

General Information

February 11, 2011 • Vol.33 Issue 3

Page(s) 30 in print issue

Enterprise Videoconferencing Rethink & Reshape Your Communication Landscape

The age of the big inexpensive network pipe is officially upon us, in turn giving rise to a videoconferencing explosion among enterprises of every size. No longer handcuffed by strict travel budgets, today's enterprises can now reap the benefits of videoconferencing technology that continues to be refined by a wealth of manufacturers and developers. In fact, according to Network Instruments' State of the Network Global Study, nearly two-thirds of today's companies have implemented videoconferencing technologies to some extent, and that number is expected to reach 90% in the next two years.

"Videoconferencing is no longer considered a luxury but has become the standard," explains John Belisle, design engineer at CCS (www.ccsprojects.com). "Organizations and enterprises are recognizing the cost savings, the productivity increases, and the positives that only face-to-face communication can provide. Organizations are using video-conferencing and collaboration equipment for interdepartmental training, company-wide events, and distance learning, as well as meeting management and recording. The average person now has more ways to communicate with one another than ever and is getting used to having that technology available to them."

■ Develop A Video Mindset

Getting started with videoconferencing technology generally isn't a complex process, but identifying your needs can go a long way toward ensuring future success with any given platform. John Antanaitis, vice president of marketing at Polycom (www.polycom.com), notes there are several elements that enterprises should consider before moving forward with videoconferencing.

For example, he recommends thinking about how video can tie into line-of-business applications such as manufacturing and research and development, which could have special considerations and customization requirements. Further, he suggests thinking about how telepresence can tie into recording, streaming, and video content management. Planning should also extend beyond company walls, Antanaitis adds, including how enterprises want to use the technology with customers and partners.

"Enterprises should think about video as a call rather than a conference," says Dave Hart, CTO and executive vice president of Presidio (www.presidio.com). "The term 'conference' implies multiple parties in a conference room calling multiple parties in another. Video technology has advanced to the point where we can provide a high-quality experience in a very ubiquitous way including, and in particular,

Key Points

• Videoconferencing can extend to many parts of a business, so think closely about your communication needs before moving forward with an implementation.

• Today's equipment includes features that were once considered luxuries, so experts recommend looking beyond the standard functions to take advantage of cutting-edge innovations.

• Because videoconferencing can stress an internal network, IT staff must ensure the network infrastructure can handle video and current business applications simultaneously.

experience in a very ubiquitous way including, and in particular, [support for] one-on-one interaction. We advise our clients to start with the premise that every interaction that does not occur in person should have a video component, regardless of the number of people involved.â€

■ Target Your Needs

When seeking to identify the right videoconferencing product for your environment, several factors must be considered. Jason Francois, a design engineer with CCS, says an enterprise must evaluate its current needs, network infrastructure and topology, and peak bandwidth requirements for general operations.

â€œEquipment for recording, archiving, and streaming content; bridging conferencing standards; traversing firewalls; and integrating into enterprise scheduling and email are no longer niceties but have become standard issue. Media-rich content, multipoint communication, and integration into VoIP infrastructure are the keys. The conferencing equipment that is chosen should meet not only the immediate requirements but should allow for expansion,â€ Francois says.

Presidioâ€™s Hart adds that a range of dependencies ultimately spawn the need to find answers to several questions. For example, how will you use video as a communication tool? What types of video communication do you envision (person-to-person, person-to-group, room-to-room, person-to-classroom, etc.)? What type of experience is required (desktop/laptop, standard-definition office, high-definition, room-based office, immersive telepresence, etc.)? What will my existing infrastructure support? Do I have the capital to upgrade that infrastructure to support my video requirements?

â€œAn enterprise has to choose between using an overlay-independent IP network for video or using their existing converged IP WAN transporting applications and VoIP,â€ explains Frederic Hediard, vice president of product marketing at Streamcore (www.streamcore.com). â€œAn independent network makes the most sense for high-end, immersive videoconferencing systems. But many enterprises choose to exchange videoconferencing traffic over their existing WAN for obvious cost savings purposes and also when videoconferencing is included in a UC [unified communications] project running UC traffic over the converged WAN.â€

■ Roadblocks Ahead

Videoconferencing can quickly and effectively boost communication while helping cut costs on travel and other expenses, but enterprises still must be prepared to address some roadblocks when integrating and using the technology. For example, Hediard says that videoconferencing is both bandwidth and performance-sensitive.

â€œWhen deployed over a converged IP network, videoconferencing traffic is mixed with other types of network traffic and can suffer from serious performance degradation if the WAN traffic is not prioritized and controlled. Another challenge relates to desktop video. These flows must be controlled so that they do not degrade the business applicationsâ€™ performance,â€ he says.

Education—or lack thereof—is another potential roadblock to successful implementations. Belisle says that end users donâ€™t exactly need to be certified technical experts in videoconferencing, but they should be comfortable using the equipment. He recommends that enterprises designate staff members that understand the equipment so that they can train other staff and can be available for assistance when something goes wrong.

“Also, something that a lot of us don’t think about is etiquette,” Belisle adds. “While there aren’t rules as to proper etiquette for video collaboration, we must be cognizant that there are microphones on conference tables, the locations of cameras, and, most importantly, to not speak over one another. Conference participants need to know that what they say, no matter how softly, may be heard on the other end of the conference. This not only pertains to voices but rustling papers, side conversations, and general background noise.” ■

by Christian Perry

Watch For These Challenges

Today’s videoconferencing market includes products and technologies for practically every enterprise need, but video communications nonetheless bring a unique set of challenges.

John Antanaitis, vice president of marketing at Polycom, identifies several of these challenges.

Video traffic is different. Real-time video traffic is very different from other traffic on the network. It requires substantial bandwidth and is more susceptible to network congestion and packet loss than other types of non-real-time data traffic.

Cultural barriers. Using video communications dramatically changes how people collaborate across distances. Initial training can help users transition and adjust to a more collaborative environment. The good news is that users typically embrace the technology and become comfortable rather quickly.

Interoperability. Not all video solutions use the same technologies, which can create interoperability issues. The safest bet for customers is to look for solutions that use established videoconferencing standards.