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Why Conference on the Web?

Welcome to the age of online communication! Even though we frequently use electrons to communicate today, the basics of communication can probably be traced at least as far as the Stone Age, when our ancestors gathered around campfires to discuss important business—the best hunting spots, how to keep warm, and what to do with the kids. As time went on, this activity shifted to the local water cooler, though the general concerns may not have changed as much as we'd like to think—hunting for jobs, hunting for houses, and...what to do with the kids. Fast-forward to the late '90s, and this activity has moved to the Internet, specifically web-based discussions about...jobs, careers, and kids.

In many ways, the online world mimics the real world. We send and receive mail electronically rather than through the postal service; we search for and find information in databases rather than at the local library; we buy and sell products and services with a few keystrokes rather than making a trip to the store. But what about conversing with groups of people? Exchanging ideas and information with colleagues, friends, family members, and strangers? Collaborating on projects, hobbies, or shared goals? High-level corporate international conferences? Does the online world support this type of group communication?

WebBoard 3.0 lets you turn your computer into communications central, replacing the campfire or the water cooler and bringing users from far and wide a little closer together. With this latest version of WebBoard, your communication and information delivery options just expanded exponentially. For the enterprise, WebBoard now includes SQL Server support. The integrated ConferenceRoom IRC chat server allows up to 1,000 simultaneous users on both public and private IRC channels. You can also track usage of WebBoard through enhanced logging and logs that can be easily analyzed.

In addition to its powerful conferencing and chat capabilities, WebBoard 3.0 supports mailing lists. Now WebBoard users can participate by email. WebBoard distributes conference content to subscribers by email and in return, subscribers can respond to messages and post new topics by email. No matter where WebBoard users are, they can conveniently be part of the discussion.

This book is dedicated to showing you how to build a high-powered, compelling web conference system using WebBoard. This first chapter provides an overview of WebBoard and some ideas for using it. The rest of this book tells you how to install, manage, customize, and use WebBoard.

How Can I Use WebBoard?

WebBoard is a tool for fostering communication, globally or locally, among people with common interests whether they be professional, civic, or social. WebBoard is extremely flexible and convenient to use and manage. Because it is browser-based, you can use it anywhere, any time. All your users need is access to a browser. As the administrator, you can manage WebBoard through your browser, making remote administration easy.

You may decide to use WebBoard to promote discussion for developing a product, pursuing a goal, or simply having fun. Perhaps the most important thing to note about using WebBoard is that it is designed to bring people to your site and *keep* them there, unlike many web pages that have links sending users out to *other* sites on the Web. If your boards are well designed and maintained, they can become an exciting destination for a variety of people.

This section gives you some standard ideas as well as some you might not have thought of for using WebBoard. Whenever group participation and collaboration is appropriate, WebBoard offers a well-organized framework for managing the discussion and users. As you become more familiar with WebBoard and your online community, you can tailor these ideas accordingly. And, you can always visit WebBoard Central (<http://webboard.oreilly.com>) for more ideas—and to share your own WebBoard use.

Note

You'll need a JavaScript-enabled browser such as Netscape 3.0 or higher or Microsoft Internet Explorer 3.0 or higher to use many of WebBoard's features. A level 4 browser is recommended to use all WebBoard's features. See Chapter 2, *Before You Start*, for a more detailed discussion of WebBoard's requirements.

Virtual meetings

We're all familiar with the often impossible task of coordinating schedules for meetings to review and discuss time-critical information with our peers. Scheduling meetings with multiple participants from far-flung locations can often be more time-consuming than the meetings themselves! However, WebBoard gives you an effective alternative by providing a meeting place without regard to time or location.

For example, let's say that on a countywide basis all the office managers in the medical field routinely meet to exchange ideas and discuss solutions to the unique challenges in small practices. Because of schedule conflicts, some managers can't attend these meetings. Setting up a WebBoard conference devoted to these issues lets office managers participate in meetings without having to go somewhere, and to do so on their own schedules. Office managers can easily follow and participate in conferences at their convenience. Not only does this save time, but it also makes this valuable information readily available to office managers who may join the group later. It also ensures that members won't miss information because of sickness, vacation, or emergencies. For more dynamic needs or on a regular, predetermined basis, the managers can meet in a chat session with other conference members.

Information management

We live in the Information Overload Age. Having too much information can be useless or even counterproductive. WebBoard helps you manage information so that it is readily available and logically organized.

WebBoard's conferences and structured information hierarchy create an ideal medium for managed information. For example, a research facility can arrange conferences in much the same way as one would manage a filing cabinet. The information is made available both logically and chronologically. As you need more room or other topics emerge, you can add more boards, just as you would add more filing cabinets.

In addition, WebBoard's support for file attachments and links to other sites on the Internet lets users extend the message-posting and -reading capability of WebBoard. A research scientist may want to have peers review current findings stored in a spreadsheet file, or point users to images recorded during a recent observation. When scientists are onsite and Internet connections limited, participating in conferences by email allows them to stay up-to-date by receiving and posting messages.

Web conference hosting

WebBoard makes it easy for you to host virtual boards for others. Each virtual board is unique with its own set of conferences, messages, and users. It can also have its own color schemes, and look and feel. You may want to run separate boards for different departments or locations in your company. If you're a web consultant or host web pages for others, you can set up boards for your business clients who want conferences to discuss their products and services. Each client's board can have its own pages with the client's own custom look. Each board can also have its own managers and conference moderators.

Foreign-language conferences

Whether you want to provide a discussion area for your international customers or simply a place to practice with your local French club, WebBoard makes setting up foreign-language conferences easy. Nearly every element displayed by WebBoard is an HTML document or image that you can translate or replace. For example, you can change the images used for buttons on the menubar to display the same commands in German (or French or Japanese!). You can translate the HTML pages and the help files, as described in Section III, *Tailoring WebBoard*, of this book.

If your business serves a variety of international locations or you're head of the foreign language department for a school system, you may want to set up multiple boards based on language. From the conference center home page, users can select the language they want and go directly to the appropriate board. Foreign-language students can benefit by having native speakers from the country also participate in the conferences and chat sessions.

Customer service/technical support

WebBoard is an ideal way to provide customer service or technical support. In conferences set up for specific product activities, a customer can post a question. Other participants can answer from their own experience, or a staff member can provide an official answer. You may choose to moderate some of these conferences to ensure that solutions are proper and won't lead to bigger problems. Once a solution is posted, it is available for other users to read. In fact, rather than repeating the same information over and over, support staff can point users to WebBoard conferences for answers to questions. In essence, a customer or tech support WebBoard becomes a knowledge base for troubleshooting, diagnostics, and Frequently Asked Questions (FAQs).

Online brainstorming

WebBoard makes it easy for team members to hold brainstorming sessions despite being separated by time and distance. The fundamental rule of brainstorming is never to discard ideas, but record them all. In the traditional brainstorming model, each idea may be the seed of the final, creative solution.

WebBoard's JavaScript Chat feature provides a great vehicle for real-time brainstorming sessions. Set a time for the chat brainstorming session and have the WebBoard administrator record the session in a chat log. The log can then be posted in the conference for participants to review.

Similarly, you can brainstorm through WebBoard's conferences. Because WebBoard keeps conference postings until the administrator removes them or they reach the expiration date, participants in a WebBoard brainstorming session can refer to earlier comments, previous ideas, and the entire flow of the conversation throughout its lifetime.

Project collaboration

As businesses have become more flexible in reacting to changing market-places and the increasing pace of technological advancements, much has been said and written about the virtual corporation. Virtual corporations or virtual teams rely heavily on electronic communication, such as email, file transfers, voicemail, pagers, and fax service, to share and track the issues that their projects face.

WebBoard's ability to store information by topic, combined with its fast search engine, makes it an excellent choice for offsite groups collaborating on the same project. In addition, WebBoard can keep a history of previous collaborations. This archiving use of WebBoard means that knowledge acquired by the team can be passed on to future teams working in similar areas. Unless you're working on an internal network, you probably want to make project conferences private, limited to the project team members.

The following scenario traces the use of WebBoard for just such project collaboration:

- Your organization sets up a board for the product you're bringing to market, with several conferences: one for marketing information, one for technical discussion, one for production, and others as required. During the course of several months, each team uses the conferences that concern it the most, but also has access to the discussions the other groups are having about the product. For faster and more universal participation, you may want to encourage team members to subscribe to the conferences' mailing lists. Sometimes busy team members find it easier to read and respond to email than to visit the WebBoard site.
- At the end of the process, your new product goes to market and is a success. Furthermore, your team's use of WebBoard is lauded as a model for the corporation's future information management.
- Because the specific information is no longer active, but could be useful as reference material, the final step is to archive the conferences used for the

project. To do so, simply move the virtual board's URL from the Current Projects page to the Archived Projects page.

How Does WebBoard Work?

We've talked a lot about how you might use WebBoard, and you probably have some more ideas of your own. At this point, it may be good to take a few minutes to get an overview of how WebBoard works and what its basic components are. Of course, the rest of this book explains them in more detail.

WebBoard combines database and email technology with World Wide Web technology. Behind the scenes, WebBoard relies on a Microsoft Access database to keep track of virtual boards, conferences, messages, users, and WebBoard's configuration. Or you can upsize WebBoard to use Microsoft SQL Server 6.5 or later for the same purposes.

Out on stage, if you will, WebBoard presents a web personality: HTML pages for logging in, reading and posting messages, searching, and learning more about conferences and users. Through its mailing list capability, WebBoard's alter ego allows registered users to read and post messages or responses via email. Two types of chat—ConferenceRoom IRC chat and WebBoard's JavaScript chat—extend WebBoard's capabilities beyond the standard web page.

Sitting between the database and the browser is the WebBoard script, a program that enables the two pieces to communicate. This program comes in one of two flavors: Win-CGI or ISAPI to support a wide variety of Windows-based web servers.

Which leads to the next component in WebBoard: the web server. The WebBoard Win-CGI or ISAPI program requires a web server, the software that handles requests from and responses to browsers. WebBoard 3.0 includes its own internal web server, so all the components you need are shipped with the product. WebBoard also works with a variety of other web servers as an add-on application. You can even use WebBoard's internal web server on one port and a different external web server on another port.

With the addition of mailing list capabilities, WebBoard now includes its own SMTP mail server to handle inbound mail only. This mail server takes care of properly routing email messages to the designated conference and, if the email is a response to an existing message, marking it as a reply to the appropriate topic. Outbound mail for welcome messages, email notifications, and mailing lists requires an external SMTP mail server.

The new IRC chat server and client are provided by WebMaster. Their ConferenceRoom chat server and Java client are tightly integrated with WebBoard. Chat channels are automatically registered and security maintained for private boards

and conferences. Although you can further configure the chat server, you can also just get in and drive away. Users can participate in public chats using any IRC client; for private chats, they must use the Java client that comes with WebBoard.

That's the very quick tour of WebBoard's operation. As you learn more about WebBoard and understand the various pieces, you'll appreciate both the power and elegant simplicity of the WebBoard model.

What Are Some WebBoard Features?

Now let's take a look at some specific WebBoard features. This overview should help flesh out your ideas and get you headed in the right direction for installing WebBoard and building your own web conferences.

Virtual boards

WebBoard lets you set up completely separate boards, called *virtual boards*, with only one copy of WebBoard running. Each virtual board has its own set of conferences, topics, and messages, and can also have its own color scheme and custom look and feel. WebBoard supports up to 255 virtual boards and unlimited conferences.

Conferences

Conferences can organize content on a virtual board. Generally each conference deals with a specific subject area such as cooking or travel or your company's latest product. WebBoard supports four types of conferences:

- Public conferences, in which any user who can reach WebBoard can read and post messages.
- Private conferences, in which only specified users can read and post messages. Private conferences are useful for collaboration on projects that should not be viewed by others on your WebBoard.
- Read-only conferences, in which anyone can read messages, but only the system administrator, manager, or moderator can post messages. Read-only conferences are useful for disseminating information such as policies or product news.
- Moderated conferences, in which anyone can read and post messages, but the moderator must approve all messages before they are available for general reading. Moderated conferences are useful for keeping a conference focused on the subject or goal of the conference.

Messages

The content of a conference is developed by users posting new topics or responding to previous messages. On unmoderated conferences, the users drive the discussion. On moderated or read-only conferences, the moderator

determines the conference's content. Users can post messages directly through their browsers or by email. When creating and posting messages, users can take advantage of these WebBoard features:

- Spell-checking and correction
- Message preview
- Anonymous posting of messages
- Support for HTML tags and other elements in messages
- File attachments

SQL Server support

Although WebBoard uses an Access database, you can easily upsize it to full SQL Server 6.5 for enterprise-level computing. The upsizing process is quick and easy and allows WebBoard to fit easily into your overall computing strategy.

ConferenceRoom IRC Chat

The ConferenceRoom chat server supports up to 1,000 simultaneous users in true Internet Relay Chat (IRC). In addition to the server, WebBoard includes a Java client for participating in IRC chat, which loads in the user's browser. Users can also participate with any other IRC client such as Pirc. IRC chat provides a full range of discussion and configuration modes, but is transparently integrated with WebBoard so you can use it with a simple setting.

WebBoard JavaScript chat and Chat Spots

WebBoard's internal JavaScript chat lets users have interactive, real-time conversations. The JavaScript chat is limited in its number of users, but supports a wide range of options such as whispering, custom text, active links, and paging. The Chat Spot feature causes HTML documents (typically images or short messages) to display randomly or sequentially at specified intervals. Chat Spots commonly display company logos, ads, or brief messages.

Mailing lists

WebBoard has mailing list capabilities that allow registered users to participate in conferences via email. Users can subscribe to conferences that have mailing lists and receive by email all messages posted to the conference in one of three formats:

- Non-digest, in which are sent individually, immediately after being posted
- Digest, in which messages posted to the conference within the past 24 hours are sent together in a single, indexed email message once a day
- Digest/ZIPped, in which messages posted to the conference within the past 24 hours are zipped into an archive sent in a single, indexed email message once a day

Per-board authentication

Authentication is set on a per-board basis rather than for the entire WebBoard site. WebBoard supports three types of authentication:

- Cookie authentication lets users have WebBoard remember their passwords. WebBoard's internal and all external web servers support cookie authentication.
- Basic authentication requires users to enter their login name and password each time. Only WebBoard's internal web server and the two WebSite servers support Basic Authentication.
- No authentication lets anyone participate in the board without registering. Users enter and post messages freely simply by supplying a name and email address. Since there is no user database for this type of board, many features such as user lists and user profiles are not available.

Administrative privileges

WebBoard supports three levels of users that have varying administrative privileges. Each level performs different tasks and is essential in delegating the upkeep of WebBoard. Figure 7-1 in Chapter 7, *Managing Users*, provides a good overview of WebBoard's user hierarchy. The three privileged user types are as follows:

- WebBoard administrator has full control over the WebBoard site, boards, conferences, messages, and users
- Managers have full control over the board or boards to which they are assigned. They can't, however, edit or delete a board.
- Moderators have full control over the conference or conferences to which they have been assigned. They can edit and delete conferences.

Log files

WebBoard supports seven types of log files: board logs, chat logs (JavaScript chat only), SMTP log, upload log, install log, error log, and WebBoard log. The board logs are created on a per-board basis and record all HTTP requests to the board. You can analyze board logs using any log file analysis program. The other logs provide important information on activity and are helpful in troubleshooting problems. Board logging can be enabled or disabled across the entire site. The SMTP log can record detailed information when SMTP tracing is turned on.

Downloadable log files

Managers and administrators can download a zipped copy of the HTTP log for the current board. This feature makes it easy for managers to analyze the current WebBoard traffic of their own boards by viewing their current statistics conveniently.

Log cycling

A button available to the WebBoard administrator and board managers lets them cycle the logs. The old log is assigned a new extension (.001 to .030), and a new log is automatically created.

WebBoard page customization

You can easily change the look and feel of WebBoard's user interface and help system, because the sources for these pages are HTML documents that you can edit. For example, you may want to add your company's logo to the welcome message. Or you may want to add foreign language conferences and need to translate the standard pages. WebBoard also has a number of special text-handling tags that let you include dynamic information about WebBoard. You can also change the background color using WebBoard's color selector.

Built-in web server

WebBoard's built-in web server requires no configuration or special maintenance. It supports all WebBoard features, including all three security modes, file attachments, and the JavaScript used for chat and administration wizards (note that not all external servers support these features). WebBoard's internal web server also provides faster performance than the external servers, a key consideration if you expect heavy traffic on your WebBoard. You can even use WebBoard's built-in server in conjunction with an external web server: simply assign them to different ports.

Built-in SMTP mail server

The built-in SMTP mail server handles the incoming mail for WebBoard's mailing list feature. It prevents unregistered or unauthorized users from posting messages by email and bounces the messages back to the sender (if desired). WebBoard still requires an external SMTP server for handling outgoing mail. The external server must reside on a different computer from the one running WebBoard.

New message identification

WebBoard provides three ways to find new messages quickly: from the New Messages link on the Welcome page, from the New Messages link in the Conferences List, and from the New Messages link on the More Options menu. A list of new messages and their associated conferences are displayed in the Conferences List (left frame) area.

Message search feature

WebBoard includes a search engine for finding specific text in message topics and/or message bodies. Full-text searches make finding specific information even faster on your WebBoard.

Message archiving and retrieval

WebBoard can archive messages on a predetermined basis, either by number of messages in a conference or by age of messages. Once archived, messages can be retrieved by the administrator, manager, or moderator.

User lists

WebBoard lets you easily find out user activity and information for each board. In addition to being able to search the user database by first or last name, WebBoard generates the following lists on request:

- Current Users, showing who has logged in during the last 30 minutes
- Today's Users, showing who has logged in since midnight
- Top 10 Users, showing who has logged in to this board the most
- Top 10 Posters, showing who has posted the most messages to this board

Email notification

WebBoard can notify users once a day by email when new messages have been posted to conferences they specify. Email notification helps users keep track of activity in conferences that are of particular interest.

What's New in WebBoard 3.0?

If you're upgrading from an earlier version of WebBoard, you'll notice enhancements and new features seemingly everywhere you look. The WebBoard team has been working hard to bring you the latest web conferencing, chat, and mailing list technologies in a high-quality package to meet your communication demands. We added many features and enhancements in response to suggestions and requests from current Webboard users. As always, we welcome your feedback as we continue to develop the best Windows conferencing server package on the market.

Here's a brief list of some of the new features you'll see in WebBoard 3.0. Some of these have been discussed in the preceding section.

- Support for Microsoft SQL Server 6.5 brings WebBoard to the enterprise. If you have SQL Server, you can easily upsize the WebBoard database to use the power of SQL.
- Tightly integrated with WebBoard, ConferenceRoom IRC chat server supports up to 1,000 users to provide full-strength, Internet-ready chat. Boards can use either ConferenceRoom chat or WebBoard's JavaScript chat, which can be enabled on a per-conference basis. ConferenceRoom starts and runs seamlessly with WebBoard, automatically registering channels and respecting WebBoard's security.

- WebBoard's logging capabilities are greatly enhanced. Each board now creates an HTTP log that records requests to that board. These logs can be analyzed by any web traffic analyzer. Administrators and managers can download the logs instantly and cycle logs when needed. Another new log is the SMTP log, with optional tracing, for recording the SMTP server's activity.
- Users can now participate in WebBoard through email. Conferences can have mailing lists to which users subscribe. They receive messages from the conference in a non-digest, digest, or digest/ZIPped format. They can respond to the messages or post new topics by email.
- Authentication can now be set on a per-board, rather than systemwide, basis.
- A new type of authentication—no authentication—allows free access to a board with no user registration required. Users are identified by providing an optional name and email address. They can read, post, and search for messages. They can participate in chat. However, several user-oriented features are not available such as user profiles, user lists, and search users.
- Boards are now identified by aliases rather than numbers. A board's URL *must* contain an alias in the form `http://your.server.com/~boardalias` (for the internal server), or `http://your.server.com/$webb.exe/~boardalias` or `http://your.server.com/webboard.dll/~boardalias` (for an external web server).
- The WebBoard administrator and board managers can easily change the background colors of the current board. Color values can be hexadecimal, names, or chosen from the built-in Color Selector.
- New messages now appear in the left frame rather than the right. New messages and their associated conferences are displayed on a unique "New Messages" background. A New Messages link has been added to the top of the Conferences List.
- The WebBoard administrator and board managers can change the conference order by specifying a weight for each conference in a given board. The conference ordering feature is available from the More Options menu.
- The Conferences List updates automatically when a user posts a message.
- A Logoff button has been added to the WebBoard menubar. You must specify a logoff URL when you create a board or remove the logoff button from the menubar. The logoff button makes users comfortable about ending their WebBoard session and also gives you control over where they go next.
- Another new item on the More Options menu, available to all users except on no-auth boards, is List Boards. This item shows a list of all boards on this site the user has visited and provides a link to each. Boards for which the user has administrator or manager privileges include a key icon.

- The email notification message (stored in *notify.txt*) now includes a link to the board from which the message was sent. The message also includes more information to help the user identify the conference.
- The run mode of WebBoard when using an external WebSite or WebSite Professional server is more flexible than in Version 2.0. Previously, the server and WebBoard had to run in the same mode. Now they can run in different modes except that WebBoard cannot run as a service if WebSite is running as an application. Note that this restriction does not apply if you are using WebBoard's internal web server.