

# Pro Windows Small Business Server 2003



Tony Campbell

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# Windows SharePoint Services

*SharePoint portal has been our savior. Previously, managers and staff at our various sites have kept in touch via mobile calls and emails. There were many places to locate data and lots of places for it to get lost. We are now able to keep our managers up-to-date no matter where in the world they are. They know they can log on and get access to all the information they need and that it is up-to-date. They can get immediate feedback on users and review discussions. Copyworld has implemented a very large WSS site and it contains multiple sites below it.*

—Michael Jenkin, IT manager, Copyworld

**W**ithout a doubt, the most important aspect of introducing a good IT infrastructure into your business is to enable effective collaboration services between users. By *collaboration*, I mean any services that allow your users to work more effectively in sharing data, ideas, and strategy.

A prime example of what I mean by collaborative capabilities is the set of services delivered with Exchange Server 2003. Exchange allows users to send information to one another electronically, organize meetings, and view each other's free/busy time so that they always know who's available and where everyone is. Another less-obvious kind of collaboration is that of a simple shared network drive. By using a network share, many users can access data folders to read or contribute to company or team-related information.

Another method of sharing information is to mimic the services provided on the Internet by creating your own internal website. This will allow you to publish corporate information to a shared community, available through the user's standard desktop web browser, such as Microsoft Internet Explorer. Nowadays, intranets are extremely popular and most companies are employing their services for at least some of their total workforce collaboration capability.

So, everyone needs an intranet. That much is clear (I hope). But the question is, *where do you start?* Web development is certainly not as easy as setting up an email server, and nothing like creating a network share. Although there are many good tools available for creating web content, the real trick comes from learning how to create interactive services that allow users not only to read shared information, but to leverage many of the collaborative facilities of the underlying technologies, such as shared file stores, all through one intuitive interface.

Microsoft has yet again come to the rescue. Included with SBS 2003 is a relatively new intranet technology known as *Windows SharePoint Services (WSS)*. WSS is a free download available from the Microsoft website, but it has been integrated into the SBS 2003 product suite to make life easier.

## Introducing WSS

The idea behind WSS was for Microsoft to deliver a product that created an out-of-the-box intranet for companies that didn't have the resources to start creating one from scratch. Generating your own intranet site that is capable of offering the collaborative capabilities you'd expect your business to use would easily cost a few months' worth of profits in development time and still might not be good enough to add real benefit.

WSS is a predefined set of collaborative capabilities designed to interface with existing aspects of your infrastructure, such as the file store, Exchange Server 2003, and Internet Information Services.

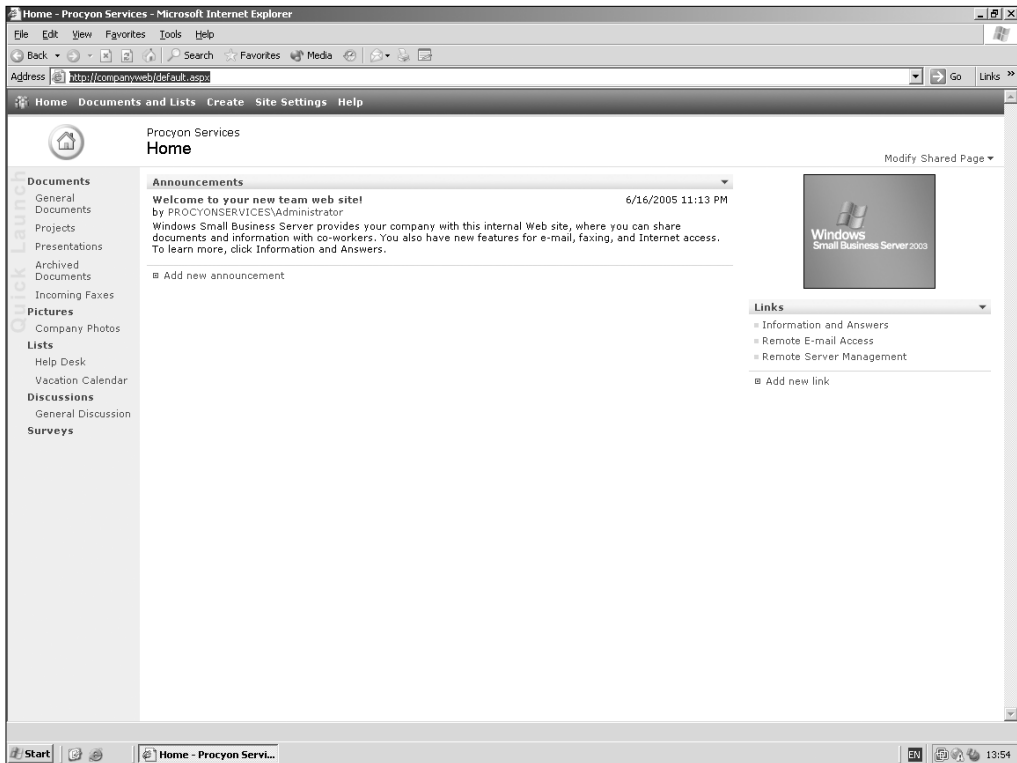
The features WSS provides to your company are as follows:

- *Document management:* WSS provides a powerful document management system that allows you to share and manage your business documentation, applying version control and a checking in and out system to ensure that documents are maintained in a secure fashion.
- *Idea sharing:* Through the use of discussion forums and lists, WSS allows you to share information, start discussion threads, and communicate with the rest of the business through a single, highly versatile interface.
- *Office integration:* If you use the latest version of Microsoft Office, you'll find that many of the features accessible directly on the WSS website are also integrated into the Microsoft Office menus. This allows you to publish directly to WSS from within Word, for example.
- *Security:* As with all Microsoft products, the WSS system uses a set of tightly controlled groups to assign permissions to users. The hierarchy of site groups allows the data within each site to be associated with varying levels of permission.

SBS 2003 automatically generates an intranet website based on the information provided during the general product installation. Accessing the default WSS site is as easy as opening Internet Explorer and typing the address <http://companyweb> in the address bar at the top of the screen. This takes you to a web page with a list of services available on your SBS 2003 server:

- My Company's Internal Website
- Network Configuration Wizard
- Remote Web Workplace
- Information and Answers

To access the WSS site, click the topmost link, My Company's Internal Website. This will take you to the WSS home page, <http://companyweb/default.aspx> (see Figure 6-1).



**Figure 6-1.** The WSS home page lists links to all collaborative services.

## Microsoft Office Integration

If you are using any of the features of Microsoft Office 2003 (such as Outlook 2003, which comes part and parcel with SBS 2003), you'll immediately gain the advantage of the tightly integrated services connecting client to server. Office applications directly interface to the WSS server system, and your Office menus will list extra capabilities that allow you to perform server-side functions without leaving the Office environment.

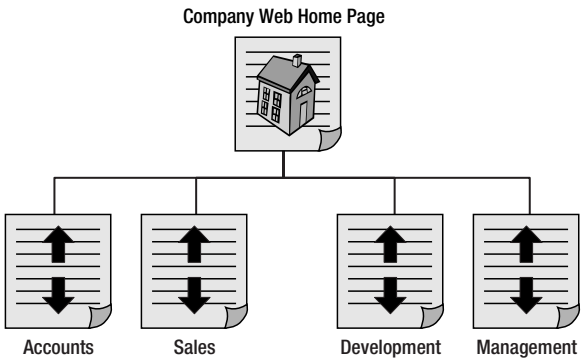
If you are using earlier versions of Microsoft Office, you can still use WSS. However, as you move back through the versions, there is less and less integration between the two products. For anything preceding Office 2000, you'll have to rely on accessing the WSS site directly rather than via the Office application menus.

## WSS Site Hierarchy

It's possible to generate any number of WSS subsites that sit beneath the default company site, and in each case these subsites can be created for a specific purpose. For example, a company might choose to use the top-level site purely as a way of allowing different departments to access lower sites. In this case, the site administrator would remove all the collaborative capabilities from the top level, create links to the lower levels, and apply the appropriate permissions to these lower levels so that only the appropriate staff in each department could access data.

Management could access data from all departments, but the workers would be constrained to access data only within their own.

A typical site hierarchy is shown in Figure 6-2.



**Figure 6-2.** Create a site hierarchy to support your business structure.

### Permissions in WSS

Before delving into the guts of WSS, it's necessary to get a few concepts into your head. Access to your WSS site is controlled by using permissions like those employed by the NTFS service to restrict access to the file system (as you have already seen in Chapter 5). Users attain site membership to each of the WSS sites in the site hierarchy, and their ability to perform operations on these sites is controlled through their membership in *site groups*. Every WSS user is a member of at least one WSS site group, ranging from the least privileged Guest site group to the total control attributed to the Administrator site group.

Table 6-1 shows the site groups that a user can be a member of.

**Table 6-1.** Site Groups

Site Group	Description
Guest	The Guest site group does not permit a user to do anything on the site.
Reader	A user who is a member of the Reader site group can browse the site and read any data held within that site. This user has no right to add information to the site or modify the site itself.
Contributor	A user placed in the Contributor site group can add, edit, and delete items as well as doing anything that a user in the Reader site group can do.
Web Designer	The Web Designer site group adds to the Reader and Contributor permissions by also allowing the user to modify the web pages within the site.
Administrator	Any user placed in the Administrator site group can completely remodel the WSS site, add new subsites, and modify the permissions.

# Getting Started

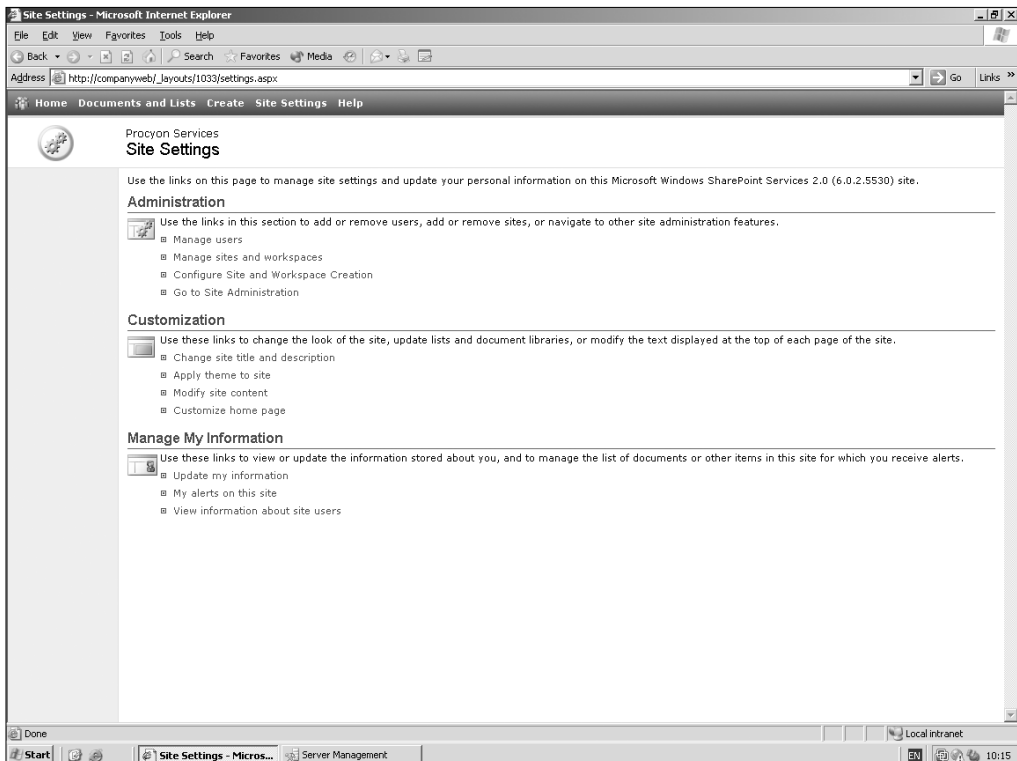
The first time you load the WSS default company home page, you'll see some links down the left side listing the WSS's capabilities. Current company announcements are displayed in the middle of the screen, and various web links to complementary sites and services are shown on the right.

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**Note** WSS is a highly customizable application. The default libraries and capabilities supplied when the site is first created should be evaluated in light of your specific business requirements. In many cases, the default will be applicable and should remain intact (such as the document library for incoming faxes). In other instances, such as the placement of the Help Desk option under the Lists heading, the default might not be appropriate to your business.

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The great thing about WSS is its flexibility. Practically everything you can see on the home page is configurable, right down to the layout of the page itself. By clicking Site Settings in the horizontal menu at the top of the screen, you are taken to the site administration console (see Figure 6-3). Here you can (as long as you have the appropriate permissions) customize the web content, manage your users, and personalize the site for the logged-in user.



**Figure 6-3.** *SharePoint sites are configurable via the web interface.*

We'll start by exploring the default home page to give you an idea of which services are offered out-of-the-box and how you might exploit these services for your own business environment.

The components you'll find accessible from here are as follows:

- *Libraries*: Libraries are WSS components used to contain collections of files that you wish to control in a more orderly fashion than that of the NTFS files and folders. You can create as many libraries as you need, for files such as Word documents, pictures, spreadsheets, and virtually any other category that's required by your business. The libraries included by default with WSS are Documents and Pictures. You can have sub-folders within each library to help you separate data into manageable containers.
- *Lists*: In WSS, lists provide a structured way to publish company data that has an element of order to it. Broadcasts, such as company announcements, for example, would be considered a list because they contain discrete pieces of information placed in order by date. The default lists included in WSS are Announcements (appearing on the home page), Help Desk, Links (also appearing on the home page), and Vacation Calendar.
- *Discussion boards*: Discussion boards are the WSS equivalent of Internet newsgroups. You can post comments, start new threads of conversation, and keep tabs on existing lines of debate. As many discussion boards as necessary for your business can be created, but the default WSS site comes with only one: General Discussion.
- *Surveys*: You can use a survey to solicit opinions from a set of users. Surveys can be created when needed. There are no default surveys because each would have a very different set of questions and responses.

## Navigating Your Intranet

A WSS site is no different from any other website you might access on the Internet. You use your web browser (Internet Explorer) to access the data, click links on the pages to move from one place to another, and follow the intuitive advice on each page to navigate around the various services and data stores.

WSS sites have the following items of interest:

- A link bar at the top of the page for accessing the site's main facilities
- Quick Launch bar down the left side also showing links to the site's facilities
- The main form of the page, where information is displayed



## The Top Link Bar

At the top of each page on a WSS website, you can at any time access a standard set of links. This section gives you an overview of each of these links (details of each are provided later in this chapter).

### Home

You can click Home at any time to bring you right back to the top-level home page. The Home link is available from all web pages on all subsites and can be used at any time during normal site usage or site administration to return you to the top level of the web hierarchy.

### Documents and Lists

Clicking Documents and Lists takes you to a new page listing every library and list you've defined on your site (see Figure 6-4). You will also be presented with links to all subsites and workspaces beneath the top-level WSS site.

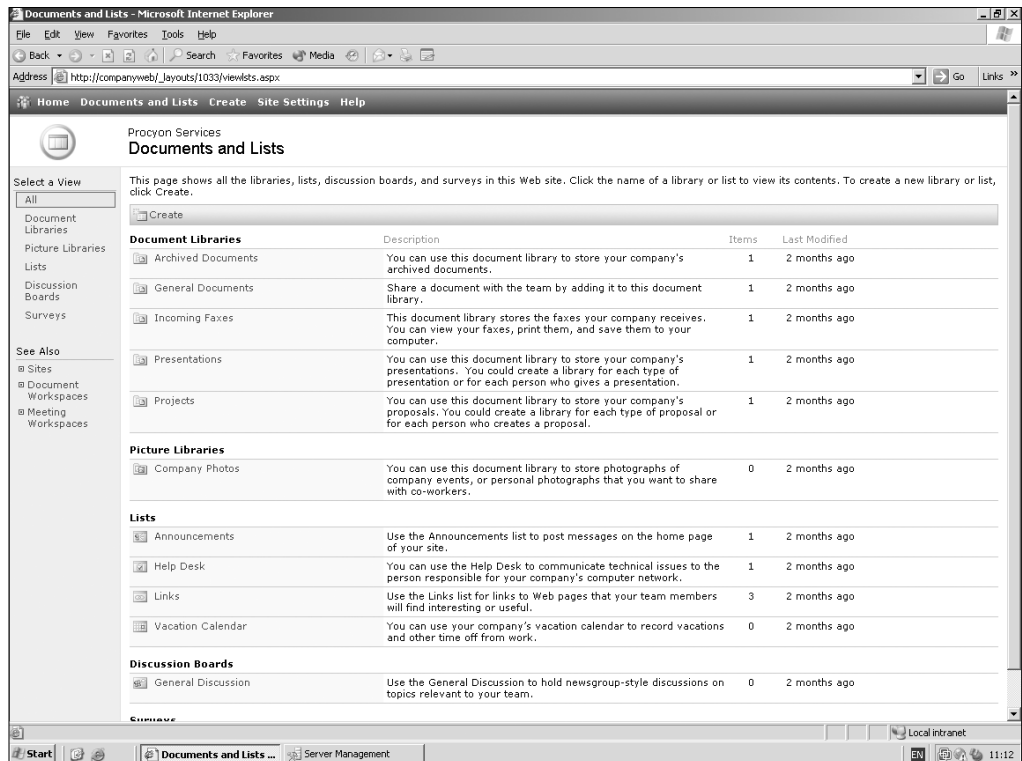


Figure 6-4. The Documents and Lists link provides a full site map.

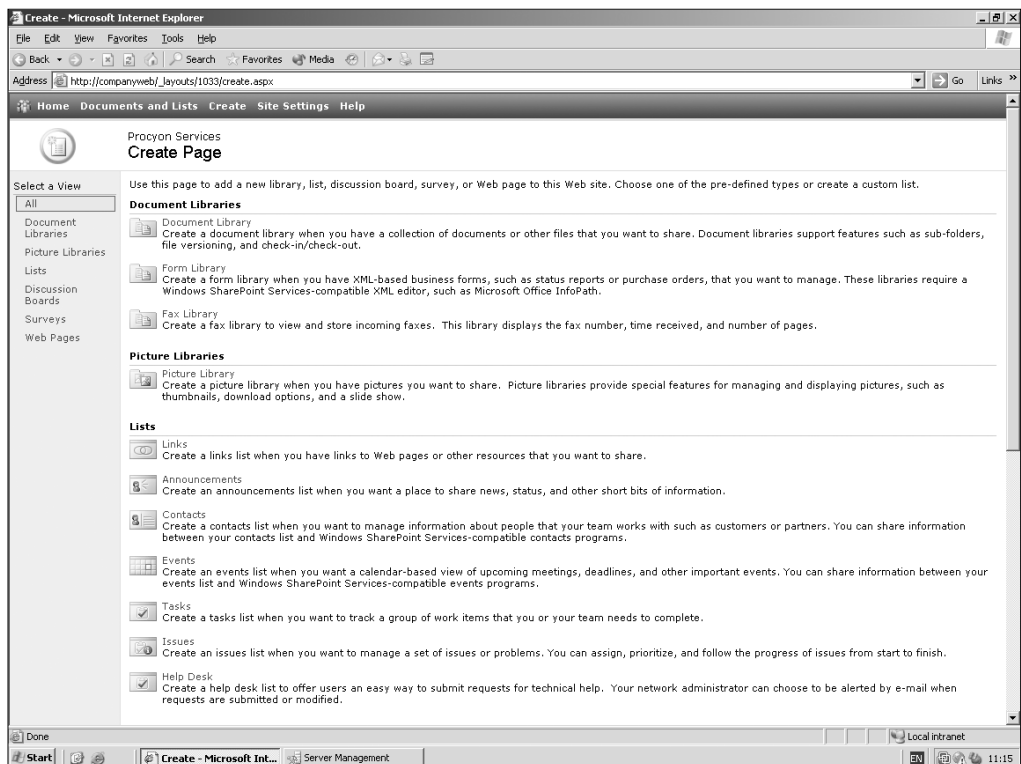
By clicking the Create link at the top of the list, you are taken to the Create Page, from which you have the ability to create new libraries and lists that have a specific focus on your business (see Figure 6-5).

You can also navigate to any of the existing libraries or lists by simply clicking on the relevant name, such as Incoming Faxes.

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**Note** Although you can create and remove any of the default libraries or lists installed on your SBS 2003 WSS system, it's advisable to keep the Incoming Faxes library as installed. You can route all incoming faxes to this library, hence publishing them all automatically to your workforce via the intranet.

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**Figure 6-5.** Create libraries or lists pertinent to your business needs.

To give you an example of library creation, Donald Munro of Practical Gardens wants to create a picture library specifically for his head landscape gardeners to share their creations with each other. He creates a new picture library by clicking the Picture Library link, gives the new library the name Success Stories, and then adds a description of how the library should be used. To make life easy for his users, he selects the option to Display This Picture Library on the Quick Launch bar. To make sure all versions of pictures are stored, he selects a radio button that allows the system to create a version each time a file is edited in this picture library.

To finally create the site, he simply clicks the Create button. WSS pauses for a few seconds while it creates a new library to these specifications, making sure that this library is accessible through the Documents and Lists link as well as via the Quick Launch bar.

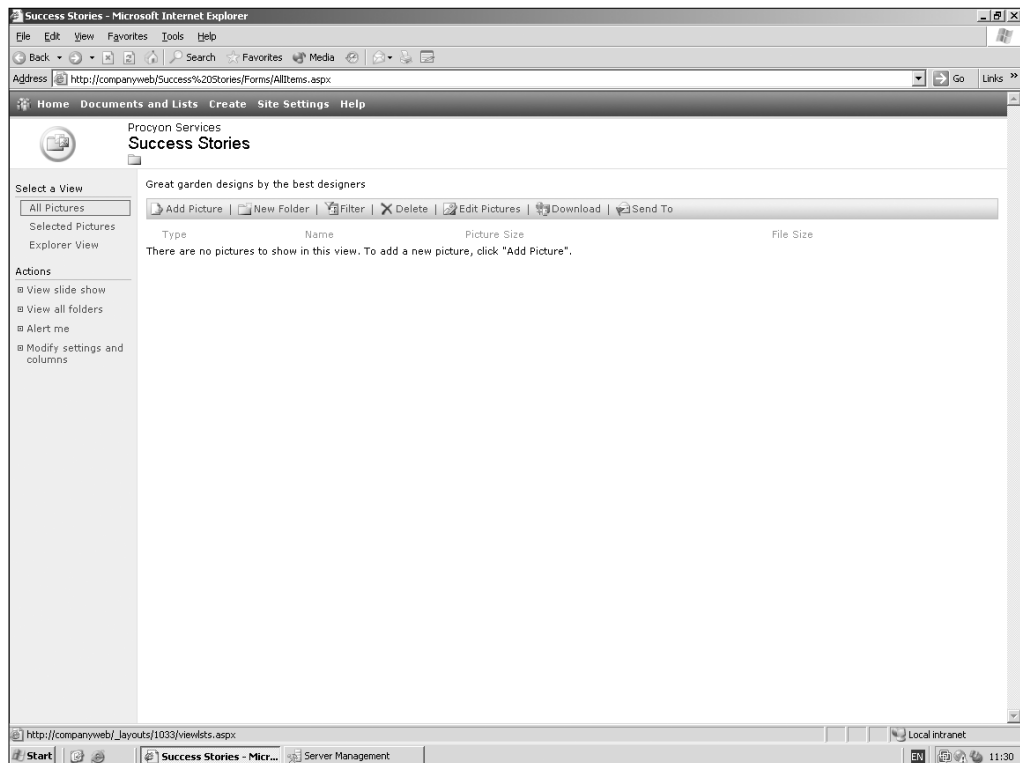
New libraries are instantly accessible, and WSS automatically navigates the web browser to the library's main interface, where Donald can subsequently populate the library with whichever information he sees fit (see Figure 6-6).

A picture can be added to the library by any user in the Contribute site group, by clicking Add Picture. Donald can also create any number of subfolders inside the library to split the data into manageable chunks.

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**Warning** Site permissions are not as granular as NTFS is in this context. All libraries and lists on a site are controlled by using the permissions of the five top-level site groups. If you need to stop users from accessing data in a particular folder, you can do it in one of two ways. You can create an NTFS share and secure the information by using standard security groups, and in this case you'd create a link on the WSS intranet site to point to the share. The other way to achieve this result is to create a new child site off the main site and limit the users who have access to this site.

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**Figure 6-6.** You can populate a new library immediately after creation.

**Note** If you are adding new files to a document library, you can use the New Document link only when you have the appropriate Microsoft Office products installed. The most comprehensive integration between WSS and Office comes with Microsoft Office 2003.

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## Site Settings

If you click the Site Settings link on the top link bar, you are taken to a page where you can administer the rest of the WSS system. From here you are presented with the following options:

- Manage Users
- Manage Sites and Workspaces
- Configure Site and Workspace Creation
- Go to Site Administration
- Change Site Title and Description
- Apply Theme to Site
- Modify Site Content
- Customize Home Page
- Update My Information
- My Alerts on This Site
- View Information About Site Users

I'll go into more detail on each of these options later, but for now keep in mind that this interface is used to manage the overall site configuration as well as the logged-in user's personal configuration. Normal users would use this menu to manage their own identity, and administrators would also use it to customize the site for others.

An additional administration console is available for advanced site administration and will be covered later in more detail (see Figure 6-7).

## Help

If you select the Help link from the top link bar, a new browser window opens, containing the WSS help interface. The information displayed in this menu (like many other Windows 2003 help files) is totally context specific. Figure 6-8 shows how context-specific help is used when creating a new library or list. The window displayed will always be relevant to the WSS feature you are viewing at the time when you select Help.

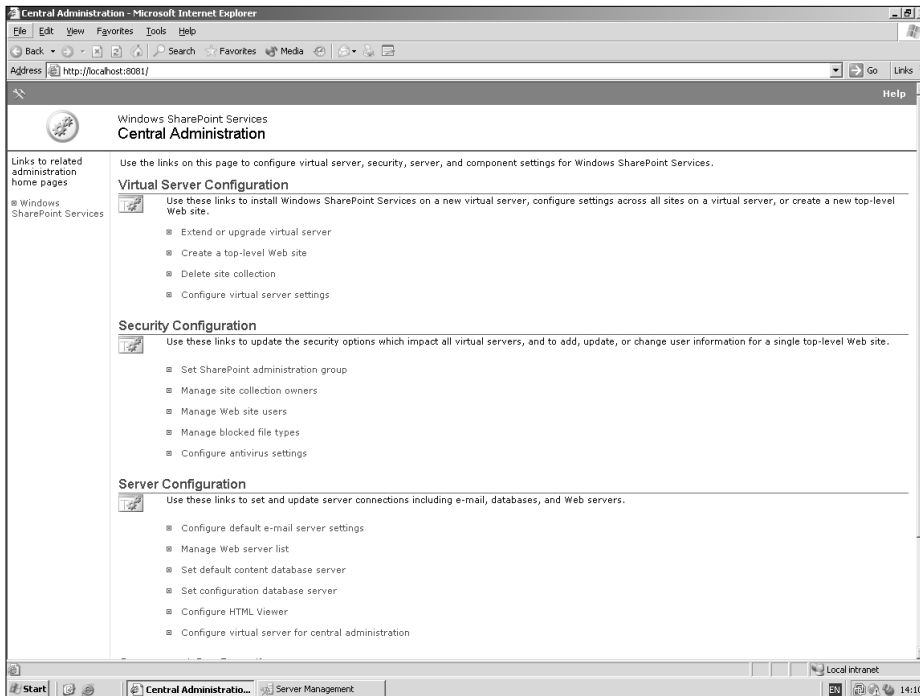


Figure 6-7. *Central Administration is used for advanced management.*

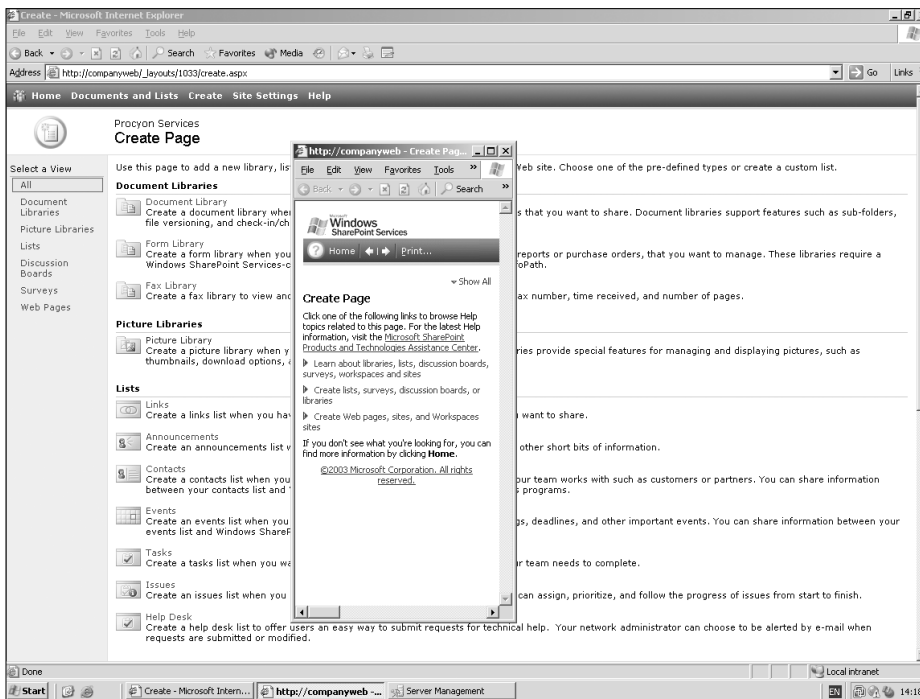


Figure 6-8. *Context-specific help focuses on your current task.*

## The Quick Launch Bar

On the left side of the home page, you'll see the Quick Launch bar. This is a highly configurable menu that allows you to publish links to the most commonly used WSS pages on your site.

We'll start by looking at the links included on the default site and then proceed to configuring the Quick Launch bar for your own needs. In all cases, the Quick Launch bar provides two levels of links: categories and subjects. The category (shown in bold) will take you to the full set of subjects of that type, while the subjects will take you only to the specific item.

### Document Libraries

The Document Libraries category is used to display the document libraries you want accessible from the home page. The list of libraries shown here is by no means comprehensive. You can opt not to display all your libraries on the Quick Launch bar, but if there is room, it's a good idea to add your most important company libraries because this will improve the users' experience of your intranet.

Figure 6-9 shows the page displayed when you click the Document Libraries category in the Quick Launch bar. This category is a subset of the Documents and Lists page shown when you follow the link from the top link bar.

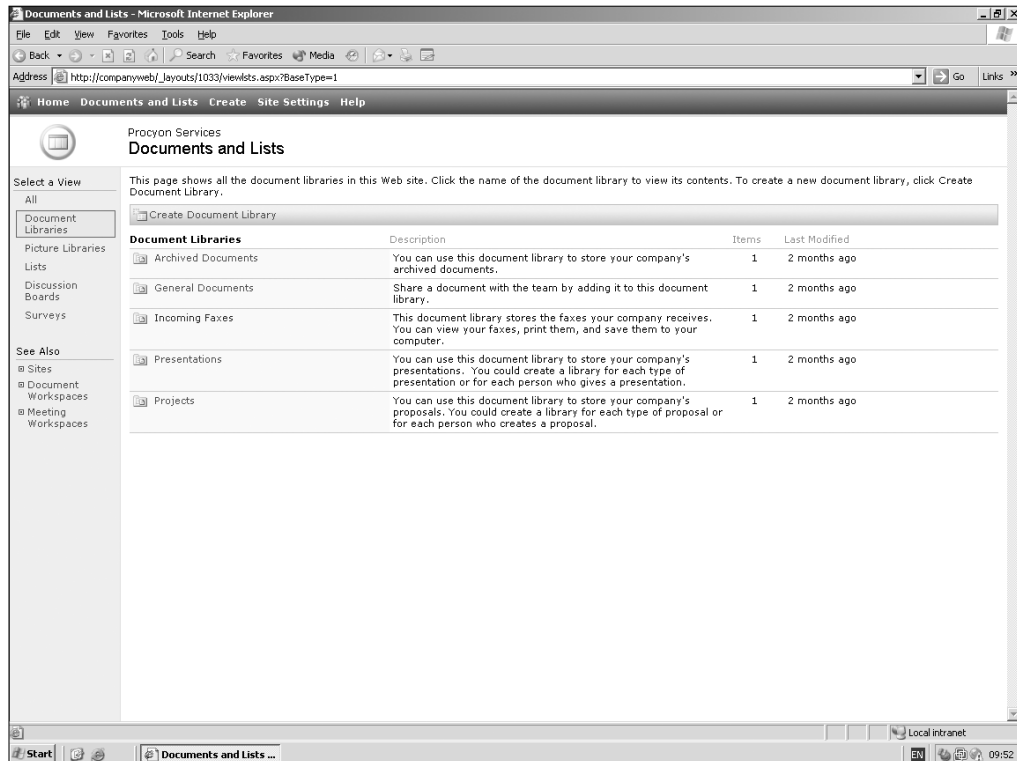


Figure 6-9. The Quick Launch bar displays categories and subjects.

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**Note** As with most aspects of the SBS 2003 solution, there are many ways to accomplish the same task. The trick is finding the way that best suits the way you work. Find it and stick to it.

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**Warning** If you don't strive to provide the most optimized interface you can for all your users, you could drive them away from the intranet, and they will seek other ways to collaborate and work. If this happens, the site has failed, and you should reconsider your site design very carefully. The worst thing that can happen to your business is that some of your users end up using the intranet, while others seek a more user-friendly method of collaboration. This split method of working will undermine any aspirations you have in creating an improved collaboration workspace. If in doubt of how your users perceive your intranet, conduct a survey, listen to the results, and update the site accordingly.

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## Picture Libraries

If you follow the Picture Libraries link on the Quick Launch bar, you will be taken to a list of all the libraries on your site dedicated to digital images. Any digital image libraries you decide to display on the Quick Launch bar during their creation will be displayed beneath this category heading. By default, there is only one of these: Company Photos.

## Lists

The Lists link on the Quick Launch bar takes you to a full list of all the WSS lists created for use on your intranet. Any list selected to be displayed on the Quick Launch bar during creation is displayed beneath the category heading. By default, there are two of these: Help Desk and Vacation Calendar.

## Discussion Boards

The Discussion Boards link on the Quick Launch bar takes you to a full list of all the discussion forums you've created for your users. Any discussion selected to be displayed on the Quick Launch bar during creation is displayed beneath the category heading. By default, there is only one of these: General Discussion.

## Surveys

The bottommost link on the Quick Launch bar is Surveys. There are no default surveys set up on your system, but when you create any, you can opt to have them shown here.

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**Warning** It's a good idea to have only a few surveys active at any one time, and you should be discerning in their use. Although surveys are great tools for soliciting users' opinions on company-related matters, you don't want your company turning into such a democracy that you no longer have any control over what happens. Try to find a happy medium and let users have their say in the things that matter the most to them, not to your business.

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## The Main Screen

Okay, so we've covered the top link bar and the Quick Launch bar. Now it's time to take a look at the rest of the home page.

### Announcements

In the middle of the home page, you'll see the default list, Announcements, shown with a default message to welcome users to the site. If you follow the link ("Welcome to your new team web site!"), the announcement is opened and you can read the complete message.

If you go back to the home page and click Add New Announcement, you are then presented with dialog boxes that allow you to create a brand new company announcement. You'll need to fill in the title of the announcement, the message body, and an expiry date of when the announcement is no longer applicable. You might, for example, be announcing a team meeting that takes place one week from now. When the date passes, the announcement no longer is required, so it will be automatically removed. If you want to attach a file to the announcement, click Attach a File. Then when you are finished, click the Save and Close button.

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**Note** Try not to attach files to announcements. If you need to direct people to a file, try putting the file in a document library and then include the link to the document in the message body. This means that documents will remain in their respective libraries, remaining under change control and appropriate access control.

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### Links

The following three links are listed on the right-hand side of the home page when you first start WSS:

- *Information and Answers*: Information and Answers is a useful help facility containing myriad information about SBS 2003 and how to use its many services. This covers topics such as remote access, mobile devices, email, and faxes.
- *Remote Email Access*: Clicking this link takes you to your web-based email facility. This is covered in greater detail in Chapter 7.
- *Remote Server Management*: This link is for administrators to allow access to the server that needs managing. If you're trying to access the server from the Internet or via a dial-up link, this is the easiest and quickest way of gaining access to the server's management consoles. Remote Server Management uses a terminal services session on the server to permit access to the standard Windows 2003 desktop, allowing you to run the Server Management console or any other MMC snap-in.

Adding new links to this section allows you to customize the page to include other company-related intranet pages, Internet links to external websites, or even links to file stores somewhere on your server. To add a link, click Add New Link. You will be directed to a new web form where you can enter the URL, a description of the target site, and some notes about the target site.



**Note** To add a link to a piece of file store somewhere on your server, create a share for that file store and in the URL field type `//<servername>/<sharename>`. For example, in my case, to map the C: hidden share, I'd type `//sbs/c$`.

## Managing the Intranet

There are two elements of managing WSS that must be covered to make sure you can fully configure the intranet site to your needs:

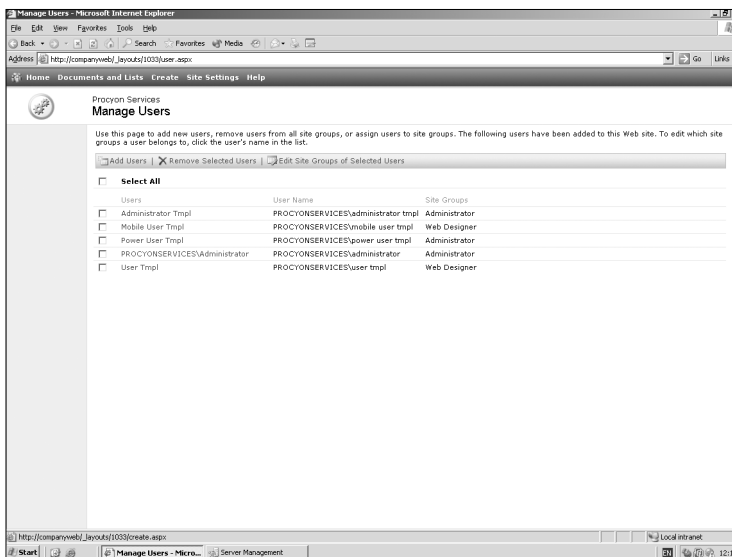
- To access the site-related administration interface, start at the main WSS home page and click the Site Settings link on the top link bar.
- To configure the entire WSS capability (that is, elements of the WSS system that affect all sites), you need to open Server Management, click Internal Website (under Standard Management), and then select Central Administration.

## Site Administration

If you click the Site Settings link on the top link bar, you are presented with various options. Some of them are self explanatory, such as Change Site Title and Description, while some require a more in-depth analysis. This section presents the details of managing your users, and managing your sites and workspaces. It also takes you on a tour of how to perform more-advanced management tasks associated with user permissions.

## Manage Users

By clicking the Manage Users link, you are taken to the Manage Users interface (see Figure 6-10).



**Figure 6-10.** Manage the capabilities your users have on your intranet.

You can add a new user to the list of users allowed to access WSS by following these steps:

1. Click the Add Users button. You are offered a page where you can type in an email address, user name, or *cross-site* group. In the case of a cross-site group, you can type the name of a Windows security group, such as Domain Users, to give access to all your SBS 2003 users.

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**Warning** When you add a Windows group to the Users dialog box, you'll have to use the <DOMAIN>\ prefix, where DOMAIN is the name of your SBS 2003 domain, for example mybusiness\users. If you happen to not enter the domain name, WSS will attempt to find the group in your local domain, but if you are trying to add users from a remote domain, they won't be found.

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2. Select the level of permissions these users will have over your site (selecting from the permissions detailed earlier). After you've finished adding users and attributing permissions to these users, click Next.
3. Provide an email address for the user or users that you can use to notify them that they have permission to your new site. You can also change the name that the group of users would be displayed as within the web interface, making it something more meaningful than the security group name.
4. Create the welcome message for your new users. This is optional, so don't worry if you decide not to bother. When you're done, click Finish.

The web page will revert to the Manage Users page, and you'll see the new users added to the bottom of the list.

To remove users from your WSS site, select the check box next to the user or group and click Remove Selected Users. If you want to change the permissions a user or group has on the WSS site, again select the appropriate check box and click Edit Site Groups of Selected Users.

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**Note** If your business is very small and you intend for everyone to have the same access to all data (except for the administrator, who will be able to completely modify the whole site), then all you have to do is add the Domain Users built-in security group and give it the Contribute permissions. This means that all users can write to and read from all aspects of your WSS site.

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## Manage Sites and Workspaces

To create a new child site in the WSS hierarchy, click the Manage Sites and Workspaces link and then click the Create button. This takes you to the New SharePoint Site page, where you can specify the name of the site under the heading of Title, add a description of the site so that users can determine whether they need to visit it, add the URL details of the site so that users can directly access it from their browser, and select the permissions model to be adopted for the site.

The only aspect of creating a new site that you need to consider at this stage is whether the site needs the same permissions model as that of the parent (top-level) site.

When you are ready to create the new WSS site, click Create.

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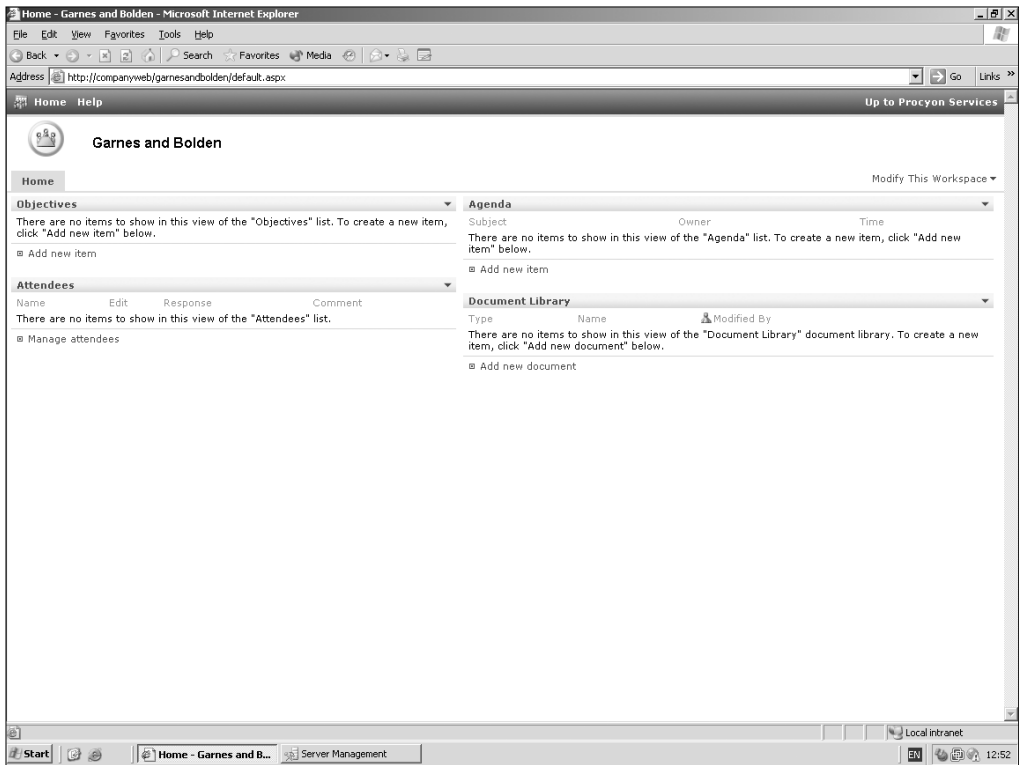
**Note** If you are creating a child site specifically for access by a certain business unit, and this business unit's data is to be kept private, you should select the Use Unique Permissions radio button before clicking the Create button. If you are simply creating a child site to partition data into more meaningful chunks, and you are sure the permissions defined at the top should be reflected throughout the site, leave the User Permissions radio button as the default (Use Same Permissions as Parent Site) and click Create.

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The next phase of site creation is to select the appropriate template to use for that site. Templates are used to adjust the capabilities of each WSS site. There are eight standard templates, each with its own subset of capabilities. For completeness they are listed here:

- *Team Site*: A team site is effectively the same as the default site you have already seen. Selecting this template will create a child site with all the capabilities available from the top-level site. In a business with very separate business units, this template might be more applicable, directing users to their own child site rather than to the top-level site; the child site would contain all information that is relevant to those users. If this were the case, administration of the site would be devolved down to the manager in charge of that business unit.
- *Blank Site*: A blank site is great for advanced users to create whatever kind of look and feel they want. If you are planning to start developing highly customized WSS sites by using Microsoft Office FrontPage 2003, a blank site is the best choice, allowing you to start from scratch.
- *Document Workspace*: A document workspace is a cut-down version of the top-level site, offering document management facilities for document storage as well as a task list for assigning to-do items and a links component for customizing the list of websites made readily available through the site.
- *Basic Meeting Workspace*: A basic meeting workspace offers you a site capable of setting objectives for users, creating attendee lists, publishing meeting agendas, and assigning a new document library to that meeting workspace. This can be used when a business unit needs to focus on one particular task, pulling together the right people and source information into a single collaborative workspace. See Figure 6-11 for an example of a typical basic meeting workspace created for a business unit called Garnes and Bolden.
- *Blank Meeting Workspace*: A blank meeting workspace allows you to completely customize the site in the context of a collaborative meeting workspace. You can add and remove web components that allow you to perform any of the functions inherent to the rest of the site.
- *Decision Meeting Workspace*: Use a decision meeting workspace to create an extremely focused meeting environment for document reviews, process reviews, and marketing initiatives.

- *Social Meeting Workspace*: A social meeting workspace can be used to generate chat among your workers that is related to social events and company policy. This site includes discussion forums, image libraries, and document libraries specifically for event directions.
- *Multipage Meeting Workspace*: A multipage meeting workspace is the most flexible of all the workspaces, containing all the functionality of the other templates but over a multiple-page layout. This means that each page can contain much more information.



**Figure 6-11.** Create customized workspaces to facilitate collaboration.

---

**Note** When you go back to the Sites and Workspaces page, you'll see that you now have your new site listed under the appropriate heading. To delete a site, click the X button opposite the site name.

---

## Configure Site and Workspace Creation

By following this link, you can opt to allow users in the Contribute site group, or users in the Web Designer domain security group, to create child sites beneath the parent.

Remember, only site administrators can create sites by default. However, you can delegate this capability to users in the Contribute group or Web Designers group (for FrontPage users) by clicking the Configure Site and Workspace Creation link on the left-hand side of the screen.

On this page you can choose to allow users in either the Contribute site group or in the Web Designer domain security group to create subsites. I prefer to allow only the latter to create sites. If you have a department that needs to do this sort of ad hoc site creation, appoint an administrator and leave the contributors to be responsible for merely contributing to the resources they have been assigned. The problem with offering normal users the ability to create sites is that your governance over your hierarchy disappears and your site structure becomes unwieldy and messy.

## Go to Site Administration

This link takes you to another management interface that allows you to perform a more comprehensive set of management tasks on your site:

- Users and Permissions
- Management and Statistics
- Site Collection Galleries
- Site Collection Administration

It wouldn't be a good use of time to list every one of the management facilities available through this interface. Many of the items are intuitive, and the functionality is a straight copy from another part of the site, for example the Manage Users interface. However, some of these lower-level management tasks should be examined in a bit more detail to make sure you understand exactly what's possible with WSS:

- *Manage Site Groups*: Use this interface to create new site groups with very specific low-level permissions. This capability can be likened to the Advanced NTFS permissions that you can apply to security groups and users to offer only very specific capabilities.
- *Manage Anonymous Access*: You can specify whether you allow anonymous users access to your site. This might be useful if you are publishing your website to an Internet-facing interface, such as through ISA Server, and you want anyone on the Internet to access the information.
- *Manage Cross-Site Groups*: Cross-site groups allow you to offer access to other sites where users participate in collaborative work.
- *Save Site as a Template*: You can easily create your own child site templates by creating a generic site that would be suitable for your purposes, and then saving this site as a template to be applied later (much in the way you can create user templates for taking the pain out of creating additional users). New templates appear in the template list when you create a new site.
- *Manage Web Discussions*: This is a good way to expose all the web discussions happening on your server at any one time. Clicking Update will search the entire site hierarchy for these kinds of discussions and list them all under this heading. You can then navigate to any of the displayed discussions and manage them individually.

- *Manage User Alerts*: This link will display an interface for searching the site for all alerts designated for a specific user.
- *Manage Web Part Gallery*: The Web Part Gallery allows you to look at any of the web parts already installed on your system, and if you have some new ones, you can upload them to WSS.

---

**Note** A *web part* is a web page object designed with a single purpose in mind. Web parts work together to act as the building blocks that make up a web part page. A web part is made up of two files, with its values stored in a database. I will cover web parts later in this chapter in a bit more detail.

---

## Virtual Server Administration

You've learned how to navigate your way around a WSS site, create new child sites, create site templates, and manage the basic settings for a site. But there is more to managing a WSS system than merely the internal working of the site itself. The underlying server architecture that WSS is built upon is known as *Internet Information Services (IIS)*, a complex subcomponent of the Windows 2003 operating system that WSS exploits for its web-hosting environment.

IIS plays host to items known as *virtual servers*, websites that can be as simple or complex as required. You can run as many virtual servers as you require for your business. Some can be created and populated with content directly (possibly by using Microsoft Office FrontPage 2003) and some, such as WSS, have been already created and are simply running as client-facing services. You can see the Central Administration console shown in Figure 6-12. There are various advanced tasks you can perform on your WSS site from this menu.

Understanding a little about what can be done with the WSS site at the virtual server level is important for one primary reason: you will be constrained in what your WSS site can do by the control imposed on that site by the virtual server. If you learn how the virtual server can be manipulated to your benefit, you can do the following tasks:

- Create, remove, or modify the entire WSS hierarchy
- Change the underlying security settings for the entire site
- Modify how WSS interacts with other aspects of your SBS 2003 system
- Manipulate the site statistics and configure analysis tools, such as quota management

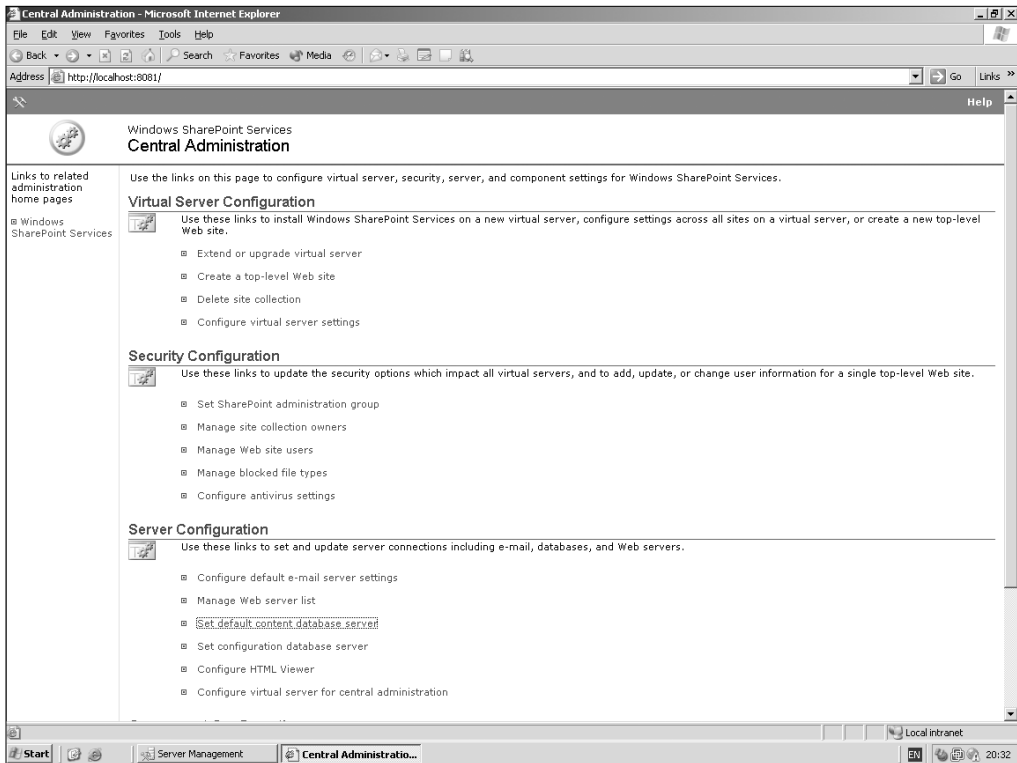
To access the Central Administration interface, do the following:

1. Click the Start menu and then Select Server Management.
2. Under Standard Management, highlight Internal Website.
3. Click the Central Administration link on the right-hand side of the screen.

---

**Warning** I strongly advise that any modifications to a WSS virtual server should be performed only when you are completely confident in the consequences of modifying that setting. To learn more about modification of a WSS virtual server, click Help in the top-right corner of the Central Administration web page.

---



**Figure 6-12.** *Central Administration manipulates the IIS virtual server.*

## Using Document Libraries

Document libraries are one of the most useful features you get with WSS. WSS includes five default document libraries when it's first installed, but these are purely there as examples to show you how these could be used. You can create as many new document libraries as you need for your business and should seriously consider rounding up all extraneous files and file store areas currently used by your users, removing any shares they use to store files, and forcing them to put all their data into WSS. This might sound radical, but a half-hearted approach to using WSS doesn't really work—I'm sorry to say, it's all or nothing.

Probably the most important consideration when deciding whether to start using document libraries is that of backup. Documents are not held in standard file system folders, in the way you store documents in your My Documents folder on a workstation. Instead they are stored within a database file (Microsoft SQL Server database or an MSDE database). This means that unlike files and folders that can be restored selectively in a normal backup, your document libraries, like everything else stored by Windows SharePoint Services, must be restored as one. It is extremely important that you implement a comprehensive backup strategy that can not only store, but easily recover, your Windows SharePoint Services system because its use will soon position it as a business-critical system that you can't afford to lose.

To help get around this problem, Microsoft has developed (and delivered with Windows SharePoint Services on your server) a tool called `stsadmin.exe`. This tool allows you to perform

command-line administration of your Windows SharePoint Services installation. To use stsadmin.exe, you'll need to be running as a user with Administrative privileges on your SBS 2003 server. The stsadmin.exe tool provides you with a means of automating Windows SharePoint Services administration by using batch files/scripts or by running discrete commands you execute from the command-line. For more information on using stsadmin.exe for backing up and restoring your Windows SharePoint Services site files, see <http://support.microsoft.com/?kbid=889236>.

As long as this hasn't put you off using document libraries and you are happy with the backup and restore limitations (all or nothing), it's time to proceed to the next stage: creating a library.

## Creating a New Document Library

Creating a new document library is easy. From the WSS home page, for any level of the site hierarchy, do the following:

1. Click the Documents and Lists link on the top link bar.
2. On the Documents and Lists page, click Create.
3. Select Document Library (at the top of the list).
4. Add a name and description for the library.
5. If you want the library to appear on the Quick Launch bar, select the appropriate radio button.
6. At the "Create a version each time you edit a file in this document library?" question, select Yes.
7. The document template selection determines which type of document is stored in this library. Select Microsoft Office Word Document for this exercise.
8. Finally, click Create to make the library.

The web browser is automatically redirected to the new document library's home page, from which you can create a new document, choose to upload a document, create folders inside the library, and filter the list of files displayed within the library.

---

**Warning** Reorganizing a document library after it is being used is a lot harder than reorganizing simple folders and files on a hard drive. The checking in and out process that protects the documents inside the database can cause system administrators hours of work that might have taken a few minutes in a standard file store. If you are going to use document folders, make sure to get the design of the folder system right up front.

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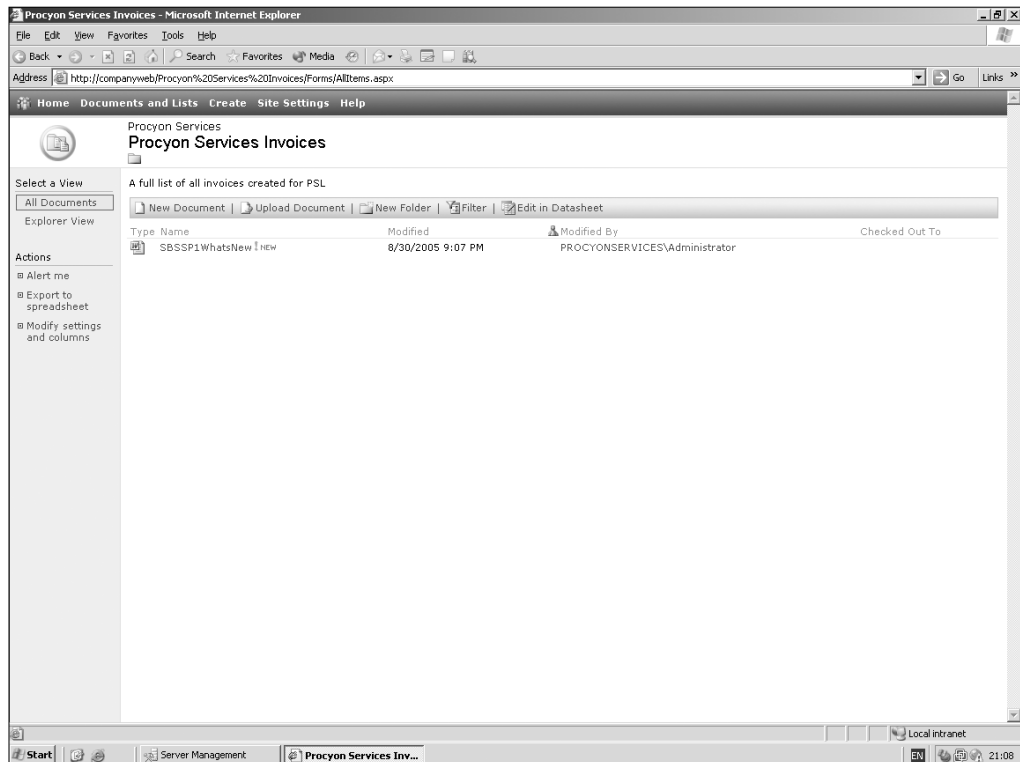
## Using a Document Library

If you have accessed the WSS site from a workstation with Microsoft Office 2003 running on the desktop, you can click the New Document button to launch the appropriate editor for the document template type you selected in the previous section. If you created a library by using the Microsoft Word template, Microsoft Word will open and allow you to create a new document that will be stored in WSS. If you don't have a compatible version of Microsoft Office to use to integrate with WSS, you can still open Word manually, create your document, and then click the Upload Document button to move it into WSS.

To upload a document, follow these steps:

1. Click the Upload Document button.
2. Click Browse to find the file you want to move into WSS.
3. Find the file, highlight it, and click OK.
4. Click the Save and Close button.

You'll see that your file has been uploaded into the library (see Figure 6-13) and can be accessed directly through the web interface.



**Figure 6-13.** Documents can be better controlled when held in libraries.

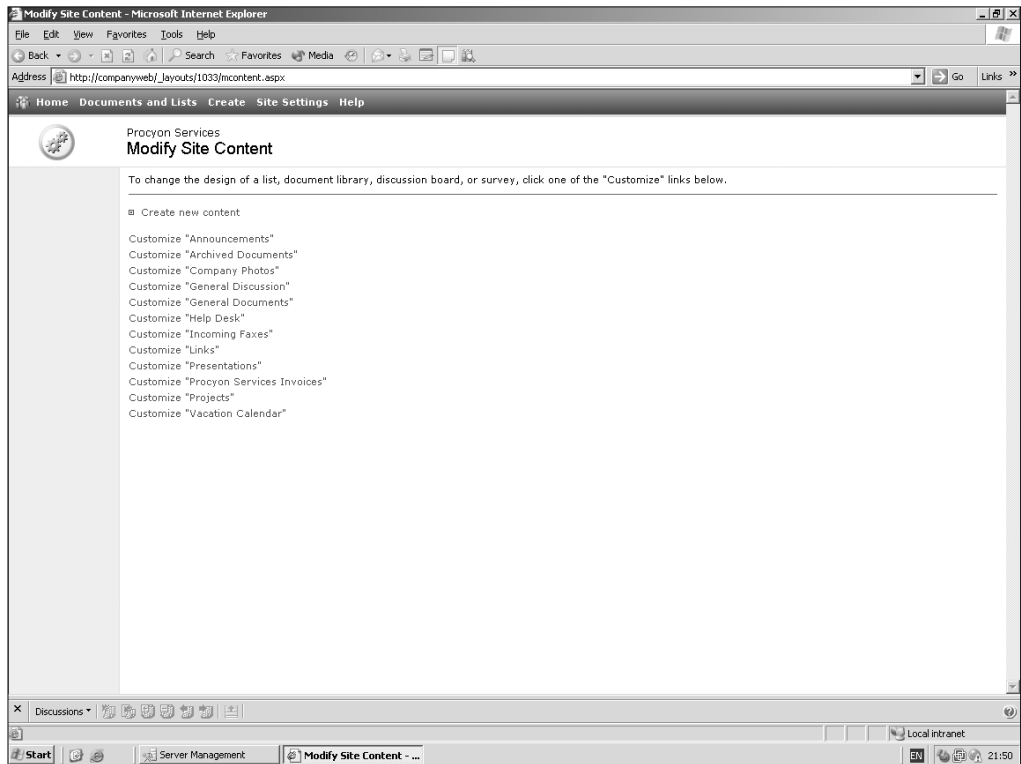
Every document held in a library can be manipulated from the web interface. If you move the mouse over the document title, you'll see a drop-down menu that lists the following options for the document:

- *View Properties*: If you select the View Properties item from this context menu, you are presented with a list of information explaining when the document was created, who it was created by, and when it was last modified.
- *Edit Properties*: You can edit some of the properties of each item by selecting this option. You can modify the name of the document as well as giving it a more meaningful title. If you have chosen to maintain version control, a new version is created each time you modify the document's properties.
- *Edit in Microsoft Office Word*: If you choose to edit the document in Word, WSS instructs your system to first run Microsoft Word and then load the document from the library straight into Office. Again, this requires the version of Office to be compatible with this feature.
- *Delete*: You can delete a file by using this option, if you want the file and all previous versions removed from the document library.
- *Check Out*: Some shared folders or document libraries require that you check out a file to work on it and then check it back in when your changes are complete. Checking out a document ensures that no one else can edit the file while you are making any changes to it. You can check out and check in the document from the document library or the relevant Microsoft Office application so long as it's compatible. When a file is checked out, it is effectively locked for access by other users. No one else can check it out until you check it back in again. When you check the document back in again, you are prompted to add some comments about the changes you've made to that document. This allows you to track who has done what to your documents over time and trace any mistakes back to their point of origin.
- *Version History*: If you want to view the version history of a file, this option shows a list of versions ordered from the most recent at the top to the oldest at the bottom. You can opt to open any of the previous versions of the document by clicking on the relevant date.
- *Alert Me*: This option invokes the WSS alerting engine, whereby a user can opt to be alerted by an email when a change to a subscribed document occurs. Alerts can be specific to document changes, new posts in discussion forums, or all changes across the entire site.
- *Discuss*: Clicking this option enables you to insert review comments into the document, as long as it is saved as HTML. This opens a special editor that allows you to insert inline HTML comments into a browser and discuss these comments with another collaborator.
- *Create Document Workspace*: If you opt to promote the importance of the document to one that demands its very own document workspace, you are effectively creating a WSS child site specifically for this document. Your employees can now collaborate on this document in a way that ensures they have absolute focus.

## Customizing Document Libraries

As you're probably beginning to see by now, virtually every aspect of WSS can be customized. Document libraries are certainly no exception. Every library you create can be modified to suit your needs by following the Site Settings link on the top link bar and then selecting Modify Site Content.

You can now select the appropriate library you wish to manipulate from the list shown on the Modify Site Content page (see Figure 6-14).



**Figure 6-14.** *Customize a library's settings to suit your needs.*

When you click on the specific library you need to modify, you can opt to change the settings you selected when the library was first created, such as the name of the library, its description, the file template it is associated with, and its version control standards. You can also opt to change the way the library presents information to the user on the screen.

## And If All Else Fails...

You might find that your users simply don't like Windows SharePoint Services for document storage. It is certainly a change of working practice from a standard file store solution. Because of its extra complications of checking files in and out and users' inability to easily browse (Windows Explorer-style) around the entire store, many users revert to having their files stored on a mapped drive on your server.

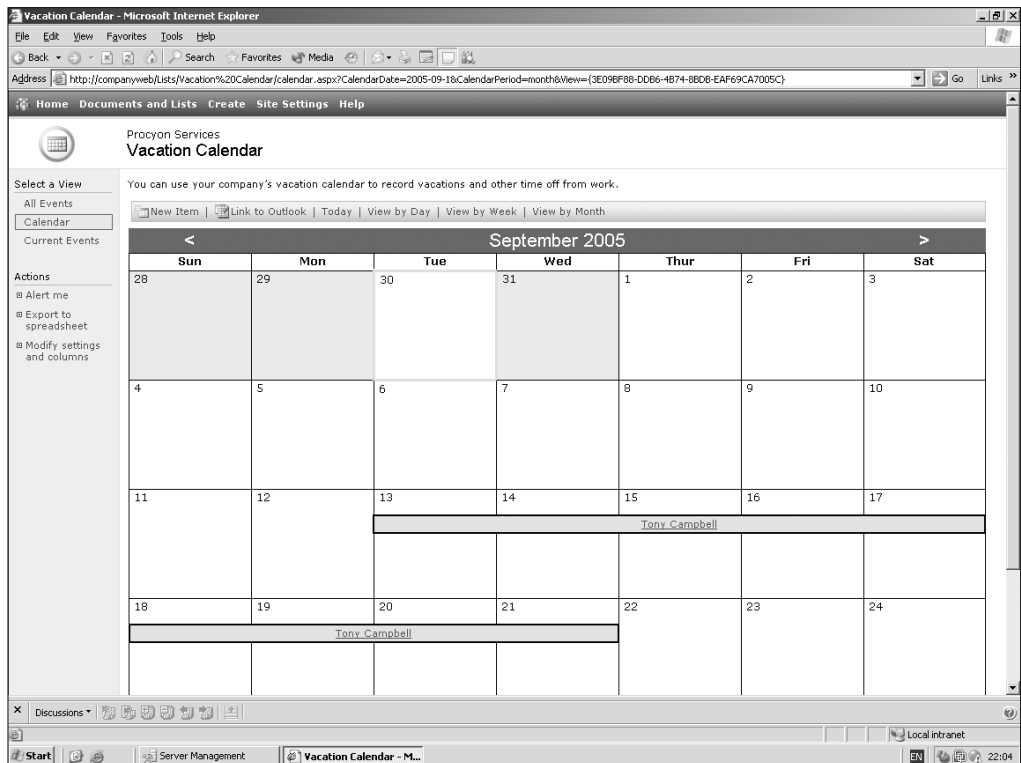
If document libraries can work for your business, use them. Otherwise, stick with what you know. As with most things, it works for some and not for others. You could always look for a compromise, allowing users to use traditional file stores on a mapped drive, while company-related marketing information and so called “published” material could be posted into a document library and made available through the intranet.

## Using Lists

As I’ve said earlier in this chapter, there are four default lists included in WSS: Announcements, Help Desk, Links, and Vacation Calendar. A list is a stylized view of data that can be ordered in a certain predefined way. For instance, a calendar can have a date-ordered list of events or holidays, and a Help Desk can have a time-ordered list of support calls awaiting resolution.

## Exploring the Vacation Calendar

To get an idea of what lists can be used for, click the Lists link shown on the Quick Launch bar and then click the Vacation Calendar option. This will take you to a view not unlike that of the calendar feature within Microsoft Office Outlook 2003, where you can add new entries for your employees’ holiday dates to a shared calendar for your entire business (see Figure 6-15).



**Figure 6-15.** A shared calendar can be used to track employee leave.

You can opt to share information with your Microsoft Office Outlook 2003 application so that any appointments or vacation information stored in your WSS site can easily be amalgamated into your Microsoft Office Outlook calendar. This means that you still have a single consolidated view of your calendar, although some information might be entered by using Microsoft Outlook, while other information related to the team site might come from WSS.

## Creating a New List

As with any new component, to create a new list in WSS, click the Create link on the top link bar and then select the appropriate list type from the selection menu. You can create lists for any of the following topics:

- *Links*: You can add hyperlinks to other websites, whether internal or external to the WSS site.
- *Announcements*: This type of list allows authorized users to create announcements to share company information, news, meeting requests, or social events.
- *Contacts*: A contacts list is a list specifically aimed at allowing you to manage people-related information. You might create separate contacts lists for customers, employees, or suppliers.
- *Events*: The vacation calendar is an example of an events list. These calendar-based views of events can be integrated with Microsoft Office Outlook 2003 and can be used to represent any date-related company information.

---

**Warning** Don't expect calendar information from Microsoft Exchange Server to synchronize automatically with Windows SharePoint Services event views. You are expected to manually export and import information into these Windows SharePoint Services lists, and it can become a burden to keep them synchronized. Try to keep your Microsoft Exchange calendar requirement separate from that of Windows SharePoint Services, such as keeping the event view specifically for a WSS site, and you'll avoid this problem. Users need to realize that although Windows SharePoint Services is good, it has not mastered everything just yet.

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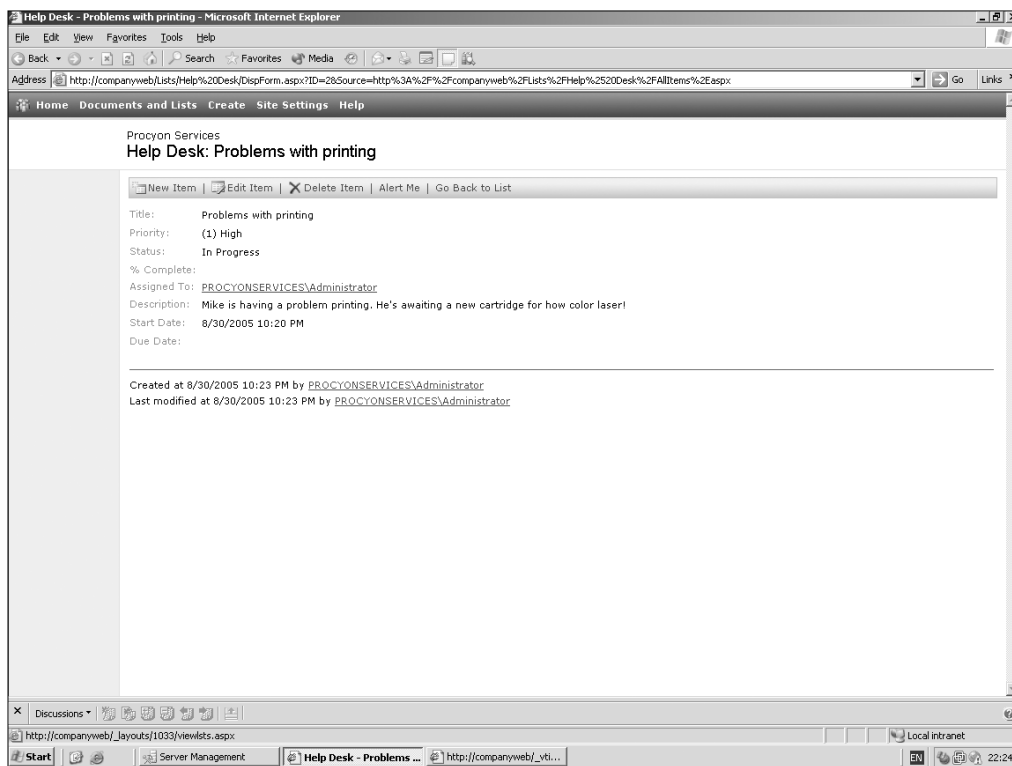
- *Tasks*: A tasks list can be used to track the work assigned to a group of users or to assign work to individual workers or teams of workers.
- *Issues*: An issues list is used to identify a set of problems that might be facing a project. Think of this as part of your project risk or issues register. If you let workers have access to an issues list, the collective brains of your workforce might help solve these issues quickly and efficiently.

---

**Note** Microsoft occasionally releases Windows SharePoint Services templates for enhancing your site's capabilities. Take a look at <http://www.microsoft.com/technet/prodtechnol/sppt/wssapps/default.aspx> to see the latest list of templates.

---

- *Help Desk*: The Help Desk list is a very specific kind of tool (see Figure 6-16). It is used to track user problems, assign the problems to a manager, and make sure your users have somewhere to get feedback on any outstanding problems they have with the system.



**Figure 6-16.** *Help Desk lists are useful for keeping employees informed.*

## Using Surveys

A survey can be created at any time to take a poll on how users feel about a particular topic. Surveys can be anonymous, or users can respond with their name and contact details if they are to be contacted individually to discuss their opinions.

A good example of when a survey might be of use is about a month after you implement the SBS 2003 server solution for your business. At that time, you might want to take a poll across all your users to see what they really think of your investment. The results might show that they find some aspects of your implementation unwieldy, and this would prove invaluable in feeding in to your system's development plan.

## Creating a New Survey

There are two aspects to every survey that you must consider: the survey container, which is the work area that houses the survey, and then the questions that give the survey context.

The process for creating a new survey is very like that of libraries and lists. Follow these steps:

1. Click the Surveys link on the Quick Launch bar.
2. On the Surveys page, click the Create Survey button.
3. On the Create page, click the only option available, Survey, to start the process.
4. On the New Survey page, you need to add a meaningful name and description for the survey, making sure that the purpose of the poll is obvious to your users. I recommend that you choose to display the new poll on the Quick Launch bar to ensure that your users see it as soon as they log in.

---

**Note** After you create the survey, I also recommend that you send out an announcement related to the survey, clearly stating the objectives and any timescales you want your staff to adhere to. The announcement will help draw attention to the survey on the home page.

---

5. Under the Survey options, you can select either to show the users' names who respond to the questions or to grant them anonymity by selecting the radio button marked No under the "Show user names in survey results?" question.
6. If you want to stress test a survey and have the same person input multiple answers, you might want to select Yes under the "Allow multiple responses?" question. In most cases, it's best to not allow multiple responses because survey results can be misleading if the same person voices their opinion more than once. After you've filled in all the details on this page, click Next.

## Defining Questions

You will now be asked to create the questions that your survey will offer to your users. There are two kinds of questions to consider: those with free-form text answers enabling your users to respond in their own words, and those with a finite set of responses, such as a rating of 1 to 5 or a lookup list of predefined answers for the user to choose from. An example lookup question might be, *What's your favorite time of year?* The four possible answers might be predefined as Spring, Summer, Fall, and Winter.

The Add Question page is shown in Figure 6-17.

## Question and Type

In the topmost box in this section, you type the question in plain text. However, this should be the last thing you do, because the context of the question, its type, and responses should all be considered before you word the question.

---

**Warning** Creating surveys is an art in itself. You need to make sure that the questions are searching enough, offer enough scope for users to voice their opinions clearly, but also bound the context of the survey in such a way that the answers don't meander and you get a real result at the end of it. A badly constructed survey will lead to ambiguous results, which in turn can lead to inappropriate action.

---

As you've seen, users can respond in a variety of ways to survey questions, by free-form text, by selecting from a list, by clicking Yes or No, or by entering a numeric value. These answers can be checked in such a way as to ensure that the data is of the right context, but in the case of free-form text, this is impossible. It's worth having as few free-form text answers as possible, because these subjective answers are hard to disseminate into hard results.

**Create New Question - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address [http://companyweb/\\_layouts/qstnew.aspx?List={2B6B1B54-BBDD-452B-8CBA-153043F55C80}](http://companyweb/_layouts/qstnew.aspx?List={2B6B1B54-BBDD-452B-8CBA-153043F55C80}) Go Links

Home Documents and Lists Create Site Settings Help

Procyon Services

### Satisfactor Poll for SBS 2003 Users: Add Question

Use this page to add a question to this survey.

#### Question and Type

Type your question and select the type of answer.

Question:

Which features of the new system do you use the most?

The type of answer to this question is:

☐ Single line of text

☐ Multiple lines of text

☒ Choice (menu to choose from)

☐ Rating Scale (a matrix of choices)

☐ Number (1, 1.0, 100)

☐ Currency (\$, ¥, £)

☐ Date and Time

☐ Lookup (information already on this site)

☐ Yes/No (check box)

#### Optional settings for your question

Specify detailed options for the type of answer you selected. Show me more information.

Require a response to this question:

☐ Yes ☒ No

Type each choice on a separate line:

Enter Choice #1

Enter Choice #2

Enter Choice #3

Display choices using:

☐ Drop-Down Menu

☒ Radio Buttons

☐ Checkboxes (allow multiple selections)

Allow "Fill-in" choices:

☐ Yes ☒ No

Start Server Management Create New Question ... Local intranet 09:20

**Figure 6-17.** Questions should be unambiguous and have definite answers.

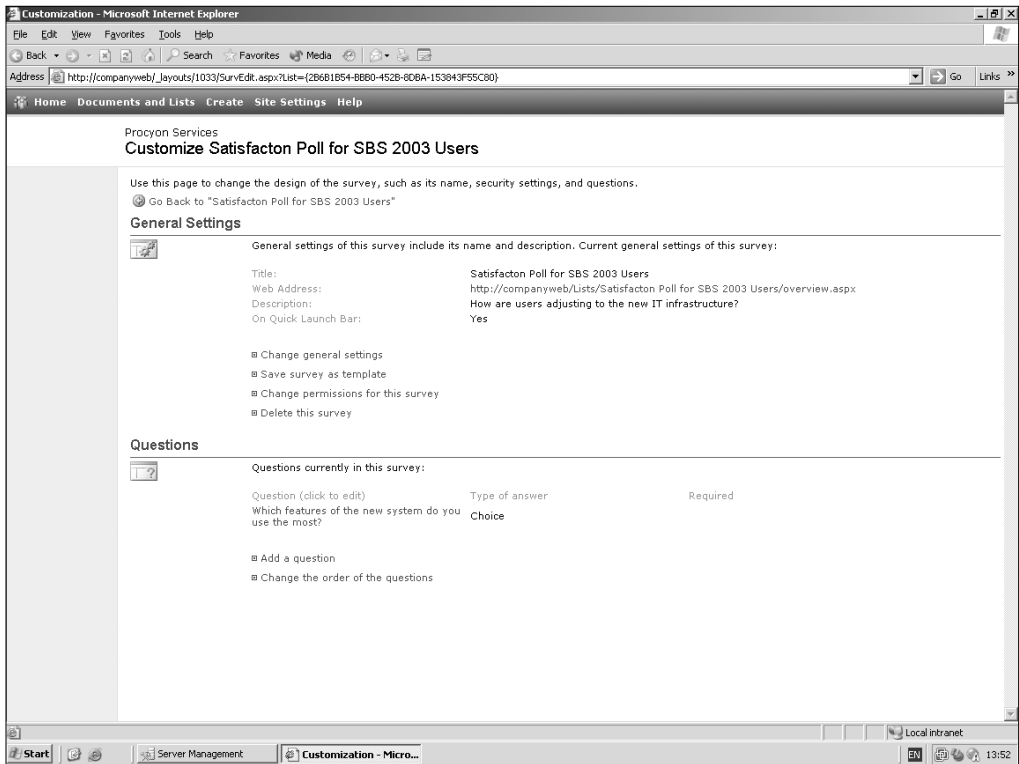


There are nine types of questions you can ask, and every question must be one of these types. As you select any of the radio buttons next to the question type, you will see the optional settings in the lower part of the screen change in relation to the type of question you want to ask. The question types are as follows:

- *Single Line of Text*: Users are allowed to add only a few words in answer to this question. This limits the ramble factor that some users might be prone to. Questions of this type can be optional. It's possible to limit the character count (the default is 255) and you can add a default text string, such as an example answer.
- *Multiple Lines of Text*: This is the most free-form answer. A user has the flexibility to ramble on and on about what he feels. These answers should be reserved for the end stages of a survey—you know, those Any Further Comments sections. Questions of this type can be optional. It's possible to limit the line count (the default is five), and you can opt for a rich-text answer that allows the user to add some formatting to the answer.
- *Choice (Menu to Choose From)*: When answering a question of this type, a user is presented with a set of choices from a menu. You can add as many choices as you need, entering one on each line in the dialog box. You can configure the method of delivery of the questions, such as drop-down menu, radio button, or check boxes.
- *Rating Scale (a Matrix of Choices)*: This answer type should be used when you want your users to select from a set of choices on a numeric scale. This kind of question is the one you most commonly see on marketing surveys, with the scale from 1 to 5, the answers equating to strongly disagree to strongly agree, with some graded answers in between.
- *Number (1, 1.0, 100)*: This question is purely for a numeric answer. You can set upper and lower thresholds for the answers, set the number of decimal places the answer should be calculated to, display the result as a percentage, and suggest a default value.
- *Currency (\$, ¥, £)*: This one is fairly obvious: the response to a question of this kind is a numeric value related to an amount of currency. You can select the appropriate format from the drop-down list, add a default value, and specify whether this question should be optional.
- *Date and Time*: The date and time question should be used to force users to respond with a date and time. You can ask for the date field to be entered without the time or opt to have both. You can also fill in a default date and time to be used as an example.
- *Lookup (Information Already on This Site)*: This question type allows the user to cross-reference other aspects of the WSS site, such as user information, discussions, and libraries.
- *Yes/No (Check Box)*: This question is akin to the typical true/false, yes/no, black/white question type. There are two answers and only one choice.

Each time you complete the details of a question, click the Next Question button at the bottom of the page. After you have entered all the questions you need for your survey, click the Finish button.

After you have finished populating your survey container with the required set of questions, you get a last chance to customize the survey before publishing it to the WSS company home page (see Figure 6-18).



**Figure 6-18.** *Last-minute customization before the survey goes live*

You can modify the general settings of the survey—the basic survey details such as the name and description—as well as delving into a bit more detail with the survey permissions. You can also go back and add a few more questions at this stage in case you’ve forgotten anything before finally going live.

To go to the live survey, click the Go Back to <Name of Survey> link at the top of the Customize page. This takes you to the actual survey page.

## Obtaining Responses to a Survey

As I’ve already said, the best way to indicate to users that a new survey has appeared is to create an announcement that will greet them on the WSS home page. Although the survey has been created to appear on the Quick Launch bar, many users, when they become familiar with using WSS, will intuitively click to their area of interest and might miss the new item on the left side. An announcement will always grab attention.

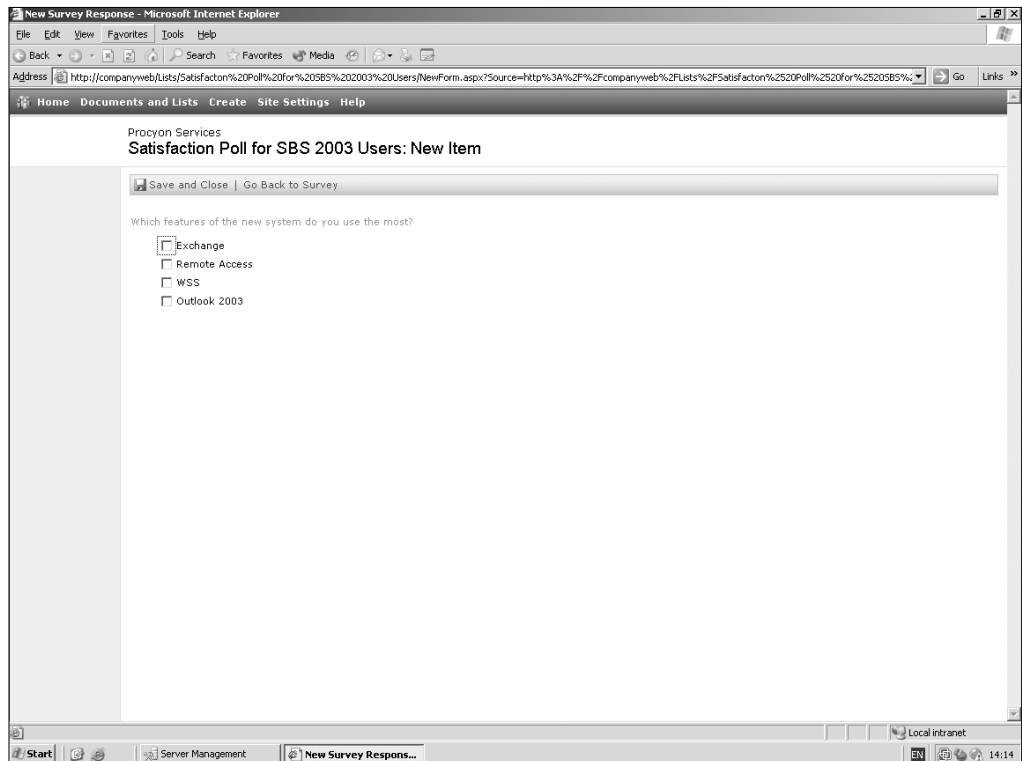
## Creating an Announcement

As the site administrator and survey owner, go to the company web home page and click Add New Announcement. Give the announcement a snappy title and make the message body bold. Say something like, “New Survey” and “All Users *must* reply within two weeks of this date.” Try using some of the rich-text formatting in the announcement description. Tell your users what the survey is all about, when the results will appear, what effect the results will have on the users, and how much you value their opinion. Make the announcement expire on the date that you want the survey to end.

After you're finished creating your announcement, click Save and Close.

## Handing It Over to the Users

When it's time for a user to respond to the survey, he will simply click the relevant link in the Quick Launch bar (Satisfaction Poll for SBS 2003 Users in this case) and then click the Respond to This Survey button. This will start the survey and present the user with the first question (see Figure 6-19).

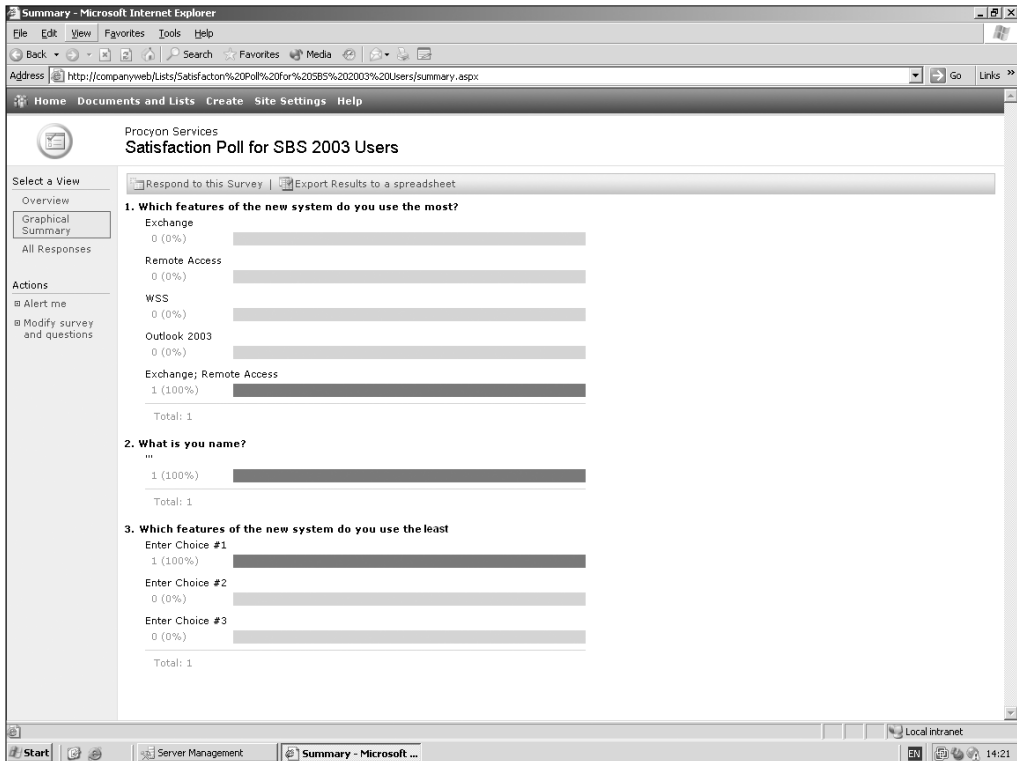


**Figure 6-19.** Respond to each question in turn until the survey is done.

The questions are displayed in a list down the screen. Users are required to respond to all mandatory questions (defined during the Add Question phase), and the answers are validated for use later. After the users have entered all answers to the survey, they click Save and Close.

## Viewing Survey Results

Administrators of the survey can look at the results of the survey at any stage. They can either obtain a graphical view of the results (see Figure 6-20) or drill into each user's individual responses to see the answers.



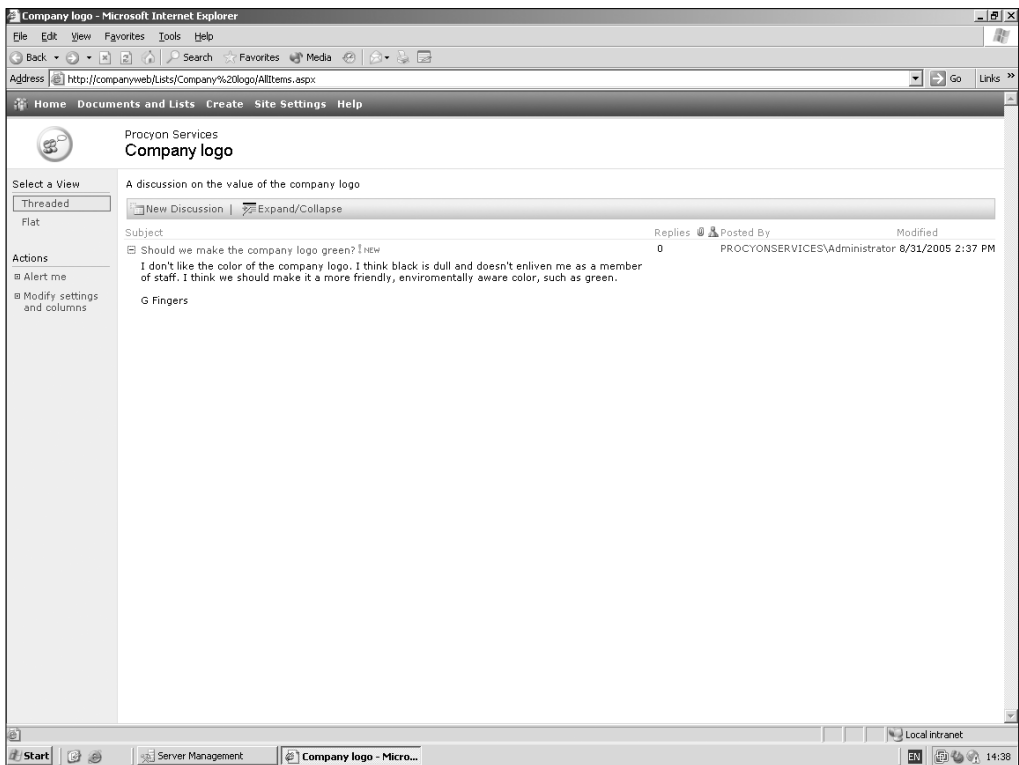
**Figure 6-20.** *The survey responses are best illustrated as a bar graph.*

## Using Discussion Boards

Discussion boards are yet another excellent collaborative feature of WSS, not unlike the Internet newsgroups you might have come across during your travels on the World Wide Web. They are easy to set up and can yield fantastic results because they make effective use of workers' time. When people are sitting at their desks, maybe working on something else, for example, they might think of something that could contribute to an ongoing problem. Discussion boards provide a mechanism to voice an opinion without waiting for other members of the forum to be available for a meeting or teleconference.

Setting up a discussion board is easy. Here are the steps:

1. From the company home page, click Discussions in the Quick Launch bar.
2. On the Discussions page, click the Create Discussion Board button.
3. On the Create page, click Discussion Board. You are asked to supply a name and description for that discussion board and advise whether this discussion should appear on the Quick Launch bar. When ready, click Create.
4. Your browser then focuses on the top-level discussion board page, where you can subsequently begin a thread of discussion on that topic. To create a new thread, click the New Discussion button, give the thread a subject title, and state your point (see Figure 6-21).
5. Click Save and Close to add the thread to the discussion board.



**Figure 6-21.** A discussion board can house multiple discussion threads.

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**Note** You can click the Alert Me link on the left side of the screen to be notified of new postings to any of the threads in this discussion board. Alerts are sent by email to your inbox and will indicate when you should return to a board for an update.

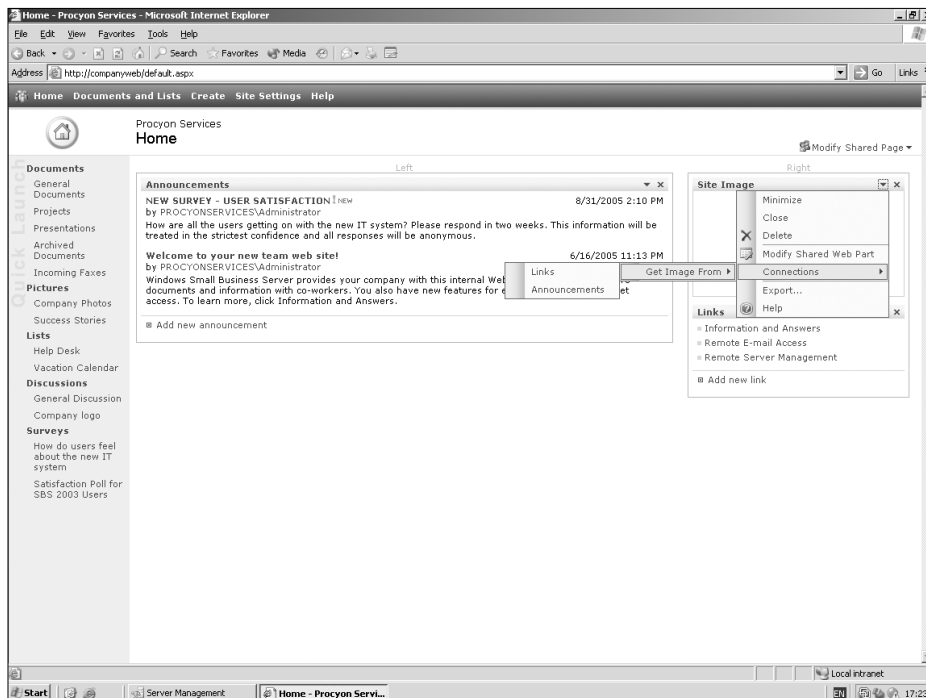
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## Using Web Parts

WSS is built by using a technology known as *web parts*. These are discrete components of a web page that have a single self-contained function, and can be used on their own or with other web parts to build up an entire multifunctional capability. Web pages created by using web parts are known as *web part pages*, of which there are many under the banner of Windows SharePoint Services.

Web parts are highly reusable and should be thought of in much the same way as real-life objects that have specific parameters and functions, such as an orange: it's round, orange in color, and you can eat it, juice it, or put it in a fruit bowl with other fruit and keep it for later. In the same way, a web part used for inputting data into a database offers a dialog box, a function that context-checks the input, a function that saves the data into the database after it has been verified, and the entire web part can be used as many times as required to perform the same operation in many places on your website.

To see exactly how each web page is constructed from the associated web parts, go to the WSS company home page and click the link called Modify Shared Page at the top-right corner of the screen. This menu links to all the capabilities you'll need for designing and managing web part pages. To begin with, we'll look at customizing existing pages, moving the embedded web parts around so you can change the feel of the page to best suit your users. Click the Design This Page button. This changes the view of the home page to design mode, allowing you to drag and drop the embedded web parts to other parts of the screen. Each web part is manipulated from its respective title bar, such as the Site Image web part in the top-right corner of the main screen (see Figure 6-22).



**Figure 6-22.** Start design mode to change a WSS site's look and feel.

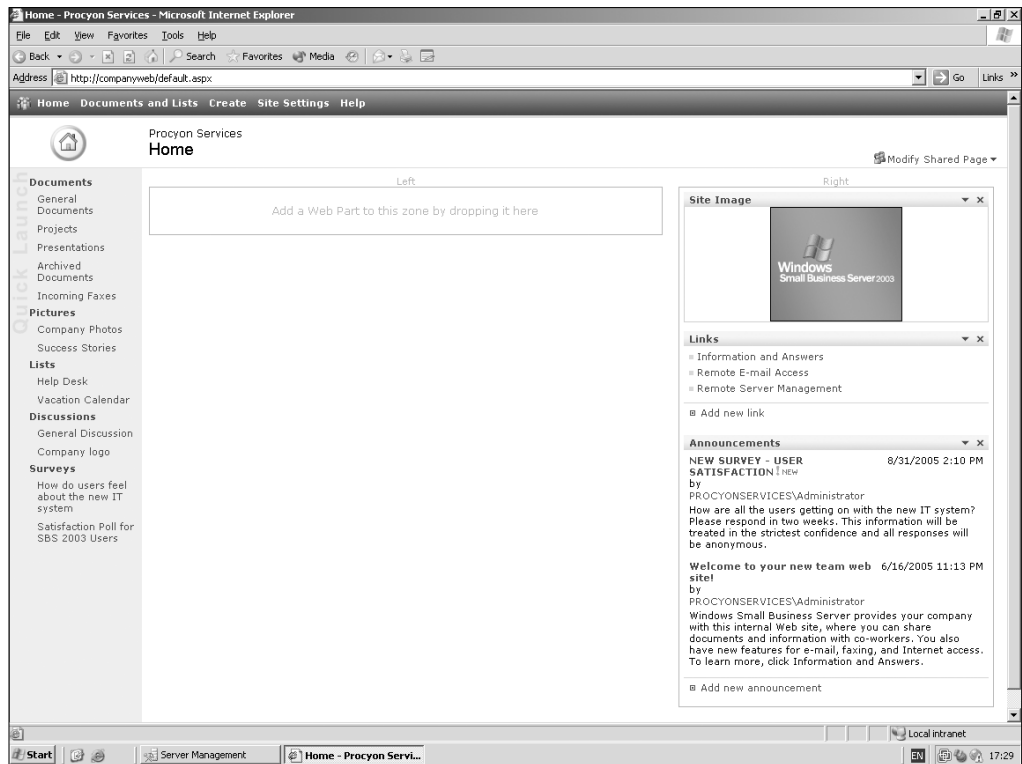
Each configurable web part has a thin-lined box drawn around it, emphasizing that it is in fact a configurable object. You can drag and drop any web part to any other part of the screen that the interface will permit, but the underlying page layout limits where exactly you are allowed to drop in web parts. Try dragging the Announcements web part into the Links web part. You'll immediately see a new layout, and an empty web part container at the top of the screen (see Figure 6-23).

If you click the down arrow in the title bar of any of the web parts on the screen, you are presented with another menu, offering some context-specific options.

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**Note** Please remember to use the Help facility provided through the web part context menu. This link will take you to a Help page detailing exactly what the web part does and when it should be used.

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**Figure 6-23.** Drag and drop web parts to authorized screen areas.

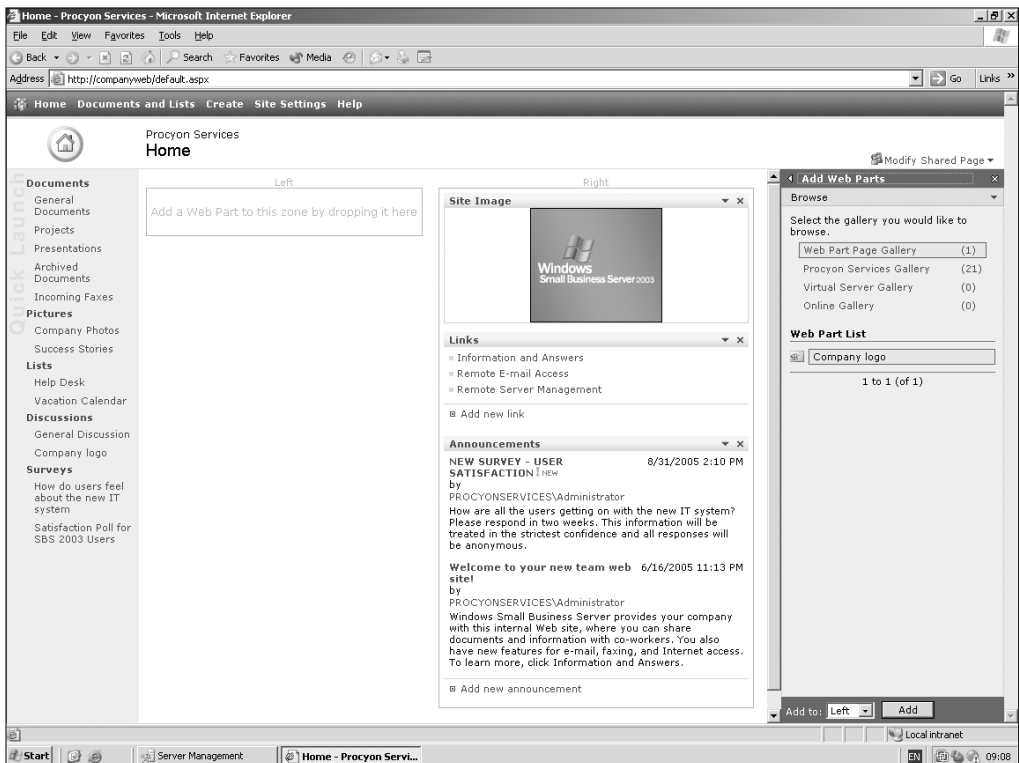
Clicking the Close button (the button with the X icon) on the web part title bar will delete the web part from that page. If you do delete a web part and want to get it back, or you want to add a new web part to a page where one does not exist, click the Modify Shared Page link, select Add Web Parts, and select Browse. This brings up the web part list, where you can select from a list of categories any of the possible web parts you have available to inset into your site.

To add a new web part, highlight the one you require and click the Add button (see Figure 6-24). After you have finished adding web parts to your page, click the Close button to the right of the Add Web Parts title bar.

**Note** Another way of reducing the footprint of a web part on the screen without deleting it altogether is to click on the context menu in design mode and select Minimize. This will ensure that only the header for that web part is displayed on the screen and not the entire contents of the web part's body. Users can still follow the header link to the body of the web part, displayed on a separate web page.

There are two further context menu items worth exploring before you finish with web parts:

- Modify Shared Web Part
- Connections



**Figure 6-24.** Add predefined web parts to a web page from the gallery.

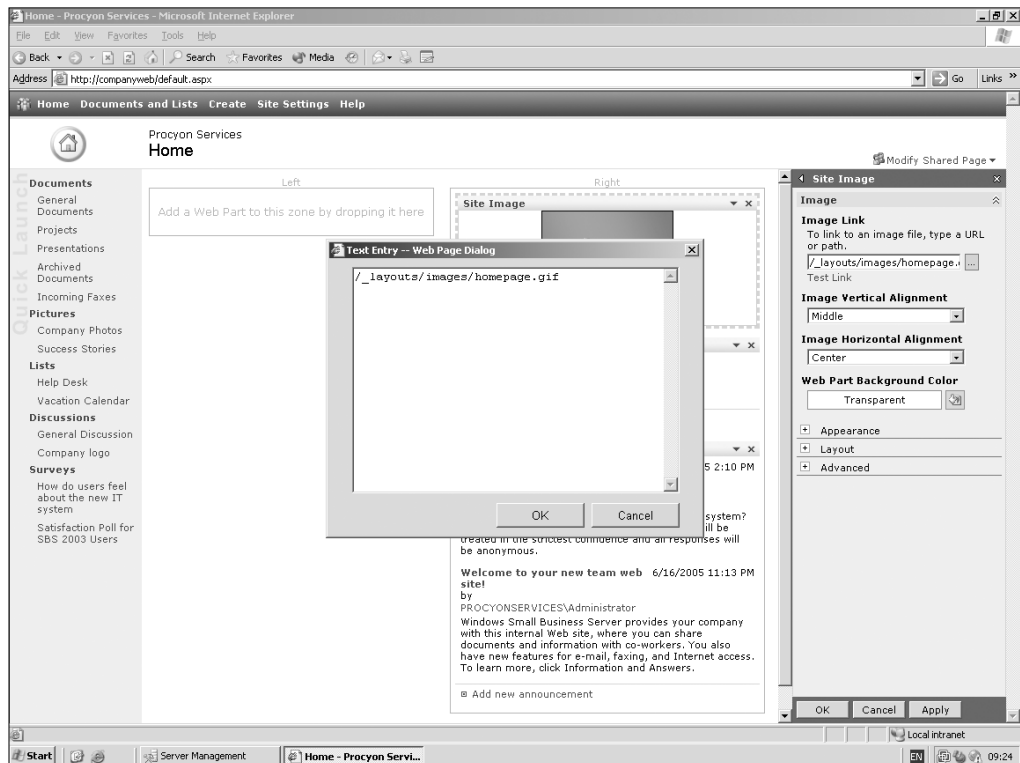


## Modifying Shared Web Parts

When you add a new web part to a web page, it's not always going to display exactly what you want by default. Each web part is different in functionality, so for each one there is a different set of configurable parameters that define its operation in the environment you put it in.

The example I'll use here is a simple one, but is useful for illustrating the process. To best understand the features of more-complex web parts, refer to the help file for that web part. For this example, we'll use the Site Image web part:

1. Click on the context menu of the Site Image web part and select **Modify Shared Web Part**.
2. To modify the image file used as the site image (possibly to your own company logo), click the ellipsis (...) icon next to the URL.
3. In the Text Entry dialog box (see Figure 6-25), type the URL of your own site image (this can also be a file system path). Then click **OK**.



**Figure 6-25.** Web parts are highly configurable components of a site.

4. To change the position of the image as displayed within the bounds of the web part container, click the Image Vertical Alignment drop-down list and select Top, Middle, or Bottom.
5. The background color can be changed if you need a solid color rather than a transparent backing.
6. You can now expand any of the other categories: Appearance, Layout, or Advanced.
7. Under Appearance, you can change features of the image itself, such as its Title, Height, Width, and some aspects of the frame design.
8. Under Layout, you specify whether the web part is visible on the page and its relative position on the page.
9. Under Advanced, you can specify additional features of the web part, such as whether the image can be minimized, closed, or moved, and whether you want to include a Help link and further information about the web part.

## Making Connections

From the context menu of a web part, you can select the Connections option to connect web parts together for information exchange, such as drawing specific attributes of a list or discussion from one web part into another. This allows you to glue web parts together so that their behavior on a page is linked; if you update one web part, the other one automatically synchronizes with it.

Most commonly you'd be linking listed web parts with static web parts to enhance the information in the list. As you select each item in the list, the static component would synchronize with that list item and display further information.

Think of the process as one web part being the source and the other being the recipient. The data flow is always one-way. You can set up the connection from either the source or the recipient, through the web part context menu, by clicking Connections, selecting the data type to be collected or sent, and then specifying the list you wish to connect to.

For more details on how connections can be used, consult the help file from the web part context menu.

## Case Study—Copyworld

Windows SharePoint Services has been used extensively by Copyworld's staff to help them keep in touch with events, procedures, occupational health and safety documentation, social items, and even work time sheets.

Because their network spans the entire Australian continent, it's been essential that services such as RDP, VPN, and RWW allow users to check the vacation calendar and keep up-to-date. Social functions, company photos, and more items are updated in real-time to staff in hotel rooms, interstate offices, and at home. Users can open saved Word files and publish Microsoft Office Excel records easily and painlessly. Users can see photos of Copyworld staff they have never met before (due to being more than 1,000 miles apart in some cases) and catch up with various function groups of the Copyworld team.

## Case Study—Planthire

WSS was something completely new to Philip Stanley. When Philip thought of websites, he thought of informational pages on the Internet or pages selling products or services for companies that have “got with the times.” Exploring WSS was slow to begin with as Philip tentatively started clicking links to see what they would do, but it wasn’t long before it clicked—WSS is not just any old website; it’s a completely new way of working. After running through a few examples with himself, setting up discussion forums and document libraries for solely his own use, he decided to create a user guide for his workforce. It wasn’t long before he had a good idea of how WSS would fit within his business and he decided it was time to expose this functionality to everyone else.

To do this, Philip created a survey specifically to try to lure people into looking at the site. He’d already set up some public document libraries and a few high-level discussion forums, as well as a list service for company announcements. Next, he subscribed all his users to the list service and created the survey. After he was finished, he instructed WSS to inform all his users that they had to take part, and a link was subsequently mailed to the entire workforce. It didn’t take long for it all to catch on as more and more people started exploring the WSS system. Philip published his user guide to the site and then sent out a message for everyone to read it and comment. The next thing he did was announce the survey results and then call a meeting to discuss the way forward.

Now the entire business runs on WSS. They rarely use a shared file store in the traditional way, and all corporate documentation and information is stored in WSS. Everyone loves the simple interfaces and the integration of things like the shared calendar function for holiday and leave planning, and the routing of faxes to a fax library where automatic notifications are generated has made taking on WSS easy.

The key to the success of the introduction of WSS was in letting his workers see the benefits and allowing natural transitions rather than imposing new ways of working straight away.

## Case Study—Servideal

For such a small organization as Servideal, the idea of collaboration didn’t seem as key to their success as advertising and increasing revenue. It was then that Henry realized WSS can be published externally to clients who can subsequently participate in discussions and interact with the Servideal staff. This allowed Henry to create a new service, unlike any found elsewhere on the Internet, whereby the customers on the World Wide Web could collaborate and interact with the Servideal business directly, making suggestions, taking part in surveys, even taking part in discussions about product introduction and termination of unwanted product lines. The Servideal customers loved this interactive shopping experience, giving Servideal a really satisfied and loyal customer base.

## Case Study—Country Estates

Alan Smith’s vision of the future removed the barriers created by the physical separation of his offices, instead creating what he called e-sales teams across all sites and all disciplines. He saw an e-sales group comprising a manager, a team of agents, an administrative clerk, a financial adviser, and a legal adviser. These groups would service different customer requirements,

wherever that customer might be, meaning the team of people assigned to a property were not merely the local team in the local office, but rather a team of experts in that line of property from anywhere in his business.

All of his employees were expected to travel when a customer meeting was planned, but for the majority of time, they would work within the bounds of a dedicated WSS site, specifically created for their area of interest. This site would be for not only managing potential and secured contracts, but also for providing a repository for any specialized information in their field. For example, the WSS site for Victorian town houses had discussion forums relating to restoration, national pricing, builders, and location information.

## Summary

WSS is extremely powerful. You will probably have realized by now just how powerful it is, but the only way to ensure that you get the most use from it is to educate your users about all its capabilities. It's extremely easy, and very common, for users to stick with what they know, and if you're not careful, you'll end up with only a small portion of your staff using the facilities, while the rest struggle along with shared file stores and long drawn-out meetings where nothing really gets accomplished. I'm not by any means saying that you won't still have unproductive meetings—this is part and parcel of running any business—but if meetings sometimes go down rabbit holes with protracted discussions that might not require an immediate decision, turn these into WSS discussion boards and let your employees interact in their own time.

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**Note** You'll be surprised that some people who are shy in face-to-face meetings will display an amazing talent to contribute to discussion boards. The less formal and far less confrontational view of a discussion board allows all members of staff to voice their opinions openly and honestly without vying for the attention of bosses or peers in a noisy conference room.

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So, construct a training program for your users—both old and new—and make it mandatory. If you see a trait to move back to the old way, but you know this will not help business, make the old way of working no longer viable. Upload files from a shared drive into a document library; then remove the users' permissions to access the share. To make it work, you need to adopt a somewhat dictatorial role as company director. If you are a consultant putting this solution into someone else's business, make sure to explain in detail all the benefits WSS will bring to that business. Train the managers as part of your consultancy.

All in all, WSS is whatever you make it: from a simple place to store and version-control your corporate documentation, to a fully integrated and collaborative work environment from which every aspect of your business is run. Some small business managers have found that aside from email and some line-of-business applications, their workforce spends the majority of their day logged in and interoperating with the company.