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# Oracle Database 12c Managing Multitenant Architecture

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Oracle Database 12c New Features  
OCA/OC P Oracle Database 12c All-in-One Exam  
Guide (Exams 1Z0-061, 1Z0-062, & 1Z0-063)  
Manage and Safeguard Your Organization's Data  
Oracle Database 12c Release 2 In-Memory: Tips  
and Techniques for Maximum Performance  
Oracle Database 12c Db a Handbook  
Oracle Database 12c Security Cookbook  
The Cloud DBA-Oracle  
Oracle on IBM Z  
Building Database Clouds in Oracle 12c  
A Lazy DBA's Guide to Mastering Multitenant  
Features on Oracle Cloud  
Oracle Database Upgrade and Migration Methods  
Pro Oracle Database 12c Administration  
How Oracle's New Architecture Simplifies  
Database Consolidation!  
Oracle Certification Upgrade to Oracle Database  
12c Practice Questions & Dumps  
Oracle Application Express Administration  
OCA: Oracle Database 12c Administrator Certified  
Associate Study Guide

Oracle Database 12c Security  
Bridging Relational and NoSQL Databases  
Managing Oracle Database in the Cloud  
OCP Upgrade to Oracle Database 12c Exam Guide  
(Exam 1Z0-060)  
Pro Oracle Database 18c Administration  
Exams 1Z0-061 and 1Z0-062  
Including Oracle 12c Release 2  
Oracle Database 12c DBA Handbook  
OCP Oracle Database 12c Advanced  
Administration Exam Guide (Exam 1Z0-063)  
Oracle Database 12c Release 2 Multitenant  
Cdb, Pdb and the Multitenant World  
The Introduction to Private Cloud using Oracle  
Exadata and Oracle Database  
Oracle 12c For Dummies  
Experiences with Oracle Database 12c Release 1  
on Linux on System z  
Oracle Database 12c  
For DBAs and Developers  
Advanced Oracle PL/SQL Developer's Guide  
100+ Exam practice questions for Oracle 1Z0-060  
Updated 2020  
Oracle on LinuxONE  
From Novice to Professional  
Oracle Database 12c DBA Handbook  
OCP 12c Upgrade 1Z0-060 Exam Guide  
ORACLE DATA BASE. Advanced Administration  
with SQL

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## **MURRAY ASHLEY**

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Oracle Database 12c New Features Apress  
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

*OCA/OCP Oracle Database 12c All-in-One Exam Guide (Exams 1Z0-061, 1Z0-062, & 1Z0-063)*

CRC Press

Master Oracle Database 12c Release 2's powerful In-Memory option This Oracle Press guide shows, step-by-step, how to

optimize database performance and cut transaction processing time using Oracle Database 12c Release 2 In-Memory. Oracle Database 12c Release 2 In-Memory: Tips and Techniques for Maximum Performance features hands-on instructions, best practices, and expert tips from an Oracle enterprise architect. You will learn how to deploy the software, use In-Memory Advisor, build queries, and interoperate with Oracle RAC and Multitenant. A complete chapter of case studies illustrates real-world applications.

- Configure Oracle Database 12c and construct In-Memory enabled databases
- Edit and control In-Memory options from the graphical interface

- Implement In-Memory with Oracle Real Application Clusters
- Use the In-Memory Advisor to determine what objects to keep In-Memory
- Optimize In-Memory queries using groups, expressions, and aggregations
- Maximize performance using Oracle Exadata Database Machine and In-Memory option
- Use Swingbench to create data and simulate real-life system workloads

**Manage and Safeguard Your Organization's Data**

Apres  
Succeed in managing Oracle Application Express (APEX) environments. This book focuses on creating the right combination of scalability, high-availability, backup

and recovery, integrity, and resource control. The book covers everything from simple to enterprise-class deployments, with emphasis on enterprise-level requirements and coverage of cloud and hybrid-cloud scenarios. Many books cover how to develop applications in Oracle APEX. It's a tool with a fast-growing user-base as developers come to know how quick and easy it is to create new applications that run in a browser. However, just getting an application off the ground is only a small part of a bigger picture. Applications must be supported. They must be available when users need them. They must be robust against disaster and secure against

malicious attack. These are the issues addressed in Oracle Application Express Administration. These are the issues that when tackled successfully lead to long term success in using Oracle APEX as a rapid application-development toolset. Readers of this book learn how to install the Oracle APEX engine in support of small-scale projects such as at the departmental level, and in support of enterprise-level projects accessed by thousands of users across dozens of time zones. Readers learn to take advantage of Oracle Database's underlying feature set in regards to application scalability and performance, integrity, security, high-availability, and

robustness against failure and data loss. Oracle Application Express Administration also describes different cloud solutions, integration with Oracle E-Business Suite, and helps in taking advantage of multitenancy in Oracle Database 12c and beyond. Covers important enterprise considerations such as scalability, robustness, high-availability. Describes cloud-based application deployment scenarios Focuses on creating the right deployment environment for long-term success What You Will Learn Install, upgrade, and configure robust APEX environments Back up and recover APEX applications and their data Monitor and tune the APEX engine and

its applications Benefit from new administration features in APEX 5.0 Run under multi-tenant architecture in Oracle Database 12c Manage the use of scarce resources with Resource Manager Secure your data with advanced security features Build high-availability into your APEX deployments Integrate APEX with Oracle E-Business Suite Who This Book Is For Architects, administrators, and developers who want to better understand how APEX works in a corporate environment. Readers will use this book to design deployment architectures around Oracle Database strengths like multi-tenancy, resource management, and high

availability. The book is also useful to administrators responsible for installation and upgrade, backup and recovery, and the ongoing monitoring of the APEX engine and the applications built upon it.

**Oracle Database 12c Release 2 In-Memory: Tips and Techniques for Maximum**

**Performance** McGraw Hill Professional Maintain a high-performance Oracle Database using the best practices and expert techniques in this Oracle Press guide. Oracle Database 12c DBA Handbook is thoroughly updated to cover the new features and utilities, including the multitenant architecture, Oracle Database In-Memory

option, and cloud enhancements. Real-world examples for every major configuration are included. You'll learn how to successfully manage a highly available, robust, secure, and extensible Oracle enterprise database environment. Oracle Database 12c Dba Handbook Apress Oracle Database 12c is the newest version of the Oracle flagship product. Arguably the biggest new feature for Oracle Database, Multitenant ushers in a totally new database architecture for Oracle. This book first provides an introduction to the Multitenant architecture. Then it takes the reader through the process of creating an Oracle database capable of creating the keystone

of the multitenant database - the Pluggable Database. The reader will also learn how to administer the multitenant database. They will learn about a new type of Oracle user called the common user. The reader will learn how to create a common user and manage security issues related to common users and PDBs. Chapter of Contents for Book One:  
 1INTRODUCTION TO ORACLE MULTITENANT  
 2CREATING THE CDB  
 3CREATING AND REMOVING PDBS  
 4ADMINISTRATION OF CDB AND PDB DATABASES  
 5BASIC USER AND ADMINISTRATION OF MULTITENANT DATABASES  
**Oracle Database 12c Security Cookbook**

McGraw Hill Professional Beginning Oracle Database 12c Administration is your entry point into a successful and satisfying career as an Oracle Database Administrator. The chapters of this book are logically organized into four parts closely tracking the way your database administration career will naturally evolve. Part 1 "Database Concepts" gives necessary background in relational database theory and Oracle Database concepts, Part 2 "Database Implementation" teaches how to implement an Oracle database correctly, Part 3 "Database Support" exposes you to the daily routine of a database

administrator, and Part 4 "Database Tuning" introduces the fine art of performance tuning. Beginning Oracle Database 12c Administration provides information that you won't find in other books on Oracle Database. You'll discover not only technical information, but also guidance on work practices that are as vital to your success as are your technical skills. The author's favorite chapter is "The Big Picture and the Ten Deliverables." (It is the editor's favorite chapter too!) If you take the lessons in that chapter to heart, you can quickly become a much better Oracle database administrator than you ever thought possible. You will grasp the key aspects of theory behind

relational database management systems and learn how to:

- Install and configure an Oracle database, and ensure that it's properly licensed;
- Execute common management tasks in a Linux environment;
- Defend against data loss by implementing sound backup and recovery practices; and
- Improve database and query performance.

The Cloud DBA-Oracle  
CRC Press

Oracle Database In-Memory delivers leading-edge in-memory performance without the need to restrict functionality or accept compromises, complexity and risk. Deploying Oracle Database In-Memory with virtually any existing Oracle Database compatible

application is as easy as flipping a switch--no application changes are required. It is fully integrated with Oracle Database's scale-up, scale-out, storage tiering, availability and security technologies making it the most industrial-strength offering in the industry. Oracle Database In-Memory accelerate database performance by orders of magnitude for analytics, data warehousing, and reporting while also speeding up online transaction processing (OLTP). Allow any existing Oracle Database-compatible application to automatically and transparently take advantage of columnar in-memory processing, without additional programming or application changes.

With Oracle Database In-Memory is possible fast ad-hoc analytics without the need to pre-create indexes, completely transparent to existing applications, faster mixed workload OLTP, no database size limit, industrial strength availability and security and robustness and maturity of Oracle Database 12c. Oracle Database In-Memory's ability to easily perform real-time data analysis together with real-time transaction processing enables organizations to become Real-Time Enterprises: Enterprises that quickly make data-driven decisions, respond instantly to customer demands, and continuously optimize all key business

processes to maximize profitability. The most important content of the book is as follows:  
ORACLE DATA BASE IN-MEMORY. ESSENTIAL CHARACTERISTICS  
ORACLE DATABASE 12C IN-MEMORY ARCHITECTURE HANA AND ORACLE DATABASE 12C ORACLE DATABASE IN-MEMORY OPTION ROW FORMAT VS. COLUMN FORMAT THE IN-MEMORY COLUMN STORE POPULATING THE IN-MEMORY COLUMN STORE RESTRICTIONS IN-MEMORY COMPRESSION IN-MEMORY SCANS IN-MEMORY JOINS IN-MEMORY AGGREGATION DML AND THE IN-MEMORY COLUMN STORE PARTITION EXCHANGE LOADS TRANSACTION PROCESSING THE IN-

MEMORY COLUMN  
 STORE ON RAC IN-  
 MEMORY FAULT  
 TOLERANCE THE IN-  
 MEMORY COLUMN  
 STORE IN A  
 MULTITENANT  
 ENVIRONMENT  
 CONTROLLING THE USE  
 OF ORACLE DATABASE  
 IN-MEMORY OPTIMIZER  
 HINTS IN-MEMORY  
 SCAN IN-MEMORY  
 JOINS IN-MEMORY  
 AGGREGATION  
 MONITORING AND  
 MANAGING ORACLE  
 DATABASE IN-MEMORY  
 IN-MEMORY COLUMN  
 STORE. EXAMPLES  
 MANAGING TABLES  
 MANAGING COLUMNS  
 MANAGING  
 MATERIALIZED VIEWS  
 MANAGING  
 TABLESPACES VIEWS  
 WORKING WITH  
 ORACLE DATABASE IN-  
 MEMORY SOFTWARE  
 ORACLE DATABASE IN-  
 MEMORY. EXAMPLES  
 ORACLE DATABASE

SOFTWARE  
 INTRODUCTION AND  
 INSTALLATION  
**Oracle on IBM Z**  
 Packt Publishing Ltd  
 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 Building Database Clouds in Oracle 12c "O'Reilly Media, Inc." Relational databases have been predominant for many years and are used throughout various industries. The current system faces challenges related to size and variety of data thus the NoSQL databases emerged. By joining these two database models, there is room for crucial developments in the field of computer

science. Bridging Relational and NoSQL Databases is an innovative source of academic content on the convergence process between databases and describes key features of the next database generation. Featuring coverage on a wide variety of topics and perspectives such as BASE approach, CAP theorem, and hybrid and native solutions, this publication is ideally designed for professionals and researchers interested in the features and collaboration of relational and NoSQL databases.

**A Lazy DBA's Guide to Mastering Multitenant Features on Oracle Cloud** McGraw Hill Professional  
 Publisher's Note:

Products purchased from Third Party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitlements included with the product. The Most Complete, Current Oracle DBA Resource Maintain a high-performance Oracle Database using the best practices and expert techniques in this Oracle Press guide. Oracle Database 12c DBA Handbook is thoroughly updated to cover the new features and utilities, including the multitenant architecture, Oracle Database In-Memory option, and cloud enhancements. Real-world examples for every major configuration are included. You'll learn how to successfully manage a highly

available, robust, secure, and extensible Oracle enterprise database environment. Upgrade to Oracle Database 12c Plan and manage tablespaces Maximize database performance using effective physical database layouts and storage management methods Monitor disk space used by database objects Manage transactions with undo tablespaces Implement expert performance-tuning techniques Increase query speed using the new Oracle Database In-Memory option Manage database security through authentication, authorization, and auditing Take full advantage of the multitenant database architecture Enable high availability and

scalability with Oracle Real Application Clusters and Oracle Active Data Guard Perform backup and recovery with Oracle Recovery Manager Manage distributed databases and VLDBs

**Oracle Database Upgrade and Migration Methods**

Apress  
A Fully Integrated Study System for OCP Exam 1Z0-060 Prepare for the Oracle Certified Professional Upgrade to Oracle Database 12c exam with this exclusive Oracle Press guide. Each chapter features step-by-step examples, 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 the new features of Oracle Database 12c, including: Oracle Enterprise Manager Database Express and additional tools for database monitoring Multitenant container databases and pluggable databases Auditing, administrative privileges, data redaction, and other Oracle security features Adaptive execution plans, adaptive statistics, and automatic SQL plan management Oracle Recovery Manager backup and recovery improvements Oracle Database Resource Manager and other performance enhancements Oracle Data Pump, SQL\*Loader, external

tables, and online operations enhancements  
Improvements to information lifecycle management and storage, including automatic data optimization, in-database archiving, and temporal validity  
Electronic content includes: 170 practice exam questions with detailed answer explanations  
*Pro Oracle Database 12c Administration*  
Lulu Press, Inc  
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

[How Oracle's New Architecture Simplifies Database Consolidation!](#) IBM Redbooks

Protecting Oracle Database 12c helps you solve the problem of maximizing the safety, resilience, and security of an Oracle database whilst preserving performance, availability, and integration despite ongoing and new security issues in the software. The book demonstrates, through coded examples, how

you can enable the consolidation features of Oracle Database 12c without increasing risk of either internal corruption or external vulnerability. In addition, new protections not publicly available are included, so that you can see how demonstrable risk improvements can be achieved, measured, and reported through Enterprise Manager 12c. Most importantly, the challenge of privileged access control within a consolidation environment will be addressed, thus enabling a safe move to greater efficiency.

*Oracle Certification Upgrade to Oracle Database 12c Practice Questions & Dumps*  
John Wiley & Sons  
Oracle Database 12c Release 2

MultitenantMcGraw Hill  
Professional

**Oracle Application**

**Express**

**Administration** Pascal  
Books

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.

*OCA: Oracle Database 12c Administrator Certified Associate Study Guide* McGraw Hill Professional

This book focuses on range of Oracle Database 12c Release 2 Multitenant features on Oracle Cloud, including faster PDB cloning with no downtime, tighter resource control at the PDB level, ILM Automatic Data Optimization (ADO) policies for PDBs using Heat Maps, and even FLASHBACK recovery for individual PDBs.

This book explores the latest features of Oracle Database 12cR1 and 12cR2 Multitenant option and provides practical, hands-on experience; as well as numerous code examples that can

immediately be leveraged when deploying, upgrading to, and migrating to CDBs and PDBs with zero downtime. This book also demonstrates compelling Multitenant features such as:\*  
 Migrating Databases to Oracle Cloud\* How to Perform Extreme Consolidation with Oracle PDBs \* How to Deal with Oracle Wallets in Oracle Cloud\* Application Containers: Isolating Applications from Each Other\* Juggling Hot PDBs: Multitenant Migration Techniques\* Implementing PDB Memory, CPU, I/O, and Other Resource Limits\* Hot Data, Cold Data: Leveraging ILM and ADO for PDBs  
*Oracle Database 12c Security* Addison-Wesley Professional

An updated guide for an updated certification exam! As the most popular database software in the world, Oracle Database 12c has been updated for the first time in nearly six years and the changes are significant. This study guide reviews how Oracle 12c allows multiple instances to be used simultaneously via the cloud. You'll sharpen your skills to prepare for the three levels of certification: Oracle Certified Associate, Oracle Certified Professional, and Oracle Certified Master. Workbook exercise appendix, test engine, chapter review questions, electronic flashcards, searchable PDF glossary, and two

bonus practice exams all help to enhance your preparation to take the Oracle 12c exam. Addresses such topics as: database architecture, configuring and recoverability, configuring backup specifications, and performing user-managed backup and recovery. Reviews how to use RMAN to create backups, perform recovery, and duplicate a database. Looks at performing tablespace point-in-time recovery and using flashback technology. Covers diagnosing the database, managing memory, managing resources, and automating tasks. Focusing 100 percent on the exam objectives, OCP: Oracle Database 12c Administrator Certified

Professional Study Guide is designed for those who feel they are ready to attempt this challenging exam.

### **Bridging Relational and NoSQL**

**Databases** Apress Private clouds allow for managing multiple databases under one roof, avoiding unnecessary resource management. Private cloud solutions can be applied in sectors such as healthcare, retail, and software. The Introduction to Private Cloud using Oracle Exadata and Oracle Database will explore the general architecture of private cloud databases with a focus on Oracle's Exadata database machine. The book describes the private cloud using fundamental-level Exadata and database.

Exadata has been Oracle's pioneer product for almost a decade. In the last few years, Oracle has positioned Exadata for customers to consume as a cloud service. This book will provide a timely introduction to Exadata for current and potential Oracle customers and other IT professionals.

### **Managing Oracle Database in the Cloud**

McGraw Hill Professional Written by Oracle insiders, this indispensable guide distills an enormous amount of information about the Oracle Database into one compact volume. Ideal for novice and experienced DBAs, developers, managers, and users, Oracle Essentials walks you through technologies

and features in Oracle's product line, including its architecture, data structures, networking, concurrency, and tuning. Complete with illustrations and helpful hints, this fifth edition provides a valuable one-stop overview of Oracle Database 12c, including an introduction to Oracle and cloud computing. Oracle Essentials provides the conceptual background you need to understand how Oracle truly works. Topics include: A complete overview of Oracle databases and data stores, and Fusion Middleware products and features Core concepts and structures in Oracle's architecture, including pluggable databases Oracle objects and the

various datatypes Oracle supports System and database management, including Oracle Enterprise Manager 12c Security options, basic auditing capabilities, and options for meeting compliance needs Performance characteristics of disk, memory, and CPU tuning Basic principles of multiuser concurrency Oracle's online transaction processing (OLTP) Data warehouses, Big Data, and Oracle's business intelligence tools Backup and recovery, and high availability and failover solutions Apress 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