SBC CNe Edge

Intelligent Edge™ – Cloud Native Session Border Controller

Organizations are aggressively moving their business applications to the cloud, including communications and contact center services such as Microsoft Teams, Zoom Phone, Ring Central, Genesys, Five9 or one of hundreds of other cloud unified communications or contact center services. As part of that cloud migration, businesses are adopting cloud-based telecom services and cloud-based security.

Ribbon's Cloud Native Edition Edge (SBC CNe Edge), is modern instantiation of communications security software designed to embrace micro services, containers, and automated deployment & scaling. SBC CNe Edge is delivered from the convenience of the Microsoft Azure Cloud, leveraging industry-standard Kubernetes and Docker services to minimize compute resources and maximize reuse of monitoring toolsets, keeping monthly spend to a minimum. The SBC CNe Edge supports up to 10,000 concurrent calls, potentially enough capacity for a million users! All while delivering best-in class communications security and powerful media management, including support for high fidelity SILK and OPUS voice encoding.

The SBC CNe Edge software protects communications infrastructure from Denial of Service (DoS)/Distributed DOS (DDoS) attacks, maintains privacy, encrypts calls, and interworks with a wide variety of third-party SIP and legacy voice infrastructure devices/services, all while providing reliable, scalable performance that ensures maximum uptime and service availability.

Ribbon has been working closely with Microsoft for more than a decade so it should come as no surprise that the SBC CNe Edge is Microsoft certified for Microsoft Direct Routing. The SBC CNe Edge is also ready for use with most UCaaS and contact center services, including Zoom Phone™ and Cisco BroadSoft™

Microsoft Certified for Direct Routing

Certified for Zoom Phone

Key Capabilities

- SCompelling cloud native design with automated deployment and elastic scaling
- Secure signaling, media, and management
- Robust media processing, including SILK & OPUS
- Denial-of-Service (DoS) and Distributed DoS (DDoS) attack prevention
- Available in the Azure Marketplace
- 30-day trial license
- Perpetual and monthly licensing options
- Easy Configuration Wizard to simplify deployment
- Centralized management via Ribbon Application Management Platform (RAMP)
- Support for redundant SIP trunks
- Microsoft Phone System emergency calling support (E911, ELIN)

Capabilities	SBC CNe Edge
Maximum Concurrent Calls	up to 10,000
Maximum Encrypted Calls	up to 10,000
Scalable cloud native architecture	√
Ideal for cloud-based UC and contact centers	√
One-time Permant Licensing Option	√
Monthly Licensing Option	√
Microsoft Direct Routing and Zoom BYOC	√
Session Resiliency	√

Note: Ribbon's SBC CNe Edge shares it's software heritage with Ribbon's virtualized SBC Swe Edge as well as SBC 1000 and SBC 2000 appliances. Organizations can mix and match platforms, depending on the application.

Click Here to Get a Quote for One of Our SBCs
https://rbbn.com/ribbon-sbc-quote

Part of an Industry Leading Portfolio of Real-time Security Solutions - from Ribbon Communications

The SBC CNe Edge for public cloud deployments represents one element of Ribbon's security portfolio. The SBC SWe Edge is also available for virtual machine deployments including Microsoft® Hyper-V®, VMware® vSphere® Hypervisor and Linux® KVM. Ribbon's SBC 1000 and SBC 2000 appliances share the same software as the SBC CNe Edge, making them ideal for organizations that want an appliance or need analog or TDM ports for integration.

Ribbon also provides massively scalable SBCs for large enterprises and over 1,000 of the world's leading communications service providers. In fact, there is a good chance that your communications service provider is already a Ribbon customer.

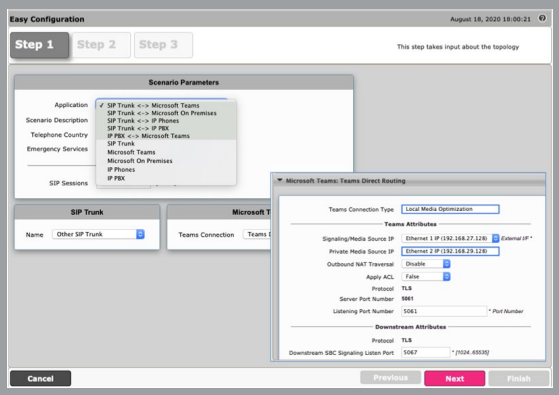
Rapid Cloud Deployment – Easy to Set-up and Use

Ribbon has made it easy to deploy an SBC CNe Edge instance in the Azure cloud. We even provide a 30-day trial license to test the solution before you buy. The SBC CNe Edge includes a built-in Easy Configuration Wizard that is pre-populated with sought-after cloud UC services and service provider configurations, making deployments as simple as point and click. Most importantly, the SBC CNe Edge is designed by the same Ribbon engineers that design Ribbon SBCs to secure the largest cloud providers in the world. No one knows more about securing cloud communications than Ribbon.

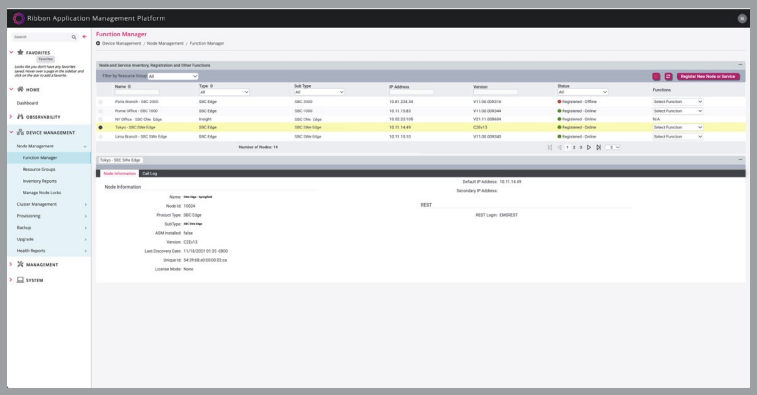
Centrally Managed from Ribbon Application Management Platform

Ribbon SBC CNe Edge is centrally managed via the Ribbon Application Manageent Platform (RAMP). RAMP provides streamlined access to SBC CNe Edge management interfaces and simplified access to cross location centralized reporting. The RAMP platform manages heterogenous deployments of SBC 1000 , SBC 2000 & EdgeMarc appliances, SBC SWe Edge software and SBC CNe Edge instances in the public cloud. Customers can manage far-flung networks, monitor performance and quickly remediate issues to improve user experience and reduce operational costs.

RAMP



Easy to use configuration wizard



Easily spot issues across thousands of instances

PSTN Access

VoIP Firewall

NAT/DHCP

WAN Resiliency

Back-up Call Server

Call Recording Support

Voice Quality Monitor

Traffic Shaper

The Ribbon SBC CNe Edge is cloud-based software that provides a comprehensive solution to secure and manage communications

SBC CNe Edge

Features and Capabilities	Specifications
Security	• TLS (Transaction Layer Security) for signaling encryption - TLS 1.2 (RFC 5246) • Secure Real-time Transport Protocol (SRTP) & Control Protocol (SRTCP) for media and media control encryption (RFC 3711) • Multiple unique X.509 public key certificates/PKCS #12 files (up to 11) • Wildcard certificate support • Topology hiding; user privacy • Prevention of Denial-of-Service (DoS) and Distributed DoS (DDoS) attacks • Traffic separation (VLAN interface separation) • Malformed packet protection • Access Control Lists (ACLs) • NAT/NAPT and port forwarding; NAT traversal
Protocol Support	• SIP (RFC 3261) over UDP, TCP, TLS • RTP/RTCP/RTCP-XR (RFC 3550, 3551, 3611) • RTP/RTCP multiplexing over single UDP port (RFC 5761) • IPv4, IPv6, and IPv4/IPv6 interworking • DHCP client (RFC 2131) • Network Address Translation – NAT (RFC 2663) • SNMPv2c, SNMPv3 • HTTPS • RIPv2, OSPF as dynamic IP routing protocols
Media Services	• G.711, G.722, G.722.2 (AMR-WB), G.723.1, G.726 (32 kbps), G.729A/B (8 kbps), T.38, SILK-NB/WB media encoding • Video interworking • Session Recording Protocol support - SIPREC (RFC 7866) • DTMF support (RFC 4733), Inband DTMF, and SIP INFO (RFC 2833) • Voice Activity Detection (VAD) • Comfort noise generation and packet loss concealment • Music on hold (available in an upcoming release) • RTP inactivity monitoring (inactive call detection)
Quality of Service (QoS)	• Bandwidth management • Call Admission Control (CAC) to deny inappropriate calls • P-time mediation for rate limiting • Per-call statistics • Diffserv/DSCP marking
Routing/Policy	• Interactive Connectivity Establishment (ICE), full and lite support (RFC 8445) • Azure® and on-premises Active Directory®/LDAP-based call routing • Least cost, time of day and quality-based routing • On-board call forking (up to eight end points) • Supplementary services: call hold, call transfer (blind & assisted) and call forward • SIP routing based on source and destination IP address or Fully Qualified Domain Name (FQDN) • ITSP E911 support; 911 call preemption
Management Capabilities	• Single, secure, web-based GUI with real-time port monitoring • Easy Configuration Wizard, for quick provisioning between: • - SIP trunks, SIP phones, SIP PBXs (e.g. Avaya® Aura® or Cisco® Unified Communications Manager) - Microsoft Direct Routing, Zoom Phone, Twilio Elastic SIP Trunks, and more • Centralized management from Ribbon Application Management Platform (RAMP) • REST-based programmatic interface to remotely manage multiple SBCs • SNMP v2c/v3 for comprehensive network management using third-party management systems • Configuration backup and restore; upload from one site to another • CDR reporting and local logging for troubleshooting • Free Ribbon LX syslog server and log parser tool available • Authentication: local user (username/password), Active Directory®, RADIUS
Certified SBC for Microsoft Phone System & Direct Routing (Teams)	• SILK-NB, SILK-WB codec support for improved Microsoft Teams user experience • Enhanced 911 (E911) and Emergency Location Identification Number (ELIN) Gateway Support • Media Bypass and Local Media Optimization support • Simplified migration from on-premises Skype for Business Server to Microsoft Teams • Support for multiple tenant-related Direct Routing deployments with Microsoft partners/PSTN carriers
Site Survivability	• IP route redundancy to UC provider, in case of ISP or router failure • PSTN fallback in case of WAN failure • Multiple Spanning Tree Protocol, to prevent routing loops

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