



FIS#bacnet

BACnet Protocol Implementation Conformance Statement (PICS)

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Versionsverlauf

In der folgenden Tabelle werden alle Änderungen des Dokumentes gegenüber der Vorversion vermerkt.

Version	Kurzbeschreibung	Datum	Bearbeiter
1	Neuerstellung	03.09.2014	Hirsch, Martin
2	BIBB DS-COV-B entfernt	07.10.2014	Hirsch, Martin
3	BIBB AE-ACK-B entfernt	02.02.2015	Hirsch, Martin

Tabelle 1: Versionsverlauf

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1 General Information

Vendor Name:	HERMOS AG
Product Name:	FIS#bacnet
Product Model Number:	FIS# 2.5
Applications Software Version:	2.5
Firmware Revision:	2.5
BACnet Protocol Revision:	1.12
Product Description:	FIS#bacnet is a BACnet protocol implementation for the FIS# control system software.

It allows the use of BACnet objects from other BACnet stations within FIS# and provides access to its own data via BACnet.

2 Standardized Device Profile

- BACnet Operator Workstation (B-OWS)
- BACnet 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)

3 Interoperability Building Blocks Supported (BIBBs)

3.1 Data Sharing

BIBB	Supported	Remarks
DS-RP-A	×	
DS-RP-B	×	
DS-RPM-A	×	
DS-RPM-B	×	
DS-RPC-A		Removed
DS-RPC-B		Removed
DS-WP-A	×	
DS-WP-B	×	
DS-WPM-A	×	
DS-WPM-B	×	
DS-COV-A	×	
DS-COV-B		
DS-COVP-A	×	
DS-COVP-B	×	
DS-COVU-A	×	
DS-COVU-B		
DS-V-A	×	
DS-AV-A	×	
DS-M-A	×	
DS-AM-A	×	

Tabelle 2: Data Sharing BIBBs

3.2 Alarm & Event Management

BIBB	Supported	Remarks
AE-N-A	×	
AE-N-I-B		
AE-N-E-B		
AE-ACK-A	×	
AE-ACK-B		
AE-ASUM-A	×	Deprecated
AE-ASUM-B		
AE-ESUM-A	×	Deprecated

BIBB	Supported	Remarks
AE-ESUM-B		
AE-INFO-A	×	Deprecated
AE-INFO-B		
AE-LS-A	×	
AE-LS-B		
AE-VN-A	×	
AE-AVN-A	×	
AE-VM-A	×	
AE-AVM-A	×	
AE-AS-A	×	
AE-ELV-A	×	
AE-ELVM-A	×	
AE-EL-I-B		
AE-EL-E-B		

Tabelle 3: Alarm & Event Management BIBBs

3.3 Scheduling

BIBB	Supported	Remarks
SCHED-A	×	Deprecated
SCHED-I-B		
SCHED-E-B		
SCHED-R-B		
SCHED-AVM-A	×	
SCHED-VM-A	×	
SCHED-WS-A	×	
SCHED-WS-I-B		
SCHED-R-B		

Tabelle 4: Scheduling BIBBs

3.4 Trending

BIBB	Supported	Remarks
T-VMT-A	×	Deprecated
T-VMT-I-B		
T-VMT-E-B		
T-ATR-A	×	
T-ATR-B		
T-VMMV-A		Deprecated

BIBB	Supported	Remarks
T-VMMV-I-B		
T-VMMV-E-B		
T-AMVR-A	×	
T-AMVR-B		
T-V-A	×	
T-AVM-A	×	
T-A-A	×	

Tabelle 5: Trending BIBBs

3.5 Device & Network Management

BIBB	Supported	Remarks
DM-DDB-A	×	
DM-DDB-B	×	
DM-DOB-A	×	
DM-DOB-B	×	
DM-DCC-A	×	
DM-DCC-B		
DM-PT-A		Removed
DM-PT-B		Removed
DM-TM-A		
DM-TM-B		
DM-TS-A	×	
DM-TS-B	×	
DM-UTC-A	×	
DM-UTC-B	×	
DM-RD-A	×	
DM-RD-B		
DM-BR-A	×	
DM-BR-B		
DM-R-A	×	
DM-R-B	×	
DM-LM-A	×	
DM-LM-B	×	
DM-OCD-A	×	
DM-OCD-B		
DM-VT-A		
DM-VT-B		
DM-ANM-A	×	

BIBB	Supported	Remarks
DM-ADM-A	X	
DM-ATS-A	X	
DM-MTS-A	X	
NM-CE-A	X	
NM-CE-B	X	
NM-RC-A		
NM-RC-B		

Tabelle 6: Device & Network Management BIBBs

3.6 Network Security

BIBB	Supported	Remarks
NS-SD		
NS-ED		
NS-MAD		
NS-DMK-A		
NS-DMK-B		
NS-KS		
NS-TKS		
NS-SR		
NS-SP		

Tabelle 7: Network Security BIBBs

4 Object Types Supported

FIS# can read and write (if supported) any required, optional or proprietary property of any standard or proprietary object from a remote device. It is also possible to create or delete any standard object-type in remote devices.

Object	Client	Server		
	Supported	Supported	Createable	Deletable
Access-Credential	×			
Access-Door	×			
Access-Point	×			
Access-Rights	×			
Access-User	×			
Access-Zone	×			
Accumulator	×			
Analog-Input	×			
Analog-Output	×			
Analog-Value	×			
Averaging	×			
Binary-Input	×			
Binary-Output	×			
Binary-Value	×			
Bitstring-Value	×			
Calendar	×			
Characterstring-Value	×			
Command	×			
Credential-Data-Input	×			
DatePattern-Value	×			
Date-Value	×			
Datetime-Pattern-Value	×			
Datetime-Value	×			
Device	×	×	N/A	N/A
Event-Enrollment	×			
Event-Log	×			
File	×			
Global-Group	×			
Group	×			
Integer-Value	×			
Large-Analog-Value	×			
Life-Safety-Point	×			
Life-Safety-Zone	×			
Load-Control	×			

Object	Client	Server		
	Supported	Supported	Createable	Deletable
Loop	×			
Multi-State-Input	×			
Multi-State-Output	×			
Multi-State-Value	×			
Network-Security	×			
Notification-Class	×			
Octetstring-Value	×			
Positive-Integer-Value	×			
Program	×			
Pulse-Converter	×			
Schedule	×			
Structured-View	×			
Time-Pattern-Value	×			
Time-Value	×			
Trend-Log	×			
Trend-Log-Multiple	×			

Tabelle 8: Supported Object Types

5 Object Properties Supported

A list of all object properties which can be present in the specified object with conformance-code and support of COV-P. An empty conformance code means that this property is not supported.

5.1 Device

Property	CC	COV-P	Remarks
Object_Identifier	R		
Object_Name	W	×	
Object_Type	R		
System_Status	R	×	
Vendor_Name	R		
Vendor_Identifier	R		
Model_Name	R		
Firmware_Revision	R		
Application_Software_Version	R		
Location	W	×	
Description	W	×	
Protocol_Version	R		
Protocol_Revision	R		
Protocol_Services_Supported	R		
Protocol_Object_Types_Supported	R		
Object_List	R		
Structured_Object_List			
Max_APDU_Length_Accepted	R	×	
Segmentation_Supported	R	×	
Max_Segments_Accepted	R	×	
VT_Classes_Supported			
Active_VT_Sessions			
Local_Time	R		
Local_Date	R		
UTC_Offset	R		
Daylight_Savings_Status	R		
APDU_Segment_Timeout	R	×	
APDU_Timeout	R	×	
Number_Of_APDU_Retries	R	×	
Time_Synchronization_Recipients	W	×	
Max_Master			
Max_Info_Frames			
Device_Address_Binding	R	×	

Property	CC	COV-P	Remarks
Database_Revision	R	×	
Configuration_Files			
Last_Restore_Time			
Backup_Failure_Timeout			
Backup_Preparation_Time			
Restore_Preparation_Time			
Restore_Completion_Time			
Backup_And_Restore_State			
Active_COV_Subscriptions	R		
Slave_Proxy_Enable			
Manual_Slave_Address_Binding			
Auto_Slave_Discovery			
Slave_Address_Binding			
Last_Restart_Reason	R	×	
Time_Of_Device_Restart	R	×	
Restart_Notification_Recipients	W	×	
UTC_Time_Synchronization_Recipients	W	×	
Time_Synchronization_Interval	W	×	
Align_Intervals	W	×	
Interval_Offset	W	×	
Profile_Name	R	×	

Tabelle 9: Supported Device Properties

6 Segmentation Capability

- Able to transmit segmented messages - Window Size 127
- Able to receive segmented messages - Window Size 127

7 Data Link Layer Options

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, RS-484 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): OS driver dependent
- LonTalk, (Clause 11), medium: -
- Other: -

8 Device Address Binding

Is static device binding supported? Yes No

9 Networking Options

- Router, Clause 6
- 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

10 Character Sets Supported

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

Multiple character sets can be used simultaneously. According to the remote device's revision it is may be necessary to switch between the character sets ISO 10646 (UTF-8) and ANSI X3.4 for write-requests. This compatibility switch is made automatically.

11 Gateway Functions

FIS#bacnet can act as a gateway from and to all FIS# supported devices and protocols.

12 Network Security Options

- Non-secure Device – is capable of operating without BACnet Network Security
- Secure Device – is capable of using BACnet Network Security
 - Multiple Application-Specific Keys
 - Support encryption
- Key Server

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Optionale Dokumentkommentare:

[Kommentare]