

Improving customer experiences with Wavelength Services

Large financial firm employs dense fiber connectivity to meet bandwidth needs

A leading investment services firm with more than 20,000 employees in 300 locations servicing nearly 12 million accounts bases its success on a customer-centric approach that leverages technology and innovation to deliver the highest quality customer experience.

This customer-first approach means that access to customer data, innovative investment applications and electronic platforms must be available in real time, and an always-on basis. They also must be accessible by customers, bankers and support staff from a variety of devices anywhere, anytime.

This means that the IT department focuses intently on ensuring data and application availability and resiliency. To support these requirements, the firm deployed a business continuity and disaster recovery (BC/DR) plan based on a cloud strategy with multiple off-site data centers.

Challenge

The investment firm needed to enable bankers to deliver a more personalized, quality customer experience with BC/DR capabilities that would be reliable, uninterrupted and seamless. The multi-cloud environment requires high-speed, resilient connectivity between data centers and regional and remote offices. The network connectivity needed to respond quickly enough to changing application bandwidth demands and recover quickly from performance degradation and outages.

The high-speed links required multiple data-rate interfaces, including 1 Gigabit Ethernet (GbE), 10GbE, 40GbE and 100GbE. Furthermore, the interconnectivity needed to support near-zero response times and be free of service

Why CenturyLink® Wavelength Services?

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

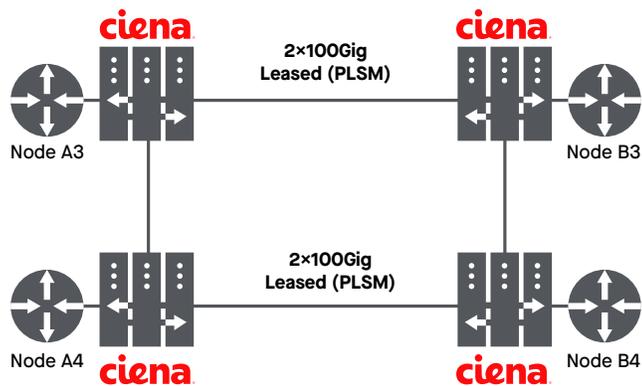
- End-to-end transparency for visibility and control
- Privately-owned fiber and repeater stations, relieving the burden of network management for end users
- Reduction of the financial expenditure of network ownership, preserving capital resources
- Ability to be configured to meet disaster recovery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

delays and disruptions. The solution also needed to be cost effective, providing a solid return on investment.

Due to the variety of applications and traffic types transmitted over the links, the network needed to differentiate between services to allocate appropriate bandwidth and prioritization. And as a mission-critical infrastructure component, the network required visibility through all protocol layers (dense wavelength division multiplexing, Optical Transport Networking (OTN), and packet services).

Solution

The solution they chose was CenturyLink® Wavelength Services powered by Ciena's 6500 Packet-Optical Platform. The combination provides high flexibility, performance and cost efficiencies, and a quality customer experience.



Wave Services

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 wavelengths come in speeds of 1G to 100G providing end-to-end transparency and greater visibility and control of their broadband services resulting in more effective network management. Businesses are then able to reap the benefits of a dedicated broadband transport network connectivity without capital outlay or the responsibility of owning and operating network infrastructure to connect their data centers.

Benefits

By utilizing 100GbE leased or managed wave service, the firm makes the most of its network assets. The rising popularity of 10GbE and 100GbE connections make managed wavelength services and dark fiber advantages even more compelling. Ciena's 6500 Packet-Optical Platform easily supports 10GbE and 100GbE packet switching and aggregation that leverages coherent DWDM optical technology.

While high-scale Data Center Interconnect (DCI) must include BC/DR as well as meet aggressive bandwidth and latency requirements, not all DC services are alike. For example, some services must scale up or down seamlessly while other services must always be available with zero downtime and have a zero maintenance window. By using quality of service for differentiated services on the Ciena platform, these services can coexist with the correct priority and bandwidth needs. Finally, mission-critical networks require visibility through all protocol layers (DWDM, OTN, packet services). Ciena's comprehensive unified management system allows complete network visibility and asset management.

The CenturyLink and Ciena solution provided the investment firm with the flexibility to customize connectivity to the specific needs of each location. The firm can now choose between diverse capacity managed wavelength services depending upon the route and location to optimize the cost per bandwidth ratio. And as requirements change in response to evolving customer needs, the investment firm 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 customer service.