Case Study

IPx Connect: A Service Provider Deployment of IP-based Video and Data Conferencing

VCON

Introduction

IPx Connect is an innovative service provider of online business solutions that combine cutting edge technology in video, audio, web conferencing, and collaborative tools. IPx Connect merges these technologies into interactive online meeting and training services which they deliver over the Internet, and to end-user equipment that IPx Connect provides. IPx Connect distinguishes itself by giving customers the flexibility to determine how, when and where they want to communicate, and by providing a complete solution in terms of network services, endpoints, and in application areas such as business training, courseware and real-time instruction. Whether a customer needs to share any application across any IP network, or to engage in multimedia collaboration, IPx Connect's products helps users meet, sell, train, and present more effectively.

IPx Connect solutions include:

- The IPNexus PC application sharing and Web-collaboration service
- The IPVideo Platform, a video-conferencing and remote training service delivered via PC-based videoconferencing and remote training endpoints that IPx Connect leases to its customers

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CASE STUDY QUICK FACTS

MXM Size: 200-user license with 250-user license for IPNexus

Number of VCON Desktop Endpoints: 4 VCON ViGO Executives and 200 vPoints

MCUs Deployed: One 24 port VCON Conference Bridge (VCB) for ad-hoc multipoint videoconferencing, and one Radvision viaIP 400 MCU for larger, scheduled multipoint videoconferences

Most Valuable MXM Features:

- Centralized management of entire distributed network

- Reporting and billing

- Scalability

- Remote management and upgrades of client endpoints

IPx Connect's IPNexus Service is a unique web conferencing and collaboration service that enables users to share any file open on their PCs with anyone else on an enterprise network or across the Internet, without compromising the customer's network security. Additionally, IPx Connect has made IPNexus extremely cost effective. Now small to medium size companies can conduct business online in an affordable manner.

The IPx Connect IPVideo Platform provides complete multimedia capabilities wrapped into a single turnkey solution. The IPVideo Platform enables organizations to communicate via audio, video, and web collaboration with all of their employees, clients or customers, or their business partners-wherever they may be. For a flat monthly fee, the IPVideo Platform provides a PC-based videoconferencing system, 12-hours per month of multipoint bridge conferencing time, unlimited point-to-point videoconferencing and the IPNexus Service.

managed, controlled, maintained and upgraded by IPx Connect staff who do not need to leave their offices.

VCON solutions provide these very capabilities. In addition, IPx Connect relies on a number of VCON technologies to enable a high quality, highly reliable experience despite the unmanaged nature of Internet bandwidth.

TAG National
An IPx Connect customer that exemplifies the benefits and value of IPx Connect solutions is TAG National (Technology Assurance Group National). A for-profit, national association of almost 80 telecom provider/interconnects (installers of small and medium size business telecom systems) across the United States, TAG is an important force in the telecommunications industry. TAG's large membership enables cooperative purchasing power, higher commission schedules, information sharing, year-round training for

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"With organizations demanding flexibility on how, when and where they communicate, we decided it was crucial to provide a rich media conferencing service that encompasses video, audio and web conferencing," said Dan Moody, vice president of sales, IPx Connect. "IPx Connect chose VCON as a partner because of the scalability and manageability of their videoconferencing, Web sharing and text messaging solution, and the ease of use of their endpoints."

Bang for the Buck
IPx Connect's business model and network architecture leverage their customers' LANs and the open Internet for both data-collaboration and videoconferencing. Furthermore, IPx Connect's value proposition to their customers, and the cost structure of IPx Connect's own business, requires that they be able to ship customers endpoints that are easy to install, "just plug right in" to their customers' LANs, and can be monitored,

sales and financial staff, and one-on-one support to presidents and executive management. TAG uses the IPx Connect IPVideo Platform to train their member companies in a range of subjects and to augment their "in person" consultations with members' executives.

In addition to offering the IPNexus Service and IPVideo Platform, IPx Connect provides training services that are delivered over the

IPVideo Platform. In fact, TAG National provides its member companies with Convergence Technologies Professional (CTP) training, over the IPVideo Platform, by IPx Connect instructors. CTP is a Telecommunications Industry Association (TIA) certification program now recommended and even required by many top telecom equipment vendors, such as Toshiba, NEC, Avaya, Mitel and Inter-Tel, for their integrators, resellers and installers.

Why IPx Connect Chose VCON
IPx Connect chose VCON on the basis of centralized management, control, monitoring, maintenance and upgrade of customers' endpoints; reliable and high quality voice and video experience using the open Internet and customer LANs that haven't been optimized for real-time communications; and a rich set of

service provider-oriented reporting and billing capabilities.

IPx Connect is a data-collaboration and videoconferencing service provider that uses the Internet to transport services to the LANs of small and medium size businesses distributed across the United States. Yet, for IPx Connect's customers and their LAN administrators, real-time voice and video communications are often new frontiers.

VCON solutions enable IPx Connect to quickly create and deploy innovative services that use endpoints that can be easily installed by the LAN administrators at IPx Connect's customers, and which are managed and upgraded from a central IPx Connect location.

IPx Connect/TAG Network Architecture
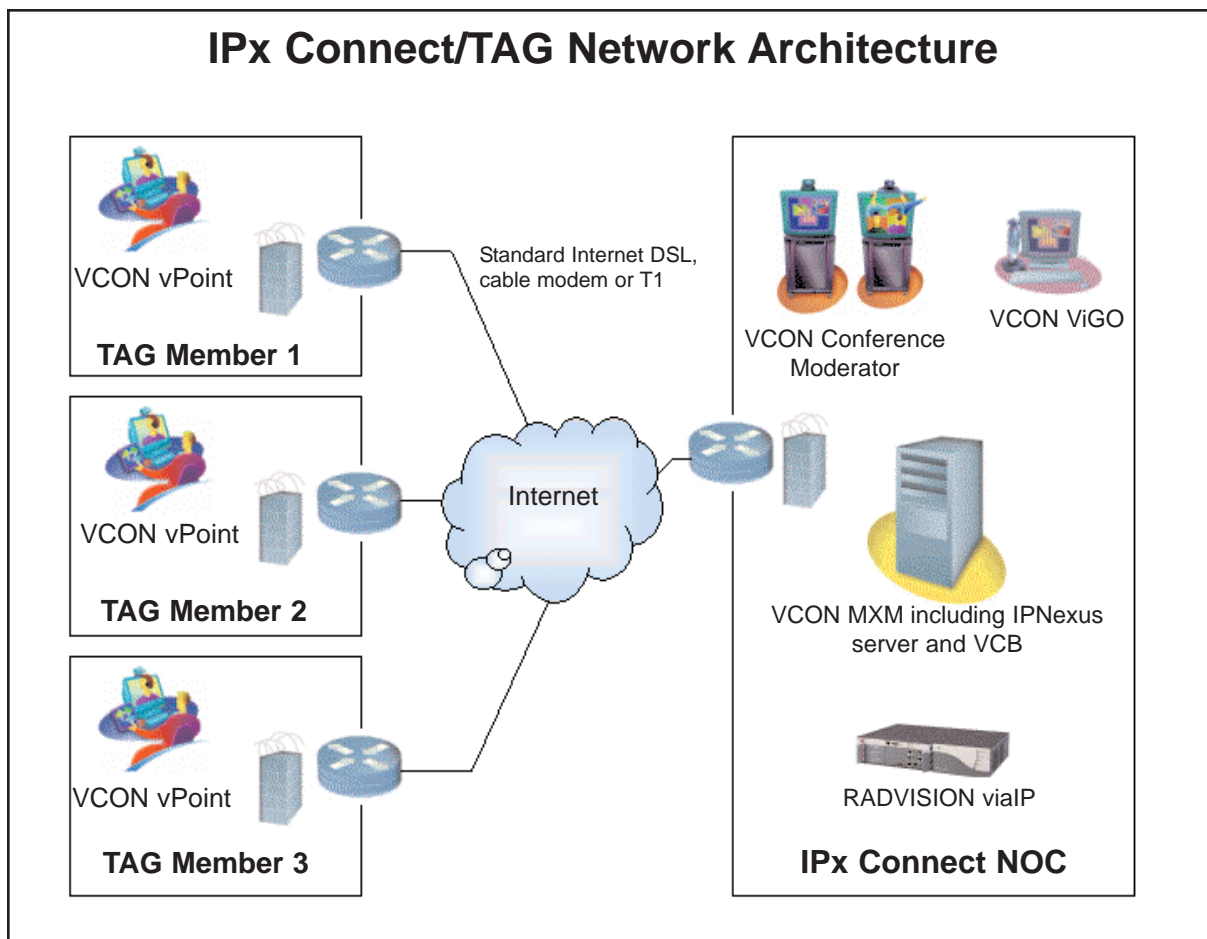
And, because IPx Connect uses the Internet to connect their customers, and their customers demand a high quality voice and video conferencing experience, IPx Connect also chose VCON for its PacketAssist™ technology. This technology delivers Quality of Service for videoconferencing over the open Internet and over customers' LANs that have not been optimized for real-time communications.

Finally, the reporting and billing capabilities of the MXM, and their suitability to the service provider business model were important factors in IPx Connects' choice of VCON as their technology partner. With the IPx Connect service offering including some services that are billed according to a flat-rate plan and others billed on a usage basis, the

Up and Running Since May 2003

Because the VCON equipment performed in the real Internet-based environment exactly as it had in IPx Connect's lab, IPx Connect was able to keep to their service launch schedule without surprises or setbacks. As a result, TAG succeeded in becoming the first company in the telecommunications industry to provide remote training, and was able to establish their members' technicians as the best trained, most-up-to-date and most consistently certified in the field, without travel or per diem expenses. Since the original IPx Connect platforms and services were put to use by TAG in the area of technical training, new applications such as remote sales presentations and sales consultations have been delivered to TAG member companies.

VCON Media Xchange Manager™ (MXM) provides:

- Dial Plan Administration
- Remote Device Configuration
- QoS and Policy Services
- Directory Services
- Remote Call Initiation
- Video Telephony and Voice/Video IP-PBX functionality
- Event Log and Alert Agents
- Reporting and Billing

MXM's robust network management system ensures accurate tracking without additional work on the part of IPx Connect or its customers.

Overall, IPx Connect chose VCON because of how well VCON technology fit their network architecture, business model, network architecture and the needs of their target customers.

MXM Benefits

The VCON MXM proved, in a number of ways, to be ideally suited to IPx Connect's requirements as a service provider. To begin with, the MXM supports a diverse suite of revenue-enhancing services including:

- Multipoint Videoconferencing
- Instant Messaging
- Web-based Collaboration,
- Streaming Video, and
- Web-scheduled and ad hoc videoconferencing.

The MXM also supports multiple interfaces to the physical endpoint devices that need access to rich media services. These endpoints include standards-based VCON (or non-VCON) H.323 or SIP endpoints, multipoint conferencing units (MCUs), gateways to H.320-based ISDN endpoints, directories, and proxies and encryption devices. The MXM is highly scalable and can support from ten to 750,000 user endpoints distributed over any geographic distance.

In addition, the MXM provides the means to efficiently install, configure, monitor, manage, and upgrade all endpoints, regardless of where they are, from a single location. And, the MXM has a full suite of tools for centrally managing and administering the rich media conferencing network in terms of the policies

multipoint videoconferencing bridge to VCB 2000.

IPx Connect will then be able to offer a SIP-H.323 gateway service for networks that have both SIP and H.323 video clients. Customer endpoints will be able to communicate with each other regardless of the protocols in their networks. MXM 4.0 also provides many improvements that mean more scalability and reliability for an MXM-managed network. Upgrading from VCB to VCB 2000 provides IPx Connect with the flexibility to use their VCON videoconferencing bridge as 24 ports able to support a single session (conference) of up to 24 participants, or two-sessions of up to 12 participants each, or three sessions of up to 8 participants each, etc, rather than as a fixed 3-session, 8-participant resource.

> **"Thanks to videoconferencing and data-collaboration, our TAG members' technicians are the best trained and most up-to-date in the industry," said Dale Stein, TAG director of strategic planning and business development. "This is the single most important thing TAG has ever done for its members. We are using the IPx Connect platforms and services daily, and we are continually finding new ways to use them to help our members build competitive advantage."**

governing the bandwidth and QOS prioritization provided to each endpoint. Finally, the MXM includes a comprehensive CDR and reporting tool that supports multiple services customers and their multiple users, both for flat rate and usage-based billed services.

Looking Ahead: Service Growth and Plans for Expansion

Besides expecting to scale the service with the growth of customers and increasing usage, IPx Connect plans on soon upgrading its MXM to Release 4.0, and with that, upgrading the VCB

The VCB 2000 combines traditional multipoint videoconferencing and streaming into a single, low-cost solution. Interactive conferences can be broadcast to hundreds or thousands of passive participants via bandwidth-efficient multicasting. The VCB 2000 also includes the ability to conduct mixed SIP and H.323 multipoint conferencing sessions. This capability provides investment protection for IPx Connect and its customers. Organizations, which have yet to deploy SIP or H.323 endpoints for their employees' communications, can move forward with confidence because either investment will be

leveraged by VCON's multi-protocol platform. The VCB 2000 also includes VCON Conference Moderator, a Web-based scheduler and moderator application. Users can schedule both point-to-point and multipoint calls, and schedule recurring events and gateway calls. The conference moderation capability provides the ability to see a list of all participants, as well as add and remove participants, view conference statistics, and start/stop streaming - all from a Web-based console.

As IPx Connect's needs grow, they can continue to rely on VCON to provide them- and their customers-with standards-based solutions.

Enabling IPx Connect to Create Unique Services

VCON enables IPx Connect to create and deploy unique services for their customers like TAG National. For example, in seizing the opportunity created by the Telecommunication Industry Association's CTP certification program, IPx Connect has created a platform and network for remote CTP training via VCON vPoint videoconferencing endpoints and VCON IPNexus instant messaging and collaboration software. Building upon that platform and network, IPx Connect has become, in addition, a certified CTP trainer and courseware developer. IPx Connect and their customer TAG National are excited by what they have accomplished together in nine short months, as well as all the new opportunities they are discovering using VCON video-conferencing and data-collaboration technologies.

VCON

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