

Web Conferencing

Web conferencing

Web conferencing is used to conduct live meetings or presentations over the Internet. In a web conference, each participant sits at his or her own computer and is connected to other participants via the internet. This can be either a downloaded application on each of the attendee's computers or a web-based application where the attendees will simply enter a URL (website address) to enter the conference.

A webinar is a specific type of web conference. It is typically one-way, from the speaker to the audience with limited audience interaction, such as in a webcast. A webinar can be very collaborative and include polling and question & answer sessions to allow full participation between the audience and the presenter. In some cases, the presenter may speak over a standard telephone line, pointing out information being presented on screen and the audience can respond over their own telephones, preferably a speaker phone. There are web conferencing technologies on the market that have incorporated the use of VoIP audio technology, to allow for a truly web-based communication. Webinars may (depending upon the provider) provide hidden or anonymous participant functionality, enabling participants to be unaware of other participants in the same meeting.

In the early years of the Internet, the terms "web conferencing" was often used to describe a group discussion in a message board and therefore not live. The term has evolved to refer specifically to live or "synchronous" meetings.

Features

Other typical features of a web conference include:

- Slide presentations (often created through PowerPoint or Keynote on a Mac)
- Live video (via webcam or digital video camera)
- VoIP (Real time audio communication through the computer via use of headphones and speakers)
- Web tours - where URLs, data from forms, cookies, scripts and session data can be pushed to other participants enabling them to be pushed through web based logons, clicks, etc. This type of feature works well when demonstrating websites where users themselves can also participate.
- Recording (for viewing at a later time by anyone using a unique web address)
- Whiteboard with annotation (allowing the presenter and/or attendees to highlight or mark items on the slide presentation. Or, simply make notes on a blank whiteboard.)
- Text chat (for live question and answer sessions)
- Polls and surveys (allows the presenter to conduct questions with multiple choice answers directed to the audience)
- Screen sharing/desktop sharing/application sharing (where participants can view anything the presenter currently has shown on their screen. Some screen sharing applications allow for remote desktop control, allowing participants to manipulate the presenters screen, although this is not widely used.)

Web conferencing is often sold as a service, hosted on a web server controlled by the vendor, either on a usage basis (cost per user per minute) or for a fixed fee (cost per "seat"). Some vendors make their conferencing software available as a licensed product, allowing organizations that make heavy use of conferencing to install the software on their own servers. Some web conferencing software is distributed free for hosting on the MC's server. There is also software available that is installed on the MC's computer and does not require server configuration software.

An important capability of web conferencing software is application sharing, the ability for one party in the conference to share an application (such as a web browser, spread sheet, etc.) from their desk top with every one else in the meeting and pass the control of the application to someone else in the meeting.

History

Real-time text chat facilities such as IRC appeared early in the internet's history. Web-based chat and instant messaging software appeared in the mid-1990s. In the late 1990s, the first true web conferencing capability became available and

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dozens of other web conferencing venues followed thereafter.

In May 1998 Eric R. Korb was first to use the term "webinar" (web-seminar) to brand the online meeting service for his company ComLinx, LLC. Korb received a registered trademark (Serial Number 75478683) by the USPTO on April 18, 2000. Korb successfully defended the mark several times, but widespread use of the mark without his permission flourished throughout the internet making it very difficult to monitor and defend. Korb eventually transferred ownership of the mark when the dot.com boom failed and ComLinx was forced to shut down in 2001 due to lack of funding. The mark has subsequently been abandoned.

Standards

Web conferencing technologies were not standardized for many years, a significant factor in the lack of interoperability, platform dependence, security issues, cost and market segmentation. In 2003, the IETF established a working group to establish a standard for Web conferencing, called "Centralized Conferencing (xcon)". Mechanisms for privacy and security are important requirements for the resulting protocols.

The deliverables of xcon, listed as part of their charter include creating:

- A basic floor control protocol. This was published in 2006 as RFC 4582: Binary Floor Control Protocol (BFCP)
- A mechanism for membership and authorization control
- A mechanism to manipulate and describe media "mixing" or "topology" for multiple media types (audio, video, text)
- A mechanism for notification of conference related events/changes (for example a floor change)

A webcast is a media file distributed over the Internet using streaming media technology. As a broadcast may either be live or recorded, similarly, a webcast may either be distributed live or recorded. Essentially, webcasting is "broadcasting" over the Internet.

The generally accepted use of the term webcast is the "transmission of linear audio or video content over the Internet".

A webcast uses streaming media technology to take a single content source and distribute it to many simultaneous listeners/viewers.

The largest "webcasters" include existing radio and TV stations that "simulcast" their output, as well as a multitude of Internet only "stations". The term webcasting is usually reserved for referring to non-interactive linear streams or events.

Rights and licensing bodies offer specific "webcasting licenses" to those wishing to carry out Internet broadcasting using copyright material.

Webcasting is also used extensively in the commercial sector for investor relations presentations (such as Annual General Meetings), in E-learning (to transmit seminars), and for related communications activities. However, webcasting does not bear much, if any, relationship to the idea of web conferencing which is designed for many-to-many interaction.

The ability to webcast using cheap/accessible technology has allowed independent media to flourish. There are many notable independent shows that broadcast regularly online. Often produced by average citizens in their homes they cover many interests and topics; from the mundane to the bizarre. Webcasts relating to computers, technology, and news are particularly popular and many new shows are added regularly.

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Origins

"Webcasting" was first publicly described and presented by Brian Raila of GTE Laboratories at InterTainment '89, 1989, held in New York City, USA. Raila recognized that a viewer/listener need not download the entirety of a program to view/listen to a portion thereof, so long as the receiving device ("client computer") could, over time, receive and present data more rapidly than the user could digest same. Raila used the term "buffered media" to describe this concept. Raila was joined by James Paschetto of GTE Laboratories to further demonstrate the concept. Paschetto was singularly responsible for the first workable prototype of streaming media, which Raila presented and demonstrated at the Voice Mail Association of Europe 1995 Fall Meeting of October, 1995, in Montreux, Switzerland. Alan Saperstein (Visual Data, now known as Onstream Media (Nasdaq:ONSM), was the first company to feature streaming video in June of 1993 with HotelView, a travel library of 2 minute videos featuring thousands of hotel properties worldwide. The term webcasting was coined (in the early/mid 1990s) when webcast/streaming pioneers Mark Cuban (Audionet), Howard Gordon (Xing Technologies), William Mutual (ITV.net) and Peggy Miles (InterVox Communications) got together with a community of webcasters to pick a term to describe the technology of sending audio and video on the Net...that might make sense to people. The term netcasting was a consideration, but one of the early webcast community members owned a company called NetCast, so that term was not used, seeking a name that would not be branded to one company. Discussions were also conducted about the term with the National Association of Broadcasters for their books - Internet Age Broadcaster I and II, written by Peggy Miles and Dean Sakai.

The actual word "webcast" was coined by Daniel Keys Moran in his 1988 novel The Armageddon Blues.: "... DataWeb News had done an in-depth on it not two weeks ago, and tourists had been trekking up into the New York hills ever since the webcast." -- page 191 of the Bantam paperback.

Examples

Virtually all the major broadcasters have a webcast of their output, from the BBC to CNN to Al Jazeera to UNTV Webcast in television to Radio China, Vatican Radio, United Nations Radio and the World Service in radio.

A notable webcast took place in September 1999 to launch NetAid, a project to promote Internet use in the world's poorest countries. Three high profile concerts were to be broadcast simultaneously on the BBC, MTV and over the Internet; a London concert at Wembley Stadium featuring the likes of Robbie Williams, George Michael; a New York concert featuring Bono of U2 and Wyclef Jean; a Geneva concert.

More recently, Live8 (AOL) claimed around 170,000 concurrent viewers (up to 400 Kbit/s) and the BBC received about the same (10 Gbit/s) on the day of the 7 July 2005 bombings in London. The growth of webcast traffic has roughly doubled, year on year, since 1995 and is directly linked to broadband penetration.

Connecting Media was one of the first companies to do live webcasting using a special IFP Van (Internet Field Production) dedicated to webcasting.

Today, webcasts are being used more frequently and by novice users. Live webcasts are allowing viewing of presentations, business meetings, and seminars etc. for those that telecommute rather than attend. Such sites offer live broadcasting as an affordable solution to public speaking events that expands the viewing audience to anyone that has an internet connection.

An Internet forum is a web application for holding discussions and posting user-generated content. Internet forums are also commonly referred to as Web forums, newsgroups, message boards, discussion boards, (electronic) discussion groups, discussion forums, bulletin boards, fora (the Latin plural) or simply forums. The terms "forum" and "board" may refer to the entire community or to a specific sub-forum dealing with a distinct topic. Messages within these sub-forums

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are then displayed either in chronological order or as threaded discussions. In many cases a gateway allows access to the same data via an HTTP or an NNTP interface.

Such forums perform a function similar to that of dial-up bulletin board systems that were common from the late 1970s to the 1990s. Early web-based forums date back as far as 1996. A sense of virtual community often develops around forums that have regular users. Technology, computer games and/or video games, sports, fashion, religion, and politics are popular areas for forum themes, but there are forums for a huge number of topics. Internet slang and image macros popular across the internet are abundant and widely used in internet forums.

Membership and anonymity

Anonymous forums may offer full anonymity or pseudonymity, allowing posts without registration. Captchas, e-mail authentication, and tripcodes are often used to prevent comment spam on such forums.

Registered members of a forum, who are identified by unique usernames, may have additional privileges, such as the ability to edit their previous posts, start new topics, and control their individual settings and profiles. The profiles tend to include graphical avatars and signature blocks which are appended to their future posts, sometimes consisting of elaborate shoutboxes. Members also have the ability to send personal messages to each other. In certain cases, members have been given the ability to close their own topics, edit previously posted comments, or delete posts in topics they have started.

Western-style forums place heavy emphasis on identity and user registration. This makes the tone of discussion very different from the more anonymous 2channel style boards. The burdens of status and persona encourage both highly formal discourse and close personal relationships, depending on the tone given a forum by its moderators and heaviest users. The permanence of messages on many western-style forums can encourage users to self-moderate. Precursor systems like Usenet have been archived as far back as 1981 by Google Groups (formerly DejaNews).

Administrators and moderators

A forum administrator typically has the ability to edit, delete, move or otherwise modify any thread on the forum. Administrators also usually have the ability to close the board, change major software items, change global skins, modify the board, and ban, delete, or create members. Moderators have a subset of these powers, which may include editing, deleting, and moving threads, mass pruning, warning members for offences, and changing minor forum details. It is often possible for moderator privileges to be delegated to other forum members.

A board's moderation system can include moderation of the moderators via a meta-moderation system. The board software may also allow administrators to create wordfilters, automated scripts which strip undesirable text from users' messages. Other features may include sticky threads, allowing moderators and administrators to cause significant threads to display at the top of the forum's index.

Features

Forum software packages are widely available on the Internet and are written in a variety of programming languages, such as PHP, Perl, Java and ASP. The configuration and records of posts can be stored in text files or in a database. Each package offers different features, from the most basic, providing text-only postings, to more advanced packages, offering multimedia support and formatting code (usually known as BBCode). Many packages can be integrated easily into an existing website to allow visitors to post comments on articles.

Several other web applications, such as weblog software, also incorporate forum features. Wordpress comments at the bottom of a blog post allow for a single-threaded discussion of any given blog post. Slashcode, on the other hand, is far more complicated, allowing fully threaded discussions and incorporating a robust moderation and meta-moderation system as well as many of the profile features available to forum users. Full content management systems such as Drupal

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or Mambo can also incorporate full-blown forums as plugins or basic features of forums in other portions of their website.

Comparison with other web applications

One significant difference between forums and electronic mailing lists is that mailing lists automatically deliver new messages to the subscriber, while forums require the member to visit the website and check for new posts. Because members may miss replies in threads they are interested in, many modern forums offer an "e-mail notification" feature, whereby members can choose to be notified of new posts in a thread, and web feeds that allow members to see a summary of the new posts using aggregator software. The main difference between newsgroups and forums is that additional software, a newsreader, is required to participate in newsgroups. Visiting and participating in forums normally requires no additional software beyond the web browser.

Wikis, unlike conventional forums, typically allow all users to edit all content, including each other's messages. This level of content manipulation is reserved for moderators or administrators on most forums. Wikis also allow the creation of other content outside of the talk pages. On the other hand, weblogs and generic content management systems tend to be locked down to the point where only a few select users can post blog entries, although many allow other users to comment upon them.

Forums differ from chat rooms and instant messaging in that forum participants do not have to be online simultaneously to receive or send messages. Messages posted to a forum or Usenet are publicly available for some time, which is uncommon in chat rooms that maintain frequent activity.

Forum netiquette

Netiquette

Forum netiquette can vary on different forums. On default, individuals must agree to a Registry Agreement that defines a forum's rules before joining that particular forum, but whether those rules are actively enforced varies from forum to forum. For example, a family friendly forum would prohibit sexually explicit content, but a sex-oriented forum would encourage it. Also, some forums are more tolerant of cursing and rude behavior than others. Rowdy forum users often engage in flaming

Multiple posts (or double posting)

One common faux pas on internet forums is to post the same message twice. Users sometimes post versions of a message that are only slightly different, especially in forums where they aren't allowed to edit their earlier posts. Multiple posting instead of editing prior posts can artificially inflate a user's post count. Multiple posting can be unintentional; a user's browser might display an error message even though the post has been transmitted or a user of a slow forum might become impatient and repeatedly hit the submit button. Multiple posting can also be used as a method of trolling or spreading forum spam. A user may also send the same post to several forums, which is termed crossposting. This problem was inherited from Usenet and is a common complaint in many forums.

In many forums which have editing allowed they have rules asking people not to make multiple posts, and also use a common plug-in to merge double posts (without an administrator/moderator having to manually delete or merge the posts).

Spamming

Forum spam

Forum spamming is a breach of netiquette where users repeat the same word or phrase over and over, but differs from multiple posting in that spamming is usually a wilful act which sometimes has malicious intent. This is a common trolling technique. It can also be traditional spam, unpaid advertisements that are in breach of the forum's rules. Spammers

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utilize a number of illicit techniques to post their spam, including the use of botnets. A different form of spamming is making posts that have little or no meaning (e.g., "I lik to tadada").

Trolls

Troll (Internet)

A troll is a user that repeatedly and intentionally breaches netiquette, often posting derogatory or otherwise inflammatory messages about sensitive topics in an established online community to bait users into responding, often starting flamewars. They may also link to shock sites or plant images on networks that others may find disturbing in order to cause confrontation. Trolls known as gravediggers purposefully post in old and irrelevant threads used to bring that thread to light again.

Online chat can refer to any kind of communication over the Internet, but is primarily meant to refer to direct one-on-one chat or text-based group chat (formally also known as synchronous conferencing), using tools such as instant messaging applications—computer programs, Internet Relay Chat, talkers and possibly MUDs, MUCKs, MUSHes and MOOes. The expression online.