RETN scales Eurasian network with Juniper 400G

RETN owns one of the world's largest independent networks, with diverse routes throughout Eastern, Central and Western Europe that extend to the border of China and into Southeast Asia. With a long history as a transport provider and a reliable partner for the wholesale market, RETN is increasingly serving the communications needs of enterprises.

RETN expanded its pan-European network with Juniper 400G routing and switching for a flexible and efficient way to meet the growing demand for network services across all Pan-European region.

OVERVIEW

Company	RETN
Industry	Service Provider
Products Used	MX10003, MX10004 and MX10008, MX304, MX204, QFX5220, QFX5120, ACX7100
Region	EMEA

CUSTOMER SUCCESS AT-A-GLANCE

400G

Upgrade of pan-European core network entailed just two hours of downtime

36.8 Tbps

Network capacity

132,000

Kilometers of network and 865 points of presence

11th

Largest network in the world, ranked by the number of autonomous systems

CHALLENGE

Meet growing digital demand from east to west

"We have a challenging target to become a Tier 1 provider within the next two years," says William Manzione, product manager at RETN. "RETN continues to invest in and expand our network to achieve that business goal."

Customer focus and serving their needs is a priority for RETN. The service provider takes an engineering-focused, customer-driven approach as it delivers high-quality IP transit, peering, Ethernet VPN, collocation, and cloud connect services over its 132,000-kilometer network. RETN's in-country expertise helps customers overcome cultural difficulties as they enter new territories and regions.

"Customers appreciate our expertise and flexibility," says Manzione. "We work with them to understand their business and help them achieve their goals."

To support customers' growing need for high-performance, resilient connectivity, RETN wanted to upgrade its pan-European network with the next generation of 400G routers.
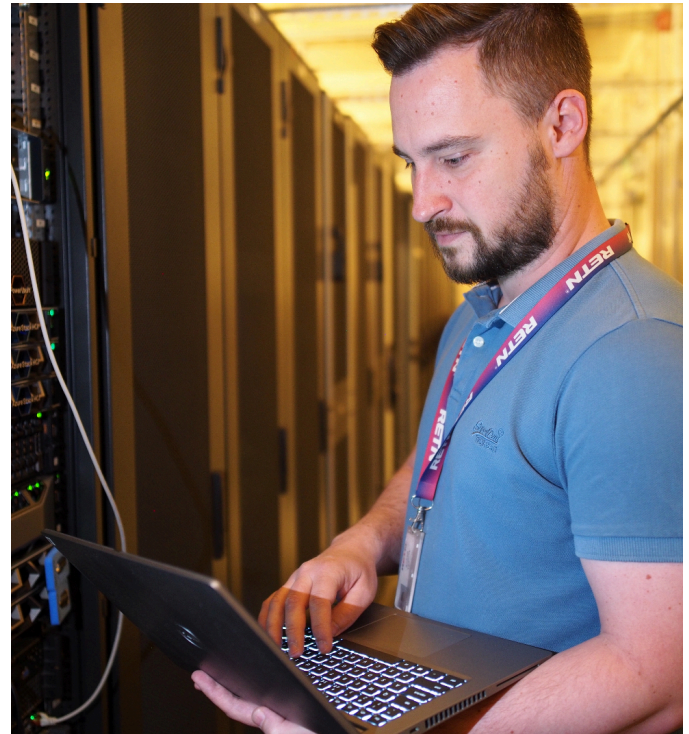
SOLUTION
A seamless way to expand

RETN has relied on Juniper for its Eurasian backbone for almost 20 years. Based on proven reliability and flexibility, as well as the team's operational expertise with Juniper platforms, RETN chose the Juniper MX10008 for its next-generation transport network and Juniper ACX Cloud Metro Routers for modernising its metro networks.

"We don't have a strict separation between our core and metro networks," explains Aleksei Serdiuk, project manager at RETN. "The majority of our network functions as the core, enabling us to directly link customers to the backbone, ensuring exceptional performance and resilience. We offer all customers direct access to core routers, and performance-wise, leveraging the right gear enhances the excellence of this architecture."

RETN's Eurasian network is extensively interconnected to maximize capacity and resiliency, and the Juniper MX10008 delivers the performance, 100GbE and 400GbE interface density, and versatility that RETN wanted—as well as the investment protection it needed. The MX10008 router, which scales to 76 Tbps in 13 RU (rack units) now and is 800GbE-ready, provides ample capacity for future needs.

The network upgrade is always seamless. "With the latest change we replaced the core routers with only two hours of downtime," says Serdiuk.

Demand for collocation services is also growing, and RETN uses the Juniper QFX5220 Switch and the Juniper QFX5120 Switch for its data center IP fabric. The QFX5220 is ideal for large, dense, and fast data center fabrics and metro networks, with 10GbE to 400GbE interfaces. RETN uses the QFX5120, which supports 1GbE to 100GbE interfaces, for access.

RETN is deploying Juniper ACX Cloud Metro routers as it expands into more cities and regions. The high-bandwidth, low-latency ACX7100 delivers 4.8 Tbps throughput for aggregation in a compact, energy-efficient footprint. The company uses the ACX710 for access. "We started in London, and next we plan to use the ACX Cloud Metro routers to connect our metro networks in the Baltics," says Manzione.

OUTCOME
High capacity with a global reach

Service providers and enterprises can rely on RETN for fast, reliable connectivity in western Europe as well as in fast-growing eastern European markets. RETN's network, with a total 36.8 Tbps capacity and highly diverse routes, supports the delivery of high-performance, highly available services. With the upgrade of its European network, RETN can directly connect customers at speeds from 100 Gbps to 400 Gbps.

An all-Juniper network supports agile service delivery. RETN's operations and engineering teams have extensive experience with Juniper solutions, which is essential to the company's commitment to highly expert, personalised customer support.

"We don't have a traditional helpdesk with support tiers," explains Serdiuk. "Customers communicate with an experienced technical person right away. A team of qualified RETN engineers constantly monitors the network and take preventive measures to ensure continuing service availability. Our NOC team is dedicated to timely detect, diagnose and resolve issues in a precautionary approach. As we grow, we see the benefits of this way of operating; it's one of the secrets of our superior customer experience."

"With a Juniper network, RETN has the reliability, flexibility, and operational efficiency that we need as we continue to expand our Eurasian network."

William Manzione
Product Manager, RETN

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