JAVA技术丛书

The Java Developers Almanac
1.4, Volume 2

PEARSON Addison Wesley

JAVA开发人员年鉴

影印版（第1.4版，第2卷）

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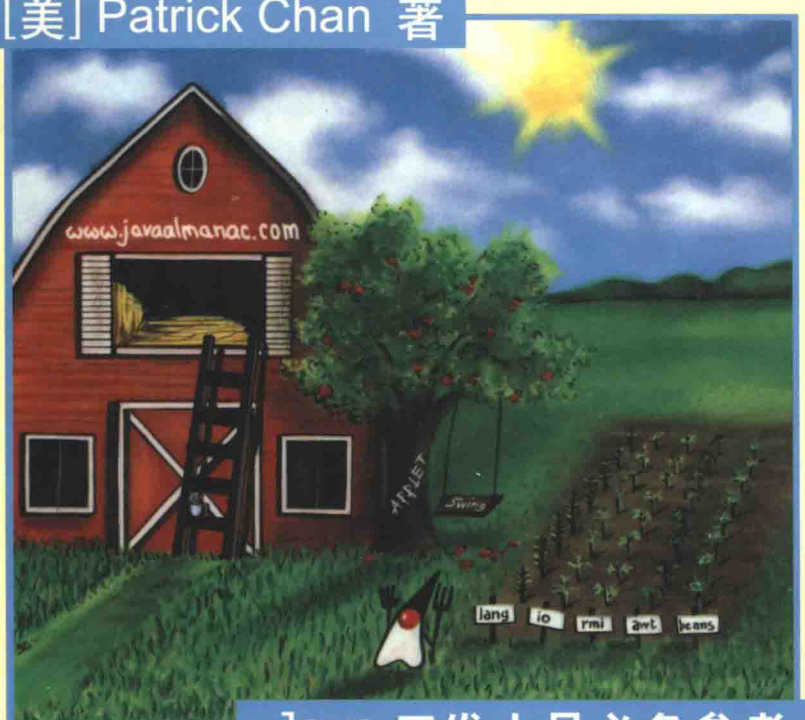

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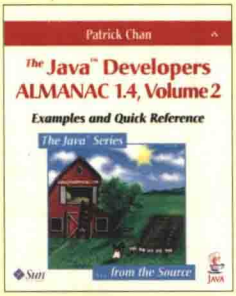

内容介绍

《Java开发人员年鉴》就像是Java类库的一幅全图。它覆盖了几乎所有的库，可以从本书中方便地查找方法名、参数及其他细节，还可以快速地了解类和类之间的关系。本年鉴是所有Java程序开发人员必备的参考书。

作者简介

Patrick Chan是Bluelight.com的CTO，是Sun Microsystems公司最初的Java平台项目的首席开发者。他在1998的JavaOne大会上获得Duke奖，另外还参与写作了《Java类库》系列书籍，并是Java Series丛书的供稿人之一。

读者评价

本书不管是在内容上还是在组织上，都具有一流的水准。它先从Package的级别介绍Java库，再逐渐地深入各个独立的类级别。我觉得拥有这样的一套参考书是绝对有必要的，我手上的老版本《Java开发人员年鉴》已经使用多年，由于经常使用，里面的一些书页都已经脱落。

我的职业是为有经验的开发者讲授Java课程，经常都要在课堂上回答一些涉及原型和其他方法的问题，可想而知这样的一本书对我有多重要。书中的例子也提高了它的内在价值，所以你拿到的并不仅仅是一个全面的方法列表。尽管我可以轻松地指出一个方法如何在原型中使用，但如果能拿一、两个实际的例子来说话，我的学生就可以更快地理解。

强烈建议你将本套《Java开发人员年鉴》选为自己的Java语言参考书，而且它肯定会出现在我今年的Top 10书籍列表中。

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JAVA开发人员手册

Patrick Qu

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Java 技术丛书

Java 开发人员年鉴

影印版（第 1.4 版，第 2 卷）

[美] Patrick Chan 著

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内 容 简 介

本年鉴是 Java 类库的一幅全图。它覆盖了几乎所有的库，可以从本书中方便地查找方法名、参数及其他细节，还可以快速地了解类和类之间的关系。

本年鉴是所有 Java 程序开发人员必备的参考书。

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Patrick Chan
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Volume 2

Examples and Quick Reference

Patrick Chan

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To Kevin and Melissa
For the things that really matter.

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Preface

Welcome to the fourth edition of *The Java™ Developers Almanac*.

There was a time when I intimately knew *all* of the Java class libraries. I knew how it all worked and exactly how everything fit together. I knew what subclassed what, what overrode what, and so on (of course, it helped that I was one of the original developers :-). But aside from the occasional inability to remember which argument of `Vector.insertElementAt()` is the index, I rarely had to refer to any reference documentation.

Version 1.1 added 250 classes and my mastery of the Java class libraries was reduced to half. This left me feeling a little disoriented since I no longer knew my way around, and the increased size of the libraries exceeded my ability to recall the details of the signatures.

Since I make my living writing Java code, it was important that I find an efficient way of "navigating" the new libraries. What I wanted was a quick overview of all of the libraries; something that covered every class and briefly showed their relationships; something that would allow me to explore and quickly learn about new packages. This need led to this book.

The Java™ Developers Almanac is like a map of the Java class libraries. It's a compact and portable tool that covers almost all[1] of the libraries, if only from a bird's-eye view. It's great for reminding you of things like method names and parameters. With today's class count at 3000, you're bound to forget a few details now and again. The almanac is great for discovering the relationships between the classes, such as determining all methods that return an image. It's also great for quickly exploring a new package.

While this book is comprehensive, the libraries are so vast that there simply isn't enough room to provide equally comprehensive documentation. So if you're working with a package that is new to you, you'll probably also need a tutorial book such as *The Java Tutorial, Third Edition* (Campione and Walrath, Addison-Wesley, 1998), a detailed reference such as *The Java Class Libraries, Volumes 1 and 2* (Chan, Lee, and Kramer, Addison-Wesley, 1998), and/or the on-line documentation at *http://java.sun.com/docs*.

1. Due to size constraints, the `javax.swing.plaf.*` packages are left out of Volume 2.

The book is divided into four parts, briefly described next.

Part 1: Packages
This part covers each package in alphabetical order: a brief description of the package, a description of each class and interface in the package, and a hierarchy diagram showing the relationship between the classes and interfaces in the package. This part is useful when you need an overview of a package or want to see what other related classes are available in a package.

Most packages provide a number of examples demonstrating common usage of classes in the package. The examples are designed to demonstrate a particular task using the smallest amount of code possible. Their main purpose is to show you which classes are involved in the described task and generally how they interact with each other. The code for the examples are available on *http://javaalmanac.com*.

Part 2: Classes
This part contains 500 pages of class tables, one for each class in all the covered packages. Each class table includes a class tree that shows the ancestry of the class and a list of every member in the class. Also included in the member lists are inherited members from superclasses. Thus you have a complete view of all members made available by a class. This part is useful when you're already working with a particular class and want a quick reference to all of the members in the class. New for this edition are example numbers on some of the members. This number refers to an example that demonstrates the use of the member (or a related member).

Part 3: Topics
This part is a set of quick-reference tables on miscellaneous topics. For example, the topic title "Java 1.4" contains a detailed analysis of the API differences between Java 1.3 and Java 1.4.

Part 4: Cross-Reference
This part is a cross-reference of all of the Java classes and interfaces covered in this book. This part is useful when you have questions such as What methods return an `Image` object? or What are all the descendents of `java.io.InputStream`?

Updates

As the title suggests, this book is intended to be updated whenever a new major version of the Java class libraries is released. However, before a new version is published, I will be placing any new material that I manage to write on the *http://javaalmanac.com* website. Since this book is designed for you to use in your everyday programming-related work, I would love to hear how I could improve it for the next version or simply what you thought about it. Although I'm afraid I probably won't be able to reply, I promise to read and consider each suggestion I receive. You can reach me at the following e-mail address:

almanac14@xeo.com

Acknowledgments

First and foremost, I thank Mike Hendrickson, who spent a great deal of time collaborating with me on this project. He helped me hone the ideas in this book and then supported me all of the way. It's been tremendous fun working with him.

Arthur Ogawa (*ogawa@teleport.com*), TeX master extraordinaire, provided me with TeX macros without which this book would have been impossible. Thanks for working with me in the wee hours of the morning trying to get everything just right.

I want to thank Lisa Friendly, the series editor, for all sorts of help getting this book off the ground and for getting me all of the support I needed.

Thanks to Lananh Dang who complained about my java.sql examples and ended up writing the java.sql examples for this edition.

Special thanks to Rosanna, my wife, who helped me with writing examples and many other parts of the book.

Many people gave me feedback or provided some other assistance in the making of this book. Thanks to Jens Alfke, Ken Arnold, Joshua Bloch, Paul Bommarito, David Brownell, Michael Bundschuh, Bartley Calder, Casey Cameron, Norman Chin, Mark Drumm, Robert Field, Janice Heiss, Jeff Jackson, Doug Kramer, Sheng Liang, Tim Lindholm, Hans Muller, John Pampuch, Rob Posadas, Mark Reinhold, Dan Rudman, Georges Saab, Bill Shannon, Ann Sunhachawee, Joanne Stewart-Taylor, Laurence Vanhelsuwe, Bruce Wallace, Kathy Walrath, and Tony Welch.

Finally, I want to thank the wonderful people at Addison-Wesley who made this project a lot of fun: Jacquelyn Doucette, Tracy Russ, and Sarah Weaver.

Patrick Chan
July 2002

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