

CarrierX replaces Cisco Router with 6WIND VSR Software Solutions



At a Glance:

- CarrierX LLC
- Location: Los Angeles, CA, US
- Industry: CPaaS

Challenge:

- Improve flexibility and throughput for the current encrypted multi-cloud network environment

Solution:

- Virtual Security Gateway (vSecGW)

Results:

- High performance & bandwidth achieved
- Best cost-performance functionality ratio
- Simplification of deployments
- Delivered high throughput

CarrierX is a scalable CPaaS and API provider with its own network. It gives developers powerful tools to build enterprise-ready applications and services with Cloud-Based Voice, Video and Messaging. CarrierX transmits billions of monthly minutes across its platform from many of its own retail brands, including FreeConferenceCall.com, as well as third-party services.

Challenge

Replace the existing multi-vendor routers serving as a VPN gateway for multiple locations.

CarrierX's network equipment was based on Cisco CSR1Kv and had reached end of support. Although they proposed the Cisco Catalyst 8000, it did not meet the customer's requirements as its scaling capability using DMVPN/NHRP to connect different data centers to their HUB was found to be limited.

The main challenge was to replace their existing multi-vendor routers with a border router that could serve as a VPN gateway for multiple locations. Simplifying the deployment process and keeping routers virtualized throughout their infrastructure to achieve higher flexibility with support of bare metal and virtualized deployments in public and private clouds. This would allow them to select the appropriate deployment option and platform without the need to purchase expensive hardware.

“6WIND Virtual Security Gateway was able to meet our exact requirements by delivering a highly scalable, high performing, secure and sustainable solution which will provide us with the flexibility to grow cost-effectively. The 6WIND Team continues to help us adopt the solution into our existing environment seamlessly and efficiently.”

Max Urmanov, Director of Networking Engineering at CarrierX

As CarrierX's infrastructure needs to be flexible in its deployments, including cloud-based deployments, they were looking for border routers to provide a simple unified experience and deliver similar features but with much higher performance and enhanced management capabilities at a much better price.

Requirements

CarrierX engineers were looking to achieve a better cost-performance functionality ratio and ensure investment protection with a "pay as you grow" model regardless of the deployment model; bare metal or virtualized, and regardless of the deployment environment; private or public.

Solution

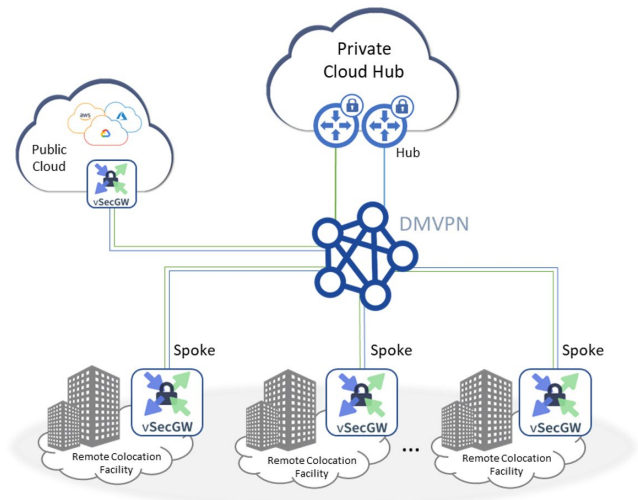
6WIND Virtual Security Gateway (vSecGW)

CarrierX chose 6WIND vSecGW for its proven high performance and secure use cases.

6WIND vSecGW router met the customer's requirements and was deployed as a branch VPN router on multiple physical and virtual cloud-based PoPs. The CarrierX's team eventually plans to extend the VSR adoption to the entire VPN network, including the HUB sites.

CarrierX's team leverages from the 6WIND product features such as BGP, OSPF, NHRP, IPSEC, route tracking, etc., and benefits from enhanced Netconf-based management and Telemetry-based monitoring. DMVPN/NHRP with IPsec encryption has been the leading feature in this project.

The simplified licensing model of 6WIND VSR product suite allows CarrierX to have a much more predictable cost planning in place.



6WIND vSecGW deployed as VPN Spokes in Private Colocation facilities and in Public Clouds

Results

By implementing 6WIND vSecGW, the customer was able to achieve significantly higher bandwidth and performance, resulting in a substantial increase of the volume of services transiting through the router such as SIP, VOIP, Screen Sharing, Video Conferencing, etc.

The DMVPN/NHRP functionality has been enabled and all traffic going through different locations was encrypted. This solution delivered deployment flexibility as it is deployed on baremetal, VMware and AWS at the same time.

CarrierX's engineers build on 6WIND VSR solutions to leverage standardized routing and security services for an easy staggered deployment and look forward to replacing the rest of the multi-vendor VPN routers.

In the first deployment stage, 6WIND virtual service routers are successfully integrated into the existing environment, gradually working more on production traffic, and eventually becoming a significant part of the customer network.

With 6WIND, the customer has successfully embarked on the virtualization journey, achieving high-performance, security, scalability, agility, flexibility, sustainability cost-effectively.