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Database Object-Relational Developer's Guide

What's New in Object-Relational Features?

This section describes the new object-relational features of Oracle 11g release 1 (11.1). New features information from previous releases is also retained to help users upgrading to the current release.

The following sections describe the new features in Oracle Object-Relational Features:

- [Oracle Database 11g Release 2 \(11.2\) New Features in Object-Relational Features](#) ([a0c060u00](#))
- [Oracle Database 11g Release 1 \(11.1\) New Features in Object-Relational Features](#) ([a0c0u0000](#))
- [Oracle Database 10g Release 1 \(10.1\) New Features in Object-Relational Features](#) ([a0c000000](#))

Oracle Database 11g Release 2 (11.2) New Features in Object-Relational Features

FORCE Option Added to CREATE OR REPLACE TYPE Statement

`CREATE OR REPLACE TYPE` statements now have a `FORCE` option, which enables you to replace the type even if it has type dependents. This does not work without the `FORCE` option.

See Also:

"Using CREATE OR REPLACE TYPE with Type and Table Dependencies" ([a0dotgmg.htm#CH08A2H0](#))

Oracle Database 11g Release 1 (11.1) New Features in Object-Relational Features

Support for Generalized Invocation

Generalized invocation syntax is now supported. Therefore, a member method in a subtype can statically invoke (dispatch) a member method in any supertype in the supertype hierarchy of the current subtype, including the subtype's immediate supertype. See "Generalized Invocation" ([a0dotpas.htm#CH0F8D60](#)).

Oracle Database 10g Release 1 (10.1) New Features in Object-Relational Features

New object-relational features for Oracle 10g release 1 (10.1) include the following collection enhancements:

Nested Table and Varray Storage

New functionality for nested table and varray storage, including the evolution of varray size and specification of a tablespace when storing nested tables. See "Collection Data Types" ([a0dotjool.htm#A675560](#)).

Nested Table Comparisons and ANSI SQL Multiset Operations

New functionality for nested table comparisons and ANSI SQL multiset operations for nested tables. See "Operations on Collection Data Types" ([a0dotjool.htm#CH0U0A0](#)).

Oracle Database Application Developer Guide Object Relational Features

R.M. Menon



Oracle Database Application Developer Guide Object Relational Features:

Encyclopedia of Database Technologies and Applications Rivero, Laura C.,Doorn, Jorge Horacio,Ferraggine, Viviana E.,2005-06-30 Addresses the evolution of database management technologies and applications along with the progress and endeavors of new research areas P xiii *Handbook of Research on Innovations in Database Technologies and Applications: Current and Future Trends* Ferraggine, Viviana E.,Doorn, Jorge Horacio,Rivero, Laura C.,2009-02-28 This book provides a wide compendium of references to topics in the field of the databases systems and applications Provided by publisher

Oracle Database Programming using Java and Web Services Kuassi Mensah,2011-04-08 The traditional division of labor between the database which only stores and manages SQL and XML data for fast easy data search and retrieval and the application server which runs application or business logic and presentation logic is obsolete Although the books primary focus is on programming the Oracle Database the concepts and techniques provided apply to most RDBMS that support Java including Oracle DB2 Sybase MySQL and PostgreSQL This is the first book to cover new Java JDBC SQLJ JPublisher and Web Services features in Oracle Database 10g Release 2 the coverage starts with Oracle 9i Release 2 This book is a must read for database developers audience DBAs database applications developers data architects Java developers JDBC SQLJ J2EE and OR Mapping frameworks and to the emerging Web Services assemblers Describes pragmatic solutions advanced database applications as well as provision of a wealth of code samples Addresses programming models which run within the database as well as programming models which run in middle tier or client tier against the database Discusses languages for stored procedures when to use proprietary languages such as PL SQL and when to use standard languages such as Java also running non Java scripting languages in the database Describes the Java runtime in the Oracle database 10g i e OracleJVM its architecture memory management security management threading Java execution the Native Compiler i e NCOMP how to make Java known to SQL and PL SQL data types mapping how to call out to external Web components EJB components ERP frameworks and external databases Describes JDBC programming and the new Oracle JDBC 10g features its advanced connection services pooling failover load balancing and the fast database event notification mechanism for clustered databases RAC in Grid environments Describes SQLJ programming and the latest Oracle SQLJ 10g features contrasting it with JDBC Describes the latest Database Web services features Web services concepts and Services Oriented Architecture SOA for DBA the database as Web services provider and the database as Web services consumer Abridged coverage of JPublisher 10g a versatile complement to JDBC SQLJ and Database Web Services Oracle Essentials Rick Greenwald,Robert Stackowiak,Jonathan Stern,2004-02-11 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 Professional Oracle Programming Rick Greenwald,Robert Stackowiak,Gary Dodge,David Klein,Ben Shapiro,Christopher G. Chelliah,2005-06-08

One of the only Oracle books to focus exclusively on database programming rather than administration Oracle owns sixty percent of the commercial database market Provides full coverage of the latest Oracle version 10g including new features such as regular expressions and the MODEL SQL clause as well as versions 8 8i and 9i The authors are well known as Oracle gurus Greenwald is the author of Oracle in a Nutshell and the coauthor with Stackowiak of Oracle 9 Essentials Shows how to use Oracle data and data structures to build robust scalable database applications using Java SQL and PL SQL *Learning Oracle PL/SQL* Bill Pribyl, Steven Feuerstein, 2002 Learning Oracle PL SQL introduces PL SQL in a way that s useful to a variety of audiences beginning programmers new Oracle database administrators and developers familiar with other databases who now need to learn Oracle A consistent and understandable example application the development of a library s electronic catalog system runs through the chapters

Oracle PL/SQL Programming Steven Feuerstein, Bill Pribyl, 2014-01-23 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

Expert Oracle JDBC Programming R.M. Menon, 2006-11-01 JDBC is the most commonly used API in Java to access and manipulate data in a database Oracle is one of the most popular and scalable databases in the world This book is a must have for any developer building an application that employs JDBC on Oracle database Unlike other JDBC books this book has been written to complement not rehash the contents of Oracle JDBC documentation and the JDBC specification The book teaches you not just how to write JDBC code but how to write effective JDBC code in a step by step fashion This book does not assume any prior knowledge of JDBC though it does assume basic knowledge of SQL and PL SQL It covers JDBC with a focus on writing high performing scalable and secure applications for Oracle 10g and 9i

Oracle PL/SQL by Example Benjamin Rosenzweig, Elena Rakhimov, 2008-08-15 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 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

[Advances in Databases: Concepts, Systems and Applications](#) Ramamohanarao Kotagiri, P. Radha Krishna, Mukesh Mohania, Ekawit Nantajeewarawat, 2007-08-02 This book constitutes the refereed proceedings of the 12th International Conference on Database Systems for Advanced Applications DASFAA 2007 held in Bangkok Thailand April 2007 Coverage includes query language and query optimization data mining and knowledge discovery P2P and grid based data management XML databases database modeling and information retrieval Web and information retrieval database applications and security

Expert One-on-One Oracle Thomas Kyte, 2006-11-10 Thomas Kyte has a simple philosophy You can treat Oracle as a black box and shove data inside of it or you can learn how Oracle works and exploit it as a powerful computing environment If you choose the latter you will see there are few information management problems you cannot solve quickly and elegantly Kyte has selected the most important features and techniques to discuss in *Expert One on One Oracle* which he teaches in a proof by example manner He discusses available features implementing software using these features and avoiding potential pitfalls

Beginning Oracle SQL Tim Gorman, Inger Jorgensen, Melanie Caffrey, Lex deHaan, 2014-03-06 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

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Php Oracle Web Development Yuli Vasiliev,2007-07-30 This practical book for PHP Oracle developers is built around well explained easy to follow example code to build robust efficient secure solutions covering popular current topics on using PHP with Oracle Assuming no special skill level experienced author Yuli Vasiliev shows how to install and configure PHP and Oracle connect PHP to Oracle move application business logic to Oracle build transactional applications use security features improve performance with caching employ XML features implement SOAP web services build Ajax driven PHP Oracle solutions Building and deploying PHP applications on Oracle Database combines the power and robustness of Oracle with the easy rapid development of open source PHP to achieve high performance scalable reliable data driven web applications with minimal effort Unlike some other databases Oracle allows building the key business logic of PHP applications inside the database moving data processing from web server to database server *Proceedings 2004 VLDB Conference* VLDB,2004-09-17 Proceedings of the 30th Annual International Conference on Very Large Data Bases held in Toronto Canada on August 31 September 3 2004 Organized by the VLDB Endowment VLDB is the premier international conference on database technology *Oracle ADF Real World Developer's Guide* Jobinesh Purushothaman,2012-10-22 Become an ADF expert with essential tips n tricks and case studies for leveraging your ADF applications *Temporale Daten in Relationalen Und Objektrelationalen Datenbanken* Rinaldo Wurglitsch,2004-12-20 Diese Arbeit zeigt einen fur die Praxis gangbaren Weg zur Umsetzung zeitbezogener Daten in betrieblichen Informationssystemen auf Das vorgestellte Modell bietet dafur einen strukturierten Ansatz mit dem es moglich ist ohne Modifikation des DBMS Kerns und ohne eine Zwischenschicht z B Pre Compiler den temporalen Aspekt in gangigen kommerziellen DBMS angemessen zu berucksichtigen Das vorgestellte Modell

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Concise Guide to Databases Konstantinos Domdouzis, Peter Lake, Paul Crowther, 2021-05-20 Modern businesses depend on data for their very survival creating a need for sophisticated databases and database technologies to help store organise and transport their valuable data This updated and expanded easy to read textbook reference presents a comprehensive introduction to databases opening with a concise history of databases and of data as an organisational asset As relational database management systems are no longer the only database solution the book takes a wider view of database technology encompassing big data NoSQL object and object relational and in memory databases Presenting both theoretical and practical elements the new edition also examines the issues of scalability availability performance and security encountered when building and running a database in the real world Topics and features Presents review and discussion questions at the end of each chapter in addition to skill building hands on exercises Provides new material on database adaptiveness integration and efficiency in relation to data growth Introduces a range of commercial databases and encourages the reader to experiment with these in an associated learning environment Reviews use of a variety of databases in business environments including numerous examples Discusses areas for further research within this fast moving domain With its learning by doing approach supported by both theoretical and practical examples this clearly structured textbook will be of great value to advanced undergraduate and postgraduate students of computer science software engineering and information technology Practising database professionals and application developers will also find the book an ideal reference that addresses today's business needs

Astroparticle, Particle and Space Physics, Detectors and Medical Physics Applications Maura Barone, Emilio Borch, 2004 Astroparticle and space physics Calorimetry High energy physics Medical applications New detectors and particle identification Open session on experimental results Radiation damage Tracker

Oracle SQL and PL/SQL Handbook John Adolph Palinski, 2002 CD ROM contains Practice database Sample scripts reference in text

Reviewing **Oracle Database Application Developer Guide Object Relational Features**: Unlocking the Spellbinding Force of Linguistics

In a fast-paced world fueled by information and interconnectivity, the spellbinding force of linguistics has acquired newfound prominence. Its capacity to evoke emotions, stimulate contemplation, and stimulate metamorphosis is truly astonishing. Within the pages of "**Oracle Database Application Developer Guide Object Relational Features**," an enthralling opus penned by a very acclaimed wordsmith, readers set about an immersive expedition to unravel the intricate significance of language and its indelible imprint on our lives. Throughout this assessment, we shall delve to the book is central motifs, appraise its distinctive narrative style, and gauge its overarching influence on the minds of its readers.

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