Oracle 技术系列丛书

ORACLE®

HZ BOOKS

Oracle Certified Professional

AUTHORIZED ORACLE PRESS™—EXCLUSIVELY FROM OSBORNE

OCP Building Internet Applications I & II 考试指南（英文版）

(Exams 1Z0-131 & 1Z0-132)

OCP Building Internet Applications I & II Exam Guide

(美) Christopher Allen 著

附赠 CD-ROM

机械工业出版社 China Machine Press

McGraw Hill Education

Oracle技术系列丛书

OCP Building Internet Applications I & II 考试指南

（英文版）

OCP Building Internet Applications I & II Exam Guide

（美） Christopher Allen 著

机械工业出版社
China Machine Press

Christopher Allen: OCP Building Internet Applications I & II Exam Guide (ISBN: 0-07-219333-6).

Copyright © 2002 by the McGraw-Hill Companies, Inc.

Original language published by The McGraw-Hill Companies, Inc. All rights reserved. No part of this publication may be reproduced or distributed in any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

Authorized English language reprint edition jointly published by McGraw-Hill Education (Asia) Co. and China Machine Press. This edition is authorized for sale in the People's Republic of China only, excluding Hong Kong, Macao SAR and Taiwan. Unauthorized export of this edition is a violation of the Copyright Act. Violation of this Law is subject to Civil and Criminal Penalties.

本书英文影印版由机械工业出版社和美国麦格劳-希尔教育出版(亚洲)公司合作出版。此版本仅限在中华人民共和国境内（不包括香港、澳门特别行政区及台湾）销售。未经许可之出口，视为违反著作权法，将受法律之制裁。

未经出版者预先书面许可，不得以任何方式复制或抄袭本书的任何部分。

本书封面贴有McGraw-Hill公司防伪标签，无标签者不得销售。

版权所有，侵权必究。

本书版权登记号：图字：01-2002-4820

图书在版编目（CIP）数据

OCP Building Internet Applications I & II考试指南（英文版）/（美）艾伦（Allen, C.）著. -北京：机械工业出版社，2002.11

(Oracle技术系列丛书)

书名原文：OCP Building Internet Applications I & II Exam Guide

ISBN 7-111-11117-6

I. O … II. 艾… III. 关系数据库-数据库管理系统，Oracle-工程技术人员-资格考核-自学参考资料-英文 IV. TP311.138

中国版本图书馆CIP数据核字（2002）第083006号

机械工业出版社（北京市西城区百万庄大街22号 邮政编码 100037）

责任编辑：华 章

北京牛山世兴印刷厂印刷·新华书店北京发行所发行

2002年11月第1版第1次印刷

787mm × 1092mm 1/16 · 27.5印张

印数：0 001-3 000 册

定价：85.00元（附光盘）

凡购本书，如有倒页、脱页、缺页，由本社发行部调换

About the Author

Christopher Allen has been a database professional for over 20 years and has provided computer consulting services for clients such as IBM, Dell, Microsoft, Universal Studios, the California Institute of Technology, and the Department of Justice. He has programmed hundreds of customer applications and has taught more than a thousand computer classes for professionals.

Allen is an Oracle Certified Professional DBA and OCP Internet Developer. He is the author of *PL/SQL 101*, co-author of the *OCP Financial Applications Consultant Exam Guide*, and co-author of the *OCP Application Developer Exam Guide*.

OracleCertified Professional

About the Oracle Certification Exams

Oracle Corporation is very committed to helping professionals learn how to use the inherently complicated products they sell. Oracle's Education division produces a wide variety of quality courses, along with a growing battery of exams designed to recognize those who have both "book learning" about Oracle products and plenty of hands-on experience with those products. Although these exams do not guarantee that someone who is certified is an expert, they do guarantee that the person is not an amateur.

The response to the Oracle Certified Professional (OCP) programs has been impressive. In a study performed by International Data Corporation, most of the companies said the increased effectiveness of OCP-certified professionals resulted in savings that paid for the certification in less than nine months! Not surprisingly, when OCP professionals were surveyed, 97 percent said they benefited from becoming certified. These benefits include increased knowledge, of course, but professionals have also gained other, less tangible benefits such as getting in the door for a more fulfilling job, being given more complicated (and more visible) projects at their current job, and gaining concrete leverage for increased pay. OCP-certified professionals also receive the right to use the OCP logo.

Requirements for Certification

This may sound strange, but each exam in the Oracle Applications Developer Release 6/6*i* certification track has a different passing score. That's because Oracle Education changes the exams frequently, but they want the level of skill necessary to pass them to remain constant. So when they change an exam, they carefully gauge the difficulty of the new questions compared to the old ones, and if the questions are more difficult, they let you answer fewer of them correctly and still pass. If the questions are easier, you must give a correct answer on more of them in order to pass. They've been doing this for several years, so the number of questions on each exam, as well as the number you have to answer correctly, is a little different for each exam. The following table shows the current requirements in the Oracle Applications Developer Release 6/6*i* certification track. By the time you take your exams, the figures could be slightly different than those in the table, but the overall point is the same: you must answer 60 to 70 percent of the questions correctly in order to pass an exam. Because of this, it makes sense to wait to schedule each exam until you are consistently scoring at least 85 percent on the related practice exams in this book. If you have the time, it will also help if you invest a few months into application development before taking your exams.

此为试读，需要完整PDF请访问：www.ertongbook.com

Exam Number	Exam Title	Number of Questions	Minimum Correct Answers to Pass	Passing Percentage
1Z0-001	Introduction to Oracle: SQL and PL/SQL	57	39	68%
1Z0-101	Develop PL/SQL Program Units	57	39	68%
1Z0-131	Build Internet Applications I	60	38	63%
1Z0-132	Build Internet Applications II	60	36	60%

If you take an exam and do not pass, you have to wait 30 days before you can take it again. You may repeat an exam three times in a 12-month period.

Recertification

As Oracle products are upgraded, the exams must also be upgraded. When Oracle Education releases a modified exam track for a new software version, they notify people who have been certified in the earlier version of the software. The prior certification remains valid for six more months. During that time you can become certified in the new version of the product by taking a New Features exam that covers the features added in the new release of the software.

Exam Format

The OCP exams are administered by Sylvan Prometric, an independent professional testing company with over 800 locations worldwide. Because the exams are computer based, they can be scheduled at your convenience—you don't have to go at a specific predetermined time. You only need call Sylvan, identify what exam you want to take, select the location you want, and identify when you want to go. Generally, you will take the exam in a room with a few computers in it; you will be assigned a computer and you will take your exam individually. Another person may or may not be in the room at the same time, and if a person is in the room, the chances are good he or she is taking some other exam. The exams consist of 60 to 90 questions; you have 90 minutes to answer them. The questions are either multiple choice, or scenario based, in which you are presented with a problem, shown an image of an Oracle product, and asked to click on the areas of the product that you would use to solve the problem. While taking the exam, you can mark questions to come back to later for further review. Once you have finished, your exam will be graded on the spot.

Preface

he Oracle Internet Application Developer certification track consists of four exams:

- Introduction to Oracle: SQL and PL/SQL
- Develop PL/SQL Program Units
- Build Internet Applications I
- Build Internet Applications II

The first two exams are the basis of numerous Oracle certifications, and they can be prepared for using a variety of SQL and PL/SQL books. (In fact, you can prepare for the first exam using the Oracle Press book *PL/SQL 101*, which I wrote. I don t mean to be self-serving in mentioning it—I really believe it s the best preparation available for the first exam.)

This book covers the last two exams, and it contains two units—one for each exam. Within each unit, you will find a number of chapters that teach the information you need to know to achieve a successful score on the related exam.

How Chapters Are Organized

The chapters in this book observe the following format:

Discussion Sections

Each subject covered in an exam will be addressed with a discussion section in this book. Each discussion section will be immediately followed by a brief set of questions that review the material just presented. The answers to these questions are not printed elsewhere in the book; the idea is that if you read the questions and don t know the answers, you have not absorbed the information just presented, and you should go back and reread it before you continue forward.

Chapter Summaries

Each chapter closes with a summary of the chapter s main points. In addition to helping drive home the important points after you have read the discussion sections, this compressed review is a powerful, efficient review tool to use before you take the exam. After you have gone through a unit in the book and have scheduled to take the related exam, I recommend that you reread the relevant summaries once a day for several days preceding the exam. This will keep the material fresh in your mind with very little time investment.

Two-Minute Drills

Following the chapter summary, the same information is presented in an even briefer format: as a series of bullet points called Two-Minute Drills. These are great to read over just before you go in to take your exam.

Chapter Questions and Answers

The final part of each chapter is a series of multiple-choice questions that emulate the questions you will encounter in the actual exam. After the questions, you will find the answers, along with an explanation of why the correct answer is correct and why the others choices are not. Answer these questions after reading the chapter. If you get 85 percent or more correct, proceed to the next chapter. If you don t, go back and read the chapter sections related to the questions you missed, and then wait a couple of days and answer the sample questions again.

Conventions Used in This Book

Bold text indicates text that you will type as shown. *Italics* are used to identify new terms the first time they are presented, as well as to emphasize key facts. Items that deserve special notice are set apart as Notes or Tips. They look like this:

NOTE
Remember to do all the right things and to not do the things that aren t.

TIP
Never tie your shoelaces together before a hike.

How to Get the Most Out of This Book

You must do three things to get the most out of this book:

1. **Do.**
2. **The.**
3. **Exercises.**

The exercises take the "book learning," which is quickly forgotten, and put it into your hands, where it can be retained for a long, long time. Through the course of this book, you will go through the steps to create a variety of new forms for working with data. If you want to really maximize your learning and retention, do the exercises, and then do them *again* with an application of your own. Your application can be real or fanciful—it doesn t matter. The magical retention phenomenon called "transferring the knowledge" will happen either way.

The only exception to doing the exercises is if you are a seasoned Oracle Forms professional who has created numerous forms already. If this is the case, you can test out of a chapter by going directly to the questions at the end of the chapter, answering them, and checking your score. If you get 85 percent or more of the answers right, and you are pressed for time, it s worthwhile to consider skipping that chapter and proceeding to the next one, which you might test out of as well.

Acknowledgments

Once again I find myself privileged to be part of the distinguished Oracle Press collection. A tip of the hat to Brandon Nordin and Scott Rogers for guiding the Oracle Press line to make it the quality series that it is. I'm honored to be in such a company.

I would like to thank Jessica Wilson, Athena Honore, and Molly Applegate for stewarding this book through the production process so smoothly. In addition, Christian Bauwens did an exceptional job of technical editing, adding substantial polish to the finished product. And through it all, Jeremy Judson kept the rudder firmly pointed in the right direction.

Lastly, I thank my wife Grace, for more reasons that I can fit on this page.

Introduction

he market for professionals who understand how to install, modify, and manage Oracle Forms is exploding. The product is as easy to use as any point-and-click form generator, but much more robust than products designed strictly to run with PC-based databases. Companies are clamoring for Oracle Forms consultants. As of this writing, the job-oriented Internet newsgroups contained 8,400 messages from people looking to hire Oracle Forms experts. The market for this skill set is strong.

But how does a company's hiring manager know who is hot and who is just hot air? Well, word of mouth is always helpful, but only if you trust the mouth you're listening to. Getting in the door can be a challenge. It helps to have something that makes you stand out. Putting the Oracle Certified Professional logo in your resume can certainly help. And once you are on the job, you have an advantage too. On-the-job training is great, but it tends to be spotty—you learn the things that the particular job calls for, filtered by whatever the people around you happen to already know. In contrast, studying for the OCP exams takes you into every area of Oracle Forms. It is extremely likely that you will learn things you can apply in your work—things you didn't even know were available. That helps make you an expert, and experts are noticed and rewarded in the workplace.

此为试读,需要完整PDF请访问: www.ertongbook.com

How Should You Prepare for the OCP Exams?

With dedication. You will get the most out of this process if you can set aside a certain amount of time each day (or, perhaps, each *work* day—let s be realistic) for study and practice. This enables you to build on recently acquired knowledge while it is still fresh. At the end of each chapter, take the sample exam. If you answer 85 percent or more of the questions correctly, proceed to the next chapter. If not, go back and reread the chapter, taking special care to answer the small collection of exercises that follow each subject point. If you follow this approach, you should do quite well on the sample exam at the end of the chapter. Continue this process, as regularly as possible, until you have completed one of the book s two units.

After you have successfully completed a unit, schedule your OCP exam with Sylvan Prometric. Then read through the Chapter Summaries and the Two-Minute Drills until the day you take the exam. On that day, wear comfortable clothing (nobody cares how you look there) and plan to arrive early, so that unforeseen delays don t ruffle your feathers. When it is time to take the exam, you will be seated in front of a PC at the testing center you ve selected. The Prometric personnel will not let you take any books or notepaper in with you—they even ask that you turn off your pager so an accomplice can t page you with answers! (Remember, they re just doing their job.) They do provide some notepaper of their own, which you have to turn in after the exam (to be thrown away, not graded).

The computer-based exam starts by asking you to identify yourself. Then it offers to give you an introduction to how the testing software works. It s a good idea to go through this introduction, and it will not count against your time. When you do decide to start the actual test, you will be presented with the first question and the timer will start. Each screen contains a question, several potential answers (or a screen shot on which you will click), buttons to go to the next or prior question, and an option to mark that question for later review. If you read a question and are reasonably sure of the correct answer, select the answer and move on to the next question. If you are not sure, ponder the question for a bit of time—you have an average of a minute and a half per question—and if you don t know the answer after several moments, mark the question to be reviewed later and move on. After you have answered all the questions you know, you can return to the questions that stumped you earlier, and spend more time thinking about the answer to each. If you really don t know the answer to a question, then eliminate whatever answers you are sure are *incorrect* and guess from those that remain. A question left blank is considered incorrect, so you have nothing to lose by guessing an answer to a question you don t know.

After you are done with the exam, you will be shown an on-screen analysis of how you did. This is where you hoot and holler, congratulate yourself, and tell the Prometric administrator that he or she is your best friend. Or maybe it s where you

introspectively ponder how you can study more effectively, and think about scheduling a repeat performance in 30 days. The on-screen analysis includes both an overall score and a subject-by-subject summary—the latter is handy if you have to take the exam again because it lets you know what areas need further review. This screen is also printed for you to take home with you.

Remember, you have taken two important steps already. First, you have decided what you want: OCP certification. Knowing what you want enables you to focus your attention and schedule your time accordingly. Second, you have acquired a trusty study guide to help you prepare. These steps reflect a level of commitment that will serve you well as you study. Keep that level of commitment high, do the work, and you will get the rewards.

Go for it!

Contents at a Glance

PART I

Preparing for OCP Exam 3: Build Internet Applications I

1 Introduction to Oracle Forms 6*i* 3

2 Form Builder 25

3 Forms Design I 75

4 Forms Design II 127

5 Working with Triggers 175

6 Forms Processing 213

7 Forms Programming 249

PART II

Preparing for OCP Exam 4: Build Internet Applications II

8 Working with Menu Modules 285

9 Advanced Forms Programming I 311

10 Advanced Forms Programming 343

11 Advanced Forms Programming III 373

Contents

PREFACE xxi
ACKNOWLEDGMENTS xxv
INTRODUCTION xxvii

PART I
Preparing for OCP Exam 3: Build Internet Applications I

1 Introduction to Oracle Forms 6*i* **3**
Overview of the Oracle Forms 6*i* Package 4
Features and Benefits of Using Oracle Forms 6*i* 4
Component Groups in Oracle Forms 6*i* 6
Introduction to Oracle Forms 6*i* Builder Tools 7
Builder Tools for Project Management 8
Builder Tools for Front-End Development 8
Builder Tools for Back-End Development 9
Chapter Summary 13
Two-Minute Drill 15
Chapter Questions 16
Answers to Chapter Questions 21

2 Form Builder **25**
Working in the Form Builder Environment 26
Identifying the Main Form Builder Executables 27

Identifying the Main Components of Form Builder 28
Identifying the Main Objects in a Form Module 29
Creating Basic Form Modules 31
Creating a Form Module 32
Using the Data Block Wizard to Create and Modify Data Blocks . . . 33
Creating and Modifying Layouts Using the Layout Wizard 38
Saving, Compiling, and Running a Form Module 44
Form Builder File Formats and Their Characteristics 46
Creating Data Blocks with Relationships 48
Running a Master/Detail Form Module 51
Running a Form Builder Application 51
Understanding the Runtime Environment 52
Navigating a Form Builder Application 54
Understanding the Two Modes of Forms Runtime Operation 57
Retrieving Data into a Form Builder Application 58
Inserting, Updating, and Deleting Records 61
Displaying Database Errors Using the Help Facility 62
Chapter Summary 64
Two-Minute Drill 65
Chapter Questions 67
Answers to Chapter Questions 72

3 Forms Design I 75
Working with Data Blocks and Frames 76
Property Palette Components 77
Manipulating Properties 80
Controlling the Behavior of Data Blocks 81
Controlling Frame Properties 83
Creating Blocks That Do Not Correspond to a Database Object 84
Deleting Data Blocks and Their Components 85
Working with Text Items 87
Introduction to Text Items 88
Modifying a Text Item s Appearance 88
Controlling the Data in a Text Item 89
Modifying the Navigational Behavior of a Text Item 91
Enhancing the Relationship Between the Text Item and a Database . 92
Modifying the Functionality of a Text Item 92
Including Help Messages in Your Applications 93
Creating LOVs and Editors 95
Introduction to LOVs and Editors 96
Creating LOVs 100
Creating Editors 104

Chapter Summary 106
Two-Minute Drill 109
Chapter Questions 112
Answers to Chapter Questions 121

4 Forms Design II **127**
Creating Additional Input Items 128
Introduction to Item Types that Allow Input 128
Creating a Check Box 130
Creating a List Item 132
Creating a Radio Group 133
Creating Noninput Items 137
Introduction to Item Types that Do Not Allow Input 138
Creating a Display Item 139
Creating an Image Item 139
Creating a Sound Item 144
Creating a Button 147
Creating a Calculated Field 149
Creating Windows and Content Canvases 150
Introduction to Windows and Content Canvases 150
Window and Content Canvases Properties 151
Displaying a Form Module in Multiple Windows 154
Working with Other Canvases 154
Introduction to Canvas Types 155
Creating an Overlay Effect Using Stacked Canvases 156
Creating a Toolbar 158
Creating a Tabbed Interface 159
Chapter Summary 163
Two-Minute Drill 165
Chapter Questions 168
Answers to Chapter Questions 173

5 Working with Triggers **175**
Introduction to Form Triggers 176
Definition of a Trigger 176
Form Trigger Categories 177
Form Trigger Types and Scope 178
Form Trigger Properties 178
How to Produce Triggers 178
Writing Trigger Code 180
Understanding the Use of Built-In Subprograms 181
Introduction to the When-Window-Closed Trigger 184

此为试读，需要完整PDF请访问：www.ertongbook.com