



VOXOLOGY

At a glance:

- Voxology
- Location: Orange County, CA
- Industry: CPaaS

Challenge:

 Needed a solution to that delivered high performance, security and flexibility to meet the growing infrastructure needs

Solution:

Virtual Routers

Results:

- Best cost-performance ratio
- High Performance & End-toend Security
- Easy to implement
- Efficiency

Voxology Carrier Services is the infrastructure arm of Voxology, a Communications Platform as a Service (CPaaS) based in Orange County, CA. Voxology provides a suite of voice and messaging services including SIP termination, SIP origination, SMS, toll-free and local phone numbers as well as their next gen Programmable Voice and Messaging API.

Voxology's mission is to introduce the world to a new communications experience. They believe communication matters; they exemplify their belief through strong customer service and building meaningful relationships with their employees, customers, and vendors.

Challenge

Replace existing array of Cisco 10G ASR series routers with Virtual Routers

As Voxology's infrastructure needs grew, the team was looking for a border router that provided an alternative to its existing array of Cisco 10G ASR series routers that could deliver similar features but higher performance and management at a better price, and with more flexibility in interface options. Specifically, 6WIND provided this alternative with vRouter software that can be installed on commodity, standardized servers and deployed with off-the-shelf NICs in size and quantity to meet Voxology's current and future needs.

"Moving to 6WIND allowed us to add the capacity we need without having to purchase expensive, enterprise hardware. The ability to easily add commodity 10/40/100G NICS and license by throughput, instead of by port, was especially attractive to us. It was the biggest factor in switching from Cisco to 6WIND."

Karsten Leone, Director of Telecom and Infrastructure at Voxology





Requirements

Voxology was looking for a solution that would replace their existing array of Cisco 10G ASR series routers at the best cost-performance ratio. They wanted something that would be scalable and flexible to meet their growing needs as their business grows without compromising performance and security. They needed a solution that could be implemented without disrupting their processes quickly and efficiently.

Solution

6WIND Virtual Routers

6WIND Virtual Routers met Voxology's requirements. The Voxology team deployed the Virtual Routers configured with peerings to major cloud providers, 3rd party exchanges, and to direct customers. Voxology primarily depends on 6WIND Virtual Router's BGP and OSPF features. The team plans to eventually replace their remaining Cisco ASRs with 6WIND Virtual Routers.

As a professional-grade CPaaS, Voxology operates in its own data centers, not in the public cloud. Within its own cages, Voxology leverages bare metal when appropriate. Voxology's infrastructure utilizes 6WIND Virtual Router on bare metal 1RU Dell R630 servers with Intel XL710, X520, and i350 NICs. These run dual Intel Xeon E5-2640v3 (2.6GHz, 8 core, 16 thread) processors. (The hardware is significantly over-built, in order to standardize with other builds).

The deciding factors for Voxology to select 6WIND Virtual Routers were:

- The ability to run the 6WIND vRouters on any Commodity hardware.
- Commodity hardware allows Voxology not to be locked in to a single hardware vendor
- Simple licensing structure that allows to easily add ports without having to replace an entire router
- Lowest TCO



Results

Voxology's engineers leverage 6WIND Virtual Router's standard CLI for management, and like the flexibility versus competing router vendors' CLIs, such as Juniper Junos OS and Cisco IOS. The team also found significant benefits to quickly onboarding with downloadable trial software.

During the first phase of deployment, the routers are handling up to 10,000-20,000 concurrent phone calls (signaling and media).

With 6WIND vRouters, Voxology has been able to:

- Quickly deploy replacement routers without any downtime"
- Attain the best cost-performance ratio with significantly more capacity
- Expand their edge networks and bring up new peers quickly.
- Achieve the lowest TCO

