Athol Murray College of Notre Dame Installs Easy-to-Control Wi-Fi® Network in Challenging, Mixed-Structure Campus

Power over Ethernet (PoE) and Seamless Roaming Ensure Painless Installation and Transparent Mobility

The Challenge

Last year, if Notre Dame’s students wanted Internet access, they had to physically connect into Ethernet lines at two locations on campus. Both students and faculty lobbied for better availability—wired or wireless. Anything would be an improvement.

Notre Dame needed an easy to install solution that wouldn’t burden their two-man staff once it was up and running.

“Hard wiring requires more support and, obviously, more infrastructure,” said Pat Vigneron, Notre Dame’s IT director. “From a cost and a support standpoint, we determined that wireless offered a whole lot more for a whole lot less, both dollar-wise and time-wise.”

The buildings on campus are made of brick, wood and metal. And two of the buildings are quite old. “The physical makeup of those two was completely different from any of the other buildings that we were working with,” said Vigneron. “That presented a challenge for us. We needed a Wi-Fi hardware solution and site strategy that would handle the drastic changes in building structures.”

Notre Dame also wanted to easily manage and control Internet availability schedules and access policies. “Everyone knows the Internet can be the most useful tool,” said Vigneron. “But it can also be the biggest distraction. The ability to control use and schedule availability easily was one of our top criteria for selecting a vendor.” In addition to flexible coverage and manageability, Notre Dame needed seamless roaming capabilities and Power over Ethernet (PoE) for installing switches in areas where electric power was not easily accessible.

The right solution would have to meet Notre Dame’s specific needs and be economical. “You can buy any solution with an unlimited budget, but it might not be the best value for your dollar,” said Vigneron. “There were companies that were willing to come in and do the whole thing for us, but the price tag was fairly heavy. So, we had to find something that would work within our budget and with our support team.”

For many of the students at Athol Murray the Internet is their main means of communication with friends and relatives back home.

The Solution

Notre Dame used three D-Link DWS-1008 8-Port Wireless Switches and 27 DWL-8220AP Wireless Switch Dualband Access Points to provide seamless, campus-wide wireless coverage for the student body and faculty. The APs are all remotely controlled from one centralized server room.

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- Pat Vigneron, IT Director
Athol Murray College of Notre Dame

The ability to control access scheduling from an easy-to-use software console sold us on D-Link,” said Vigneron. We can quickly make adjustments according to management policy by opening the router control panel and making the appropriate changes. For example, the dormitories were having problems with students sitting on the Internet right before class and missing breakfast. “The dorm managers asked me how much time it would take to modify the schedule—shutting off access from 7 A.M. to 8:00 A.M. when the students need to be getting ready for school,” explained Vigneron. “I said, ‘Probably about five minutes.’ They were quite happy with that answer.”

In fact, once the Wi-Fi installation was complete, the entire school was ecstatic with the seamless network. The PoE worked like a charm in difficult to access roof and ceiling areas of the varied architecture. Roaming capability delivers seamless switching from AP to AP while students walk around campus and move from room to room.
Quick and Easy Implementation
The installation took a little over a week. They spent seven days physically mounting the access points and a day firing up and configuring the switches. “Sam Vergiris, our D-Link account manager arranged a building-by-building site survey to determine the most appropriate locations for the access points,” said Vigneron. “The technicians evaluated power options and PoE switch placement options. That service was totally invaluable for us.” The site survey allowed Notre Dame to quickly determine exactly what hardware was needed and where to put it.

“Guessing AP placement would have been very difficult and time consuming on our own,” continued Vigneron. “The D-Link staff have the experience. They took out all the guesswork, and that was huge for us.”

D-Link also helped support the configuration process. “The D-Link support was just fantastic,” said Vigneron. “A couple of phone calls here and there, and the tech support guys got back to us with a solution within a half hour to 45 minutes.”

Planning and Site Survey Critical
Vigneron recommends detailed planning and site surveys for those considering a wireless network. “It’s absolutely imperative that you plan it, map it out and determine the specific needs from a user point of view,” he said. “If you can find someone with site survey expertise, you’re way ahead of the game. I give D-Link a lot of credit there. To have that kind of expertise and the right survey tools available for the install is critical.”

“I was very, very happy with D-Link, from start to finish. They were excellent,” said Vigneron. “There was no sales pressure from Sam, and, like I said, the site survey was invaluable to us.”

With 27 D-Link wireless access points, the faculty and students now enjoy seamless, campus-wide wireless coverage.