SbC3200 Cimetrics MS/TP to BACnet/IP and MS/TP/IP to SC

Data Sheet

Scalability for Evolving BACnet Networks: Modern building automation systems require secure and scalable network segmentation. The **SbC3200 BACnet Network Segmentation Device (BNSD)** meets today's BACnet MS/TP to BACnet/IP routing demands while also enabling a seamless transition to segmented BACnet/SC networks. Designed for adaptability, it ensures reliable performance as network architectures evolve.

The SbC3200's built-in BACnet Firewall enforces strict security policies, filtering BACnet traffic to prevent unauthorized access and mitigate cyber threats. It allows, blocks, or restricts specific BACnet messages and devices while providing real-time event logging to the SbC4000 Appliance and IT monitoring systems for enhanced visibility and compliance.

SbC3200 BNSD's FEATURES

Physical Hardware Ports:
- **Ethernet Ports:** 1 x 10/100/1000 Mbps for BACnet/IP and BACnet/SC routing and segmentation.
- **RS485 Ports:** 2 optically isolated BACnet MS/TP ports.

Multiple BACnet Routing Connections:
- Routes BACnet MS/TP to BACnet/IP networks
- Segments 2 BACnet MS/TP and 1 BACnet/IP networks from 1 BACnet/SC network.

### BACnet Firewall - Advanced Cybersecurity:
- **Can Be Configured For Traffic Filtering and Control:** Secures segmented BACnet networks by filtering traffic based on device ID, object type, service, and direction. Provides granular control options, including read-only, read/write, or block, to prevent unauthorized access and enhance network security.
- **Rule-Based Configuration:** Utilizes a JSON file to define firewall rules, enabling flexible communication policies and logging traffic for enhanced security .
- **Comprehensive Audit Trails:** Maintains a detailed log of all firewall activities, including traffic filtering decisions, policy modifications, and security events. These logs are sent to the SbC4000 Appliance for centralized compliance reporting and forensic analysis.
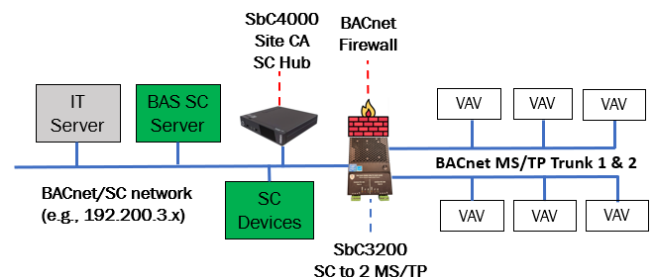
Web Configuration:
- **Secure Web Configuration:** Encrypted web-based management via TLS 1.3.

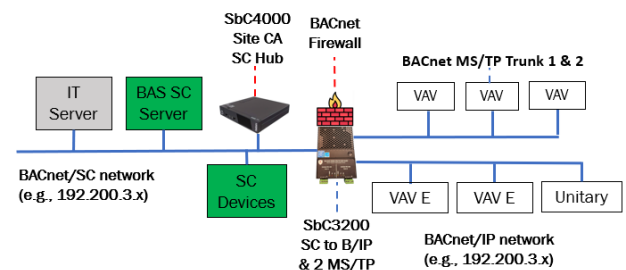## SbC3200 BACnet Segmentation Applications

1. Routes 2 BACnet MS/TP networks to BACnet/IP Network. The BACnet Firewall filters unauthorized traffic.
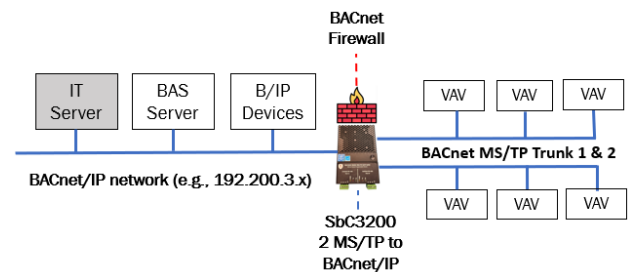
2. Segments 2 existing BACnet MS/TP networks from a new BACnet/SC network. BACnet Firewall filtering.

3. Segments 2 existing BACnet MS/TP and 1 BACnet/IP network from a new BACnet/SC network. BACnet Firewall filtering.

SbC Virtual Machine Large Scale BACnet/SC Deployment

The **Secured by Cimetrics (SbC)** SbC4000 and SbC410x Virtual Machine (VM) Appliance platforms are advanced for securing, monitoring, and optimizing small to large-scale BACnet/SC networks in Building Automation Systems (BAS). These Appliances simplify deployments by addressing critical challenges such as network segmentation, diagnostics, and multi-vendor integration.

Supporting this architecture, BACnet Network Segmentation Devices (BNSDs) like the SbC3100 and SbC3200 securely segments BACnet/SC, BACnet/IP, and BACnet MS/TP networks. These devices enforce advanced firewall policies, monitor traffic, and provide diagnostics, ensuring seamless operation across secured and unsecured network segments. Together, the SbC410x and BNSDs deliver a resilient, efficient solution for managing complex BAS networks.
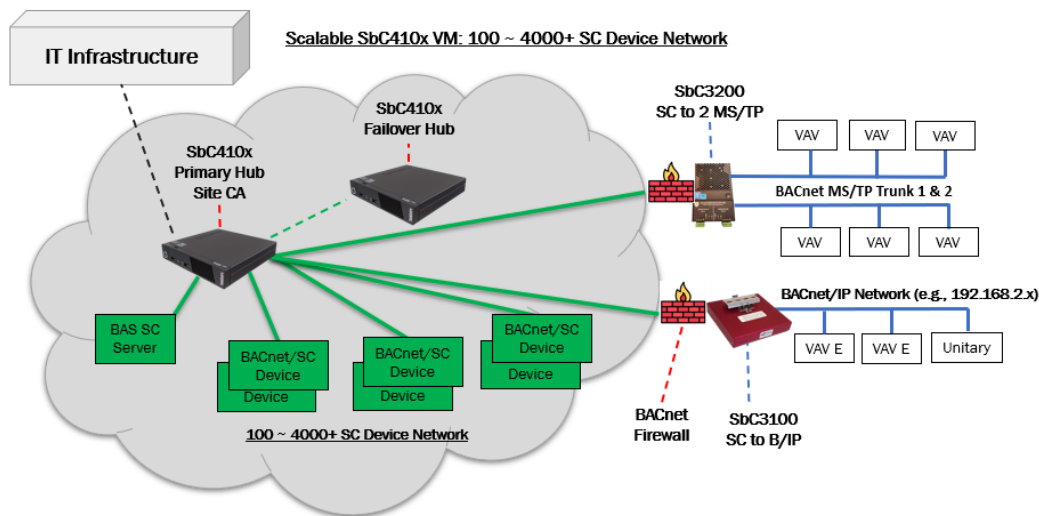
HARDWARE SPECIFICATIONS

Communication

Serial (Galvanic Isolation):

2 x RS-485 BACnet MS/TP ports

Connects up to 64 devices on 2 ports

Baud: 9600, 19200, 34800, 57600, 76800, 115,000

Ethernet ports:

(1) 10/100/1000 Mbps, DHCP

Operating Temperature: 0 to 40 C

Storage Temperature: -30 to 50 C

Power Adapter Input Voltage:

100-240 VAC, 50-60 Hz

Approvals

FCC Class A, CE

BACnet DETAILS

BACnet/SC, BACnet/IP, 2 BACnet MS/TP interfaces

Supports BACnet MS/TP to BACnet/IP routing (Clause 6)

Supports BACnet/SC TLS 1.3 or 1.2

BBMD with up to 127 devices in BDT

Foreign Device Registration—Up to 127 devices on different subnets

BACnet revision 16

ORDERING INFORMATION

Ordering Part Number:

SbC3200 - Secured by Cimetrics BNSD

Other

Web configuration

BACnet Firewall — Rules based configuration

On-Board diagnostics for BACnet/SC and unsecured networks

DIN Rail included