

Dialogic® BorderNet™ Session Border Controller Edge

Extending the “Single-Software” BorderNet SBC to the Enterprise Edge

Dialogic’s all-software future-ready BorderNet SBC Edge deployment model reduces service provider CAPEX and OPEX while enabling deployment options based on x86 commercial off-the-shelf (COTS) platforms, private Cloud (VMware), public Cloud (Amazon EC2), and NFV.

Today’s real-time communication service providers are looking for ways to sustain their existing businesses by reducing capital and operational costs while building new lower-cost cloud-based services that can scale geographically and provide customers with a high quality of experience (QoE).

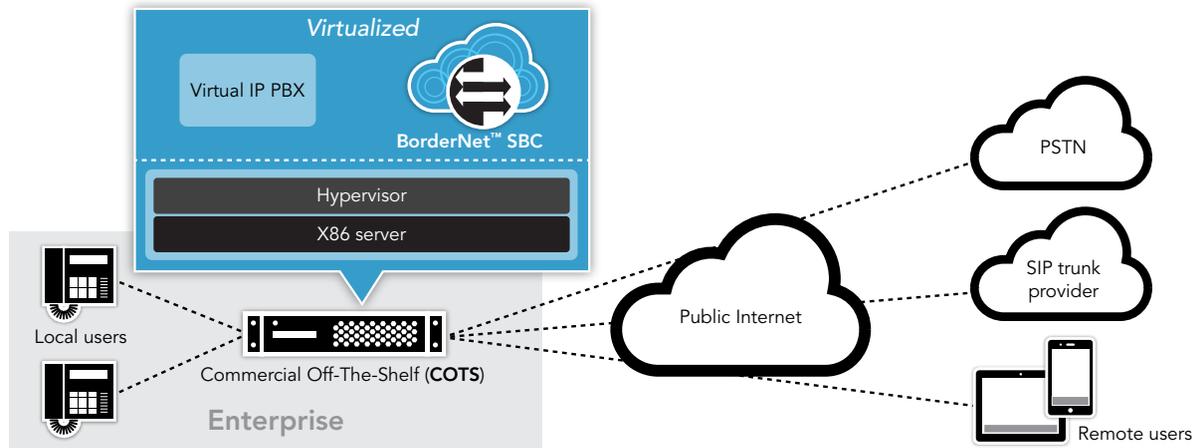


Service delivery architectures and legacy business models are being challenged by Cloud offerings and are under significant pressure to change. Dialogic’s future-ready all-software BorderNet SBC meets service providers’ secure Enterprise Access and SIP Trunking connectivity requirements with an attractive range of deployment options and business models.

Features	Benefits
Virtualized Function with leading hypervisor support from VMware ESXi™, Amazon HVM™ and Linux KVM	Lower TCO, speed and ease of deployment, no hardware limitations or forklifts
Powerful easy-to-use SIP-profiling tool	Rapid service deployment and ease of interoperability with no software changes
Integrated Dialogic analytics agent	Enables near real time centralized Enterprise SLA monitoring and reporting and voice quality measurement (VQM) using Dialogic’s integrated analytic solution eliminating the need for expensive probes and monitoring systems
Web 2.0 real-time dashboard and reporting	Easy-to-use local monitoring
All-software-based features with no hardware dependencies	Eliminate specialized hardware costs and forklift upgrades. Features are never limited by hardware type but only by common infrastructure resource availability
Dynamically optimized resource utilization; no dedicated or pre-allocated resources	Reduce infrastructure costs by fully utilizing available resources (compute, memory, etc.). Dynamically allocate resources in real time for intensive services such as media handling and transcoding while all other processes, such as signaling, are balanced across the total available vCPU resource pool
High Availability, Survivability, and Service resilience	Software-based carrier-grade high availability (HA) deployment model provides continuous service and low TCO
Integrated remote Wireshark tool	Rapid troubleshooting and resolution
Extensive scalability	The BorderNet SBC Edge scales through software licensing from 25 – 1,000 sessions per instance. No hardware upgrades or forklifts.
Advanced security functions	Advanced algorithms secure and protect the internal Enterprise network

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Security and Analytics Reporting

The BorderNet SBC Edge conceals internal private network topology, manages bandwidth usage and prioritizes call sessions for both network interconnections and service delivery to individual Users within the Enterprise premise. The BorderNet SBC Edge’s unique algorithms identify and block malicious threats while maintaining service assurance and reporting user QoE. SLAs are inherently monitored and reported in near-real time based on user-defined alarming thresholds per Enterprise creating unparalleled service provider value by eliminating the need for expensive QoE probes or other expensive adjunct systems.

Advanced Security features

- Customizable signaling and media topology hiding; prevents internal IP network exposure during VoIP service delivery
- Built-in firewall capabilities
- Dynamic access control list
- Automated rate limiting to protect against DoS attacks
- Real time messages syntax and semantic inspection
- Protection against malformed messages
- Encryption – TLS, IPsec, SRTP and HTTPS
- Message flood protection
- Dynamic black listing
- Media related security – pinhole management; non-solicited RTP detection and bandwidth control; media inactivity detection
- Adaptive overload controls assuring high priority traffic delivery

Media Expertise

Increased agility through ease of media interworking is achieved by methods such as codec transcoding and transrating performed natively within the BorderNet SBC Edge software. All integrated BorderNet SBC Edge media handling is based on 30 years of in-house media expertise, resulting in industry leading efficiency and quality with a highly attractive cost model that lowers the performance and cost barriers to implementing software-based transcoding in cloud and NFV environments.

Architectural Advantage

The BorderNet SBC Edge software delivers industry-leading performance while simultaneously reducing SBC total cost of ownership (TCO) by efficiently leveraging today’s multi-core compute platforms to improve SBC performance and scale by over 60%. The BorderNet SBC Edge dynamically distributes processor loads across all platform vCPUs while simultaneously protecting each vCPU from overload, enabling a dynamic compute resource allocation model.

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Technical Specifications

Features (per instance)

Session Licensing†	25 to 1,000 sessions in increments of 25 sessions
Registered Users	10,000
Redundancy	A single pair of BorderNet SBC Edge instances provides full high availability (HA)
Transcoding	Software-based; any codec to any codec; up to 100 sessions (assuming all sessions are transcoded)
Encryption	Software based, IPsec tunneling, TLS session setup, SRTP traffic encryption and decryption.
Supported Codecs for Transcoding	G.711-PCMA, G.711-PCMU, G.729AB, G.723.1, G.722, G.726, AMR-NB, AMR-WB, OPUS, iLBC, and EVS narrow-band FAX: G.711 FAX, T.38 Tones: In Band, SIP INFO, RFC2833 DTMF
Hypervisor technology	VMware ESXI 5.5, Linux KVM, Amazon HVM
Operation and Management	HTTP WEB browser SNMP-based Alarms Session Detail Records (SDR) Roles based user privileges Integrated Wireshark Remote tool. Integrated Dialogic Analytic agent for near real time SLA monitoring and reporting
Signaling protocols	SIP, H.323
IP	IPv4, IPv6 and Overlapped IP networks.
Voice Quality reports	System, network, and peer level MOS reports based on R-Factor.
Minimal resources	Interfaces - 4 vNICs Memory – 6GB CPU – 2 vCPUs

† Session capacity for same codec without transcoding or SRTP

Dialogic’s “Single-Software” Enterprise SBC

Dialogic’s single-software BorderNet SBC Edge increases service provider agility and lowers total cost of ownership (TCO) by supporting different deployment options with attractive commercial models tailored to your business needs. The BorderNet SBC Edge is the same carrier-grade Dialogic BorderNet SBC software that scales to 100,000 sessions in a single rack unit (RU), depending on the chosen deployment model. The evolving BorderNet SBC software protects operator investments by enabling operators to deploy on COTS today and evolve through virtualization to a private, public, or NFV-based cloud without forklift upgrades or loss of operational knowledge base.

For More Information

For more information about the product discussed in this datasheet, contact your local Dialogic representative.



www.dialogic.com

For a list of Dialogic locations and offices, please visit: <https://www.dialogic.com/contact.aspx>

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