

Solution Brief

CPaaS and SBCs – A Perfect Match

Summary

- **CPaaS and Session Border Controllers (SBC) are increasingly being combined in Bring Your Own Carrier (BYOC) networks**
- **BYOC allows CPaaS users to choose preferred carriers for their service, reducing costs and consolidating traffic**
- **SBCs also provide the necessary security, SIP normalization, load balancing and network resilience**

Background

Communications Platform as a Service (CPaaS) is the preferred new technology to build telecommunications applications to enhance customer experience, improve security and develop speed. Frequently used in contact centers, interactive voice response, two-factor authentication, notification, and many other telecom applications, CPaaS provides a rapid development and execution environment for these and many other use cases.

Additionally, Session Border Controller (SBC) technologies are the preferred solution for telecommunications network security, routing, and resilience functions.

Solutions

So why are these two technologies often deployed together?

- **Bring Your Own Carrier (BYOC)** – allowing the use of one or more preferred carriers, instead of the carrier provided by the CPaaS hosting provider. SBCs provide a means to integrate third-party carriers with virtually any CPaaS platform, reducing costs and consolidating traffic into an already-contracted carrier.
- **Security** – protecting against denial of service (DOS), registration floods, scanning, and many other attack profiles, SBCs block attackers from causing outages or executing extortion schemes.
- **SIP Normalization** – as there are subtle technical differences in SIP signaling between carriers (especially across international borders), SBCs are often used in normalizing dissimilar SIP traffic into a CPaaS environment.

- **Load Balancing / Scaling** – as the scale of CPaaS-based applications grows, SBCs are utilized to manage traffic across multiple CPaaS server clusters, performing load balancing or redirect traffic during maintenance windows.
- **Resilience** – for high-value CPaaS applications, SBCs can improve resilience by detecting network and server outages, redirecting traffic to active servers.

Examples

A few examples of SBCs and CPaaS working together include:

Aircall – a Paris-based business phone system that offers an innovative contact-center-as-a-service is fully based on CPaaS infrastructure from Twilio. As a global offering, the service is hosted in multiple Twilio data centers and interfaces with numerous international SIP service providers. TelcoBridges’ ProSBC is utilized on AWS to normalize and manage the international service provider traffic, improving efficiency and resilience.



More at: <https://telcobridges.com/case-study-aircall/>

Network Intelligence – a California-based managed service provider, Network Intelligence manages a CPaaS application for a large state-wide 2-1-1 public service application for the United Way of California. Core to the application infrastructure is TelcoBridges’ ProSBC, providing call routing and network management, and interacting multiple telecom carriers with their CPaaS services.



More at: <https://telcobridges.com/case-study-network-intelligence/>

What they Say

“ProSBC provides the functionality we need, and it’s been very reliable,” says Aircall engineer and co-founder Pierre-Baptiste Béchu. “The subscription and scalable nature of ProSBC fits our business model perfectly, and we think it’s just what we need in order to continue expanding our business around the globe and satisfying our customers.”

“If we didn’t have ProSBC in the architecture, we wouldn’t be able to access the incoming calls, or analyze what’s being manipulated by the CPaaS component. ProSBC is an Integral part of our solution. It’s managing our traffic at the physical layer as well as the applications layer, and it’s giving us control over the entire process.”

Where to Learn More

- More on ProSBC at: <https://telcobridges.com/sbc>
- More customer stories at: <https://telcobridges.com/case-studies/>

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