



*Reliable, High-Performance Network Infrastructure to Support Leading-Edge Delivery of High-School Curriculum*

**INTRODUCTION**

ACPS, which incorporates laptop computer-based applications into every aspect of the students' curriculum, provides a learning environment that is at the leading edge of technology and requires a network infrastructure that is fast, flexible and reliable.

**THE CHALLENGE**

**Grow the Network Infrastructure to Support More Students, With Faster Connectivity and Ease-of-Management, on a Limited Budget**

To support the rapid growth of the high school student population and improve the quality of education provided to the students, the ACPS district built the new T.C. Williams High School, a cutting-edge facility designed to connect students and the faculty to each other and to the vast amount of educational resources available through the Internet. At 120,000 square feet, T.C. Williams is 30,000 square feet larger than the previous high school requiring more switches to support more laptop computers than ever before.

To maximize the flexibility of each room in the building, individual switches would be ceiling-mounted in each room enabling them to be easily configured as classrooms, computer labs, resource centers, or a variety of other network-accessible configurations.

Supporting the high-bandwidth Internet-access requirements for as many as 2,200 students and 157 faculty members who would be streaming audio and video content through subscription-based ASP-style applications from the network throughout the school day, would require a reliable, high-performance network infrastructure.

With county revenues down and budget cuts across the district being implemented, John Crites, Deputy Director of IT for ACPS, faced the challenge of implementing a high-performance, easy-to-manage solution to network the new high school, all within the confines of a shrinking IT budget.

**CUSTOMER**

**Industry**

Education

**Profile**

Alexandria City Public Schools (ACPS), located in Alexandria, Virginia, is one of the most diverse school systems in the country serving nearly 11,000 students in grades K-12 and employing more than 2,000 employees.

## THE SOLUTION

### The NETGEAR® ProSafe® 24-Port Gigabit L2 Managed Switch

After an extensive testing process that confirmed the functionality and value of the NETGEAR solution, the ACPS purchased and deployed 89 NETGEAR® ProSafe® 24-Port Gigabit L2 Managed Switches (GSM7224).

"I found the switches easy-to-manage using the ProSafe Control Center web-based GUI," explained Crites. "The ability to log into each switch using a Web browser from virtually anywhere in the world enables me to effectively troubleshoot and repair network issues without having to physically travel to the school."

According to Crites, one of the key benefits to the NETGEAR managed switches, particularly in the classroom environment, is that they are quiet. "Because the switches are ceiling-mounted in each room, they must operate as quietly as possible. NETGEAR switches use only two fans and they don't make nearly as much noise as the competitors' products which require as many as 6-8 fans per switch. Teachers can't tolerate environmental noise in the classroom, so the NETGEAR switches were ideal."

Crites found the feature-rich and affordable ProSafe 24-Port Gigabit L2 Managed Switch to be a compelling cost-effective alternative to the HP ProCurve switches that he had previously standardized upon across the district. "I found that I could get Gigabit managed switches from NETGEAR at the same price as the 10/100 switches from HP, which would not only enable me to equip each classroom with its own 24-port Gigabit switch, but would also enable me to have a number of spare units on-hand in case of equipment failure."

While Crites' previous experience with NETGEAR switches and customer support gave him the confidence to standardize on the NETGEAR switches, he stated that the value provided in the switches combined with the NETGEAR Lifetime Warranty played a role in his decision. "The value afforded by the NETGEAR switches enabled me to deploy a high-performance Gigabit network and still have the resources to purchase spare units to keep on-hand in case of equipment failures. The Lifetime Warranty gives me the piece-of-mind that in the event one of the switches does fail, NETGEAR will replace the equipment quickly and efficiently. The ability that the NETGEAR solution gives me to provide this high-availability, high-reliability network infrastructure is critical."



## THE RESULTS

### A High-Performance, High-Reliability, Cost-Effective Network Infrastructure Solution

Crites explained why the move to NETGEAR managed switches made sense for the ACPS District. "We spent tens of thousands of dollars on the chassis at the core of our network. It doesn't make sense to spend tens of thousands of additional dollars out at the edge. NETGEAR managed switches give us Gigabit performance, ease-of-management, a robust feature set, and a lifetime warranty at a fraction of the cost of the high-end manufacturers."

A recent customer survey confirmed Crites' thinking. "Our faculty and staff are happy with the network. They don't perceive the network as being a problem because anytime an issue arises, I can respond very quickly to resolve the issue through a simple Web browser." Crites explained that the Web-based management feature is critical to being able to maximize network uptime, providing him with the ability to remotely log into switches from anywhere around the world to troubleshoot and resolve network issues.

For more information on NETGEAR ProSafe products, please go to [www.netgear.com](http://www.netgear.com).

## ADDITIONAL SUPPORT SERVICES

**OnCall 24x7 Support:** Covers unlimited phone and email based technical support

**XPressHW:** Provides phone-based hardware support and next business day express hardware replacement

**Lifetime Warranty\*:** Lifetime hardware warranty on all ProSafe products



BUILT FOR BUSINESS

# NETGEAR®

4500 Great America Parkway  
Santa Clara, CA 95054 USA  
1-888-NETGEAR (638-4327)  
E-mail: [info@netgear.com](mailto:info@netgear.com)  
[www.netgear.com](http://www.netgear.com)

\*The lifetime hardware warranty only covers hardware, fans and internal power supplies, and does not include external power supplies or software. Hardware modifications or customization void the warranty. The warranty is only valid for the original purchaser and cannot be transferred.

NETGEAR, the NETGEAR logo, Connect with Innovation, and ProSafe are trademarks and/or registered trademarks of NETGEAR, Inc. and/or its subsidiaries in the United States and/or other countries. Other brand names mentioned herein are for identification purposes only and may be trademarks of their respective holder(s). Information is subject to change without notice. © 2008 NETGEAR, Inc. All rights reserved.

CSS-Edu2-Rev1