

## Oregon Provides IP Videoconferencing to State Agencies with RADVISION Technology

### Introduction

Oregon's Data and Video Services group is a branch of the state's Information Resources Management Division. Created by the state, it provides enterprise-caliber data and video services to state agencies, local county and city governments and non-profit organizations. The group offers network connectivity, e-mail, videoconferencing, data warehousing, IT training and applications development services.

Currently, Data and Video Services provides real-time, multipoint videoconferencing utilizing RADVISION's *viaIP* and OnLAN network infrastructure technology. The group provides services to approximately 250 IP endpoints at organizations including the Oregon University System, community colleges, K-12 schools, Department of Corrections, Department of Justice, Department of Transportation and four of the state's nine Confederated Tribes.

### Challenge

Before it deployed RADVISION's technology, the Data and Video Services Group videoconferencing offering was based on a satellite network hosted by an outside service provider. When a conference was scheduled, the third party provider would build it and connect the participants through a bridge. Unfortunately, if a problem arose at the last minute, Data and Video Services had to reconfigure the network settings and re-establish the connection using slow, outdated equipment. The time-consuming process could delay meetings by up to 15 minutes or more. In addition, the equipment utilized in this satellite-based network was costly and required an enormous amount of maintenance, which involved state employees spending many hours a month on the road.

### Solution

In response to these issues, Data and Video Services was tasked to find an easier, more cost-effective LAN technology for videoconferencing. The group extensively researched numerous manufacturers to find the one that offered users the latest in standards-based multipoint voice and video conferencing.

To build the core of the network, Oregon chose RADVISION's IP multipoint conferencing units, gateways and gatekeepers, all of which conform with the latest H.323 standards. This allows for interfacing with traditional circuit-switched networks and are interoperable with Oregon's endpoint vendors such as Forgent (formerly VTEL), Polycom, Tandberg and VCON. The components implemented include products from RADVISION's OnLAN and *viaIP* lines of networking solutions. RADVISION's OnLAN suite of networking products includes individual stackable gateways and conferencing bridges along with embedded and standalone gatekeeper applications.

- **OnLAN MCU-323 Multipoint Conferencing Unit** – Six 15 port OnLAN MCUs are utilized by Oregon as bridges that establishes voice, video and data conferences between three or more people.
- **OnLAN L2W-323 PRI Gateway** – Oregon employs the OnLAN multimedia gateway to enable easier communication between its users and organizations that rely on traditional circuit-switched networks for videoconferencing. This gateway allows for an outside ISDN video endpoint to communicate with any IP location on Oregon's network.

RADVISION's *vialP* multi-service platform is a chassis-based solution for deploying IP-centric voice, video and data conferencing services. This all-in-one solution for service providers, large enterprises and government agencies integrates multimedia gateway, multipoint conferencing, data collaboration and gatekeeper intelligence into a single platform. In addition, this compact, scalable solution can be made to fit any network configuration due to its tremendous flexibility.

- ***vialP* Multipoint Conferencing Unit Card** – Chosen by Oregon for the large number of video endpoints it supports, this MCU module for RADVISION's *vialP* platform acts as a bridge that establishes voice, video and data conferences between three or more people.
- ***vialP* Enhanced Communication Service (ECS)** – Occupying only a single slot in the *vialP* chassis, the ECS card is the primary gatekeeper that manages, monitors and controls Oregon's network resources and usage.
- ***vialP* Data Collaboration Server (DCS)** –The DCS card for the *vialP* platform makes meetings among multiple sites run smoother by enabling all viewers to see the same document, such as a Microsoft Word document or PowerPoint presentation.

### Results

Utilizing RADVISION's videoconferencing infrastructure, Oregon's Data and Video Services group builds and hosts all conferences for its clients without the need of a third-party to schedule, manage and administer the calls. In addition, RADVISION's technology, when compared to the prior satellite-based system, is significantly more cost efficient, reliable and easy to use, resulting in fewer resources needed to maintain the network.

### Real World Applications: Benefits for Oregon Schools

Educational institutions are the largest consumer of Oregon's Data and Video Services videoconferencing offering. More than 186 K-12 schools alone are connected with video endpoints, with 62 additional sites expected to participate in the near future. Network connectivity for K-12 schools across the state is managed by the Oregon Public Education Network (OPEN), which became involved with videoconferencing two years ago after a donation from US WEST (now Qwest) allowed OPEN to test 21 video units around the state. Senate Bill 622, passed by the Oregon Legislature in 1999, allocated \$8 million over two years to OPEN for continued growth of videoconferencing in K-12 education.

"Videoconferencing is exploding in our public school system and offers a world of benefits to teacher, administrators and students alike," said Tom Cook, director of OPEN. "We've had more than 3,000 videoconferences occur since June 2000, including 15 daily online courses for students. We're now able to offer students, especially those in rural areas of the state, access to teachers and resources that were previously unreachable."

"For example," added Cook, "We had a great high level mathematics teacher in a rural high school with only three or four students qualified to take his class. With real-time videoconferencing, we were able to bring in students from other rural schools to take his course, making it financially feasible for the small school and benefiting a number of students that otherwise would not have been able to take the higher level course."

While OPEN is constantly devising new ways to aid students with videoconferencing, including statewide guest lecture series and medical assessment of students in rural areas, Cook has seen the largest use of videoconferencing in staff development and training. Teachers and administrators have replaced long car rides and cumbersome conference calls with multipoint videoconferencing for anything from large statewide meetings to small conferences and training workshops.

"Once they use the video system for meetings or training, teachers and administrators never want to go back," said Cook. "Given a choice to drive five hours to Portland for a conference or stay at home with their families and participate via videoconference, no one chooses the car ride."

#### About RADVISION

RADVISION is a leading provider of products and technology for real-time voice, video, and data communications over packet networks; this includes the Internet and other Internet Protocol (IP) based networks. Recognized universally as the experts in real-time voice and video over IP (V<sup>2</sup>oIP), RADVISION offers the broadest and most complete set of enabling technology and networking systems needed to enable enterprises and service providers to migrate their voice and video communications from traditional telephone networks to new converged networks. Today, hundreds of thousands of end-users around the world communicate over next-generation networks, using IP-centric products and solutions built around RADVISION products and technology. RADVISION's multi-protocol software toolkits for developers of IP communications include: SIP, MEGACO, MGCP, and H.323; RADVISION's V<sup>2</sup>oIP networking products include: gateways, conferencing bridges, and gatekeeper applications. For more information, please visit our website at [www.radvision.com](http://www.radvision.com).

