

FLEXCUBE UBS Outbound Application
Adapter Installation
Oracle FLEXCUBE Universal Banking
Release 12.2.0.0.0
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Table of Contents

1. INSTALLATION STEPS.....	2
1.1 PREREQUISITE.....	2
1.2 STEPS.....	2

1. Installation Steps

1.1 Prerequisite

- ✓ Ensure that the basic NOTIFY MDB Gateway Environment Setup is done.

[Please refer [GW_NOTIFY_MDB Installation.doc.](#)]

- ✓ Ensure that the basic Adapter Environment Setup is done.

[Please refer [SSIAD_Installation_FCUBSV.UM8.0.0.0.0.0Lot1.doc.](#)]

1.2 Steps

A. Modify ejb-jar.xml

- ✓ Edit <KERNEL_INSTALL_DIR>/SSIAD_MDB/config/ejb-jar.xml. This XML file shall have a similar section as the one shown below,

```
<env-entry>
    <env-entry-name>propertyPath</env-entry-name>
    <env-entry-type>java.lang.String</env-entry-type>
    <env-entry-value>C:/Documents and Settings/SSI_ADAPTER/</env-entry-value>
</env-entry>
```

- Set the location of the properties file SSIAD_MDB_Prop.xml as the value of propertyPath.

E.g.: C:/Documents and Settings/ **SSI_ADAPTER** /

[NOTE: Give property file path with forward slash (/) as file separator and remember to give a slash at the end.]

- ✓ Edit <resource-env-ref> section as the one shown below,

```
<resource-ref>
    <description>Connection Factory for Response / DLQ</description>
    <res-ref-name>SSIAD_MDB_QCF</res-ref-name>
    <res-type>javax.jms.XAQueueConnectionFactory</res-type>
    <res-auth>Container</res-auth>
    <res-sharing-scope>Shareable</res-sharing-scope>
</resource-ref>

<resource-env-ref>
    <description>Queue to send reply to</description>
    <resource-env-ref-name>NOTIFY_DEST_QUEUE</resource-env-ref-name>
    <resource-env-ref-type>javax.jms.Queue</resource-env-ref-type>
</resource-env-ref>

<resource-env-ref>
    <description>MDB Dead Letter Queue</description>
    <resource-env-ref-name>NOTIFY_MDB_DLQ</resource-env-ref-name>
    <resource-env-ref-type>javax.jms.Queue</resource-env-ref-type>
</resource-env-ref>
```

B. Configure FLEXCUBE UBS MDB Adapter Properties

Edit <KERNEL_INSTALL_DIR>/SSIAD_MDB/config/SSIAD_MDB_Prop.xml file to give appropriate values for the properties as described below,

1. XSD_PATH: This property specifies the path where the BaExchangeFileRequest.XSD is stored.

e.g. XSD_PATH=<KERNEL_INSTALL_DIR>/SSIAD_MDB/XSD/

[NOTE: Give XSD file path with forward slash (/) as file separator and remember to give a slash at the end.]

2. SSI_MDB_XSD: This property specifies the name of the XSD file.

e.g. SSI_MDB_XSD = BaExchangeFileRequest.XSD

3. IS_XSD_VAL_REQD - This property specifies whether XSD validation should be done or not . To enable XSD validation specify "Y" and to disable specify "N".

4. FCUBS_DB_SERVER_IP: This property defines FCUBS Database server IP address.

5. FCUBS_DB_SERVER_UID: This property defines user id for FCUBS Database server.

6. FCUBS_DB_SERVER_PWD: This property defines password for FCUBS Database server.

7. FCUBS_DB_PAYLOAD_PATH: This property defines payload file path on FCUBS Database server.

8. SSIAD_EJB_MH_IP: This property defines SSI MH server IP address.

9. SSIAD_EJB_MH_USERID: This property defines user id for SSI MH server.

10. SSIAD_EJB_MH_PASSWORD: This property defines password for SSI MH server.

11. SSIAD_EJB_MH_ENVELOPE: This property defines envelope file path on SSI MH Server

12. SSIAD_MH_PAYLOAD_PATH: This property defines payload file path on SSI MH server.

13. SSIAD_OB_ENVELOPE_FILE_FOLDER: This property defines local folder name where temporary envelope file will be stored.

eg. SSIAD_OB_ENVELOPE_FILE_FOLDER = "C:/Documents and Settings/Default
User/SSIAD_OB_ENVELOPE/"

[NOTE: Give XSD file path with forward slash (/) as file separator and remember to give a slash at the end.]

14. SSIAD_OB_ENVELOPE_FILE_PREFIX: This property specifies envelope file prefix.
eg. SSIAD_OB_ENVELOPE_FILE_PREFIX = "BA".

15. SSIAD_OB_ENVELOPE_FILE_EXTENSION: This property specifies envelope file extension.

eg. SSIAD_OB_ENVELOPE_FILE_EXTENSION = ".xml".

16. SSIAD_OB_ENVELOPE_FILE_SAVE_DATE_FORMAT: This property specifies envelope file date format tah will be suffixed with SSIAD_OB_ENVELOPE_FILE_PREFIX.

eg. SIAD_OB_ENVELOPE_FILE_SAVE_DATE_FORMAT = "yyyyMMddHHMMSSsss".

17. SSIAD_OB_DEAD_ENVELOPE_FILE_FOLDER: This property defines local folder name where dead envelope file will be stored. This folder must be under USER_HOME dir.

eg. SSIAD_OB_ENVELOPE_FILE_FOLDER = "C:/Documents and Settings/Default

User/SSIAD_OB_DEAD_ENVELOPE/"

[NOTE: Give XSD file path with forward slash (/) as file separator and remember to give a slash at the end.]

18. XSL_PATH: This property specifies the path where the SSIAD_MDB_XSL.XSL is stored.

eg. XSL_PATH = "<KERNEL_INSTALL_DIR>/SSIAD_MDB/XSL/"

[NOTE: Give XSD file path with forward slash (/) as file separator and remember to give a slash at the end.]

19. SSIAD_MDB_XSL: This property specifies the acknowledgement XSL file name.

eg. SSIAD_MDB_XSL = SSIAD_MDB_XSL.xsl

20. LOGGER_PATH: This property specifies the path of the logger property file. This file can be found at <KERNEL_INSTALL_DIR>/SSIAD_MDB/config.

[NOTE: Give XSD file path with forward slash (/) as file separator and remember to give a slash at the end.]

The SSIAD_MDB_Prop.xml will look similar as follows,

```
<add key="XSD_PATH" value="D:/KERNEL_SSIAD_OC4J/SSIAD_MDB/XSD"/>

<!-- Kernel 8.0 Lot 1 ITR1 SFR#01 <Start> -->

<add key="SSIAD_MDB_XSD" value="BaExchangeFileRequest.XSD"/>

<add key="IS_XSD_VAL_REQD" value="Y"/>

<!-- Kernel 8.0 Lot 1 ITR1 SFR#01 <End> -->

    <!-- FCUBS DB FTP details -->

<add key="FCUBS_DB_SERVER_IP" value="10.80.50.227"/>

<add key="FCUBS_DB_SERVER_UID" value="kerneldev"/>

<add key="FCUBS_DB_SERVER_PWD" value="kerneldev"/>

<add key="FCUBS_DB_PAYLOAD_PATH" value="users/outbound/db/payload"/>

    <!-- SSI MH FTP details -->

<add key="SSIAD_MDB_MH_IP" value="10.80.161.40"/>

<add key="SSIAD_MDB_MH_USERID" value="rashmish"/>

<add key="SSIAD_MDB_MH_PASSWORD" value="Password123"/>

<add key="SSIAD_MDB_MH_ENVELOPE" value="OutBound/OutEnvelop"/>

<add key="SSIAD_MDB_MH_PAYLOAD_PATH" value="OutBound/OutPayload"/>

    <!--Outbound Envelope File -->

<add key="SSIAD_OB_ENVELOPE_FILE_FOLDER" value="C:/Documents and Settings/Default
User/SSIAD_OB_ENVELOPE"/>

<add key="SSIAD_OB_ENVELOPE_FILE_PREFIX" value="BA"/>

<add key="SSIAD_OB_ENVELOPE_FILE_EXTENSION" value=".xml"/>

<add key="SSIAD_OB_ENVELOPE_FILE_SAVE_DATE_FORMAT"
```



```

value="yyyyMMddHHMMSSsss"/>

<add key="SSIAD_OB_DEAD_ENVELOPE_FILE_FOLDER"

value="C:/Documents and Settings/Default User/SSIAD_OB_DEAD_ENVELOPE/"/>

        <!-- XSL -->

<add key="XSL_PATH" value="D:/KERNEL_SSIAD_OC4J/SSIAD_MDB/XSL/"/>

<add key="SSIAD_MDB_XSL" value="SSIAD_MDB_XSL.xml"/>

        <!-- MISCELLANEOUS PROPERTIES -->

<add key="LOGGER_PATH"

value="D:/KERNEL_SSIAD_OC4J/SSIAD_MDB/config/ssiad_mdb_logger.xml"/>

```

4. Configure logger parameters

Edit <KERNEL_INSTALL_DIR>/SSIAD_MDB/config/ssiad_mdb_logger.xml file to change the value of the property "SSIAD.LOGGER.FPATH" to value <KERNEL_INSTALL_DIR>/SSIAD_MDB/log/.

e.g. If the value of your <KERNEL_INSTALL_DIR> is D:/Kernel8.0, then the entry for this property will be,

```
<add key="SSIAD.LOGGER.FPATH" value="D:/Kernel8.0/SSIAD_MDB/log"/>
```

[NOTE: Give SSIAD.LOGGER.FPATH with forward slash (/) as file separator and remember to give a slash (/) at the end.]

5. Run the build file

- ✓ For WINDOWS

- Go to the folder <KERNEL_INSTALL_DIR>\setup in the command prompt, type “**set_env**” and press enter.
 - Change directory to <KERNEL_INSTALL_DIR>\SSIAD_MDB\setup\WAS in the command prompt, type “**ws_ant**” and press enter.
- ✓ For UNIX
- Go to the folder <KERNEL_INSTALL_DIR>/setup in the shell prompt, type “**set_env.sh**” and press enter.
 - Change directory to <KERNEL_INSTALL_DIR>/SSIAD_MDB/setup/WAS in the shell prompt, type “**ws_ant**” and press enter.

*[NOTE: Please make sure that you get a message **BUILD SUCCESSFUL** after compilation.]*

6. Deploy the MDB in WebSphere Application Server (WAS)

1. Stop the application server.

If the application server is already running, then stop the application server as follows:

- ✓ For Windows
- Go to the <APP_SERVER_HOME>/bin directory in the command prompt, type **stopServer.bat server1** and press enter.

2. Start the application server.

- ✓ For Windows
- Go to the < APP_SERVER_HOME>/bin .i.e the application server installation directory in the command prompt, type **startServer.bat server1** and press enter.

- This will start the server. Ensure that you get no error during start up. If the server start up is proper we shall get the following screen.

```
C:\Program Files\IBM\WebSphere\AppServer\bin>startServer.bat server1
ADMU0116I: Tool information is being logged in file C:\Program
Files\IBM\WebSphere\AppServer\profiles\default\logs\server1\startServer.log
ADMU0128I: Starting tool with the default profile
ADMU3100I: Reading configuration for server: server1
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server server1 open for e-business; process id is 1852
```

3. Open the administrative console of the application server

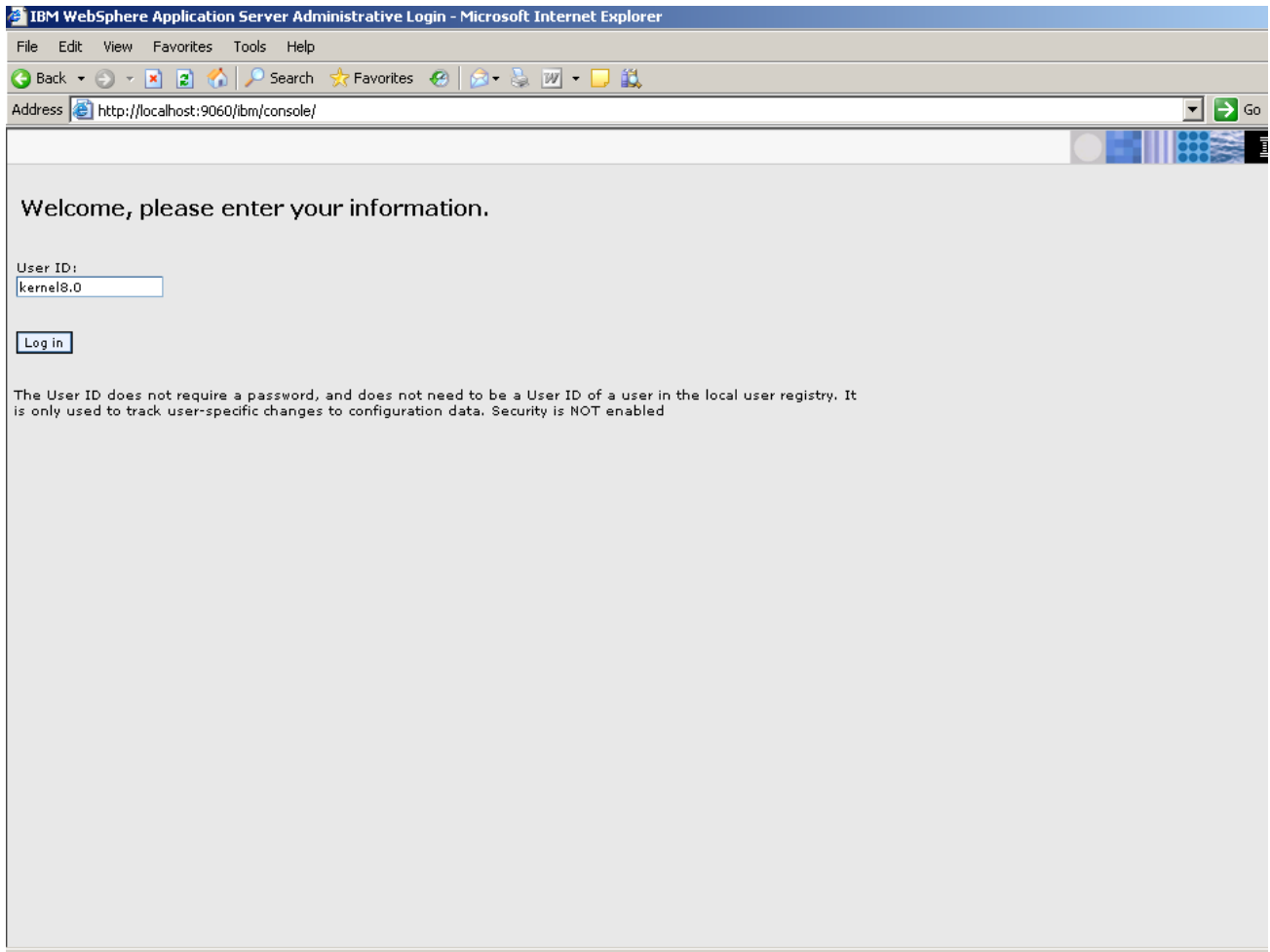
- ✓ Open an internet browser and type the WAS Admin Console URL Address of the server.

e.g. <http://10.80.4.102:9060/ibm/console>

where, 10.80.4.102 is the machine IP Address on which WAS is running.

- ✓ Enter a user id for launching the WAS Admin Console window.

The user id can be any name e.g.: KERNEL 8.0



4. Create an XA QueueConnectionFactory with the name SSIAD_MDB_QCF

[Refer: [WAS_SSIAD_WebSphereMQ_Installation.doc](#)]

5. Make sure MQ Queue Destinations are present with the following names

- a. NOTIFY_DEST_QUEUE
- b. NOTIFY_MDB_DLQ

6. **Create Message Listener with the name SSIAD_MDB_LISTENER with Destination as NOTIFY_DEST_QUEUE and QueueConnectionFactory as SSIAD_MDB_QCF**

[Refer: [WAS_SSIAD_WebSphereMQ_Installation.doc](#)]

7. **Stop and re-start the WebSphere Application Server**

[Refer: Steps 1 and 2 above.]

1. Deploying SSIAD_MDB_Bean.ear

- ✓ Click on **Applications -> Install New Application**.
- ✓ Following screen will be displayed. Specify the local path of the enterprise archive file
(i.e. <KERNEL_INSTALL_DIR>/SSIAD_MDB/build/SSIAD_MDB_Bean.ear) and click on Next.



Preparing for the application installation

A screenshot of the 'Preparing for the application installation' dialog box. The dialog has a blue header bar with the title 'Preparing for the application installation'. Below the header, the text reads 'Specify the EAR, WAR or JAR module to upload and install.' The main content area is titled 'Path to the new application.' and contains two radio button options: 'Local file system' (selected) and 'Remote file system'. Under 'Local file system', there is a text input field labeled 'Specify path' containing the text 'D:\Kernel8.0\SSIAD_MDB' and a 'Browse...' button. Under 'Remote file system', there is a text input field labeled 'Specify path'. Below the radio buttons, there is a 'Context root' label and a text input field. To the right of the input field, the text reads 'Used only for standalone Web modules (.war files)'. At the bottom of the dialog, there are two buttons: 'Next' (highlighted with a red circle) and 'Cancel'.

2. Following screen will be displayed. Click on Next.

Preparing for the application installation ? -

Choose to generate default bindings and mappings.

Generate Default Bindings

Override:

Do not override existing bindings

Override existing bindings

Specific bindings file

3. Following screen will be displayed. Click on Next.

Install New Application

Specify options for installing enterprise applications and modules.

→ **Step 1: Select installation options**

[Step 2](#) Map modules to servers

[Step 3](#) Provide listener bindings For message-driven beans

✱ [Step 4](#) Map resource references to resources

✱ [Step 5](#) Map resource env entry references to resources

[Step 6](#) Summary

Select installation options

Specify the various options that are available to prepare and install your application.

Pre-compile JSP

Directory to install application

Distribute application

Use Binary Configuration

Deploy enterprise beans

Application name

Create MBeans for resources

Enable class reloading

Reload interval in seconds

Deploy Web services

Validate Input off/warn/fail

Process embedded configuration

4. Following screen will be displayed. Click on Next.

Install New Application

Specify options for installing enterprise applications and modules.

Step 1
Select installation options

→ **Step 2: Map modules to servers**

Step 3
Provide listener bindings For message-driven beans

* **Step 4**
Map resource references to resources

* **Step 5**
Map resource env entry references to resources

Step 6
Summary

Map modules to servers

Specify targets such as application servers or clusters of application servers where you want to install the modules contained in your application. Modules can be installed on the same application server or dispersed among several application servers. Also, specify the Web servers as targets that will serve as routers for requests to this application. The plug-in configurator file (plugin-cfg.xml) for each Web server is generated based on the applications which are routed through it.

Clusters and Servers:

Select	Module	URI	Server
<input type="checkbox"/>	SSIAD_MDB_Bean.jar	SSIAD_MDB_Bean.jar,META-INF/ejb-jar.xml	WebSphere:cell=ddtd0258Node01Cell,node=ddtd0258Node01,server=server1

5. Following screen will be displayed.

Give the Listener Name as provided in step 7 and click on Next.

Install New Application

Specify options for installing enterprise applications and modules.

Step 1 Select installation options

Step 2 Map modules to servers

→ **Step 3: Provide listener bindings For message-driven beans**

★ **Step 4** Map resource references to resources

★ **Step 5** Map resource env entry references to resources

Step 6 Summary

Provide listener bindings For message-driven beans

Each message-driven enterprise bean in your application or module must be bound to a listener port name or to an activation specification JNDI name. When a message-driven enterprise bean is bound to an activation specification JNDI name you may also specify destination JNDI name and authentication alias.

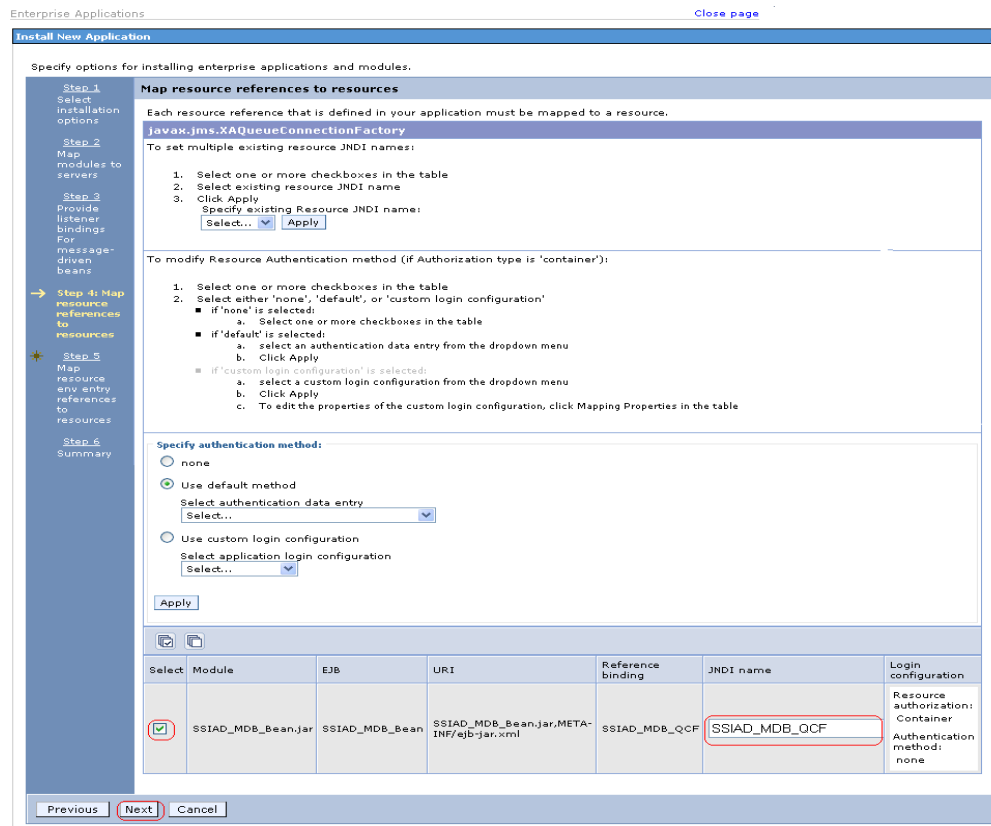
Apply Multiple Mappings

Select	EJB module	EJB	URI	Messaging Type	Bindings
<input checked="" type="checkbox"/>	SSIAD_MDB_Bean.jar	SSIAD_MDB_Bean	SSIAD_MDB_Bean.jar,META-INF/ejb-jar.xml	javax.jms.MessageListener	<input checked="" type="radio"/> Listener port Name SSIAD_MDB_LISTENER <input type="radio"/> Activation Specification JNDI name <input type="text"/> Destination JNDI Name <input type="text"/> ActivationSpec Authentication Alias <input type="text"/>

Previous **Next** Cancel


6. Following screen will be displayed.

Give the mapping for Queue Connection Factory and Data Source that has been created in above steps 6 and 7.



7. Following screen will be displayed. Click on Continue.

Application Resource Warnings

 ADMA8019E: The resources that are assigned to the application are beyond the deployment target scope. Resources are within the deployment target scope if they are defined at the cell, node, server, or application level when the deployment target is a server, or at the cell, cluster, or application level when the deployment target is a cluster. Assign resources that are within the deployment target scope of the application or confirm that these resources assignments are correct as specified.

Step 4 - Map resource references to resources resulted in the following resource warnings. If Application Resource Validation is set to fail, you will not be able to continue past.

Module:

Name: SSIAD_MDB_Bean.jar

URI: SSIAD_MDB_Bean.jar,META-INF/ejb-jar.xml

Target: WebSphere:cell=DDTD0270Node01Cell,node=DDTD0270Node01,server=server1


Resource Reference:

Name: SSIAD_MDB_QCF

Type: javax.jms.XAQueueConnectionFactory

Resource Assignment:

Name: SSIAD_MDB_QCF

 Scope: WebSphere:cell=DDTD0270Node01Cell,node=DDTD0270Node01,server=server1

 Type: JMSProvider

JNDI: SSIAD_MDB_QCF

8. Following screen will be displayed.

- ✓ Give the JNDI name mapping for Queues same as their respective reference Bindings names.

Install New Application

Specify options for installing enterprise applications and modules.

[Step 1](#)
Select installation options

[Step 2](#)
Map modules to servers

[Step 3](#)
Provide listener bindings for message-driven beans

[Step 4](#)
Map resource references to resources

→ [Step 5: Map resource env entry references to resources](#)

[Step 6](#)
Summary

Map resource env entry references to resources

Each resource environment reference defined in your application must map to a resource.

Apply Multiple Mappings

Select	Module	EJB	URI	Reference binding	JNDI name
<input checked="" type="checkbox"/>	SSIAD_MDB_Bean.jar	SSIAD_MDB_Bean	SSIAD_MDB_Bean.jar,META-INF/ejb-jar.xml	NOTIFY_DEST_QUEUE	NOTIFY_DEST_QUEUE
<input checked="" type="checkbox"/>	SSIAD_MDB_Bean.jar	SSIAD_MDB_Bean	SSIAD_MDB_Bean.jar,META-INF/ejb-jar.xml	NOTIFY_MDB_DLQ	NOTIFY_MDB_DLQ

Previous

Next

Cancel

9. Following screen will be displayed. Click on Finish.

[NOTE: This may take a few minutes.]

Install New Application

Specify options for installing enterprise applications and modules.

[Step 1](#) Select installation options

[Step 2](#) Map modules to servers

[Step 3](#) Provide listener bindings For message-driven beans

[Step 4](#) Map resource references to resources

[Step 5](#) Map resource env entry references to resources

→ **Step 6: Summary**

Summary

Summary of installation options

Options	Values
Use Binary Configuration	No
Create MBeans for resources	Yes
Cell/Node/Server	Click here
Reload interval in seconds	
Enable class reloading	No
Process embedded configuration	No
Application name	SSI_MDB Adapter
Validate Input off/warn/fail	warn
Directory to install application	
Distribute application	Yes
Deploy Web services	No
Pre-compile JSP	No
Deploy enterprise beans	No

Previous **Finish** Cancel

10. Following screen will be displayed. Click on “Save to Master Configuration”.

ADMA0115W: Resource Assignment of name NOTIFY_MDB_DLQ and type javax.jms.Queue, with JNDI name NOTIFY_MDB_DLQ is not found within scope of module SSIAD_MDB_Bean.jar with URI SSIAD_MDB_Bean.jar,META-INF/ejb-jar.xml deployed to target WebSphere:cell=ddtd0258Node01 Cell,node=ddtd0258Node01 ,server=server1 .

ADMA0115W: Resource Assignment of name NOTIFY_DEST_QUEUE and type javax.jms.Queue, with JNDI name NOTIFY_DEST_QUEUE is not found within scope of module SSIAD_MDB_Bean.jar with URI SSIAD_MDB_Bean.jar,META-INF/ejb-jar.xml deployed to target WebSphere:cell=ddtd0258Node01 Cell,node=ddtd0258Node01 ,server=server1 .

ADMA5068: The resource validation for application SSI_MDB Adapter completed successfully, but warnings occurred during validation.

ADMA5058: Application and module versions validated with versions of deployment targets.

ADMA5005: The application SSI_MDB Adapter is configured in the WebSphere Application Server repository.

ADMA5053: The library references for the installed optional package are created.

ADMA5005: The application SSI_MDB Adapter is configured in the WebSphere Application Server repository.

ADMA5001: The application binaries are saved in d:\Program Files\IBM\WebSphere\AppServer\profiles/default\wstemp\1148044957\workspace\cells\ddtd0258Node01 Cell\applications\SSI_MDB Adapter.ear\SSI_MDB Adapter.ear

SECJ0400: Successfully updated the application SSI_MDB Adapter with the appContextIDForSecurity information.

ADMA5011: The cleanup of the temp directory for application SSI_MDB Adapter is complete.

ADMA5013: Application SSI_MDB Adapter installed successfully.

Application SSI_MDB Adapter installed successfully.

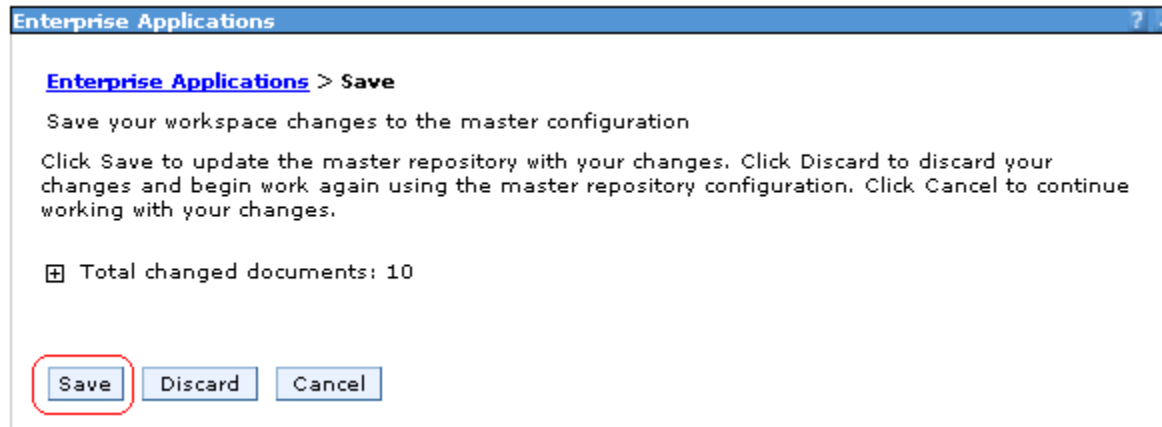
To start the application, first save changes to the master configuration.

Save to Master Configuration

To work with installed applications, click the "Manage Applications" button.

Manage Applications

11. Following screen will be displayed. Click on Save.



12. Browse to Application -> Enterprise Applications.

- ✓ The deployed SSIAD_MDB_Bean will be displayed on the screen.
- ✓ Click the check box beside it and click on **Start**.

- Welcome
- [-] Servers
 - Application servers
 - Web servers
- [-] Applications
 - Enterprise Applications
 - Install New Application
- [-] Resources
- [-] Security
- [-] Environment
- [-] System administration
- [-] Monitoring and Tuning
- [-] Troubleshooting
- [-] Service integration
- [-] UDDI

Enterprise Applications ?

Enterprise Applications

Lists installed applications. A single application can be deployed onto multiple servers.

[-] Preferences

Start
Stop
Install
Uninstall
Update
Rollout Update
Remove File
Export
Export DDL

Select	Name	Status
<input type="checkbox"/>	DefaultApplication	
<input type="checkbox"/>	EJB Gateway	
<input type="checkbox"/>	FCUBSETDService	
<input type="checkbox"/>	Gateway Client	
<input type="checkbox"/>	HTTP Servlet Gateway	
<input type="checkbox"/>	MDB Gateway	
<input type="checkbox"/>	NOTIFY MDB Gateway	
<input type="checkbox"/>	PlantsByWebSphere	
<input type="checkbox"/>	SSIAD EJB ACK Adapter	
<input type="checkbox"/>	SSI EJB Adapter	
<input checked="" type="checkbox"/>	SSI MDB Adapter	
<input type="checkbox"/>	SamplesGallery	
<input type="checkbox"/>	ivtApp	
<input type="checkbox"/>	query	

Total 14

13. Following screen will be displayed with a green arrow as the status indicating that the deployed SSIAD_MDB_Bean is running.

Enterprise Applications

Messages

Application SSI_MDB Adapter on server server1 and node dtd0258Node01 started successfully.

Enterprise Applications

Lists installed applications. A single application can be deployed onto multiple servers.

Preferences

Start Stop Install Uninstall Update Rollout Update Remove File Export Export DDL

Select	Name	Status
<input type="checkbox"/>	DefaultApplication	➔
<input type="checkbox"/>	EJB_Gateway	➔
<input type="checkbox"/>	FCUBSETDService	➔
<input type="checkbox"/>	Gateway Client	➔
<input type="checkbox"/>	HTTP Servlet Gateway	➔
<input type="checkbox"/>	MDB Gateway	➔
<input type="checkbox"/>	NOTIFY MDB Gateway	➔
<input type="checkbox"/>	PlantsByWebSphere	➔
<input type="checkbox"/>	SSIAD_EJB ACK Adapter	➔
<input type="checkbox"/>	SSI EJB Adapter	➔
<input type="checkbox"/>	SSI MDB Adapter	➔
<input type="checkbox"/>	SamplesGallery	➔
<input type="checkbox"/>	ivtApp	➔
<input type="checkbox"/>	query	➔

Total 14



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