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## Web Conferencing Provides Enhanced Meeting Experiences

A host of online collaboration tools is changing the way many businesses get jobs done.

Photo courtesy of Sigma Design



*Web conferencing allows co-workers to collaborate in the office and in the field. Features that services commonly offer include instant messaging, application sharing, and streaming audio and video.*

By Andrew Humphrey, Assistant Editor

**A**h, the telephone conference. Most of us have at some time or other gathered with our co-workers around a conference room table to listen and speak to a speakerphone. Or perhaps you've dialed into a company-wide announcement from the phone at your desk. Some of us have even participated in videoconferences, which does telephone conferencing one better by allowing participants to see each other and watch demonstrations.

Now a new kind of conferencing technology is emerging, one that is generating a lot of buzz. It's Web conferencing. Just like traditional conferencing technologies, it affords companies the ability to bring together people in far-flung locations and realize significant savings in time and travel costs. But it also raises the bar for what a conference experience can and should be.

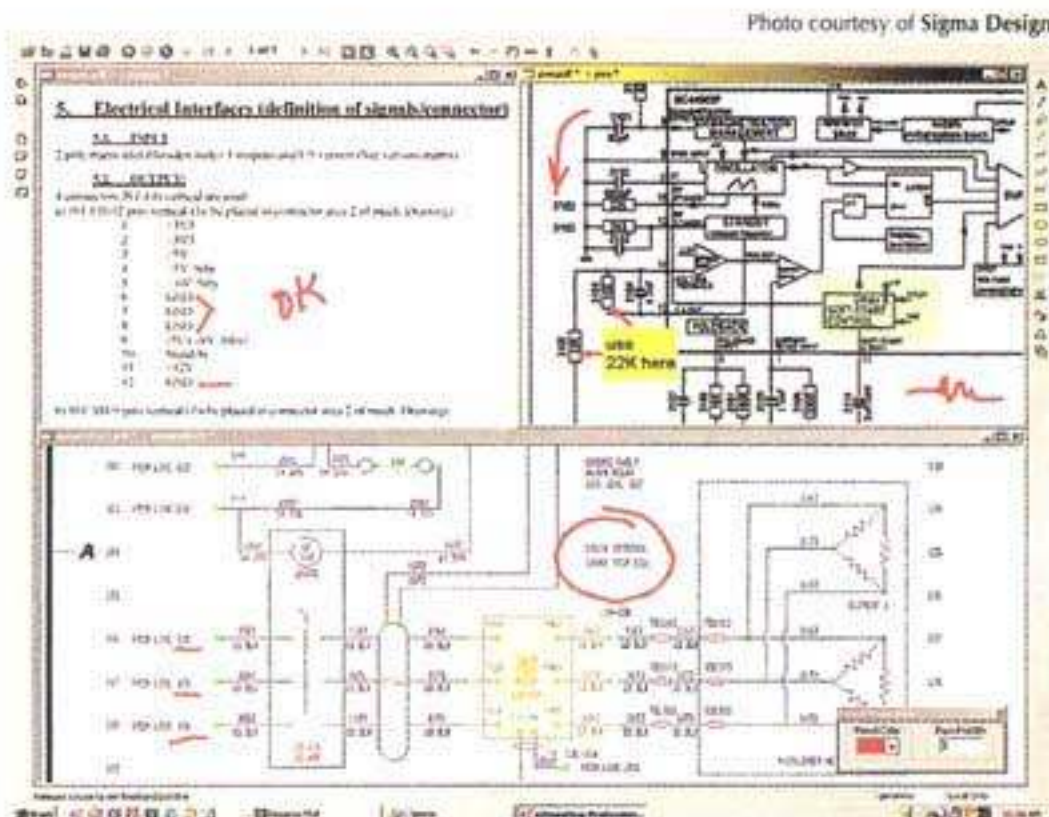
With Web conferencing, you can not only interact with others and discuss projects, you can show everyone else what's on your computer screen—even if they don't have the same applications as you. They can mark up your document, providing suggestions and changes, and you can save the marked-up document for future reference (see Photo at right.). You can discuss the document using instant messaging, commonly referred to as "online chat." Or install a Web camera, and you can interact with people face-to-face. And it can all be done through your computer.

**The newest member of the conferencing family.** Robert Heist, CEO and founder of Digital Connections, an Omaha, Neb.-based firm that provides conferencing services, says that Web conferencing provides a low-cost way to transmit visual and audio content to large numbers of people. He describes it as the conferencing technology that is "the newest conceptually and the fastest growing."

"I know master electricians need to take continuing education," he says. "Imagine with Web conferencing that a state or national organization could provide this course work in audio combined with PowerPoint presentations and offer a training seminar to 5,000 electricians throughout the United States at the same time."

Does this still sound a bit like videoconferencing? Consider Heist's next example.

"Just assume that a national electrical contractor is working on multiple projects for the same company, replicating, for the most part, a power distribution system at multiple locations around the U.S.," he says. "Web conferencing would be a way for project team members—the engineers, jobsite superintendents, and foremen—to view project reviews. They can look at project timelines, status reports, and those



Web conferencing software can include a whiteboarding feature that allows participants to share and mark up documents in real-time.

types of things."

Charlie White, CEO of Sigma Design, New York, provides his own example of how his company's eZmeeting software could provide a similar solution.

"Take an electrical example: You

The electrical drawings are at the engineer's office, the photo is at the jobsite, and the staff collaborates in real-time with both documents. What may have taken days to resolve can be resolved in a matter of minutes.

get out there to the jobsite, and you're looking at your drawings, and they say that the panels are going to be located here and you look at it and nothing's fitting."

What to do? White says you can

take a digital photo of the problem and use eZmeeting to instantaneously show it to the electrical engineer for review. At the same time, you can bring up electrical drawings from the electrical engineer's office and reference those while looking at the digital photos in the field.

"So the electrical drawings are at the engineer's office, the digital photo is at the jobsite, and you and the electrical engineer are able to collaborate in real-time with both pieces of information," he says. "Something that may have taken a couple of days to resolve can literally be resolved in a matter of minutes now."

eZmeeting is an example of the many software packages that enable Web conferencing using the same peer-to-peer file-sharing technology that allowed Napster users to trade music. With eZmeeting, multiple users can view and mark up documents because it natively supports popular file formats such as Adobe Acrobat .pdfs. That means these files can be displayed without other programs.

"So any software—which is most software now—that can write a .pdf, eZmeeting can read," White says. If the file format is not supported, the

## BICSI Uses Web Conferencing to Improve Editing Process

Before 1998, industry representatives and members of the BICSI editorial committee from around the globe would travel to a destination to review and edit the organization's technical publications, which vary in length from a 100-page dictionary to a 1,600-page reference manual. The process lasted several days. Tracking who made what edits and why was difficult.

Now, BICSI uses SiteScape Enterprise Forum 6.0 to review and discuss text-based documents before their meeting. When a draft of a document is still in its early stages, members of the editorial committee begin to meet in an online forum, where they share documents and post threaded discussions as part of the review process. The files are revised and resubmitted for consideration, consolidation, and approval before holding a face-to-face meeting.

The participants still meet, but now the meetings are much shorter. The organization and its committee members save money on costs such as meeting rooms, overnight hotel fees, meals, and car rentals, and now they have more time to tackle other projects and topics.

"In the past, the publication would go through a few reviews to get it to a draft stage, and then the entire committee would come together for three to five days to hash out the final details," says Jay Warmke, former executive director of BICSI. "Now, most of the details are worked out online, so we meet for a shorter time period."

program has a screen capture function that lets you take a snapshot of everything on-screen and show it to others that way. The software can also be configured with scanners to instantly present others with scanned images, much like a fax machine. At any time, the program allows you to share as many as 32 documents.

Some companies are offering Web conferencing services that take advantage of Internet telephony technologies. For example, Middletown, Conn.-based Axiom8 has developed Ossia, a communications application designed to connect people through telephones, cell phones, and PCs.

When you try to contact other users through Ossia, it uses a database of contact information to attempt to establish connections with those users via telephone numbers and e-mail addresses.

"As opposed to introducing a

new device that creates a new address or new contact point, what we are doing is integrating the primary network, the telephone, and Internet network, and offering multiple types of media streams: instant

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Companies can opt to buy Web conferencing software and install it on their own servers, or work with outside service providers.

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messaging, voice, and video," says Jonathan Wheeler, Axiom8 CEO.

"Imagine that you needed to talk to a colleague somewhere else in the world, and you use Ossia. You

don't know where the other person actually is, and you send out a dynamic conference invitation. You find me and I happen to be on a computer and you're on a computer. We can escalate from an instant message dialogue, to a voice, to a video dialogue. And the system is making that happen very easily for us."

He says his clients also use the service to improve their accessibility to customers. "Let's just say there's some kind of critical situation that has got to be resolved and there's three different people that need to be part of the resolution with the contractor onsite," he says. "Ossia can reach out and create the connections to those three people as they become available."

**Buying online services vs. using local software.** What do you need to start Web conferencing? Companies can opt to buy Web conferencing software and install it on their own servers, or work with outside service providers (OSPs).

"There's probably an unlimited number of software products that will provide some sort of Web conferencing capability," Heist says. "In most cases, companies use outside service providers."

What you pay for is the usage only—there's no upfront charge, nor any software upgrades.

"The nice thing about those types of services is all they require is an Internet connection and a standard Web browser on a PC. So they don't require any specialized hardware at the end-user location."

Heist says service providers are the way for businesses to go. He recommends businesses seek out OSPs that can provide guidance and inexpensive ways to find out what's going to help them in their business environment.

As an alternative to using an OSP, a company can buy the software and incorporate it into its IT infrastructure. For example,

companies that use Ossia buy the software and pay an annual maintenance fee or on a subscription basis.

You can also incorporate eZ-meeting in your business's IT infrastructure. Like many other Web conferencing programs, you pay a one-time charge for the software on a per computer basis: One person

using it costs \$199, two people \$398, and so on.

Many companies offer free trial versions of their software from their Web sites. Windows 2000 users should already have Microsoft's NetMeeting Web conferencing software installed on their computers, and versions of the software for other Windows

systems are available as free downloads from Microsoft's Web site.

**Leveling the playing field.** Middle-market companies are finding that conferencing technologies are endemic to a competitive edge. Although these \$5 million to \$500 million companies didn't use conferencing technologies in the past, that's changing.

"Those companies have found out that in today's marketplace, any company that has any reasonable product or service very quickly becomes more than a regional company," Heist says. "If they have a product or service that is well-positioned in their industry, very quickly they can become national and even international in nature."

Web conferencing levels the playing field for these companies, allowing them to provide their customers the same types of services

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Middle-market  
companies are  
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that larger companies do. And like larger companies, they can now train their employees in remote locations. In the contractor world, that means middle-tier contractors can use this technology to better compete against bigger contractors.

So, next time you're called to participate in a conference, you might not sit at a boardroom table or at your desk. The meeting might not even be scheduled beforehand. Even so, you might be surprised to find it much more productive than meetings you've attended in the past.

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