SbC3100 Cimetrics B/SC, B/IP to B/SC and B/IP BNSD

Data Sheet

The **Secured by Cimetrics™ SbC3100 BACnet Network Segmentation Device** offers a scalable and secure solution for BACnet/SC and BACnet/IP networks. It seamlessly integrates secured BACnet/SC and unsecured BACnet/IP networks while ensuring compliance with evolving BACnet standards.

The SbC3100 BNSD creates a new BACnet/SC segment, enabling the addition of a new hub to expand network device capacity. It also securely segments existing unsecured BACnet/IP networks from BACnet/SC networks, enhancing overall system security while ensuring smooth integration of modern and legacy systems. Its built-in BACnet firewall further strengthens network defenses, making the SbC3100 BNSD a vital component for addressing the challenges of scaling and modernizing Building Automation Systems (BAS).

SbC3100 Functionality

Port Configuration:
- 2 - 10/100/1000 Mbps Ethernet ports for BACnet segmentation.

Segments:
- A BACnet/SC network from BACnet/SC network.
- A BACnet/IP network from BACnet/SC network.
- A BACnet/IP network from BACnet/IP network.

Network Capacity:
- Supports up to 250 BACnet/IP devices on a segmented network.
- Fixed IP address assignments for the segmented network are managed by the integrator not IT.

Network Isolation:
- Creates private network - devices not invisible to IT.
- All non-BACnet traffic is blocked for enhanced security.

OpenVPN Remote Connectivity:
- Enables, secure non-BACnet communications to segmented network for configuration and diagnostics.

### BACnet Firewall - Advanced Cybersecurity:
- **Traffic Filtering and Control:** Filters and controls traffic by device ID, object type, service, and direction, providing granular options such as read-only, read/write, or block functionality.
- **Rule-Based Configuration:** Utilizes a JSON file to define firewall rules, enabling flexible communication policies and logging traffic for enhanced security and compliance.

Monitoring and Diagnostics:
- Syslog integration logs real-time events, including BACnet Firewall actions, for reporting to IT systems and the SbC Appliance.
- Wireshark-compatible packet capture on both network interfaces to quickly diagnose network issues.

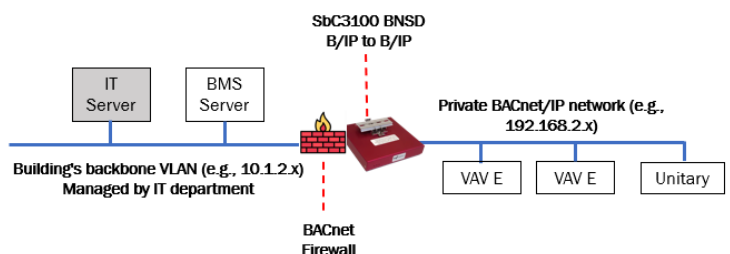## SbC3100 BACnet Segmentation Applications

1. Creates a secure new BACnet/SC segment from existing SC network to expand network capacity.
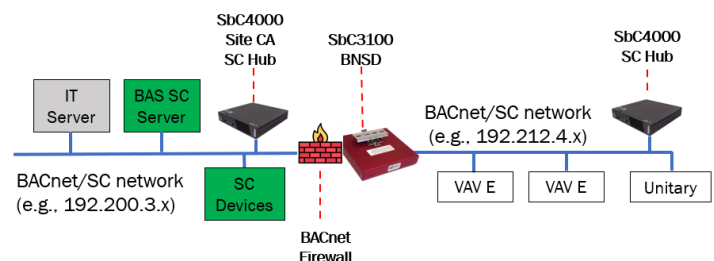
2. Segments existing BACnet/IP network to enable communication with BACnet/SC Networks.
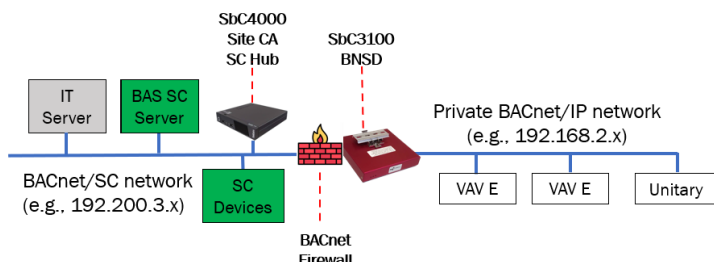
3. Creates a BACnet/IP private network when IT limits fixed IP addresses or device access.

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.
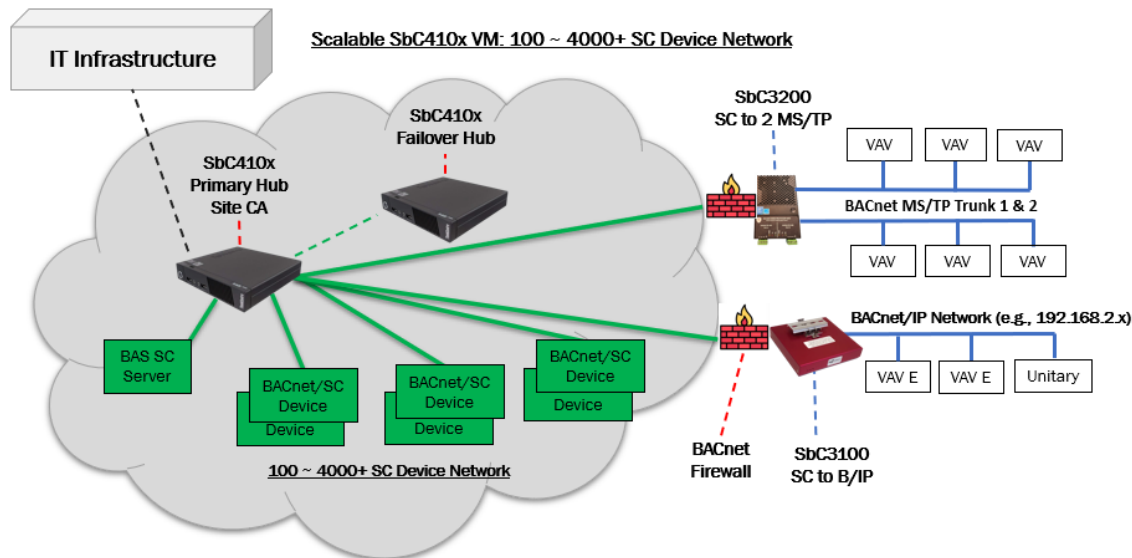
HARDWARE SPECIFICATIONS

Communication

Ethernet ports:

(2) 10/100/1000 Mbps, DHCP on Customer Network

Operating Temperature: 0 to 40 C

Storage Temperature: -30 to 50 C

Power Adapter Input Voltage:

100-240 VAC, 50-60 Hz

Dimensions: 15.8 X 16 X 2.5 CM

Weight: 1 lb

Approvals

FCC Class A, CE

BACnet DETAILS

BACnet/SC, BACnet/IP, 2 BACnet interfaces

Supports BACnet/SC TLS 1.3

BBMD with up to 127 devices in BDT

Foreign Device Registration—Up to 127 devices on different subnets

BACnet Protocol Revision 23

ORDERING INFORMATION

Ordering Part Number:

SbC3100 - Secured by Cimetrics BNSD

Other

Web configuration

BACnet Firewall

On-Board diagnostics for BACnet/SC and BACnet/IP networks

DIN Rail included

Product Support

2 Year warranty on SbC3100 hardware

Free product technical support

tel: +1-617-350-7550 - fax: 617-350-7552 - products@cimetrics.com - www.cimetrics.com   Revised January 2025