

Museum Solution Meets Stringent IT Needs

Wireless Ethernet Bridge Across Ottawa River Links Video Surveillance Systems for Two of Canada's Most Important Cultural Institutions



Two of Canada's most important repositories of culture and history – the Canadian Museum of Civilization and the Canadian War Museum – faced a unique challenge several years ago when security and IT executives from the Crown Corporation responsible for the two facilities began discussions with March Networks about a new video surveillance system.

The Museum of Civilization, a one million square foot (93,000-square meter) architectural treasure on the Quebec side of the Ottawa River directly across from Canada's Parliament Buildings, had an analog-based video surveillance system in need of upgrading, while the brand new Canadian War Museum across the river was a candidate for the latest and greatest technology. One had a mix of coax and fiber cabling, the other hoped to make do with a fiber data network only, but the two had to function

as a single system. Approximately one mile apart (1.6 kilometers) and separated by the broad expanse of the Ottawa River, both museums are served by a common security department.

"I was the Chief Information Officer at the time, so it fell into my jurisdiction because the security services people were looking for a networked system," said Gord Butler, Chief Financial Officer of the Canadian Museum of Civilization Corporation. "We wanted something flexible that could accommodate our existing system, while also allowing us to move into more IP-based technology."

The March Networks® VideoSphere™ solution selected by Butler and his team allowed the Museum Corporation to leverage its investment in analog cameras and existing cabling while upgrading to digital technology at the Museum of Civilization, and avoid the expense of installing parallel fiber and CAT-5

cabling in the new War Museum.

"Both the War Museum and the Museum of Civilization are wired with fiber, so the move to IP is ongoing as we get funding for capital replacement," said Butler. "Being able to piggyback on our data network offers significant savings for us in not having redundant or duplicate connectivity between the two buildings."

The facilities are linked by two 100 Mbps wireless microwave pairs from DragonWave Inc. that provide a wireless Ethernet link across the river, carrying all voice, video and data traffic.

The Museum of Civilization, Canada's national museum of human history, opened in 1989 and ranks as the country's most popular and most visited museum, attracting close to 1.3 million visitors annually. Housing approximately 3.75 million artifacts, the museum promotes a greater understanding



Canadian Museum of Civilization and the Canadian War Museum

The Canadian Museum of Civilization and the Canadian War Museum (www.civilization.ca) are two of Canada's most popular cultural institutions. Located on opposite sides of the Ottawa River in the heart of the nation's capital, the two architecturally stunning landmarks offer visitors a better understanding of the country's culture, history and proud military heritage. The two museums attract a combined total of more than 1.7 million visitors annually.

of Canada's identity, history and culture.

Dedicated to the education, preservation and remembrance of Canada's military history, the 440,000-square foot (40,860-square meter) Canadian War Museum opened in May 2005 and attracts more than 500,000 visitors annually.

"We have a cumulative collection of more than four million artifacts between the two institutions, so we have a responsibility to the Canadian people to safeguard those treasures," said Butler.

"The new video surveillance system gives us the ability to go back and review evidence of any suspicious behavior. We haven't had any serious breaches of security, but there is the potential for shoplifting from our boutiques or risk to our collections."

Security officers are able to monitor live video remotely from monitoring stations in either building, selecting camera views

in sensitive areas for display on overhead monitors. Camera views are also sent immediately to these overhead displays in the event of an alarm through an integration of the video and alarm systems.

Museum management has expressed an interest in video analytics to further enhance video system effectiveness. Video analytics, for example, could trigger an alert automatically if an individual enters a building through an emergency exit, goes into a restricted area or loiters for longer than a predetermined period of time in an exhibit area.

People-counting analytics would also be useful to keep track of visitor numbers in different exhibit areas, noted Butler. "We currently use infrared cameras and sensors in door mullions, but as some of this technology gets older, we'd look at using the video surveillance system for people counting and put it to multiple use."

Between the two facilities, the Museum Corporation has 550 cameras, providing coverage of all access points, the outside grounds, the exhibit spaces and all of the vaults and storage areas.

As the CIO at the time, Butler paid special attention to how much bandwidth the video surveillance system would consume. "That was a huge consideration because we also have IP telephony going across the network, but we assessed the bandwidth usage of the system and concluded that we could handle it well with our current network infrastructure. And, sure enough, we haven't experienced any quality of service problems."

Butler gives March Networks high marks for reliability and ease of use.

"Other than a rare hard drive failure, the system has been very dependable and new staff coming on board have been able to learn how to use it with very little training." ✨