DELTEK GOES GREEN, SAVES GREEN WITH OPTICAL LAN

Tellabs Optical LAN minimizes power consumption, supports company's "green" strategy

By M.J. Richter

George Goforth, Vice President – IT, Deltek

Deltek has discovered a "green" communications solution that not only helps protect the physical environment. It also enables the company to conserve financial and human resources.

Based in suburban Washington, D.C., Deltek provides enterprise software and information solutions. Clients include professional-services firms and government contractors around the world.

In late 2011, the company consolidated 5 separate facilities in a new corporate headquarters building in Herndon, Va. There, Deltek became the first private-sector enterprise to deploy the Tellabs® Optical LAN solution. Today several U.S. government agencies also rely on the Tellabs Optical LAN.

Optical LAN supports green strategy

Deltek's new headquarters was designed for sustainability and cost-efficiency. Late last year the company achieved Leadership in Energy and Environmental Design (LEED) certification. The U.S. Green Building Council gives LEED certification to companies with high levels of sustainability.

Building features that helped Deltek to earn a LEED certification include:

- sensors that control 75% of the company's lights to provide illumination only on demand
- construction materials that came primarily from landfills and
- manufactured materials, 20% of which Deltek procured from sources within a 500-mile radius of the building.

Tellabs Optical LAN was a natural fit for Deltek's green strategy. The product is based on GPON technology. It reduces LAN energy consumption as much as 80%, since it requires less power and much less cooling than a copper-based LAN. It uses fewer power

GPON Gigabit Passive Optical Network
LAN Local Area Network
LEED Leadership in Energy and Environmental Design

drops, minimizes the types of power drops required and minimizes the number of uninterruptible power supplies required. And it reduces the required amount of floor, rack and closet space by up to 90%.

— George Goforth, Vice President – IT, Deltek

"We lowered power requirements," comments George Goforth, Deltek vice president of IT. "We reduced energy consumption. And we are more green as a result of Optical LAN."

Green considerations weren't Deltek's only reason for choosing Tellabs, however.

A LAN that offers dependability plus

What Deltek wanted first and foremost from its communications infrastructure was dependability and performance, says Goforth.

"The LAN within the building we had, prior to our move, had a poor architecture and was prone to failure," he says. "In the new building, I wanted excellent resiliency and availability. I wanted to make sure I can support our people from the data center down to the service endpoints."

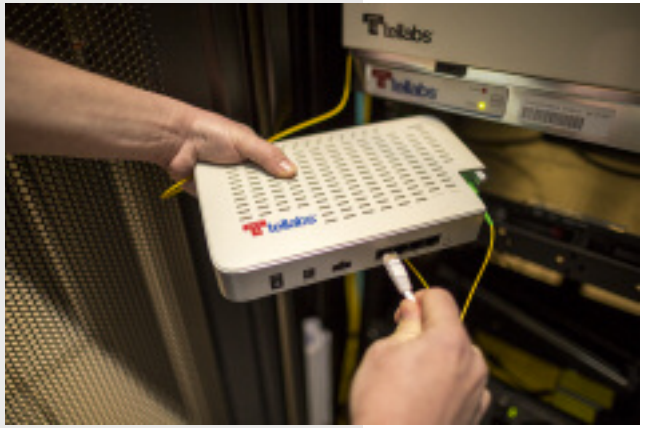
The Tellabs Optical LAN cost significantly less than a copper-based LAN that relies more heavily on active electronics throughout the premises, says Goforth. According to Tellabs, the solution has been demonstrated to reduce total costs by up to 70%.

"If you factor in its simplicity of operations, its ability to reduce operational and energy costs, and our time and resources, we started saving money on the building," Goforth says.

IT Information Technology

Solution saves IT time

Goforth also liked the product's ability to deliver up to 1 Gbps to the desktop and leverage Deltek's existing investment in VoIP, as well as supporting the service quality and dependability required for VoIP and video delivery.



Tellabs Optical network terminal *is usually installed on or under a user's desk to provide data and voice ports.*

"The Tellabs Optical LAN provided us greater bandwidth and higher throughput than we ever experienced before," observes Goforth.

Legacy copper-based LAN architecture requires the periodic swapping out of Ethernet switches. But with the Optical LAN, Goforth says he "no longer has a stack of switches on every floor that I have to manage and support — and refresh every 4 to 7 years."

The Tellabs solution also enables Goforth to make more effective use of his IT team's skills and time. A building the size of Deltek's headquarters typically requires the IT staff to focus a lot of attention on LAN and port management. But with the Optical LAN Goforth says, "You just don't have to deal with that." Goforth notes that Deltek has saved about 50 hours per week that previously would have been required to handle moves, adds and changes.

Installation takes only one week

NET100 of Chantilly, Va. installed Deltek's fiber infrastructure and Optical LAN equipment. Corning's LANscape Passive Optical LAN solution was chosen for its flexibility and ease of use. NET100 completed the Optical LAN deployment in about one week.

The Deltek Optical LAN uses a single Tellabs® 1150 Optical Line Terminal (OLT) with 8 GPON cards. The Tellabs 1150 uses a native Ethernet switching infrastructure

OLT Optical Line Terminal

with multiple 10G uplinks interfacing to Deltek's routed network.

About 700 of Deltek's 1,700 employees work throughout the building's 6 floors. To support them, a passive fiber infrastructure provides connectivity directly to 700 of Tellabs 1100-709G Desktop GPON Optical Network Terminals (ONTs).

The Tellabs 709GP Desktop GPON ONT features four 10/100/1000 Base-T Ethernet interface ports. The devices support Power-over-Ethernet plus (PoE+) and provide data, VoIP and video service.

The installation also includes 11 Tellabs® 1100-729 Multi-Desk/Multi-Dwelling Unit (MDU) GPON ONTs. The Tellabs 729GP ONT features 24 10/100/1000 Base-T Ethernet interface ports with PoE+. In addition it has 24 POTS interface ports for carrier-grade voice services.

Positioned for tomorrow's needs

Charlie Stone, vice president of Tellabs Enterprise & Government Systems, says the Optical LAN gives Deltek a future-proof solution.

"With the Optical LAN running single-mode fiber all the way to the desktop, Deltek will never need to upgrade the company's cabling infrastructure," he says. "When they are ready to migrate to 10-Gbps service, they'll only have to get the appropriate GPON cards and ONTs."

Deltek's new headquarters was designed before the company chose the Tellabs Optical LAN. Anticipating a traditional LAN, Deltek's architect had included 12 telecommunications closets. Goforth says that now-unnecessary space has turned into "great storage. I don't have to get warehouse space anymore." ■

SEE MORE Click to see videos about the benefits that Deltek obtained from using Tellabs Optical LAN.
VIDEO 1
VIDEO 2

MDU Multi-Dwelling Unit
ONT Optical Network Terminal
PoE+ Power over Ethernet Plus
POTS Plain Old Telephone Service