



**VyOS**  
Networks



**/** VYOS SUCCESS STORY

# Modernizing the Edge: How Vitec Memorix Simplified Border Routing and Cloud Infrastructure with VyOS

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## Customer Overview

Vitec Memorix, a business unit within the [Vitec Software Group](#), based in Western Europe, specializes in digital infrastructure for heritage institutions, public sector clients, and municipalities. Operating from the Netherlands, Vitec Memorix runs a dedicated cloud platform that supports long-term hosting and indexing of digital-born media—ensuring secure and reliable access to cultural and historical archives.

While part of the Vitec Software Group, Vitec Memorix uniquely manages its own private cloud and network backbone, upholding strict standards for transparency, cost-efficiency, operational independence, and alignment with open-source technologies.

## The Challenge

By 2023, the Vitec Memorix team faced mounting pressure to replace its aging Juniper MX80 border routers. These devices struggled to load full BGP tables reliably, leading to performance issues. On top of that, there were no suitable, cost-effective replacements available, only prohibitively expensive Juniper models. Additionally, their infrastructure suffered from:

- **Escalating Costs**

Legacy routing hardware required expensive licenses and maintenance.

- **Operational Fragmentation**

Disparate systems for routing and firewalling introduced complexity and slowed down automation efforts.

- **Lack of Developer Flexibility**

The team needed a transparent, CLI-first platform that allowed custom patching and community contributions.

## Discovering VyOS

While revisiting Vyatta, a platform he had explored years ago, network engineer Sander rediscovered VyOS. After evaluating VyOS 1.4 rolling on test hardware, the team found it offered everything required to replace their border infrastructure—and more.



*"I loaded up VyOS and realized it could fully replace our Junipers. It's open, transparent, and I can contribute to it. That's rare."*

— Sander Klein, Head of Tech & Senior Network Engineer at Vitec Memorix



## Deployment Highlights

Vitec Memorix now runs **VyOS 1.4.2** on two high-performance **Supermicro servers**, replacing legacy Junipers:

- **Border Routing at AMS-IX**  
Each server handles **4–5 full BGP tables** with direct peerings at the **Amsterdam Internet Exchange**, managing millions of routes and peering sessions.
- **10G Interfaces with Headroom**  
Though the platform peaks around **2 Gbps**, it's built to handle spikes and future demand.
- **Extended Deployment into Internal Firewalls**  
VyOS is also replacing legacy Debian firewalls across **Kubernetes** and legacy clusters to ensure a unified, CLI-driven configuration approach.



## Why VyOS?

- **Unified CLI Configuration:** Simplifies routing, firewalling, and automation from a single control plane.
- **Cost Efficiency:** Commodity hardware and subscription-based licensing significantly reduce total cost of ownership.
- **Contributable Platform:** Sander directly contributed patches to improve VRF support—benefiting both his team and the community.
- **Operational Transparency:** The system is based on Debian and uses known open-source tools, making it fully auditable and customizable.

## Results

- **Lower Infrastructure Costs:** Replaced expensive appliances with Supermicro hardware and VyOS subscriptions.
- **Improved Agility:** Faster provisioning and consistent configuration across border routers and firewalls.
- **Enhanced Community Engagement:** The team actively participates in VyOS development and roadmapping.
- **Long-Term Scalability:** Ready to adopt new performance features such as **Vector Packet Processing (VPP)** as needs grow.



## Conclusion

VyOS empowered Vitec Memorix to modernize its network infrastructure with a scalable, cost-effective, and fully transparent solution—without sacrificing stability or performance. What started as a tactical replacement quickly became a strategic investment in VyOS, a powerful and enterprise-grade networking platform built for scale, stability, and control.



*We replaced Juniper with VyOS, and never looked back. It's open, reliable, and does exactly what we need—without the vendor lock-in.*

— Sander Klein, Head of Tech & Senior Network Engineer at Vitec Memorix

