



VyOS

The universal networking platform



ConvergeOne

/ VYOS SUCCESS STORY

ConvergeOne Empowers Engineering Lab Routers with VyOS

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The Challenge

ConvergeOne, the premier IP-enabled, services-led, customer experience solutions provider, faced a significant challenge when it came to their engineering lab routers. They needed a robust and reliable solution to effectively manage their network infrastructure, ensuring seamless connectivity and efficient testing for their clients. With over 700 staff engineers relying on the lab, ConvergeOne required a solution that could accommodate their unique needs, replicate customer environments for testing and staging, and provide flexibility for widely varied use cases.

Exploring Options

ConvergeOne extensively explored their options to find the ideal networking solution for their engineering lab routers. They had previously used a Cisco ASA, but it failed to meet their requirements. They considered Cumulus Linux but found that the virtual Cumulus was not reliable and lacked proper support. Furthermore, the acquisition of NVIDIA/Mellanox complicated hardware support. After careful evaluation, ConvergeOne decided to design and build their new lab infrastructure based on VyOS, an open-source virtual router and firewall system.



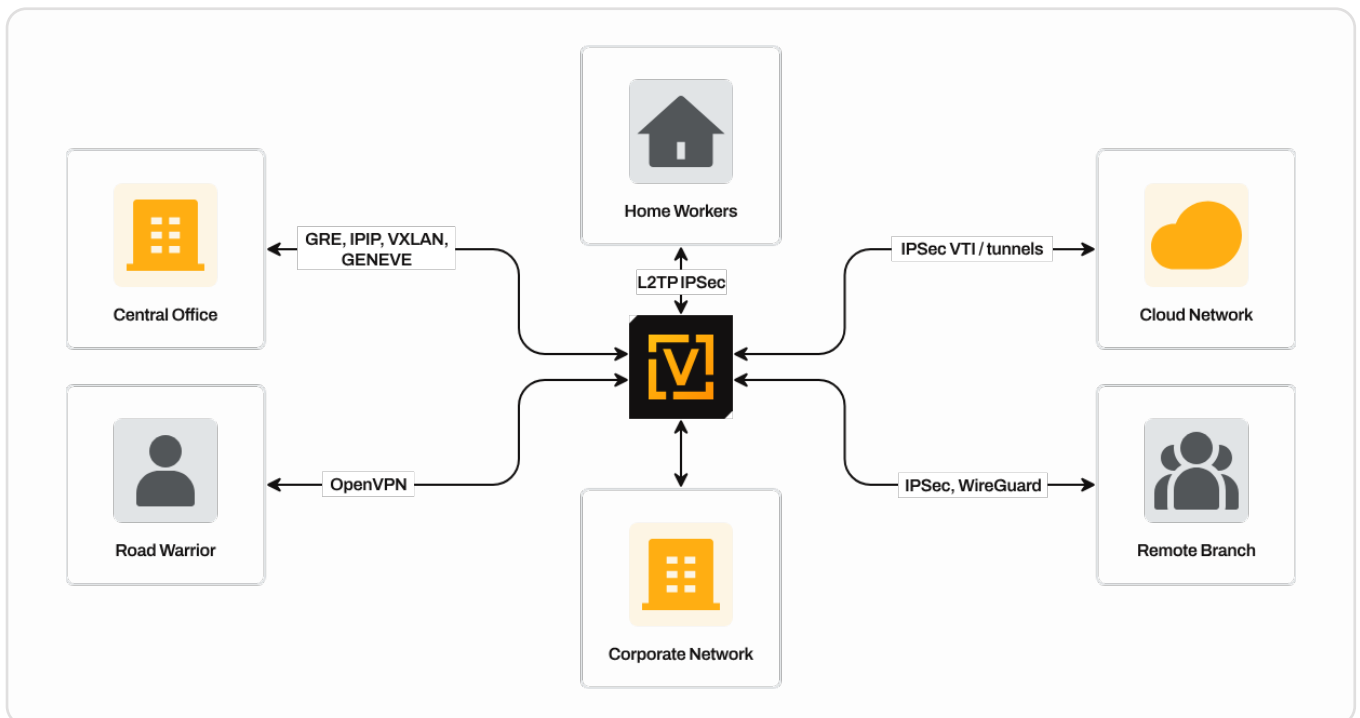
Why VyOS?

ConvergeOne chose VyOS as their ultimate solution due to its remarkable flexibility, robust feature set, and ease of use. VyOS allowed them to create "micro-pods" within the lab, effectively replicating the diverse environments required for testing and staging diverse customer scenarios. The team at ConvergeOne appreciated VyOS's built-in services, eliminating the need for additional software components. And that, when necessary, they can easily drop into Linux for more advanced functionality. VyOS provided a simplified overlay on top of their physical switching equipment, reducing complexity and improving overall management.

Solution and Benefits

- By adopting VyOS as the routing platform for their engineering lab, ConvergeOne gained numerous benefits. **The flexibility of VyOS allowed them to meet the unique requirements** of their lab pod use cases efficiently. They leverage VyOS as a simple firewall with NAT capabilities, enabling geo-IP blocking and blacklisting of IPs. VyOS also serves as their NTP and DNS servers, ensuring accurate time synchronization and efficient domain name resolution.

- ConvergeOne further utilizes **VyOS's extensive feature set for monitoring and control**. They seamlessly integrated VyOS with Zabbix, a performance monitoring tool, to track router performance and identify potential failures. They were impressed by the stability and longevity of VyOS, with routers running continuously for "years and years" without any issues.
- With the recent addition of EVPN support in VyOS, ConvergeOne was thrilled to leverage this technology in their backbone infrastructure. **EVPN allows for efficient and scalable communication** between their various lab environments (pods), further enhancing their testing and staging capabilities.
- Looking ahead, ConvergeOne plans to expand their usage of VyOS by employing it as a VPN concentrator, now that OpenConnect is supported. This will provide secure and reliable connectivity for their lab users, ensuring seamless access to resources.



VyOS proved to be the ideal solution for ConvergeOne's engineering lab network. Its flexibility, extensive feature set, and ease of use empowered the company to replicate diverse environments efficiently and provide seamless connectivity for their testing and staging needs. With VyOS as their routing platform, ConvergeOne experiences enhanced network management, improved performance monitoring, and greater overall efficiency. As they continue to expand their usage of VyOS, ConvergeOne is confident in their choice and looks forward to leveraging its capabilities to meet future challenges.