



Ten of WebEx's Unique Capabilities

Developed over the course of five years, WebEx's switch-based communications network offers unsurpassed reliability, scalability and security for delivering the industry's most advanced experience of completely interactive, Web-based meetings.

With the advice and guidance of industry luminaries such as Nobel-Laureate Arno Penzias and NCSA's Larry Smarr, WebEx has created a totally unique interactive environment for businesses to conduct live meetings through their Web sites. WebEx services fully integrate traditional voice and video communications with the world's most advanced set of real-time, data exchange capabilities.

Here are some specific examples of the patented capabilities that set WebEx switch-based communication services apart from products based on simple streaming or store-and-forward technologies.

1 All-in-one, Web-based, firewall-friendly communications

WebEx's interactive platform has been designed from the ground up to provide fully integrated voice, video, and data communications, including robust application sharing and desktop control capabilities, all in a completely Web-based implementation. This means that WebEx users enjoy two important benefits:

- First, because WebEx takes an integrated approach, with a single, automatic download, WebEx users have everything they need to use all WebEx capabilities, even the most advanced
- Second, because WebEx is firewall-friendly, WebEx customers can meet with anyone, anywhere, all through a simple Web browser, requiring no involvement from IT.

In short, WebEx is unique in its ability to provide Web-based, integrated data, voice and video, which gives users the ability to share presentations, share documents, co-browse the Web, share applications, remotely control applications and desktops, utilize integrated teleconferencing and/or Voice Over IP, and display real-time video.

These advantages are unmatched by the competition.

- Most competitive offerings provide basic presentation sharing and rudimentary Web tours, and they try to simulate application sharing using screen image capture. (The advantages of WebEx's presentation sharing, document sharing, and application sharing capabilities are described in more detail below.)
- In addition, most conference software vendors offer no advanced features, such as remote control or video, because they are unable to do so without requiring that IT make firewall adjustments that can compromise security.

On the other hand, the WebEx Multimedia Switching Platform encapsulates transmitted data, creating an HTTP-tunneling protocol that delivers the rich data carried by these protocols through a standard Web browser connection. This means that WebEx Meeting content is communicated through port 80, the port used for Web-based communications. It is standard for businesses to open port 80 in their firewall, and no other ports are required to be opened to enable users to participate in WebEx meetings. Other conferencing software products can only use port 80 when they convert Powerpoint slides or screen images into HTML, which can then be sent using the HTTP protocol. Most conferencing software vendors do not even attempt to offer the kind of broad capabilities for application sharing, remote control and video that WebEx provides. Those that do use technology that requires customers to open up special ports in their firewalls, which can compromise security. These special arrangements must be made by the IT organizations for each company that has employees trying to participate in a conference.

2 Comprehensive review of any printable document, with full image, font and color integrity

Any printable document can be shared in a WebEx meeting, including CAD drawings, blueprints, network diagrams, and more. WebEx's vector-based imaging ensures high fidelity image quality for presentations and documents, with retention of the original fonts and colors.

WebEx is also able to adjust image size to accommodate to different sized screens, so that, when a presentation is shown in full-screen view, a meeting attendee using a laptop will see the image fill his/her screen and so will the attendee using a 17" desktop monitor.

3 High-resolution, low bandwidth, full-screen sharing of presentations and documents

Because WebEx vector-based image technology is able to retain high resolution, presentations and documents can be shown in full screen or zoom mode (from 25% to 400%), with no degradation in image quality or clarity. An additional advantage of using a vector-based format is that the bandwidth required to transmit images during a WebEx meeting is very low. Competitive products and services use bit-map technology, which does not render well in an enlarged view. Thus, these products typically don't support full-screen or zoom views, since the image quality would be poor. An additional disadvantage of bitmap technology is that it requires very high bandwidth.

4 Fully interactive, cross-platform application sharing and on-the-fly file transfer

While most competitive products offer basic screen image capture and call it application sharing, WebEx gives users the ability to share and collaborate on live applications. This means, for example, that a financial planner can share his Windows-based Excel spreadsheets with his client, even though his client is using a Macintosh and doesn't have Excel on her system. If the financial planner chooses to share control with the client, she can actually enter and edit data in the Excel spreadsheet running on the remote Windows desktop.

WebEx's File transfer capability complements application sharing. At any point in a WebEx meeting, the presenter can transfer files to any meeting attendee(s). Thus, a software developer who's just previewed a new version of code to her colleagues in a WebEx meeting, can distribute the revised file to all attendees before the conclusion of the meeting. A technical support representative can easily pass on a patch or updated version of software, during an interactive session with his customer.

5 Permission-based desktop remote control

WebEx enables a user to give permission for a technical support representative to take control of his/her desktop in order to diagnose and fix a problem, either with a software application or with system settings. The result is faster problem resolution and improved customer satisfaction. None of the other leading Web conference software or service vendors offer this capability.

6 Completely spontaneous presenter delegation

With WebEx, any attendee can instantly be designated as the presenter. Presenter privileges do not have to be determined at the start of the meeting, as is the case with most competitive offerings. At any point in a meeting, the presenter can pass presenter control with one click of the mouse. This is especially useful for colleagues in separate locations who may be jointly presenting material to an important customer or when members of a geographically-distributed project team meet to review the results of each person's assignments.

7 Secure real-time, transient data exchange

Unlike most competitive offerings, WebEx does not require that presenters upload their presentations to WebEx servers in advance. With WebEx, conversion of the presenter's presentation or document to WebEx's vector-based format occurs at the presenter's system, and the data is then distributed to all participant systems, where the presentation or document is rendered. Not only does this improve the spontaneity and flexibility of a WebEx meeting, it greatly reduces the security risk that can come from storing confidential files on an external server. With WebEx, no files are ever stored on our server -- data is transient and exchanged in real-time.

8 Low-cost, firewall friendly real-time video

By offering users the ability to share real-time video in WebEx meetings using inexpensive desktop videocams, WebEx offers a tremendous advantage over competitive solutions. Presenters can introduce themselves and their colleagues and can show physical objects during the meeting. As with all other WebEx data exchange, our real-time video is completely firewall-friendly.

9 True browser-based Web page co-navigation

WebEx offers true Web page co-browsing, in which the presenter can guide all participants through any Web site. While the presenter may share control of the Web tour with other attendees, if he does not share control, the attendees will not have the ability to navigate on their own. The advantage of this approach is that it's possible for the presenter to use WebEx to show customers or partners sections of his/her intranet that may contain information to the meeting, without any risk that the attendees will then navigate on their own to sections of the intranet that are proprietary. Most competitive offerings simply "push" a url selected by the presenter to all attendees. The presenter cannot then navigate by clicking on links -- he or she must send another url for all attendees to view the new page. At the same time, attendees may easily become confused or "lost", since each of them can then click off to different sections of the site being toured.

10 Unique T120-based, fully scalable distributed network and platform

WebEx technology is T120-based, which provides highly reliable, telecommunications-like switch-based data exchange. T.120 is a suite of networking protocol standards for real-time multi-point data communications, and, thus, WebEx can support true multi-point, real-time meetings. In addition to interoperability, the T.120 standard was established to ensure a long list of benefits: data integrity, network transparency, platform independence, network independence, and scalability.

Most competitive solutions utilize database, store-and-forward technology, and cannot provide real-time, multi-point communications. While a few vendors have utilized T120, they do not support full data exchange using HTTP, so their communications are not firewall-friendly.