Broome-Tioga BOCES: Connected education at lower costs

HPE solution provides superb networking reliability for education cooperative

Objective
Reduce networking costs to conserve funds for new initiatives

Approach
Engage HPE partner and Gold Networking Specialist Synergy to implement HPE switches in cores and at the network edge, replacing Cisco and Avaya
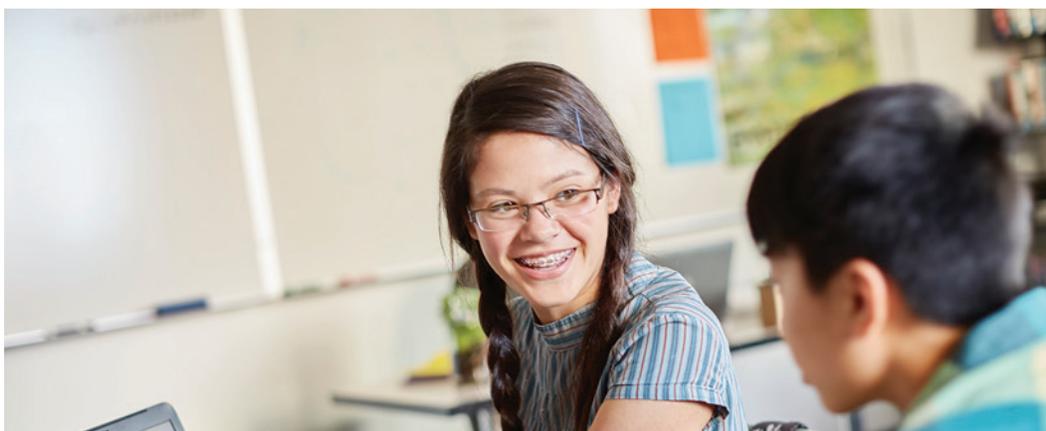
IT Matters
- Avoided costly end-of-life Cisco upgrade
- Powered gradual transition from 1 GB to 10 GB with upgradable switches
- Simplified network for easier functionality and maintenance

Business Matters
- Reduced cost of ownership for district networks
- Found reliable network partner with clear roadmap and ongoing product support
- Streamlined specification and purchase processes
- Strengthened confidence and eliminated hidden costs with HPE Lifetime Warranty

The South Central Regional Information Center (RIC) supports New York State's Broome-Tioga Board of Cooperative Educational Services (BOCES) with its technology needs. Avaya network switches needed to be replaced due to longevity concerns, and Cisco had become far too cost prohibitive. Based on equal or superior functionality and far lower costs, South Central RIC worked with HPE partner and Gold Networking Specialist Synergy to implement HPE Networking solutions.

The Broome-Tioga (BT) Board of Cooperative Educational Services (BOCES) is one of 37 entities located around New York State, each functioning as an extension of the local school districts. The BOCES system is designed to allow school districts to share the cost of educational and administrative services, including technology services that are delivered through Regional Information Centers (RICs).

The South Central Regional Information Center (SCRIC) supports three regional BOCES with vocational schools and more than 50 school districts. Its mission is to provide the most reliable, accessible, and efficient technology information systems and infrastructure, enabling schools and BOCES to advance teaching and learning.

More robust connectivity, lower costs

In evaluating the future requirements of its supported districts, the SCRIC identified the need for significant network upgrades over an extended period of time, both for SCRIC itself as an Internet Service Provider and for its supported districts. Future wireless requirements, increased use of virtualization, and expanded computer-based testing would all require a transition from the standard 1 GB backbone to 10 GB over the next several years.

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> "HPE solutions offer significantly lower cost of ownership and have superb functionality and reliability when compared to the world's largest network provider."

— Jim Thompson, Network Engineer, South Central Regional Information Center

"We started looking at where the networking industry was going," says John Madden, network engineer for SCRIC. "The existing networks based on Avaya and Cisco products were aging and unable to be upgraded adequately without total replacement, an expensive proposition because with Cisco we needed to jump into the 10 GB hardware models immediately, not over time. "

In one district, SRIC projected a Cisco upgrade to tally up to expenses of $573,000 over six years. "Those types of numbers, especially in education, don't make sense. School districts need robust connectivity at far lower costs," says Madden.

The Avaya products had been taking a direction away from redundant cores since the termination of the 8200/8600 product line, making SCRIC hesitant to continue use of Avaya's stacking line given previous problems experienced. "We were very uncomfortable with both Cisco and Avaya's ability to deliver a long-term, upgradable solution that didn't break the bank from the beginning. In addition, both vendors insisted on expensive maintenance contracts in order to access their latest code updates," says Madden.

Searching for lower costs and rich functionality

Uncertain of where to turn for feature-rich networking solutions with a stable future and lower cost, SCRIC invited multiple companies to submit proposals for new network switches. SCRIC initially was leaning toward a Cisco solution as the way forward simply based on the perceived safety of going with the largest network switching provider—until decision-makers conducted a comprehensive cost analysis.

In the larger districts, the situation was the worst. As SCRIC looked at the total cost of ownership (TCO) over 5-plus years, technologists discovered an alarming cost for Cisco based on maintenance costs and the continuing cost of updates required to retain maintenance contracts. The average yearly TCO for the districts analyzed was approximately $100,000 per year. SCRIC saw no good justification for that kind of expenditure.

The organization began evaluating HPE solutions and discovered many advantages. Depending on the school district, HPE solutions offered hundreds of thousands in savings over a few short years. HPE had a clear roadmap and commitment to ongoing product innovation and support.

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HPE offered reliability and equally rich functionality with, in many cases, a much lower entry cost and better expansion. Upon determining that HPE was far simpler to purchase and configure, Network Engineers Jim Thompson and John Madden then called industry analysts at Gartner Group to get a trusted, third party opinion. Gartner analysts wholeheartedly recommended HPE, the industry's second largest networking provider.

"The experts at Gartner had nothing but good things to say about HPE," says Madden. "Then the HPE Account Manager came in and genuinely listened to us. He had a great understanding of what we needed right away and conveyed trust in HPE's flexibility, attentiveness, and long-term viability."

Nearly 20 districts and counting

Working closely with HPE partner and Gold Networking Specialist Synergy Global Solutions, SCRIC began rolling out HPE solutions to an increasing number of districts. Synergy has been instrumental in making the implementation a success, from delivering equipment to solving problems such as a one-time power supply issue that was remedied immediately. "Transitioning from Cisco and Avaya to HPE solutions has been a smooth process with a low learning curve," Thompson says.

Today, nearly 20 districts within BT BOCES have switched from Cisco to HPE solutions, including Aruba 2920, 2530, 5400 zl, and 3800 Switch Series in the schools and redundant HPE 12500s and a 10500 Switch Series in the SCRIC network operations center (NOC). The move to HPE has resulted in a broad array of benefits.

Thompson and Madden cite ease of functionality as an advantage of HPE solutions. They also like built-in, 30-watt Power over Ethernet (PoE) to enable faster deployment of new FlexCampus networking infrastructures by eliminating the need for a power outlet for every end point. Although some features and benefits may seem small, they add up on a daily basis in efficiency and productivity for SCRIC and the districts it serves.

Thoughtful features add up to big benefits

The HPE switches are well designed, highly scalable, offer economical redundancy options for always-on availability, and deliver 10 GB expansion capabilities out of the box. Upgrades and expansions are no longer a headache, because HPE's solutions are built from the start to help organizations stay agile and adapt to new networking requirements. HPE solutions offer ease of functionality and a uniform code base. For the SCRIC, that makes maintenance and continuous upgrades trouble-free. Ample bandwidth and performance enable virtualized applications to run swiftly and responsively to keep productivity throughout the districts at all-time highs.

"HPE has thoroughly considered and addressed many facets when it comes to networking that are convenient and cost-effective for us on a daily basis," says Madden. "The new auxiliary power in the HPE 2920 Switch Series is one-third less than the cost of offerings from competitors, and new HPE switches we are implementing soon will offer dual supervisors and rock-solid power supplies. When you're implementing, growing, and supporting networks on our large scale and modest budget, little things add up to big benefits."

Customer at a glance

Application

• Nutrikids

• iData and iExam Data Dashboard

• Finance Manager/nVision

• ClearTrack 200

• ESchool Plus

• Specialized administrative services

Hardware

• HPE FlexNetwork 1200 and 10500 Switch Series

• Aruba 2920, 2530, 5400zl, and 3800 Switch Series

Software

• VMware vSphere

Robust functionality and lower TCO

The most significant advantage for BT BOCES and the SCRIC, especially in today's tough economic climate, is enormous savings—without sacrifice. Districts are conserving hundreds of thousands of dollars that can save taxpayers money or be put toward new programs and technologies. HPE offers a simpler solution all around with functionality on par with—and in some cases superior to—the networking tools Cisco offers. Based on experience in nearly 20 school districts, SCRIC is bullish on HPE solutions.

"HPE solutions offer significantly lower cost of ownership and have superb functionality and reliability," says Thompson. "Buying networking equipment without looking at HPE is shortsighted."

In the end, the comfort level of the people that use the equipment every day is not something to be ignored. "People have to rely on the network and feel safe with it," says Thompson. "Switching from a Cisco 6513 to HPE 12500 core switches in our regional NOC was a bold move for us, then we ran it for over two years without a reboot. When we did reboot, it was a shutdown to replace our UPS unit. That was a record for us. You can't argue with success."

Learn more at
hpe.com/networking

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