# 



### **Customer Name**

Bell

**Bell Canada** Canada

### Challenge

- Build converged IP network
  infrastructure
- Achieve high network availability
- Translate advanced network capabilities into innovative, revenue-generating services

### Solution

 Cisco Services, including Focused Technical Support, Optimization Services for Service Provider Routing and Switching, Optimization Services for Mobility, Service Provider Test and Validation Services, Network Availability Improvement Support, Project Management Office

#### Results

- Achieved 99.999-percent network availability
- Accelerated time to market for new network services by significantly reducing software testing and certification
- Improved customer satisfaction, retention, and acquisition costs

## North American Carrier Achieves 99.999-Percent Network Availability Bell Canada transforms operations and accelerates time to market by teaming with Cisco Services.

### Challenge

Bell Canada is Canada's largest communications company, providing comprehensive and innovative communication services to large enterprise, small and medium-sized businesses, government, and consumer markets. Under the Bell brand, the company's services include local, long distance, and wireless phone services; high-speed and wireless Internet access; IP broadband services; information and communications technology services; and direct-to-home television services. Today a large percentage of Canada's businesses rely on Bell's network for their operations: a network that is the result of vision, dedication to market leadership, careful planning, and a strong partnership with Cisco Services.

In 2005, Bell Canada began executing a strategy to develop a new network architecture that could transport voice, data, and video over a single IP network and create a foundation for delivering advanced, value-added network services. The company chose to evolve its network to an IP Multiprotocol Label Switching (MPLS) architecture, based on Cisco® technology.

"Our first step was to establish the network footprint and increase network availability to the five nines level," says Glenn Ward, senior vice president of network operations for Bell Canada. "This would give our business customers confidence to migrate their services and provide the IP foundation that we needed for delivering innovative future services."

Bell Canada had invested in Cisco technology prior to 2005. However, in moving to a converged network, based on an MPLS architecture, the company recognized that the new technology was more complex than its existing data and voice networks. The new network would require significant changes to Bell Canada's established operating practices.

The Bell Canada team quickly recognized that to achieve its aggressive goals for developing new network capabilities and attaining five-nine reliability levels, it would be tremendously beneficial to have access to Cisco's resources and expertise. Bell Canada reached out to Cisco Advanced Services and began a journey that has transformed its network services operations.

# cisco.

"It is not just having resources assigned to you that makes the difference. The Cisco Services agreement gives us access to outstanding people and a breadth of expertise, knowledge, and support. This is what enables us to continue to evolve our capabilities and service offerings faster and with higher quality than if we were trying to do it on our own."

—Glenn Ward, Senior Vice President Network Operations, Bell Canada

## Solution

The first step toward helping Bell Canada achieve its goals was performing an assessment to ascertain its existing capabilities and processes. Cisco Services' Network Availability Improvement Support team conducted an Operational Risk Management Assessment, based on Information Technology Infrastructure Library audit practices. The audit resulted in numerous recommendations, which then became Bell Canada's work plan priorities.

The company then chose to begin its infrastructure and operational transformation through a subscription-based Cisco Services agreement that provides focused technical support, optimization services, test and validation services, and annual operational audits to drive continuous improvement. As part of the engagement, Bell and Cisco would adhere to a governance methodology for tracking business goals, project progress, and issues handling across both companies' business units and executive levels. Cisco Services also assigned on-site resources to Bell Canada's engineering, operations, and test lab organizations and dedicated a Cisco Service Delivery Executive to manage the engagement. Both Bell Canada and Cisco also named corporate executives as sponsors for the initiative.

"The Cisco Services agreement moved us from a transactional relationship with Cisco, where every engagement was a separately negotiated engagement, to a relationship where we have unfettered access to Cisco resources and capabilities," says Gid Morson, director of data technical support for Bell Canada. "Cisco people are embedded in our engineering technology and operations groups, enabling us to work smoothly together to evolve our capabilities."

Having dedicated Cisco expertise onsite was an important factor in helping Bell Canada move toward its goal of achieving 99.999-percent availability. Through Cisco Focused Technical Support Services, Cisco experts work in the Network Operations Center (NOC) alongside Bell Canada's team to deliver personalized operational and technical support. In addition to helping ensure holistic management of network issues, the Focused Technical Support Service provides critical mentoring opportunities. Both teams collaboratively monitor daily network events, identify issues and trends, and use the data to optimize Bell Canada methods and procedures. In addition, Cisco Services' proactive Network Optimization, Service Provider Test and Validation, and program management, and responsive Focused Technical Support offerings complement the dedicated, on-site mentoring resources. Bell Canada also took advantage of Cisco optimization services and innovative tools. Network health checks and syslog analysis enable Bell Canada's team to proactively identify and network performance, capacity, and security issues.

"Having Cisco resources in our NOC is absolutely critical for helping us train our resources specifically for the job, our environment, and best practices," says Morson. "An engineer can learn about BGP, OSPF, and all of those other wonderful acronyms, but when you come in front of a screen and actually have to maintain a network element in the network it's a completely different environment. There will always be issues with managing networks, but Cisco Services help us contain issues to successfully provide a high-availability network to our customers."

Another critical element of achieving five-nines availability is the Cisco Service Provider Lab and Test and Validation Lab Service. As part of this service, Cisco invested in a test facility that emulates Bell Canada's production network. Cisco and Bell Canada develop joint test plans for configurations and equipment. Test and Validation Services pre-test Cisco software code and engineering configurations before releasing them to Bell Canada for deployment and certification in Bell's network.

# 



"We are able to dramatically expand the scope of our certification testing," says Morson. "There is clear understanding between the two organizations of the network's technology and functionality to help ensure that code meets our requirements. The lab interlock translates into more thorough test practices, which results in better network reliability."

## Results

Bell Canada has consistently achieved its goal of 99.999-percent availability, thanks to the dedicated collaboration between its team and Cisco Services. The combination of comprehensive services and collaboration has given Cisco the confidence to establish a high-availability Service Level Agreement (SLA) with Bell Canada. Consistently excellent network performance has given Bell Canada the confidence to extend similar SLAs to its customers.

"Achieving five nines' represents fewer outages and improved service," says Ward. "We have significantly fewer outages in a network that is continually growing and now we deal with outages that span minutes instead of hours and days. That difference translates into pure savings." Cisco Services helped Bell Canada to significantly reduce network events, outage duration, and outage frequency, which has delivered significant operational cost savings while increasing customers' confidence in Bell Canada's services.

As Bell Canada aligned with Cisco Services on new product and new technology introductions, the Lab Interlock enabled improved software quality. As a result, Bell Canada reduced test times from 16 weeks to 10 weeks, which represents substantial savings and faster time to market.

"Having Cisco Advanced Services on board has allowed us to break speed-to-market barriers," says Paul Rowe, vice president, Enterprise Products and Marketing for Bell Canada. "As the marketing person, I can clearly differentiate our value proposition against our competitors, and we can execute faster to evolve our services and build on the value that we deliver to customers."

Ward, Morson, and Rowe are quick to point out that the value of the relationship between Bell Canada and Cisco Services is even greater than simply reduced testing times and faster time to market. It is relatively easy to identify and resolve a technical issue or translate a requirement into a technical capability. It is much more difficult to understand customers' requirements and what is required of Bell Canada to meet its customers' requirements for marketplace success. Collaboration is critical to achieving this larger goal.

"It is the ability to bill, provision, activate, and support a customer day in and day out that differentiates you in the marketplace," says Ward. "When I am involved in a bid process with our customers, I often talk about our Advanced Services agreement and the fact that we have in-depth access to Cisco's best resources and people. I really believe that this relationship has given us a competitive advantage."

Bell Canada's broad portfolio of managed service offerings now enables its business customers to transfer functions that they previously managed in-house to Bell Canada. Customers vastly simplify their businesses, and Bell Canada has captured new revenue streams that were not possible with its previous technologies and platforms. The industry has also noticed. In 2008, Forrester Research studied North American MPLS service providers and ranked each on 48 attributes of service excellence. Bell Canada ranked number one.

## **Next Steps**

Bell Canada expects that its track record of success and the unique partnership with Cisco will attract new revenue opportunities. Bell Canada continues to implement new capabilities and execute its roadmap of value-added services. The company is adding Cisco TelePresence™, managed Cisco Unified Communication offerings, Unified Contact Center, and other application networking services. With 99.999-percent network availability, now Bell Canada can attract customers who require application-level SLAs.

"It is not just having resources assigned to you that makes the difference," says Ward. "The Cisco Services agreement gives us access to outstanding people and a breadth of expertise, knowledge, and support. This is what enables us to continue to evolve our capabilities and service offerings faster and with higher quality than if we were trying to do it on our own."



.........

CISCO

### For More Information

To find out more about Cisco Services, visit:

www.cisco.com

To learn more about Bell Canada, visit

www.bell.ca

This customer story is based on information provided by Bell Canada and describes how that particular organization benefits from the deployment of Cisco products and services. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

CISCO PROVIDES THIS PUBLICATION AS IS WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties, therefore this disclaimer may not apply to you.



Americas Headquarters Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA www.cisco.com Tel: 408 526-4000 800 553-NETS (6387) Fax: 408 527-0883 Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd 168 Robinson Road #28-01 Capital Tower Singapore 068912 www.cisco.com Tel: +65 6317 7777 Fax: +65 6317 7799 Europe Headquarters Cisco Systems International BV Haarlerbergpark Haarlerbergweg 13-19 1101 CH Amsterdam The Netherlands www-europe.cisco.com Tel: +31 0 800 020 0791 Fax: +31 0 20 357 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCVP, the Cisco logo, and Welcome to the Human Network are trademarks of Cisco Systems, Inc.: Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.: and Access Registrar, Aironet, Catalyst, CCDA, CCDP, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, Ether/Channel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, IQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc.: and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0711R)