

## How Cisco Built a Medianet to Handle Bandwidth-Intensive Traffic

By planning for bandwidth and QoS, Cisco IT is ready for more video traffic on the corporate network.

### BUSINESS BENEFITS

- Easier deployment of new video technologies
- Network scalability to support growing traffic demands
- Simpler bandwidth management
- Network well positioned for future video and rich media applications

“Because we designed a medianet, we do not need to rearchitect the Cisco WAN when we deploy high-demand applications such as TelePresence.”

**Craig Huegen, IT Director and Chief Network Architect, Cisco**

From video downloads on an Internet site to company broadcasts to live meetings, video traffic is increasing on many corporate networks. Cisco has long transported many varieties of video traffic, along with data and voice, across its corporate network, but it required significant network changes to support the new types of media traffic.

By 2001, a new WAN architecture was necessary to converge voice, video, and data onto a single, IP-based network. The new architecture needed to meet the requirements of voice and video applications for low-latency paths, sufficient bandwidth, multicast support for large streaming broadcasts, and quality of service (QoS) protection to avoid delayed or dropped packets.

Today, Cisco’s medianet supports a variety of video applications, including Cisco TelePresence™, room-based and desktop video conferencing, IPTV broadcasts, real-time streams and downloads for on-demand video files, and video camera streams for physical security monitoring.

Cisco has gained significant business value from its medianet. Benefits include easier deployment of new video and other media technologies, better network scalability to support growing traffic demands, simpler bandwidth management, and a network well positioned for future video and rich media applications.

Creating an end-to-end QoS architecture makes the network more stable and simpler to troubleshoot and manage. A low-latency, peer-to-peer network design as well as proactive WAN capacity management, and appropriate link redundancy and diversity are also crucial factors for a successful implementation of a medianet.

Cisco IT staff will continue to plan for more growth in video traffic on the network. Increased video traffic will come from new technologies such as higher definition video, digital media signage, and integration of Cisco TelePresence, IP video conferencing, and Cisco Unified Video Advantage endpoints for collaborative video sessions.

### 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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**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
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**Europe Headquarters**  
Cisco Systems International BV  
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