



ANNEX A - PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (NORMATIVE)

(This annex is part of this Standard and is required for its use.)

BACnet Protocol Implementation Conformance Statement

Date: 22.09.2011

Vendor Name: SysCom Automationstechnik GmbH

Product Name: SB-BACnet

Product Model Number: 1.0

Application Software Version: User Defined **Firmware Revision:** 1.3.0.3 **BACnet Protocol Revision:** 9

Product Description:

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)

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

Data Sharing:

DS-RP-A	ReadProperty-A
DS-RP-B	ReadProperty-B
DS-RPM-A	ReadPropertyMultiple-A
DS-RPM-B	ReadPropertyMultiple-B
DS-WP-A	WriteProperty-A
DS-WP-B	WriteProperty-B
DS-WPM-A	WritePropertyMultiple-A
DS-WPM-B	WritePropertyMultiple-B
DS-COV-A	COV-A
DS-COV-B	COV-B

Device and Network Management:

DM-DDB-A	Dynamic Device Binding-A
DM-DDB-B	Dynamic Device Binding-B
DM-DOB-B	Dynamic Object Binding-B
DM-DCC-B	DeviceCommunicationControl-B
DM-TS-A	TimeSynchronisation-A
DM-TS-B	TimeSynchronisation-B
DM-UTC-A	UTCTimeSynchronisation-A
DM-UTC-B	UTCTimeSynchronisation-B
DM-RD-B	ReinitializeDevice-B
DM-BR-B	Backup and Restore-B
DM-LM-B	List Manipulation-B
DM-OCD-B	Object Creation and Deletion-B
DM-R-A	Restart-A
DM-R-B	Restart-B

Trend:

T-VMT-I-B	Trending-Viewing and Modifying Trends Internal-B
T-VMT-E-B	Trending-Viewing and Modifying Trends External-B
T-ATR-B	Trending-Automated Trend Retrieval-B

Scheduler:

SCHED-I-B	Scheduling-Internal-B
SCHED-E-B	Scheduling-External-B

Alarm – Event:

AE-N-I-B	Alarm and Event-Notification Internal-B
AE-ACK-B	Alarm and Event-ACK-B
AE-ASUM-B	Alarm and Event-Alarm Summary-B
AE-ESUM-B	Alarm and Event EnrollmentSummary-B
AE-INFO-B	Alarm and Event-Information-B

Segmentation Capability:

- Able to transmit segmented messages Window Size 16
- Able to receive segmented messages Window Size 16

Object-Type	Dyn. Creatable Deleteable	Optional Properties Supported	Writable Properties ((C)onditional)	Property range restrictions	Property ID	Type
Binary Input	<input checked="" type="checkbox"/>	Device-Type Change-Of-State-Time Time-Of-State-Count- Reset Time-Of-Active-Time- Reset Acked-Transitions Event-Time-Stamps Description Reliability Inactive-Text Active-Text Change-Of-State-Count Elapsed-Active-Time Time-Delay Notification-Class Alarm-Value Event-Enable Notify-Type	Present Value (C) Object-Name Out-Of-Service Polarity Description Reliability (C) Inactive-Text Active-Text Change-Of-State-Count Elapsed-Active-Time Time-Delay Notification-Class Alarm-Value Event-Enable Notify-Type			

Object-Type	Dyn. Creatable Deleteable	Optional Properties Supported	Writable Properties ((C)onditional)	Property range restrictions	Property ID	Type
Binary Output	<input checked="" type="checkbox"/>	Device-Type Device-Type Change-Of-State-Time Time-Of-State-Count- Reset Time-Of-Active-Time- Reset Acked-Transitions Event-Time-Stamps Description Reliability Inactive-Text Active-Text Change-Of-State-Count Elapsed-Active-Time Minimum-Off-Time Minimum-On-Time Time-Delay Notification-Class Feedback Value Event-Enable Notify-Type SC-Priority SC-Hand SC-Handvalue SC-Modulahand	Object-Name Present-Value Out-Of-Service Polarity Relinquish-Default Description Reliability (C) Inactive-Text Active-Text Change-Of-State-Count Elapsed-Active-Time Minimum-Off-Time Minimum-On-Time Time-Delay Notification-Class Feedback Value Event-Enable Notify-Type SC-Hand SC-Handvalue	0, 1	48943 48944 48945 48946	U B E B

Object-Type	Dyn. Creatable Deleteable	Optional Properties Supported	Writable Properties ((C)onditional)	Property range restrictions	Property ID	Type
Binary Value	<input checked="" type="checkbox"/>	Change-Of-State-Time Time-Of-State-Count- Reset Time-Of-Active-Time- Reset Priority-Array Acked-Transitions Event-Time-Stamps Description Reliability Inactive-Text Active-Text Change-Of-State-Count Elapsed-Active-Time Minimum-Off-Time Minimum-On-Time Relinquish-Default Time-Delay Notification-Class Alarm-Value Event-Enable Notify-Type SC-Priority SC-Hand SC-Handvalue	Object-Name Present-Value Out-Of-Service Description Reliability Inactive-Text Active-Text Change-Of-State-Count Elapsed-Active-Time Minimum-Off-Time Minimum-On-Time Relinquish-Default Time-Delay Notification-Class Alarm-Value Event-Enable Notify-Type SC-Priority SC-Hand SC-Handvalue			
				0, 1	48943 48944 48945	U B E
Calendar	<input checked="" type="checkbox"/>	Description SC-Out-Of-Service	Present-Value (C) Object-Name Date-List Description SC-Out-Of-Service		48932	B

Object-Type	Dyn. Creatable Deleteable	Optional Properties Supported	Writable Properties ((C)onditional)	Property range restrictions	Property ID	Type
Device	<input type="checkbox"/>	Location Description Max-Segments-Accepted Local-Time Local-Date Daylight-Savings-Status Time-Synchronization-Recipients Configuration-Files Last-Restore-Time Active-COV-Subscriptions Utc-Offset Apdu-Segment-Timeout Backup-Failure-Timeout SC_Alarm_Led_State SC_Quit_All_Alarms	Object-Name Apdu-Timeout Number-Of-Apdu-Retries Utc-Offset Apdu-Segment-Timeout Backup-Failure-Timeout SC_Quit_All_Alarms	250 - 60000 1 - 30 250 - 10000 0 - 65535	48949 48950	E B
Event Enrollment	<input checked="" type="checkbox"/>	Description SC_Out_Of_Service	Description Object-Name Event Type Notify-Type Event Parameters Object Property Reference Event-Enable Notification-Class SC_Out_Of_Service		48932	B
File	<input type="checkbox"/>	Record-Count Description	Object-Name Archive Description			

Object-Type	Dyn. Creatable Deleteable	Optional Properties Supported	Writable Properties ((C)onditional)	Property range restrictions	Property ID	Type
Multi-State Output	<input checked="" type="checkbox"/>	State-Text Reliability Priority-Array Acked-Transitions Event-Time-Stamps Description Relinquish-Default Feedback Value Time-Delay Notification-Class Event-Enable Notify-Type SC-Priority SC-Hand SC-Handvalue SC-Modulahand	State-Text Number of States Object-Name Present-Value Out-Of-Service Description Relinquish-Default Feedback Value Time-Delay Notification-Class Event-Enable Notify-Type SC-Hand SC-Handvalue	1 - 1024 1 - # of States	48943 48944 48945 48946	U B E B
Multi-State Value	<input checked="" type="checkbox"/>	State-Text Reliability Priority-Array Acked-Transitions Event-Time-Stamps Description Relinquish-Default Time-Delay Notification-Class Alarm-Values Fault-Values Event-Enable Notify-Type SC-Priority SC-Hand SC-Handvalue	State-Text Number of States Object-Name Present-Value Out-Of-Service Description Relinquish-Default Time-Delay Notification-Class Alarm-Values Fault-Values Event-Enable Notify-Type SC-Priority SC-Hand SC-Handvalue	1 – 1024 1 - # of States	48943 48944 48945	U B E
Command	<input checked="" type="checkbox"/>	Action-Text Description	Object-Name Present-Value Description			
Notification Class	<input checked="" type="checkbox"/>	Description SC_Out_Of_Service	Object-Name Priority Ack-Required Recipient-List Description SC_Out_Of_Service		48932	B

Object-Type	Dyn. Creatable Deleteable	Optional Properties Supported	Writable Properties ((C)onditional)	Property range restrictions	Property ID	Type
Program	<input type="checkbox"/>	Reason-For-Halt Description-Of-Halt Reliability Description SC_Runtime SC_Mode SC_Priority_For_Writing SC_File_State SC_Cycle_Time	Object-Name Program-Change Description	10 – 255000 0, 1 1 – 5, 7 - 16	48924 48929 48926 48927 48925	U E U E U
Schedule	<input checked="" type="checkbox"/>	Description Weekly-Schedule Exception-Schedule SC_Schedule_Tag_Type SC_Seconds2Change SC_Change_Value	Object-Name Effective-Period Schedule-Default Out-Of-Service List of Obj.Prop.Ref. Priority for Writing Description Weekly-Schedule Exception-Schedule	1 – 5, 7 - 16	48942 48940 48941	E U Any
Trend Log	<input checked="" type="checkbox"/>	Records-Since-Notification Last-Notify-Record Acked-Transitions Event-Time-Stamps Description Start-Time Stop-Time Log-DeviceObjectProperty Log-Interval COV-Resubscription-Interval Notification-Threshold Notification-Class Event-Enable Notify-Type	Object-Name Enable Stop when Full Buffer Size Record-Count Total Record Count Logging_Type Description Start-Time Stop-Time Log DeviceObjectProperty Log-Interval COV-Resubscription-Interval Notification-Threshold Notification-Class Event-Enable Notify-Type	0 0 60 - 86400		

Object-Type	Dyn. Creatable Deleteable	Optional Properties Supported	Writable Properties ((C)onditional)	Property range restrictions	Property ID	Type
Event Log	<input checked="" type="checkbox"/>	Records-Since-Notification Last-Notify-Record Acked-Transitions Event-Time-Stamps Description Start-Time Stop-Time Notification-Threshold Notification-Class Event-Enable Notify-Type	Object-Name Enable Stop when Full Buffer Size Record-Count Total Record Count Description Start-Time Stop-Time Notification-Threshold Notification-Class Event-Enable Notify-Type	 0 0		

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 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)
 - Number of BDT entries: 128
 - Number of FDT entries: 256
 - 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:
