Oracle® Fusion Middleware
Licensing Information
11g Release 1 (11.1.1)
E14860-09

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B Oracle Access Manager Basic
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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 Fusion Middleware is available in multiple editions, each suitable for different development and deployment scenarios. Oracle also offers several application server options and packs that enhance the capabilities of Oracle Fusion Middleware for specific application requirements. Oracle Fusion Middleware Licensing Information provides information on these optional application server products and their licensing requirements.

This Preface contains these topics:

- Intended Audience
- Documentation Accessibility
- Related Documents
- Conventions

**Intended Audience**

This book is intended for all purchasers of Oracle Fusion Middleware.

**Documentation Accessibility**

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. 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. Accessibility 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 more information, visit the Oracle Accessibility Program Web site at [http://www.oracle.com/accessibility/](http://www.oracle.com/accessibility/).
Accessibility of Code Examples in Documentation
Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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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.

Access to Oracle Support
Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/support/contact.html or visit http://www.oracle.com/accessibility/support.html if you are hearing impaired.

Related Documents
For more information, see these Oracle resources:

- Oracle Fusion Middleware Concepts for information on the features new to this release of Oracle Fusion Middleware

Conventions
The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>boldface</td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td>italic</td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
This chapter describes the application server product family, and the features available with this product family. It contains the following sections:

- Section 1.1, "Oracle TopLink and Application Development Framework"
- Section 1.2, "The Oracle WebLogic Server Product Family"
- Section 1.3, "The Oracle Internet Application Server Product Family"
- Section 1.4, "The Oracle GlassFish Server"
- Section 1.5, "Oracle Web Tier"
- Section 1.6, "Oracle Coherence"
- Section 1.7, "Coherence Suite"
- Section 1.8, "BPEL Process Manager"
- Section 1.9, "WebLogic Integration"
- Section 1.10, "Service Registry"
- Section 1.11, "Enterprise Repository"
- Section 1.12, "Oracle Web Services Manager"
- Section 1.13, "SOA Suite for Non-Oracle Middleware"
- Section 1.14, "Business Process Management Suite for Non Oracle Middleware"
- Section 1.15, "Oracle Business Process Analysis Suite"
- Section 1.16, "Event-Driven Architecture Suite"
- Section 1.17, "Oracle Forms and Reports"
- Section 1.18, "Oracle Data Service Integrator"
- Section 1.19, "Oracle Data Profiling"
- Section 1.20, "Oracle Data Integration Suite"
- Section 1.21, "Oracle Data Integrator Enterprise Edition"
- Section 1.22, "Oracle Data Quality for Data Integrator (Up to a Maximum of 100 Million Records)"
- Section 1.23, "Oracle Data Quality for Data Integrator (for Greater than 100 Million Records)"
- Section 1.24, "Oracle Data Quality Rules for Data Integrator"
- Section 1.25, "Oracle Application Adapters for Data Integration"
1.1 Oracle TopLink and Application Development Framework

Oracle TopLink and Application Development Framework can be separately licensed, independently of any Oracle WebLogic Server or Oracle Internet Application Server edition. Oracle TopLink, Application Development Framework, and Oracle MapViewer are also included in all of the Oracle Internet Application Server and WebLogic Server and Suite editions.

When you license Oracle TopLink and Application Development Framework separately, the license includes Oracle TopLink Mapping Workbench and Oracle MapViewer.

---

**Note:** The developer tools used with the Application Development Framework — for example, Oracle JDeveloper — are freely available for download from the Developer Tools page at [http://www.oracle.com/technology/products/developer-tools/index.html](http://www.oracle.com/technology/products/developer-tools/index.html).

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1.2 The Oracle WebLogic Server Product Family

Oracle WebLogic Server is available in three editions with different functional capabilities, each suitable for different kinds of applications and different development and deployment scenarios. Oracle also offers several application server options, packs, and other products that enhance the capabilities of Oracle WebLogic Server for specific purposes. This section describes the licensing editions of Oracle WebLogic Server.

Table 1–1 introduces the Oracle WebLogic Server licensing options.

<table>
<thead>
<tr>
<th>Licensing Edition</th>
<th>High Level Functionality</th>
<th>Features Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Edition</td>
<td>The WebLogic Server Standard Edition includes:</td>
<td>Includes:</td>
</tr>
<tr>
<td></td>
<td>■ Core WebLogic application server, with Administration Console, Configuration Wizard, and Upgrade Framework</td>
<td>■ Java EE 5/EJB 3.0</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Toplink, Oracle Application Development Framework, and Oracle MapViewer</td>
<td>■ High performance JMS messaging</td>
</tr>
<tr>
<td></td>
<td>■ Oracle JDeveloper</td>
<td>■ Web 2.0 HTTP Pub-Sub Server</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Enterprise Pack for Eclipse</td>
<td>■ WebLogic JDBC Drivers, WebLogic Server Clients, and WebLogic and Apache Web Server Plug-Ins</td>
</tr>
<tr>
<td></td>
<td>■ Kodo Enterprise</td>
<td>■ FastSwap iterative development, and Application Development Framework shared across Fusion Middleware and Applications</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Security Developer Tools</td>
<td>■ Streamlined storing of important objects to data stores, available to all Java applications and a core component of EJB 3.0</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Web Tier</td>
<td></td>
</tr>
<tr>
<td></td>
<td>■ Oracle Enterprise Manager Fusion Middleware Control</td>
<td></td>
</tr>
</tbody>
</table>
1.2.1 Installation of Oracle WebLogic Product Editions

Oracle WebLogic Server does not provide installation programs that correspond directly to each available edition. For example, depending on the edition licensed, you may need to run one or more of the following individual installers:

- Oracle WebLogic Server
- Oracle Web Tier

Table 1–1 (Cont.) Oracle WebLogic Server Licensing Editions

<table>
<thead>
<tr>
<th>Licensing Edition</th>
<th>High Level Functionality</th>
<th>Features Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Edition</td>
<td>Includes all of the Standard Edition functionality, plus:</td>
<td>All Standard Edition features, plus:</td>
</tr>
<tr>
<td></td>
<td>■ Clustering support</td>
<td>■ Whole-server migration and service migration</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware</td>
<td>■ Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware includes Application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diagnostics for Java (AD4J) and JRockit Mission Control. For details, see Section 1.2.2.2.2, “Diagnostics Pack for Oracle Middleware.”</td>
</tr>
<tr>
<td>WebLogic Suite</td>
<td>Includes all of the Enterprise Edition functionality, plus:</td>
<td>All Enterprise Edition features, plus:</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Coherence Enterprise Edition</td>
<td>■ Application data management provided by Oracle Coherence Enterprise Edition. Includes:</td>
</tr>
<tr>
<td></td>
<td>■ Oracle WebLogic Operations Control</td>
<td>fault-tolerant data caching, data management, write-behind, transactions, analytics and events. For license details, see Section 1.6, “Oracle Coherence.”</td>
</tr>
<tr>
<td></td>
<td>■ Oracle WebLogic Real Time</td>
<td>■ WebLogic Operations Control enables centralized governance and control, dynamic activation, and service level management of WebLogic Server and Oracle Coherence.</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Forms, Reports, Portal and Discoverer</td>
<td>■ High performance, low latency JDK with deterministic garbage collection for Java EE applications running on WebLogic Server with WebLogic Real Time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Also includes Oracle Internet Application Server Enterprise Edition, which contains:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Oracle Internet Directory</td>
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<tr>
<td></td>
<td></td>
<td>■ Oracle Single Sign-On</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Oracle Discoverer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Oracle Reports Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Oracle Forms Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Oracle WebLogic Server</td>
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<td></td>
<td></td>
<td>■ Oracle Containers for J2EE</td>
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<td>■ Oracle Portal</td>
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<td>■ Oracle Web Cache</td>
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<td></td>
<td></td>
<td>■ Oracle Directory Integration Platform</td>
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</table>

For license details about Oracle Internet Application Server Enterprise Edition, see Section 1.3, “The Oracle Internet Application Server Product Family.”
The Oracle WebLogic Server Product Family

- Oracle Coherence
- Oracle JRockit
- Oracle WebLogic Operations Control
- Oracle JDeveloper
- Oracle TopLink
- Oracle Business Intelligence
- Oracle SOA Suite
- Oracle Enterprise Manager Grid Control
- Oracle Application Diagnostics for Java (AD4J)

In addition, many installers contain multiple components that may be installed all together or individually, and each installation component has a minimum license requirement. The following table identifies the minimum edition requirements for each installation option available from the Oracle WebLogic Server installation programs.

Table 1–2  Installation Programs Required for WebLogic Product Editions

<table>
<thead>
<tr>
<th>Licensing Edition</th>
<th>Corresponding Installation Programs</th>
</tr>
</thead>
</table>
| Standard Edition    | Standard Edition encompasses the following installation programs:  
- WebLogic Server 10.3.1 net or package installer, and Apache plug-ins (optional). This installer includes the core JEE 5 application server, Administration Console, Configuration Wizard and Upgrade Framework, WebLogic and third-party JDBC drivers, JMS, WebLogic Server clients, Web server plug-ins, UDDI and Xquery Support, WebLogic Server examples, Oracle Enterprise Pack for Eclipse, and Sun or Oracle JRockit JDKs (depending on platform).  
- Oracle JDeveloper installer  
- Oracle TopLink installer  
- Oracle Web Tier installer |
| Enterprise Edition  | The installation programs for Enterprise Edition include all those for Standard Edition, plus the installers for:  
- Oracle JRockit Mission Control  
- Oracle Enterprise Manager Grid Control  
- Oracle Application Diagnostics for Java (AD4J) |

Notes:
- Adding cluster support does not require an additional installation procedure.
- The installers for both Oracle Enterprise Manager Grid Control and AD4J must be run to obtain Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware.
1.2.2 Licensing Considerations for Additional Features

Certain Oracle WebLogic Server editions contain features that have additional licensing considerations.

1.2.2.1 WebLogic for Oracle Internet Application Server

The license for Oracle Internet Application Server within WebLogic Suite includes the unrestricted rights to the full capabilities of the WebLogic Server Enterprise Edition.

Note: When Oracle Internet Application Server is licensed independently of WebLogic Suite, a constrained WebLogic license, called WebLogic Server Basic, is included. However, when Oracle Internet Application Server is licensed as part of WebLogic Suite, an unrestricted license of WebLogic Server Enterprise Edition is included. This does not imply that two licenses of WebLogic Server Enterprise are provided within WebLogic Suite, but rather that the rights to WebLogic Server included in Internet Application Server are expanded to the unrestricted use of WebLogic Server Enterprise Edition included in WebLogic Suite.

1.2.2.2 Management and Diagnostics

The following topics describe license considerations for management and diagnostics features for editions of Oracle WebLogic Server.

1.2.2.2.1 Management Features

Note the following license considerations for management features:


- Unrestricted use of the WebLogic Server Administration Console, the WebLogic Scripting Tool, and WebLogic JMX is available in all WebLogic Server editions.

1.2.2.2 Diagnostics Pack for Oracle Middleware

The Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware improves the availability and performance of Java applications with low overhead, as well as providing in-depth diagnostics. It enables administrators to proactively monitor application performance and diagnose the root cause of performance problems, such as an application crashing and hanging in a production environment, which may severely impact businesses.

This pack includes the following components:

- Enterprise Manager system monitoring functionality applicable for both Oracle Internet Application Server and Oracle WebLogic Server
- Oracle Application Diagnostics for Java (AD4J), which is able to diagnose the root cause of Java application performance problems in Java applications with very low performance overhead. It can support applications running on Sun, HP and IBM JVMs.
- Oracle JRockit Mission Control, which you can use with either WebLogic or Oracle Internet Application Server with JRockit JVM

For more feature highlights about Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware, including licensing information, see “Oracle Middleware Enterprise Management” in Oracle Enterprise Manager Licensing Information.

1.2.2.3 High Availability Features

Oracle WebLogic Server provides several features and tools to support the deployment of highly available and scalable applications, including the following:

- WebLogic Server clusters, which provide scalability and reliability for your applications by distributing the work load among multiple instances of WebLogic Server.
- Work Managers, which prioritize work based on rules you define and by monitoring actual run time performance statistics. Work Managers can be used to provide overload protection, such as detecting, avoiding, and recovering from excess workload. They may be applied globally to a WebLogic Server domain or to a specific application or component.
- WebLogic Server persistent store, which is a built-in, high-performance storage solution for WebLogic Server subsystems and services that require persistence. For example, it can store persistent JMS messages or temporarily store messages sent using the Store-and-Forward feature. The persistent store supports persistence to a file-based store or to a JDBC-enabled database.
- Network channels, which facilitate the effective use of network resources by segregating network traffic into channels based on the type of traffic.
- Store-and-forward services, which enable WebLogic Server to deliver messages reliably between applications that are distributed across WebLogic Server instances. If the message destination is not available at the moment the messages are sent, either because of network problems or system failures, then the messages are saved on a local server instance and are forwarded to the remote destination once it becomes available.

Some WebLogic Server high availability features require special licensing considerations, which are described in the following sections.

1.2.2.3.1 WebLogic Server Standard Edition

A Standard Edition license provides unlimited access to most high availability features in WebLogic Server, with the
exception of Cluster Support. With a Standard Edition license, no restrictions are placed on the following:

- The number of Managed Server instances that may be configured in a WebLogic domain
- Use of the Apache HTTP Server Plug-In to perform load balancing among non-clustered Managed Server instances using the WebLogicCluster plug-in configuration parameter

1.2.2.3.2 Cluster Support  Cluster Support is provided in all WebLogic Server Enterprise Edition and WebLogic Suite Edition licenses, and includes the following capabilities:

- Application failover
  When an application component becomes unavailable for any reason, a copy of the failed object finishes the job. In case of hardware or other failures, session state is available to other cluster nodes that can resume the work of the failed node.

- Cluster management and administration
  Creating a cluster of Managed Servers enables management and administration of these clustered servers as a single entity. Cluster management and administration features are provided for configuration, application deployment, and monitoring purposes.

- Automatic and manual migration of a clustered server instance from one machine to another using Server Migration
  Using Service Migration, the uninterrupted availability of singleton services — services that must run on only a single server instance at any given time, such as JMS and the JTA transaction recovery system — is ensured when the hosting server instance fails.

- Load balancing
  Incoming requests can be routed to a WebLogic Server instance in the cluster based on the volume of work being processed.

The following types of objects can be clustered in a WebLogic Server deployment:

- Servlets
- Java Server Pages
- Enterprise JavaBeans
- Remote Method Invocation (RMI) objects
- Java Messaging Service (JMS) destinations. Note:
  - A connection factory and a destination can be targeted to different WebLogic Server instances.
  - Foreign servers and distributed destinations may be used across multiple WebLogic Server instances.

1.2.2.3.3 High Availability Considerations for Oracle WebLogic Server Middle-Tier Instances

There are several ways that you can make WebLogic Server instances highly available. Each of these high availability models has specific licensing implications. These considerations are similar to the licensing considerations for the high availability features of the Oracle Database.
Backup: In this type of recovery, WebLogic Server data/files of the primary server are stored on storage devices, such as tape media, and customers are not required to purchase additional licenses.

Failover (also known as Active/Passive or Cold Failover Cluster): In this type of recovery, WebLogic Server nodes are configured in an Active/Passive Cluster; the first installed node acts as a primary node. If the primary node fails, one of the nodes in the cluster acts as the primary node. In this type of environment Oracle permits licensed Oracle WebLogic Server customers to run the WebLogic Server on an unlicensed spare computer for up to a total of ten separate days in any given calendar year. Any other use requires the environment to be fully licensed. Additionally, the same metric (that is, processor-based, or named user based) must be used when licensing the WebLogic Server in a failover environment.

Remote Mirroring: This method involves copying the WebLogic Server software to the secondary site and copying the changes in the primary WebLogic Server configuration and data to the secondary site. This can be accomplished through techniques such as storage based remote mirroring or host based mirroring. In the event of a failure at the primary site, the Oracle WebLogic Server on the secondary site is run using the remote storage. In this environment, Oracle WebLogic Server must be fully licensed at the primary site, and if it is ever installed and/or run at the secondary site, it must also be fully licensed there. Additionally, the same metric (that is, processor-based, or named user based) must be used to license both WebLogic Server domains.

1.2.2.4 PointBase
PointBase Server is an all-Java DBMS product included in the WebLogic Server distribution solely in support of WebLogic Server evaluation, either in the form of custom trial applications or through packaged sample applications provided with WebLogic Server. The non-evaluation development or production use of PointBase requires the end-user to obtain a license from IBM.

1.2.2.5 Oracle JRockit
Note the following Oracle JRockit considerations.

1.2.2.5.1 Oracle JRockit JDK
Oracle JRockit JDK provides tools, utilities, and a complete run-time environment for developing and running applications using the Java programming language. The JDK includes the Oracle JRockit Java Virtual Machine (JVM), which is optimized for Intel architectures and is designed to provide reliability, scalability, and manageability for server-side Java applications.


1.2.2.5.2 Oracle JRockit Real Time
Oracle JRockit Real Time provides lightweight, front-office infrastructure for low latency, event-driven applications.

Within WebLogic Suite Edition, Oracle JRockit Real Time is licensed under the name Oracle WebLogic Real Time. Oracle WebLogic Real Time is a license of JRockit Real Time that is limited to running WebLogic Server and the Java EE applications hosted on it.

1.2.2.5.3 Oracle JRockit Mission Control
Oracle JRockit Mission Control is a diagnostics tool that enables sophisticated problem analysis, performance tuning, and monitoring of the Oracle JRockit JVM. Oracle JRockit Mission Control is licensed as part of the
Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware and is included in WebLogic Server Enterprise Edition. For more information about the Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware, see "Oracle Middleware Enterprise Management" in Oracle Enterprise Manager Licensing Information.

1.2.2.6 Standalone WebLogic Clients


The client JARs and other resources provided in Oracle WebLogic Server for creating standalone clients, and the key features they support, are listed in Table 1–3:

| Table 1–3 Client JAR files and Other Resources Provided for Standalone Clients |
|----------------------------------------|------------------|-----------------|
| Client Type                           | Bundled Resources | Key Features |
| WebLogic Full Client (T3)             | wlfullclient.jar  | Supports the following: |
|                                       |                  | ■ Most Java EE and WebLogic-specific features |
|                                       |                  | ■ Clustering, SSL |
|                                       |                  | ■ JMS and JMS SAF clients |
| WebLogic-IIOP                         | wlfullclient.jar  | Supports most WebLogic-specific features |
|                                       |                  | ■ Supports clustering, SSL |
|                                       |                  | ■ Faster and more scalable than IIOP thin clients |
|                                       |                  | ■ Not ORB-based |
|                                       |                  | ■ Does not support WebLogic Server JMS |
| Java EE Application Client (Thin Client) | wlclient.jar    | Clustering, SSL, many Java EE features, including security and transactions |
|                                       |                  | ■ Uses CORBA 2.4 ORB |
| JMS Thin Client                       | wljmsclient.jar  | Thin client functionality |
|                                       | wlclient.jar     | WebLogic JMS, except for client-side XML selection for multicast sessions and JMSHelper class methods |
|                                       |                  | ■ SSL |
| JMS SAF Client — for using store-and-forward services | wlsafclient.jar  | Locally stores messages on the client and forwards them to server-side JMS destinations when the client is connected |
|                                       | wljmsclient.jar  | ■ Supports SSL |
|                                       | wlclient.jar     | |
| JMS C Client                          | wlfullclient.jar or wljmsclient.jar | C client applications that can access WebLogic JMS applications and resources |
|                                       | wlclient.jar     | ■ Supports SSL |
| JMS .NET Client                       | WebLogic.Messaging.dll dynamic library | Microsoft .NET client applications, written in C# that can access WebLogic JMS applications and resources |
| JMX Client                            | wljmxclient.jar  | Accesses WebLogic Server MBeans |
1.2.3 Restricted-Use Licensing

The following restricted-use licenses are included with Oracle WebLogic Server in the editions and products indicated.

1.2.3.1 Oracle Database License Requirements


1.2.3.2 Oracle Internet Application Server Requirements

See Section 1.3.3, “Restricted-Use Licensing,” for details about restricted-use licenses included with WebLogic Suite Edition.

1.2.3.3 Oracle JDeveloper License Requirements

Oracle JDeveloper bundles UDDI client libraries from the HP SOA Systinet Registry. Such libraries and UDDI client functionality are licensed only to the end user for the purpose of connecting to and communicating with the Oracle Service Registry.

1.2.4 General Licensing Information


1.3 The Oracle Internet Application Server Product Family

Oracle Internet Application Server is available in three editions with different functional capabilities, each suitable for different kinds of applications and different development and deployment scenarios. Oracle also offers several application server options, packs, and other products that enhance the capabilities of Oracle Internet Application Server for specific purposes. This section describes the licensing editions of Oracle Internet Application Server.

---

**Note:** All editions of the products Oracle Internet Application Server and Oracle Forms and Reports Server include rights to WebLogic Server Basic, a license-constrained version of Oracle WebLogic Server. WebLogic Server Basic is only for running components provided within these products such as Forms, Reports, Discoverer, Portal, and for custom Java applications previously developed for Oracle Containers for J2EE. Products outside of Oracle Internet Application Server and Oracle Forms and Reports that have licensing dependencies on any edition of Oracle Internet Application Server or Oracle Forms and Reports do not have the right to run those products on WebLogic Server Basic unless stated specifically within their licensing documentation. For complete details about WebLogic Server Basic, see Appendix A, "WebLogic Server Basic."
Table 1–4 introduces the Oracle Internet Application Server licensing options.

<table>
<thead>
<tr>
<th>Licensing Edition</th>
<th>High-Level Functionality</th>
<th>Included Features</th>
</tr>
</thead>
</table>
| Standard Edition  | Oracle Internet Application Server Standard Edition includes:  
|                   | ■ Oracle HTTP Server  
|                   | ■ Oracle TopLink  
|                   | ■ Oracle MapViewer  
|                   | ■ Oracle Portal  
|                   | ■ Oracle Web Cache  
|                   | ■ WebLogic Server Basic (see Appendix A)  
| Note: In Oracle Fusion Middleware 10g Release 2 and Release 3, Oracle Internet Application Server includes the licensing rights to Oracle Containers for J2EE (OC4J) as the J2EE container. In Oracle Fusion Middleware 11g, customers of Oracle Internet Application Server continue to have rights to OC4J 10g Release 2 and Release 3.  
|                   | Oracle Internet Application Server also includes the Oracle Security Developer Tools  
|                   | In Oracle Fusion Middleware 10g Release 2, Oracle Internet Application Server Standard Edition includes limited use licenses for Oracle Internet Directory and Oracle Single Sign-On. The full use licenses for these products are available in Oracle Internet Application Server Enterprise Edition, and also in Oracle Identity and Access Management Suite Plus as described in Section 8.13, "Oracle Identity and Access Management Suite Plus."  
|                   | Oracle Internet Directory  
|                   | Oracle Single Sign-On  
| Note: In Oracle Fusion Middleware 10g Release 2, Oracle Internet Application Server includes the licensing rights to Oracle Single Sign-On. In Oracle Fusion Middleware 11g, customers of Oracle Internet Application Server continue to have rights to Oracle Single Sign-On 10g Release 2. In Oracle Fusion Middleware 11g, customers of Oracle Internet Application Server additionally have the rights to Oracle Access Manager Basic as described in Section B, "Oracle Access Manager Basic."  
|                   | PL/SQL Server Pages  
|                   | Oracle Content Management SDK  
|                   | Oracle Repository Creation Utility  
|                   | Compatible:  
|                   | ■ mod_ossl  
|                   | ■ mod_oradav  
|                   | ■ mod_fastcgi  
|                   | ■ mod_rewrite  
|                   | ■ Proxy Plug-In  
|                   | ■ XML Developer Kit  
|                   | ■ Oracle Application Development Framework (ADF)  
|                   | ■ Oracle Security Developer Tools  
|                   | ■ Oracle Enterprise Manager Fusion Middleware Control  
|                   | ■ Java Authentication and Authorization Service (JAAS) Provider  
|                   | ■ Data Direct JDBC drivers for Oracle and non-Oracle databases  
|                   | ■ mod_plsql  
|                   | ■ mod_php  
|                   | ■ mod_osso  
|                   | ■ mod_perl  
|                   | ■ Perl Interpreter  
|                   | ■ DBI/DBD data access libraries  
|                   | One  
| Note: In Oracle Fusion Middleware 10g Release 2, Oracle Internet Application Server Standard Edition includes limited use licenses for Oracle Internet Directory and Oracle Single Sign-On. The full use licenses for these products are available in Oracle Internet Application Server Enterprise Edition, and also in Oracle Identity and Access Management Suite Plus as described in Section 8.13, "Oracle Identity and Access Management Suite Plus."  
|                   | All features included in Standard Edition |
1.3.1 Oracle Internet Application Server Editions and Installation Types

When you install Oracle Internet Application Server, you will have the choice of several installation types. Each installation type provides a specific set of components and features.

Oracle Internet Application Server editions do not map directly to these product installation types. It is important to understand how these two concepts relate to each other. Table 1–5 lists the minimum edition requirements for each installation type.

In each case, the minimum edition listed is the edition required to install the installation type. However, the minimum edition may not enable you to use everything included in that installation type. For example, you can install Portal, Forms, Reports and Discoverer from an installation type, but the Standard Edition license does not cover the usage of Oracle Forms, Reports and Discoverer. These restrictions are detailed in Table 1–6.
Table 1–5  Edition Requirements for Installation Types of Oracle Internet Application Server

<table>
<thead>
<tr>
<th>Installation Type</th>
<th>Oracle Internet Application Server Minimum Edition Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Tier</td>
<td>Standard Edition</td>
</tr>
<tr>
<td>WebLogic Server</td>
<td>Standard Edition or Standard Edition One</td>
</tr>
<tr>
<td>JDeveloper</td>
<td>Standard Edition</td>
</tr>
<tr>
<td>TopLink</td>
<td>Standard Edition</td>
</tr>
<tr>
<td>Oracle Identity Management</td>
<td>Standard Edition or Standard Edition One</td>
</tr>
<tr>
<td>Portal, Forms, Reports and Discoverer</td>
<td>Standard Edition or Standard Edition One</td>
</tr>
<tr>
<td>Integration, Oracle B2B</td>
<td>Enterprise Edition</td>
</tr>
<tr>
<td>Repository Creation Utility</td>
<td>Standard Edition or Standard Edition One</td>
</tr>
</tbody>
</table>

Table 1–6 lists the installation types available with each of the Oracle Internet Application Server editions, along with any exceptions or restrictions associated with each edition-installation pair.

Table 1–6  Installation Types Included with Editions of Oracle Internet Application Server

<table>
<thead>
<tr>
<th>Edition</th>
<th>Installation Types</th>
<th>Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Edition or</td>
<td>Web Tier</td>
<td>Upgrade to Enterprise Edition if you need:</td>
</tr>
<tr>
<td>Standard Edition One</td>
<td>WebLogic Server</td>
<td>■ Portal, Forms, Reports and Discoverer</td>
</tr>
<tr>
<td></td>
<td>JDeveloper</td>
<td>■ Oracle Single Sign-On</td>
</tr>
<tr>
<td></td>
<td>TopLink</td>
<td>■ Oracle Internet Directory</td>
</tr>
<tr>
<td></td>
<td>Portal, Forms, Reports and Discoverer</td>
<td>See also Section 1.3.3, &quot;Restricted-Use Licensing.&quot;</td>
</tr>
<tr>
<td></td>
<td>Repository Creation Utility</td>
<td></td>
</tr>
<tr>
<td>Enterprise Edition</td>
<td>Web Tier</td>
<td>If you use Discoverer Plus and/or Discoverer Viewer, you need at least one license of Discoverer Administrator, which is included in Oracle Developer Suite.</td>
</tr>
<tr>
<td></td>
<td>WebLogic Server</td>
<td>For Integration installations, all packaged application, legacy system, and B2B adapters are licensed separately.</td>
</tr>
<tr>
<td></td>
<td>JDeveloper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TopLink</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Portal, Forms, Reports and Discoverer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration, Oracle B2B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Repository Creation Utility</td>
<td></td>
</tr>
</tbody>
</table>

1.3.2 Licensing Considerations for Additional Features

Certain Oracle Application Server features have additional licensing considerations. This section contains the following subsections:

- Section 1.3.2.1, "Management Features"
- Section 1.3.2.2, "Security Features"
- Section 1.3.2.3, "High Availability Features"
1.3.2.1 Management Features
All editions of Oracle Internet Application Server include Oracle Enterprise Manager Fusion Middleware Control, which is used for managing all the components within Oracle Internet Application Server. In addition, all of the Oracle Internet Application Server editions work with Oracle Enterprise Manager Grid Control, which is Oracle’s integrated tool for managing your Oracle Grid and the components running on the grid (for example, single instance databases, Real Application Clusters, Oracle Applications, Oracle Fusion Middleware, and third-party products).

Grid Control includes a restricted-use license for the Oracle Database and Oracle Application Server components required to deploy Grid Control. Refer to Section 1.3.3, "Restricted-Use Licensing," for details on the restricted-use licenses.

1.3.2.2 Security Features
Oracle Application Server provides a number of features to ensure security between the client and the application server, and between the application server and the database.

1.3.2.2.1 Oracle Advanced Security
Oracle Advanced Security ensures that communication over the Oracle SQL*Net Protocol is encrypted and secure. It also provides strong authentication services between the application server and the database. As part of a "secure by default" architecture, Oracle Advanced Security is installed with Oracle Fusion Middleware by default. This ensures that the client components required for secure communication and strong authentication between the application server and an Oracle database are present. However, if you want to configure and use the secure communication and authentication services provided by Oracle Advanced Security, you must also license Oracle Advanced Security with the Oracle database with which the application server communicates.

1.3.2.2.2 Oracle Identity Management
The Oracle Identity Management license that is included in Oracle Internet Application Server Enterprise Edition includes the following:

- Oracle Internet Directory
- Oracle Directory Integration Platform
- Oracle Delegated Administration Services
- Oracle Directory Services Manager
- Oracle Single Sign-On
- Oracle Access Manager Basic

For more information, see Section B, "Oracle Access Manager Basic."

A restricted use license for some of the Oracle Identity Management features is included with the application server for specific purposes. For more information, see Section 1.3.3, "Restricted-Use Licensing."

1.3.2.3 High Availability Features
Oracle Internet Application Server has several high availability features that require special licensing considerations. These considerations are similar to the licensing considerations for the high availability features of the Oracle Database. These considerations are described in Section 1.2.2.3.3, "High Availability Considerations for
Oracle WebLogic Server Middle-Tier Instances.” There are further high availability restrictions for Oracle Internet Application Server based on the limited use license of WebLogic Server Basic, described in Appendix A, "WebLogic Server Basic."

1.3.2.4 Adapters
See Chapter 3, "Oracle Fusion Middleware Adapters,” for a description of Fusion Middleware Adapters. Technology adapters are included in all Oracle Internet Application Server editions. Other adapters require separate licensing.

1.3.2.5 Oracle JRockit
Note the Oracle JRockit considerations described in the subsections that follow.

1.3.2.5.1 Oracle JRockit JDK
Oracle JRockit JDK provides tools, utilities, and a complete run-time environment for developing and running applications using the Java programming language. The JDK includes the Oracle JRockit Java Virtual Machine (JVM), which is optimized for Intel architectures and is designed to provide reliability, scalability, and manageability for server-side Java applications. Oracle JRockit JVM is included in all Oracle Internet Application Server editions. JRockit JDK is restricted to running applications hosted on components within these products.

1.3.2.5.2 Oracle JRockit Real Time
Oracle JRockit Real Time provides lightweight, front-office infrastructure for low latency, event-driven applications.
Oracle JRockit Real Time is licensed under the name Oracle WebLogic Real Time within the WebLogic suite. Oracle WebLogic Real Time is a license of JRockit Real Time that is limited to running WebLogic Server and the Java EE applications hosted on it.

1.3.2.5.3 Oracle JRockit Mission Control
Oracle JRockit Mission Control is a diagnostics tool that enables sophisticated problem analysis, performance tuning, and monitoring of the Oracle JRockit JVM. Oracle JRockit Mission Control is licensed as part of the Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware and is not included in any Oracle Internet Application Server editions. For more information, see Section 1.2.2.2.2, "Diagnostics Pack for Oracle Middleware."

1.3.3 Restricted-Use Licensing
The following restricted-use licenses are included with Oracle Internet Application Server in the editions and products indicated.

1.3.3.1 Standard Edition and Standard Edition One
- Oracle Single Sign-On is provided only for use with Oracle Portal.
- Oracle Internet Directory is provided for use with Oracle Single Sign-On and with application server components to:
  - Provision, store, and manage users and groups, along with their associated security credentials and privileges
  - Synchronize data with third party directory services
  - Store other component-specific metadata
- Oracle Advanced Security Option is included, with use limited strictly to the Oracle Java SSL Library.
- The Oracle Database (Enterprise Edition) is provided only for use with the Oracle Repository Creation Utility database schema for storing product metadata.
1.3.3.2 Enterprise Edition

- Oracle Advanced Security Option is included, with use limited strictly to the Oracle Java SSL Library.
- The Oracle Database (Enterprise Edition) is provided only for use with the Oracle Repository Creation Utility database schema for storing product metadata.

**Notes:** During installation, you can choose to install the product metadata into an existing, licensed database. Choosing this option has the following licensing implications:

- The restricted use license does not apply to the use of the existing database as the Oracle Repository Creation Utility database schema.
- If the machine on which your existing database is running does not run any other Oracle Application Server installations, there is no Oracle Internet Application Server license requirement for that machine.
- Installing the Oracle Repository Creation Utility database schema into your existing database may increase the number of users accessing that database, and may thus affect your database license needs. You need to make sure that you have the appropriate number of database licenses to ensure compliance.

1.3.3.3 Oracle Database License Requirements: Oracle Internet Application Server (Standard Edition, Standard Edition One, Enterprise Edition) and WebLogic Suite

Storing any data other than the Oracle Repository Creation Utility database schema in the Oracle Application Server Infrastructure database requires a full use license of the Oracle Database (Standard Edition, Standard Edition One, or Enterprise Edition).

1.3.3.3.1 Full Use License of Oracle Database Standard Edition or Standard Edition One

Some examples of the kinds of data that require the purchase of a full use license for the Oracle Database Standard Edition or Standard Edition One include:
- Documents or any other objects stored in the Oracle Database under Oracle Content Management SDK
- Documents or any kind of content stored in the Portal Repository
- Oracle Integration B2B
- Any BPEL Process Manager process instance data, which includes using Oracle Database as the dehydration store
- Any LDAP data related to the use of Oracle Internet Directory as a general purpose LDAP directory
- Any other custom data that is created or updated by an application

1.3.3.3.2 Full Use License of Oracle Database Enterprise Edition

Two kinds of data require the purchase of a full use license of the Oracle Database Enterprise Edition:

- Any Oracle Portal that leverages the VPD functionality of the database for hosting
- Any LDAP data related to the use of an Oracle Internet Directory LDAP Directory, and database replication is used

1.3.3.3.3 When is a Full Use License of Oracle Database Not Required?

The following scenarios do not require the purchase of a full use license of the Oracle Database when you purchase Oracle Internet Application Server:

- If you are only using Oracle Web Cache
- If you are using Oracle Business Intelligence Discoverer only against a non-Oracle database
- If you are using Oracle Reports Services only against a non-Oracle database

1.3.4 General Licensing Information

Oracle Internet Application Server Standard Edition, Oracle Internet Application Server Standard Edition One, and Oracle Internet Application Server Enterprise Edition can be licensed with the Named User Plus metric and/or the Processor metric.

1.4 The Oracle GlassFish Server

Oracle GlassFish Server is a Java EE server infrastructure that comes with a rich administrative console and scripting infrastructure for developing and deploying Java EE applications. It is available as a standalone product.

When you license Oracle GlassFish Server, it includes:

- Java EE Server infrastructure
- Enterprise Manager, GlassFish Control — management console
- Oracle TopLink — for JPA 2.0 persistence infrastructure
- asadmin — the command line interface to Oracle GlassFish Server
- HADB — for Oracle GlassFish 2.x releases, enabling additional quality of service support for state management

Oracle GlassFish Server is part of the Oracle Fusion Middleware application grid portfolio and is ideally suited for applications requiring lightweight infrastructure with the most up-to-date implementation of enterprise Java, Java EE 6, and Java Web Services infrastructure.
1.4.1 Oracle JRockit JDK

Oracle JRockit JDK provides tools, utilities, and a complete run-time environment for developing and running applications using the Java programming language. The JDK includes the Oracle JRockit Java Virtual Machine (JVM). Oracle JRockit JVM is included as part of the license of Oracle GlassFish Server. JRockit JVM is restricted to running applications hosted on Oracle GlassFish Server.

Access to Oracle JRockit Mission Control is available in the Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware. Access to Oracle JRockit Real Time is available within Oracle WebLogic Suite and Oracle Coherence Suite.

1.4.2 Hotspot JDK

Hotspot JDK provides tools, utilities, and a complete run-time environment for developing and running applications using the Java programming language. The Hotspot JDK includes the Oracle Hotspot Java Virtual Machine (JVM). Hotspot JVM is included as part of the license of Oracle GlassFish Server. Hotspot JVM is restricted to running applications hosted on Oracle GlassFish Server.

1.5 Oracle Web Tier

Oracle Web Tier is a high performance Web server infrastructure consisting of the following components:

- Oracle HTTP Server
  
  Oracle HTTP Server is an Apache based web server that provides a HTTP listener for Oracle WebLogic Server and the framework for hosting static pages, dynamic pages, and applications over the web.

- Oracle iPlanet Web Server
  
  Oracle iPlanet Web Server is the former Sun Java System Web Server, and delivering a single, secure infrastructure for all Web technologies and applications.

- Oracle iPlanet Web Proxy Server
  
  Oracle iPlanet Web Proxy Server solves the problems of network congestion and slow response time and provides control over network resources without burdening end users or network administrators.

- Oracle Web Cache
  
  Oracle Web Cache is a content-aware server accelerator, or reverse proxy, for the web tier that improves the performance, scalability, and availability of Web sites running on any web server or application server, such as Oracle HTTP Server and Oracle WebLogic Server. Oracle Web Cache can serve large numbers of client requests, offloading this process from the application server.

1.6 Oracle Coherence

Oracle Coherence is an in-memory data grid solution that enables you to scale applications by providing fast access to frequently used data.

This section contains the following topics:

- Section 1.6.1, "Oracle Coherence Standard and Enterprise Edition"
- Section 1.6.2, "Oracle Coherence Grid Edition"
- Section 1.6.3, "Oracle JRockit with Oracle Coherence"
1.6.1 Oracle Coherence Standard and Enterprise Edition

This section includes the following topics:

- License Model
- Client Access to Enterprise and Standard Edition Clusters

1.6.1.1 License Model

The licensing model for Coherence Enterprise and Standard Edition provides for homogeneous peer-to-peer deployments within the cluster. That means that every member node in the Coherence cluster needs to be licensed with the same Server Edition of Coherence. For example, every cluster member node in the Enterprise Edition cluster must be running and be properly licensed for Coherence Enterprise Edition. Standard and Enterprise Edition licensing does not distinguish between Cache Clients\(^1\) and Cache Servers\(^2\). With Standard and Enterprise Editions Cache Clients must be licensed with the appropriate Server Edition license.

1.6.1.2 Client Access to Enterprise and Standard Edition Clusters

For enabling access to the Enterprise or Standard Edition clusters by clients that are not members of the cluster using TCP/IP (through Extend/TCP) Coherence Data Clients may be used. An unlimited number of Coherence Data Client licenses are included at no additional charge with every license of Coherence Enterprise or Standard Edition. Data Clients are also multi-language clients. Currently Java, C++ or .NET (C#) Data Clients are available. Coherence Data Clients connect to the Coherence cluster through one or more specially configured cluster member node called an Extend Proxy. All Extend Proxy nodes must also be properly licensed with appropriate Server Edition licenses. Coherence Data Clients are able to access (put, get, query) data in the Coherence Cluster and make invocation service requests using standard Coherence APIs, but they do not have the ability to sign up to be notified of the changes to the data in the grid. Further, Data Clients do not have the ability to use Near Caches or Continuous Query, as those capabilities also rely on the ability to receive notifications of data change from the cluster.

*Figure 1-1* shows what an Enterprise or a Standard Edition deployment may look like from the licensing perspective.

---

\(^1\) *Cluster member configured as a Cache Client* is a storage-disabled cluster member; that is, one with the `local-storage` attribute for all partitioned cache services set to false.

\(^2\) *Cluster member configured as a Cache Server* is a storage-enabled cluster member; that is, one with the `local-storage` attribute for all or some of the partitioned cache services set to true.
1.6.2 Oracle Coherence Grid Edition

Grid Edition licensing includes the unlimited use of Real Time Clients which may be of the following two types:

- Real Time Cluster Member Client
- Real Time Extend/TCP Client

1.6.2.1 Real Time Cluster Member Client

Real Time Cluster Member Clients may be part of the Grid Edition Cluster and have all the capabilities of the Grid Edition except those associated with managing partitioned data and those associated with being an Extend Proxy. In other words they may be thought of as Grid Edition nodes configured to have all their partitioned cache services `storage-enabled` attribute set to `false` and unable to host connections from Extend/TCP Clients.

Real Time Cluster Member Clients are always Java clients.

Real Time Cluster Member Client nodes may not be configured as Extend Proxy for other Real Time Clients (only Server Edition nodes may be configured as Proxy Servers for use by multi-language Data Clients and Real Time Extend/TCP Clients).

1.6.2.2 Real Time Extend/TCP Client

Real Time Extend/TCP Clients connect to the Coherence cluster over TCP/IP through one or more specially configured cluster member node called an Extend Proxy. All Extend Proxy nodes must also be properly licensed with the Grid Edition licenses.
Real Time Extend/TCP Clients are multi-language clients and currently Java, .NET (C#) and C++ Real Time Extend/TCP Clients are available.

In contrast to the Data Clients, Real Time Extend/TCP Clients have the ability to sign up for notifications for events taking place in the Grid and can take advantage of Coherence Near Caches and Continuous Queries.

Under the Grid Edition licensing model, unlimited number of Real Time Client licenses is included at no additional charge with every license of Coherence Grid Edition.

Figure 1–2 shows what a Grid Edition deployment may look like from the licensing perspective.

**Figure 1–2 Oracle Coherence Grid Edition Deployment**

1.6.3 Oracle JRockit with Oracle Coherence

Oracle JRockit JDK is included in all licenses of Oracle Coherence Standard Edition, Oracle Coherence Enterprise Edition, Oracle Coherence Grid Edition. JRockit JDK is restricted to running applications hosted on components within these products.

1.6.4 Management Pack for Oracle Coherence

Oracle Coherence is an in-memory data grid solution that enables organizations to predictably scale mission-critical applications. Any performance issue in Oracle Coherence directly impacts the availability and Quality of Service (QoS) of your applications, so it is important that Oracle Coherence be managed in conjunction with other system components to ensure QoS of applications and quick problem resolution.
The Management Pack for Oracle Coherence provides comprehensive tools to manage and monitor the entire Oracle Coherence Cluster from a single console. The pack includes all of the important aspects of management such as discovery, monitoring, reporting, events management, configuration management, life cycle management, and process automation.

### 1.6.4.1 Features

The Management Pack for Oracle Coherence includes the features shown in Table 1–7.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management simplification of Coherence clusters</td>
<td>Simplify management of the Coherence clusters by providing automatic discovery of an entire cluster and all of its components such as nodes, services, caches, connections, and connection managers.</td>
</tr>
<tr>
<td>Coherence cluster monitoring</td>
<td>Help monitor the Coherence cluster components in real-time and identify problem areas.</td>
</tr>
<tr>
<td>Detailed performance and usage statistics</td>
<td>Provide detailed performance and usage statistics that can help with improved performance and availability.</td>
</tr>
<tr>
<td>Configuration management</td>
<td>Manage configurations of Coherence cluster components.</td>
</tr>
<tr>
<td>Deployment automation</td>
<td>Automate the deployment and setup of Coherence nodes.</td>
</tr>
</tbody>
</table>

### 1.6.4.2 Installation and Licensed Links

The Management Pack for Oracle Coherence is available from the Oracle Enterprise Manager Grid Control installer.

For complete license details about Management Pack for Oracle Coherence license information, see "Oracle Middleware Enterprise Management" in Oracle Enterprise Manager Licensing Information.

### 1.6.5 Feature Availability in Coherence Server Editions

Table 1–8 lists the features available in the following Coherence Server editions:


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Fault-tolerant data caching</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>General</td>
<td>Data management including write-behind, transactions, analytics and events</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>General</td>
<td>Support for heterogeneous clients</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
<td>--------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Embedded Data Client and Real Time Client functionality¹</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Connectivity</td>
<td>TCMP cluster technology²,³</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Support for cross-platform Data Clients</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Multicast-free operation (WKA)</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Security</td>
<td>Network traffic encryption</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Security</td>
<td>Java Authentication &amp; Authorization Service (JAAS)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Management &amp; Monitoring</td>
<td>Management host⁴</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Management &amp; Monitoring</td>
<td>Manageable through clustered JMX</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Local cache, Near cache, continuous query cache, real-time events</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Fully replicated data management</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Partitioned data management</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Data source integration through read-through/write-through caching</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integration</td>
<td>Hibernate integration</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integration</td>
<td>HTTP session management for application servers</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integration</td>
<td>BEA Portal “p13n cache” integration</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Analytics</td>
<td>Parallel InvocableMap and QueryMap⁵</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Transactions</td>
<td>Write-behind caching</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Transactions</td>
<td>J2CA Resource Adapter</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Compute Grid</td>
<td>InvocationService</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Compute Grid</td>
<td>WorkManager</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Enterprise Data Grid</td>
<td>WAN support⁶</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Enterprise Data Grid</td>
<td>Support for cross-platform Real Time Clients</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
</tbody>
</table>

¹ Coherence TCMP clusters must be homogeneous with respect to the Coherence Edition. A TCMP cluster of one type (for example, Caching Edition) may connect to a TCMP cluster of another type (for example, Grid Edition) as a Data Client or as a Real Time Client, but this requires server-side licenses. The connection type is configurable and defaults to Real Time Client.

² Coherence Editions may not be mixed within the context of a single TCMP-based cluster. Integration of different Edition types is accomplished through Coherence*Extend (with each cluster acting as either a Data Client or a Real Time Client).
Oracle’s cluster-aware wire protocol (TCMP) provides detailed knowledge of the entire cluster that enables direct server access for lower latency and higher throughput, faster failover/failback/rebalancing, and the ability for any participating member to act as a service provider (for example, data management, remote invocation, management and monitoring, and so on).

Supports integration with a local MBeanServer. This, with local JMX “agents”, allows this node to provide management and monitoring features. Clustered JMX support adds the ability for this node to manage and monitor remote nodes as well.

Parallel support for InvocableMap and QueryMap will result in server-side execution whenever possible, minimizing data transfer, allowing use of indexing, and parallelizing execution across the cluster. Without parallel support, the operations will retrieve the full dataset to the client for evaluation (which may be very inefficient).

Grid Edition is required for WAN and other deployments that implement cluster-to-cluster interconnects, including any deployment where responsibility for data and/or processing spans more than one data center and activities are coordinated between those data centers using any form of Coherence-provided messaging or connectivity, such as deployments that feature two or more TCMP clusters interconnected by Coherence*Extend.

### 1.6.6 Feature Availability in Coherence Client Editions

Table 1–9 lists the features available in the following Coherence Client Editions: note that the Data Client may be used with all Coherence Server Editions. The Real Time Client may only be used with Grid Edition. Extend/TCP is an abbreviation for Coherence*Extend configured for transport over TCP/IP.

- **Data Client** — The Data Grid client for use anywhere. May be used with all Coherence Server Editions.
- **Real Time Client configured as an Extend/TCP client** — The real time desktop client. May be used only with Coherence Grid Edition.
- **Real Time Client configured as a Compute Client** — The server-class client providing key manageability, monitoring, Quality of Service, and performance capabilities. May be used only with Coherence Grid Edition.

<table>
<thead>
<tr>
<th>Category</th>
<th>Feature</th>
<th>Data Client</th>
<th>Real Time Client (Extend/TCP)</th>
<th>Real Time Client (Compute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Access to data and services on the data grid</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>General</td>
<td>Real time synchronization with the data grid</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>API Language</td>
<td>Java</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>API Language</td>
<td>.NET</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td>API Language</td>
<td>C++</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td>Client API</td>
<td>Data transformation (PIFPOF / ExternalizableLite / XmlBean)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Client API</td>
<td>InvocationService¹</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Client API</td>
<td>NamedCache (core)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Client API</td>
<td>NamedCache (with ObservableMap real time events)</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Client API</td>
<td>MemberListener</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Coherence*Extend client²</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Multicast-free operation²</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
1.7 Coherence Suite

Coherence Suite includes all of the following product editions:

- **Oracle Coherence Grid Edition**
  
  Oracle Coherence Grid Edition provides application data management, fault tolerant data caching, data management, write-behind, transactions, analytics and events. For license details, see Section 1.6, "Oracle Coherence."

- **Oracle WebLogic Operations Control**

  Oracle WebLogic Operations Control enables centralized governance and control, dynamic activation, and service level management of Coherence.

- **Oracle JRockit Real Time**

---

**Table 1–9 (Cont.) Coherence Client Editions**

<table>
<thead>
<tr>
<th>Category</th>
<th>Feature</th>
<th>Data Client</th>
<th>Real Time Client (Extend/TCP)</th>
<th>Real Time Client (Compute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity</td>
<td>TCMP cluster technology&lt;sup&gt;3&lt;/sup&gt;</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Security</td>
<td>Network traffic encryption</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Security</td>
<td>Java Authentication &amp; Authorization Service (JAAS)</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Local cache</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Near cache</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Continuous query cache</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caching</td>
<td>Fully replicated cache</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Transactions</td>
<td>Local transactions</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Integration</td>
<td>Hibernate integration</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Integration</td>
<td>HTTP session management for application servers</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Integration</td>
<td>BEA Portal &quot;p13n cache&quot; integration</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Management &amp; Monitoring</td>
<td>Management host</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Management &amp; Monitoring</td>
<td>Manageable through clustered JMX</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Compute Grid</td>
<td>InvocationService</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Compute Grid</td>
<td>WorkManager</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
</tbody>
</table>

<sup>1</sup> Data Client and Real Time Client (Extend/TCP) invocations are executed by the Extend Proxy Server they are connected to.

<sup>2</sup> For Data Clients and Real Time Clients (Extend/TCP), Coherence*Extend is used to extend the core TCMP cluster to a greater ranging network, including desktops, other servers and WAN links. The Coherence*Extend protocol is transported over TCP/IP.

<sup>3</sup> Oracle’s cluster-aware wire protocol (TCMP) provides detailed knowledge of the entire cluster that enables direct server access for lower latency and higher throughput, faster failover/failback/rebalancing, and the ability for any participating member to act as a service provider (for example, data management, remote invocation, management and monitoring, and so on).
Oracle JRockit Real Time provides high performance, low latency JDK with deterministic garbage collection for Java applications running on Coherence Grid Edition.

- **Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware**
  Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware ensures high availability of mission-critical applications by reducing the complex tasks of diagnosing and correcting application performance problems, lowering the costs of managing Web-based applications spanning multiple systems. For details, see Section 1.2.2.2, "Diagnostics Pack for Oracle Middleware."

- **Oracle Enterprise Manager Diagnostics Pack for Non-Oracle Middleware**
  Oracle Enterprise Manager Diagnostics Pack for Non-Oracle Middleware improves the availability and performance of Java applications with low overhead deployed on Non-Oracle Middleware (such as, IBM WebSphere Application Server, JBoss Application Server, and Apache Tomcat), as well as providing in-depth diagnostics. For details, see Section 1.7.3, "Diagnostics Pack for Non-Oracle Middleware."

- **Oracle Enterprise Manager Management Pack for Oracle Coherence**
  This Enterprise Manager Management Pack for Oracle Coherence provides monitoring, administration, and provisioning capabilities for Oracle Coherence. For details, see Section 1.6.4, "Management Pack for Oracle Coherence."

**Note:** Coherence Suite does not include WebLogic Server.

### 1.7.1 Installation Programs for Coherence Suite

To install Coherence Suite, you run the individual installers for the following products:

- **Oracle Coherence Grid Edition**
- **Oracle WebLogic Operations Control**
- **Oracle JRockit**
- **Oracle Enterprise Manager Grid Control**
- **Oracle Application Diagnostics for Java (AD4J)**

**Note:** AD4J is part of Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware, so the installers for both AD4J and Oracle Enterprise Manager Grid Control must be run to obtain the Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware and the Oracle Enterprise Manager Management Pack for Oracle Coherence.

### 1.7.2 Oracle JRockit with Coherence Suite

Note the following Oracle JRockit considerations.

#### 1.7.2.1 Oracle JRockit JDK

Oracle JRockit JDK provides tools, utilities, and a complete run-time environment for developing and running applications using the Java programming language. The JDK includes the Oracle JRockit Java Virtual Machine (JVM), which is optimized for Intel architectures and is designed to provide reliability, scalability, and manageability for server-side Java applications.
JRocKIT JDK is restricted to running applications hosted on components within these products.

1.7.2.2 Oracle JRocKIT Real Time
Oracle JRocKIT Real Time provides lightweight, front-office infrastructure for low latency, event-driven applications.

The Coherence Suite packaging provides a full use license of JRocKIT Real Time per server processor licensed.

1.7.2.3 Oracle JRocKIT Mission Control
Oracle JRocKIT Mission Control is a diagnostics tool that enables sophisticated problem analysis, performance tuning, and monitoring of the Oracle JRocKIT JVM. Oracle JRocKIT Mission Control is licensed as part of the Oracle Enterprise Manager Diagnostics Pack for Oracle Middleware and is included in Coherence Suite. For more information, see Section 1.2.2.2, "Diagnostics Pack for Oracle Middleware."

1.7.3 Diagnostics Pack for Non-Oracle Middleware
This pack improves the availability and performance of Java applications with low overhead deployed on Non-Oracle Middleware (such as, IBM WebSphere Application Server, JBoss Application Server, and Apache Tomcat), as well as providing in-depth diagnostics. It enables administrators to proactively monitor application performance and diagnose the root cause of performance problems, such as an application crashing and hanging in a production environment, which may severely impact businesses.

1.7.3.1 Features
This pack includes the following components:

- Enterprise Manager system monitoring functionality for IBM WebSphere, Application Servers, JBoss Application Servers, and Apache Tomcat
- Oracle Application Diagnostics for Java (AD4J), which is applicable for Application Servers and standalone Java applications running on supported JVMs. This diagnoses the root cause of Java application performance problems in Java applications with very low performance overhead.
- JRocKIT Mission Control, which is applicable for Application Servers and standalone Java applications running on JRocKIT JVM

The Diagnostics Pack for Non-Oracle Middleware includes the features summarized in Table 1–10.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance monitoring</td>
<td>Provide real-time and historical performance monitoring. Reduces the complex tasks of diagnosing and correcting performance problems for your targets.</td>
</tr>
<tr>
<td>Advanced alert management</td>
<td>Provide notification methods, rules and schedules, metric history and associated drill-downs, ability to set blackouts, associate corrective actions with alerts, user-defined metrics, metric snapshots, and monitoring templates.</td>
</tr>
<tr>
<td>Real-time monitoring of JVM</td>
<td>Summary view of resource bottlenecks affecting performance, such as the database, I/O, CPU, and locks.</td>
</tr>
</tbody>
</table>
1.7.3.2 Installation and Licensed Links

The Diagnostics Pack for Non-Oracle Middleware is available from the Oracle Enterprise Manager Grid Control installer.

For complete license details about Oracle Enterprise Manager Diagnostics Pack for Non-Oracle Middleware, see "Other Infrastructure Management" in Oracle Enterprise Manager Licensing Information.

1.8 BPEL Process Manager

Oracle BPEL Process Manager enables enterprises to model, deploy, and manage BPEL (Business Process Execution Language) processes. It includes a BPEL business process modeler, a scalable BPEL run-time engine, an extensible WSDL binding framework, and a monitoring console.

Oracle BPEL Process Manager can be separately licensed as a standalone product or as an option to WebLogic Suite. It is also a component of the following suites:

- SOA Suite for Non Oracle Middleware
- SOA Suite for Oracle Middleware
- Business Process Management Suite for Non Oracle Middleware
- Business Process Management Suite

Note: Oracle BPEL Process Manager bundles UDDI client libraries from the HP SOA Systinet Registry. Such libraries and UDDI client functionality are licensed only to the end user for the purpose of connecting to and communicating with the Oracle Service Registry.

1.9 WebLogic Integration

Oracle WebLogic Integration is a comprehensive and flexible java-based solution that allows integrating systems, data, and people within and across companies to make the most of existing assets wherever they are. It includes standards-based connectivity for all major packaged applications, support for best practice patterns, and a unified development environment designed to allow rapid construction of complex, transactional process scenarios. WebLogic Integration accelerates SOA initiatives by rapidly enabling corporate information and process integrations as a service to drive continued business innovation.

Oracle WebLogic Integration is separately licensed as a standalone product.
1.10 Service Registry

Oracle Service Registry (OSR) provides a "DNS"-like reference for SOA. A fully compliant UDDI v3 registry, Oracle Service Registry provides a standards-based interface for SOA run-time infrastructure to dynamically discover and bind to deployed service end points. As part of the Oracle SOA Governance solution, Oracle Service Registry bridges the gap between the design time and run-time environments through automated synchronization with Oracle Enterprise Repository and Oracle SOA Suite.

Oracle Service Registry is separately licensed as a standalone product; however, OSR works together with Oracle Enterprise Repository, Oracle Web Services Manager, and Management Pack Plus for SOA to provide an enterprise-class SOA Governance solution.

Customers who licensed Oracle Internet Application Server (Java Edition, Standard Edition, or the Enterprise Edition), before August 8, 2008, continue to be licensed for the free 50 Service Registry entries. All Internet Application Server (any edition) licenses after August 8, 2008 do not contain these.

1.11 Enterprise Repository

The Oracle Enterprise Repository (OER) is a comprehensive repository that provides visibility into all SOA assets and their relationships to eliminate redundancy, promote reuse, and manage impact of change; end-to-end governance of the SOA lifecycle for risk reduction through automated, repeatable processes; and analytics that provide insight into the business value of SOA for better decision-making. OER includes a restricted-use license to Oracle Business Process Management Suite or Oracle Business Process Management Suite for Non-Oracle Middleware to modify existing workflows that are supplied with OER and implement new Repository-centric workflows. The following capabilities of Oracle BPM Suite are not included in the restricted-use license and would trigger the full-use license: Simulation, Business Activity Monitoring, Process Analytics, and Process Portal.

Oracle Enterprise Repository is separately licensed as a standalone product; however, OER works together with Oracle Service Registry, Oracle Web Services Manager, and Management Pack Plus for SOA to provide an enterprise-class SOA Governance solution.

1.12 Oracle Web Services Manager

Oracle Web Services Manager provides policy based declarative security and reliability for Web services and their clients. Oracle Web Services Manager is licensed as part of SOA Suite. Oracle Web Services Manager works together with Oracle Enterprise Repository, Oracle Service Registry, and Oracle Enterprise Manager Management Pack Plus for SOA to provide an enterprise-class SOA Governance solution.

1.13 SOA Suite for Non-Oracle Middleware

Oracle SOA Suite is an integrated, best-in-class suite of products that helps you build, deploy, and manage deployments ranging from department-level to enterprise-wide systems. This 100% standards-based, hot-pluggable infrastructure interoperates with your existing IT investments. Many Oracle customers have succeeded in deploying high-volume, mission-critical SOA systems by leveraging the industry’s best Service
Bus and BPEL orchestration engine combined with Oracle’s extensive connectivity options and renowned extreme-scalability on a grid computing infrastructure.

Oracle SOA Suite for Non-Oracle Middleware can be separately licensed, independent of any Oracle application server. Customers with other application servers, such as WebSphere, should license this version. Customers using Oracle Application Server or WebLogic Server should use Oracle SOA Suite for Oracle Middleware (Section 2.3, "SOA Suite for Oracle Middleware"). The suite includes:

- **Oracle BPEL Process Manager** (see Section 1.8, "BPEL Process Manager")
- **Oracle Enterprise Service Bus**
  
  Oracle Enterprise Service Bus was introduced with the 10.1.3.1 release of the SOA Suite and was Oracle’s primary ESB on Oracle Containers for J2EE as well as on 3rd-party Java EE platforms such as WebSphere. With the BEA acquisition, Oracle Service Bus has become our strategic service bus going forward. In the 11g version of SOA Suite, Oracle Enterprise Service Bus continues as the Mediator component.

- **Oracle Business Activity Monitoring**
  
  Oracle Business Activity Monitoring (BAM) gives business executives the ability to monitor their enterprise business services in real-time and to correlate their KPIs (key performance indicators) to the actual business process. Oracle BAM also provides users the ability to change the business processes and take corrective action if the business environment changes. Oracle BAM is a complete solution for building real-time operational dashboards, monitoring and alerting applications over the Web.

---

**Note:** Oracle Business Activity Monitoring includes restricted use of Oracle Data Integrator Enterprise Edition for scenarios where Oracle Business Activity Monitoring is the source of and/or destination for the transformed data. Oracle Business Activity Monitoring is included in the following product suites:

- **SOA Suite for Oracle Middleware**
- **SOA Suite for Non-Oracle Middleware**
- **Event-Driven Architecture Suite**
- **Business Process Management Suite for Non-Oracle Middleware**
- **Business Process Management Suite (for Oracle Middleware)**

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- **Oracle Web Services Manager**

  Oracle Web Services Manager provides management, monitoring, and enforcement of WS-Policy, WS-RM & QOS Policies.

- **Oracle Business Rules**

  Oracle Business Rules is a high performance light-weight business rules product that delivers agility and enables businesses to change their key decisions and policies rapidly, flexibly, and with confidence. Oracle Business Rules has seamless integration with Oracle BPEL PM and rest of the SOA stack.

- **Oracle Complex Event Processing**

  Oracle Complex Event Processing (CEP) is the first and only Java server for the development of high-performance event driven applications. It is a lightweight Java application container built from the ground up, based on Equinox OSGi, with
shared services, including a powerful Complex Event Processing (CEP) service, which provides a rich, declarative environment to improve the efficiency and effectiveness of managing business operations. CEP detects patterns in the flow of events, often based on filtering, correlation, and aggregation across event sources and includes industry leading temporal and ordering capabilities. It supports ultra-high throughput (in excess of one million events per second) and microsecond latency.

- **JDeveloper and ADF**

Oracle JDeveloper is a free integrated enterprise development environment with end-to-end support for modeling, developing, debugging, optimizing, and deploying Java based SOA applications. Oracle JDeveloper introduces a new approach to Java EE development with features that enable visual and declarative development. The innovative Oracle Application Development Framework (ADF) simplifies Java EE development. Oracle JDeveloper’s “productivity with choice” offers a choice of development approach, technology scope, and deployment platform.

- **Adapters**

See Chapter 3, "Oracle Fusion Middleware Adapters," for a description of Fusion Middleware Adapters. Technology adapters are included in the SOA Suite license. Others require separate licensing.

---

**Notes:**

1. Oracle SOA Suite bundles UDDI client libraries from the HP SOA Systinet Registry. Such libraries and UDDI client functionality are licensed only to the end user for the purpose of connecting to and communicating with the Oracle Service Registry.

2. Oracle SOA Suite for Non-Oracle Middleware includes a restricted license for Coherence only for internal use within SOA Suite for cluster communication purposes. Any other uses of Coherence require a separate license.

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### 1.14 Business Process Management Suite for Non Oracle Middleware

Oracle Business Process Management Suite (BPM Suite) is a software suite that integrates the modeling, integration, execution, management and monitoring of business processes into a complete lifecycle that supports rapid change. It enables the creation, execution, and optimization of business processes, providing for unparalleled collaboration between business and IT. As a result, business processes are automated and optimized to improve efficiency and agility while costs are lowered. Oracle Business Process Management leverages your existing IT investments and is specially tuned for line-of-business users. Using Oracle Business Process Management, you can improve productivity and visibility and provide your organization with the ability to respond to market needs as never before.

The Oracle Business Process Management Suite comprises the following components:

- **Oracle BPM Studio**

Oracle BPM Studio is a set of extensions on top of Oracle JDeveloper providing Business Process Modeling Notation (BPMN) modeling and simulation, including business friendly modeling of supporting artifacts such as organization, business calendars, business catalog, and business objects. In particular, business process guides navigate end users through different activities they need to perform as part of a process, organizing them in milestones and aggregating status.
- **Oracle BPM Composer**
Oracle BPM Composer is a web based modeling and customization tool for BPMN models and Business Rules.

- **Oracle BPMN Service Engine and Workflow Extensions**
BPMN Service Engine provides the ability to execute BPMN models natively and integrates with Oracle Enterprise Manager Fusion Middleware Control for administration and management. Workflow Extensions add more advanced capabilities to the base workflow capabilities in BPEL Process Manager and SOA Suite. These extensions include approval management extensions, which are features targeted at sophisticated document-based and dynamic approval routing.

- **Oracle BPM Process Spaces**
BPM Process Spaces include BPM specific WebCenter Spaces Group Spaces, corresponding templates, and task flows.

- **Oracle BPM Process Analytics**
BPM Process Analytics include the ability to define business indicators as part of process models and to capture these and other standard process metrics in an included STAR schema. Also provides seamless integration to Oracle BAM.

- **Oracle BPEL Process Manager**
Oracle BPEL Process Manager is a leading implementation of the Business Process Execution Language (BPEL). This product is especially strong in system-centric BPM processes, being built upon a robust service-oriented architecture. It includes a BPEL editor housed within Oracle JDeveloper, a BPEL run-time server, and a worklist application for end user interactions.

- **Oracle Business Rules**
Oracle Business Rules is an inference capable declarative rules engine that enables externalization of rules and policies, processes, and applications. It includes an authoring environment and run-time server.

- **Oracle Business Activity Monitoring**
Oracle Business Activity Monitoring (BAM) is a complete solution for building real-time operational dashboards, monitoring and alerting applications over the Web. It enables customers to monitor business processes and their emanating events to understand the impact on the Key Performance Indicators affecting their business.

- **Oracle WebCenter Suite (restricted use: for use with Process Portal/Process Spaces only)**
Oracle WebCenter Suite is a user interaction suite for building portals, composite applications, and Enterprise 2.0 social and collaborative applications with seamless combination of search, publishing, and knowledge management.

An integral part of the Oracle Business Process Management platform, though not included in BPM Suite, is **Oracle Business Process Analysis Suite** (Oracle BPA Suite). Oracle BPA Suite is a modeling and analysis tool targeted at business analysts. It supports rigorous process methodologies such as Six Sigma and hierarchical process modeling including value-chain diagrams, ultimately decomposing down to BPMN models. These BPMN models are shared with the BPEL editor, including full bidirectional synchronization, for seamless round trip design. BPA Suite also includes rich analysis, simulation, and reporting.
1.15 Oracle Business Process Analysis Suite

Oracle BPA Suite is a modeling and analysis tool targeted at business analysts. It supports rigorous process methodologies such as Six Sigma and hierarchical process modeling including value-chain diagrams, ultimately decomposing down to BPMN models. These BPMN models are shared with the BPEL editor, including full bidirectional synchronization, for seamless round trip design. BPA Suite also includes rich analysis, simulation, and reporting.

Although it is not included in the Oracle BPM Suite package, Oracle BPA Suite is an integral part of the Oracle Business Process Management platform.

1.16 Event-Driven Architecture Suite

The EDA Suite is a differentiated suite of Oracle integration products focused on meeting the event-driven application development needs of developers defining front-office applications that require low latency, high throughput and deterministic processing of data or event streams.

The Event-Driven Architecture Suite includes:

- **Oracle Complex Event Processing (CEP)**
  
  Oracle CEP (formerly BEA’s WebLogic Event Server) is the first and only Java server for the development of high-performance event driven applications. It is a lightweight Java application container built from the ground up, based on Equinox OSGi, with shared services, including a powerful Complex Event Processing (CEP) service, which provides a rich, declarative environment to improve the efficiency and effectiveness of managing business operations. CEP detects patterns in the flow of events, often based on filtering, correlation, and aggregation across event sources and includes industry leading temporal and ordering capabilities. It supports ultra-high throughput (in excess of one million events per second) and microsecond latency. Oracle CEP includes the Oracle JRockit JVM.

- **Oracle Business Activity Monitoring**
  
  Oracle Business Activity Monitoring (BAM) is a complete solution for building real-time operational dashboards, monitoring and alerting applications over the Web. It enables customers to monitor business processes and their emanating events to understand the impact on the Key Performance Indicators affecting their business.

- **Oracle Enterprise Service Bus** (see Section 1.13, "SOA Suite for Non-Oracle Middleware")

- **Oracle Business Rules**
  
  Oracle Business Rules is an inference capable declarative rules engine that enables externalization of rules and policies processes and applications. It includes an authoring environment and run-time server.
The EDA Suite is separately licensed as a standalone product, however high-performance deployments of Oracle CEP will require Coherence Suite for optimally low latency.

1.17 Oracle Forms and Reports

Oracle Forms and Reports can be separately licensed, independent of any Oracle Internet Application Server edition.

When you license it independently, Oracle Forms and Reports includes:

- Oracle Forms
- Forms client applet
- Forms Runtime
- Oracle Reports
- WebLogic Server Basic
- Oracle Enterprise Manager Fusion Middleware Control

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**Note:** All editions of the products Oracle Internet Application Server and Oracle Forms and Reports Server include rights to WebLogic Server Basic, a license-constrained version of Oracle WebLogic Server. WebLogic Server Basic is only for running components provided within these products such as Forms, Reports, Discoverer, Portal, and for custom Java applications previously developed for Oracle Containers for J2EE. Products outside of Oracle Internet Application Server and Oracle Forms and Reports that have licensing dependencies on any edition of Oracle Internet Application Server or Oracle Forms and Reports do not have the right to run those products on WebLogic Server Basic unless stated specifically within their licensing documentation. For complete details about WebLogic Server Basic, see Appendix A, "WebLogic Server Basic."

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1.17.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Forms:

- Oracle Single Sign-On is provided for authentication services to users accessing Oracle Forms and Reports.
- Oracle Internet Directory is provided to provision, store, and manage Oracle Forms and Reports users and groups, their associated security credentials and privileges, to synchronize data with third party directory services, and to store other metadata specific to Oracle Forms and Reports.
- Oracle HTTP Server and its modules are provided for running Oracle Forms and Reports applications only.
- WebLogic Server Basic is provided for running Oracle Forms and Reports applications only.
1.18 Oracle Data Service Integrator

Oracle Data Service Integrator provides the ability to create canonical data service components for SOA, perform federated query capabilities from databases, Web services and other sources, and execute multi-target database updates. Oracle Data Service Integrator supplies fine-grained security with data redaction, and is natively accessible from the Oracle Service Bus product.

Oracle Data Service Integrator is separately licensed as a standalone product.

Oracle Data Service Integrator includes restricted use Oracle WebLogic Server Enterprise Edition as host for only Oracle Data Service Integrator, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

1.19 Oracle Data Profiling

Oracle Data Profiling enables business users to assess the quality of their data through metrics, to discover or infer rules based on this data, and to monitor the evolution of data quality over time.

Oracle Data Profiling has a prerequisite requirement that the license holder also owns a valid license for Oracle Data Integrator.

1.20 Oracle Data Integration Suite

Oracle Data Integration Suite is comprehensive software bundle for enabling scalable, highly-accessible data integration in any heterogeneous data environment. It can be separately licensed, independent of any Oracle Internet Application Server edition.

Oracle Data Integration Suite includes:

- Oracle Data Integrator Enterprise Edition
- Oracle Data Relationship Management (up to maximum of 2,000 records per processor).

1.20.1 Restricted-Use Licenses

Oracle Data Integration Suite includes restricted use licences for the following components:

- Oracle WebLogic Suite is included as host for only ODI Suite components including run-time components to provide Java run-time environment as well as configuration and administration components used for the setup and management of these run-time components.

- Oracle BPEL Process Manager is included for use with Oracle Data Integrator and/or Hyperion Data Relationship Management as endpoints.

- Oracle Service Bus is included for use with Oracle Data Integrator and/or Hyperion Data Relationship Management as endpoints.

1.21 Oracle Data Integrator Enterprise Edition

Oracle Data Integrator Enterprise Edition is a comprehensive software package for enabling scalable data integration in heterogeneous data environments. Oracle Data Integrator Enterprise Edition is separately licensed independent of any Oracle Internet
Application Server edition or Oracle Business Intelligence Server Enterprise Edition or Oracle Business Intelligence Suite Enterprise Edition.

Oracle Data Integrator Enterprise Edition includes the following components:

- Oracle Data Integrator (ODI) — a heterogeneous platform for data integration that includes design time components for modelling and mapping, and run-time components for executing bulk data movement and transformation. ODI includes Job Scheduler Services, Changed Data Capture components, and a complete set of Knowledge Modules for access to an unlimited number of Source technologies.

- Oracle Warehouse Builder Enterprise ETL — an enterprise class data integration platform for the Oracle Database that includes design time components for modelling and mapping, run-time components for executing bulk data movement and transformation, and administration components for managing the metadata repository.

Oracle Warehouse Builder Enterprise ETL extends the Oracle Database ETL features and includes the following functionality:

- Accessing sources and targets
  - Native support for heterogeneous databases, including the definition of new platform types, JDBC connectivity, knowledge modules, and code templates
  - Change Data Capture mappings in ETL
  - Publishing and consuming web services, including integrating with process orchestration technologies such as Oracle BPEL Process Manager
  - Importing Cobol copybooks using the built-in wizard
  - Targeting XML files

- Working with dimensional objects
  - Creating slowly changing dimensions, types 2 and 3
  - Storing data in OLAP cube-organized materialized views
  - Defining orphan management policies

- Designing and executing ETL jobs
  - Right-time data warehousing utilizing queues and real-time mappings
  - Reusing and embedding mapping code with pluggable mappings
  - Specifying the load order of multiple targets in a single mapping
  - Partitioning and parallelizing updates to tables by utilizing the data chunking feature
  - Scheduling ETL jobs using the built-in Schedule interface
  - Using advanced process flows features (activity templates, use of the following activities: Assign, Set Status, For Loop, While Loop, Route, Notification, EJB, Java Class, and Webservice)
  - Designing mappings to handle complex types using the following operators: varray iterator, construct object, and expand object
  - Rapidly moving large amounts of data with transportable modules
  - Using spatial transformations and streams transformations

- Integrating with other products
– Deploying metadata directly to Oracle Discoverer End User Layer
– Deriving and deploying metadata to Oracle Business Intelligence Enterprise Edition

Administering Warehouse Builder and its metadata repository
– Managing environments, including promoting from development to test to production, using the multiple configurations functionality
– Interactively analyzing metadata lineage and impact and automatically propagating metadata change using the Metadata Dependency Manager
– Extending the metadata repository using the following: user-defined objects, user-defined associations, user-defined modules, creating icon sets and custom icons
– Hosting the OWB design repository in an Oracle Real Application Clusters (Oracle RAC) environment (executing in an Oracle RAC environment does not require this license)

For more information about Warehouse Builder functionality, see the Oracle Database 11.2 Documentation Library for Data Warehousing and Business Intelligence.

1.22 Oracle Data Quality for Data Integrator (Up to a Maximum of 100 Million Records)

Oracle Data Quality for Data Integrator is a comprehensive data quality platform that enables data standardization, match, merge, de-duplication, householding and name and address cleansing.

Data Quality for Data Integrator is licensed using the Per Processor metric for up to a maximum of 100 million records per calendar year. Records are to be any distinct non-duplicated set of related data attributes identified by a unique key that are cleansed in the production environment.

One Oracle Data Quality Rules rule set is included in the Data Quality for Data Integrator (up to a maximum of 100 million records) license. Each additional rule set must be licensed separately.

Oracle Data Profiling has a prerequisite requirement that the license holder also owns a valid license for Oracle Data Integrator.

1.23 Oracle Data Quality for Data Integrator (for Greater than 100 Million Records)

Oracle Data Quality for Data Integrator (for greater than 100 Million Records) allows usage of Oracle Data Quality for Data Integrator over 100 million records per year. It is licensed using the Per 1000 Records metric. Records are to be any distinct non-duplicated set of related data attributes identified by a unique key that are cleansed in the production environment.

Data Quality for Data Integrator (for greater than 100 Million Records) has a prerequisite requirement that the license holder also owns a valid license for Oracle Data Integrator.
1.24 **Oracle Data Quality Rules for Data Integrator**

Oracle Data Quality Rules for Data Integrator provide a set of pre-defined cleansing rules that extend Oracle Data Quality for Data Integrator capabilities explicitly for name and address cleansing for one or more countries.

Each Oracle Data Quality Rules for Data Integrator license gives the holder the capability to use these rules for one given country.

Rule Sets are available for the following countries and each Rule Set is licensed separately: Argentina, Australia, Austria, Belgium, Brazil, Brunei Darussalam, Canada, Chile, Colombia, Denmark, France, Germany, Great Britain, Hong Kong, India, Ireland, Italy, Jamaica, Malaysia, Mexico, Netherlands, New Zealand, Peru, Philippines, Portugal, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, United Arab Emirates, United States, Venezuela.

1.25 **Oracle Application Adapters for Data Integration**

Oracle Application Adapters for Data Integration provide specific software components for reverse-engineering metadata from, and extracting bulk data from various ERP software applications. Each unique Application Adapter for Data Integration is licensed separately, but must be used with Oracle Data Integrator Enterprise Edition and the Data Integrator component.

Application Adapters for Data Integration are available for PeopleSoft, JD Edwards, E-Business Suite, Siebel, and SAP Applications. Each Application Adapter for Data Integration is licensed separately.

1.26 **Oracle Application Adapters for Warehouse Builder**

Oracle Application Adapters for Warehouse Builder provide specific software connectors for reverse-engineering metadata from, and extracting bulk data from various ERP software applications. Each unique Application Adapter for Data Integration is licensed separately, but must be used with Oracle Data Integrator Enterprise Edition and the Oracle Warehouse Builder component.

Application Adapters for Warehouse Builder are available for PeopleSoft, SAP, Siebel, and E-Business Suite.
This chapter covers licensing for SOA products. It contains the following sections:

- Section 2.1, "BPEL Process Manager Option"
- Section 2.2, "Oracle Service Bus"
- Section 2.3, "SOA Suite for Oracle Middleware"
- Section 2.4, "Business Process Management Suite"
- Section 2.5, "Management Pack Plus for Service-Oriented Architecture (SOA)"
- Section 2.6, "Management Pack for WebLogic Server"
- Section 2.7, "SOA Suite and BPEL PM Licensing with Oracle Internet Application Server"

### 2.1 BPEL Process Manager Option

BPEL Process Manager can be licensed as an option to WebLogic Suite. For more information, see Section 1.8, "BPEL Process Manager."

### 2.2 Oracle Service Bus

Oracle Service Bus (OSB – formerly BEA AquaLogic Service Bus) is a proven, lightweight SOA integration platform and a key component of the Oracle SOA Suite product family. OSB is designed for connecting, mediating and managing interactions between heterogeneous services, not just Web services, but also Java and .Net, messaging services and legacy endpoints.

OSB uniquely delivers the integration capabilities of an Enterprise Service Bus (ESB) with operational service management in a single product with an efficient, seamless user experience. With its flexible deployment options and automated integration with Oracle SOA Governance Suite, Oracle Service Bus is designed to handle the deployment, management and governance challenges of implementing Service-Oriented Architecture (SOA) from department to enterprise scale.

Oracle Service Bus is licensed as an option to WebLogic Suite and is also included in SOA Suite for Oracle Middleware.

### 2.3 SOA Suite for Oracle Middleware

This SOA Suite version is for customers running WebLogic or Oracle Application Server. The 11g version of Oracle SOA Suite provides heightened design-time and
run-time integration using Oracle’s SOA Service Platform based on SCA (Service Composite Architecture).

The components in SOA Suite for Oracle Middleware are the same as SOA Suite for Non-Oracle Middleware (see Section 1.13, "SOA Suite for Non-Oracle Middleware") with the addition of the following products:

- Oracle Service Bus
  For details, see Section 2.2, "Oracle Service Bus."

- Oracle B2B
  For an enterprise to extend business processes to its trading partners requires a well-defined architecture that addresses compliance, security, visibility, scalability, and standards. The Oracle SOA Suite provides this platform, enabling process orchestration, administration, monitoring, inter-enterprise connectivity and more. As an integral part of this architecture, Oracle B2B enables an enterprise to define, configure, manage, and monitor the exchange of information, electronically, with its trading partners.
  Oracle B2B includes the B2B engine and the following adapters, which must be licensed separately:
  - RosettaNet Adapter
  - EDI Adapter
  - Healthcare Adapter
  - ebXML Adapter

SOA Suite for Oracle Middleware is licensed as an option to WebLogic Suite.

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**Note:** Oracle SOA Suite bundles UDDI client libraries from the HP SOA Systinet Registry. Such libraries and UDDI client functionality are licensed only to the end user for the purpose of connecting to and communicating with the Oracle Service Registry.

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2.4 Business Process Management Suite


2.5 Management Pack Plus for Service-Oriented Architecture (SOA)

The Oracle Enterprise Manager Management Pack Plus for SOA is licensed as an option to WebLogic Suite. This pack delivers comprehensive management and modeling capabilities for a SOA-based environment. By combining SOA run-time governance, business-IT alignment, model-driven metrics, and SOA infrastructure management with Oracle's rich and comprehensive system management solution, Enterprise Manager Grid Control significantly reduces the cost and complexity of managing SOA-based environments.

This pack supports the following Grid Control SOA targets:

- Business Process Execution Language (BPEL)
- Oracle Service Bus (OSB)
This pack also supports the following Composite Application Monitor and Modeler (CAMM) targets:

- Business Process Execution Language (BPEL)
- Oracle Enterprise Service Bus (OESB)
- WebLogic Integration (WLI)
- WebLogic Portal (WLP)

The following sections provide SOA Plus licensing information for both the Grid Control and CAMM target types.

### 2.5.1 Licensing for Grid Control SOA Targets

This portion of the pack delivers comprehensive management and modeling capabilities for a SOA-based environment. By combining SOA run-time governance, business-IT alignment, model-driven metrics, and SOA infrastructure management with Oracle's rich and comprehensive system management solution, Enterprise Manager Grid Control significantly reduces the cost and complexity of managing SOA-based environments.

The Management Pack Plus for SOA Grid Control targets include the features shown in Table 2–1.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralized management console</td>
<td>Provide administrators managing SOA environments with a consolidated browser-based view of the entire enterprise, thereby enabling them to monitor and manage all of their components from a central location.</td>
</tr>
<tr>
<td>Discovery and service modeling</td>
<td>Provide discovery of the following:</td>
</tr>
<tr>
<td></td>
<td>- Oracle BPEL processes deployed to the Oracle BPEL Process Manager (BPEL Process Manager) server and the dependent partner links.</td>
</tr>
<tr>
<td></td>
<td>- Oracle Service Bus-based business and proxy services.</td>
</tr>
<tr>
<td></td>
<td>- Service modeling offers out-of-the-box automated system modeling capabilities for the SOA infrastructure.</td>
</tr>
<tr>
<td>Run-time governance</td>
<td>Define SOAP tests to measure and record availability and performance of partner links (or any Web service) and business/proxy services for historical trending, troubleshooting, and root cause analysis purposes. Also provides an error hospital of process instances with drilldowns into instance details.</td>
</tr>
<tr>
<td>Infrastructure management</td>
<td>Monitor the availability and performance of the SOA infrastructure components. Both current and historic availability of targets (such as BPEL Process Manager or Oracle Service Bus) are recorded for troubleshooting and root cause analysis.</td>
</tr>
<tr>
<td>Configuration management</td>
<td>Collect configuration information for the BPEL Process Manager server/domains/processes and Oracle Service Bus. The parameters can be refreshed, saved, or compared with another target. Different versions of the same target can also be compared.</td>
</tr>
</tbody>
</table>
Management Pack Plus for Service-Oriented Architecture (SOA)

Table 2–2 Feature Highlights of Management Pack Plus for SOA CAMM Targets

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic modeling and discovery</td>
<td>Automatically model and discover management applications displaying multiple views of the application, including the topology, function/flow, and architectural views.</td>
</tr>
<tr>
<td>Contextual visibility into SOA, and J2EE metrics</td>
<td>Provide drill-down contextual visibility into SOA, and J2EE metrics, enabling administrators to both quickly understand and analyze their application to identify potential bottlenecks and performance trends, as well as prepare for capacity changes and overall application management.</td>
</tr>
<tr>
<td>Transaction tracing</td>
<td>Trace transactions for SOA, and J2EE metrics both vertically through the application stack as well as horizontally across containers.</td>
</tr>
<tr>
<td>Metrics visibility at any layer</td>
<td>Automatically generate customized dashboards and views to view metrics at any layer in the application through graphs and tables.</td>
</tr>
</tbody>
</table>
2.5.3 Installation and Licensed Links

Note the following installation requirements:

- Oracle Enterprise Manager Management Pack Plus for SOA is available when you install Oracle Enterprise Manager Grid Control.
- Oracle Composite Application Monitor and Manager is available as a separate installer.

For complete license details about Management Pack Plus for SOA and Oracle Composite Application Monitor and Manager, see "Oracle Middleware Enterprise Management" in Oracle Enterprise Manager Licensing Information.

2.6 Management Pack for WebLogic Server

This pack offers a complete, cost-effective, and easy-to-use solution for provisioning and patch automation, configuration management, and application performance management for Oracle Fusion Middleware. The Management Pack for WebLogic Server automates the time-consuming and often error-prone process of installing, patching, and managing the configurations of Oracle Fusion Middleware software and its underlying operating system and hardware. This pack also models and monitors Java EE and Web Services applications, enabling users to quickly identify bottlenecks, performance trends, and overall application efficiency.

The following sections provide licensing information for all of these products.

Note: All Oracle Enterprise Manager 11g Fusion Middleware Control and Oracle Enterprise Manager 10g Application Server Control functionality is included with each edition of Oracle Fusion Middleware. The links and areas that require the Management Pack for WebLogic Server are outside of Fusion Middleware Control and Application Server Control.

2.6.1 Provisioning and Patch Automation in Management Pack for WebLogic Server

Provisioning and patch automation features within the Management Pack for WebLogic Server automate deployment of Oracle Fusion Middleware software, applications, and patches. The features provide easy and scalable critical data center operations, resulting in lower operational risk and cost of ownership. The features in this pack provide functionality for "bare-metal" provisioning of operating systems and Oracle Fusion Middleware software images, cloning of existing Oracle Fusion Middleware installations, and operating system and Oracle Fusion Middleware patching.
The Management Pack for WebLogic Server includes the features shown in Table 2–3. These features apply to Oracle Application Server target types, not to Oracle WebLogic Server target types.

### Table 2–3 Feature Highlights of Provisioning and Patch Automation

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patching</strong></td>
<td>■ Provide end-to-end patching of the Oracle Application Server across a wide range of product patches and customer environments.</td>
</tr>
<tr>
<td></td>
<td>■ Provide automated Linux, Solaris, and Windows host patching and integration with an Unbreakable Linux Network (ULN).</td>
</tr>
<tr>
<td></td>
<td>■ Receive alerts to critical patches that need to be applied through Critical Patch Advisories, and automate the downloading and deployment of patches through the Critical Patch Facility.</td>
</tr>
<tr>
<td><strong>Provisioning</strong></td>
<td>■ Create and maintain a library of reference software images.</td>
</tr>
<tr>
<td></td>
<td>■ Deploy operating systems and Oracle Fusion Middleware software to bare metal servers.</td>
</tr>
<tr>
<td></td>
<td>■ Create a provisions standard, or &quot;gold&quot; image of Oracle Fusion Middleware software.</td>
</tr>
<tr>
<td></td>
<td>■ Leverage out-of-box and custom reporting on provisioning and deployments.</td>
</tr>
<tr>
<td><strong>Cloning</strong></td>
<td>■ Clone Oracle Application Server and SOA applications.</td>
</tr>
<tr>
<td></td>
<td>■ Extend Oracle Application Server DCM Managed Clusters and Oracle Application Server clusters.</td>
</tr>
<tr>
<td><strong>Security management</strong></td>
<td>■ Ensure system security and adherence to operation security standards.</td>
</tr>
<tr>
<td></td>
<td>■ Receive notifications for security policies, including Enterprise Security Advisories.</td>
</tr>
</tbody>
</table>

#### 2.6.2 Configuration Management Features in Management Pack for WebLogic Server

Configuration management features within the Management Pack for WebLogic Server automate the process of managing software and hardware configurations and deployments. The Management Pack for WebLogic Server provides capabilities such as search and compare across all systems, configuration monitoring, policy management and compliance support, security configuration scoring and dashboards, and comprehensive reporting.

You can access the configuration management features available with the Management Pack for WebLogic Server through Grid Control licensed links and by installing the Configuration Change Console and Application Configuration Console. All three of these components comprise the configuration management features provided by the Management Pack for WebLogic Server.

The Management Pack for WebLogic Server includes the features listed in Table 2–4. Unless otherwise stated, these features apply to both Oracle WebLogic Server and Oracle Application Server target types, as well as to the underlying host target types on which they have been installed.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middleware and host configuration management</td>
<td>Provide hardware and software configuration data collection, search, comparison, historical change tracking, and analytical reporting.</td>
</tr>
<tr>
<td>Patching</td>
<td>Include Critical Patch Advisories, which alert you to critical patches you need to apply.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This feature does not apply to Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Policy and security management</td>
<td>■ Ensure consistency of deployments, system security, and adherence to operation standards.</td>
</tr>
<tr>
<td></td>
<td>■ Receive policy violation notifications, including Enterprise Security Advisories.</td>
</tr>
<tr>
<td></td>
<td>■ Utilize out-of-box policies or generate user-defined policies to meet your specific operational best practices, industry requirements, or regulatory compliance requirements.</td>
</tr>
<tr>
<td>Policy groups</td>
<td>■ Provide a structured collection of security configuration rules against which you can measure or judge targets.</td>
</tr>
<tr>
<td></td>
<td>■ Create your own policy groups to specifically address your operational processes and best practice needs. Choose from the library of out-of-box or user-defined policies to group policies to meet your specific needs. This capability enables you to create, edit, and delete policy groups.</td>
</tr>
<tr>
<td></td>
<td>This feature is accessible from the Policy Group sub-tab under the Compliance tab.</td>
</tr>
<tr>
<td>Deployments/installations, including patch-level</td>
<td>Understand what you have by utilizing the Configuration Management pack for discovery, asset tracking of all hardware and software configurations, configuration change tracking, and maintenance of relationships.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This feature does not apply to the Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Client System Analyzer</td>
<td>Enable your system administrators to collect and analyze configuration information and data from end-user systems. Using the pre-installed application enables you to collect end-user configuration information without setting up a separate Web server. The Management Agents collect, analyze, and upload the end-user configuration information to the Management Repository.</td>
</tr>
<tr>
<td>Security at a glance</td>
<td>From a single view, monitor and standardize compliance to security standards across your enterprise. View compliance scores and track trends over time to understand improvements in compliance or deviations. Drill down into individual targets to understand policy violations and closed loop remediation.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This feature does not apply to the WebLogic Server.</td>
</tr>
<tr>
<td>Real-time configuration change detection</td>
<td>Provide real-time configuration change detection and automation of compliance frameworks, such as Sarbanes-Oxley (SOX), Information Technology Infrastructure Library (ITIL), and Payment Card Industry (PCI) data security standards. Management Pack for WebLogic Server solves this need with a centralized Configuration Change Console that includes out-of-box and user-defined policies and controls.</td>
</tr>
</tbody>
</table>
2.6.3 Application Performance Management in the Management Pack for WebLogic Server

As part of the Management Pack for WebLogic Server, Composite Application Monitor and Modeler (CAMM) delivers comprehensive management and modeling capabilities for pure Java EE and Web Service environments running in Oracle WebLogic Server. By combining contextual drill-down modeling capabilities with extensive metrics that can span containers horizontally as well as the entire vertical stack for Java EE, the Management Pack for WebLogic Server significantly reduces the cost and complexity of managing Java EE-based environments in development, testing, staging, and production environments.

Oracle CAMM models and monitors SOA, Portal, and Java EE applications to enable users to quickly identify bottlenecks, performance trends, and overall application efficiency.

Oracle CAMM within the Management Pack for WebLogic Server includes the features shown in Table 2–5.

Table 2–5 Feature Highlights of Oracle CAMM Within the Management Pack for WebLogic Server

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic modeling and discovery</td>
<td>Automatically model and discover management applications displaying multiple views of the application, including the topology, function/flow, and architectural views.</td>
</tr>
<tr>
<td>Contextual visibility into Java EE and Web Service metrics</td>
<td>Provide drill-down contextual visibility into Java EE and Web Service metrics, enabling administrators to both quickly understand and analyze their application to identify potential bottlenecks and performance trends, as well as prepare for capacity changes and overall application management.</td>
</tr>
<tr>
<td>Transaction tracing</td>
<td>Trace transactions for Java EE metrics both vertically through the application stack as well as horizontally across containers.</td>
</tr>
<tr>
<td>Metrics visibility for any layer</td>
<td>Automatically generate customized dashboards and views to view metrics at any layer in the application through graphs and tables.</td>
</tr>
<tr>
<td>Service-level objectives</td>
<td>Provide service-level objectives (SLOs) at any point within the architecture for indicators and alerts.</td>
</tr>
</tbody>
</table>
2.6.4 Installation and Licensed Links

The features available with this pack are spread across multiple products as follows:

- Provisioning and patch automation features are available in Oracle Enterprise Manager Grid Control.
- Configuration management features are available in the following:
  - Oracle Enterprise Manager Grid Control
  - Oracle Enterprise Manager Configuration Change Console
  - Oracle Enterprise Manager Application Configuration Console
- Application performance management features are available in Oracle Composite Application Monitor and Modeler (Oracle CAMM).

Each of the products identified in the preceding list must be installed to make the complete set of features of this pack available.

For complete license details about the Management Pack for WebLogic Server and Oracle CAMM, see "Oracle Middleware Enterprise Management" in Oracle Enterprise Manager Licensing Information.

2.7 SOA Suite and BPEL PM Licensing with Oracle Internet Application Server

Customers who have previously licensed BPEL Process Manager Option and SOA Suite on Oracle Internet Application Server Enterprise Edition have the right to use WebLogic Server Basic to run those products on WebLogic Server as part of their existing Oracle Internet Application Server Enterprise Edition license. This right is only for products that previously ran on Oracle Internet Application Server and does not include the right to run Oracle Service Bus or Oracle Business Activity Monitoring on WebLogic Server Basic. WebLogic Server Basic is defined in Appendix A, "WebLogic Server Basic."
This chapter covers licensing for Oracle Fusion Middleware adapters.

Table 3–1 lists the types of integration adapters:

<table>
<thead>
<tr>
<th>Application Adapters</th>
<th>Legacy Adapters</th>
<th>Changed Data Capture (CDC) Adapters</th>
<th>B2B Adapters</th>
<th>Technology Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP</td>
<td>CICS</td>
<td>VSAM Batch</td>
<td>RosettaNet</td>
<td>File</td>
</tr>
<tr>
<td>PeopleSoft</td>
<td>IMS DB</td>
<td>Adabas</td>
<td>EDI</td>
<td>FTP</td>
</tr>
<tr>
<td>Siebel</td>
<td>IMS TM</td>
<td>DB2/390</td>
<td>Healthcare</td>
<td>JMS</td>
</tr>
<tr>
<td>Oracle Applications</td>
<td>VSAM</td>
<td>Microsoft SQL Server 2005</td>
<td>ebXML</td>
<td>Database</td>
</tr>
<tr>
<td>J. D. Edwards</td>
<td>Tuxedo</td>
<td>Microsoft SQL Server 2000</td>
<td></td>
<td>Advanced Queueing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IMS/DB</td>
<td>MQ Series</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>VSAM CICS</td>
<td>Socket</td>
<td></td>
</tr>
</tbody>
</table>

Technology adapters are included in the Oracle Internet Application Server and WebLogic Suite license upon which the Oracle SOA Suite has a licensing dependency. Other adapter types are licensed separately.

Financial Service adapters, along with Financial Message Designer, are separately licensed standalone products which interoperate with Oracle Service Bus. They are not JCA adapters like the other integration adapters. They include:

- SWIFT Adapter for Oracle Service Bus
- FIX Adapter for Oracle Service Bus
- Payments Adapter for Oracle Service Bus
- Derivatives Adapter for Oracle Service Bus

An additional separately licensed adapter, Enterprise Link for Business Activity Monitoring, is offered as an extension of the Oracle BAM 10g product for customers who are looking to leverage Oracle BAM’s embedded extract, transform, and load (ETL) tooling. Enterprise Link is only one of five major ways to source data into Oracle BAM and is not required in all customer implementations. Customers who do not need Enterprise Link are any customers connecting to Oracle BAM only through BPEL PM Sensors or the Web Services API for Oracle BAM’s Active Data Cache. Enterprise Link is required for all customers connecting to Oracle BAM through JMS queues or through query-based ETL updates. This includes customers who want to listen to JMS...
messages in existing integration environments, transfer large data sets into BAM, or archive data out of the BAM Active Data Cache on a scheduled basis. Enterprise Link is an extension to the 10g version of Oracle BAM only.
This chapter describes licensing for Oracle Tuxedo and add-on products.

4.1 The Oracle Tuxedo Product Family

The Oracle Tuxedo product family comprises of following components:

**Oracle Tuxedo**: Oracle Tuxedo provides infrastructure for building C/C++/COBOL based, high performance, transactional applications in heterogeneous environment that extend from the Web to the Enterprise. Using Oracle Tuxedo, users can develop, manage, and deploy distributed applications independently of the underlying hardware, operating system, network, and database environment.

Tuxedo installer can be used to install various servers and clients components of Tuxedo as follows:

**Server components**:
- Oracle Application-to-Transaction Monitor Interface (ATMI) server software
- Oracle Common Object Request Broker Architecture (CORBA) C++ server software
- Oracle SALT
- Oracle Jolt server software
- Oracle SNMP Agent software
- Oracle Tuxedo Administration Console software
- Oracle TSAM Agent
- Link-Level Encryption (LLE) and Secure Sockets Layer (SSL) encryption software

**Client components**:
- Oracle ATMI Workstation (/WS) client software
- Oracle CORBA C++ client software—includes the C++ client Object Request Broker (ORB) and the environmental objects
- Oracle Jolt client software
- Tuxedo.NET Workstation client software
- LLE and SSL encryption software

Oracle Tuxedo installer can also be used to install Oracle Jolt, Oracle SALT and Oracle TSAM product components. Note that Oracle Tuxedo license does not allow use of
these components. Each of these components (Oracle Jolt, Oracle SALT and Oracle TSAM) must be licensed separately as described below.

**Oracle Jolt:** Oracle Jolt provides Java-based client API to access the Oracle Tuxedo application services extending functionality of existing Tuxedo applications to Intranet- and Internet-wide availability. Jolt client API can be used in standalone mode or from within an application server, such as Oracle WebLogic server.

**Oracle Service Architecture Leveraging Tuxedo (SALT):** Oracle SALT enables access to Tuxedo services as Web services as well as enables Tuxedo applications to access Web services hosted outside of Tuxedo domain. SALT provides easy to use, configuration driven model, without requiring any programming.

**Oracle Tuxedo System and Applications Monitor (TSAM):** Oracle TSAM monitors system and application servers, application transactions and provides end-to-end performance data and relevant statistics. TSAM reports collected data, such as service response times, utilization, SLA violations, through a centralized Web-based console.

You must run a TSAM agent on each node that you want to monitor and manage through TSAM Manager. Each such agent must be licensed. You can run one or more instances of the TSAM Manager and its Console without any additional license.

**Oracle Tuxedo Mainframe Adapters (SNA, TCP and OSITP):** Tuxedo Mainframe Adapters provides bi-directional, transactional connectivity between Tuxedo and CICS/IMS services running on the IBM mainframes and/or Unisys mainframes. These adapters support automatic data conversion to and from HOST formats.
This chapter covers licensing for Oracle Business Intelligence products. It contains the following sections:

- Section 5.1, "Oracle Business Intelligence Standard Edition"
- Section 5.2, "Oracle Business Intelligence Publisher"
- Section 5.3, "Business Intelligence Management Pack"

### 5.1 Oracle Business Intelligence Standard Edition

Oracle Business Intelligence can be separately licensed, independent of any Oracle Application Server edition. Oracle Business Intelligence is also included in Oracle Application Server Enterprise Edition.

When you license it independently, Oracle Business Intelligence includes:

- Oracle Business Intelligence Discoverer Plus
- Oracle Business Intelligence Discoverer Viewer
- Oracle Discoverer Administrator
- Oracle Business Intelligence Discoverer Desktop
- Oracle Business Intelligence Discoverer Portlet Provider
- Oracle Reports Services
- Oracle Warehouse Builder
- Oracle Spreadsheet Add-in
- Oracle Enterprise Manager Fusion Middleware Control
- Oracle Data Miner

In order to use the Oracle Business Intelligence offering, you must separately license Oracle Database Standard Edition (for use with Oracle Business Intelligence Discoverer Relational) or Oracle Database Enterprise Edition and the Oracle OLAP option (for use with Oracle Business Intelligence Discoverer OLAP).

In order to use the Oracle Spreadsheet Add-in, you only need to license Oracle Database Enterprise Edition with the Oracle OLAP option. You do not need to license the Oracle Business Intelligence offering.
5.1.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Business Intelligence:

- Oracle Internet Developer Suite is provided for use with Oracle Reports Builder and Discoverer Administrator only. Two Named User Plus licenses per Processor are provided.
- Oracle HTTP Server and its modules are provided for running Oracle Business Intelligence applications only.
- Oracle Advanced Security Option is included, with use limited strictly to the Oracle Java SSL Library.
- WebLogic Server Basic, described in Appendix A, is provided as the J2EE container for deployment of Oracle Business Intelligence Applications only.
- The Oracle Database is provided for use with the Oracle Repository Creation Utility database schema for storing Discoverer metadata. Storing any other data in the Oracle Repository Creation Utility database schema requires a full use license of the Oracle Database.

Notes: During installation, you can choose to install the product metadata into an existing, licensed database. Choosing this option has the following licensing implications:

- The restricted use license does not apply to the use of the existing database as a metadata repository.
- If the machine on which your existing database is running does not run any other Oracle Application Server installations, there is no Oracle Application Server license requirement for that machine.
- Installing the metadata repository into your existing database may increase the number of users accessing that database, and may thus affect your database license needs. You need to make sure that you have the appropriate number of database licenses to ensure compliance.

5.2 Oracle Business Intelligence Publisher

Oracle Business Intelligence Publisher is a Java-based tool that allows users to convert XML into other document types, such as Adobe Acrobat and Microsoft Word.

5.2.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Business Intelligence Publisher:

- Oracle Containers for J2EE (OC4J) is provided for running Oracle Business Intelligence Publisher only.

5.3 Business Intelligence Management Pack

The Oracle Enterprise Manager Business Intelligence Management Pack provides an integrated solution for ensuring the performance and availability of Oracle Business Intelligence Enterprise Edition (Oracle BI EE). Using the pack, you can receive...
proactive alerts on impending problems for the application, examine run-time statistics to troubleshoot and tune performance, compare configurations across different environments, and keep track of configuration changes to avoid configuration-related problems.

You can use the pack with other Oracle Enterprise Manager management packs and plug-ins to achieve end-to-end management of the entire application environment, including both Oracle and non-Oracle databases, operating systems, storage, and network devices.

The following sections summarize key features and installation information.

5.3.1 Features

The Business Intelligence Management Pack includes the features shown in Table 5–1.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dashboards and reports</td>
<td>Visualize in one stop the health status of the BI environment.</td>
</tr>
<tr>
<td>Alert notifications</td>
<td>Provide proactive management to improve performance and availability.</td>
</tr>
<tr>
<td>Historical metrics</td>
<td>Measure a wide range of usage and performance metrics for monitored Oracle BI targets, send out alerts when these metrics exceed or nearly exceed pre-defined thresholds, and diagnose performance problems by identifying bottlenecks in any of the monitored Oracle BI targets.</td>
</tr>
<tr>
<td>Blackouts</td>
<td>Suppress unnecessary alerts during maintenance windows, and provide more accurate availability reporting.</td>
</tr>
<tr>
<td>O/S monitoring</td>
<td>Provide complete end-to-end management of the application environment.</td>
</tr>
<tr>
<td>Automatic discovery</td>
<td>Speed up the management pack setup for quicker time-to-benefit.</td>
</tr>
<tr>
<td>Configuration snapshot</td>
<td>Allow known effective configuration information to be retained for future analysis. Save configurations to a configuration file (XML file) or to the Management Repository.</td>
</tr>
<tr>
<td>Configuration comparison</td>
<td>Get quicker configuration diagnostics. Use Configuration Comparison to:</td>
</tr>
<tr>
<td></td>
<td>■ Replicate configuration in development/staging to production.</td>
</tr>
<tr>
<td></td>
<td>■ Make sure that configuration settings amongst Oracle BI components in a clustered environment are consistent.</td>
</tr>
<tr>
<td>Change history</td>
<td>Search collected configuration data and view the history of configuration changes for diagnostic and regulatory purposes.</td>
</tr>
</tbody>
</table>

5.3.2 Installation and Licensed Links

The Oracle Enterprise Manager Business Intelligence Management Pack is available from the Oracle Enterprise Manager Grid Control installer.

For complete license details about Business Intelligence Management Pack, see "Business Intelligence Management" in Oracle Enterprise Manager Licensing Information.
This chapter describes licensing for Oracle WebCenter products. It contains the following sections:

- Section 6.1, "The Oracle WebCenter Product Family"
- Section 6.2, "Management Pack for WebCenter Suite"
- Section 6.3, "Restricted Use Licenses"
- Section 6.4, "WebCenter Licensing with Oracle Internet Application Server"

### 6.1 The Oracle WebCenter Product Family

Table 6–1 describes the functionality provided by each product in the Oracle WebCenter family:

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Included Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebLogic Portal</td>
<td>Complete J2EE Portal solution for transactional Web sites and enterprise portals.</td>
<td>WebLogic Portal</td>
</tr>
<tr>
<td>Oracle WebCenter Services</td>
<td>A rich collection of Web 2.0 services and features, including a J2EE portal framework.</td>
<td>WebCenter Framework</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WebCenter Web 2.0 Services, including:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- blogs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- wikis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- discussion forums</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WebCenter Ensemble</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WebCenter Analytics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GroupWare Portlets for Lotus Notes and Microsoft Exchange</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BPEL Worklist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oracle Portlet Bridge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JSR 168 Container</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Universal Content Management adapter</td>
</tr>
</tbody>
</table>
Management Pack for WebCenter Suite

Table 6–1  (Cont.) Oracle WebCenter Product Family

| Product                     | Description                                                                 | Included Features                                                                 |
|-----------------------------|-----------------------------------------------------------------------------|===================================================================================|
| Oracle WebCenter Suite      | Bundles Oracle’s solutions for transactional Web sites, enterprise portals,  | All WebCenter Services features, plus:                                              |
|                             | team collaborative workspaces, and composite applications, providing a    | ▪ WebCenter Spaces                                                                 |
|                             | complete solution for customers seeking to implement these across the      | ▪ WebCenter Interaction                                                            |
|                             | enterprise.                                                                | ▪ WebCenter Collaboration                                                           |
|                             |                                                                             | ▪ WebLogic Portal                                                                  |
|                             |                                                                             | ▪ WebCenter Application Accelerator for .NET                                         |
|                             |                                                                             | ▪ WebCenter Console for Microsoft SharePoint                                         |
|                             |                                                                             | ▪ WebCenter Web Control Consumer for .NET                                             |
|                             |                                                                             | ▪ WebCenter Interaction Container for WSRP                                           |
|                             |                                                                             | ▪ WebCenter Content Services for Lotus Notes, Microsoft Exchange, EMC Documentum,    |
|                             |                                                                             | and Microsoft Files                                                                |
|                             |                                                                             | ▪ WebCenter Interaction Identity Service                                             |
|                             |                                                                             | ▪ Restricted use of Content Server                                                  |
|                             |                                                                             | ▪ Restricted use of Secure Enterprise Search                                       |
|                             |                                                                             | ▪ Restricted use of WebLogic Communication Services and Oracle Communications       |
|                             |                                                                             | Presence                                                                            |
| WebCenter Adapter           | Provides standardized access to enterprise systems.                        | Separately licensed adapters available for:                                       |
|                             |                                                                             | ▪ Microsoft SharePoint                                                              |
|                             |                                                                             | ▪ IBM Lotus Domino                                                                  |
|                             |                                                                             | ▪ EMC Documentum                                                                   |

6.2 Management Pack for WebCenter Suite

This pack delivers comprehensive management and modeling capabilities for WebLogic Portal (now part of WebCenter Suite) environments running in Oracle WebLogic Server as well as the underlying J2EE components. By combining contextual drill-down modeling capabilities with extensive metrics that can span containers horizontally as well as the entire vertical stack for Portal and J2EE, Management Pack for WebCenter Suite significantly reduces the cost and complexity of managing WebLogic Portal-based environments in development, testing, staging, and production environments.
6.2.1 Features of Composite Application Monitor and Modeler (Oracle CAMM)

Oracle CAMM models and monitors SOA, Portal, and J2EE applications that enables users to quickly identify bottlenecks, performance trends, and overall application efficiency.

Oracle CAMM within the Management Pack for WebCenter Suite includes the features shown in Table 6–2.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic modeling and discovery</td>
<td>Automatically model and discover management applications displaying multiple views of the application, including the topology, function/flow, and architectural views.</td>
</tr>
<tr>
<td>Contextual visibility into Portal, Web Services and J2EE metrics</td>
<td>Provide drill-down contextual visibility into Portal, Web Services, and J2EE metrics, enabling administrators to both quickly understand and analyze their application to identify potential bottlenecks and performance trends, as well as prepare for capacity changes and overall application management.</td>
</tr>
<tr>
<td>Transaction tracing</td>
<td>Trace transactions for Portal, Web Services, and J2EE metrics both vertically through the application stack as well as horizontally across containers.</td>
</tr>
<tr>
<td>Metrics visibility at any layer</td>
<td>Automatically generate customized dashboards and views to view metrics at any layer in the application through graphs and tables.</td>
</tr>
<tr>
<td>Service-level objectives</td>
<td>Provide service-level objectives (SLOs) at any point within the architecture for indicators and alerts.</td>
</tr>
</tbody>
</table>

6.2.2 Installation and Licensed Links

The Management Pack for WebCenter Suite is available from the Oracle CAMM installer.

For complete license details about Management Pack for WebCenter Suite and Oracle CAMM, see "Oracle Middleware Enterprise Management" in Oracle Enterprise Manager Licensing Information.

6.3 Restricted Use Licenses

The following restricted use licenses are available when you license WebCenter Suite:

- Secure Enterprise Search allows you to search and index any content stored in the content repository, as well as any page delivered as part of a WebCenter Suite application or portal. If a page includes portlets, the information delivered within the portlet can be indexed as part of the search results as well. However, if you want to search and index all of the information in the backend system that supplies portlet content, you will need a full-use license of Secure Enterprise Search.

- Universal Content Management can be used to store all content that is delivered as part of any WebCenter Suite web site, application, or portal. This includes base content management features, such as versioning and rendering different renditions of content, as well as indexing content in the repository for integration with search results within the site, portal, or application. This also includes full feature usage of the Web Content Management (WCM), Digital Asset Management (DAM), and other UCM components for content delivered via WebCenter Suite.
All interactions can be done through the WebCenter Suite portal interface, a custom application, Desktop integrations, or the UCM user interface including administration activities.

- BPEL Process Manager is restricted to running existing deployed processes and responding to requests that require user input delivered inside of a WebCenter Suite application or portal. However, the ability to define, deploy, and run new BPEL processes is allowed provided that all process endpoints exist entirely within WebCenter Suite delivered components. The modification of document BPEL processes included with the content repository can also be integrated with existing BPEL processes. The pre-built BPEL portlet and taskflows, which enable viewing of a user’s worklist items from any combination of backend BPEL servers, is also included.

**Note:** Oracle BPEL Process Manager bundles UDDI client libraries from the HP SOA Systinet Registry. Such libraries and UDDI client functionality are licensed only to the end user for the purpose of connecting to and communicating with the Oracle Service Registry.

- Oracle WebLogic Communication Services (OWLCS) and Oracle Communications Presence (OCP) are included for development and evaluation purposes only. OWLCS can be used to set and display presence information and enable text chat functionality within WebCenter Suite applications or portals. OCP provides a central repository of real-time presence states for users over various communications networks. OWLCS and OCP are restricted to development and non-production systems only.

### 6.3.1 Identity Management

WebLogic Server is a prerequisite to WebCenter Suite. Customers can leverage WebLogic Server SAML support to enable Single Sign-On for WebCenter Suite applications or portals and WebCenter Suite delivered components. Oracle Internet Directory (OID) and Oracle Wallet are included for use with WebCenter Suite applications or portals and WebCenter Suite components with the following restrictions:

- The use of OID is restricted to storing credentials and policies specific to WebCenter Suite and its delivered components.
- The use of file-based Oracle Wallet is restricted to storing credentials specific to WebCenter Suite and its delivered components.

### 6.4 WebCenter Licensing with Oracle Internet Application Server

Customers who have previously licensed Oracle Internet Application Server as a pre-requisite for WebCenter Services or WebCenter Suite have the right to use WebLogic Server Basic to run WebCenter Services and WebCenter Suite as part of their existing Oracle Internet Application Server Standard Edition or Enterprise Edition license. This right is only for products within WebCenter Services and WebCenter Suite that were previously certified against Oracle Internet Application Server. WebLogic Server Basic cannot be used to run the following: WebLogic Portal, WebCenter Interaction, WebCenter Collaboration, WebCenter Ensemble, WebCenter Analytics, Oracle WebCenter Console for Microsoft SharePoint, and Oracle WebCenter Application Accelerator for .NET. Instead, a separate WebLogic Server license is
required to run these. WebLogic Server Basic is defined in Appendix A, "WebLogic Server Basic."
This chapter describes Oracle’s content management products and the features available with those products. It contains the following sections:

- Section 7.1, "The Oracle Enterprise Content Management Product Family"
- Section 7.2, "Oracle Database License Requirement"
- Section 7.3, "Oracle WebLogic Server License Requirement"

### 7.1 The Oracle Enterprise Content Management Product Family

The Oracle Enterprise Content Management product family consists of several content management products. This section describes the functionality included in each of these products.

Table 7–1 introduces the Oracle Enterprise Content Management product family.

Licensing information for version 10g content management products can be found in the Enterprise Content Management Licensing Information 10g Release 3 (10.1.3.3.0) document, available at the following URL:

http://download.oracle.com/docs/cd/E10316_01/license/toc.htm

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Included Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Imaging and Process Management</td>
<td>Oracle Imaging and Process Management provides imaging and business process management capabilities for enterprise applications such as accounts payable and human resources, as well as for business applications like loan origination and claims processing. Oracle Imaging and Process Management includes the restricted use Oracle Business Process Management Suite for modeling, executing and monitoring processes that are initiated from Oracle Imaging and Process Management.</td>
<td>Included products:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Restricted use of Oracle Business Process Management Suite</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Imaging and Process Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Imaging Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Document Viewer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Input Agent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Web Services and Java SDK</td>
</tr>
</tbody>
</table>
7.2 Oracle Database License Requirement
An Oracle Database license is not included with Oracle Enterprise Content Management components and must be licensed separately.

7.3 Oracle WebLogic Server License Requirement
An Oracle WebLogic Server license is not included with Oracle Enterprise Content Management components and must be licensed separately.
This chapter describes the separately licensed Oracle Identity and Access Management independent license offerings.

The following sections describe the Oracle Identity and Access Management products and product families that can be separately licensed, independent of the packaged Oracle Application Server or WebLogic editions.

- Section 8.1, "Oracle Entitlements Server"
- Section 8.2, "Oracle Entitlements Server Security Module"
- Section 8.3, "Oracle Directory Services Plus"
- Section 8.4, "Oracle Access Manager"
- Section 8.5, "Oracle Adaptive Access Manager"
- Section 8.6, "Oracle Identity Federation"
- Section 8.7, "Oracle Identity Manager"
- Section 8.8, "Oracle Identity Manager Connectors"
- Section 8.9, "Oracle Role Manager"
- Section 8.10, "Oracle Information Rights Management"
- Section 8.11, "Oracle Enterprise Single Sign-On Suite Plus"
- Section 8.12, "Oracle Access Management Suite Plus"
- Section 8.13, "Oracle Identity and Access Management Suite Plus"
- Section 8.14, "Management Pack for Identity Management"

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 the appropriate licenses.

See Section 8.15, "Oracle Database License Requirements," for important license requirements regarding the use of Oracle Database with the products described in this chapter.

### 8.1 Oracle Entitlements Server

Oracle Entitlements Server can be separately licensed, independent of any Oracle Application Server or WebLogic edition.
8.1.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Entitlements Server:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Oracle Entitlements Server, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

8.2 Oracle Entitlements Server Security Module

Oracle Entitlements Server Security Module can be separately licensed, independent of any Oracle Application Server or WebLogic edition.

Note that to use the Oracle Entitlements Server Security Module, you need to license Oracle Entitlements Server or Oracle Access Management Suite Plus (which includes Oracle Entitlements Server).

8.3 Oracle Directory Services Plus

Oracle Directory Services Plus can be separately licensed, independent of any Oracle Application Server or WebLogic edition. It includes:

- Oracle Internet Directory (including Delegated Administration Services and Directory Integration Platform). These components are described in Section 1.3.2.2.2, "Oracle Identity Management."

- Oracle Virtual Directory

- Oracle Directory Server Enterprise Edition

- Oracle Directory Services Manager

8.3.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Directory Services Plus:

- Oracle Single Sign-On is provided for authentication services to users accessing Oracle Delegated Administration Services only.

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Oracle Directory Services Plus, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.
Oracle Database Standard Edition. This infrastructure database is only to be used for storing LDAP related data related to the use of Internet Directory as a general purpose LDAP directory. Storing any other data in the infrastructure database requires a full use license of Oracle Database Standard Edition.

8.4 Oracle Access Manager

Oracle Access Manager can be separately licensed, independent of any Oracle Application Server or WebLogic edition.

8.4.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Access Manager:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Oracle Access Manager, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

8.5 Oracle Adaptive Access Manager

Oracle Adaptive Access Manager can be separately licensed, independent of any Oracle Application Server or WebLogic edition.

8.5.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Adaptive Access Manager:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Oracle Adaptive Access Manager, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

8.6 Oracle Identity Federation

Oracle Identity Federation can be separately licensed, independent of any Oracle Application Server or WebLogic edition. It includes Oracle OpenSSO Fedlet.
8.6.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Identity Federation:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Oracle Identity Federation, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

8.7 Oracle Identity Manager

Oracle Identity Manager can be separately licensed, independent of any Oracle Application Server or WebLogic edition.

8.7.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Identity Manager:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Oracle Identity Manager, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

8.8 Oracle Identity Manager Connectors

Oracle Identity Manager Connectors can be separately licensed, independent of any Oracle Application Server or WebLogic edition. Oracle Identity Manager Connectors require Oracle Identity Manager.

Available Identity Manager Connectors are:

- Database User Management
- Database Applications Table
- Microsoft Active Directory
- Oracle Internet Directory
- Novell eDirectory
- Sun Java System Directory
- Oracle e-Business
- PeopleSoft Enterprise Applications
Oracle Role Manager can be separately licensed, independent of any Oracle Application Server or WebLogic edition.

8.9.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Role Manager:

- BPEL Process Manager for creating workflows where Role Manager is one of the endpoints.

**Note:** Oracle BPEL Process Manager bundles UDDI client libraries from the HP SOA Systinet Registry. Such libraries and UDDI client functionality are licensed only to the end user for the purpose of connecting to and communicating with the Oracle Service Registry.

- Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Oracle Role Manager, including run-time components to
provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

8.10 Oracle Information Rights Management

Oracle Information Rights Management can be separately licensed, independent of any Oracle Application Server or WebLogic edition.

8.10.1 Restricted-Use Licenses

There are no restricted-use licenses included when you separately license Oracle Information Rights Management.

8.11 Oracle Enterprise Single Sign-On Suite Plus

Oracle Enterprise Single Sign-On Suite Plus can be separately licensed, independent of any Oracle Application Server or WebLogic edition.

8.11.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Enterprise Single Sign-On Suite Plus:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

8.12 Oracle Access Management Suite Plus

Oracle Access Management Suite Plus can be separately licensed, independent of any Oracle Application Server or WebLogic edition. It includes:

- Oracle Access Manager
- Oracle Adaptive Access Manager
- Oracle Identity Federation
- Oracle Entitlements Server
- Oracle Information Rights Management
- Oracle OpenSSO STS
- Oracle OpenSSO Fedlet

8.12.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Access Management Suite Plus:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.
Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Access Management Suite Plus, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

8.13 Oracle Identity and Access Management Suite Plus

Oracle Identity and Access Management Suite Plus can be separately licensed, independent of any Oracle Application Server or WebLogic edition. It includes:

- Oracle Access Manager
- Oracle Identity Federation
- Oracle Identity Manager
- Oracle Single Sign-On (described in Section 1.3.2.2.2, "Oracle Identity Management")
- Oracle Internet Directory (including Delegated Administration Services and Directory Integration Platform). These components are described in Section 1.3.2.2.2, "Oracle Identity Management."
- Oracle Virtual Directory
- Oracle Directory Server Enterprise Edition
- Oracle OpenSSO STS
- Oracle OpenSSO Fedlet
- Oracle Directory Services Manager

8.13.1 Restricted-Use Licenses

The following restricted-use licenses are included when you separately license Oracle Identity and Access Management Suite Plus:

- Restricted Use: Business Intelligence Publisher to publish and/or view:
  - Shipped BI Publisher reports. Layout changes are allowed, AND
  - Shipped or newly created BI Publisher reports that are modified to access data from the existing Identity Management schema that has not been customized.

- Oracle Internet Application Server Enterprise Edition or WebLogic Enterprise Edition as host for only Identity and Access Management Suite, including run-time components to provide Java run-time environment and HTTP support, as well as configuration and administration components used for the setup and management of these run-time components.

- Oracle Database Standard Edition. This infrastructure database is only to be used for storing LDAP related data related to the use of Internet Directory as a general purpose LDAP directory. Storing any other data in the infrastructure database requires a full use license of Oracle Database Standard Edition.

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**Note:** If an included product (for example, Oracle Access Manager) comes with restricted-use licenses, the restricted-use licenses still apply when you separately license Oracle Identity and Access Management Suite Plus.
8.14 Management Pack for Identity Management


8.14.1 Features

The Management Pack for Identity Management leverages Oracle Enterprise Manager Grid Control’s broad set of capabilities in configuration management, performance management, and service level management to manage the end-to-end Oracle Access Manager, Oracle Identity Manager, and Oracle Identity Federation environments.

When combined with other Enterprise Manager packs and plug-ins for managing Oracle and non-Oracle database, middleware, network devices and hosts, you can achieve complete end-to-end management of your entire Oracle Identity Management environment.

Note: A management pack license is required to use the features described below in the Enterprise Manager graphical user interface, command-line interface, and published repository views.

The Management Pack for Identity Management includes the features shown in Table 8–1.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-step discovery</td>
<td>Perform a single-step discovery of Oracle Access Manager (OAM), Oracle Identity Manager (OIM), and Oracle Identity Federation (OIF), enabling you to quickly set up your monitoring environment.</td>
</tr>
<tr>
<td>Monitoring and diagnostics</td>
<td>Receive real-time metrics and historical data as well as alert notifications. Proactively monitor the Oracle Identity Management environment from both a systems-oriented view and an end-user perspective. Out-of-box collection of key performance metrics for monitored components facilitates rapid time to value. This enables you to set up alerts based on warning and critical thresholds, view current and historical performance information using graphs and reports, and diagnose performance problems by identifying bottlenecks in any of the monitored targets.</td>
</tr>
<tr>
<td>Configuration</td>
<td>Track configuration metrics, take configuration snapshots, and compare configurations for Oracle Access Manager components.</td>
</tr>
</tbody>
</table>
8.14.2 Installation and Licensed Links

The Management Pack for Identity Management is available from the Oracle Enterprise Manager Grid Control installer.

For complete license details about the Management Pack for Identity Management, see "Identity Management Enterprise Management" in Oracle Enterprise Manager Licensing Information.

8.15 Oracle Database License Requirements

Storing any data other than the Oracle Repository Creation Utility database schema in the Oracle Application Server Infrastructure database requires a full use license of the Oracle Database (Standard Edition, Standard Edition One, or Enterprise Edition).

8.15.1 Full Use License of Oracle Database Standard Edition or Standard Edition One

Some examples of the kinds of data that require the purchase of a full use license for the Oracle Database Standard Edition or Standard Edition One include:

- Documents or any other objects stored in the Oracle Database under Oracle Content Management SDK
- Documents or any kind of content stored in the Portal Repository
- Oracle Integration B2B
- Any BPEL Process Manager process instance data, which includes using Oracle Database as the dehydration store
- Any other custom data that is created or updated by an application

8.15.2 Full Use License of Oracle Database Enterprise Edition

Two kinds of data require the purchase of a full use license of the Oracle Database Enterprise Edition:

- Any Oracle Portal that leverages the VPD functionality of the database for hosting
- Any LDAP data related to the use of an Oracle Internet Directory LDAP Directory, and database replication is used
8.15.3 When is a Full Use License of Oracle Database Not Required?

The following scenarios do not require the purchase of a full use license of the Oracle Database when you purchase Oracle Internet Application Server:

- If you are only using Oracle Web Cache
- If you are using Oracle Business Intelligence Discoverer only against a non-Oracle database
- If you are using Oracle Reports Services only against a non-Oracle database
This appendix describes WebLogic Server Basic and the WebLogic Server functionality that is available in the WebLogic Server Basic license. The following topics are included:

- Section A.1, "WebLogic Server Basic Overview"
- Section A.2, "Installation of WebLogic Server Basic"
- Section A.3, "Restricted Primary Services in WebLogic Server"
- Section A.4, "Restricted WebLogic Web Services Features"
- Section A.5, "Restricted Tooling Features"
- Section A.6, "Restricted APIs"
- Section A.7, "Verifying License Compliance"

A.1 WebLogic Server Basic Overview

WebLogic Server Basic is a license-constrained version of WebLogic Server that is available in licenses for the following Oracle products:

- Oracle Internet Application Server Standard Edition
- Oracle Internet Application Server Standard Edition One
- Oracle Internet Application Server Enterprise Edition
- Oracle Forms and Reports
- Oracle Business Intelligence Standard Edition

The license for each edition of Oracle Internet Application Server and for Oracle Forms and Reports enables the right to full use of the WebLogic Server Basic license.

**Note:** All editions of the products Oracle Internet Application Server and Oracle Forms and Reports Server include rights to WebLogic Server Basic. WebLogic Server Basic is only for running components provided within these products such as Forms, Reports, Discoverer and Portal. It can also be used for custom Java applications such as those developed for Oracle Containers for J2EE. Products outside of Oracle Internet Application Server and Oracle Forms and Reports that have licensing dependencies on any edition of Oracle Internet Application Server or Oracle Forms and Reports do not have the right to run those products on WebLogic Server Basic unless stated specifically within their licensing documentation.
The WebLogic Server Basic license includes usage rights, with the limitations summarized in Table A–1, to the following WebLogic Server features:

- Core WebLogic application server
- Java EE 5/EJB 3.0
- WebLogic Server management tools, including the Administration Console and WebLogic Scripting Tool
- WebLogic JDBC Drivers, WebLogic Server Clients, and WebLogic and Apache Web Server Plug-Ins
- Basic JMS messaging, deployment, and high availability functionality
- Streamlined storing of important objects to data stores, available to all Java applications and a core component of EJB 3.0

Table A–1 summarizes the WebLogic Server features that have usage restrictions under the terms of the WebLogic Server Basic license.

<table>
<thead>
<tr>
<th>Feature Category</th>
<th>Summary of Restrictions in WebLogic Server Basic License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary services</td>
<td>WebLogic Server provides a number of services to assist with the construction of production architectures that are restricted, or that may not be used, in the WebLogic Server Basic license. These services fall into the following categories:</td>
</tr>
<tr>
<td></td>
<td>■ High availability features, such as whole server migration, service migration, custom Work Managers, and overload management</td>
</tr>
<tr>
<td></td>
<td>■ Deployment services and features, such as application versioning; standalone deployment of JMS, JDBC, and WLDF modules; and FastSwap</td>
</tr>
<tr>
<td></td>
<td>■ JMS messaging service features</td>
</tr>
<tr>
<td></td>
<td>■ Services such as the WebLogic Diagnostics Framework, WebLogic SNMP agents, and the WebLogic Tuxedo Connector</td>
</tr>
<tr>
<td></td>
<td>For details about these services and restrictions on their use, see Section A.3, &quot;Restricted Primary Services in WebLogic Server.&quot;</td>
</tr>
<tr>
<td>WebLogic Web Services</td>
<td>Use of the following WebLogic Web Services features is not permitted in the WebLogic Server Basic license:</td>
</tr>
<tr>
<td></td>
<td>■ Buffered Web Services</td>
</tr>
<tr>
<td></td>
<td>■ Asynchronous Web Services</td>
</tr>
<tr>
<td></td>
<td>■ Conversational Web Services</td>
</tr>
<tr>
<td></td>
<td>■ JMS transport</td>
</tr>
<tr>
<td></td>
<td>For information about these WebLogic Web Services features and restrictions on their use, see Section A.4, &quot;Restricted WebLogic Web Services Features.&quot;</td>
</tr>
<tr>
<td>Tooling</td>
<td>Use of the following tooling features is not permitted in the WebLogic Server Basic license:</td>
</tr>
<tr>
<td></td>
<td>■ Configuration Wizard, or the \texttt{pack} and \texttt{unpack} commands, for creating custom domains</td>
</tr>
<tr>
<td></td>
<td>■ Domain Template Builder, or the \texttt{pack} and \texttt{unpack} commands, for creating domain or domain extension templates</td>
</tr>
<tr>
<td></td>
<td>■ Recording WebLogic Server Administration Console operations as a series of WebLogic Scripting Tool (WLST) commands</td>
</tr>
<tr>
<td></td>
<td>■ Extending the WebLogic Server Administration Console</td>
</tr>
<tr>
<td></td>
<td>For details about these tooling features and restrictions on their use, see Section A.5, &quot;Restricted Tooling Features.&quot;</td>
</tr>
</tbody>
</table>
A.2 Installation of WebLogic Server Basic

To install WebLogic Server Basic, use any of the WebLogic Server 10.3.1 package or net installers as described in Oracle WebLogic Server Installation Guide, as appropriate for your platform. Each installer includes the core JEE 5 application server, Administration Console, Configuration Wizard and Upgrade Framework, WebLogic and third-party JDBC drivers, JMS, WebLogic Server clients, Web server plug-ins, UDDI and Xquery Support, WebLogic Server examples, Oracle Enterprise Pack for Eclipse, and Sun or Oracle JRockit JDKs (depending on platform).

The HTTP Publish-Subscribe Server is excluded from the license for WebLogic Server Basic. To ensure that this component is not installed, do the following when running the installation program:

1. In the Choose Install Type window, in which you specify whether you wish to have a complete or a custom installation, choose Custom.
2. In the Choose Products and Components window, deselect Web 2.0 HTTP Pub-Sub Server.

For a description of the individual components of WebLogic Server that may be selectively installed, see Oracle Fusion Middleware Getting Started With Installation for Oracle WebLogic Server.

A.3 Restricted Primary Services in WebLogic Server

The following sections describe the primary services in WebLogic Server that may not be used, or that have usage restrictions in, WebLogic Server Basic.

- Section A.3.1, "High Availability Services"
- Section A.3.2, "Deployment Services and Features"
- Section A.3.3, "JMS Messaging Services"
- Section A.3.4, "Additional Primary Services"

A.3.1 High Availability Services

Table A–2 lists and describes the high availability services that have restrictions, or that may not be used, in WebLogic Server Basic.
Table A–2  Primary Services Restricted in WebLogic Server Basic License

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole server migration</td>
<td>Whole server-level migration enables a migratable server instance, and all of its services, to be migrated to a different physical machine. When a migratable server becomes unavailable for any reason, for example, if it hangs, loses network connectivity, or its host machine fails—migration is automatic. Upon failure, a migratable server is automatically restarted on the same machine if possible. If the migratable server cannot be restarted on the machine where it failed, it is migrated to another machine. In the license for WebLogic Server Basic, whole server migration is not permitted. For more information about this feature, see &quot;Whole Server Migration&quot; in Oracle Fusion Middleware Using Clusters for Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Service migration</td>
<td>In a WebLogic Server cluster, most subsystem services are hosted homogeneously on all server instances in the cluster, enabling transparent failover from one server to another. In contrast, pinned services, such as JMS-related services, the JTA Transaction Recovery Service, and user-defined singleton services are hosted on individual server instances within a cluster—for these services, the WebLogic Server migration framework supports failure recovery with service migration, as opposed to failover. Service-level migration in WebLogic Server is the process of moving the pinned services from one server instance to a different available server instance within the cluster. In the license for WebLogic Server Basic, the configuration and execution of automatic service-level migration is not permitted. For more information about this feature, see &quot;Service Migration&quot; in Oracle Fusion Middleware Using Clusters for Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Managed Server cloning</td>
<td>WebLogic Server provides the capability of cloning an existing Managed Server instance that is part of a cluster. This capability is typically used when an administrator wants to make a duplicate copy of an existing Managed Server. In the WebLogic Server Basic license, the use of the WebLogic Server Administration Console for cloning a Managed Server instance is not permitted. For information about how to clone a Managed Server instance, see &quot;Clone machines&quot; in Oracle Fusion Middleware Oracle WebLogic Server Administration Console Help.</td>
</tr>
<tr>
<td>MAN and WAN state replication</td>
<td>In addition to providing HTTP session state replication across servers within a cluster, WebLogic Server provides the ability to replicate HTTP session state across multiple clusters in a Metropolitan Area Networks (MAN) or in a Wide Area Network (WAN). This improves high-availability and fault tolerance by allowing clusters to be spread across multiple geographic regions, power grids, and Internet service providers. Resources within a MAN are often in physically separate locations, but are geographically close enough that network latency is not an issue. Network communication in a MAN generally has low latency and fast interconnect. Clusters within a MAN can be installed in physically separate locations which improves availability. Resources in a WAN are frequently spread across separate geographical regions. In addition to requiring network traffic to cross long distances, these resources are often separated by multiple routers and other network bottle necks. Network communication in a WAN generally has higher latency and slower interconnect. Slower network performance within a WAN makes it difficult to use a synchronous replication mechanism like the one used within a MAN. WebLogic Server provides failover across clusters in WAN by using an asynchronous data replication scheme. In the license for WebLogic Server Basic, the use of either the MAN and WAN state replication type is not permitted. For more information about this feature, see &quot;Session State Replication Across Clusters in a MAN/WAN&quot; in Oracle Fusion Middleware Using Clusters for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>
Singleton service

Within an application, or as a standalone artifact, you can define a singleton service that can be used to perform tasks that you want to be executed on only one member of a cluster at any given time. A singleton service is active on exactly one server in the cluster at a time and processes requests from multiple clients. A singleton service is generally backed by private, persistent data, which it caches in memory. It may also maintain transient state in memory, which is either regenerated or lost in the event of failure. Upon failure, a singleton service must be restarted on the same server or migrated to a new server.

In the license for WebLogic Server Basic, the configuration of either a standalone or application-provided singleton service is not permitted.

For more information about singleton services, see "Service Migration" in Oracle Fusion Middleware Using Clusters for Oracle WebLogic Server.

Cluster constraints deployment

The default cluster deployment behavior ensures homogeneous deployment for all clustered server instances that can be reached at the time of deployment. However, if the Administration Server cannot reach one or more clustered servers due to a network outage, those servers do not receive the deployment request until the network connection is restored.

It is possible to change WebLogic Server default deployment behavior for clusters by setting the ClusterConstraintsEnabled option when starting the WebLogic Server domain. This option enforces strict deployment for all servers configured in a cluster. A deployment to a cluster succeeds only if all members of the cluster are reachable and all can deploy the specified files.

In the license for WebLogic Server Basic, the use of cluster constraints deployment is not permitted.

For more information about cluster constraints deployment, see "Enforcing Consistent Deployment to All Configured Cluster Members" in Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server.

Overload management

WebLogic Server has features for detecting, avoiding, and recovering from overload conditions. WebLogic Server overload protection features help prevent the negative consequences—degraded application performance and stability—that can result from continuing to accept requests when the system capacity is reached.

In the license for WebLogic Server Basic, the configuration of any overload protection scheme at either a cluster or server level is not permitted.

For more information about overload management, see "Avoiding and Managing Overload" in Oracle Fusion Middleware Configuring Server Environments for Oracle WebLogic Server.

Server ADMIN and STANDBY mode

The series of states through which a WebLogic Server instance can transition is called the server life cycle. At any time, a WebLogic Server instance is in a particular operating state. Two states in which WebLogic Server can be started include the following:

- **ADMIN** — WebLogic Server is up and running, but available only for administration operations, allowing you to perform server and application-level administration tasks.

- **STANDBY** — WebLogic Server does not process any request; its regular Listen Port is closed. The Administration Port is open and accepts life cycle commands that transition the server instance to either the RUNNING or the SHUTDOWN state. Other administration requests are not accepted.

  Starting a server instance in STANDBY is a method of keeping it available as a "hot" backup, a useful capability in high-availability environments.

In the license for WebLogic Server Basic, starting a WebLogic Server instance in either ADMIN or STANDBY state is not permitted.

For more information about these operating states, see "Understanding Server Life Cycle" in Oracle Fusion Middleware Managing Server Startup and Shutdown for Oracle WebLogic Server.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singleton service</td>
<td>Within an application, or as a standalone artifact, you can define a singleton service that can be used to perform tasks that you want to be executed on only one member of a cluster at any given time. A singleton service is active on exactly one server in the cluster at a time and processes requests from multiple clients. A singleton service is generally backed by private, persistent data, which it caches in memory. It may also maintain transient state in memory, which is either regenerated or lost in the event of failure. Upon failure, a singleton service must be restarted on the same server or migrated to a new server. In the license for WebLogic Server Basic, the configuration of either a standalone or application-provided singleton service is not permitted. For more information about singleton services, see &quot;Service Migration&quot; in Oracle Fusion Middleware Using Clusters for Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Cluster constraints deployment</td>
<td>The default cluster deployment behavior ensures homogeneous deployment for all clustered server instances that can be reached at the time of deployment. However, if the Administration Server cannot reach one or more clustered servers due to a network outage, those servers do not receive the deployment request until the network connection is restored. It is possible to change WebLogic Server default deployment behavior for clusters by setting the ClusterConstraintsEnabled option when starting the WebLogic Server domain. This option enforces strict deployment for all servers configured in a cluster. A deployment to a cluster succeeds only if all members of the cluster are reachable and all can deploy the specified files. In the license for WebLogic Server Basic, the use of cluster constraints deployment is not permitted. For more information about cluster constraints deployment, see &quot;Enforcing Consistent Deployment to All Configured Cluster Members&quot; in Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Overload management</td>
<td>WebLogic Server has features for detecting, avoiding, and recovering from overload conditions. WebLogic Server overload protection features help prevent the negative consequences—degraded application performance and stability—that can result from continuing to accept requests when the system capacity is reached. In the license for WebLogic Server Basic, the configuration of any overload protection scheme at either a cluster or server level is not permitted. For more information about overload management, see &quot;Avoiding and Managing Overload&quot; in Oracle Fusion Middleware Configuring Server Environments for Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Server ADMIN and STANDBY mode</td>
<td>The series of states through which a WebLogic Server instance can transition is called the server life cycle. At any time, a WebLogic Server instance is in a particular operating state. Two states in which WebLogic Server can be started include the following: - <strong>ADMIN</strong> — WebLogic Server is up and running, but available only for administration operations, allowing you to perform server and application-level administration tasks. - <strong>STANDBY</strong> — WebLogic Server does not process any request; its regular Listen Port is closed. The Administration Port is open and accepts life cycle commands that transition the server instance to either the RUNNING or the SHUTDOWN state. Other administration requests are not accepted. Starting a server instance in STANDBY is a method of keeping it available as a &quot;hot&quot; backup, a useful capability in high-availability environments. In the license for WebLogic Server Basic, starting a WebLogic Server instance in either ADMIN or STANDBY state is not permitted. For more information about these operating states, see &quot;Understanding Server Life Cycle&quot; in Oracle Fusion Middleware Managing Server Startup and Shutdown for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>
A.3.2 Deployment Services and Features

Table A–3 lists and describes the deployment services and features that have restrictions, or that may not be used, in WebLogic Server Basic.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production redeployment</td>
<td>Production redeployment strategy involves deploying a new version of an updated application alongside an older version of the same application. WebLogic Server automatically manages client connections so that only new client requests are directed to the new version. Clients already connected to the application during the redeployment continue to use the older version of the application until they complete their work, at which point WebLogic Server automatically retires the older application. This capability is supported by deploying the application in Administration mode, which makes it available only through a configured Administration channel. In the license for WebLogic Server Basic, deploying any application that uses a version identifier is not permitted. For more information about this feature, see &quot;Distributing a New Version of a Production Application&quot; in Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Application Administration mode</td>
<td>Distributing an application copies deployment files to target servers and places the application in a prepared state. You can then start the application in Administration mode, which restricts access to the application to a configured Administration channel so you can perform final testing without opening the application to external client connections or disrupting connected clients. You can start an application in Administration mode with the -adminmode option. After performing final testing, you can either undeploy the application to make further changes, or start the application in Production mode to make it generally available to clients. In the license for WebLogic Server Basic, configuring any application to start in Administration mode is not permitted. For more information, see in “Administration Mode for Isolating Production Applications” in Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Changing the order of deployment</td>
<td>You can change the deployment order for a deployed application or standalone module by setting the AppDeploymentMBean DeploymentOrder attribute in the Administration Console (or programmatically using the AppDeploymentMBean). The DeploymentOrder attribute controls the load order of deployments relative to one another—modules with lower DeploymentOrder values deploy before those with higher values. By default, each deployment unit is configured with a DeploymentOrder value of 100. Deployments with the same DeploymentOrder value are deployed in alphabetical order using the deployment name. In all cases, applications and standalone modules are deployed after the WebLogic Server instance has initialized dependent subsystems. In the license for WebLogic Server Basic, deploying an application or module with a non-default deployment order setting is not permitted. For more information about deployment order, see &quot;Changing the Order of Deployment at Server Startup&quot; in Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>
A.3.3 JMS Messaging Services

Table A–4 lists and describes the JMS messaging services and features that have restrictions, or that may not be used, in WebLogic Server Basic.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Unit-of-Order</td>
<td>Message Unit-of-Order is a WebLogic Server value-added feature that enables a standalone message producer, or a group of producers acting as one, to group messages into a single unit with respect to the processing order. This single unit is called a Unit-of-Order and requires that all messages from that unit be processed sequentially in the order they were created. In the license for WebLogic Server Basic, changing the default Unit-of-Order for a message producer is not permitted. For more information about this feature, see &quot;Using Message Unit-of-Order&quot; in Oracle Fusion Middleware Programming JMS for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>
A.3.4 Additional Primary Services

Table A–5 lists and describes additional services and components that have restrictions, or that may not be used, in WebLogic Server Basic.

Table A–5 Additional Services Restricted in WebLogic Server Basic License

<table>
<thead>
<tr>
<th>Component or Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebLogic Diagnostics Framework</td>
<td>The WebLogic Diagnostic Framework (WLDF) is a monitoring and diagnostic framework that defines and implements a set of services that run within WebLogic Server processes and participate in the standard server life cycle. Using WLDF, you can create, collect, analyze, archive, and access diagnostic data generated by a running server and the applications deployed within its containers. This data provides insight into the run-time performance of servers and applications and enables you to isolate and diagnose faults when they occur. In the license for WebLogic Server Basic, the use of WLDF is not permitted. For more information about the WebLogic Diagnostic Framework (WLDF), see &quot;What Is the WebLogic Diagnostic Framework?&quot; in Oracle Fusion Middleware Configuring and Using the Diagnostics Framework for Oracle WebLogic Server.</td>
</tr>
<tr>
<td>WebLogic Server SNMP agents</td>
<td>WebLogic Server SNMP agents query the WebLogic Server management system and communicate the results to managers over the SNMP protocol. The WebLogic Server management system exposes management data through a collection of managed beans (MBeans). When a WebLogic Server SNMP agent receives a request from a manager, it determines which MBean corresponds to the OID in the manager's request. Then it retrieves the data and wraps it in an SNMP response. In the license for WebLogic Server Basic, all SNMP agents must be disabled. For more information about WebLogic Server SNMP agents, see Oracle Fusion Middleware SNMP Management Guide for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>
A.4 Restricted WebLogic Web Services Features

Table A–6 describes the WebLogic Web Services features that are not available for use under the terms of the WebLogic Server Basic license.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffered Web Services</td>
<td>When a buffered operation is invoked by a client, the method operation goes on a JMS queue and WebLogic Server deals with it asynchronously. As with Web Service reliable messaging, if WebLogic Server goes down while the method invocation is still in the queue, it will be dealt with as soon as WebLogic Server is restarted. When a client invokes the buffered Web Service, the client does not wait for a response from the invoke, and the execution of the client can continue. In the license for WebLogic Server Basic, the use of buffered Web Services is not permitted. For more information about this feature, see &quot;Creating Buffered Web Services&quot; in Oracle Fusion Middleware Programming Advanced Features of JAX-RPC Web Services for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>
A.5 Restricted Tooling Features

Table A–7 describes the tooling features in WebLogic Server that are not available for use under the terms of the WebLogic Server Basic license.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asynchronous Web Services</td>
<td>When you invoke a Web Service synchronously, the invoking client application waits for the response to return before it can continue with its work. In cases where the response returns immediately, this method of invoking the Web Service is common. However, because request processing can be delayed, it is often useful for the client application to continue its work and handle the response later on, or in other words, use the asynchronous request-response feature of WebLogic Web Services. In the license for WebLogic Server Basic, the use of the asynchronous request-response feature is not permitted. For more information about this feature, see “Invoking a Web Service Using Asynchronous Request-Response” in Oracle Fusion Middleware Programming Advanced Features of JAX-WS Web Services for Oracle WebLogic Server.</td>
</tr>
<tr>
<td>Conversational Web Services</td>
<td>A Web Service and the client application that invokes it may communicate multiple times to complete a single task. Also, multiple client applications might communicate with the same Web Service at the same time. Conversations provide a straightforward way to keep track of data between calls and to ensure that the Web Service always responds to the correct client. In the license for WebLogic Server Basic, the use of conversational Web Services is not permitted. For more information about this feature, see “Creating Conversational Web Services” in Oracle Fusion Middleware Programming Advanced Features of JAX-RPC Web Services for Oracle WebLogic Server.</td>
</tr>
<tr>
<td>JMS transport</td>
<td>WebLogic Web Services may be configured to use the JMS transport as an alternative to the HTTP/HTTPS connection protocol for use by WebLogic clients. Using JMS transport offers the following benefits: reliability, scalability, and quality of service. As with Web Service reliable messaging, if WebLogic Server goes down while the method invocation is still in the queue, it will be dealt with as soon as WebLogic Server is restarted. When a client invokes a Web Service, the client does not wait for a response from the invoke, and the execution of the client can continue. In the license for WebLogic Server Basic, the use or configuration of JMS transport in either WebLogic Web Services or WebLogic Web Services clients is not permitted. For more information about this feature, see “Using JMS Transport as the Connection Protocol” in Oracle Fusion Middleware Programming Advanced Features of JAX-RPC Web Services for Oracle WebLogic Server.</td>
</tr>
</tbody>
</table>
Table A–7  WebLogic Server Tooling Features Restricted in WebLogic Server Basic

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
</table>
| Configuration Wizard, Domain Template Builder, and `pack` and `unpack` commands | The Configuration Wizard guides you through the process of creating a domain for your target environment by selecting the WebLogic Server components to include in your domain, or by using domain templates. If required, you can also customize the domain to suit your environment by adding and configuring Managed Servers, clusters, and machine definitions, or customizing predefined JDBC data sources, and JMS file store directories. After you create a domain and add resources and applications to it, you can use the Domain Template Builder, or `pack` and `unpack` commands, to create a custom domain or domain extension template. These templates provide a convenient means to replicate a domain, or domain extension, throughout your environment. In the license for WebLogic Server Basic: none of the following are permitted:  
  - Use of the Configuration Wizard to create domains based on templates not supplied by Oracle  
  - Use of the Domain Template Builder to create custom domain or domain extension templates  
  - Use of the `pack` or `unpack` commands to create custom domains, domain extension, domain templates, or domain extension templates  
For more information about these tools, see the following:  
  - Oracle WebLogic Server Creating WebLogic Domains Using the Configuration Wizard  
  - Oracle WebLogic Server Creating Domain Templates Using the Domain Template Builder  
  - Oracle WebLogic Server Creating Templates and Domains Using the Pack and Unpack Commands |
| Recording Administration Console operations | To help automate the task of configuring a domain, you can record your configuration actions in the WebLogic Server Administration Console as a series of WebLogic Scripting Tool (WLST) commands and then use WLST to replay the commands. In the license for WebLogic Server Basic, use of the Record element in the Administration Console tool bar is not permitted. For more information about this feature, see "Record WLST Scripts" in Oracle Fusion Middleware Oracle WebLogic Server Administration Console Help. |
| Extending the Administration Console | Administration Console extensions enable you to add content to the WebLogic Server Administration Console, replace content, and change the logos, styles and colors without modifying the files that are installed with WebLogic Server. For example, you can add content that provides custom monitoring and management facilities for your applications. In the license for WebLogic Server Basic, the modification or extension of the Administration Console is not permitted. This restriction is placed on making any additions or changes to the Administration Console using the console extension mechanism. For more information about this feature, see Oracle Fusion Middleware Extending the Administration Console for Oracle WebLogic Server. |

A.6 Restricted APIs

Table A–8 describes the APIs in WebLogic Server that have restricted use under the terms of the WebLogic Server Basic license.
Verifying License Compliance

A.7 Verifying License Compliance

It is the end user’s responsibility to ensure that the features available in WebLogic Server Basic are used in accordance with the terms of the license agreement. This section explains how the appropriate usage of license-restricted features can be easily verified, or how their usage can be prevented, to ensure that each installation of WebLogic Server Basic is used in compliance with its license.

To help with verifying that WebLogic Server is being used in accordance with the WebLogic Server Basic license, a WLST script is available from My Oracle Support that you can download and run. This script is described in the following My Oracle Support article:

Doc ID: 885587.1

Subject: WebLogic Server Basic License Audit Script

This script audits a WebLogic Server installation and generates a report that provides data about the usage or configuration of restricted WebLogic Server features defined by WebLogic Server Basic. Not every license-restricted feature is audited by this script, so its coverage is not exhaustive. But it can simplify compliance verification of most restricted features. (None of the data gathered by this script is transmitted or reported anywhere, nor is its use mandatory. It is provided only as a convenience.) You can log in to My Oracle Support at the following URL to obtain this script:

http://www.oracle.com/support/premier/myoraclesupport.html

For each license-restricted feature in WebLogic Server Basic, Table A–9 provides the following information:

- A description of the specific license restriction associated with the feature. If the feature can be disabled by a specific configuration setting, this table identifies that setting.
Whether the audit script can verify that the feature is being used in accordance with the WebLogic Server Basic license

<table>
<thead>
<tr>
<th>Feature</th>
<th>Restriction and Method of License Compliance Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole server migration</td>
<td>This feature may not be used. Whole server migration must be disabled. You can verify that whole server migration is disabled in a domain by viewing Migratable Targets in the Administration Console, or by examining the values of the following MBean attributes: ServerMBean::AutoMigrationEnabled, ClusterMBean::MigrationBasis You can obtain the values of these attributes by running the audit script.</td>
</tr>
<tr>
<td>Service migration</td>
<td>This feature may not be used. Make sure that none of the following services are configured in the domain: Server Migration framework, User defined Singleton Services, Migratable targets with migration policy other than manual, Clustered EJB Timers, JTA Transaction Recovery service You can determine whether these services are configured by running the audit script.</td>
</tr>
<tr>
<td>MAN/WAN state replication</td>
<td>The use of either of these replication types is not permitted. You can verify that these replication types are not configured by running the audit script.</td>
</tr>
<tr>
<td>Managed Server cloning</td>
<td>You may not enable the Clone attribute, which is available in the Administration Console by navigating to the Environment &gt; Machines page.</td>
</tr>
<tr>
<td>Singleton services</td>
<td>Configuring either a standalone or application-provided singleton service is not permitted. You can verify that no singleton services are configured by running the audit script.</td>
</tr>
<tr>
<td>Cluster constraints deployment</td>
<td>Setting the ClusterConstraintsEnabled option in a cluster is not permitted. You can verify that this feature is not in use by running the audit script.</td>
</tr>
</tbody>
</table>
Verifying License Compliance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Restriction and Method of License Compliance Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overload management</td>
<td>Configuring any of the following overload protection schemes at either a cluster or server level is not permitted:</td>
</tr>
<tr>
<td></td>
<td>■ Limiting requests in the thread pool. You may not change the value of the Shared Capacity For Work Managers attribute in the Administration Console from the default value of 65536.</td>
</tr>
<tr>
<td></td>
<td>■ Limiting HTTP sessions. You may not use &lt;max-in-memory-sessions&gt; in the &lt;session-descriptor&gt; element of the Web application deployment descriptor file.</td>
</tr>
<tr>
<td></td>
<td>■ Exiting on &quot;Out of Memory&quot; exceptions. You may not configure this, either in the Administration Console or by editing the config.xml file.</td>
</tr>
<tr>
<td></td>
<td>■ Stuck thread handling. You may not configure WebLogic Server to exit if all application threads are stuck. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td></td>
<td>You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>Server ADMIN and STANDBY mode</td>
<td>You may not use the ADMIN or STANDBY parameters in the command to start a WebLogic Server instance. You can verify that neither of these states is enabled by running the audit script.</td>
</tr>
<tr>
<td>Production redeployment</td>
<td>Deploying an application in which a version identifier is specified, either indirectly through the manifest.mf file or directly through the weblogic.Deployer utility, is not permitted. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>Application Administration mode</td>
<td>You may not use the -adminmode option to start any application hosted in a WebLogic Server instance. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>Changing the order of deployment</td>
<td>This feature may not be used. Do not change the value of the Deployment Order attribute, which can be set in the Administration Console or in the DeploymentOrder attribute of the AppDeploymentMBean. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>FastSwap</td>
<td>This feature may not be used. Make sure the &lt;fast-swap&gt;true&lt;/fast-swap&gt; element is not present in the weblogic-application.xml file. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>Deploying standalone JMS, JDBC,</td>
<td>The deployment of standalone JMS, JDBC, or WLDF modules is not permitted. This restriction encompasses both module-level targeting as well as sub-module targeting. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>and WLDF modules</td>
<td></td>
</tr>
</tbody>
</table>
### Table A–9  (Cont.) Methods of Verifying License Compliance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Restriction and Method of License Compliance Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Unit-of-Order</td>
<td>Configuring a JMS resource in which the default Unit-of-Order for a message producer is changed from the default value of None is not permitted. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>Unit-of-Work Message Groups</td>
<td>Configuring a JMS resource to set the value of UnitOfWorkHandlingPolicy to anything other than the default value of Pass-Through is not permitted. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>JMS Store-and-Forward agents</td>
<td>Configuring any store and forward agents is not permitted. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>WebLogic Diagnostics Framework</td>
<td>The WebLogic Diagnostics Framework may not be configured. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>WebLogic Server SNMP agents</td>
<td>All SNMP agents must be disabled. You can verify this feature is not used by running the audit script.</td>
</tr>
<tr>
<td>WebLogic Tuxedo Connector</td>
<td>This component may not be used.</td>
</tr>
<tr>
<td>WebLogic HTTP Publish-Subscribe Server</td>
<td>The installation of this component is not permitted.</td>
</tr>
</tbody>
</table>
| Use of custom Work Managers to prioritize and optimize work | This feature may not be used. You can verify that no custom Work Managers are configured in the domain by examining the value of the WorkManagerMBean. Note that the Console Work Manager is permitted in the WebLogic Server Basic license. This configuration MBean is accessed in the run-time tree or configuration tree, depending on how the Work Manager is accessed by an application:  
  - If a Work Manager is defined at the module level, the WorkManagerRuntimeMBean is available through the corresponding ComponentRuntimeMBean.  
  - If a Work Manager is defined at the application level, then WorkManagerRuntimeMBean is available through the ApplicationRuntimeMBean.  
  - If a Work Manager is defined globally in the domain, each application creates its own instance of the Work Manager. Each application has its own corresponding WorkManagerRuntimeMBean available at the application level. |
| Buffered Web Services           | Using the buffered Web Services feature of WebLogic Web Services is not permitted. Neither of the following tasks involving the use of this feature are permitted by the WebLogic Server Basic license:  
  - Configuring a WebLogic Server instance for buffered Web Services  
  - Implementing or deploying a buffered Web Service  
  - Implementing a client that invokes a buffered Web Service |
Table A–9  (Cont.) Methods of Verifying License Compliance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Restriction and Method of License Compliance Verification</th>
</tr>
</thead>
</table>
| Asynchronous Web Services | Using the asynchronous request-response feature of WebLogic Web Services is not permitted. None of the following tasks involving the use of this feature are permitted by the WebLogic Server Basic license:  
  - Configuring a WebLogic Server instance so that asynchronous Web Services may be deployed on it  
  - Implementing or deploying clients that invoke Web Services asynchronously |
| Conversational Web Services | Implementing or deploying a Web Service that uses the conversational Web Service feature of WebLogic Web Services is not permitted. |
| JMS transport | Configuring or using the JMS transport feature of WebLogic Web Services as a connection protocol for invoking Web Services is not permitted. None of the following tasks involving the use of this feature are permitted by the WebLogic Server Basic license:  
  - Configuring the JMS transport Web Service in a WebLogic domain  
  - Using the @WLJmsTransport JWS annotation in a Web Service  
  - Creating Web Service clients that use the JMS transport |
| Configuration Wizard, or the pack and unpack commands, for creating custom domains | Only domain templates and domain extension templates provided by Oracle may be used to create WebLogic domains. The use of these tools to create custom domains, create custom domain extension templates, or modify an existing domain through a custom domain extension template, is not permitted. |
| Domain Template Builder, or the pack and unpack commands, for creating domain or domain extension templates | The following tools may not be used:  
  - Domain Template Builder  
  - pack command  
  - unpack command |
| Recording WebLogic Server Administration Console operations as a series of WebLogic Scripting Tool (WLST) commands | You may not use this feature in the Administration Console. |
| Extending the WebLogic Server Administration Console | You may not modify the WebLogic Server Administration Console through using the console extension feature. |
| Custom or CommonJ Work Manager usage outside the default WebLogic Server Work Manager | Any use of the CommonJ API in deployed applications is not permitted. |
| WebLogic JMS client for Microsoft .NET and C | Neither JMS client may be used. |
Oracle Access Manager Basic

This appendix describes Oracle Access Manager Basic and the Oracle Access Manager functionality that is available in the Oracle Access Manager Basic license. The following topics are included:

- Section B.1, "Oracle Access Manager Basic Overview"
- Section B.2, "Oracle Access Manager Basic License Feature Constraints"

B.1 Oracle Access Manager Basic Overview

Oracle Access Manager Basic is a version of Oracle Access Manager that is available in licenses for the following Oracle products:

- Oracle Internet Application Server Standard Edition
- Oracle Internet Application Server Standard Edition One
- Oracle Internet Application Server Enterprise Edition

The license for each edition of Oracle Internet Application Server enables the right to use of the Oracle Access Manager Basic license.

Oracle Access Manager Basic is only for providing single sign-on capabilities to Oracle Internet Application Server and for custom Java applications previously developed for Oracle Containers for J2EE (OC4J). Products outside of this scope do not have the right to use Oracle Access Manager Basic.

The Oracle Access Manager Basic license includes Oracle Access Manager usage rights, with the limitations summarized below:

- No explicit usage of Access Manager SDK
- No explicit usage of Custom Plug-Ins
- LDAP limited to Oracle Internet Directory
- Application Server limited to Oracle Containers for J2EE (OC4J) or WebLogic Server
- Web Server limited to Oracle HTTP Server (OHS)
- No integration with Oracle Adaptive Access Manager permitted
- No integration with Oracle Identity Federation permitted
Table B–1 summarizes the Oracle Access Manager features that have usage restrictions under the terms of the Oracle Access Manager Basic license. For full use of these capabilities you are required to license Oracle Access Manager.

### Table B–1  Oracle Access Manager Basic License Feature Constraints

<table>
<thead>
<tr>
<th>Feature Category</th>
<th>Summary of Restrictions in Access Manager Basic License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Manager SDK</td>
<td>The Access Manager SDK is used to create custom Access Gates for protecting resources protected by Access Manager. Use of the Access Manager SDK is not permitted in the Access Manager Basic License.</td>
</tr>
<tr>
<td>Custom Plug-Ins</td>
<td>Oracle Access Manager provides APIs that allow software developers to write custom programs or components that integrate closely with Oracle Access Manager. These modules may represent anything from custom extensions of base Oracle Access Manager functionality to significant applications that are outside of Oracle Access Manager, but need to interact with Oracle Access Manager for identity or access control functions. Use of Custom Plug-Ins is not permitted in the Access Manager Basic License.</td>
</tr>
<tr>
<td>LDAP</td>
<td>Oracle Access Manager supports a range of directory technologies for storing identity and policy data. The Access Manager Basic License only permits the use of Oracle Internet Directory for the storage of identity and policy data—no other directory use is permitted.</td>
</tr>
<tr>
<td>Application Servers</td>
<td>Oracle Access Manager can be integrated with a variety of application server containers. The Access Manager Basic License only permits integration with Containers for J2EE (OC4J) or WebLogic Server—integration with other application servers or containers is not permitted.</td>
</tr>
<tr>
<td>Web Servers</td>
<td>Oracle Access Manager can be integrated with a variety of Web servers. The Access Manager Basic License only permits integration with Oracle HTTP Server (OHS)—integration with other Web servers is not permitted.</td>
</tr>
<tr>
<td>Adaptive Access Manager Integration</td>
<td>Oracle Adaptive Access Manager provides Web access, real-time fraud detection, and multi-factor online authentication security for the enterprise. The Access Manager Basic License does not permit integration with Oracle Adaptive Access Manager.</td>
</tr>
<tr>
<td>Identity Federation Integration</td>
<td>Users need to access content on different corporate Web sites. Corporate Web sites need to authenticate and authorize users from different domains that use different security products. The Oracle Identity Federation product addresses these problems. The Access Manager Basic License does not permit integration with Oracle Identity Federation.</td>
</tr>
</tbody>
</table>