

# NIAGARA FALLS BRIDGE COMMISSION



## IP NETWORKS

## Brocade Bridges the International Divide

### Objective

- Deploy a converged networking solution to consolidate the many types of data coming in to the NFBC's Operations Center
- Include advanced security features to keep this busy border crossing between the U.S. and Canada safe
- Create a robust, reliable networking environment that is as mission-critical as the bridges it serves

### Solution

- The network includes the Brocade BigIron RX backbone switches, FastIron family of power over Ethernet (PoE) switches, IronPoint Mobility Series, and IronView Network Manager (INM) software

### Results

- NFBC staff are able to analyze incoming video, voice, and data and coordinate responses 24 hours a day
- By integrating Lancope's Stealthwatch with INM, the NFBC is able to integrate network behavior analysis with network management to detect flow-based anomalies and threats
- Lockdown's NAC solution protects network access control by authenticating and auditing network users and devices

Niagara Falls is undoubtedly one of the most picturesque areas of North America. Long a destination for honeymooners and other vacationers, both the U.S. and Canadian sides of this popular region draw many tourists each year who come to take in the spectacular scenery and enjoy the many attractions.

Linking the two sides of the Niagara Falls region falls under the auspices of the Niagara Falls Bridge Commission (NFBC), a joint U.S. and Canadian agency which owns and operates three bridges that traverse the Niagara River: the Lewiston-Queenston Bridge, the Rainbow Bridge, and the Whirlpool Bridge.

Almost 12 million crossings take place across these three critical links between the U.S. and Canada each year, and about \$32 billion in trade goes back and forth across the border.

Although the NFBC does not handle customs and immigration between the two countries, the organization is charged with keeping the Niagara Falls bridges safe and ensuring that traffic flows efficiently to and from either side.

The NFBC is an excellent example of agencies cooperating with one another. Not only does the agency span an international border, but it also relies on local law enforcement agencies and other entities in both countries.

### OBJECTIVE

Security and traffic management functions are remotely overseen from NFBC's Operations Center, which is housed at the agency's new \$5.8 million administrative headquarters in Lewiston, NY.

From the state-of-the-art Operations Center, which operates 24 hours a day, 7 days a week, NFBC management and staff are able to analyze information coming in from some 160 video cameras and 96 access control points that are installed along the bridges as well as at six U.S./Canadian customs plazas on the bridges.

# BROCADE

With so many sources of data and the critical nature of the NFBC's task of keeping the fourth busiest border crossing between the U.S. and Canada safe, the agency needed a converged networking solution that would provide it with best-of-breed communications and advanced security requirements.

"With recent heightened security requirements, we place the utmost importance on maintaining a very high level of virtual and physical network security, while maintaining a robust and fully functional network for all operations," says Michael O'Reilly, head of MIS for the NFBC.

## SOLUTION

To that end, the NFBC has installed a converged network from Brocade® that runs on networking and wireless hardware; transports on-demand data, voice, and video throughout its operations; and provides the NFBC and travelers with critical information.

The solution includes a number of Brocade products, including BigIron® RX backbone switches, FastIron® family of power over Ethernet (PoE) switches, IronPoint® Mobility Series, IronView® Network Manager (INM) software, as well as Lancope's StealthWatch Network Behavior Analysis and response solution and Lockdown's Enforcer Network Access Control (NAC) solution.

This comprehensive end-to-end networking solution helps NFBC secure and manage its highly traveled border crossings.

## RESULTS

From the Operations Center, management and staff are able to analyze the information from numerous PoE IP video and CCTV cameras and secure wireless Access Points placed at strategic locations along the bridges as well as at the U.S. and Canadian Customs Plazas and the NFBC's headquarters. The information from the cameras is sent through the Brocade network infrastructure and is used to monitor traffic in each lane and locate traffic accidents and any unusual activities or incidents remotely.

The Operations Center staff is able to analyze incoming video, voice, and data and coordinate responses 24/7; consequently, the appropriate specialist teams and resources are deployed more efficiently and quickly saving the NFBC time and financial resources.

By integrating Lancope's StealthWatch with INM, the NFBC is able to integrate network behavior analysis with network management to detect flow-based anomalies and threats. To protect network access control, the NFBC has implemented Lockdown's NAC solution to authenticate and audit network users and devices.

The Brocade open network architecture allows NFBC to deploy a best-of-breed, multi-vendor solution in which the Brocade wired and wireless network is complemented with products from Lancope and Lockdown Networks. The robust network delivers the performance, convergence, and scalability advantages of the underlying Brocade switch infrastructure and the access control and real-time threat detection and mitigation enabled by Lancope and Lockdown Networks' products. This complete solution allows NFBC to meet extensive technical, security, and regulatory compliance requirements.

With this success, NFBC's partnership with Brocade is likely to continue to keep things safe and secure on this important international border.

"It is crucial that our network infrastructure, from security cameras to our data center, operate around the clock without unexpected downtime or failure," O'Reilly says. "Brocade's robust, reliable, and scalable network hardware allows us to remotely monitor and manage our entire security and information management systems without unnecessary maintenance or unexpected additional costs."

For more information, visit [www.brocade.com](http://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

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