How Cisco Deployed a High-Speed WAN

Metro Ethernet service delivers higher capacity, controlled costs, and easier upgrades.

BUSINESS BENEFITS

- 200-Mbps capacity at comparable cost to previous circuit
- Incremental capacity increases for controlled costs
- No additional hardware cost or service disruption during circuit upgrade
- Improved capacity, network resilience, and link diversification
- Traffic control features prevent circuit oversubscription

"The flexibility of the Metro Ethernet solution simplifies deployment and improves the return on investment and quality of service for the circuit."

– JJ Kim, Cisco Network Engineer

The Cisco® headquarters campus in San Jose, California, was served by four separate OC-3 links for Internet connectivity. When one of the link providers stopped delivering enterprise support to place greater emphasis on the wholesale market, Cisco IT was tasked with identifying and implementing a replacement circuit. In addition, the existing circuits were terminated on Cisco 7500 Series Routers, which could no longer serve Cisco's growing Internet traffic or the company's need for new features.

Cisco IT replaced the OC-3 circuit with the AT&T Metro Ethernet service and a Cisco 12404 Router for termination. The Metro Ethernet service is delivered over a dark-fiber connection that is terminated with a Cisco 12404 Router at the Cisco premises. Two dark fiber pairs are used for load balancing and failover on the circuit.

The Metro Ethernet circuit now serves 45 percent of the campus Internet traffic at a cost comparable to the previous OC-3 circuit. The service provides improved link diversification, failover, and traffic control capabilities. With the Cisco 12404 Router, Cisco also benefits from higher capacity and traffic throughput, and improved routing protocol convergence and scalability.

Because the AT&T Metro Ethernet service operates over a Cisco Powered Network, both parties benefit from equipment interoperability and network features. For example, policing capabilities in the AT&T network and shaping features on the Cisco 12404 Router ensure that traffic received from Cisco does not exceed the 200-Mbps circuit capacity.

Incremental capacity increases are also possible, with no additional hardware cost or service disruption during upgrade of the Metro Ethernet circuit. Cisco IT is now considering deploying Cisco 12000 Series Routers and Metro Ethernet service as traffic increases in other company locations worldwide.

Case Study: http://www.cisco.com/web/about/ciscoitatwork/case_studies.html

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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