



Core



Edge



Cable



Mobile

Innovation@Speed with Juniper Networks



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Patrick Carson
Head of Product and Service Management



TelstraClear is changing the landscape of the New Zealand communications market with a new suite of voice, data and video broadband services—the Speedway suite of products. Built on Juniper Networks IP routing platforms, TelstraClear customers enjoy the benefits of low cost, high performance and secure broadband services such as virtual private networks (VPNs) and virtual local area networks (VLANs) at speeds between 2Mbps and 1Gbps.

- Pure Juniper Networks IP infrastructure, independent of SDH or ATM intermediate transport layers means reduced cost structure and increased margin for TelstraClear.
- Cost savings and network efficiencies mean customers enjoy TelstraClear 10Mbps service at almost the same pricepoint as the traditional 2Mbps service of its competitors.
- The reliability of the Juniper Networks JUNOS software delivers the highest availability of customer networks leaving TelstraClear to focus on developing new IP services and revenues.
- Juniper Networks provides crucial performance, scalability, security and features.

The largest communications challenger in New Zealand, TelstraClear is a true innovator. Its new broadband service offering, Speedway, has altered the landscape for business applications and communications in New Zealand. A pure greenfield network, fully integrated into the TelstraClear New Zealand core network and legacy customer base but with none of the limitations of legacy infrastructure, TelstraClear offers New Zealand business customers broadband value added services at speeds from 2Mbps, the limit of traditional services, to an impressive 1Gbps.

At such high speeds, VLAN and VPN services enable customers to run bandwidth-demanding applications such as Enterprise Resource Planning (ERP), video-conferencing, video-training and Voice over IP (VoIP). TelstraClear can also offer high-speed, secure connections between traffic heavy data centres and call centres across cities and suburbs seamlessly. In addition to these service benefits, the low cost and efficient deployment of IP enables TelstraClear to offer a 10Mbps service at the same pricepoint as their competitors' 2Mbps “legacy” service.

Juniper Networks provides the enabling routing infrastructure at the core of the network. With Juniper Networks routers, TelstraClear has built its Speedway broadband services with market-leading performance and reliability, and more importantly, with a reduced total cost of service deployment and ownership.

A Next-Generation Carrier

As New Zealand's communications challenger, TelstraClear's goal is to provide new competition and choice to New Zealanders who thrive on the cutting edge of information technology. TelstraClear is a next-generation carrier resulting from the merger of leading innovators, Telstra New Zealand, Saturn Communications, and more recently Clear Communications. TelstraClear has successfully established itself in both the residential and corporate markets with a variety of voice, video, VPN and Internet service offerings.

In the past, wide-area and metropolitan networking solutions available in New Zealand had been confined to low speed services delivered on “legacy” network architectures leveraged from enterprise-class routers comprised of layers of transmission protocols such as SDH, Frame Relay, ATM and IP. As customers embrace IP information delivery to explore competitive advantages through more sophisticated business applications, the expense of bandwidth threatens to become the largest cost of business application operation.

TelstraClear saw an opportunity to break the bandwidth barrier and gain the competitive edge with a cost-efficient pure IP network that delivers numerous services at scale. By cutting a number of the layers out of the network, TelstraClear scales its network to deliver significantly more bandwidth per customer. At the same time, the cost structure of the network enables TelstraClear to offer a 10Mbps service with advanced features such as VLAN and VPN for almost the same price as a traditional 2Mbps service. “We consider ourselves a new competitor and are focused on market differentiation and innovation. We have changed the rules of the game,” said Patrick Carson, Head of Product and Service Management at TelstraClear. “By investing in the new public network with the latest IP technology and infrastructure, we have been able to deploy and manage unprecedented services at a much lower cost base than our competitors.”

Changing the Rules

TelstraClear did change the rules. With direct broadband connectivity of speeds from 10Mbps up to 1Gbps, customers can upgrade the service in speed increments that match exactly their business needs. They also have the choice between a Layer 2 VLAN and a Layer 3 VPN service. "We route multiple services such as Internet and VPN over a common broadband IP connection," explains Carson. "It simplifies the service delivery while reducing operational costs including network management time. At the same time, our customers are impressed." For TelstraClear the network management is seamless and the cost of operations and ownership is substantially reduced, which translates directly to competitive advantage.

"We use Juniper Networks to run IP-based services directly over our DWDM transmission infrastructure. This was the only way to offer our services with the level of price-feature-performance we needed to succeed. Juniper Networks performance, scalability and feature set are critical to our success and competitive advantage," said Carson.

"It's almost invisible"

TelstraClear's network stretches from the North Island to the South Island of New Zealand touching all the major cities and over 30 regional areas, delivering voice, data, mobile, Internet and cable television services to a mix of business and residential customers. Seamless network management is a crucial aspect of the network. TelstraClear's 24 X 7 Network Operation Centre (NOC) is based in Auckland and it centrally manages the entire network under an open environment.

Juniper Networks JUNOS software helps us gain operation efficiencies through a single software across the edge and core of our network infrastructure. "JUNOS is straight forward considering the rich set of features it offers us in deploying our VLAN and VPN services. The software, which offers the same feature set on every Juniper Networks platform, enriches our NOC and the rest of the network. JUNOS does its job so well that it's almost invisible to us. The network is reliable and it has never missed a beat," adds Carson.

"Carrier-Class IP"

The TelstraClear broadband services network is built on Juniper Networks. "We looked at almost every alternative in the market and we were uncompromising in our selection process," said Carson. "The concept of deploying a mission-critical broadband service with two layers of router, one at the core and the other at the edge, sounds trivial but isn't. We always knew at our product design stage that if we could identify the right platform to implement the idea, the low total cost of ownership would put us in front of our competitors. While there are alternative solutions that claim to do a similar job, few offer true carrier-class IP. We know that we have made the right choice. The key advantage of the Juniper Networks solution is that it is truly carrier-class, meaning it is reliable, uncompromising in performance and security, and it scales well. We get peace of mind from the stability of JUNOS. The network transparency and the feature set are excellent."



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