

SECTION 23 09 00 – BUILDING AUTOMATION SYSTEM

This is supplemental language for a BAS spec. This is not an all inclusive spec. This is language that is meant to be copied and pasted into an existing BAS spec.

PART 1 - GENERAL

PART 2 - PRODUCTS

2.1 WEB BASED CONTROLLER SOFTWARE FOR CONFIGURATION, PROGRAMMING AND OPERATORS (Siemens Launch Pad™)

- A. The purpose of this specification is to allow the Owner/Operator to have the same controller programming capabilities as the Controls Contractor Technician without additional software, tools, or licenses.
 - 1. The controller programming shall be accessible to any user via a Web Services application over an IP or Internet connection through port 80.
- B. The following types of controllers shall have this feature:
 - 1. All BACnet BC level controllers
 - 2. Network Engine Controllers
 - 3. Controllers on equipment or sequences customized for this job
- C. Manufacturer:
 - 1. Siemens Launch Pad™ (compatible with PXC controllers with 3.2.5 firmware)
 - 2. Controllers from other manufacturers shall meet the capabilities of this specification
- D. The controller shall come with the software built-in and delivered with the controller as part of the controller purchase. It shall not require a separate software license to enable the software capability.
 - 1. The software shall be provided as an integral part of DDC Controllers and shall not be dependent upon any higher level computer or another controller for execution.
- E. The software application shall be accessible from a PC using Web Services, but shall use all of its own services and data files so as to not be susceptible to Microsoft Windows operating systems based viruses.
- F. Access to the controller software shall be username and password protected. User shall be authenticated by the controller.
- G. The embedded Web Services shall provide the following functionality to users, based on their access and privilege rights:
 - 1. Point Navigation – Provide a screen that allows users to see all of the points that are active in the system. The points shall include hardwired, software, schedules, trends, alarms and network setup.

- a. The point navigation shall display the point name, descriptor, command priority, alarm status, and current value.
 - b. The user shall be able to run and print a pre-configured point log report through a web interface client that shows the point name, descriptor, command priority, alarm status, and current value.
 - c. The interface and report shall allow selection filter such that the operator can select or deselect the types of point that are visible.
2. Alarm Display –displays current BAS alarms to which the user has access will be displayed. Users will be able to acknowledge active alarms, erase resolved alarms, and directly link to the Point Commanding feature.
 - a. The alarm display must provide a filter that displays all alarms whether acknowledged or not.
 - b. The alarm display must provide a filter that displays only alarms that have not yet been acknowledged.
 - c. The alarm display must provide a persistent indication whenever there is one or more unacknowledged alarm in any connected field panel.
 3. Point details – users will have access to point detail information including operational status, operational priority, physical address, and alarm limits, for point objects to which they have access rights.
 4. Point Commanding – users will be able to override and command points they have access to via the Web browser interface.
 5. Scheduling – allows operators, depending on their current user privileges, to override schedules selected by date, and to modify the properties of a selected schedule.
 - a. The scheduler display must be able to represent facility mode schedules in a graphical format.
 6. Trend Data Report – allows users to run and print a pre-configured trend data report for historical data reporting, including a representation of the alarm status of the each point for each Trend sample. The report shall allow selection of individual points or wildcard selection of points.
 - a. Trend data shall be exportable to a data file, such as .csv or other comparable.
 7. Network navigation - Provide a screen that allows users to navigate to the panels and terminal units via the network architecture.
- H. The web server shall be able to send SMTP text messages to notify users of alarm status. The owners shall provide a mail server and a connection port. SSL shall not be required.
- I. The operator shall be able to add modify and delete controller database program, including points, schedules, alarms, and trends.
 1. The operator shall be able to edit the custom program in the field panel that executes the sequences of operations, control loops and logic for the systems controlled.
 2. The operator shall be able to add terminal unit controllers that reside on field panel subnetworks.
- J. Internet connections, ISP services, as well as necessary firewalls or proxy servers shall be provided by the Owner as required to support the Web access feature.

PART 3 - EXECUTION

3.1 COORDINATION WITH IT

- A. Coordinate with the Owner/Operator's IT representatives to setup and allow access to controllers via IP connections and Web Services through port 80.
 - 1. It shall be the responsibility of the Owner/IT to setup and maintain security for user access to the private networks.
 - 2. Coordinate IP addressing scheme.

END OF 23 09 00