

## BACnet Protocol Implementation Conformance Statement

<b>Date:</b>	<b>September 28, 2016</b>
<b>Vendor Name:</b>	<b>Azbil Corporation</b>
<b>Vendor ID:</b>	<b>85</b>
<b>Product Name:</b>	<b>savic-net™</b>
<b>Product Model Number:</b>	<b>BS-700 models</b>
<b>Application Software Version:</b>	<b>1.0</b>
<b>Firmware Revision:</b>	<b>11.2</b>
<b>BACnet Protocol Revision:</b>	<b>12 (135-2010)</b>

### Product Description

The savic-net™ is a suite of Building Management System Software that can act as a BACnet Advanced Operator Workstation (B-AWS). The savic-net™ is able to communicate with BACnet devices via BACnet/IP.

### 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)

## BACnet Interoperability Building Blocks supported (Annex K)

BIBBs		Support	
Data Sharing	DS-RP-A	ReadProperty-A	✓
	DS-RP-B	ReadProperty-B	✓
	DS-RPM-A	ReadPropertyMultipule-A	✓
	DS-WP-A	WriteProperty-A	✓
	DS-WP-B	WriteProperty-B	✓
	DS-WPM-A	WritePropertyMultipule-A	✓
	DS-V-A	View-A	✓
	DS-AV-A	Advanced View-A	✓
	DS-M-A	Modify-A	✓
	DS-AM-A	Advanced Modify-A	✓
	DS-COV-A	COV-A	✓
	DS-COVP-A	COVP-A	✓
Alarm & Event	AE-N-A	Notification-A	✓
	AE-ACK-A	ACK-A	✓
	AE-ASUM-A *1	Alarm Summary-A	✓
	AE-ESUM-A *1	Enrollment Summary-A	✓
	AE-INFO-A *1	Information-A	✓
	AE-AS-A	Alarm Summary View-A	✓
	AE-VM-A	View and Modify-A	✓
	AE-AVM-A	Advanced View and Modify-A	✓
	AE-VN-A	View Notifications-A	✓
	AE-AVN-A	Advanced View Notifications-A	✓
	AE-ELV-A	Event Log View-A	✓
	AE-ELVM-A	Event Log View and Modify-A	✓
Scheduling	SCHED-A *2	Scheduling-A	✓
	SCHED-VM-A	View and Modify-A	✓
	SCHED-AVM-A	Advanced View and Modify-A	✓
Trending	T-V-A	Viewing-A	✓
	T-VMT-A *3	Viewing and Modifying Trends-A	✓
	T-VMMV-A *3	Viewing and Modifying Multiple Values-A	✓
	T-AVM-A	Advanced View and Modify-A	✓
	T-ATR-A	Automated Trend Retrieval-A	✓
	T-AMVR-A	Automated Multiple Value Retrieval-A	✓
	T-A-A	Archival-A	✓
Device & Network Management	DM-DDB-A	Dynamic Device Binding-A	✓
	DM-DDB-B	Dynamic Device Binding-B	✓

BIBBs			Support
	DM-DOB-B	Dynamic Object Binding-B	✓
	DM-ANM-A	Automatic Network Mapping-A	✓
	DM-ADM-A	Automatic Device Mapping-A	✓
	DM-DCC-A	Device Communication Control-A	✓
	DM-OCD-A	Object Creation and Deletion-A	✓
	DM-RD-A	Reinitialize Device-A	✓
	DM-BR-A	Backup and Restore-A	✓
	DM-LM-A	List Manipulation-A	✓
	DM-LM-B	List Manipulation-B	✓
	DM-MTS-A	Manual Time Synchronization-A	✓
	DM-TS-A	Time Synchronization-A	✓
	DM-UTC-A	UTC Time Synchronization-A	✓
	DM-MTS-A	Manual Time Synchronization-A	✓
	DM-ATS-A	Automatic Time Synchronization-A	✓

\*1: Deprecated, contained in Alarm Summary View-A (AE-AS-A)

\*2: Deprecated, contained in View and Modify-A (SCHED-VM-A)

\*3: Deprecated

## Segmentation Capability

- Segmented requests supported
- Segmented responses supported

Window Size: Configurable

Window Size: Configurable

## Standard Object Types Supported

- The savic-net™ as BACnet server

Object Type	Object Type Supported	Dynamically Creatable and Deletable	Optional Properties Supported	Proprietary Properties
Device	Yes	No	Location Description Max_Segments_Accepted Local_Time Local_Date UTC_Offset Daylight_Savings_Status APDU_Segment_Timeout Time_Synchronization_Recipients UTC_Time_Synchronization_Recipients Time_Synchronization_Interval Align_Intervals Interval_Offset	-

- The savic-net™ as BACnet client

The following description defines all objects that the savic-net™ is able to read as a BACnet client. That doesn't mean these objects may be present in the savic-net™.

Object Type	Object Type Supported	Dynamically Creatable and Deletable	Optional Properties Supported	Proprietary Properties
Access-credential	Yes	No	All	Yes *1
Access-door	Yes	No	All	Yes *1
Access-point	Yes	No	All	Yes *1
Access-rights	Yes	No	All	Yes *1
Access-user	Yes	No	All	Yes *1
Access-zone	Yes	No	All	Yes *1
Accumulator	Yes	No	All	Yes *1
Analog-input	Yes	No	All	Yes *1
Analog-output	Yes	No	All	Yes *1

Object Type	Object Type Supported	Dynamically Creatable and Deletable	Optional Properties Supported	Proprietary Properties
Analog-value	Yes	No	All	Yes *1
Averaging	Yes	No	All	Yes *1
Binary-input	Yes	No	All	Yes *1
Binary-output	Yes	No	All	Yes *1
Binary-value	Yes	No	All	Yes *1
Bitstring-value	Yes	No	All	Yes *1
Calendar	Yes	No	All	Yes *1
Characterstring-value	Yes	No	All	Yes *1
Command	Yes	No	All	Yes *1
Credential-data-input	Yes	No	All	Yes *1
Date-pattern-value	Yes	No	All	Yes *1
Date-value	Yes	No	All	Yes *1
Datetime-pattern-value	Yes	No	All	Yes *1
Datetime-value	Yes	No	All	Yes *1
Device	Yes	No	All	Yes *1
Event-enrollment	Yes	No	All	Yes *1
Event-log	Yes	No	All	Yes *1
File	Yes	No	All	Yes *1
Global-group	Yes	No	All	Yes *1
Group	Yes	No	All	Yes *1
Integer-value	Yes	No	All	Yes *1
Large-analog-value	Yes	No	All	Yes *1
Life-safety-point	Yes	No	All	Yes *1
Life-safety-zone	Yes	No	All	Yes *1
Load-control	Yes	No	All	Yes *1
Loop	Yes	No	All	Yes *1
Multi-state-input	Yes	No	All	Yes *1
Multi-state-output	Yes	No	All	Yes *1
Multi-state-value	Yes	No	All	Yes *1
Network-security	Yes	No	All	Yes *1
Notification-class	Yes	No	All	Yes *1
Octetstring-value	Yes	No	All	Yes *1
Positive-integer-value	Yes	No	All	Yes *1
Program	Yes	No	All	Yes *1
Pulse-converter	Yes	No	All	Yes *1
Schedule	Yes	No	All	Yes *1
Structured-view	Yes	No	All	Yes *1

Object Type	Object Type Supported	Dynamically Creatable and Deletable	Optional Properties Supported	Proprietary Properties
Trend-log	Yes	No	All	Yes *1
Trend-log-Multiple	Yes	No	All	Yes *1
Time-pattern-value	Yes	No	All	Yes *1
Time-value	Yes	No	All	Yes *1

\*1: Proprietary properties are supported if based on one of the primitive datatypes.

## 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)
  - Does the BBMD support registrations by Foreign Devices?  Yes  No
  - Does the BBMD support network address translation?  Yes  No

## Character Sets Supported:

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

- ANSI X3.4
- IBM™/Microsoft™ DBCS
- ISO 8859-1
- ISO 10646 (UCS-2)
- ISO 10646 (UCS-4)
- JIS X 0208 (JIS C 6226)
- ISO 10646 (UTF-8)

## 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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