



PcVue - BACnet Server PICS

Last update :	August 28, 2021
Revision :	1.2/15.0.0
Content :	This document contains Protocol Implementation Conformance Statement of the CimWay built-in Server Add-on 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.

The information in this book is subject to change without notice and does not represent a commitment on the part of the publisher. The software described in this book is furnished under a license agreement and may only be used or copied in accordance with the terms of that agreement. It is against the law to copy software on any media except as specifically allowed in the license agreement. No part of this manual may be reproduced or transmitted in any form or by any means without the express permission of the publisher. The author and publisher make no representation or warranties of any kind with regard to the completeness or accuracy of the contents herein and accept no liability of any kind including but not limited to performance, merchantability, fitness for any particular purpose, or any losses or damages of any kind caused or alleged to be caused directly or indirectly from this book. In particular, the information contained in this book does not substitute to the instructions from the products' vendor. This book may contain material belonging to third-parties. Such information is used exclusively in internal work processes and is not intended to be disclosed. In addition, this notice is not a claim of property on such third-party information. All product names and trademarks mentioned in this document belong to their respective owner.

Authorization

	Name	Stamp	Date
Written by	JS, ABQ		January 8 th , 2019
Checked by	BL		January 8 th , 2019
Authorized by	JS		January 8 th , 2019

Revision history

Revision	Author	Action	Editing	Date	Distribution
1.0	JS, ABQ	Creation of the document for PcVue 12.0: - B-ASC profile	BL	January 8 th , 2019	Public
1.1	ABQ	Update for PcVue 15.0.0: - Added optional Device Properties related to "BACnet Device Restart Procedure" - Editorial changes	BL	November 5 th , 2020	Public
1.2	BL	Editorial changes (15.1.3)	FMA	August 27 th , 2021	Public

Content

1	BACNET APPLICATION SPECIFIC CONTROLLER	4
1.1	PRODUCT DESCRIPTION	4
1.2	BACNET STANDARDIZED DEVICE PROFILE	4
1.3	BACNET INTEROPERABILITY BUILDING BLOCKS SUPPORTED	4
1.4	SEGMENTATION CAPABILITY	4
1.5	STANDARD OBJECT TYPES SUPPORTED	5
1.6	DATA LINK LAYER OPTIONS	6
1.7	DEVICE ADDRESS BINDING	6
1.8	NETWORKING OPTIONS	6
1.9	CHARACTER SETS SUPPORTED	6
1.10	NETWORK SECURITY OPTIONS	7

1 BACnet Application Specific Controller

Date:	August 28 th , 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 **Application Specific Controller (B-ASC)**. PcVue is able to communicate with BACnet workstations 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-B	DS-RP-B
	ReadPropertyMultiple-B	DS-RPM-B
	WriteProperty-B	DS-WP-B
	WritePropertyMultiple-B	DS-WPM-B
	COV-B	DS-COV-B
	COVP-B	DS-COVP-B
Device & Network Management	Dynamic Device Binding-B	DM-DDB-B
	Dynamic Object Binding-B	DM-DOB-B
	DeviceCommunicationControl-B	DM-DCC-B

1.4 Segmentation Capability

- Segmented requests supported Window Size: 16
- Segmented responses supported Window Size: 16

1.5 Standard Object Types Supported

- PcVue as BACnet server

The following description defines all objects that PcVue is able to expose as a BACnet server. That does not mean these objects may be present in a given PcVue project.

Object Type	Object Type Supported	Dynamically Creatable and Deletable	Optional Properties Supported	Proprietary Properties
Analog-input	Yes	No	Description Min_Pres_Value Max_Pres_Value Resolution COV_Increment Profile_Name	No
Analog-output	Yes	No	Description Min_Pres_Value Max_Pres_Value Resolution COV_Increment Profile_Name	No
Analog-value	Yes	No	Description Min_Pres_Value Max_Pres_Value Resolution Priority_Array Relinquish_Default COV_Increment Time_Delay Profile_Name	No
Binary-input	Yes	No	Description Inactive_Text Active_Text Profile_Name	No
Binary-output	Yes	No	Description Inactive_Text Active_Text Profile_Name	No
Binary-value	Yes	No	Description Inactive_Text Active_Text Priority_Array Relinquish_Default Profile_Name	No
Device	Yes	No	Location Description Local_Time Local_Date UTC_Offset Daylight_Savings_Status ADPU_Segment_Timeout	No

			Active_COV_Subscriptions Max_Segments_Accepted Time_Of_Device_Restart Last_Restart_Reason Restart_Notification_Recipients	
--	--	--	---	--

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)

ARC Informatique

Headquarters and Paris offices
2 avenue de la Cristallerie
92310 Sèvres - France
tel + 33 1 41 14 36 00
fax + 33 1 46 23 86 02
hotline +33 1 41 14 36 25
arcnews@arcinfo.com
www.pcvuesolutions.com

ARC Informatique

Private limited company
capitalized
at 1 250 000 €
RCS Nanterre B 320 695 356
APE 5829C
SIREN 320 695 356
VAT N°FR 19320695356

PcVue - BACnet Server PICS

© 2021 ARC Informatique.
All rights reserved.
Partial or integral reproduction is
prohibited without prior authorization
All names and trademarks are the
property of their respective owners.



ISO 9001 and ISO 14001 certified

We would love to hear your thoughts and suggestions
so we can improve this document
Contact us at team-doc@pcvuesolutions.com