



DESIGO™ INSIGHT OPEN

BACnet client

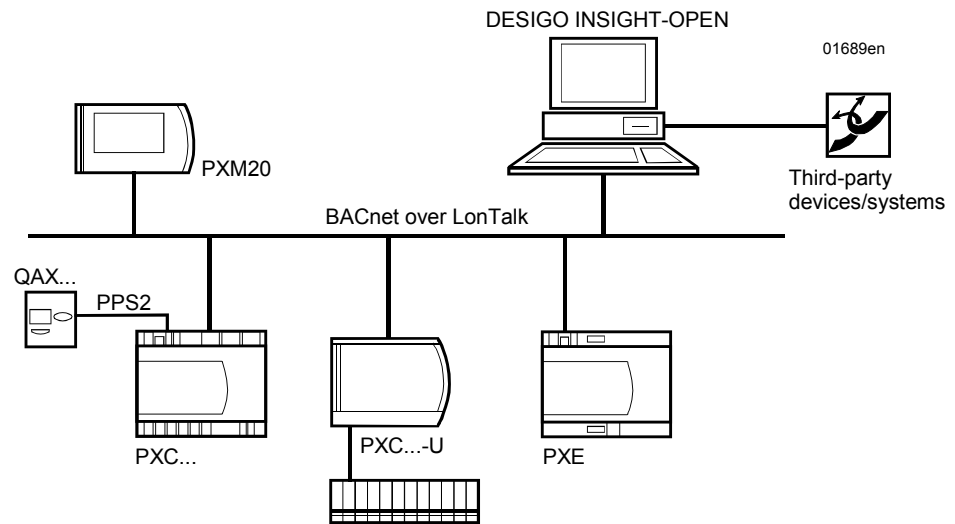
The INSIGHT OPEN BACnet solution offers a standard integration solution for the communication and exchange of information between DESIGO INSIGHT and a BACnet network. At the heart of the solution is OPC.

Function

The INSIGHT OPEN BACnet client offers the following features:

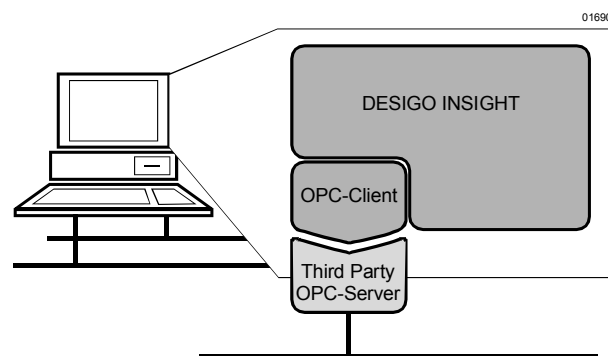
- Solution based on Windows NT and Windows 2000
- Citect V5.40, OPC Client V1.7.3 and DI V1.1
- BACnet Ethernet or BACnet on IP bus
- Compliant with OPC DA 2.0

Topology



DESIGO INSIGHT OPEN LONWORKS OPC solution for the DESIGO system V2.1

Internal topology



The INSIGHT OPEN BACnet solution uses a OPC server from **Cimetrics Technology Inc.**

Engineering

Engineering is carried out with DESIGO:

- BACnet network engineering
- OPC database import with the INSIGHT OPEN Import Tool (DIO-IT)
- Engineering of INSIGHT as standard

Third-party commissioning

The commissioning procedure is described in the data sheet in the Application Guide for the respective Solution Pack.

Related documents

Type	Data Sheet No.	Eng./Appl. Guide No.
INSIGHT OPEN OPC Import Tool	CA2N9751	CA2Y9751
INSIGHT OPEN BACnet Client V2.1	CA2N9753	CA2Y9753
INSIGHT OPEN EIB Client V2.1	CA2N9752	CA2Y9752
INSIGHT OPEN LON Client	CA2N9754	CA2Y9754

BACnet Protocol Implementation Conformance Statement (PICS)

Vendor Name: **Cimetrics Technology, Inc.**
Product Name: **BACnet OPC server**
Product Model Number: **V2.1**

Product Description

The **Cimetrics BACnet OPC server** is a BACnet client software component, which allows access to BACnet as a BACnet client, and provides access to the data points via OPC.

The BACnet OPC server product line is divided into four (4) different options:

Option 1: BACnet Client support for Conformance Class 4 server

Option 2: BACnet Client support for Conformance Class 6 server

Option 3: like Option 2, additional support for BACnet over LonTalk

Option 4: like Option 3, additional routing support

Functions which are not supported by all versions of this software are listed in footnotes.

Conformance Class

Class 1	Supported	Class 4	Supported
Class 2	Supported	Class 5	Supported
Class 3	Supported	Class 6	Supported

Conformance Classes 5 and 6 are not supported by software option 1.

Functional groups

Clock	Supported
HHWS	Supported
PCWS	Supported
Event Initiation	Not supported
Event Response	Supported
COV Event Initiation	Not supported
COV Event Response	Supported
Files	Supported
Reinitialize	Supported
Virtual Operator Interface	Not supported
Virtual Terminal	Not supported
Device Communications	Supported
Time Master	Supported

The functional groups "HHWS", "PCWS", "Files", "Reinitialize" and "TimeMaster" are not supported by software option 1.

Application Service	Initiates Request	Executes Request
AcknowledgeAlarm	Supported	Not supported
ConfirmedCOVNotification	Not supported	Supported
ConfirmedEventNotification	Not supported	Supported
GetAlarmSummary	Supported	Not supported
GetEnrollmentSummary	Not supported	Not supported
Subscribe COV	Supported	Not supported
UnconfirmedCOVNotification	Not supported	Supported
UnconfirmedEventNotification	Not supported	Supported
AtomicReadFile	Supported	Not supported
AtomicWriteFile	Supported	Not supported
AddListElement	Supported	Not supported
RemoveListElement	Supported	Not supported
CreateObject	Supported	Not supported
DeleteObject	Supported	Not supported
ReadProperty	Supported	Not supported
ReadPropertyConditional	Supported	Not supported
ReadPropertyMultiple	Supported	Not supported
WriteProperty	Supported	Not supported
WritePropertyMultiple	Supported	Not supported
DeviceCommunicationControl	Supported	Not supported
ConfirmedPrivateTransfer	Not supported	Not supported
UnconfirmedPrivateTransfer	Not supported	Not supported
ReinitializeDevice	Supported	Not supported
ConfirmedTextMessage	Not supported	Not supported
UnconfirmedTextMessage	Not supported	Not supported
TimeSynchronization	Supported	Not supported
Who-Has	Not supported	Not supported
I-Have	Not supported	Not supported
Who-Is	Not supported	Not supported
I-Am	Not supported	Not supported
VT-Open	Not supported	Not supported
VT-Close	Not supported	Not supported
VT-Data	Not supported	Supported
Authenticate	Supported	Not supported
Request Key	Not supported	Not supported
Read Range	Supported	Supported

The application services "CreateObject", "DeleteObject", "ReadPropertyConditional" and "DeviceCommunicationControl" are not supported by software option 1.

The initiation of the application service "TimeSynchronization" is not supported by software option 1.

Standard object types supported

Object type	Supported	Dynamic creation	Dynamic deletion
Analog Input	Supported	Supported	Supported
Analog Output	Supported	Supported	Supported
Analog Value	Supported	Supported	Supported
Binary Input	Supported	Supported	Supported
Binary Output	Supported	Supported	Supported
Binary Value	Supported	Supported	Supported
Calendar	Supported	Supported	Supported
Command	Supported	Supported	Supported
Device	Yes	N/A	N/A
Event Enrollment	Supported	Supported	Supported
File	Supported	Supported	Supported
Group	Supported	Supported	Supported
Loop	Supported	Supported	Supported
Multi-State Input	Supported	Supported	Supported
Multi-State Output	Supported	Supported	Supported
Notification Class	Supported	Supported	Supported
Program	Supported	Supported	Supported
Schedule	Supported	Supported	Supported
Multi-State Value	Supported	Supported	Supported
Trendlog	Supported	Supported	Supported
Averaging	Supported	Supported	Supported

Dynamic creation and deletion of objects is not supported by software option 1.

Data Link Layer

Data Link Layer option	ISO 8802-3	10Base5	Supported
	ISO 8802-3	10Base2	Supported
	ISO 8802-3	10BaseT	Supported
	ISO 8802-3	Fiber	Supported
	ARCNET	Coax star	Supported
	ARCNET	Coax bus	Supported
	ARCNET	Twisted pair star	Supported
	ARCNET	Twisted pair bus	Supported
	ARCNET	Fiber star	Supported
	MS/TP master	Baud rate [s]	Not supported
	MS/TP slave	Baud rate [s]	Not supported
	Point-To-Point	EIA232	Supported
	Point-To-Point	modem	Supported
	LonTalk	medium: FTT-10A	Supported
	Other:	BACnet/IP	Supported

Data Link Layer LONWORKS is not supported by software options 1 and 2.

Support for certain bus topologies depends on the interface card.

Support for certain baud rates (PTP) depends on the software configuration.

Character sets supported

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

ANSI X3.4	Supported
IBM / Microsoft DBCS	Supported
JIS C 6226	Supported
ISO 10646 (ICS-4)	Supported
ISO 10646 (UCS2)	Supported
ISO 8859-1	Supported

Special functions

Segmented Requests Supported Window size can be configured	Yes
Segmented Responses Supported Window size can be configured	Yes
Router	Supported
Routing capabilities	See below
Property Range Restrictions	

Routing capabilities are not supported by software options 1, 2 and 3.