American Dynamics

BACnet Protocol Implementation Conformance Statement

Date: July, 2023
Vendor Name: Access Control and Video Systems
Product Name: Building Management System for C•CURE 9000, victor Unified system and victor
Product Model Number: _____
Application Software Version: 4.00.0.100_
Firmware Revision:___
BACnet Protocol Revision: 135-2010

Product Description:
The Primary function of the Building Management System for victor provides a generic integration between victor and Building Management Devices based on BACnet protocol, allowing customers to configure and control BMS devices. It provides connectivity to equipment using the BACnet protocol over Ethernet (called "BACnet/IP" or "Annex J"). Devices on other BACnet network types may be accessed using BACnet gateway devices. If the device is based on other protocol (e.g. N2), a protocol converter to BACnet(e.g. BACnet - N2 router) is needed.
The integration also supports the creation of BACnet objects mapped to victor objects that allows customers to view various properties associated with the victor objects. These objects are discoverable using the BACnet protocol over Ethernet (called "BACnet/IP" or "Annex J").

BACnet Standardized Device Profile (Annex L):

■ BACnet Operator Workstation (B-OWS)
☐ BACnet Advanced Operator Workstation (B-AWS)
☐ BACnet Operator Display (B-OD)
☐ BACnet Building Controller (B-BC)
☐ BACnet Advanced Application Controller (B-AAC)
■ BACnet Application Specific Controller (B-ASC)
☐ BACnet Smart Sensor (B-SS)
☐ BACnet Smart Actuator (B-SA)

(B-OWS)
List all BACnet Interoperability Building Blocks Supported (Annex K):

BIBB	Service	Initiates	Responds to
DS-RP-A/B	ReadProperty	X	X
DS-RPM-B	ReadPropertyMultiple	X	X
DS-WP-A/B	WriteProperty	X	X
DS-WPM-B	WritePropertyMultiple	X	X
DM-DDB-A/B	Who-Is	X	X
DM-DDB-A/B	I-Am	X	X
DS-COV-A/B	SubscribeCOV	X	X
DS-COV-A/B	SubscribeCOVProperty	X	X
DS-COV-A	ConfirmedCOVNotification	X	X
DS-COV-A	UnconfirmedCOVNotification	X	X
AE-N-A	ConfirmedEventNotification		X
AE-N-A	UnconfirmedEventNotification		X
AE-ACK-A	AcknowledgeAlarm	X	

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Johnson Controls

Segmentation Capability:
☐ Segmented requests supported Window Size ___
☐ Segmented responses supported Window Size ___

(B-ASC)
List all BACnet Interoperability Building Blocks Supported (Annex K):

BIBB	Service	Initiates	Responds to
DS-RP-A/B	ReadProperty	X	X
DM-DDB-A/B	Who-Is	X	X
DM-DDB-A/B	I-Am	X	X
DS-COV-A/B	SubscribeCOV	X	X
DS-COV-A	ConfirmedCOVNotification	X	X

Standard Object Types Supported: (B-OWS)
An object type is supported if it may be present in the device.
Note: None of the object types listed in this section is dynamically creatable or dynamically deletable.

The BACnet conformance codes are as follows:

- O - Optional (may be required under some conditions)
- R - Required, but not required to be writable (may be required to be writable under some conditions)
- W - Not only required, but also required to be writable

The following codes are used in this document to describe how the properties are implemented:

- R/W - Read/write
- R/O - Read-only
- R/O=value - Implemented as a read-only with the indicated value

Device Object

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="device"
System_Status	R	R/O="operational"
Vendor_Name	R	R/O
Vendor_Identifier	R	R/O
Model_Name	R	R/O
Firmware_Revision	R	R/O
Application_Software_Version	R	R/O
Protocol_Version	R	R/O=1
Protocol_Revision	R	R/O=4
Protocol_Services_Supported	R	R/O
Protocol_Object_Types_Supported	R	R/O
Object_List	R	R/O
Max_APDU_Length_Accepted	R	R/O
Segmentation_Supported	R	R/O
Local_Time	O	R/O
Local_Date	O	R/O
UTC_Offset	O	R/O
Daylight_Savings_Status	O	R/O
APDU_Timeout	R	R/O
Number_Of_APDU_Retries	R	R/O
Device_Address_Binding	R	R/O=empty list
Database_Revision	R	R/O=0
Max_Master	O	R/O
Max_Info_Frames	O	R/O
location	O	R/O
description	O	R/O

Analog Input

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O

Analog Output

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-output"
Present_Value	W	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O
Priority_Array	R	R/O
Relinquish_Default	R	R/O

Analog Value

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-value"
Present_Value	R	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O

Binary Input

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Polarity	R	R/O

Binary Output

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-output"
Present_Value	W	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Polarity	R	R/O
Priority_Array	R	R/O
Relinquish_Default	R	R/O

Binary Value

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-value"
Present_Value	R	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE

Multi-state Value

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="multi-state-value"
Present_Value	R	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Number_Of_States	R	R/O

Multi-state Input

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="multi-state-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Number_Of_States	R	R/O

Multi-state Output

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="multi-state-Output"
Present_Value	R	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Number_Of_States	R	R/O

Schedule

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="Schedule"
Present_Value	R	R/O
Effective_Period	R	R/W
Weekly_Schedule	O	R/W
Exception_Schedule	O	R/W
Schedule_Default	R	R/W
List_Of_Object_Property_References	R	R/W
Priority_For_Writing	R	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Number_Of_States	R	R/O

Standard Object Types Supported: (B-ASC)

An object type is supported if it may be present in the device.
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Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="device"
System_Status	R	R/O="operational"
Model_Name	R	R/O
Firmware_Revision	R	R/O
Application_Software_Version	R	R/O
Object_List	R	R/O
Device_Address_Binding	R	R/O=empty list
description	O	R/O

Analog Input

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O

Analog Output

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O

Analog Value

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-value"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O

Binary Input

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE

Binary Output

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-output"
Present_Value	W	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE

Binary Value

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-value"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE

Multi-state Value

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="multi-state-value"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE

Multi-state Input

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="multi-state-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE

Multi-state Output

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="multi-state-Output"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Number_Of_States	R	R/O

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? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.)
☐ Yes X No

Networking Options:

☐ Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.

☐ 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

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)

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

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

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

The product supports the mapping of victor objects as BACnet devices, with the Properties of those devices being represented as present Values of BACnet objects.