



FOUNDRY
NETWORKS

CASE STUDY: BERWICK AREA SCHOOL DISTRICT

Berwick Area School District Passes the Test with Foundry Networks



SUMMARY

With four elementary schools, one middle school, one high school, and 3,500 students, the Berwick Area School District in Berwick, Penn., is working hard to give its students and teachers the latest tools for learning.

This strategy includes continually enhancing the technology used within the schools to ensure the district remains competitive—and offers the most current 21st century learning skills. The latest step in this evolution is introducing wireless networks to each school.

OBJECTIVE

The school district, located about 100 miles from Philadelphia, has a network infrastructure that consists of fiber among its sites with a single central hub, according to Jeff Ryan, Director of Technology at the Berwick Area School District. “We had a couple of laptop carts with thick access points, but really no wireless environment.” Faced with the choice of expanding the network through wired or wireless connectivity, Ryan was ready to take the school district into a more mobile world.

Ryan says after obtaining the funding to conduct an audit of the schools in the district, he came to the conclusion that the elementary schools didn’t have sufficient connections to add teacher PCs. “I wanted to give them laptops, but I was going to have to re-wire the schools because the buildings were old,” he says. “In the past, wireless was more cumbersome, but now we knew it was in our best interest to move to a wireless environment rather than trying to wire these buildings.”

Ryan gave his team a small timeframe in which to evaluate mobile solutions. “We had to act fast and do it now,” he says. “First I researched my options, and then I visited other school districts to see what they were doing.”

After dropping in on a vocational school that was using solutions from Foundry Networks, Ryan added Foundry to the list of companies to evaluate. “I had all the vendors come in for meetings, and I looked at white papers and resource materials.” Once Ryan’s research was complete, he chose Foundry as the wireless solution for his school district.

SOLUTION

The main reasons for selecting Foundry were the price and the performance, says Ryan. “We had limited funds to address several needs. One of the big selling points for the Foundry wireless solution was that it would allow more connections per access point.” In fact, Foundry’s IronPoint® Mobility Series can support 100 active clients per access point—a 10-fold increase over other vendors’ access points.

“We got a couple of laptop carts together and a traditional thick access point and tested it against Foundry,” Ryan says. “Our tests found that there was a significant increase in throughput with Foundry.”

Another reason Foundry won out over other vendors was that Ryan would not have to pay to have a site survey conducted. With the IronPoint Mobility Series, no RF planning or site surveys are required, and the system conducts automatic discovery and configuration of IronPoint Mobility Access Points over any network topology. RF intelligence within the solution automatically selects the best power and channel settings. “With Foundry, we could plug it in and find the coverage holes without having to throttle power and worry about channels,” Ryan says.

WWW.BERWICKSD.ORG

INDUSTRY

Education

COMPANY DESCRIPTION

The Berwick Area School District, located about 100 miles from Philadelphia in Berwick, Penn., encompasses six schools—four elementary schools, one middle school, and one high school—and about 3,500 students.

OBJECTIVE

- Deploy a secure wireless solution as an alternative to wiring older school buildings
- Ensure the wireless infrastructure is compatible with the existing network
- Securely support a variety of student, teacher, and administrative applications

SOLUTION

- IronPoint Mobility Series is deployed at all six schools
- 70 wireless access points are installed, with another 20 or so slated for future deployment

RESULTS

- Entire deployment took just two months, including three to four weeks of research
- Centralized management and configuration made deployment very easy for the three-person IT staff
- Foundry access points delivered significantly more throughput than other access points
- Teacher, student, and guest traffic can be secured with VLANs
- Deployment will be the foundation for the Classroom of the Future initiative, which could mean more than 1,000 laptops on the wireless network

Ryan says he and his staff went into various school buildings and put access points in what they thought would be a good distance and configuration. "We were able to find out what kind of coverage we had in all our buildings, and we could space out the access points pretty far," he says.

Currently, the Berwick Area School District has deployed 70 of Foundry's IronPoint® 200 Wireless Access Points, with several more being held back as backups. Ryan adds that he has 90 access points altogether, and the remaining ones will be installed at a later time.

Another selling point for Ryan was Foundry's ease of administration. The Berwick Area School district has just 3 IT employees to handle the entire district, which includes 2,000 workstations (PCs and laptops), 25 servers, and 500 staff.

Ryan was also drawn to Foundry for the support it had for the school district's stringent security requirements. "We have RADIUS, which allows automatic authentication when a user logs on with a laptop, and for Macs we can add a higher level of authentication in the future," he says.

RESULTS

From start to finish, the wireless deployment only took about two months. "The research was the longest part of the process and took three to four weeks," he says.

Ryan says the easiest part was the configuration with IronView® Network Manager. "We can push configurations out so each access point looks the same. When you plug them in, we push the configuration down to it, and the access point is up in a minute or two."

The centralized management and configuration of the IronPoint Mobility Series solution made deployment a snap, and its ability to integrate with the school district's existing infrastructure made it even more of an obvious choice.

Initially, the wireless network supported Web traffic and allowed students and teachers to access files and print. In the future, Ryan says the network will handle streaming video, audio, and podcasting, so teachers will have access to the latest teaching methods.

Overall, Ryan has been very pleased with Foundry's IronPoint Mobility Series. "We've had a lot of good success, and we will add access points to the middle school and high school," he says. "We've been able to support two mobile carts off one access point, and no one has to spend a lot of time logging onto the network."

Future plans include segmenting the network, giving students separate access from teachers. "We'll have students on one VLAN, and guests will have a VLAN to the Internet but not internal access," Ryan says.

Foundry's wireless solution will also play a big role in the school district's Classrooms of the Future initiative, which will enable teachers to use technology as an effective tool for educating students and preparing them to enter the increasingly high-tech global job market.

"If this initiative goes through, we will have 1,200 laptops on the wireless network," Ryan says. And with Foundry's scalability features, that should be no problem for the school district's infrastructure.

Ryan is also very pleased with Foundry's sales and engineering teams, saying the company made every effort to be on-site when needed. "They have gone above and beyond our requests; between the trips early on to our schools, the information, sales calls, and equipment orders, everything has been a very smooth process from start to finish," he says. "We're really happy with the product; everything has been fantastic."

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— Jeff Ryan
Director of Technology
Berwick Area School District

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