Dialogic

Dialogic® BorderNet™ Session Border Controller Solutions

Supercharge Connections between Networks, Services and Subscribers with Ease and Scale

The BorderNet™ family of session border controllers (SBCs) from Dialogic helps service providers and enterprises energize networks with a better way to interconnect and deliver services through

• Superior media and signaling session handling performance
• Secure Any-to-Any IP network and service connectivity
• Web 2.0 dashboard and management console

The combination of features and performance capabilities of BorderNet SBCs enables secure and seamless, any-to-any connectivity across diverse IP and TDM networks, as well as improved ease-of-use and low total cost of ownership (TCO). BorderNet SBCs provide real world solutions to address the challenges service providers and enterprises are facing by helping to:

• Transform networks and services to IMS-ready, all IP
• Rapidly roll out innovative multimedia, Unified Communications, hosted business and consumer services
• Seamlessly connect disparate SIP, H.323 and IPv4 and IPv6 networks
• Secure networks from attacks that can lead to outages and customer dissatisfaction
• Reduce operational costs and improve operational efficiency

BorderNet SBCs provide multimedia connectivity including native software transcoding, security, service assurance, optimization and border management capabilities, along with regulatory compliance features that offer exceptional CAPEX and OPEX value and provide a future ready platform for emerging applications such as WebRTC.

As shown in the graphic below, The BorderNet SBC family is made up of both hardware-based and cloud ready virtualized solutions that are well-suited for peering, access and business services applications in both mobile and fixed service provider networks and enterprise environments.

Dialogic® BorderNet™ 4000 Session Border Controller

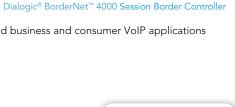Dialogic® BorderNet™ Virtualized Session Border Controller

The BorderNet SBC Family of Solutions Includes:

Dialogic® BorderNet™ 4000 Session Border Controller

- High-performance security and session management for peering and access applications in mobile and fixed NGN and IMS/VoLTE networks
- Native software transcoding
- Scales up to 32,000 simultaneous media and signaling sessions
- Session handling rate of up to 600 calls per second
- Supports up to 256,000 access subscribers for SIP Trunk, Unified Communications, hosted PBX, and business and consumer VoIP applications
- BroadSoft BroadWorks certified and SIPconnect 1.1 compliant
- Lowers service delivery costs and reduces the time required to interconnect diverse IP endpoints
- Standalone and High-Availability (HA) modes of operation in a carrier class 1U appliance

Dialogic® BorderNet™ 4000 Session Border Controller

Dialogic® BorderNet™ Virtualized Session Border Controller

- Full featured SBC for virtualized computing environments for use in service provider access networks and medium to large enterprises
- Public and private cloud ready
- Native software transcoding
- SIPconnect 1.1 compliant for use in SIP Trunking applications
- Rapid deployment with Open Virtualization Format (OVF) and flexible licensing options for low TCO

Dialogic® BorderNet™ Virtualized Session Border Controller

World-Class Support Programs

Dialogic delivers flexible, expert support with a global reach. Customers can choose from an array of contracts and support levels, which allows them to call upon a seasoned team with a proven track record and unmatched product knowledge. Our training experts present a wide variety of support and educational programs on Dialogic® products throughout the world.

BorderNet Session Border Controllers

The **Dialogic® BorderNet™ 4000 SBC** is the highest capacity SBC offered by Dialogic and provides security and session management for peering and access applications in both mobile and fixed environments. Available in a carrier class, "five-nines" reliability configuration, the BorderNet 4000 SBC provides comprehensive session security and control, native software transcoding without the need for additional hardware, interworking and border management functions that enable operators to offer high quality SIP and H.323 peering services over IPv4 and IPv6 networks. The access features enable rapid deployment of SIPconnect 1.1 compliant SIP Trunk, Unified Communications, hosted PBX, contact center, mobility and business and consumer VoIP services. Comprehensive security features include topology hiding, firewall, overload protection, dynamic black listing, and multiple encryption options for protecting service and network integrity.

The powerful routing capabilities and SIP interworking tools built into the BorderNet 4000 SBC can lower service delivery costs through simplified operations and fast, error-free interconnection of diverse IP endpoints. The Web 2.0 based WebUI of the BorderNet 4000 SBC provides full FCAPS capabilities with a real-time dashboard and easy-to-use configuration management, reporting, alarming and trouble-shooting tools.

The **Dialogic® BorderNet™ Virtualized SBC** brings carrier class to the cloud and enables service providers and enterprises to take advantage of flexibility and cost savings from virtualization. The BorderNet Virtualized SBC can interconnect IP networks securely and seamlessly with unmatched ease of use and low TCO to help secure mission critical infrastructure and reduce the cost of delivering services.

The BorderNet Virtualized SBC is designed to operate in virtualized public and private cloud environments to address complex service delivery challenges including security, device interoperability, media handling, reliability and service assurance encountered in today's demanding service provider and enterprise networks.

The BorderNet Virtualized SBC shares the same code base with the BorderNet 4000 SBC so it boasts the same carrier class features including native software transcoding, a Web 2.0 based real-time dashboard, powerful user management and reporting capabilities, and menu driven configuration and provisioning tools to make network interworking and SIP header manipulation easier and more intuitive.
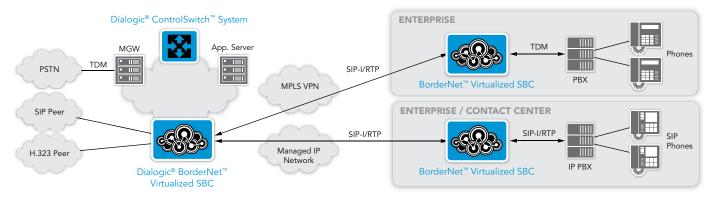
SIP Trunking and Hosted Services

A SIP trunking service can offer significant cost-savings opportunities to enterprises by allowing them to use very cost-effective SIP trunks in place of traditional PSTN trunks. Instead of dedicated TDM connections delivered by the service provider to businesses, a SIP trunk allows traditional fixed PSTN lines to be replaced with connectivity via an IP connection.

The BorderNet Family of SBCs can play a critical role for service providers wanting to deliver a business service involving SIP trunking, as well as enterprise customers wanting to take advantage of the reduced costs and added features of these SBCs.

On the service provider side, the highly scalable BorderNet 4000 SBC in the service provider's central office or data center can terminate the SIP trunks from customers and provide support for access features for consumer and business VoIP services. BorderNet 4000 SBC features include access security, registration caching, far end NAT traversal, encryption and support for call flows involved in the delivery of advanced unified communications for high value customers. The BorderNet 4000 SBC is SIPconnect 1.1 compliant and has also been validated by BroadSoft to interoperate with its BroadWorks suite of VoIP application services that integrate video, fax, voice and email communications for businesses and consumers. For lower density access SBC requirements, the BorderNet Virtualized SBC also delivers mission critical access enabling features like the BorderNet 4000 SBC and can be rapidly and economically deployed in an industry standard hypervisor environment.

At the enterprise edge, the BorderNet Virtualized SBC provides SIPconnect 1.1 compliant functionality for enterprise and contact center customers that want carrier class SBC solutions for their mission critical communications infrastructure. With the BorderNet Virtualized SBC and the BorderNet 4000 SBC, customers now have options to best match their SBC scalability requirements and infrastructure operating environment with the best solution since both BorderNet SBCs can be used in enterprise premise locations to provide:

- SIP security
- Transcoding
- SIP message interoperability
- Service provider network demarcation, and
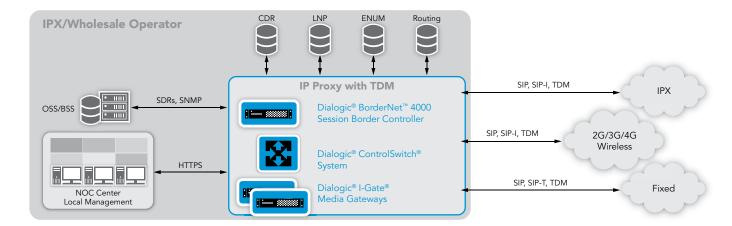- Remote performance visibility

IP Packet Exchange (IPX) and Wholesale IP Services

IPX and wholesale providers find themselves in an extremely competitive market. IPX operators are being called upon to deliver high-value, low-cost solutions that can quickly and securely connect their demanding customer base of wireline, wireless and internet service providers. To deliver competitive value at the right price point, wholesale providers look for network infrastructure that supplies high reliability and high voice quality, as well as impeccable security and operational features such as monitoring.

Dialogic offers a comprehensive solution for the next generation of VoIP providers that features the BorderNet 4000 SBC to enable the end-to-end delivery of voice services at a low cost. Paired with the powerful Dialogic® ControlSwitch™ System softswitch to enable the intelligent routing and connectivity to the PSTN, the BorderNet 4000 SBC can support a wide array of security, interworking (SIP, SIP-I/T, H.323), protocol repair, and transcoding features to enable the end-to-end delivery of services over disparate IP peer networks.
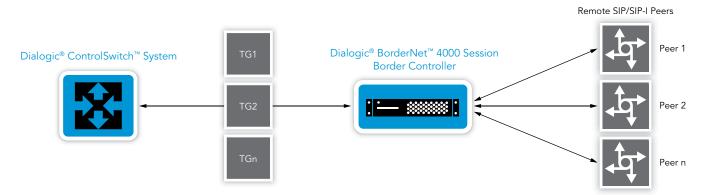
In addition to its strong capabilities for wholesale and IPX applications, the BorderNet 4000 SBC can also seamlessly integrate with the ControlSwitch System and act as a security gateway for both SIP and H.323 traffic. Unlike standalone SBCs, management of the BorderNet 4000 SBC is integrated into the Dialogic® ControlSwitch™ Element Management System (EMS). This integration allows, for example, ControlSwitch System IP trunk group provisioning to be done through the BorderNet 4000 SBC using the ControlSwitch EMS, which can improve operational consistency and significantly reduce the complexity of managing IP peering connections.

Interconnect for Peering

Peering offers many benefits for service providers, including the ability to deliver improved service because of increased redundancy, capacity, and routing control; to obtain better performance with fewer potential bottlenecks; and to take advantage of lower cost routing and termination charges. But as peering opportunities grow, so do network complexity and the need to provide reliable and secure network interconnect.

The BorderNet 4000 SBC provides the first line of defense against fraud and malicious attacks with its extensive set of layered security capabilities that can keep networks and service quality uncompromised. In addition to its security features, the BorderNet 4000 SBC is capable of delivering comprehensive session control, interworking, and media management functions like transcoding at the network border to enable service providers to offer high-quality SIP and H.323 peering services. The powerful routing capabilities and browser-based SIP interworking tools built into the BorderNet 4000 SBC can contribute to lower service delivery costs and reduced time required to interconnect diverse IP endpoints in increasingly complex interworking situations.

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