

Belgacom Offers New Managed VPN Services to Enterprises and Small and Medium-Sized Businesses

Belgacom broadens its competitive edge by offering managed virtual private network (VPN) services to its business customers by enhancing its Cisco® Multiprotocol Label Switching (MPLS)-based network with the Cisco IP Security (IPsec) VPN solution. By deploying the Cisco IPsec VPN solution, Belgacom has been able to meet customer demand for managed security services with competitive pricing and expand into high-margin business.

Background

Belgacom is Belgium's incumbent service provider and one of the best-performing providers in Europe. Belgacom's earnings before interest, taxes, depreciation, and amortization (EBITDA) for 2002 was US\$1.9 billion, and its operating profit was US\$1.1 million.

In 2000, Belgacom built a Cisco Multiprotocol Label Switching (MPLS) network. The new network has enabled it to provide IP virtual private networks (VPNs), high-speed Internet access, and asymmetric DSL (ADSL) dialup services to its enterprise and small- and mid-sized-business (SMB) customers.

Challenge

While Belgacom's enterprise customers outsource their site-to-site VPN needs to Belgacom, many enterprise customers have continued to provide access connectivity to remote teleworkers and branch offices themselves—maintaining a remote networking infrastructure that is costly and difficult to scale. Many have expressed interest in outsourcing, but Belgacom could not offer a secure, cost-effective solution.

Belgacom's SMB customers also expressed interest in an affordable, fully managed IP VPN service. But most existing options on the market were cost-prohibitive and lacked security.

Solution

In September 2002, Belgacom implemented the Cisco network-based IP Security (IPsec) VPN solution. This turnkey scalable solution takes advantage of standards-based IPsec to provide secure connectivity with Belgacom's MPLS network. It enables Belgacom to offer secure remote connectivity over ADSL lines for both enterprises and SMB customers through e-Link—a cost-effective interoffice data transmission network designed specifically for use by Belgacom's SMB customers.

Results

Through e-Link, Belgacom has been able to serve a completely new market segment—SMB customers—and has been able to gain additional revenue from its existing MPLS infrastructure with a small investment, while offering a more complete service portfolio to its customers.

VPNs Grow in Popularity

In Belgium, enterprises have readily adopted IP virtual private networks (VPNs) from Belgacom to link together their large offices with a flexible, secure, and high-bandwidth solution. Most of these enterprises outsource the entire IP VPN operation to Belgacom by subscribing to Belgacom BiLAN™ VPN service. As part of the BiLAN service, Belgacom installs and manages the complete VPN solution. It provides enterprise clients with 24-hour support of the VPN connections as well as rigorous network security measures using both firewalls and intrusion detection systems (IDSs).

For remote connectivity, however, many business customers continue to manage the VPN service themselves. But because it is costly to set up and manage a remote networking infrastructure and it does not scale easily, most enterprise customers wish to outsource this task to a provider such as Belgacom.

“We saw strong interest from our customer base to offload their remote VPN connectivity,” says Henk Destoop, VPN Solutions Product line manager at Belgacom. “If we could provide this service, then we could offer a total package—site-to-site *and* remote access. This would allow us to fully take advantage of our MPLS infrastructure to generate additional revenue and greater customer loyalty.”

Belgacom also saw an opportunity to apply the same Cisco technology to provide basic IP VPN services to the SMB market. At the time, existing IP VPN services were too costly and lacked security. Therefore, SMBs were interested in Belgacom providing them with cost-effective, secure access connections over ADSL networks.

Belgacom Capitalizes on New Market Opportunities

Belgacom considered several options that would enable its MPLS network to support secure remote ADSL-based solutions. A few vendors offered costly, high-end platforms, but Belgacom executives believed the extra functionality didn't justify the higher cost, especially when it came to building out a multi-point of presence (POP) deployment. Other vendors were unable to offer an end-to-end solution, and their offerings would have required Belgacom to invest substantial resources to develop a complete solution.

Belgacom chose to install a Cisco network-based IPsec VPN solution—a turnkey, scalable offering that takes advantage of standards-based IPsec for encryption and packet authentication. The Cisco Systems® solution also integrates with a Layer 3 (L3) MPLS network. Using the Cisco network-based IPsec VPN solution, Belgacom is able to extend its e-Link service—normally targeted at

the SMB customer—to the enterprise customer as a way to connect remote teleworkers and branch offices when the cost of BiLAN service could not be justified.

“One of the key benefits of this solution is that, because it is network-based, each of our Cisco 7200 platforms can support multiple VPNs,” Destoop explains. “In fact, we estimate that we are serving 200 VPN sites from each Cisco 7200. This greatly reduces our capital costs as well as operating expenses, as management is centralized. Now we handle all policy management and configurations on the one platform—greatly streamlining our network maintenance operations.”

When a teleworker from either a SMB or enterprise company needs to access corporate resources across a VPN, the Cisco VPN client software on the worker's PC or laptop initiates an IPsec session across the ADSL connection. The session is encrypted and forwarded to a Cisco 7200 Series Router, which resides in the MPLS-VPN network and is enabled with the network-based IPsec VPN software. The network-based IPsec VPN software authenticates the caller. The caller is then mapped to a provider-edge router into the company's VPN. The network-based IPsec VPN software is designed to aggregate multiple authenticated calls from different companies and map them into corresponding VPNs.

Enterprise Customers Gain Reliability, Security at a Fixed Cost

The benefits to Belgacom's enterprise customers include the ability to outsource the management of transport, equipment, and security to Belgacom at a predictable, fixed cost. In addition, enterprise customers enjoy a more reliable and secure service because Belgacom supports its service with stringent service-level agreements (SLAs).

The solution also allows enterprise customers to delegate the networking tasks to Belgacom and to redirect valuable IT resources to their core competencies. Finally, due to the expanse of Belgacom's network, enterprise customers are able to extend their geographic reach of their network to their customers, partners, distributors, and suppliers across secure, encrypted IPsec tunnels through the Internet.

Belgacom is also using the Cisco Remote Access MPLS solution, which allows enterprise customers to provide their branch offices with a reliable VPN backup service.

When a primary connection malfunctions, a remote branch that would normally rely on a leased line for VPN connectivity can now activate an ISDN connection within minutes—rather than having to wait hours or days for the primary connection to be repaired.

This allows Belgacom to generate incremental revenue while also providing additional high-value services to its customers—helping to further differentiate Belgacom from its competitors.

Serving the SMB Market

Belgacom's e-Link service also uses the Cisco network-based IPsec VPN solution to serve SMB customers. With IPsec security, e-Link enables VPNs to run over low-cost, high-bandwidth ADSL lines, rather than the local-loop connections. Belgacom offers e-Link for a fixed monthly fee and the service includes the following components:

- ADSL access line
- Cisco 800 Series router
- Internet access
- IPsec software client
- Manageability, including SLAs and Web-based reports

“The Cisco solution allowed us to take advantage of an excellent market opportunity with small and medium-sized businesses,” Destoop says. “It enables us to sell a much higher-value service—VPNs—and to dramatically expand our customer base.”

Flexible Network Meets Changing Needs of Customers

Belgacom's ability to offer new services to enterprise customers, and to reach a lucrative new market segment—SMB customers—was greatly facilitated by its Cisco MPLS network. Through this flexible and scalable infrastructure, Belgacom continues to evolve its service offerings to meet the changing needs of Belgium's business community—while significantly enhancing its profitability.

For more information about this and other Cisco VPN solutions, visit:

<http://www.Cisco.com/go/vpnsolutions>



Corporate 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: 408 526-4100

European Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
Capital Tower
168 Robinson Road
#22-01 to #29-01
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

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