

Zayo Networks

Business Communications. Simplified.

Fiber-to-the-Enterprise Ethernet Services

Communications, e-commerce, collaboration, data backup, distance learning, virtual IT and cloud computing have grown to be necessities of information-intensive organizations. Corporations, schools, hospitals, government agencies and other enterprises need to provide information access to a distributed workforce, connect data centers to administrative facilities in a metropolitan area, and secure mission-critical information for business continuity purposes. Beyond the business need are the technical requirements to ensure these applications work effectively over metropolitan networks, necessitating high quality, reliable and consistent services at cost-effective prices.

Zayo Networks is focused on delivering bandwidth infrastructure solutions that leverage their existing fiber assets to 16 U.S. regions—providing metropolitan and regional connectivity.



Fiber-to-the-Enterprise Ethernet Services

Scalability—bandwidth & performance tailored to application requirements

Compatibility—seamless integration into LAN and data center infrastructure

Flexibility—more connectivity choices for interconnecting sites

zayo®

- **Industry:** Bandwidth Infrastructure
- **Geography:** 16 regions serving 60 metro markets across the continental United States
- **Service Portfolio:** Dark Fiber, Ethernet, Internet Access, Wavelength, Data Center Colocation
- **Zayo Definition:** [zey-oh] In Xhosa; forthcoming, adj: responsive

Challenges

Information-intensive customers demanding more bandwidth and high value Metro Ethernet services

Solution

- BTI 7000 Series packet optical
- BTI 700 Series Ethernet access
- proNX Network Management
- Simple Ethernet connectivity for local network interoperability
- Flexible service bandwidth—from 100 Mbps to 10 Gbps—to address all customer requirements
- On-demand service and network bandwidth scaling with Carrier Ethernet and WDM underpinning
- Simplified network, ease of management, operational efficiencies—expedited customer requests

Zayo is the leader in bandwidth infrastructure providing the foundation of modern telecom and internet services to the growing needs of businesses, schools, hospitals and government agencies across the United States.

“To power this new network, we will use packet optical and Carrier Ethernet solutions from BTI Systems to offer speeds of 1 GB and higher creating one of the largest and most advanced metro-fiber networks within the region.

Glenn Russo, President, Zayo Networks

A Better Communications Solution

Connectivity across metropolitan areas has grown in applicability beyond enterprises accessing data and voice communications. Medical practitioners now access digitized patient information including Electronic Health Records, X-rays and MRIs; Educators leverage distance learning and the prevalence of web-based education resources; Government institutions now offer a full range of online e-Services and enhanced safety measures including city-wide video surveillance.

To address mission-critical communications, IT managers are looking for network services that provide high bandwidth, high availability, performance tied to application need, and flexible architectures. Zayo required a next generation service delivery solution capable of meeting customer requirements and a simplified and operationally efficient network approach that allowed Zayo to pass savings onto the customer in the form of cost-effective service offerings. The company’s policy of never overselling the capacity on its network also required the ability to scale networks quickly and efficiently relative to service demand so not to limit Zayo ability to take on new customers.

To meet increasing demand, Zayo Networks knew it needed to upgrade its area networks to support multiple 10-Gigabit Ethernet services in the short term. Eventually, the upgrade would include 40-Gigabit Ethernet and 100-Gigabit Ethernet technologies. The desire was also to utilize a standardized platform to support nationwide expansion plans.

The Network – powered by BTI Systems

BTI Systems provided Zayo’s service delivery solution, integrating both advanced packet-oriented and wavelength functionality for simplified demarcation, aggregation, and extension of Ethernet services—from 100 Mbps to 10 Gbps today—that seamlessly link customer facilities over metropolitan fiber networks.

At the heart of the network is Carrier Ethernet technology providing end-to-end, standardized service architecture options, performance definition on a per-service basis, granular bandwidth increments, and resiliency options to ensure service availability. BTI’s MEF-certified platforms and management solution provides Zayo the capability to monitor, diagnose and centrally manage networks and services—expediting response to customer requests. The Wavelength Division Multiplexing (WDM) underpinning of the core network infrastructure also allows Zayo to correlate network capacity to service demand, ensuring investment is directly tied to need and service revenue. As part of the end-to-end packet optical solution, the network leverages BTI 7000 Series as the cost-effective and operationally efficient core and BTI 700 Series Ethernet Access Devices as network on-ramps.

The Bottom Line: Differentiated, Easy-to-Manage Ethernet Services

Zayo Networks fulfills the need of many information-intensive organizations—24/7/365. BTI Systems’ service delivery solution provides the scalability, capacity, and flexibility that empowers Zayo to offer simplified and differentiated fiber-to-the-enterprise Ethernet services.

