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Preface

This documentation provides the installation and configuration instructions for installing new releases of Omni-Payer™ Management Central (OPMC). In this release, OPMC includes the Omni-Payer 360 Viewer application. This manual is intended for Omni-Payer administrators and data stewards.

How This Manual Is Organized

This manual includes the following chapters:

<table>
<thead>
<tr>
<th>Chapter/Appendix</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Installing Omni-Payer Management Central and Deploying to IBM WebSphere Application Server.</td>
</tr>
<tr>
<td>2</td>
<td>Uninstalling Omni-Payer Management Central From IBM WebSphere Application Server.</td>
</tr>
<tr>
<td>A</td>
<td>Installing or Upgrading WSO2 Identity Server (WSO2 IS).</td>
</tr>
</tbody>
</table>

Documentation Conventions

The following table lists and describes the documentation conventions that are used in this manual.
### Related Publications

Visit our Technical Documentation Library at [http://documentation.informationbuilders.com](http://documentation.informationbuilders.com). You can also contact the Publications Order Department at (800) 969-4636.

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**Help Us to Serve You Better**

To help our consultants answer your questions effectively, be prepared to provide specifications and sample files and to answer questions about errors and problems.

The following table lists the environment information that our consultants require.

<table>
<thead>
<tr>
<th>Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>OS Version</td>
</tr>
<tr>
<td>JVM Vendor</td>
</tr>
<tr>
<td>JVM Version</td>
</tr>
</tbody>
</table>

The following table lists the deployment information that our consultants require.

<table>
<thead>
<tr>
<th>Adapter Deployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container</td>
</tr>
<tr>
<td>Version</td>
</tr>
</tbody>
</table>
### Enterprise Information System (EIS) - if any

<table>
<thead>
<tr>
<th>Enterprise Information System (EIS) - if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIS Release Level</td>
</tr>
<tr>
<td>EIS Service Pack</td>
</tr>
<tr>
<td>EIS Platform</td>
</tr>
</tbody>
</table>

The following table lists iWay-related information needed by our consultants.

<table>
<thead>
<tr>
<th>iWay Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>iWay Release Level</td>
</tr>
<tr>
<td>iWay Patch</td>
</tr>
</tbody>
</table>

The following table lists additional questions to help us serve you better.

<table>
<thead>
<tr>
<th>Request/Question</th>
<th>Error/Problem Details or Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the problem arise through a service or event?</td>
<td></td>
</tr>
<tr>
<td>Provide usage scenarios or summarize the application that produces the problem.</td>
<td></td>
</tr>
<tr>
<td>When did the problem start?</td>
<td></td>
</tr>
<tr>
<td>Can you reproduce this problem consistently?</td>
<td></td>
</tr>
<tr>
<td>Describe the problem.</td>
<td></td>
</tr>
<tr>
<td>Describe the steps to reproduce the problem.</td>
<td></td>
</tr>
<tr>
<td>Specify the error messages.</td>
<td></td>
</tr>
<tr>
<td>Request/Question</td>
<td>Error/Problem Details or Information</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Any change in the application environment: software configuration, EIS/database configuration, application, and so forth?</td>
<td></td>
</tr>
<tr>
<td>Under what circumstance does the problem not occur?</td>
<td></td>
</tr>
</tbody>
</table>

The following is a list of error and problem files that might be applicable.

- Input documents (XML instance, XML schema, non-XML documents)
- Transformation files
- Error screen shots
- Error output files
- Trace files
- Service Manager package to reproduce problem
- Custom functions and agents in use
- Diagnostic Zip
- Transaction log

For information on tracing, see the *iWay Service Manager User's Guide*.

**User Feedback**

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. Please use the Reader Comments form at the end of this document to communicate your feedback to us or to suggest changes that will support improvements to our documentation. You can also contact us through our website, [http://documentation.informationbuilders.com/connections.asp](http://documentation.informationbuilders.com/connections.asp).

Thank you, in advance, for your comments.

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Installing Omni-Payer Management Central and Deploying to IBM WebSphere Application Server

This section describes how to install Omni-Payer Management Central (OPMC) and then deploy OPMC to IBM WebSphere Application Server.

Topics:
- Overview
- Preparing the Omni-Payer Management Central Home Environment
- Starting and Stopping IBM WebSphere Application Server
- Configuring Heap Sizes and JVM Settings
- Configuring Name Space Bindings
- Configuring JDBC Providers
- Installing the Remediation Service
- Resolving Library Conflicts
- Installing and Deploying the OPMC Application
- Known Issues
Overview

Omni-Payer is an enterprise master data application that combines an enterprise master payer index with pre-packaged models to provide full payer identity management, and easily achieve a 360-degree view of key entities, with a single golden record for each payer, provider, workforce and facility.

IBM WebSphere Application Server performs the role of a web application server. More specifically, it is a software framework and middleware that hosts Java based web applications. It is the flagship product within the IBM WebSphere software suite.

Omni-Payer Management Central (OPMC) is a portal web application, running in the IBM WebSphere Application Server, which provides a 360 viewer application, an Advanced Remediation application, and a Data Dictionary application. These applications combine to expose, display, and allow for the remediation of enterprise master data stored in Omni-Payer.

OPMC also uses a WSO2 Identity Server (WSO2 IS) component to provide user authentication and role-based data access authorization services to the OPMC web application. For more information on installing or upgrading WSO2 IS, see Installing or Upgrading WSO2 Identity Server on page 67.

Preparing the Omni-Payer Management Central Home Environment

This section describes how to prepare the Omni-Payer Management Central (OPMC) home environment.

1. Copy the opay_home directory to the local drive of your computer.
   
   **Note:** This directory is supplied as part of the delivery installation package.

2. If Omni-Payer is using a DB2 database, then edit the remediation.properties file, which is located in the following directory:

   opay_home/Properties

   Change:

   workflow.sql=sql/mssql/

   To:

   workflow.sql=sql/db2/

   **Note:** Microsoft SQL Server (MS SQL) is set by default.
Starting and Stopping IBM WebSphere Application Server

The following are typical start and stop command formats for IBM WebSphere Application Server. You must substitute the `/usr/local` path and the server name values with the path and server names in your specific IBM WebSphere Application Server instance.

Use the following command to **start** IBM WebSphere Application Server:

```
/usr/local/subin/ibmwas8-start AppSrv01 server1
```

Use the following command to **stop** IBM WebSphere Application Server:

```
/usr/local/subin/ibmwas8-stop AppSrv01 server1
```

Configuring Heap Sizes and JVM Settings

This section describes how to configure heap sizes and JVM settings for IBM WebSphere Application Server using the Administrative Console.

1. Ensure the IBM WebSphere Application Server is started.
2. Enter the following URL in a browser to access the IBM WebSphere Application Server Administrative Console:

   ```
   http://localhost:port/ibm/console/login.do
   ```

   where:

   - `localhost`
     - Is the name the system that is hosting IBM WebSphere Application Server.

   - `port`
     - Is the configured port number where the IBM WebSphere Application Server is listening.
3. Configure the heap size for the server by performing the following steps:

   a. From the Servers section on the left pane, expand Server Types, click WebSphere application servers, and then on the right pane, click the name of an available server (for example, server1) in the Application servers section.
b. In the Server Infrastructure section, expand *Java and Process Management* and click *Process definition*, as shown in the following image.
The Process definition pane opens, as shown in the following image.

![Process definition pane image]

**c.** In the Additional Properties section, click *Java Virtual Machine*.

4. Set the following properties:
   - Initial heap size: **512**
Maximum heap size: **1024** (or more if required)

5. Configure the JVM settings by performing the following steps:

   a. From Application servers, click **server**, **Java Process Management**, select **Process Definition**, click **Java Virtual Machine**, and then set Generic JVM arguments to:

      ```
      -Xverify:none
      ```


      Add the following custom property:

      ```
      com.ibm.ws.classloader.getInputStream.enableIOException
      ```

      Set this custom property value to **true**.

   c. From Application servers, click **server**, Select **Web container**, and then click **Custom Properties**.
Add the following custom property:

```
com.ibm.ws.webcontainer.invokeFiltersCompatibility
```

Set this custom property value to `true`.

---

**Configuring Name Space Bindings**

**How to:**

Configure Name Space Bindings

This section describes how to configure name space bindings for the WSO2 server using the IBM WebSphere Application Server Administrative Console.
Procedure: How to Configure Name Space Bindings

1. Expand the Environment section, expand Naming, and then click Name space bindings, as shown in the following image.
2. From the drop-down list, select the node and the server (for example, Node=iwaix3Node01, Server=server1), as shown in the following image.

![Image of Name Space Bindings](image)

3. Click New and then click Next.
4. In the Specify basic properties section, enter the required parameters. The following table lists and describes the requested parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binding Identifier</td>
<td>Name in the Environment properties value.</td>
</tr>
<tr>
<td>Name in name space relative to lookup name prefix</td>
<td>The value in the Binding Identifier.</td>
</tr>
<tr>
<td>String Value</td>
<td>The value in the Environment properties.</td>
</tr>
</tbody>
</table>

5. After entering the values, click Next, click Finish, and then click Save.

6. Configure the following properties, as listed in the table below:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binding Identifier</td>
<td>is.wso2.url</td>
</tr>
<tr>
<td>Name in name space relative to lookup name prefix</td>
<td>is.wso2.url</td>
</tr>
<tr>
<td>String value</td>
<td>https://[company_specific_machine_name]:9443</td>
</tr>
</tbody>
</table>
### Configuring Name Space Bindings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property 2:</strong></td>
<td></td>
</tr>
<tr>
<td>Binding Identifier</td>
<td>is.wso2.username</td>
</tr>
<tr>
<td>Name in name space relative to lookup name prefix</td>
<td>is.wso2.username</td>
</tr>
<tr>
<td>String value</td>
<td>PRIMARY/admin</td>
</tr>
<tr>
<td><strong>Property 3:</strong></td>
<td></td>
</tr>
<tr>
<td>Binding Identifier</td>
<td>is.wso2.password</td>
</tr>
<tr>
<td>Name in name space relative to lookup name prefix</td>
<td>is.wso2.password</td>
</tr>
<tr>
<td>String value</td>
<td>admin</td>
</tr>
<tr>
<td><strong>Property 4:</strong></td>
<td></td>
</tr>
<tr>
<td>Binding Identifier</td>
<td>logging.elk.url</td>
</tr>
<tr>
<td>Name in name space relative to lookup name prefix</td>
<td>logging.elk.url</td>
</tr>
<tr>
<td>String value</td>
<td>0.0.0.0:0</td>
</tr>
<tr>
<td><strong>Property 5:</strong></td>
<td></td>
</tr>
<tr>
<td>Binding Identifier</td>
<td>logging.elk.enabled</td>
</tr>
<tr>
<td>Name in name space relative to lookup name prefix</td>
<td>logging.elk.enabled</td>
</tr>
<tr>
<td>String value</td>
<td>false</td>
</tr>
<tr>
<td><strong>Property 6:</strong></td>
<td></td>
</tr>
<tr>
<td>Binding Identifier</td>
<td>source.url</td>
</tr>
<tr>
<td>Name in name space relative to lookup name prefix</td>
<td>source.url</td>
</tr>
<tr>
<td>Parameter</td>
<td>Property</td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>String value</td>
<td>http://{company_specific_machine_name}:9280/workflow/</td>
</tr>
</tbody>
</table>

**Property 7:**
- **Binding Identifier**: wfService.url
- **Name in name space relative to lookup name prefix**: wfService.url
- **String value**: http://{company_specific_machine_name}:9280/workflow/

**Property 8:**
- **Binding Identifier**: Omni.Home
- **Name in name space relative to lookup name prefix**: Omni.Home
- **String value**: {company_specific_defined_directory_of_omnihome}. For example: /prog/opay_home/
  - **Note**: This value must point to the Omni-Payer home directory that was configured.

**Property 9:**
- **Binding Identifier**: OPMC.HOME
- **Name in name space relative to lookup name prefix**: OPMC.HOME
- **String value**: {company_specific_defined_directory_of_omnihome}. For example: /prog/opay_home/
  - **Note**: This value is used by the Data Dictionary. Also note that this should be the same directory as Omni.Home, but in the value, do not insert the trailing forward slash.

7. Click **Finish**, and then click **Save**.
Configuring JDBC Providers

In this section:

H2 Database
Omni-Payer DB2 Database

This section describes how to configure JDBC providers for the H2 database and Omni-Payer DB2 database.

H2 Database

How to:

Configure a JDBC Provider for the H2 Database

This section describes how to configure a JDBC provider for the H2 database, which will be used to store the Omni-Payer configuration database location.
**Procedure: How to Configure a JDBC Provider for the H2 Database**

1. In the Resources section, expand JDBC, and then click JDBC providers, as shown in the following image.
2. From the Scope/Server drop-down list, select the node and the server (for example, \( \text{Node=iwaix3Node01, Server=server1} \)), and then click New, as shown in the following image.

The Create new JDBC provider pane opens, as shown in the following image.
3. Enter the required parameters, as shown in the following table.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>User-defined</td>
</tr>
<tr>
<td>Implementation class name</td>
<td>org.h2.jdbcx.JdbcDataSource</td>
</tr>
<tr>
<td>Name</td>
<td>H2 Provider</td>
</tr>
<tr>
<td>Description</td>
<td>H2 JDBC 2.0-compliant Provider configuration</td>
</tr>
</tbody>
</table>

4. Click Next.

The Enter database class path information pane opens, as shown in the following image.

5. In the Class path field, enter the path where the h2.jar file is located, for example:

   C:/h2-1.3.176.jar


   **Note:** The H2 .jar file for IBM WebSphere Application Server version 8.5.5 in the AIX environment .jar must be version 1.4.186 or higher (for example, h2-1.4.186.jar).

6. Click Next.
7. Click *Finish*.

8. Set up the configuration database data source.

   This data source will be used by the Omni-Payer application to get a connection configuration (metadata) data source.

   a. Click *Data sources*, as shown in the following image.
b. Click New.

The Enter basic data source information pane opens, as shown in the following image.

c. In the Data source name field, enter `config.db`.

d. In the JNDI name field, enter `config.db`.

e. Click Next.

f. In the Data store helper class name field, enter `com.ibm.websphere.rsadapter.ConnectJDBCDataStoreHelper`, as shown in the following image.
g. Click Next, and then click Next again, using the default selections.

h. Click Finish.

i. Click `config.db`, as shown in the following image.

![Image of JDBC providers configuration](image-url)
j. In the Additional Properties section, click **Custom Properties**.

![Custom Properties](image)

k. Click **New**, as shown in the following image.

![New](image)
I. Adding each property value individually, create the following properties (taken from the config.db JNDI property configuration) and click OK and then New after each property:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property 1:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>auth</td>
</tr>
<tr>
<td>Value</td>
<td>Container</td>
</tr>
<tr>
<td><strong>Property 2:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>type</td>
</tr>
<tr>
<td>Value</td>
<td>javax.sql.DataSource</td>
</tr>
<tr>
<td><strong>Property 3:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>pooled</td>
</tr>
<tr>
<td>Value</td>
<td>true</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td><strong>Property 4:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>driverClassName</td>
</tr>
<tr>
<td>Value</td>
<td>org.h2.Driver</td>
</tr>
<tr>
<td><strong>Property 5:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>username</td>
</tr>
<tr>
<td>Value</td>
<td>sa</td>
</tr>
<tr>
<td><strong>Property 6:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td></td>
</tr>
<tr>
<td><strong>Property 7:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>password</td>
</tr>
<tr>
<td>Value</td>
<td>password</td>
</tr>
<tr>
<td><strong>Property 8:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>URL</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>The absolute path must be used to define where the production database will be written to. In this case, write it to /prog/lc10683/prod-db (directory). Replace /prog/lc10683/prod-db with a site-specific directory.</td>
</tr>
<tr>
<td>Value</td>
<td>jdbc:h2:/prog/lc10683/prod-db/prodDb;MVCC=TRUE;LOCK_TIMEOUT=10000;DB_CLOSE_ON_EXIT=FALSE</td>
</tr>
<tr>
<td><strong>Property 9:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>numTestsPerEvictionRun</td>
</tr>
<tr>
<td>Value</td>
<td>3</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>Property 10:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>testOnBorrow</td>
</tr>
<tr>
<td>Value</td>
<td>true</td>
</tr>
<tr>
<td><strong>Property 11:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>testWhileIdle</td>
</tr>
<tr>
<td>Value</td>
<td>true</td>
</tr>
<tr>
<td><strong>Property 12:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>maxActive</td>
</tr>
<tr>
<td>Value</td>
<td>-1</td>
</tr>
<tr>
<td><strong>Property 13:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>maxIdle</td>
</tr>
<tr>
<td>Value</td>
<td>30</td>
</tr>
<tr>
<td><strong>Property 14:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>maxWait</td>
</tr>
<tr>
<td>Value</td>
<td>10000</td>
</tr>
<tr>
<td><strong>Property 15:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>testonReturn</td>
</tr>
<tr>
<td>Value</td>
<td>false</td>
</tr>
<tr>
<td><strong>Property 16:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>validationQuery</td>
</tr>
<tr>
<td>Value</td>
<td>Select 1</td>
</tr>
<tr>
<td><strong>Property 17:</strong></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>Name</td>
<td>jdbcInterceptors</td>
</tr>
<tr>
<td>Value</td>
<td>ConnectionState</td>
</tr>
<tr>
<td><strong>Property 18:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>validationInterval</td>
</tr>
<tr>
<td>Value</td>
<td>15000</td>
</tr>
<tr>
<td><strong>Property 19:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>maxAge</td>
</tr>
<tr>
<td>Value</td>
<td>600000</td>
</tr>
<tr>
<td><strong>Property 20:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>timeBetweenEvictionRunsMillis</td>
</tr>
<tr>
<td>Value</td>
<td>5000</td>
</tr>
<tr>
<td><strong>Property 21:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>minEvictableIdleTimeMillis</td>
</tr>
<tr>
<td>Value</td>
<td>60000</td>
</tr>
<tr>
<td><strong>Property 22:</strong></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>removeAbandonedTimeout</td>
</tr>
<tr>
<td>Value</td>
<td>120</td>
</tr>
</tbody>
</table>
9. Click *Test connection*, as shown in the following image.

![Test connection image]

**Omni-Payer DB2 Database**

**How to:**
Configure a JDBC Provider for the Omni-Payer DB2 Database

This section describes how to configure a JDBC provider for the Omni-Payer DB2 database.
Procedure: How to Configure a JDBC Provider for the Omni-Payer DB2 Database

1. From the Resources section, expand JDBC and then click JDBC providers, as shown in the following image.
2. From the Scope/Server drop-down list, select the node and the server (for example, *Node=iwaix3Node01, Server=server1*), and then click *New*, as shown in the following image.

The Create new JDBC provider pane opens.

3. Provide the required values for the parameters.
   a. For the Database type drop-down list, select *DB2*.
   b. For the Provider type drop-down list, select *DB2 Universal JDBC Driver Provider*.
   c. For the Implementation type drop-down list, select *Connection Pool Data Source*. 

In the Name field, enter the name of the provider, for example, **DB2 Universal JDBC Driver Provider**.

4. Click Next.
5. In the Class path field, enter the path where the database drivers reside in, and then click Apply, as shown in the following image.

![Create a new JDBC Provider](image)

**Note:** Use a site-specific directory of where the database drivers reside.

6. Click Next.

7. Click Finish.
8. In the following screen that opens, click **OMNIPAY DB2 Universal JDBC Driver Provider**, as shown in the following image.
9. Click Data sources, as shown in the following image.

![Image of Data sources]

10. Click New.

![Image of New option]

11. Create the following JNDI/Names:
   - jdbc/Omni-Workflow
   - jdbc/Omni-Payer
   - jdbc/OmniWorkflow
   - jdbc/OmniDictionary
12. In the JNDI name field, enter:
jdbc/Omni-Workflow

13. Click Next.

The Enter database specific properties for the data source pane opens.

14. Enter the required values for the requested parameters.
   a. In the Database name field, enter the name of the database (for example, iwayprs).
   b. In the Server name field, enter the name of the server, for example, iwaix3.
c. In the Port number field, enter the port number, for example, 60004.

![Create a data source](image)

**Note:** The Database name, server name, and port number in this example are for documentation purposes. You should use a site-specific database name, server name, and port number as it relates to Omni-Payer.

15. Click Next, and then click Next again.

16. Click Finish, and then save your progress.
17. Click Remediation - DB2 Universal JDBC Driver DataSource, as shown in the following image.
18. Click JAAS - J2C authentication data.

19. Click New, as shown in the following image.
The General Properties pane opens, as shown in the following image.

Note: When adding additional JNDI database names, proceed to Step 23 in this procedure.

20. Enter the required values for the requested parameters.

   a. In the Alias field, enter an alias name, for example, iwayprs.
   
   b. In the User Id field, enter a user ID, for example, iwayprs.
   
   c. In the Password field, enter a password, for example, iwayprs.

   Note: The Alias, User ID, and Password in this example are for documentation purposes. You should use a site-specific alias, user ID, and password as it relates to Omni-Payer.

21. Click Ok and then save your work.
22. Click the bread crumb, *Remediation - DB2 Universal JDBC Driver DataSource*, to go back to the previous section, as shown in the following image.
23. In the Security settings section, click the Component-managed authentication alias drop-down list and select `iwaix3Node01/iwayprs`, as shown in the following image.

![Security Settings Screenshot]

**Note:** For documentation purposes, use a site-specific node.

24. Click Apply.
### Configuring JDBC Providers

25. Click **Custom properties**, as shown in the following image.
26. Scroll down the list of properties and then click on `CurrentSchema`, as shown in the following image.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>currentSQLID</td>
<td>Specifies the default schema name that is used to qualify unqualified database objects in dynamically prepared SQL statements. This value of this property sets the value in the CURRENT SQLID special register on a DB2 UDB for OS/390 or z/OS server. If the currentSQLID property is not set, the default schema name is the value in the CURRENT SQLID special register.</td>
<td>false</td>
</tr>
<tr>
<td>currentSchema</td>
<td>Identifies the default schema name used to qualify unqualified database object references where applicable in dynamically prepared SQL statements. Unless currentSchema is used, the default schema name is the authorization id of the current session user.</td>
<td>false</td>
</tr>
<tr>
<td>cursorSensitivity</td>
<td>Specifies whether java.sql.ResultSet.TYPE_SCROLL_SENSITIVE maps to sensitive dynamic or sensitive static scroll. This property is ignored for insensitive scrollable cursors. The default is 0 (TYPE_SCROLLSENSITIVE_STATIC).</td>
<td>false</td>
</tr>
</tbody>
</table>

27. In the Value field, enter `OMNIPAY_WORKFLOW`, as shown in the following image.

Note: This value changes for each schema as it relates to a JNDI data source.

28. Click OK and then click Save.
29. Select the check box for Remediation - DB2 Universal JDBC Driver, and then click Test connection, as shown in the following image.

![Image of JDBC providers page]

A confirmation message indicates that connection was successful.

![Message box showing successful test connection]

30. Repeat Step 12 for the other JNDI database connections listed in Step 11.
Installing the Remediation Service

This section describes how to install the remediation service.

1. Click Install, and then click Browse to select a .war file.

2. Click Next.

3. Select the installation options.
   a. Select Allow EJB reference targets to resolve automatically.
   b. Click Next.

4. Map modules to the servers.
   a. Select iWay 7.0.2 xxxxxxx RemediationService.
   b. Click Next.

5. Map the virtual host for web modules.
   a. Select iWay 7.0.2 xxxxxxx RemediationService.
   b. Leave the default setting for virtual host.
   c. Click Next.

6. Map the context roots for web modules.
   a. Map the context root to /RemediationService.
   b. Click Next.

7. Ensure that there is metadata for modules and then click Next.

8. Review the summary and then click Finish.

9. Once the .war has been deployed, click Save to save it directly to the master configuration.

Resolving Library Conflicts

How to:

Configure Isolated Shared Libraries

This section describes how to configure isolated shared libraries and is used to resolve library conflicts between IBM WebSphere Application Server and the Omni-Payer application. For now, the only conflicted library is the Apache HTTP Client.
**Procedure: How to Configure Isolated Shared Libraries**

To configure isolated shared libraries:

1. From the Environment section, click *Shared libraries*.

2. From the Scope/Server drop-down list, select the node and the server (for example, *Node=iwaix3Node01, Server=server1*), and then click *New*.

3. Enter the required values for the parameters.
   
   a. In the Name field, enter a library name, for example, *apachehttpclient*.

   b. In the Classpath field, enter a list of paths separated by semicolons (;), for example, *C:\httpclient-4.3.2.jar;C:\httpcore-4.3.1.jar*.

   **Note:** You can find the specified libraries in the *opmc.war* file (WEB-INF\lib\ directory). You can copy them to your file system and edit the classpath according to the new location.
c. Select the *Use an isolated class loader for this shared library* check box, as shown in the following image.

4. Click *Apply*, and then click *Save*.

5. Prepare the *opmc.war* file. Some additional preparations are required due to library incompatibilities.
   a. Explore the contents of the *opmc.war* file using any archiving tool.
   b. Navigate to the *WEB-INF\lib\* directory.
   c. Delete the *validation-api-1.0.0.GA.jar* and *xml-apis-1.3.04.jar* files.
Installing and Deploying the OPMC Application

This section describes how to install and deploy the OPMC application.

1. Install the OPMC application.
   a. From the Applications section, expand Application Types, and then click WebSphere enterprise applications.
   b. Click the Install button.
   c. Select the .war file that pertains to the OPMC application you wish to install (for example, opmc.war), as shown in the following image.
   d. Click Next.
   e. Leave the default values (Fast Path mode) and click Next.
   f. Select Allow EJB reference targets to resolve automatically, and leave the other options to their default settings, then click Next.
   g. Continue clicking Next until you reach Step 4.
   h. In the Context root field, enter:
      /opmc
   i. Click Next, and then click Finish.
   j. Click Save.

2. Reference the shared libraries.
The previously created Apache HTTP Client shared library should be referenced by the OPMC application.

a. From the Applications section, expand Application Types and click Websphere enterprise applications, then select opmc_war.

b. Click Shared library references.

c. Select the opmc_war check box and then click the Reference shared libraries button, as shown in the following image.
d. Move the apachehttpclient shared library from the Available section to the Selected section, as shown in the following image.

![Shared Library Mapping Image]

- Click OK and then click OK again on the following page.
- Click Save.

3. Configure the class loader.
   a. From the Applications section, expand Application Types, click WebSphere enterprise applications, and select opmc_war.
   b. Select Class loading and update detection.
1. Installing Omni-Payer Management Central and Deploying to IBM WebSphere Application Server

- **c.** Select *Classes loaded with local class loader first (parent last)* and *Single class loader for application*, as shown in the following image.

![Enterprise Applications Configuration](image)

Click **OK** and then click **Save**.

4. Install the Omni-Payer Domain application.

   - **a.** From the Applications section, expand *Application Types*, and then click *WebSphere enterprise applications*.

   - **b.** Click the **Install** button.

   - **c.** Select the .war file that pertains to the Omni-Payer application you wish to install, for example, *OmniPayerDomain.war*.

   - **d.** Click **Next**.

   - **e.** Leave the default values (Fast Path mode) and click **Next**.
f. Select **Allow EJB reference targets to resolve automatically**, and leave the other options to their default settings, then click **Next**.

g. Enter the following Resource References:
- jdbc/OmniWorkflow
- jdbc/OmniDictionary
- jdbc/OmniPayer

h. Click **Next**.

i. In the Context root field, enter:

```
/OmniPayerDomain
```

j. Click **Next**, and then click **Finish**.

k. Click **Save**.
5. Start the Omni-Payer application.
   a. From the Applications section, expand Application Types, and click WebSphere enterprise applications.
   b. Select OmniPayer_war.
   c. Click Start.

6. Check and review the installation by navigating to:
   
   http://localhost:9080/opmc/
   
   where:
   
   `localhost`
   
   Is the site-specific machine name.
   
   `9080`
   
   Is the site-specific default host port number.
   
   If the Omni-Payer login page is displayed, then the installation was successful. It is also recommended to restart the IBM WebSphere Application Server after the Omni-Payer application installation to determine whether there are any library conflicts.

Known Issues

In this section:

Inappropriate URL Format

This section describes known issues that were encountered when deploying Omni-Payer Management Central (OPMC) to IBM WebSphere Application Server.

Inappropriate URL Format

An inappropriate URL format has been recognized. When deploying to IBM WebSphere Application Server version 8.5, the following URL:

http://localhost:9080/opmc/

is not the same as:

http://localhost:9080/opmc

As a workaround, perform the following steps:

1. In the Servers section of the IBM WebSphere Application Server Administrative Console, expand Server Types, click WebSphere application servers, Web container settings, Web container, select Additional Properties, and then click Custom properties.
2. Add the following new property:
   
   com.ibm.ws.webcontainer.redirectcontextroot

3. Set this new property to true.

4. Click OK and then click Save.
Uninstalling Omni-Payer Management Central
From IBM WebSphere Application Server

This section describes how to uninstall Omni-Payer Management Central (OPMC) from IBM WebSphere Application Server.

Topics:
- Uninstalling Omni-Payer Management Central
Uninstalling Omni-Payer Management Central

How to: Uninstall Omni-Payer Management Central

If a specific version of Omni-Payer Management Central (OPMC) must be removed or replaced, use the IBM WebSphere Application Server Administrative Console to uninstall OPMC from your system.

Procedure: How to Uninstall Omni-Payer Management Central

1. Ensure the IBM WebSphere Application Server is started.
2. Enter the following URL in a browser to access the IBM WebSphere Application Server Administrative Console:

   http://localhost:port.ibm/console/login.do

   where:

   **localhost**
   
   Is the name the system that is hosting IBM WebSphere Application Server.

   **port**
   
   Is the configured port number where the IBM WebSphere Application Server is listening.

3. From the Applications section on the left pane, expand Application Types, and then click WebSphere enterprise applications.
The Enterprise Applications pane opens, as shown in the following image.

4. Select the following .war files:
   - OPMC.war
   - OmniPayerDomain.war
   - RemediationServices.war

5. Click **Uninstall**.
Uninstalling Omni-Payer Management Central
Installing or Upgrading WSO2 Identity Server

This appendix describes how to install or upgrade WSO2 Identity Server (WSO2 IS) used with Linux and AIX-based Omni-Payer Management Central (OPMC) for Omni-Payer versions 1.2.9 through 1.3.5.x.

Topics:
- Overview
- Installing New Omni-Payer Management Central Components
- Installing a New Version of the WSO2 Identity Server
- Starting the WSO2 Identity Server
- Upgrading the WSO2 Identity Server
- Verifying if the WSO2 Identity Server is Active
- Stopping the WSO2 Identity Server
Overview

Each working Omni-Payer Management Central (OPMC) consists of:

- Three web archives (.war files) deployed in an application server:
  - OPMC.war
  - OmniPayerDomain.war
  - RemediationServices.war

- A file system beneath the OMNI_Home folder, which contains SQL scripts and other artifacts used by the OPMC .war files during runtime, OPMC installation, upgrade, and configuration tasks.

- A standalone instance of WSO2 Identity Server (WSO2 IS), including Role and Policy definitions, which may change with each version of OPMC.

- An external properties file (for Apache Tomcat only), which is called context.xml. It is used to configure which databases are used, and which ports are used to communicate with Omni-Payer. The context.xml file is located in the following directory:
  
  /opmc/apache-tomcat 7.0.47/conf/

- A fourth web archive (OmniDictImport.war) is used only during Data Dictionary building, and not during runtime.

Installing New Omni-Payer Management Central Components

Perform the following steps to install new Omni-Payer Management Central (OPMC) components.

1. If not already completed earlier, extract the opmc_pay_1.3.5.1.zip file into the desired location on the AIX-based OPMC host machine.

2. Create a new folder called opmc_1.3.5.1 folder at the root of the C: drive on the Windows-based WSO2 Identity Server (WSO2 IS) host machine.

3. Copy the wso2is-4.6.0.zip file from the AIX file system location to the C:\opmc_1.3.5.1 folder on the Windows-based WSO2 IS host machine.

Installing a New Version of the WSO2 Identity Server

To install a new version of the WSO2 Identity Server (WSO2 IS), extract the wso2is-4.6.0.zip file into C:\wso2is-4.6.0.
Starting the WSO2 Identity Server

To start WSO2 Identity Server (WSO2 IS), enter the following from a Windows command prompt (C:\ drive):

C:\>cd \wso2is-4.6.0\bin
C:\wso2is-4.6.0\bin>wso2server.bat *

Upgrading the WSO2 Identity Server

No upgrade of WSO2 Identity Server (WSO2 IS) is required for Omni-Payer Management Central (OPMC) when upgrading Omni-Payer to version 1.3.5.1.

Verifying if the WSO2 Identity Server is Active

Perform the following steps to verify if the WSO2 Identity Server (WSO2 IS) is active.

1. Enter the following URL in a web browser:

https://machine_name:9443

where:

machine_name

Is the name of the system that is hosting WSO2 IS.

Note: You can specify http or https in the URL.

2. If you receive a message indicating This page can't be displayed, then WSO2 IS is down. You must start WSO2 IS in this case.

3. If WSO2 IS is active you will receive a certificate warning message. Ignore the certificate warning message and click Continue to this website (not recommended).

4. Provide the following login credentials:

   - Username: primary/admin
   - Password: admin
The following image shows the WSO2 IS Sign-in dialog.

The following image shows the WSO2 IS home page with configuration details for WSO2 IS. If you are able to view this page, then you have verified that WSO2 IS active.

**Stopping the WSO2 Identity Server**

Perform the following steps to stop WSO2 Identity Server (WSO2 IS).

1. Click the grey *Main* tab in the left pane of the WSO2 IS home page.
2. Click the *Shutdown/Restart* command with the green target icon.
3. Click the red *Graceful Shutdown* command.
4. Click Yes to confirm stopping your WSO2 IS.

WSO2 IS now shuts down.
Reader Comments

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