

Alcedo: BACnet Protocol Implementation Conformance Statement

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1. General Information

Date	2017/08/15
Vendor Name	Avelon Cetex AG
Product Name	Alcedo
Product Model Number	7
Application Software Version	7
Firmware Revision	5.0.8.181
BACnet Protocol Revision	14

1.1. Product Description

Alcedo serves as SCADA system, alarm server, and system for energy management, and real estate and asset management .

1.2. BACnet Standardized Device Profile

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

1.3. BACnet Interoperability Building Blocks Support

BACnet BIBB	Name	B-AWS	Supported	Comment
S-RP-A	Data Sharing – ReadProperty – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-RP-B	Data Sharing – ReadProperty – B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-RPM-A	Data Sharing – ReadPropertyMultiple – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-RPM-B	Data Sharing – ReadPropertyMultiple – B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-WP-A	Data Sharing – WriteProperty – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-WPM-A	Data Sharing – WritePropertyMultiple – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-COV-A	Data Sharing – COV – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-COVP-A	Data Sharing – COVP – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-V-A	Data Sharing – View – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-AV-A	Data Sharing – Advanced View – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-M-A	Data Sharing – Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DS-AM-A	Data Sharing – Advanced Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-N-A	Alarm and Event Management – Notification – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-ACK-A	Alarm and Event Management – ACK – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-AS-A	Alarm and Event Management – Alarm Summary View – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-VN-A	Alarm and Event Management – View Notifications – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-AVN-A	Alarm and Event Management – Advanced View Notifications – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-VM-A	Alarm and Event Management – View and Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-AVM-A	Alarm and Event Management – Advanced View and Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-ELV-A	Alarm and Event Management – Event Log View – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
AE-ELVM-A	Alarm and Event Management – Event Log View and Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
SCHED-VM-A	Scheduling – View and Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
SCHED-AVM-A	Scheduling – Advanced View and Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
SCHED-WS-A	Scheduling – Weekly Schedule – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
T-ATR-A	Trending – Automated Trend Retrieval – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
T-AMVR-A	Trending – Automated Multiple Value Retrieval – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
T-V-A	Trending – View – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
T-AVM-A	Trending – Advanced View and Modify – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
T-A-A	Trending – Archival – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-DDB-A	Device Management – Dynamic Device Binding – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-DDB-B	Device Management – Dynamic Device Binding – B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-DOB-B	Device Management – Dynamic Object Binding – B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-DCC-A	Device Management – DeviceCommunicationControl – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-MTS-A	Device Management – Manual Time Synchronization – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-RD-A	Device Management – ReinitializeDevice – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-BR-A	Device Management – Backup and Restore – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-OCD-A	Device Management – Object Creation and Deletion – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DM-ANM-A	Device Management – Automatic Network Mapping – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

BACnet BIBB	Name	B-AWS	Supported	Comment
DM-ADM-A	Device Management – Automatic Device Mapping – A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

1.4. Segmentation Capability

Able to transmit segmented messages	Window Size: > 100
Able to Receive segmented messages	Window Size: > 100

1.5. Standard Objects Types Supported

Standard Object Type	Enum	Dynamically Creatable	Dynamically Deletable	Range Restrictions
Analog Value	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	none
Device	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	none

Analog Value Object

Optional Properties	Writable
Description	<input checked="" type="checkbox"/>
Reliability	<input checked="" type="checkbox"/>
COVIncrement	<input checked="" type="checkbox"/>

Device Object

Optional Properties	Writable
Description	<input checked="" type="checkbox"/>
Max_Segments_Accepted	<input checked="" type="checkbox"/>
Local_Time	<input checked="" type="checkbox"/>
Local_Date	<input checked="" type="checkbox"/>
APDU_Segment_Timeout	<input checked="" type="checkbox"/>

1.6. 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

1.7. 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

1.8. Networking Options

- Router, Clause 6
- Annex H, BACnet Tunneling Router over IP
- BACnet/IP Broadcast Management Device (BBMD)
- Registration as Foreign Devices

1.9. Character Sets Supported

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

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> ISO 10646 (UTF-8) | <input checked="" type="checkbox"/> IBM/Microsoft DBCS | <input checked="" type="checkbox"/> ISO 8859-1 |
| <input checked="" type="checkbox"/> ISO 10646 (UCS-2) | <input checked="" type="checkbox"/> ISO 10646 (UCS-4) | <input checked="" type="checkbox"/> JIS X 0208 |

1.10. 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)

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