



## Vidéotron Telecom Migrates 171 Servers From Chicago to Montreal in Seven Weeks With VMware Software

Vidéotron Meets Tough Deadline Using VMware Virtual Infrastructure and Engaging VMware Technical Account Manager (TAM) Program

### Results

- Reduced costs by 70 percent
- 78 percent server consolidation (4.5:1) on blade servers
- 78 percent greater CPU utilization
- Reduced server deployment time from 24 hours to 90 minutes
- Improved application availability by 50 percent
- Improved performance
- Increased management flexibility with snapshots, change control, ability to move servers without hardware dependence
- Eliminated hardware dependence, resulting in cost savings

### Seven-Week Migration Plan Seems Impossible

Vidéotron Telecom Ltd. (VTL), a subsidiary of Quebecor Media Inc., is a state-of-the-art business communications provider delivering robust, high-quality services to large and medium-sized businesses, Internet Service Providers (ISPs), Application Service Providers (ASPs), broadcasters and government institutions. VTL offers customers a complete portfolio of network solutions as well as data, hosting Internet, local and long distance telephony and studio-quality audio-video services.

VTL supports more than 25,000 users and 600 servers for internal and external clients, offering turn-key IT solutions including managed services for its customers. When one client wanted to migrate 128 production servers plus 43 development and test servers from Chicago to VTL's headquarters in Montreal in two months, the VTL technical staff knew it would be a challenge.

"Ideally, we would have more time to prepare ourselves to do what was required for the migration of a datacenter from one city to another," says Alain Dagenais, director of operations for VTL. "Our present datacenter didn't have the capacity to receive these 128 production servers plus another 43 development and test servers in such short time. It would have been difficult to get a new datacenter in place and expensive to get the raised floor space, electricity and other requirements necessary to build a new datacenter."

Dagenais and the Windows Administration team, consisting of Corey Vafi, Louay Farah, and Yann Sloterdijk, investigated how to migrate the servers without disrupting the client's business. One option was to consolidate the client's servers in Chicago, reproduce the servers in VTL's Montreal datacenter, and then transfer the services. "We couldn't do that because there wasn't enough time," says Vafi. "The only thing we could do was to bring these servers into logical environments by using any software that would convert physical servers to virtual servers, using VMware P2V Assistant or P2V tools from other vendors. Because VMware has been in the market longer than anyone else, they had the best reputation. We also had direct contact with VMware already and had confidence in their products, so we decided to go with VMware P2V Assistant."

### Study Reveals Cost Effectiveness of VMware Virtual Infrastructure

Before beginning the project, VTL conducted a study showing the total cost of ownership (TCO) for the next three years of operations. The company looked at many cost factors, including square footage of data center space, licensing fees, manpower, management and operations. "We looked at different formulas to calculate costs," says Vafi. "We found that using VMware software would give us a 70 percent reduction in costs over the next three years. The cost of bringing servers to Montreal by itself would have cost more than putting a virtual infrastructure in place."

**"As a service company, we want to provide the best solution to our clients, fully meeting their needs. Because we are able to use virtual infrastructure technology, we were able to give our clients the benefits of this technology – a fast migration from physical to virtual environment, reduced costs, higher performance and high availability."**

*Alain Dagenais  
Director of Operations, Vidéotron*



#### VMWARE VIRTUAL INFRASTRUCTURE AT WORK

- ESX Server Virtual Infrastructure Nodes on 28 servers: 2 blade chassis with 14 IBM HS20 servers in each
- Blade servers are attached to SAN switch attached to IBM FastT 900 SAN
- Migrated 128 production servers plus 43 test and development servers
- Guest operating systems: Microsoft Windows 2000, Windows 2003 and Windows NT4
- Applications in virtual machines include: IBM Domino servers, Microsoft SQL, Citrix, and custom applications supporting 1,200 client sessions

### Enlisting a VMware TAM Helps Make the Impossible Possible

Facing a large project with a short deadline, VTL chose to engage a VMware Technical Account Manager (TAM) to help ensure the overall success of the project and apply best practices per the VMware Virtual Infrastructure Methodology. The VMware TAM program provides customers with a technical VMware insider who serves as their organization's conduit into all groups within VMware, including product management, support and the executive team. The VMware TAM was assigned to VTL to validate the project plan, identify risks and apply best practices throughout the deployment life cycle.

The VTL team says the VMware TAM was a key ingredient to their success in meeting their client's needs. "The TAM helped keep us on track through the deployment," says Vafi. "I would recommend the TAM program to anyone. To gain confidence and validate processes, as well as get top-notch support, it is best to engage a TAM."

### Cost Savings and Increased Flexibility With Virtual Infrastructure

By implementing virtual infrastructure, VTL was able to provide its client with a cost-effective solution in record time. VTL and its client have also realized the following benefits:

- **Reduced Costs by 70 Percent.** Evaluating factors including floor space, software licensing fees, hardware costs and utility fees, Vafi estimates a 70 percent cost savings by implementing virtual infrastructure.
- **Achieved Server Consolidation Rate of 4.5:1.** VTL was able to consolidate its client's 128 production servers onto 28 blade servers. Also, the combination of ESX Server on blades saved a tremendous amount of datacenter space, power, and management resources.
- **Improved CPU Utilization by 78 Percent.** Instead of having many underutilized servers, VTL was able to have fewer, highly utilized servers.
- **Server Deployment Time Reduced by More Than 87 Percent.** Whereas it used to take about 8 hours to deploy a server, with virtual machines it takes about 20 minutes, including setting all permissions.
- **Improved Application Availability by 50 Percent.** Vafi says performance and availability has increased with the virtual infrastructure. "It allows us to support the client's applications," says Vafi. "Also, the performance is better than before for many applications."



- **Increased Flexibility.** The Win Admin Team says working with virtual machines instead of physical servers provides more flexibility. "We have live cloning of servers, snapshots and change control," says Vafi. "I can take a physical server and bring it into a virtual environment. I can take snapshots of my running environment, and if anything goes wrong, I can revert to that snapshot. After using VMware software I wouldn't want to go back to purely physical server management."
- **Increased Control.** With VMware VirtualCenter, VTL system administrators can manage servers from a central console. "VirtualCenter gives us flexibility for everyday administration," Vafi says. "It has removed the drudgery from management duties."
- **Eliminated Hardware Dependence.** The virtual infrastructure frees VTL from dependence on hardware, resulting in cost savings. "I love that I can move servers from one place to another without being dependent on the hardware," says Vafi. "It doesn't matter whether the servers are brand new or not, as long as they have enough resources and are operating well. That we do not need to consider hardware for each new virtual machine, or worry about having compatible hardware, is a huge cost savings."

## Optimal Customer Service With Virtual Infrastructure

The VTL Win Admin Team says VMware software and the assistance of the VMware TAM enabled VTL to meet its client's needs with a successful, cost-effective solution. "As a service company, we want to provide the best solution to our clients, fully meeting their needs," Dagenais says. "Because we are able to use virtual infrastructure technology, we were able to give our clients the benefits of this technology – a fast migration from physical to virtual environment, reduced costs, higher performance and high availability."

Vafi says that in addition to these benefits to VTL clients, virtual infrastructure brings increased flexibility and ease of management for him and his staff. "Because it is easier for us to manage the servers in a virtual environment, we can quickly react in order to best serve our clients," he says."

## One Year Later

Since the delivery of project, one full year has passed, and VTL is happy with the results. Vafi says, "The environments are more robust and that the up-time has been improved."

VTL is also using VMware software as an important part of its Disaster Recovery plans. "We are proud to be able to bring up all critical servers within a couple of hours in case of a major event."

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