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Introduction to Microsoft SharePoint 2007

I am extremely happy you are reading this book. It tells me that you are planning to install SharePoint 2007 or at least are curious about it. Congratulations! This is a very good move! This is the third generation of SharePoint, and it is so much better than its predecessors. In fact, at the TechEd 2006 conference I heard a Microsoft representative talk about how they build a new software application: "First we do a lot of planning, analysis and of course guessing at what the customer wants in such a product; this results in version 1.0. Of course, we quickly realize that we missed a number of things, so we learn from that, rebuild the product, and then release version 2.0. This version will most likely also miss some important features, which our customers tell us in a very frank and honest way. So, we sit down again, add the missing features, plus a lot more, and fix weaknesses, and then we release version 3.0. And this time we usually get it right!"

If we apply that logic to the different SharePoint versions, we see that in 2001 Microsoft released version 1.0 of SharePoint Team Services and SharePoint Portal Server 2001. In 2003 Microsoft released version 2.0, which was known as Windows SharePoint Services and SharePoint Portal Server 2003. Finally, in late 2006 they released version 3.0, which is known as Windows SharePoint Services and Microsoft Office SharePoint Server. If you ask someone who has been working with all these versions, they will tell you that Microsoft's story about software versions is indeed true; version 3.0 of SharePoint, also known as "SharePoint 2007," is a fantastic application. It has almost everything you would want in such a program. I love it, and I am sure you will it too!

So what is SharePoint 2007, and what can it do for you? That is the subject for this book. You will learn step by step how to install, configure, and maintain a SharePoint environment, regardless of the size of your company. You will also learn how to take advantage of all the cool features it includes, such as extended integration with products like MS Word and MS Outlook. And, hopefully, you will find this book easy to understand, and sometimes even fun to read. The objective in this chapter is to show you why SharePoint is such an interesting product and to give you some ideas of what you can do after installing it.

What Is SharePoint?

SharePoint helps you gather information together, regardless of what type it is. It may be MS Word documents or any other type of file, but it may also be information that you usually store in other types of applications, such as contact lists, team calendars, product databases, project planning, or news lists. SharePoint also helps you find information, even when you don't know where it is stored, and SharePoint helps you keep track of updated information. In other words, SharePoint does not invent any new information type; instead, it helps you get the right information when you need it without spending lots of time looking for it. Even more importantly, all this information is easily shared among users, such as project teams, departments, or even entire organizations.

Microsoft has performed a thorough analysis of how people use their computers in most types of organizations. Microsoft has a very good understanding of what types of problems these users have and what things that need to be changed or removed in order to help the users work more effectively. One of Microsoft's findings indicates that people tend to become frustrated when they need help from the administrator or Help desk to do even simple things, such as creating a place in the network for sharing information within a team or adding a new team member. Users want to have more power to do what they want, when they want, and exactly how they want. This concept is sometimes referred to as self-service and is a new trend in the computer business. For example, you can find applications that allow the user to reset her password, change her properties in the Active Directory (AD), and so on.

SharePoint is built around this concept, and the main idea is to allow the ordinary user to create web sites for projects and other activities without any support from the server administrator or Help desk. This requires some training for the SharePoint user, but SharePoint is straightforward and easy to learn. Your role, as the SharePoint Server administrator, is to install, maintain, and configure SharePoint. You are also the person people will contact when they need help understanding how do things in SharePoint, such as creating sites and managing lists of information. That's why this book tells you how to do these things and gives you tips and hints to make things easier for you and your users. I am sure that you will like it for your own personal use, too — SharePoint is simply a fantastic application with enormous potential, if you know how to use it correctly!

It is actually hard to describe what SharePoint is in just a few words, but let's give it a try. Using this application, you can build a web-based environment that includes the following, and more:

- A public Internet site
- An intranet portal for the organization and each department
- An extranet portal for your customers and partners
- A team site for your sales department
- A project site for the development team
- A document management system that is compliant with Sarbanes-Oxley (SOX) and ISO-9000
- A personal site for each user where they can store personal data and create links to their team sites
- A digital dashboard for storing business intelligence data such as key performance indicators
- A place to search and locate any type of information, regardless of where it is stored
- A record management system for storing legal information in a secure way

The list goes on and on. Since SharePoint is such a flexible and powerful application, it is almost only your own imagination that limits what you can do with it. It is also very fun to work with, since it is so easy to build an impressive solution with it. Microsoft has most certainly created a killer application — again! Figure 1-1 shows a typical SharePoint 2007 site, just to give you an idea about how it looks.

Figure 1-1

The History of SharePoint

In order to understand how to install and manage SharePoint, you need to know its history. This will help you understand not only where it comes from but also some abbreviations that are used in SharePoint 2007.

Around 2000, Microsoft unveiled an application called a Digital Dashboard. This web-based application used a new concept called web parts, which are rectangular areas on a web page that display some type of information, such as a list of contacts, links, or documents. This was innovative because the user could now arrange the web parts on the web page herself, without any help from an HTML programmer.

In 2001, Microsoft released its first two SharePoint products. One was SharePoint Team Services (STS), and the other was SharePoint Portal Server (SPS). Only a few organizations implemented these products, which was a pity since they offered a number of advanced collaboration features, especially for MS Office users. STS was a free web-based product used for collaboration. You could use it to share contacts,

calendar events, and documents within teams and small departments. The information was stored in an MS SQL database. It was a nice application, but it did not have any document-management features, and it was not built for creating intranet solutions for larger organizations.

SPS was a separate product, initially made as an MS Exchange 2000 public folder application (under the beta name Tahoe). However, during the beta phase of Tahoe, Microsoft got a loud and clear message from the customers: "Do not mess with our Exchange system!" So Microsoft finally released the SPS using a built-in MS Exchange 2000 server database (which made more than one SharePoint administrator wonder why on earth the SharePoint server event log contained messages from the Exchange Information Store). This new SPS had built-in document-management features, such as document versioning, checkout/checkin, and document workflow. It also had a good search engine that allowed the user to find information, regardless of where it was stored. One serious problem with SPS 2001 was the quality of its performance and the limited number of documents it could manage. And it did not have some of the nice collaboration features that STS had. In fact, the two products were competing with each other, to some extent, which is not a good way of convincing the customer to invest in SharePoint technology. Also, SPS was not free like STS, but licensed per server and per user.

In October 2003, Microsoft released its second generation of SharePoint. The old STS, now renamed Windows SharePoint Services (WSS), was basically a fancier version of STS (internally, Microsoft referred to it as STS version 2). SPS kept its name, SharePoint Portal Server, but that was about all that was kept from the previous SPS version. No longer did SPS have its own MS Exchange database, and no longer was SPS a separate product! Now it was an add-on to the WSS application. Finally, Microsoft had one integrated SharePoint solution, completely based on the MS SQL Server database.

Still, there were some annoying things about the SharePoint 2003 editions. Although they now looked very similar, they did not behave in a similar way. For example, the permission settings for lists in WSS was different from the same type of lists in SPS, and while SPS was security-trimmed (users only saw what they were allowed to see), WSS was not.

At the end of 2006, Microsoft released the third generation of SharePoint. WSS kept its name, and the version number changed to WSS 3.0. WSS still was a free add-on for Windows 2003 Server and used an MS SQL–based server to store its content. Its bigger brother SPS was now renamed MS Office SharePoint Server (MOSS), but it was still an optional add-on to WSS and was using the same MS SQL database as WSS. The MOSS server was available in different editions and with optional services, such as MOSS 2007 Standard and MOSS 2007 Enterprise, plus Office Forms Server and Office SharePoint Server 2007 for Search.

The important things you should remember from this section are:

- STS is the old name for WSS and is still used in SharePoint 2007 in some places, such as the administrative tool `tsadm.exe` and the folder sts storing the site definition for WSS sites.
- MOSS has replaced SPS.
- MOSS comes in Standard and Enterprise editions and has optional servers.
- MS SQL Server is used by MOSS and WSS 3.0.

This book describes the features and functionality of both WSS 3.0 and MOSS 2007, which are also known as SharePoint Products and Technology (SPPT) 2007.

Differences between WSS and MOSS

When thinking of WSS and MOSS, the important thing to understand is that WSS is the foundation and MOSS is an optional add-on. In fact, you cannot install MOSS by itself. If you try to do this, you will be requested to install WSS first. So, the question is: What differs between WSS and MOSS? If you have never seen SharePoint before, some of these answers might be hard to understand. Give it a try anyhow. The following chapters further flesh out the following points.

Windows SharePoint Services 3.0

WSS 3.0 has the following characteristics:

- ❑ It is a web-based application.
- ❑ It stores all information in an MS SQL database.
- ❑ It displays information using web parts.
- ❑ It has good document-management features.
- ❑ It has a number of list types that you can use for storing all kinds of information.
- ❑ It allows you to build workflow solutions that start when a document is changed.
- ❑ It is perfect for simple, but effective, intranet solutions.
- ❑ It is ideal for collaboration on project data, meetings, social events, and the like.
- ❑ It has its own index and search engine.
- ❑ Its lists and libraries can operate as RSS Feeds.
- ❑ It comes with site temples for creating Wiki and Blog sites.
- ❑ It is a free add-on to MS Windows 2003 Server (any edition).

In other words, WSS is the perfect place to collect information for your projects, your customers, and your meetings. You can move all documents from your file system into WSS and by doing so get access to the powerful document-management features it offers. It is also a very good solution when you need local intranets for teams or departments. And all this is free when you run Windows 2003 Server!

But there are things that WSS does not offer. The following are just a few examples:

- ❑ There is no support for indexing and searching information outside the WSS.
- ❑ It has no advanced intranet features, such as targeted information and content management.
- ❑ It has no advanced document management features, such as document policies.
- ❑ It has no record management of legal and other important documents.
- ❑ It cannot display InfoPath forms in a web browser.
- ❑ It cannot display MS Excel spreadsheets as web parts.
- ❑ It comes with less than 10 web parts.
- ❑ It cannot read and write to and from external databases.

This is where MOSS comes in.

MS Office SharePoint Server 2007

MOSS 2007 uses the same types of sites as WSS 3.0 but adds a lot of functionality to WSS 3.0, making it possible to do the following:

- Use global search functionality to find any type of information regardless of type and location.
- Target information to one or more user groups.
- Import user data from Active Directory.
- Use advanced content management for public Internet sites or portal sites.
- Use the RSS web part to list information fetched from RSS feeds.
- Display and use InfoPath forms with a web client, using the Forms Service.
- Display MS Excel spreadsheets and charts in a web part, using Excel Services.
- Search, display and edit content in external databases, such as SAP, using Business Data Catalog.
- Give each SharePoint user a personal web site, for both private and public use.

These characteristics make MOSS a very good solution for building public Internet sites or global intranets that are smart enough to show the right information to the right people. MOSS is also a good solution when you want to build a site for displaying business data, such as MS Excel spreadsheets, forms, and key performance indicators (KPIs)

What You Need to Run SharePoint

This section provides general information about what you need to install and run SharePoint, both WSS and MOSS. It also has general guidelines on the hardware configuration and some tips for building a test environment. Chapter 2 provides the exact steps on how to do the actual installation of a WSS 3.0 only environment. Chapter 4 provides the installation steps for a MOSS 2007 environment.

Software Requirements

Because SharePoint is a web application, you need to have a web server. The only web server that supports SharePoint is Internet Information Server version 6 (and later versions), which runs on Windows 2003 Server and later generations of Windows Server. You can use any edition of Windows 2003 Server, including the cheaper Web Edition.

You need to install the Windows component ASP.NET web platform, as described in Chapter 2, plus upgrade it to support ASP.NET 2.0, including Windows Workflow Foundation (Win WF). If you want SharePoint to act as a mail server, thus allowing users to send mail to its lists, you must also install the Windows component SMTP. All of this is covered in detail in Chapters 2 and 4.

The last, but not least, component you need is an MS SQL–based database. You have two choices: Microsoft SQL Server 2005 Express, which comes free with SharePoint 2007 or the full MS SQL 2000/2005 Server. These two choices give you different features, as listed in the following table:

Feature	SQL Server Express	MS SQL 2000/2005
Limited database size	Yes (4 GB max — but see comment in the text below)	No
Can run on a separate server	No	Yes
Includes management tools	No	Yes
License type	Free	Per CPU or per user

However, the story is a bit more complicated than this! If you install a pure WSS 3.0 environment, you will have a special version of SQL Server Express referred to as the Embedded SQL Server Express. This version does not have any size limitations, which means that you can run WSS 3.0 using this embedded database edition in a production environment — and both of these are free when running on Windows 2003 Server! But if you install MOSS, you get the 4 GB size-limited version of SQL Server Express. This means that you cannot use MOSS with SQL Server Express in a production environment due to the limitation; rather, you must use the MS SQL 2000/2005 Server.

There is one more important difference regarding SQL Server Express and SQL 2000/2005 Server: The former must be installed on the same server as SharePoint (WSS or MOSS), while MS SQL 2000/2005 gives you an option of choosing what server to use for storing all the data. Only by using the full SQL 2000/2005 Server can you keep SharePoint and the database on separate servers, which provides improved performance and scalability. This is known in SharePoint terms as a small server farm configuration.

Hardware Requirements

In addition to all the software requirements, the server hardware must also be configured properly. For a test environment, you can get by with 1 GB of memory and at least 10 GB of free disk space. This type of requirement is easily met by using virtual server software, such as MS Virtual PC. The CPU type is not important in a test environment, but in a production environment you will want a high-speed single or multiple-CPU configuration. You learn more about this in Chapters 2 and 4.

Building a Test Environment

Using a virtual server, such as MS Virtual PC, makes it possible to build and test SharePoint on your ordinary MS Windows XP client. It also makes it possible to test and play with different configurations and scenarios. And if (or, more likely, when) things go wrong, you can simply use the undo feature of MS Virtual PC. Another nice option with virtual servers is to make a copy of the virtual server environment and, if necessary, restore that copy in the event that your test environment becomes messed up beyond repair!

I recommend that you use a virtual server for testing everything detailed in this book. It will make it much easier for you in case something goes wrong, and you won't have to worry about testing and playing around. Once you know how SharePoint works, you can then go on to use your own production environment.

Integrating with MS Office

Given that you are reading this book, the chance that you use MS Office for creating documents, spreadsheets, and presentations is rather high. Therefore, this section is important for you. SharePoint will not change the way you are working with Office documents, but it will enhance the functionality, making many things a lot easier than they are without using SharePoint. What features you can expect to have depends on what version of MS Office you are using.

The story is this: MS Office 2007 was released together with SharePoint 2007 at the end of 2006. They were built to be integrated, just like the previous SharePoint 2003 and Office 2003. If you use Office 2003 along with SharePoint 2007, you will get a lot of the functionality in SharePoint 2007, but not everything. Using older MS Office versions, such as 2000 or XP, will allow such a user to read and save documents to SharePoint 2007, but nothing more. The reason is that these older versions of MS Office do not know about SharePoint, so they lack this integration capability. Do not expect Microsoft to release an update for any version previous of MS Office 2007, and frankly if you've seen what Office 2007 can do, you'll want to upgrade — it is both much easier to work with and has a lot of new features.

The following list gives you an idea about what to expect when running Office 2000/XP versions with SharePoint 2007:

- **File Save Integration:** Microsoft Office 2000 integrates with Windows SharePoint Services. Users can open and save files stored on SharePoint sites. They can also receive alerts in Outlook 2000.
- **Basic Data Integration:** Microsoft Office XP provides for data integration with SharePoint sites. Users can view properties and metadata for files stored on SharePoint sites. They can also export list data to Microsoft Excel 2002.
- **Contextual Integration**: SharePoint integrates fully into the business tasks that users perform every day with Microsoft Office 2003 Editions.

Microsoft produced a white paper describing Office integration with SharePoint 2007 called "Fair, Good, Better, Best." Fair is what you get with Office 2000, good means the functionality achieved by MS Office XP, better is what you get with MS Office 2003, and best requires you to run Office 2007. Note that there is no technical problem in using SharePoint in a mixed MS Office environment, but it will place an extra burden on the Help desk and the support team, since each version will support different SharePoint 2007 features. A more detailed comparison of the four MS Office versions is presented in the following table (including new SharePoint 2007 features in the second half of the list):

Feature	Office Version	
Save and open files from SharePoint sites	Office 2000:	Yes
	Office XP:	Yes
	Office 2003:	Yes, enhanced (Office plus FrontPage, InfoPath, OneNote, Microsoft Project, Publisher, Visio)
	Office 2007:	Like Office 2003, plus SharePoint Designer
Create new documents in web browser	Office 2000:	No
	Office XP:	Yes (Excel, FrontPage, PowerPoint, Word)
	Office 2003:	Yes (Excel, FrontPage, InfoPath, PowerPoint, Microsoft Project, Publisher, Word)
	Office 2007:	Like Office 2003, plus SharePoint Designer
Collect document columns automatically	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes
	Office 2007:	Yes
Change document columns in both Office and the web browser	Office 2000:	Data stored, but not displayed
	Office XP:	Yes
	Office 2003:	Yes, enhanced (Excel, FrontPage, InfoPath, PowerPoint, Visio, Word)
	Office 2007:	Like Office 2003, plus SharePoint Designer

Feature	Office Version	
Track document versions	Office 2000:	No. Use web browser to view and manage document versions.
	Office XP:	No. Use web browser to view and manage document versions.
	Office 2003:	Enhanced (Excel, PowerPoint, Visio, Word)
	Office 2007:	Like Office 2003, and can also compare document versions very easily
Check out and check in documents	Office 2000:	No. Use web browser to manually check out and check in documents.
	Office XP:	No. Use web browser to manually check out and check in documents.
	Office 2003:	Yes, enhanced (Excel, PowerPoint, Visio, Word). Use web browser to manually check out and check in other types of documents.
	Office 2007:	Like Office 2003
Upload multiple documents	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes
	Office 2007:	Yes
Use inline discussions	Office 2000:	Yes
	Office XP:	Yes
	Office 2003:	Yes
	Office 2007:	Yes

Feature	Office Version	
Create document workspace	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes
	Office 2007:	Yes
Create meeting workspace	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes, with Outlook 2003
	Office 2007:	Yes, with Outlook 2007
Synchronize calendar, tasks, and contact list in SharePoint sites	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes, but only from SharePoint to Outlook 2003
	Office 2007:	Yes, two-way synchronization with Outlook 2007
Alert integration with Outlook	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes
	Office 2007:	Yes
Display lists as RSS information	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes
	Office 2007:	Yes

Feature	Office Version	
Using Excel services	Office 2000:	No
	Office XP:	No
	Office 2003:	Yes, can publish to SharePoint site from Excel
	Office 2007:	Yes, same as Office 2003
Access to business data catalog	Office 2000:	No
	Office XP:	No
	Office 2003:	No
	Office 2007:	Yes, allows Office 2007 documents to display content in external data sources, using SharePoint 2007 lists
InfoPath forms services	Office 2000:	Yes
	Office XP:	Yes
	Office 2003:	Yes
	Office 2007:	Yes
InfoPath forms in Office clients	Office 2000:	No
	Office XP:	No
	Office 2003:	No
	Office 2007:	Yes
Document information panel	Office 2000:	No
	Office XP:	No
	Office 2003:	No
	Office 2007:	Yes, can display and modify document properties in customizable InfoPath-based forms in Office clients

Feature	Office Version	
Access to workflows	Office 2000:	No
	Office XP:	No
	Office 2003:	No
	Office 2007:	Yes, can start and complete workflow tasks from within the Office 2007 client
PowerPoint slide libraries	Office 2000:	No
	Office XP:	No
	Office 2003:	No
	Office 2007:	Yes
Use record management	Office 2000:	No
	Office XP:	No
	Office 2003:	No
	Office 2007:	Yes, allows Office 2007 documents to be stored in a record repository
Compose and publish Wikis and blogs using Word	Office 2000:	No
	Office XP:	No
	Office 2003:	No
	Office 2007:	Yes

Built-In Features of SharePoint

So, what features can you expect in SharePoint 2007? The answer depends on what version you implement: MOSS or WSS. Following is a list of everyday scenarios showing you how SharePoint can make things easier for you and your users. Chapter 10 provides more detailed steps on how to create a SharePoint environment that solves these problems.

Alerts (WSS and MOSS)

One feature that both WSS and MOSS offer is something Microsoft refers to as alerts. An alert is a request you create in SharePoint to be notified by e-mail when SharePoint content changes (for example, when a document is updated, a contact is deleted, or a News item is added). Using alerts, you can be sure to keep yourself updated about changes to information that is important to you! SharePoint will send you an e-mail to notify you what has happened. The following information types are examples of what can be watched by alerts:

- Complete document libraries, or single documents and files.
- Complete picture libraries or single pictures.
- Contact lists or single contacts.
- Link lists or single links.
- News lists or single news items.
- Event lists or single events.

Alerts can watch a lot more places and types of information, as you will see in Chapter 10. This is extremely useful — you will no longer miss any important updates!

RSS (WSS and MOSS)

A new feature in SharePoint 2007 is support for the relatively new Really Simple Syndication technique. Using this feature a user can also be notified when new items are added to any type of SharePoint lists, such as document libraries, contacts, news, and tasks lists. This is similar to alerts, but the main difference between them is that alerts send e-mails that will be stored in your Inbox along with other e-mail, while all RSS notifications will be collected in one folder (see Figure 1-2).

File and Document Management (WSS and MOSS)

Today you organize your files by using a folder structure and giving your files descriptive names so that they are easy to find. But you also know that after some time, it gets harder and harder to find the file when you need it. And even worse, you may have several copies of different versions of the same file. How can you be sure you're looking at the right version? If you are looking for a file that somebody else created, it gets even harder because the folder structure may not be as intuitive as you would like it to be and the filenames may not be as descriptive as they should be.

This is where SharePoint comes in. All files and documents in SharePoint are stored in document libraries. This is very similar to a folder in the file system, but on steroids! The document library in SharePoint 2007 has lots of new features compared to previous SharePoint versions, which will help you organize, compose, and find the files you are looking for. The key features are as follows:

- **Document Columns:** Add your own columns to describe the files and documents, such as Document Type, Customer Name, Project Name, or Status. These columns can be local for a specific document library or they can be shared between libraries, using a feature called Site Columns.

Figure 1-2

- **Document Views:** Create your own view of how the files should be presented. For example, you could create a view that shows only documents of the type Contract for the customer Volvo, sorted by its status.
- **Document Workflows**: When adding or modifying a document, a workflow can start. For example, this workflow could send an e-mail to some people in your team to collect feedback or to get an approval by your manager before getting published.
- **Content Types**: Allows you to create multiple document templates for a document library. A user that creates a new document will be able to choose between these templates. These templates can be based on different file types (such as Word and Excel files), different content, and different workflows, columns, and policies. SharePoint 2003 users have been waiting for this feature for a long time!
- **Individual Permissions**: You can set a specific permission for each document if necessary. For example, if you remove the Read permission for a specific document, users will not see it at all.
- **Check Out/In**: You can force a user to check out (lock a document) before editing a document. Only when this document later is checked in (unlocked) will the updated version be visible for all users.

These features make it easier for you to name your documents. You no longer need files with names like `Contract_Volvo_version05.doc`. And more importantly, you can force the writers of documents to enter information in these columns when they save their files, which will automatically start the workflow you have defined.

There are many other interesting features in SharePoint related to document management. In this book, you will see and try all of the important features.

Project Management (WSS and MOSS)

Think about how you work with projects. What type of information is related to a standard project? Although it depends on the project, you will find that most projects share the following types of information among the project members:

- **Gantt Schema**: A list of project tasks, including start and due dates, displayed in a graphical calendar view.
- **Documents:** Examples include MS Word files, Excel spreadsheets, text files, and PowerPoint presentations.
- **Members:** A list of all the members in the project.
- **Calendar:** A list of events, such as meetings, conferences, and project milestones.
- **Contacts:** A list of external contacts, such as vendors, partners, consultants, and other resources.
- **Tasks:** A list of things to do, assigned to project members.
- **e-mail:** Questions, status, and comments regarding the project.

The problem without SharePoint and specific project-management tools is that this information is stored in several places. Documents and files are stored in a file share; members exist in an e-mail distribution list; calendar events, contacts, and tasks are stored in an Outlook public folder; and e-mail is, of course, stored in each member's personal Inbox. Another way to describe this is organized chaos. Each project member needs to know and remember exactly where each type of information is stored. If she does not, valuable time is wasted searching for the information. To make things worse, if a new member joins the project, you must explain to her where everything is stored and how it works. To make sure that the new member understands what has been going on, you must forward a copy of all mail related to this project — if you can find it. The new member then faces the challenging task of reading all this e-mail and understanding what it contains.

I am sure you recognize this situation! To solve this problem, you need something that can store all this information in a single place — or at least make all the information available through a single source. This is exactly what SharePoint does! Here is how you do it:

1. Create a SharePoint web site for the project.
2. Add the members to the site. SharePoint sends the members an e-mail with an invitation and a link to the site. SharePoint may also create a mailing list for this project team to make it easy for you to share e-mail.
3. Create a document library to store all files and documents, and copy any related file to this document library.

4. Create another document library to store all e-mail, and copy all project-related e-mail to this document library. Give this document library an e-mail address, and make that address a member of the project team mailing list.
5. Create a calendar, a task list, and a contact list, and then use these lists for the project data.
6. Create a project task list, and display it as a Gantt schema.

Such a project site could look something similar to Figure 1-3. Chapter 2 gives detailed steps on how to create this type of web site and all its lists and fill it with data. You will also learn how easy it is to design the page to make it easy to use.

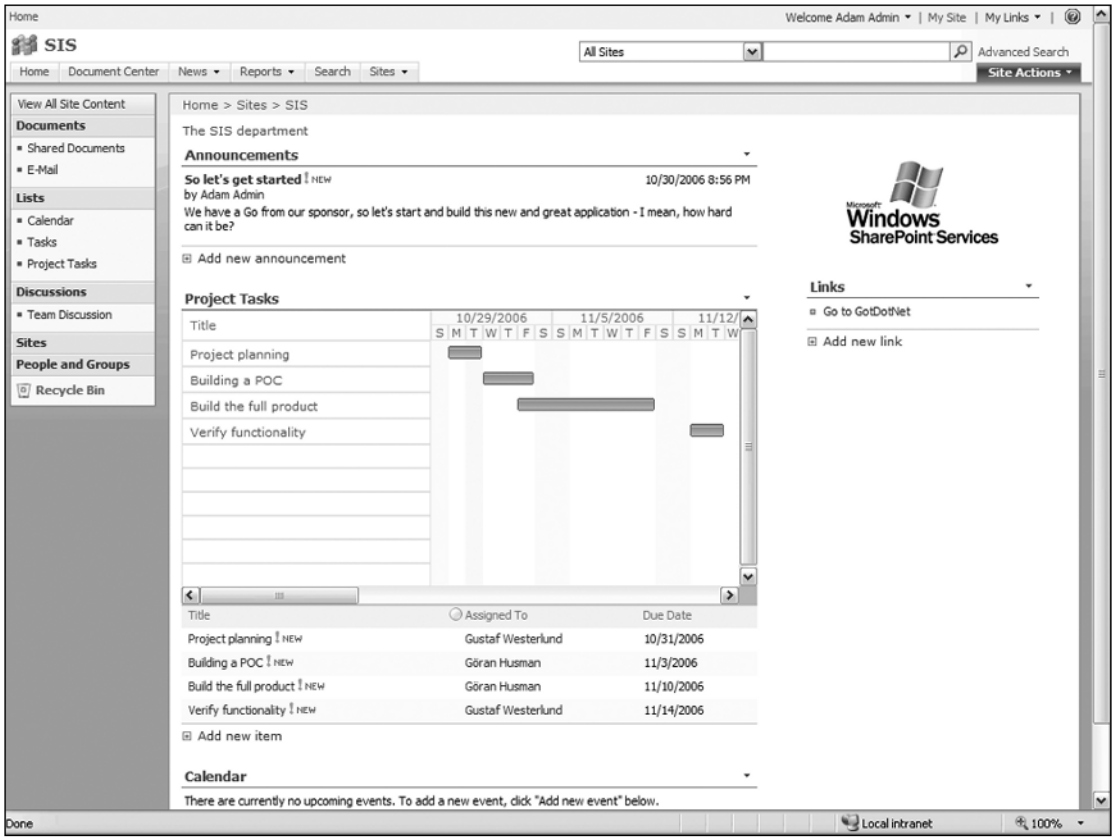

Figure 1-3

Managing Meetings (WSS)

If there is one thing that almost everyone agrees on, it is that most meetings are a huge pain! Why? The usual complaints are that they are a waste of time, boring, and too long; that meeting participants are unprepared; and that it's hard to follow up on tasks and activities after the meeting. That indicates that even a small step forward to make meetings more effective is important. With SharePoint, you will be able to change many tasks related to meetings into something more positive.

In a typical meeting, the meeting organizer uses Outlook to invite participants, as well as to reserve resources such as the conference room. A meeting is an event where the following steps occur:

1. A number of people are invited.
2. The invitees come together.
3. While together, they discuss a number of topics.
4. The discussion results in a number of actions and decisions.

The Typical Meeting Process

Let's look at a typical meeting process. In this example the meeting organizer creates an agenda and describes the meeting objective. (By the way, have you noticed how many meetings don't have a clear objective? Meeting objectives should be brief, clear, and easy for everyone to understand.) The meeting organizer then estimates the length of the meeting and sends an invitation to all participants. Some documents, with information needed for the meeting, may be attached to the invitation.

Later, the actual meeting takes place. Each participant has his own copy of the agenda and the attached documents. Well, actually, some participants forgot the agenda and need to print a copy; somebody else did not see the attached document, so he also needs to print a copy. About 15 minutes after the meeting should have started, everyone is ready to proceed. Because there is no clear indication as to how long each agenda point should take to discuss, the meeting takes 20 minutes longer than expected. This makes some people feel stressed because they have other appointments after this meeting.

During the meeting, someone takes notes about all the activities agreed upon, the tasks assigned, and the decisions made. This information is later listed in the meeting minutes. One more person also takes notes because, after this meeting, she will be the person appointed to check the minutes.

One week later, the meeting minutes are created and checked and sent to all participants by e-mail. A few of these participants actually read the minutes, some just take a quick glance at them, and some do not have time to even open the document. The next time this team has a meeting, only a few participants have read the previous minutes, and many have missed that they were assigned tasks. And the story goes on.

Using SharePoint for Effective Meetings

The preceding story might not be true for every organization, of course, but I am sure you are familiar with the ways meetings can go wrong. So, what can SharePoint do to make this process both more effective and more interesting? Thanks to the integration of Outlook and SharePoint, you can simultaneously send a meeting invitation, book a conference room, and create a meeting workspace, a web site where you can host all information regarding the meeting, including the following:

- **Agenda:** A list of all the items you will discuss during the meeting, including who is responsible for each one, how long it will take, and any comments regarding the items.
- **Participants:** SharePoint automatically creates a list of all invited participants. This list is automatically updated with the status of each participant so that everyone can see who will come or why someone declined the invitation.
- **Tasks:** A list of all the tasks agreed upon during the meeting.

- **Decisions:** A list of all the decisions agreed upon during the meeting.
- **Document Library:** Contains any document with information that will prepare the participants for the meeting, as well as documents created as a result of the meeting.

All this information is available to each participant directly when they receive the invitation. This means that the participant can see the agenda before it takes place, maybe add some extra items to it, and get access to any document with information related to the meeting. If needed, the participant can add her own documents.

When the actual meeting takes place, you use a video projector that displays the meeting workspace so that everyone can see it. No one needs a printed copy of the meeting agenda because it is listed on the meeting workspace. All documents are listed in the document workspace — if there is a discussion about what a document contains, the organizer can quickly open the document for everyone to see.

Any activities, tasks, or decisions that are agreed upon during the meeting are directly entered into the list. Everyone can see this, so there is no need for anyone to check the meeting minutes afterwards. The effect is that everyone will be involved in whatever decision is made. This makes the meeting more interesting and engaging. Because the agenda clearly states the amount of time it should take to discuss each item, the participants can focus on that subject and try to stay within the estimated time.

Because everything is recorded directly in tasks and decision lists during the meeting, you don't need any meeting minutes at all! If a participant afterwards needs to see what was decided in the meeting, she can simply go back to the meeting in the Outlook calendar and click the link to open the meeting workspace again.

In Chapter 7, you will see how to create a meeting workspace, configure what lists it contains, and fill it with data. You will also see that repeated meetings can be linked to the same meeting workspace, giving you one page for each meeting instance and making it very simple to go back and see what you discussed in a previous meeting.

Keeping Your Organization Updated (MOSS)

For many years now, organizations have used an intranet to make sure that everyone has access to general information, such as company news, information from the Human Resources department, or a list of all employees and their contact information. SharePoint is a great tool to help you create an intranet. With SharePoint, you often refer to the intranet as "the portal site," or simply "the portal."

Using SharePoint for your intranet has many advantages. It is fast, it can support organizations with millions of users, and it has several interesting features, such as the following:

- **Content Management:** MOSS has implemented and enhanced all the important features from MS Content Management Server. This allows you to edit web content, such as the intranet home pages and news, with features like check out/check in, approval procedures, version history, and workflows. This is the main feature that most users of SPS 2003 have been waiting for.
- **News:** This is a special site in MOSS where some, or all, users create news pages about the company and its customers and partners. This news site is based on the content management features mentioned above.

- **Targeting:** Helps you make sure that your news, links, and other information are visible to only a certain group of people, which is also referred to as an "audience."
- **Active Directory Synchronization:** Makes it possible to present relevant information about your users, such as e-mail addresses, departments, phone numbers, pictures, descriptions, and so on. SharePoint stores this information in its profile database.
- **Document Center:** Allows you to copy documents from a workspace area, such as a project site, to a specific document archive with its own set of permissions, policies, and workflows. For example, say that your teams develop documents, and some of these documents should be published to the intranet. Using a document archive makes it easy for the author to publish the document to that location.
- **Report Center:** This is a special site in MOSS where you can create, distribute, and manage important business data.
- **Site Directory:** Displays a list of existing web sites, including their names, descriptions, owners, and other properties. This makes it easy for a user to quickly find a specific web site.
- **My Site:** A personal site for each user that typically is used for displaying personal information, such as news, links, e-mail, and calendars, as well as document and picture libraries. There is also a public view of this site that displays information about the user, such as e-mail address, phone numbers, department, and a general description.

In addition, you will find that the News pages allow you to define when to display and remove the news from the list. News is not automatically deleted; instead, it is archived and will still be possible to find using the search feature in SharePoint. You can link pictures to your news, and you can make the news item show up in several places, such as on the organization-wide intranet and on a local intranet for a given department.

An intranet based on MOSS will automatically add links to the web sites you create for your projects, meetings, and other shared team sites. These links will show up in the site directory in MOSS, where the user can browse through different categories of sites, such as project sites, team sites and so on. The categories used in this site directory are created by the SharePoint administrator. The intranet also allows you to create any type of list, including document libraries, contacts, and events. If you decide to go with both MOSS and WSS, it is hard to find a good reason why you should use an additional product only for the intranet. Doing this will not only make things harder for you to support and manage (backup and restore), but it will also force your organization to pay two server licenses rather than one.

Now take a look at an intranet scenario. Say that your organization has three departments: Sales, IT, and Human Resources. You also have some special groups: The executive team, a project team, and an external sales force. Your task is to make sure each of them gets the right information, in an easy and intuitive way. Your CEO requires a common intranet where all important information regarding the company, its customers, and its employees are presented. Each department requires its own intranet. The IT folks tell you they are sick and tired of all the sales info, and the sales guys asks you politely if there is a way to filter out everything except the sales-related information. And all of them say they want a fast and easy way to find the right web site where all the information is stored for the projects, meetings, customers, and so on. And by the way, the executive group wants an easy way of finding all contracts, regardless of where they are stored. How do you solve this?

One simple solution would be to do this:

1. Install MOSS and WSS.
2. Create a common intranet portal for the organization.
3. Create a separate page on the intranet for each department, with its own news listing, document libraries, and contact lists. These pages are:
   - ❑ Sales
   - ❑ IT
   - ❑ HR
4. Create these audiences:
   - ❑ Sales Team
   - ❑ IT Team
   - ❑ HR Team
   - ❑ Executive Team
   - ❑ Project Team
   - ❑ External Sales Team
5. Instruct your general news authors how to target their news items to a specific audience so that each audience only sees information targeting their group.
6. Instruct local news authors in the departments on how to create news items only for their own areas.
7. Use the site directory in MOSS to create new web sites for each project, team site, and so on. This ensures that all web sites are listed in the site directory and are therefore easy to find.
8. Create a document library named Contract on the Document Center site. Tell the salespeople that whenever they create a new contract document to make sure that it also is submitted to this document library.
9. Make sure every user has updated information in the Active Directory (AD), such as phone numbers, department, company name, and e-mail address. Then synchronize the AD with SharePoint once every night. Make sure each user profile in SharePoint links to a photo of the user. Instruct everyone that whenever they see a name listed, they can simply click it to get more information about that user.

Finding Your Information Faster (MOSS)

How often do you search for information? I would guess at least once every day. Assume the average user spends 10 minutes every day searching for information. If you have 200 users, this would be about 2000 minutes, or 33 hours per day. You could also put it this way: Your organization pays for 200 employees, but it only gets the efficiency of 196 (4 people times 8 working hours = 32 hours in total per day). What this means is that even small improvements in efficiency may lead to big results. And not just for the owners of the company — the employees will be also happy because they can concentrate on doing their jobs instead of searching for information.

Both WSS 3.0 and MOSS 2007 has its own built-in search and indexing engine; the difference is that WSS will only allow the user to search in SharePoint sites, while MOSS allows the user to search almost anywhere, both in SharePoint and in external sources, such as MS Exchange server and file servers. Because the WSS search functionality is fairly intuitive, this section discusses the search and indexing features of only MOSS.

A number of client-based search tools are available, such as MSN Search and Google Search. At the time of this writing, these tools are not made for searching SharePoint information, so you need to implement MOSS in order to get a real search and index engine. But this is not just any search engine; it is a very sophisticated tool that enables you to search for any type of data in SharePoint, regardless of where it is stored. You can also instruct the index engine to make information outside the SharePoint database searchable, including these content sources:

- Every web site in the SharePoint environment (including all MOSS and WSS sites).
- Any file server in your IT environment (including older NT 4 and Windows 2000 servers).
- Your MS Exchange database (such as all public folders or role-based mailboxes such as Help Desk).
- External business and production databases, such as SAP and Oracle.
- Any Lotus Notes database you may have.
- Other internal web sites (such as your old intranet, your public web site, or similar sites).
- External web sites (such as your partner's web site — and why not your competitor's?).

What File Types Can You Search?

Before SharePoint allows you to search, it must index the content sources. So, the question should really be "What file types can MOSS index?" And the answer is: practically anything stored in a computer! You can index MS Office file formats, such as MS Word and MS Excel, and all standard file formats, such as text files, HTML, and RTF files.

What about other common file types, such as PDF, ZIP, and CAD files? In order to explain this, I have to tell you a little more about the indexing process. The process is more complicated than this, but the basic steps are these:

1. When the scheduled task for indexing starts, the index engine looks into every place you have instructed it to look in, also known as Content Sources.
2. When it finds a file, it looks at the file type (for example, DOC).
3. It checks a list in SharePoint where you have specified what file types you want indexed. In this example, DOC is a file type that should be indexed.
4. The index process now needs a program that understands how to read DOC files. Such programs are referred to as Index Filters (IFilters, for short). Every file type needs its own IFilter, including DOC files.

5. The IFilter opens the file and starts scanning it. Whenever it finds some text, it sends it through a filter that removes words that should not be indexed (such as "yes," "no," "one," and "two" and numerals like 1, 2, or 3). The resulting stream of words are then stored in an index file, along with information about the name and location of this file.
6. When all the text in the file is read, the IFilter closes the file, and the process starts again with step 2, looking for next file.

So if you want to make file types like PDF searchable, you need to do two things: Configure SharePoint to look for PDF files and install an IFilter for the PDF file type. The index engine does not include this by default. You may wonder why Microsoft has not added common file types such as PDF or ZIP. The answer is simple: At the time MOSS was released, Adobe owned the PDF format, so Microsoft could not include an IFilter for legal reasons. So, Adobe is making the IFilter for the PDF — and the good news is that Adobe is giving it away for free to encourage people to use the PDF format for storing all kinds of content. In Chapter 8, you learn how to find and install common IFilters, including the PDF version.

What Type of Searching Can You Do?

The default configuration of the SharePoint search engine allows you to search for whole words and their stemmers only. For example, you can search for "write" and you will also find files with "writing" and "wrote." However, if you search for the word "Admin," you will not find "Administrator" because "Admin" is not recognized as a whole word.

You can also search for document properties, also referred to as metadata, such as author, title, and file size. The list of properties is different for different types of documents. For example, if you want to see what properties a standard MS Word document has available, you can do this:

1. Open any Word 2007 file.
2. Choose the Office button ➪ Prepare ➪ Properties.

Now you will see all standard properties for this document, such as Author and Title, in the document property pane directly above the document text. You will also see any custom columns in the document library where this document is stored, since Word and SharePoint automatically synchronize, or propagate, custom columns between them.

All the standard properties on the document property pane are searchable. You can also make combinations, such as searching for documents containing the word "Viking" with the standard attribute "Author" equal to "Göran Husman." This is satisfactory for most search scenarios. But sometimes you want to search for a document that matches your own custom column value. You may recall that you can add any number of columns to a document library, for example "Doc Type" or "Status." As you learn in Chapter 8, even these column properties can be searchable if you configure SharePoint properly.

If your SharePoint search engine has indexed many documents, the search result may give you too many matching documents. If so, you want to limit the search to a given area. This is made possible by configuring search scopes. For example, you can create one search scope for MS Exchange, another for files on the file system, and a third that only shows results from a specific SharePoint site. This reduces the number of search results, but it requires that you know in what search scope your document belongs.

Finally, you can define keyword best bets. This feature helps your users to find frequently requested information. For example, suppose that when you talk with the sales manager, she tells you that members in her team often need access to the product specifications. The problem is that these products have several names. The bestselling product is article X2025A, but most customers refer to this as the "Super Gadget." To add to the problem, the internal name used by the sales team is the "Money Maker." She wants her team to be able to search for any of these terms and still find the product specification for the X2025A. With the keyword best bet feature in SharePoint, this is an easy fix. You simply need to create a list of each alias for the keyword X2025A and then link this keyword to the proper document. When someone later searches for any of these words, that person will find the product specification for X2025A at the top of the search results. Below it, he will find all other documents that match this search criterion.

Accessing SharePoint over the Internet

Very soon after you start working with SharePoint, you will find that it contains more and more of your business-critical data. You also become aware of the fact that you need online access to the SharePoint server in order to work with the documents, projects, and everything else stored in the SharePoint database. So you start thinking, "How do I access this information when I am not at the office?" One way is to use the offline functionality of MS Outlook 2007, which allows a user to make a copy for a document library in an Outlook folder, thus making it possible to read and even update documents while offline. Another answer is: You can make your SharePoint information accessible over the Internet, in a secure way, while still getting good performance. You have to plan this carefully and configure SharePoint and the other modules involved, such as the firewall.

> **If the SharePoint server is accessible over the Internet, SharePoint 2007 allows even a mobile phone to connect to a SharePoint list using a special view that only shows text.**

How You Do It

Because SharePoint is a web application running on top of IIS 6, it is very easy to make SharePoint accessible from outside your organization. You simply open up your firewall so that it allows connections to the SharePoint server from the outside. But this is not a good solution from a security perspective. This leaves your SharePoint server wide open to the world, and there are lots of threats for this server that could destroy it or even the other servers on your network. Another big problem with this simple solution is that your password and user account could be transferred over the Internet unencrypted, depending on what type of authentication method you use. Someone listening in on your communication could learn your password and be able to log on as you!

A better solution is to install a Secure Socket Layer (SSL) certificate on your IIS 6 and demand that every access to the SharePoint server use SSL-encrypted connections. That is, the user must enter the Uniform Resource Locator (URL) address to the SharePoint server starting with `https://`. The effect of this is that your logon credentials are protected. There is no longer any risk that someone will see your password.

The best solution is to prohibit the external users from accessing the SharePoint server directly from the outside, combined with the SSL-encrypted connection. Instead, your users would access something that looks like the SharePoint server but in reality is a replica. This type of replica is known as an application proxy server. Microsoft has a product for this: the Internet Security and Acceleration Server, also known as the MS ISA server. With this solution, things works like this:

1. The external user connects to the SharePoint web address over the Internet, using an SSL connection such as `https://intranet.filobit.com`. This could be the exact same address for users on the inside, except for the `https://` part (internally, you would use `http://` instead).
2. The user connection is passing through the firewall but is directed to the MS ISA server instead of the real SharePoint server.
3. The MS ISA server looks at the requested URL address, checks its rules, and if everything is okay, connects to that URL and retrieves the SharePoint page. This page is then sent back to the user.
4. The user sees the requested URL and believes he is connected to the real SharePoint server. He clicks a link on that page, and, once again, the MS ISA server gets a request for a new URL, repeating step 3.

The nice thing with this solution is that the user never gets access to anything more than the MS ISA server, which normally is installed on the Demilitarized Zone (DMZ) segment of the network. This segment is where you put all your publicly available servers, such as your public web site. You can use the rules in the MS ISA server to control exactly what the user can see and do. For example, in some organizations, users have different levels of access, depending on where they are situated at the moment. Inside the network, they have full access; on the Internet, they have access to only some part of SharePoint. This is something that only the MS ISA server can help you deploy because SharePoint itself cannot distinguish access to its information in this way. Another bonus effect is that frequently requested web pages are cached on the MS ISA server, meaning that these pages will be displayed more quickly for the users.

Allowing External Partners Access

Now you know the general steps in configuring the SharePoint environment for access over the Internet. But what about partners and other users living outside your organization? If there is a need to give them limited access to your SharePoint server, it can be done! Before you do this, you must understand how SharePoint controls what the user can do with its access control feature.

Every user who wants to access any part of SharePoint must belong to a SharePoint group that defines the exact permission. Some of the default SharePoint groups are these:

- **Visitor:** Allows the user to open and read information, including documents, pictures, and list content. The user will not be able to create, modify, or delete information in SharePoint.
- **Member:** Allows the user to do everything a Visitor can do, plus create, modify, and delete information, including news, documents, contacts, and so on.
- **Owner:** Has full access to the site. Can do everything, including adding and deleting members and changing their access. This group is often referred to as the site administrator group.

SharePoint groups are not specifically used for intranet scenarios; instead they are used for controlling access to any part of SharePoint, regardless of user access.

First, look at how you can allow access internally. Assume that you have an employee named Anna. She needs access to your intranet, and she will only read information. You add Anna's user account to the SharePoint group Visitors on the intranet portal site. Later, Anna comes back to you and says that she needs both read and write access to a given project site; now you add Anna's user account to the site group Members for this particular project site. Anna now belongs to different SharePoint groups in different parts of the SharePoint environment. Whenever she is accessing SharePoint, it will validate her user account and check what SharePoint group she belongs to.

If you want to allow access to a user outside your organization, it must be possible to authenticate that user. In other words, the external user needs to log on so that SharePoint can see what access he is granted. This will be a problem with external users because they don't have a user account in your network. One simple way to resolve this is to create a local user account for each of these external users. You can assign the user membership in any SharePoint group you like, and you can create rules in the MS ISA server to control exactly what part of SharePoint they can access. The external user must remember to log on with the local account you created. So everyone is happy now, at least for a while.

Problems with This Solution

But this solution is far from perfect. It works, this is true, but what happens if this external person moves to another company? For example, suppose that Michael works for the company ABC. Michael is involved in a project in your organization, Filobit Inc, and needs access to the SharePoint site where all the project information is stored. You create a local user account for Michael, grant him the proper access, and tell him the URL for the project site and that his logon name is `Filobit\Michael`. He starts working on the project, and everything works as expected. One month later, Michael leaves ABC, and starts working for its competitor, XYZ. You don't have an agreement with XYZ, so its employees are not allowed access to your project site. You need to disable the account `Filobit\Michael`. But how will you know that Michael has left his old company, ABC? There is no automatic process that will inform you about this. Hopefully, someone at ABC tells you this, or somebody in the project team gets this information and tells you. Clearly, this situation will be very hard to handle if you have 10 or more external partners. But at the moment, this is how things work.

A new feature in SharePoint 2007 called Forms Based Authentication allows you to create a logon page for external users and store those external accounts in an SQL Server database, instead of the Active Directory. This feature is beyond the scope of this book, since it requires both programming skills and good understanding of SQL Server; for more information see `http://blogs.msdn.com/sharepoint/archive/2006/08/16/configuring-multiple-authentication-providers-for-sharepoint-2007.aspx`**.**

ADFS

However, there is some light at the end of the tunnel. Starting with Release 2 of Windows 2003 Server, Microsoft released a feature called Active Directory Federation Service (ADFS). The objective of ADFS is to resolve precisely this type situation (that is, letting two completely separate organizations share access to web applications like SharePoint without the need to create local accounts for the remote organization). The idea is rather simple and easy to understand, but the technique beneath is advanced and worth its own book.

The basic idea of ADFS is to make it possible for an organization to use its own user accounts to get access on a remote web application. For example, assume that you have two companies, A and B. User Bob works for B, and he needs access to a SharePoint site in A. Bob talks to the administrator for the site in A, which then grants the `B\Bob` account access to the requested site.

The magic in this scenario is managed by adding extra servers to your Active Directory domain, one in each organization. The primary ADFS server is referred to as the federation server and hosts the federation service component. Its primary task is to route incoming requests from the Internet to the web site a user is trying to access. It is also responsible for creating a security token that will be passed on to the web application. The process that validates the external user is the ADFS Web Agent, which runs on the web server (in this case, the SharePoint server).

Most organizations do not want their federation server exposed to the Internet. You can protect it by installing an optional federation proxy server. This proxy relays federation requests from the outside world to your internal federation server, meaning that your federation server is no longer exposed directly to the outside world.

> **ADFS is based on the standard Security Assertion Markup Language (SAML), which means that that the external company need not be running MS Windows.**

MS Groove

With SharePoint 2007 there is a new type of solution for this situation. Using MS Groove, a project's members are able to share and collaborate on SharePoint lists and libraries, regardless of the project members' organizational membership. It is a very attractive solution for teams and groups of up to 15 members, and Groove will automatically synchronize any updates of these lists and libraries between all members as soon as they get connected to the Internet. The current version of MS Groove has its own user database, so there is no requirement that all members have user accounts in the same Windows domain.

One thing to remember with Groove is that it is an independent application that may be used as a standalone product or synchronized with SharePoint content. It is not a special application made for SharePoint as of today, although this will probably change in the future. In a way, Groove and SharePoint are both offering a shared workplace for teams, although the strength of Groove is its great replication engine that works independently of the users' organizational membership, while SharePoint's strength is all the functionality mentioned earlier in this chapter, including integration with all MS Office products.

> **For more information about MS G¡roove look at**
> `http://www.microsoft.com/office/groove`**.**

Summary

In this chapter you learned the following:

- SharePoint is a web-based application that helps users share and collaborate with any type of data and information.
- SharePoint lets the ordinary user create sites and document libraries in a secure and controlled manner.
- The previous versions of SharePoint were STS (SharePoint Team Services) and SPS 2003 (SharePoint Portal Server). STS was replaced by WSS 3.0 (Windows SharePoint Services), and SPS 2003 was replaced by MOSS 2007.
- Moss now comes in several editions, and with optional server modules.
- WSS is the base module of SharePoint. It is used to create sites for managing and sharing information, such as projects, customer data, meetings, and local intranets.
- MOSS is the optional add-on package. It enhances WSS with several new features, such as Search, Excel Services, and Forms Server, plus new site templates such as Internet Site, Intranet Portal, and Record Management sites.
- To install SharePoint, the server needs Windows 2003 Server with IIS and ASP.NET activated.
- SharePoint can use two types of SQL databases: MS SQL 2000/2005 Server and SQL Server Express.
- SQL Server Express must be installed on the same computer as SharePoint.
- MS SQL 2000/2005 Server can be installed on a separate computer if required.
- WSS has a special version of SQL Server Express, named Embedded SQL Server Express.
- SharePoint 2007 (WSS and MOSS) is best integrated with MS Office 2007.
- You can use older versions of MS Office, but you will lose functionality, and the integration with SharePoint 2007 is not as good as with Office 2007.
- You can use SharePoint to build intranets for the complete organization, for the department, or for any local groups of teams, if requested.
- The index and search functionality MOSS 2007 are very good! It makes it possible to search anywhere and in practically any file type.
- WSS 3.0 now comes with its own index and search engine, but it is limited to searching in WSS sites only.
- You can use MOSS to index new file types by installing a corresponding IFilter (Index Filter).
- You can search for content in both files and properties, such as Author, Title, and Size.
- You can configure SharePoint to make your own library columns searchable.
- You can define keyword best bets for frequently requested information.
- SharePoint requires every user to have an account in order to authenticate. You can use local sever accounts or domain accounts, and thanks to the new pluggable authentication system you can also store accounts in a MS SQL server

- To allow a secure access to the SharePoint server from the Internet you must use a MS ISA server or similar product.
- If external users such as partners or customers need access, you must create an account for them in your environment.
- Another way of allowing users in remote organizations access to your SharePoint server is to install the Active Directory Foundation Service (ADFS).
- Using MS Groove a project team can share and collaborate on SharePoint list or library, regardless of the team members' organizational membership.

By now, you have a general idea of what SharePoint is and how you can use it. In the next chapter, you learn how to install and configure Windows SharePoint Services 3.0.