



@business on demand™

What is it again? ▶ Find out [now](#).



search



About itbusiness.ca
Advertise with itbusiness.ca
Contact us
Subscribe Online

Canada's IT
Connection

? Get Answers

- Data management
- e-Government
- Networking
- Wireless
- Channel
- Security
- Storage
- Training
- Infrastructure
- E-Business
- IT Opinions

* Subscriber Services

- Print Publications
- IT e-Newsletter
- Our Partners



Advertise With Us ⓘ
Privacy ⓘ
Site Map ⓘ
Help ⓘ

Monday, November 24, 2003

Communications & Networking, May 2003, Vol. 6 No. 5

print story email to a friend

Vancouver credit union migrating to storage-area networking model

4/25/2003 3:30:32 PM - ■

by *Dianne Daniel*

Challenging. Cumbersome. Costly. These are just some of the words Tony Fernandes uses to describe data management in a decentralized computing environment — a task he's more than happy to leave behind him as he joins a growing number of financial organizations willing to challenge the distributed

computing model.

Fernandes, vice-president of technology infrastructure for Vancouver-based Inventure Solutions (the IT subsidiary of Vancouver City Savings Credit Union) is in the middle of migrating VanCity to a centralized storage model. The project includes updating the company's wide-area network (WAN) and reducing the number of its servers from close to 50 to a cluster of six. The intent is to move IT functionality away from VanCity's 45 remote locations, consolidating it across two data centres in order to make it easier to manage the data.

"The cost per terabyte (of storage) has decreased so dramatically that where previously we couldn't afford to put anything other than key banking applications on a storage-area network (SAN), now it's much more affordable," says Fernandes. While VanCity always maintained mission-critical banking applications in a centralized environment, file and print services, e-mail and other distributed applications were managed and maintained locally, with each remote location operating as "its own mini data centre," he adds.

Moving to IP a key part of the simplification strategy

To enable the transition to a SAN model, VanCity's first step was to increase the bandwidth on its WAN. The existing T1 network, leased from Telus Corp., was upgraded to include a fibre network with 10 Mbps Ethernet connections to each branch location and additional 100 Mbps Ethernet links to key locations. The copper T1 links remain the primary path for voice and automated teller machine traffic, while the fibre connections provide the primary path for data.

To ensure the network is highly available, the routers are programmed to detect trouble on both the fibre and T1 networks, and reroute traffic accordingly in the event of a failure.

"Part of the challenge in getting there was the fact that the fibre networks are IP-based," Fernandes says. "In order to achieve this goal of redundancy we had to get voice-over-IP."

Moving to Internet Protocol (IP) is a key part of VanCity's simplification strategy as it attempts to limit the number of protocols and operating systems on its network. According to Ross Allen, area manager for Canada of Hopkinton, Mass.-based EMC Corp., maturity in the IP market is one of the key drivers propelling financial institutions like VanCity to consider SAN scenarios.

Read Up

- Computing Canada
- Computer Dealer News
- EDGE
- Technology in Government
- Communications and Networking
- Direction Informatique
- IT Business Report

ITBusiness.ca asks :

Has open source software made its way into your corporate environment?

We use open source on our back-end servers and will think about the desktop. Yes, on back-end servers, but have no plans for the desktop.

We have deployed an open source desktop and are thrilled with it.

We have experimented with an open source desktop, but found it lacking. We are running open source on both our desktop and servers.

Vote
Result

"The prohibitor on longer distance disaster recovery or business continuity planning has not been the technology, it's been the vehicle in-between," says Allen. "IP is going to enable more people to take advantage of it."

Devices were under-utilized

Another driver is return on assets as companies aim to have 70 to 85 per cent of their storage utilized versus the 20 to 30 per cent that is typical in the industry, he adds.

Fernandes agrees the 45 servers the credit union ran previously "weren't really being taxed from a CPU and performance standpoint." However, while the centralized model provides better utilization, it also introduces the worry of grinding business to a halt if something goes wrong. "If we have a service disruption, we're impacting 40 branches, whereas in a decentralized model, if a server breaks it's only one branch," says Fernandes.

Now that the server consolidation strategy is in full swing — all branches will be on the SAN by mid-summer — those fears have subsided. The cluster model is not only performing faster, but is also enabling VanCity to increase its availability. "From time to time one of the servers fails," notes Fernandes, "but our customers see nothing because the other server just takes over automatically."

Once the SAN is complete, the next step will be to get the two data centres (one is used as a disaster recovery site) talking to each other using IP-based software for data replication and mirroring.

"That will provide greater flexibility and protect the main thing we're trying to protect, which is the data," says Fernandes. "Hardware is a bit of a commodity, but the data is what's irreplaceable."

 print story  email to a friend

[Back](#)

[Back to Top](#)

@ business on demand™

What is it again? ▶ Find out [now](#).



IBM

Copyright © 2003 Transcontinental Media Inc. All rights reserved.