

FLEXCUBE UBS Inbound Application Adapter Installation
Oracle FLEXCUBE Universal Banking
Release 14.4.0.0.0
[May] [2020]



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1 Installation Steps

1.1 Prerequisite

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

[Please refer [GW_MDB_Installation.doc.](#)]

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

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

1.2 Steps

A. Configure FCC – FC SSI MH Integration Adapter Properties

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

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

e.g. XSD_PATH=`<KERNEL_INSTALL_DIR>/SSIAD_EJB_ACK/XSD/`

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

2. SSIAD_ACK_XSD: This property specifies the name of the XSD against which

SSIAD Envelope validation is done for acknowledgement messages.

e.g. SSIAD_ACK_XSD = "AckFile.XSD".

3. SSIAD_ERR_XSD: This property specifies the name of the XSD against which

SSIAD Envelope validation is done for error messages.

e.g. SSIAD_ERR_XSD = "ErrorInfo.xsd".

4. IS_XSD_VAL_REQD - This property specifies whether XSD validation should be done or not. To enable XSD validation specify "Y" and to make it disable specify "N".
5. IB_EJB_SERVER_URL: This property specifies protocol, server url and the port number on which WAS server is running "protocol:// server [URL:port](#)" format
e.g. IB_EJB_SERVER_URL = "iiop://10.80.161.40:2809"
6. IB_EJB_CTX_FACTORY: This property defines context factory for WAS server used by WebSphere Application Server applications to perform JNDI operations
e.g. IB_EJB_CTX_FACTORY = "com.ibm.websphere.naming.WsnInitialContextFactory"
7. IB_EJB_SECURITY_PRINCIPAL: specifying the identity of the principal for authenticating the caller to the service if required otherwise can be left blank.
8. IB_EJB_SECURITY_CREDENTIALS: specifies the credentials of the principal for authenticating the caller to the service if required otherwise can be left blank.
9. IB_EJB_CALL_TYPE: This property specifies the call type of EJB. This must always be REMOTE.
10. IB_EJB_LOCAL_CALL: This must always be LOCAL.

11. IB_EJB_REMOTE_CALL: This must always be REMOTE.
12. FCUBS_DB_SERVER_IP: This property defines FCUBS Database server IP address.
13. FCUBS_DB_SERVER_UID: This property defines user id for FCUBS Database server.
14. FCUBS_DB_SERVER_PWD: This property defines password for FCUBS Database server.
15. FCUBS_DB_PAYLOAD_PATH: This property defines payload file path on FCUBS database server.
16. FCUBS_DB_DEAD_LETTER_PATH: This property defines dead letter file path on FCUBS database server.

[NOTE: Give XSD file path with forward slash (/) as file separator and remember to give a slash at the end.]
17. SSIAD_EJB_MH_IP: This property defines SSI MH server IP address.
18. SSIAD_EJB_MH_USERID: This property defines user id for SSI MH server.
19. SSIAD_EJB_MH_PASSWORD: This property defines password for SSI MH server.
20. SSIAD_EJB_MH_ENVELOPE: This property defines envelope file path on SSI MH

Server.

21. SSIAD_MH_PAYLOAD_PATH: This property defines payload file path on SSI MH server.
22. SSIAD_EJB_MH_ACKNOWLEDGE: This property defines acknowledgement file path on SSI MH server.
23. SSIAD_EJB_JMS_ICF: This property defines InitialContextFactory that is responsible for getting and instance of the initial context. It is also responsible for looking up JMS topics and queues.
24. SSIAD_EJB_JMS_PROVIDER_URL: This property is used for external JNDI lookups.
eg. provider URL in <host>[:<port>] format.

Specify whole path of the binding file that has been created for Gateway MDB installation.
25. SSIAD_EJB_JMS_SECURITY_PRINCIPAL: This property defines the name of the entity (user) that is authenticated when the connection to the JMS provider is established.

The Security Principal and the Security Credentials are included in the naming context when the connection factory is looked up from the naming.
26. SSIAD_EJB_JMS_SECURITY_CREDENTIALS: This property defines the credentials (typically a password) that authenticate the security principal to the JMS provider.
27. SSIAD_EJB_JMS_QCF: This property specifies the Queue Connection Factory of the Queue Manager to which Gateway MDB is associated.

e.g. SSIAD_EJB_JMS_QCF =MDBQCF

28. SSIAD_EJB_JMS_QUEUE_NAME: This property specifies the Queue on which the Gateway MDB is listening.
- SSIAD_EJB_JMS_QUEUE_NAME =MDB_QUEUE
29. SSIAD_EJB_JMS_Q_ACKNOWLEDGE: This property specifies the mode of acknowledgement to be given to the MOM by the application. The possible values are CLIENT_ACKNOWLEDGE, DUPS_OK_ACKNOWLEDGE and AUTO_ACKNOWLEDGE.
30. SSIAD_EJB_JMS_Q_TRANSACTION: This property specifies whether the message sent/received has to be transacted or not. The value is false.
31. SSIAD_EJB_JMS_Q_DELIVERY_OPT: The message delivery option represents whether the message will be delivered with the Delivery mode as PERSISTENT or NON-PERSISTENT. Possible values are 1 and 2. 1 represents delivery mode to be NON-PERSISTENT while 2 represents the delivery mode to be PERSISTENT.
32. SSIAD_EJB_JMS_Q_TIME_TO_LIVE: This is the maximum time in milliseconds for which the outgoing/reply message will remain in the queue before expiring, if not already picked up by the external system application. Value 0 ensures that message will NEVER expire.
33. SSIAD_EJB_JMS_Q_PRIORITY: This is the priority of the outgoing/reply message.
- Priority value can be ranging from 0 to 9, 9 being highest priority and 0 being lowest priority. Priorities 0-4 are gradations of normal priority and priorities 5-9 are gradations of expedited priority.
34. XSL_PATH: This property specifies the path where the SSIAD_EJB_ACK_XSL.XSL is stored.

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

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

35. SSIAD_EJB_ACK_XSL: This property specifies the acknowledgement XSL file name.

eg. SSIAD_EJB_ACK_XSL = SSIAD_EJB_ACK_XSL.xsl

36. SSIAD_EJB_ERR_XSL: This property specifies the error XSL file name.

e.g. SSIAD_EJB_ERR_XSL = SSIAD_EJB_ERR_XSL.xsl

37. EJB_OBJ_PATH: This property specifies the path to store ejb reference.

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

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

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

39. MSG_REPOLL_SLEEP_TIME: This property specifies interval of polling in milliseconds

The SSIAD_EJB_ACK_Prop.xml will look similar as follows,

```
<add key="XSD_PATH" value="D:/KernelSSI_8.0/SSIAD_EJB_ACK/XSD/" />

<add key="SSIAD_ACK_XSD" value="AckFile.xsd" />

<add key="SSIAD_ERR_XSD" value="ErrorInfo.xsd" />

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

```

<add key="IB_EJB_JNDI_NAME" value="SSIAD_EJB_ACK_Bean"/>

<add key="IB_EJB_SERVER_URL" value="iiop://10.80.161.40:2809"/>

<add key="IB_EJB_CTX_FACTORY"

    value="com.ibm.websphere.naming.WsnInitialContextFactory"/>

<add key="IB_EJB_SECURITY_PRINCIPAL" value=""/>

<add key="IB_EJB_SECURITY_CREDENTIALS" value=""/>

<add key="IB_EJB_CALL_TYPE" value="REMOTE"/>

<add key="IB_EJB_LOCAL_CALL" value="LOCAL"/>

<add key="IB_EJB_REMOTE_CALL" value="REMOTE"/>

<!--

<add key="MAX_CLOB_LEN" value="32512"/>

<add key="DB_TIMEOUT" value="20"/>

-->

    <!-- 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/TestDes/" />

<add key="FCUBS_DB_ACK_DEAD_LETTER_PATH" value="C:/Documents and Settings/Default

    User/ejback/ACK_ERR_DLF/" />

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

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

```

```

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

<add key="SSIAD_MH_ACK_FOLEDER" value="ack"/>

<!--

<add key="SSIAD_EJB_MH_ENVELOPE" value="Line1/CLIENT/REQ"/>

<add key="SSIAD_MH_PAYLOAD_PATH" value="Line1/CLIENT/FILEACT/PAYLOAD/PUT"/>

-->

        <!-- JMS details -->

<add key="SSIAD_EJB_JMS_ICF" value="com.sun.jndi.fscontext.RefFSContextFactory"/>

<add key="SSIAD_EJB_JMS_PROVIDER_URL" value="file:/D:/bindings"/>

<add key="SSIAD_EJB_JMS_SECURITY_PRINCIPAL" value=""/>

<add key="SSIAD_EJB_JMS_SECURITY_CREDENTIALS" value=""/>

<add key="SSIAD_EJB_JMS_QCF" value="MDBQCF"/>

<add key="SSIAD_EJB_JMS_QUEUE_NAME" value="MDB_QUEUE"/>

<add key="SSIAD_EJB_JMS_Q_ACKNOWLEDGE" value="AUTO_ACKNOWLEDGE"/>

<add key="SSIAD_EJB_JMS_Q_TRANSACTION" value="false"/>

<add key="SSIAD_EJB_JMS_Q_DELIVERY_OPT" value="2"/>

<add key="SSIAD_EJB_JMS_Q_TIME_TO_LIVE" value="500000"/>

<add key="SSIAD_EJB_JMS_Q_PRIORITY" value="7"/>

        <!-- XSL -->

<add key="XSL_PATH" value="D:/KernelSSI_8.0/SSIAD_EJB_ACK/XSL"/>

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

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

```

```

        <!-- Client -->

<add key="EJB_OBJ_PATH" value="C:/Documents and Settings/Default User/ejback/obj"/>

        <!-- ISCELLANEOUS PROPERTIES -->

<add key="LOGGER_PATH"

        value="D:/KernelSSI_8.0/SSIAD_EJB_ACK/config/ssiad_ejb_ack_logger.xml"/>

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

<add key="MSG_REPOLL_SLEEP_TIME" value="1000"/>

```

B. Configure logger parameters

- Edit <KERNEL_INSTALL_DIR>/SSIAD_EJB_ACK/config/ssiad_ejb_ack_logger.xml file to change the value of the property “SSIAD.LOGGER.FPATH” to <KERNEL_INSTALL_DIR>/SSIAD_EJB_ACK/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_EJB_ACK/log/" />
```

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

C. 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_EJB\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_EJB/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.]*

D. Deploy the EJB 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.

✓ For UNIX

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

2. Start the application server.

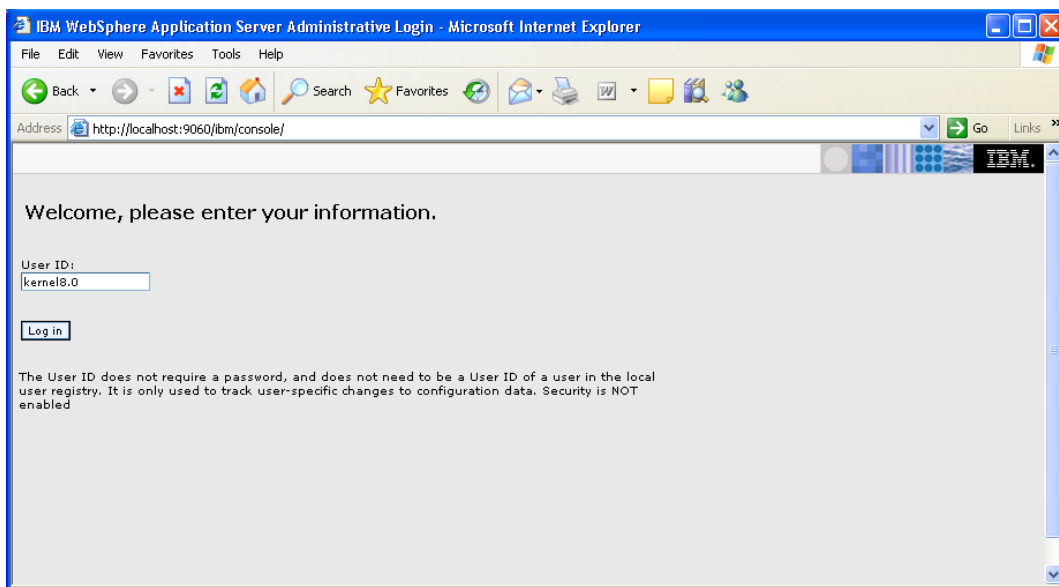
✓ For Windows

- 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.

✓ For UNIX

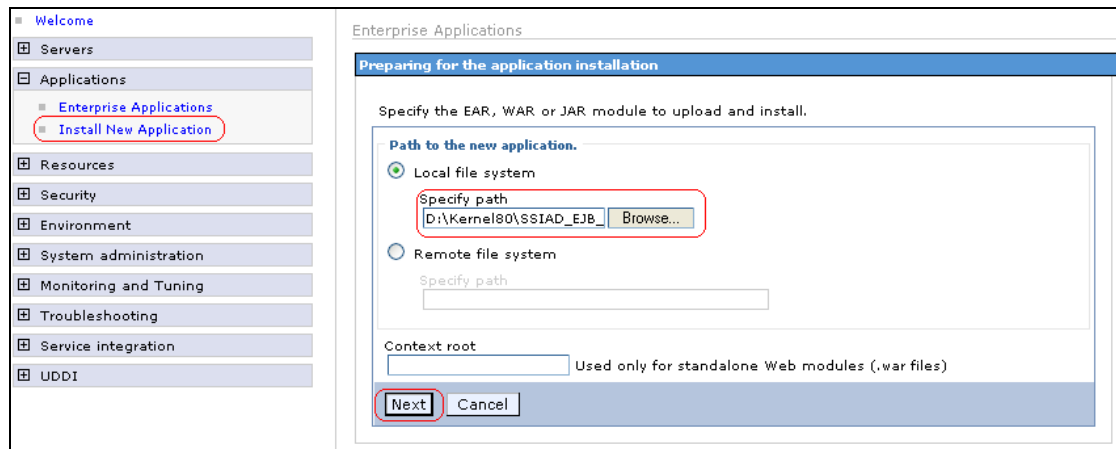
- Go to the <APP_SERVER_HOME>/bin .i.e the application server installation directory in the command prompt, type `./startServer.sh server1` and press enter.
- ✓ This will start the server. Ensure that you get no error during start up. **Open the administrative console of the application server** Open 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

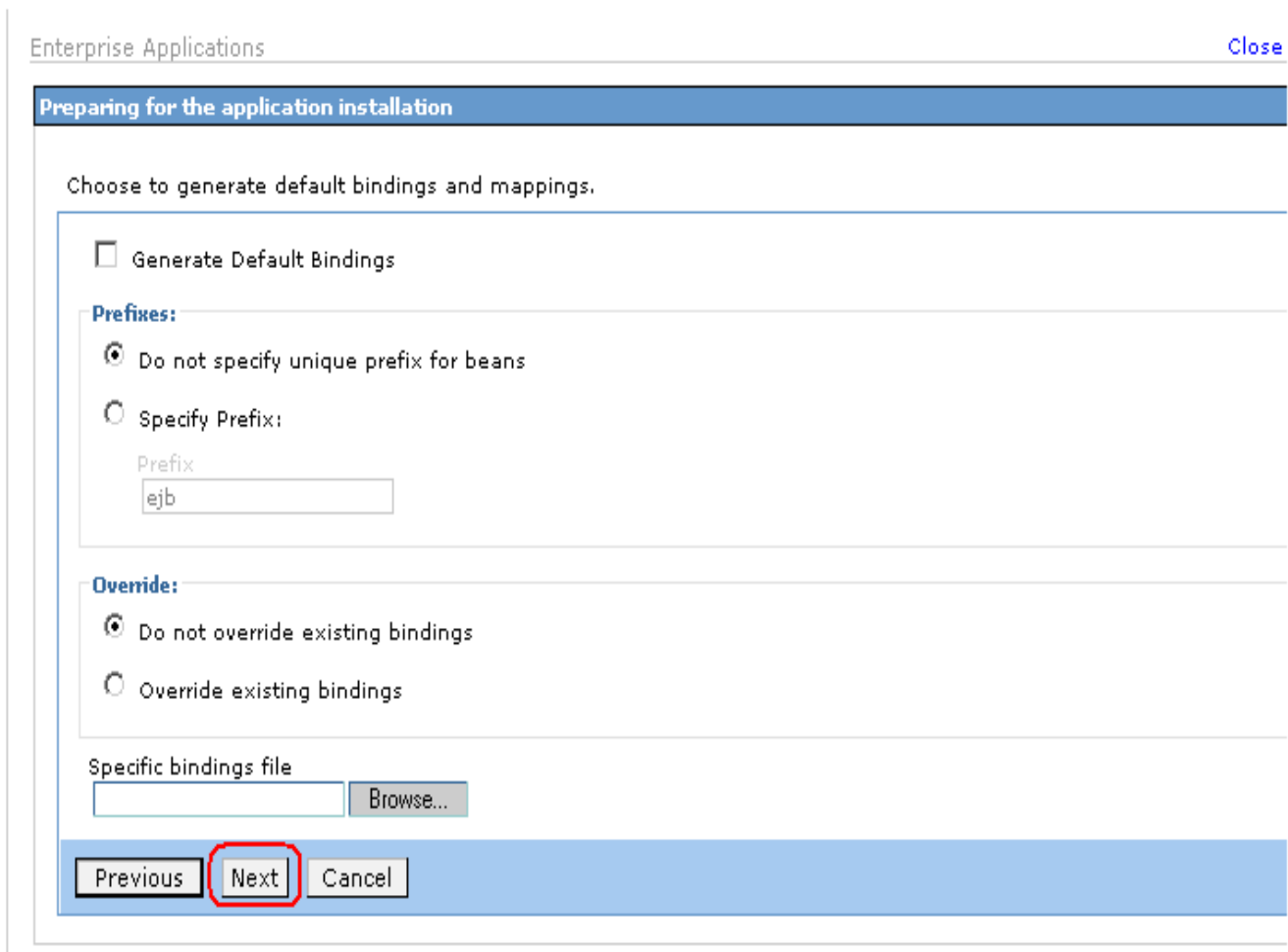


Deploying SSIAD_EJB_Bean.ear

- ✓ 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_EJB_ACK/build/SSIAD_EJB_ACK_Bean.ear) and click on Next.



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



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

Enterprise Applications

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 options to perform the EJB Deploy](#)

✦ [Step 4: Provide JNDI Names for Beans](#)

✦ [Step 5: Map resource references to resources](#)

[Step 6: Ensure all unprotected 2.x methods have the correct level of protection](#)

[Step 7: 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

Next Cancel

5. 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 options to perform the EJB Deploy

★ Step 4
Provide JNDI Names for Beans

★ Step 5
Map resource references to resources

Step 6
Ensure all unprotected 2.x methods have the correct level of protection

Step 7
Summary

Map modules to servers

Specify targets such as application servers or clusters of application servers where you want to install the module. Modules can be installed on the same application server or dispersed among several application servers. Also, that will serve as routers for requests to this application. The plug-in configuration file (plugin-rfg.xml) for each the applications which are routed through it.

Clusters and Servers:

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

Apply

☒
☐

Select	Module	URI	Server
<input type="checkbox"/>	SSIAD_EJB_ACK_Bean.jar	SSIAD_EJB_ACK_Bean.jar;META-INF/ejb-jar.xml	WebSphere:cell=DDTD0270Node01Cell,node=DDTD0270Node01,server=server1

Previous

Next

Cancel

6.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 options to perform the EJB Deploy](#)**

[Step 4](#) Provide JNDI Names for Beans

[Step 5](#) Ensure all unprotected 2.x methods have the correct level of protection

[Step 6](#) Summary

Provide options to perform the EJB Deploy

Specify the options to deploy enterprise beans.

EJB Deployment Options	Enable
Deploy EJB option - Class path	<input type="text"/>
Deploy EJB option - RMIC	<input type="text"/>
Deploy EJB option - Database type	DB2UDB_V81 ▾
Deploy EJB option - Database schema	<input type="text"/>

7. Following screen will be displayed.

Specify the JNDI name of the EJB Bean i.e. "SSIAD_EJB_ACK_Bean" and click on NEXT.

Enterprise Applications

Close page

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 options to perform the EJB Deploy

→ Step 4: Provide JNDI Names for Beans

✦ Step 5 Map resource references to resources

Step 6 Ensure all unprotected 2.x methods have the correct level of protection

Step 7 Summary

Provide JNDI Names for Beans

Each non-message-driven enterprise bean in your application or module must be bound to a Java Naming and Directory Interface (JNDI) name.

EJB module	EJB	URI	JNDI name
SSIAD_EJB_ACK_Bean.jar	SSIAD_EJB_ACK_Bean	SSIAD_EJB_ACK_Bean.jar,META-INF/ejb-jar.xml	SSIAD_EJB_ACK_Bean

Previous

Next

Cancel

8.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 options to perform the EJB Deploy

[Step 4](#)
Provide JNDI Names for Beans

→ **Step 5: Ensure all unprotected 2.x methods have the correct level of protection**

[Step 6](#)
Summary

Ensure all unprotected 2.x methods have the correct level of protection

Specify whether you want to assign a security role to the unprotected method, add the method to the exclude list, or mark the method as unchecked.

☒ Uncheck
☐ Exclude
☐ Role:

Select	EJB module	URI	Protection type
<input type="checkbox"/>	SSIAD_EJB_ACK_Bean.jar	SSIAD_EJB_ACK_Bean.jar,META-INF/ejb-jar.xml	methodProtection.uncheck

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 options to perform the EJB Deploy

Step 4 Provide JNDI Names for Beans

Step 5 Ensure all unprotected 2.x methods have the correct level of protection

→ Step 6: Summary

Summary

Summary of installation options

Options	Values
Use Binary Configuration	No
Deploy EJB option - Class path	
Create MBeans for resources	Yes
Cell/Node/Server	Click here
Reload interval in seconds	
Enable class reloading	No
Deploy EJB option - Database type	DB2UDB_V81
Deploy EJB option - Database schema	
Process embedded configuration	No
Application name	SSIAD_EJB ACK Adapter
Deploy EJB option - RMIC	
Validate Input off/warn/fail	warn
Directory to install application	
Distribute application	Yes
Deploy Web services	No
Pre-compile JSP	No
Deploy enterprise beans	Yes

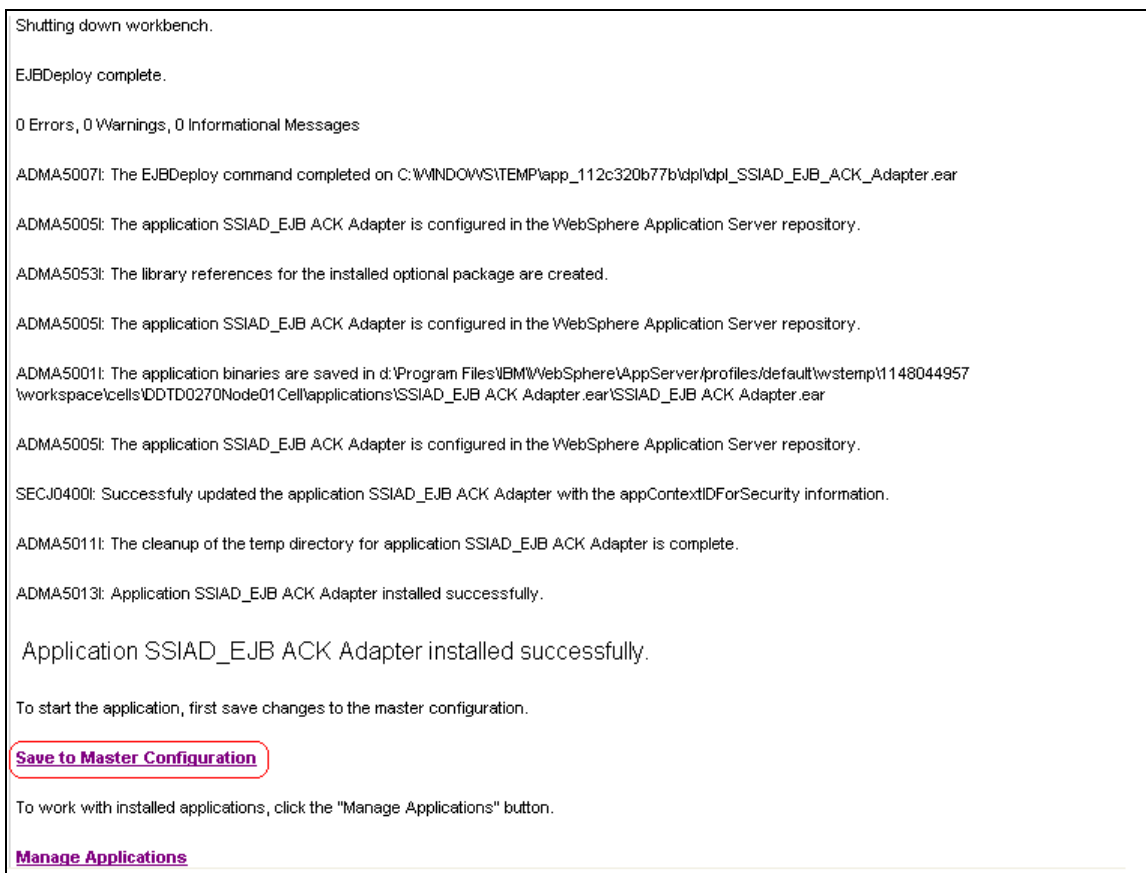
Previous

Finish

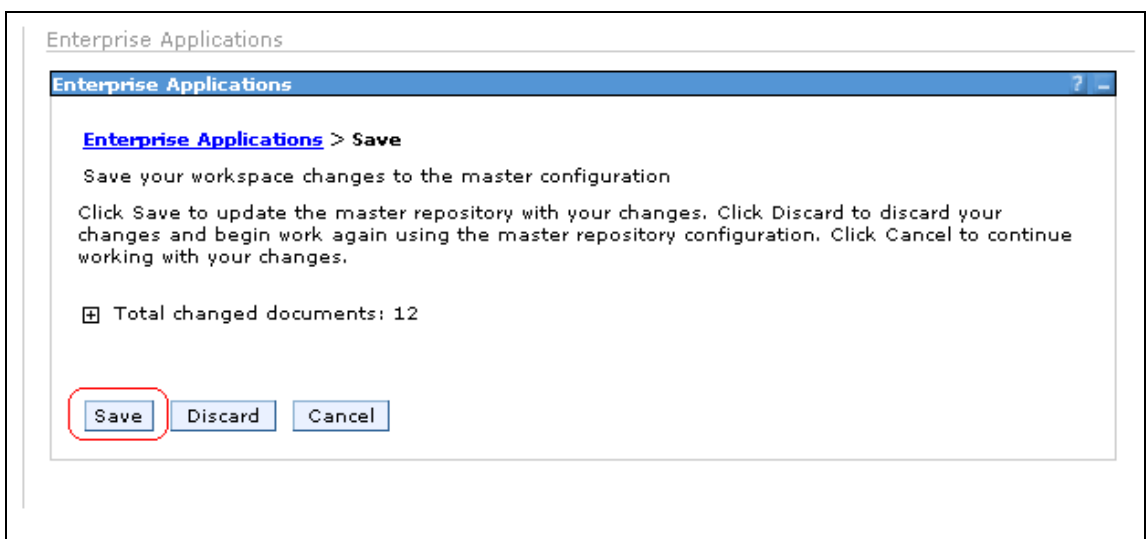
Cancel

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

1-18



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



12. Browse to Application -> Enterprise Applications.

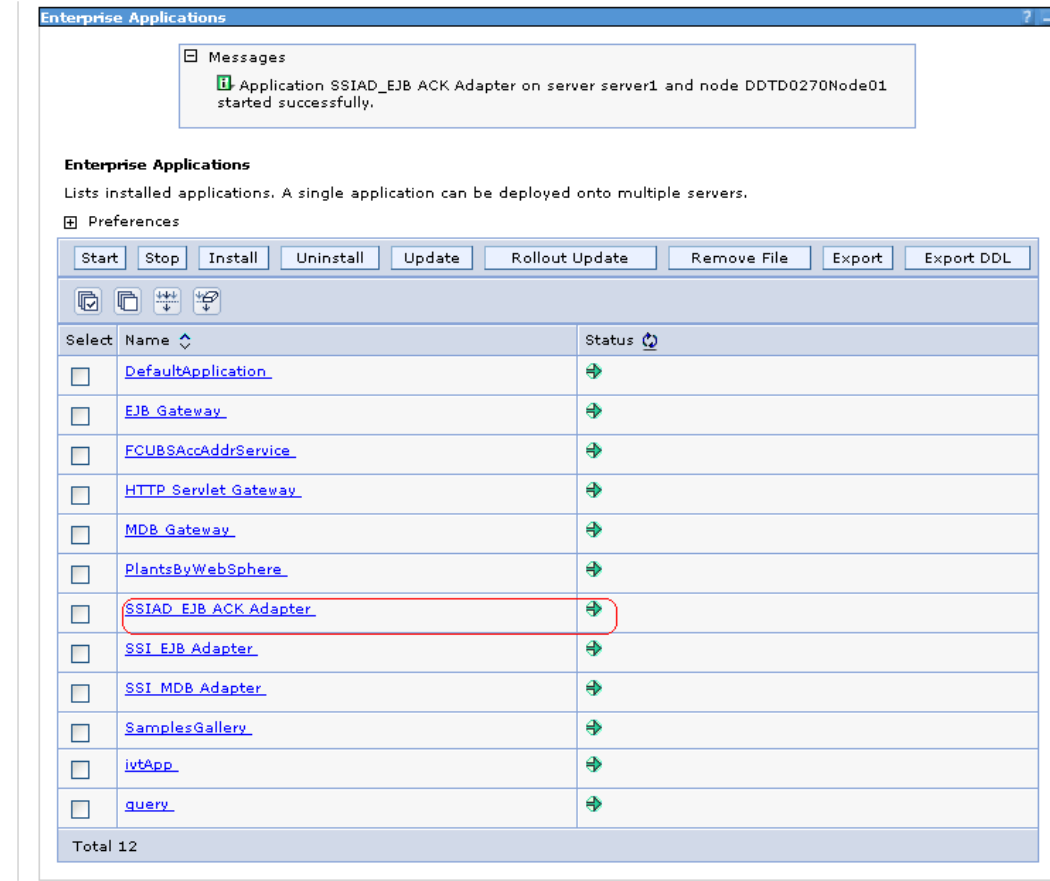
- ✓ The deployed SSIAD_EJB_ACK_Bean will be displayed on the screen.
- ✓ Click the check box beside it and click on **Start**.

The screenshot shows the 'Enterprise Applications' management interface. On the left, a navigation pane lists various system components, with 'Enterprise Applications' selected. The main area displays a table of installed applications. The 'SSIAD_EJB ACK Adapter' is highlighted with a red box, and its status is shown as a red 'X' icon, indicating it is not running. The 'Start' button is visible at the top of the application list.

Select	Name	Status
<input type="checkbox"/>	DefaultApplication	➔
<input type="checkbox"/>	EJB Gateway	➔
<input type="checkbox"/>	FCUBSAccAddrService	➔
<input type="checkbox"/>	HTTP Servlet Gateway	➔
<input type="checkbox"/>	MDB Gateway	➔
<input type="checkbox"/>	PlantsByWebSphere	➔
<input checked="" 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 12

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



E. Notifying the SSIAD_EJB_ACK_Bean to start polling on Folder

✓ For Windows

1. Open a Command prompt
2. Go to <KERNEL_INSTALL_DIR>\setup
3. Type **set_env** and press Enter.
4. Go to <KERNEL_INSTALL_DIR>\SSIAD_EJB_ACK\client\WAS
5. Type **runEJB_ACKClient START** and press enter

✓ For Unix

1. Go to <KERNEL_INSTALL_DIR>/setup
2. Type **chmod +x set_env.sh** and press Enter.
3. Type **set_env.sh** and Press Enter.
4. Go to <KERNEL_INSTALL_DIR>/SSIAD_EJB_ACK /client/WAS
5. Type **chmod +x runEJB_ACKClient.sh**
6. Type **runEJB_ACKClient.sh START** and press Enter

F. Canceling the SSIAD_EJB_ACK_Bean so as to stop polling on Folder

✓ For Windows

1. Open a Command prompt
2. Go to <KERNEL_INSTALL_DIR>/setup
3. Type **set_env** and press Enter.
4. Go to <KERNEL_INSTALL_DIR>/SSIAD_EJB_ACK/client/WAS
5. Type **runEJB_ACKClient STOP** and press enter

✓ For Unix

1. Go to <KERNEL_INSTALL_DIR>/setup
2. Type **chmod +x set_env.sh** and press Enter.
3. Type **set_env.sh** and Press Enter.
4. Go to <KERNEL_INSTALL_DIR>/SSIAD_EJB_ACK/client/WAS
5. Type **chmod +x runEJB_ACKClient.sh**
6. Type **runEJB_ACKClient.sh STOP** and press Enter



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