

Oracle 12c New Features Sql PI Sql And Administration

The book teaches the basics of the Oracle database from a beginner's perspective to the advanced concepts using a hands-on approach. Each and every concept has been elaborated with suitable practical examples along with code for clear and precise understanding of the topic. Using a practical approach, this new edition of the book covers the detailed introspection of pluggable databases and explains practically the various new features incorporated in the new 12c version. It also explains how to retrieve, add, update and delete data in the Oracle database using SQL, SQL*PLUS and PL/SQL. In the process, it discusses the various data types and built-in functions of Oracle, as well as the sorting of records and the table operations. The text also includes coverage of advanced queries using special operators, Oracle security, indexing, and stored functions and procedures. The book is suitable for undergraduate engineering students of Computer Science and Information Technology, B.Sc. (Computer Science/IT), M.Sc. (Computer Science/IT) and students of Computer Applications (BCA, MCA, PGDCA, and DCA). Besides, the book can be used as a reference by professionals pursuing short-term courses on Oracle Database and students of Oracle Certified Courses. KEY FEATURES • Based on latest Oracle Database 12c: It explains the various features introduced with the new Oracle Database 12c software. • Hands-on methodology: Its objective is to impart practical skills using hands-on methodology. • Elaborate Practical Examples: Each topic begins with appropriate theory and concept followed by relevant examples for better understanding of the concepts. • Commands tested and executed on Oracle Database software: All the programming examples have been tested on actual Oracle Database software.

Beginning Oracle SQL is your introduction to the interactive query tools and specific dialect 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

Proven Database Optimization Solutions?Fully Updated for Oracle Database 12c Release 2 Systematically identify and eliminate database performance problems with help from Oracle Certified Master Richard Niemiec. Filled with real-world case studies and best practices, Oracle Database 12c Release 2 Performance Tuning Tips and Techniques details the latest monitoring, troubleshooting, and optimization methods. Find out how to identify and fix bottlenecks on premises and in the cloud, configure storage devices, execute effective queries, and develop bug-free SQL and PL/SQL code. Testing, reporting, and security enhancements are also covered in this Oracle Press guide. • Properly index and partition Oracle Database 12c Release 2 • Work effectively with Oracle Cloud, Oracle Exadata, and Oracle Enterprise Manager • Efficiently manage disk drives, ASM, RAID arrays, and memory • Tune queries with Oracle SQL hints and the Trace utility • Troubleshoot databases using V\$ views and X\$ tables • Create your first cloud database service and prepare for hybrid cloud • Generate reports using Oracle's Statspack and Automatic Workload Repository tools • Use sar, vmstat, and iostat to monitor operating system statistics This book is for enthusiast who would like to know 12c new features with real life examples. This book expanded the following features of 12c SQL: - Row limiting clause, expand sqltext of a view, internal parser re-written sql, Invisible column, session level sequence, extended data type, truncate with cascade option, default value for NULL column, auto populate column using sequence and identity type, advanced index compression, Lateral/cross apply/outer apply, multiple index on a column, match_recognise clause for inter-rows pattern, In memory column store etc. For 12c PL/SQL it has expanded the following features: - WITH clause improvement, PRAGMA UDF, REDACTION, BEQUEATH clause, Restructuring error stack and backtrace, enhancement in PL/SQL specific data type support in NDS & binding, white listing by means of accessible by clause, Invoker right code using result_cache, improvement in conditional compilation, granting role to stored subprogram instead of user etc. For 12c ADMINISTRATION it has expanded the following features: - Adaptive query optimization and online stats gathering, faster online table column addition, DDL LOGGING, adding multiple new partition, global temporary table enhancement, stats gathering improvement, heat map, improvement in auditing using flashback, improvement in tracking security sensitive tables, import & export of version history, free flashback archive and optimize option, Multitenant container database with Pluggable database option etc. While explaining only 12c new features, I have tried to provide alternative approach prior to 12c also so that the reader can understand the concept with an ease. Hope this 75 pages book will help immensely to learn all the 12c new features and help the reader to use the features in real life confidently.

ORACLE DATABASE 12C HANDS-ON SQL AND PL/SQL

The Essential Reference

OCA Oracle Database 12c SQL Fundamentals I Exam Guide (Exam 1Z0-061)

Oracle Database 11g SQL

PL/SQL Programming

Expert Consolidation in Oracle Database 12c is your key to reducing data management costs and increasing data center efficiency. Consolidation and cloud computing are converging trends sweeping the industry. The same technologies enabling cloud computing enable consolidation as well, leading to savings on all fronts from the amount of power used for servers to the amount of floor space consumed to the number of administrators needed to manage an installation. Yet the consolidation

process can be a long and winding road. Success requires planning, and consideration to the impacts on supporting infrastructure. Expert Consolidation in Oracle Database 12c guides you through planning and implementing a consolidated Oracle Database installation using the many new features built into the latest release of Oracle's database management system. You'll learn to identify candidates for consolidation and to recognize instances that are best left stand-alone. The book guides in working with clustered systems and ASM storage in the consolidated environment. Focus is given to Oracle Enterprise Manager 12c Cloud Control as a monitoring and management dashboard. Always the goal is to drive towards a cost-effective environment that is efficient both in technology and people. Focuses on the new consolidation features in Oracle Database 12c Helps you evaluate and correctly decide when to consolidate Leads to cost savings and improved data center efficiency Beginning Oracle SQL is your introduction to the interactive query tools and specific dialect 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 I 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

Master the Cutting-Edge Features of Oracle Database 12c Maintain a scalable, highly available enterprise platform and reduce complexity by leveraging the powerful new tools and cloud enhancements of Oracle Database 12c. This authoritative Oracle Press guide offers complete coverage of installation, configuration, tuning, and administration. Find out how to build and populate Oracle databases, perform effective queries, design applications, and secure your enterprise data. Oracle Database 12c: The Complete Reference also contains a comprehensive appendix covering commands, keywords, features, and functions. Set up Oracle Database 12c or upgrade from an earlier version Design Oracle databases and plan for application implementation Construct SQL and SQL*Plus statements and execute powerful queries Secure data with roles, privileges, virtualization, and encryption Move data with SQL*Loader and Oracle Data Pump Restore databases using flashback and the Oracle Database Automatic Undo Management feature Build and deploy PL/SQL triggers, procedures, and packages Work with Oracle pluggable and container databases Develop database applications using Java, JDBC, and XML Optimize performance with Oracle Real Application Clusters

Write powerful queries using as much of the feature-rich Oracle SQL language as possible, progressing beyond the simple queries of basic SQL as standardized in SQL-92. Both standard SQL and Oracle's own extensions to the language have progressed far over the decades in terms of how much you can work with your data in a single, albeit sometimes complex, SQL statement. If you already know the basics of SQL, this book provides many examples of how to write even more advanced SQL to huge benefit in your applications, such as:Pivoting rows to columns and columns to rowsRecursion in SQL with MODEL and WITH clausesAnswering Top-N questionsForecasting with linear regressions Row pattern matching to group or distribute rowsUsing MATCH_RECOGNIZE as a row processing engineThe process of starting from simpler statements in SQL, and gradually working those statements stepwise into more complex statements that deliver powerful results, is covered in each example. By trying out the recipes and examples for yourself, you will put together the building blocks into powerful SQL statements that will make your application run circles around your competitors. What You Will LearnTake full advantage of advanced and modern features in Oracle SQL Recognize when modern SQL constructs can help create better applicationsImprove SQL query building skills through stepwise refinementApply set-based thinking to process more data in fewer queriesMake cross-row calculations with analytic functionsSearch for patterns across multiple rows using row pattern matchingBreak complex calculations into smaller steps with subquery factoring Who This Book Is For Oracle Database developers who already know some SQL, but rarely use features of the language beyond the SQL-92 standard. And it is for developers who would like to apply the more modern features of Oracle SQL, but don't know where to start. The book also is for those who want to write increasingly complex queries in a stepwise and understandable manner. Experienced developers will use the book to develop more efficient queries using the advanced features of the Oracle SQL language.

Advanced Oracle PL/SQL Developer's Guide

From Novice to Professional

Oracle PL/SQL Programming

Beginning Oracle SQL for Oracle Database 18c

Oracle 12c: SQL

Maximize the New and Improved Features of Oracle Database 12c Written by Master Principle Database Expert, Oracle, and Oracle ACE Robert G. Freeman, this Oracle Press guide describes the myriad new and enhanced capabilities available in the latest Oracle Database release. Inside, you'll find everything you need to know to get up and running quickly on Oracle Database 12c. Supported by running commentary from world-renowned Oracle expert Tom Kyte, and with additional contributions by Oracle experts Eric Yen and Scott Black, Oracle Database 12c New Features offers detailed coverage of: Installing Oracle Database 12c Architectural changes, such as Oracle Multitenant The most current information on upgrading and migrating to Oracle Database 12c The pre-upgrade information tool and parallel processing for database upgrades Oracle Real Application Clusters new features, such as Oracle Flex Cluster, Oracle Flex Automatic Storage Management, and Oracle Automatic Storage Management Cluster File System Oracle RMAN enhancements, including cross-platform backup and recovery Oracle Data Guard improvements, such as Fast Sync, and Oracle Active Data Guard new features, such as Far Sync SQL, PL/SQL, DML, and DDL new features Improvements to partitioning manageability, performance, and availability Advanced business intelligence and data warehousing capabilities Security enhancements, including privileges analysis, data redaction, and new

administrative-level privileges Manageability, performance, and optimization improvements

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)

Pro Oracle SQL unlocks the power of SQL in the Oracle Database—one of the most potent SQL implementations on the market today. To master it requires a three-pronged approach: learn the language features, learn the supporting features that Oracle provides to help use the language effectively, and learn to think and work in sets. Karen Morton and her team help you master powerful aspects of Oracle SQL not found in competing databases. You'll learn analytic functions, the MODEL clause, and advanced grouping syntax—features that will help in creating good queries for reporting and business intelligence applications. Pro Oracle SQL also helps you minimize parsing overhead, read execution plans, test for correct results, and exert control over SQL execution in your database. You'll learn when to create indexes, how to verify that they make a difference, how to use SQL Profiles to optimize SQL in packaged applications, and much more. You'll also understand how SQL is optimized for working in sets, and that the key to getting accurate results lies in making sure that queries ask clear and precise questions. What's the bottom-line? Pro Oracle SQL helps you work at a truly professional level in Oracle dialect of SQL. You'll master the language, the tools to work effectively with the language, and the right way to think about a problem in SQL. Pro Oracle SQL helps you rise above the crowd to provide stellar service in your chosen profession. Endorsed by the OakTable Network, a group of Oracle technologists well-known for their rigorous and scientific approach to Oracle Database performance Comprehensive—goes beyond the language with a focus on what you need to know to write successful queries and data manipulation statements.

Learn how to use the PL/SQL programming language effectively, using one of the most popular and widely-used software programs in large companies today. Oracle 10g Developer: PL/SQL Programming uses Oracle 10g to provide an overview of the PL/SQL programming language, beginning with fundamental PL/SQL concepts and progressing to the writing and testing of PL/SQL code. The book then progresses to more advanced topics, such as Dynamic SQL and code tuning. Updated to the latest release, Oracle 10g, it uses the developer's perspective to focus on the PL/SQL component of the software. With real-world examples and a straightforward writing style, this is a valuable resource for anyone preparing for the new Oracle Certification exam, or simply looking to master the PL/SQL programming language with Oracle.

Oracle Database 11g PL/SQL Programming

Oracle Database 12c Edition

Oracle Database 12c SQL

Oracle SQL

ORACLE High-Performance SQL Tuning

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.

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 exception 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.

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 O'Reilly web site. Oracle PL/SQL 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.

Demystifying the power of the Oracle 12c database The Oracle database is the industry-leading relational database management system (RDMS) used from small companies to the world's largest enterprises alike for their most critical business and analytical processing. Oracle 12c includes industry leading enhancements to enable cloud computing and empowers users to manage both Big Data and traditional data structures faster and cheaper than ever before. Oracle 12c For Dummies is the perfect guide for a novice database administrator or an Oracle DBA who is new to Oracle 12c. The book covers what you need to know about Oracle 12c architecture, software tools, and how to successfully manage Oracle databases in the real world. Highlights the important features of Oracle 12c Explains how to create, populate, protect, tune, and troubleshoot a new Oracle database Covers advanced Oracle 12c technologies including Oracle Multitenant—the "pluggable database" concept—as well as several other key changes in this release Make the most of Oracle 12c's improved efficiency, stronger security, and simplified management capabilities with Oracle 12c For Dummies.

Oracle PL/SQL Language Pocket Reference

Get Started Fast with Oracle 11g Enhancements

Oracle Database 12c New Features

For Oracle Database 12c

Oracle SQL Tuning with SQLTXPLAIN is a practical guide to SQL tuning the way Oracle's own experts do it, using a freely downloadable tool called SQLTXPLAIN. Using this simple tool you'll learn how to tune even the most complex SQL, and you'll learn to do it quickly, without the huge learning curve usually associated with tuning as a whole. Firmly based in real world problems, this book helps you reclaim system resources and avoid the most common bottleneck in overall performance, badly tuned SQL. You'll learn how the optimizer works, how to take advantage of its latest features, and when it's better to turn them off. Quickly tune any SQL statement no matter how complex. Build and tune test cases without affecting production. Use the latest tuning features with confidence.

Get a thorough understanding of Oracle Database 10g from the most comprehensive Oracle database reference on the market, published by Oracle Press. From critical architecture concepts to advanced object-oriented concepts, this powerhouse contains nearly 50 chapters designed to enlighten you. Upgrade from earlier versions, use SQL, SQL Plus, and PL/SQL. Get code examples and access popular documentation PDFs--plus a full electronic copy of the book on the included CD-ROM. Go beyond the basics and learn security, text searches, external tables, using Java in Oracle, and a great deal more.

SQL (Structured Query Language), the heart of a relational database management system, is the language used to query the database, to create new tables in the database, to update and delete fields, and to set access privileges. Aimed at everyone who needs to access an Oracle database using SQL, including developers, DBAs, designers, and managers, this book delivers all the information they need to know about standard SQL, and Oracle's extensions to it.

Write Powerful SQL Statements and PL/SQL Programs Learn how to access Oracle databases through SQL statements and construct PL/SQL programs. Oracle Database 12c SQL offers complete coverage of the latest database features and techniques. Find out how to write SQL statements to retrieve and modify database information, use SQL*Plus and SQL Developer, work with database objects, write PL/SQL programs, use performance optimization techniques, incorporate XML, and more. This Oracle Press guide contains everything you need to know to master SQL. Use SQL statements to access an Oracle database Work with SQL*Plus and SQL Developer Write PL/SQL programs Create tables, sequences, indexes, views, and triggers Design advanced queries containing complex calculations Create database objects to handle abstract data Use date, time stamp, and time interval data types Establish user roles and privileges Handle multimedia files using large objects Tune SQL statements to make them execute faster Generate, process, and store XML data Master the very latest Oracle Database 12c features Code examples in the book are available for download.

Oracle 11g New Features

Oracle SQL*Plus

Including Oracle 12c Release 2

Practical Oracle SQL

Oracle PL/SQL by Example

Using PL/SQL for Oracle Database 12c, you can build solutions that deliver unprecedented performance and efficiency in any environment, including the cloud. Oracle® 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 informit.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 12c solutions 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

Master the Powerful Multitenant Features of Oracle Database 12c Govern a scalable, extensible, and highly available enterprise database environment using the practical information contained in this Oracle Press guide. Written by a team of Oracle Masters, Oracle Database 12c Release 2 Multitenant shows, step-by-step, how to deploy and manage multitenant configurations across IT frameworks of all types and sizes. Find out how to create databases, work with PDBs and CDBs, administer Oracle Net Services, and automate administrative tasks. Backup and recovery, security, and advanced multitenant options are covered in complete detail. Learn how to:

- Build high-performance multitenant Oracle databases
- Create single-tenant, multitenant, and application containers
- Establish network connections and manage services
- Handle security using authentication, authorization, and encryption
- Back up and restore your mission-critical data
- Work with point-in-time recovery and Oracle Flashback
- Move data and replicate and clone databases
- Work with Oracle's Resource Manager and Data Guard

Introduce the latest version of the fundamental SQL language used in all relational databases today with Casteel's ORACLE 12C: SQL, 3E. Much more than a study guide, this edition helps those who have only a basic knowledge of databases master the latest SQL and Oracle concepts and techniques. Learners gain a strong understanding of how to use Oracle 12c SQL most effectively as they prepare for the first exam in the Oracle Database Administrator or Oracle Developer Certification Exam paths. This edition initially focuses on creating database objects, including tables, constraints, indexes, sequences, and more. The author then explores data query techniques, such as row filtering, joins, single-row functions, aggregate functions, subqueries, and views, as well as advanced query topics. ORACLE 12C: SQL, 3E introduces the latest features and enhancements in 12c, from enhanced data types and invisible columns to new CROSS and OUTER APPLY methods for joins. To help readers transition to further studies, appendixes introduce SQL tuning, compare Oracle's SQL syntax with other databases, and overview Oracle connection interface tools: SQL Developer and SQL Plus. Readers can trust ORACLE 12C: SQL, 3E to provide the knowledge for Oracle certification testing and the solid foundation for pursuing a career as a successful database administrator or developer. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Learn all of the available upgrade and migration methods in detail to move to Oracle Database version 12c. You will become familiar with database upgrade best practices to complete the upgrade in an effective manner and understand the Oracle Database 12c patching process. So it's time to upgrade Oracle Database to version 12c and you need to choose the appropriate method while considering issues such as downtime. This

book explains all of the available upgrade and migration methods so you can choose the one that suits your environment. You will be aware of the practical issues and proactive measures to take to upgrade successfully and reduce unexpected issues. With every release of Oracle Database there are new features and fixes to bugs identified in previous versions. As each release becomes obsolete, existing databases need to be upgraded. Oracle Database Upgrade and Migration Methods explains each method along with its strategy, requirements, steps, and known issues that have been seen so far. This book also compares the methods to help you choose the proper method according to your constraints. Also included in this book: Pre-requisite patches and pre-upgrade steps Patching to perform changes at the binary and database level to apply bug fixes What You Will Learn: Understand the need and importance of database upgrading and migration Be aware of the challenges associated with database upgrade decision making Compare all upgrade/migration methods Become familiar with database upgrade best practices and recommendations Understand database upgrade concepts in high availability and multi-tenant environments Know the database downgrade steps in case the upgraded database isn't compatible with the environment Discover the features and benefits to the organization when it moves from the old database version to the latest database version Understand Oracle 12c patching concepts Who This Book Is For: Core database administrators, solution architects, business consultants, and database architects

Oracle 12c New Features

The Complete Reference

The Definitive Guide

Pro Oracle SQL

Mastering the Full Power of Oracle Database

Oracle 12c New Features SQL, PL/SQL & Administration Createspace Independent Publishing Platform

Leverage the New and Improved Features of Oracle Database 12c Written by Oracle experts Bob Bryla and Robert G.

Freeman, this Oracle Press guide describes the myriad new and enhanced capabilities available in the latest Oracle Database release. Inside, you'll find everything you need to know to get up and running quickly on Oracle Database 12c Release 2.

Supported by contributions from Oracle expert Eric Yen, Oracle Database 12c Release 2 New Features offers detailed coverage of:

- **Installing Oracle Database 12c and Grid Infrastructure**
- **Architectural changes, such as Oracle Multitenant**
- **The most current information on upgrading and migrating to Oracle Database 12c**
- **The pre-upgrade information tool and parallel processing for database upgrades**
- **Oracle Real Application Clusters new features, such as Oracle Flex Cluster, Oracle Flex Automatic Storage Management, and Oracle Automatic Storage Management Cluster File System**
- **Enhanced and new online operations: tables, indexes, and PDBs**
- **Oracle RMAN enhancements, including cross-platform backup and recovery**
- **Oracle Data Guard improvements, such as Fast Sync, and Oracle Active Data Guard new features, such as Far Sync**
- **SQL, PL/SQL, DML, and DDL new features**
- **Improvements to partitioning manageability, performance, and availability**
- **Advanced business intelligence and data warehousing capabilities**
- **Security enhancements, including privileges analysis, data redaction, and new administrative-level privileges**
- **Manageability, performance, and optimization improvements**

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.

Design Feature-Rich PL/SQL Applications Deliver dynamic, client/server PL/SQL applications with expert guidance from an Oracle programming professional. With full coverage of the latest features and tools, Oracle Database 11g PL/SQL

Programming lays out each topic alongside detailed explanations, cut-and-paste syntax examples, and real-world case studies. Access and modify database information, construct powerful PL/SQL statements, execute effective queries, and deploy bulletproof security. You'll also learn how to implement C, C++, and Java procedures, Web-enable your database, cut development time, and optimize performance. Create, debug, and manage Oracle-driven PL/SQL programs Use PL/SQL structures, delimiters, operators, variables, and statements Identify and eliminate errors using PLSQL_WARNINGS and exception handlers Work with functions, procedures, packages, collections, and triggers Define and deploy varray, nested table, and associative array data types Handle external routines, object types, large objects, and secure files Communicate between parallel sessions using DBMS_ALERT and DBMS_PIPE Call external procedures through Oracle Net Services and PL/SQL wrappers Integrate internal and server-side Java class libraries using Oracle JVM Develop robust Web applications using PL/SQL Gateway and Web Toolkit

Oracle Database 10g The Complete Reference

Oracle 12c For Dummies

Murach's Oracle SQL and PL SQL for Developers

Practical Solutions

Oracle SQL Tuning with Oracle SQLTXPLAIN

Start developing with Oracle SQL. This book is a one-stop introduction to everything you need to know about getting started developing an Oracle Database. You'll learn about foundational concepts, setting up a simple schema, adding data, reading data from the database, and making changes. No experience with databases is required to get started. Examples in the book are built around Oracle Live SQL, a freely available, online sandbox for practicing and experimenting with SQL statements, and Oracle Express Edition, a free version of Oracle Database that is available for download. A marquee feature of Beginning Oracle SQL for Oracle Database 18c is the small chapter size. Content is divided into easily digestible chunks that can be read and practiced in very short intervals of time, making this the ideal book for a busy professional to learn from. Even just a 15-20 minute block of free time can be put to good use. Author Ben Brumm begins by helping you understand what a database is, and getting you set up with a sandbox in which to practice the SQL that you are learning. From there, easily digestible chapters cover, point-by-point, the different aspects of writing queries to get data out of a database. You'll also learn about creating tables and getting data into the database. Crucial topics such as working with nulls and writing analytic queries are given the attention they deserve, helping you to avoid pitfalls when writing queries for production use. What You'll Learn Create, update, and delete tables in an Oracle database Add, update, delete data from those database tables Query and view data stored in your database Manipulate and transform data using in-built database functions and features Correctly choose when to use Oracle-specific syntax and features Who This Book Is For Those new to Oracle who are planning to develop software using Oracle as the back-end data store. The book is also for those who are getting started in software development and realize they need to learn some kind of database language. Those who are learning software development on the side of their normal job, or learning it as a college student, who are ready to learn what a database is and how to use it also will find this book useful.

This integrated learning solution teaches all the Oracle PL/SQL skills you need, hands-on, through real-world labs, extensive examples, exercises, and projects! Completely updated for Oracle 11g, Oracle PL/SQL by Example, Fourth Edition covers all the fundamentals, from PL/SQL syntax and program control through packages and Oracle 11g's significantly improved triggers. One step at a time, you'll walk through every key task, discovering the most important PL/SQL programming techniques on your own. Building on your hands-on learning, the authors share solutions that offer deeper insights and proven best practices. End-of-chapter projects bring together all the techniques you've learned, strengthening your understanding through real-world practice. This book's approach fully reflects the authors' award-winning experience teaching PL/SQL programming to professionals at Columbia University. New database developers and DBAs can use its step-by-step instructions to get productive fast; experienced PL/SQL programmers can use this book as a practical solutions reference. Coverage includes • Mastering basic PL/SQL concepts and general programming language fundamentals, and understanding SQL's role in PL/SQL • Using conditional and iterative program control techniques, including the new CONTINUE and CONTINUE WHEN statements • Efficiently handling errors and exceptions • Working with cursors and triggers, including Oracle 11g's powerful new compound triggers • Using stored procedures, functions, and packages to write modular code that other programs can execute • Working with collections, object-relational features, native dynamic SQL, bulk SQL, and other advanced PL/SQL capabilities • Handy reference appendices: PL/SQL formatting guide, sample database schema, ANSI SQL standards reference, and more

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

Write powerful SQL statements and PL/SQL programs Learn to access Oracle databases through SQL statements and construct PL/SQL programs with guidance from Oracle expert, Jason Price. Published by Oracle Press, Oracle Database 11g SQL explains how to retrieve and modify database information, use SQL Plus and SQL Developer, work with database objects, write PL/SQL programs, and much more. Inside, you'll find in-depth coverage of the very latest SQL features and tools, performance optimization techniques, advanced queries, Java support, and XML. This book contains everything you need to master SQL. Explore SQL Plus and SQL Developer Use SQL SELECT, INSERT, UPDATE, and DELETE statements Write PL/SQL programs Create tables, sequences, indexes, views, and triggers Write advanced queries containing complex analytical functions Create database objects and collections to handle abstract data Use large objects to handle multimedia files containing music and movies Write Java programs to access an Oracle Database using JDBC Tune your SQL statements to make them execute faster Explore the XML capabilities of the Oracle Database Master the very latest Oracle Database 11g features, such as PIVOT and UNPIVOT, flashback archives, and much more

Oracle Database 12c Release 2 Multitenant

Covers Versions Through Oracle Database 12c

Oracle Database 12c The Complete Reference

Optimizing Oracle Code

Beginning Oracle SQL

Murach's Oracle SQL and PL: SQL for Developers By Joel Murac

The authors have revised and updated this bestseller to include both the Oracle8i and new Oracle9i Internet-savvy database products.

Master Oracle Database 12c PL/SQL Application Development Develop, debug, and administer robust database programs. Filled with detailed examples and expert strategies from an Oracle ACE, *Oracle Database 12c PL/SQL Programming* explains how to retrieve and process data, write PL/SQL statements, execute effective queries, incorporate PHP and Java, and work with dynamic SQL. Code testing, security, and object-oriented programming techniques are fully covered in this comprehensive Oracle Press guide. Explore new SQL and PL/SQL features in *Oracle Database 12c Build control structures, cursors, and loop statements* Work with collections, varrays, tables, and associative array collections Locate and repair errors and employ exception handlers Execute black box, white box, and integration tests Configure and manage stored packages and libraries Handle security with authentication and encryption Use LOBs to store text and multimedia content Write and implement PL/SQL and Java triggers Extend functionality using dynamic SQL statements Understand object types, nested tables, and unnesting queries

A guide to the new features of Oracle Database 11g covers such topics as architectural changes, database administration upgrades, security enhancements, and programming innovations.

Oracle Database 12c PL/SQL Programming

SQL, PL/Sql & Administration

Expert Consolidation in Oracle Database 12c

Oracle Database Upgrade and Migration Methods

Mastering Oracle PL/SQL

Learn through this practical guide to SQL tuning how Oracle's own experts do it, using a freely downloadable tool called SQLTXPLAIN. This new edition has been expanded to include AWR, Oracle 12c Statistics, interpretation of SQL Monitor reports, Parallel execution, and Exadata-related features. Reading this book and using SQL helps you learn to tune even the most complex SQL, and you'll learn to do it quickly, without the huge learning curve usually associated with tuning as a whole. Firmly based in real-world problems, this book helps you reclaim system resources and avoid the most common bottleneck in overall performance, badly tuned SQL. You'll learn how the optimizer works, how to take advantage of its latest features, and when it's better to turn them off. Best of all, the book is updated to cover the very latest feature set in Oracle Database 12c. Covers AWR report integration Helps with SQL Monitor Report Interpretation Provides a reliable method that is repeatable Shows the very latest tuning features in Oracle Database 12c Enables the building of test cases without affecting production What You'll Learn Identify how and why complex SQL has gone wrong Correctly interpret AWR reports generated via SQLTXPLAIN Collect the best statistics for your environment Know when to invoke built-in tuning facilities Recognize when tuning is not the solution Spot the steps in a SQL statement's execution plan that are critical to performance of that statement Modify your SQL to solve performance problems and increase the speed and throughput of production database systems Who This Book Is For divAnyone who deals with SQL and SQL tuning. Both developers and DBAs will benefit from learning how to use the SQLTXPLAIN tool, and from the problem solving methodology in this book.

A Complete Study System for OCA Exam 1Z0-061 Prepare for the Oracle Certified Associate Oracle Database 12c SQL Fundamentals I exam with this Oracle Press guide. Each chapter features challenging exercises, a certification summary, a two-minute drill, and a self-test to reinforce the topics presented. This authoritative resource helps you pass the exam and also serves as an essential, on-the-job reference. Get complete coverage of all OCA objectives for exam 1Z0-061, including: Data retrieval using the SQL SELECT statement Restricting and sorting data Single-row functions Using conversion functions and conditional expressions Reporting aggregated data with the group functions Displaying data from multiple tables with joins Using subqueries to solve problems Using the set operators Manipulating data with DML statements Using DDL statements to create and manage tables Electronic content includes: 150+ practice exam questions with detailed answers and explanations Score report performance assessment tool

Oracle Database 12c Release 2 New Features

Oracle Database 12c Release 2 Performance Tuning Tips & Techniques

Oracle 10g Developer

Oracle PL / SQL For Dummies

Oracle PL/SQL Best Practices