

Secure Real-Time Communications



Ribbon Session Border Controllers



The ABCs of SBCs

Session Border Controllers (SBCs) work behind the scenes to ensure that voice, video and data communications flow smoothly and securely between networks and the people who use them. An SBC is part firewall, protecting the network from IP-based attacks; part traffic cop, policing traffic to prevent overloads and directing it over shorter distances to save money; and part peacemaker, ensuring that networked devices from different vendors all speak the same language. Why does a network need an SBC? Because, in order to take advantage of new IP-based communications services like SIP trunking, VoIP, video and Unified Communications, networks must have an SBC in place to provide the requisite security, control and interoperability for these services.



The World's Most Reliable, Secure SBCs

What makes Ribbon SBCs stand apart from the competition? Maybe it's because the world's most demanding networks have trusted Ribbon to deliver high-quality SIP communications for more than 15 years. Or maybe it's because we offer more choices than anyone else, with eight unique SBC models that scale from small businesses to the world's largest service provider networks. But more than likely it comes down to something simple: Ribbon SBCs simply work, no matter what kind of network you have, by embracing multivendor and legacy communications solutions rather than replacing them.

Feature	SBC 1000	SBC 2000	SBC 5110	SBC 5210	SBC 5400	SBC 7000	SBC SWe	SBC SWe Lite
Session count (max)	192	600	10,000	64,000	75,000	150,000	Unlimited	1,000
Independent performance verified	MIETCOIII PERFORMANCE VERIFIED	MIERCOIT PERFORMANCE PIERIFIED	MIERCOIN PERFORMANCE WERIFIED	MIERCOIL PERFORMANCE VERIFIED	Mierconi Performance VERIFIED	Mierconi PERFORMANCE PERFORMANCE	MIERCOIT PERFORMANDE PERFORMANDE	
Skype for Business qualified	✓	✓	✓	✓	✓	✓	✓	✓
SIP Security	✓	✓	✓	✓	✓	✓	✓	✓
Encryption (TLS, SRTP, IPsec)	✓	✓	✓	✓	✓	✓	✓	✓
DoS/DDoS protection	✓	✓	✓	✓	✓	✓	✓	✓
SIP interworking	✓	✓	✓	✓	✓	✓	✓	✓
H.323 interworking	×	×	✓	✓	✓	✓	✓	✓
TDM interworking	✓	✓	×	×	×	×	×	×
PBX interop	✓	✓	✓	✓	✓	✓	✓	✓
Media transcoding	✓	✓	✓	✓	✓	✓	✓	✓
Embedded routing engine	✓	✓	✓	✓	✓	✓	✓	✓
Centralized policy enforcement	✓	✓	✓	✓	✓	✓	✓	✓
Integrated Cloud Connector Edition Appliance	√	✓	×	×	×	×	×	×

Industry-Leading Interworking Across Voice, Video and Collaboration

Ribbon is the only vendor in the market with the ability to provide video interworking among endpoints from various vendors without compromising SBC performance or scale. By enabling interoperability between video endpoints, Ribbon SBCs help companies maximize current video investments while providing the freedom for businesses to use the devices of their choice without being locked into one vendor or endpoint device.



Ribbon SBC SWe

The Ribbon SBC Software Edition (SWe) is the industry's only software-based Session Border Controller (SBC) that delivers user-defined scalability with the same advanced features and functionality of hardware on a virtualized platform—without compromise. The SBC SWe features the same code base, resiliency, media transcoding and security technology found in Ribbon's award-winning hardware-based Ribbon SBC 5000 Series. The only difference is how customers choose to deploy it: on industry-standard servers or in virtualized environments. The SBC SWe operates seamlessly with the existing Ribbon SBC product portfolio. Scalable from 25 to an unlimited number of sessions, the unique architecture of the SBC SWe allows customers to define where on the performance curve their network needs to reside.



SWe

Ribbon SBC SWe Lite

The Ribbon SBC Software Edition Lite (SWe Lite) is a virtualized enterprise SBC designed for small and mid-sized businesses (SMBs), providing a virtual Customer Premises Equipment (vCPE) option for enterprises looking to virtualize interworking, security and survivability for Unified Communications (UC). The SBC SWe Lite allows for rapid expansion or feature activation remotely via a simple license key, eliminating the need for on-site technicians or disruption to operations during peak business hours. With support for popular virtualization environments such as Microsoft® Hyper-V®, the SBC SWe Lite can be installed quickly and easily.





Ribbon SBC 7000™

The Ribbon SBC 7000 is purpose-built with industry-leading performance and scale that delivers increased operational efficiency and uncompromised quality of service to help service providers securely, efficiently handle and monetize the massive amount of audio, video and collaboration traffic crossing their networks. The SBC 7000 not only provides the critical features service providers equate with Ribbon Session Border Controllers (robust security, sophisticated routing and policy management, overload controls and SIP normalization), it also delivers IPv4-IPv6 interworking, high density media transcoding and sophisticated policy management at high performance levels to meet the increasing demands of multimedia communications. To further simply deployment, the SBC 7000 implements a fully modular chassis design, enabling service providers to rapidly scale today's networks while preparing for future growth.





Ribbon SBC 5400™

The SBC 5400 is the ultimate eSBC platform that advances today's and tomorrow's real-time communications. Its future-proofed design allows customers to upgrade capacity for multimedia traffic from 2GB to 10GB using a simple software license. The Ribbon SBC 5400 provides all the features you need in an SBC today—robust network security, sophisticated routing and policy management, overload controls, SIP normalization—plus the features you'll need tomorrow, such as IPv4-IPv6 interworking, multi-modal communication, built-in media transcoding, with assured performance and scale under heavy traffic. As the newest member of Ribbon' award-winning SBC Core platform family, the SBC 5400 is specifically designed to address the unique real-time communications business challenges for security, interoperability, and reliability. It is ready made to address everything from voice, video, unified communication and collaboration, webRTC and mobility in enterprise and service provider deployments.







Ribbon SBC 5210™

The Ribbon SBC 5210 is a powerful, compact and purpose-built SBC designed for SIP trunking, Unified Communications, VoIP, video and other SIP-based communications. The SBC 5210 delivers all of the features that enterprises and service providers need in an SBC today—robust security, sophisticated routing and policy management, overload controls, SIP normalization—plus the features they'll need tomorrow, like IPv4-IPv6 interworking, centralized policy management, built-in media transcoding, cost-efficient scalability and high performance under heavy traffic.





Ribbon SBC 5110™

Built for medium to large enterprises and regional service providers, the Ribbon SBC 5110 is a powerful "mid-sized" SBC that delivers robust network security features, flexible SIP session routing and policy management, and built-in multimedia transcoding—all at a price that even smaller enterprises can afford. With high-end features you won't find in other mid-sized SBCs, the SBC 5110 allows enterprises and regional service providers to deliver a world-class communications experience designed for their world.





Ribbon SBC 2000™

The Ribbon SBC 2000 is an advanced SBC designed to help medium-sized enterprise networks safely and cost-effectively embrace the new multi-vendor world of SIP-based communications, such as Voice over IP (VoIP) and Unified Communications. The SBC 2000 delivers all of the features you would expect in an enterprise-class SBC, including security, built-in media transcoding, SIP interworking and intelligent call routing. The Ribbon SBC 2000 also has a unique feature not found in other solutions: survivable branch appliance (SBA) functionality that enables the SBC to complete voice calls over the PSTN should the enterprise WAN go down. The SBC 2000 also provides the following:





- TDM interconnect for trunking and analog connections, including fax machines, lobby phones, etc.
- Microsoft Skype for Business quality of experience (QoE) monitoring—the SBC 1000 and SBC 2000 are the only SBCs on the market that monitor the entire call flow
- Optional on-board Microsoft Cloud Connector Edition—Ribbon SBC 1000 and SBC 2000 models
 offer an optional on-board Cloud Connector Edition (running on an integrated Application
 Services Module), alleviating the need for customers to supply a Hyper-V(R) Virtual Server and
 providing a Graphical User Interface to vastly reduce the complexity of deployment, maintenance,
 and operation.



Ribbon SBC 1000™

The award-winning SBC 1000 delivers all of the functionality of the SBC 2000 in a solution right-sized for medium businesses and branch offices (up to 192 concurrent sessions). The SBC 1000 delivers built-in media transcoding, network security (encryption, authentication, DoS protection, etc.), robust SIP interworking, intelligent call routing, multi-vendor interoperability and 24/7/365 survivability. The Ribbon SBC 1000 and the Ribbon SBC 2000 Session Border Controllers are the only SBC solutions available which offer Microsoft Skype for Business survivability through either a 3G/4G or PSTN connection to provide reliability in the event of a wide area network (WAN) failure. The SBC 1000 also provides the following:



- TDM interconnect for trunking and analog connections, including fax machines, lobby phones, etc.
- Microsoft Skype for Business quality of experience (QoE) monitoring—the SBC 1000 and SBC 2000 are the only SBCs on the market that monitor the entire call flow
- Optional on-board Microsoft Cloud Connector Edition—Ribbon SBC 1000 and SBC 2000 models
 offer an optional on-board Cloud Connector Edition (running on an integrated Application Services
 Module), alleviating the need for customers to supply a Hyper-V(R) Virtual Server and providing a
 Graphical User Interface to vastly reduce the complexity of deployment, maintenance, and operation.

Ribbon = Peace of Mind

In today's multi-vendor networks, security and interoperability provides assurance that different networks (and different network elements from a variety of vendors) can securely communicate effectively with one another. Our solutions are designed and tested to provide the most robust SIP security and interoperability with legacy communications equipment, SIP providers as well as application providers and international standards, to name only a few. With the industry's broadest portfolio of Microsoft Skype for Business qualified SBCs, Ribbon gives enterprises and service providers more choices to communicate more securely, more efficiently and more intelligently.

SBC Implementation Services from Ribbon

Whether you need a little help or a lot, onsite support or remote assistance, count on Ribbon Global Services to be there for your business. We offer flexible SBC Implementation Services to help service providers and enterprises get more from their SBCs in less time:

- · SBC Implementation Services, featuring planning, configuration and testing; and
- Supplemental SBC Services, including design consulting, technical support and project management

SIP Runs Better on Ribbon

Ribbon builds real-time communications solutions for the real world. Since introducing the first carrier-class VoIP switch in 1997, we've helped the world's leading communications providers and enterprises move the conversation forward from analog voice to SIP-based multimedia. Today, Ribbon session border controllers and SIP session management/policy solutions are driving the next generation of change toward Unified Communications, Cloud services and beyond.



About Ribbon Communications

Ribbon is a company with two decades of leadership in real-time communications. Built on world class technology and intellectual property, Ribbon delivers intelligent, secure, embedded real-time communications for today's world. The company transforms fixed, mobile and enterprise networks from legacy environments to secure IP and cloud-based architectures, enabling highly productive communications for consumers and businesses. With locations in 28 countries around the globe, Ribbon's innovative, market-leading portfolio empowers service providers and enterprises with rapid service creation in a fully virtualized environment. The company's Kandy Communications Platform as a Service (CPaaS) delivers a comprehensive set of advanced embedded communications capabilities that enables this transformation.

To learn more visit RibbonCommunications.com



Voice Unified Communications Business Productivity Solutions Midmarket Solution Provider

www.ribboncommunications.com

© 2018 Ribbon Communications Inc. All rights reserved, v1018. The content in this document is for informational purposes only and is subject to change by Ribbon Communications without notice. While reasonable efforts have been made in the preparation of this publication to assure its accuracy, Ribbon Communications assumes no liability resulting from technical or editorial errors or omissions, or for any damages resulting from the use of this information. Unless specifically included in a written agreement with Ribbon Communications, Ribbon Communications has no obligation to develop or deliver any future release or upgrade, or any feature, enhancement, or function.

Ribbon Communications is a registered trademark of Ribbon Communications, Inc. All other trademarks, service marks, registered trademarks, or registered service marks may be the property of their respective owners.