

IN BRIEF

Industry

- » Nonprofit

Challenge

- » Difficulty implementing private cloud infrastructure due to slow access to files and applications
- » Wanted to avoid expensive server upgrades project (CN\$210,000)
- » Needed to improve disaster recovery plan

Solution

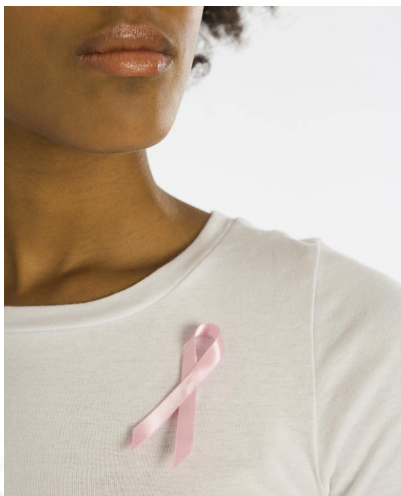
- » 41 Steelhead appliances deployed across Canada

Benefits

- » 35 servers consolidated to the private cloud
- » Substantial improvement accessing e-mail and HTTP applications
- » Able to deploy VoIP without bandwidth upgrades
- » Increased productivity and employee satisfaction
- » Secure disaster recovery plan



Canadian
Cancer
Society



Canadian Cancer Society

Riverbed® Steelhead® Products Enable Private Cloud Infrastructure at the Canadian Cancer Society

The Canadian Cancer Society (www.cancer.ca) is a national, community-based organization of volunteers that strives to research, prevent, and find potential cures for cancer. The largest charitable funder of cancer research in Canada, the Society has contributed close to \$47 million to fund a broad spectrum of cancer research – including basic laboratory, behavioral, palliative care, and prevention research and research that will directly impact clinical practices and treatment. It has two national offices (in Toronto and Ottawa), 10 provincial and territorial divisions, and more than 600 community locations. The Society consists of 170,000 national volunteers and a full-time staff of 1,200 people.

Aiming to eliminate cancer and enhance the lives of those already living with cancer, the Society organizes fundraising and cancer awareness events, collects donations, supports advocacy campaigns, and provides emotional support to cancer patients and their families through national and local community divisions.

Challenge: Aging Servers, Limited Employee Productivity, and Needed Costly Upgrades

The Ontario Division was first faced with the challenge of upgrading their remote servers, which were aging and becoming very costly to maintain. Upgrades were going to cost up to CN\$210,000 total. The Ontario Division also needed to address the problem of backing up the servers over the network. If the upgraded servers failed, the Ontario Division's many remote locations would be unable to function for days until replacement equipment could be installed at a site. Because the Ontario Division has remote locations throughout Ontario, this presented a problem for Director of IT Gerald Holmes and his team.

The Canadian Cancer Society's thirty-five offices are connected by a wide area network (WAN). The Ontario division had a total staff of 17 people managing the organization's one data center, which included 26 standalone servers, as well as 35 distributed file and print servers at branch locations.

The Society wanted to move towards a private cloud infrastructure, which would involve consolidating and then virtualizing the servers in remote offices. "We needed to consolidate and virtualize these servers to our private cloud so I could properly manage them and not worry about backing up over the WAN," said Holmes. The Society also wanted to make sure that users in their remote offices would have faster response times while accessing their files and applications.

While adopting a private cloud model had long been the goal, performance of applications over the WAN had made this effort nearly impossible. Specifically, the Ontario Division was looking for a solution to improve the speed of email and HTTP applications over the WAN. Employees that tried to access file servers had to wait several minutes for their files to download, limiting productivity and causing dissatisfaction. "I wanted to be able to give the users in the field offices a decent response time when they tried to access their files and applications from a central location," said Holmes. "We needed a significant impact on performance."

Because the Ontario Division's remote offices are manned by non-technical staff, they were also challenged to find a device that local employees with limited technical knowledge would be able to install on their own.

These challenges led the Ontario Division to research WAN optimization technology in order to improve their application response times, allow them to consolidate servers to the private cloud, and find a simple and user-friendly solution that could be used by non-technical employees in remote sites.

Solution: 41 Riverbed Steelhead Appliances Deployed

Holmes and his team wanted to transition to a private cloud computing model to avoid an upgrade of their aging distributed servers, but they also wanted to improve employee productivity. To accomplish this, the Ontario Division selected Riverbed Steelhead appliances. When Holmes ran a pilot program with the Riverbed Steelhead appliances, the Ontario Division noticed significant application performance benefits. "We achieved the data transfer speeds that we'd been promised," he said. "We were literally in a position where we could not remove the device after we tried it out."

Holmes was also very impressed by Riverbed's position in the Gartner Magic Quadrant. "Riverbed's placement in that particular report definitely came into play when we decided to research various WAN optimization solutions," said Holmes.

Holmes also chose the Riverbed Steelhead appliance solution because of its ease of installation. Because the Ontario Division's remote offices are manned by non-technical staff, the Riverbed product was a good fit because it could be installed by someone with very limited knowledge of technology. "We chose the Riverbed solution for the simplicity of installation and operation of the device. It had elegant simplicity; it was literally plug-and-play, which was very important to us," said Holmes.

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With more than 40 devices deployed across Ontario, Holmes also utilizes the Riverbed Central Management Console (CMC) to view how the WAN traffic is being optimized in each office. "It makes the whole management process very simple," he said.

Benefits: Successful Transition to a Private Cloud and Improved Disaster Recovery Strategy

With the Steelhead appliances in place, the Ontario Division was able to reduce their server count by 35 servers, which they no longer have to upgrade, repair, and maintain. Instead, these servers are now centralized as part of the organization's private cloud infrastructure, which also means that these servers don't need to be backed up over the WAN every night. "We no longer have unnecessary tasks that needed to be attended to and checked by the staff, so we have saved money in manpower," said Holmes.

Because the staff no longer has to focus on maintaining the 35 servers that were removed, they now are able to focus their work on the resources in the Ontario Division's private cloud. As part of this new infrastructure, the Ontario division now has seven VMware servers and that host 98 virtual servers, with only a handful of standalone servers for functions that could not be virtualized. "Running a private cloud infrastructure is more efficient for us. Because we have fewer distributed IT assets to maintain, we have been able to easily manage more complexity and increase our use of virtualization and other technologies, without even increasing our staff," said Holmes.

The Ontario Division has also been able to improve employee satisfaction through much faster response times of email and other applications, especially HTTP applications. "Our internal satisfaction is the biggest benefit we've experienced," said Holmes. "The better response time on email access has been our biggest area of improvement."

Faster response times also resulted in a major productivity increase for the organization. Although the Society did consolidate some file servers to their private cloud before the Steelhead appliances were installed, employees would have to wait minutes to download files from those servers. Now, their downloads are instantaneous, regardless of where the server is located. “The wait times

“We got the speeds and the transfer rates that we’d been promised. We were literally in a position where we could not remove the device after we tried it out.”

built up, caused dissatisfaction, and distracted people from their jobs,” said Holmes. “With the Steelhead appliances in place, we have eliminated all of the distractions of slow response times.”

The private cloud infrastructure enabled by the Steelhead appliances has also provided more flexibility for the Ontario Division. For example, they were able to relocate their data center from headquarters to a remote site

without users experiencing any degradation in service; in fact, employees did not notice that the data center had been moved at all. “The Steelhead appliances made it very easy for us to relocate that office without building an enormous, very high bandwidth network,” said Holmes.

The Ontario Division was also able to implement a VoIP system, without having to upgrade bandwidth circuits. Because the Steelhead appliances removed so much data from the WAN, there was more room for voice traffic to travel over that same network. “Before Riverbed, each location had its own independent voice system, which was difficult to maintain and not user friendly. With the Steelhead appliances in place, we were able to eliminate those independent systems and run one VoIP system over the WAN for all our locations,” said Holmes.

“With the Steelhead appliances in place, we have eliminated all of the distractions of slow response times.”

Riverbed has also helped the Ontario Division optimize their disaster recovery (DR) processes. “We wanted to set our DR site up with a minimum amount of hardware on the site. The most important part of the DR is the protection of the data,” said Holmes. “I can avoid transferring data over again using the Steelhead product.” With the Steelhead appliances in place, Holmes and his team only need one VMware server at the DR site, instead of six or seven.

SUMMARY

Faced with an expensive server upgrade project, the Ontario Division of the Canadian Cancer Society wanted to transition to a private cloud infrastructure. However, poor performance of email and HTTP applications over the WAN were a major barrier.

The Ontario Division chose Riverbed Steelhead appliances for their private cloud initiative because it was impressed with their ease of installation, excellent performance, and placement on the Gartner Magic Quadrant.

Steelhead appliances have enabled the Canadian Cancer Society to improve the efficiency of their IT department, reduce costs, and improve employee productivity through faster application response times.



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About Riverbed

Riverbed Technology is the IT infrastructure performance company. The Riverbed family of wide area network (WAN) optimization solutions liberates businesses from common IT constraints by increasing application performance, enabling consolidation, and providing enterprise-wide network and application visibility – all while eliminating the need to increase bandwidth, storage or servers. Thousands of companies with distributed operations use Riverbed to make their IT infrastructure faster, less expensive and more responsive. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com



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Riverbed Technology
199 Fremont Street
San Francisco, CA 94105
Tel: +1 415 247 8800
Fax: +1 415 247 8801
www.riverbed.com

Riverbed Technology Ltd.
Farley Hall, London Road
Binfield
Bracknell
Berks RG42 4EU
Tel: +44 (0) 1344 401900

Riverbed Technology Pte. Ltd.
391A Orchard Road #22-06/10
Ngee Ann City Tower A
Singapore 238873
Tel: +65 6508-7400

Riverbed Technology K.K.
Shiba-Koen Plaza Building 9F
3-6-9, Shiba, Minato-ku
Tokyo, Japan 105-0014
Tel: +81 3 5419 1990

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