

# NetBorder SBC Carrier Appliance



IP communications across multiple, sometimes untrusted, networks needs to be normalized, managed and secured. There is a need to guarantee interoperability of multiple devices, carriers and protocols in a transparent way to the user of the network. Session border controllers take care of the conversion between protocols, transcoding, threat prevention, resource limiting, and accounting at the edge of VoIP networks of enterprises and carriers alike.

## You wouldn't put your data network on the internet without a firewall—why would you expose your voice network without a Session Border Controller?

Sangoma's NetBorder SBC is designed for large enterprises, call centers, carriers and service providers that: want deliver scalable SIP trunking and PSTN services to clients, need to support SIP network peering arrangements, require comprehensive management and reporting functionality or integration with existing OSS and BSS environments.

A complete solution, the NetBorder SBC is easy to deploy and manage and delivers carrier-class security and reliability.

### Tailored for Your Business Needs

All Sangoma SBCs feature field upgradable, session-based licensing as well as hardware-based transcoding and media handling (optional for Vega SMB). Support for a broad range of SIP trunking topologies and integration with Skype for Business and Microsoft Lync environments, the Vega series includes comprehensive security configuration and a full suite of GUI-based tools and APIs for deployment, management, reporting and troubleshooting.



### Quick Facts

- » Supports 250 - 4,000 Simultaneous Calls
- » Field Upgradeable Session Expansion
- » Browser-based GUI for Easy Configuration
- » Session-based Licensing - No Hidden Fees
- » PSTN Equivalency for SIP Trunking Deployments
- » RAID-1 Solid State Drive
- » Hardware-based Transcoding & Media Handling
- » Optional Annual Support & Software Maintenance Plans

### ADVANCED CAPABILITIES

#### High Availability

Ensure business continuity with our new High availability (HA) feature, allowing mirroring of your main SBC with a standby SBC ready to automatically take over calls in case of failure. This feature is included free of charge!

#### Protection from Enterprise Security Threats Denial of Services

- » Call/registration overload
- » Malformed messages (fuzzing)

#### Configuration Errors

- » Mis-configured devices
- » Operator and application errors

#### Theft of Service / Fraud

- » Unauthorized users
- » Unauthorized media types

#### BYOD

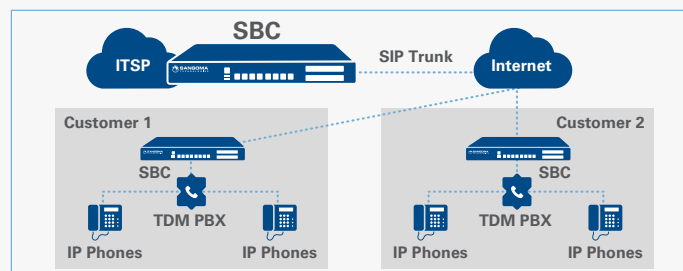
- » Smartphones running unauthorized apps
- » Viruses and malware attacking your VoIP network

### USE CASES

#### Service Provider Applications

- » SIP trunking
- » Remote worker
- » Hosted PBX
- » Core session router and load balancer

#### SIP TRUNKING



## TECHNICAL SPECIFICATIONS

### Features

#### Capacities:

- » Max. 4,000 calls/sessions
- » Full transcoding capability
- » Full security (SRTP/TLS) capability
- » Unlimited SIP trunks

#### Media Capabilities:

- » Voice, Video, FAX, IM and Presence support
- » Full RTP transcoding (G.711, G.722, G.729, G.726, G.723.1, iLBC, AMR, G.722.1) \*Only with hardware transcoding option
- » T.38 Fax Relay \*Only with hardware transcoding option

#### Networking:

- » 7x 10/100/1000 BaseT ethernet ports
- » IPV4, IPV6
- » VLAN support
- » 1x IPMI port
- » 1x console port

#### Licensing:

- » Only max. number of calls are licensed
- » Field upgradeable in 250/500/1000/2000 call increments

#### Security:

- » DDoS / DoS attack protection
- » Call security with TLS/SRTP
- » Media security with SRTP
- » IPSec encryption
- » IP firewall with port forwarding
- » Two-stage authentication

#### High Availability / Redundancy:

- » 1:1 active/standby two-box redundancy to guarantee business continuity

#### Call Control:

- » Advanced XML routing engine
- » Dynamic load balancing and call routing
- » Multiple call access control options
- » Least cost routing
- » Rate limiting: Call and registration
- » Endpoint authentication
- » Media bandwidth policy
- » Intelligent media anchoring/release

#### VoIP:

- » SIP 2.0 compliant
- » SIP trunking and remote working
- » SIP intrusion prevention
- » SIP registration scan attack detection
- » SIP request rate limiting
- » SIP registration pass-thru
- » SIP header normalization
- » SIP malformed packet protection
- » Advanced NAT traversal capabilities
- » Topology hiding
- » ENUM routing

#### Session and Monitoring:

- » Multiple session routing options
- » RTCP statistics reports
- » QoS (ToS or DSCP)
- » RADIUS CDR and authentication
- » QoS monitoring and reporting

#### Debugging:

- » Dedicated Browser interface for capturing full RTP media and signaling information
- » Onboard browser-based PCAP tracing, signalling and media – wireshark compatible
- » Large onboard storage capacity for long term tracing

#### Management:

- » Easy to use web interface
- » HTTP XML-based CDR
- » Real-time monitoring and debugging
- » TR-069 for remote provisioning
- » REST based interface to remotely configure SBCs

### Hardware

#### Specifications:

- » Power: Internal AC Power: 300W, dual, modular universal power supplies
- » Dimensions: 430mm (W) x 470mm (D) x 45mm (H)
- » Weight: 15kgs (33lbs)
- » 19 inch rackmount brackets included