Elite Adds Network Capacity and More with Juniper Networks Technology

Summary

Company:
Elite Limited

Industry:
B2B, Technology, Telco

Business Challenge:
Elite Limited needed to:

- Expand core network capacity
- Increase VPN and MPLS service density
- Improve network security and resilience to ensure secure customer connectivity

Technology Solution:
- MX Series 3D Universal Edge Routers
- SRX Series Services Gateways
- vSRX Virtual Firewall

Business Results:
- Higher resilience
- Increased capacity
- Simple and efficient multi-site connectivity
- Increased support and improved maintenance
- The ability to fully scale our network
- Reduced TCO (total cost of ownership)
- Increased efficiencies in the data centre environment

Elite Limited is a national network operator and ISP that provides its customers with access to diverse and resilient networks throughout the U.K, as well as next-generation MPLS and virtual private LAN (VPLS) services. Elite has a wide range of partners who resell its business-grade Internet connectivity, colocation, VoIP, cloud, and hosting services.

Servicing over 10,000 businesses through an intricate list of channel partners that range from large multinationals to SMBs, charities, government agencies, and everything in between, Elite specialises in cloud and connectivity services, and is also an IP voice carrier, using its fully quality-of-service (QoS)-enabled network to deliver high-quality IP services.

Business Challenge

Elite's experience with Juniper began when it implemented Juniper Networks® SRX Series Services Gateways on its managed circuits five years ago. The success of this effort led to the full adoption of Juniper security solutions across Elite's core network as well as at the edge of its customers' networks.

Given the high volume of traffic supported on its network and its forecast growth rate, Elite decided to upgrade its infrastructure and maintain its reputation as one of the most forward thinking and innovative ISPs in the U.K. telecom market. As David Simmons, Managing Director, Elite Limited explains, "Adding more capacity to the network was at the forefront of our thinking, it is one of our biggest and most important assets. If the network becomes oversubscribed, you can lose customers. Furthermore, with more customers seeking MPLS for multi-site connectivity, we had to ensure that the additional capacity could be reliably provisioned with speed and ease."

"We also needed to focus on energy consumption and costs," David adds. "With the virtualization of I.T. resources in all our data centers, Elite needed to ensure the highest standard of routing performance while being as energy efficient as possible.

"Once we integrated the new edge routers into our network and added a few additional tweaks, Juniper and (our partner) Axians engineers took it out of our hands and set it up in our data centers for us. Their commitment to our success was second to none, and eliminated risk during the transition period. A first class service by all standards."

David Simmons, Managing Director, Elite Limited

Technology Solution

Elite's positive experience with the SRX Series gave Elite the confidence to evaluate Juniper Networks MX Series 3D Universal Edge Routers for its capacity expansion effort. After passing a rigorous qualification exercise, the MX480 3D Universal Edge Router now provides Elite with both carrier-class Ethernet switching and routing to support a wide range of business applications and services. These include high-speed transport and VPN services, next-generation broadband multiplay services, and high-volume Internet data center internetworking. The MX480 3D Universal Edge Router also provides Elite with high-density 10GbE, 40GbE, and 100GbE interfaces, which is critical for efficiently interconnecting Elite's Dark Fibre network core.

"Our investment in the MX480 lets us handle up to 5 Tbps per node and streamline our operations like never before," David Simmons says. "Now we can provision multiple 10GbE dense wavelength-division multiplexing (DWDM) waves in a matter of minutes." In addition to these benefits, the MX Series portfolio utilizes the same Juniper Networks Junos® operating system as the SRX Series Services Gateways, which further streamlines operations, maintenance, and monitoring tasks.

Business Results

"Juniper forms the foundation of the Elite network, allowing superior levels of network security and resilience, mitigating against threats to customer connectivity, and keeping Elite on the cutting edge of performance—well ahead of the market," says Matthew Rogers, Elite's BD and Marketing Manager.

"Since the upgrade, customers, partners, and wholesalers using our VoIP services have noticed measurably improved performance and decreased latency. In fact, the upgrade has helped improve all of our services: Our existing customers have seen positive results from day one, and new customers have been commenting on how superior the experience is on our network compared to their old ISPs."

As a major provider of business grade Internet connectivity, cloud and VoIP services, Elite's hardware estate is extremely extensive, so maximizing space and power efficiency is a primary concern. An additional MX480 benefit is its high capacity in a small form factor—a whopping 5 Tbps system capacity in just eight rack units—helping Elite consolidate platforms, reduce energy consumption, and free up significant amounts of rack space. "The whole solution, from the capability of Juniper's equipment to Axians' support services, enabled Elite to operate much more efficiently and cost-effectively, while increasing network capacity and adding additional layers of redundancy," Matthew says.

Making this project successful took more than great products and technology. "Our highly experienced team of engineers who maintain and manage our network on a daily basis, worked side by side with the team of experts from Juniper and our partner, Axians," David Simmons says. "Once we integrated the new edge routers into our network and added a few additional tweaks, Juniper and Axians engineers took it out of our hands and set it up in our data centers for us. Their commitment to our success was second to none, and eliminated risk during the transition period. A first class service by all standards."

"Since the upgrade, customers, partners, and wholesalers using our VoIP services have noticed measurably improved performance and decreased latency. In fact, the upgrade has helped improve all of our services: Our existing customers have seen positive results from day one, and new customers have been commenting on how superior the experience is on our network compared to their old ISPs."

Matthew Rogers, BD and Marketing Manager, Elite Limited

Next Steps

Continuous investment in advanced technologies and solutions are paramount to Elite's ongoing success, as it provides services to over 10,000 businesses. Elite is working towards implementation of a wholly virtualized cluster across multiple data centers, to enable higher quality services and improved scalability for customer solutions. In turn, the virtualization solution will allow for next-generation services to become more affordable to SMEs, as well as have higher energy efficiencies.

Juniper's SDN and Network Functions Virtualization (NFV) technologies will form the foundation of Elite's virtualization strategy, allowing the company to fully automate its processes and lower its total cost of ownership. As Matthew Rogers explains, "Elite will be able to intelligently orchestrate, as well as automate procedures such as the provisioning and operation of virtual and physical network functions through Juniper's NFV and SDN technologies. Elite will be enabled to instantly manage its vast infrastructure estate and provision crucial additions in next to no time at all. Not to mention the resilience that this software will add to our network and ultimately, customer solutions."

For More Information

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

To find out more about Elite Limited's products and solutions, please visit https://elite.net.uk

About Juniper Networks

Juniper Networks challenges the status quo with products, solutions and services that transform the economics of networking. Our team co-innovates with customers and partners to deliver automated, scalable and secure networks with agility, performance and value. Additional information can be found at Juniper Networks or connect with Juniper on Twitter and Facebook.

Corporate and Sales Headquarters

Juniper Networks, Inc.

1133 Innovation Way

Sunnyvale, CA 94089 USA

Phone: 888.JUNIPER (888.586.4737)

or +1.408.745.2000

Fax: +1.408.745.2100

www.juniper.net

APAC and EMEA Headquarters

Juniper Networks International B.V.

Boeing Avenue 240

1119 PZ Schiphol-Rijk

Amsterdam, The Netherlands

Phone: +31.0.207.125.700

Fax: +31.0.207.125.701

EXPLORE JUNIPER
Get the App.

JUNIPER
1ON1

Download on the
App Store

ANDROID APP ON
Google Play

3520572-001-EN July 2016

JUNIPEr
NETWORKS