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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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**IN BRIEF**

**Industry**

- » Nonprofit

**Challenge**

- » Expensive server upgrades project (C\$210,000)
- » Improvements to disaster recovery plan
- » Slow access to files and applications

**Solution**

- » 41 Steelhead appliances deployed across Ontario

**Benefits**

- » 35 servers consolidated to data center
- » Substantial improvement in e-mail and HTTP applications
- » Increased productivity and employee satisfaction
- » Secure disaster recovery plan



**Canadian  
Cancer  
Society**



## Canadian Cancer Society

### Riverbed® Steelhead® Products Improve Email and Application Response Times at the Canadian Cancer Society

The Canadian Cancer Society ([www.cancer.ca](http://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 C\$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 Costly Upgrades Needed

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 estimated to cost up to C\$210,000 total. 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 on-site which presented a problem for Director of IT Gerald Holmes and his team.

The Ontario Division had trouble with slow applications that did not run very well over their existing WAN, and were looking for a solution to improve the speed of email and HTTP applications. Employees who 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," said Holmes. "We needed a significant impact on performance."

Also, the Ontario Division needed to address concerns about backing up data over the WAN and further impacting network performance. The Canadian Cancer Society's thirty-five offices are connected by a wide area network (WAN). A total staff of 17 people managed the organization's data center, seven VMware servers, eight Citrix servers, 98 virtual servers, and a few standalone servers. Although the Society wanted to centralize and virtualize more of its server infrastructure, the performance of the WAN was insufficient and made this effort nearly impossible. Holmes and his team decided that they needed to centralize their IT environment. "We needed to consolidate these servers so I could properly manage them in the data center 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.

Finally, because the Ontario Division's remote offices do not have technical staff on-site, they were also challenged to find a solution 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 their servers, and find a simple and user-friendly device that could be used by non-technical employees in remote sites.

### **Solution: 41 Riverbed Steelhead Appliances Deployed**

Holmes and his team wanted to consolidate servers to avoid upgrading aging distributed servers and improve employee productivity. In order to consolidate, the Ontario Division

**“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 Riverbed devices after we tried them out.”**

selected Riverbed Technology 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 Riverbed devices after we tried them 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 solution because of its ease of installation. The Riverbed product was a good fit because it could be installed by staff with very limited knowledge of technology. “We chose the Riverbed solution for the simplicity of installation and operation of the device. The Riverbed solution had elegant simplicity; it was literally plug-and-play, which was very important to us,” said Holmes.

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With 41 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: Consolidation of Remote Servers to Data Center and Improved Disaster Recovery Strategy**

With the Steelhead appliances in place, the Ontario Division was able to eliminate 35 physical servers and virtualize them in the centralized data center. Consequently, Holmes’ team no longer needed to back up these servers over the WAN every night. The Riverbed Steelhead deployment also enabled the Ontario Division to make two critical infrastructure improvements, by allowing them to relocate their data center without an outage and virtualize servers in their DR site. “We no longer have remote servers that needed to be attended to and checked by the staff, so we have saved money in manpower,” said Holmes.

The Ontario Division has been able to improve employee satisfaction as a result of faster response times for 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 have resulted in a major productivity increase for the organization. Although the Society consolidated file databases to their data center before the Steelhead appliances were installed, employees would have to wait minutes to access these databases

on the file servers and download files. Now, their downloads are instantaneous according to Holmes. "The wait times built up, caused dissatisfaction, and distracted people from their

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jobs," said Holmes. "With the Steelhead appliances in place, we have eliminated all of the distractions of slow response times."

Because the Ontario Division recently relocated its data center from its headquarters to a remote site, employees now connect servers over the WAN. Because

of the Steelhead appliances, users experienced no degradation in service and the results were as if the data center had never 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.

After the Ontario Division decided to virtualize a number of their servers using VMware, the need for WAN acceleration for their disaster recovery plan became a priority. "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, instead of six or seven.

**"We have been able to create more complexity in our environment by adding VMware and other technologies without even increasing our staff."**

## SUMMARY

The Ontario Division of the Canadian Cancer Society needed to upgrade its remote servers, which would have cost up to C\$6,000 per site, creating a total cost of C\$210,000. In addition, employees in many locations had poor access to email and HTTP applications.

The Ontario Division chose Riverbed Steelhead appliances 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 productivity through faster response times for email and improved access to other applications.