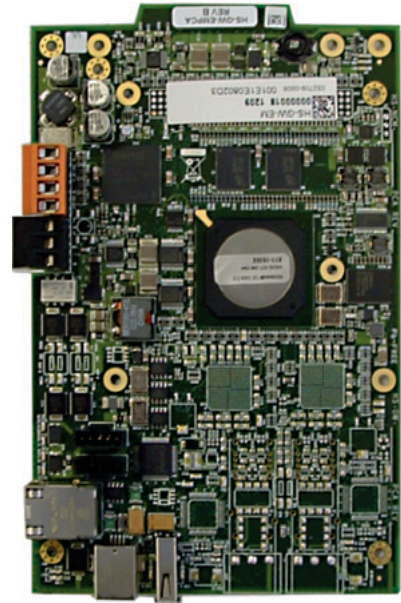# BACnet Gateway

The BACnet protocol is a Standard (Ansi/Ashrae 135-2004). With the Gateway Interface, devices on Vigilon fire alarm control panels are represented as BACnet objects to the BACnet client. The user subscribes to Event Notification objects from the FACP as required and the BACnet device receives events from objects on the FACP as a result of the subscription.

With the VIG-BNG-RW the BACnet client can also write to certain objects on the FACP.

The BACnet Gateway can be connected to a standalone EN54 FACP using an S4-34440-12 Interface or it can be connected to an EN54 Vigilon network via a VIG-NET-NODE. Each BACnet Gateway can support a maximum of 15 FACP or 15000 objects. Multiple Gateways can be used to interface with larger networks.

Description

The BACnet Gateway provides an interface between the EN54 Vigilon fire panel network using the BACnet/IP communication protocol.

KEY FEATURES

- Compatible with Vigilon Plus and Compact Plus range of panels
- PC programming using the BACnet Import generator tool

- Configurable selection of certain FACP objects reducing object count
- Auto discover or data file import of all objects on FACP`s

- Support for Life Safety operations

- With RW version, support for Enablement/Disablement of Zones, Devices and Command Builds , Changing states of Sensors and On/Off control of Command Builds

- The BACnet Gateway can act as a foreign device when communicating with a third-party BBMD (BACnet Broadcast Management Device)

BACnet Gateway Technical Specifications

SPECIFICATION	
POWER REQUIREMENTS	24V DC @ 270mA nominal and supervised battery back up
OPERATING TEMPERATURE	32ºF to 120ºF (0ºC to 49ºC) 93% humidity non condensing at 30ºC
MIN FACP SOFTWARE REQUIREMENTS	MCC 4.41, NC 4.07, IOC 4.12

Connections

- The BACnet Gateway is connected to the Vigilon Network using an RS232 connection to port 1 of a VIG-NET-NODE having address 1. The PCB assembly is fitted in Loop Card 1 Slot.

- The BACnet Gateway is connected to a Standalone FACP using an RS232 connection to a VIG-IOC-DOM. The assembly is fitted on the din rail of an S4-34440-12 mains powered interface using a VIG-BNG-DINKIT.

- The BACnet Gateway is connected to the BACnet client via a standard RJ45 Ethernet connector.

PIC Statement/BACnet Information

The VIG-BNG and VIG-BNG-RW PIC Statement along with an event and instance listing for all FACP objects is available on request. For information on the BACnet protocol see www.bacnet.org
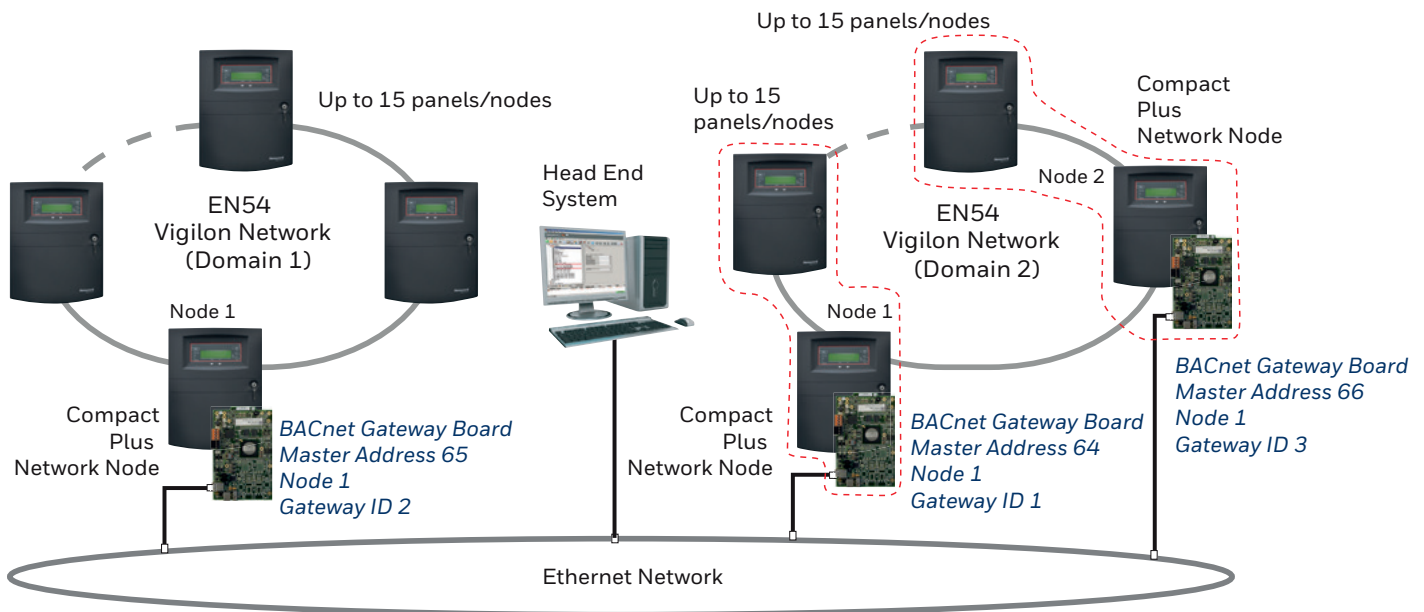
System Architecture

PC (BACnet IP Client) > Ethernet > VIG-BNG or VIG-BNG-RW > FACP (VIG-NET-NODE).

Product Information

The VIG-BNG and VIG-BNG-RW includes everything to fit inside and connect to a VIG-NET-NODE (Ethernet cable not included).

- Gateway PCB
- PCB Carrier
- Mounting Pillars
- 500mA Fuse
- 24v DC supply cable
- RS232 cable (NUP to open wire)

BACnet Gateway Technical Specifications

Conforms to BACnet Standard Annex J for IP and supports the following:

DEVICES AVAILABLE	BACnet OBJECT
PANEL	**DEVICE**
LOOP CARD	Multi State Output
SMS SENSOR/MCP	Life Safety Point
S-QUAD SENSOR/MCP	Life Safety Point
MONITORED LINE IP	Multi State Input
INTERFACE UNIT	Multi State Input/ Multi State Output
PANEL ZONES (1-128)	Life Safety Zones (all Life Safety points are associated to Life Safety Zone)
SECTOR	Multi State Output
COMMAND BUILDS (RW VERSION)	Binary Value
BATTERY, CHARGER AND PSU	Multi State Value
AUXILIARY RELAYS	Multi State Value
MASTER ALARMS	Multi State Value
MONITORED PANEL IP (COMPACT PLUS PANEL)	Multi State Value
COMMAND	**LIFE SAFETY OPERATION / WRITE COMMANDS**
SILENCE SOUNDERS	Silence
MUTE BUZZER	Silence Audible
EVACUATE	UnSilence
RESET SYSTEM	Reset
DISABLE (RW VERSION)	Out of service
C BUILD ON/OFF (RW VERSION)	Present Value
DEVICE SENSITIVITY (RW VERSION)	Setting

ORDER CODES	
VIG-BNG	BACnet Gateway Assembly for Vigilon Plus & Compact Plus
VIG-BNG-RW	BACnet Gateway Assembly for Vigilon Plus & Compact Plus with Controls & Command Builds
VIG-BNG-DINKIT	BACnet Gateway Din Rail Mounting Kit for Mains powered interfaces S4-344402/12

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