

# RADVISION Enables Illinois Century Network School Video Services Solution

## About



**Customer:** Illinois Century Network (ICN)

**Country:** USA

**Industry:** Education

**Product:** RADVISION Video Conferencing Infrastructure including: Multipoint Conferencing Unit (MCU), IP-to-ISDN Gateway and H.323 Gatekeeper

### About ICN

As a "service provider" for school and public facilities throughout Illinois, the Illinois Century Network (ICN) provides a service to hundreds of institutions for regular communications with peers and mentors in the state of Illinois. ICN's video service is based on products that are highly reliable, easy for administrators as well as customers to use and scalable to meet the demands of hundreds of facilities with one or more video conferencing endpoints.

The Illinois Century Network consists of points of presence in virtually all Illinois LATA connected in a partial mesh via OC12, OC3 and DS3 circuits. Constituents connect to the ICN via Fast Ethernet, OC12, OC3, DS3 and DS1 and other means.

## The Mission

ICN offers its subscribers a robust intranet, with more than 3 gigabits of Internet egress via multiple POPs and access to Internet 2. In addition to access and backbone transport, ICN provides value-added services including DNS filtering, QoS, multicasting, equipment and access circuit discounts, technical support and consulting. ICN, as a network service provider, also evaluates the need for, as well as developing and introducing other services in response to constituent requirements. Video conferencing over IP is a powerful ICN service that is in high demand from its constituent members.

One of the user communities on ICN is composed of institutions communicating with video over the Illinois

Video Education Network. The Illinois Video Education Network (IVEN) was established in 1995 through a joint initiative of the Illinois Board of Higher Education (IBHE) and the Illinois Community College Board (ICCB). The joint venture leverages ten regional video networks that include public and private universities and colleges, community colleges, secondary schools, health care facilities and a few business locations. Thousands of video calls are made each year over this network and it is considered essential to meeting the managerial and educational objectives of the state. Many locations on the Illinois Video Education Network make their video calls on the ICN H.323 network.

## The Challenge

One critical shortcoming of switched network and ISDN-based systems for video conferencing is that the same network connection cannot be used for multiple applications or one consolidated network for multiple smaller locations. This led most schools to have two or more

dedicated T-1 or higher connections to their campuses, one for video conferencing and the other to the ICN. By moving to IP, the schools can converge their video and data applications onto a single high speed network that both reduces the cost of ownership and operation for

institutions as well as lower the cost of entry for other organizations currently without video conferencing.

Another incentive for those using legacy circuit switched networks to migrate to an H.323 video conferencing network is the opportunity to have higher quality video and audio, higher call retention and more telephone-like features accessible to users during a video session.

Compression algorithms have improved substantially since the late 1990s and not all hardware purchased in the first generation network is capable of supporting processor-intensive tasks such as required by the latest codecs. When a call is established by an IP application, such as an H.323 device, the quality of service provided by the network can be specified and guaranteed during a session.

## The Solution

ICN uses RADVISION's MCU to provide subscribers with the ability to participate in multi-site video calls without the expense of purchasing and maintaining regional equipment. MCU resources are configured to offer various conference services based on the number of sites in a conference, connection speeds and formats. Speed matching permits the users on a call with multiple data rates to receive the best experience their connection will support without degrading the experience of participants who have higher bandwidth capabilities.

ICN offers services to a group of approximately 50 H.323 endpoints associated with the IVEN and ICN. Once

they are registered with RADVISION's advanced H.323 Gatekeeper, it provides call control, address resolution and sets policies such as bandwidth usage and traffic direction for the ICN H.323 endpoint users, ensuring optimal performance.

The H.323 Gatekeeper also manages RADVISION IP-to-ISDN Gateways distributed throughout the network - for those users who are authorized and wish to access sites not currently on the ICN or the Internet. The ICN Gateways offer ICN constituents the ability to complete H.323-to-H.320 video calls both on-net (within the IVEN network) and via ICN-provided PRI trunks to other H.320 networks.

## The Benefits

RADVISION was selected as the partner of choice for the ICN video service because RADVISION's products met or exceeded ICN's requirements for ease of administration, support for call detail records (CDRs), strong diagnostic tools, redundancy and failover capabilities, as well as other product-specific features.

This implementation allows users to try the technology prior to committing to a full deployment of their own. A constituent wishing to enjoy the benefits of video conferencing or distance learning can deploy a relatively low cost video system and use the existing ICN connection to connect to H.320 or H.323 sites worldwide.



### About RADVISION

RADVISION (NASDAQ: RVSN) is the industry's leading provider of market-proven products and technologies for unified visual communications over IP and 3G networks. With its complete set of standards based video networking infrastructure and developer toolkits for voice, video, data and wireless communications, RADVISION is driving the unified communications evolution by combining the power of video, voice, data and wireless - for high definition video conferencing systems, innovative converged mobile services, and highly scalable video-enabled desktop platforms on IP, 3G and emerging next generation networks. For more information about RADVISION, visit [www.radvision.com](http://www.radvision.com)

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