

Beginning SharePoint with Excel



Gini Courter and
Annette Marquis

Beginning SharePoint with Excel

Copyright © 2006 by Gini Courter and Annette Marquis

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the copyright owner and the publisher.

ISBN-13 (pbk): 978-1-59059-690-6

ISBN-10 (pbk): 1-59059-690-0

Printed and bound in the United States of America 9 8 7 6 5 4 3 2 1

Trademarked names may appear in this book. Rather than use a trademark symbol with every occurrence of a trademarked name, we use the names only in an editorial fashion and to the benefit of the trademark owner, with no intention of infringement of the trademark.

Lead Editor: Jim Sumser

Technical Reviewer: Alexzander Nepomnjashiy

Editorial Board: Steve Anglin, Ewan Buckingham, Gary Cornell, Jason Gilmore, Jonathan Gennick, Jonathan Hassell, James Huddleston, Chris Mills, Matthew Moodie, Dominic Shakeshaft, Jim Sumser, Keir Thomas, Matt Wade

Project Manager: Kylie Johnston

Copy Edit Manager: Nicole LeClerc

Copy Editor: Susannah Pfalzer

Assistant Production Director: Kari Brooks-Copony

Production Editor: Kelly Winquist

Compositor and Artist: Kinetic Publishing Services, LLC

Proofreader: Nancy Riddiough

Indexer: Broccoli Information Management

Cover Designer: Kurt Krames

Manufacturing Director: Tom Debolski

Distributed to the book trade worldwide by Springer-Verlag New York, Inc., 233 Spring Street, 6th Floor, New York, NY 10013. Phone 1-800-SPRINGER, fax 201-348-4505, e-mail orders-ny@springer-sbm.com, or visit <http://www.springeronline.com>.

For information on translations, please contact Apress directly at 2560 Ninth Street, Suite 219, Berkeley, CA 94710. Phone 510-549-5930, fax 510-549-5939, e-mail info@apress.com, or visit <http://www.apress.com>.

The information in this book is distributed on an “as is” basis, without warranty. Although every precaution has been taken in the preparation of this work, neither the author(s) nor Apress shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this work.

The source code for this book is available to readers at <http://www.apress.com> in the Source Code section.

Contents

About the Authors	xiii
About the Technical Reviewer.....	xv
Acknowledgments	xvii
Introduction.....	xix
■ CHAPTER 1 SharePoint and Excel: The Perfect Partnership	1
Excel Has Something for Everyone.....	2
Using Excel As a Database Tool.....	2
XML Makes Data Truly Portable.....	2
Excel Lists Simplify Data Management	2
SharePoint Makes Collaboration Possible.....	3
Microsoft SharePoint Portal Server.....	4
Microsoft Windows SharePoint Services	6
Common Features of SPS and WSS	7
Working Together: Excel and SharePoint.....	13
Uploading an Excel Workbook to SharePoint.....	14
Publishing an Excel List	16
From SharePoint to Excel and Back Again.....	17
Summary	17
■ CHAPTER 2 Working with Lists in SharePoint	19
Exploring SharePoint Lists.....	19
Creating a SharePoint List	20
Modifying a List's Settings	23
Working with SharePoint List Data.....	31
Inserting Column Totals	32
Using the SharePoint Datasheet Task Pane.....	33

Publishing an Excel List to a SharePoint Site	34
Publishing Lists with Formulas	34
Publishing Excel Lists Using the List Toolbar	35
Working with Lists on the SharePoint Site	36
Modifying a List	37
Synchronizing a List	37
Resolving Conflicts	37
Refreshing a List and Discarding Changes	38
Setting External Date Range Properties	38
Breaking the Link	39
Summary	39
 CHAPTER 3 Working with SharePoint Lists in Excel	41
Taking SharePoint Data Offline with Excel	41
Exporting to Excel from a Datasheet View	41
Exporting to Excel from a Standard View	42
Saving and Using a Query	43
Working with Offline Data in Excel	46
SharePoint Calculated Fields in Excel	46
Adding Calculations in Excel	47
Synchronizing the Offline Data with SharePoint	48
Scenario: The Crisis Response Team System	49
Charting SharePoint Data in Excel	51
Creating PivotTable and PivotChart Reports	52
Creating a PivotTable Report from SharePoint	53
Changing Field Settings	54
Refreshing PivotTable and PivotChart Data	57
Creating a PivotTable Report from Excel Offline Data	57
Summary	57
 CHAPTER 4 Creating SharePoint Views	59
Modifying a SharePoint List	59
Adding Columns to a List	60
Creating a Column	60
Column Types	62

Changing the Order in Which Fields Appear	68
Modifying a Column.....	69
Creating a New View.....	71
Customizing the View	72
Displaying and Positioning Columns.....	73
Sorting Data	75
Filtering Data	75
Grouping Data.....	76
Adding Totals	77
Selecting a Style	78
Setting Item Limits.....	79
Modifying an Existing View	79
Summary	80

■ CHAPTER 5 **Creating Custom Calculations in SharePoint** 81

Working with Formulas.....	81
Creating Formulas	81
Creating Calculated Columns Using Column References	83
Incorporating Functions into Formulas	85
Calculating with Math Functions.....	88
Using Statistical Functions.....	91
Applying Date Functions.....	92
Using Text and Data Functions	95
Applying Logical Functions	98
Using Information Functions	99
Nesting Functions for Maximum Efficiency.....	101
Summary	102

■ CHAPTER 6 **Publishing Excel Web Pages for SharePoint** 103

Creating a Web Page in Excel	103
Formatting the Workbook Before Saving.....	104
Saving the Workbook As a Web Page	104
Displaying the Web Page in SharePoint.....	107
Saving a Selection As a Web Page	108
Republishing Web Pages Automatically	109

Creating Interactive Web Pages	109
Publishing and Using the Spreadsheet Component.....	112
Publishing and Using the Chart Component	114
Publishing and Using the PivotTable Component.....	116
Appending to an Existing Web Page.....	118
Automatically Republishing Web Pages.....	118
Displaying HTML Pages in SharePoint.....	119
Creating a Web Part Page.....	120
Adding and Modifying the Page Viewer Web Part.....	121
Summary	125
 ■ CHAPTER 7 Building Out-of-the-Box Business Solutions.....	 127
Business Solutions Using Lists and Views	127
The Project Issue Tracking Scenario.....	128
Building the SharePoint Issue Tracking Solution	129
Extending the Solution	137
Business Solutions Using Charts and Tables	139
The Sales Performance Scenario	139
Building the SharePoint Sales Performance Dashboard	142
Summary	150
 ■ CHAPTER 8 Using Excel to Query SharePoint.....	 151
Creating a Static Query	151
Creating a Refreshable Web Query.....	153
Refreshing Query Data	156
Modifying a Web Query.....	157
Saving the Query	160
Using Web Queries to Manage SharePoint Site Users.....	160
Summary	165
 ■ CHAPTER 9 Using SharePoint's Office Web Parts	 167
Using the Office Spreadsheet Web Part.....	168
Creating a Web Part Page.....	170
Adding the Office Spreadsheet Web Part to a Page.....	171
Working with the Office Spreadsheet Web Part	173

Working with the Office PivotTable Web Parts	178
Connecting Web Parts to Data	179
Using the Office Datasheet Web Part	184
Using the Office PivotTable Web Part	185
Using the Office PivotChart Web Part	187
Using the Office PivotView Web Part	189
Modifying Office Web Parts	190
Appearance	190
Layout	192
Advanced	192
Spreadsheet or PivotView	193
Summary	194
 CHAPTER 10 Building Excel Spreadsheet Web Parts	 195
Installing the Spreadsheet Web Part Add-In	196
Custom Web Parts	198
Creating a Simple Custom Web Part	199
Setting up the Excel Workbook	199
Using the Spreadsheet Add-In	201
Protecting Your Web Part	203
Adding the Web Part to a Web Part Page	205
Adding Your SharePoint Site to My Network Places	205
Importing the Custom Web Part	206
Creating a Web Part That Returns a Data Set	209
Creating the Data Retrieval Service Connections File	210
Formatting and Saving the XML Spreadsheet	214
Creating and Importing the Web Part	214
Summary	215
 APPENDIX A Creating and Using Excel Lists	 217
Creating a New List	217
Entering Data into a List	218
Redefining the Columns in a List	219
Deleting List Data	219

Using Database Features and Functions	219
Sorting and Filtering	220
Adding Totals	221
When Lists Don't Work	222
Converting a List to a Normal Range	223
 ■ APPENDIX B Mapping Excel Spreadsheets for XML	225
XML Basics	225
Opening XML Files in Excel	228
Mapping an XSD in Excel	229
Adding an XSD File to a Workbook	229
Adding Fields to the Map	230
Importing XML Data Using the Map	231
Exporting XML Data Using the Map	233
 ■ APPENDIX C Resources	235
General SharePoint Resources	235
MSD2D	235
The Boiler Room—Mark Kruger, SharePoint MVP	236
SharePoint Portal Server Frequently Asked Questions	236
SharePoint Hosting	236
SharePoint Training Resources	237
MindSharp	237
SharePoint Experts	237
Microsoft SharePoint Portal Server 2003 Training Kit	237
Excel and SharePoint Add-Ins	238
Spreadsheet Web Part Add-In for Microsoft Excel	238
Microsoft Excel XML Tools Add-In	238
Microsoft SharePoint Sites Worth Noting	238
Microsoft SharePoint Products and Technologies	238
Microsoft Applications for Windows SharePoint Services	238
Microsoft SharePoint Products and Technologies Team Blog	239
 ■ INDEX	241