ORACLE
INSURANCE

Oracle® Insurance Policy Administration

Installation Instructions

Oracle Insurance Policy Administration, Rules Palette Web Application Utility and Rules Palette

Version 9.2.0.0.0

Part number: E16287-01

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Introduction

The Oracle Insurance Policy Administration application and the Oracle Insurance Rules Palette form a solution for configuring, managing and processing policy data. Both applications, along with the Rules Palette Web Application Utility, must be installed and then configured to work together. This install guide will cover the steps necessary to complete the installation and then the integration of the three applications.

There are four stages to the installation process. First, you will install and set-up the database that will be used with the Oracle Insurance Policy Administration and Rules Palette applications. Next, you will install Oracle Insurance Policy Administration, which includes establishing the server location through the installation of WebSphere, and establishing all necessary database connections. Then you will install and set-up the Rules Palette Web Application Utility. Finally, you will install and set-up the Rules Palette application.

Database Installation

Prerequisites

- Must be an Oracle 11G, SQL Server or DB2 database.
- Any compatible operating system.
- Database driver
    - Oracle database: **ojdbc14.jar**. This file is included in the .zip file you downloaded from E-Delivery. Open the OIPA_*version number* folder. It is in the ext jar .zip file.
    - SQL Server database: download the **jtds.jar** file
        a. Download **jtds** from the following site: http://sourceforge.net/projects/jtds/.
        b. Click **Download** on the top menu bar.
        c. Click the **download** link for jtds (release 1.2.2).
        d. Select the **jtds-1.2.2-dist.zip** file. Save the download .zip file to the lib directory you created (i.e., ../opt/oracle/lib).
        e. Open the downloaded .zip file and extract the file **jtds-1.2.2** from the root of the .zip file.
        f. Rename the file **jtds.jar**.
    - DB2 database – The three necessary .jar files (**db2jcc**, **db2jcc_license_cisuz**, 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.

Steps to Install the Database

1. Install the Oracle or SQL database according to the vendor's instructions. Skip to Step 3 if you are installing a DB2 database.

   Note: Oracle database must use a Unicode character set defined at database creation.

2. Complete the required post installation tasks. Tasks for each database are listed below:
   - **Oracle databases** require the following post installation tasks:
     a. Set the database for case insensitive searches and create the User.
        - Run sqlplus as a user with DBA privileges
          - **sqlplus / as sysdba**
        - From sqlplus, logged in as a user with DBA privileges, execute the following commands:
          1. **ALTER SYSTEM SET NLS_COMP=LINGUISITC SCOPE=SPFILE;**
          2. **ALTER SYSTEM SET NLS_SORT=BINARY-CI SCOPE=SPFILE;**
          3. **SHUTDOWN IMMEDIATE;**

     Note: Shutdown will stop and bring down the database. Only run this when all users have safely exited the system.

        - **STARTUP;**
        - Optional step: Check to see if the tablespace already exists:
          - **SELECT tablespace_name FROM dba_tablespaces**
        - Create tablespaces. This will need to be performed twice; once for OIPA database and once for IVS database.
          - **CREATE TABELSPACE <OIPA_PAS|OIPA_IVS> DATAFILE '<FULL PATH OF FILE'> SIZE 100M AUTOEXTEND ON MAXSIZE 2000M EXTENT MANGAMGNET LOCAL**

     Note: The tablespace name for OIPA is OIPA_PAS and the tablespace name for IVS is OIPA_IVS.

        - Create the users. You can use one user for both or set up separate users for each database.
          - **CREATE USER <USER> IDENTIFIED BY <PASSWORD> DEFAULT TABLESPACE <OIPA_PAS|OIPA_IVS>**;
        - Set permissions for each user.
          - **GRANT CONNECT, RESOURCE TO <USER>;**

     b. Create triggers for log-in.
        - **CREATE OR REPLACE TRIGGER <OIPA_USERNAME>.SETSESSIONPARAMETERS_TRIGGER AFTER LOGON ON DATABASE**
        - **BEGIN**
          - **EXECUTE IMMEDIATE 'ALTER SESSION SET NLS_COMP=LINGUISTIC';**
          - **EXECUTE IMMEDIATE 'ALTER SESSION SET NLS_SORT=BINARY_CI';**

- **END;**
- **EXIT;**

c. Now import the supplied data from a command line:
   - **imp <OIPA Username>/<password> file=oipa_pas_v92.dmp full=yes**
   - **imp <IVS Username>/<password> file=oipa_ivs_v9_0_1.dmp full=yes**

- **SQL Server 2005 databases** require the following post installation tasks:
  a. Open SQL Server Enterprise manager.
  b. Create a new database.
  c. Restore from the supplied SQL Server backup to the new database.

3. Login to the database server and create a DB2 database called ASADMIN. `db2 create database asadmin`
   - Configure the database
     a. Global Settings
        1. `db2set DB2_USE_ALTERNATE_PAGE_CLEANING=YES`
        2. `db2set DB2_REDUCED_OPTIMIZATION=TRUE`
        3. `db2set DB2_EVALUNCOMMITTED=TRUE`
        4. `db2set DB2_CORRELATED_PREDICATES=YES`
        5. `db2set DB2_SKIPINSERTED=YES`
        6. `db2set DB2_SKIPDELETED=YES`
     b. DBM Changes
        1. `db2 update dbm cfg using sheapthres 120000`
        2. `db2 update dbm cfg using mon_heap_sz 256`
        3. `db2 update dbm cfg using query-heap-sz 2048`
     c. Database Settings
        1. `db2 connect to asadmin`
        2. `db2 update db cfg using dbheap 2400`
        3. `db2 update db cfg using logbufsz 512`
        4. `db2 update db cfg using locklist 10000`
        5. `db2 update db cfg using app_ctl_heap_sz 256`
        6. `db2 update db cfg using sortheap 1024`
        7. `db2 update db cfg using applheapsz 4096`
        8. `db2 update db cfg using locktimeout 360`
        9. `db2 update db cfg using maxlocks 76`
        10. `db2 update db cfg using chngpgs_thresh 30`
        11. `db2 update db cfg using num_iocleaners 7`
        12. `db2 update db cfg using num_ioservers 7`
        13. `db2 update db cfg using logfilsiz 20000`
        14. `db2 update db cfg using logprimary 30`
        15. `db2 update db cfg using logsecond 0`
        16. `db2 update db cfg using pckcachesz 1024`
        17. `db2 update db cfg using catalogcache_sz 512`
        18. `db2 update db cfg using maxfilop 256`
        19. `db2 update db cfg using maxappls 60`
        20. `db2 update db cfg using avg_appls 1`
        21. `db2 update db cfg using PCKCACHESZ 2048`
        22. `db2 update db cfg using SORTHEAP 512`
        23. `db2 update db cfg using dft_queryopt 3`
   - Prepare DDL Script
     a. Edit the file. `db2look_asadmin.out`
     b. Change the file names in the create tablespace commands to valid fully qualified file names.

- Run DDL Script
    a. `db2 -tvf db2look_asadmin.out > db2look_asadmin.log`
    b. Re-run the script to make sure the procedures are created properly.
- Load the Data
    a. Copy the exported data to the database server.
    b. Change directory to the directory holding the exported data.
    c. `db2 db2move asadmin load`

Oracle Insurance Policy Administration Installation

Prerequisites

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

- A server (with Windows, Linux, Solaris or AIX)
- WebSphere Network Deployment Manager Version 6.1.0.21. This can be downloaded from the IBM website or from a CD provided by IBM.
- Administrative rights to the server.
- PASJava.war file. This file is included in the Media Pack that was downloaded from E-Delivery when you selected the **Oracle Insurance Policy Administration** link. Extract the files and open the application root folder. Next, locate the PASJava.war file.
- Properties files. These files are included in the Media Pack that was downloaded from E-Delivery. Open the application root folder. You will see a properties folder, which contains all of the properties files.
- .jar files. These files are included in the Media Pack that was downloaded from E-Delivery. Open the application root folder. You will see a directory called **ext jars**.

Server Set-up

IMPORTANT: These installation instructions are written with the assumption that you are using an Oracle database. If you are using SQL Server or DB2, then the steps will vary slightly.

Create a Directory for the Configuration files

1. Create a directory on the WebSphere installation machine to store configuration files for the Oracle Insurance Policy Administration V9 system (i.e., /opt/oracle/server1).
2. Copy into this folder the following files from the .zip file you downloaded from E-Delivery:
   - PASJava.war
   - AdminServerMessages.properties – error message
   - APEMessages.properties - error message
   - MathMessages.properties - error message
   - PAS.properties – application settings. A description of the application settings is available on OTN in the OIPA documentation library.
   - PASMessages.properties - error message
   - ResourceBundleMessages.properties - error message
   - SREMessages.properties - error message
   - UtlMessages.properties - error message
   - Coherence-config.xml
   - Coherence-cache-config.xml
   - ExtensibilityMessages.properties
   - log4j.xml(optional)
3. Edit the Coherence-config.xml file to include the location of the Coherence-cache-config.xml file.
   a. In the <**configurable-cache-factory-config**> section, edit the **<param-value>** to reflect the location of the Coherence-cache-config.xml file.
      Example: <param-value>**/opt/oracle/server1/coherence-cache-config.xml**</param-value>
4. Create a lib directory and add the database driver (i.e., /opt/oracle/lib). The type of database you are using will determine the driver you need to download.

- Oracle database – **ojdbc14.jar**. This file is included in the .zip file you downloaded from E-Delivery. It is in the **ext jars** folder.
- SQL Server database – download the **jtds.jar** file.
  a. Download **jtds** from the following site: http://sourceforge.net/projects/jtds/.
  b. Click **Download** on the top menu bar.
  c. Click the **download** link for jtds (release 1.2.2).
  d. Select the **jtds-1.2.2-dist.zip** file. Save the download .zip file to the lib directory you created (i.e., ../opt/oracle/lib).
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  f. Rename the file **jtds.jar**.
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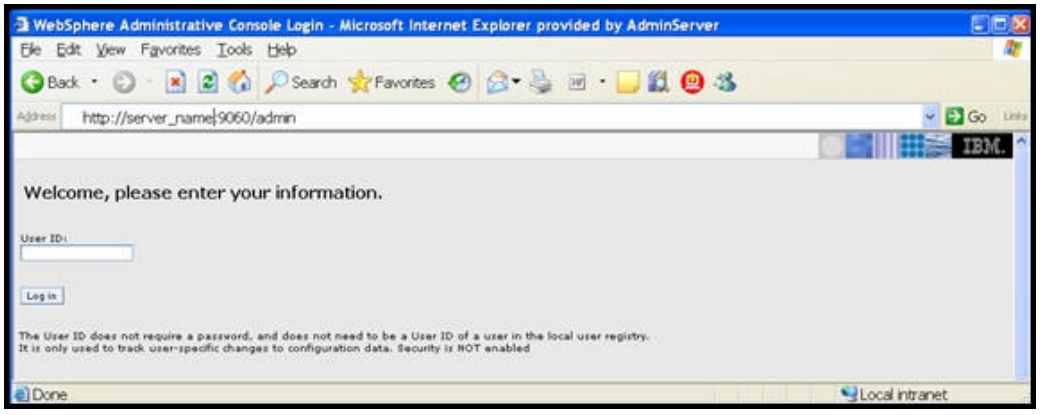
4. Copy the following .jar files to the Websphere ext folder (i.e., ../opt/IBM/WebSphere/AppServer/lib/ext). These files are located in the **ext jars** folder in the .zip file you downloaded from E-Delivery.
   - antlr-2.7.6.jar
   - commons-collections.jar
   - commons-logging-1.1.jar
   - el-api.jar
   - log4j-1.2.9.jar
   - spring-agent.jar

Create a New Application Server

1. Using a WebBrowser, connect to the Administrative Console using the appropriate server_name and port. (Ex: http://server_name:port/admin)
2. Login using your username.

IMPORTANT: OIPA and the Web Application Utility cannot exist on the same application server.

Figure 1-1: WebSphere Administrative Console



3. Click **Servers** from the main menu.

Figure 1-2: Main Menu

4. Click **Application servers** from the main menu.

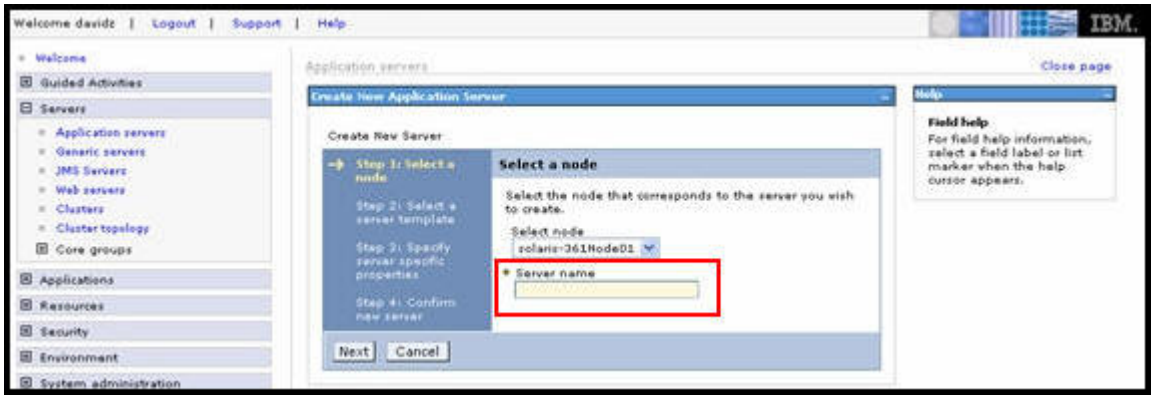
Figure 1-3: Servers

5. Click **New**.

Figure 1-4: Application Servers

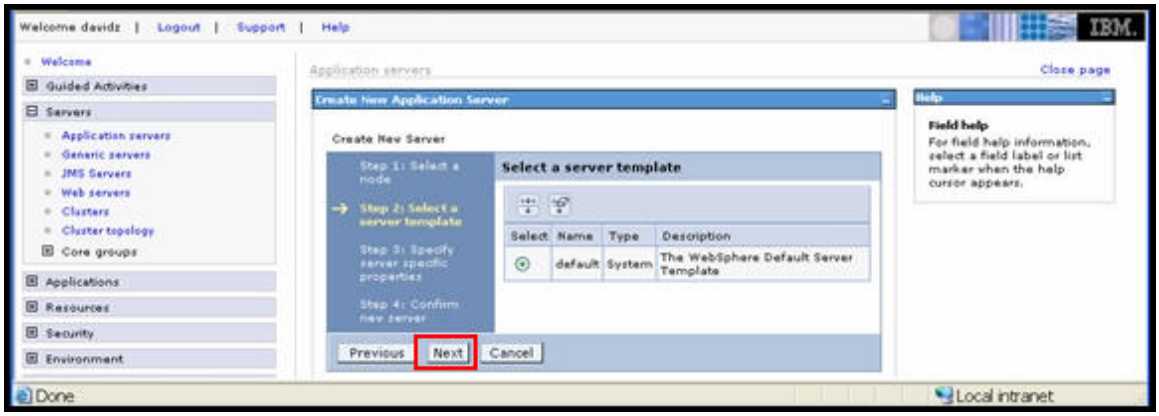
6. Fill in the appropriate server name.
7. Click **Next.**

Figure 1-5: Select a Node



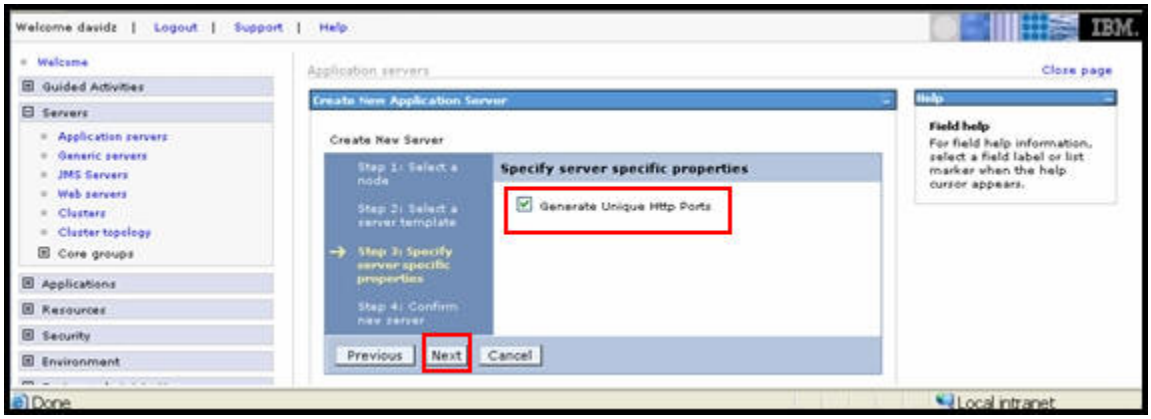
8. Click **Next**.

Figure 1-6: Server Template



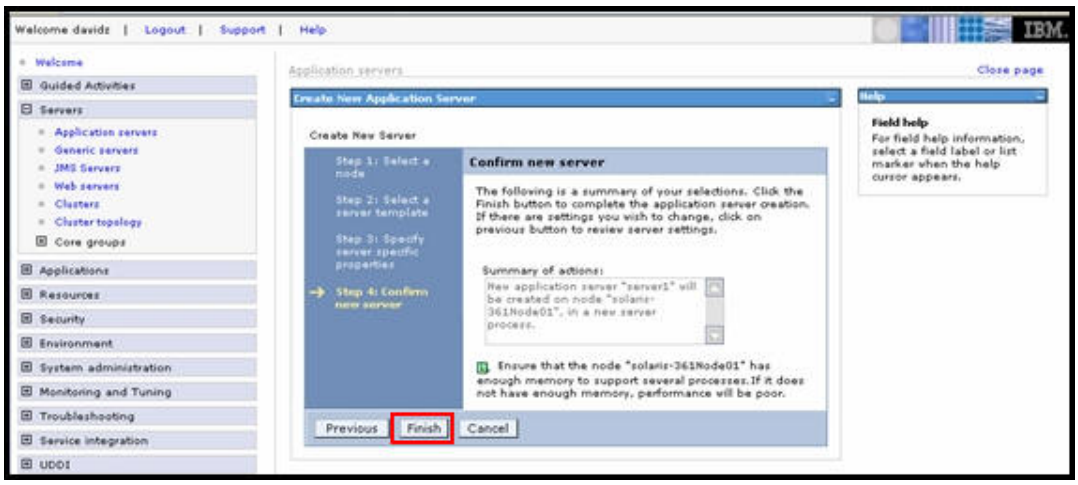
9. Make sure the box titled "Generate Unique Http Ports" is checked.
10. Click **Next**.

Figure 1-7: Specify Server Specific Properties



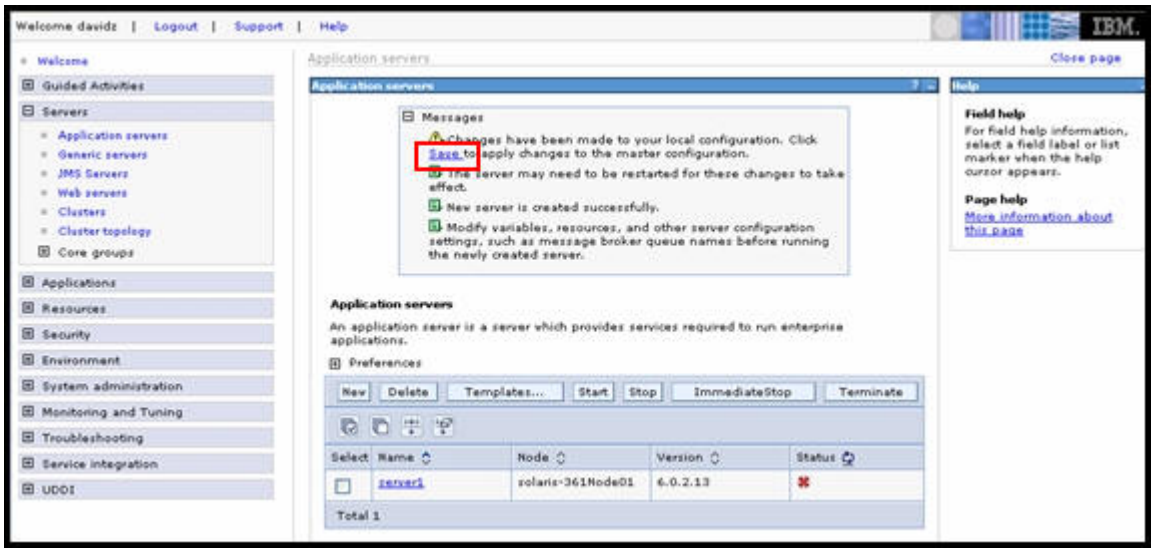
11. Click **Finish**.
12. Click **Save**. Make sure **Synchronize changes with Nodes** check box is checked.

Figure 1-8: Confirm New Server



13. Click **Save** and then **OK**.

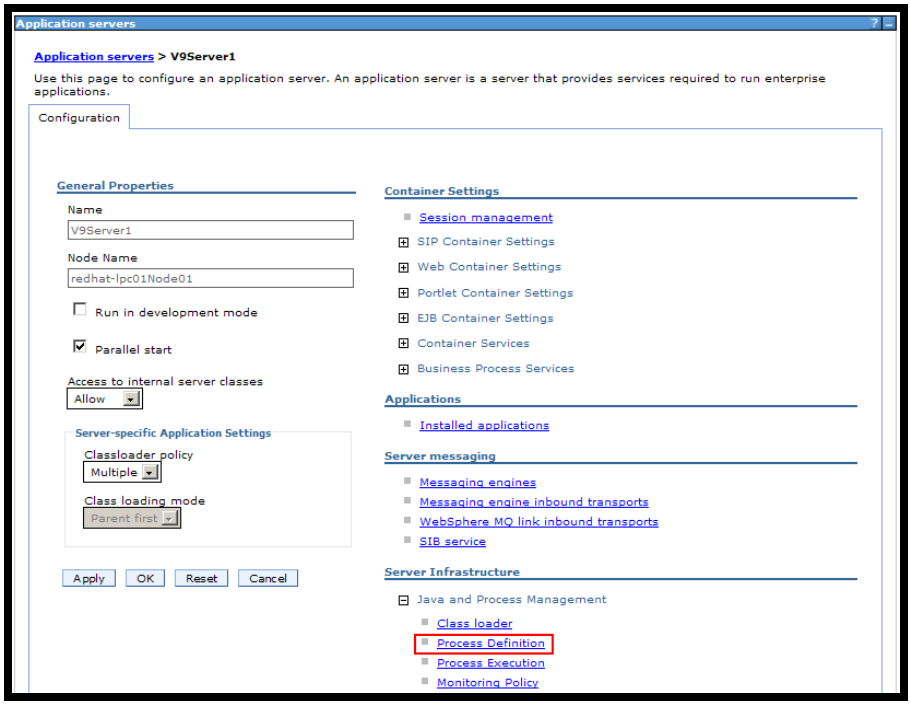
Figure 1-9: Apply Changes to Application Server



Server Properties

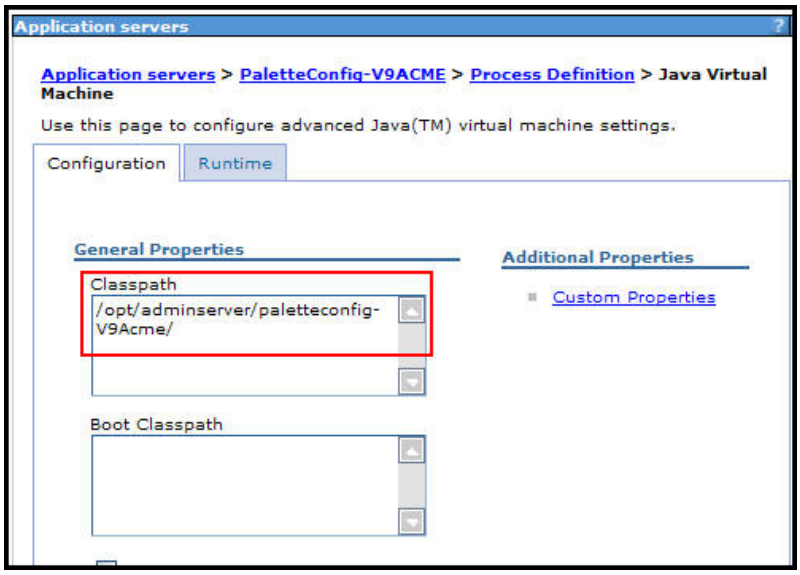
1. Click the **Name** of the server you just created. Expand out **Java and Process Management** from the right column and select **Process Definition**.

Figure 1-10: Select Process Definition



2. Under **Additional Properties** select **Java Virtual Machine**.
3. Under **Classpath** enter the location of your properties files. They are in the folder you created for Configuration files during server set-up.

Figure 1-11: Enter Location of Properties Files



4. Set **Initial** and **Maximum Heap Sizes** to 512 and 1024 respectively. These are the default recommended values. Depending on the hardware and number of servers existing or planned, these values may differ.
5. Enter the following default values (on a single line) for **Generic JVM arguments**:

   -Duser.language=en -Duser.region=US -Djava.net.preferIPv4Stack=true -Djava.net.preferPv6Addresses=false -javaagent:**FilePath**/spring-agent.jar -Dtangosol.coherence.override=/**FilePath**/coherence-config.xml

   Note: Use backslash (\ ) if using Windows. Use the forwardslash (/) if using Linux.

   Note: As with the heap sizes, these values may differ depending on the system configuration.

6. When finished click **OK** and **Save**. Make sure to synchronize changes.

Environment

Driver Variables

1. Select **Environment** from the main menu.
2. Click **WebSphere Variables**.

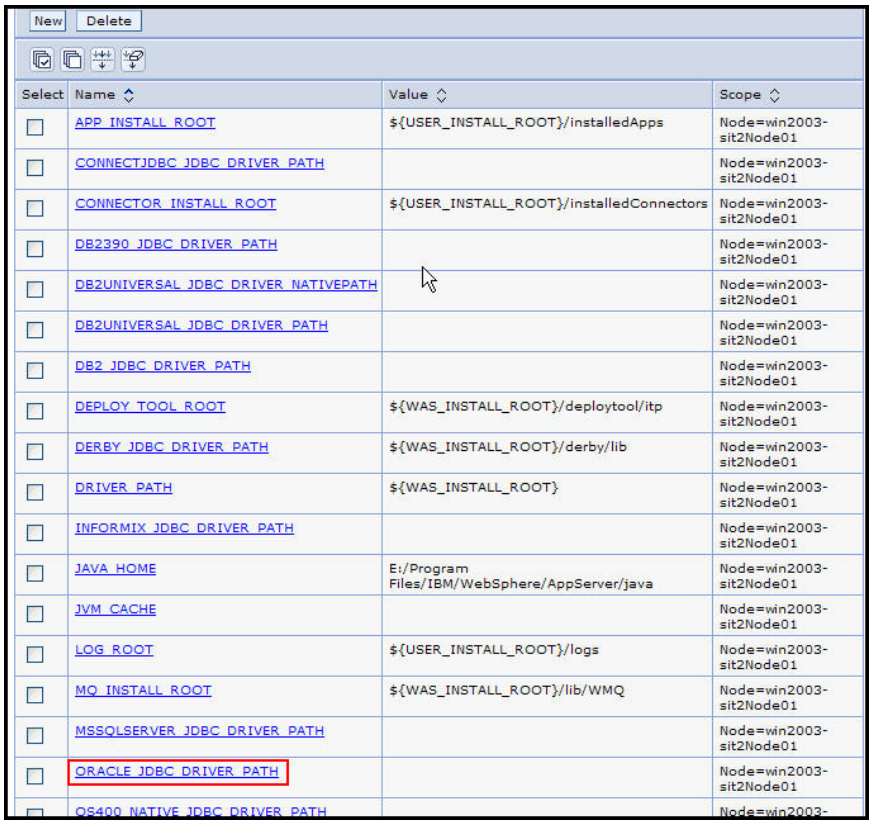
Figure 1-12: Environment

Environment

Depending on your environment, you will need to select the proper values for the database you will be accessing.

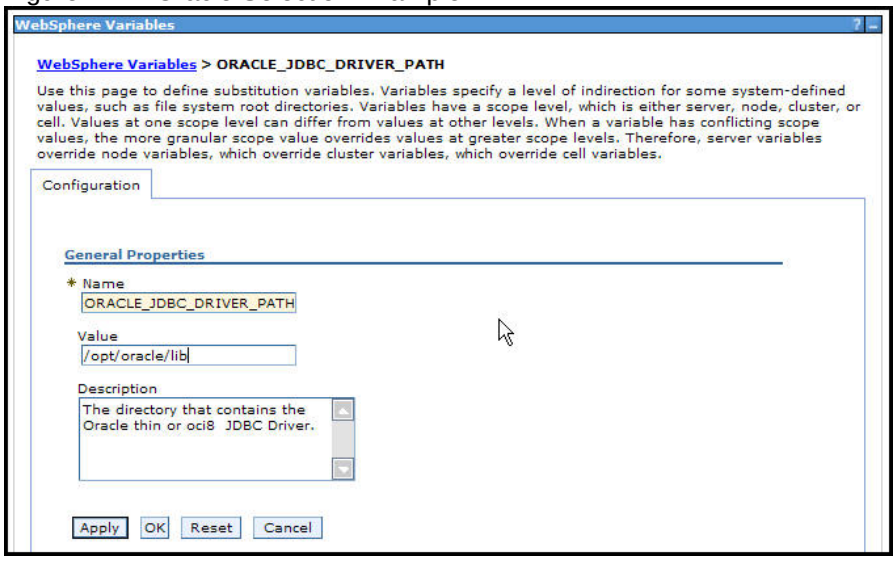
3. For an Oracle database, you need to create or edit **ORACLE JDBC DRIVER PATH**.
   For a DB2 database, you need to create or edit **DB2UNIVERSAL_JDBC_DRIVER_PATH**.
   For a SQL Server database, you need to create or edit **User-defined_JDBC_DRIVER_PATH**.

Figure 1-13: Oracle JDBC Driver Path



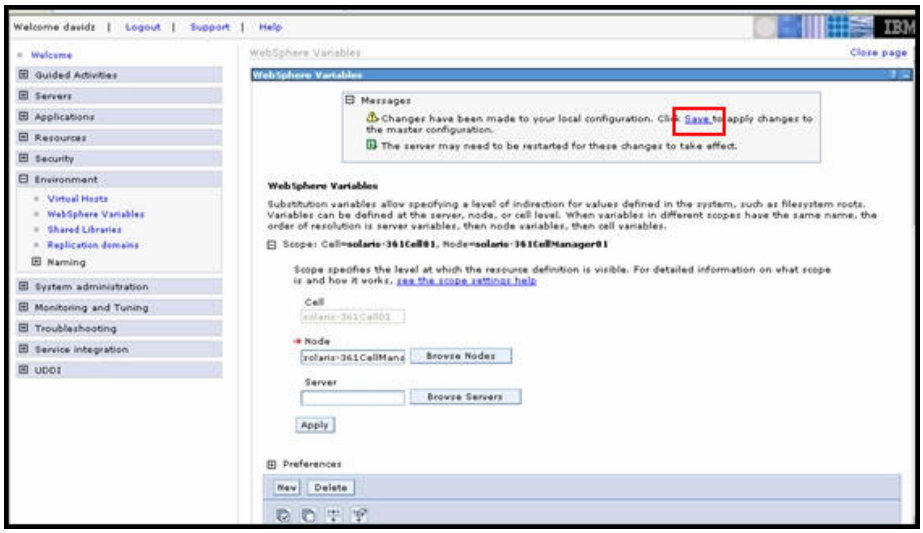
4. Make sure the value field is filled out with the location of the .jar files. Then select **OK**. The following example illustrates the selection of **ORACLE_JDBC_DRIVER_PATH.**

Figure 1-14: Oracle Selection Example



5. Select **Save**.

Figure 1-15: WebSphere Variables Changes



6. Select **Save**.
7. Click **OK.**

Figure 1-16: Synchronize Changes

Virtual Hosts

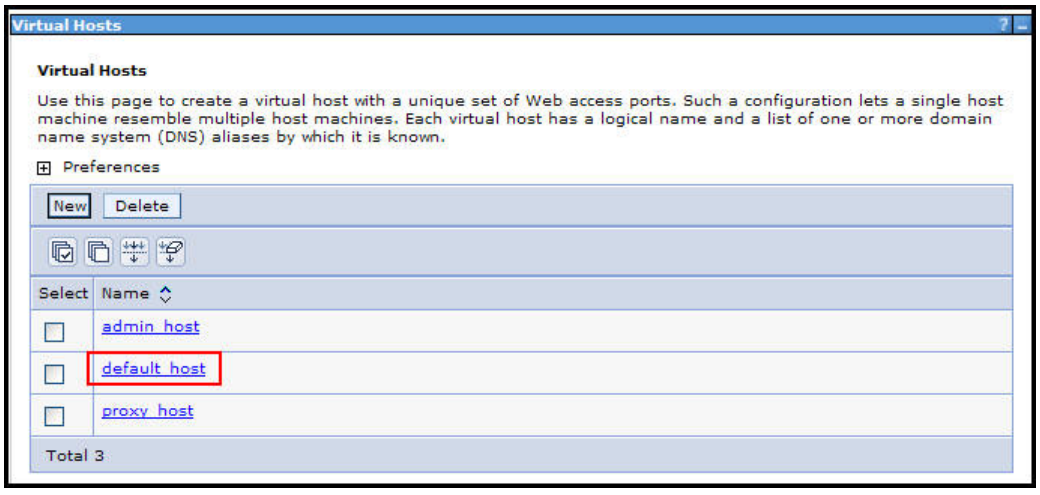
If you are adding another server then the new default host port must be added.

1. Click **Servers** | **Application Servers**.
2. Click on the server you created.
3. Click **Ports** under **Communications**.
4. Review the port number listed as WC_defaulthost. You will need this later in Step 9.
5. Select **Environment** and **Virtual Hosts** from the main menu.

Figure 1-17: Virtual Host

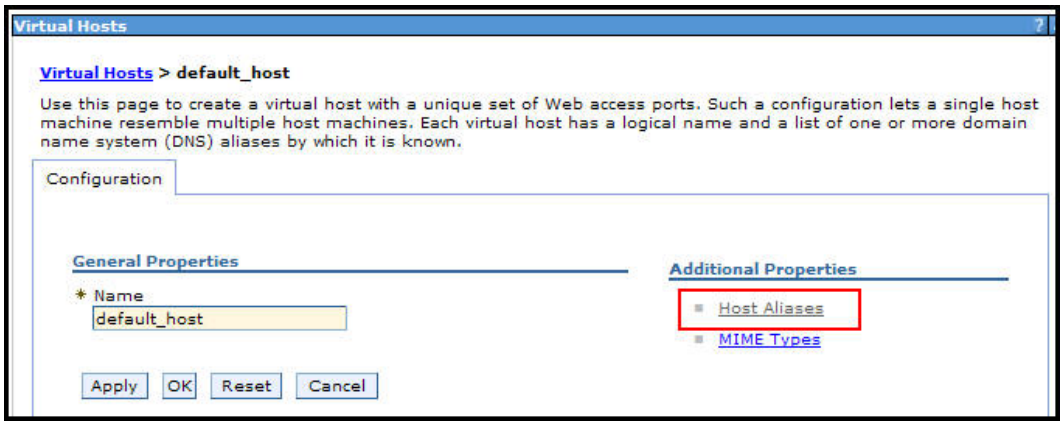
6. Click **Default Host.**

Figure 1-18: Default Host



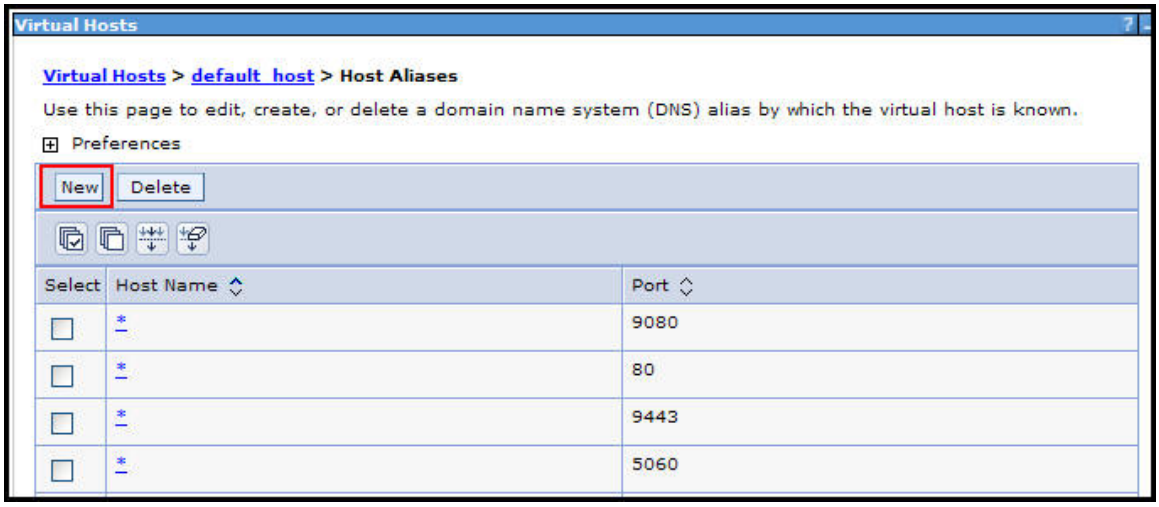
7. Click **Host Aliases**.

Figure 1-19 Host Aliases



8. Click **New**.

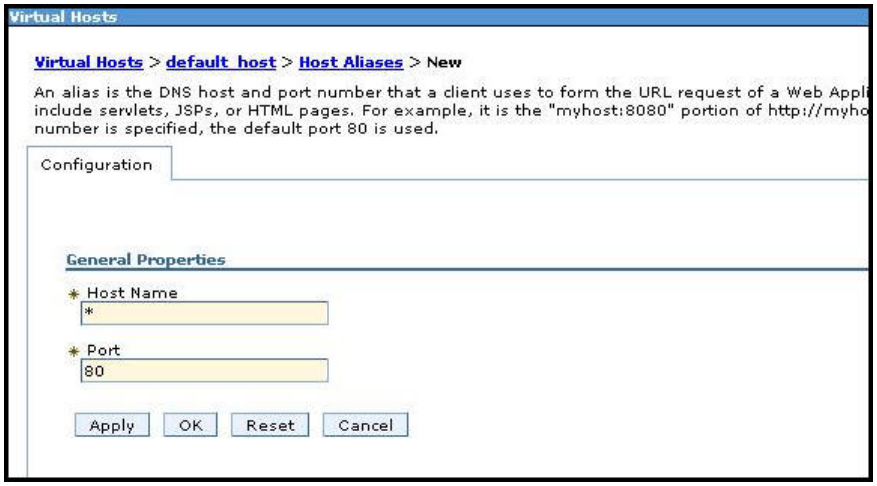
Figure 1-20: New Host Alias



9. Change the Port to the desired number.
    - Standard is 908x where x is incremented up starting at 1 for each additional server added.
10. Click **OK**.
11. Click **Save**. Make sure to synchronize your changes.

12. Click **OK**.

Figure 1-21: General Properties



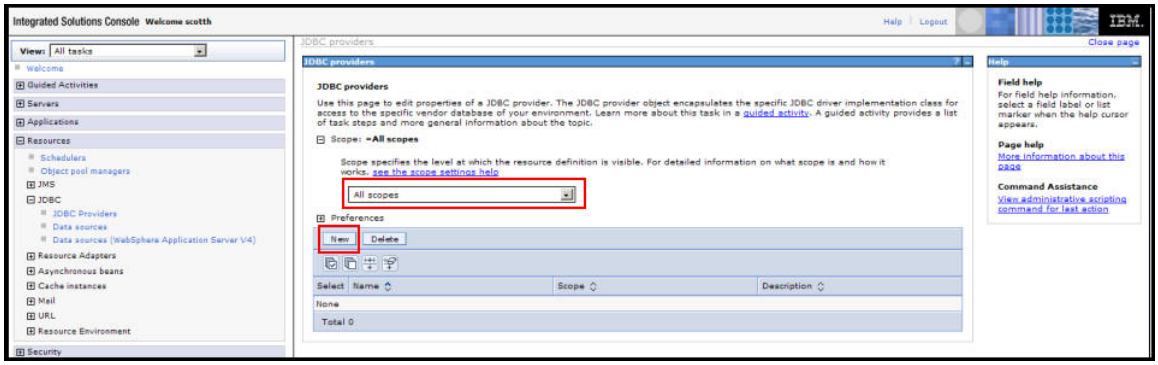
Resources

1. Select **Resources** and then **JDBC** and **JDBC Providers** from the main menu.

Figure 1-22: JDBC Provider Selection

2. Select the server name where you are installing from the drop down list on the top portion of the screen.
3. Select **New**.

Figure 1-23: Select Server



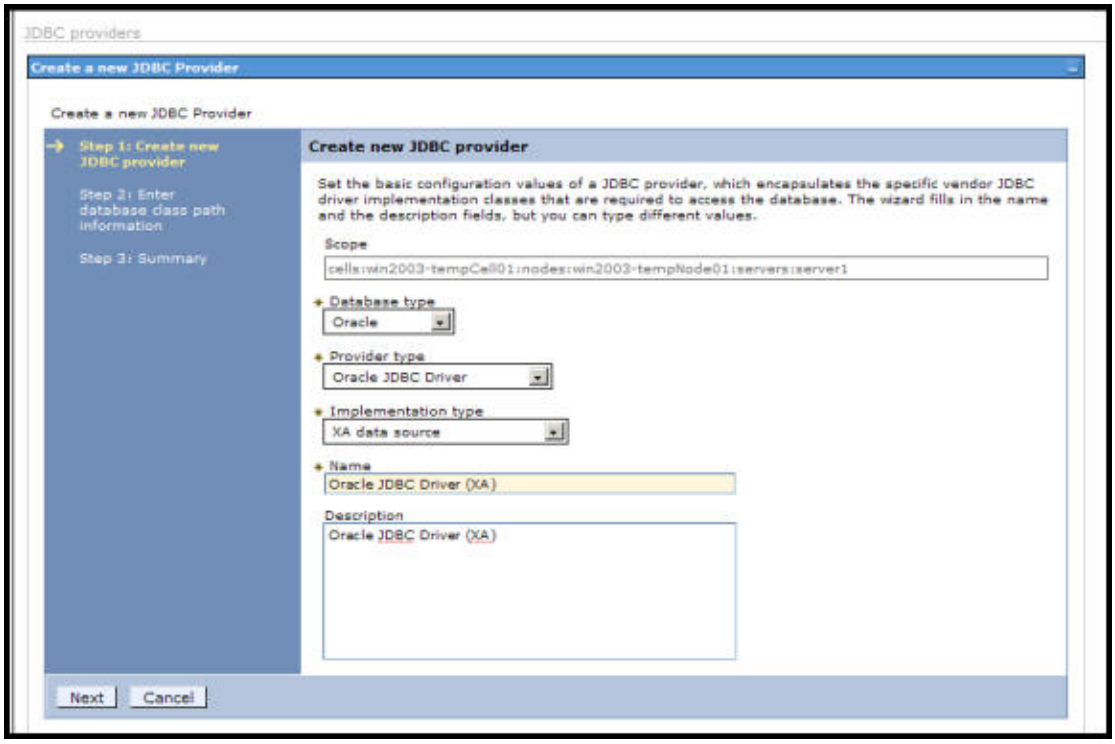
4. For an Oracle database, select “Oracle” from the **Database type** dropdown, “Oracle JDBC Driver” from the **Provider type** dropdown, and “XA data source” from the **Implementation type** dropdown. (Shown in Figure 3.3)

   For a DB2 database, select “DB2” from the **Database type** dropdown, “DB2 Universal JDBC Driver Provider” from the **Provider type** dropdown, and “XA data source” from the **Implementation type** dropdown.

   For a SQL Server database, select “User-defined” from the **Database type** dropdown and enter “net.sourceforge.jtds.jdbcx.JtdsDataSource” in the **Implementation class name** field.

5. Select **Next**.

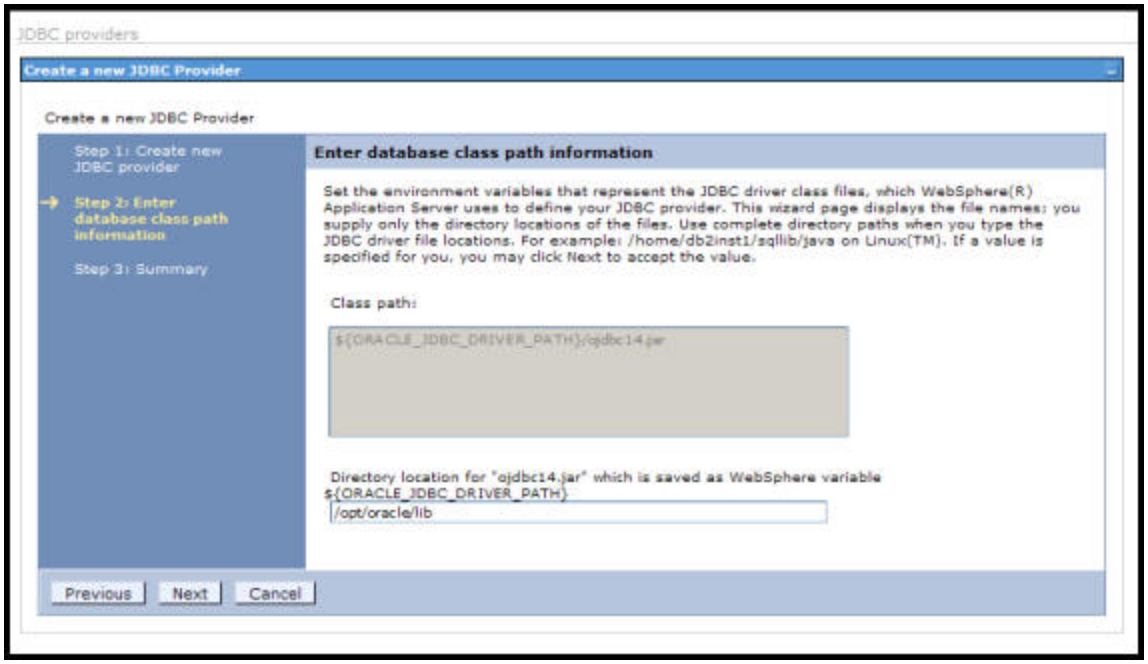
Figure 1-24: Properties



6. Enter the path(s) for the database .jar file(s) if different from the default path(s) listed.

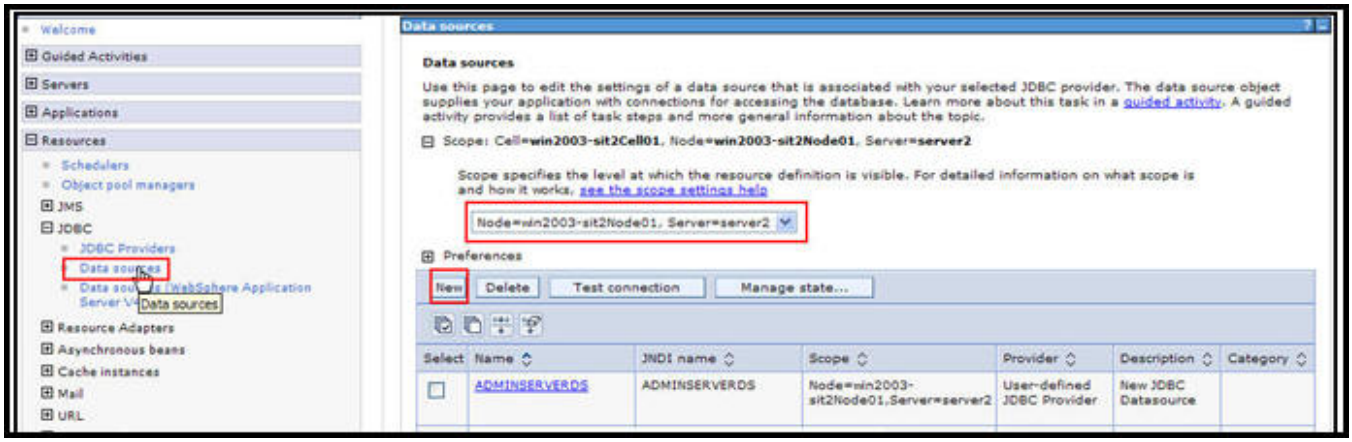
7. Select **Next**.

Figure 1-25: Select Node Scope



8. Click **Finish.**
9. Click **Save**.

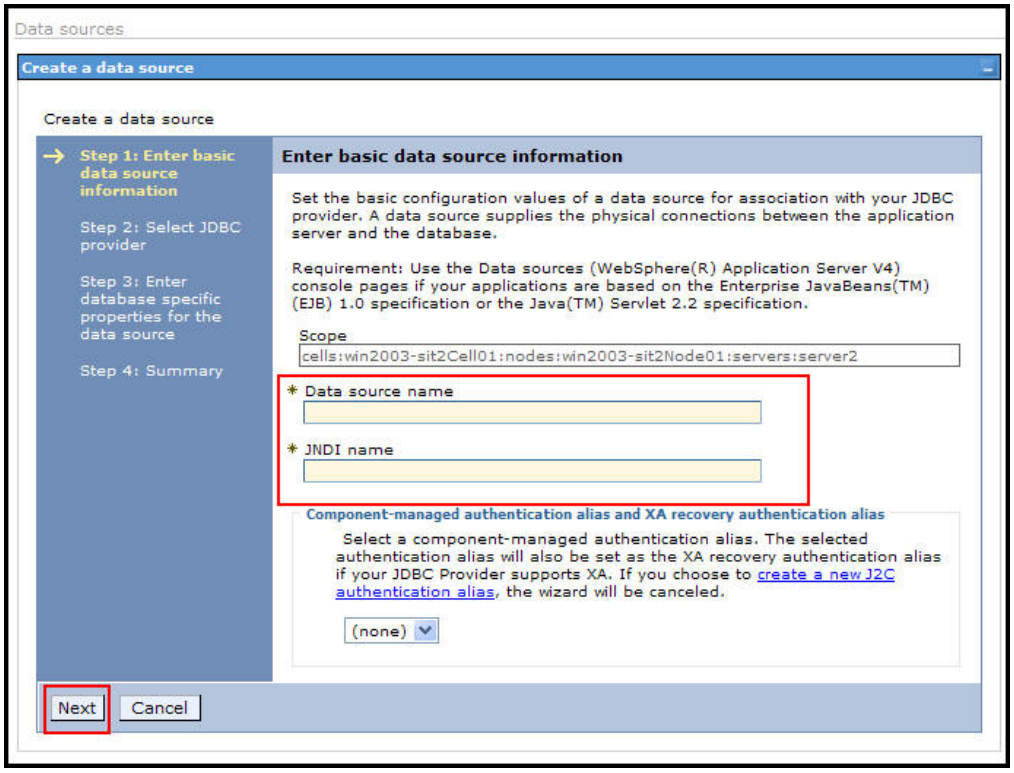
Figure 1-26: Data Sources



10. Select **Data Sources** from the Resources menu option.
11. Select the server if it is not listed in the drop down box.
12. Select **New**.
13. Enter the data source name, which is ADMINSERVERDS.
14. Enter the JNDI name, which is ADMINSERVERDS.

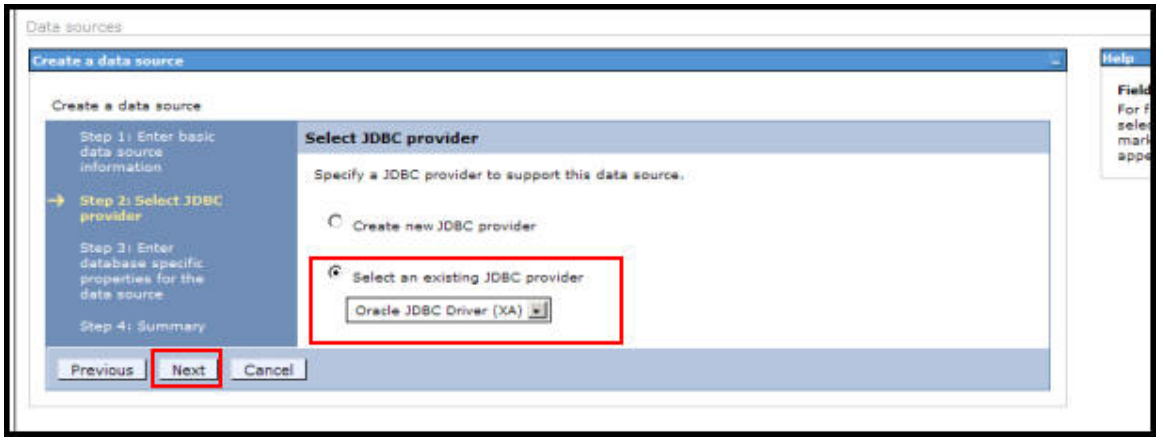
15. Select **Next**.

Figure 1-27: New JDBC Provider



16. Select the radio button for **Select an existing JDBC provider** and then select the existing JDBC provider from the drop down list.
17. Select **Next**.

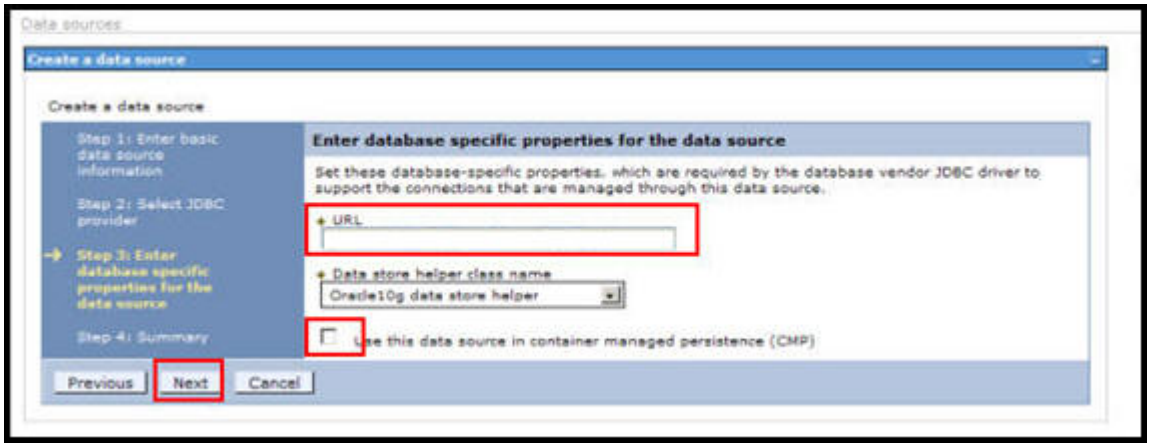
Figure 1-28: JDBC General Properties



18. For an Oracle database, enter the database URL (Ex: **jdbc:oracle:thin:@ServerName:Port:SID)**. For a DB2 database, enter the database name, driver type, server name, and port number. (There is no data to enter/edit for a SQL Server database.)
19. Uncheck the CMP check box.

20. Select **Next**.

Figure 1-29: Oracle Database Properties

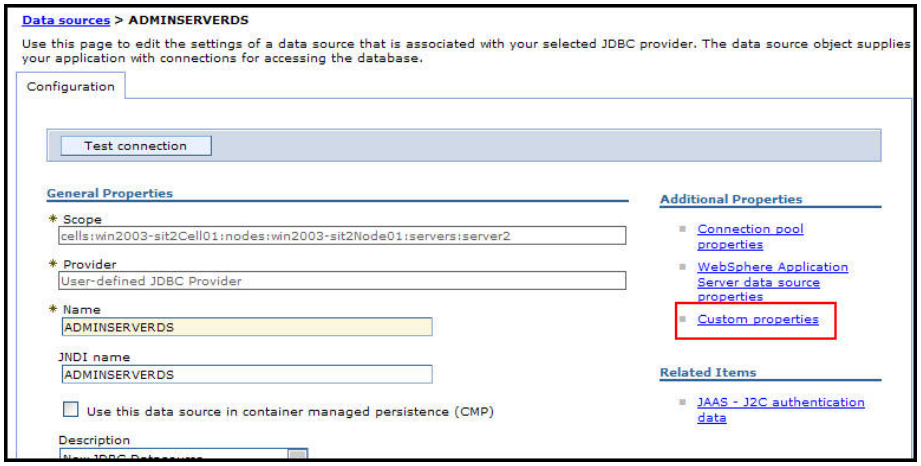


21. Select **Finish**.
22. Select **ADMINSERVERDS** from the Data sources window.

Figure 1-30: Modify Data source

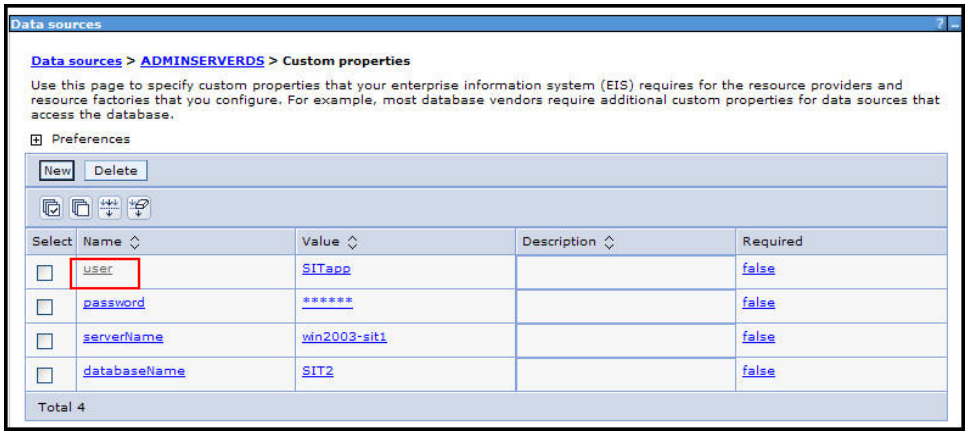
23. Select **Custom Properties**.

Figure 1-31: Custom Properties



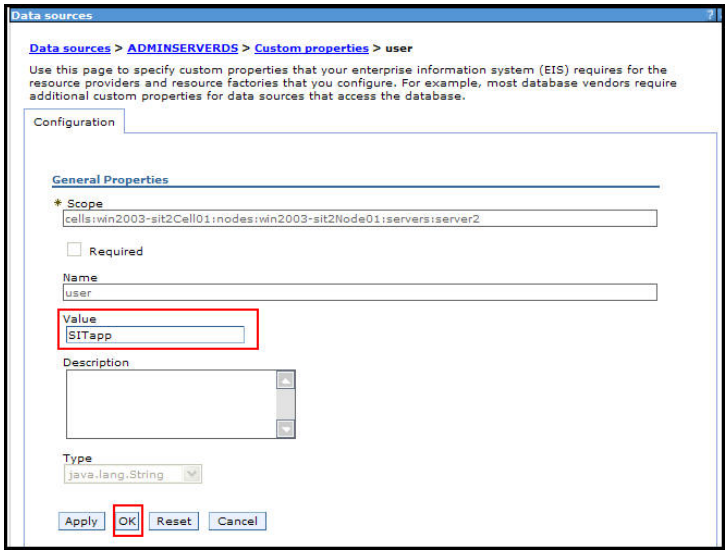
24. Select **User** if setting up Oracle. If you are setting up SQL Server or DB2, skip to step 27.
25. Input Database Login user name in the Value field.
26. Select **OK** and skip to step 34.

Figure 1-32: Set User Login



27. Click **New** if setting up SQL Server or DB2.
28. Enter a name for your custom property.
29. Enter the value, which will vary depending on the type of property you are creating. For user, enter user name. For server, enter server name and so forth.
30. Click **OK**.
31. For **SQL Server**, repeat steps 27-30 to continue creating custom properties until you have one for databasename, password, user and servername.
32. For **DB2**, repeat steps 27-30 to continue creating custom properties until you have one for password and user.
33. Select **OK** and skip to step 37.

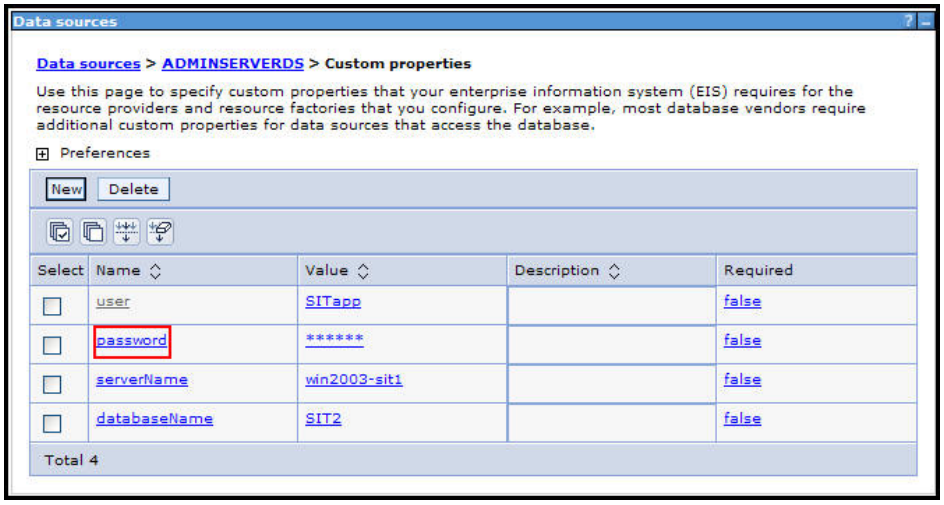
Figure 1-33: Configuration of Custom Properties



34. Select **password** from the Custom Properties page.
35. Enter the password in the Value field.

36. Select **OK**.

Figure 1-34: Set Password



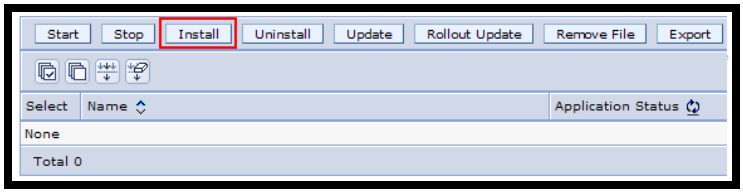
37. Select **Save**.
38. Select **Data Sources** from the Resources menu option.
39. Select the server if it is not listed in the drop down box.
40. Select **New**. Return to step 12 and repeat all steps to step 37, replacing ADMINSERVERDS with **ADMINSERVERRESOURCEDS.**

Install New Application

Deploy the Oracle Insurance Policy Administration Version 9 Application

1. Select Applications → Enterprise Application → **Install**
2. If upgrading an existing Application select **Update.**

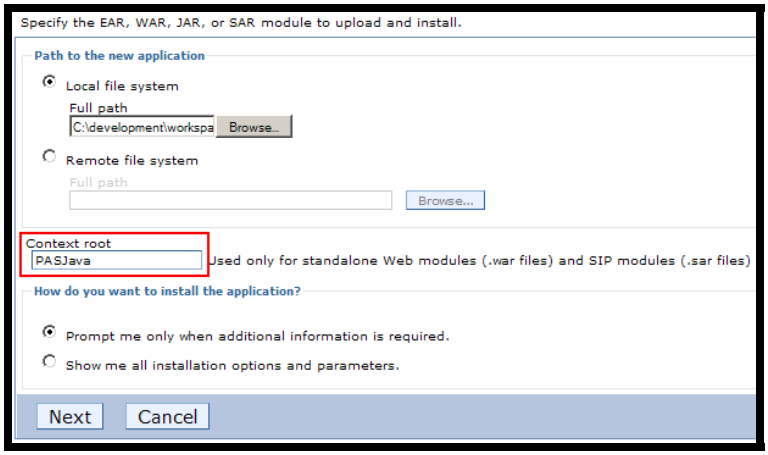
Figure 1-35: Install New Application



a. If uploading from your machine, under **Local file system,** click B**rowse** and select the **PASJava.war** file. It should be in the folder you created for Configuration files during server set-up.
b. If uploading from the server, select the **Remote file system,** and enter the path to the PASJava.war file.

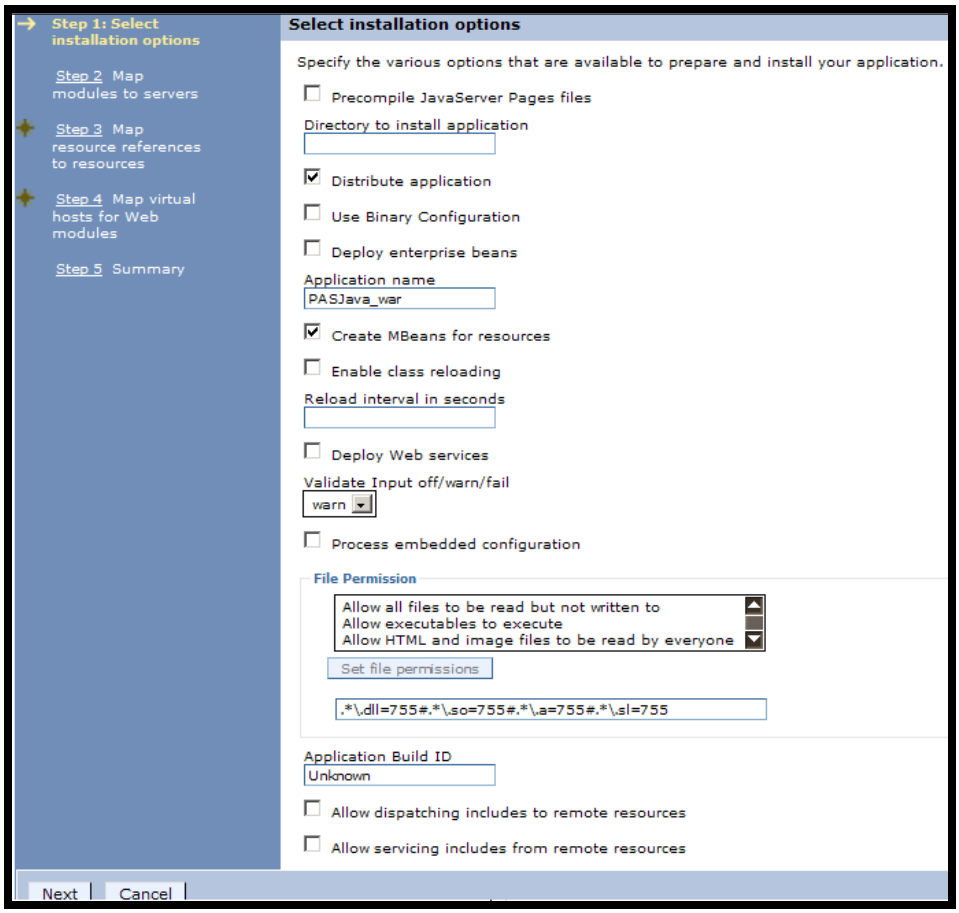
3. Set the **Context root** to **PASJava** and click **Next**.

Figure 1-36: Set Context Root



4. If you wish to specify a **Directory to install the application** or change the **Application name** you can do so from here, otherwise click **Next**. If you have multiple servers you will need to change the **Application name** to differentiate between them.

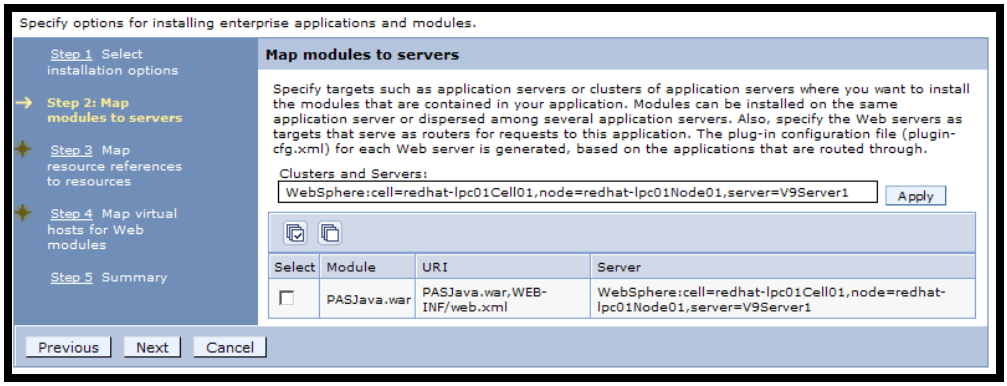
Figure 1-37: Select Install Options



5. Click **Next**. If you have multiple servers then you will have to select the appropriate server under **Clusters and Servers** and then select the PASJava.war file.

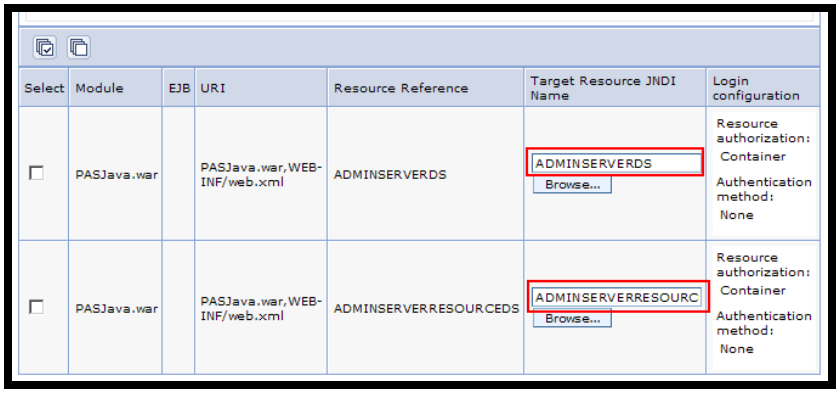
6. Select the .war file.
7. Click **Apply** then click **Next**.

Figure 1-38: Select .war File



8. Scroll down to the following location. In the Target Resource JNDI Name column click **Browse** and select the **AMINSERVERDS** option.
9. Click **Apply**.
10. Scroll down to the following location. In the Target Resource JNDI Name column click **Browse** and select the **AMINSERVERRESOURCEDS** option.
11. Click **Apply**.
12. Click **Next**. These are the default values for the Resources.

Figure 1-39: Select Target Resource JNDI Name

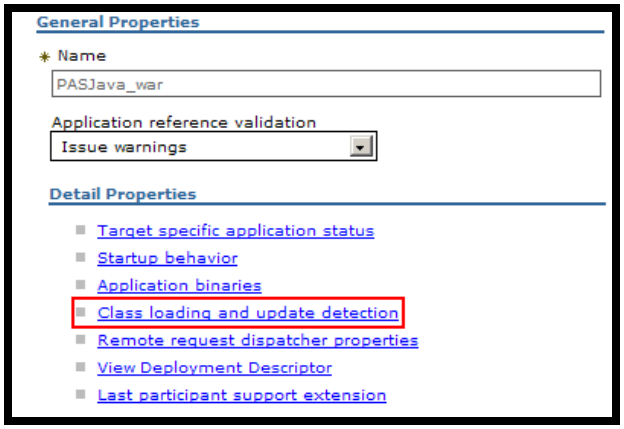


13. Click **Next**.
14. Review your configuration and make any necessary changes.
15. If no changes are needed then click **Finish**.
16. Once the installation is complete click **Save**. When synchronization is complete click **OK**.

Configure the Application

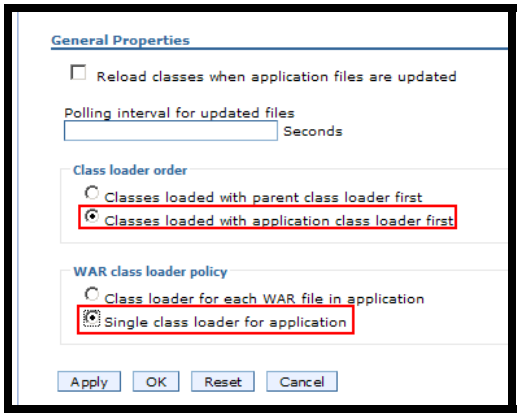
1. Select Application → Enterprise Application → New Application you just created.
2. Click **Class Loading and update detection** under **Detail Properties**.

Figure 1-40: Select Class Loading



3. Select **Classes loaded with application class loader first** and **Single class loader for application**.

Figure 1-41: Select Class Loader Order



4. Click **OK** and **Save**.

Start the Application

1. Select Servers → Application Servers.
2. Select the server(s) you wish to start.
3. Click **Start**.

IMPORTANT: If there are installation errors, your application will not start. Check the System.Out log for error messages. You will need to be well versed in WebSphere and JAVA to decipher the error messages. Here are a few sample locations for the System.Out log.

Windows: E:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01\logs\server1\
Linux: /opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/

Depending on where you have WebSphere installed, the first few folders of the location may vary. In both instances above, the Application Server name is "server1". The AppSrv01 name might also differ depending on the installation of WebSphere.

4. Wait for the page to refresh and the icon under Application Status to turn to a green arrow.
5. In your browser, go to: http://**servername**:**portnumber**/PASJava/Login/Login.iface replacing the **servername** and **portnumber** with the correct information.
6. The default login ID and password is *install*.

You have successfully completed the installation process for the Oracle Insurance Policy Administration application. The next step is to install and set-up the Rules Palette Web Application Utility.

Web Application Utility Installation

Prerequisites

In order to complete the installation steps, you must have the following components:

- A server (with Windows, Linux, Solaris or AIX)
- WebSphere Network Deployment Manager media. This can be downloaded from the IBM website or from a CD provided by IBM.
- Administrative rights to the server. You will not be able to complete the installation without administrative privileges.
- PaletteConfig.war file. This file is located in the Rules Palette Media Pack you downloaded from E-Delivery when you selected the Oracle Insurance Application product pack and the Windows 32-bit platform. When you extract the .zip file, you will see a folder called WebApplicationUtility. Open the folder to access the PaletteConfig.war file.
- PaletteWebApplication.properties- This file is included in your download from E-Delivery. You will see a folder called WebApplicationUtililty. Open the folder to access the properties file.
- Database driver
    - Oracle database: **ojdbc14.jar**. This file is included in the .zip file you downloaded from E-Delivery. Open the OIPA_*version number* folder. It is in the ext jar .zip file.
    - SQL Server database: download the **jtds.jar** file
        a. Download **jtds** from the following site: http://sourceforge.net/projects/jtds/.
        b. Click **Download** on the top menu bar.
        c. Click the **download** link for jtds (release 1.2.2).
        d. Select the **jtds-1.2.2-dist.zip** file. Save the download .zip file to the lib directory you created (i.e., ../opt/oracle/lib).
        e. Open the downloaded .zip file and extract the file **jtds-1.2.2** from the root of the .zip file.
        f. Rename the file **jtds.jar**.
    - DB2 database – The three necessary .jar files (**db2jcc**, **db2jcc_license_cisuz**, 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.

Server Set-up

IMPORTANT: OIPA and the Web Application Utility cannot exist on the same application server.

IMPORTANT: You must have a separate instance of the Web Application Utility for each OIPA environment. You will need to perform the following steps each time you want to add a new environment.

Create a Directory for the Configuration files

1. Create a directory on the WebSphere installation machine to store configuration files for the Rules Palette V9 system (i.e., /opt/oracle/server1).

2. Copy into this folder:
   - PaletteWebApplication.properties – Edit the file to tell the application where to save various application files. You may elect to create a separate directory for these files. After you have created the directory, specify the location in this file.

Specify Path for Rules Palette Upload

1. Edit the PaletteWebApplication.properites file to specify the upload directory.
   Example: download.dir= /opt/oracle/server1
2. Set permissions for files so that the application server can write to it.
   a. In Unix type: **chmod 777 /opt/oracle/server1**
   b. For all other environments, follow the procedures for setting permissions for the directory.

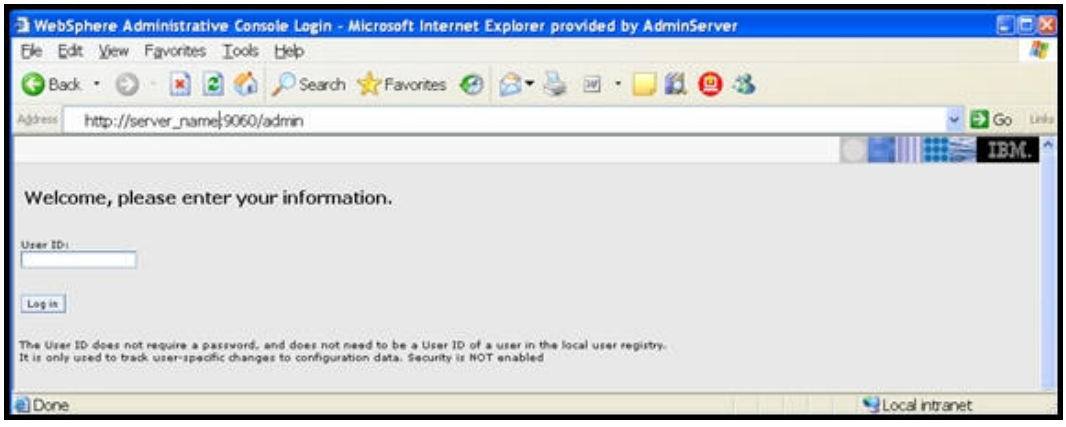
Copy Database Driver jar files

1. Copy the database driver jar files (for the specific database type being used) into Websphere's external library folder.
   Library Folder Example: /opt/IBM/WebSphere/AppServer/lib/ext/
   a. Oracle – ojdbc14.jar
   b. DB2 - db2jcc, db2jcc_license_cisuz, and db2jcc_license_cu
   c. SQL Server - jtds

Create a New Application Server

1. Using a WebBrowser, connect to the Administrative Console using the appropriate server_name and port. (Ex: http://server_name:port/admin)
2. Log-in using your username.

Figure 2-1: WebSphere Administrative Console



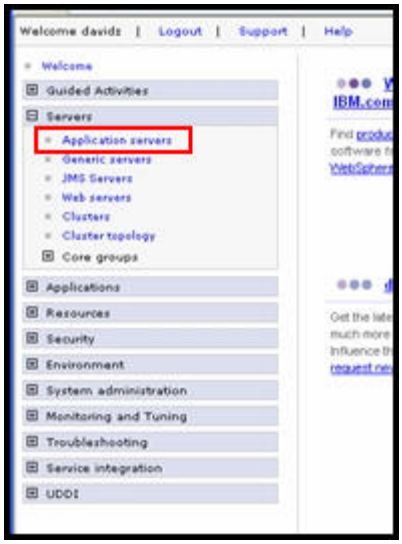
3. Select **Servers** from the main menu.

Figure 2-2: Main Menu


Welcome davidz | Logout | Support | Help
Welcome
Guided Activities
Servers
Applications
Resources
Security
Environment
System administration
Monitoring and Tuning
Troubleshooting
Service integration
UDDI

4. Select **Application servers** from the main menu.

Figure 2-3: Servers

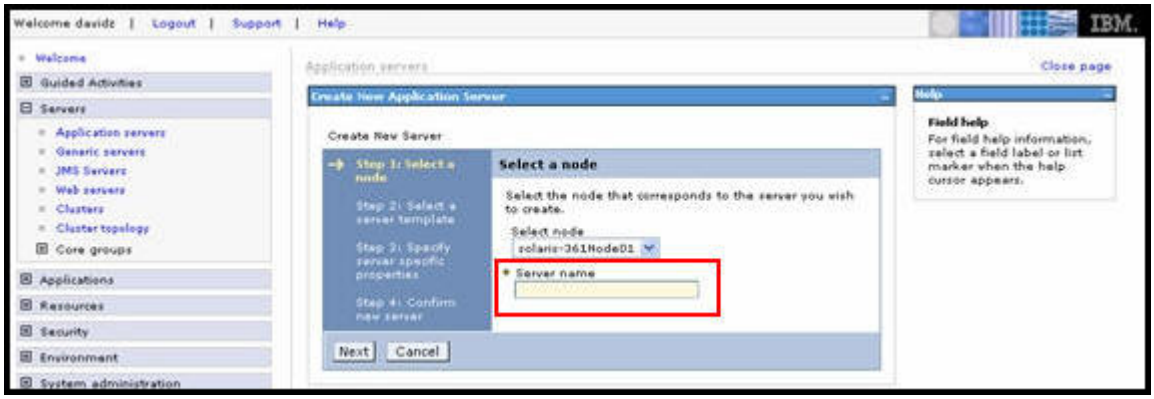


5. Select **New**.

Figure 2-4: Application Servers

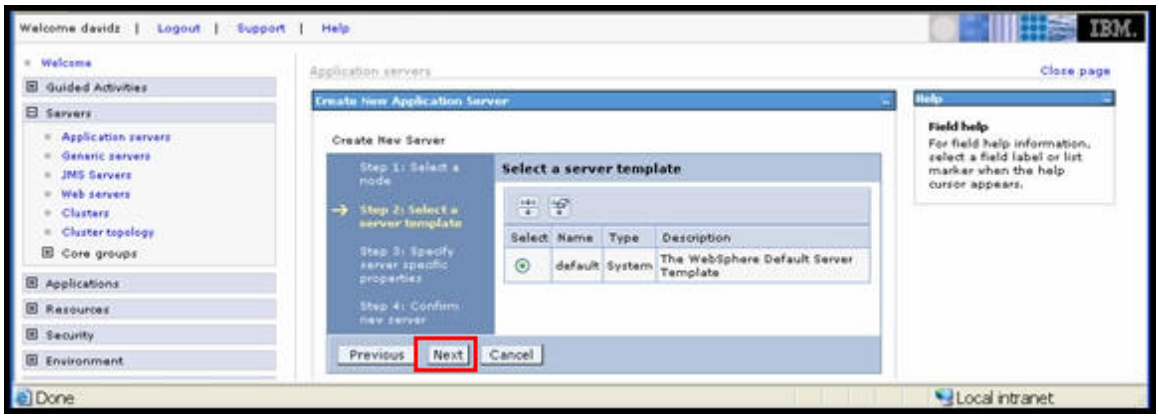
6. Fill in the appropriate server name.
7. Click **Next.**

Figure 2-5: Select a Node



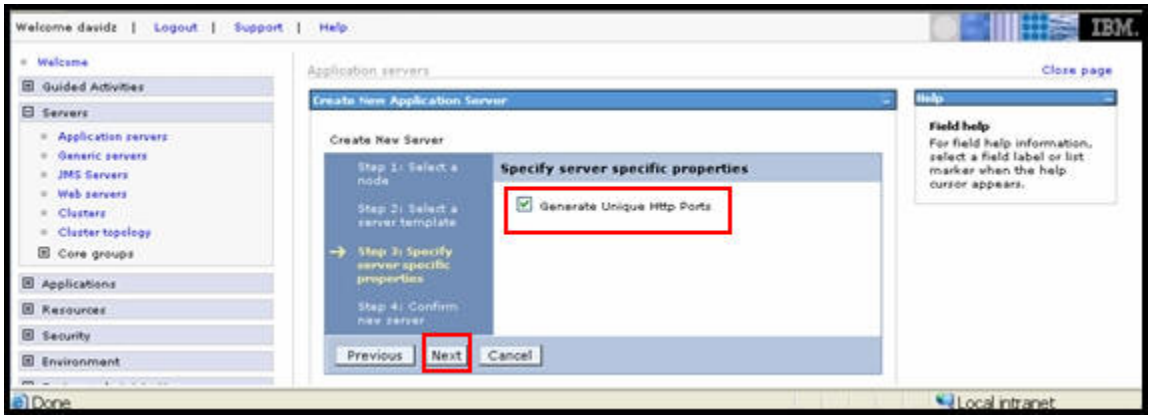
8. Click **Next**.

Figure 2-6: Server Template



9. Make sure the box titled **Generate Unique Http Ports** is checked.
10. Select **Next**.

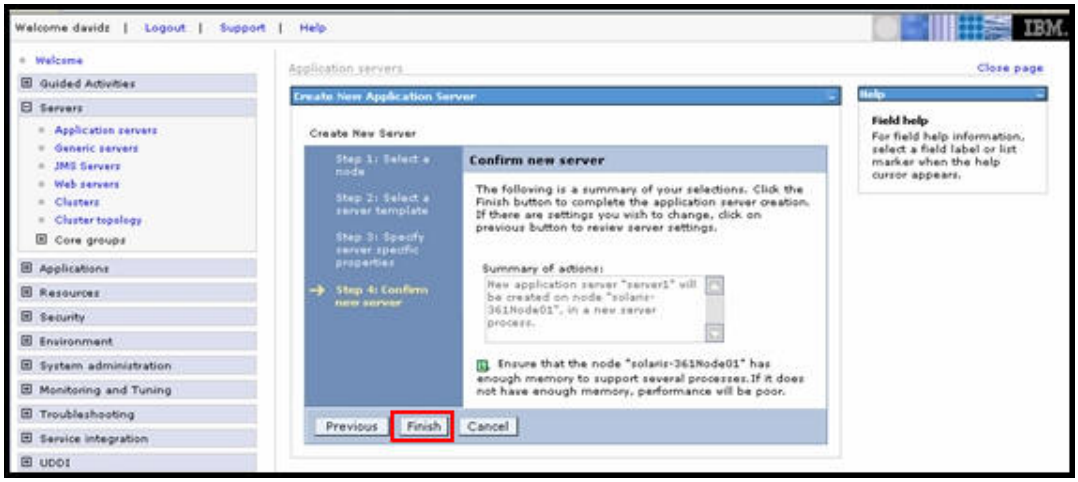
Figure 2-7: Specify Server Specific Properties



11. Select **Finish**.

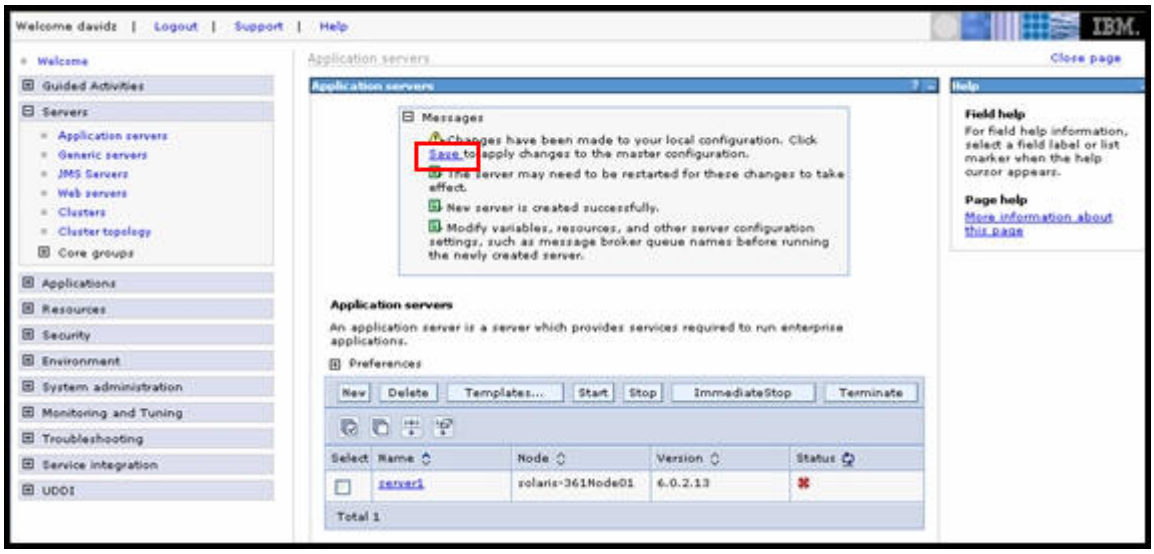
Note: Before saving for the first time select **Preferences** and select the **Synchronize changes with Nodes** check box.

Figure 2-8: Confirm New Server



12. Select **Save**.

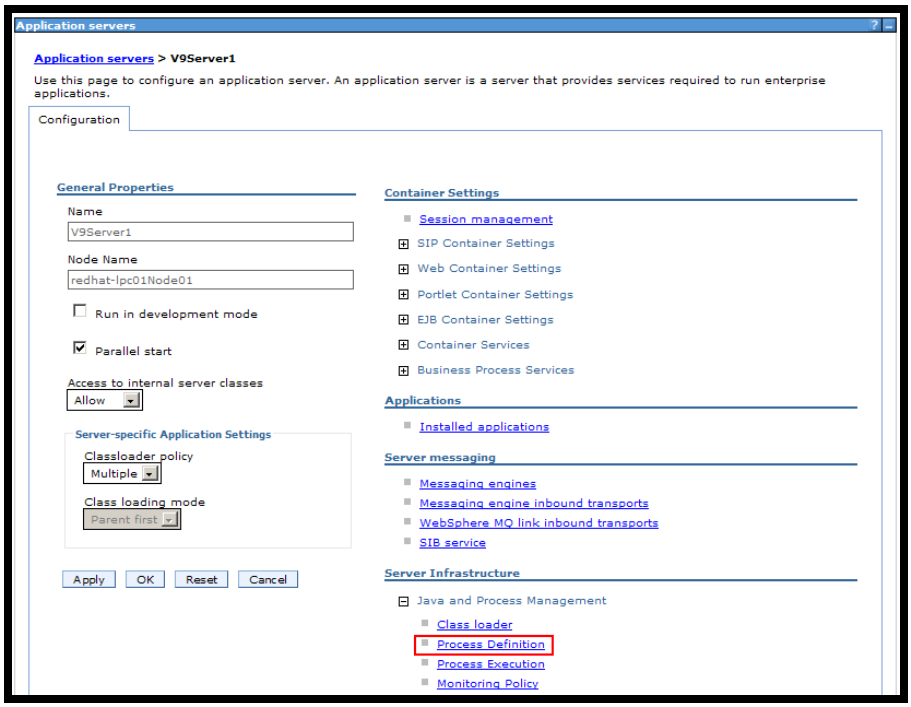
Figure 2-9: Apply Changes to Application Server



Server Properties

1. Click the **Name** of the server you just created. Expand out **Java and Process Management** from the right column and select **Process Definition**.

Figure 2-10: Select Process Definition



2. Under **Additional Properties** select **Java Virtual Machine**.

3. Under **Classpath** enter the location of your PaletteWebApplication.properties file. (Make sure you put a slash at the end of the file location.) This is located in the directory you created during server set-up.
4. Set **Initial** and **Maximum Heap Sizes** to 512 and 1024 respectively. These are the default recommended values. Depending on the hardware and number of servers existing or planned these values may differ.

   Note: As with the heap sizes, these values may differ depending on the system configuration.

5. When finished click **OK** and **Save**.

Virtual Hosts

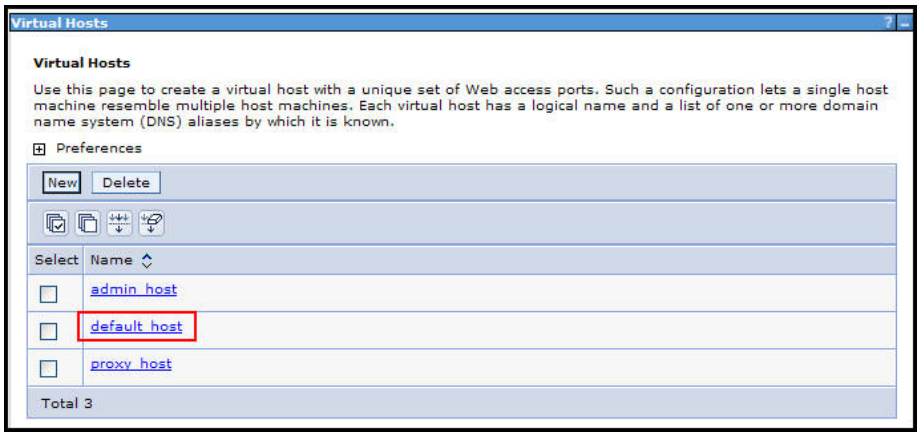
If you are adding another server, then the new default host port must be added.

1. Select **Environment** and **Virtual Hosts** from the main menu.

Figure 2 11: Virtual Host

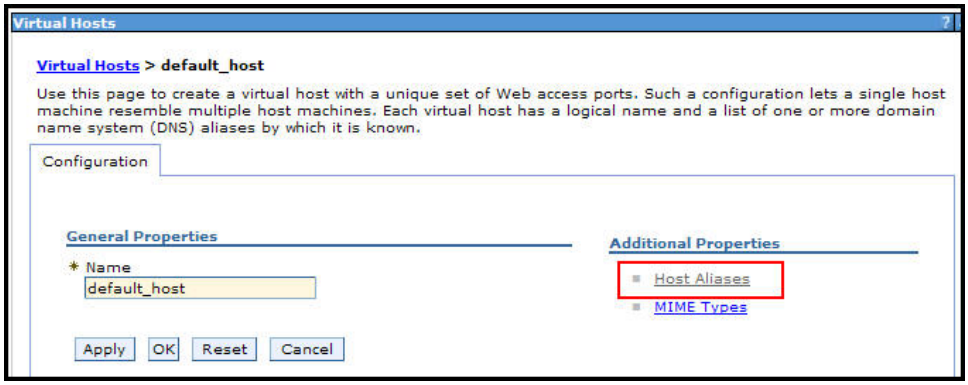
2. Select **Default Host.**

Figure 2-12: Default Host



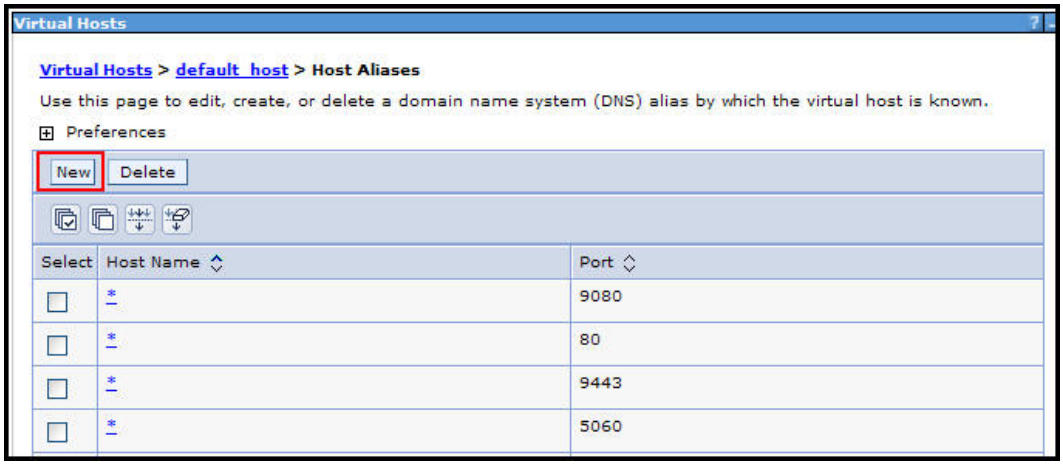
3. Select **Host Aliases**.

Figure 2-13: Host Aliases



4. Select **New**.

Figure 2-14: Create New Host Alias



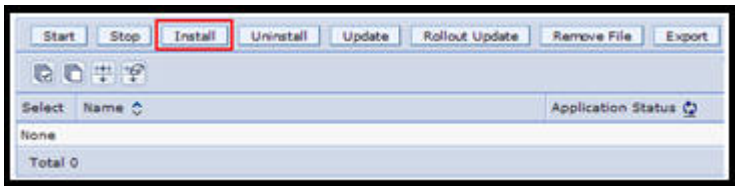
5. Change the Port to the desired number.
    - Standard is 908x where x is incremented up starting at 1 for each additional server added.
6. Click **OK**.
7. Save and Sync.

Install New Application

Deploy the Web Application Utility

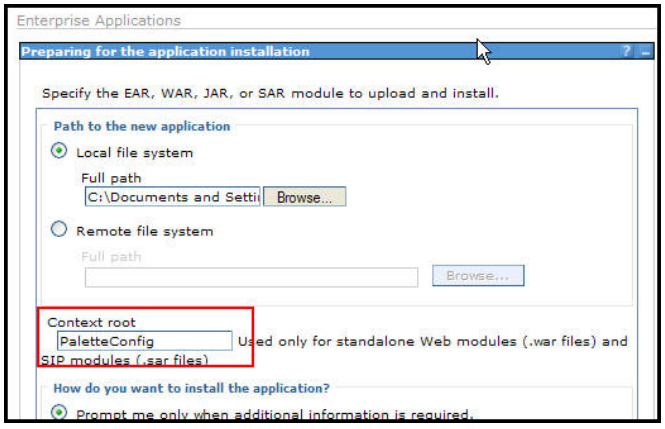
1. Select Applications → Enterprise Application → Install.

Figure 2-15: Install the Application



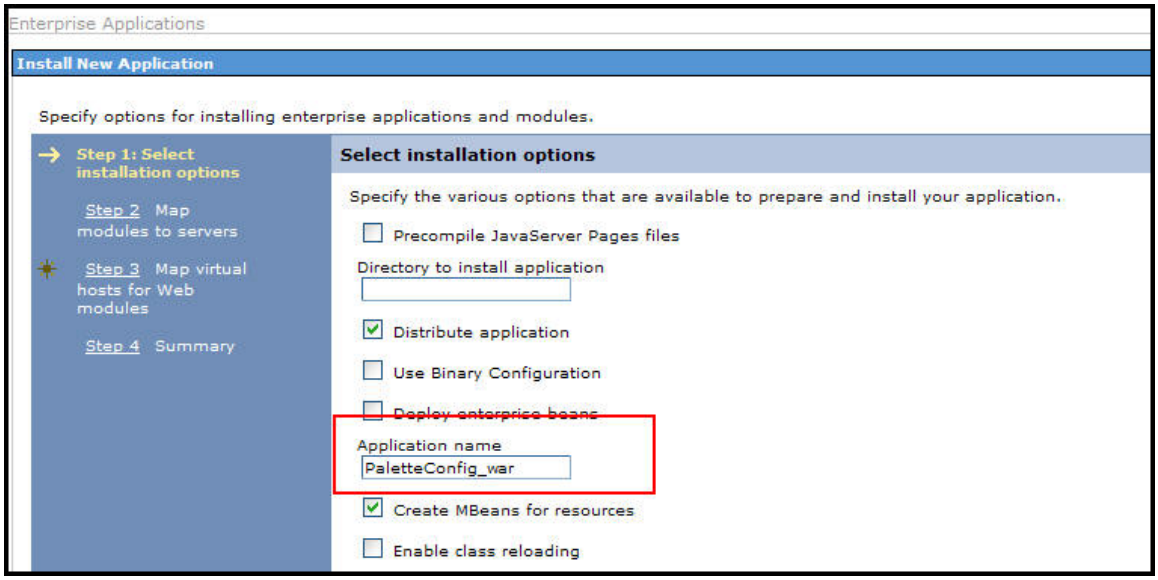
2. If upgrading an existing Application select **Update**.
    a. If uploading from your machine, under Local file system, click browse and select the **PaletteConfig.war** file.
    b. If uploading from the server, select the Remote file system, and enter the path to the **PaletteConfig.war** file.
3. Set the Context root to **PaletteConfig** and click **Next**.

Figure 2-16: Set Context Root



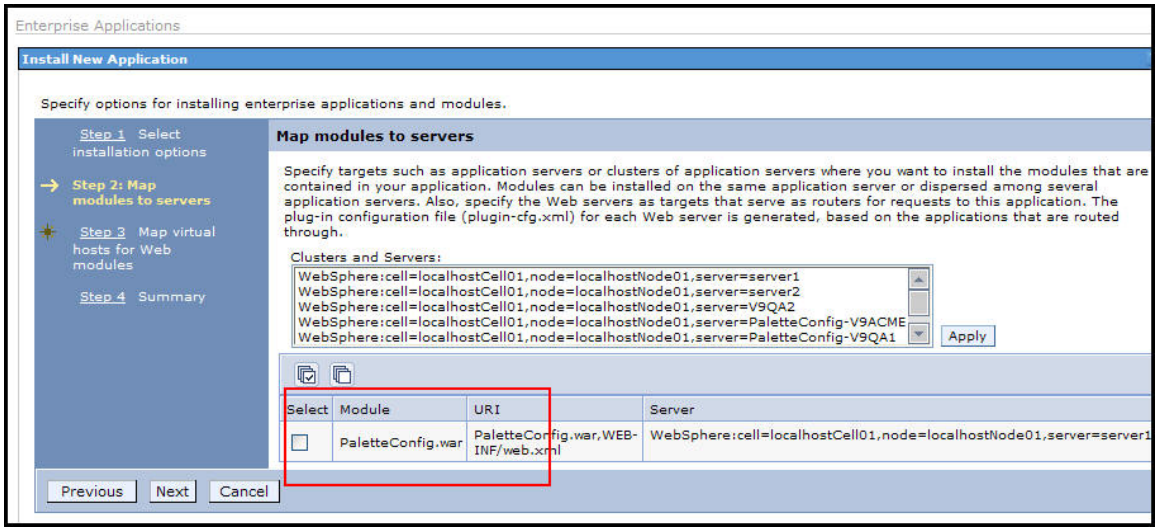
4. If you wish to specify a **Directory to install the application** or change the **Application name** you can do so from here, otherwise click **Next**. If you have multiple servers you will need to change the **Application name** to differentiate between them.

Figure 2-17: Select Install Options



5. Click **Next**. If you have multiple servers you will have to select the server you want under **Clusters and Servers.** Then click the PaletteConfig.war file, click **Apply** and click **Next**.

Figure 2-18: Select .war File

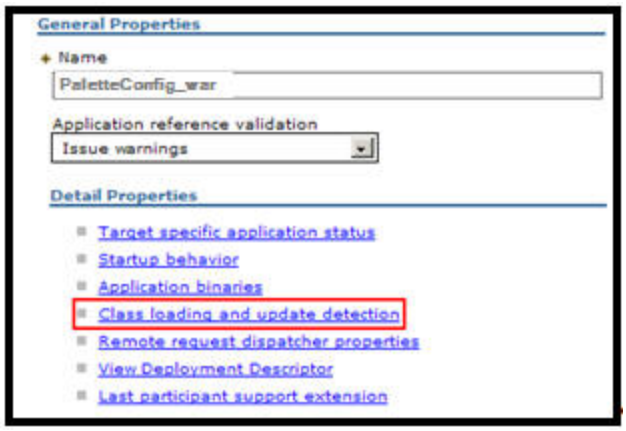


6. Review your configuration and make any necessary changes.
7. If no changes are needed click **Finish**.
8. Once installation is complete click **Save**. When synchronization is complete click **OK**.

Configure the Application

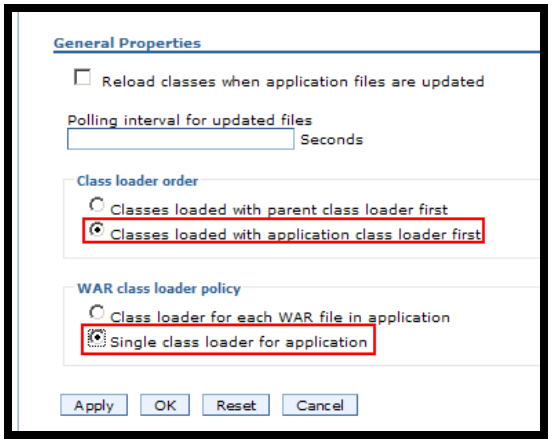
1. Select Application → Enterprise Application → New Application. You are looking for the one you just created.
2. Click **Class Loading and update detection** under **Detail Properties**.

Figure 2-19: Select Class Loading



3. Select **Classes loaded with application class loader first** and **Single class loader for application**.

Figure 2-20: Specify Class Loader Order



4. Click **OK** and **Save**.

Start the Application

1. Select Servers → Application Servers.
2. Select the server(s) you wish to start.
3. Click **Start**.

IMPORTANT: If there are installation errors, your application will not start. Check the System.Out log for error messages. You will need to be well versed in WebSphere and JAVA to decipher the error messages. Here are a few sample locations for the System.Out log.

Windows: E:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01\logs\server1\
Linux: /opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/

Depending on where you have WebSphere installed, the first few folders of the location may vary. In both instances above, the Application Server name is "server1". The AppSrv01 name might also differ depending on the installation of WebSphere.

4. Wait for the page to refresh and the icon under Application Status to turn to a green arrow.
5. In your browser, go to: http://**servername**:**portnumber/PaletteConfig/** replacing the **servername** and **portnumber** with the correct information.
6. The default log-in ID and password is *admin*.

IMPORTANT: The servername and portnumber are the ones you should use when setting-up environment properties for the Rules Palette.

IMPORTANT: Keep this application running while users access the Rules Palette or they will not be able to log-in.

You have successfully completed the installation process for the Web Application Utility. Before users can install the Rules Palette, the build manager needs to upload the Rules Palette to the Web Application Utility and configure the Rules Palette environment properties.

Upload Rules Palette to Web Application Utility

1. Move the Rules Palette zip file out of the Media Pack download and put it on your desktop.
2. Navigate to the Web Application Utility using the following URL: http://**servername:port**/PaletteConfig/. The servername and port should be the one you used when you set-up the Web Application Utility.
3. Enter the default user name (admin) and password (admin) and select **login**.
4. Change the user ID and password immediately to a more secure user ID and password.
5. Click **Palette Versions** | **Upload**.

Figure 2-21: Upload Rules Palette zip file

6. Click **Browse** and select the Rules Palette zip file, then click **Open.**
7. Click **Upload**.

You can add additional versions of the Rules Palette by following the same steps listed above. Make sure each version has a distinctive name so that the user can select the appropriate version of the Rules Palette version for download.

You have successfully uploaded the Rules Palette zip file. You can now establish the environment connection properties for the Rules Palette.

Set-up Rules Palette Environment Properties with the Web Application Utility

The Build Manager will use the Web Application Utility to configure the environment properties and the remote debugging Web Service for the Rules Palette. When Rules Palette users create a new environment, they will need the host name, port number, palette user name and password and database ID and password, which the Build Manager will provide for them. The Build Manager will manage environment settings from this application.

Set-Up Rules Palette Environment Settings

1. Navigate to the Web Application Utility using the following URL: http://**servername:port**/PaletteConfig/. The servername and port should be the one you used when you set-up the Web Application Utility.
2. Enter the default user name (admin) and password (admin) and select **login**.
3. Change the user ID and password immediately to a more secure user ID and password.
4. Under the Environment Options tab select **Edit**.
5. Enter the information for the environment:
    a. PaletteVersion: Enter the version of the palette that will be used. This is used to ensure the corresponding Oracle Insurance Policy Administration version is used.
    b. PaletteBuildNumber: Enter the build number of the palette that will be used.
    c. ApplicationType: Either OIPA for the Policy Administration system or NBUW for New Business Underwriting.
    d. ApplicationEnvType: Either Development or Production for the type of environment.
    e. DebuggerWebserviceUrl: http://servername:port/PASJava/service/DebuggerService?wsdl. This is the URL for the Web Service used to connect for remote debugging. The servername and port should be the same as the servername and port for the Oracle Insurance Policy Administration application.
    f. DebugUserName: Enter the debug user name.
    g. DebugPassword: Enter the debug password.
    h. ApplicationDatabaseType: SQL Server, DB2 or Oracle.
    i. ApplicationDatabaseServer: Server where the database is located.
    j. ApplicationDatabasePort: Port for database.
    k. ApplicationDatabaseName: Name of the database. Only needed for SQL Server and DB2.
    l. ApplicationDatabaseSchema: Schemas of the database. Only needed for DB2.
    m. ApplicationSID: Only needed for Oracle.
    n. ApplicationDatabaseUserName: Enter the database user name.
    o. ApplicationDatabasePassword: Enter the database password.

6. Select the **Yes** radio button for IVS if you will be using an IVS environment.
    a. Enter the IVS environment information.
    b. IVSDatabaseType: SQL Server, DB2 or Oracle.
    c. IVSDatabaseServer: Server where the database is located.
    d. IVSDatabasePort: Port of the database.

e. IVSDatabaseName: Name of the database.
f. IVSDatabaseSchema: Schema of the database.
g. IVSDatabaseUserName: Enter the IVS database user name.
h. IVSDatabasePassword: Enter the IVS database password.
i. IVSEnv: Name of the IVS environment that will be used.
j. IVSTrackNumber: Track number of the IVS environment that will be used.

7. Select **Save**.
8. Send the server name, port information and the three sets of user names and passwords (database, IVS database and palette user names and passwords) to the Rules Palette users so that they can set-up the environment.

You have successfully completed the environment properties set-up for the Rules Palette. You can now install the Rules Palette application or you can send the environment connection information to the Rules Palette users so that they may install the application.

Rules Palette Installation

The Rules Palette can only be installed after the Web Application Utility has been used to set-up the environment properties.

Prerequisites

- Servername where the Web Application Utility resides.
- Portnumber of the Web Application Utility.
- Database ID and passwords provided by the build manager or server administrator who installed the Web Application Utility.
- URL of the Web Application Utility. You will download the Rules Palette from this utility.
- Location of the **swingx-beaninfo-1.0.jar** file and the **swingx-1.0.jar** file. You will need to put these two files in the **asgraphicruleside\modules\ext folder** during installation.
- Location of the JDBC drive file for the database type you are using. You will need to point to this location when setting up the environment connection in the Rules Palette.

Install the Rules Palette

1. Navigate to the Web Application Utility using the following URL: http://**servername:port**/PaletteConfig/.
2. Click **Download Palette Version**.

Figure 3-1: Download Palette Version

3. Click **Download** next to the version of the Rules Palette that you want to download.
4. Click **Open** from the File Download window when it asks what you want to do with the file. It will take a few minutes for the file to download. Once the file has been downloaded, it should automatically open with the compression software that is available on your system. If you do not have compression software, contact your IT department.
5. Extract the files using your compression software and save the files to your local computer in the following folder:

   C:/Program files/Oracle/RulesPalette
6. Download the two swing-x.jar files and place them in the **asgraphicruleside\modules\ext** folder.
   a. Navigate to http://www.swinglabs.org/.
   b. Click **Downloads** on the top menu bar.
   c. Click **Download** under the Binaries column for the SwingX 1.0 project.
   d. Click **Save** when the File Download dialog box appears and save the file to your desktop.
   e. Open the file and double-click the **swingx-1.0** folder and then double-click the **dist** folder.
   f. Select the **swingx1.0.jar** and **swingxbeaninfo-1.0.jar** files and move them to the **asgraphicruleside\modules\ext** folder, which is located in the Rules Palette folder where you saved the application files.
7. Launch the Rules Palette via the executable file **asgraphicruleside.exe.** This file will run the Rules Palette. To launch the application, double-click on the executable file. This executable file can be found in the following directory:

   C:\Program Files\Oracle\RulesPalette\bin

8. Create a shortcut on your Windows Desktop. You should create a shortcut to the executable file so that it is easier to access the Rules Palette. To create a shortcut, right-click on the asgraphiculeside.exe file (*C:/Program Files/Oracle/RulesPalette/bin*) and select **Create Shortcut**. Once the short-cut appears, drag it out onto your desktop.

You have successfully installed the Rules Palette application. Now you need to establish environment connections. If Rules Palette users will be performing the next step, then they will need the *Rules Palette User Installation Guide* located on the OTN. This guide is under Documentation | Insurance | Oracle Insurance Policy Administration Library E16287_01.

Create an Environment Connection in the Rules Palette

1. Open the Rules Palette and select either the Global Rules Explorer tab or the Main Explorer tab.
2. Right-click anywhere in the tab and select **Create Environment from Web Service** from the right-click menu.
3. Enter a descriptive environment name that will allow you to distinguish between the various environment connections you create. Alphabet characters only are allowed in the name. Numbers and special characters are not supported at this time.
4. Enter the Configuration Server (server name).
5. Enter the Configuration Port information.
6. Enter your palette username.
7. Enter your palette password.
8. Check the automatic log-on box if you want the application to automatically log you on once the environment creation is complete.
9. Click **Test Configuration Server** to test your connection to the Web Service that will auto-populate your database properties. If the connection is successful, click **Next**.

Note: If you receive an error message that says your username and password are incorrect, check your configuration server and port information as well. There are instances where errors in these fields also trigger the username and password error.

10. Browse to the location of the jdbc driver files. (SqlServer uses the jtds.jar and DB2 uses three jar files beginning with db2_***.jar.) You will only need to specify the jar file location the first time you set-up an environment. If you create additional environments, then this Browse field will not display.
11. Enter the user ID and password for the OIPA database. The database properties should be grayed out and listed in the database fields directly above the user ID and password.
12. Click **Test Connection** to test your database connection. If the connection is not successful, review the properties you set-up in the Web Application Utility.
13. Enter the user ID and password for the IVS database. The IVS database properties should be grayed out and listed in the database fields directly above the user ID and password.
14. Click **Test Connection** to test your IVS database connection. Once both connections are successful, click **Finish**.

A node for the environment you just created will display on the Main Explorer and Global Rules Explorer tabs. If you did not check the automatic log-in box, you will need to log-in now. Right-click on the node and select **Log-in** to access the Rules Palette application. Enter the palette log-in name and password you used in step one of the environment creation wizard.

Note: Refer to the Rules Palette help system for instructions on operating the Rules Palette. The help system is located inside the Rules Palette application.

You have successfully created an environment connection in the Rules Palette application. Now you need to reload security scripts.

Re-load Security Scripts

After you have completed the initial installation of the OIPA and Rules Palette applications, security scripts must be re-loaded in the database. This step is important because it grants each primary company access to the Web Services. You will also need to perform this step when a new company is created or when a company is deleted.

Each type of database will need its own security script.

SQL Server

Oracle

DB2

Run Security Scripts for SQL Server Database

1. Open your database query software.
2. Type **delete * from AsAuthCompanyWebService** and execute the query to delete all records from the AsAuthCompanyWebService table.
3. Type the following query as shown below and then execute the query.

```
INSERT INTO AsAuthCompanyWebService
SELECT AuthCompanyGUID, AuthWebService.AuthWebServiceGUID
  FROM AsAuthCompany,
      (SELECT '7B629464-31DE-4A2C-B415-F9BD45F492FA' AS AuthWebServiceGUID
       UNION ALL
       SELECT '5ADC18E4-D752-4D3D-BEFE-5AA626210768' AS AuthWebServiceGUID
       UNION ALL
       SELECT '5007146B-326D-447C-B11B-F1A9CD7489B2' AS AuthWebServiceGUID
       UNION ALL
       SELECT 'FD913858-B77A-40B1-9B6A-71E1191AA807' AS AuthWebServiceGUID)
AuthWebService
GO
```

Note: If you cannot access a Web Service after reloading security scripts, re-run your Web Service definitions to make sure the Web Services you are referencing in the security scripts are the same ones in your database.

Run Security Scripts for Oracle Database

1. Open your database query software.
2. Type **delete * from AsAuthCompanyWebService** and execute the query to delete all records from the AsAuthCompanyWebService table.
3. Type the following query as shown below and then execute the query.

```
INSERT INTO AsAuthCompanyWebService
SELECT AuthCompanyGUID, AuthWebService.AuthWebServiceGUID
  FROM AsAuthCompany,
      (SELECT '7B629464-31DE-4A2C-B415-F9BD45F492FA' AS AuthWebServiceGUID FROM
DUAL
        UNION ALL
       SELECT '5ADC18E4-D752-4D3D-BEFE-5AA626210768' AS AuthWebServiceGUID FROM
DUAL
        UNION ALL
       SELECT '5007146B-326D-447C-B11B-F1A9CD7489B2' AS AuthWebServiceGUID FROM
DUAL
        UNION ALL
       SELECT 'FD913858-B77A-40B1-9B6A-71E1191AA807' AS AuthWebServiceGUID FROM
DUAL ) AuthWebService
GO
```

Note: If you cannot access a Web Service after reloading security scripts, re-run your Web Service definitions to make sure the Web Services you are referencing in the security scripts are the same ones in your database.

Run Security Scripts for DB2 Database

1. **Open your database query software.**
2. Type **delete * from AsAuthCompanyWebService** and execute the query to delete all records from the AsAuthCompanyWebService table.
3. Type the following query as shown below and then execute the query.

```
INSERT INTO AsAuthCompanyWebService
SELECT AuthCompanyGUID, AuthWebService.AuthWebServiceGUID
  FROM AsAuthCompany,
      (SELECT '7B629464-31DE-4A2C-B415-F9BD45F492FA' AS AuthWebServiceGUID FROM
SYSIBM.SYSDUMMY1
        UNION ALL
       SELECT '5ADC18E4-D752-4D3D-BEFE-5AA626210768' AS AuthWebServiceGUID FROM
SYSIBM.SYSDUMMY1
        UNION ALL
       SELECT '5007146B-326D-447C-B11B-F1A9CD7489B2' AS AuthWebServiceGUID FROM
SYSIBM.SYSDUMMY1
        UNION ALL
       SELECT 'FD913858-B77A-40B1-9B6A-71E1191AA807' AS AuthWebServiceGUID FROM
SYSIBM.SYSDUMMY1 ) AuthWebService
GO
```

Note: If you cannot access a Web Service after reloading security scripts, re-run your Web Service definitions to make sure the Web Services you are referencing in the security scripts are the same ones in your database.

Re-Run Web Service Definitions for SQL

1. Open your database query software.
2. Type the following query as shown below and then execute the query.

```
INSERT INTO AsAuthWebService (AuthWebServiceGUID, WebServiceName)
SELECT '7B629464-31DE-4A2C-B415-F9BD45F492FA' AS AuthWebServiceGUID, 'FileReceived'
AS WebServiceName
  UNION ALL
SELECT '5ADC18E4-D752-4D3D-BEFE-5AA626210768' AS AuthWebServiceGUID, 'InputRequest'
AS WebServiceName
  UNION ALL
SELECT '5007146B-326D-447C-B11B-F1A9CD7489B2' AS AuthWebServiceGUID,
'DebuggerService'
AS WebServiceName
  UNION ALL
SELECT 'FD913858-B77A-40B1-9B6A-71E1191AA807' AS AuthWebServiceGUID,
'ExposedComputation'
AS WebServiceName
GO
```

Re-Run Web Service Definitions for Oracle

1. Open your database query software.
2. Type the following query as shown below and then execute the query.

```
INSERT INTO AsAuthWebService (AuthWebServiceGUID, WebServiceName)
SELECT '7B629464-31DE-4A2C-B415-F9BD45F492FA' AS AuthWebServiceGUID, 'FileReceived'
AS WebServiceName FROM DUAL
   UNION ALL
SELECT '5ADC18E4-D752-4D3D-BEFE-5AA626210768' AS AuthWebServiceGUID, 'InputRequest'
AS WebServiceName FROM DUAL
   UNION ALL
SELECT '5007146B-326D-447C-B11B-F1A9CD7489B2' AS AuthWebServiceGUID,
'DebuggerService'
AS WebServiceName FROM DUAL
   UNION ALL
SELECT 'FD913858-B77A-40B1-9B6A-71E1191AA807' AS AuthWebServiceGUID,
'ExposedComputation'
AS WebServiceName FROM DUAL
GO
```

Re-run Web Service Definitions for DB2

1. Open your database query software.
2. Type the following query as shown below and then execute the query.

```
INSERT INTO AsAuthWebService (AuthWebServiceGUID, WebServiceName)
SELECT '7B629464-31DE-4A2C-B415-F9BD45F492FA' AS AuthWebServiceGUID, 'FileReceived'
AS WebServiceName FROM SYSIBM.SYSDUMMY1
   UNION ALL
SELECT '5ADC18E4-D752-4D3D-BEFE-5AA626210768' AS AuthWebServiceGUID, 'InputRequest'
AS WebServiceName FROM SYSIBM.SYSDUMMY1
   UNION ALL
SELECT '5007146B-326D-447C-B11B-F1A9CD7489B2' AS AuthWebServiceGUID,
'DebuggerService'
AS WebServiceName FROM SYSIBM.SYSDUMMY1
   UNION ALL
SELECT 'FD913858-B77A-40B1-9B6A-71E1191AA807' AS AuthWebServiceGUID,
'ExposedComputation'
AS WebServiceName FROM SYSIBM.SYSDUMMY1
GO
```