

Go virtual and drive application delivery improvements around the globe.

Virtual Network Services - SBCaaS with Ribbon



Deploying IP-based real-time communication services like SIP trunking, Voice over IP (VoIP) and Unified Communications (UC) is more than an IT decision; it's a business decision. Today's enterprises require secure, high-quality voice and video service, flexible delivery of multimedia applications to its customers and employees, and efficiency to control costs and complexity. This is exactly what a Session Border Controller (SBC) delivers.

Figure 1 below shows a high-level view of an SBC that provides per-session security and interoperability, so that real-time communications flow smoothly and work properly between networks and the people who use them.

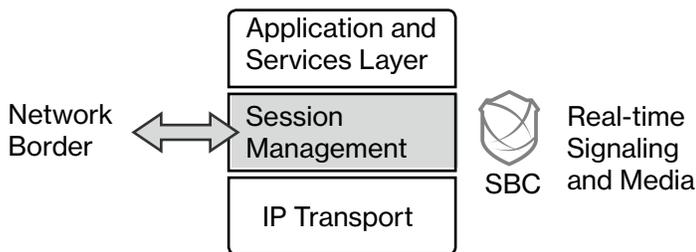


Figure 1. High-level view of SBC.

Traditionally, enterprises that wanted to take advantage of an SBC's value would have to make an investment decision to purchase an SBC. This would typically be part of a capital budget request, require money to be allocated and approved, and then make the actual purchase during a new budget expenditure cycle. Along with this, the enterprise would have to allocate people and resources to test, implement and maintain their SBC.

For customers seeking to realize the full potential of their network communications there is a better way to get the value of an SBC, and that is through Verizon Virtual Network Services – SBCaaS with Ribbon.

- Ribbon has delivered 20 years of innovation, from one of the first carrier class IP telephony switches and session border controllers, to leading cloud-native design for SBC as a Service in the cloud.
- Ribbon named Frost & Sullivan 2017 North American Enterprise Session Border Controller Company of the Year.
- Ribbon SBC SWe received an Internet Telephony NFV Product of the Year Award and 2016 Cloud Computing Magazine Cloud Security Excellence Award.

Session Border Controller as a Virtual Network Service.

By leveraging our investment in virtualization and cloud infrastructure, Verizon is able to deliver a fully orchestrated, fully managed, virtual Session Border Controller with Ribbon technology. Customers are able to deploy a cloud-native SBC as a virtual network function (VNF) and maintain physical SBCs.

Benefits of implementing a Virtual Network Services – SBCaaS with Ribbon solution can include:

- Network and service protection from SIP-based attacks.
- Policing of traffic to prevent overloads and to direct it over the right paths.
- Interoperability and protocol translation, so that networks and devices from different vendors all speak to each other.
- Operated and managed by Verizon Managed Services.
- Deployment via Hosted Network Services platform.
- Ability to connect to Verizon IP Trunking network.
- Ability to combine (aka service chain) SBC services with other core enterprise services such as routing, firewall and SD-WAN.

And you can also benefit because Virtual Network Services – SBCaaS with Ribbon helps:

- Manage SBC capital expenses.
- Eliminate the need to carry and manage spare physical inventory.
- Avoid the risk of possible CPE obsolescence.

Key Attributes of Virtual Network Services - SBCaaS with Ribbon.



To achieve the efficiency and effectiveness of deploying SBCaaS, the Ribbon solution is specially designed for a cloud-native deployment model. Below are some of its key attributes:

- Run-time ready – the ability to instantiate a virtual SBC without manual configuration.
- Elasticity – scale SBC capacity up or down on-demand.
- Licensing flexibility - support for flexible licensing options to enable subscription pricing.
- Orchestration – enabling the automation of SBCaaS delivery.
- Integrated media services – providing high-quality customer experience for real-time communications.
- Resiliency and high availability – mandatory for a virtual, cloud-based SBC.
- Integrated analytics – provide critical data as part of closed loop service delivery.

Deployment Model for Virtual Network Services - SBCaaS with Ribbon.

Virtual Network Services - SBCaaS with Ribbon is a virtual SBC provided via Verizon's Hosted Network Services platform, as shown in Figure 2.

Through Enterprise Orchestration, Verizon can remotely instantiate, configure, manage and maintain an SBC that was once deployed only on dedicated hardware platforms.

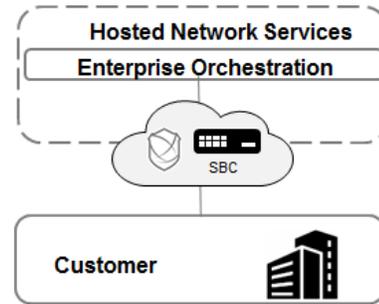


Figure 2. Hosted Network Services

Hosted Network Services.

Verizon hosts and operates SBC instances in Data Centers strategically located to enable high availability and resilience. These virtual SBC instances are created for each customer and orchestrated via Verizon's Enterprise Orchestration platform using a common cloud infrastructure, which helps you get the most from your investment.

With a Hosted Network Services deployment, Verizon also provides a solution designed to assist you in better implementation of your cloud infrastructure. For example, one option presented is the ability to leverage existing central office locations as data centers to locate applications such as Session Border Controllers closer to the network edge.

Making the Right Choice.

As your one-stop shop for managed Virtual Network Services, Verizon makes it easy to get the agility, flexibility and performance you need from your network. Verizon is globally recognized as a leader in providing innovative networking, security and cloud solutions and we deliver game-changing virtualization for the modern, hyper-connected world.

An industry leader for more than 20 years, Ribbon has also established a proven track record of bringing cutting-edge products to market. Ribbon provides reliable and secure real-time communications, including the next generation of cloud-native SIP and 4G/VoLTE solutions for VoIP, video, IM and on-line collaboration.

By joining forces, Verizon and Ribbon deliver the next-generation solutions today's enterprises need now and in the future. We worked together to introduce Virtual Network Services - SBCaaS with Ribbon, our cloud-native session border control solution. This is one example of the exceptional value our relationship will continue to provide to our enterprise customers.

About Ribbon.

Ribbon Communications transforms fixed, mobile and enterprise networks from legacy environments to secure IP and cloud-based architectures. Ribbon's secure, real-time communications software solutions enable highly productive and secure communications for businesses and consumers. To learn more visit: ribboncommunications.com.

The Verizon advantage.

With experience managing more than 400,000 security, network and hosting devices, and over 4,000 customer networks in 150+ countries, Verizon has the ability to deliver the end-to-end managed services you need.

Learn more.

Find out how you can deploy and manage a more efficient, intelligent network with Virtual Network Services. Contact your account representative today.

VerizonEnterprise.com/ribbon-nfv

