



Case Study

NEC XON and Juniper Networks Power MetroFibre’s Cutting-Edge Fiber Network in Cape Town

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Overview

As the demand for fast and reliable Internet surged in Cape Town, as elsewhere, infrastructure giant MetroFibre faced a bandwidth crunch that led to resiliency issues. In response to the growing demand, MetroFibre Network had to rapidly deploy fibre infrastructure in Cape Town’s burgeoning business hubs. The fibre network operator (FNO) aimed to complete a 100km network ring and route by the end of November 2023. In the initial phase, approximately 4000 businesses in the main business hubs of Montagu Gardens, Brackenfell, Rondebosch, Paarden Island, Stikland, Epping, Belville, Tyger Valley, and the City Bowl would gain access to the MetroFibre network.

Real Results Delivered

With the help of NEC XON and Juniper Networks, MetroFibre Network now owns and manages South Africa’s first globally compliant Carrier Ethernet 3.0 (CE 3.0) open-access fiber network. This network enhances access, scalability, and reliability for clients, connecting over 60 cloud, application, voice, and Internet service providers with their customers.

The Threat

With the demand for fast and reliable Internet skyrocketing in Cape Town, MetroFibre encountered bandwidth limitations that jeopardized network resiliency. Rapid deployment of fiber infrastructure became imperative to meet the needs of over 4000 businesses in key business hubs.

The Response

MetroFibre turned to NEC XON and Juniper Networks to address connectivity challenges and support advanced technologies like Ethernet VPN and Segment Routing. Through meticulous planning and leveraging best-of-breed solutions, a scalable network solution was designed and implemented, delivering high reliability and performance.

The Benefits

Reliability: NEC XON’s Juniper-based solution ensures a highly reliable network with low latency and full end-to-end encryption capabilities.

Scalability: The network is designed to accommodate future growth, meeting the evolving needs of businesses in Cape Town.

Security: With carrier-grade connectivity and full end-to-end encryption, MetroFibre’s network ensures data security and privacy.

Performance: The network boasts a capacity exceeding 24 Terabits, delivering high-speed internet access to businesses and residential properties.

Flexibility: Adtran technology facilitates flexible delivery options, offering a range from 1 Gig to 200 Gig full internet and fiber channel access.

Manageability: User-friendly interfaces and seamless rollout ensure easy management, diagnostics, and troubleshooting for network administrators.

MetroFibre’s fully diverse network in Cape Town offers true route and carrier diversity, enhancing reliability and resiliency. Additionally, the Carrier Ethernet 3.0 (CE 3.0) compliant network accelerates the deployment of fiber services for businesses, ensuring standardized and globally deployable solutions.



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