

GLOWPOINT DELIVERS FEATURE-RICH MANAGED VIDEOCONFERENCING SERVICES USING RADVISION

Highlights:

- Client: Glowpoint, Hillside, NJ, largest non-carrier videoconference service provider in North America
- Products: ECS Gatekeeper with V2 dial plan, firewall proxy, LDAP, third party call control, central database, child gatekeeper usage
viaIP Gateway
viaIP MCU
iVIEW Network Management System
- Number of endpoints: Over 1,450, in zones and using multiple gateway ports throughout the US, Canada, Puerto Rico, UK, and Japan

Introduction

Glowpoint is the leading network-independent, managed videoconferencing service provider in North America. The company carries video calls between endpoints on subscriber premises on an IP network spanning the US, Europe Canada and Asia, provisioned through carrier-class backbone and last-mile access partners over DSL, full and fractional E1 and T1, ATM and optical Ethernet. The H.323-compliant network guarantees quality of service, and its infrastructure is the result of numerous partnerships with equipment manufacturers, a range of IP telecommunications carriers, and systems integrators.

Designed in 1999 and commercially launched in late 2000, Glowpoint's network was deployed to offer basic and value-added services for IP-based, H.323-compliant videoconferencing users. By using a professionally-managed video network, Glowpoint customers avoid the overhead of installing their own audio, web, and video bridging infrastructure and retaining their own staff of videoconferencing experts, while assuring the best ease of use and reliability. They get training and 24-hour customer support on a variety of systems and services, as well as videoconference streaming and archiving.



Glowpoint customers also receive many of the advanced services familiar to telephone users: operator assistance, conference calling with or without prior reservation, call forwarding, and online access to usage records.



Many Glowpoint customers, however, have videoconferencing systems that run on circuit-switched, ISDN lines. For these, Glowpoint offers H.323-to-H.320, or IP-to-ISDN gateway services for seamless video calling between the two transport protocols. In addition, Glowpoint's Bridging Services Group manages multipoint conferencing servers and gateways.

Since customers generally own their own videoconferencing terminal equipment, the Glowpoint network is comprised of H.323 products from many vendors, each tested and certified by Glowpoint's own R&D group to confirm interoperability. Even with this certification, however, Glowpoint had to make sure that its infrastructure devices and management systems were agnostic when it came to terminal manufacturer. To manage the widest possible range of videoconferencing endpoints and gatekeepers, and to achieve the widest possible array of advanced videoconferencing services, Glowpoint chose RADVISION carrier-grade ECS gatekeepers, *via*IP gateways, and MCU bridging systems.

Why Glowpoint Chose RADVISION

Being standards-based, easily configurable, and IP-based, RADVISION gateway technologies are easy to deploy and manage in remote POPs, providing customers geographically distributed H.323-to-H.320 and H.320-to-H.323 protocol translation services. Calls initiated from RADVISION gateway ports have a very high success rate when connecting with gateways deployed by enterprises or other service providers, enabled in part by the product's IP-backplane, robust architecture, and high scalability.

RADVISION Gateway – The RADVISION *via*IP Gateway is a high-performance, scalable and cost effective solution for connecting ISDN-based H.320 systems to IP-based H.323 systems and endpoints. It seamlessly translates between H.320 and H.323 networks to relay audio and video streams from one network to another.

Another significant challenge facing a managed H.323 video service provider such as Glowpoint is to seamlessly peer between gatekeepers within a network. This is necessary in order to provide users with a seamless experience when connecting end points that are in different zones registered to different gatekeepers. Gatekeepers must be able to exchange their directories, as well as determine the best route for the call, given the location of all participating end points. This need was satisfied by RADVISION's ECS gatekeeper architecture.

RADVISION Enhanced Communication Server (ECS) – The RADVISION ECS is an advanced management application with H.323 gatekeeper functionality that is essential for the management of IP telephony and multimedia communication networks. The ECS can set policies and control network resources, such as bandwidth usage and traffic direction, to ensure optimal performance.

With the Glowpoint managed service each end point terminal connected to the Glowpoint network is issued a 10-digit public DID number, reachable from any on-net or off-net ISDN terminal, with which to register with the Glowpoint gatekeeper (a RADVISION ECS) in their local geographical zone. Very much like standard telephone dialing, this provides a universal calling architecture, with the first three digits of the alias identifying the zone and so directs the calling traffic to that local gatekeeper for routing to the end users.



As an innovator in the video services marketplace, Glowpoint continually seeks to develop new services that differentiate it from competitors and to scale to accommodate thousands of users. Toward that end, Glowpoint offers automated gateway dialing and supplementary services such as call forwarding on busy or no answer. Subscribers can use the tools at their disposal to control services as well as to view their account information.

Finally, GlowPoint uses RADVISION's advanced viaIP MCU for bridging multiple calls between users into a single, easy-to-use and managed conference. With high scalability, support of SIP, H.323, and legacy ISDN, as well as the latest standards such as H.264, the MCU provides the perfect tool for Glowpoint to support their existing H.323 and ISDN customers yet also later support customers using SIP-based devices.

In order to manage the entire video infrastructure and network, GlowPoint is also using RADVISION's iVIEW Network Manager. The Network Manager is suitable for all types of carrier, enterprise and distributed network deployments and enables the GlowPoint network administrator to easily and intuitively manage their distributed worldwide video network. The iVIEW Network Manager enables them to easily monitor and configure network elements and respond quickly to problems from one central location, maximizing network uptime and increasing productivity.

Glowpoint engineers manage the provisioning and installation of dedicated and symmetrical video network access to new customers from one Network Operations Center in Hillside, NJ. They also manage all video network resources for over 350 enterprise and government customers, encompassing over 1,450 Glowpoint-connected videoconferencing terminals. Continuous monitoring and management of all Glowpoint network facilities is performed using custom software applications. Any alerts or failures in call establishment and completion are logged in the RADVISION gatekeepers and are accessible to Glowpoint engineers for troubleshooting and trouble ticket resolution.

Measured Success

Glowpoint's success can be measured by the rising call initiation and call duration its network has experienced. In April and May 2003, average daily call volume on Glowpoint rose 23% to approximately 343 calls per day, compared to an average of 278 calls per day in the first quarter of 2003. The increase was punctuated by the week of May 19th, reaching a record daily average of 407 calls. The usage marks the continuation of a trend first reported in mid-March, when Glowpoint announced a 19% increase in average daily call volume, attributed to fears over business travel.

The scalability and easy configuration of the RADVISION technology, along with the ability to cascade gatekeepers in order to implement a flexible dialing plan, was key in supporting this rapidly increasing customer usage.





“Network call volume rose faster than the rate at which new endpoints came online during the first two months of the second quarter, reaffirming our belief that subscribers are incorporating Glowpoint into their everyday business communication activity,” commented Michael Brandofino, Chief Technology Officer of Glowpoint. “Call volumes on Glowpoint demonstrate that our customers are increasingly using video communications as they would a phone or fax.”

About RADVISION:

RADVISION (Nasdaq: RVSN) is the industry’s leading provider of high quality, scalable and easy-to-use products and technologies for videoconferencing, video telephony, and the development of converged voice, video and data over IP and 3G networks. RADVISION has two distinct business units. RADVISION’s Networking Business Unit (NBU) offers one of the broadest and most complete set of videoconferencing network solutions for IP- and ISDN-based networks, supporting all end points in the industry. The company also provides businesses and service providers with integrated solutions that deliver converged IP-based video telephony applications to employee computer desktops and broadband residences worldwide. The Company’s Technology Business Unit (TBU) provides protocol development tools and platforms, enabling equipment vendors and service providers to develop and deploy new converged networks, services, and technologies. For more information please visit our website at www.radvision.com. For more information on Glowpoint, please visit www.glowpoint.com

