Microsoft

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精通
Windows®
SharePoint® Services 3.0

INSIDE
OUT

China Edition
Published by Shanghai World Publishing Corporation

- The ultimate, in-depth reference
- Hundreds of timesaving solutions
- Supremely organized book

世界图书出版公司

Windows® SharePoint® Services 3.0 Inside Out

Errin O'Connor

精通 Windows SharePoint Services 3.0

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About the CD

The companion CD that ships with this book contains many tools and resources to help you get the most out of your Inside Out book.

What's on the CD

Your Inside Out CD includes the following:

- **Complete eBook**   In this section, you'll find an electronic version of *Windows SharePoint Services 3.0 Inside Out*. The eBook is in PDF format.

- **Microsoft Online Resources**   A catalog of helpful online resources for Microsoft Windows SharePoint Services 3.0 (WSS 3.0), Microsoft SharePoint Server 2007, Microsoft Office SharePoint Designer 2007, SQL Server 2005, .NET Framework, and Microsoft Windows Vista.

- **Links to Reference Documents, Files, and Material**   These links will point you to a collection of files that are referenced within the book. Files such as the full installation file for WSS 3.0, the WSS 3.0 Quick Reference Guide, WSS 3.0 Applications Templates, the Microsoft Best Practices Analyzer for WSS 3.0, and many more.

- **The Links (URLs) Listed in the Chapters**   Here's a catalog of the links that were referenced throughout the book. They are sorted by chapter for easy navigation.

- **Contacting the Author**   Here you'll find several ways to contact the author as well as links to the WSS 3.0 dedicated site on *EPCGroup.net*. Errors, omissions, corrections, and frequently asked questions will be posted on this site, along with free Web Parts and solutions that were developed for the readers of this book.

> **Note**
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> Please note that the links to third-party sites are not under the control of Microsoft Corporation, and Microsoft is therefore not responsible for their content. Nor should their inclusion on this CD be construed as an endorsement of the product or the site.
>
> Software provided on this CD is in only the English language and may be incompatible with non-English language operating systems and software.

System Requirements

The following are the minimum system requirements necessary to run the CD:

- Microsoft Windows Vista, Windows XP with Service Pack 2 (SP2), Windows Server 2003 with SP1, or newer operating system

- 500 megahertz (MHz) processor or higher

- 2 gigabyte (GB) storage space

- 256 megabytes (MB) RAM

- CD-ROM or DVD-ROM drive

- Microsoft Windows or Windows Vista–compatible sound card and speakers

- Microsoft Internet Explorer 6 or higher

- Microsoft Mouse or compatible pointing device

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Conventions and Features Used in This Book

This book uses special text and design conventions to make it easier for you to find the information you need.

Text Conventions

Convention	Meaning
Abbreviated menu commands	For your convenience, this book uses abbreviated menu commands. For example, "Choose Tools, Forms, Design A Form" means that you should click the Tools menu, point to Forms, and select the Design A Form command.
Boldface type	**Boldface** type is used to indicate text that you enter or type.
Initial Capital Letters	The first letters of the names of menus, dialog boxes, dialog box elements, and commands are capitalized. Example: The Save As dialog box.
Italicized type	*Italicized* type is used to indicate new terms.
Plus sign (+) in text	Keyboard shortcuts are indicated by a plus sign (+) separating two key names. For example, Shift+F9 means that you press the Shift and F9 keys at the same time.

Design Conventions

Note

Notes offer additional information related to the task being discussed.

Cross-references point you to other locations in the book or other sources that offer additional information on the topic being discussed.

INSIDE OUT **This statement illustrates an example of an "Inside Out" problem statement**

These are the book's signature tips. In these tips, you'll get the straight scoop on what's going on with the software—inside information on why a feature works the way it does. You'll also find handy workarounds to different software problems.

TROUBLESHOOTING

This statement illustrates an example of a "Troubleshooting" problem statement

Look for these sidebars to find solutions to common problems you might encounter. Troubleshooting sidebars appear next to related information in the chapters. You can also use the Troubleshooting Topics index at the back of the book to look up problems by topic.

Sidebar

The sidebars sprinkled throughout these chapters provide ancillary information on the topic being discussed. Go to sidebars to learn more about the technology or a feature.

Introduction

People working together is a key element in the success of any organization. Only through the cooperation, interaction, and collaboration of its members can an organization multiply its efforts and become stronger and more productive.

Much of this collaboration is, of course, face-to-face—we work together in pairs, in informal groups, in targeted meetings, and even in large assemblies. And when we can't be face-to-face, we speak by telephone, teleconferencing, instant messaging, and e-mail. Although these methods are personal, immediate, convenient, and efficient, we sometimes need a more permanent record of our thoughts, our preparations, and our statements. For that, we've historically resorted to paper trails, file folders, and electronic media such as Microsoft Office Word documents, Microsoft Office Excel spreadsheets, Microsoft Office PowerPoint presentations, and Web pages.

To be useful, of course, documents of any kind must find their way to the people who need them. Traditionally, they've followed one of four routes:

- **Mail**   Gets the immediate attention of its recipient, but it creates duplicate copies of each document for each recipient; it requires the sender to anticipate who might need a document; and it's awkward for long-term storage.

- **File Systems**   Provide medium-term storage for documents and (usually) a hierarchical scheme for organizing them in some sort of folder structure. Unfortunately, most computer file systems maintain very little data about the documents they store, often providing just a cryptic file name and the date the file was last updated. Metadata, or data about data, is mostly nonexistent in the standard file system. Searching for documents by content or by property (such as author, title, keyword, or version) is slow and resource-intensive.

- **Databases**   Provide excellent long-term storage and search capabilities, but only by splitting documents into discrete data elements. As such, they usually store the data content of highly structured documents, and not the documents themselves.

- **Libraries**   Combine, in many respects, the file system and database approaches. A library stores whole documents, not just their structured data content, and it provides a database of information about the documents it stores. This is a powerful approach, but it often suffers from a lack of scalability. Either the library can't accommodate the massive number of documents a large organization can generate, or its indexing, search, and retrieval mechanisms aren't granular enough. For example, they start generating search results in the thousands or tens of thousands.

Taken individually, none of these approaches meets all the requirements for quick, easy, accurate, and efficient collaboration throughout an organization. Vendors, systems integrators, and organizations have therefore tried combining these approaches in various ways, hoping to multiply their benefits and cancel out their deficiencies.

Presenting Windows SharePoint Services 3.0

Microsoft's approach to collaboration and document management answers the short-comings of all past and present approaches. It centers on two products named, collectively, SharePoint Products and Technologies—those two products are Microsoft Windows SharePoint Services 3.0 (WSS 3.0) and SharePoint Server 2007.

Microsoft Windows SharePoint Services 3.0 (WSS 3.0) is built on the Windows Server 2003 platform and conforms to the Windows Server 2003 licensing model. Using these services, you or any authorized team member can create specialized Web sites for sharing information, developing group documents, organizing meetings, and generally fostering collaboration among team members. The key components of these Web sites are lists and libraries.

- A SharePoint *list* contains rows and columns of data, much like a standard database table. SharePoint lists, however, are much easier to create and maintain. They're great for collecting and sharing fielded information such as contact lists, calendars of events, or custom information of any kind.

- A SharePoint *library* is similar to a list, except that it exists solely to store a collection of documents. Each list item describes one document, providing information such as the file name, the file title, the date last modified, and the person who last modified the document. SharePoint libraries can retain multiple versions of each document, and they support change control through document check-in and checkout. WSS 3.0 supports special library types for pictures and for Microsoft Office InfoPath forms.

Organizing these lists and libraries into team Web sites places most administration and content management in the hands of team members who are close to the work and familiar with the subject matter. This avoids the bureaucracy and the waiting times that are typical of strictly centralized administration. But at the same time, Microsoft provides all the tools that centralized administrators need to keep the installation under control and running smoothly.

Team members can access SharePoint Web sites by using either a browser or a Microsoft Office 2003 or Microsoft Office 2007 application. Individuals on teams can configure lists and libraries to record whatever information they want, and they can easily create shared work areas for documents, projects, and other work in progress. Members can sign up to receive change notifications by e-mail. These features go way beyond anything traditional file sharing can provide. The file share is a thing of the past!

You can also use WSS 3.0 as a development platform for creating custom collaboration and information-sharing applications. For example, third-party or in-house programmers can access SharePoint sites by using Web services or readily accessible application programming interfaces (APIs). In addition, you can develop custom Web pages by using SharePoint Designer 2007, and custom SharePoint objects and solutions with Microsoft Visual Studio 2005.

SharePoint Server 2007 is an application that runs on the WSS 3.0 platform. For most organizations, its most important features are enterprise content management, search, workflow, and enterprise-wide collaboration. SharePoint Server 2007 also provides a personal Web site for each user, called a My Site. I like to refer to this as the Corporate MySpace.

SharePoint Server 2007 also has the ability to connect and search other business applications such as SAP by using the Business Data Catalog.

Both of these products integrate smoothly, almost effortlessly, with your existing Microsoft software. The platform is Windows Server 2003 or Windows Server 2008; the Web server is Internet Information Server (IIS); security integrates with Windows domains or Microsoft Active Directory directory service; and both the run-time environment and development platform are Microsoft .NET Framework version 2.0. All Office 2007 programs function as SharePoint clients. You can even e-mail–enable SharePoint lists and document libraries. Microsoft Project Server 2007 runs on WSS 3.0, and SharePoint Server 2007 integrates with BizTalk Server 2006. The list goes on and on.

Both WSS 3.0 and SharePoint Server 2007 make extensive use of Microsoft SQL Server 2005. If you are using a single server deployment, then you can either go with the Windows Internal Database or install SQL Server on the stand-alone machine along with the other components.

Scalability is never really going to be an issue with WSS 3.0. If usage demands, you can create as large a farm of Web servers as you like and spread the database load across as many SQL servers as you like. The back up and restore functionality has been drastically improved in this latest release of SharePoint.

Who This Book Is For

This book addresses the needs of anyone who uses, designs, installs, administers, governs, or programs WSS 3.0. It begins with an overview of the product and how a successful SharePoint initiative should be planned and implemented. I have used my past 6.5 years of SharePoint consulting experience to provide you with a best practices approach for successfully implementing SharePoint within any organization. This is helpful so that any audience can see the big picture of an entire SharePoint implementation project. The book ends with an explanation of detailed SharePoint programming techniques, best practices, and information about how to get your new implementation off the ground. In between, the material is organized in order of increasing detail and complexity. This means you can read until you learn what you need at the moment, and then continue as the need arises.

Alternatively, you can approach the book randomly, on a sort of "need to know" basis. The index and table of contents will guide you to the specific information you need.

Even in its initial release, WSS 3.0 integrates tightly with an extremely wide range of Microsoft software. This book, however, is a complete guide only for WSS 3.0, with some detailed information about SharePoint Server 2007. It presumes that if you're

interested in the interface between WSS 3.0 and, say, Microsoft Office Outlook, then you already know how to use Office Outlook. The same is true for the other Microsoft Office programs, for Windows Server 2003, Microsoft SQL Server 2005, and for Visual Studio 2005. This book also gives you a great deal of information about using Share-Point Designer 2007.

How the Book Is Organized

This book consists of seven parts, organized in order of increasing complexity and specialization. The early chapters, for example, meet the needs of the widest and least technically curious audience: team members who use WSS 3.0 via Internet Explorer or Microsoft Office 2007 on a daily basis. Later chapters address the needs of more specialized workers, such as Web designers, power users, administrators, and software developers.

Here are the titles and specific coverages of each part:

- **Part 1: Overview and Concepts**   In this part, Chapter 1, "Introducing Windows SharePoint Services 3.0," introduces the basic features and mindset of WSS 3.0. For comparison, Chapter 2, "Introducing Microsoft Office SharePoint Server 2007," describes an overview of a SharePoint enterprise deployment and Share-Point Server 2007.

- **Part 2: End-User Features and Experiences**   This part explains the features team members are likely to use the most. Chapter 3, "Using the Built-In Features of Windows SharePoint Services 3.0," explains how to work with SharePoint sites by using a browser, and Chapter 4, "Using SharePoint with Microsoft Office 2007," explains how to access SharePoint sites from Microsoft Office 2007.

- **Part 3: Creating, Designing, and Configuring Sites, Workspaces, and Pages with a Browser**   Chapter 5, "Creating SharePoint Sites, Workspaces, and Pages," explains how to create, design, and configure new SharePoint sites, workspaces, and Web pages by using only a browser. Chapter 6, "Designing Lists, Libraries, and Pages," explains how to create, modify, and manage SharePoint lists and libraries, again using the browser interface.

- **Part 4: Creating. Designing, and Managing Sites and Working with SharePoint Designer 2007**   A lot of functionality and options are available for you to con-sider when properly creating, designing, and managing SharePoint sites. Also, with the release of SharePoint Designer 2007, you have a very powerful tool to use for site customization and the creation of custom functionality. With all of this information, it takes six chapters to properly explain.

  Chapter 7, "What's New with Templates and Design," explains how SharePoint Designer 2007 can create, open, add pages to, export, import, back up, and re-store SharePoint sites. It also goes into creating no-code solutions such as custom workflow. Chapter 8, "Creating and Formatting Web Part Pages," then explains how to create and modify Web Part pages, which are special Web pages that

display the output of SharePoint software components called, logically enough, Web Parts.

Chapter 9, "Creating and Modifying Basic Site Features," explains how to create and modify basic site features as well as how to modify SharePoint site navigation. This chapter also discusses the use and creation of site templates in relation to how to properly use master pages.

Chapter 10, "Creating Data Sources and Data Views," explains how to design, create, and modify SharePoint lists and libraries. Chapter 11, "Using WSS 3.0 Web Parts," explains how to properly use WSS 3.0's out-of-the-box Web Parts. Chapter 12, "Managing Site Content," explains how to manage SharePoint content and how to properly keep your site's content up-to-date and relevant.

- **Part 5: Installing Windows SharePoint Services 3.0**   In this part, Chapter 13, "Planning and Installing Windows SharePoint Services 3.0," explains how to plan for and then install WSS 3.0 in the most common scenarios. It goes into requirements gathering and the choices you have concerning the proper server configurations. Chapter 13 also discusses the extranet capabilities of WSS 3.0 as well as information on language packs. Chapter 14, "Backing Up, Restoring, and Migrating Sites," then explains how to back up and restore SharePoint sites. It covers information on SharePoint disaster recovery plans for your organization, migrating sites, and third-party backup and restore tools you should consider.

- **Part 6: Administering SharePoint Services**   An organization running WSS 3.0 can delegate administration at the physical server, virtual server, site collection, or site level. If your duties fall into any of these categories, this part has something for you.

  Chapter 15, "Administering a SharePoint Server," explains how to properly administer a SharePoint server. This chapter covers topics such as server monitoring, how to use applications such as Microsoft Operations Manager or System Center Operations Manager 2007, and using SQL Reporting Services with SharePoint.

  Chapter 16, "Managing Site Settings," explains how to administer an individual SharePoint site or site collection. For the most part, these are functions that administrators of individual sites or site collections will use. Chapter 17, "SharePoint Central Administration," explains how to use SharePoint Central Administration's Operations and Application Management pages. This chapter is geared toward site collection and server administrators because these pages control almost every aspect of your organization's WSS 3.0 implementation.

- **Part 7: Developing Web Parts in Visual Studio 2005, SharePoint Best Practices, and Maintaining Your Implementation**   This part provides four chapters of interest to software developers who want to learn SharePoint development techniques and want to develop new components such as Web Parts for WSS 3.0. This part is also geared toward administrators because it covers SharePoint best

practices, content type configuration, and limitations, as well as how to maintain a healthy SharePoint environment. Chapter 18, "Advanced Design Techniques," explains a number of techniques that are useful when designing Windows Share-Point Services 3.0 sites. The topics that are covered in this chapter will assist you in following best practices development techniques to help you and your organization get the most out of this powerful platform. Chapter 19, "Beginning Web Part Development," explains Web Part development, information on how to configure a development environment, the SharePoint object model, and a number of other detailed development topics. Chapter 20, "Additional SharePoint Best Practices," explains SharePoint best practices to help you successfully implement many different areas of your WSS 3.0 deployment. Chapter 21, "Getting Share-Point off the Launch Pad," concludes with instructions for getting your new SharePoint implementation off the ground with topics concerning SharePoint training and communications.

If this strikes you as quite a range of topics, you're right, and it indicates the popularity that WSS 3.0 enjoys among Microsoft products and technologies. SharePoint is becoming one of the hottest software solutions available. It is also becoming one of the hottest IT skill sets on the market. With this kind of promise, it's no wonder you're interested in WSS 3.0.

Contents at a Glance

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