION PANEL

This panel gives an overview of the full controller Strategy and allows you to jump directly to different parts of the Strategy.
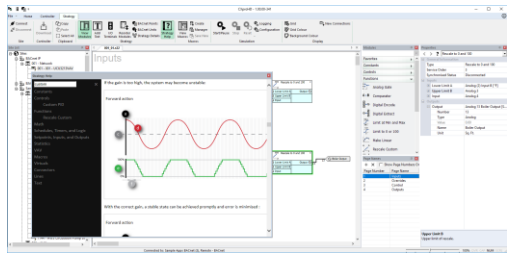
FEATURES INCLUDE

STRATEGIES

Graphical programming makes it easy to create custom sequences visually assembling building blocks together as necessary. Complex equations can also be created using the equation module.
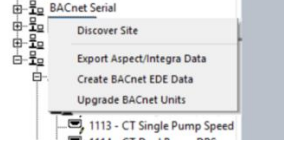

EASY-TO-USE INTERFACE

CXpro^{HD} offers simple navigation and page naming, giving developers the ability to maneuver around a large strategy with ease. It also offers immediate access to properties of points and modules. Help on a module can be quickly obtained with a click of a button.
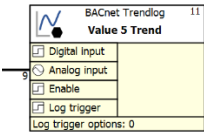

EXPORT DATA TO ASPECT® AND INTEGRA™

Data from CXpro^{HD} can be easily imported into ASPECT® or INTEGRA™ making your project easy to engineer and deliver. All point values are automatically populated and ready for immediate use in ASPECT®-Studio or INTEGRA™ Niagara Workbench
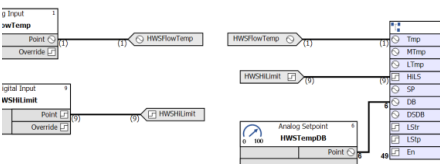

SYSTEM MONITORING

CXpro^{HD} includes enhanced trending capability. Data logs can be reviewed with the **Datalog Manager** for tasks such as tuning PID loops and reviewing the operations of a strategy. All controllers support alarming on all inputs, values, and outputs, and are simple to connect to a BMS system.
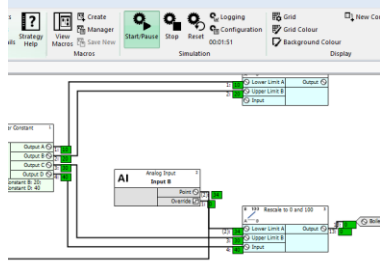

CONNECTORS

CXpro^{HD} can represent data paths between modules across your strategy using lines and connectors. With connectors, many data paths can be easily created resulting in clean strategies that are easy to understand. You can find any connector in your strategy and easily jump between source and destination connectors.
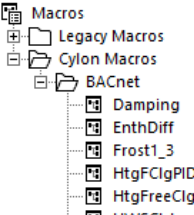

SIMULATION

Full strategy simulation features allow you to test strategies off-site, emulating the complete end-to-end strategy without the need to connect to the physical controller. Simulation testing helps identify any problems or issues, allowing for more comprehensive engineering resulting in more time effective and efficient commissioning on site.
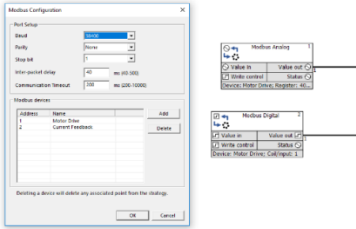

MACROS

The CXpro^{HD} macro user interface is enhanced to improve its functionality, making it simpler and easier to produce strategies with macros. CXpro^{HD} macros are easily portable between PCs. After developing a unique set of macros just import and export these to share between engineering development teams.

MODBUS® CONNECTIVITY

Support for Modbus® RTU connections to electric and water meters, variable frequency drives, air flow stations, and more without the need for external hardware or gateways.

BACNET PROPERTIES

When a BACnet point or module is selected, a properties window is available to fetch and display the object's BACnet properties:

SYSTEM REQUIREMENTS

Operating System	Windows 10 Professional 64-bit, Windows 11

SYSTEM ARCHITECTURE

System architecture diagram showing MATRIX1.1, Internet, Remote Web Browser, Mobile Applications and Tools, eXplore, ASPECT®-Studio CXpro^HD, ASPECT®-Enterprise, INTEGRA™-Supervisor connected via Ethernet, TCP/IP, BACnet/IP, FT/Net, XML, HTTP, Modbus® TCP, Unitron/IP, FOX (INTEGRA).

Devices shown: FBXi-X256 (1...16 FLX), FBXi-X48, IT-8000, NEXUS, MATRIX, eXplore, Fusion, CBT-STAT-H, CBXi-8R8, CBXi-8R8-H, FLX-PS24, CBX-8R8, CBT-STAT, CBX-8R8-H, CBV-2U4-3T, FBVi-2U4-4T, CBT-4T4-2U1R, UCU Room Display, FBVi-2U4-4T-N, CBV-2U4-3T-N, CBT-3T6-5R.

Bus labels: Sensor bus, CBT-STAT bus, Room display bus, Modbus® RTU, BACnet® MSTP.

Legend

FBXi-X256 / CBXi-8R8 / CBX-8R8	FLX-8R8 -H
CBXi-8R8-H / CBX-8R8-H	FLX-4R4-H
CBV-2U4-3T	FLX-PS24
FLX-8R8 / FLX-4R4 / FLX-16DI	CBT-4T4-2U1R

FBVi-2U4-4T	NEXUS Series
FBVi-2U4-4T-N	MATRIX Series
eXplore	INTEGRA Series

Fusion Smart Sensor	
CBT-STAT	
UCU Room Display	