

## How Cisco IT Provides Remote Access for Small Offices and Telecommuters

The Cisco Virtual Office solution improves the reliability, availability, and security of Cisco's VPN.

### BUSINESS BENEFITS

- Enhanced reliability, availability, and security of network access
- 20% total cost of ownership reduction with zero-touch deployment
- 29% overall productivity improvement for users
- 2.5 tons reduced CO<sub>2</sub> emissions per employee per year from less commuting
- Higher employee job satisfaction from ability to work at home
- Scalable solution to serve thousands of users

"Cisco IT has already subscribed more than 15,000 employees to the Cisco Virtual Office solution, and we anticipate that more than 30,000 employees will eventually decide to use the service."

**Plamen Nedeltchev, Solution Architect,  
Cisco IT**

**Many Cisco employees need to work from home on a full-time, part-time, or occasional basis.** In 2001, the company introduced a software VPN solution to provide remote connectivity.

**The software solution presented limitations and management challenges.** Cisco needed a way to increase the capabilities of home-based network services while making deployment and ongoing management simpler, more secure, and less labor intensive.

**Cisco IT implemented the new, hardware-based Cisco Virtual Office solution.** At the employee's home, the solution combines a router with a high-speed broadband connection. Cisco IT implemented "zero-touch" provisioning, which automates the configuration process, eliminating virtually all the time and effort previously spent by technicians for significant cost savings. Automated provisioning also simplifies the installation process for users.

**Several components work together to manage the solution.** Cisco's internally developed enterprise management tool (EMAN) monitors routers across the worldwide Cisco network. The Cisco Security Manager generates and maintains router configurations and policies.

And the Cisco Configuration Engine downloads configuration and policy information to the remote router.

**As of mid-2008, Cisco had more than 15,000 internal users for the Cisco Virtual Office solution.** This deployment is yielding the benefits of increased employee productivity and job satisfaction as well as reductions in Cisco's environmental impact. For Cisco IT, zero-touch deployment allows addition of more than 1000 routers per month to the VPN while maintaining a low total cost of ownership. In addition, comprehensive and multilayered security features in the Cisco Virtual Office solution minimize risks to the Cisco corporate network that might originate from remote sites and users.

## FOR MORE INFORMATION

To read the entire case study or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT [www.cisco.com/go/ciscoit](http://www.cisco.com/go/ciscoit)

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