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Licensing Information

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Oracle Database Licensing Information 10*g* Release 1 (10.1)

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Oracle Database Licensing Information 10*g* Release 1 (10.1)

Part No. B13552-01

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- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

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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 and the licenses required to use them. Oracle offers a variety of licensing options that determine your rights to run the Oracle Programs. If you have a question about your licensing needs, please contact your Oracle sales representative or refer to the resources listed in the "Related Documents" section below for more information.

Oracle Database 10*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 and their licensing requirements.

This Preface contains these topics:

- Intended Audience
- Documentation Accessibility
- Structure
- Related Documents
- Conventions

Intended Audience

This book is intended for all purchasers of Oracle Database 10*g*.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at

`http://www.oracle.com/accessibility/`

Accessibility of Links to External Web Sites in Documentation This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Structure

This document contains two chapters:

Chapter 1, "Oracle Database Editions"
This chapter describes the Oracle Database editions.

Chapter 2, "Options and Packs"
This chapter describes the Oracle Database options and packs and their availability.

Related Documents

For more information, see these Oracle resources:

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

  `http://www.oracle.com/corporate/pricing/sig.pdf`

Printed documentation is available for sale in the Oracle Store at

`http://oraclestore.oracle.com/`

To download free release notes, installation documentation, white papers, or other collateral, please visit the Oracle Technology Network (OTN). You must register online before using OTN; registration is free and can be done at

`http://otn.oracle.com/membership/`

If you already have a username and password for OTN, then you can go directly to the documentation section of the OTN Web site at

`http://otn.oracle.com/documentation/`

Conventions

We use various conventions in text to help you more quickly identify special terms. The following table describes those conventions and provides examples of their use.

Convention	Meaning	Example
Bold	Bold typeface indicates terms that are defined in the text or terms that appear in a glossary, or both.	When you specify this clause, you create an **index-organized table**.
Italics	Italic typeface indicates book titles or emphasis.	*Oracle Database Concepts* Ensure that the recovery catalog and target database do *not* reside on the same disk.

Convention	Meaning	Example
`UPPERCASE monospace (fixed-width) font`	Uppercase monospace typeface indicates elements supplied by the system. Such elements include parameters, privileges, datatypes, RMAN keywords, SQL keywords, SQL*Plus or utility commands, packages and methods, as well as system-supplied column names, database objects and structures, usernames, and roles.	You can specify this clause only for a `NUMBER` column. You can back up the database by using the `BACKUP` command. Query the `TABLE_NAME` column in the `USER_TABLES` data dictionary view. Use the `DBMS_STATS.GENERATE_STATS` procedure.
`lowercase monospace (fixed-width) font`	Lowercase monospace typeface indicates executables, filenames, directory names, and sample user-supplied elements. Such elements include computer and database names, net service names, and connect identifiers, as well as user-supplied database objects and structures, column names, packages and classes, usernames and roles, program units, and parameter values. **Note:** Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	Enter `sqlplus` to start SQL*Plus. The password is specified in the `orapwd` file. Back up the datafiles and control files in the `/disk1/oracle/dbs` directory. The `department_id`, `department_name`, and `location_id` columns are in the `hr.departments` table. Set the `QUERY_REWRITE_ENABLED` initialization parameter to `true`. Connect as `oe` user. The `JRepUtil` class implements these methods.
`lowercase italic monospace (fixed-width) font`	Lowercase italic monospace font represents placeholders or variables.	You can specify the *`parallel_clause`*. Run *`old_release`*`.SQL` where *`old_release`* refers to the release you installed prior to upgrading.

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Oracle Database Editions

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

- The Oracle Database Product Family
- Feature Availability by Edition
- Restricted-Use Licensing
- General Licensing Information

The Oracle Database Product Family

Oracle Database is available in four 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 application purposes. This section describes the Oracle Database editions. The database enhancement 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. Standard Edition One can only be licensed on servers with a maximum capacity of two processors.

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 Real Application Clusters. Oracle Database Standard Edition can be licensed on single servers or server clusters that have a maximum capacity of four processors. Real Application Clusters is not included in the Standard Edition of releases prior to Oracle Database 10*g*, nor is it an available option with those earlier releases.

When used in a clustered server environment, Oracle Database Standard Edition requires the use of Oracle Cluster Ready Services (CRS). Third-party clusterware management solutions are not supported. In addition, Automatic Storage Management (ASM) must be used to manage the data stored in Oracle Database. Third-party volume managers and file systems are not supported for this purpose. CRS and ASM are required in a clustered server environment in order to facilitate the installation, configuration, and support of Real Application Clusters on Standard Edition.

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 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 2000, Windows NT, Windows XP, and Windows Server 2003 (32-bit and 64-bit versions). The Management Packs are not included in Personal Edition.

Feature Availability by Edition

Table 1–1 lists the features that are not available with Standard Edition or Standard Edition One. 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) for the features you need in your business.

Table 1–1 Features Not Available with Oracle Database Standard Edition or Standard Edition One

Area and Feature	Comments
High Availability	
Oracle Data Guard	Data Guard provides a comprehensive set of services that create, maintain, manage, and monitor one or more standby databases to enable a production Oracle Database to survive disasters and data corruption.
Fast-start fault recovery	This feature provides fast and predictable recovery from system failures.
Online operations	The following online operations are not included with Standard Edition or Standard Edition One: ■ Online index maintenance ■ Online table organization ■ Online table redefinition
Backup and recovery	The following backup and recovery features are not included with Standard Edition or Standard Edition One: ■ Block-level media recovery ■ Parallel backup and recovery ■ Change-aware incremental backups ■ Duplexed backup sets (backup sets can be written to multiple devices in parallel) ■ Point-in-time tablespace recovery (a tablespace can be recovered up to a specified point in time after a failure or inadvertent transaction execution) ■ Trial recovery (redo is applied in memory only but is not written to disk and is easily rolled back)

Table 1–1 (Cont.) Features Not Available with Oracle Database Standard Edition or Standard Edition One

Area and Feature	Comments
Oracle Flashback features	The following Oracle Flashback features are not part of Standard Edition or Standard Edition One: ■ Oracle Flashback Table ■ Oracle Flashback Database ■ Oracle Flashback Transaction Query
Security	
Oracle Advanced Security	This option is described in "Oracle Advanced Security" on page 2-2.
Oracle Label Security	This option is described in "Oracle Label Security" on page 2-2.
Virtual Private Database	This feature provides functionality to create security policies that implement row-level security.
Fine-grained auditing	This features allows the monitoring of database access based on the content of the data accessed.
Enterprise User Security	This features allows the definition of enterprise users and roles.
N-tier authentication authorization	This feature preserves client identity throughout all tiers.
Manageability	
Oracle Change Management Pack	This pack is described in "Oracle Change Management Pack" on page 2-3.
Oracle Configuration Management Pack	This pack is described in "Oracle Configuration Management Pack" on page 2-6.
Oracle Diagnostic Pack	This pack is described in "Oracle Diagnostic Pack" on page 2-3.
Oracle Tuning Pack	This pack is described in "Oracle Tuning Pack" on page 2-5.
Database Resource Manager	Database Resource Manager gives Oracle Database more control over resource management decisions, circumventing problems arising from inefficient operating system management.
VLDB, Data Warehousing, Business Intelligence	
Oracle Partitioning	This option is described in "Oracle Partitioning" on page 2-1.
Oracle OLAP	This option is described in "Oracle On-Line Analytical Processing (OLAP)" on page 2-2.
Oracle Data Mining	This option is described in "Oracle Data Mining" on page 2-2.
Data compression	This feature provides the ability to compress tables and partitions.
Bitmapped index and bitmapped join index	This feature provides an index type commonly used in data warehouses for columns with low cardinality, such as 'Y' or 'N', to dramatically improve performance gains in a data warehouse application.
Export transportable tablespace	Import transportable tablespace, including cross-platform transport, is included with Standard Edition and Standard Edition One, but export transportable tablespace is not included.
Asynchronous change data capture	This feature provides a framework for capturing change data, publishing it, and enabling applications to subscribe to the change data in a controlled fashion. Change capture occurs asynchronously based on the information in the Oracle redo logs.
Summary management	Summary management consists of mechanisms to define materialized views and dimensions, refresh and query rewrite mechanisms, and a collection of materialized view analysis and advisory functions and procedures in the `DBMS_OLAP` package.

Table 1–1 (Cont.) Features Not Available with Oracle Database Standard Edition or Standard Edition One

Area and Feature	Comments
Parallel Operations	
Parallel query	Oracle Database transparently distributes query execution across multiple processes, resulting in excellent performance.
Parallel DML	This feature no longer requires the Oracle Partitioning option. DML operations are transparently divided across multiple processes.
Parallel index build	Indexes can be created using parallel processes, significantly improving performance of the operation.
Parallel statistics gathering	--
Parallel Data Pump export and import	The new Data Pump Export and Import utilities can each be run in parallel, resulting in better performance in loading and unloading data and metadata.
Parallel text index creation	--
Parallel backup and recovery	--
Information Integration	
Oracle Streams	Message queuing and apply features of Oracle Streams are available in Standard Edition and Standard Edition One, but change capture is available only in Enterprise Edition.
Advanced Replication (multimaster)	Basic replication (which is available with Standard Edition and Standard Edition One) provides support for read-only and updatable materialized views (for replication) and multitier materialized views. Standard Edition and Standard Edition One databases can also act as a master site for materialized views, but cannot participate in multimaster replication.
Oracle Messaging Gateway	Oracle Messaging Gateway consists of an administration package for gateway configuration and management and a gateway agent that processes propagation.
Networking	
Connection Manager	This feature provides multiplexing, multiprotocol connectivity, and network access control.
Multiprotocol connectivity	This feature bridges Oracle Net Services communities of users that use different network protocols such as SPX/IPX, TCP/IP, or LU6.2.
High-speed Infiniband network support	Oracle protocol support now includes support for the industry-standard Sockets Direct Protocol (SDP) for Infiniband high-speed networks. The SDP protocol is a high-speed communication protocol that speeds up performance of client/server and server/server connections. By using SDP, applications place most of the messaging burden upon the network interface card, freeing the CPU for other tasks.
Content Management	
Oracle Spatial	This option is described in "Oracle Spatial" on page 2-3.

The following features related to application development are included in the Standard Edition but are available only on Windows platforms:

- COM Automatic
- 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

Restricted-Use Licensing

The following restricted-use licenses are included with Oracle Database 10*g* in the editions indicated:

- A restricted-use license for Oracle Internet Directory (OID), a component of Oracle Identity Management, is included with all editions 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 Identity Management.
- For OS/390 implementations of Enterprise Edition, use of either Access Manager for CICS or Access Manager for IMS/TM is included.
- A restricted-use license for Oracle Application Server Containers for J2EE (OC4J) is included with all editions. This embedded version is provided solely to support Oracle Enterprise Manager (Database and Grid Control), Advanced Queuing Servlet, *i*SQL*Plus, Ultra Search, and Workflow, and may not be used or deployed for other uses.

General Licensing Information

Oracle Database Standard Edition One, Oracle Database Standard Edition, and Oracle Database Enterprise Edition can be licensed with the Named User Plus metric and/or the Processor metric. Oracle Database Personal Edition can be licensed only using the Named User Plus metric.

Metric Definitions[1]

Named User Plus This metric is defined as an individual authorized by you to use the programs which are installed on a single server or multiple servers, regardless of whether the individual is actively using the programs at any given time. A non-human-operated device will be counted as a named user plus in addition to all individuals authorized to use the programs, if such device can access the programs. If multiplexing hardware or software (for example, a TP monitor or a web server product) is used, this number must be measured at the multiplexing front end. Automated batching of data from computer to computer is permitted.

Processor This metric is defined as all processors where the Oracle Programs are installed and/or running. Programs licensed on a Processor basis may be accessed by your internal users (including agents and contractors) and by your third-party users.

[1] In the event of a conflict between these metric definitions and those set forth in your ordering document for the Oracle Programs, the definitions in your ordering document will prevail.

License Minimums[2]

Oracle Database Standard Edition One If licensing by Named User Plus, the minimum is 5.

Oracle Database Standard Edition If licensing by Named User Plus, the minimum is 5.

Oracle Database Enterprise Edition If licensing by Named User Plus, the minimum is 25 Named User Plus licenses per processor. Also, the Database Enterprise Edition options and Enterprise Managers must match the number of licenses of the associated Oracle Database Enterprise Edition. "Associated database" is defined as the database(s) which is (are) being managed by this option.

Oracle Database Personal Edition Oracle Database Personal Edition requires exactly one Named User Plus license.

[2] In the event of a conflict between these license minimums and those set forth in your ordering document for the Oracle Programs, the terms in your ordering document will prevail.

2

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
- 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. Real Application Clusters is included with Oracle Database Standard Edition. You cannot purchase any options with Oracle Database Standard Edition One. The Personal Edition includes all options except Real Application Clusters at no additional cost.

Oracle Real Application Clusters Oracle Real Application Clusters (RAC) is a database computing environment that harnesses the processing power of multiple interconnected computers using clustering technology. RAC provides unlimited scalability and high availability for all applications. 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. RAC provides scalable performance: as demand for database throughput grows, additional computers can be added to the database cluster with no downtime. RAC supports a single-system image for ease of management. RAC also provides a complete and integrated stack of clustering software on all platforms; third-party clusterware software is not required. Finally, RAC provides cluster file system capability on the Windows and Linux platforms. When using RAC and Standard Edition, the maximum number of processors per cluster is 4.

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. Range, hash, list, and composite (range combined with hash and range combined with list) partitioning methods are supported.

Oracle Data Mining Oracle Data Mining enables companies to build advanced business intelligence applications that mine corporate databases, reveal new patterns and relationships, and integrate that information into business applications. This option 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 either a Java or PL/SQL API.

Oracle Advanced Security Oracle Advanced Security provides network encryption and a complete suite of strong authentication services to Oracle Database. Network encryption is implemented using industry-standard data encryption and data integrity algorithms. This feature provides a choice of algorithms and cipher strengths for deployment. Strong authentication services support a comprehensive suite of industry-standard third-party authentication options. The authentication options include single sign-on services to the Oracle Database by interoperating with existing authentication frameworks and two-factor authentication choices such as smart cards and token cards.

Users wishing to use Enterprise User Security in Oracle Database Enterprise Edition no longer need to license the Oracle Advanced Security Option for password-based authentication. However, they must license the Oracle Identity Management Option, which includes Oracle Internet Directory (OID). Users wishing to use stronger authentication alternatives (such as Kerberos or PKI) for Enterprise User Security must license Oracle Advanced Security and Oracle Identity Management. Oracle Identity Management is an option to the Oracle Application Server 10*g* Standard Edition product. Any Oracle Advanced Security licenses purchased on or before January 31, 2004, have restricted use of the Oracle Identity Management option to support enterprise user security. Please contact your Oracle sales representative for additional information.

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 Management. Please contact your Oracle sales representative for additional information.

Oracle On-Line Analytical Processing (OLAP) Oracle OLAP is a scalable, high-performance calculation engine with fully integrated management and administration for delivering analytic applications. Fully integrated in the database, this option provides a complete set of analytic functions. Predictive analysis can be used, for example, to forecast market trends, predict product manufacturing requirements, and build enterprise budgeting and financial analysis systems. Using complex, multidimensional queries and calculations, information such as market shares and net present value can be derived. The Java OLAP API provides efficient object-orientation for building applications that require complex analytic queries.

Oracle Spatial Oracle Spatial enables users and application developers to integrate their spatial data seamlessly into enterprise applications. This option comprises an integrated set of functions and procedures that facilitate analysis based on the spatial relationships of associated data. Examples of such analysis include the proximity of store locations to customers within a given distance and sales revenue per territory. Oracle Spatial manages spatial data in an industry-standard database, resulting in application integration that takes place at the server. This enables vendor tools and applications to access spatial data directly from Oracle Database, providing interoperability and minimizing cost.

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, and APIs provided with Oracle Database software.

Oracle Change Management Pack The Oracle Change Management Pack enables database administrators to make complex changes to schema objects safely, track changes to schemas and databases over time, make copies of schemas or objects, and compare and synchronize schemas and databases. With Oracle Change Management, you can:

- Capture and store object definitions
- Compare object definitions and highlight differences
- Synchronize object definitions
- Propagate object definitions to one or more sites
- Clone objects with a subset of their data
- Manage and plan changes over the life of the database and its applications

Oracle Diagnostic Pack The Oracle Diagnostic Pack provides automatic performance diagnostic and advanced system monitoring functionality. The Diagnostic Pack includes the following features:

- Automatic Workload Repository
- Automatic Database Diagnostic Monitor (ADDM)
- Performance monitoring (database and host)
- Event notifications: notification methods, rules, and schedules
- Event history and metric history (database and host)
- Blackouts

In order to use the features listed above, you must purchase licenses to the Diagnostic Pack. The list that follows itemizes the Enterprise Manager links and the database server APIs and command-line interfaces that require licensing of the Diagnostic Pack.

- Almost all Enterprise Manager pages have a **Related Links** section at the bottom of the page. The **All Metrics**, **Alert History** and **Blackouts** links are part of the Diagnostic Pack. If the **Advisor Central** link appears, it takes you to the **Advisor Central** page. On that page, in the **Advisors** section, the **ADDM** link is part of this pack. In the **Results** section, table rows containing "ADDM" in the **Advisory Type** column are part of this pack.

- Some components of the Diagnostic Pack are accessed only when you are in Grid Control mode. You can navigate to these components in several ways. The list that follows assumes that you begin from the main **Grid Control** page.
  - When you click the **Preferences** link, the navigation bar contains a **Notification** section, where the **Rules** and **Schedule** links are part of this pack.
  - When you click the **Setup** link, the navigation bar contains links for **Notification Methods** and **Blackouts**, both of which are part of this pack.
  - When you click the **Alerts** tab, the resulting table contains a **Message** column which is part of this pack.
  - When you click the **Targets** tab and then the **Groups** subtab, the resulting **Wait Time** chart and **Alert History** chart are part of this pack.
  - When you click the **Targets** tab and then the **Databases** subtab, the resulting table has four columns with names beginning with **Sessions:** and an **Instance CPU** column, all of which are part of this pack.
  - When you click the **Targets** tab and then the **Groups** subtab, the **Alerts** and **Policy Violations** columns of the resulting table are part of this pack.
  - In the same table, if you click a link in the **Name** column, you reach the **Group** home page. In the **General** section, the **Up** link is part of this pack. In the **Alerts** section, links in the **Metric** column are part of this pack. If you click the **Components** link on this page, links in the **Availability**, **Alerts**, and **Policy Violations** columns are part of this pack.
  - When you click the **Targets** tab and then the **All Targets** tab, links in the **Availability** column of the table are part of this pack.
- Some components of the Diagnostic Pack can be accessed in either Grid Control or Database Control mode. You can navigate to these components in several ways. The list that follows assumes that you begin on the main **Database** home page.
  - In the **General** section of the home page, the **Availability %** link is part of this pack.
  - The entire **Active Sessions** section and all of its links are part of this pack.
  - In the **Diagnostics Summary** section, the **Performance Findings** link is part of this pack.
  - In the **Alerts** section, the links in the **Message** column of the table are part of this pack.
  - In some circumstances a **Performance Analysis** section appears on the **Database** home page. Links in the **Recommendations** column to "ADDM" are part of this pack.
  - The entire **Database Performance** page, which you reach by clicking the **Performance** subtab from the **Database** home page, is part of this pack.
  - The **Database Administration** page is reached by clicking the **Administration** subtab of the Database home page. In the **Enterprise Manager Administration** section, the **Notification Schedules** and **Blackouts** links are part of this pack. In the **Workload** section, the **Automatic Workload Repository** link takes you to the **Workload Repository** page, where the **Snapshots** and **Preserved Snapshot Sets** links are part of this pack.
  - On the Database home page, in the **General** section the **Host** link takes you to the top-level **Hosts** page. In the table on that page, links in all table columns except **Alerts** are part of this pack.

  - From the top-level **Hosts** page, clicking the name of a host takes you to the **Host** home page. In the **General** section, the **Availability** link is part of this pack. In the **Alerts** section, the **Metric Name** column is part of this pack.
  - On the **Host** home page, the entire **Performance** subtab is part of this pack.
  - From the **Host** home page, the **Targets** tab takes you to the **Host Targets** page, where the links in the **Availability** column of the table are part of this pack.
- Some Diagnostics Pack features are accessed by way of database server APIs and command-line interfaces:
  - The `DBMS_WORKLOAD_REPOSITORY` 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 `V$ACTIVE_SESSION_HISTORY` dynamic performance view is part of this pack.
  - All data dictionary views beginning with the prefix `DBA_HIST_` are part of this pack, along with their underlying tables.
  - 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_ID`.
  - The following reports found in the **/rdbms/admin/** directory of the Oracle home directory are part of this pack: awrrpt.sql, awrrpti.sql, addmrtp.sql, addmrpti.sql, awrrpt.sql, awrrpti.sql, addmrpt.sql, addmrpti.sql.

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

- SQL Access Advisor
- SQL Tuning Advisor
- SQL Tuning Sets
- Reorganize objects

In order to use the features listed above, you must purchase licenses to the Tuning Pack. The lists that follow itemize the Enterprise Manager links and the PL/SQL packages that require licensing of the Tuning Pack.

- Almost all Enterprise Manager pages have a **Related Links** section at the bottom of the page. In that section, the **Advisor Central** link takes you to the Advisor Central page. On that page, in the **Advisors** section, the **SQL Tuning Advisor** and the **SQL Access Advisor** links are part of this pack. In the **Results** section, table rows containing "SQL Tuning Advisor" or "SQL Access Advisor" in the **Advisory Type** column are part of this pack.
- In Enterprise Manager, the links that access Tuning Pack components can be reached in either Grid Control or Database Control mode. You can navigate to these components in several ways. The list that follows assumes that you begin on the main **Database** home page.

  - When you click the **Administration** subtab, in the **Workload** section, the **SQL Tuning Sets** link is part of this pack.
  - When you click the **Maintenance** subtab, in the **Utilities** section, the **Reorganize Objects** link is part of this pack.
  - In some circumstances, the **Database** home page has a **Performance Analysis** section at the bottom of the page. Clicking a link in the **Findings** column of the table takes you to the **ADDM Finding Details** page. If the recommendation on that page is to run either the SQL Tuning Advisor or the SQL Access Advisor, then the button that runs either of those advisors is part of this pack.
- Use of the following PL/SQL packages requires a license for the Oracle Tuning Pack:
  - `DBMS_SQLTUNE`
  - `DBMS_ADVISOR`, when the value of the *`advisor_name`* parameter is either '`SQL Tuning Advisor`' or '`SQL Access Advisor`'.

Oracle Configuration Management Pack The Oracle Configuration Management Pack enables database administrators to track hardware and software configuration information for hosts and databases managed by Enterprise Manager. That information can then be browsed, searched, compared, exported, and tracked historically. The pack also offers policy management and patch management capabilities based on the configuration information. Finally, to facilitate deployments, cloning functionality for database instance and Oracle home is also provided. The Configuration Management Pack includes the following features:

- Extensive searching on configuration data, such as Oracle home patch status, versions deployed, parameter settings, database feature use, and so forth.
- Ability to compare the configuration of two databases
- Host-to-host and host-to-multiple-hosts configuration comparison
- Exporting of host configuration information on the same or a different instance of Enterprise Manager for later browsing or comparison
- Patch management, including automated determination of what patches apply to a given Oracle home, using data obtained directly from MetaLink, as well as mass deployment of patches
- Database and Oracle home cloning
- Policy management to alert the administrator to deviations from best practices
- Automated in-context Critical Patch advisory assessment

In order to use the features listed above, you must purchase licenses to the Configuration Management Pack. The lists that follow itemize the Enterprise Manager links that require licensing of the Configuration Management Pack.

- Almost all Enterprise Manager pages have a **Related Links** section at the bottom of the page. In that section, the **Deployments** link is part of this pack.
- Some components of the Configuration Management Pack are accessed only when you are in Grid Control mode. You can navigate to these components in several ways. The list that follows assumes that you begin from the main **Grid Control** home page.
  - In the **All Target Alerts** section of the **Grid Control** page, links take you to various **Alert** tables. In those tables, links in the **Message** column are part of this pack.

  - All of the links in the **Critical Patch Advisories** section are part of this pack.
  - All links in the **Deployments Summary** section are part of this pack.
  - When you click the **Setup** link, the navigation bar link for **Patching Setup** is part of this pack.
  - When you click the **Targets** tab and then the **Groups** subtab, you reach the **Grid Control Groups** page. In the table on that page, the links in the **Policy Violations** column are part of this pack.
  - In the **Grid Control Groups** page, when you click the name of a group, you reach the **Database Group** home page. On that page, all links in the **Deployments Summary** and **Advice** sections are part of this pack.
  - From the **Database Group** home page, you can click a database name to go to the **Database** home page. Clicking on the **Maintenance** tab takes you to the **Database Maintenance** page. In the **Utilities** section, the **Clone Database** link is part of this package.
  - The entire **Deployments** tab on the **Grid Control** home page is part of this pack.

- Some components of the Configuration Management Pack can be accessed in either Grid Control or Database Control mode. You can navigate to these components in several ways. The list that follows assumes that you begin on the main **Database** home page.
  - In the **General** section, the **Oracle Home** link is part of this pack.
  - In the **Space Usage** section, the **Policy Violations** link is part of this pack.
  - In the **Diagnostics Summary** section, the **All Policy Violations** link is part of this pack.
  - The **Administration** subtab takes you to the **Database Administration** page. All links in the **Configuration Management** section are part of this pack.
  - The **Maintenance** subtab takes you to the **Database Maintenance** page. All links in the **Deployments** section are part of this pack.
  - When you click the **Targets** tab and then the **Hosts** link, a table is displayed. The links in the **Policy Violation** column are part of this pack.
  - In the **General** section, the **Host** link takes you to the top-level **Hosts** page. Clicking on a host name takes you to the **Host** home page. All links in the **Configuration** section are part of this pack. In the **General** section, the **Policy Violations** link is part of this pack.
  - From the **Host** home page, clicking the **Targets** link takes you to the **Host Targets** table. Links in the **Oracle Home** and **Policy Violations** columns are part of this pack.
  - From the **Host** home page, the **Configuration** link takes you to the **Host Configuration** page. All links on this page are part of this pack.

Other Oracle Products

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

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
- Four call-level interfaces: Oracle Call Interface (OCI), Oracle C++ Call Interface (OCCI), ODBC, and JDBC
- Two COM data access interfaces: Oracle Objects for OLE (OO4O) and Oracle Provider for OLE DB
- Microsoft .Net support: Oracle Data Provider for .NET (ODP.NET), OLE DB .NET, and ODBC .NET
- Two utilities to generate host-language bindings from database schemas: Object Type Translator and JPub

Oracle Database Lite

Oracle Database Lite provides efficient, reliable, and secure data management for applications running locally on mobile and small-footprint devices (handhelds, laptops, communicators, and so forth). Oracle Database Lite supports scalable synchronization of data between devices and any Oracle Database while offering complete management of users, devices, and applications. Oracle Database Lite requires a minimum of one Named User Plus license or the total number of actual users, whichever is greater.

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