



## PcVue - BACnet Client PICS

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Last update :	September 2, 2021
Revision :	4.2/15.0.0
Content :	This document contains Protocol Implementation Conformance Statement of the CimWay built-in Client driver for BACnet.

The last revision of the technical content accommodates changes in PcVue 15.0.0. Unless otherwise stated, this document is valid for releases made publicly available since.

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# Authorization

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	<b>Name</b>	<b>Stamp</b>	<b>Date</b>
Written by	JS/JL		November 25 <sup>th</sup> , 2015
Checked by	BL		November 25 <sup>th</sup> , 2015
Authorized by	AB		November 25 <sup>th</sup> , 2015

# Revision history

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Revision	Author	Action	Editing	Date	Distribution
4.0	JS, JL	Update for PcVue 11.2: - B-AWS profile	BL	November 25 <sup>th</sup> , 2015	Public
4.1	BL	Update for PcVue 15.0.0: - Added support for Static Binding	JL	January 10 <sup>th</sup> , 2020	Public
4.2	BL	Editorial changes (15.1.3)	JL, FMA	August 27 <sup>th</sup> , 2021	Public

# Content

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# 1 BACnet Advanced Operator Workstation

Date:	August 28 <sup>th</sup> , 2021
Vendor Name:	ARC Informatique
Vendor Id:	624
Product Name:	PcVue
Product Model Number:	PcVue 15.0
Application Software Version:	1.0
Firmware Revision:	The full build number under the form x.y.z (for example 15.0.0)
BACnet Protocol Revision:	12 (135-2010)

## 1.1 Product description

PcVue is a SCADA Software that can act as a **BACnet Advanced Operator Workstation (B-AWS)**. PcVue is able to communicate with BACnet devices via BACnet/IP.

## 1.2 BACnet Standardized Device Profile

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

## 1.3 BACnet Interoperability Building Blocks Supported

Data Sharing	ReadProperty-A ReadProperty-B ReadPropertyMultiple-A WriteProperty-A WriteProperty-B WritePropertyMultiple-A View-A Advanced View-A Modify-A Advanced Modify-A COV-A COVP-A	DS-RP-A DS-RP-B DS-RPM-A DS-WP-A DS-WP-B DS-WPM-A DS-V-A DS-AV-A DS-M-A DS-AM-A DS-COV-A DS-COVP-A
Device & Network Management	Dynamic Device Binding-A Dynamic Device Binding-B Dynamic Object Binding-B Automatic Network Mapping-A Automatic Device Mapping-A DeviceCommunicationControl-A Object Creation and Deletion-A ReinitializeDevice-A Backup and Restore-A List Manipulation-A List Manipulation-B Time Synchronization-A UTC Time Synchronization-A Manual Time Synchronization-A Automatic Time Synchronization-A	DM-DDB-A DM-DDB-B DM-DOB-B DM-ANM-A DM-ADM-A DM-DCC-A DM- OCD-A DM-RD-A DM-BR-A DM-LM-A DM-LM-B DM-TS-A DM-UTC-A DM-MTS-A DM-ATS-A
Event & Alarm	Notification-A ACK-A Alarm Summary-A Enrollment Summary-A Information-A Alarm Summary View-A View and Modify-A Advanced View and Modify-A View Notifications-A Advanced View Notifications-A Event Log View-A Event Log View and Modify-A	AE-N-A AE-ACK-A AE-ASUM-A <sup>1</sup> AE-ESUM-A <sup>1</sup> AE-INFO-A <sup>1</sup> AE-AS-A AE-VM-A AE-AVM-A AE-VN-A AE-AVN-A AE-ELV-A AE-ELVM-A
Scheduling	Scheduling-A View and Modify-A Advanced View and Modify-A Weekly schedule-A	SCHED-A <sup>2</sup> SCHED-VM-A SCHED-AVM-A SCHED-WS-A

Trending	Viewing-A	T-V-A
	Viewing and Modifying Trends-A	T-VMT-A <sup>3</sup>
	Viewing and Modifying Multiple Values-A	T-VMMV-A <sup>3</sup>
	Advanced View and Modify-A	T-AVM-A
	Automated Trend Retrieval-A	T-ATR-A
	Automated Multiple Value Retrieval-A	T-AMVR-A
	Archival-A	T-A-A

<sup>1</sup> Deprecated, contained in Alarm Summary View-A (AE-AS-A)

<sup>2</sup> Deprecated, contained in View and Modify-A (SCHED-VM-A)

<sup>3</sup> Deprecated

## 1.4 Segmentation Capability

Segmented requests supported

Window Size: Configurable

Segmented responses supported

Window Size: Configurable

## 1.5 Standard Object Types Supported

- PcVue 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	-

- PcVue as BACnet client

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

Object Type	Object Type Supported	Dynamically Creatable and Deletable	Optional Properties Supported	Proprietary Properties
Access-credential	Yes	Yes	All	Yes <sup>1</sup>
Access-door	Yes	Yes	All	Yes <sup>1</sup>
Access-point	Yes	Yes	All	Yes <sup>1</sup>
Access-rights	Yes	Yes	All	Yes <sup>1</sup>
Access-user	Yes	Yes	All	Yes <sup>1</sup>
Access-zone	Yes	Yes	All	Yes <sup>1</sup>
Accumulator	Yes	Yes	All	Yes <sup>1</sup>
Analog-input	Yes	Yes	All	Yes <sup>1</sup>
Analog-output	Yes	Yes	All	Yes <sup>1</sup>
Analog-value	Yes	Yes	All	Yes <sup>1</sup>
Averaging	Yes	Yes	All	Yes <sup>1</sup>
Binary-input	Yes	Yes	All	Yes <sup>1</sup>
Binary-output	Yes	Yes	All	Yes <sup>1</sup>
Binary-value	Yes	Yes	All	Yes <sup>1</sup>
Bitstring-value	Yes	Yes	All	Yes <sup>1</sup>
Calendar	Yes	Yes	All	Yes <sup>1</sup>
Characterstring-value	Yes	Yes	All	Yes <sup>1</sup>
Command	Yes	Yes	All	Yes <sup>1</sup>
Credential-data-input	Yes	Yes	All	Yes <sup>1</sup>
Date-pattern-value	Yes	Yes	All	Yes <sup>1</sup>
Date-value	Yes	Yes	All	Yes <sup>1</sup>
Datetime-pattern-value	Yes	Yes	All	Yes <sup>1</sup>
Datetime-value	Yes	Yes	All	Yes <sup>1</sup>
Device	Yes	No	All	Yes <sup>1</sup>
Event-enrollment	Yes	Yes	All	Yes <sup>1</sup>
Event-log	Yes	Yes	All	Yes <sup>1</sup>
File	Yes	Yes	All	Yes <sup>1</sup>
Global-group	Yes	Yes	All	Yes <sup>1</sup>
Group	Yes	Yes	All	Yes <sup>1</sup>
Integer-value	Yes	Yes	All	Yes <sup>1</sup>
Large-analog-value	Yes	Yes	All	Yes <sup>1</sup>
Life-safety-point	Yes	Yes	All	Yes <sup>1</sup>
Life-safety-zone	Yes	Yes	All	Yes <sup>1</sup>

Object Type	Object Type Supported	Dynamically Creatable and Deletable	Optional Properties Supported	Proprietary Properties
Load-control	Yes	Yes	All	Yes <sup>1</sup>
Loop	Yes	Yes	All	Yes <sup>1</sup>
Multi-state-input	Yes	Yes	All	Yes <sup>1</sup>
Multi-state-output	Yes	Yes	All	Yes <sup>1</sup>
Multi-state-value	Yes	Yes	All	Yes <sup>1</sup>
Network-security	Yes	Yes	All	Yes <sup>1</sup>
Notification-class	Yes	Yes	All	Yes <sup>1</sup>
Octetstring-value	Yes	Yes	All	Yes <sup>1</sup>
Positive-integer-value	Yes	Yes	All	Yes <sup>1</sup>
Program	Yes	Yes	All	Yes <sup>1</sup>
Pulse-converter	Yes	Yes	All	Yes <sup>1</sup>
Schedule	Yes	Yes	All	Yes <sup>1</sup>
Structured-view	Yes	Yes	All	Yes <sup>1</sup>
Trend-log	Yes	Yes	All	Yes <sup>1</sup>
Trend-log-Multiple	Yes	Yes	All	Yes <sup>1</sup>
Time-pattern-value	Yes	Yes	All	Yes <sup>1</sup>
Time-value	Yes	Yes	All	Yes <sup>1</sup>

<sup>1</sup> Proprietary properties are supported if based on one of the primitive datatypes.

## 1.6 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-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 - 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

## 1.9 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)

## 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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