



PROSOLUCE

PROSOLUCE UPGRADES 100G BACKBONE NETWORK TO IP INFUSION OCNOS

How Prosoluce Cooperated with IP Infusion to Build Next-Gen Scalable Network

Prosoluce, a regional Cloud Provider and Internet Service Provider (ISP) based in France, was struggling to keep pace with growing customer demand. Their existing 10G backbone network was based on MikroTik's solution and lacked the capacity and support required for a 100G upgrade.

Evaluating alternatives like Juniper Networks revealed up to a tenfold price increase compared to their existing solution. Prosoluces' reliance on proprietary solutions also often restricted them to leverage best-in-breed solutions and negotiate competitive pricing within the marketplace.

Prosoluce as well had an offering from Huawei, but that was no longer viable for European communication

service providers. An additional upgrade challenge was interoperability: Prosoluces' network infrastructure included products from Alcatel Lucent, Huawei, MikroTik, and Ubiquiti.

Solution

In a bid to solve these problems, Prosoluce adopted a decisive strategy: embracing an open networking architecture with IP Infusion at its core. IP Infusion's OcNOS emerged as the ideal solution, providing a cost-effective and scalable foundation for their network. Complementing this, Edgecore Networks' cutting-edge 100G switches were deployed.

HIGHLIGHTS

Prosoluce, in collaboration with Pine Networks, charted a bold course by adopting an open networking architecture. This strategic move yielded significant benefits:

OcNOS vs. Proprietary Solutions

- **Decisive Cost Savings Over Traditional vendors** such as Arista, Alcatel-Lucent Enterprise, Ciena and Juniper that presented a price point that proved prohibitively high. IP Infusion offered comparable features and support at up to five times lower price.
- **OcNOS Hedges Vendor Supply Problems With Huawei:** Huawei solutions are no longer viable for many European CSPs. Recognizing the shifting landscape, IP Infusion emerged as the go-to solution in this context.
- **OcNOS Replaces MikroTik:** MikroTik couldn't offer an adequate 100G upgrade to legacy 10G switches deployed at Prosoluce.
- **Modern Fabric Technology:** EVPN-VXLAN, the core technology of the solution, provided the same functionality as MPLS with greater efficiency and a more modern approach.
- **Seamless Integration:** Built on industry standards, IP Infusion OcNOS on Edgecore switches passed all interoperability tests and deployed alongside Alcatel, Huawei, MikroTik, and Ubiquity.

Central to this solution was the utilization of EVPN-VXLAN fabric technology offered by OcNOS, offering modern functionalities with superior efficiency when compared to traditional MPLS networks. This open architecture not only facilitates seamless integration with Prosoluce's existing network elements, but also safeguarded their prior investments and streamlined future upgrades.

“Prosoluce's transition to open networking was a game-changer for us. By diversifying our equipment sources, we mitigated the risks associated with vendor dependency. The IP Infusion software not only enhanced compatibility and performance but also drove down costs significantly.”

– Gaël Hermet, Directeur Général for Prosoluce

Deployment

The foundation of the new network is IP Infusion's OcNOS DC IP BASE 3200 software. This software offers a robust feature set for data center deployments, including line-rate Layer 2 and Layer 3 forwarding, support for BGP, OSPF, EVPN, VXLAN, comprehensive security features, and programmability with NETCONF and ANSIBLE.

For hardware, Prosoluce selected the Edgecore Networks AS7726-32X switch. This high-performance switch boasts a Broadcom Trident3-X7 ASIC for exceptional performance and scalability. It features 32 x 100G QSFP28 ports, supporting connections ranging from 100GbE down to 10GbE. Additionally, the switch delivers a 3.2Tbps forwarding capacity and utilizes redundant, hot-swappable power supplies and fans for maximum uptime.

The core of the solution utilized EVPN-VXLAN fabric technology. This modern approach offers several advantages over traditional MPLS networks, including scalability for large, geographically distributed data centers, efficiency through its use of existing Layer 3 infrastructure, and advanced features for multi-tenancy, mobility, and security.

SOFTWARE PRODUCTS

- IP Infusion OCNOS-DC-IPBASE-3200

HARDWARE PRODUCTS

- Edgecore AS7726-32X – 1U, 32x 100GE QSFP28 Open Switches

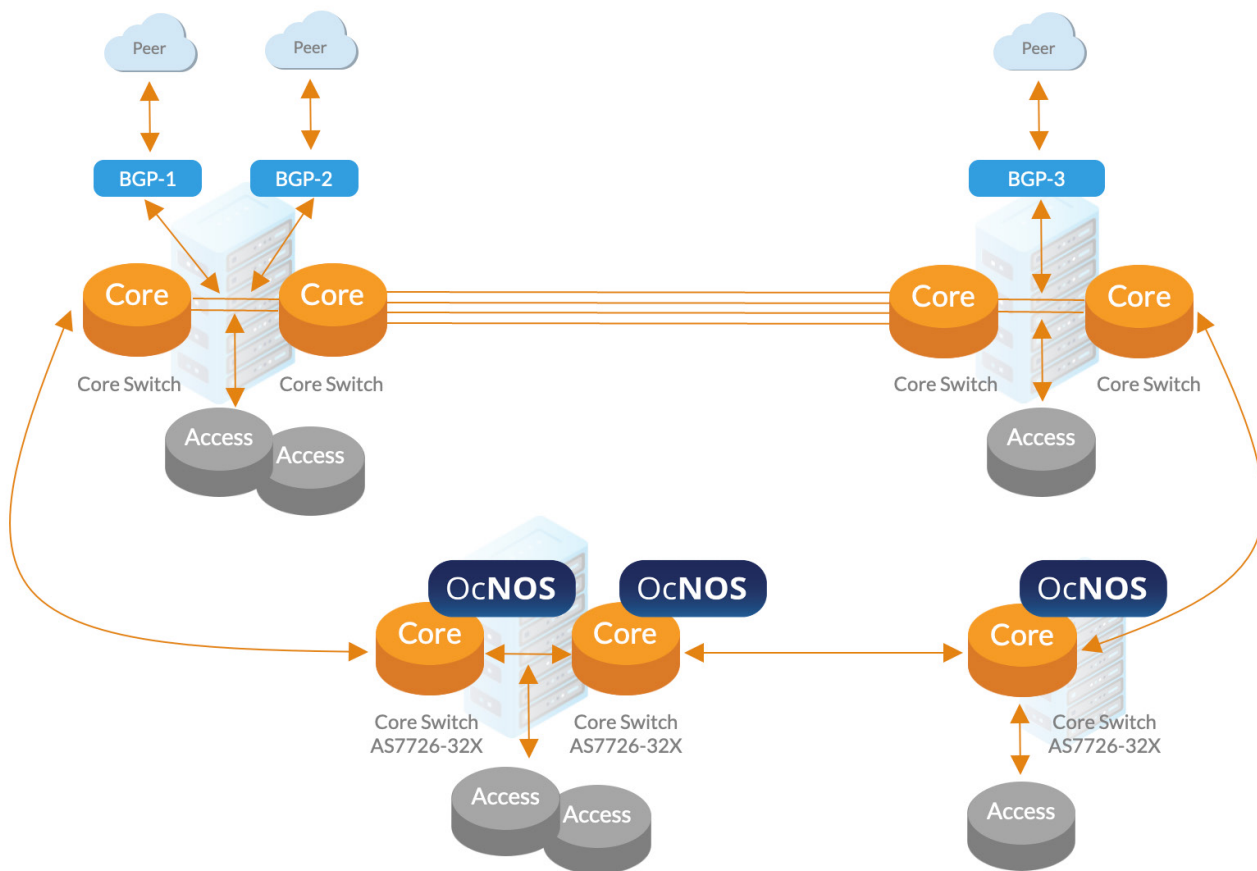


Figure 1. Prosoluce Data Center Deployment Reference Network Topology

Results: A Symphony of Success

Prosoluce’s open networking deployment resulted in a **future-proofed core network** capable of handling 100G speeds. This transformation delivered:

- **Increased Network Performance:** The solution significantly enhanced network performance, enabling Prosoluce to deliver a superior customer experience.

- **Reduced Operational Costs:** The open networking approach yielded substantial cost savings on both hardware and software, from deployment stage, support, and future upgrades, improving overall profitability. Simple transparent licensing of OcNOS enabled Prosoluce to objectively prognose network upgrade costs.
- **Greater Flexibility and Choice:** Prosoluce gained the freedom to choose the most suitable solutions for their needs, including white box platforms and optics, fostering a more agile and responsive network.

Summary and Future Implications

Prosoluce's journey stands as a testament to the remarkable impact of open networking, achieving unmatched scalability, cost-efficiency, and future-proof agility. By embracing open standards, they broke free from vendor limitations, enabling the adoption of cost-effective, best-in-breed solutions while fostering a network poised for seamless adaptation to evolving technologies and business demands.

“The benefits of open networking are becoming easier to see as organizations look into the Total Cost of Ownership (TCO). But perhaps more important than price, open networking deployments are also becoming easier to manage and operate as an integral part of any advanced network.”

– Hadi Choueiry, General Manager for Pine Networks

“By embracing open networking, Prosoluce has become a testament to its potential. This approach has not only delivered the scalability and performance we require, but it has also positioned us for future growth and innovation within the ever-evolving telecom landscape.”

– Gaël Hermet, Directeur Général for Prosoluce

Contact for More Information:

For more information on the OcNOS software, please contact sales@ipinfusion.com.

ABOUT IP INFUSION

IP Infusion is a leading provider of open network software and solutions for carriers, service providers and data center operators. Our solutions enable network operators to disaggregate their networks to accelerate innovation, streamline operations, and reduce Total Cost of Ownership (TCO). Network OEMs may also disaggregate network devices to expedite time to market, offer comprehensive services, and achieve carrier grade robustness. IP Infusion network software platforms have a proven track record in carrier-grade open networking with over 500 customers and over 10,000 deployments. IP Infusion is headquartered in Santa Clara, Calif., and is a wholly owned and independently operated subsidiary of ACCESS CO., LTD. Additional information can be found at <http://www.ipinfusion.com>

© 2024 IP Infusion, Inc. All rights reserved. IP Infusion is a registered trademark and the ipinfusion logo and OcNOS are trademarks of IP Infusion, Inc. All other trademarks and logos are the property of their respective owners. IP Infusion assumes no responsibility for any inaccuracies in this document. IP Infusion reserves the right to change, modify, transfer, or otherwise revise this publication without notice.