Canadian Cancer Society

Riverbed’s End-to-End IT Performance Solutions Save Money that Goes Toward Cancer Research

The Canadian Cancer Society (www.cancer.ca) is a national, community-based organization dedicated to fighting 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 – that will directly affect 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 volunteers and a full-time staff of 1,200 people.

Challenge: Application Performance over a WAN

The offices of the Canadian Cancer Society’s Ontario division are connected by a wide area network (WAN). After years of supporting servers in remote offices, the division’s IT director, Gerald Holmes, wanted to move toward a private cloud infrastructure that would allow him to consolidate IT resources in a single location. Part of reason for consolidation was the difficulty of backing up the 35 remote servers. “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,” says Holmes. In addition, the servers were at the point of needing to be upgraded, at a cost of approximately $200,000.

At first, the slow performance of applications over the WAN made consolidation nearly impossible. Employees had to wait several minutes for their files to download, limiting productivity and causing dissatisfaction. “I wanted to give the users in the field offices a decent response time when they accessed their files and applications from a central location,” says Holmes. “We needed to make a significant improvement in performance.”

This led Holmes and his colleagues to consider a WAN optimization solution. Because the Ontario division’s remote offices are manned by non-technical staff, any solution IT adopted had to be something that local employees with limited technical knowledge could install on their own.

Solution: WAN Optimization and Network Visibility Products

A pilot program with Steelhead® appliances from Riverbed® Technology showed significant performance improvements for users in remote offices. “We achieved the data transfer speeds that we’d been promised,” Holmes notes. “We were literally in a position where we could not remove the appliances after we tried them out.”

Holmes was also impressed by analysts’ high evaluations of Riverbed technology. “That definitely came into play when we decided to research various WAN optimization solutions,” he says. In addition, the Riverbed Steelhead appliances also met the requirement for ease-of-installation. “The Riverbed solution has elegant simplicity. It was literally plug-and-play, which was very important to us,” Holmes adds.
The society deployed 40 Steelhead appliances across Ontario. Holmes immediately began using the Riverbed Central Management Console (CMC) to view how WAN traffic was being optimized in each office. “It makes the whole management process very simple,” he said. However, he also wanted visibility into the end-to-end (PC-to-application server) performance. “We could look at the performance of a router, for example, using CMC, but not see traffic between an individual PC and an application server,” he explains. “People would complain about access to a particular application, saying response was slow, and we wouldn’t know whether we were having network capacity problems or router problems or it truly was the application server having response problems.”

Riverbed’s Cascade® network performance monitoring solution solved this problem. Cascade provides network monitoring, network traffic recording and analysis, dependency mapping and performance management capabilities that collect traffic data on the network, calculate performance metrics and alert the IT staff to problems before end-users are affected. “Because we’re running 40 offices across the provinces, we’re using Cascade daily. There are always going to be issues,” Holmes says.

**Benefits: Successful Transition to a Private Cloud and Faster**

With the Steelhead appliances in place, the Ontario division was able to reduce its server count by 35 servers, which they no longer have to upgrade, maintain, or back up over the WAN every night. “We no longer have unnecessary tasks that need to be attended to and checked by the staff, so we have saved money in manpower,” Holmes explains.

As part of this new infrastructure, the Ontario division has seven VMware servers that host 98 virtual servers, with only a handful of stand-alone servers for functions that could not be virtualized. Employee satisfaction is greatly improved, thanks to much faster response times for email and other applications, regardless of where the server is located. “Our internal satisfaction is the biggest benefit we’ve experienced,” Holmes notes.

The private cloud infrastructure enabled by Riverbed made it possible to relocate the society’s data center from headquarters to a remote site without users experiencing any degradation in service; in fact, they didn’t even notice that the data center had been moved. “The Steelhead appliances made it very easy for us to relocate that office without building an enormous, very high-bandwidth network,” says Holmes. Because the Steelhead appliances removed so much data from the WAN, the Ontario division was able to implement a VoIP system without having to upgrade bandwidth circuits. They were also able to create a more efficient disaster recovery process. With the Steelhead appliances in place, Holmes and his team only needed one VMware server at the DR site instead of six or seven.

Cascade provides the network visibility Holmes needs to quickly address complaints about poor performance. Whether it’s someone listening to Internet radio or a more complicated issue such as an incompatibility between certain PCs and file servers, Cascade rapidly identifies the cause. In the latter situation (for example, poor response when PCs running Windows XP accessed a 2008 file server), Holmes estimates that without Cascade, the IT staff would have needed days to isolate the problem. “It would have taken working through all of the devices between the end user and the server, trying to figure out what to look at, and there are 250 users in the building,” he explains. “With Cascade, it took
about half an hour to isolate the problem.” He also credits Riverbed technical support, which works especially well in conjunction with a Cascade deployment. “The Riverbed technical support team is amazing. They really add value, and it’s a lot easier when you’re asking them a specific question,” Holmes says. “Cascade let us isolate a problem enough to know what questions to ask.” Riverbed’s end-to-end portfolio of IT performance solutions makes everyone at the Ontario division of the Canadian Cancer Society more productive, including the IT staff itself. Concludes Holmes, “Because we have fewer distributed IT assets to maintain, and we can identify even complicated performance problems very quickly, and we have been able to manage a growing workload without increasing our staff.”

**SUMMARY**

The Ontario division of the Canadian Cancer Society wanted to transition to a private cloud infrastructure but poor performance of email and HTTP applications over the WAN were a major barrier. Riverbed Steelhead appliances were chosen for their ease of installation, excellent performance, and high analyst ratings. The 40 Steelhead appliances have enabled the Society to improve the efficiency of the IT department, reduce costs, and improve employee productivity through faster application response times. Cascade network visibility products allow the IT staff to quickly identify the causes of even complex performance problems. Thanks to Riverbed’s end-to-end IT performance solutions, the Canadian Cancer Society is able to manage a growing IT workload without an increase in staff.
About Riverbed
Riverbed delivers performance for the globally connected enterprise. With Riverbed, enterprises can successfully and intelligently implement strategic initiatives such as virtualization, consolidation, cloud computing, and disaster recovery without fear of compromising performance. By giving enterprises the platform they need to understand, optimize, and consolidate their IT, Riverbed helps enterprises to build a fast, fluid and dynamic IT architecture that aligns with the business needs of the organization. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com.