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# CHAPTER 3

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## Intranet Design

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### OVERVIEW

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The explosion of the Web as a means of sharing information on the Internet has evolved into means for organizations to share documents and data internally. The buzzword that sums up this new direction is *intranet*. It is important to note that an intranet is not merely an internal Internet. Because internal company data is generally considered proprietary or confidential, security is an important concern within a company intranet.

Many applications that can be used on the Internet are ideal groupware applications for use within a company. Many of the applications discussed in this book are ideal additions to any company intranet.

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## A BULLETIN BOARD SYSTEM

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Many companies already have an internal E-mail system, but most of them are not yet equipped to handle more public discussions. A Web-based BBS message board system can help by giving a public forum for talking about a variety of topics.

For example, many organizations have committees that discuss topics relevant to the company. Unfortunately, in a busy company, finding a time when five or ten people can meet to discuss the same topic is difficult. A BBS can facilitate this discussion by letting committee members post their ideas and comments at times that are convenient for each person. Because the messages stay around, the message board is a natural “secretary,” keeping an archive of all discussions about a particular topic (see Figure 3.1).



*Figure 3.1 Example of a message board system.*

Forums, too, can be set up to discuss a variety of topics. For example, employees can ask questions about company policies and procedures. Announcements can be made on a BBS system about forthcoming system

downtimes and planned upgrades, and employees can also ask computer-related questions. Because the forums are public within the company, the employees can always search on previously posted messages to see whether their questions have already been asked and answered in a related discussion forum.

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## GROUPWARE CALENDAR

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Another Web-based application that a company intranet can benefit from is a calendar. A calendar accessible to everyone can help display company events such as special speakers or presentations (see Figure 3.2).



*Figure 3.2 Example of a groupware calendar.*

A calendar can be a great organizational device for scheduling common resources such as conference rooms. Instead of using a sign-up sheet for conference rooms and special equipment, a user could use the Web to sign up for a time slot. Using authorization techniques discussed in the authorization library chapter, resources can be controlled by an administrator while the rest of the company can view the changes. This arrangement is useful to stop employees from overwriting a previous reservation.

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## **DOCUMENT SHARING**

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Probably the most common use of an intranet is the sharing of company documents. Policies and procedures manuals and other information can be disseminated using a company intranet. In fact, CGI scripting is not even needed. What is needed is a common means of storing and retrieving the information.

Typically, information on a Web server is stored in HTML form. Although manuals and documents within a company may be stored in another format, such as Word or WordPerfect documents, these word processors now have the capability of doing conversions to HTML. In addition, cross-platform formats such as Adobe Acrobat are now being used to store the information in a common format. Whatever the form of your internal company documents, an intranet can help distribute them to the appropriate people.

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## **DATABASE MANAGER**

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The database manager discussed in this book allows you to store a variety of information that may be relevant to an intranet. For example, a user can enter service requests to a computer department online instead of having to call a hot line. In addition, the user could track the status of the request by looking it up from time to time instead of directly calling the technician, who may be on another service call.

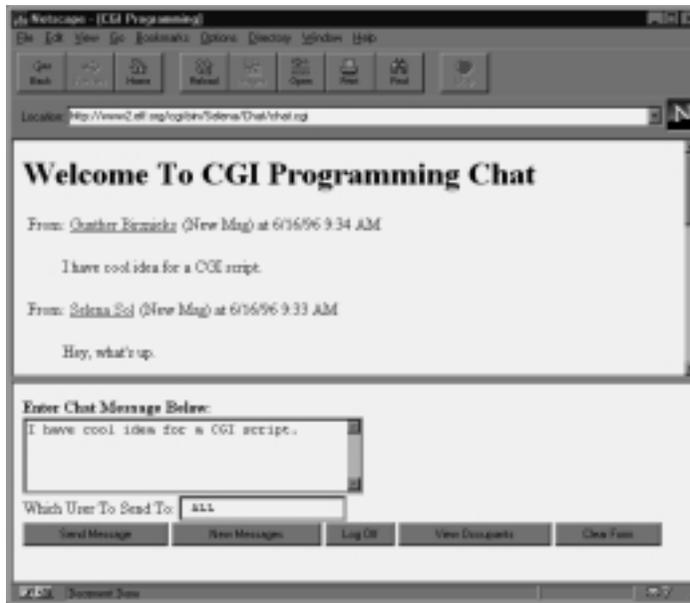
Databases can also be set up for other purposes. Within a company, you may want to allow a user to query phone numbers and room locations of other employees. This can be done with a companywide address book. In addition, information regarding the status of projects can be posted and tracked inside a database, with milestone and status update information stored inside a workgroup database.

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## WEB CHAT

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A Web chat program allows a number of people to discuss a variety of topics at the same time as if they were meeting in a conference room (see Figure 3.3). This “virtual” conference can help people meet without having to be in the same geographical location. As long as an employee has an Internet connection, he or she will be able to participate in the virtual conference.



*Figure 3.3 Example of a Web chat session.*

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## SECURITY

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Security is of paramount importance in the intranet. Instead of sharing information with the outside world, the intranet is used to share informa-

tion within a company. However, an intranet allows so much discussion and transfer of information inside a company that strict guidelines must be maintained to make sure that proprietary information does not leak outside the company.

In addition, certain topics and types of database information should be viewable and changeable only by the appropriate employees. You would not want an intern, for example, to be able to change the CEO's salary online. As a more mundane example, you might want to make sure that information about a user's service request remains confidential between that user and the service department.

These types of security issues can be solved by using the authentication library discussed later in this book. In addition, many CGI programs have sophisticated, built-in security mechanisms. Whether you modify a CGI script to add authentication or get a script with user-level security built-in, you should map out security policies thoroughly before making an intranet "live" to make sure that important information is not leaked or controlled by the wrong people within a company.

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## CONCLUSION

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Many of the scripts in this book are great additions to any company's intranet. However, because of the proprietary and confidential nature of some types of company information, it is important to remember to set them up so that only the appropriate company personnel have access to sensitive functions. Whatever the policies and procedures for your company, adding an intranet as a means of sharing information is bound to increase productivity and communication.