

RedCell Technologies designs robust, easy-to-manage wireless LAN for 267 schools throughout the Hillsborough County Public Schools district.

Hillsborough County Public Schools is the eighth-largest school district in the United States, covering a geographical area the size of Rhode Island. Located in metropolitan Tampa, Fla., the district is responsible for more than 200,500 Pre-K-12 students in 267 schools.

Until recently, the district had wireless capabilities in just 20 sites with limited coverage. Access was restricted to each school's main office, media center and perhaps the auditorium.

"In the beginning, we had a few wireless access points that a handful of people could get on," said Sharon Zulli, Manager Technology Customer Service and Support, Hillsborough County Public Schools. "Today, every student brings a device, sometimes two — say, a phone and a tablet — requiring much more coverage and capacity than we originally anticipated. We had to look at something that would work across all of our schools as well as within each school so that students could roam with their various devices and stay connected."

Hillsborough County Public Schools needed a wireless LAN (WLAN) solution that would grant anytime, anywhere access to mobile and wireless devices. To that end, the district put out a competitive bid for a controller-less WLAN solution that could be managed remotely and standardized for easy use. When the bids came in, the one from RedCell Technologies and Aruba Networks stood out.

"We were impressed by the functionality of the Aruba equipment and the solution designed by RedCell Technologies," said Zulli. "We also saw that the RedCell Technologies team would help us through the learning curve, which was especially important because we were new to implementing a wireless project of this size."

Navigating E-Rate

Funding for the project was obtained through the E-Rate Program, which provides school districts and libraries with the financial resources needed to improve their network infrastructures. While the funding is, of course, welcome, the program requires institutions to provide detailed specifications and meet critical deadlines in order to obtain funds for a particular project. Zulli says RedCell Technologies was instrumental in helping the school district hit its benchmarks throughout the lengthy E-Rate approval process.

"You almost work three years at a time, with the first couple of years devoted to crafting the RFP, choosing a provider and securing funding," she said. "RedCell Technologies could have chosen to sit on the sidelines until we got funded, but they jumped right in."



Challenge:

- Insufficient wireless access across a large, geographically dispersed and multi-location environment
- Wide range of wireless compatibility requirements encompassing nearly every device type and manufacturer
- Rigorous and lengthy funding process
- Short, unalterable implementation timeframe

Solution:

- Engineering and implementation of a controller-less WLAN solution

Benefits:

- Provided performance, resiliency and capacity to support an expanding number of mobile devices
- Enabled anytime, anywhere mobile access across a wide geographical area and within each facility
- Assured simplified remote management
- Standardized access for easy use

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RedCell Technologies’ engineers worked closely with the district’s IT team while E-Rate approval was still pending to engineer a wireless LAN that would meet the district’s needs now and in the future. Zulli says their expertise proved instrumental in meeting E-Rate requirements and getting the project off the ground.

“RedCell Technologies set up a pilot project at one of our schools so we could try out the solution,” she said. “They committed a lot of resources to make this project successful.”

The WLAN solution had to provide equal accessibility to laptops, phones, e-readers, tablets and other devices from multiple manufacturers. Equipment and software were optimized during the pilot installation to eliminate any concerns and to speed district-wide implementation.

“RedCell Technologies was willing and able to meet any-time to problem-solve and make it work,” Zulli said.

One Down, 266 to Go

In January 2013, Hillsborough County Public Schools finally received the E-Rate funding it had requested at the beginning of 2012. Once funding was approved, the district’s challenges had just begun. The E-Rate program requires that implementation be completed within one year.

This is where the upfront legwork of RedCell Technologies’ engineers really paid off. The success of the pilot project would make it much easier to implement the solution district-wide and support the aggressive project timeline. RedCell Technologies also began staging the access points and working with the third-party contractor that will complete the cabling and AP installation.

“We needed to complete a number of schools each month to get everything done within the calendar year deadline,” Zulli said. “Thanks to the efforts of RedCell Technologies, we are prepared to roll out the solution to all our schools very quickly.”

In June 2013, Hillsborough County Public Schools began district-wide deployment of the 802.11n WLAN designed by RedCell Technology engineers. The network features more than 3,500 Aruba Instant access points (APs), which provide high-density Wi-Fi support, seamless roaming and full survivability in the event of AP or WAN link failures. The controller-less technology minimizes complexity, enabling ultra-rapid deployment and reduced operational overhead.

Hillsborough County Public Schools now has a WLAN solution with the performance, resilience and capacity to support the growing number of mobile devices used by students, faculty and staff. RedCell Technologies engineered a robust solution that delivers an outstanding user experience district-wide.

ABOUT REDCELL TECHNOLOGIES

RedCell Technologies is a highly focused professional services firm specializing in the integration of enterprise mobility solutions. The company offers a broad portfolio of services based upon an unparalleled combination of experience and extensive research data on the

industry’s most effective solutions for mobility. The ability to analyze and interpret each business’ unique needs and deliver cost-effective and efficient technology solutions to meet those needs makes RedCell Technologies the clear choice for enterprise mobility.