

Neutrona Offers Carrier-Neutral Services in Latin America with High-IQ Network

Summary

Company:

Neutrona

Industry:

Service Provider

Business Challenges:

As Neutrona expanded its network core and high-speed edge to meet growing demand for extended reach services into Latin America, it needed high-performance routing with uncompromising reliability and also the ability to orchestrate services.

Technology Solution:

- MX480 and MX104 3D Universal Edge Routers
- Junos Space Network Management Platform, including Service Now and Services Activation Director

Results:

- Differentiated business based on delivering ultra-reliable telecom services in Latin America
- Leveraged automation to provision network services in half the time
- Migrated provider edge to 40 Gbps
- Forged a path to SDN

Multinational corporations operating in Latin America rely on Neutrona for highly reliable telecommunications services. Neutrona is a carrier-neutral provider that was formed in 2012, following the purchase of the international carrier services business of IFX Networks. The company is focused on providing extended reach network access to global and regional carriers into Latin America, with an IP/MPLS and Carrier Ethernet network that provides high reliability through diverse connections that use multiple subsea cable systems and terrestrial fiber rings.

Business Challenge

With demand for telecom services strong, Neutrona wanted to expand its international backbone and high-speed provider edge. “Most of the end customers using our services are Fortune 1000 companies and they are looking for a higher level of resiliency than what is normally delivered in Latin America. We work with our international carrier partners to become their carrier of choice by offering a more reliable network with the highest levels of customer focus and support,” says Daniel Monetto, director of engineering and product management at Neutrona.

One of Neutrona’s key differentiators is known as Duality®. Neutrona is the only carrier in Latin America to provide dual protected cables throughout the network, resulting in multiple diverse sub-sea and terrestrial links for any given route. This protects Neutrona’s customers from double cable cuts or massive system failures, since there are always at least two different sub-sea rings connecting each major city.

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Daniel Monetto, Director of Engineering and Product Management, Neutrona



Technology Solution

Neutrona thoroughly researched its carrier-class routing options and conducted extensive testing. Ultimately, Neutrona chose to upgrade its Juniper routing infrastructure to Juniper Networks® MX Series 3D Universal Edge Routers, because they delivered a platform that could flexibly support a variety of Ethernet, IP, and SONET/SDH interfaces at high density and with increased reliability.

In addition, many of Neutrona's engineers were highly experienced with Juniper Networks Junos® operating system from when they built the original backbone and started the first IP/MPLS network in Latin America in 2000. They knew firsthand that Juniper provided a high-performance routing solution that delivered the advanced features and uncompromising reliability that Neutrona needed to meet the stringent service-level agreements (SLAs) it offered to customers.

Neutrona deployed the Juniper Networks MX480 3D Universal Edge Router as the foundation of its international backbone, with peering points in New York and Miami. It also deployed the MX104 3D Universal Edge Router in 20 locations across Latin America.

MX Series routers provide industry-leading system capacity, density, and performance. With an advanced architecture that separates control, management, services, and forwarding plane as well as support for virtualized network services, the MX Series portfolio is tightly aligned with Juniper's SDN and Network Functions Virtualization (NFV) strategy.

Neutrona is also leveraging Junos Space Network Management platform for comprehensive management of Juniper devices, same day support for new devices and Junos OS releases, and APIs for integration with its operations and business support systems (OSS/BSS). It uses Junos Space Services Activation Director for error-free service provisioning and monitoring of carrier Ethernet and MPLS. Junos Space Service Now is a remote, automated troubleshooting client that allows Juniper to quickly identify a problem in the Neutrona network, which speeds problem resolution.

"Having a High-IQ Network from Juniper is helping us differentiate our services," Monetto says. "Our Juniper network enables the concept of Duality®, in which we incorporate international capacity from different subsystems into a regional MPLS mesh network so we can provide higher resiliency compared with competitors. Every time there is a double fiber cut on an international cable, most of our competitors' customers lose their connectivity, but our customers stay up because we reroute the traffic using an alternate sub-sea network."

Business Results

With a Juniper High-IQ Network, Neutrona can offer high-quality services to businesses operating in Latin America. "When we started Neutrona, we began as an extended reach access provider for our partners in Latin America," says Monetto. "What we are proposing now is to become part of our customers' networks in Latin America. We are trying to move to the next level of service integration and be a seamless part of their network. Our Juniper network is helping us reach that goal."

Neutrona is taking full advantage of the MX Series' advanced traffic engineering and routing capabilities to optimize traffic over the WAN. Efficient bandwidth management is also critical to Neutrona's operational and financial performance, and Junos Space is playing a key role in optimizing service delivery as well. "Traffic engineering is one of the most important capabilities," says Monetto. "We have multiple international connection points and we depend on effective traffic engineering to provide fast convergence based on the specific situation of where we need to reroute traffic and optimize performance for all of our customers."

"Our traffic engineering, combined with our high availability, is a differentiator for Neutrona," says Monetto. "Throughout the selection process—and beyond, the whole Juniper team demonstrated involvement, values, and strategic vision, and we expect to have better and more customized support from Juniper than we would from competitors."

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Next Steps

As it takes full advantage of its Juniper High-IQ Network and advanced traffic engineering and routing capabilities, Neutrona will be able to optimize traffic and services, meeting its goal of becoming a seamless part of its customers' networks in Latin America. "With Junos Space, we can achieve automation in provisioning and service delivery, which will allow us to deliver services to customers faster and reduce human errors," says Monetto. He estimates that with a fully automated, High-IQ Network, an engineer can provision the international portion of a new circuit from end to end in days, not weeks—and eventually in only minutes.

The next phase of Neutrona's evolution of its High-IQ Network will be teaming up with Juniper during the second half of 2014 to test and deploy Carrier SDN throughout Neutrona's network, making it a true pioneer in Carrier SDN.

For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

About Juniper Networks

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