NEW SAN DIEGO CENTRAL LIBRARY CONNECTS WITH OPTICAL LAN

Insight Q1 2014 15

The San Diego Central Library @ the Joan Λ Irwin Jacobs Common brings the library of the future to life. By George Stenitzer

"We want a library of the future that is flexible. One of the early technology decisions we made was Optical LAN, a future-proof backbone to allow the library to expand as future changes occur."

> Deborah Barrow, director, San Diego Central Library

he new San Diego Central Library @ the Joan Λ Irwin Jacobs Common brings the library of the future to life. The 9-story building is full of inviting spaces where patrons can explore, read and learn through books, music, art, computers and mobile devices.

"We want a library of the future that is flexible, built for now and built for the future," said Deborah Barrow, San Diego library director. "One of the early technology decisions we made was Optical LAN, a future-proof backbone to allow the library to expand as future changes occur. In a public building, the flexibility, the cost and the energy savings all need to be considered, and that's what we've done here."

In the library, Tellabs Optical LAN connects users' mobile devices and library systems. Optical LAN's high-bandwidth fiber optics deliver speeds of more than 1Gbps per port to connect:

• Fast Internet service connects library users on more than 300 library PCs — much faster than Internet connections at home or work.

3-D printers enable

the new technology.

patrons to learn to use



(BYOD) patrons, fast Internet service ki wireless access points. Wi-Fi also

- To meet demand for "bring your own device" (BYOD) patrons, fast Internet service connects mobile devices to Wi-Fi via 36 Maraki wireless access points. Wi-Fi also connects patrons with hundreds of its own wireless devices, including iPads, iPad Minis, Chromebooks, and Kindle and Sony eReaders.
- An automated material-handling system speeds check-in, sorting and distribution of more than 1 million RFID-tagged books.
- 3-D printers enable patrons to learn to use the new technology.
- Self check-out kiosks enable patrons to check out books and materials quickly. Security systems ensure that only checked-out books can leave the building.
- iPad kiosks enable patrons to leaf through digitized rare books and records that have never been available to the public before.
- Technology-enabled group workspaces encourage collaboration.
- Google indoor maps help patrons navigate through the library and its collections.
- Digital signage directs patrons and promotes library events.
- Conventional printers provide hard copies for library patrons.
- Back-office computers and phones connect hundreds of library staff and volunteers.

The 9-story library is full of inviting spaces to explore.

"It's almost like seven library branches in one spot, with over 300 desktop PCs and Wi-Fi to connect even more devices."

> Frank L. Camacho, information technology manager, San Diego Public Library



"It's almost like seven library branches in one spot," said Frank L. Camacho, information technology (IT) manager for the San Diego Public Library. "With over 300 desktop PCs here in the library, and Wi-Fi to connect even more devices, our patrons are able to work on resumes, do job or school research, and use email."

Tellabs Optical LAN can serve not only the Central Library, but also other libraries within an 18-mile, 30-kilometer radius.

"This library of the future needs fast Internet connections, capable of gigabit speeds — and Tellabs Optical LAN can far exceed the speeds most people get at home and work," said Tom Ruvarac, Tellabs director-product management. "Optical LAN can scale up easily to handle the library's traffic needs for decades to come, not only in this building but in other library branches within an 18-mile range."

Purpose-built for high-capacity, high-performance LANs, Tellabs Optical LAN replaces conventional copper-based LANs. It simplifies network infrastructure and operations, getting the job done with fewer network elements by using passive optical networking



See videos about the San Diego Central Library at http://www.tellabs.com/ resources/multimedia/

"Compared with copper LAN, Tellabs Optical LAN has a much smaller footprint for electronics and a much smaller pathway for cable."

> Debbie Preece, general manager, Vector Resources -San Diego

technology. Tellabs Optical LAN can save up to 70% in the cost of ownership, lower energy consumption by up to 80% and reduce space needs by up to 90%.

Tellabs Optical LAN converges all of a building's wired and wireless communications networks into one — handling Wi-Fi, data, voice, CATV, security, building automation networks and more. Optical LAN eliminates the need for future re-cabling and tightens security.

Vector Resources Orchestrates Optical LAN Deployment

To ensure smooth deployment for the San Diego Central Library, Tellabs partner Vector Resources handled Optical LAN installation, logistics and support.

"Compared with copper LAN, Tellabs Optical LAN has a much smaller footprint for electronics and a much smaller pathway for cable," said Debbie Preece, general manager of Vector Resources - San Diego. "When you start looking at what's behind the walls and what kind of planning has to go into building these networks, Optical LAN changes a project dramatically. Architects and building owners love freeing up that space for other uses."