

BACnet Protocol Implementation Conformance Statement

Date: Mar 21, 2016

Vendor Name: Delta Controls Inc.

Product Name: enteliWEB

Product Model Number: eWEB

Application Software Version: 4.1

Firmware Revision: 5.3.0.PC.1.262 (BACnet Server)

BACnet Protocol Revision: 14

Product Description

enteliWEB combines the power of enterprise dashboards with easy to use facility management tools. Customizable energy management dashboards and powerful energy reports give managers the tools to reduce consumption and lower costs. Task-driven alarm management and system dashboards allow operators to quickly visualize and prioritize their work and keep the facility running comfortably and efficiently.

enteliWEB resides on a server that connects to both the building automation network and to the facility LAN. enteliWEB is based on client-server architecture and it has no limits on the number of simultaneous users. It is capable of connecting to multiple sites simultaneously, displaying system dashboards and providing alarm management and energy management tool.

BACnet Standardized Device Profile (Annex L)

BACnet Advanced Operator Workstation (B-AWS)

BACnet Interoperability Building Blocks (Annex K)

enteliWEB supports the following BIBBs:

Data Sharing	DS-RP-A	Data Sharing-ReadProperty-A
	DS-RP-B	Data Sharing-ReadProperty-B
	DS-RPM-A	Data Sharing-ReadPropertyMultiple-A
	DS-RPM-B	Data Sharing-ReadPropertyMultiple-B
	DS-WP-A	Data Sharing-WriteProperty-A
	DS-WP-B	Data Sharing-WriteProperty-B
	DS-WPM-A	Data Sharing-WritePropertyMultiple-A
	DS-WPM-B	Data Sharing-WritePropertyMultiple-B
	DS-V-A	Data Sharing-View-A
	DS-AV-A	Data Sharing-Advanced View-A

	DS-M-A	Data Sharing-Modify-A
	DS-AM-A	Data Sharing-Advanced Modify-A
	DS-RR-A	Data Sharing-ReadRange-A

Alarm and Event Management	AE-N-A	Alarm and Event-Notification-A
	AE-ACK-A	Alarm and Event-ACK-A
	AE-VN-A	Alarm and Event Management-View Notifications-A
	AE-AVN-A	Alarm and Event Management-Advanced View Notifications-A
	AE-VM-A	Alarm and Event Management-View and Modify-A
	AE-AVM-A	Alarm and Event Management-Advanced View and Modify-A
	AE-AS-A	Alarm and Event Management-Alarm Summary View-A
	AE-ELV-A	Alarm and Event Management-Event Log View-A
	AE-ELVM-A	Alarm and Event Management-Event Log View and Modify-A

Scheduling	SCHED-VM-A	Scheduling-View Modify-A
	SCHED-WS-A	Scheduling-Weekly Schedule-A
	SCHED-AVM-A	Scheduling-Advanced View and Modify-A

Trending	T-V-A	Trending-View-A
	T-AVM-A	Trending-Advanced View and Modify-A

Device and Network Management	DM-DDB-A	Device Management-Dynamic Device Binding-A
	DM-DDB-B	Device Management-Dynamic Device Binding-B
	DM-DOB-B	Device Management-Dynamic Object Binding-B
	DM-DCC-A	Device Management-DeviceCommunicationControl-A
	DM-DCC-B	Device Management-DeviceCommunicationControl-B
	DM-TS-A	Device Management-TimeSynchronization-A
	DM-ATS-A	Device Management-Automatic Time Synchronization-A
	DM-MTS-A	Device Management-Manual Time Synchronization-A
	DM-UTC-A	Device Management-UTCTimeSynchronization-A

	DM-RD-A	Device Management-Reinitialize Device-A
	DM-BR-A	Device Management-Backup and Restore-A
	DM-LM-B	Device Management-List Manipulation-B
	DM-OCD-A	Device Management-Object Creation and Deletion-A
	DM-OCD-B	Device Management-Object Creation and Deletion-B
	DM-ANM-A	Device Management-Automatic Network Mapping-A
	DM-ADM-A	Device Management-Automatic Device Mapping-A

Segmentation Capability

- Able to transmit segmented message Window Size = 4
- Able to receive segmented message Window Size = 4

Standard Object Types Supported

- Dynamically creatable using the CreateObject service, except Device object.
- Dynamically deletable using the DeleteObject service, except Device object.

Standard Properties Summary

Object Type	Property Identifier	Writable	Optional	Property Range Restriction
Device Object	APDU_Segment_Timeout	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	APDU_Timeout	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Align_Intervals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Daylight_Savings_Status	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Description	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Limited to 255 characters
	Interval_Offset	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Last_Restart_Reason	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Local_Date	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Local_Time	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Location	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Limited to 1023 characters
	Max_Segments_Accepted	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Number_Of_APDU_Retries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Object_Name	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Limited to 255 characters
	Restart_Notification_Recipients	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Time_Of_Device_Restart	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Time_Synchronization_Recipients	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Time_Synchronization_Interval	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
UTC_Time_Synchronization_Recipients	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

File Object	UTC_Offset	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Archive	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Description	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Limited to 2000 characters
	File_Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	File_Size	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Read_Only	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Object_Name	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Limited to 255 characters

Proprietary Properties Summary

Proprietary properties are supported.

Data Link Layer Options

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s):
- MS/TP master (Clause 9), baud rate(s):
- MS/TP slave (Clause 9), baud rate(s):
- Point-To-Point, EIA-232 (Clause 10), baud rate(s):
- Point-To-Point, modem, (Clause 10), baud rate(s):
- LonTalk, (Clause 11), medium:
- BACnet/ZigBee (Annex O)
- Other:

Device Address Binding

Is static device binding supported? Yes No

Networking Options

- Router, Clause 6 – Router between: Ethernet, BACnet/IP
- Annex H, BACnet Tunneling Router over IP
- BACnet/IP Broadcast Management Device (BBMD)
 - Does the BBMD support registrations by Foreign Devices? Yes No
 - Does the BBMD support network address translation? Yes No

Character Set Supported

- ISO 10646 (UTF-8)
- ISO 10646 (UCS-2)
- ISO 10646 (ICS-4)
- ISO 8859-1
- IBM/Microsoft DBCS
- JIS X 0208

Communication Gateway

enteliWEB is not a communications gateway.

Network Security Options

- Non-secure Device – is capable of operating without BACnet Network Security
- Secure Device – is capable of using BACnet Network Security (NS-SD BIBB)
 - Multiple Application-Specific Keys
 - Supports encryption (NS-ED BIBB)
 - Key Server (NS-KS BIBB)