

Oracle Database Object Relational Developer Guide 11g Release 2

Object-oriented databases were originally developed as an alternative to relational database technology for the representation, storage, and access of non-traditional data forms that were increasingly found in advanced applications of database technology. After much debate regarding object-oriented versus relational database technology, object-oriented extensions were eventually incorporated into relational technology to create object-relational databases. Both object-oriented databases and object-relational databases, collectively known as object databases, provide inherent support for object features, such as object identity, classes, inheritance hierarchies, and associations between classes using object-by-ids. This monograph presents the fundamentals of object databases, with a specific focus on conceptual modeling of object database designs. After an introduction to the fundamental concepts of object-oriented data, the monograph provides a review of object-oriented conceptual modeling techniques using side-by-side Enhanced Entity Relationship diagrams and Unified Modeling Language conceptual class diagrams that feature class hierarchies with specialization constraints and object associations. These object-oriented conceptual models provide the basis for introducing case studies that illustrate the use of object features within the design of object-oriented and object-relational databases. For the object-oriented database perspective, the Object Data Management Group data definition language provides a portable, language-independent specification of an object schema, together with an SQL-like object query language. LINO (Language INtegrated Query) is presented as a case study of an object query language together with its use in the db4o open-source object-oriented database. For the object-relational perspective, the object-relational features of the SQL standard are presented together with an accompanying case study of the object-relational features of Oracle. For completeness of coverage, an appendix provides a mapping of object-oriented conceptual designs to the relational model and its associated constraints. Table of Contents: List of Figures / List of Tables / Introduction to Object-Oriented Databases / Object-Relational Databases

Role-based Access Control (RBAC) provides access control based on permissions associated with roles and simplifies the management of permissions. Among commercial software applications, database management systems (DBMSs) provide access control at several levels of granularity and many have already applied RBAC. Object-Relational Databases (ORDB) integrate an object model with the relational model and its basic goal is to bridge the gap between relational databases and the object-oriented modeling techniques used in programming languages such as Java. In this project, a general pattern called ORDB-RBAC is designed to utilize Role-based Access Control (RBAC) in Object-Relational databases in order to develop secured software applications. This pattern is reusable for most applications, which requires access control. Access controls is designed at database level instead of application level, which greatly reduces programming efforts for application developers. In this pattern, I provide how resources like users, protected objects, which are in the applications, map to RBAC standard model. Then I used a case study of software management to illustrate our approach. I implemented the case study by using Oracle database 11g express edition as the Object-relational Database Management Systems.

From the #1 source for computing information, trusted by more than six million readers worldwide, Oracle is the most popular database management system in use today, and PL/SQL plays a pivotal role in current and projected Oracle products and applications. PL/SQL is a programming language providing procedural extensions to the SQL relational database language and to an ever-growing number of oracle development tools, originally a rather limited tool. PL/SQL became with Oracle7 a mature and effective language for developers, now, with the introduction of Oracle8, PL/SQL has taken the next step towards becoming a fully realized programming language providing sophisticated object-oriented capabilities. Steven Feuerstein's Oracle PL/SQL Programming is a comprehensive guide to building applications with PL/SQL. That book has become the bible for PL/SQL developers who have raved about its completeness, readability, and practicality. Built-in packages are collections of PL/SQL objects built by Oracle Corporation and stored directly in the Oracle database. The functionality of these packages is available from any programming environment that can call PL/SQL stored procedures, including Visual Basic, Oracle Developer/2000, Oracle Application Server (for web-based development), and, of course, the Oracle database itself. Built-in packages extend the capabilities and power of PL/SQL in many significant ways, for example: DBMS_SQL executes dynamically constructed SQL statements and PL/SQL blocks of code. DBMS_PIPE communicates between different Oracle sessions through a pipe in the ORDBMS shared memory. DBMS_JOB submits and manages regularly scheduled jobs for execution inside the database. DBMS_LOB accesses and manipulates Oracle's large objects (LOBs) from within PL/SQL programs. The first edition of Oracle PL/SQL Programming contained a chapter on Oracle's built-in packages, but there is much more to say about the basic PL/SQL packages than Feuerstein could fit in his first book. In addition, now that Oracle8 has been released, there are many new Oracle8 built-in packages not described in the PL/SQL book. There are also packages extensions for specific oracle environments such as distributed database, hence this book Oracle Built-in Packages pulls together information about how to use the calling interface (API) to Oracle's Built-In Packages, and provides extensive examples on using the built-in packages effectively. The windows diskette included with the book contains the companion guide, an online tool developed by ReveaNet, Inc., that provides point-and-click access to the many files of source code and online documentation developed by the authors. The table of contents follows: Preface Part I: Overview 1. Introduction Part II: Application Development Packages Executing Dynamic SQL and PL/SQL Intersession Communication User Lock and Transaction Management Oracle Advanced Queuing Generating Output from PL/SQL Programs Defining an Application Profile Managing Large Objects Datatype Packages Miscellaneous Packages Part III: Server Management Packages Managing Session Information Managing Server Resources Job Scheduling in the Database Part IV: Distributed Database Packages Snapshots Advanced Replication Conflict Resolution Deferred Transactions and Remote Procedure Calls Appendix. What's on the companion disk?

Oracle8 Design Using UML Object Modeling Database Design for Smarties Best Practices for Writing Advanced Queries Java EE 7 Edition Covers Versions Through Oracle Database 12c The Definitive Guide: **Distilling a vast amount of knowledge into an easy-to-read volume covering the full range of Oracle's features and technologies, this title includes an overview of Oracle 10g, along with recent releases 9i and 8i. It provides everything you should need to install and run the Oracle databases.** Getting Started with Oracle WebLogic Server 12c is a fast-paced and feature-packed book, designed to get you working with Java EE 6, JDK 7 and Oracle WebLogic Server 12c straight away, so start developing your own applications. Getting Started with Oracle WebLogic Server 12c: Developer's Guide is written for developers who are just getting started, or who have some experience, with Java EE who want to learn how to develop for and use Oracle WebLogic Server. Getting Started with Oracle WebLogic Server 12c: Developer's Guide also provides a great overview of the updated features of the 12c release, and how it integrates Java EE 6 and JDK 7 to remove boilerplate code. **Develop powerful, standards-based, back-end business logic with Beginning EJB 3, Java EE 7 Edition.** Led by an author team with 20 years of combined Enterprise JavaBeans experience, you'll learn how to use the new EJB 3.2 APIs. You'll gain the knowledge and skills you'll need to create the complex enterprise applications that run today's transactions and more. Targeted at Java and Java EE developers, with and without prior EJB experience, Beginning EJB 3 is packed with practical insights, strategy tips, and code examples. As each chapter unfolds, you'll not only explore a new area of the spec; you'll also see how you can apply it to your own applications through specific examples. Beginning EJB 3 will serve not only as a reference, but it will also function as a how-to guide and repository of practical examples to which you can refer as you build your own applications. It will help you harness the power of EJBs and take your Java EE 7 development to the next level. What you'll learn How to employ session beans, message-driven beans, and entity beans How to use the updated EJB 3 persistence and object-relational mappings How to choose which EJB option is right for your application How to enrich your application's behavior with CDI services How to test the EJB container inside and out How to migrate from older EJB to the newest EJB APIs Who this book is for This book is for those Java and Java EE developers with and without prior EJB experience. Table of Contents Introduction to the EJB 3 Architecture Session Beans Entities and the Java Persistence API Advanced Persistence Features Message-Driven Beans EJB and Web Services Integrating Session Beans, Entities, Message-Driven Beans, and Web Services Transaction Management EJB Performance and Testing Context and Dependency Injection (CDI) Packaging and Deployment EJB Client Applications EJB Runtime Environments Craft the Right Design Using UML Whether building a relational, object-relational, or object-oriented database, database developers are increasingly relying on an object-oriented design approach as the best way to meet user needs and performance criteria. This book teaches you how to use the Unified Modeling Language—the official standard of the Object Management Group—to develop and implement the best possible design for your database. Inside, the author leads you step by step through the design process, from requirements analysis to schema generation. You'll learn to express stakeholder needs in UML use cases and actor diagrams, to translate UML entities into database components, and to transform the resulting design into relational, object-relational, and object-oriented schemas for all major DBMS products. Features Teaches you everything you need to know to design, build, and test databases using an OO model. Shows you how to use UML, the accepted standard for database design according to OO principles. Explains how to transform your design into a conceptual schema for relational, object-relational, and object-oriented DBMSs. Offers practical examples of design for Oracle, SQL Server, Sybase, Informix, Object Design, POET, and other database management systems. Focuses heavily on re-using design patterns for maximum productivity and teaches you how to certify completed designs for re-use.

Oracle Built-in Packages Oracle Database 10g Oracle SQL*Plus Current and Future Trends Computerworld The fourth edition of this popular pocket guide provides quick-reference information that will help you use Oracle's PL/SQL language, including the newest Oracle Database 11g features. It's a companion to Steven Feuerstein and Bill Pribyl's bestselling Oracle PL/SQL Programming. This concise guide boils down the most vital PL/SQL information into an accessible summary of: Fundamental language elements (e.g., block structure, datatypes, declarations) Statements for program control, cursor management, and action handling Records, procedures, functions, triggers, and packages Calling PL/SQL functions in SQL Compilation options, object-oriented features, collections, and Java integration The new edition describes such Oracle Database 11g elements as PL/SQL's function result cache, compound triggers, the CONTINUE statement, the SIMPLE_INTEGER datatype, and improvements to native compilation, regular expressions, and compiler optimization (including intra-unit inlining). In addition, this book now includes substantial new sections on Oracle's built-in functions and packages. When you need answers quickly, the Oracle PL/SQL Language Pocket Reference will save you hours of frustration. If you are a typical Oracle professional, you don't have the luxury of time to keep up with new technology and read all the new manuals to understand each new feature of the latest release from Oracle. You need a comprehensive source of information and in-depth tips and techniques for using the new technology. You need Oracle Internals: Tips, Trick CD-ROM contains: Practice database -- Sample scripts reference in text.

This is Part 2 of a series of quick learning guides for Oracle designers, developers & managers. Part 2 introduces completely new entrants to concepts of Oracle database analysis and design, database normalization, the logical data model, E-R modelling and diagrams, logical to physical transformation in Oracle Designer, physical database design, de-normalization and database design for performance. Querying XML Oracle Internals Fundamentals of Object Databases Oracle SQL and PL/SQL Handbook Oracle SQL Developer Data Modeler for Database Design Mastery Mastering Oracle PL/SQL The ultimate guide to designing with Oracle's Object-Relational Model. The authors show users how to implement the concepts in the real world—teaching how to fully exploit the Object-oriented capabilities of Oracle8. They cover the often neglected areas of database design system requirements, like changes to records, data entry errors, and basic transaction history—all key topics that every database designer must address. In this book, Steven Feuerstein, widely recognized as one of the world's experts on the Oracle PL/SQL language, distills his many years of programming, writing, and teaching about PL/SQL into a set of PL/SQL language "best practices"—rules for writing code that is readable, maintainable, and efficient. Too often, developers focus on simply writing programs that run without errors—and ignore the impact of poorly written code upon both system performance and their ability (and their colleagues' ability) to maintain that code over time. Oracle PL/SQL Best Practices is a concise, easy-to-use reference to Feuerstein's recommendations for excellent PL/SQL coding. It answers the kinds of questions PL/SQL developers most frequently ask about their code: How should I format my code? What naming conventions, if any, should I use? How can I write my packages so they can be more easily maintained? What is the most efficient way to query information from the database? How can I get all the developers on my team to handle errors the same way? The book contains 120 best practices, divided by topic area. It's full of advice on the program development process, coding style, writing SQL in PL/SQL, data structures, control structures, exception handling, program and package construction, and built-in packages. It also contains a handy, pull-out quick reference card. As a helpful supplement to the text, code examples demonstrating each of the best practices are available on the Oracle PL/SQL Best Practices CD-ROM. Best Practices is intended as a companion to O'Reilly's larger Oracle PL/SQL books. It's a compact, readable reference that you'll turn to again and again—a book that no serious developer can afford to be without. An interactive guide to Oracle's intensive query tool, SQL*Plus, discusses its powerful features, furnishes a syntax quick reference, and explains how to write and execute script files, generate reports, extract data from the database, utilize new administrative features, query data dictionary tables, and more. Original. (Intermediate) XML has become the lingua franca for representing business data, for exchanging information between business partners and applications, and for adding structure—and sometimes meaning—to text-based documents. XML offers some special chances and opportunities in the area of search: querying XML can produce very precise, fine-grained results, if you know how to express and execute those queries. For software developers and systems architects: this book teaches the most useful approaches to querying XML documents and repositories. This book will also help managers and project leaders grasp how "querying XML fits into the larger context of querying and XML. Querying XML provides a comprehensive background from fundamental concepts (What is XML?) to data models (the InFonet, XQuery Data Model), to APIs (querying XML from SQL or Java) and more. * Presents the concepts clearly, and demonstrates them with illustrations and examples; offers a thorough mastery of the subject area in a single book. * Provides comprehensive coverage of XML query languages, and the concepts needed to understand them completely (such as the XQuery Data Model). * Shows how to query XML documents and data using: XPath (the XML Path Language); XQuery, soon to be the new W3C Recommendation for querying XML; XQuery's companion XQueryX; and SQL, featuring the SQL/XML. * Includes an extensive set of XQuery, XPath, SQL, Java, and other examples to download/code and data samples.

Oracle Database 11g Oracle PL/SQL Language Pocket Reference Oracle 7 Tips, Tricks, and Techniques for DBAs Beginning EJB 3 Oracle SQL Development **Oracle 10g Developing Media Rich Applications is focused squarely on database administrators and programmers as the foundation of multimedia database applications. With the release of Oracle8 Database in 1997, Oracle became the first commercial database with integrated multimedia technology for application developers. Since that time, Oracle has enhanced and extended these features to include native support for image, audio, video and streaming media storage; indexing, retrieval and processing in the Oracle Database, Application Server; and development tools. Databases are not only words and numbers for accountants, but they also should utilize a full range of media to satisfy customer needs, from race car engineers, to manufacturing processes to security. The full range of audio, video and integration of media into databases is mission critical to these applications. This book details the most recent features in Oracle's multimedia technology including those of the Oracle10gR2 Database and the Oracle9i Application Server. The technology covered includes: object relational media storage and services within the database, middle tier application development interfaces, wireless delivery mechanisms, and Java-based tools. * Gives broad coverage to integration of multimedia features such as audio and Object-oriented Oracle9i Global**

A guide to building applications with Rails covers such topics as metaprogramming, Active Support library, advanced database functions, security principles, RESTful architecture, and optimizing performance. Including problem-solving techniques and examples, a manual offers a hands-on method to developing Internet applications compatible with Oracle's Web Application Server, featuring extensive programming code demonstrating the use of Oracle's development tools. Original. (Advanced). **Oracle PL/SQL by Example Object-relational Database Approach for Role-based Access Control (RBAC) XQuery, XPath, and SQL XML in context A User's and Developer's Guide, Including Version 7.1 Practical Solutions Object-oriented Oracle**

Oracle is an enormous system, with myriad technologies, options, and releases. Most users—even experienced developers and database administrators—find it difficult to get a handle on the full scope of the Oracle database. And, as each new Oracle version is released, users find themselves under increasing pressure to learn about a whole range of new technologies. The latest challenge is Oracle Database 11g. This book distills an enormous amount of information about Oracle into a compact, easy-to-read volume filled with focused text, illustrations, and helpful hints. It contains chapters on: Oracle products, options, data structures, and overall architecture for Oracle Database 11g, as well as earlier releases (Oracle Database 10g, Oracle9i, and Oracle8); Oracle's monitoring, networking, and tuning Oracle, including Enterprise Manager (EM) and Oracle's self-tuning and management capabilities; and using Oracle security, auditing, and compliance (a new chapter in this edition) Multuser concurrency, data warehouses, distributed databases, online transaction processing (OLTP), high availability and hardware architecture (e.g., SMP, clusters, NUMA, and grid computing) Features beyond the Oracle database: Oracle Application Express, Fusion Middleware (including Oracle Application Server), and database SOA support as a Web services provider The latest Oracle Database 11g features: query result set caching, Automatic Memory Management, the Real Application Testing, Advanced Compression, Total Recall, and Active Data Guard Option Options, changes to the OLAP Option (transparently accessed and managed as materialized views), the Flashback transaction command, transparent data encryption, the Support Workbench (and diagnosability infrastructure), and partitioning enhancements (including interval and new composite types) For new Oracle users, DBAs, developers, and managers, Oracle Essentials provides an invaluable, all-in-one introduction to the full range of Oracle features and technologies, including the just-released Oracle Database 11g features. But even if you already have a library full of Oracle documentation, you'll find that this compact book is the one you turn to, again and again, as your one-stop, truly essential reference. "Oracle Essentials gives a clear explanation of the key database concepts and architecture underlying the Oracle database. It's a great reference for anyone doing development or management of Oracle databases." --Andrew Mendelsohn, Senior Vice President, Database Server Technologies, Oracle Corporation Oracle7 is the most powerful and complex IBM PC-based relational database, with approximately 500,000 in use. This database is primarily used for accounting and business functions, and to record sales information. The book gives a thorough overview of databases in general, describing SQL language, data integrity and more. Oracle8 Database SQL is your introduction to the interactive query tools and specific dialects of SQL used with Oracle Database. These tools include SQL*Plus and SQL Developer. SQL*Plus is the one tool any Oracle developer or database administrator can always count on, and it is widely used in creating scripts to automate routine tasks. SQL Developer is a powerful, graphical environment for developing and debugging queries. Oracle's is possibly the most valuable dialect of SQL from a career standpoint. Oracle's database engine is widely used in corporate environments worldwide. It is also found in many government applications. Oracle SQL implements many features not found in competing products. No developer or DBA working with Oracle can afford to be without knowledge of these features and how they work, because of the performance and expressiveness they bring to the table. Written in an easygoing and example-based style, Beginning Oracle SQL is the book that will get you started down the path to successfully writing SQL statements and getting results from Oracle Database. Takes an example-based approach, with clear and authoritative explanations Introduces both SQL and the query tools used to execute SQL statements Shows how to create tables, populate them with data, and then query that data to generate business results What you'll learn Create database tables and define their relationships. Add data to your tables. Then change and delete that data. Write database queries that generate accurate results. Avoid common traps and pitfalls in writing SQL queries, especially from nulls. Reap the performance and expressiveness of analytic and window functions. Make use of Oracle Database's support for object types. Write recursive queries to query hierarchical data. Who this book is for Beginning Oracle SQL is aimed at developers and database administrators who must write SQL statements to execute against an Oracle database. No prior knowledge of SQL is assumed. Table of Contents: 1. Relational Database Systems and Oracle 2. Introduction to SQL and SQL*Plus, and SQL Developer 3. Data Definition, Part 1 4. Retrieval: The Basics 5. Retrieval: Functions 6. Data Manipulation 7. Data Definition, Part II 8. Retrieval: Joins and Grouping 9. Retrieval: Advanced Features 10. Views 11. Automating 12. Object-Relational Features 13. Appendix A – Case Tables 14. Appendix B – Exercise Solutions

Oracle 10g Developing Media Rich Applications Java Programming with Oracle JDBC Oracle Quick Guides - Part 2 - Oracle Database Design Java Oracle Database Development InfoWorld Oracle Essentials Design Databases with Oracle SQL Developer Data Modeler In this practical guide, Oracle ACE Director Heli Helskyaho explains the process of database design using Oracle SQL Developer Data Modeler—the powerful, free tool that flawlessly supports Oracle and other database environments, including Microsoft SQL Server and IBM DB2. Oracle SQL Developer Data Modeler for Database Design Mastery covers requirement analysis, conceptual, logical, and physical design, data warehousing, reporting, and more. Create and deploy high-performance enterprise databases on any platform using the expert tips and best practices in this Oracle Press book. Configure Oracle SQL Developer Data Modeler Performance requirement analysis Translate requirements into a formal conceptual data model and process models Transform the conceptual (logical) model into a relational model Manage physical database design Generate data definition language (DDL) scripts to create database objects Design a data warehouse database Use subversion for version control and to enable a multuser environment Document an existing database Use the reporting tools in Oracle SQL Developer Data Modeler Compare designs and the database

Oracle Forms is the single most important tool used to create sophisticated applications for Oracle databases. The latest versions of Oracle Forms have reflected Oracle's Internet-centered strategy, adding powerful capabilities for building Web-centered applications to the product's traditional client/server focus. In Oracle Forms Developer's Handbook, one of the world's leading Oracle developers presents powerful techniques for leveraging Oracle Forms in both web-centered and client/server environments. This is the first Oracle Forms book to reflect the brand-new Version 6i. Oracle Forms Developer's Handbook starts by presenting step-by-step instructions for using every tool in the Forms environment, including the Forms Designer, Object Navigator, and the Layout Editor. Next, learn how to use PL/SQL in Forms applications; master all of the methods and objects available to Forms programmers; and learn how to apply object-oriented programming techniques to Forms development, including inheritance, reusability, encapsulation, and polymorphism. Then, walk step-by-step through developing a series of complete, elegant, well-performing Web-based and client/server applications. An accompanying CD-ROM contains all of the book's applications and source code examples, plus all files needed to create and populate sample database objects -- enabling readers to start from any chapter and follow the hands-on activities. Learn the basics of Oracle database objects for versions 7.x through the new Oracle8; explore the structure of client/server computing and the new Network Computing Architecture implemented by Oracle; build Oracle database objects in a relational model; develop an intuitive user interface with Developer/2000 and Oracle Forms or Oracle Power Objects; master PL/SQL for improving performance and error handling; create easy-to-read visual output with Oracle Reports and Oracle Graphics; enhance user interactivity using triggers; leverage the NCA and Oracle Cartridges for cross-platform Web applications; and connect your database to the Web with Oracle Web Application Server 3.0, Developer/2000 for the Web, and Java. JDBC is the key Java technology for relational database access. Oracle is arguably the most widely used relational database platform in the world. In this book, Donald Bales brings these two technologies together, and shows you how to leverage the full power of Oracle's implementation of JDBC. You begin by learning the all-important mysteries of establishing database connections. This can be one of the most frustrating areas for programmers new to JDBC, and Donald covers it well with detailed information and examples showing how to make database connections from applications, applets, Servlets, and even from Java programs running within the database itself. Next comes thorough coverage of JDBC's relational SQL features. You'll learn how to issue SQL statements and get results back from the database, how to read and write data from large, streaming data types such as BLOBs, CLOBs, and BFILEs, and you'll learn how to interface with Oracle's other built-in programming language, PL/SQL. If you're taking advantage of the Oracle's relatively new ability to create object tables and column objects based on user-defined datatypes, you'll be pleased with Don's thorough treatment of this subject. Don shows you how to use JPublisher and JDBC to work seamlessly with Oracle database objects from within Java programs. You'll also learn how to access nested tables and arrays using JDBC. Donald concludes the book with a discussion of transaction management, locking, concurrency, and performance—topics that every professional JDBC programmer must be familiar with. If you write Java programs to run against an Oracle database, this book is a must-have.

Advanced Rails Optimizing Oracle Code Teach Yourself Oracle 8 Database Development in 21 Days A Guide for Data Administrators, Developers, and Business Analysts For Oracle Database 12c The Developer's Guide to Oracle Web Application Server 3 For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

A hands-on book for Java developers who want to learn how use Oracle and integrate it with their Java applications. It assumes an intermediate knowledge of Java and no knowledge of Oracle. .3 "The book covers comprehensive and fundamental aspects of the implementation of object-oriented modeling in a DBMS that was originated as a pure Relational Database, Oracle"—Provided by publisher. If you have mastered the fundamentals of the PL/SQL language and are now looking for an in-depth, practical guide to solving real problems with PL/SQL stored procedures, then this is the book for you. Oracle Development Languages Introduction to Oracle Advanced Oracle PL/SQL Developer's Guide Beginning Database Design Oracle PL/SQL Best Practices Beginning Oracle SQL Master the advanced concepts of PL/SQL for professional-level certification and learn the new capabilities of Oracle Database 12c About This Book Learn advanced application development features of Oracle Database 12c and prepare for the 1Z0-146 examination Build robust and secure applications in Oracle PL/SQL using the best practices Packed with feature demonstrations and illustrations that will help you learn and understand the enhanced capabilities of Oracle Database 12c Who This Book Is For This book is for Oracle developers responsible for database management. Readers are expected to have basic knowledge of Oracle Database and the fundamentals of PL/SQL programming. Certification aspirants can use this book to prepare for 1Z0-146 examination in order to be an Oracle Certified Professional in Advanced PL/SQL. What You Will Learn Learn and understand the key SQL and PL/SQL features of Oracle Database 12c Understand the new Multitenant architecture and Database In-Memory option of Oracle Database 12c Know more about the advanced concepts of the Oracle PL/SQL language such as external procedures, securing data using Virtual Private Database (VPD), SecureFiles, and PL/SQL code tracing and profiling Implement Virtual Private Databases to prevent unauthorized data access Trace, analyze, profile, and debug PL/SQL code while developing database applications Integrate the new application development features of Oracle Database 12c with the current concepts Discover techniques to analyze and maintain PL/SQL code Get acquainted with the best practices of writing PL/SQL code and develop secure applications In Detail Oracle Database is one of the most popular databases and allows users to make efficient use of their resources and to enhance service levels while reducing the IT costs incurred. Oracle Database is sometimes compared with Microsoft SQL Server, however, Oracle Database clearly supersedes SQL server in terms of high availability and addressing planned and unplanned downtime. Oracle PL/SQL provides a rich platform for application developers to code and build scalable database applications and introduces multiple new features and enhancements to improve development experience. Advanced Oracle PL/SQL Developer's Guide, Second Edition is a handy technical reference for seasoned professionals in the database development space. This book starts with a refresher of fundamental concepts of PL/SQL, such as anonymous block, subprograms, and exceptions, and prepares you for the upcoming advanced concepts. The next chapter introduces you to the new features of Oracle Database 12c, not limited to PL/SQL. In this chapter, you will understand some of the most talked about features such as Multitenant and Database In-Memory. Moving forward, each chapter introduces advanced concepts with the help of demonstrations, and provides you with the latest update from Oracle Database 12c context. This helps you to visualize the pre- and post-applications of a feature over the database releases. By the end of this book, you will have become an expert in PL/SQL programming and will be able to implement advanced concepts of PL/SQL for efficient management of Oracle Database. Style and approach The book follows the structure of the Oracle Certification examination but doesn't restrict itself to the exam objectives. Advanced concepts have been explained in an easy-to-understand style, supported with feature demonstrations and case illustrations. Considered the best Oracle PL/SQL programming guide by the Oracle community, this definitive guide is precisely what you need to make the most of Oracle's powerful procedural language. The sixth edition describes the features and capabilities of PL/SQL up through Oracle Database 12c Release 1. Hundreds of thousands of PL/SQL developers have benefited from this book over the last twenty years; this edition continues that tradition. With extensive code examples and a lively sense of humor, this book explains language fundamentals, explores advanced coding techniques, and offers best practices to help you solve real-world problems. Get PL/SQL programs up and running quickly, with clear instructions for executing, tracing, testing, debugging, and managing code Understand new 12.1 features, including the ACCESSIBLE BY clause, WITH FUNCTION and UDF pragma, BEQUEATH CURRENT USER for views, and new conditional compilation directives Take advantage of extensive code samples, from easy-to-follow examples to reusable packaged utilities Optimize PL/SQL performance with features like the function result cache and Oracle utilities such as PL/Scope and the PL/SQL Hierarchical Profiler Build modular, easy-to-maintain PL/SQL applications using packages, procedures, functions, and triggers

The authors have revised and updated this bestseller to include both the Oracle8i and new Oracle9i Internet-savvy database products. Written by experienced Oracle insiders, this essential guide distills a vast amount of information into an easy-to-read volume that covers every aspect of the Oracle database. Readers of all technical levels will learn about Oracle's features and technologies, including the product line, architecture, data structures, networking, concurrency, tuning and much more. Augmented with illustrations and helpful hints, the fifth edition of Oracle Essentials offers a valuable one-stop overview of Oracle Database 12c, Oracle's newest database release. More comprehensive than huge complete references, and more detailed than most primers, this book gives current Oracle users the conceptual background they need to understand how the Oracle database truly works. For those new to Oracle, this all-in-one guide provides an essential introduction that will get them up to speed. **Oracle Forms Developer's Handbook Handbook of Research on Innovations in Database Technologies and Applications Getting Started with Oracle WebLogic Server 12c: Developer's Guide Professional Oracle Programming Using UML for Data Modeling Oracle PL/SQL Programming** *InfoWorld is targeted to Senior IT professionals. Content is segmented into Channels and Topic Centers. InfoWorld also celebrates people, companies, and projects. Using PL/SQL for Oracle Database 12c, you can build solutions that deliver unprecedented performance and efficiency in any environment, including the cloud. Oracle8 PL/SQL by Example, Fifth Edition, teaches all the PL/SQL skills you'll need, through real-world labs, extensive examples, exercises, and projects. Now fully updated for the newest version of PL/SQL, it covers everything from basic syntax and program control through the latest optimization and security enhancements. Step by step, you'll walk through every key task, mastering today's most valuable Oracle 12c/PL/SQL programming techniques on your own. Start by downloading projects and exercises from informt.com/title/0133796787. Once you've done an exercise, the authors don't just present the answer; they offer an in-depth discussion introducing deeper insights and modern best practices. This book's approach fully reflects the authors' award-winning experience teaching PL/SQL to professionals at Columbia University. New database developers and DBAs can use it to get productive fast; experienced PL/SQL programmers will find it to be a superb Oracle Database 12csolutions reference. New in This Edition Updated code examples throughout Result-caching of invoker's right functions for better performance Extended support for PL/SQL-only data types in dynamic SQL, OCI, and JDBC Security enhancements, including ACCESSIBLE BY whitelists, improved privilege control, and Invisible Columns Other topics covered Mastering Basic PL/SQL concepts and language fundamentals, and understanding SQL's role in PL/SQL Using conditional and iterative program control, including CONTINUE and CONTINUE WHEN Efficiently handling errors and exceptions Working with cursors and triggers, including compound triggers Using stored procedures, functions, and packages to write modular code that other programs can run Working with collections, object-relational features, native dynamic SQL, bulk SQL, and other advanced features "This book provides a wide compendium of references to topics in the field of the database systems and applications"—Provided by publisher.*