Oracle® Fusion Middleware

Information Roadmap for Oracle WebLogic Server

11*g* Release 1 (10.3.6)

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This document provides a collection of cross-references to WebLogic Server documentation topics and information resources.

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Oracle Fusion Middleware Information Roadmap for Oracle WebLogic Server, 11*g* Release 1 (10.3.6)

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Preface

This preface describes the document accessibility features and conventions used in this guide—*Information Roadmap for Oracle WebLogic Server*.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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Conventions

The following text conventions are used in this document:

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

1

WebLogic Server Documentation Quick Reference

The following table provides a quick reference to WebLogic Server documentation topics and information resources.

Table 1–1 WebLogic Server Documentation Quick Reference

Information Categories and Topics	Information Categories and Topics
Getting Started With WebLogic Server ■ Section 2.1, "Get Started" ■ Section 2.2, "Learn About WebLogic Server" ■ WebLogic Server Compatibility ■ Fast Track Deployment and Administrator Guide ■ Sample Application and Code Examples	**Security** ■ Section 14.1, "Learn About Security and WebLogic Server" ■ Section 14.2, "Security Providers" ■ Section 14.3, "Secure WebLogic Server" ■ Section 14.4, "Application Programming for Security" ■ Section 14.5, "Best Practices" ■ Section 14.6, "Reference"
System Administration ■ Section 15.1, "Learn About WebLogic Server System Administration" ■ Section 15.2, "Install or Upgrade WebLogic Server" ■ Section 15.3, "Configure a Server Environment" ■ Section 15.4, "Learn About Server Startup and Shutdown" ■ Section 15.5, "Start or Stop a WebLogic Server Instance" ■ Section 15.6, "Configure Security" ■ Section 15.7, "Manage Server and Network Communications" ■ Section 15.8, "Configure System Resources" ■ Section 15.9, "Configure and Deploy Applications" ■ Section 15.10, "Monitor Your Domain" ■ Section 15.11, "Configure Server Environments for High Availability" ■ Section 15.12, "Troubleshoot" ■ Section 15.13, "Reference"	**Developing Applications** ■ Section 10.1, "Develop WebLogic Server Applications" ■ Section 10.2, "Set Up Your Development Environment" ■ Section 10.3, "Design Your Application" ■ Section 10.4, "Build Your Application" ■ Section 10.5, "Tools" ■ Section 10.6, "Move Your Application to a Production Environment" ■ Section 10.7, "Application Examples" ■ Section 10.8, "Java EE API Programming Guides" ■ Section 10.9, "Javadoc and API References" ■ Section 10.10, "General Reference" ■ Section 10.11, "WebLogic Deployment Descriptors" ■ Section 10.12, "Configuration Schema Reference"

Table 1–1 (Cont.) WebLogic Server Documentation Quick Reference

Information Categories and Topics	Information Categories and Topics
Deploying Applications ■ Section 9.1, "Learn About Deployment" ■ Section 9.2, "Package Applications" ■ Section 9.3, "Tools" ■ Section 9.4, "Advanced Topics"	**Enterprise JavaBeans** ■ Section 6.1, "Get Started" ■ Section 6.2, "Programming" ■ Section 6.3, "Simple EJB 3.0 Examples" ■ Section 6.4, "Reference"
Reference ■ Section 13.1, "Programming" ■ Section 13.2, "System Administration" ■ Section 13.3, "Programming Administration Console Extensions"	**Database Connectivity (JDBC)** ■ Section 8.1, "Get Started" ■ Section 8.2, "Configuration" ■ Section 8.4, "Managing JDBC" ■ Section 8.7, "Programming" ■ Section 8.8, "Type 4 JDBC Drivers" ■ Section 8.9, "Other JDBC Drivers"
Messaging ■ Section 12.1, "Learn About WebLogic JMS" ■ Section 12.2, "New Features" ■ Section 12.3, "Programming WebLogic Messaging" ■ Section 12.5, "Configure WebLogic Messaging" ■ Section 12.6, "Use the Administration Console to Configure WebLogic Messaging" ■ Section 12.7, "Performance and Tuning" ■ Section 12.8, "Reference"	**Web Services** ■ Section 16.1, "Learn About WebLogic Web Services" ■ Section 16.2, "Get Started Using JAX-WS" ■ Section 16.3, "Advanced Features of JAX-WS" ■ Section 16.4, "Get Started Using JAX-RPC" ■ Section 16.5, "Advanced Features of JAX-RPC" ■ Section 16.6, "Code Examples" ■ Section 16.7, "Security" ■ Section 16.8, "System Administration" ■ Section 16.9, "References" ■ Section 16.10, "Development Resources and Newsgroups"
Custom Management Utilities ■ Section 7.1, "Management Utilities" ■ Section 7.2, "Administration Console Extensions"	**Kodo Development** ■ Section 11.1, "Get Started" ■ Section 11.2, "Programming" ■ Section 11.3, "Reference" ■ See also, Developer's Guide for Oracle TopLink
WebLogic Tuxedo Connector ■ Section 17.1, "Get Started" ■ Section 17.2, "System Administration" ■ Section 17.3, "Migration" ■ Section 17.4, "Tuning" ■ Section 17.5, "Programming"	

2

Getting Started With WebLogic Server

These documents help you learn about and get started using WebLogic Server.

2.1 Get Started

- Getting Started With Installation
- Starting and Stopping Servers: Quick Reference
- Creating WebLogic Domains Using the Configuration Wizard
- Section 3, "WebLogic Server Compatibility"
- Section 4, "Fast Track Deployment and Administrator Guide"
- Top Tuning Recommendations for Oracle WebLogic Server
- WebLogic Server Administration Console Help

2.2 Learn About WebLogic Server

- Introduction to WebLogic Server
- Understanding Oracle WebLogic Server Domains
- Developing Applications for Oracle WebLogic Server
- Overview of WebLogic Server Application Development
- Overview of WebLogic Server System Administration
- Overview of the Administration Console

3

WebLogic Server Compatibility

Oracle attempts to support binary and source-level compatibility between the current version of WebLogic Server and all versions as far back as 8.1 in the areas of persistent data, generated classes, and API compatibility. In some cases, it is impossible to avoid incompatibilities. Where incompatibilities arise, they are fully documented in the *Upgrade Guide for Oracle WebLogic Server*.

3.1 Java EE 5 Compatibility

WebLogic Server 11*g* Release 1 (10.3.6) is Java EE 5 compatible. This compatibility allows a Java EE 5 compliant application to be developed on one operating system platform, and deployed for production on another, without requiring Java EE 5 application code changes. Oracle ensures this compatibility of Java EE 5 application portability within a WebLogic Server release level.

3.2 Generated Classes Compatibility

With one exception, upgrading to WebLogic Server 11*g* Release 1 (10.3.6) does not require you to recompile applications in order to create new generated classes.

The current version of the EJBGen utility recognizes only JDK 5.0 metadata annotation-style EJBGen tags and not the old Javadoc-style tags. This means that source files that use the Javadoc-style tags must be upgraded to use the equivalent annotation, and then recompiled using the updated version of EJBGen.

3.3 Compatibility Within a Domain

- All WebLogic Server instances within the same Administrative domain must be at the same major and minor version. You cannot mix server versions within a domain.
- In general, the best practice is for all server instances within a domain to be at the same Patch Set level during steady-state operation. However, there may be cases where server instances are required to run at different Patch Set levels. The primary examples include:
  - When applying a Patch Set in rolling fashion across server instances in the domain. In such cases, the Patch Set should be applied to the Administration Server first, so that the Administration Server is at the same Patch Set level or higher than its Managed Servers.
  - When there are specific requirements to run Managed Servers within a domain at different Patch Set levels in steady-state operation. In such cases, the Administration Server should be at the highest Patch Set level, so that the

Administration Server is at the same Patch Set level or higher than all of the Managed Servers. Such domains can only use configuration features that are supported on all Managed Servers in the domain. This configuration restriction may be difficult to enforce, which is why the general best practice is to use the same Patch Set level across servers within a domain during steady-state operation.

- All server instances within a cluster must be at the same Patch Set level, except when performing a rolling upgrade of Patch Sets across Managed Servers in a cluster.
- In general, the best practice is for all server instances within a domain to be at the same Patch Set Update (PSU) and Interim/One-off Patch level during steady-state operation. However, there may be cases where server instances are required to run at different PSUs or Interim/One-off Patch levels within a domain. The primary examples include:
  - When applying PSUs or Interim/One-off Patches in rolling fashion across server instances in the domain. In such cases, the maintenance should be applied to the Administration Server first, so that the Administration Server is at the same PSU and Interim/One-off Patch level or higher than its Managed Servers.
  - When there are specific requirements to run Managed Servers within a domain at different PSU or Interim/One-off Patch levels in steady-state operation. In such cases, the Administration Server should be at the highest PSU level, so that the Administration Server is at the same PSU level or higher than all of the Managed Servers. If Managed Servers within a domain are running with different Interim/One-off Patches, it will not be possible to apply a consistent set of Interim/One-off Patches to the Administration Server. Because this maintenance complexity may be difficult to manage, the general best practice is to use the same PSU and Interim/One-off Patch level across all servers in the domain.
- Server instances within a cluster or domain can run on any hardware and operating systems as long as the hardware and operating systems are listed on the Supported System Configurations page at http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html. However, note that running clustered Managed Server instances on different hardware and operating systems may impact load balancing and performance. In general, the best practice is to run all Managed Servers within a cluster on the same hardware and operating system.

3.4 Persistent Data Compatibility

When moving from WebLogic Server 8.1 to 10.3.6, there are changes required to configuration files. Upgrade tooling in WebLogic Server versions 9.0 and later automatically convert the configuration files for you.

3.5 API Compatibility

WebLogic Server 8.1, 9.x, 10.0, and 10.3.x applications deployed on WebLogic Server 11*g* Release 1 (10.3.6) will function without modification. Exceptions to this rule include cases where API behavior was changed in order to conform to a specification or to fix incorrect behavior. In certain circumstances, a correction may cause your application to behave differently.

3.6 Protocol Compatibility

Interoperability between WebLogic Server 11*g* Release 1 (10.3.6) and WebLogic Server 8.1, 9.x, 10.0, and 10.3.x is supported in the following scenarios:

- A WebLogic Server 8.1, 9.x, 10.0, and 10.3.x client can invoke RMI-based applications hosted on a WebLogic Server 10.3.6 server using IIOP, T3, T3S, HTTP, and HTTPS. JMS applications can be invoked using T3, T3S, HTTP, and HTTPS.
- A WebLogic Server 10.3.6 client can invoke RMI-based applications hosted on a WebLogic Server 8.1, 9.x, 10.0, and 10.3.x server using IIOP, T3, T3S, HTTP, and HTTPS. JMS applications can be invoked using T3, T3S, HTTP, and HTTPS.
- A WebLogic Server 10.3.6 Web server plug-in can proxy to the latest patch set release of a 8.1, 9.x, 10.0, and 10.3.x server.

3.7 JMX Compatibility

See "JMX 1.2 Implementation" in WebLogic Server 11*g* Release 1 (10.3.6) Compatibility with Previous Releases.

4

Fast Track Deployment and Administrator Guide

This document provides basic instructions for quickly deploying Java EE applications and modules, and JSP and HTML files. It also provides pointers to tools for system administrators. The deployment procedures on this page are recommended for use in development environments only; the procedures are not recommended for use in production environments. For additional information on developing and deploying applications on WebLogic Server, see *Developing Applications for Oracle WebLogic Server* and *Deploying Applications to Oracle WebLogic Server*.

Complete the *Oracle WebLogic Server Installation Guide* before using these Fast Track procedures.

4.1 Java EE Deployment

To deploy a Java EE application or module:

1. Make sure that the Java EE application or module does not require additional resources such as named JDBC data sources or JMS queues. If the application requires external resources, you must configure them in the target WebLogic Server domain before deploying the application.
2. Copy the archive file or exploded archive directory for the Java EE application or module into the `/autodeploy` directory of the examples server domain directory, *`WL_HOME`*`/samples/domains/wl_server/autodeploy`.
3. Start the Examples WebLogic Server instance. In Windows, you can use the Start Menu shortcut: **Start Examples Server**.
4. Access the application using either a Java client or the configured URI for the application.

4.1.1 What's Going On?

When running in development mode, WebLogic Server automatically deploys applications copied into the /autodeploy subdirectory of the domain directory. Auto-deployment is a simple and quick method of deploying an application for testing or evaluation. See Auto-Deployment.

4.1.2 Additional Resources

- *Deploying Applications to Oracle WebLogic Server*
- *Developing Applications for Oracle WebLogic Server*

4.2 System Administrator Tools

System Administrators can use the following tools to get started:

- Administration Console

  The Administration Console is a browser-based Web application that allows you to configure and monitor your WebLogic Server domain, server instances, and running applications and their associated resources. You can also use the Administration Console to create new server instances and clusters and tune application descriptors. More information.

  After you log into the Console using the credentials you provided during installation, click the **Help** button or **How do I ...?** links for additional information.

- Configuration Wizard

  Use the WebLogic Server Configuration Wizard to create new domains, and to create templates for automating domain configuration. More information.

4.3 JSP/HTML Deployment

To deploy a simple JSP or HTML file:

1. Make sure your JSP file does not reference a tag library or other external resources—such resources require additional deployment steps that are beyond the scope of these Fast Track procedures. HTML files do not have this restriction.
2. Copy your JSP or HTML file into the *WL_HOME*/samples/server/examples/build/mainWebApp directory.
3. Start the Examples WebLogic Server instance. In Windows, you can use the Start Menu shortcut: **Start Examples Server**.
4. In a Web browser, request the JSP or HTML file using the following URL:

   `http://localhost:port/myFile`

   where:

   `localhost` is the host name of the machine running WebLogic Server.

   `port` is the port number where WebLogic Server is listening for requests (7001 by default).

   `myFile` is the full name, including the .jsp or .html extension, of the JSP or HTML file you copied in step 2.

4.3.1 What's Going On?

The JSP or HTML file has been automatically deployed from a directory preconfigured to target the Examples Server. `mainWebApp` is deployed by default and you can place your own JSP and HTML files into the `mainWebApp` exploded directory in order to quickly view or test them.

4.3.2 Additional Resources

- *Deploying Applications to Oracle WebLogic Server*
- *Developing Applications for Oracle WebLogic Server*

5

Sample Application and Code Examples

Through a custom installation and selecting to install the Server Examples, you have access to code examples and sample applications that offer several approaches to learning about and working with WebLogic Server.

5.1 API Examples

WebLogic Server optionally installs API code examples in *WL_HOME*\samples\server\examples\src\examples, where *WL_HOME* is the top-level directory of your WebLogic Server installation, and makes them available from the Start menu. On Linux and other platforms the Examples Server can be started from the *WL_HOME*/samples/domains/wl_server directory.

The default administration username and password for the Examples domain is weblogic/welcome1.

> **Note:** If you change the password of the user weblogic, WebLogic Server may fail to boot. For more information and workarounds, see "Limitation Regarding User weblogic" in *Managing Server Startup and Shutdown for Oracle WebLogic Server*.

The examples are grouped in the following categories; the directory that contains the examples of a particular category is in parentheses:

- Database Connectivity (jdbc): Use DataSources, MultiDataSources, and Rowsets.
- EJB (ejb): Create stateless, stateful, entity, and message-driven EJBs, and more.
- Internationalization (i18n): Internationalize an application using simple message catalogs.
- Messaging (jms): Use JMS topics, queues, and message-driven beans.
- Resource Adapter (resadapter): Use an entity EJB to interact with a Java EE Connector resource adapter.
- Security (security): Configure authentication, authorization, SSL, and SAML for Web single sign-on.
- Transactions (jta): Use JTA to perform distributed transactions using the two phase commit protocol across two XA resources.
- Web Application (webapp): Create simple servlets and JSPs, use the HTTP Publish-Subscribe server, and more.

- Web Services (webservices): Create a variety of Web Services using JWS annotations.
- XML (xml): Use the StAX API and XMLBeans.
- Cluster (cluster): Cluster an EJB and use HTTP session state replication.
- WebLogic Scripting Tool (wlst): Use the WebLogic Scripting Tool (WLST) to configure and manage a running WebLogic Administration Server.
- Split Development (splitdir): Use the WebLogic split development directory structure to build, package, and deploy Enterprise Applications.
- Service Component Architecture (sca): Use WebLogic SCA, a lightweight Spring 2.5 (or higher) container, in a shopping cart application that demonstrates many of its key features.
- Spring (spring): Use Spring-simplified configuration in a Spring-based Web application.

5.2 Avitek Medical Records

Avitek Medical Records (or "MedRec") is a comprehensive educational sample application that demonstrates WebLogic Server and Java EE features, as well as best practices. If you select to install the Server Examples, Avitek Medical Records is available from the Start menu on Windows machines. On Linux and other platforms it can be started from the `WL_HOME/samples/domains/medrec` directory, where `WL_HOME` is the top-level installation directory for WebLogic Server.

The sample application, MedRec (Spring) demonstrates Spring application development practices.

The default administration username and password for the Medical Records domain is `weblogic/welcome1`.

5.3 Derby Open-Source Database

Derby is an open source relational database management system based on Java, JDBC, and SQL standards. It is bundled with WebLogic Server for use by the sample applications and code examples as a demonstration database. For more information about Derby, see http://db.apache.org/derby.

6

Enterprise JavaBeans

These documents help you learn about and get started using Enterprise JavaBeans (EJB) 3.0 for Oracle WebLogic Server.

6.1 Get Started

- Understanding Enterprise JavaBeans 3.0
- WebLogic Server Value-Added EJB 3.0 Features

6.2 Programming

- Overview of the EJB 3.0 Development Process
- Programming the Bean File: Requirements and Changes From 2.X
- Programming the Bean File: Typical Steps
- Injecting Resource Dependency into a Variable or Setter Method
- Invoking a 3.0 Entity
- Specifying Interceptors for Business Methods or Life Cycle Callback Events
- Using Kodo With WebLogic Server

6.3 Simple EJB 3.0 Examples

- Stateless Session
- Stateful Session
- Interceptor Class
- Invoking an Entity

6.4 Reference

- EJB 3.0 Metadata Annotation Reference (Session and Message-Driven Beans Only)
- EJB 3.0 Persistence Configuration Schema Reference
- Java Persistence API (From Kodo Documentation)
- EJB 3.0 API Reference (Javadoc)
- Enterprise JavaBeans 3.0 Specification (JSR-220)
- Programming Enterprise JavaBeans (Version 2.X)

- Enterprise JavaBeans Technology

7

Custom Management Utilities

These documents describe how to create Java management utilities and Administration Console extensions for WebLogic Server.

7.1 Management Utilities

- Developing Custom Management Utilities with JMX
- Developing Manageable Applications with JMX
- Programming WebLogic Deployment

7.2 Administration Console Extensions

- Administration Console API Reference
- Console Extension JSP Tag Library Reference

8

WebLogic Data Sources

These documents provide information about WebLogic data source resources and JDBC drivers:

- Section 8.1, "Get Started"
- Section 8.2, "Configuration"
- Section 8.3, "Deployment"
- Section 8.4, "Managing JDBC"
- Section 8.5, "Performance and Tuning"
- Section 8.6, "Using WebLogic Server with Oracle RAC"
- Section 8.7, "Programming"
- Section 8.8, "Type 4 JDBC Drivers"
- Section 8.9, "Other JDBC Drivers"

8.1 Get Started

- Understanding JDBC Resources in WebLogic Server
- What's New in WebLogic JDBC
- What is a GridLink Data Source

8.2 Configuration

- Configuring JDBC Data Sources
- Using GridLink Data Sources
- Configuring JDBC Multi Data Sources
- Advanced Configuration for Oracle Drivers
- JDBC Data Source Transaction Options
- Using Roles and Policies to Secure JDBC Data Sources

8.3 Deployment

- Deploying Data Sources on Servers and Clusters
- Configuring WebLogic JDBC Resources
- Configuring JDBC Application Modules for Deployment

8.4 Managing JDBC

- Managing Data Sources
- Monitoring Data Sources
- Monitoring GridLink JDBC Resources

8.5 Performance and Tuning

- Tuning JDBC Applications
- Tuning Data Source Connection Pools

8.6 Using WebLogic Server with Oracle RAC

- Using WebLogic Server with Oracle RAC
- Using Multi Data Sources with Oracle RAC
- Using Connect-Time Failover with Oracle RAC
- Using Fast Connection Failover with Oracle RAC

8.7 Programming

- Basic JDBC Programming
- Advanced JDBC Programming
- RowSets
- JDBC Modules

8.8 Type 4 JDBC Drivers

- Overview
- DB2
- Informix
- Microsoft SQL Server
- Sybase

8.9 Other JDBC Drivers

- Overview of Third-Party JDBC Drivers
- Derby

  Derby is an all-Java DBMS product included in the WebLogic Server distribution that is intended solely to support demonstration of WebLogic Server examples. Documentation is not shipped with the product; it is available at `http://db.apache.org/derby/manuals/index.html`. For more information about Derby, see `http://db.apache.org/derby`.

9

Deploying Applications

These documents help you learn about packaging and deploying applications.

9.1 Learn About Deployment

- Overview of WebLogic Server deployment
- Perform common deployment tasks

9.2 Package Applications

- Archive file and exploded archive deployments
- Use the wlpackage Ant task

9.3 Tools

- weblogic.Deployer Utility
- WebLogic Maven plug-in for deployment
- wldeploy Ant Task

9.4 Advanced Topics

- Configure applications for deployment
- Redeploy a production application
- Distribute an application
- Use deployment staging modes
- Change the deployment order
- Take an application offline
- Programming WebLogic Deployment

10

Developing Applications

These documents describe designing and developing WebLogic Server applications and provide programming guides and reference information.

10.1 Develop WebLogic Server Applications

- Overview of WebLogic Server Application Development
- Introduction to WebLogic Server

10.2 Set Up Your Development Environment

- Start and stop WebLogic Server
- Use the "split development directory" to develop your applications

10.3 Design Your Application

- Use shared Java EE libraries and optional packages to share code among deployed applications
- Programming JSF and JSTL applications
- Use life cycle listeners
- Use the HTTP Publish-Subscribe Server
- Add WebLogic Server security features
- Internationalize or localize your application
- Use threads in WebLogic Server
- Use logging in your application
- Write a client application
- Design a manageable applications

10.4 Build Your Application

- Develop applications with WebLogic Server
- Deploy your "split development directory" application on WebLogic Server
- Use Ant tasks to compile Java code

10.5 Tools

- Ant
- Administration Console
- Command Reference
- Configuration Wizard
- EJBGen
- Template Builder
- WebLogic Scripting Tool (WLST)

10.6 Move Your Application to a Production Environment

- Prepare your application or module for deployment
- Configure your application for production deployment
- Update your deployed application (Production Redeployment)

10.7 Application Examples

- Section 5.1, "API Examples"

  Short examples demonstrating Java EE and WebLogic Server APIs.
- Section 5.2, "Avitek Medical Records"

  A complete and functional Java EE application including source code.
- MedRec (Spring)

  A sample application that demonstrates Spring application development practices.

10.8 Java EE API Programming Guides

- Developing Custom Management Utilities with JMX
- Developing Manageable Applications with JMX
- Developing Security Providers for WebLogic Server
- Developing Spring-Based Application
- Developer's Guide for Oracle TopLink
- Developing Web Applications, Servlets, and JSPs for WebLogic Server
- Monitoring and Managing with the Java EE Management APIs
- Programming WebLogic Enterprise JavaBeans (EJBs)
- Programming WebLogic JDBC
- Programming WebLogic JMS
- Programming WebLogic JNDI
- Programming WebLogic JTA
- Programming WebLogic Resource Adapters
- Programming WebLogic RMI

- Programming WebLogic XML
- Programming Stand-alone Clients
- Programming WebLogic Deployment
- Programming WebLogic jCOM
- Programming WebLogic JSP Tag Extensions
- Programming WebLogic Security
- Programming WebLogic Web Services for WebLogic Server
- Timer and Work Manager API (CommonJ) Programmer's Guide
- Using WebLogic Logging Services for Application Logging
- Using Clusters
- WebLogic Tuxedo Connector Programmer's Guide

10.9 Javadoc and API References

- Java Platform, Enterprise Edition (Java EE) Version 5.0
- Java 2 SDK, Standard Edition Documentation, Version 6.0
- WebLogic JMS C API Reference
- WebLogic Server Javadocs
- Microsoft .NET Messaging API for Oracle WebLogic Server

10.10 General Reference

- WebLogic JSP cache, process, and repeat tags
- WebLogic JSP form validation tags
- WebLogic Server Command Reference
- WebLogic Server MBean Reference
- WebLogic Server Message Catalog

10.11 WebLogic Deployment Descriptors

- Client Applications (`weblogic-appclient.xml`)
- EJBs (`weblogic-ejb-jar.xml`, `weblogic-cmp-jar.xml`)
- Enterprise Applications (`application.xml`, `weblogic-application.xml`)
- Resource Adapters (`weblogic-ra.xml`)
- Web Applications (`weblogic.xml`)
- Web Services (`weblogic-webservices.xml`)
- XML schemas for WebLogic deployment descriptors

10.12 Configuration Schema Reference

- Diagnostic Framework Schema

- Domain Configuration Schema
- Domain Security Schema
- Oracle WebLogic Server Schema Home

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Kodo Development

Kodo is Oracle's implementation of the Java Persistence API (JPA) and Java Data Objects (JDO) specifications for the transparent persistence of Java objects. The following documents help you develop, configure, and deploy Kodo applications.

Note: Oracle Kodo JPA/JDO is deprecated in this release. Customers are encouraged to consider using Oracle TopLink. For more information, see Oracle Fusion Middleware Developer's Guide for Oracle TopLink.

11.1 Get Started

- Introduction to Kodo
- Frequently Asked Questions
- JPA and JDO Examples
- JPA and JDO Tutorials

11.2 Programming

- Kodo Developer's Guide for JPA/JDO (top-level TOC)
- Java Persistence API (JPA) Programming
- Java Data Objects (JDO) Programming

11.3 Reference

- Kodo API Reference (Javadoc)
- JDO API Reference (Javadoc)
- OpenJPA API Reference (Javadoc)
- Persistence API Reference (Javadoc)
- Kodo Developer's Guide for JPA/JDO
- List of Kodo Development and Runtime Libraries
- Common Database Errors
- Additional JPA Resources
- Additional JDO Resource

12 Messaging

These documents describe WebLogic Server messaging.

12.1 Learn About WebLogic JMS

- Overview of JMS Programming
- Develop a Basic JMS Application
- Overview of JMS Resource Configuration
- Value-Added WebLogic Server JMS Features
- Integrating Remote and Foreign JMS Providers
- WebLogic Server API Examples

12.2 New Features

- Configuring Partitioned Distributed Topics
- Configure Shared Subscriptions
- Configure an Unrestricted ClientID
- Interoperating with Oracle Advanced Queueing
- Using the WebLogic JMS Client for Microsoft .NET

12.3 Programming WebLogic Messaging

- Program WebLogic JMS
- Developing Advanced Pub/Sub Applications
- Design Message-Driven Beans

12.4 Clients for WebLogic Messaging

- JMS Clients
- WebLogic Server Client Types and Features

12.5 Configure WebLogic Messaging

- Best Practices for JMS Beginners and Advanced Users

- Configure and Manage WebLogic JMS
- Integrating Remote and Foreign JMS Providers
- Configure and Manage WebLogic Store-and-Forward
- Configure and Manage the WebLogic Messaging Bridge
- Use the WebLogic Persistent Store

12.6 Use the Administration Console to Configure WebLogic Messaging

- JMS Servers
- JMS System Modules and Resources
- Store-and-Forward for JMS Messages
- Messaging Bridge
- WebLogic Persistent Store

12.7 Performance and Tuning

- Tuning WebLogic JMS
- Tuning WebLogic JMS Store-and-Forward
- Tuning WebLogic Messaging Bridge
- Tuning Message-Driven Beans
- Tuning the WebLogic Persistent Store
- Tuning Logging Last Resource

12.8 Reference

- Javadoc for WebLogic JMS Extensions
- MBean Reference
- JMS Schema
- Java Message Service Specification
- WebLogic JMS C API Reference
- WebLogic Messaging API Reference for .NET Clients
- Oracle Streams Advanced Queuing User's Guide

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WebLogic Server Reference

These documents provide WebLogic Server reference information and resources.

13.1 Programming

- Java Platform, Enterprise Edition 5 Documentation
- Java SE 6 Documentation
- Javadocs for WebLogic classes
- WebLogic JMS C API Reference
- WebLogic Messaging API Reference for .NET Clients
- WebLogic Server MBean Reference
- Oracle WebLogic Server Schema Home
- XML schemas for WebLogic deployment descriptors

13.2 System Administration

- SNMP MIB ANS1 File
- WebLogic Server Command Reference
- WebLogic Server Message Catalogs

13.3 Programming Administration Console Extensions

- Administration Console Extension API
- JSP Tag Library for Extending the WebLogic Server Administration Console

14 Security

These documents help you learn about and manage WebLogic Server security.

14.1 Learn About Security and WebLogic Server

- Understanding Security for WebLogic Server
- Overview of the WebLogic Security Service
- Security fundamentals
- Security realms
- WebLogic Security Service architecture
- Glossary
- WebLogic Security programming overview
- Overview of Web service security

14.2 Security Providers

- Configuring WebLogic security providers
- Configuring authentication providers
- Developing Security Providers for WebLogic Server

14.3 Secure WebLogic Server

- Overview of security management
- Customizing the default security configuration
- Configuring Single Sign-On with Microsoft clients
- Configuring Single Sign-On with Web browsers and HTTP clients
- Migrating security data
- Managing the embedded LDAP server
- Managing the RDBMS security store
- Configuring identity and trust
- Configuring SSL
- Configuring security for a WebLogic domain

- Using compatibility security
- Secure Weblogic Resources Using Roles and Policies

14.4 Application Programming for Security

- Programming Security for WebLogic Server
- Configure resource adapter security
- WebLogic Web service security topics

14.5 Best Practices

- Secure a production environment
- Explore security options for cluster architectures

14.6 Reference

- Administration Console Help
- Javadocs for WebLogic Server classes
- Glossary
- OASIS XACML Schema Reference

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System Administration

These documents help you learn about and provide resources for WebLogic Server system administration topics and tasks.

15.1 Learn About WebLogic Server System Administration

- Overview of System Administration
- Understand WebLogic Server domains
- Understand WebLogic Server clusters
- Understand WebLogic Security
- Overview of the Administration Console
- Create custom management utilities
- WebLogic Server Performance and Tuning

15.2 Install or Upgrade WebLogic Server

- Install WebLogic Server
- Create WebLogic Server domains using the Configuration Wizard
- Supported Configurations
- What's New in Oracle WebLogic Server
- Release Notes for Oracle WebLogic Server
- Compatibility Statement
- Upgrade Guide

15.3 Configure a Server Environment

- Use system administration tools
- Manage configuration changes
- Use the Administration Console
- Use the WebLogic Scripting Tool (WLST)
- Create templates using the Domain Template Builder

15.4 Learn About Server Startup and Shutdown

- Overview of Starting and Stopping Servers
- Understanding the Life Cycle of WebLogic Server Instances
- Server Startup Command-Line Reference
- Quick Reference for starting and stopping servers

15.5 Start or Stop a WebLogic Server Instance

- Use shell scripts
- Use the Administration Console
- Use the WebLogic Scripting Tool (WLST)
- Use Node Manager to control remote servers
- Use the Quick Reference

15.6 Configure Security

- Security topics
- Secure WebLogic Server
- Secure a production environment
- Secure WebLogic resources using roles and policies

15.7 Manage Server and Network Communications

- Configure network resources
- Configure Web Server Functionality
- Use Web Server plug-ins

15.8 Configure System Resources

- Configure database connectivity topics
- Configure messaging topics
- Configure WebLogic transactions
- Configure the Weblogic Tuxedo Connector topics
- Migrate WebLogic Enterprise Connectivity (WLEC) applications to WTC
- Configure the persistent store

15.9 Configure and Deploy Applications

- Deploy applications topics
- Configure Web applications
- Configure XML resources
- Configure resource adapters

- Configure Web Services topics

15.10 Monitor Your Domain

- Configure and Use the WebLogic Diagnostics Framework
- Configure SNMP
- Configure log files and filter log messages
- Monitoring and Managing with the Java EE Management APIs
- Using the Monitoring Dashboard

15.11 Configure Server Environments for High Availability

- Understand cluster architectures
- Set up WebLogic Server clusters
- Use session replication across clusters
- Use Work Managers to prioritize application execution
- Avoid and manage overload
- Use the persistent store

15.12 Troubleshoot

- View the Error Message Catalog
- WebLogic Server Performance and Tuning
- Troubleshoot common problems with clustering
- Troubleshoot common problems with Node Manager

15.13 Reference

- Accessibility Notes for the WebLogic Server Administration Console
- Command Reference
- SNMP MIB ANS1 File
- WLST Command and Variable Reference
- WebLogic Server MBean Reference
- Oracle WebLogic Server Schema Home
- Diagnostic Framework Schema
- Domain Configuration Schema
- Domain Security Schema

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Web Services

These documents help you learn about and use WebLogic Server Web services.

16.1 Learn About WebLogic Web Services

- What's New?
- What are Web services?
- Anatomy of a WebLogic Web service
- How do I choose between JAX-WS and JAX-RPC?
- Roadmap for implementing WebLogic Web services
- Samples and related information
- Web service standards

16.2 Get Started Using JAX-WS

- Start from Java
- Start from WSDL
- Program the JWS file
- Use JAXB for data binding
- Invoke a Web service
- Migrate from JAX-RPC

16.3 Advanced Features of JAX-WS

- Invoke Web services using asynchronous request-response
- Publish a Web service endpoint
- Use callbacks
- Optimize binary data transmission using MTOM/XOP
- Create a dynamic proxy class
- Use XML catalog
- Create SOAP message handlers
- Programming RESTful Web services

- Publish and find Web services using UDDI

16.4 Get Started Using JAX-RPC

- Start from Java
- Start from WSDL
- Program the JWS file
- Understanding data binding
- Invoke a Web service
- Migrate to JAX-WS

16.5 Advanced Features of JAX-RPC

- Invoke Web services using asynchronous request-response
- Use reliable Web services messaging
- Create conversational Web services
- Use callbacks
- Create buffered Web services
- Use JMS transport as connection protocol
- Create SOAP message handlers
- Publish and find Web services using UDDI

16.6 Code Examples

- Code examples using JAX-WS
- Code examples using JAX-RPC

  Web services code examples, if installed, are located in the *WL_HOME*/samples directory of your WebLogic Server installation and are available from the Start menu. See Chapter 5, "Sample Application and Code Examples.".

16.7 Security

- Message-level: digital signatures and encryption
- Transport-level: SSL
- Access control: user access and authentication

16.8 System Administration

- Overview of Administering WebLogic Web services
- Use the Administration Console
- Use the WebLogic Scripting Tool (WLST)
- Use WebLogic Ant tasks
- Use the Java Management Extensions (JMX)

- Use the Java EE Deployment API

16.9 References

- Standards Supported by WebLogic Web services
- Web services Ant Task Reference
- JWS Annotations Reference
- Reliable Messaging WS-Policy Assertions Reference
- Security WS-Policy Assertions Reference
- WebLogic Server Javadocs

16.10 Development Resources and Newsgroups

- Java Technology and Web services

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WebLogic Tuxedo Connector

The WebLogic Tuxedo Connector provides interoperability between WebLogic Server applications and Tuxedo services. These documents help you learn about configuring and administering the Oracle WebLogic Tuxedo Connector.

17.1 Get Started

- Introduction to WebLogic Tuxedo Connector
- Introduction to WebLogic Tuxedo Connector Programming
- Weblogic Tuxedo Connector Quick Start Guide
- Where to Find WebLogic Tuxedo Connector Samples

17.2 System Administration

- Configuring WebLogic Tuxedo Connector
- WebLogic Tuxedo Connector Administration
- Controlling WebLogic Tuxedo Connector Connections and Services
- Administration of CORBA Applications
- How to Manage WebLogic Tuxedo Connector in a Clustered Environment
- How to Configure the Tuxedo Queuing Bridge
- Connecting WebLogic Integration and Tuxedo Applications
- Troubleshooting The WebLogic Tuxedo Connector

17.3 Migration

- WLEC to WebLogic Tuxedo Connector Migration Guide

17.4 Tuning

- Tuning WebLogic Tuxedo Connector

17.5 Programming

- Developing WebLogic Tuxedo Connector Client EJBs
- Developing WebLogic Tuxedo Connector Service EJBs

- Using WebLogic Tuxedo Connector for RMI/IIOP and CORBA Interoperability
- WebLogic Tuxedo Connector JATMI Transactions
- WebLogic Tuxedo Connector JATMI Conversations
- Using FML with WebLogic Tuxedo Connector
- WebLogic Tuxedo Connector JATMI VIEWs
- How to Create a Custom AppKey Plug-in
- Application Error Management