DISTECH
CONTROLS™

EC-Net
Web-based Multi-Protocol Building Automation
Solution for LonWorks® and BACnet®

EC-Net building automation system is a web-enabled solution powered by the Niagara^AX^ Framework®, establishing a fully Internet-enabled, distributed architecture for real-time access, automation and control of devices. EC-Net's open web-based framework creates a common development and management environment, for integration of LONWORKS®, BACnet®, Modbus™ and other protocols. Regardless of manufacturer and protocol, the EC-Net system provides a unified modeling of diverse systems and data, providing one common platform for development, management and enterprise applications.

- Manage your building automation system in real-time over the Internet: program, access and monitor systems from a browser

- Manage geographically dispersed sites (multi-site) with one system

- Enables integration into enterprise applications, such as accounting, tenant billing and energy management

- Integrated tools and resources for developers and facility managers

- Integrate LONWORKS, BACnet and other protocols into one common system with uniform data presentation

- Choose best of breed products and prolong the useful life of existing systems by extending its capabilities, regardless of manufacturer or protocol

- Includes network management tools, graphical development tools, alarming, scheduling and logging functions, all accessible from a standard Web browser or local station

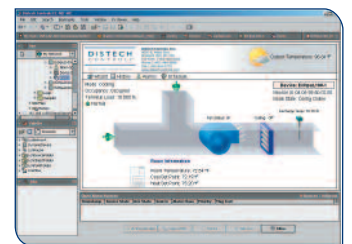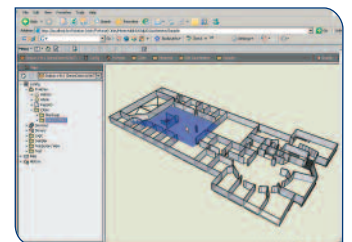- Specially developed Distech Controls tools for easy integration of our controllers within EC-Net^AX^

EC-Net ^AX^ Product Suite
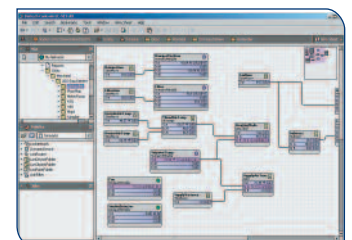
EC-Net Supervisor

EC-Net Supervisor is a flexible graphical user interface that provides global building management functions such as scheduling, trending, alarming, historical data collection, audit trails and advanced energy management applications.

- Hosts Web pages

- Supports an unlimited number of users over the Internet /Intranet with a standard web browser, depending on the host PC resources

- Direct Ethernet based driver support for BACnet I/P, OPC (Client), Modbus TCP, and SNMP

- Can be operated locally or via the Internet

- Can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of EC-BOS into a single unified application
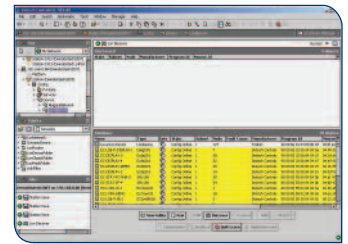
EC-Net Pro

The EC-Net Supervisor includes EC-Net Pro, a user-friendly tool kit that allows you to integrate and manage multi-vendor devices and sub-systems via the Web. This comprehensive toolset combines all the resources needed to provide a complete solution from field level programming to the end user presentation. This multi-function engineering tool includes:
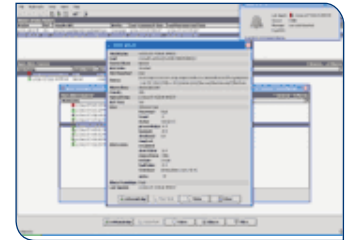
- Network management tools for the development and management of LONWORKS and BACnet networks

- Local and global control logic development applications

- Web page graphical generation and publishing tools

- Programming of Distech Controls products

- Enterprise level application integration

EC-Net Alarm Console

The EC-Net Alarm Console is a flexible client application for monitoring alarms from EC-BOS or EC-Net Supervisor nodes and provides a low cost solution for users that do not require the full EC-Net Pro to monitor, acknowledge and review current alarms within a building or multi-site installation.

EC-BOS Web Controllers

The EC-BOS real-time control devices support a wide range of protocols including LONWORKS, BACnet, Modbus and Internet standards. The EC-BOS connect to system field devices, such as LONWORKS or BACnet controllers, and provide real-time control functions. It combines integrated control, supervision, data logging, alarming, scheduling and network management functions with Internet connectivity and web serving capabilities in a small, compact platform.

Using the EC-Net platform, the EC-BOS can be used for applications ranging from smaller facilities to remote sites, and for distributing control and monitoring throughout large facilities.

EC-BOS^{AX} 2

- Includes oBIX client/server and Niagara Network (Fox) client/server drivers

- Web User interface (optional) serves rich presentations and live data to a browser

- 64MB (can be upgraded to 128MB) SDRAM and 64MB Serial Flash

- 2 Ethernet Ports – 10/100Mbps (RJ-45 connectors)

- 1 RS-232 port

- 1 RS-485 non isolated port

- 1 20-Pin Euro-DIN Connector

EC-BOS^{AX} 6

- Includes oBIX client/server and Niagara Network (Fox) client/server drivers

- Web User interface (optional) serves rich graphical presentations and live data to a browser

- 128MB (can be upgraded to 256MB) SDRAM and 128MB Serial Flash

- 2 Ethernet Ports – 10/100Mbps (RJ-45 connectors)

- 1 RS-232 port

- 1 RS-485 non isolated port

- 1 20-Pin Euro-DIN Connector

- 1 USB port

EC-BOS Plant Controller

- The EC-BOS Plant Controller provides features of the EC-BOS^{AX} 2, with the flexibility and control options provided by the on-board Input / Output (I/O) 34 module.

- The I/O 34 module provides:

  - 16 universal inputs (resistance, 0-10 volt DC, 0-20mA with external resistor)

  - 10 form A relay outputs

  - 8 analog outputs (0-10 volt DC)

- An I/O 16 module is also available. I/O modules can be added and combined to create your own EC-BOS Plant Controller according to your needs
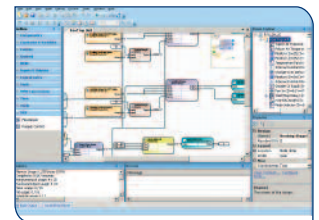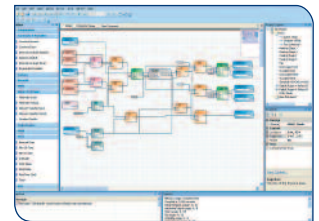
Other models and options for EC-BOS products available. Please contact us.

EC-Net Wizards - Configuration and Programming Tools and EC-*gfx*Program, Graphical Programming Interface

Distech Controls provides EC-Net wizards and EC-*gfx*Program graphical programming interface, for the configuration and custom programming of our controllers within EC-Net. These tools provide for significant improvement in efficiency in the engineering and programming process in EC-Net Pro, by allowing all of the development work to be completed from within one interface. Central to our truly open product offering, the wizards are available free of charge.

EC-*gfx*Program graphical programming interface is available for Distech Controls' programmable controllers and offers a wide array of built-in basic and advanced programming blocks with features such as fan-in, PID loops, time delay, schedules, real-time clock, optimum start, stage sequencing, logical gates, mathematical and comparator functions, psychometric functions, persistent values, etc. Additional features of this advanced programming interface includes:
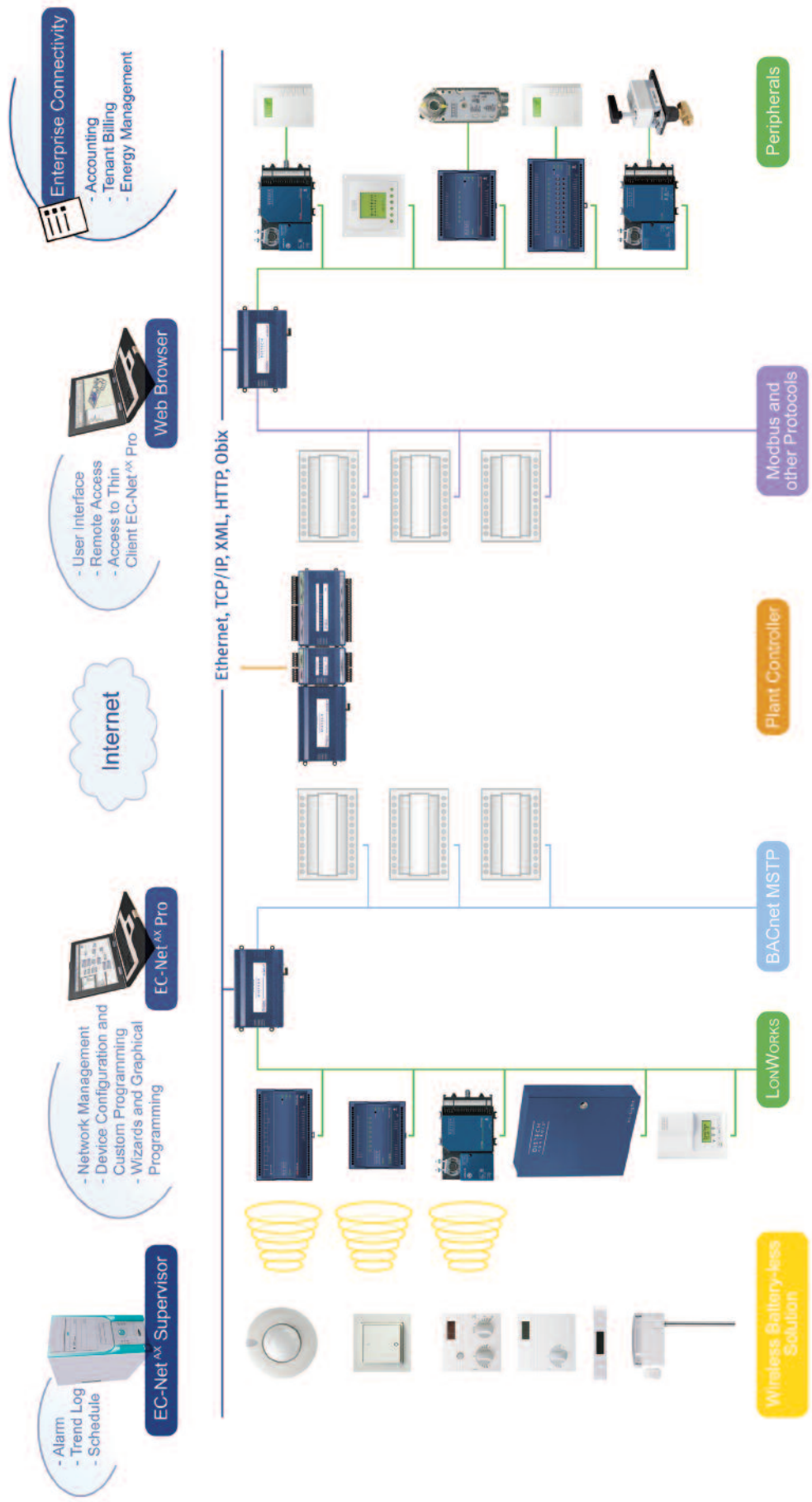
- Support for the programmable controllers' 62 network variables of which 34 are of changeable type and length

- Ability to create custom blocks, for specific applications, or repetitive sequences

- Offers real-time de-bug mode through dynamic view of the data flows

- Generates error and other statistic reports such as memory used, number of PIDs used, etc.

- Enables wireless solution and support of EC-Smart-Sensors on the programmable controllers

EC-Program and EC-Configure wizards for EC-Net, are plug and play interfaces for fast and easy custom programming of Distech Controls programmable and configurable LONWORKS controllers. The wizards automatically validate entered configuration data according to range for each property. Distech Controls also offers a support pack including device palettes and BCS, BCP services.

- EC-Program wizards are available for all programmable controllers and combines a visual interface with the power and flexibility of a code editor and compiler. Any code is easily written using logic comparators, mathematical operators, and easily configurable built-in functions (such as timers, control loops, etc…)

- EC-Configure wizards are available for all configurable controllers: through a series of screens and forms, you can easily configure a multitude of parameters, such as: inputs and outputs, heating, cooling and fan settings, alarm conditions, PID parameters, network variable settings

Solution Overview

Ethernet, TCP/IP, XML, HTTP, Obix

Enterprise Connectivity
- Accounting
- Tenant Billing
- Energy Management

Web Browser
- User Interface
- Remote Access
- Access to Thin Client EC-Net^AX Pro

Internet

EC-Net^AX Pro
- Network Management
- Device Configuration and Custom Programming
- Wizards and Graphical Programming

EC-Net^AX Supervisor
- Alarm
- Trend Log
- Schedule

Peripherals

Modbus and other Protocols

Plant Controller

BACnet MSTP

LonWorks

Wireless Battery-less Solution

Innovative Solutions for Greener Buildings

For more information concerning Distech Controls' building
automation solutions :

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