Meeting Unique Artic Challenges

Cisco helps Norilsk-Telecom respond to growing demand for satellite services, while reducing costs.

Customer Name: Norilsk-Telecom

Industry: Service Provider

Location: Siberia, Russia

Business Impact

- Network efficiency up 50 percent; web response times down 30 percent
- Significant reductions in satellite data transmission costs
- New service packages launched for individual and business users

Case Study

Business Challenge

Norilsk-Telecom is one of the largest fixed-line and broadband operators in the Krasnoyarsk region of Siberia. Set up by the mining and metallurgical company Norilsk Nickel, the firm was sold in 2008 to investment bank KIT Finance and today offers private and corporate users a wide range of telecommunications services, from telephony to multiservice data networks and pay TV.

Two cities served by the company, Norilsk and Dudinka, are inside the Arctic Circle, where extreme climatic conditions mean Internet access is only accessible over expensive satellite data channels. With network traffic and demand for bandwidth-hungry new services rising, the provider needed to find a cost-effective way of optimizing the satellite backbone.

Norilsk-Telecom employs a satellite infrastructure with ground stations at Krasnoyarsk, Moscow, and Norilsk. Fiber-optic channels between ground-stations are a key component of the satellite backbone, with the majority of Internet traffic passing through Moscow. It was, therefore, decided that the modernization project should initially target the Norilsk-Moscow backbone segment.

Solution and Results

To enable future network growth and increased productivity, Norilsk-Telecom selected a Cisco® Wide Area Application Services (WAAS) solution, a key component within Cisco Borderless Network Architecture. At the company's Norilsk head office, Cisco Wide Area Application Engine (WAE) and Cisco Wide Area Virtualization Engine (WAVE) appliances were deployed, with Cisco WAE appliances also installed in Moscow.

The WAE platform delivers optimization and application acceleration improvements for centralized applications, providing remote users with LAN-like access to content and information. Cisco WAVE appliances combine comprehensive WAN optimization with embedded virtualization for hosting remote services.

The solution now processes all traffic on the Norilsk-Moscow backbone and helps ensure optimal use of data channels. Norilsk-Telecom has increased its overall network capacity, while reducing traffic volumes; backbone efficiency is up by a half, and web application response times are down by a third.

These improvements have enabled the provider to expand both private and corporate service packages, while significantly reducing operational costs. It is now planning further Cisco enhancements on the remaining satellite segments, including the introduction of the Cisco Service Control Engine.

НОРИЛЬСК ТЕЛЕКОМ

"This solution will help to substantially reduce management costs, create a backup for network output, and guarantee high-quality Internet services for our end-users, including those on other satellite and radio-relay channels."

Sergei Rodionov
Head of Long-Term Analysis, Norilsk-Telecom.

For More Information

To find out more about Cisco Borderless Network Architecture and WAAS solutions, please visit: www.cisco.com/go/borderless

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