

Introduction

Welcome to *Cocoon: Building XML Applications*. We decided to write this book to provide additional documentation on the Cocoon open-source project. However, we also wanted to embed the Cocoon-specific information in a more-general XML application context. Therefore, we have included information that we hope is helpful for anyone starting out with XML.

Who Should Read This Book

This book was written for a wide audience. If you are currently wondering whether your application architecture should move to XML, this book provides some answers. Readers who have already decided on an XML-based architecture will find information on open-source software that will help them build that architecture. The main audience is obviously readers who are interested in the open-source XML publishing platform Cocoon.

As for the skill set you need in order to read this book, it is written for both the guru-developer and the site administrator. If you are more of a manager, you will also find interesting information that will help you decide which technology to employ when building XML applications.

Who This Book Is Not For

If you are totally into Microsoft solutions, perhaps this is not exactly the right book for you. Although you will still find helpful information on XML in general, most of this book centers around open-source software.

Overview

This book begins with an introduction to Internet applications in general and describes how those applications have been built over the years. It also details the drawbacks of HTML as a base for modern application architectures and lists the many challenges that must be met by new Internet-based solutions.

We continue by introducing XML and XML-related technologies as a way to build modern application architectures. The advantages of using XML are listed, and we introduce available software components. Using a flexible XML-based framework, such as Cocoon, allows applications to be built quickly and cost-effectively.

We then explain how to install Cocoon and provide a guide for setting up a Cocoon-based system. All the needed software is contained on the companion CD.

After you have set up Cocoon, it is time to put some of the basic concepts and components to work. The first “hands-on” chapter contains different examples that show

you how Cocoon can be used to build various types of XML applications. All the detailed solutions can be built using the components available in the Cocoon distribution and without any Java know-how.

Throughout this book, you will build more-advanced solutions in separate chapters. After each section of the book, you will use what you have learned to build different versions of a news portal. Each version expands on the previous one and introduces new concepts.

After you build the first version of the news portal, we go into more detail on the Cocoon architecture, but we still do this from a user perspective. The new concepts are then used to enhance the portal you developed.

The next two chapters cover Cocoon from a developer perspective. They require a working knowledge of Java in order for you to understand Cocoon's inner workings and how to design new components that can be used to extend the platform.

The chapter that covers the advanced version of the news portal looks at how Cocoon provides different ways of reaching the same goal and provides some tips on when to use which technology. This theme is expanded in the following chapter, where we take a step back from the technical side and provide some insight into designing applications based on Cocoon.

The final chapter contains an outlook on Cocoon's future and describes some of the developments that did not make their way into the release of Cocoon we used when writing this book.

The appendixes round out the book and provide additional information such as API and component documentation, links to more information on the web, and a description of the companion CD.

Conventions Used in This Book

This book follows a few typographical conventions:

- A new term appears in *italic* when it is introduced.
- Program text, functions, variables, and other “computer language” are set in a fixed, monospace font.
- At the beginning of a line of code indicates it is part of the line above it.