secunet
SBC

Secure VoIP Telephony

Comprehensive protection by the secunet Session Border Controller

secunet.com

secunet SBC serves as a session border controller for secure VoIP telephony between different companies or business units.

The secunet SBC enables secure coupling and connection of VoIP networks with different security classifications.

It performs key tasks to protect the internal VoIP network and also provides fraud detection and prevention to protect against external attacks.

Optimum VoIP support

As a central access point for VoIP calls, it can forward or reject calls at the network transition. SIP requests of different SIP versions are normalised in order to achieve a high error tolerance. It also supports Network Address Translation (NAT) internally, so that typical NAT problems are avoided when forwarding telephone calls.

Protective mechanisms

- Fraud detection and prevention
- Firewall Packet filter function at network level (layer 2–4)
- SBC packet filter function at VoIP level (Layer 5–7)
- secunet wall as a secure execution environment

Usage scenarios

The solution enables secure VoIP telephony between different networks or different organisations as well as within different locations of an organisation.

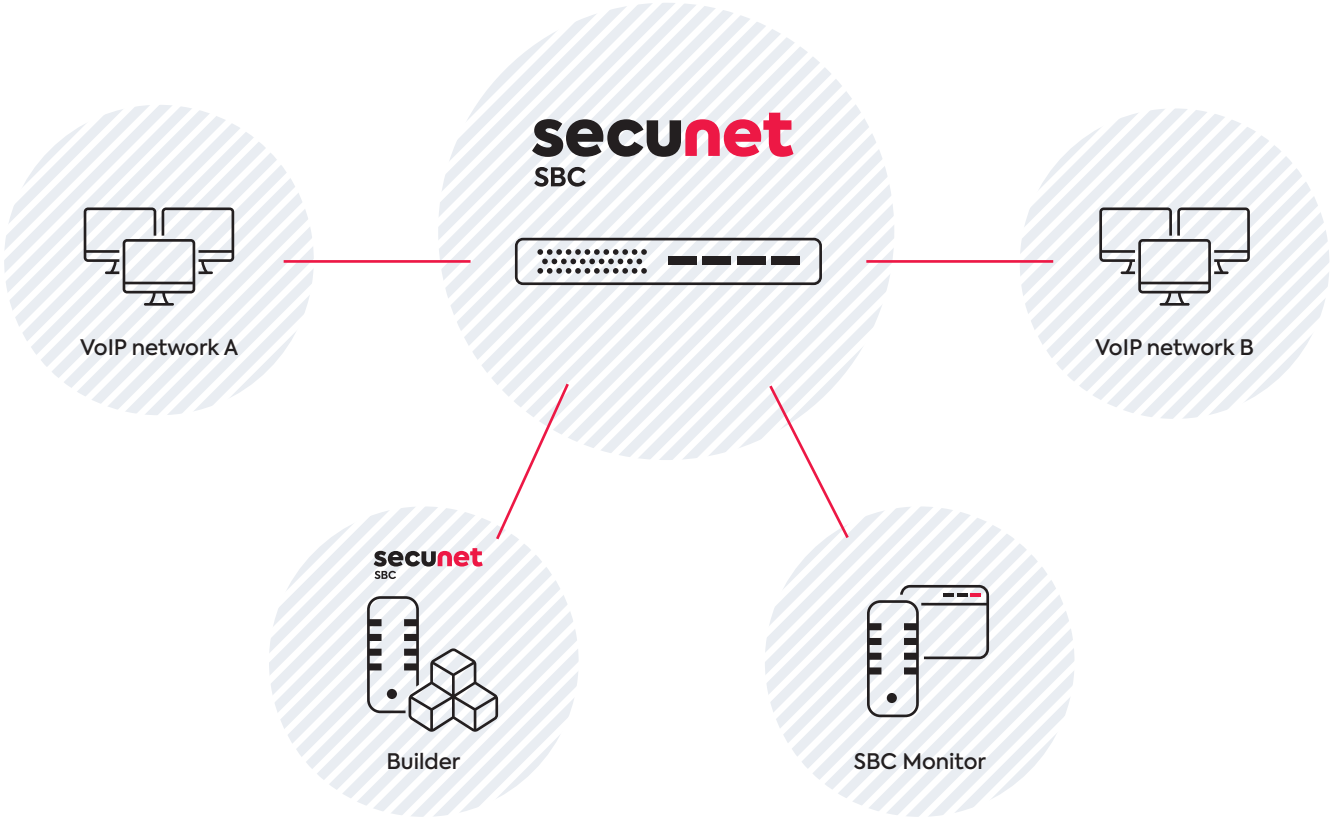
It enables the following usage scenarios:

- Tap-proof telephony via the Internet between employees of different companies
- Secure conference calls via the Internet between employees of one or different companies
- Secure web conferencing without a browser plug-in between employees of one or different companies
- VoIP traffic monitoring for protection
- against attacks

Fraud prevention and detection

secunet SBC protects against attacks aimed at a targeted overload of individual end devices. It overwrites incoming requests with its own IP address to embed an additional layer of security into the data transfer.

The data transfer is also logged via the SBC Monitor, which means that problems and potential threats in the network can be quickly detected and remedied. Risk statistics and call overviews are thereby generated.



Safe firewall

SBC is protected by the surrounding secunet wall as a secure firewall. The packet filter serves as a central gateway at the junction between different video and audio networks or network areas.

Fine-grained monitoring

The secunet SBC Monitor provides a visual representation of the entire VoIP telephony. The monitoring system facilitates a detailed description of individual calls and protocol components. Thanks to the monitor's real-time representation of session establishment, potential attacks can be detected early on and thus prevented by the secunet SBC's filter functions, among other things.

Benefits

- Audio and video support
- SIP optimisation
- NAT support
- VoIP interoperability
- Fraud detection and prevention
- Firewall-based network protection
- Simple administration
- CC EAL 4+ certification
- VS-NfD (restricted) release recommendation from V. 6.1.0
- Certified Mitel compatibility

secunet SBC Management

The Management software of the Session Border Controller is used to configure the product. It allows for a demand-optimised definition of rule sets and targeted activation of interfaces and protocols.

secunet SBC hardware

Live system
The Session Border Controller is available in two hardware variants to allow for individual performance needs. Both variants offer the same range of functions and have EAL CC 4+ certification and VS-NfD (restricted) approval recommendations from the German Federal Office for Information Security (BSI).

Technical data

	Fujitsu RX 1330-M4 performance hardware	Syslogic COMPACT 81-S entry hardware
Performance features		
System	PY RX1330M4 / LFF/ hot-plug SV/red. Fan	COMPACT81-SBC1
CPU	Intel® Xeon® E-2224 4C/4T 3.40 GHz	Intel® Atom™ x7-E3950 2.00 GHz (Burst) | 1.6 GHz Clock - Quad Core
Memory	16 GB	8 GB
Hard drive	240GB SSD SATA 6G	2 GB CFast storage card
Power connection		
Voltage supply	100 ~ 240V, 50/60 Hz redundant power supply	9–30 V DC
Power consumption (operation)	approx. 264 W	approx. 300 W
Operating environment		
Operating temperature	5 °C–45 °C	0 °C–50 °C
Operating humidity range	10–85 % non-condensing	10–85 % non-condensing
Interfaces		
Management interface	Management LAN traffic can be routed to shared onboard Gbit LAN port	Management LAN traffic can be routed to shared onboard Gbit LAN port
Ports	4× USB 3.0 (2x 3.1 Gen1 Type A at the front, 2× 3.1 Gen2 Type A on the rear) 2× USB 2.0 (rear) 1× VGA (front) 1× RS-232 (COM)	1× USB 3.0 (Type A) 1× USB 2.0 (Type A) 1× display port 1.2
LAN connections	1× dedicated management LAN port for iRMC S4 (10/100/1000 Mbit/s) 2× 1 Gbit Cu Intel I350-T2 (onboard) 4× 1 Gbit Cu Intel I350-T4 LP Intel® Ethernet server adapter I350-T4 4× 10Gb SFP+ LP Intel® Ethernet server adapter X710-DA2	1× dedicated management LAN port (10/100/1000 Mbit/s) 4× Ethernet 10/100/1000 with Intel I210 (RJ45)
Dimensions		
W × H × D	482.6 (cover) / 435.4 (housing) × 42.8 × 572 mm	approx. 174 × 47 × 127 mm (without mounting bracket)

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