



Progressive school district takes learning to new level

St. Lucie County School District turns to Presidio Networked Solutions and Cisco for grade-A wireless classroom solution

Executive Summary

St. Lucie County School District

- K-12 public schools
- 42 schools throughout St. Lucie County, Florida, with district offices in Fort Pierce
- Approximately 5,000 employees and over 40,000 students

Business Challenge

- Implement a 21st century learning environment
- Retrofit existing classrooms and equip new ones with state-of-the-art audio-visual systems
- Create a more engaging, immersive educational experience for teachers and students

Solution

- Robust local area network (LAN) and wide area network (WAN) infrastructures
- Indoor and outdoor wireless access throughout campuses
- Centralized wireless network management

Results

- Anywhere, anytime learning
- Advanced classrooms that enable teachers to more effectively teach to students' individual learning styles
- A superior educational experience that better prepares students for today's world



Business Challenge

With 42 schools, Florida's St. Lucie County School District (SLCSD) is medium in size and vastly forward-thinking. In 2006, the school board gave IT staff the initiative — and \$20M — to implement one-to-one computing in all its schools. The goal was to retrofit existing classrooms and equip new ones with state-of-the-art audio-visual systems and to give teachers and students the resources needed to engage in a true 21st century learning environment.

To accomplish this vision meant implementing a robust wired and wireless network infrastructure — a charge headed by Terence O'Leary, assistant superintendent of informational and instructional technology, SLCSD.

"Our mission is to ensure all students graduate from safe and caring schools, equipped with the knowledge, skills, and desire to succeed," O'Leary says. "To support this mission, we believe our classrooms need the best technology available to allow teachers to effectively engage students in their daily work.

"We needed a wireless solution that would give teachers the freedom to connect to audio-visual (AV) systems from their tablet PCs and allow students to use laptops anywhere on the school campus. We also needed additional wired technology to support ceiling-mounted IP cameras and IP-based clocks."

After reviewing several vendors, O'Leary and his team selected Greenbelt, Maryland-headquartered Presidio Networked Solutions and Cisco to help implement complete wireless coverage throughout its schools. With approximately 1,000 employees and offices throughout the Eastern United States, Presidio is one of the nation's largest independent value added solutions provider. In addition, the Cisco Gold Certified Partner is Cisco Master Unified Communications and Security Specialized and has significant educational industry experience.

"We have used Cisco networking products since the late 1990's and have always had good results," says O'Leary. "When we paired that with the experience, expertise, and vision Presidio brought to the table, the partnership was by far the best fit for us."

"In addition to providing an infrastructure that accommodates SLCSD's new wireless learning applications, the WLAN is less costly to manage and maintain."

Rick Hannah
Territory Manager
Presidio Networked Solutions

Solution

After working closely with O'Leary and his team to clarify objectives and specifications, Presidio began the 10-month implementation in April 2007.

For a robust, reliable network core, Presidio installed Cisco Catalyst 6500 Series, Catalyst 4500 Series, and Catalyst 3750 Series switches. These advanced power over Ethernet (PoE) switches deliver both network connectivity and power from a single wired connection. The new switches also upgraded SLCSD's advanced local area network (LAN) and wide area network (WAN) infrastructures, improving operating efficiency improving ease of use and resiliency.

"SLCSD now has an infrastructure that provides the necessary bandwidth to run its more demanding learning applications," explains Rick Hannah, territory manager, Presidio Networked Solutions. "The new network also allows IP video to run reliably across the network for enhanced learning within schools and remotely. It also improves school security."

To satisfy SLCSD's wireless requirements, Presidio implemented full coverage throughout each campus. Indoors, Presidio installed Cisco Aironet 1240 Series lightweight access points (LWAPs) and will soon install additional 1250 Series LWAPs. The IEEE 802.11a/b/g access points deliver the versatility, high capacity, security, and enterprise-class features SLCSD requires. For outdoor connectivity, Presidio went with Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points, which are specifically designed for high-volume Wi-Fi deployments.

Presidio then equipped SLCSD with Cisco 4400 Series Wireless LAN Controllers. Working in conjunction with its Cisco wireless APs, the controllers will empower O'Leary and his team to monitor and manage the entire wireless network throughout the district from a centralized location, simplifying operations and reducing the total cost of ownership. Furthermore, splitting functions between the access point and the controller simplifies management, improves performance, and increases security of large wireless networks.

"In addition to providing an infrastructure that accommodates SLCSD's new wireless learning applications, the WLAN is less costly to manage and maintain," says Hannah. "Teachers now have full mobility in the classroom and can engage in true one-to-one computing in the learning environment. And IT can now spend more time focused on tasks critical to the district's success."

"In just two months, we had the fully redundant core network in place and the wireless solution shortly thereafter."



Results

Following a smooth implementation in approximately half the district's schools to date, SLCSD is enjoying the many benefits of its Presidio-installed Cisco wired and wireless network solutions.

Teachers use wireless computing tablets to project their lessons to LCD projectors in classrooms, and students share their work from laptops. Teachers also wirelessly access and control various multimedia audio-visual equipment such as speakers and DVD players, transforming the once-stolid classroom environment into an engaging, immersive learning experience.

"Our teachers now have the technology to engage students in new and more effective ways, which we're confident will lead to greater student achievement," says O'Leary. "Instead of standing in front of the room, teachers have the mobility to roam throughout classrooms. This means they can work with students directly to accommodate different learning styles without disrupting classroom management or lesson-flow.

"And this mobility extends outside the classroom as well. The new solution has taken down classroom walls, enabling classes to meet in courtyards, libraries or anywhere on campus teachers feel will enrich their lesson plan."

O'Leary adds that students too appreciate the flexibility and ubiquity of the new "anywhere, anytime" learning environment.

"Students think it's cool, but they actually expect it," says O'Leary. "The idea of school being from 8 a.m.-4 p.m. is over. This generation has grown up with 24/7 access to information everywhere they go. It's second nature to them. By giving them the same access in our brick and mortar schools as they get outside in their everyday lives, they're learning without really even realizing it."



From IT and user perspectives, O'Leary says the new solution has proven secure, easily accessible, and simple to manage.

"We manage the entire network from a central office, which allows us to be proactive instead of reactive," says O'Leary. "Users easily log on with a single sign-on and we can monitor all access, traffic, and situations such as if an AP goes down.

Overall, O'Leary and SLCSD are highly pleased with its new solution, and praise Presidio and Cisco for a job well done.

"Our customers are our students, teachers, and community," says O'Leary. "We're confident all will benefit from this advanced new solution and that it will help move us from a good district to a great district.

"The Presidio and Cisco implementation is reliable and simple to use, which was vital to teachers and students adopting it. The companies not only brought knowledge and quality resources to the project, but also a strong partnership that remains in place today. I highly recommend Presidio and Cisco and look forward to working with them as we equip our remaining schools and beyond."

"Our customers are our students, teachers, and community. We're confident all will benefit from this advanced new solution and that it will help move us from a good district to a great district"

Terence O'Leary
Assistant Superintendent of
Informational and Instructional
Technology
St. Lucie County School District

Product List

Routing and Switching

- Cisco Catalyst 3750 Series Switches
- Cisco Catalyst 4500 Series Switches
- Cisco Catalyst 6500 Series Switches

Network Management

- Cisco 4400 Series Wireless LAN Controllers

Wireless

- Cisco Aironet 1240 Series Lightweight Access Points (LWAPs)
- Cisco Aironet 1250 Series LWAPs (soon to be implemented)
- Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points

For More Information
Visit presidio.com and
to discover how Presidio
Networked Solutions and Cisco
are enabling 21st century
learning environments in school
districts throughout the country.

Presidio Networked Solutions

www.presidio.com

Presidio Networked Solutions addresses the complete technology lifecycle—plan, design, integrate, operate and optimize—of networking and system solutions and services for the commercial and government markets. Presidio's comprehensive portfolio comprises unified communications, wireless, advanced security, storage and systems infrastructure solutions. Presidio Networked Solutions also offers customers an extensive range of financing solutions, including leasing.



©2007 Cisco Systems, Inc. All rights reserved. CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0708R)