

# The Definitive Guide to Plone

ANDY MCKAY

Apress®

**The Definitive Guide to Plone**  
**Copyright © 2004 by Andy McKay**

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 (pbk): 1-59059-329-4

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: Dominic Shakeshaft

Technical Reviewer: Michel Pelletier

Editorial Board: Steve Anglin, Dan Appleman, Ewan Buckingham, Gary Cornell, Tony Davis, John Franklin, Jason Gilmore, Chris Mills, Steve Rycroft, Dominic Shakeshaft, Jim Sumser, Karen Watterson, Gavin Wray, John Zukowski

Project Manager: Beth Christmas

Copy Edit Manager: Nicole LeClerc

Copy Editor: Kim Wimpsett

Production Manager: Kari Brooks

Production Editor: Janet Vail

Compositor: Susan Glinert

Proofreader: Christy Wagner

Indexer: Valerie Robbins

Artist: Kinetic Publishing Services, LLC

Cover Designer: Kurt Krames

Manufacturing Manager: Tom Debolski

Distributed to the book trade in the United States by Springer-Verlag New York, Inc., 175 Fifth Avenue, New York, NY 10010 and outside the United States by Springer-Verlag GmbH & Co. KG, Tiergartenstr. 17, 69112 Heidelberg, Germany.

In the United States: phone 1-800-SPRINGER, e-mail [orders@springer-ny.com](mailto:orders@springer-ny.com), or visit <http://www.springer-ny.com>. Outside the United States: fax +49 6221 345229, e-mail [orders@springer.de](mailto:orders@springer.de), or visit <http://www.springer.de>.

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](mailto: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 Downloads section.

# Contents

<i>Foreword</i> .....	<i>ix</i>
<i>About the Author</i> .....	<i>xi</i>
<i>About the Technical Reviewer</i> .....	<i>xiii</i>
<i>Acknowledgments</i> .....	<i>xv</i>
 <i>Chapter 1</i> <i>Introducing Plone</i> .....	 <i>1</i>
<i>What Is a Content Management System?</i> .....	<i>2</i>
<i>Do You Want a Content Management System?</i> .....	<i>3</i>
<i>Introducing Plone's Features</i> .....	<i>4</i>
<i>Getting Involved in Plone's Development</i> .....	<i>8</i>
<i>What Is Zope and the CMF?</i> .....	<i>8</i>
<i>What Is Python?</i> .....	<i>9</i>
<i>About This Book</i> .....	<i>11</i>
 <i>Chapter 2</i> <i>Installing Plone</i> .....	 <i>13</i>
<i>Installing Plone on Windows</i> .....	<i>14</i>
<i>Installing Plone on Mac OS X, Unix, and Linux</i> .....	<i>21</i>
<i>Installing from Source</i> .....	<i>25</i>
<i>Configuring the Web Server</i> .....	<i>28</i>
 <i>Chapter 3</i> <i>Adding and Editing Content</i> .....	 <i>33</i>
<i>Joining a Site</i> .....	<i>33</i>
<i>Setting Up Your Folder and Preferences</i> .....	<i>39</i>
<i>Adding and Editing Documents</i> .....	<i>41</i>
<i>Adding and Editing Other Types of Content</i> .....	<i>55</i>
<i>Organizing Content</i> .....	<i>61</i>
<i>Discussing and Finding Content</i> .....	<i>65</i>
<i>Example: Creating the Plone Book Web Site</i> .....	<i>69</i>

<b>Chapter 4</b>	<b>Making Simple Customizations</b>	<b>71</b>
	Administering Sites	71
	Customizing Plone's Look and Feel	81
<b>Chapter 5</b>	<b>Introducing Basic Plone Templating</b>	<b>105</b>
	Understanding the Underlying Templating Machinery	105
	Using the Zope Page Templates System	112
	Understanding the Page Template Basic Syntax	119
<b>Chapter 6</b>	<b>Introducing Advanced Plone Templating and Scripting</b>	<b>133</b>
	Understanding Advanced Plone Templating	133
	Scripting Plone with Python	148
	Useful Tips	158
	Using Forms	162
<b>Chapter 7</b>	<b>Customizing the Look and Feel of Plone</b>	<b>173</b>
	Introducing Plone Skins	173
	Customizing Skins	177
	Making New Skins and Layers	198
	Case Study: Examining the NASA Skin	206
<b>Chapter 8</b>	<b>Managing Workflow</b>	<b>213</b>
	What Is Workflow?	213
	Understanding Workflow in Plone	214
	Adding and Editing Workflow	221
	Common Tasks and Examples	233
<b>Chapter 9</b>	<b>Setting Up Security and Users</b>	<b>243</b>
	Administering Users	243
	User Registration Tools	252
	Setting Permissions	259
	Scripting Users	267
	Integrating Plone with Other Services	277

<b>Chapter 10 Integrating with Other Systems .....</b>	<b>283</b>
Installing Plone Products .....	285
Using a Different Web Server .....	292
Integrating Plone with the File System .....	303
<b>Chapter 11 Manipulating and Categorizing</b>	
<b>Content Types .....</b>	<b>317</b>
An Overview of Content Types .....	318
Searching and Categorizing Content .....	331
<b>Chapter 12 Writing a Product in Python .....</b>	<b>347</b>
Writing a Custom Content Type .....	347
Writing a Custom Tool .....	378
Adding Some User Interface Elements .....	383
<b>Chapter 13 Developing with Archetypes .....</b>	<b>387</b>
Introducing Archetypes .....	388
Developing with Archetypes .....	412
<b>Chapter 14 Administering and Scaling Plone .....</b>	<b>427</b>
Administering a Plone Site .....	427
Improving Plone Performance .....	433
Using Zope Enterprise Objects .....	458
<b>Appendix A Key Configurations and Some APIs .....</b>	<b>465</b>
Setting Up Your Environment .....	465
Text Formatting Rules .....	483
Miscellaneous .....	497
<b>Appendix B Code Listings .....</b>	<b>509</b>
Chapter 5 .....	509
Chapter 6 .....	511
Chapter 7 .....	518
Chapter 8 .....	522
Chapter 9 .....	523

*Chapter 11* ..... 526

*Chapter 12* ..... 528

*Chapter 13* ..... 529

*Chapter 14* ..... 531

  

*Appendix C Glossary and Tools* ..... 535

  

*Tools* ..... 535

*Default Objects* ..... 537

*Glossary* ..... 537

  

*Index* ..... 545