

CASE STUDY



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OVERVIEW

Fraser Valley Regional Library's IT team delivers content and services over its network to an estimated 700,000 people and 25 libraries spread over 23,000 square miles (6,000 km²). As part of a Citrix update, IT decided to replace its unreliable, labor-intensive switches. The new Ruckus switches support more bandwidth-intensive applications across the network, while reducing the burden on IT.

CHALLENGES

- Existing switches were unreliable and time-consuming to manage
- Making the full Microsoft Office suite available via Citrix required a reliable, high-performance network

SOLUTION

- 50 ICX switches

BENEFITS

- The Ruckus switches were easy to deploy and haven't experienced a single failure
- The public can now securely and reliably access Microsoft Office suite in their local libraries
- The reliable switches have freed up valuable IT resources to focus on new projects

NEW NETWORK SPEEDS DELIVERY OF NEW APPLICATIONS TO REGIONAL LIBRARIES

Created in the 1930s, the Fraser Valley Regional Library (FVRL) was the first library system of its kind in North America. Its mission was to bring books to poor rural communities in British Columbia. Back then, it was a library on wheels—a van that traveled from town to town, covering over 1,000 square miles (2,600 km²).

Today, content flows from a central data center over a network that stretches more than 23,000 square miles (6,000 km²), reaching 25 libraries and an estimated 700,000 people. FVRL's international reputation is based not only on its innovative programs, but the way it efficiently and cost-effectively delivers so many programs and services online to far-flung communities.

"We get a lot of inquiries from our IT colleagues, especially those in non-profit, who are interested in increasing service levels while reducing costs and operational overhead," says Brad Fenrick, manager of Information Technology. "When people think of such a high volume of traffic delivered to so many locations and users, they assume we have the budget and staff of a large private enterprise. But we're a small IT department operating on a modest budget."

The IT department is responsible for managing a high-performance, secure network for all member libraries, as well as the FVRL's administrative departments in Abbotsford, British Columbia. The libraries are equipped with thin clients on terminals for the public. The data center has a large Citrix server farm that terminal users access in real time over the network.

The local libraries provide vital services to their communities, including educational and literacy programs for schools and job search support for adults. For many rural towns, the local library is also their only Internet access. "Providing content and services reliably and with speed is critical to the communities we serve," says Fenrick. "Reliability also keeps our operational overhead down. When a small IT staff spends too much time troubleshooting problems—especially in a distributed network—it adds to your operating budget and takes time away from new projects. So when we have equipment that's unreliable or too labor-intensive to manage, we have to consider replacing it."

Which brings us to the aging switching infrastructure.

"We were reaching a dead end with the legacy switches," says Fenrick. "Let's just say my staff was becoming too familiar with isolating dead switch ports—and that's a waste of limited IT resources." The legacy vendor's management interface was also archaic, which translated to too much time to do even simple things.

IT was about to upgrade the Citrix server farm, and it was the perfect time to replace the HP switches. "We evaluated the Ruckus ICX switches and we



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BRAD FENRICK
IT Manager

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THE PLEASANTLY PAINLESS MOVE TO A MORE POWERFUL SWITCHING INFRASTRUCTURE

Given the breadth and depth of the FVRL’s programs, the IT department always has a long list of projects on its plate. “Because we don’t have a large staff, we’re scheduling projects into next year. Which makes productivity a high priority for everyone,” says Fenrick.

Replacing the HP switches with the Ruckus ICX switches in the head office took less than a day. “Once the Ruckus switches were configured, we just pulled out the HP switches and plugged in the ICX switches and everything worked,” says Darren Raven, Systems Analyst. “We went from a time-consuming switch infrastructure to a worry-free one.” Over time, the IT team replaced all of the switches in the library branches—about 35 remote ICX switches that are all managed centrally.

The IT team was especially impressed with the Ruckus documentation. “That’s probably not something you hear about a lot, but IT people understand the value,” says Raven. “I wish more vendors did as good a job as Ruckus. We had no problems doing the setup and configuration. In fact, we never even called Ruckus with any questions. It’s nice to report that a vendor has great support, but it’s even better when you don’t have to use it.”

ICX SWITCHES ALLEVIATE HEADACHES AND ACCELERATE PROGRESS

One of IT’s high priority projects was making the full Microsoft Office suite available to the public on over 400 remote terminals. With a Citrix environment, applications require fast, reliable performance between all of the thin clients and Citrix servers. “We simply couldn’t deliver the full Office suite online with our old switching infrastructure,” says Raven. “The speed and reliability of the new switches played an important role in enabling us to confidently provide real-time online access to these massive applications.”

The Ruckus switches have also helped reduce staff time troubleshooting problems in the field. The IT team configured the switches with redundant power supplies and fans for automated backup, but they haven’t had a single failure since installing the Ruckus switches. “These days, we don’t worry about dead switch ports. Our Ruckus switches provide a set-it-and-forget-it infrastructure,” says Raven.

The reliability and easy management of the Ruckus switches has also freed up valuable IT resources. The entire upgrade—including the Ruckus switches—has saved so much time that the IT team has already started work on next year’s projects.

“FVRL has unlimited imagination for ways to help the communities we serve,” says Fenrick. “With Ruckus, we have the foundation to take us a long way. Being able to do more things with greater efficiency ensures that we can support all of the innovative programs ahead.”

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