

Texas State Board of Plumbing Examiners Case Study

Upgrade to Passive Optical LAN saves Texas state agency energy and maintenance costs

Better network performance, less energy and smaller footprint

The Texas State Board of Plumbing Examiners regulates the plumbing industry by examining, licensing and registering plumbing professionals to ensure that drinking water, air and medical gases are not contaminated and that Texans live and work in safe conditions with properly installed plumbing systems. When the TSBPE began retrofitting its headquarters in March 2015, plans called for moving a data closet, which houses their communications and data equipment, to a smaller space.

The building's entire network also needed to be re-cabled, and that was going to be very expensive. Traditional networks, or Ethernet LANs, typically require a core switch/router, a distribution switch in each building and multiple stacked workgroup switches on every floor, not to mention, a lot of copper cable. (The price went up quick, much like copper plumbing.)

The TSBPE needed a solution that would be affordable, more efficient, flexible and work as reliably as plumbing.



Passive Optical LAN delivers cost-effective fiber solution

AWS Communications, a 3M qualified installer of Passive Optical LANs, suggested a better way. AWS devised a plan to deliver a flexible and expandable solution at a fraction of the cost of a typical copper-based Ethernet LAN configuration using the 3M Passive Optical LAN Solution (POLs).

Overview

Organization

Texas State Board of Plumbing Examiners

Situation

A retrofit called for moving a data closet to a smaller space. The TSBPE needed a solution that would be affordable, more efficient, flexible and work as reliably as their plumbing.

3M Solution

The 3M Passive Optical LAN

Benefits

Depending on the network design, Passive Optical LANs can provide savings of up to a 70 percent reduction of equipment and infrastructure, up to 80 percent less in power costs, and as much as 90 percent less space and material.

Results

TSBPE gained high performance (gigabit) broadband to the desktop at a fraction of the cost of typical copper-based Ethernet LAN configurations, all while saving energy and maintenance costs in addition to gaining network capacity for future bandwidth.

“We determined that for the same cost and a lot less labor, we could upgrade them to a 3M Passive Optical LAN Network,” said Bobby McClung, chief executive officer of AWS Communications. “The 3M solution would also save them energy and maintenance costs, and give them a lot more capacity for future bandwidth.”

A solution that delivered

So instead of re-cabling the entire building with copper twisted pair, a Passive Optical LAN Solution uses a single fiber to support miles of connectivity and to deliver voice, video and data at gigabit speeds to Ethernet end points, such as user devices, access points, wireless controllers, application servers and printers.

The state agency became one of the first in central Texas to consolidate and better organize its network by choosing to install a Passive Optical Local Area Network instead of a traditional, copper-based network. Passive Optical LANs are a cost-effective, fiber-to-the-desktop enterprise solution that’s changing minds about how to design, install, and maintain networks.



“We had to move our data closet to a different location in the building. AWS Communications and 3M worked together to help us upgrade our network using passive fiber optic networking. We gained much more capacity for future use at about the same cost as replacing the old copper cabling. We are very happy with the results.,” said Lisa Hill, executive director of the Texas State Board of Plumbing Examiners.

The Bottom Line

TSBPE gained high performance (gigabit) broadband to the desktop at a fraction of the cost of typical copper-based Ethernet LAN configurations. The 3M solution saved energy and maintenance costs, while giving the agency plenty of capacity for future broadband needs.

The 3M Network of Networks is a world leader in communication technology, connecting products, people and companies by harnessing the power of more than 45 technology platforms to create customer-centric innovations. From FTTX to xDSL to Wireless. The Network of Networks connects smart grids to smart phones, wind farms to server farms, greenfield to brownfield, wireline to wireless and customers to their goals.

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**- Bobby McClung,
chief executive officer of
AWS Communications**



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