

# Preface

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**H**il! You're holding the *Zope Bible*, a book we suspect will change how you look at building Web sites and Web applications. If you're like most Web developers and designers, you're probably always looking for ways to improve your process, both for building and for maintaining Web sites. Whether the sites you're building are consumer-oriented Web applications, content-centric publishing sites, intranets, or even vanity sites, you want to build them faster, maintain them easier, and integrate other people into your workflow with a minimum of hassle and fuss.

Zope is a tool that is hard to describe, as in many ways it's in a category all its own. So, rather than describe what it *is*, it's better to describe what Zope can *do* for you:

- ◆ Zope contains a templating language for creating dynamic pages, making it easier to create and maintain a common look and feel for your site.
- ◆ Zope uses a powerful scripting language (Python) for creating business logic, making it easy to create powerful Web applications.
- ◆ Zope has a built-in Web management interface so you can create and maintain entire sites with nothing more than a standard browser and an Internet connection.
- ◆ Zope has a built-in object database, making it easy to store content, logic, and presentation in a single place.
- ◆ Zope has a built-in security framework, making it easy and safe to delegate maintenance of sections or subsections of the site to other people.
- ◆ Zope sites are also accessible via FTP and WebDAV, making it easier to leverage the desktop site creation tools you already use.
- ◆ Zope is written in Python, making it easy to extend and enhance with your own customizations.
- ◆ Zope has built-in content management tools such as Version objects and Undo, which make it easier to safely modify and update a site while it's "live."

In other words, if you build Web sites, Zope is the tool for you.

## Why We Wrote This Book

In the two years since Zope was open-sourced, the user and developer communities have grown tremendously. However, while Zope itself has grown and become both more powerful and easier to use, the documentation has not kept pace.

The most glaring omission, the lack of a user manual, was remedied last year with the release of *The Zope Book* by Amos Latteier and Michel Pelletier (New Riders, 2001). This was a very important milestone, as *The Zope Book* was a complete reference for using Zope to build Web sites and simple applications. However, by focusing on thoroughly covering the basics, it left those who wanted to take advantage of Zope's more advanced features out in the cold.

At Codeit Computing, we've long wanted a book that could serve as a textbook for educating our own employees, not only teaching them the basics, but more advanced topics as well, such as extending Zope with Python products and building advanced user interfaces. We've also wanted a book that we could hand to our clients and their IT staff to make it easier for them to assume the maintenance of the projects that we complete.

When we were approached to write this book, we determined that this would be our opportunity to write the book that we wished we had all along.

## What You Need

To follow along with the steps in this book you need to know how to use your browser. Don't laugh! Zope is very browser-centric. Knowing what the "Back" button does, or that right-clicking a link lets you launch the link target in another window is kind of important when you're actually using your browser to develop a Web site.

This book assumes that you already know how to build Web sites "the old fashioned way." A basic familiarity and ability to write HTML, including tables and forms and using a text editor, will be very handy. In fact, we assume that you're sick and tired of maintaining your sites by hand.

A familiarity with some other application server or middleware technology is helpful, but not really required. Examples of these are Macromedia ColdFusion, Microsoft Active Server Pages, Java Servlets, Java Server Pages, or PHP.

Regardless of your operating system, you'll need to have the appropriate privileges to install software on your computer. Zope is very lightweight, and can be installed on most desktops with a minimum of fuss, but many corporate environments don't give users the ability to install software.

## DTML, Python, and ZPT Code Conventions

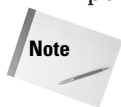
This book contains many small snippets of code, as well as complete code listings. Each listing appears in a `monospace` font.

If a line of code doesn't fit on a single line in this book, We use the arrow (↪) symbol. For example, the following two lines comprise a single line of code:

```
<dtml-in "listEntriesByGroup(_['SelectedGroup'])" size=20 ↪  
start=start sort_expr="sort_by">
```

## What the Icons Mean

Throughout the book, we've used *icons* in the left margin to call your attention to points that are particularly important.



**Note**

We use Note icons to tell you that something is important—perhaps a concept that may help you master the task at hand or something fundamental for understanding subsequent material.



**Tip**

Tip icons indicate a more efficient way of doing something, or a technique that may not be obvious.



**On the  
CD-ROM**

These icons indicate that an example file is on the companion CD-ROM.



**Caution**

We use Caution icons when the operation that we are describing can cause problems if you're not careful.



**New  
Feature**

We use this icon to indicate that the material discussed is new to the latest Zope version.



**Cross-  
Reference**

We use the Cross-Reference icon to refer you to other chapters that have more to say on a subject.

## How This Book Is Organized

This book is organized into four parts that are meant to be read in order if you're a complete newcomer to Zope.

### Part I: Getting Started with Zope

In this section Zope is introduced, as are the fundamentals of coding in DTML and Python. If you are already an experienced Zope user, and want to jump to Part II and start developing Python Zope Products, we suggest reading Chapter 5, "Object-Oriented Programming and Python," in this section first, even if you're already familiar with Python.

### Part II: Building Zope Products

In this section, we build upon the material from Part I, and show you how to extend Zope with new object types. At the end of this section, you will have built a powerful and useful Web application.

### Part III: Zope Management

Zope provides powerful tools for building and maintaining Web sites. In this section, several aspects of Zope are explored in-depth. Chapter 11 covers content management strategies using Zope, Chapter 12 explains data management including integrating external RDBMSs, and Chapter 13 deals with security and user management.

### Part IV: Advanced Zope Concepts

In this section, we've put the advanced topics that are relatively independent of each other and the rest of the book. Chapter 14 describes in detail the various parts and pieces that Zope is built out of and how they fit together; Chapter 15 covers writing scripts for Zope using Python and/or Perl Script Objects; Chapter 16 covers ZClasses for those who wish to develop products entirely within the browser; Chapter 17 explains Zope's Searching and indexing framework, and how to create automatically indexed content objects; Chapter 18 introduces Zope Page Templates, a new presentation scripting technology introduced in Zope 2.5; Chapter 19 covers Debugging; and Chapter 20 addresses creating and running clusters of Zope servers.

### Appendixes

Appendix A describes the material included on the CD-ROM, and Appendix B covers installing Zope from source code or RPM files.