How Cisco Upgraded Its Wireless Infrastructure

Next-generation WLAN provides expanded coverage, greater cost savings, improved security, and increased productivity gains.

**BUSINESS BENEFITS**

- 600 percent increase in user bandwidth
- 30 percent reduction in WLAN operational expense
- Support for new user services
- Greater WLAN availability and reliability
- New security capabilities
- Continued productivity gains for employees

“Our major goal was to deploy an enterprise-class, on-demand wireless network that is suitable as a primary access medium.”

– Oisín Mac Alasdair, Project Manager, Cisco IT

Cisco® has a highly mobile workforce, where almost every employee is issued a laptop computer with a wireless interface card. Most Cisco employees consider wireless network access to be critical to their daily work and productivity, even within Cisco facilities.

By 2005, it was clear that an upgrade of the WLAN infrastructure was necessary as user adoption continued to increase. The original infrastructure was reaching the end of its useful lifetime, and many components were no longer sold or supported. Cisco business managers were calling for improvements in service availability and operations; business objectives for the upgraded infrastructure included reduced support costs, improved stability and security, and an increased Service Level Agreement. Additionally, the existing WLAN could not offer the performance and stability required for high levels of wireless voice and video traffic.

The challenge for Cisco IT was to provide a global wireless LAN that could deliver more bandwidth and coverage to more users, while satisfying business requirements. The next-generation WLAN would also need to provide native support for wireless voice and video, while reducing service-impacting incidents.

The Cisco Next-Generation WLAN program, which began in May 2006, will evolve Cisco IT’s indoor wireless infrastructure into a more available, stable, and secure network. Cisco IT will increase the number of access points—from 3100 to more than 6000—in more than 300 Cisco locations worldwide and deploy the latest Cisco wireless products.

The next-generation WLAN is based on the Cisco Unified Wireless Network solution. This solution combines centralized Cisco Wireless LAN Controllers with Lightweight Access Point Protocol (LWAPP)-enabled access points and distributed, autonomous access points based on Cisco IOS® Software as well as advanced clients and wireless management systems.

The upgrade has produced higher bandwidth and broader coverage, substantial and ongoing cost savings, and continued gains in employee productivity. Additional benefits include new security capabilities and support for new technologies such as mobility and location-based services.

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

NOTE
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