SIEMENS

Technical Specification Sheet
Document No. 149-1000
July 30, 2018

BACnet Field Panel Web Server with Application MC and Kiosk Mode Graphics

The BACnet Field Panel Web Server provides a full-featured operator interface for PXC BACnet® controllers. Using the Web Server, you can easily monitor and control the APOGEE Building Automation System through an intuitive Web-based user interface from anywhere at anytime.

Description

The license-free Field Panel Web Server tools provide full user interface functionality for the building automation system, allowing you an alternative to workstation software installed on a computer. The Web Server enables system-wide access through a single log-in from a local browser and provides features ranging from Graphical Monitoring to programming and reporting.

Application MC is a license-free default graphics solution for standard Siemens BACnet MS/TP FLN controller products. The animated default graphics show the mechanical equipment graphics with relevant live point update information.

Licenses are also available for custom graphics created with the FIN Builder graphics tool and for the FIN Lite-based graphics tool.

The Web Server takes advantage of the multitasking PXC controllers, eliminating the need for separate high-cost “Web appliances” or dedicated Web servers. This means that the same field panel can serve as an automation controller, with full building automation and I/O features, and provides you with system information and access using a Web browser, providing lower cost and higher reliability.

A Web Server-enabled controller can accommodate an unlimited number of user accounts and simultaneous users.

Security

Meeting the demands of today’s IT systems, the BACnet Web Server is secured from IT security threats by means of password-protected operator access. The Web Server uses password encryption. User accounts can be individually configured for customized access privileges. Operator sessions may be configured to automatically log off during periods of user inactivity.

The BACnet Field Panel Web Server is compatible with standard IT security policies and tools established within a particular facility and can be protected within that environment.

NOTE: It is strongly recommended that the BACnet Field Panel Web Server is configured with a private IP address on a VLAN, rather than a public (Internet) IP address).

If the BACnet Field Panel Web Server is configured with a public address, there is a potential security risk to the system integrity from unauthorized access. You must consult the IT department responsible for the system before configuring the BACnet Field Panel Web Server with a public address.

Browser/Client Requirements

- Session cookies enabled
- Adobe Flash Player Plug-in 16.0 or later installed

Features

The BACnet Field Panel Web Server encompasses the following operator applications:

- Application MC
- Network Layout
- System Status Bar
- Alarm Status and Acknowledgement
- Point Commanding
- Scheduling
- Reporting
- Graphical Trend Display
- Archiving Trend Data to an external storage
- User Interface Customization
- Online Database Editing
- Custom Graphic Publication using FIN Builder

Application MC

Application MC (Monitor & Control) is a FIN Builder based graphical user interface which contains a Navigation Tree and application graphics for many of the available MS/TP FLN device applications. By selecting this project from within Kiosk mode, you can view the current values of control applications, command control values, acknowledge alarms, and discover new FLN devices which have been added to the hosting field panel (PXC-M or PXC36).

Application MC is accessible through a browser, not through Launch Pad, and does not require a license. It contains a wide selection of graphics for use with standard TEC applications such as Unit Vents, Heat Pumps, and VAV controls.

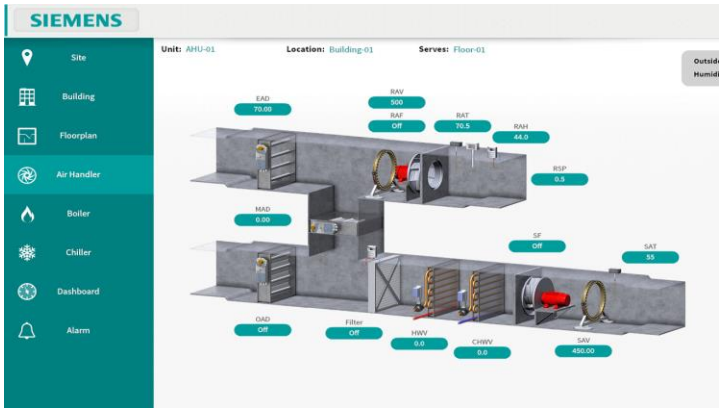
Graphics for non-standard applications can be added by the user, using the standard applications as templates or creating new applications from scratch, which will require a license (LSM-FPWEBPLHST).

Application MC allows you to:

- View the FLN MS/TP devices which have been added to the host field panel.
- Monitor the current value of application points using a feature rich graphical interface.
- Make changes to commandable points using the displayed graphic.
- View and acknowledge alarms.
- Manage Flow Balancing settings for VAV applications.
- Manage Configuration settings for Heat Pump applications.
- View available Application Notes.
- Add custom graphics

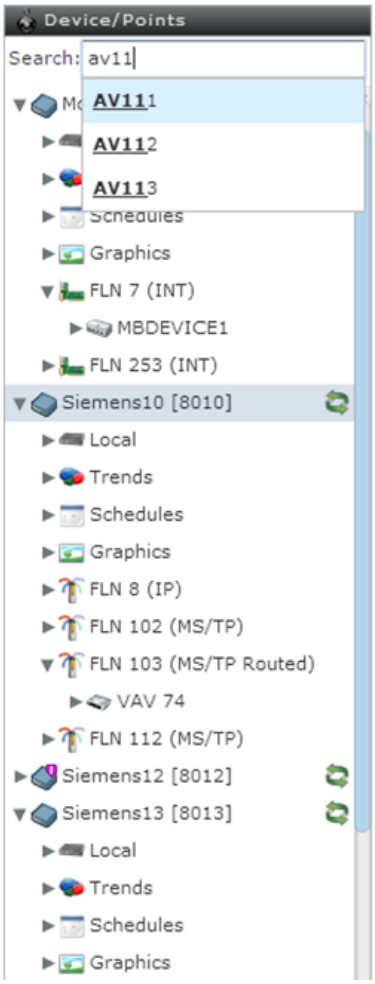
Graphics

Custom graphics can be created using the FIN Builder graphics creation tool or the FIN Lite graphics creation tool. Using a custom FIN Builder or FIN Lite graphic on a Siemens controller requires a license.



- Customized system graphics
- Live animation of equipment
- Real-time point values and status updates
- Link to system schedule and historical trend (**NOTE:** FINLite graphics only)

Network Layout



- View network layout
- View BACnet MS/TP FLNs
- Navigate to other Web-enabled panels
- Search database for individual points

Requirements:

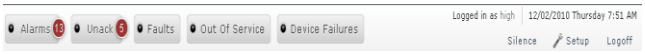
- BACnet IP Panel with FW 3.3.1 or higher
- PXC Modular or PXC 36

Limitations:

In its current version the AppMC can only show the FLN devices that are connected to the native FLN of the controller it is installed in.

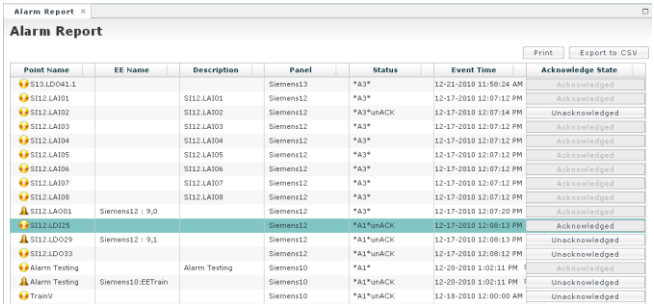
AppMC can not be used with Launch Pad.

System Status Bar



- Visual indication of new alarms and unacknowledged alarms
- Visual indication of out of service, faults, and failed devices

Alarm Status and Acknowledgement

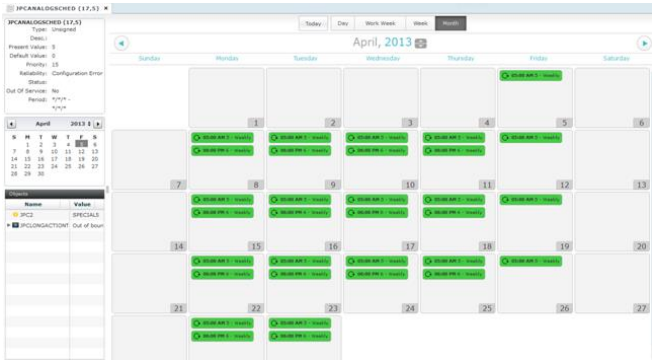


- Ability to view, filter, and acknowledge system alarms from a single page
- Remote notification of alarm status

Point Commanding

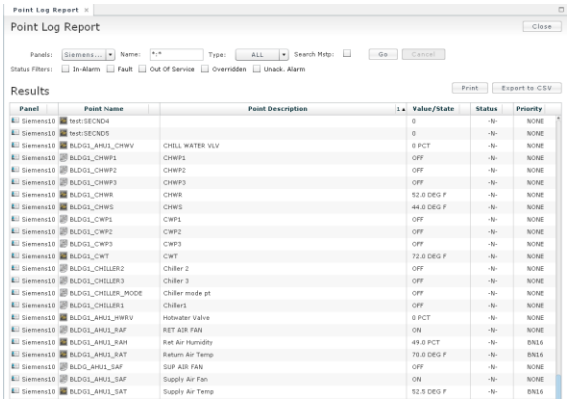
- Change point values and priorities
- Place points “Out of Service”
- Command BACnet MS/TP FLN points

Scheduling



- View schedules in a daily, weekly, or monthly view
- Add and delete schedules
- Create exceptions for existing schedules
- Set up remote notifications to email addresses and cellular phones (using email and/or email to SMS gateway)

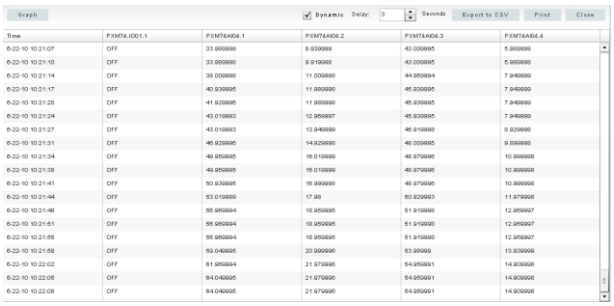
Reporting



- Generate Point Log report with multiple filters

Graphical Trend Display

- Ability to view one or more trends on a single display
- Ability to view raw data values and export to CSV file



- Print trend graph to network printers

Trend Archival via FTP

Starting with Firmware version 3.5 Trend data can be archived via FTP to an external data storage.

- Allows long term storage of trend data local to the Field Panel (USB memory) or on a networked server.
- Defined separately for each Trend for maximum flexibility

Totalization

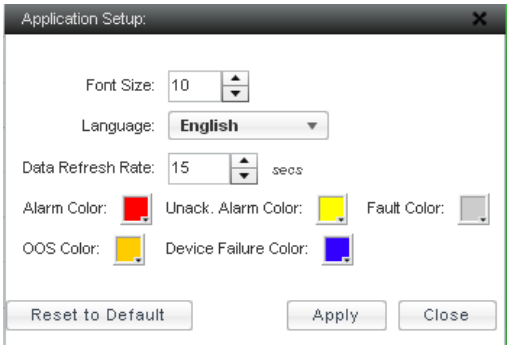
The Point Commander and Point Editor supports totalization for analog and multistate points.

The totalization function accumulates the runtime value of a point. Examples for using this feature include:

- Accumulating runtime for fans and pumps.
- Accumulating total volume from a flow rate sensor.

Calculating degree days.

User Interface Customization



- Custom Welcome Page
- User interface translatable to any browser-supported language
- Ability to customize font sizes and display colors

Online Database Editing

- Database Configuration
  - Add/Modify/Delete points
  - Add/Modify/Delete trend definitions
  - Add/Modify/Delete Event Enrollment Objects
  - Add/Modify/Delete Notification Class Objects
- Schedule
  - Add/Modify/Delete schedules
  - Add/Modify/Delete Command Objects
  - Add/Modify/Delete Calendar Objects
  - Remote Notification
- PPCL Program Editor
  - Add/Modify/Delete programs using PPCL Assist
  - View and clear program trace bits

- View program point values in real time through the Referenced Points list
- View disabled, unresolved, and comment lines

- FLN Devices
  - Add/Modify/Delete FLN Devices on multiple FLN types
  - Set and Release TEC Initial values
- User Account
  - Add/Modify/Delete user accounts
  - Change user passwords
- Panel Configuration
  - Configure/Edit IP and devices BACnet settings
  - Configure Sub network communication settings
  - Configure/Edit node table list for peer to peer communications

Graphics Creation and Editing

- Graphics configuration tool allows remote creation, modification, and deletion of graphics.
- Library of predefined graphic backgrounds
- Ability to import standard image formats (.PNG, .JPG, and .GIF)

Custom Graphic Publication using FIN Builder

FIN Builder is a J2 Innovations (www.j2inn.com) graphics creation and publication tool. Using the Siemens Connector, many customized features of FIN Builder are accessible through the Siemens controllers on Firmware Revision 3.3.1 or later.

FIN Builder allows you to create FIN Builder graphics (.finp files), binding complex data to sophisticated graphics. FIN Builder also allows you to publish the graphics to a BACnet IP Siemens Modular or Compact 36 controller that has a USB port with Drive B connected to it, and view them in a Web browser (Kiosk mode).

BACnet Field Panel Web Server

At least one PXC-M or PXC 36 controller with Firmware Revision 3.2.3 or later is required on each network to support the FPWeb and FIN Lite-based graphics. For support of FIN Builder-based graphics, at least one PXC-M or PXC 36 controller with Firmware Revision 3.3.1 or later is required. The Web Server automatically displays data from every controller that has Web Services and corresponding license for graphics support enabled. No license is required to enable Web Services for the controller configuration and online database editing tools.

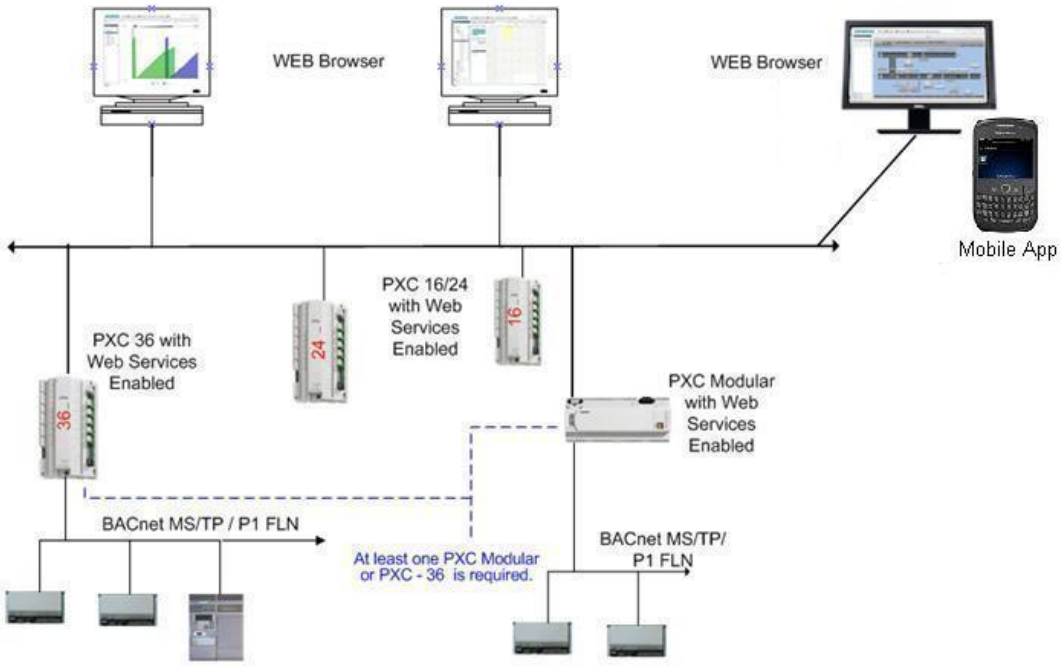


Figure 1. BACnet Field Panel Web Server.

Specifications

Supported BACnet Field Panels	BACnet IP-based PXC Modular BACnet IP-based PXC Compact 16/24/36 **NOTE:** At least one PXC Modular or PXC 36 is required on each network.
Web Browser	Internet Explorer 6.0 or later, or Firefox 3.6 or later browser, with cookies enabled, and capable of running and displaying Adobe Flash Player Plug-in 10.1 or later.

Ordering Information

Description	Part Number	SSN
Field Panel Web Server Host License	LSM-FPWEBPLHST	BPZ: LSM-FPWEBPLHST
Field Panel Web Server Service License	LSM-FPWEBPL	BPZ: LSM-FPWEBPL
Field Panel Web Server License (FIN Lite graphics)	LSM-FPWEB	P55801-Y104
FIN Builder Graphics Editor FIN Lite Field Panel Graphic Editor	Available electronically from Standard Apps	
Siemens Launch Pad (License free thick client including the FP Web UI files)	Available electronically from Standard Apps	
Siemens Connector	Available electronically from Standard Apps	
Fin Builder graphics creation tool	See Readme file on Standard Apps for download instructions	

Siemens Industry, Inc.
Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, IL 60089-4513
USA
Tel. 1 + 847-215-1000