

**Oracle® Insurance Policy
Administration**

WebLogic Deployment

Installation Instructions – Step 2

Version 9.7.0.0

Documentation Part Number: E39062_01

May, 2013

Copyright © 2009, 2013, Oracle and/or its affiliates. All rights reserved.

Trademark Notice

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

License Restrictions

Warranty/Consequential Damages Disclaimer

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

Warranty Disclaimer

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

Restricted Rights Notice

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

Hazardous Applications Notice

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Third Party Content, Products, and Services Disclaimer

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Table of Contents

INTRODUCTION.....	4
Customer Support	4
Prerequisites	4
INITIAL SYSTEM CONFIGURATION.....	5
Database Driver Setup	5
OIPA Setup	6
Web Application Utility Setup	7
CONFIGURING WEBLOGIC.....	8
Create a Machine	8
Create and Configure OIPA Server	8
Create the OIPA Server.....	8
Add the OIPA Server to the Machine	8
Configure the OIPA Server	9
Create and Configure Web Application Utility Server	9
Create the Web Application Utility Server	9
Add the Web Application Utility Server to the Machine	10
Configure the Web Application Utility Server	10
Create Data Sources.....	11
Create the Data Source for ADMINSERVERDS	11
Create the Data Source for ADMINSERVERRESOURCEDS	13
Create the Data Source for ADMINSERVERSEARCHDS	14
Create Data Source for ADMINSERVERREADONLYDS	15
Deploy OIPA Application	15
Deploy the Web Application Utility	16
Start the Servers	16
TEST THE DEPLOYMENTS	17
OIPA Deployment	17
Web Application Utility Deployment	17

INTRODUCTION

The Oracle Insurance Policy Administration (OIPA) application and the Oracle Insurance Rules Palette form a solution for configuring, managing and processing policy data. Both applications, along with the Web Application Utility, must be installed and then configured to work together.

This install guide will cover step two of the installation process, in which the OIPA application and the Web Application Utility are configured using Web Logic. Please refer to the OIPA database installation instructions in the documentation library provided with the release to ensure the database is set up correctly.

Customer Support

If you have any questions about the installation or use of our products, please visit the My Oracle Support website: <https://support.oracle.com>, or call (800) 223-1711.

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Prerequisites

Before beginning the installation steps, you must have the following components:

- A server with a Windows or Linux operating system.
- WebLogic 11g (Version 10.3.6.0). It is recommended that the Oracle 1.6.0.41 JDK is used. This can be downloaded from the Oracle Technology Network at http://www.oracle.com/technology/software/products/middleware/htdocs/fmw_11_download.html.
- Administrative rights to the server.
- Oracle Insurance Policy Administration v9.7.0.0 Media Pack from The Oracle Software Delivery Cloud.
- Oracle Insurance Rules Palette V9.7.0.0 Media Pack from The Oracle Software Delivery Cloud.

INITIAL SYSTEM CONFIGURATION

Database Driver Setup

1. Create a directory on the WebLogic installation machine to store database driver jar files for OIPA (i.e., /opt/oracle/db_drivers/ or C:\oracle\db_drivers\).
2. Copy the database drivers for your database into this directory.
 - **Oracle 11.2** – The necessary driver, **ojdbc-11.2.0.2.jar**, is included in the **libs** directory of the OIPA Media Pack.
 - **Microsoft SQL Server 2008** – download the latest **jtds.jar** file.
 - a. Download **jtds** from the following site: <http://sourceforge.net/projects/jtds/>.
 - b. Click the green **Download** box on the right side of the screen. A pop-up window will open.
 - c. Save the download .zip file to the lib directory you created (i.e., /opt/oracle/lib).
 - d. Open the downloaded .zip file and extract the file **jtds-1.2.6** from the root of the .zip file.
 - e. Rename the file **jtds.jar**.
 - **IBM DB2** – The two necessary .jar files (**db2jcc** and **db2jcc_license_cu**) are included with the purchase of the DB2 software. These files are not available for download. Contact your IT department if you need assistance locating these files.

Note: Each version of DB2 requires specific drivers. The files above correspond with DB2 9.7.

OIPA Setup

1. Create a directory on the WebLogic server to store various configuration files for OIPA (i.e., /opt/oracle/oipa/ or C:\oracle\oipa).
2. Create subdirectories inside the directory from Step 1 called **conf**, **libs** and **war**.
3. Copy **PASJava-weblogic.war** file from the OIPA distribution zip file into the **war** subdirectory and rename to **PASJava.war**

Note: Extension classes/jars developed using OIPA extension interfaces should be copied to PASJava-weblogic.war/WEB-INF/lib before copying **PASJava-weblogic.war** to the war subdirectory. This is required for the extensions to work.

4. Copy the following files from the **properties files** directory into the **conf** directory:
 - coherence-cache-config.xml
 - coherence-config.xml
 - PAS.properties
5. Copy the following files from the **ext jars** directory into the **libs** directory:
 - antlr-3.4.jar
 - commons-collections-3.2.1.jar
 - commons-logging-1.1.1.jar
 - el-api-2.2.jar
 - log4j-1.2.16.jar
 - spring-instrument-3.0.6.RELEASE.jar
6. Download aspectj-1.6.11.jar from <http://www.eclipse.org/downloads/download.php?file=/tools/aspectj/aspectj-1.6.11.jar>
 1. Open aspectj-1.6.11.jar with an unzipping software and retrieve aspectjrt.jar and aspectjweaver.jar from the lib folder.
 2. Copy aspectjrt.jar and aspectjweaver.jar into **libs** sub-directory.
7. Use a text editor to open the PAS.properties file that you just copied to the server. The PAS.properties file contains properties for Oracle, SQL Server, and DB2 database types, with the Oracle settings active by default. The inactive settings are commented out with a '#' character at the start of each line. To change a setting, remove the '#' from the required property setting, and insert it at the beginning of the setting you want to de-activate.
8. The properties setting must match the type of database being used. The two properties that are used to do this are:
 - application.databaseType
 - jpa.databasePlatform

Note: Refer to the System Properties document in the Oracle Insurance Policy Administration E39062_01 Documentation Library on the OTN for a complete list of all properties and allowed values.

9. Identify the default locale in the PAS.properties file. The locale selected will determine the translation that is loaded in the database for OIPA when it launches.
 - application.defaultLocale
10. If using an Oracle or Microsoft SQL Server database, please skip this step. If using a DB2 database, you will need to modify the PAS.properties file to include configuration for case-insensitive searching:
 - Modify the PAS.properties file to include the following line:
search.field.text.caseInsensitive=true

Web Application Utility Setup

1. Create a directory on the WebLogic server to store various configuration files for the Web Application Utility (i.e., /opt/oracle/paletteconfig/ or C:\oracle\paletteconfig).
2. Create subdirectories inside the directory from Step 1 called **conf**, **libs**, **uploads** and **war**.

Note: Grant read-write-execute permissions on all these directories.

3. Copy the **PaletteConfig-waswl.war** file into the **war** subdirectory and rename to **PaletteConfig.war**.
4. Copy the **PaletteWebApplication.properties** file into the **conf** subdirectory.
5. Open the **PaletteWebApplication.properties** file and edit the **download.dir** property to point to the **uploads** subdirectory created in Step 2.

CONFIGURING WEBLOGIC

To configure WebLogic use the WebLogic Administration Console. By default the port number is 7001 and `/console` is the context root. Example: <http://hostname:7001/console>

Note: When selecting a menu option in the WebLogic Administrative Console, the names may differ depending on whether WebLogic is used in development mode or production mode.

Create a Machine

1. Select **Environment>Machines>New**.
2. Enter the name for the machine.
3. If the OS is not UNIX, select **Other** from the **Machine OS** drop-down list.
4. Click **Next**.
5. Click **Finish**.

Create and Configure OIPA Server

Important: OIPA and the Web Application Utility can exist on the same WebLogic server if necessary.

Create the OIPA Server

1. Select **Environment>Servers**.
2. Click **New**.
3. Enter OIPA for the name of the server.
4. Set the listener port to a port that is not used by any other application.
5. Click **Next**.
6. Select **Finish**.

Add the OIPA Server to the Machine

1. Select **Environment>Machines**.
2. Select the machine that was created.
3. Select the **Servers** tab.
4. Select **Add**.
5. Select the name of the OIPA server created from the **Select a server** drop-down box.

6. Click **Finish**.

Configure the OIPA Server

1. Select **Environment>Servers**.
2. Select the OIPA server that was created.
3. Select the **Server Start** tab.
4. Specify the class path. The path names will vary depending on the configuration.

```
/opt/oracle/Middleware/wlserver_10.3/server/lib/weblogic.jar:/opt/oracle/oipa/conf:/opt/oracle/oipa/libs/antlr-3.4.jar:/opt/oracle/oipa/libs/commons-collections-3.2.1.jar:/opt/oracle/oipa/libs/commons-logging-1.1.1.jar:/opt/oracle/oipa/libs/el-api-2.2.jar:/opt/oracle/oipa/libs/log4j-1.2.16.jar:/opt/oracle/Middleware/wlserver_10.3/server/lib/consoleapp/APP-INF/lib/jstl.jar:/opt/oracle/oipa/libs/aspectjrt.jar:/opt/oracle/oipa/libs/aspectjweaver.jar
```

Note: If using WebLogic on Windows, then the separator for files/directories in the classpath is a semicolon.

5. Enter the following arguments. The path names will vary depending on the configuration. The memory settings can be altered for your needs as well. .

```
-server -Xms512M -Xmx2048M -XX:PermSize=128M -XX:MaxPermSize=512M
-javaagent:/opt/oracle/oipa/libs/spring-instrument-3.0.6.RELEASE.jar
-Dtangosol.coherence.cacheconfig=/opt/oracle/oipa/conf/coherence-cache-config.xml
-Dtangosol.pof.config=com-adminserver-pas-web-pof-config.xml
-Dtangosol.coherence.override=/opt/oracle/oipa/conf/coherence-config.xml
-Dweblogic.wsee.skip.async.response=true
```

6. Select **Save**.

Create and Configure Web Application Utility Server

Create the Web Application Utility Server

1. Select **Environment>Servers**.
2. Click **New**.
3. Enter PaletteConfig for the name of the server.
4. Set the listener port to a port that is not used by any other application.
5. Click **Next**.
6. Select **Finish**.

Add the Web Application Utility Server to the Machine

1. Select **Environment>Machines**.
2. Select the machine that was created.
3. Select the **Servers** tab.
4. Select **Add**.
5. Select the name of the Web Application Utility server created from the **Select a Server** drop-down box.
6. Click **Finish**.

Configure the Web Application Utility Server

1. Select **Environment>Servers**.
2. Select the PaletteConfig server that was created.
3. Select the **Server Start** tab.
4. Specify the class path. The path names will vary depending on the configuration.

```
/opt/Oracle/Middleware/wlserver_10.3/server/lib/weblogic.jar:/opt/oracle/paletteconfig/conf:/opt/oracle/db_drivers/ojdbc-11.2.0.2.jar
```

Note: The example lists the driver for the Oracle database. Make sure that the classpath refers to the correct drivers for SQL Server or DB2 as needed.

Make sure the classpath points to the correct directory for the Web Application Utility.

5. Enter the following arguments. This will vary depending on the configuration.
-server -Xms256M -Xmx512M -XX:PermSize=128M -XX:MaxPermSize=256M
6. Select **Save**.

Create Data Sources

Create the Data Source for ADMINSERVERDS

1. Select **Services> Data Sources for WebLogic 11g (10.3)**.
2. In the configuration section on the right, click **New** and Select **Generic Data Source**.
3. In the **JDBC Data Source Properties** pane that appears:
 - a. Change the Name. This name can be anything, but has to be unique for the entire WebLogic server. If you have more than one OIPA instance on the server, then each instance should have a unique name.
 - b. Change the JNDI Name to ADMINSERVERDS. This name cannot be anything other than ADMINSERVERDS.
 - c. Select the Oracle database type.
 - d. Click **Next**.
 - e. Keep the default driver.
4. Select **Next**.
5. Select **Next** again when Transaction options are displayed.
6. In the **Connection Properties** pane:
 - a. Enter the Database Name.
 - b. Enter the Host Name of the database server.
 - c. Enter the Port number of the database server.
 - d. Enter the Database user name. This can be obtained from the database administrator who installed the databases.
 - e. Enter both password entries. This can be obtained from the database administrator who installed the databases.
 - f. Select **Next**.

What is the name of the database you would like to connect to?

Database Name:

What is the name or IP address of the database server?

Host Name:

What is the port on the database server used to connect to the database?

Port:

What database account user name do you want to use to create database connections?

Database User Name:

What is the database account password to use to create database connections?

Password:

Confirm Password:

Figure 1-1: Connection Properties Pane

7. Test the database connection.
8. Select **Next**.
9. In the **Select Targets** pane that appears, check the box for the OIPA application server. This links the data source to the server that was created.
10. Select **Finish**.

Create the Data Source for ADMINERVERRESOURCEDS

1. Select **Services> Data Sources**.
2. In the configuration section on the right, click **New** and then **Select Generic Data Source**.
3. In the **JDBC Data Source Properties** pane that appears:
 - a. Change the Name. This name can be anything, but has to be unique for the entire WebLogic server. If you have more than one OIPA instance on the server, each instance should have a unique name.
 - b. Change the JNDI Name to ADMINERVERRESOURCEDS.
 - c. Select the database type.
 - d. Select the driver type.
4. Select **Next**.
5. Select **Next** again when Transaction options are displayed.
6. In the **Connection Properties** pane:
 - a. Enter the Database Name.
 - b. Enter the Host Name of the database server.
 - c. Enter the Port number of the database server.
 - d. Enter the Database user name for a readonly user. This can be obtained from the database administrator who installed the databases.
 - e. Enter both password entries. This can be obtained from the database administrator who installed the databases.
 - f. Select **Next**.
7. Test the database connection.
8. Select **Next**.
9. In the **Select Targets** pane that appears, check the box for the OIPA application server. This links the data source to the servers that were was created.
10. Select **Finish**.

Create the Data Source for ADMINERVERSEARCHDS

1. Select **Services> Data Sources**.
2. In the configuration section on the right, click **New** and then **Select Generic Data Source**.
3. In the **JDBC Data Source Properties** pane that appears:
 - a. Change the Name. This name can be anything, but has to be unique for the entire WebLogic server. If you have more than one OIPA instance on the server, each instance should have a unique name.
 - b. Change the JNDI Name to ADMINERVERSEARCHDS.
 - c. Select the database type.
 - d. Select the driver type.
4. Select **Next**.
5. Select **Next** again when Transaction options are displayed.
6. In the **Connection Properties** pane:
 - a. Enter the Database Name.
 - b. Enter the Host Name of the database server.
 - c. Enter the Port number of the database server.
 - d. Enter the Database user name for a readonly user. This can be obtained from the database administrator who installed the databases.
 - e. Enter both password entries. This can be obtained from the database administrator who installed the databases.
 - f. Select **Next**.
7. Test the database connection.
8. Select **Next**.
9. In the **Select Targets** pane that appears, check the box for the OIPA application server. This links the data source to the servers that were was created.
10. Select **Finish**.

Create Data Source for ADMINERVERREADONLYDS

1. Select **Services> Data Sources**.
2. In the configuration section on the right, click **New** and then **Select Generic Data Source**.
3. In the **JDBC Data Source Properties** pane that appears:
 - a. Change the Name to ADMINERVERREADONLYDS.
 - b. Change the JNDI Name to ADMINERVERREADONLYDS.
 - c. Select the database type.
 - d. Select the driver type.
4. Select **Next**.
5. Select **Next** again when Transaction options are displayed.
6. In the **Connection Properties** pane:
 - a. Enter the Database Name.
 - b. Enter the Host Name of the database server.
 - c. Enter the Port number of the database server.
 - d. Enter the Database user name for the readonly user. This can be obtained from the database administrator who installed the databases.
 - e. Enter both password entries. This can be obtained from the database administrator who installed the databases.
 - f. Select **Next**.
7. Test the database connection.
8. Select **Next**.
9. In the **Select Targets** pane that appears, check the box for the OIPA application server. This links the data source to the servers that were was created.
10. Select **Finish**.

Deploy OIPA Application

1. Using the navigation tree on the left, select **Deployments**.
2. In the configuration section on the right, select **Install**.
3. In the **Install Application Assistant**:
 - a. Locate the **PASJava.war** file.
 - b. Click **Next**.
 - c. For the **Choose targeting style** keep the default of Install this deployment as an application.
 - d. Click **Next**.
 - e. For the **Select deployment targets**, select the checkbox for the server that will host the OIPA application.
 - f. Click **Next**.

- g. Change the application name if needed.
- h. Click **Next**.
- i. Select **Finish**.

Deploy the Web Application Utility

1. Using the navigation tree on the left, select **Deployments**.
2. In the configuration section on the right, select **Install**.
3. In the **Install Application Assistant**:
 - a. Locate the **PaletteConfig.war** file.
 - b. Click **Next**.
 - c. For the **Targeting Style** keep the default of **Install this deployment as an application**.
 - d. Click **Next**.
 - e. For the **Deployment Target** select the checkbox for the server that will host the Web Application Utility.
 - f. Click **Next**.
 - g. Change the application name if needed.
 - h. Click **Next**.
 - i. Select **Finish**.

Start the Servers

1. Select **Environment>Servers**.
2. In the configuration section on the right, select **Control** tab.
3. Select the checkbox next to the OIPA and PaletteConfig servers.
4. Select the **Start** option.

Important: When configuring the Rules Palette environment use the URL of the **PaletteConfig** server. The **Web Application Utility** must always be running in order for users to access the **Rules Palette**.

TEST THE DEPLOYMENTS

The initial test of the deployment is to confirm that the application presents a login screen when the application URL is opened. Final testing of the OIPA deployment must wait until after the Web Application Utility is configured and initial users have been set up.

OIPA Deployment

1. Open a new Internet Explorer window.
2. Navigate to <http://hostname:port/PASJava/>.

Note: If you change the context name, use that name in the URL instead of PASJava.

3. Confirm that the login screen appears.

Web Application Utility Deployment

1. Open a new Internet Explorer window.
2. Navigate to <http://hostname:port/PaletteConfig/>.

Note: If you change the context name, use that name in the URL instead of PaletteConfig.

3. Confirm that the login screen appears.