



Improving the banking experience with Wavelength Services

Large South America-based bank invests in digital transformation

A leading banking organization provides a full range of products and services to more than 11 million individual and corporate customers around the world via thousands of employees and more than 900 branch offices.

The company focuses on superior customer experience as a key differentiator; through timely, innovative services to make customers' lives easier. It operates the largest bank platform in its home country and is one of the largest in South America. The firm is a trendsetter in the financial services industry, delivering cutting edge services that quickly adapt to customer needs. Industry analysts consider the firm to be one of the most technologically progressive banks in the world.

To maintain its competitive advantage, the bank follows a framework for innovation with three key components:

- Continuous growth of digital knowledge and experience
- Vision of ecosystem, including financial technology (FinTech) partners
- Constant improvement in IT platforms and processes

Over the years, the firm invested heavily in digital transformation through mobile and online service offerings. Recently, they began focusing efforts on artificial intelligence capabilities as well as enhancing digital security.

Why CenturyLink® Wavelength Services?

CenturyLink® Wavelength Services offer advantages such as stringent service level agreements (SLAs), custom routing (to meet unique diversity and disaster recovery requirements), 24/7 monitoring and management, optional custom routing and optional route protection. This typically includes:

- End-to-end transparency, providing visibility and control
- Privately owned fiber and repeater stations, relieving end users of the burden of network management
- Reduction in the financial expenditure of network ownership, preserving capital resources
- Ability to be configured to meet disaster recovery requirements combined with a customer-facing monitoring portal
- World-class SLAs from 99.9% to 99.99%

Challenge

The bank has grown rapidly over the past 10 years through a series of mergers and acquisitions. The legacy systems and applications inherited from the acquired banks made it difficult to effectively manage operations and transactions on an enterprise basis. This situation impacted the bank's ability to provide the quality customer experience central to their core mission.

The bank also needed to balance its network of branches while ensuring that local customers still had access to quality products, services and support. To reduce operational cost and risk while improving time-to-market capabilities, the bank deployed technology to automate back office processes. Real-time digital tools were also implemented to seamlessly monitor and integrate operations across all locations. In order to improve management efficiency, the bank employed a data analytics solution to improve decision making with highly valuable live feeds of performance metrics. Finally, in response to heightened concerns about cybersecurity, the bank looked to enhance data security beyond perimeter protection.

The firm's initiatives around legacy platform convergence, automation, digital innovation and cybersecurity required an upgrade of its core network connectivity between data centers. The bank chose to work with a single service provider to reduce cost and complexity, and to ensure that they had high-capacity connectivity that is controllable, intelligent and secure.

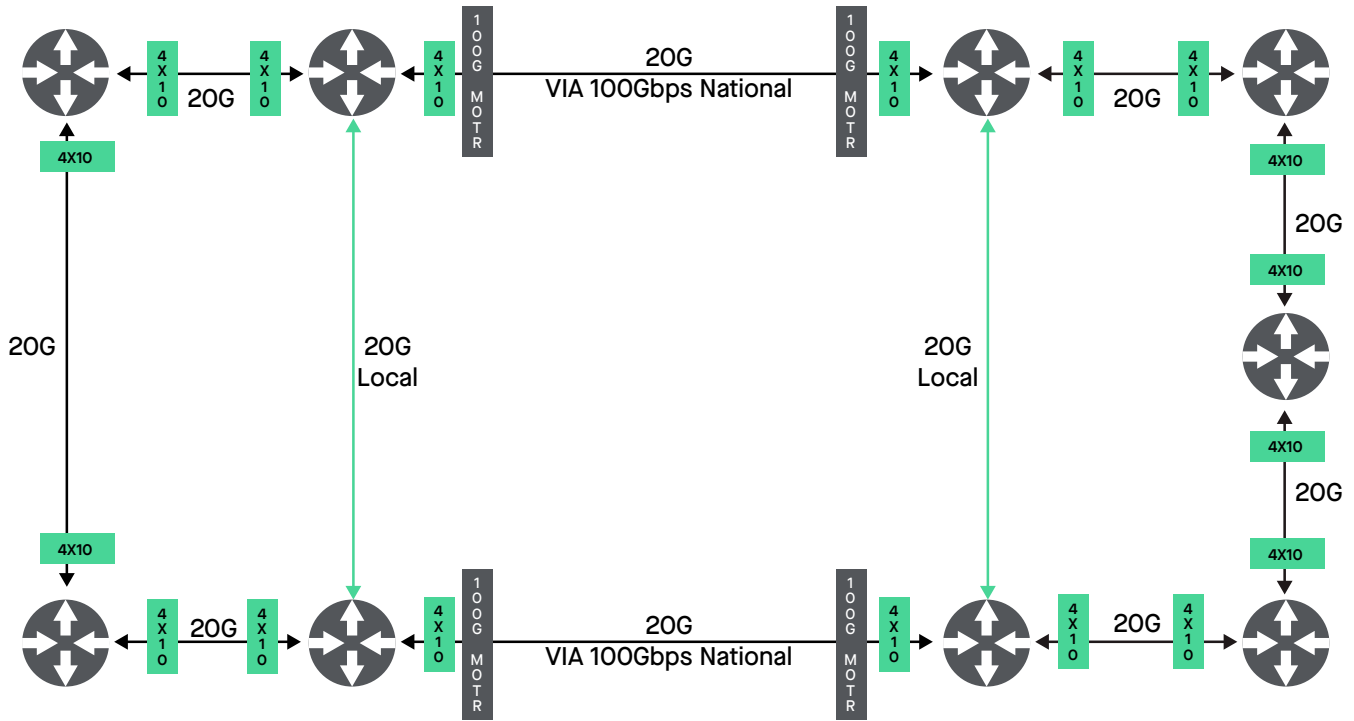
Solution

The bank ultimately selected a high-performance Ciena and CenturyLink solution leveraging cutting-edge technologies consisting of CenturyLink point-to-point Wavelength services powered by Ciena's 6500 Packet-Optical Platform. The combination provided a high degree of flexibility, performance and cost efficiencies that are critical to the firm's mission to provide the highest quality customer experience.

Service providers, like CenturyLink, use dense wavelength division multiplexing (DWDM) technology that enables several streams of digital information to be put on different wavelengths of light, with each wavelength capable of 100 billion bits per second (100G) throughput.

These wavelength services come in speeds of 1G to 100G, providing end-to-end transparency and broad visibility and control of broadband services, enabling more effective network management. The configuration chosen by the financial services firm features 20Gbit/s bandwidth wavelengths connecting regional data centers with 10-Gigabit Ethernet encrypted ports.

This solution provided the dedicated transport connectivity the bank needs without capital outlay or the responsibility of owning and operating network infrastructure to connect their data centers. The wavelengths are also encrypted at the optical layer with Advanced Encryption Standard (AES) 256-compliant encryption for in-flight data protection.



Network Architecture using CenturyLink® Wavelength Services

Benefits

By utilizing CenturyLink® Wavelength Services, the firm makes the most of its network assets. The rising popularity of 10-Gigabit Ethernet connections make the advantages of wavelength services even more compelling. Ciena's 6500 Packet-Optical Platform is easily able to support 10-Gigabit Ethernet and 100-Gigabit Ethernet packet switching and aggregation that leverages coherent DWDM optical technology.

These mission-critical networks require visibility through all protocol layers (DWDM, Optical Transport Network (OTN), packet services). Ciena's comprehensive unified management system allows complete network visibility and asset management. With the encryption of data at the network transport layer, customer data is protected from cyberattacks.

The CenturyLink and Ciena solution provided the bank with an optimal cost/capacity ratio that supports advanced digital applications while controlling expense. And as requirements change in response to evolving customer needs, the bank can quickly upgrade bandwidth capacity. This powerful combination of flexibility, scalability and resiliency is proving to be a crucial asset in the firm's ability to remain at the forefront of innovation and customer service.