ORACLE
INSURANCE

Oracle® Insurance Calculation Engine (OICE)

WebSphere 7 Deployment

Installation Instructions – Step 2

Version 9.7.0.0

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License Restrictions

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INTRODUCTION

The Oracle Insurance Calculation Engine (OICE) 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 OICE application and Web Application Utility are configured using IBM WebSphere Version 7. Please refer to the OICE Database Installation Instructions provided in the documentation library 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
- WebSphere Application Server Version 7.0 Service Pack 25
- Administrative rights to the server
- Oracle Insurance Rules Palette V9.7.0.0 Media Pack from the Oracle Software Delivery Cloud. The Web Application Utility files are included in this Media Pack.
- Oracle Insurance Calculation Engine V9.7.0.0 Media Pack from the Oracle Software Delivery Cloud

INITIAL SYSTEM CONFIGURATION

Database Drivers

Create a directory for the database drivers for your database. Copy the necessary driver .jar files into this directory.

Example: AIX or Linux: /opt/oracle/db_drivers

Windows: C:\oracle\oice\db_drivers

- **Oracle 11.2 –** The necessary driver, **ojdbc-11.2.0.2.jar**, is included in the **libs** directory of the OICE Media Pack.
- **Microsoft SQL Server 2008** – download the latest **jtds.jar** file.

  a. Download **jtds.jar** 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 .zip file.
  d. Open the downloaded .zip file and extract the file **jtds-1.2.6.jar** 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.

OICE Setup

Note: For a WebSphere 7 deployment, the .jar files need to be installed only once. If OICE Is reinstalled, the existing files may be re-used.

1. Copy the following files to the external jar file directory (e.g. /opt/IBM/WebSphere/AppServer/lib/ext):
   - eclipselink-2.3.0.jar
   - javax.persistence-2.0.3.jar
2. Edit amm.filter.properties from /opt/IBM/WebSphere/AppServer/properties
   a. Remove or comment out the lines listed below:

```
#Ignore-Scanning-Archives = ant.jar,                    \
#                           axis.jar,                   \
#                           CICS.jar,                   \
#                           db2java.zip,                \
#                           db2jcc.jar,                 \
#                           db2jcc_javax.jar,           \
#                           dfjcics.jar,                \
```

```
#                               ibmjndi.jar,                    \
#                               jaxrpc.jar,                     \
#                               jakarta.oro.jar,                \
#                               ldapbp.jar,                     \
#                               mailapi.jar,                    \
#                               msbase.jar,                     \
#                               mssqlserver.jar,                \
#                               saaj.jar,                       \
#                               wsdl4j.jar,                     \
#                               sqljdbc.jar,                    \
#                               struts.jar,                     \
#                               struts-scaffold.jar
```

b. Add the lines listed below:

3. Ignore-Scanning-Archives :

antisamy-1.4.3.jar, antlr-3.4.jar, aopalliance-1.0.jar, CICS.jar, ape-9.7.0.0.jar, aspectjrt-1.6.11.jar, aspectjweaver-1.6.11.jar, backport-util-concurrent-2.2.jar, batik-css-1.7.jar, batik-ext-1.7.jar, batik-util-1.7.jar, bcel-bcel-5.1.jar, bll-9.7.0.0.jar, bsh-core-2.0b4.jar, cglib-nodep-2.2.2.jar, coherence-3.7.1.jar, coherence.common-2.1.1.jar, coherence.patterns.processing-1.4.2.jar, commons-beanutils-core-1.7.0.jar, commons-codec-1.4.jar, commons-configuration-1.5.jar, commons-dbcp-1.4.jar, commons-dbutils-1.3.jar, commons-digester-1.8.jar, commons-fileupload-1.2.jar, commons-httpclient-3.1.jar, commons-lang-2.3.jar, commons-pool-1.5.6.jar, cycle.agent-9.7.0.0.jar, cycle.interface-9.7.0.0.jar, dal-9.7.0.0.jar, dcl-9.7.0.0.jar, document.webservice-9.7.0.0.jar, dom4j-1.6.1.jar, el-ri-1.2.jar, esapi-2.0GA.jar, ext-9.7.0.0.jar, extensibility-9.7.0.0.jar, FastInfoset-1.2.2.jar, freemarker-2.3.16.jar, global.dal-9.7.0.0.jar, global.dcl-9.7.0.0.jar, global.processing-9.7.0.0.jar, global.utl-9.7.0.0.jar, icefaces-comps-ee-EE-1.8.2.GA_P04.jar, icefaces-ee-EE-1.8.2.GA_P04.jar, icefaces-facelets-ee-EE-1.8.2.GA_P04.jar, icu4j-4.6.jar, janino-2.5.16.jar, jaxen-1.1.3.jar, jep-2.4.0.jar, jibx-bind-1.2.2.jar, jibx-extras-1.2.2.jar, jibx-run-1.2.2.jar, jsf-api-1.2_15-b01-FCS.jar, jsf-impl-1.2_15-b01-FCS.jar, krysalis-jCharts-1.0.0-alpha-1.jar, log4j-1.2.16.jar, mail-1.4.jar, math-9.7.0.0.jar, model-9.7.0.0.jar, nekohtml-1.9.12.jar, pas.ape-9.7.0.0.jar, pas.bll-9.7.0.0.jar, pas.cycle-9.7.0.0.jar, pas.dal-9.7.0.0.jar, pas.dcl-9.7.0.0.jar, pas.helper-9.7.0.0.jar, pas.model-9.7.0.0.jar, pas.oipa-9.7.0.0.jar, pas.uip-9.7.0.0.jar, pas.webservice-9.7.0.0.jar, resource-9.7.0.0.jar, saxon-9.1.0.8.jar, saxon-dom-9.1.0.8.jar, slf4j-api-1.6.1.jar, slf4j-log4j12-1.6.1.jar, spring-aop-3.0.6.RELEASE.jar, spring-asm-3.0.6.RELEASE.jar, spring-beans-3.0.6.RELEASE.jar, spring-context-3.0.6.RELEASE.jar, spring-core-3.0.6.RELEASE.jar, spring-expression-3.0.6.RELEASE.jar, spring-instrument-3.0.6.RELEASE.jar, spring-jdbc-3.0.6.RELEASE.jar, spring-orm-3.0.6.RELEASE.jar, spring-tx-3.0.6.RELEASE.jar, spring-web-3.0.6.RELEASE.jar, sre.interface-9.7.0.0.jar, sre-9.7.0.0.jar, uip-9.7.0.0.jar, utl-9.7.0.0.jar, web-9.7.0.0.jar, webservice-9.7.0.0.jar, xml-apis-ext-1.3.04.jar, xmldsig-1.0.jar, xws-security-3.0.jar

4. Create a directory on the WebSphere server to store various configuration files for OICE (e.g., /opt/oracle/oice/ or C:\oracle\oice\).
5. Create sub-directories inside the directory from Step 1 called **conf** and **libs**.

Note:	Make a note of the path to the libs directory. It will be used later in the classpath for setting up the OICE Shared Library.

6. Copy the following files from the installation media into the **conf** sub-directory:
   - coherence-cache-config.xml
   - coherence-config.xml
   - PAS.properties
7. Copy the following files from the installation media to the **libs** sub-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
8. Download aspectj-1.6.11.jar from http://www.eclipse.org/downloads/download.php?file=/tools/aspectj/aspectj-1.6.11.jar
   - Open aspectj-1.6.11.jar with an unzipping software and copy aspectjrt.jar and aspectjweaver.jar from the lib folder into the **libs** sub-directory.

Note:	Delete aspectjrt.jar from ./IBM/WebSphere/AppServer/lib

9. 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.

10. 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 Calculation Engine Documentation Library on the OTN for a complete list of all properties and allowed values.

11. Identify the default locale in the PAS.properties file. The locale selected will determine the translation that is loaded in the database for OICE when it launches. The default setting is English.

- application.defaultLocale

12. 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 change the following line from the default setting of “false” to “true”:

      ```
      search.field.text.caseInsensitive=true
      ```

Web Application Utility Setup

1. Create a directory on the WebSphere server to store various configuration files for the Web Application Utility (i.e., /opt/oracle/paletteconfig/ or C:\oracle\paletteconfig\).
2. Create sub-directories inside the directory from Step 1 called **conf, libs** and **uploads**.
3. Copy the **PaletteWebApplication.properties** file into the **conf** sub-directory.
4. Use a text editor to open the PaletteWebApplication.properties file and edit the **download.dir** property to point to the **uploads** sub-directory created in Step 2.

CREATE AND CONFIGURE OICE

Using a web browser, connect to the Administrative Console using the appropriate server name and 9060 as the default port (Ex: http://server_name:9060/admin).

Create the OICE Application Server

1. Select **Servers>New server**.
2. Select server type **WebSphere application server**.
3. Enter **OICE** for the name of the server.
4. Click **Next**.
5. Select the default server template.
6. Click **Next**.
7. Ensure **Generate Unique Http Ports** is checked.
8. Confirm the new server by clicking **Finish**.
9. After the application has been created, review the messages at the top of the Application servers screen to confirm that the new server has been created successfully.
10. Navigate to the OICE server by clicking on its name within the list of application servers.
11. Click the **Session management** link in the **Container Settings** section.
12. Verify that **Enable Cookies** is checked. This is checked by default.
13. Click the **Enable Cookies** link and verify that 'Restrict **cookies to HTTPS sessions'** is unchecked. (This is unchecked by default.)
14. Click **OK**.
15. Click **OK** to save the configuration changes.

Note:	These instructions assume that a fresh installation of the application server was performed. All configuration settings must use the default settings unless otherwise noted. If the application server has been used for previous deployments, you may want to create a new application server specifically for the deployment of the OICE environment.

Configure WebSphere Environment Variable for Database Driver

A variable must be used to define the location where the database driver is located. The name of the variable depends on the type of database.

- **Oracle**: ORACLE_JDBC_DRIVER_PATH
- **IBM DB2**: DB2UNIVERSAL_JDBC_DRIVER_PATH and DB2UNIVERSAL_JDBC_DRIVER_NATIVEPATH
- **Microsoft SQL Server:** User-defined_JDBC_DRIVER_PATH

1. Select **Environment>WebSphere Variables**.
2. Select the scope of the OICE server from the drop-down list.
3. Click **New**.
4. Enter the name of the database driver variable, as listed above.
5. In the **Value** field, enter the path to the directory where the database driver is located. For example:

   `/opt/oracle/db_drivers` or `C:\oracle\oice\db_drivers`
6. Click **OK**.

Configure the OICE Application Server

JVM Settings

1. Navigate to **Servers>Server Types>WebSphere application servers**.
2. Select the OICE application server.
3. Expand **Java and Process Management**.
4. Select **Process Definition**.
5. Select **Java Virtual Machine**.
6. In the **Classpath** text box, enter the location of the OICE property files.

   Example: `/opt/oracle/oice/conf/ or c:\oracle\oice\conf\`

Note:	Be sure to include the trailing slash (/ or \) character.

7. Set **Initial Heap Size** to 512.
8. Set **Maximum Heap Size** to 2048.
9. In the **Generic JVM Arguments** text box, enter the following arguments, replacing the location of each file (highlighted) with the correct location for the configuration.

Note:	You may find it easier to copy the text below to a text editor and make the necessary changes there, then copy and paste it into the JVM Arguments text box.

```
-Duser.language=en -Duser.region=US -Djava.net.preferIPv4Stack=true
-Djava.net.preferPv6Addresses=false
-javaagent:/opt/oracle/oice/libs/spring-instrument-3.0.6.RELEASE.jar
-Dtangosol.coherence.override=/opt/oracle/oice/conf/coherence-config.xml
-Dtangosol.coherence.cacheconfig=/opt/oracle/oice/conf/coherence-cache-config.xml
-Dtangosol.pof.config=com-adminserver-pas-web-pof-config.xml
```

10. Click **OK**.

Configure the Listening Port

1. Select **Servers>Server Types>WebSphere application servers**.
2. Select the OICE server.
3. In the **Communications** section, select **Ports**.
4. Note the port listed for **WC_defaulthost.**
   a. If the port number needs to be changed, select the WC_defaulthost port.
   b. Modify the **Port** text box as needed.
   c. Click **OK**.

Configure the Virtual Host

1. Select **Environment > Virtual Hosts**.
2. Click **default_host**.
3. Click **Host Aliases**.
4. Click **New**.
5. Enter the port assigned for WC_defaulthost in the previous listening port section.
6. Click **OK**.

Create Data Sources

Add the JDBC Provider

1. Select **Resources>JDBC>JDBC providers**.
2. Select the scope of the server from the drop-down list (the drop-down list displays if the "**Show scope selection drop-down list…**" is checked).
3. Click **New**.
4. Select the **Database type**.
   - For Oracle, select **Oracle**.
   - For DB2, select **DB2**.
   - For Microsoft SQL Server, select **user-defined**.
5. Select the **Provider type**.
   - For Oracle, select **Oracle JDBC Driver**.
   - For DB2, select **DB2 Universal JDBC Driver Provider**.
6. Select **Implementation type**.
   - For Oracle, select **XA data source**.
   - For DB2, select **XA data source**.
   - For Microsoft SQL Server, enter **net.sourceforge.jtds.jdbcx.JtdsDataSource** for the **Implementation class name**.
7. Click **Next**.
8. Enter the variable name used for the database driver.
   - For Oracle, enter ${ORACLE_JDBC_DRIVER_PATH}
   - For DB2, click **Next**.
   - For Microsoft SQL Server, enter ${User-defined_JDBC_DRIVER_PATH}
9. Click **Finish**

Note:	For Oracle and Microsoft SQL Server, skip steps 10 and 11. For DB2, continue at step 10.

10. Click on the newly created JDBC provider.
11. Confirm that the class path field is set to correctly reference the two DB2 drivers. Refer to the examples below. Edit the field if needed.
    - ${DB2UNIVERSAL_JDBC_DRIVER_PATH}/db2jcc.jar
    - ${DB2UNIVERSAL_JDBC_DRIVER_PATH}/db2jcc_license_cu.jar
    - ${DB2UNIVERSAL_JDBC_DRIVER_PATH}/db2jcc_license_cisuz.jar
12. Click **OK**.

Create the Data Sources

Four data sources must be created:

- ADMINSERVERDS
- ADMINSERVERRESOURCEDS
- ADMINSERVERSEARCHDS
- ADMINSERVERREADONLYDS.

A readonly database user should be used for ADMINSERVERRESOURCEDS, ADMINSERVERSEARCHDS and ADMINSERVERREADONLYDS.Repeat the following steps for each data source, replacing **<DATASOURCE_NAME>** with the specific data source being configured.

1. Select **Resources>JDBC>Data sources.**
2. Click **New**.
3. For the **data source name**, enter <DATASOURCE_NAME>.
4. For the **JNDI name**, enter <DATASOURCE_NAME>.
5. Click **Next**.
6. Select the JDBC provider created in the last step.
7. Click **Next**.
8. Enter the database connection information.
    - For Oracle, enter the database information in the following format:

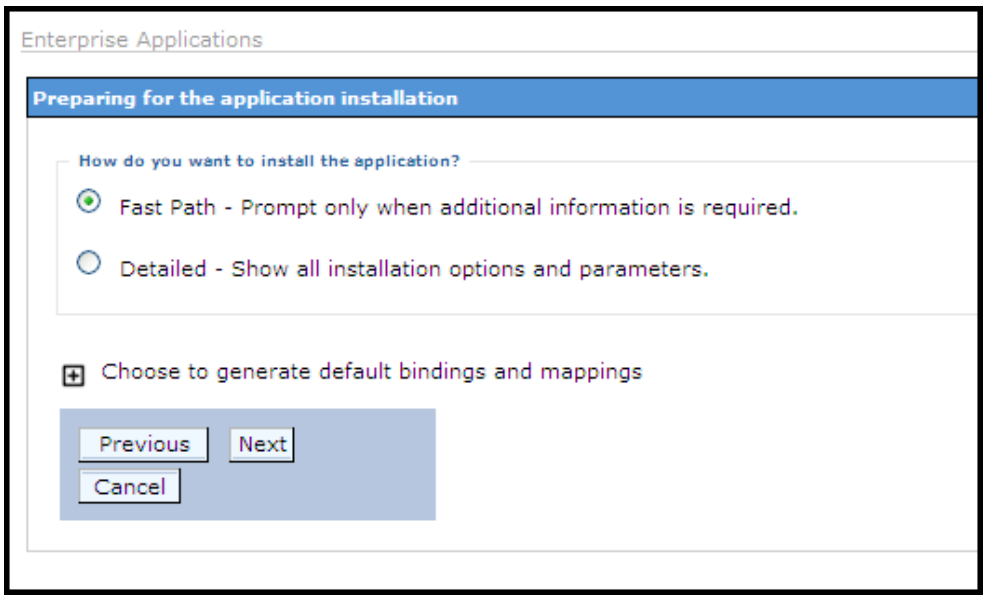
      `jdbc:oracle:thin:@hostname:port:SID`

    - For DB2, enter the **database name, hostname** and **port**.
    - For Microsoft SQL Server, skip to the next step.
9. Uncheck the checkbox for **Use this data source in container managed persistence**.
10. Click **Next**.
11. On the **Setup security aliases** screen, click **Next**.

12. Click **Finish**.
13. Select <DATASOURCE_NAME> from the list of data sources that appears.
14. Select **Custom Properties**.
15. Click **New** to create new variables for each property listed below.
    - For Oracle:
      - Name: **user**
        Value: database user name
      - Name: **password**
        Value: database password
    - For DB2:
      - Name: **user**
        Value: database user name
      - Name: **password**
        Value: database password
      - Name: **currentSchema**
        Value: schema name (only needed for readonly data source.)
    - For Microsoft SQL Server:
      - Name: **user**
        Value: database user name
      - Name: **password**
        Value: database password
      - Name: **databasename**
        Value: name of database
      - Name: **servername**
        Value: hostname of database server
16. In the Messages area at the top of the screen, click the link for **Save to the master configuration**.
17. Once complete, return to the **Datasources** screen and use the **Test Connection** button on the main data source list to confirm that the settings were successful for each data source.

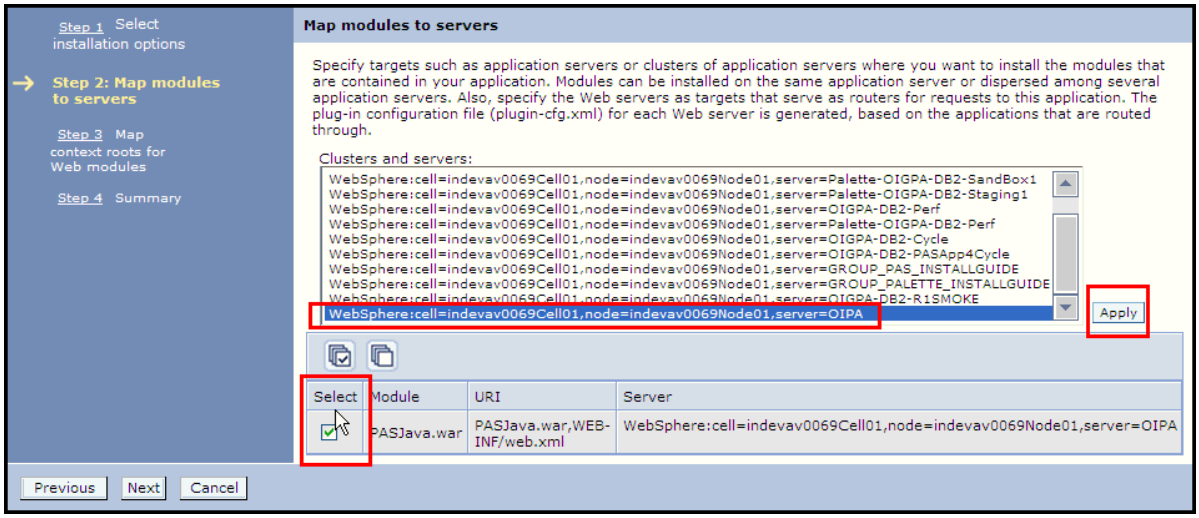
Deploy the OICE Application

1. Select **Applications>New Application**.
2. Select **New Enterprise Application**.
3. Use the **Local file system** or **Remote file system** browsing feature to locate the **OICE-websphere.war** file and rename to PASJava.war.
4. Click **Next**.
5. Confirm that **Fast Path** is selected and click **Next**.
6. On the **Select installation options** screen, click **Next**.

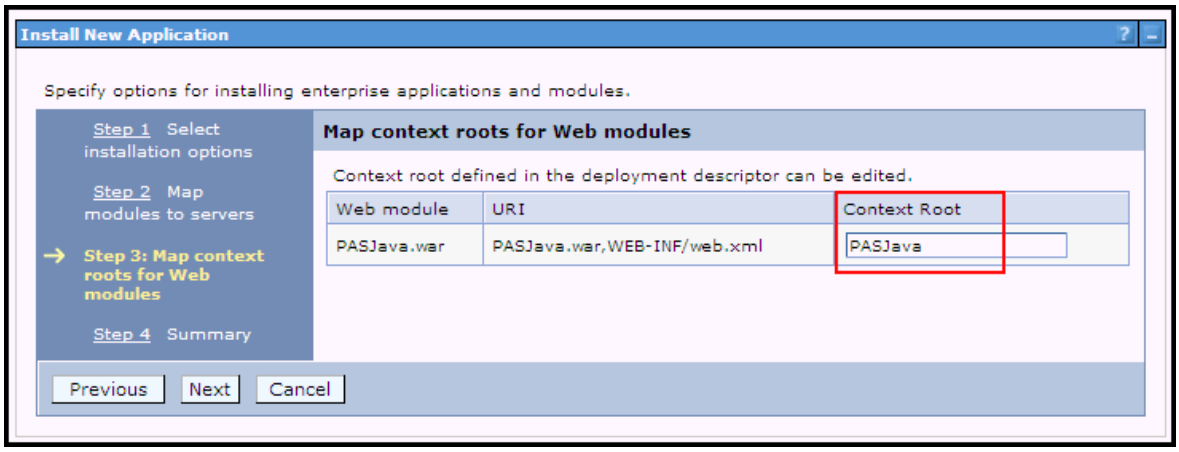


On the **Map modules to servers** screen:

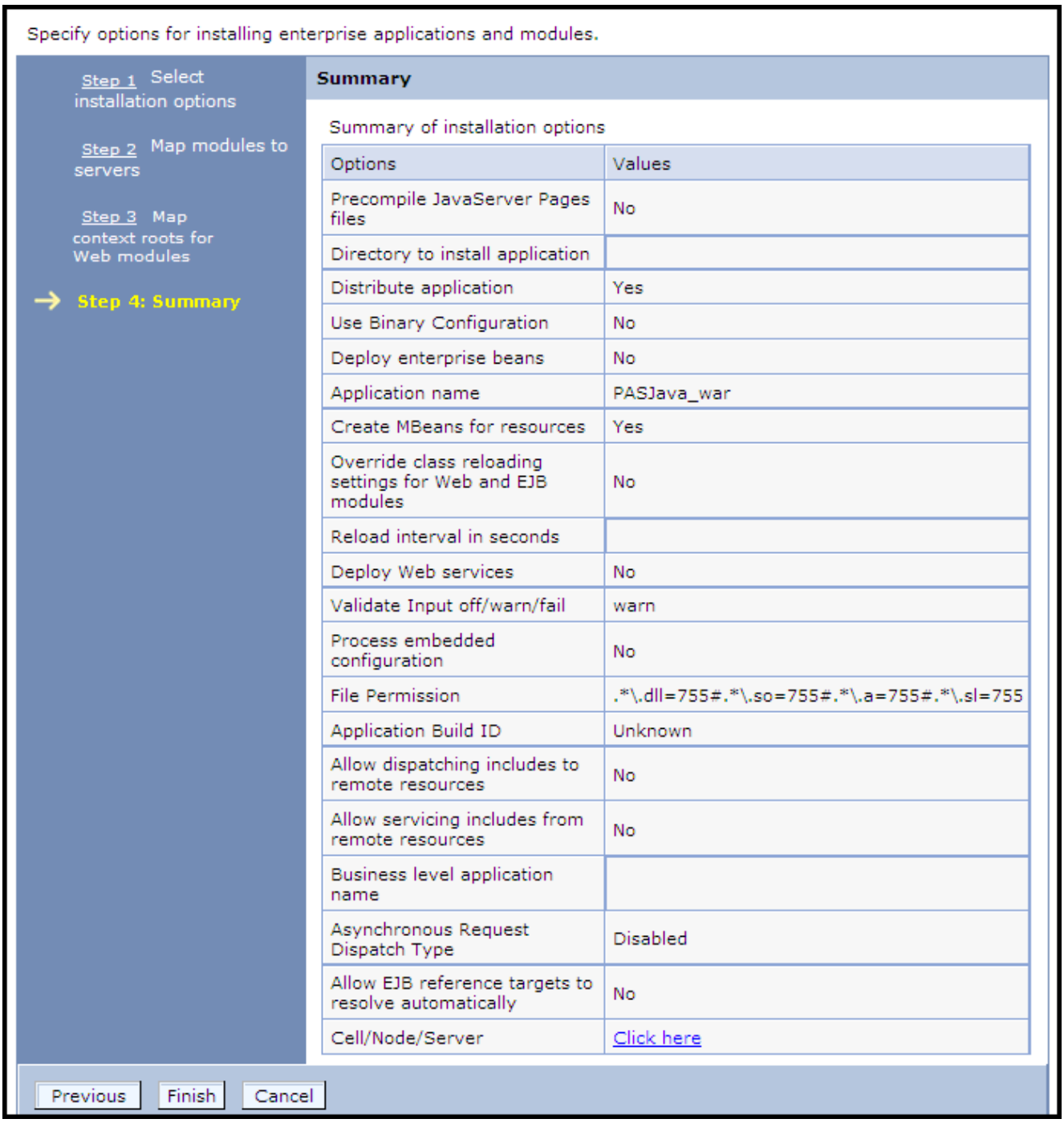
- Select the server from the scrolling list.
- Check the box for PASJava.war and click **Apply.**
- **Click Next.**



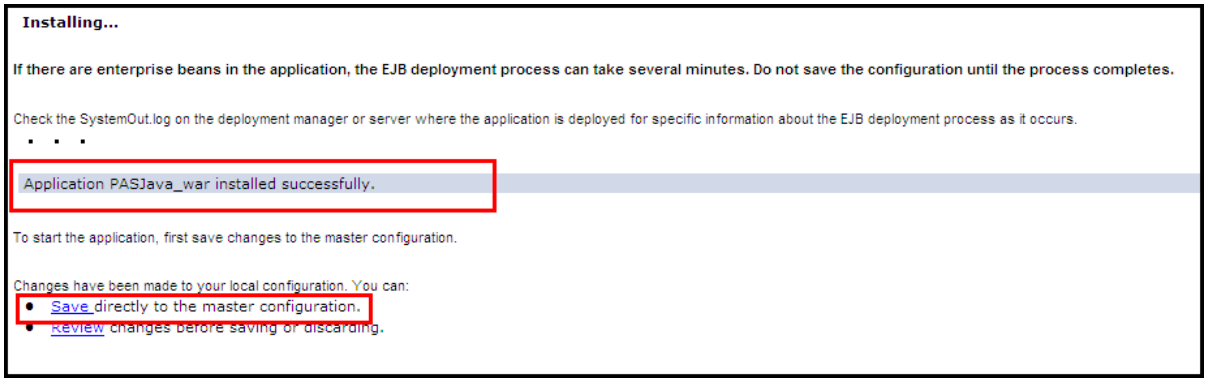
7. On the **Map virtual hosts for Web modules** screen, check the box for PASJava.war and click **Next**.
8. On the **Map context roots for Web modules screen,** enter **PASJava** for the Context Root.



9. Click **Next**.
10. Confirm the settings on the following screen.



11. Click **Finish**.
12. The system lists output from the installation, with the final status at the end. Look for “Application PASJava_war installed successfully.”



13. Click the link to **Save** directly to the master configuration.

Create a Shared Library for OICE

1. Select **Environment > Shared Libraries**.
2. Select the OICE application server from the selection box.
3. Click **New**.
4. For the **Name** field, enter **SharedLibs**.
5. For the **Classpath** field, enter the full paths to the following jar files (using the directory that was created in steps 4 and 5 in the OICE Setup section):
   - antlr-3.4.jar
   - aspectjrt-1.6.11.jar
   - aspectjweaver-1.6.11.jar
   - commons-collections-3.2.1.jar
   - commons-logging-1.1.1.jar
   - log4j-1.2.16.jar
   - spring-instrument-3.0.6.RELEASE.jar
6. For the Native Library Path field, enter the full path for the following jar file:
   - el-api-2.2.jar
7. Click **OK**.
8. Save the configuration changes.
9. Select **Applications>WebSphere enterprise applications**.
10. Click on the OICE application.
11. Under the References heading, click the **Shared library references** link.
12. Check the **PASJava.war** module and click the **Reference shared libraries** button.
13. In the Available box, click on **SharedLibs** and then click the **>>** button. This will move **SharedLibs** to the **Selected** box.
14. Click **OK**.
15. Click **OK**.

16. Save the configuration changes.

Configure the OICE Application

1. Select **Applications>Application Types>WebSphere enterprise application**.
2. Select the **PASJava.war** application.
3. Click **Class loading and update detection.**
4. Check the radio button for **Classes loaded with application class loader first (parent last)**
5. Check the radio button for **Single class loader for application**.
6. Click **OK**.
7. Save the configuration.

Start the OICE Application

1. Select **Servers>Server Types>WebSphere application servers**.
2. Select the OICE application.
3. Click **Start**.
4. Look for the message: “<server name> server started successfully.”

CREATE AND CONFIGURE THE WEB APPLICATION UTILITY

Using a web browser, connect to the Administrative Console using the appropriate server_name and port. (Ex: http://server_name:port/admin)

Note:	The files that are used to set up the Web Application Utility are often named PaletteConfig. Any files with the name PaletteConfig are part of the Web Application Utility.

Create the Web Application Utility Server

1. Select **Servers>New server**.
2. Select **WebSphere application server** for the server type and click **Next**.
3. Enter **PaletteConfig** for the name of the server.
4. Click **Next**.
5. Select the **default** server template.
6. Click **Next**.
7. Ensure **Generate Unique Ports** is checked.
8. Click **Next**.
9. Confirm the server settings and click **Finish**.

The system displays the **Application servers** screen.

Configure the Web Application Utility Server

JVM Settings

1. Select the PaletteConfig server.
2. Expand **Java and Process Management.**
3. Select **Process Definition**.
4. Select **Java Virtual Machine**.
5. In the **Classpath** text box, enter the location of the Web Application Utility property files.
6. Example: /opt/oracle/paletteconfig/conf/ or C:\oracle\paletteconfig\conf\

Note:	Be sure to include the trailing slash (/ or \) character.

7. Set **Initial Heap Size** to **256**.

8. Set **Maximum Heap Size** to **512**.
9. Click **OK**.

Configure the Listening Port

1. Select **Servers>Server Types>WebSphere application servers**.
2. Select the PaletteConfig server.
3. In the **Communications** section, select **Ports**.
4. Note, or change if needed, the port listed for **WC_defaulthost**.
5. Select **Finish**.

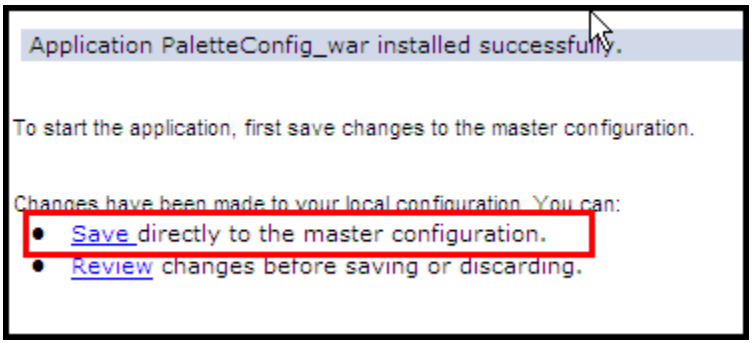
Configure the Virtual Host

1. Select **Environment>Virtual Hosts**.
2. Click **default_host**.
3. Click **Host Aliases**.
4. Click **New**.
5. Enter the port selected for **WC_defaulthost** in the previous step.
6. Click **OK**.

Deploy the Web Application Utility

1. Locate the `PaletteConfig-waswl.war` file in the Oracle Insurance Rules Palette V9.7.0 Media Pack in the Web Application Utility directory and rename to PaletteConfig.war.
2. Select **Applications>New Application**.
3. Select **New Enterprise Application**.
4. Use the Local file system and Remote file system browsing feature to locate and select the `PaletteConfig.war` file.
5. Click **Next**.
6. Confirm that **Fast Path** is selected, and click **Next**.
7. On the **Select installation options** screen, click **Next** to accept the default options.
8. On the **Map modules to servers** screen:
   - Select the server from the scrolling list.
   - Check the box for PaletteConfig.war and click **Apply**
   - Click **Next**.
9. On the **Map virtual hosts for Web modules** screen, check the box for PaletteConfig.war and click **Next**.

10. On the **Map context roots for Web modules screen,** enter **PaletteConfig** for the Context Root.
11. Click **Next**.
12. Confirm the settings on the next screen.
13. Click **Finish**.
14. The installation messages display on the screen. Look for "Application PaletteConfig.war installed successfully" at the end.
15. Save the configuration changes.



Create a Shared Library for Web Application Utility

1. Select **Environment>Shared Libraries**.
2. Select the Web Application Utility application server from the selection box.
3. Click **New**.
4. For the **Name** field, enter **SharedLibs**.
5. For the **Classpath** field, enter the full paths to the database driver jar files (using the directory that was created in the **Database Drivers** section on page 5). Be sure to supply the appropriate drivers for the database type you are using.
   - AIX or Linux example for Oracle:
     `/opt/oracle/db_drivers/ojdbc-11.2.0.2.jar`
   - Windows example for Oracle:
     `C:\oracle\db_drivers\ojdbc-11.2.0.2.jar`
6. Click **OK**.
7. Save the configuration changes.
8. Select **Applications>WebSphere enterprise applications**.
9. Click on the Web Application Utility application.

10. Under the **References** heading, click the **Shared library references** link.
11. Check the **PaletteConfig.war** module and click the **Reference shared libraries** button.
12. In the **Available** box, click on **SharedLibs** and then click the **>>** button. This will move SharedLibs to the **Selected** box.
13. Click **OK**.
14. Click **OK**.
15. Save the configuration changes.

Configure the Web Application Utility

1. If not already on this screen, select **Applications>Application Types>WebSphere enterprise applications**.
2. Select the PaletteConfig application.
3. Click **Class loading and update detection.**
4. Check the radio button for **Classes loaded with application class loader first (parent last).**
5. Check the radio button for **Single class loader for application**.
6. Click **OK**.

Start the Web Application Utility

1. Select **Servers>Application Types>WebSphere application servers**.
2. Select the PaletteConfig application.
3. Click **Start**.
4. Look for the message: “<server name> server started successfully.”

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 OICE deployment must wait until after the Web Application Utility is configured and initial users have been set up.

OICE 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 OICE 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 Web Application Utility set-up screen appears.

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