



Lolo Company expand their global IoT network at speed with 6WIND Virtual Routers

Lolo company

At a glance:

- Lolo Company
- Location: Stockholm, Sweden
- Industry: IoT

Challenge:

- Achieve multiple Gbps of encrypted traffic with CG-NAT capability

Solutions:

- 6WIND Virtual CG-NAT & Virtual Security Gateway

Results:

- Virtualized Security Gateway with 10x more performance
- 40 Gbps of IPsec performance
- High scalability, flexibility & scalability
- Lowest TCO
- Stability and resiliency

Lolo Company's platform makes global scale IP traffic and applications a serverless API experience. SMS and Voice use cases using APIs are commonplace in the CPaaS domain, but building networks, security domains, policies and localized content experiences is Lolo's domain.

In addition to building and deploying serverless API driven networks, Lolo's platform allows you to build highly scalable applications with telco grade data integrity and single click deployment to the edge of their global networks in 37 data centers in 27 countries, any cloud or on prem. Lolo is the foundation of your application and connectivity infrastructure that solves the toughest challenges in scale, performance and localization so you can focus on what you do best.

Challenge

High performance virtualized security gateway for their Global POP

Lolo needed a high performance Virtualized Security Gateway for their Global POP that could achieve multiple Gbps of encrypted traffic with NAT capability to ensure the transport and encryption of high volume of customer's traffic. A high performance, low footprint and cost effective virtual router that could be deployed in an agile way in the new POPs.

“Over the last year, the 6WIND team has been an extremely agile partner to Lolo and a key to our success in winning large customers. As a practical experience, using a different top tier billion-dollar market cap vendor in a cloud environment, we only got 300 Mbps IPsec performance and with 6WIND it was 40 Gbps. Results speak for themselves, we are extremely pleased we chose 6WIND to be our partner of choice!”

Stephen Bryant, Co-founder of Lolo Company

Requirements

Lolo Company was looking for a VNF that runs on COTS hardware that can be deployed on any IaaS platform, one that is open and programmable and commercially supported. They wanted a solution that delivered high performance and was cost effective to meet their customer demands and at the same time help them scale and grow at speed.

Solution

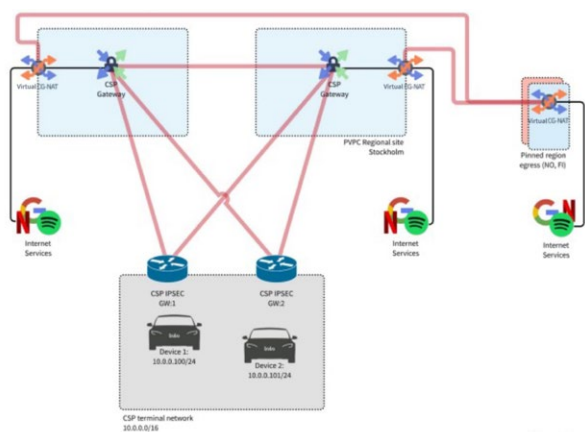
6WIND Virtual Router: Delivered High Performance, Scalability and Flexibility

Lolo evaluated multiple solutions on the market from major Tier 1 OEMs however these solutions couldn't meet Lolo's requirements.

6WIND Virtual Router met Lolo's requirements. The solution was deployed in all of the Lolo infrastructure serving multiple large customers in IoT and automotive industry.

Data from IoT devices, such as connected cars, is exchanged with Mobile Network Operators for e-SIM registered to Lolo Company added-value service. This data is typically exchanged in a protected manner, using the IPsec protocol to cipher its content and ensure its authenticity.

PVPC Architecture



6WIND's virtual router has been deployed on bare-metal-as-a-service platform, with 10Gbps connectivity. 6WIND's packet processing architecture leverages both the capabilities of the Intel XEON processor combined with the Intel QuickAssist cryptographic chipset to provide outstanding IPsec performances.

Lolo primarily depends on 6WIND Virtual Router's IPsec capabilities for encrypting the traffic between various POPs and the mobile operators PGW. Lolo Company's solution ensures that the traffic is transported to a geographical location that allows the end-user to benefit from the best possible user experience, such as accessing content in its native language.

Then, in order to breakout the traffic locally to the Internet, Lolo Company leverages 6WIND's CG-NAT features for translating from private IP addresses to public IP addresses.

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

- The ability to achieve very high performance on any Commodity hardware
- The programmability of the solution based on standard APIs
- Lowest TCO

Results

With 6WIND Virtual Routers Lolo has been able to:

- Expand their global network cost effectively
- Deliver more services to their end customers while maintaining very low TCO
- Benefit from the agility to deploy a software networking solution on COTS servers, provided by third party IaaS platforms. They didn't need to handle the complexity to order any dedicated physical hardware appliance, which logistics can be tricky due to the current component shortage.
- Achieved more than 10 times the performance with 6WIND Virtual Routers when compared to other virtual security gateway solutions on the market.

Lolo & 6WIND continue to work closely together to address new use cases in the IoT and automotive industry. Lolo's feedback contributes to the development of new product features.