

ST. MARY'S ACADEMY



IP NETWORK

St. Mary's Academy Preps Graduates for Higher Ed

EXECUTIVE SUMMARY

Challenge

Provide teachers with innovative educational applications and resources, including streaming video supported over a high-performance, highly reliable network

Solution

- Brocade FastIron SuperX switch at the network core
- Brocade FastIron GS Series PoE switches at the network edge

Results

- Provisioned 10 terabytes of streaming video to classrooms by increasing IP network capacity and reliability
- Supported Apple Podcast Producer multimedia learning tools that allow teachers to post podcasts of classroom activities online
- Enabled wireless network and Voice over IP (VoIP)
- Added Power over Ethernet (PoE) switches to reduce wiring costs by more than \$17,000
- Reduced time spent managing the network by more than 90 percent

Founded in 1864, St. Mary's Academy has a long history of education excellence in Colorado. The school awarded the first high school diploma in the Colorado Territory, and has since built an outstanding reputation for preparing students for higher education.

St. Mary's Academy has 100 percent college placement for seniors graduating in 2010, and that same graduating class has qualified for almost \$6 million in university scholarships. The teachers, staff, Board of Trustees, and parents are committed to academic achievement and recognize that innovative multimedia educational resources help today's tech-savvy students excel.

Having technology in the classroom also helps the private, independent school recruit new students and retain current students. Almost all of the school's classrooms have an interactive whiteboard, and students utilize the latest technology—such as video streaming, podcasts, laptops,

and more—to help them master the basic and advanced curricula taught at the school.

"St. Mary's Academy wants to make sure that we are ahead of the curve as far as technology is concerned," says Curtis Johnson, Director of Information Technology at St. Mary's Academy. "Our network is the most important piece."

NETWORK TECHNOLOGY GETS TOP GRADES

The emphasis on technology in the classroom led St. Mary's Academy to research Brocade® solutions when it became clear that the school needed to upgrade its IP network. For years the school had relied on a public Class C network for basic connectivity, but it had become so difficult to manage and unstable that the IT group was spending 10 to 20 percent of its time troubleshooting problems.

BROCADE

After comparing the product offerings from Brocade and Cisco, St. Mary's Academy selected Brocade for the robust feature set in the company's high-performance switches. Johnson also weighed in the positive relationship he had built with the Brocade team. "Having a great relationship with the support team is extremely important," says Johnson. "Brocade was also helpful in designing the best solution for our environment."

St. Mary's Academy replaced all its networking equipment with a Brocade FastIron® SuperX Switch at the core, and it deployed Brocade FastIron GS Series Power over Ethernet (PoE) switches at the edge of the network. The network now has gigabit-to-the-desktop speeds across a five-building, 24-acre campus, and it has six subnets and supports a 3Com Voice over IP (VoIP) network as well as a wireless LAN. "The Brocade IP network compared to our past network is like night and day," says Johnson. "The school now has the capacity to be on the leading edge of education technology."

VIDEO STREAMING MOVES TO THE FRONT OF THE CLASS

By upgrading to 1 Gigabit Ethernet (GbE), St. Mary's Academy has been able to provide its 800 users with attention-grabbing multimedia resources. The school can now host more than 10 terabytes of video with no latency across the network.

"These types of technology in the classroom really benefit from having a fast network," says Johnson. "It allows a level of interactivity that was unavailable to students before we added the high-performance Brocade IP network."

The Brocade IP network can also support the school's VoIP and wireless networks. The PoE features in the Brocade switches made the installation of these networks much easier. "All of our access points [APs] and phones run on PoE," says Johnson. "We have APs and phones installed in ceilings and hallways and other places where it's almost impossible to run cable for power. The PoE features saved us about \$17,500 because the school did not have to hire someone to add wiring."

The Brocade IP network is also proving to be ultra-reliable. St. Mary's Academy has experienced 100 percent uptime since upgrading to the Brocade infrastructure. "I was spending 10 to 20 percent of my day on network-related problems," Johnson explains. "Now, I have cut that by almost 90 percent because the Brocade equipment is so stable."

HIGH-TECH SCHOOL IS READY FOR DIGITAL FUTURE

Today's students are digital pioneers who understand and want to use technology. St. Mary's Academy is providing hands-on experience with interactive applications that are highly engaging and designed to both challenge students and prepare them for a digital lifestyle.

The advanced Brocade IP network, which will soon be upgraded to 10 GbE performance at the core, provides the foundation the school needs to support its students, and the flexibility to adapt as future learning applications or devices enter the classroom. Johnson concludes,

WHY BROCADE

"The school now has the capacity to be on the leading edge of education technology. The faculty is more energized to teach, and the students have the latest learning tools at their fingertips."
– Curtis Johnson, Director of Information Technology

"The Brocade IP network will allow us to support the constantly changing environment and help us prepare our students for a successful future."

For more information, visit www.brocade.com.

Corporate Headquarters

San Jose, CA USA
T: +1-408-333-8000
info@brocade.com

European Headquarters

Geneva, Switzerland
T: +41-22-799-56-40
emea-info@brocade.com

Asia Pacific Headquarters

Singapore
T: +65-6538-4700
apac-info@brocade.com

© 2010 Brocade Communications Systems, Inc. All Rights Reserved. 10/10 GA-SS-1543-00

Brocade, the B-wing symbol, BigIron, DCFM, DCX, Fabric OS, FastIron, IronView, NetIron, SAN Health, ServerIron, Turbolron, and Wingspan are registered trademarks, and Brocade Assurance, Brocade NET Health, Brocade One, Extraordinary Networks, MyBrocade, and VCS are trademarks of Brocade Communications Systems, Inc., in the United States and/or in other countries. Other brands, products, or service names mentioned are or may be trademarks or service marks of their respective owners.

Notice: This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered or to be offered by Brocade. Brocade reserves the right to make changes to this document at any time, without notice, and assumes no responsibility for its use. This informational document describes features that may not be currently available. Contact a Brocade sales office for information on feature and product availability. Export of technical data contained in this document may require an export license from the United States government.



BROCADE