accessible IT

Is Web Conferencing Software Ready for the Big Time?

"HOW ACCESSIBLE ARE WEB CONFERENCING SYSTEMS FOR PEOPLE WITH VISION, HEARING, AND/OR MOBILITY CHALLENGES?"

by TOM PETERS and LORI BELL

In each Accessible-IT column we plan to address a technology that is "hot" and of interest to librarians serving "mainstream" customers. Then we'll also discuss some features that can be incorporated into the technology to make it more accessible to those who are not mainstream users.

This month, we're focusing on online Web conferencing software. This year promises to have the right mix of conditions to create significant growth in the use of these systems among libraries; library consortia, networks, and associations; and other library-related organizations. Travel budgets are being cut, librarian positions are being reduced, and remaining staff members are expected to take on additional responsibilities and to multitask as much as possible. As people spend more time on the Internet both at work and at home, librarians (and everyone else) will be conducting more meetings, conferences, and workshops on the Web. How accessible are Web conferencing systems for people with vision, hearing, and/or mobility challenges?

All Systems Aren't Equal

If you are in the market for a Web conferencing system, you will quickly discover a wide range in pricing as well as basic accessibility. Recently, we examined and tested a number of different packages, their features, and their accessibility options. Some vendors are aware of the need to make these systems accessible to all; others are clueless. One vendor representative even told us that Web conferencing communication is so heavily based on visual information that it would be pointless to even attempt to make the company's system accessible to the blind and visually impaired. We calmly informed that rep that he was wrong. The auditory and textual information conveyed via online events can and should produce a rich online experience without relying on visual info.

One vendor remarked to us, "Web conferencing is Web conferencing is Web conferencing." If someone tells you this, move on. All Web conferencing systems are not similar, and anyone who tries to convince you that they are is trying to pull the wool over your eyes. We have found there are huge differences in pricing, pricing models, features, accessibility, quality, reliability, and hosting options. Companies are developing Web conferencing software and systems rapidly. It is well worth your time to look at a number of packages to determine what features are most important to your library and your library users. While one package may have all the bells and whistles (and a hefty price tag), another that's less expensive and easier to

Here are a few things to keep in mind when looking for Web conferencing software:

- All systems are not created equal. There are great variations in pricing and features.
- There is a great variance on how different features work with different packages. For example, the video on some of the programs we tested worked seamlessly; on others, it was very clunky and required much more bandwidth. Also, delays in VoIP transmissions can range from less than 1 second to the unacceptable dozens of seconds.
- No matter what you pay, you are not going to get every feature you may think you want or need.
- Many vendors are unaware of accessibility needs and requirements.
- There is no full-featured software package that contains every accessibility option.

use may provide most of the features you want.

Our Search for Software

Early in 2003, the Illinois State Library Talking Book and Braille Service was looking for accessible Web conferencing software with Voice over Internet Protocol (VoIP) for a book discussion program. Talking book centers serve huge geographic areas, sometimes a whole state, so Web conferencing was the only way we could have one. In our research at that time, the only accessible chat program with VoIP was the tcConference system (formerly called iVocalize) from a small, agile company called Talking Communities. In addition to VoIP that can be performed with a PC-based microphone for less than $10, the software provides Web cobrowsing and the ability to upload and display PowerPoint presentations as well as to record online events in common file formats such as Windows Media Audio. Although Talking Communities is moving beyond the iVocalize system, that platform is still available directly from iVocalize, Ltd.

The software is easy to learn and use. The computer screen of an online room is clean and uncluttered, and a blind person can navigate it by using identified keystrokes and screen reader software, such as WindowEyes from GW Micro or JAWS for Windows from Freedom Scientific.

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Since the summer of 2003, a number of other talking book centers and mainstream libraries of various sizes and types have joined OPAL: Online Programming for All Libraries—And All Library Users to do collaborative programming for the public. We have also started offering continuing education events for librarians using this software. The software does require a small, free plug-in, which is automatically installed when an individual enters the online room for the first time.

Web Conferencing Features

For those of you who have never experienced Web conferencing, here's a list of some of the features that are available in these software packages:

- **Audio:** Some software requires that you be on the phone while you are on the computer. Some packages have VoIP that lets you use a PC microphone to talk. We prefer these programs, because there are many people that still use dial-up. Conference calls tend to be expensive. For people with dial-up, solutions without VoIP are totally inaccessible.

- **Text chat:** We did not find any Web conferencing tools without text chat. For users without microphones, text chat is a necessity. It can also be used to make a program accessible to the hearing-impaired.

- **Video:** Video will be the next big feature. tcConference currently does not use video. (We did not require video, because most of our users are sight-impaired.) In some types of online events, however, it is nice to see the speaker. Several programs devote a very small portion of the screen to video of the presenter. Other programs offer video at multiple points (like the tiled display of faces at the beginning of *The Brady Bunch*). In programs that used one small video presenter, such as iLinc and Elluminate, video worked well. In some other programs, the video took a great deal of bandwidth and slowed down everything else.

When you consider video, ask yourself if a talking head is really necessary and how many dial-up users you are going to have. These users' video experience may not be satisfactory. In many instances, a photo of the presenter may be sufficient to help the audience get a sense of who is talking. Watching moving lips and some nonverbal communication signals from facial expressions and hand gestures

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does convey some info and enrich the overall online experience, but other visual information may be more meaningful and useful to your participants. Video generally requires a higher-end computer and more bandwidth.

- **Co-browsing Web pages:** This is an important feature and was included in most of the packages we examined. We were able train our users on how to search Google and FirstSearch and how to do things on the Internet. Blind people need the program to have keystroke alternatives so that they can move from section to section and "see" or "hear" what is happening. When one vendor was asked about these alternatives, he said, "We don't have keystrokes. You are the first person to even ask about blind people using our software. We have over 2,000 customers, and Web conferencing is a visual experience." Wrong! Web conferencing is a very multisensory experience involving both sight and sound. Including some of these features that make an online event more accessible improves everyone's experience.

- **Desktop application sharing:** This can be an important feature for Web conferencing, depending on what you want to do. The software currently used for OPAL does not have this capability. Early conferencing software would easily freeze up a user's computer when sharing applications. Now, however, application sharing has improved and is a part of most Web conferencing packages. This allows an instructor to share her or his desktop with users or to take over the desktop of an attendee to offer technical support, to do training on proprietary databases or password-protected pages, etc.

- **Whiteboard:** Another feature some people want is a whiteboard where attendees can share notes and mark up the screen. We have not had any use for a whiteboard in the OPAL events we have hosted.

Accessible to Everyone?

Of all the packages we examined, a few vendors were more concerned about accessibility than about features. These tended to be those who were working with either specific populations or with clients who demanded accessible systems. They had incorporated keystroke alternatives into the software so that blind users could easily navigate around the screen. Some vendors did not even know what we meant when we asked about accessibility and had no immediate interest in making their products accessible.

Elluminate has taken steps toward making its Web conferencing system, Elluminate Live!, accessible to all. Within this context, the company identifies three major accessibility challenges: serving people with visual, hearing, and physical challenges; having a system that works with most major operating systems; and having a system that works well across the bandwidth spectrum. Elluminate Live! provides keystroke alternatives to all menus and clickable buttons, compatibility with major screen reader software programs, closed captioning, user control over auditory notification of certain events within a Web conferencing room, the ability to enlarge the display, and end-user control over the color scheme.

The company also claims that the product is compliant with Section 508 (29 U.S.C. 794d) of the U.S. Rehabilitation Act, which requires federal agencies to make their electronic and information technologies accessible to people with disabilities. Elluminate Live! also

Resources Discussed

Illinois State Library Talking Book and Braille Service
http://www.cyberdriveillinois.com/departments/library/who_we_are/talking_book_and_braille_service/home.html

Talking Communities
http://www.talkingcommunities.com

iVocalize, Ltd.
http://www.ivocalize.com

GW Micro—WindowEyes
http://www.gwmicro.com/products

Freedom Scientific—JAWS for Windows
http://www.freedomscientific.com/fs_products/software_jaws.asp

OPAL: Online Programming for All Libraries—And All Library Users
http://www.opal-online.org

iLinc
http://www.ilinc.com

Elluminate—Elluminate Live!
http://www.elluminate.com/accessibility.jsp

Section 508 (29 U.S.C. 794d) of the U.S. Rehabilitation Act
http://www.section508.gov

Web Accessibility Initiative of the World Wide Web Consortium
http://www.w3.org/WAI

is compliant with the Web Accessibility Initiative of the World Wide Web Consortium. Details about the accessibility of Elluminate Live! can be found in an accessibility white paper on the company's Web site.

INCLUDING SOME FEATURES THAT MAKE AN ONLINE WEB CONFERENCING EVENT MORE ACCESSIBLE IMPROVES EVERYONE'S EXPERIENCE.

At the time of this writing in mid-December, Talking Communities, which for years has offered a much-better-than-average Web conferencing system when it comes to accessibility, was working on an entirely new software package. The package, which was due to be released early this year, has a text-to-speech engine so that text chat can be vocalized for anyone, not just users of screen reader software. It also allows users to open a closed-captioning window and features built-in voice-recognition mobility options. Not all accessibility features are available with this first release, however. For example, the company plans to incorporate an extra video window just for signing in a future release. Unfortunately, while users of recent Microsoft Windows operating systems (Win 98 and higher) as well as users of Mac OS X and Linux can access the established tcConference software, this new software initially works only with computers running Windows.

Cost Still Matters

One of the most important considerations is price and pricing options. Costs can range from $4 to $100 per seat per month. Can you host the software or do you want it hosted? Do you want to lease the software month to month or buy it and pay a hefty maintenance fee? If you do buy it, do you have to pay for new developments, or do they come as part of the package? Features are developing quickly, so this is important.

Inform Vendors, Aid Users

We librarians can help all end users —who rarely, if ever, interact with vendors—by informing the vendor community that there are accessibility issues and concerns about Web conferencing software and that approximately 10 percent of the population has some sort of physical challenge.

As with any new technology you investigate for your library, it is time-consuming to do the necessary research to find the system that will best serve your users for the price that best fits your budget. It is important to determine what features are most important for what you want to accomplish. Requiring basic accessibility options will guarantee a better experience for everyone. ■

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