VyOS
The universal networking platform

VYOS SUCCESS STORY

60% Cost Reduction with VyOS: Carrefour Belgium's Cloud Infrastructure Transformation

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Customer Overview

Carrefour Belgium is part of Carrefour Group, one of the world's largest retail chains, which operates over 800 stores, along with multiple warehouses and headquarters across various locations.

Carrefour Belgium has fully transitioned its infrastructure to Google Cloud Platform (GCP), moving away from physical data centers. This migration required a flexible and scalable networking solution to efficiently manage its cloud and on-premises operations.

Challenges

Before adopting VyOS, Carrefour Belgium faced several challenges related to their network infrastructure:

- **Cloud Migration Issues:** Carrefour Belgium transitioned rapidly to GCP, without migrating incrementally, resulting in several legacy systems and applications not being cloud-native. This created challenges, such as limitations with cross-VPC routing in GCP, which hindered connectivity between different services.
- **High Network Costs:** The existing network infrastructure was costly, especially with the number of routers needed to support operations in GCP. Traditional solutions posed a significant financial burden, particularly with competitors' offerings.
- **Lack of Flexibility:** Carrefour Belgium required greater flexibility within its cloud environment to support legacy applications and databases without being limited by GCP's restrictions.

Why VyOS?

Carrefour Belgium chose VyOS for several key reasons:

Flexibility and Scalability: VyOS helped Carrefour Belgium overcome GCP's limitations by enabling seamless routing between different VPCs, even for legacy applications.

Cost Reduction: The deployment of VyOS offered significant savings compared to traditional network equipment and competitors, allowing Carrefour Belgium to streamline its network infrastructure while maintaining performance and reliability.

Performance and Stability: Carrefour Belgium's team tested VyOS under heavy workloads, and the solution proved to be stable and high-performing, with no issues after over two years of operation.

Technical Features: VyOS offered powerful features like Virtual Routing and Forwarding (VRF), which helped manage complex network setups, and provided access to an underlying Linux distribution for custom scripts and automation.

> *"As we continue to embrace cloud-native solutions, we realized that many companies, like ours, face the limitations inherent in platforms such as GCP and AWS. VyOS provides a powerful solution that can benefit any organization working entirely in the cloud, helping to overcome these challenges and enabling seamless scalability and flexibility."*
>
> — Pieter Salaets, Network, Security & Telecom Operations Lead at Carrefour Belgium.

The Solution

VyOS was deployed across Carrefour's GCP infrastructure to address the routing challenges and reduce costs. Key features implemented included:

- **VPC Connectivity:** VyOS facilitated routing between separate GCP VPCs, enabling end-to-end connectivity for various services.
- **Cost Savings:** Carrefour Belgium deployed 12-14 VyOS routers to support its GCP environment, replacing more expensive networking solutions.
- **Automation:** VyOS provided Carrefour Belgium with the ability to run custom scripts for daily backups and data management within GCP, which simplified operations.

Results

The adoption of VyOS led to significant improvements for Carrefour Belgium:

60% Cost Reduction: Carrefour Belgium reduced network infrastructure costs by approximately 60%, which was a significant improvement over their previous network solution.

Improved Network Flexibility: The implementation of VyOS gave Carrefour Belgium the flexibility to manage complex cloud environments and legacy systems, overcoming the limitations of GCP.

Stable and Scalable Solution: VyOS has proven to be a reliable and scalable solution for Carrefour Belgium's evolving network needs. After two years of operation, the system has been running smoothly with no significant issues.

Looking Ahead

Carrefour Belgium plans to continue leveraging VyOS for its cloud-based network infrastructure, as the solution scales with their operations.

The flexibility of VyOS enables Carrefour Belgium to extend its network infrastructure without incurring extra costs, ensuring the company can continue to evolve its cloud strategy effectively.

Conclusion

VyOS has played a crucial role in transforming Carrefour Belgium's cloud infrastructure. By **reducing network costs by 60%** and providing a flexible solution to meet both cloud-native and legacy application requirements, VyOS has proven to be an indispensable part of Carrefour Belgium's IT strategy.

The partnership between VyOS and Carrefour Belgium showcases how VyOS can help large-scale enterprises overcome cloud networking limitations and achieve substantial cost savings while maintaining high performance.