

Product Description

A BACnetP2 is a software gateway, developed by PurpleSwift, for integration of Apogee P2 systems with BACnet. Allowing the benefits of BACnet to be unlocked for P2 systems.

This gateway software provides for an elegant integration of a Siemens Apogee system to any BACnet client software. Due to the Apogee P2 protocol support, this gateway software gives fast access to the Apogee system data points for both read and write operations as achieved by the Siemens Insight building management software. BACnetP2 functions perfectly with Insight in place, or if Insight is replaced.

Key Points

- Integrate Siemens Apogee panel and TEC device data
- Full read and write access to all Apogee device points
- Supports both legacy P2 (RS485) and P2 /Ethernet
- Support for both P1 and LON TEC devices (LMEC & LTEC)
- Minimal configuration required
- Very fast data acquisition
- Low impact on Apogee system
- BACnet /IP protocol

System Requirements

The BACnetP2 software is a Linux software application. Windows not supported although the gateway software can be run on Windows from a Linux virtual machine.

- Ubuntu 18.04.3 LTS AMD64 (server or desktop)
- CPU Atom 1.8 GHz
- RAM 2 GByte
- DISK 100 Gbyte
- RS485 adapter (Legacy P2 /RS485 only)

Connections and Mapping

BACnetP2 can be connected to an Apogee legacy P2 over RS485 network. Connection to an Apogee P2 /Ethernet network is also supported including multi-BLN configurations.

The software automatically maps the complete Apogee system to BACnet for easy use with BACnet discovery tools. Each Apogee panel is mapped to a separate BACnet device object. Likewise, each Apogee TEC device is mapped to a separate BACnet device object.

BACnetP2 appears on the Apogee system as a native Apogee panel device. The Apogee P2 network load is increased by a small amount, typically a few percent, and so this integration has a very low impact on the Apogee system.

Cost/Pricing

- BACnetP2 requires the once off purchase of a licence.
- There are no annual fees.
- The cost of the licence depends on the size and configuration of the existing system.

Two reports are required for a quote. Please see our [Pricing](#) page for instructions on how to generate the reports.

Technical

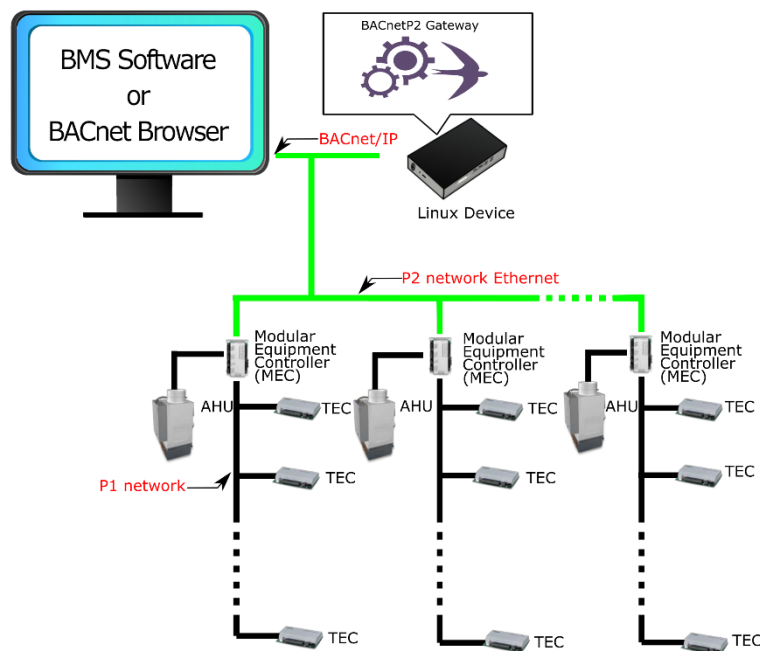
Part of software	Requirement
BACnet server	UDP socket on port 47808 (this is configurable to a custom port if required)
Apogee P2/Ethernet	Static IP for P2/Ethernet TCP socket (server) on port 5033 (this is configurable to a custom port if required) TCP socket (client) to port 5033 (this is configurable to a custom port if required) on each of the Apogee panels including the Insight PC. So if we have 10 panels plus the Insight PC we would have between 11 and 22 incoming TCP connections to our server socket. We would also have 11 TCP connections out to the panels.
Apogee P2/RS485	RS485 serial port.

- The BACnetP2 runs as a service with “root” privileges on Ubuntu 18.04.3 LTS AMD64
- For installation we use SSH on port 22.
- For remote support we use SSH on port 22 from some suitable VPN if permitted.
- For cyber security it is recommended to run the Ubuntu Linux in a container as a virtual machine.

System Architecture Example

P2- Ethernet

BACnetP2- run on dedicated linux device



This setup is showing a P2/Ethernet connection

Specifications are subject to change without notice.

No endorsement of this system by any manufacturer or organization is implied.

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