



Seminole County Public Schools

Seminole County Public Schools Extends Reliable, Centrally Managed WLAN throughout its Sprawling Florida District with Aerohive

Challenges

- To offer highly available and secure wireless access for students, staff and guests at the district's high schools, middle schools, and, starting this year, elementary schools.
- Support the changing learning environment with a wireless infrastructure that could pave the way to support the bring-your-own-device (BYOD) trend and the increase in computer-based testing.
- A wireless LAN that would integrate with existing network infrastructure, was easy to manage and would scale cost-effectively across the entire district for future needs.

Results

- Resilient wireless network cost-effectively scaled across most of its campuses, creating a secure learning environment as well as access for visitors and staff.
- Easy to manage network enabling IT to monitor and control access and configure devices from a central location freeing up time and resources for the IT team.
- An increase in computer-based testing is now easily handled by laptops deployed in a variety of places on campus, not just the overcrowded computer labs.

About Seminole County Public Schools

The mission of the Seminole County Public Schools (SCPS), one of the largest school districts in Florida, is to ensure that all students acquire the knowledge and skills, necessary to be successful in life.

SCPS is also one of the highest-rated school districts in the Sunshine State. It was recently named to the College Board's Advanced Placement Honor Roll for the second year in a row, one of only three districts nationwide to receive this honor. SCPS is ranked No. 1 in Florida in the percentage of its budget spent in the classroom.

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—Claire Robinson

Information Services' Technology Implementation Manager,
Seminole County Public Schools

About 64,000 students are spread throughout this central Florida district, attending 37 elementary schools, 12 middle schools and 12 high schools.

The Challenge

Like many school districts, Seminole had been relying on laptop carts with independent access points for a very limited wireless experience.

Looking to accommodate the changing learning landscape and reap the benefit that smart devices can provide in education for staff and students, SCPS sought to upgrade its wireless capabilities and provide secure, scalable Wi-Fi across its campuses.

The district needed a highly available and resilient wireless LAN (WLAN) that could provide fast access to learning resources on both the network and the Internet for students and staff.

The district's existing wireless approach was sorely lacking, considering the new educational realities, Claire Robinson, Information Services' Technology Implementation Manager, explained.

"The level of wireless we had was just laptop carts with independent wireless access points attached to them," Robinson said. "You had to be in range of that access point to access the wireless network. So it was a very direct kind of wireless environment."

The district wanted to move toward a more pervasive enterprise-level system. "With bring your own device (BYOD) coming down the pike — we didn't know how we were going to achieve that. But we know that our kids are walking into schools with better computers in their pockets than we have in some of our classrooms."

Before implementing Aerohive, Robinson and her team embarked on a consolidation project, because they were dealing with 60 + separate network domains in the district. "We had several steps that we had to take before we could just jump off and move into an enterprise wireless system. We did not want individual wireless systems. We wanted an across-the-board system, up in our ops area, where one guy can run the whole wireless from up here.. We don't want people at different levels having to deal with it."

The ease and speed of deployment and management were huge points in Aerohive's favor. "The fact that it's a single pane of glass is key," Robinson explained. "The management system is right there, all in one place, and we can push out configurations, we can make modifications. One person can do all of that for the entire district."

Considering the Alternatives

Robinson and her team did an extensive amount of research on wireless networks, including a fact-finding mission to Hillsborough County, which was dropping their current wireless network in favor of Aerohive.

"We were thoroughly impressed," Robinson said. "The more we researched and found out about Aerohive's controller-less architecture — not having to have that controller sitting in the middle — we decided to move away from controller-based environments. That was one of the things that were a determining factor of us moving to Aerohive."

"Since we had not invested a lot in wireless prior to this, we wanted to make sure that whatever we got was the latest-greatest and would be future proof, would be the direction that, we felt, the world should be going in. We don't like bottlenecks. We don't like to have to worry about putting a piece of equipment at every one of our schools in order to run this. That's why Aerohive was introduced to us," she said.

SCPS chose Aerohive because of its advanced features and unrivalled price point, with help from trusted IT reseller Insight Public Sector.

The Results and Benefits

Florida uses an increasing amount of computer-based testing. "That was escalating, and we knew that the only way we were going to be able to survive with the numbers of computers that we needed is to be able to use our hard-wired labs with our desktops to do most of the actual testing," Robinson said. "And we needed to have our laptops

available for classes that were being kicked out of those labs. And so we started brainstorming ... what would it take for us to move in that direction."

Since then, the school district has expanded the Aerohive network so that the laptops can also be used in the computer-based testing. A couple of schools have APs in their secondary gyms, and they're putting 120 laptops, or their media center, in there. "The wireless has been one step above what were even looking for at the time," Robinson said.

The school district has been phasing in Aerohive since the 2010/2011 school year, starting with high schools. The following year, SCPS deployed Aerohive to the middle schools, and this year they're starting on the elementary schools. The district is currently using about 1,000 Aerohive APs, a mix that includes the Aerohive AP350 Access Point. The AP350 is a high-performance, 3 stream, 802.11n Access Point with external antennas designed for challenging indoor environments.

In states like Florida and Texas, high school football plays a prominent role. One of the ways the school district is using Aerohive APs is in an innovative athletic project

The district employs a popular physics teacher who every year picks a huge physics problem for students to work on. This year, he's chosen to combine physics and football. "We're using an Aerohive AP170 Outdoor Access Point in a line-of-sight project with the press box at the football stadium. And they are putting up one of those cameras that you see on the pro football fields that are wired across the field, with the remote-controlled camera in it. They'll operate that and then push the video to the press box, and then in the press box, it'll be pushed via wireless and streamed down onto the Web."

Once the project is complete, home viewers will be treated to some stunning, eye-in-the sky video of their favorite team.

When it comes to other Aerohive features, Robinson said: "One of the main features that attracted us to Aerohive was the non-controller environment, radius authentication at the edge, and ease of configuration. The meshing features and 'single pane of glass' device-monitoring have been very beneficial to our district already. We have one network specialist who monitors the entire district and he can easily make any needed modifications."

Recommendations

As to whether Robinson would recommend Aerohive to others, she said, "Oh gosh yes. I already have." There's a charter school in her area that's being built, and the administrator was worried about installing wireless APs. "Well, plug 'em in and they're done. How hard can that be?" Robinson told her.



Contact us today to learn how your organization can benefit from Aerohive wireless LAN architecture.

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