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# SQL SERVER 2005 REPORTING SERVICES

由入门到精通

Step by Step

Stacia Misner Hitachi Consulting

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# Microsoft® SQL Server™ 2005 Reporting Services Step by Step

Stacia Misner; Hitachi Consulting

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## Introduction

Microsoft Reporting Services is the component of Microsoft SQL Server 2005 that adds a server-based reporting solution to the Microsoft business intelligence framework. The goal of this book is to guide you through the installation of Reporting Services and through each stage of the reporting life cycle so that you can easily create, manage, and share reports in your organization. In support of this goal, step-by-step exercises are included to give you the opportunity to explore Reporting Services with confidence. When you complete these exercises, you'll be ready to tackle real-world reporting challenges!

To help you learn the many features of Reporting Services, this book is organized into five parts. Part I, "Getting Started with Reporting Services," explains how the components of Reporting Services fully support the reporting life cycle, shows you how to install these components, and provides you with a hands-on introduction to the reporting life cycle. Part II, "Authoring Reports," starts by showing you how to build simple reports, then gradually introduces advanced techniques to teach you how to use Reporting Services features to satisfy a variety of reporting requirements. Part III, "Managing the Report Server," covers all of the activities that you need to perform when managing the reporting environment. Part IV, "Delivering Reports," describes the many ways that you can use Reporting Services to provide reports to the user community. Part V, "Programming Reporting Services," introduces how to use Reporting Services as a development platform for custom applications that author, manage, or deliver reports.

#### **Finding Your Best Starting Point**

If you are

Although the range of topics addressed in this book is comprehensive, this book also caters to readers with varying skills who are involved in one or more stages of the reporting life cycle. Accordingly, you can choose to read only the chapters that apply to the stages of the reporting cycle for which you are responsible and skip the remaining chapters. To find the best place to start, use the following table.

An information worker or analyst who develops reports	1.	Install the sample files as described in "Installing and Using the Sample Files."
	2.	Work through Part I to get an overview of Reporting Services and to install the product on your computer.
	3.	Complete Part II to develop the necessary skills to author

Follow these steps

If you are	Follow these steps
An administrator who maintains server resources	<ol> <li>Install the sample files as described in "Installing and Using the Sample Files."</li> </ol>
	<ol><li>Complete Part I to understand the technologies used by Reporting Services and to install the product on your computer.</li></ol>
	<ol><li>Complete Part III to learn how to manage and secure content on the server and how to configure and manage server components.</li></ol>
An information consumer who uses reports to make decisions	<ol> <li>Install the sample files as described in "Installing and Using the Sample Files."</li> </ol>
	<ol><li>Complete Chapter 2 to install the product on your computer.</li></ol>
	3. Work through Part IV to discover how to retrieve and save reports, how to subscribe to reports, and how to use Report Builder to develop your own reports.
A programmer who develops applications with reporting	<ol> <li>Install the sample files as described in "Installing and Using the Sample Files."</li> </ol>
functionality	<ol><li>Work through Part I to get an overview of Reporting Services and install the product on your computer.</li></ol>
	<ol><li>Skim Parts II–IV to understand the functionality that is included in Reporting Services.</li></ol>
	<ol> <li>Work through one or more chapters that interest you in Part V to explore specific areas of customization.</li> </ol>

## About the Companion CD-ROM

The CD that accompanies this book contains the sample files that you need to follow the step-by-step exercises throughout the book. For example, in Chapter 3, "Building Your First Report," you use a sample file that contains a SQL query so you don't have to type in the query yourself. In other chapters, you use Microsoft Visual Studio solution files that have reports or programs created for you as starting points in preparation for adding other features to the reports or programs. These sample files allow you to build on what you've learned rather than spend time setting up the prerequisites for an exercise.

## **System Requirements**

To install Reporting Services and to use the samples provided on the companion CD, your computer configuration will need to meet the following requirements:

- Microsoft Windows 2000, Windows XP Professional, or Windows Server 2003 with the latest service pack installed.
- Microsoft SQL Server 2005, Developer or Enterprise Edition with any available service packs installed and using Windows or Mixed Mode authentication. Refer to the

Operating System Requirements listed at http://msdn2.microsoft.com/en-us/library/ms143506(en-US,SQL.90).aspx to determine which edition is compatible with your operating system.

- Microsoft Internet Explorer 6.0 SP1 or later.
- Microsoft Internet Information Services (IIS) 5.0 or later.

The step-by-step exercises in this book and the accompanying practice files were tested using Windows XP Professional and Microsoft SQL Server 2005 Developer Edition. If you're using another version of the operating system or a different edition of either application, you might notice some slight differences.

### **Installing and Using the Sample Files**

The sample files require approximately 140 MB of disk space on your computer. To install and prepare the sample files for use with the exercises in this book, follow these steps:

1. Remove the CD-ROM from its package at the back of this book and insert it into your CD-ROM drive.



**Note** If the presence of the CD-ROM is automatically detected and a Start window is displayed, you can skip to Step 4.

- 2. Click the Start button, click Run, and then type **D:\startcd** in the Open box, replacing the drive letter with the correct letter for your CD-ROM drive if necessary.
- 3. Click Install Sample Files to launch the Setup program, and then follow the directions on the screen.

The sample files will be copied from the CD-ROM to your local hard drive. The default installation folder is C:\Documents and Settings\<username>\My Documents \Microsoft Press\rs2005sbs, where <username> is the login name you use to operate your computer. You can change this installation folder to a different location and reference the new location when working through the exercises. For each chapter that uses sample files, you will find a corresponding folder in the rs2005sbs folder. You'll be instructed where to find the appropriate sample files when an exercise requires the use of an existing file.



**Tip** In the C:\Documents and Settings\<username>\My Documents\Microsoft Press \rs2005sbs\Answers folder, you will find a separate folder for each chapter in which you make changes to the sample files. The files in these folders are copies of these sample files when you complete a chapter. You can refer to these files if you want to preview the results of completing all exercises in a chapter.

4. Remove the CD-ROM from the drive when installation is complete.

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#### Introduction

Now that you've completed installation of the sample files, you need to follow some additional steps to prepare your computer to use these files. You start by setting up fictional user accounts and groups.

5. Click Start, right-click My Computer, and then click Manage.



**Important** Do *not* create these accounts on a production server. It is recommended that you work through the exercises in this book on a test or development server. If you don't plan to perform the exercises in Chapter 10, "Managing Security," or Chapter 14, "Managing Subscriptions," you can skip to Step 18.

- 6. Expand Local Users and Groups, right-click the Users folder, and then click New User.
- 7. Type **EuropeDirector** in the User Name, Password, and Confirm Password boxes to create a new account, and then click Create.
- 8. Repeat the previous step to create the following accounts: **PacificDirector**, **NADirector**, and **SalesAnalyst**.
- 9. Click Close.
- **10.** Right-click the Groups folder, and then click New Group.
- 11. Type AWSalesDirector in the Group Name box, and then click Add.
- 12. In the text box, type EuropeDirector; PacificDirector; NADirector.
- 13. Click OK to close all dialog boxes.
- 14. Right-click the Groups folder, and then click New Group.
- 15. Type AWSalesAnalyst in the Group Name box, and then click Add.
- 16. In the text box, type SalesAnalyst.
- 17. Click OK to close all dialog boxes.
- 18. Click Start, click Run, and then type C:\Documents and Settings\<username>\My Documents\Microsoft Press\rs2005sbs\Setup\Restore\restore\_databases.cmd in the Open box.

This step attaches the SQL Server databases that are the data sources for the reports that you will create and use throughout this book. It also creates the user logins and user tables that are used for demonstrating security and subscriptions.

19. Open SQL Server Management Studio, connect to Analysis Services, right-click the Databases folder, select Restore, type rs2005sbs in the Restore Database box, click Browse, type C:\Documents and Settings\susername>\My Documents\Microsoft Press \rs2005sbs\Setup\Database in the Selected Path box, type rs2005sbs.abf in the File Name box, and then click OK twice.

This step restores the database that is used to demonstrate how to use an Analysis Services database as a data source for a report.

You're now ready to get started!

#### **Conventions and Features in This Book**

To use your time effectively, be sure that you understand the stylistic conventions that are used throughout this book. The following list explains these conventions:

- Hands-on exercises for you to follow are presented as lists of numbered steps (1, 2, and so on).
- Text that you are to type appears in **bold** type.
- Properties that you need to set in Visual Studio or in Report Manager are sometimes displayed in a table as you work through steps.
- Pressing two keys at the same time is indicated by a plus sign between the two key names, such as Alt+Tab when you need to hold down the Alt key while pressing the Tab key.
- A note that is labeled as **Note** is used to give you more information about a specific topic.
- A note that is labeled as **Important** is used to point out information that can help you avoid a problem.
- A note that is labeled as **Tip** is used to convey advice that you might find useful when using Reporting Services.

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