

# › REJUVENATING TECHNICAL SUPPORT WITH SELF-SERVICE AND IP CONTACT CENTERS



**NORTEL**



## Case Study

### Help desks go IP at CGI Group, Inc.

#### CGI Group, Inc.

The information technology consulting giant rejuvenates its technical support units with self-service and IP contact center solutions.

#### The scenario

It has been eight years, but Montréal residents will not soon forget January 7, 1998 — the day Quebec was hit by the worst ice storm in the region's history. Thick ice toppled 15,000 trees, blocked roads, knocked out power for 750,000 homes — and froze business operations throughout the province.

“One- to two-week power failures forced many businesses to operate with skeleton staffs, shut down, move to remote disaster sites or rely on generators that in some cases are being used beyond their normal capacity,” wrote Tim Ouellette in *Computerworld*. “There are cold, hard lessons to be learned for IT. Disasters can occur without major physical damage to computers or their buildings.”

Alec Ko, Partner and Executive Consultant with CGI Group, Inc., remembers it well. His team of more than 500 telephone help desk specialists was sidelined by the disaster that shut down even the giant corporations in Quebec and parts of Ontario.

“Our equipment was fully functional on emergency power, but our staff couldn't get to work because of the road conditions,” Ko recalled. “Even if they could have gotten here, there would have been no heat, lights, food or water for them, because utility power was out for days.”

## Customer:

CGI Group, Inc., one of the largest independent information technology (IT) services firms in the world

## Country:

Canada

## Industry:

IT strategic consulting and outsourcing

## Challenge:

To set up two new help desk centers that would reuse existing hardware and applications, reduce cost and complexity, provide resilience through geographic redundancy and give contact center workers the freedom to stay accessible while not at their desks

## Solution:

A Nortel contact center solution that offers the cost savings and flexibility of IP and wireless LANs while simultaneously supporting traditional equipment and configurations

This event prompted Ko to reconsider the company's contact center strategy, where help desk functions for a very large client base were centralized in one Montréal office. However, it was difficult to make a business case based on what-ifs, when the existing system was working just fine. With any luck, the storm of the century wasn't likely to be repeated until the next century.

Fast-forward to the twenty-first century. In 2000, CGI upgraded from a centrex-based call center to a Nortel Meridian Option 81C with skill-based routing on a Nortel Contact Center — but the contact center was still in a single location.

Four years later, when the contact center had to relocate due to building renovations, Ko had the perfect catalyst for adding geographic redundancy.

CGI set out to find a solution that would distribute contact center functionality across two buildings, five kilometers apart, without adding undue burden in configuration and management. The new system should also have the potential to support more remote agent locations in the future and reduce the cost and complexity of adding new agent seats. "After extensive consideration, CGI concluded that the only way to cost-effectively address these requirements was with IP-based telephony," Ko said. "Our offices in Montréal and Toronto had already been using voice over IP internally, and based on our experience with thousands of users, we were confident we could count on VoIP for customer-facing applications as well."

"First, we knew that one converged network would be much easier to manage and modify than separate voice and data networks. Second, physical agent location becomes irrelevant, which would open up new options for mobile, remote and home-office agents. Third, we would reduce costs in several ways. It was easy to make a case to the bean counters upstairs."

## The solution

In February 2005, CGI implemented an IP contact center solution including **Nortel Contact Center**, **Media Processing Server** self-service and **CallPilot** unified messaging.

This comprehensive Nortel solution provides CGI with efficiency and resiliency in two new locations while retaining previous investments and business strategy. All components are integrated across the **Communication Server 1000E** IP environment, which delivers hundreds of features for 565 agents, using both the firm's existing telephone network and IP LAN. Both facilities can use common tools and standard reporting modules.

The solution also introduced an IP softphone installed on every agent's PC so agents can work from any location with secure Internet access. During the next ice storm, for example, an agent can connect from home. New agent positions are supplied with Nortel IP telephones that provide displays and programmable keys. Connecting these directly to the Ethernet LAN makes it simple to complete moves, adds or changes without requiring a visit to the equipment closet. CGI continues to protect its prior investment by utilizing legacy Nortel Meridian telephone sets with the new solution giving double the efficiency.

Help desk agents and supervisors use Nortel's WLAN portfolio to move freely around the facility while remaining accessible to customers and being more productive. Nortel **WLAN IP Telephony Manager** provides the quality of service (QoS) needed for clear and reliable voice conversations. Supervisors and selected agents use the durable Nortel WLAN Handset 2210 on this network to stay connected when they're away from their desks — communicating by voice, e-mail, fax or Internet.

## The results

“Since the core business of this group is a contact center function, and our contracts and service level agreements are based on how well we handle call volumes, we were fairly optimized already,” Ko recalled. “But with this upgrade we are still gaining some significant advantages.”

### Seamless cutover

“We couldn’t take any chances in moving a high-volume 24x7 help desk,” Ko said. Customers couldn’t be inconvenienced during the move. The existing PBX, still under lease, was installed in the new network center as a backup, but it was never needed. Ko and his team transitioned 565 agents serving four major customers without incident. In fact, there haven’t been any “hits” to service level agreements since the new system was implemented.

### Ease of agent moves, adds and changes

“In a traditional PBX environment, every time we wanted to add new agents, we had to run network cable and telephone wires to the stations, make connections in a riser room, configure voice lines in the switch and configure data lines in the network,” Ko said. “With IP, we only have to pull one network Cat5 cable to a new agent position. And since numbers are attached to a phone set rather than a location, when agents move, you just pick up the equipment, move it and go.”

### Option to add remote agents

Some CGI customers prefer having their support staff on site. In the past, this has required CGI to deploy a remote peripheral shelf to extend the network to the customer location. “It was quite a headache,” Ko recalled. “With VoIP, we can simply establish a virtual private network over the Internet and connect agents anywhere in the world to our switch. Physical location is irrelevant.”

### Campus redundancy for resilience

“The Nortel Communication Server 1000E was the only option on the market that enabled us to split the core across locations many kilometers apart,” Ko said. “Other products required two separate infrastructures, which would have required twice the configuration effort.” CGI took advantage of a Nortel-exclusive feature for campus redundancy, whereby half of the call processing core is located in one building and half in another, connected with dedicated, redundant fiber. With this “split-core” configuration, if anything happened to one side of the server, calls would simply switch over to the other side without affecting users and enabling the contact center to stay fully functional.

### Full mobility for agents

During off-peak hours, when phones aren’t constantly ringing, agents now have the freedom and flexibility to leave their stations and walk around the building while continuing to field customer calls. Morale has improved, because agents are not tied to their desks for an entire shift. Service quality is enhanced because supervisors can roam around and assist agents as needed.

### Easy creation of self-service scripts

The Nortel Media Processing Server supports Voice eXtensible Markup Language (VoiceXML) — a dialect of XML for writing Web-empowered speech recognition scripts. In the past, CGI needed programmers with C++ experience to create self-service applications. VXML offers powerful new options in a popular, easy-to-use tool.



*“When customers call us — the firm to which they have entrusted their critical data and applications — they expect premium service. We deliver it with our Nortel IP contact center solution.”*

— Alec Ko, Partner and Executive Consultant, CGI Group, Inc.

## About CGI Group, Inc.

Headquartered in Montréal, Quebec, CGI Group, Inc. is one of the largest independent information technology (IT) services firms in the world. This public company, traded on Toronto and New York stock exchanges, reports more than \$3.7 billion (Canadian) in annual revenues and has 25,000 team members in 15 countries. CGI provides consulting and outsourcing services in technology management, application management, systems integration and development, and business process management.

[www.cgi.com](http://www.cgi.com)

## *Phased migration from traditional to IP telephony and reuse of existing servers and telephones*

CGI saved money by reusing their existing Nortel Contact Server, CallPilot unified messaging system and phone sets. "We had 500 traditional Nortel Meridian 2616 phones that we didn't want to replace," Ko said. "The Communication Server 1000E enables us to keep those old phones and add new IP phones as needed." CGI can migrate smoothly to VoIP on their timetable, without costly hardware upgrades and support both time division multiplexing (TDM) and VoIP networking side by side.

CGI is now positioned to grow into **Nortel Applications Center**, which brings together contact center, advanced speech, unified messaging and multimedia collaboration into a cohesive application environment. Each existing component of the portfolio will share common modules (e.g., the same reporting tool), a common interface and the same operations staff — making it much more effective and 'easy' to use, administer, maintain and enhance. As CGI's business changes and grows, CGI will be able to use the Nortel Applications Center to easily add new functionality or capacity with even tighter integration.

## Closing thoughts

What advice would Ko offer network administrators in a similar position? "If you're considering upgrading or moving your contact center, consider the new IP architecture or at least a hybrid TDM/IP environment. If you're creating a new contact center, definitely go with IP."

"If possible, go with a single-vendor solution. For our needs, only Nortel, with their Elite Advantage Channel Partner Bell Canada, was able to offer a complete solution, and in turn, offer optimal integration. We liked this approach; we didn't have the challenge of vendors pointing fingers at each other. Nortel Professional Services did an excellent job with the installation. We learned from those guys, and now our people are supporting the system completely."

CGI plans to expand the solution to other business units, to connect with a help desk in Toronto and potentially in other locations as well — to create a global, virtualized help desk operation.

Nortel is a recognized leader in delivering communications capabilities that enhance the human experience, ignite and power global commerce, and secure and protect the world's most critical information. Our next-generation technologies, for both service providers and enterprises, span access and core networks, support multimedia and business-critical applications, and help eliminate today's barriers to efficiency, speed and performance by simplifying networks and connecting people with information. Nortel does business in more than 150 countries. For more information, visit Nortel on the Web at [www.nortel.com](http://www.nortel.com).

For more information, contact your Nortel representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

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