

### Customer Profile:



Pittsburgh Theological Seminary is a graduate-level educational institution that has been preparing pastors and lay leaders for over 200 years. Affiliated with the Presbyterian Church (USA), the student body currently includes students from over 30 different denominations. The Seminary enrolls nearly 400 students on a campus that covers one square block in the East End of Pittsburgh.

“D-Link was the only company with a reasonably priced, centrally managed switch that could communicate with access points connected to a switch in a separate building.”

- David Middleton – Network Administrator, Pittsburgh Theological Seminary

## Pittsburgh Theology School Solves Wireless AP Centralized Management Issue with D-Link Wireless Networking Solution

### The Challenge

Like many educational institutions with limited budgets, Pittsburgh Theological Seminary needed a wireless networking solution that would not require a big budget outlay. Their existing wireless Internet access failed to cover important areas like their library, classrooms and meeting areas across the campus. What they wanted were wireless access points (APs) and a switching solution that would allow them to centrally manage everything from one simple interface.

“In general, the solutions we looked at were way too pricey,” said David Middleton, Network Administrator at Pittsburgh Theological Seminary. “I was looking for a switching solution we could control centrally and manage 20 to 30 APs in separate buildings. Yet we needed something inexpensive.” In addition, the school foresaw that they would eventually need to rollout tighter network security measures; therefore, they need the flexibility to simply implement this, without having to replace equipment.

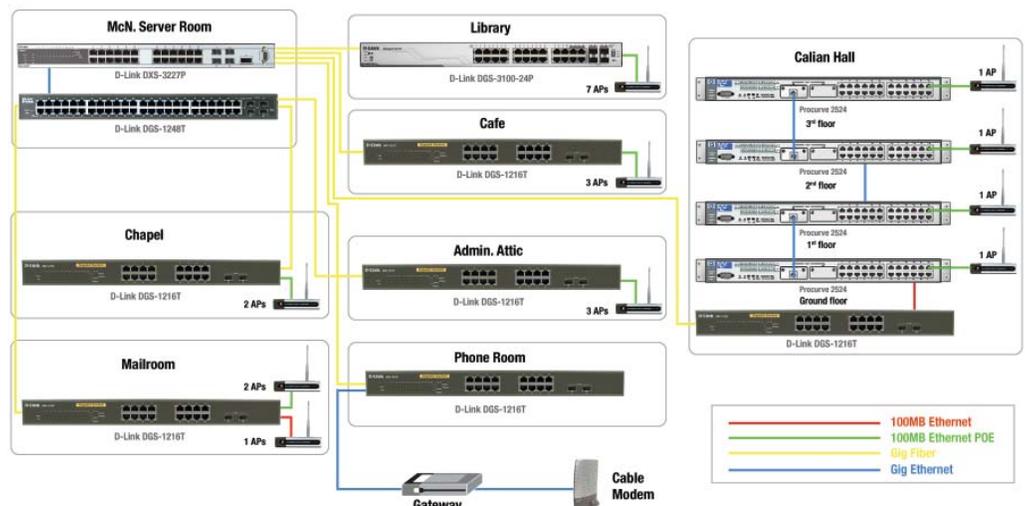
### The Solution

Middleton came across the right switch – the D-Link DXS-3227P 24-Port PoE Gigabit Wireless-Ready Switch – while browsing hardware online. In the right place at the right time, he saw a D-Link promotion for a free switch demo. “D-Link gave us the central switch for free,” said Middleton. “So that was a big selling point, of course.” The price was right, and the DXS-3227P met their requirements for centralized management.



*Founded in 1794, Pittsburgh Theological Seminary is a graduate theological institution located in the East Liberty neighborhood of Pittsburgh, Pennsylvania, USA and houses one of the largest theological libraries in the nation.*

“Other vendors had similar solutions, but none of those would allow us to deploy APs in other buildings without having them directly connected into the switch. D-Link was the only company with a reasonably priced, centrally managed switch that could communicate with access points connected to a switch in a separate building. Most other solutions – in our price range – required that access points be plugged directly into the central switch.”



*D-Link's business-class WLAN solutions allow Pittsburgh Theological Seminary to centrally manage everything from one simple interface.*

## Business Class Wireless



D-Link DXS-3227P 24-Port PoE Gigabit Wireless-Ready Switch

- 'Wireless-ready' Switching for Seamless Roaming and Centralized AP Management
- 24 10/100/1000 Ports with 4 Combo SFP in 1RU Chassis
- Built-in XFP Interface and Optional 10-Gigabit Stacking/Uplinks
- Preconfigured ACLs Protect against Trojans, Worms, and More
- 24 Ports of 802.3af PoE



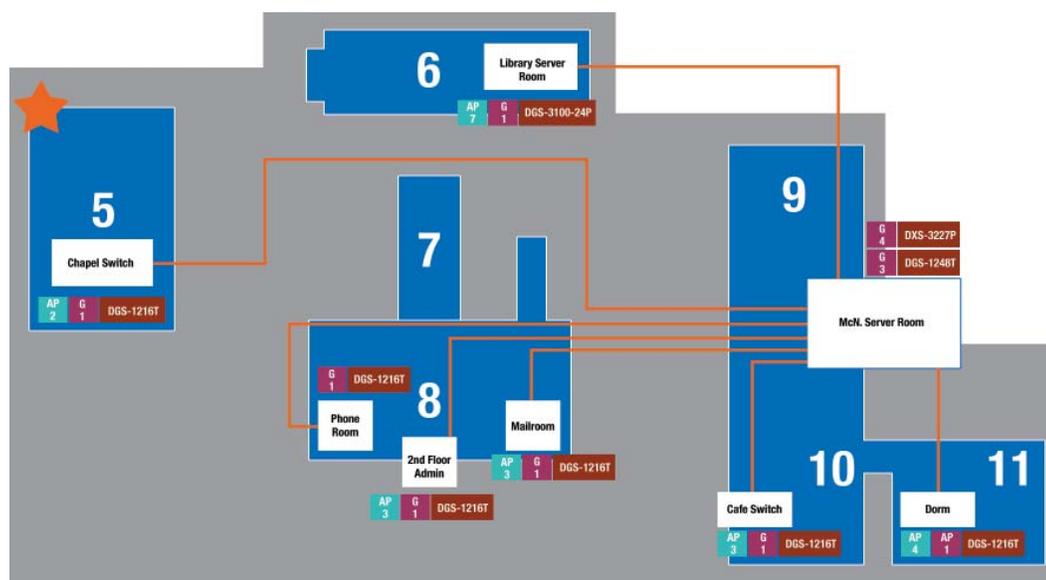
D-Link DWL-2230AP 802.11g Access Point with PoE for DWS-3200 Series Wireless Switches

- Designed for Use with xStack 3200 Series Wireless Switches
- Supports WPA2 Encryption
- Supports 802.11b, 802.11g Standards
- Supports Power over Ethernet for Use with DXS/DWS-3227P

Pittsburgh Theological Seminary got the DXS-3227P for free, purchased 20 DWL-2230 APs, and also bought a 50 AP license (DS-750) so they could grow into the solution. They also have six D-Link DGS-1216T Web Smart 16-Port 10/100/1000+2 combo SFP switches, one DGS-1248T, and a DGS-3100-24P at satellite locations. D-Link branded GBICs (DEM-311GT) were used in the switches to tie into a redundant fiber backbone.

### The Results

Before, the pursuit of knowledge was stymied without comprehensive wireless access. Now, study areas, meeting areas, and classrooms are all covered with high-performance wireless equipment. "People come in from all around the world, and they can pull up their presentation and they're good to go," said Middleton. "Overall, user response has been very positive. The dorms did have individual



*Pittsburgh Theological Seminary, consists of five different buildings and surrounding areas, installed D-Link switches and access points for seamless wireless coverage across its campus.*

The school's technical staff performed a walk-through with NetStumbler and a wireless router to determine optimal placement locations. "We ran it by the D-Link techs, and they said it would work, and sure enough it did," said Middleton. "We turned the APs on, they were detected and they all worked."

Pittsburgh Theological Seminary now has five different buildings and the surrounding areas covered with a single SSID across the campus. "There's no need to distinguish between Dorm1, Dorm2, and so forth," said Middleton.

APs for Wi-Fi coverage before. We swapped them out and replaced them with the D-Link APs and no one noticed, which is good. We now have a modern campus with seamless coverage. People expect this now."

Best of all, the entire network is centrally managed and the pricing was ideal. "That's why we chose the product," said Middleton. "No one else could do it for this price."