Oracle® Database

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Preface

This document, which is part of the Program Documentation under the terms of your Oracle licensing agreement, is intended to help you understand the features, functionality, and options available for Oracle Programs. If you have a question about your licensing needs, please contact your Oracle sales representative, contact the License Management Services representative at

http://www.oracle.com/us/corporate/license-management-services/index.html, or refer to the resources listed in "Related Documents" on page 2-vi for more information.

Oracle Database 11*g* is available in multiple editions, each suitable for different development and deployment scenarios.

Oracle also offers several database options and packs that enhance the capabilities of Oracle Database for specific application requirements. *Oracle Database Licensing Information* provides information on these optional database products.

This Preface contains these topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

This book is intended for all purchasers of Oracle Database 11g.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

For more information, see these Oracle resources:

- Oracle Database New Features Guide for information on the features new to this release of Oracle Database
- The Software Investment Guide, available at:

http://www.oracle.com/us/corporate/pricing/index.html

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Oracle Database Editions

This chapter describes Oracle Database editions and the features available with those editions. It contains the following sections:

- The Oracle Database Product Family
- Feature Availability by Edition
- Features Specific to Exadata, ZFS, and Pillar Axiom 600 Storage Platforms
- Features Specific to the Windows Platform
- Special-Use Licensing

The Oracle Database Product Family

Oracle Database is available in five editions, each suitable for different development and deployment scenarios. Oracle also offers several database options, packs, and other products that enhance the capabilities of Oracle Database for specific purposes. This section describes the Oracle Database editions. The database options and associated products are described in Chapter 2, "Options and Packs".

Oracle Database Standard Edition One Oracle Database Standard Edition One delivers unprecedented ease of use, power, and performance for workgroup, department-level, and Web applications. From single-server environments for small business to highly distributed branch environments, Oracle Database Standard Edition One includes all the facilities necessary to build business-critical applications.

Oracle Database Standard Edition Oracle Database Standard Edition delivers the unprecedented ease of use, power, and performance of Standard Edition One, with support for larger machines and clustering of services with Oracle Real Application Clusters (Oracle RAC). Oracle RAC is not included in the Standard Edition of releases prior to Oracle Database 10g, nor is it an available option with those earlier releases.

Oracle Database Enterprise Edition Oracle Database Enterprise Edition provides the performance, availability, scalability, and security required for mission-critical applications such as high-volume online transaction processing (OLTP) applications, query-intensive data warehouses, and demanding Internet applications. Oracle Database Enterprise Edition contains all of the components of Oracle Database, and can be further enhanced with the purchase of the options and packs described in Chapter 2, "Options and Packs".

Oracle Database Express Edition Oracle Database Express Edition (Oracle Database XE) is an entry-level edition of Oracle Database that is quick to download, simple to install and manage, and is free to develop, deploy, and distribute. Oracle Database XE

makes it easy to upgrade to the other editions of Oracle without costly and complex migrations. Oracle Database XE can be installed on any size machine with any number of CPUs, stores up to 11 GB of user data, using up to 1 GB of memory, and using only one CPU on the host machine. Support is provided by an online forum.

Oracle Database Personal Edition Oracle Database Personal Edition supports single-user development and deployment environments that require full compatibility with Oracle Database Standard Edition One, Oracle Database Standard Edition, and Oracle Database Enterprise Edition. Personal Edition includes all of the components that are included with Enterprise Edition, as well as all of the options that are available with Enterprise Edition, with the exception of the Oracle Real Application Clusters option, which cannot be used with Personal Edition. Personal Edition is available on Windows and Linux platforms only. The Management Packs are not included in Personal Edition.

Feature Availability by Edition

Table 1–1 lists feature availability for Oracle Database Standard Edition One (SE1), Standard Edition (SE), and Enterprise Edition (EE). The Y value in a column means that the feature is available in the specified release; N means that it is unavailable. This table can help you understand the difference between the editions and determine whether you require Enterprise Edition (or Personal Edition for a single-user environment).

Note that Oracle Database XE is a separate product from the rest of the Oracle Database product family. The features available with Oracle Database XE are documented in Oracle Database Express Edition Licensing Information, which is installed along with the product itself.

Table 1–1 Feature Availability for Oracle Database Editions

Feature/Option	SE1	SE	EE	Notes
High Availability				
Oracle Fail Safe	Y	Y	Y	Windows only
Oracle RAC One Node	N	N	Y	Extra cost option
Oracle Data Guard—Redo Apply	N	N	Y	
Oracle Data Guard—SQL Apply	N	N	Y	
Oracle Data Guard—Snapshot Standby	N	N	Y	
Oracle Active Data Guard	N	N	Y	Extra cost option
Rolling Upgrades—Patch Set, Database, and Operating System	N	N	Y	
Online index rebuild	N	N	Y	
Online index-organized table organization	N	N	Y	ALTER TABLE MOVE ONLINE operations
Online table redefinition	N	N	Y	Using the DBMS_REDEFINITION package
Duplexed backup sets	N	N	Y	
Block change tracking for fast incremental backup	N	N	Y	
Unused block compression in backups	N	N	Y	

Table 1–1 (Cont.) Feature Availability for Oracle Database Editions

Feature/Option	SE1	SE	EE	Notes
Block-level media recovery	N	N	Y	
Lost Write Protection	N	N	Y	
Automatic Block Repair	N	N	Y	Requires Oracle Active Data Guard option
Parallel backup and recovery	N	N	Y	
Tablespace point-in-time recovery	N	N	Y	
Trial recovery	N	N	Y	
Fast-start fault recovery	N	N	Y	
Flashback Table	N	N	Y	
Flashback Database	N	N	Y	
Flashback Transaction	N	N	Y	
Flashback Transaction Query	N	N	Y	
Optimization for Flashback Data Archive history tables	N	N	Y	For releases earlier than Oracle Database 11g Release 2 (11.2.0.4): You must license the Oracle Advanced Compression option to use Flashback Data Archive (formerly known as Total Recall).
				Beginning with Oracle Database 11g Release 2 (11.2.0.4): You must license the Oracle Advanced Compression option to use Optimization for Flashback Data Archive history tables. Basic Flashback Data Archive—without history table optimization—is available in all editions.
Scalability				
Oracle Real Application Clusters	N	Y	Y	Extra cost with EE, included with SE
Automatic Workload Management	N	Y	Y	Requires Oracle Real Application Clusters
Quality of Service Management	N	N	Y	Requires Oracle Real Application Clusters
Oracle NoSQL Database Basic Edition	N	N	Y	
Performance				
Client Side Query Cache	N	N	Y	
Query Results Cache	N	N	Y	
PL/SQL Function Result Cache	N	N	Y	
	» T	N	Y	Extra cost option
TimesTen Application-Tier Database Cache	N	1 N	1	Extra cost option
TimesTen Application-Tier Database Cache Database Smart Flash Cache	N N	N	Y	Solaris and Oracle Linux only

Table 1–1 (Cont.) Feature Availability for Oracle Database Editions

Feature/Option	SE1	SE	EE	Notes
Security				
Oracle Advanced Security	N	N	Y	Extra cost option
Oracle Database Vault	N	N	Y	Extra cost option
Oracle Label Security	N	N	Y	Extra cost option
Enterprise User Security	N	N	Y	Enterprise User Security is an EE feature for directory-based management of database users. It does require a corresponding Oracle Identity Management Directory Services Plus to be licensed.
				Usage of Enterprise User Security with Oracle Database strong authentication (PKI, Kerberos) no longer requires Oracle Advanced Security to be licensed.
Fine-grained auditing	N	N	Y	
Real Application Security	N	N	Y	
Virtual Private Database	N	N	Y	
Development Platform				
SQLJ	Y	Y	Y	Requires Oracle Programmer
Oracle Developer Tools for Visual Studio .NET	Y	Y	Y	Windows only
Microsoft Distributed Transaction Coordinator support	Y	Y	Y	Windows only
Active Directory integration	Y	Y	Y	Windows only
Native .NET Data Provider—ODP.NET	Y	Y	Y	Windows only
.NET Stored Procedures	Y	Y	Y	Windows only
Manageability				
Oracle Change Management Pack	N	N	Y	Extra cost option
Oracle Configuration Management Pack	N	N	Y	Extra cost option
Oracle Data Masking and Subsetting Pack	N	N	Y	Extra cost option
Oracle Diagnostics Pack	N	N	Y	Extra cost option
Oracle Provisioning and Patch Automation Pack	N	N	Y	Extra cost option
Oracle Tuning Pack	N	N	Y	Extra cost option, also requires the Diagnostics Pack
Oracle Real Application Testing	N	N	Y	Extra cost option
Database Resource Manager	N	N	Y	
Instance Caging	N	N	Y	
SQL Plan Management	N	N	Y	

Table 1–1 (Cont.) Feature Availability for Oracle Database Editions

Feature/Option	SE1	SE	EE	Notes
SQL Tuning Sets	N	N	Y	SQL Tuning Sets can also be accessed by way of database server APIs and command-line interfaces. The following subprograms, part of the DBMS_SQLTUNE package, provide an interface to manage SQL Tuning Sets and are part of Oracle Database Enterprise Edition: ADD_SQLSET_REFERENCE, CAPTURE_CURSOR_CACHE_SQLSET, CREATE_SQLSET, CREATE_STGTAB_SQLSET, DELETE_SQLSET, DROP_SQLSET, LOAD_SQLSET, PACK_STGTAB_SQLSET, REMOVE_SQLSET_REFERENCE, SELECT_CURSOR_CACHE, SELECT_SQLSET, SELECT_WORKLOAD_REPOSITORY, UNPACK_STGTAB_SQLSET, UPDATE_SQLSET.
VLDB, Data Warehousing, Business Intelligence				
Oracle Partitioning	N	N	Y	Extra cost option
Oracle OLAP	N	N	Y	Extra cost option
Oracle Advanced Analytics	N	N	Y	Extra cost option
				Oracle R Enterprise Server is limited to operation on Oracle Linux 5 Update 6 or higher and Red Hat Enterprise Linux 5 Update 6 or higher
Oracle Advanced Compression	N	N	Y	Extra cost option
Key Compression	N	N	Y	
Hybrid Columnar Compression	N	N	Y	Requires Exadata, ZFS, or Pillar Axiom 600 storage
Exadata Flash Cache Compression	N	N	Y	Requires the Advanced Compression option
Basic Table Compression	N	N	Y	
Deferred Segment Creation	N	N	Y	
Bitmapped index, bitmapped join index, and bitmap plan conversions	N	N	Y	
Parallel query/DML	N	N	Y	
Parallel statistics gathering	N	N	Y	
Parallel index build/scans	N	N	Y	
Parallel Data Pump Export/Import	N	N	Y	
In-memory Parallel Execution	N	N	Y	
Parallel Statement Queuing	N	N	Y	

Table 1–1 (Cont.) Feature Availability for Oracle Database Editions

Feature/Option	SE1	SE	EE	Notes
Parallel capture and apply via XStream	N	N	Y	
Transportable tablespaces, including cross-platform	N	N	Y	Import of transportable tablespaces supported into SE SE1, and EE
Summary management—Materialized View Query Rewrite	N	N	Y	
Asynchronous Change Data Capture	N	N	Y	
Integration				
Basic Replication	Y	Y	Y	SE1/SE: read-only, updateable materialized view
Advanced Replication	N	N	Y	Multi-master replication
Oracle Streams	Y	Y	Y	SE1/SE: no capture from redo
Database Gateways	Y	Y	Y	Separate product license
Messaging Gateway	N	N	Y	
Networking				
Oracle Connection Manager	N	N	Y	Available via a custom install of the Oracle Database client, usually installed on a separate machine
				See "Oracle Connection Manager" on page 1-8 for more information
Infiniband Support	N	N	Y	
Content Management				
Oracle Spatial and Graph	N	N	Y	Extra cost option
Semantic Technologies (RDF/OWL)	N	N	Y	Requires the Oracle Spatial and Graph option and the Oracle Partitioning option
Spatial and Location Data				
Parallel spatial index builds	N	N	Y	
Multimaster replication of SDO_GEOMETRY objects	N	N	Y	Single master/materialized view replication for SDO_ GEOMETRY objects is supported with both Standard Edition and Enterprise Edition
Partitioned spatial indexes	N	N	Y	Requires the Oracle Partitioning option

Features Specific to Exadata, ZFS, and Pillar Axiom 600 Storage **Platforms**

Hybrid Columnar Compression is a feature of the Enterprise Edition of Oracle Database 11g that is dependent on the underlying storage system. Only Exadata storage, ZFS storage, and Pillar Axiom 600 storage support Hybrid Columnar Compression. On storage platforms other than those previously mentioned, Hybrid Columnar Compression is not available, and no right to use Hybrid Columnar Compression is granted by a license of the Oracle Database.

Features Specific to the Windows Platform

The following features related to application development are available only on Windows platforms:

- **COM Automation**
- Microsoft Transaction Server/COM+ integration
- Oracle OLE DB Provider
- Oracle Objects for OLE (OO4O)
- **VLM Support**
- OLE DB.NET and ODBC.NET support
- Native .NET Data Provider ODP.NET
- Oracle Database Extensions for .NET (.NET Stored Procedures)

Special-Use Licensing

Oracle Database Express Edition

Oracle Database Express Edition may be used for free, for the purposes of developing, prototyping and running applications. It can also be used for free to provide demonstrations and training. It may also be distributed for free with any applications. However, any use of the Oracle Database Express Edition is subject to the following limitations:

- Express Edition is limited to a single instance on any server.
- Express Edition may be installed on a multiple CPU server, but may only be executed on one processor in any server.
- Express Edition may be used only to support up to 11 GB of user data (not including Express Edition system data).
- Express Edition may use up to 1 GB RAM of available memory.

The Oracle technical support organization will not provide technical support, phone support, or updates for Oracle Database Express Edition.

Oracle Database Standard Edition and Oracle Real Application Clusters (Oracle RAC)

When used with Oracle Real Application Clusters in a clustered server environment, Oracle Database Standard Edition requires the use of Oracle Clusterware. Third-party clusterware management solutions are not supported.

The license restrictions for Standard Edition must be adhered to. The maximum number of CPUs defined is for the entire cluster; it is not a per node maximum.

Oracle Automatic Storage Management or the ASM Cluster File System (ACFS) is required for creating and managing all Oracle database file types. Raw volumes, partitions, or third-party cluster file systems are not supported for storing Oracle database files with Oracle Standard Edition and Oracle RAC. Refer to Oracle Automatic Storage Management Administrator's Guide for a comprehensive list of all database file types.

ASM Cluster File System (ACFS) or a local OS file system must be used to store all non-database files. No Oracle-maintained copies of any non-database files can exist in any other locations, with the following exceptions:

- 1. Customers who want to manually script maintenance of a standby database can create a second copy of their archive logs outside of Oracle ASM on a local file system only, designated by the LOG_ARCHIVE_DEST_n parameter.
- 2. RMAN backups of files can reside on either a local or network mounted file

No other cluster software can be installed on the system, including OCFS, OCFS2, third-party clusterware, third-party cluster volume managers, and third-party cluster file systems.

Oracle Data Guard Broker

You can install the broker command line interface DGMGRL and run the observer software on computer systems that are separate from the Oracle Data Guard primary and standby systems. It is not necessary to obtain a separate license for a system hosting the observer.

Oracle Database Vault

When Oracle Database Vault is configured and enabled, it configures and enables Oracle Label Security. Oracle Label Security is solely restricted for use by the Oracle Database Vault software. If you want to create Oracle Label Security policies, then you must purchase a full-use license for Oracle Label Security.

Oracle Database Vault and Oracle9i Database Release 2 (9.2.0.8)

A separate Oracle Database 11g can be installed and used to administer Oracle Database Vault when installed with Oracle9i Database Release 2 (9.2.0.8), without additional license requirements. All 9.2.0.8 databases managed by Database Control in this manner must be correctly licensed with the Oracle Database Vault option. The installation of Oracle Database 11g deployed in this manner may not be used or deployed for other uses.

Oracle Connection Manager

Oracle Connection Manager can be installed and used on a machine different from the machine where the Oracle Database is installed and used. It is not necessary to obtain a separate license for the machine running Oracle Connection Manager.

Oracle Database Gateway for ODBC

Oracle Database Gateway for ODBC can be installed and used on a machine different from the machine where the Oracle Database is installed and used. It is not necessary to obtain a separate license for the machine running Oracle Gateway for ODBC.

Support of Real Application Testing in Earlier Releases

The full functionality of Oracle Real Application Testing is available only on Oracle Database 11g Release 1 or higher. Partial functionality of Oracle Real Application Testing is available to customers wishing to upgrade from Oracle9i Database Release 2 or Oracle Database 10g.

The functionality available on Oracle9*i* Database Release 2 is as follows:

Database Replay: Only the Workload Capture feature is supported, and the captured workload may only be replayed only on Oracle Database 11g. This feature can be used only to facilitate upgrades from Oracle 9i Database Release 2 to Oracle Database 11g.

The functionality available on Oracle Database 10g Release 2 is as follows:

- **Database Replay**: Only the Workload Capture feature is supported, and the captured workload may be replayed only on Oracle Database 11g. This feature can be used only to facilitate upgrades from Oracle Database 10g Release 2 to Oracle Database 11g.
- **SQL Performance Analyzer:** Only the Remote SQL Test Execute and SQL Capture into SQL Tuning Set features are supported. These features can be used only to facilitate upgrades from Oracle9i Database Release 2 and Oracle Database 10g Release 1 to Oracle Database 10g Release 2 or higher. When upgrading to Oracle Database 10g Release 2 from earlier releases (Oracle 9i Database or Oracle Database 10g Release1), Oracle Database 11g is needed to remotely execute SQL on the target database (that is, Oracle Database 10g Release 2). Real Application Testing licensing is required for both systems, Oracle Database 10g Release 2 and Oracle Database 11g.

Oracle Database Backup Cloud Service

Oracle Database Backup Cloud Service includes use of two optimizations at no additional cost. These optimizations are normally available only with the purchase of the Oracle Advanced Security Option or the Oracle Advanced Compression Option. This Oracle Database Backup Cloud Service special-use licensing includes:

- RMAN backup encryption
- All RMAN backup compression algorithms

To use additional features of the Oracle Advanced Security Option or the Oracle Advanced Compression Option, you must license those options separately. In addition, the Oracle Advanced Security Option must be licensed when performing RMAN encrypted backups directly to disk.

Oracle Secure Backup and Oracle Secure Backup Cloud Module

For backup of Oracle Database Enterprise Edition, Oracle Secure Backup includes restricted use licenses for:

- RMAN backup encryption to tape or Amazon S3
- RMAN backup compression leveraging LOW, MEDIUM, BASIC or HIGH algorithms

The Oracle Secure Backup special-use licenses apply to RMAN backup encryption, which is a component of the Oracle Advanced Security Option, and RMAN backup compression levels, which are components of the Oracle Advanced Compression Option. To use additional features of the Oracle Advanced Security Option or the Oracle Advanced Compression Option, you must license those options separately. In addition, the Oracle Advanced Security Option must be licensed when performing RMAN encrypted backups directly to disk whether or not Oracle Secure Backup is the media manager.

Oracle Secure Backup Express

Oracle Secure Backup Express is bundled with the Oracle Database. Support for Oracle Secure Backup Express is provided exclusively through a free Oracle Discussion Forum monitored by Oracle employees as well as community experts.

Oracle Secure Backup Express can back up an Oracle database as well as Oracle home files and other file system data requiring tape protection.

For more information, refer to *Oracle Secure Backup Licensing Information*.

Oracle Wallet

An Oracle Wallet is a PKCS#12 container used to store authentication and encryption keys. The Oracle database secure external password store feature stores passwords in an Oracle Wallet for password-based authentication to the Oracle database. The Oracle Wallet may also be used to store credentials for PKI authentication to the Oracle Database, configuration of network encryption (SSL/TLS), and Oracle Advanced Security transparent data encryption (TDE) master encryption keys. Strong authentication services (Kerberos, PKI, and RADIUS) and network encryption (native network encryption and SSL/TLS) are no longer part of Oracle Advanced Security and are available in all licensed editions of all supported releases of the Oracle database.

Infrastructure Repository Databases

A separate Oracle Database can be installed and used as a Recovery Manager (RMAN) repository without additional license requirements, provided that all the Oracle databases managed in this repository are correctly licensed. This repository database may also be used for the Oracle Enterprise Grid Control repository. It may not be used or deployed for other uses.

A separate Oracle Database can be installed and used as an Oracle Enterprise Manager Grid Control (OEM Grid Control) repository without additional license requirements, provided that all the targets (databases, applications, and so forth) managed in this repository are correctly licensed. This database may also be used for the RMAN repository. It may not be used or deployed for other uses.

Oracle Advanced Security and Enterprise User Security

If you wish to use Enterprise User Security in Oracle Database Enterprise Edition, you no longer need to license the Oracle Advanced Security Option for Kerberos and PKI based authentication. It does require a corresponding Oracle Identity Management Directory Services Plus to be licensed.

Any Oracle Advanced Security licenses purchased on or before January 31, 2004, have restricted use of the Oracle Internet Directory (OID) component of Oracle Directory Services Plus to support enterprise user security.

Current User Database Links

Current user database links are one type of database link that is supported inside the Oracle Enterprise Edition database. Current user database links provide stronger security because they do not require credentials to be stored inside the database link definition. Current user database links require Enterprise User Security and use SSL to secure the communication channel over which the current user database link communicates with the target database. If you wish to use current user database links, you do not need to license Oracle Advanced Security to enable SSL.

XStream

XStream, which is built on the infrastructure of Oracle Streams, provides application programming interfaces (APIs) that enable client applications to receive real-time data changes from an Oracle database (using XStream Out APIs) and to send real-time data changes to an Oracle database (using XStream In APIs). These data changes can be shared between Oracle databases and other systems, such as filesystems and non-Oracle databases. XStream is licensed via the Oracle GoldenGate product. You must purchase a license for this product before using the XStream APIs. Please contact your Oracle sales representative for additional information.

Oracle Clusterware

Oracle Clusterware provides cluster membership and high availability monitoring and failover. Oracle Clusterware may be used to protect any application (restarting or failing over the application in the event of a failure) on any server, free of charge. Oracle will provide support for Clusterware only if the server is running an Oracle product, which may include Oracle Linux or Oracle Solaris, that is also under Oracle support.

Oracle ASM Cluster File System (Oracle ACFS)

Refer to following table for the license requirements that apply to the Oracle ACFS features:

Oracle ACFS Features	Oracle Database Files	Non-Oracle Database Files
All Oracle ACFS features other than those listed below	Free	Free
ACFS Snapshot	Requires Oracle Database Enterprise Edition*	Free
ACFS Encryption	Not available (use Oracle Transparent Data Encryption, part of the Oracle Advanced Security option*)	Free
ACFS Security	Not available (use Oracle Database Vault*)	Free
ACFS Replication	Not available (use Oracle Data Guard*)	Free
ACFS Auditing	Not available (use Oracle Audit Vault*)	Free
ACFS Tagging	Free	Free

Oracle will provide support services for Oracle ACFS only if the server it operates on also operates an Oracle product, which may include Oracle Linux or Oracle Solaris, which is under an Oracle support contract.

Restricted-Use Licensing

The following restricted-use licenses are included with Oracle Database 11g in the editions indicated:

- A restricted-use license for Oracle Internet Directory (OID) is included with all editions (except for Oracle Database Express Edition) if users use the Directory Naming feature to configure Oracle Net Services. OID may not be used or deployed for other uses. Please contact your Oracle sales representative for additional information on Oracle Internet Directory (OID).
- A restricted-use license for Oracle Application Server Containers for J2EE (OC4J) is included with all editions (except for Oracle Database Express Edition). This embedded version is provided solely to support Oracle Enterprise Manager (Database and Grid Control), Advanced Queuing Servlet, Ultra Search, Application Express, and Warehouse Builder, and may not be used or deployed for other purposes.
- A restricted-use license for Oracle HTTP Server is included with all editions (except for Oracle Database Express Edition) when the HTTP Server is running on the same server as the database. Running Oracle HTTP server on a different server requires that other server be licensed to use the HTTP server, either through an Oracle Database license or an Oracle Application Server license.

^{*} Requires appropriate full-use licenses to these products or components.

- A restricted-use license of Oracle Berkeley DB is included for use with the Oracle Grid Infrastructure only.
- Restricted-use licenses of Load Testing Accelerator for Oracle Database, Oracle Load Testing, and Oracle Load Testing Controller are included with Oracle Real Application Testing for use for Oracle Database testing and may not be used for application testing.
- Oracle Database Vault includes a restricted-use license for the following Oracle Enterprise Manager features:
 - Application Data Modeling (previously called Data Discovery and Modeling)
 - Application Data Modeling accelerator for select versions of Oracle E-Business Suite
 - Application Data Modeling accelerator for select versions of Oracle Fusion Applications

Changes in Product Licensing

Oracle Warehouse Builder Enterprise ETL Option

The following features, previously licensed with the Oracle Warehouse Builder ETL Option, are no longer licensed with the Oracle Database. Instead, they are licensed via the Oracle Data Integrator Enterprise Edition:

- Slowing Changing Dimensions (SCD) Type 2 and 3
- XML Files as a target
- Transportable ETL modules, multiple configurations, and pluggable mappings
- Operators for pluggable mapping, pluggable mapping input signature, pluggable mapping output signature
- Design Environment Support for RAC
- Target load ordering
- Seeded spatial and streams transformations
- Process Flow Activity templates
- Process Flow variables support
- Process Flow looping activities such as For Loop and While Loop
- Process Flow Route and Notification activities
- Metadata lineage and impact analysis
- Metadata change propagation
- Schedulable Mappings and Process Flows
- Metadata Extensibility
- Deployment to Discoverer EUL
- Deployment to Oracle BI Beans catalog

Options and Packs

This chapter describes the separately licensed Oracle Database options, management packs, and other products you can purchase to enhance the capabilities of Oracle Database in specific application environments. This chapter contains the following sections:

- **Oracle Database Options**
- **Oracle Management Packs**
- Checking for Database Option and Management Pack Usage
- Other Oracle Products

You may not use the options, packs, or products described below without separately purchased licenses. The fact that these options, packs, or products may be included in product CDs or downloads or described in documentation that you receive does not authorize you to use them without purchasing appropriate licenses.

Oracle Database Options

All the Oracle Database options can be purchased with Oracle Database Enterprise Edition. Oracle Real Application Clusters (Oracle RAC) is included with Oracle Database Standard Edition. You cannot purchase any options with Oracle Database Standard Edition One or Oracle Express Edition. The Personal Edition includes all options except Oracle RAC at no additional cost.

This section describes the following database options:

- Oracle Active Data Guard
- **Oracle Advanced Analytics**
- Oracle Advanced Compression
- **Oracle Advanced Security**
- **Oracle Database Vault**
- Oracle Label Security
- Oracle On-Line Analytical Processing (OLAP)
- **Oracle Partitioning**
- Oracle RAC One Node
- Oracle Real Application Clusters (Oracle RAC)
- **Oracle Real Application Testing**

- Oracle Spatial and Graph
- Oracle TimesTen Application-Tier Database Cache

Oracle Active Data Guard

Oracle Active Data Guard enhances the Quality of Service (QoS) for production databases by off-loading resource-intensive operations to one or more standby databases, which are synchronized copies of the production database. With Oracle Active Data Guard, a physical standby database can be used for real-time reporting, with minimal latency between reporting and production data. Compared with traditional replication methods, Active Data Guard is very simple to use, transparently supports all datatypes, and offers very high performance. Oracle Active Data Guard also allows backup operations to be off-loaded to the standby database, and be done very fast using intelligent incremental backups. Oracle Active Data Guard thus is a very effective way to insulate interactive users and critical business tasks on the production system from the impact of such long-running operations. Oracle Active Data Guard provides the additional benefit of high availability and disaster protection by quickly failing over to the standby database in the event of a planned or an unplanned outage at the production site.

The Active Data Guard option contains the following features:

- Physical Standby with Real-time Query
- Fast Incremental Backup on Physical Standby
- Automatic Block Repair

If a physical standby database in a Data Guard configuration has any of the above features enabled, then the Active Data Guard option must be licensed for every such physical standby, and also for the primary database.

Oracle Advanced Analytics

Oracle Advanced Analytics provides predictive analytics, data and text mining, and statistical functionality in the database. Analytic capabilities are accessible through two interfaces: SQL and/or the open source R language. Oracle Data Mining provides powerful data mining algorithms that run as native SQL functions for in-database model building and model deployment. Oracle Data Mining can be accessed through the SQL Developer extension Oracle Data Miner GUI to build, evaluate, share, and deploy predictive analytics methodologies. Oracle R Enterprise tightly integrates the open source R programming language with the database and further extends the database with R's library of statistical functions. Oracle R Enterprise's R to SQL transparency layer, SQL statistics engine, and embedded R mode translate R scripts to SQL, look for opportunities to push down functionality to SQL for significant performance improvement, and enable production execution of R code in the database. Additionally, R is integrated into the SQL language enabling SQL applications to embed Oracle R Enterprise. Together, these features enhance the database with a comprehensive range of analytical functionality for data mining, text mining and predictive analytics, summary and descriptive statistics, exploratory data analysis and graphics, comparative statistics, correlations, univariate and multivariate statistics, and advanced numerical computations.

Oracle Advanced Analytics comprises the following two major components:

- **Oracle Data Mining**
- Oracle R Enterprise

Oracle Data Mining

Oracle Data Mining enables you to build advanced business intelligence applications that mine corporate databases, reveal new patterns and relationships, and integrate that information into business applications. This component embeds data mining functionality into Oracle Database for making classifications, predictions, and associations. All model-building, scoring, and metadata management operations are accessible by way of the ODM SQL and PL/SQL APIs. Oracle Data Mining includes the following features:

- API to Access Algorithms:
 - SQL and PL/SQL API—for model build, model apply, and data transformations
- Algorithm Category and Supported Algorithms:
 - Classification: Naive Bayes, Decision Trees, Support Vector Machines, Logistic Regression
 - Regression: Multivariate Linear Regression, Support Vector Machines
 - Anomaly Detection: One Class Support Vector Machines
 - Attribute Importance: Minimum Description Length
 - Association Rules: A Priori
 - Clustering: K-Means Clustering, O-Clustering
 - Feature Extraction: Non-Negative Matrix Factorization
 - Predictive Analytics (PL/SQL Packages): Predict, Explain, Profile

Oracle R Enterprise

Oracle R Enterprise makes the popular R statistical programming language and environment ready for the enterprise and big data. Designed for problems involving large amounts of data, Oracle R Enterprise enables users to run R commands on database-resident data, develop and refine R scripts, and leverage the parallelism and scalability of the database. Data analysts can run the latest R open source packages and develop and operationalize R scripts for analytical applications in one step—without having to learn SQL. Oracle R Enterprise includes the following features:

- Key components:
 - The Oracle R Enterprise R transparency layer: The transparency layer allows an R user to directly interact with database-resident data using R language constructs.
 - The Oracle R Enterprise statistics engine, a collection of statistical functions and procedures.
 - Embedded R: ORE can launch multiple R servers while the database manages data flows to enable parallel R processes running independently.
- All Oracle R Enterprise functionality is invoked using the ORE package.

Oracle R Enterprise Server is limited to operation on Oracle Linux 5 Update 6 or higher and Red Hat Enterprise Linux 5 Update 6 or higher.

Oracle Advanced Compression

Oracle Advanced Compression provides comprehensive data compression capabilities to compress all types of data, backups, and network traffic in an application

transparent manner. With Advanced Compression, Oracle includes table compression targeted at OLTP workloads, resulting in reduced storage consumption and improved query performance while incurring minimal write performance overhead. Advanced Compression can be used to compress any unstructured content using SecureFiles Compression. Deduplication provides the ability to automatically eliminate redundant copies of SecureFiles data. RMAN offers multiple backup compression levels, to meet the needs of various environments, including faster compression and better compression ratio choices. Note that the RMAN DEFAULT COMPRESS option does not require Advanced Compression. With Advanced Compression, Data Pump exports can now be compressed to reduce disk space requirements. Note that the COMPRESSION=METADATA ONLY option for Data Pump does not require Advanced Compression, and is the default behavior. Finally, Data Guard can compress redo data resulting in reduced network traffic and faster gap resolution.

The Oracle Advanced Compression option contains the following features:

- Data Guard Network Compression
- Data Pump Compression (COMPRESSION=METADATA_ONLY does not require the Advanced Compression option)
- Multiple RMAN Compression Levels (RMAN DEFAULT COMPRESS does not require the Advanced Compression option)
- **OLTP Table Compression**
- SecureFiles Compression and Deduplication
- Flashback Data Archive (formerly known as Total Recall)

For releases earlier than Oracle Database 11g Release 2 (11.2.0.4): You must license the Oracle Advanced Compression option to use Flashback Data Archive.

Beginning with Oracle Database 11g Release 2 (11.2.0.4): Flashback Data Archive—without history table optimization—is available in all editions.

- Optimization for Flashback Data Archive history tables. Available starting with Oracle Database 11g Release 2 (11.2.0.4).
- Exadata Flash Cache Compression: This feature can be enabled only on Exadata storage servers, and all database processors that access the Exadata storage servers must be licensed for Oracle Advanced Compression.

Oracle Advanced Security

Oracle Advanced Security helps you protect sensitive information and comply with various privacy and compliance regulations including breach notification laws and the Payment Card Industry Data Security Standard (PCI-DSS) by enabling encryption inside the database that is transparent to applications.

Oracle Advanced Security includes the following features:

- Transparent Data Encryption (TDE) for columns
- Transparent Data Encryption (TDE) for tablespace
- Transparent Data Encryption (TDE) for SecureFiles
- DataPump Export File encryption
- RMAN backup encryption
- Data Redaction of sensitive data returned to applications. Available starting with Oracle Database 11g Release 2 (11.2.0.4).

Full, Partial, Regular Expression, and Random techniques

Network encryption (native network encryption and SSL/TLS) and strong authentication services (Kerberos, PKI, and RADIUS) are no longer part of Oracle Advanced Security and are available in all licensed editions of all supported releases of the Oracle database.

Oracle Database Vault

Oracle Database Vault lets you control who, when, and where data and applications can be accessed—protecting your business against the most common security threat: malicious internal users. Enforcing separation of duties, even among administrators, Oracle Database Vault additionally serves as a powerful preventive control to help comply with today's stringent compliance and privacy requirements.

- It improves your ability to meet compliance requirements like Sarbanes-Oxley and other regulations that mandate control of access to, and release of, sensitive information
- It controls access to application and database data, even by super-users and other highly privileged users
- It enforces multi factor authorization via flexible business rules
- It shows who is accessing what and when via over three dozen out-of-the-box security reports

Oracle Database Vault is an option for Oracle Database 10g or later. However, it has also been provided for earlier releases as well, including Oracle9i Database Release 2 (9.2.0.8) on a limited number of platforms. Please contact your Oracle Sales Representative if you are interested in Oracle Database Vault as an option on Oracle9i Database.

The Oracle Database Vault option includes the following features:

- Separation of Duties
- Realms
- Command Rules
- Trusted Paths
- Privilege Analysis

Oracle Label Security

Oracle Label Security provides sophisticated and flexible security based on row labels for fine-grained access control. This option employs labeling concepts used by government, defense, and commercial organizations to protect sensitive information and provide data separation. It includes a powerful tool to manage policies, labels, and user label authorizations.

By default, Oracle Label Security is configured to use Oracle Database for all policy management. Users interested in centralized policy management using the Oracle identity management infrastructure must additionally license Oracle Identity and Access Management Suite. Please contact your Oracle sales representative for additional information.

The Oracle Label Security option includes the following features:

Label based access control (LBAC)

- Multi-level security (MLS)
- Label factors for Database Vault (Confidential, Sensitive)
- User label authorizations (Confidential, Sensitive: PII)
- Data labels (Sensitive: PII)

Oracle On-Line Analytical Processing (OLAP)

The OLAP option to Oracle Database is a full-featured OLAP server embedded in Oracle Database Enterprise Edition. Oracle OLAP cube datatypes improve business intelligence tools and applications by providing excellent query performance, rich analysis, and fast incremental updates of data sets. OLAP cubes are easily queried by SQL-based business intelligence tools through cube-organized materialized views and OLAP cube views. Cube-organized materialized views provide an alternative summary management solution to table-based materialized views. As with a table-based materialized view, an OLAP cube is accessed by SQL-based tools transparently using the automatic SQL query rewrite feature of the materialized views. SQL-based tools can access both summary data and rich analytic content directly through OLAP cube views. Multidimensional OLAP tools can provides a full-dimensional OLAP experience using the Oracle OLAP multidimensional API to cubes. A single OLAP cube can service each of these types of applications.

The Oracle OLAP option includes the following features:

- OLAP Cube Definition, Storage, and Querying
- OLAP API and Metadata
- **OLAP Cube Materialized Views**
- **Analytic Workspaces**
- SQL Access to OLAP Cubes

Oracle Partitioning

Oracle Partitioning enhances the data management environment for OLTP, data mart, data warehouse, and content management applications by adding significant manageability, availability, and performance capabilities to large underlying database tables and indexes. Oracle Partitioning lets you store large tables as individually managed smaller pieces, while retaining a single application-level view of the data.

The Oracle Partitioning option includes the following features:

- Table Partitions and Subpartitions
- Local Index Partitions and Subpartitions
- Global Index Partitions and Subpartitions
- Range Partitioning
- Hash Partitioning
- List Partitioning
- **Interval Partitioning**
- Reference Partitioning
- System Partitioning
- Virtual Column-based Partitioning

- Composite Partitioning
- Subpartition Template
- Fast Partition Split
- Partition Exchange

Oracle RAC One Node

Oracle RAC One Node is the one-node version of Oracle Real Application Clusters (Oracle RAC). It enables customers to standardize on a single deployment model for all their database needs. Oracle RAC One Node makes the database highly available in the presence of computer hardware failures, software failures, or planned software maintenance events. In the event of failures, the database instance is restarted on an available server in the cluster and the client connections are moved to the new instance. Oracle RAC One Node can be online upgraded to full Oracle RAC (RAC license required) in order to scale to multiple servers.

Oracle RAC One Node includes the following features:

- Database Cold Failover to another node in the cluster in case of server or instance failure
- Online migration of the database instance to another server
- Support for online rolling upgrades of the database, grid infrastructure, and OS
- Online upgrade to Oracle Real Application Clusters
- Policy-managed Server Pools
- Quality of Service Management

Oracle Real Application Clusters (Oracle RAC)

Oracle Real Application Clusters (Oracle RAC) is a database computing environment that harnesses the processing power of multiple interconnected computers using clustering technology. Oracle RAC enables multiple servers to mount a single databases, providing unlimited scalability and high availability for all applications. Oracle RAC makes the database highly available in the presence of computer hardware or software failure: in the event any computer in the cluster fails, the database continues to provide service on the surviving computers in the cluster. Oracle RAC provides scalable performance: as demand for database throughput grows, additional computers can be added to the database cluster with no downtime. Oracle RAC also supports a single-system image for ease of management.

Oracle Real Application Clusters includes the following features:

- All the capabilities of Oracle RAC One Node
 - With the exception of "Online migration of the database instance to another server"
- Real Application Clusters scaling to multiple servers
- Connection Load Balancing
- Fast Connection Failover
- Hot Cluster Failover

Oracle Real Application Testing

The Oracle Real Application Testing option comprises a suite of features that help protect database applications from undesirable impact of routine changes such as hardware/software upgrades, configuration changes, platform migrations, and so forth. These features enable comprehensive testing of real-world applications so that any issues resulting from system changes are fully identified and addressed during testing, and unexpected problems encountered when a change is finally made in the production systems are minimized.

The Oracle Real Application Testing option includes the following features:

- **Database Replay**
- SQL Performance Analyzer (SPA)

Oracle Real Application Testing functionality can be accessed by Enterprise Manager as well as through the database server command-line APIs. The use of either interface requires an Oracle Real Application Testing option license.

In addition, the use of the 'Replay Compare Period Report' requires a license of Oracle Diagnostics Pack.

Command-Line APIs

The Database Replay feature can also be accessed by way of database server APIs and command-line interfaces:

- DBMS_WORKLOAD_CAPTURE package is part of the Oracle Real Application Testing option
- DBMS_WORKLOAD_REPLAY package is part of the Oracle Real Application Testing option

The use of the DBMS_WORKLOAD_REPLAY.COMPARE_PERIOD_REPORT() function also requires a license of Oracle Diagnostics Pack.

The SQL Performance Analyzer feature can also be accessed by way of database server APIs and command-line interfaces:

DBMS_SQLPA package is part of Oracle Real Application Testing option

The Oracle Real Application Testing license is required on both capture and replay systems for Database Replay and is charged by the total number of CPUs on those systems.

Oracle Spatial and Graph

The Oracle Spatial and Graph option includes advanced features for spatial data and analysis and for physical, network, and social graph applications.

Spatial Features

The geospatial data features support complex geographic information systems (GIS) applications, enterprise applications, and location-based services applications, augmenting the Oracle Database Locator feature, which provides storage, analysis, and indexing of 2D location data accessible through SQL and standard programming languages.

These advanced spatial features include:

Selected Spatial Functions, including the SDO_AGGR_UNION spatial aggregate function

- The following SDO_GEOM package subprograms: SDO_GEOM.RELATE, SDO_GEOM.SDO_ DIFFERENCE, SDO GEOM.SDO INTERSECTION, SDO GEOM.SDO UNION, SDO GEOM.SDO VOLUME, and SDO_GEOM.SDO_XOR
- Classes in packages other than the oracle.spatial.geometry (sdoapi.jar) and oracle.spatial.util (sdoutil.jar) packages of the Spatial Java API
- Linear Referencing System (LRS) support
- GeoRaster Storage, Indexing, and Querying
- Network Data Model
- Topology Data Model
- Spatial analysis and mining subprograms (SDO_SAM package)
- Spatial Routing Engine
- Geocoding Engine
- Spatial Web Services including OpenLS support, including support for geocoding, mapping, business directory (Yellow Pages), and driving directions (routing) services, Web feature service (WFS) support (SDO_WFS_PROCESS and SDO_WFS_LOCK packages), and Catalog services for the Web (CSW) support (SDO_CSW_PROCESS package)
- 3-D Geometry, Surface, Triangulated irregular network (TIN), and Point Cloud Storage, Indexing, and Querying
- Semantic Content Storage, Indexing, and Querying (RDF/OWL Support), and ontology management

Note: Oracle Locator, a feature of Oracle Database 11g, includes the spatial vector geometry type, spatial indexing and operators, and a limited set of spatial functions. The list of functions included in Locator can be found in Appendix B of Oracle Spatial Developer's Guide.

Graph Features

The graph database features include two graph models:

- A network data model (NDM) graph to model and analyze link-node graphs to represent physical and logical networks used in transportation, utilities and telco
- A semantic RDF graph to model and analyze data represented as triples for social network, linked data, and other semantic applications

The Network Data Model graph features include:

- A storage model to represent graphs and networks in link and node tables
- Java APIs to perform analysis in memory
- Numerous graph analysis functions including shortest path, within cost, nearest neighbors, traveling salesman, spanning tree, and more
- Explicit storage and connectivity of the graph with link- and node-level attributes
- Support for directed and undirected graphs with or without cost

The RDF Semantic graph features include:

- Graph relationships represented as triples in compressed, partitioned tables
- Indexing, querying, and ontology management

- RDFS, OWL, and user-defined inferencing (parallel, batch, and incremental)
- Support for SPARQL 1.1 and mixed SPARQL and SQL queries
- Enhanced Open Source Tools including Jena, Sesame, Joseki Web Services

Note: The RDF Semantic graph features require the Oracle Partitioning option.

Oracle TimesTen Application-Tier Database Cache

Oracle TimesTen Application-Tier Database Cache enables you to improve application transaction response time by caching a performance critical subset of tables from an Oracle Database to the application tier. Applications perform read/write operations on the cache tables using standard SQL with automatic persistence, transactional consistency, and data synchronization with the Oracle database.

Oracle TimesTen Application-Tier Database Cache includes the following features:

- Data access using PL/SQL, JDBC, ODBC, ttClasses, OCI, and Pro*C/C++ interfaces
- Transaction Log API (XLA) for change notification
- Multi-node Cache Grid
- Automatic data synchronization with the Oracle database
- Transactional replication between the in-memory cache databases
- Automated failure detection and database failures
- TimesTen Extension for Oracle SQL Developer
- TimesTen Plug-in for Oracle Enterprise Manager

Oracle Management Packs

The sections that follow describe the Oracle management packs. The management packs can be purchased only with Enterprise Edition. The features in these packs are accessible through Oracle Enterprise Manager Database Control, Oracle Enterprise Manager Grid Control, Desktop Widgets, and APIs provided with Oracle Database software.

This section describes the following management packs:

- **Oracle Change Management Pack**
- Oracle Configuration Management Pack
- Oracle Data Masking and Subsetting Pack
- Oracle Diagnostics Pack
- Oracle Provisioning and Patch Automation Pack
- Oracle Tuning Pack
- Legacy: Oracle Data Masking Pack for Oracle and non-Oracle Databases
- Legacy: Oracle Test Data Management Pack for Oracle and non-Oracle Databases

Oracle Change Management Pack

Oracle Change Management Pack enables administrators to evaluate, plan, and implement database schema changes. Using Oracle Change Management Pack, administrators can investigate and track changes, compare and synchronize objects and schemas, modify schema objects, evaluate the change impact, and if required undo changes that have been made previously. Oracle Change Management Pack makes change management simple and efficient and minimizes chances for error, thereby reducing the opportunity for data loss and system down-time.

Oracle Change Management Pack includes the following features:

- **Dictionary Baselines**
- **Dictionary Comparisons**
- **Dictionary Synchronizations**
- Realtime Schema Change Tracking
- Reverse Engineering Dictionary objects
- Copying Dictionary Object
- Object Definition Update
- **Evaluate Change Impact**
- Clone and Propagate Schema

Enterprise Manager

The following licensed pages and links in Enterprise Manager apply to Oracle Change Management Pack.

From the Enterprise Manager Home page, select the Schema property page. In the Change Management section, the following links and associated pages are licensed as part of the pack:

- **Dictionary Baselines**: All links, buttons, and drilldowns on this page are licensed features of this pack.
- Dictionary Comparisons: All links, buttons, and drilldowns on this page are licensed features of this pack.
- **Dictionary Synchronizations**: All links, buttons, and drilldowns on this page are licensed features of this pack.

init.ora Parameters

The use of the following init.ora parameter is licensed under Oracle Change Management Pack:

ENABLE_DDL_LOGGING: when set to TRUE (default: FALSE)

Oracle Configuration Management Pack

The Configuration Management Pack for Oracle Database automates the time-consuming, costly, and often error-prone process of software configuration, software and hardware inventory tracking, patching, policy management, and compliance, ensuring consistency across deployments. You can access the Configuration Management Pack for Oracle Database functionality through Enterprise Manager licensed links and by installing the Configuration Change Console and

Application Configuration Console. All three of these components comprise the features provided by the Configuration Management Pack for Oracle Database.

> **Note:** To obtain all features of the Configuration Management Pack for Oracle Database, you need to enable the Configuration Management Pack for Non-Oracle Systems in Grid Control for the host on which you have the licensed Configuration Management Pack for Oracle Database. If you already have the licensed Pack for Oracle Database, you are entitled to the Configuration Management Pack for Non Oracle Systems for the host on which you have the Configuration Management Pack for Oracle Database.

Oracle Configuration Management Pack includes the following features:

- Database and host configuration management
- **Patching**
- Policy and security management
- Policy groups
- Deployments/installations, including patch-level
- Client system analyzer
- Security at a glance
- Real-time configuration change detection
- Application configuration management

Any and all methods of accessing Oracle Configuration Management Pack functionality, whether through Enterprise Manager Console, Desktop Widgets, command-line APIs, or direct access to the underlying data, requires an Oracle Configuration Management Pack license.

Enterprise Manager

The following licensed pages and links in Enterprise Manager apply to Oracle Configuration Management Pack:

- **Grid Control Home page:**
 - All links in the **All Targets Policy Violations** section
 - Database, Hardware, and Operating System related information in the **Deployments Summary section**
 - All links in the Security Policy Violations section
 - All links in the Critical Patch Advisories for Oracle Homes section
- From the Grid Control Home page, click the Targets tab, then the Databases sub-tab. On the **Databases page**, the Policy Violations links are licensed as part of the pack.
- From the **Grid Control Home** page, click the **Deployments** tab. On the **Deployments page**, the following items are licensed as part of the pack:
 - All links in the **Configuration** and **Client Configurations** sections
- From the Grid Control Home page, select the Compliance tab to display the **Policy Violations page**, which is grouped in the **Violations** sub-tab. All links,

- sub-navigation tabs, and features available on or linked to from the Grid Control Policies Violations page for policies related to databases and hosts are licensed as part of this pack.
- From the **Grid Control Home** page, select the **Compliance** tab, then the **Policy** Groups sub-tab. On the Grid Control Policy Group Evaluation Results page, all links and features are licensed as a part of this pack.
- From the Grid Control Home page, select the Compliance tab, then the Security at a Glance sub-tab. On the Grid Control Security at a Glance page, all links and features are licensed as a part of this pack.
- From the Grid Control Hosts page, click a specific host to display the Host Home **page**. The following links are licensed as part of the pack:
 - All links in the **Security** section
 - Under **Related Links**, the following links are licensed:
 - Deployments
 - Metric and Policy Settings
- From the **Host Home page**, click the **Targets** tab. The following links and columns are licensed:
 - **Policy Violations** and associated links
 - Compliance Score (%)
- From the **Host Home page**, click the **Configuration** tab. The following buttons are licensed:
 - Save
 - History
 - Compare Configuration
 - Compare to Multiple Configurations
- From the **Grid Control Home page**, click the **Targets tab**, then select the **Systems sub-tab**. On the **Systems page**, the following items are licensed as part of the pack:
 - **Policy Violations** links
- From the **Systems** page, click any system **Name**. On the **System Home page**, everything is licensed as part of the pack except for the Status and Alerts sections.
- From the Grid Control Home page, click the Targets tab, then select the Groups **sub-tab**. On the **Groups page**, the following items are licensed as part of the pack:
 - Policy Violations links
- From the Groups page, click any group Name. On the Group Home page, everything is licensed as part of the pack except for the Status and Alerts sections.
- From the Groups Home page, click the Administration tab. The following links and features are licensed features of the pack:
 - Hardware and Operating Systems related information in the Deployments **Summary** section
 - Host Operating System and Hardware Summaries selection for the Configuration Searches section
- Click the **Setup** link on the upper right corner of the Enterprise Manager console, then click the **Monitoring Templates** link. On the **Monitoring Templates** page,

click any Name. The **Policies** sub-tab on the **View Monitoring Template** page is a licensed feature of the pack.

Configuration Management Pack Database Reports

The following reports are part of the Configuration Management Pack for Oracle Database. All reports in each of these sections are licensed for this pack. To display the Report Definitions page, click the **Reports** tab on the Grid Control Home page.

- All reports under **Deployment and Configuration**
- Monitoring reports
 - **Alerts and Policy Violations**
 - **Disabled Policies**
- Security reports
 - **Security Policy Overview**

Additional Licensed Features

With the purchase of the Configuration Management Pack for Oracle Database, you also are entitled to the features described in the following sections. These features are restricted to the Oracle Database targets in the Oracle Database Home and the Platform (hardware and operating system) for the CPUs you have licensed.

Configuration Change Console

The Configuration Change Console offers real-time change detection and integration capabilities as described below.

Real-time Change Detection The Configuration Change Console is a policy-based system designed to help organizations and administrators support their IT compliance goals and help deliver the level of service expected by their users. The console includes a set of predefined frameworks created by industry experts to meet common compliance requirements. This enables IT departments to quickly and easily demonstrate compliance with government regulations and industry standards such as SOX, PCI, and ITIL.

The frameworks provide predefined controls mapped to application, device, and user event detection rules. These mappings empower the enterprise to monitor adherence for best practices from a centralized dashboard and provide concrete evidence in the form of reports for internal and external audits, reducing both the risk and cost of compliance. The console also provides an easy-to-use interface enabling administrators to define their own specific frameworks, policies, and controls and map them to the devices across their environment that they decide to monitor.

The Configuration Change Console automates the detection and capture of user and application actions that result in changes to the infrastructure without requesting or requiring user input. This automates the compliance audit trail and minimizes the time required to uncover compliance breaches.

Examples of components monitored for configuration change include:

- Files and directories
- **Processes**
- User accounts
- Server resources

- **Databases**
- Middeware
- Network devices

Integration Capabilities The Configuration Change Console complements many existing IT infrastructure and service management systems through the following integration approaches:

- Change management system integration The Configuration Change Console integrates with popular change management systems (such as Remedy) to create a closed-loop change management solution. Integration is achieved through an adapter that enables communication between the change management system and Configuration Change Console. This integration enables the Configuration Change Console to determine if a change was authorized or unauthorized through an open request for change in the change management system.
- Simple Network Management Protocol traps The Configuration Change Console can send an alert whenever a specific change is detected to any third-party system.
- Standards-based APIs The Configuration Change Console is based on industry standards such as Java Platform, Enterprise Edition (J2EE), and Extensible Markup Language (XML), and can integrate with similar standards-based interfaces.

Configuration Change Console Restricted-use Licensing Configuration Change Console Server includes restricted-use licenses for Oracle Database (Enterprise Edition), Oracle BEA Weblogic, and Oracle Business Intelligence, solely for the purpose of running the Configuration Change Console Release Server.

Restricted-use License for Oracle Database (Enterprise Edition)

Oracle includes restricted-use licenses for Oracle Database (Enterprise Edition) with licenses of Configuration Change Console Release. If you want to use the Oracle Database (Enterprise Edition) not solely for the purposes of running Configuration Change Console Release Server, then you must purchase full-use licenses for Oracle Database (Enterprise Edition).

Restricted-use License for Oracle BEA Weblogic

Oracle includes restricted-use licenses for Oracle BEA Weblogic with licenses of the Configuration Change Console Release. If you want to use the Oracle BEA Weblogic not solely for the purposes of running the Configuration Change Console Release 5 Server, then you must purchase full-use licenses for Oracle BEA Weblogic.

Restricted-use License for Oracle Business Intelligence

Oracle includes restricted-use licenses for Oracle Business Intelligence with licenses of Configuration Change Console Release 5 (10.2.0.5). If you want to use Oracle Business Intelligence not solely for the purposes of reporting on the data within the Configuration Change Console Release 5 (10.2.0.5) Server, then you must purchase full-use licenses for Oracle Business Intelligence. You may use the restricted-use license to, (1) utilize out-of-box reports shipped with the Configuration Change Console, (2) modify out-of-box report visualization and layouts, (3) add additional data to reports with the Configuration Change Console repository as the sole source of additional data, (4) create new reports with the Configuration Change Console repository as the sole source of data.

Application Configuration Console

Enterprises today require a comprehensive solution for managing their application infrastructure underlying their mission-critical applications. The Application Configuration Console provides IT infrastructure teams with an automated "gold master" approach to application infrastructure configuration management that enables smooth delivery and support of mission-critical business applications. IT infrastructure personnel can capture the current state of configuration settings for IT assets, monitor them for changes, and automate processes for provisioning changes as well as set up new environments throughout the application lifecycle — from development, testing, and through production.

The Application Configuration Console provides:

- Management of database and IT infrastructure configuration data at individual property levels
- System-level configuration comparisons
- Template-based configuration collections
- Policy enforcement at individual configuration property levels
- Intelligent parameter-setting for configuration properties
- Change tracking and alerts for individual configuration property changes
- Blueprints for configuration collection of 100+ software assets
- Role-based views of configuration data
- Agentless collections

Configuration Management Pack Enterprise Manager Repository Views

The following repository views are part of Oracle Configuration Management Pack:

- **Policy Definition Views**
 - MGMT\$POLICIES
 - MGMT\$POLICY_PARAMETERS
 - MGMT\$POLICY VIOLATION CTXT
 - MGMT\$POLICY VIOL ANNOTATIONS
 - MGMT\$POLICY_VIOL_NOTIF_LOG
- **Policy Association Views**
 - MGMT\$TARGET_POLICIES
 - MGMT\$TARGET_POLICY_SETTINGS
 - MGMT\$TARGET_POLICY_EVAL_SUM
 - MGMT\$TARGET COMPLIANCE SCORE
- **Policy Violation Views**
 - MGMT\$POLICY_VIOLATION_CURRENT
 - MGMT\$POLICY_VIOLATION_HISTORY
 - MGMT\$POLICY VIOLATION CONTEXT
- **Configuration Views**
 - MGMT\$DB_TABLESPACES

- MGMT\$DB_DATAFILES
- MGMT\$DB_CONTROLFILES

Oracle Home Patching

- MGMT\$CPF ADVISORY INFO
- MGMT\$CPF_HOMES_INFO
- MGMT\$CPF_PATCH_INFO
- MGMT\$EM_HOMES_PLATFORM
- MGMT\$HOMES_AFFECTED
- MGMT\$PATCH_ADVISORIES
- MGMT\$APPL_PATCH_AND_PATCHSET
- MGMT\$APPLIED_PATCHES
- MGMT\$APPLIED_PATCHSETS

Linux Patching

- MGMT\$HOSTPATCH HOSTS
- MGMT\$HOSTPATCH GROUPS
- MGMT\$HOSTPATCH_GRP_COMPL_HIST
- MGMT\$HOSTPATCH_HOST_COMPL

Security Views

- MGMT\$ESA_ALL_PRIVS_REPORT
- MGMT\$ESA_ANY_DICT_REPORT
- MGMT\$ESA_ANY_PRIV_REPORT
- MGMT\$ESA_AUDIT_SYSTEM_REPORT
- MGMT\$ESA_BECOME_USER_REPORT
- MGMT\$ESA_CATALOG_REPORT
- MGMT\$ESA_CONN_PRIV_REPORT
- MGMT\$ESA_CREATE_PRIV_REPORT
- MGMT\$ESA_DBA_GROUP_REPORT
- MGMT\$ESA_DBA_ROLE_REPORT
- MGMT\$ESA_DIRECT_PRIV_REPORT
- MGMT\$ESA_EXMPT_ACCESS_REPORT
- MGMT\$ESA_KEY_OBJECTS_REPORT
- MGMT\$ESA_OH_OWNERSHIP_REPORT
- MGMT\$ESA_OH_PERMISSION_REPORT
- MGMT\$ESA_POWER_PRIV_REPORT
- MGMT\$ESA_PUB_PRIV_REPORT
- MGMT\$ESA_SYS_PUB_PKG_REPORT
- MGMT\$ESA_TABSP_OWNERS_REPORT

- MGMT\$ESA_TRC_AUD_PERM_REPORT
- MGMT\$ESA_WITH_ADMIN_REPORT
- MGMT\$ESA WITH GRANT REPORT

Client Configuration Views

- MGMT\$CSA_COLLECTIONS
- MGMT\$CSA_FAILED
- MGMT\$CSA_HOST_OS_COMPONENTS
- MGMT\$CSA_HOST_SW
- MGMT\$CSA_HOST_COOKIES
- MGMT\$CSA_HOST_CUSTOM
- MGMT\$CSA_HOST_RULES
- MGMT\$CSA_HOST_CPUS
- MGMT\$CSA_HOST_IOCARDS
- MGMT\$CSA_HOST_NICS
- MGMT\$CSA_HOST_OS_PROPERTIES
- MGMT\$CSA_HOST_OS_FILESYSEMS
- MGMT\$ECM_CONFIG_HISTORY
- MGMT\$ECM_CONFIG_HISTORY_KEY1
- MGMT\$ECM_CONFIG_HISTORY_KEY2
- MGMT\$ECM_CONFIG_HISTORY_KEY3
- MGMT\$ECM_CONFIG_HISTORY_KEY4
- MGMT\$ECM_CONFIG_HISTORY_KEY5
- MGMT\$ECM_CONFIG_HISTORY_KEY6
- MGMT\$HW_NIC
- MGMT\$OS COMPONENTS
- MGMT\$OS FS MOUNT
- MGMT\$OS_HW_SUMMARY
- MGMT\$OS_HW_SUMMARY
- MGMT\$OS_PATCHES
- MGMT\$OS_SUMMARY
- MGMT\$SOFTWARE_COMP_PATCHSET
- MGMT\$SOFTWARE_COMPONENT_ONEOFF
- MGMT\$SOFTWARE_COMPONENTS
- MGMT\$SOFTWARE_DEPENDENCIES
- MGMT\$SOFTWARE_HOMES
- MGMT\$SOFTWARE_ONEOFF_PATCHES
- MGMT\$SOFTWARE_OTHERS

- MGMT\$SOFTWARE_PATCHES_IN_HOMES
- MGMT\$SOFTWARE PATCHSETS

Oracle Data Masking and Subsetting Pack

Oracle Data Masking and Subsetting Pack facilitates the creation of production-like data for non-production environments by replacing production data with fictitious yet realistic values. Generation of the fictitious data can be performed during export or on a separate staging server. The Subsetting functionality provides the ability to subset a database by deleting or extraction a portion of data. Subsetting can optionally be used in line with masking functionality.

Features

Oracle Data Masking and Subsetting Pack includes the following components and features:

- Application Data Modeling
- **Data Masking Formats Library**
- **Data Masking Definitions**
- **Data Subsetting Definitions**
- Application Data Modeling, Data Masking and Subsetting Enterprise Manager Command Line Interface (CLI) verbs
- Application Data Modeling accelerator for select versions of Oracle E-Business Suite
- Application Data Modeling accelerator for select versions of Oracle Fusion **Applications**
- Data Masking templates for select versions of Oracle Fusion Applications
- Data Masking templates for select versions of Oracle E-Business Suite

Oracle Data Masking and Subsetting Pack includes the following restricted-use licenses:

- Database Gateway for APPC
- Database Gateway for DRDA
- Database Gateway for Informix
- Database Gateway for SQLServer
- Database Gateway for Sybase
- Database Gateway for Teradata

If you want to use the Oracle Database Gateways listed above not solely for the purposes of Oracle Data Masking and Subsetting Pack, then you must purchase full-use licenses for the Oracle Database Gateways. When using Oracle Data Masking and Subsetting Pack for non-Oracle databases, the Oracle Database Gateways stage the data in a separately licensed Oracle Database. Oracle Data Masking and Subsetting functionality cannot be executed directly against the non-Oracle database.

Oracle Data Masking and Subsetting Pack must be licensed only for the source database server, i.e., the databases from which the data originates.

There is no requirement to license the pack for the staging database server on which masking and subsetting operations are executed, or for copies made of the masked database.

Licensed Links

The following are the licensed pages and links for Oracle Data Masking and Subsetting Pack within Oracle Enterprise Manager.

Licensed Page/Link	How to Access
Application Data Modeling	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Application Data Modeling .
	From the Oracle database or cluster database target home page, click the Security menu, then Application Data Modeling .
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Data Masking and Subsetting Pack.
Data Masking Definitions	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Data Masking Definitions .
	From the Oracle database or cluster database target home page, click the Security menu, then Data Masking Definitions .
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Data Masking and Subsetting Pack.
Data Masking Formats	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Data Masking Formats .
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Data Masking and Subsetting Pack.
Data Subset Definitions	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Data Subset Definitions .
	From the Oracle database or cluster database target home page, click the Schema menu, then Data Subsetting .
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Data Masking and Subsetting Pack.

Note:

- Oracle Data Masking and Subsetting Pack incorporates the previous Oracle Data Masking Pack, Oracle Test Data Management Pack, and Oracle Data Masking and Subsetting Pack for non-Oracle Databases.
- Application Data Modeling was previously called Data Discovery and Modeling.

Oracle Diagnostics Pack

Oracle Diagnostics Pack provides automatic performance diagnostic and advanced system monitoring functionality.

Oracle Diagnostics Pack includes the following features:

- Automatic Workload Repository
- Automatic Database Diagnostic Monitor (ADDM)
- Active Session History (ASH)
- Performance monitoring (database and host)
- Event notifications: notification methods, rules, and schedules

- Event history and metric history (database and host)
- Blackouts
- Dynamic metric baselines
- Monitoring templates
- Memory-access based performance monitoring
- Supporting functionality to perform per stream bottleneck detection and per component top wait event analysis
- Execution of the Real Application Testing 'Replay Compare Period Report'

In order to use the features listed above, you must purchase licenses for Oracle Diagnostics Pack. A new initialization parameter, CONTROL_MANAGEMENT_PACK_ACCESS, controls access to Oracle Diagnostics Pack and Oracle Tuning Pack. This parameter can be set to one of three values:

- DIAGNOSTIC+TUNING: Oracle Diagnostics Pack and Oracle Tuning Pack functionally is enabled in the database server.
- DIAGNOSTIC: Only Oracle Diagnostics Pack functionality is enabled in the server.
- NONE: Oracle Diagnostics Pack and Oracle Tuning Pack functionally is disabled in the database server.

Any and all methods of accessing Oracle Diagnostics Pack functionality, whether through Enterprise Manager Console, Desktop Widgets, command-line APIs, or direct access to the underlying data, requires an Oracle Diagnostics Pack license.

Enterprise Manager

To determine which links in Enterprise Manager Grid Control and Database Control are part of Oracle Diagnostics Pack, click the **Setup** link on the top right-hand part of the Enterprise Manager Home page.

- When you click the **Setup** link, the navigation bar contains the **Management Pack Access** link. Click this link.
- This will take you to the **Management Pack Access** page, which allows you to grant and remove access from all the management packs.
 - For Enterprise Manager Database Control, click the Remove Access radio button for the Diagnostics Pack and click **Apply**.
 - For Enterprise Manager Grid Control, click the appropriate check box for the Diagnostics Pack and click **Apply**.

This procedure disables all the links and tabs associated with Oracle Diagnostics Pack in Enterprise Manager. All the disabled links and tabs are part of Oracle Diagnostics Pack and therefore require a pack license.

Command-Line APIs

Oracle Diagnostics Pack features can also be accessed by way of database server APIs and command-line interfaces:

- The DBMS_WORKLOAD_REPOSITORY package is part of this pack.
- The DBMS_ADDM package is part of this pack.
- The DBMS_ADVISOR package is part of this pack if you specify ADDM as the value of the advisor_name parameter, or if you specify for the value of the task_name parameter any value starting with the ADDM prefix.

- The DBMS_WORKLOAD_REPLAY.COMPARE_PERIOD_REPORT function is part of this pack.
- The V\$ACTIVE_SESSION_HISTORY dynamic performance view and its underlying table, X\$ASH, are part of this pack.
- The DBA_STREAMS_TP_PATH_BOTTLENECK view is part of this pack.
- All views beginning with DBA_ADDM_ are part of this pack.
- Some data in DBA_STREAMS_TP_COMPONENT_STAT requires Oracle Diagnostics Pack. The following filter clause to any query on DBA_STREAMS_TP_COMPONENT_STAT shows Diagnostics-Pack-dependent data:

```
where STATISTIC_UNIT = 'PERCENT'
```

For example, the following query shows Diagnostics-Pack-dependent data only:

```
SELECT * FROM DBA STREAMS TP COMPONENT STAT
  where STATISTIC_UNIT = 'PERCENT';
```

- All data dictionary views beginning with the prefix DBA_HIST_ are part of this pack, along with their underlying tables. The only exception are the views: DBA_ HIST_SNAPSHOT, DBA_HIST_DATABASE_INSTANCE, DBA_HIST_SNAP_ERROR, DBA_ HIST_SEG_STAT, DBA_HIST_SEG_STAT_OBJ, and DBA_HIST_UNDOSTAT. They can be used without the Oracle Diagnostics Pack license.
- All data dictionary views with the prefix DBA_ADVISOR_ are part of this pack if queries to these views return rows with the value ADDM in the ADVISOR_NAME column or a value of ADDM* in the TASK_NAME column or the corresponding TASK_
- The following reports found in the /rdbms/admin/ directory of the Oracle home directory are part of this pack: awrrpt.sql, awrrpti.sql, awrgrpt.sql, awrgrpti.sql, awrgdrpt.sql, awrgdrpi.sql, addmrpti.sql, addmrpti.sql, ashrpt.sql, ashrpti.sql, awrddrpt.sql, awrddrpi.sql, awrsgrpi.sql, awrsqrpt.sql, awrextr.sql, awrload.sql, awrinfo.sql, spawrio.sql, and spawrrac.sql.

Oracle Diagnostics Pack Enterprise Manager Repository Views

- **Monitoring Views**
 - MGMT\$BLACKOUT HISTORY
 - MGMT\$BLACKOUTS
 - MGMT\$ALERT_ANNOTATIONS
 - MGMT\$ALERT_NOTIF_LOG
 - MGMT\$TARGET_METRIC_COLLECTIONS
 - MGMT\$METRIC_COLLECTIONS
 - MGMT\$TARGET METRIC SETTINGS
 - MGMT\$AVAILABILITY_CURRENT
 - MGMT\$AVAILABILITY_HISTORY
 - MGMT\$ALERT_CURRENT
 - MGMT\$ALERT HISTORY
 - MGMT\$METRIC DETAILS
 - MGMT\$METRIC_CURRENT

- MGMT\$METRIC_HOURLY
- MGMT\$METRIC_DAILY
- **Template Views**
 - MGMT\$TEMPLATES
 - MGMT\$TEMPLATE_POLICY_SETTINGS
 - MGMT\$TEMPLATE_METRIC_COLLECTION
 - MGMT\$TEMPLATE METRIC SETTINGS

Oracle Provisioning and Patch Automation Pack

Oracle Provisioning and Patch Automation Pack automates the deployment of software, applications, and patches for the database and underlying operating system. It makes critical data center operations easy, efficient and scalable resulting in lower operational risk and cost of ownership. The ability to provision the entire software stack that includes the operating system and the database, supplemented by comprehensive reporting tools make Oracle Provisioning and Patch Automation Pack an extremely significant entity in overall System Management space.

Oracle Provisioning and Patch Automation Pack contains the following features:

- Automated patching for Oracle database products and the operating system
- Critical Patch Facility
- Bare metal OS provisioning
- Single instance and RAC provisioning, including when invoked in the context of Real Application Testing
- Single click cluster scale up and scale down
- Single instance-to-RAC conversion
- CLI driven runtime of the above operations
- **Enterprise Security Advisor**
- Provisioning and deployment reports

Oracle Tuning Pack

Oracle Tuning Pack provides database administrators with expert performance management for the Oracle environment, including SQL tuning and storage optimizations. Oracle Diagnostics Pack is a prerequisite product to Oracle Tuning Pack. Therefore, to use Oracle Tuning Pack, you must also have Oracle Diagnostics Pack.

Oracle Tuning Pack includes the following features:

- SQL Access Advisor
- **SQL Tuning Advisor**
- **Automatic SQL Tuning**
- SQL Monitoring
- Reorganize objects

A new initialization parameter, CONTROL_MANAGEMENT_PACK_ACCESS, is introduced to control access to Oracle Diagnostics Pack and Oracle Tuning Pack in the database server. This parameter can be set to one of three values:

- DIAGNOSTIC+TUNING: Oracle Diagnostics Pack and Oracle Tuning Pack functionally is enabled in the database server.
- DIAGNOSTIC: Only Oracle Diagnostics Pack functionality is enabled in the server.
- NONE: Oracle Diagnostics Pack and Oracle Tuning Pack functionally is disabled in the database server.

Any and all methods of accessing Oracle Tuning Pack functionality, whether through Enterprise Manager Console, Desktop Widgets, command-line APIs, or direct access to the underlying data, requires an Oracle Tuning Pack license.

Enterprise Manager

To determine which links in Enterprise Manager Grid Control and Database Control are part of Oracle Tuning Pack, click the **Setup** link on the top right-hand part of the Enterprise Manager Home page.

- When you click the **Setup** link, the navigation bar contains the **Management Pack Access** link. Click this link.
- This will take you to the Management Pack Access page, which allows you to grant and remove access from all the management packs.
 - For Enterprise Manager Database Control, click the Remove Access radio button for the Tuning Pack and click **Apply**.
 - For Enterprise Manager Grid Control, click the appropriate check box for the Tuning Pack and click **Apply**.

This procedure disables all the links and tabs associated with Oracle Tuning Pack in Enterprise Manager. All the disabled links and tabs are part of Oracle Tuning Pack and therefore require a pack license.

Command-Line APIs

Oracle Tuning Pack features can also be accessed by way of database server APIs and command-line interfaces:

- DBMS_ADVISOR, when the value of the advisor_name parameter is either SQL Tuning Advisor or SQL Access Advisor.
- DBMS_SQLTUNE (See Note)
- V\$SQL MONITOR
- V\$SQL PLAN MONITOR
- The following report found in the /rdbms/admin/ directory of the Oracle home directory is part of this pack: sqltrpt.sql.

Note: If you are licensed for Oracle Database Enterprise Edition, then you can use certain subprograms of the DBMS_SQLTUNE package even if you do not have an Oracle Tuning Pack license. See the SQL Tuning Sets entry in Table 1–1 for more information.

Legacy: Oracle Data Masking Pack for Oracle and non-Oracle Databases

Oracle Enterprise Manager Cloud Control no longer offers the Oracle Data Masking Pack. Customers who purchased the legacy Oracle Data Masking Pack are entitled to use the following components and features of Oracle Data Masking and Subsetting

- Application Data Modeling
- Data Masking Formats
- **Data Masking Definitions**
- Data Subsetting Definitions excluding the Table Rules and Rule Parameters tabs
- Application Data Modeling and Data Masking Enterprise Manager Command Line Interface (CLI) verbs
- Application Data Modeling accelerator for select versions of Oracle E-Business
- Application Data Modeling accelerator for select versions of Oracle Fusion **Applications**
- Data Masking templates for select versions of Oracle Fusion Applications
- Data Masking templates for select versions of Oracle E-Business Suite

Oracle Data Masking Pack for non-Oracle Databases includes the following restricted-use licenses:

- Database Gateway for APPC
- Database Gateway for DRDA
- Database Gateway for Informix
- Database Gateway for SQL Server
- Database Gateway for Sybase

If you want to use the Oracle Database Gateways listed above not solely for the purposes of Oracle Data Masking Pack, then you must purchase full-use licenses for the Oracle Database Gateways. When using Oracle Data Masking Pack for non-Oracle databases, the Oracle Database Gateways stage the data in a separately licensed Oracle database. Oracle Data Masking functionality cannot be executed directly against the non-Oracle database.

Licensed Links

The following are the licensed pages and links for Oracle Data Masking Pack within Oracle Enterprise Manager.

Licensed Page/Link	How to Access
Application Data Modeling	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management, then Application Data Modeling.
	From the Oracle database or cluster database target home page, click the Security menu, then Application Data Modeling .
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Data Masking Pack.
Data Masking Definitions	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management, then Data Masking Definitions.
	From the Oracle database or cluster database target home page, click the Security menu, then Data Masking Definitions .
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Data Masking Pack.

Licensed Page/Link	How to Access
Data Masking Formats	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Data Masking Formats .
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Data Masking Pack.
Data Subset Definitions	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Data Subset Definitions .
	From the Oracle database or cluster database target home page, click the Schema menu, then Data Subsetting .
	All features, functions, links, buttons, and drill-downs on these menus with the exception of the features under the Table Rules and Rules Parameters tabs are licensed as part of the Oracle Data Masking Pack.

Legacy: Oracle Test Data Management Pack for Oracle and non-Oracle Databases

Oracle Enterprise Manager Cloud Control no longer offers Oracle Test Data Management Pack. Customers who purchased Oracle Test Data Management Pack are entitled to use the following components and features of Oracle Data Masking and Subsetting Pack:

- Application Data Modeling
- **Data Subset Definitions**
- Application Data Modeling and Data Subsetting Enterprise Manager Command Line Interface (CLI) verbs
- Application Data Modeling accelerator for select versions of Oracle E-Business
- Application Data Modeling accelerator for select versions of Oracle Fusion Applications

Oracle Test Data Management Pack for non-Oracle Databases includes the following restricted-use licenses:

- Database Gateway for APPC
- Database Gateway for DRDA
- **Database Gateway for Informix**
- Database Gateway for SQL Server
- Database Gateway for Sybase

If you want to use the Oracle Database Gateways listed above not solely for the purposes of Oracle Test Data Management Pack, then you must purchase full-use licenses for the Oracle Database Gateways. When using the Oracle Test Data Management Pack for non-Oracle databases, the Oracle Database Gateways stage the data in a separately licensed Oracle database. Oracle Test Data Management functionality cannot be executed directly against the non-Oracle database.

Licensed Links

The following are the licensed pages and links for Oracle Test Data Management Pack within Oracle Enterprise Manager.

Licensed Page/Link	How to Access
Application Data Modeling	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Application Data Modeling .
	From the Oracle database or cluster database target home page, click the Security menu, then Application Data Modeling .
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Data Subset Definitions	From the Enterprise Summary home page, click the Enterprise menu, then Quality Management , then Data Subset Definitions .
	From the Oracle database or cluster database target home page, click the Schema menu, then Data Subsetting.
	All features, functions, links, buttons, and drill-downs on these menus are licensed as part of the Oracle Test Data Management Pack.

Checking for Database Option and Management Pack Usage

Oracle provides the script options_packs_usage_statistics.sql, which enables you to check database option and management pack usage on your database. This script lists, in two distinct sections:

- Database option and management pack usage
- Features used by each database option and management pack

You can obtain the script from My Oracle Support as follows:

Use a Web browser to view the My Oracle Support Web site:

https://support.oracle.com

Log in to My Oracle Support.

If you are not a My Oracle Support registered user, then click Register and follow the registration instructions.

Search for Document ID 1317265.1, or access it directly at the following URL:

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=1317265.1

You can manually run the script on an individual database or use Oracle Enterprise Manager Job System to automatically run the script on multiple databases. Refer to Oracle Enterprise Manager Cloud Control Administrator's Guide for information on Oracle Enterprise Manager Job System.

Note: The information obtained from this script will provide you an overview of the licensable Database Options and Enterprise Management Packs that were identified as used by your organization. This is to be used for informational purposes only and this does not represent your license entitlement or requirement. Please contact the License Management Services representative at

http://www.oracle.com/us/corporate/license-management-servic es/index.html to understand your license requirements.

Other Oracle Products

In addition to the options and packs described in this chapter, Oracle provides the following additional products for specific customer environments:

- Oracle Database Mobile Server
- Oracle Programmer
- Oracle Secure Backup

Oracle Database Mobile Server

Oracle Database Mobile Server is middle-tier infrastructure for mobile applications and embedded devices. It can run on either Oracle WebLogic Server or Oracle Glassfish. It provides a secure, scalable connection for remote clients to an Oracle enterprise backend, including data synchronization with Oracle Database. The synchronization process is designed to be robust and resilient. It is reliable, even over shaky network connections. Oracle Database Mobile Server also provides management for applications, users, and devices. It is designed to work with Oracle Berkeley DB as a client data store, providing efficient, reliable, and secure data management running locally on mobile and embedded devices. It is also compatible with SQLite, a widely used open source data store. Database Mobile Server supports many popular device platforms, such as embedded Java, Android, Linux, and Windows, both mobile and desktop.

Oracle Programmer

Oracle Programmer is a separate Oracle product that provides a programmatic interface to any edition of Oracle Database for application programmers. Programmer provides a rich set of interfaces for developers who build enterprise applications that access and manipulate Oracle Database. This product is licensed separately from the Oracle Database products. Oracle Programmer is a family of the following products:

- Three embedded SQL-style interfaces: precompilers, SQL*Module, and SQLJ
- Two utilities to generate host-language bindings from database schemas: Object Type Translator and JPub

Oracle Secure Backup

Oracle Secure Backup provides tape backup management for the entire Oracle environment. You can use Oracle Secure Backup to back up Oracle databases and host file systems to tape through direct-attached or network-attached tape drives. Oracle Secure Backup provides centralized management and control over backup and restore operations.

Oracle Secure Backup is available in the following forms, each suitable for different development and deployment scenarios:

Oracle Secure Backup For environments that consist of many servers, Oracle Secure Backup offers high performance data protection from server to tape. This protection is crucial for local and offsite storage of business-critical data.

Oracle Secure Backup Express For environments that consist of a single server, Oracle Secure Backup Express offers the same tape backup functionality as Oracle Secure Backup, but is limited to a single host with one direct-attached tape drive.

Third-Party Licenses

This appendix contains licensing information about third-party products included with Oracle Database 11g Release 2 (11.2). This appendix contains the following sections:

Third-Party Product Licensing for Oracle Database

Third-Party Product Licensing for Oracle Database

This section includes third-party license information for certain third-party products included with Oracle Database 11g Release 2 (11.2).

Third-Party Products Included with Oracle Database

Oracle acknowledges that the following third-party proprietary and open source software are used in the provided programs covered by this documentation.

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- lib/gssapi/mechglue/g_accept_sec_context.c
- lib/gssapi/mechglue/g_acquire_cred.c
- lib/gssapi/mechglue/g_canon_name.c
- lib/gssapi/mechglue/g_compare_name.c
- lib/gssapi/mechglue/g_context_time.c
- lib/gssapi/mechglue/g_delete_sec_context.c
- lib/gssapi/mechglue/g_dsp_name.c
- lib/gssapi/mechglue/g_dsp_status.c
- lib/gssapi/mechglue/g_dup_name.c
- lib/gssapi/mechglue/g_exp_sec_context.c
- lib/gssapi/mechglue/g_export_name.c
- lib/gssapi/mechglue/g_glue.c
- lib/gssapi/mechglue/g_imp_name.c
- lib/gssapi/mechglue/g_imp_sec_context.c
- lib/gssapi/mechglue/g_init_sec_context.c
- lib/gssapi/mechglue/g_initialize.c
- lib/gssapi/mechglue/g_inquire_context.c
- lib/gssapi/mechglue/g_inquire_cred.c
- lib/gssapi/mechglue/g_inquire_names.c
- lib/gssapi/mechglue/g_process_context.c
- lib/gssapi/mechglue/g_rel_buffer.c
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Based upon the plugin by Tzury Bar Yochay: http://github.com/tzuryby/hotkeys

Original idea by:

Binny V A, http://www.openjs.com/scripts/events/keyboard_shortcuts/

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¡Query, Validation plugin, 1.7

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http://bassistance.de/jquery-plugins/jquery-plugin-validation/

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