

Oracle FLEXCUBE Direct Banking
Mobile Enabler
Installation Manual On Oracle Application Server

Release 12.0.3.0.0

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ORACLE®

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2. Preface

1.1 Intended Audience

This document is primarily targeted at

- Oracle FLEXCUBE Direct Banking Development Teams
- Oracle FLEXCUBE Direct Banking Implementation Teams
- Oracle FLEXCUBE Direct Banking Implementation Partners

1.2 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

1.3 Access to OFSS Support

<https://support.us.oracle.com>

1.4 Structure

This manual is organized into the following categories:

Preface gives information on the intended audience. It also describes the overall structure of the User Manual

Abbreviations provides details of abbreviations used in document.

Application server configuration and rest explains details about configuration and Installation of ME on application server.

1.5 Related Information Sources

For more information on Oracle FLEXCUBE Direct Banking Release 12.0.3.0.0, refer to the following documents:

Oracle FLEXCUBE Direct Banking Licensing Guide

3. Abbreviations

FCDB	Oracle FLEXCUBE Direct Banking
Java EE / JEE	Java Enterprise Edition
Java SE / JSE	Java 2 Standard Edition
DBA	Database Administrator
JDK	Java Development Kit
FCDBME BASE DIR	Oracle FLEXCUBE Direct Banking Mobile Enabler Base Working Directory
ME	Mobile Enabler
TGT App	Target Internet Banking Application (for e.g. 2.9.X)
App Server	Application Server

4. Pre- requisites

During installation of Oracle Application Server SOA Suite appropriate instance name with administrator username and password must be provided.

The Flexcube Direct Banking Application Mobile Enabler is installed successfully using Oracle FLEXCUBE Direct Banking Mobile Enabler Installer.

5. Application Server Configuration

a. Creating and Managing a Server Instance

i. Creating server instance

To create the server instance do the following steps at the command prompt:

Use the netstat command to identify unoccupied HTTP port.

```
netstat -ano
```

This command will tell the port numbers that are being used.

Create one OC4J instance for application deployment by issuing the following command in <Oracle_Home>\bin:

e.g. D:\product\10.1.3.1\OracleAS_1\bin>

```
createinstance -instanceName <Instance Name> -port <User specified HTTP port>
```

e.g createinstance -instanceName FCDBME -port 80

Set OC4J administrators password for the instance (password text will not be displayed as it is entered)The password entered should be the same as the password entered earlier during installation.

Issue the following commands under directory path given below.

```
<Oracle_Home>\opmn\bin
```

Command	Purpose
opmnctl startall	To start opmn and all the managed processes.
opmnctl stopall	To stop opmn and all the processes.
opmnctl status	To check the status of the process , if its Alive (running) or Down.
opmnctl reload	It triggers opmn to reread opmn.xml

Start the created instance *FCDBME* by issuing the following command :

```
opmnctl startall
```

```
opmnctl startproc process-type=<instance name>
```

```
e.g. opmnctl startproc process-type=FCDBME
```

ii. Configuring the instance

The Administration Console facilitates in creating, starting, suspending, resuming and stopping servers, deploying applications and other administration facilities.

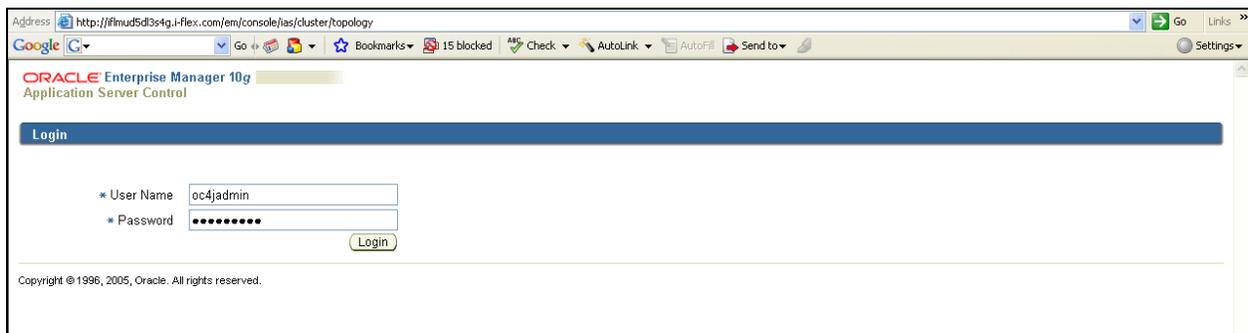
To start the Oracle 10g Server Administration Console in Windows click on

Program Files→Oracle→Oracle Application Server Control **OR**

Find the *readme.txt* under <Oracle _Home>\install and locate the path for the console.

e.g. <http://IFLMUD5DL3S4G.i-flex.com:80/em>

1. Enter Username and Password which was entered during the Installation process. Click on “Login” button.



Configure the server properties.

Through “opmn.xml”

Open the <Oracle Home Folder>\ opmn\conf folder. Edit the file “opmn.xml”.

Add the following lines in “start-parameters” of the instance i.e. FCDBME.

Property Name	Value	Example
Path for the server logs	<pre><data id="oc4j-options" value=" -properties -out <FCAT.LOGFILE.PATH>\logs\ SystemOut.log -err <FCAT.LOGFILE.PATH>\logs\ SystemError.log -userThreads"/></pre>	<pre><data id="oc4j-options " value=" -properties -out D:\ FCDBMELogs\logs\FCDBME_default_group_1\ SystemOut.log -err D:\ FCDBMELogs\logs\FCDBME_default_group_1 \SystemError.log -userThreads"/></pre>
Path for the home folder	<pre><data id="java-options " value=" -Dfcacat.basedir= <Base Folder> -Dfcacat.jvm.id=1" /></pre>	<pre><data id="java-options" value=" -Dfcacat.basedir= D:\ FCDBME -Dfcacat.jvm.id=1"/ ></pre>
Property for file encryption status	<pre><data id="oc4j-optipns" value=" -Dfcacat.propfile.isencr=false /></pre>	<p>This property indicates the properties file’s encryption status. Set as ‘true’ if files are encrypted, else set as ‘false’. Refer to point 7 in this document for more details.</p>

- Refer to the screenshot below

```
<process-type id="FCDBME" module-id="OC4J" status="enabled">
  <module-data>
    <category id="start-parameters">
      <data id="java-options" value="-server -Xdebug -Xnoagent -Xrunjdpw:transport=dt_socket,server=y,suspend=n,address=7777
-Djava.security.policy=${ORACLE_HOME}/j2ee/FCDBME/config/java2.policy -Djava.awt.headless=true
-Dhttp.webdir.enable=false -Dfcacat.basedir=D:\FCDBME_15 -Dfcacat.jvm.id=1"/>
      <data id="oc4j-options" value="-properties -out D:\FCDBME_15\logs\SystemOut.log -err D:\FCDBME_15\logs\SystemError.log -userThreads"/>
    </category>
    <category id="stop-parameters">
      <data id="java-options" value="-Djava.security.policy=${ORACLE_HOME}/j2ee/FCDBME/config/java2.policy
-Djava.awt.headless=true -Dhttp.webdir.enable=false"/>
    </category>
  </module-data>
  <start timeout="600" retry="2"/>
  <stop timeout="120"/>
  <restart timeout="720" retry="2"/>
  <port id="default-web-site" range="12501-12600" protocol="ajp"/>
  <port id="rmi" range="12401-12500"/>
  <port id="jms" range="12601-12700"/>
  <process-set id="default_group" numprocs="1"/>
</process-type>
```

Restart the instance. The instance can be started or stopped through the console by selecting the OC4j instance and click on the “Start”, “Stop” or “Restart” button.

b. Deploying Applications

Web Application Deployment

Following section explains deploying Web application on Oracle Application Server.

These steps should be carried out for “B001.war” FCDB ME web application mentioned below.

Deployable	Suggested Context	Path Location	Description
B001.war	B001	< FCDBME BASE DIR>\deploy	Application for Bank entity B001. This is available only for Base release.

1. Click the instance name created in the above steps i.e. *FCDBME*.

ORACLE Enterprise Manager 10g
Application Server Control

Setup Logs Help Logout

Cluster Topology Page Refreshed May 10, 2012 12:21:33 PM IST • View Data Manual Refresh

Overview

Hosts 1 Application Servers 1
OC4J Instances 2 HTTP Server Instances 1

Members

View By Application Servers

Start Stop Restart

Select All | Select None | Expand All | Collapse All

Select	Focus	Name	Status	Type	Host	CPU (%)	Memory (MB)
<input type="checkbox"/>		▼ All Application Servers					
<input type="checkbox"/>		▼ FCDBME.IFLMUD5HP0887.i-flex.com		Application Server	IFLMUD5HP0887		
<input type="checkbox"/>		▶ FCDBME		OC4J		0.02	56.20
<input type="checkbox"/>		▶ home		OC4J		1.60	60.39
<input type="checkbox"/>		HTTP_Server		Oracle HTTP Server		0.08	56.96

Indicates the active ASControl instance.

TIP If a parent topology member is selected all contained members are implicitly selected.

Groups

A Group is a loosely synchronized group of like-named OC4J instances. Configuration operations can be executed simultaneously on all OC4J instances in the Group.

Start Stop

Select	Name	Status	Application Server
<input checked="" type="radio"/>	FCDBME		FCDBME.IFLMUD5HP0887.i-flex.com
<input type="radio"/>	home		FCDBME.IFLMUD5HP0887.i-flex.com

Related Links

[Cluster MBean Browser](#)

Setup Logs Help Logout

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- Click on “Applications” tab.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: FCDBME,IFLMUD5HP0887.i-flex.com >

OC4J: FCDBME

Page Refreshed May 10, 2012 12:24:50 PM IST • View Data Manual Refresh

Home Applications Web Services Performance Administration

General **Response and Load**

Status Up
Start Time May 10, 2012 9:18:43 AM IST
Oracle Home D:\oracle
Host IFLMUD5HP0887.i-flex.com
Notifications 0

Home Applications Web Services Performance Administration

Setup | Logs | Help | Logout

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- Click on “Deploy”.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: FCDB,OFSMUD6HP06KK.i-flex.com >

OC4J:FCDBME

Page Refreshed

Home Applications Web Services Performance Administration

This page shows the J2EE applications and application components (EJB Modules, WAR Modules, Resource Adapter Modules) deployed to this OC4J instance.

View Applications

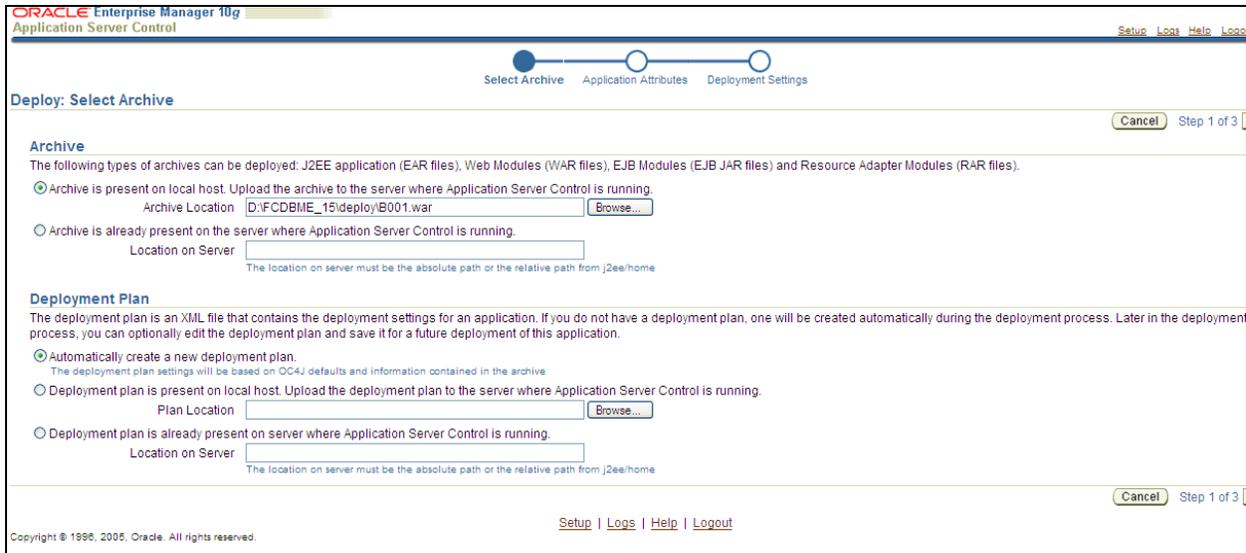
Start Stop Restart Undeploy Redeploy Deploy

Expand All Collapse All

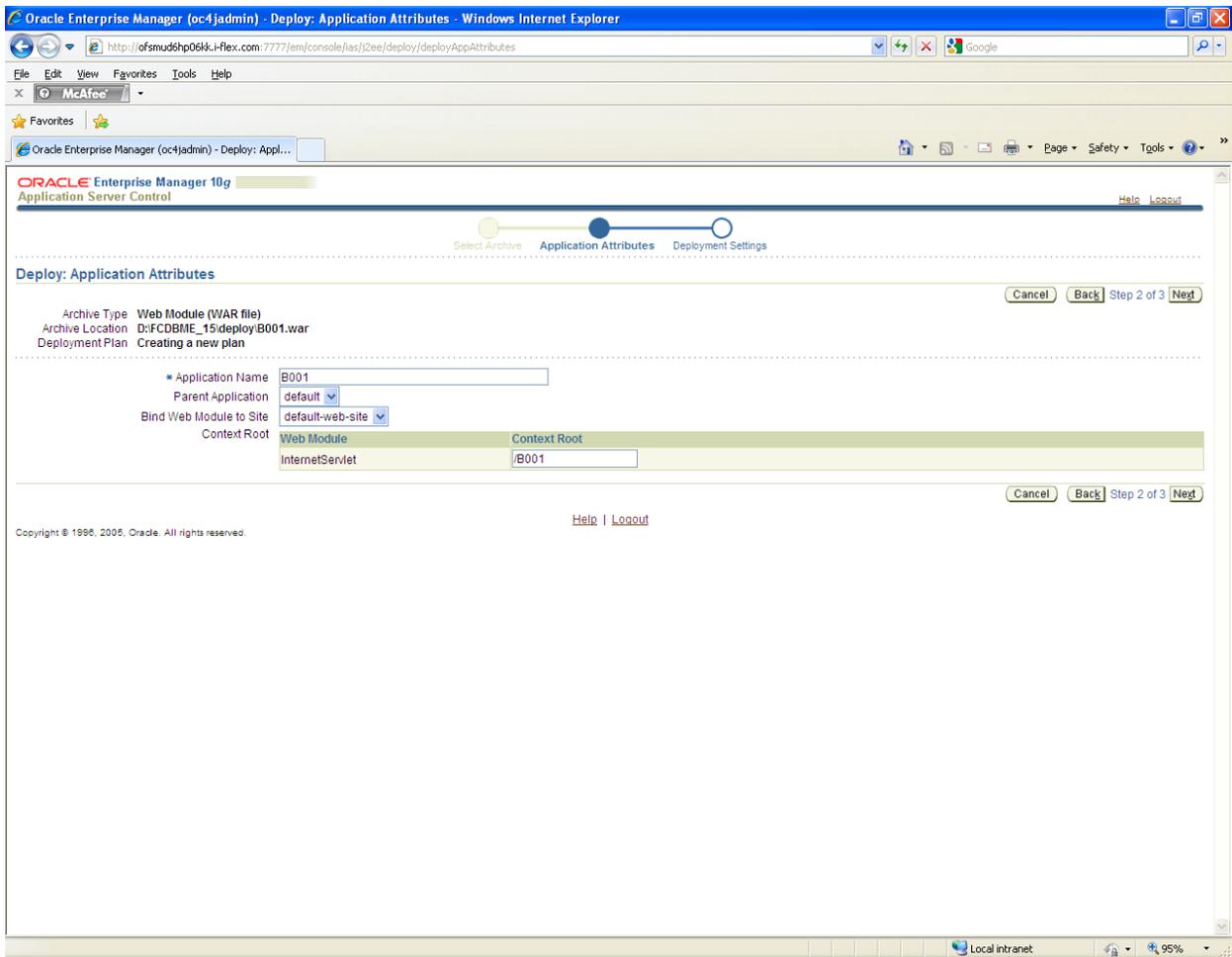
Select Name	Status	Start Time	Active Requests	Request Processing Time (seconds)	Active EJB Methods	Application Defined MBeans
▼ All Applications						
○ ascontrol	↓					
▼ default	↑	May 3, 2012 2:28:40 PM IST	0	0.00	0	
○ B001	↑	May 3, 2012 2:28:42 PM IST	0	0.00	0	
○ M001	↑	May 3, 2012 2:28:42 PM IST	0	0.00	0	

Home Applications Web Services Performance Administration

- Select the first option “Archive is present on local host. Upload the archive to the server where Application Server Control is running”. Give the path of “B001.war” to be deployed. Click on the “Next” button.



5. Click on “Next”.



- Give the "Application Name" as "B001" and the "Context Root" as "/B001". Keep the other default settings in drop down as it is and click "Next".

Oracle Enterprise Manager 10g
Application Server Control

Deploy: Deployment Settings

Archive Type: Web Module (WAR file)
Archive Location: D:\FCDBME_15\deploy\B001.war
Deployment Plan: Creating a new plan

Application Name: R001
Parent Application: default
Bind Web Module to Site: default-web-site
Context Root: /R001

Deployment Tasks
The table below provides a set of common deployment tasks you might want to perform for this application. Only those tasks that apply to the current application are enabled.

Task Name	Go To Task	Description
Map Environment References		Map any environment references in your application (for example, data sources) to physical entities currently present on the operational environment.
Select Security Provider		A security provider acts as the source for available users and groups when mapping security roles.
Map Security Roles		Map any security roles exposed by your application to existing users and groups. The list of users and groups is obtained from the security provider you selected for this application.
Configure EJBs		Configure the Enterprise JavaBeans in your application.
Configure Clustering		Configure clustering of your application.
Configure Class Loading		Manipulate the classpath of your application.

Advanced Deployment Plan Editing
Click: Edit Deployment Plan to set more advanced deployment options. [Edit Deployment Plan](#)

Save Deployment Plan
After you make changes, you can save the deployment plan to your local disk. You can then use the saved deployment plan to redeploy this application later. [Save Deployment Plan](#)

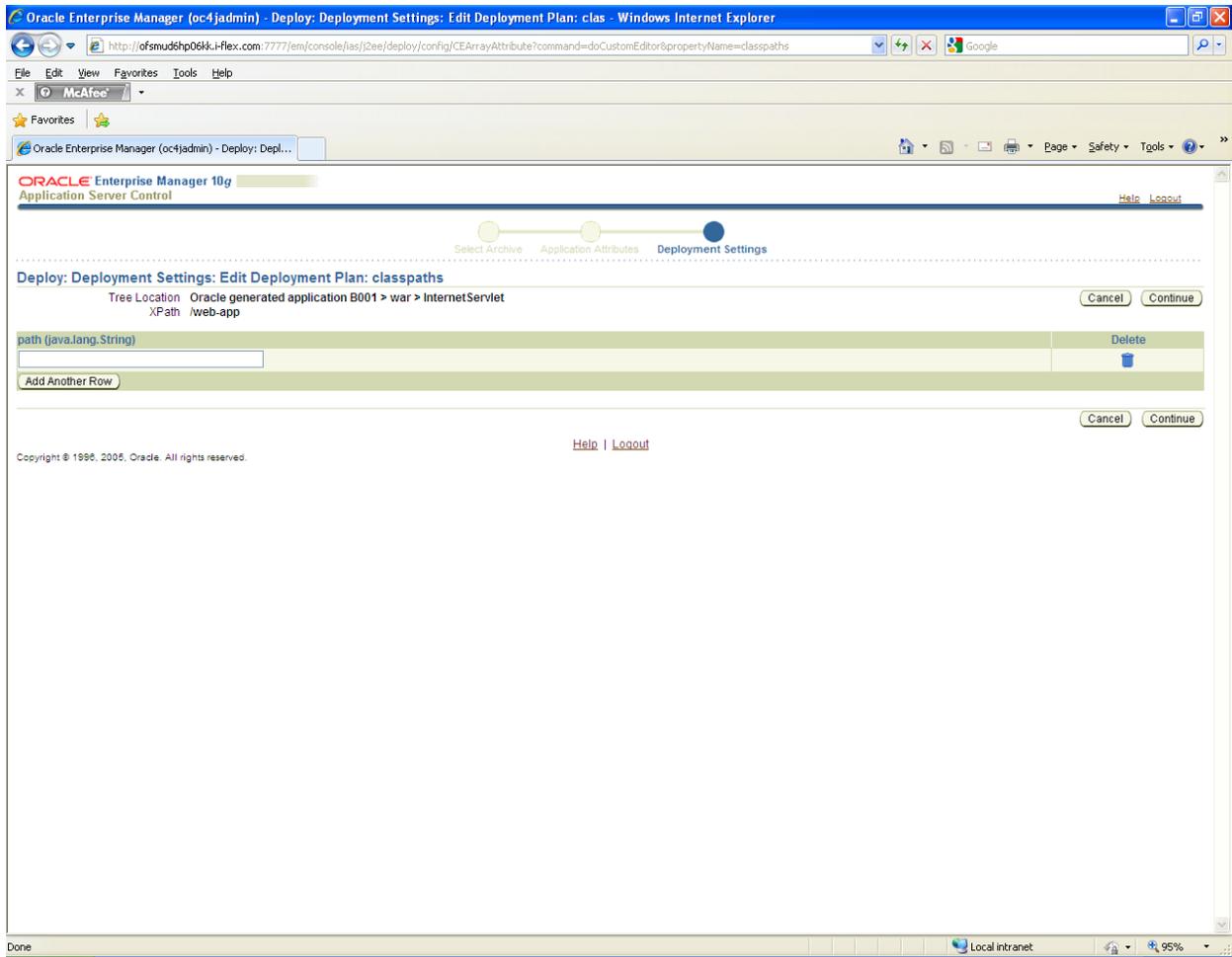
Copyright © 1996, 2005, Oracle. All rights reserved. [Help](#) | [Logout](#)

Click on the “Edit Deployment Plan” link.

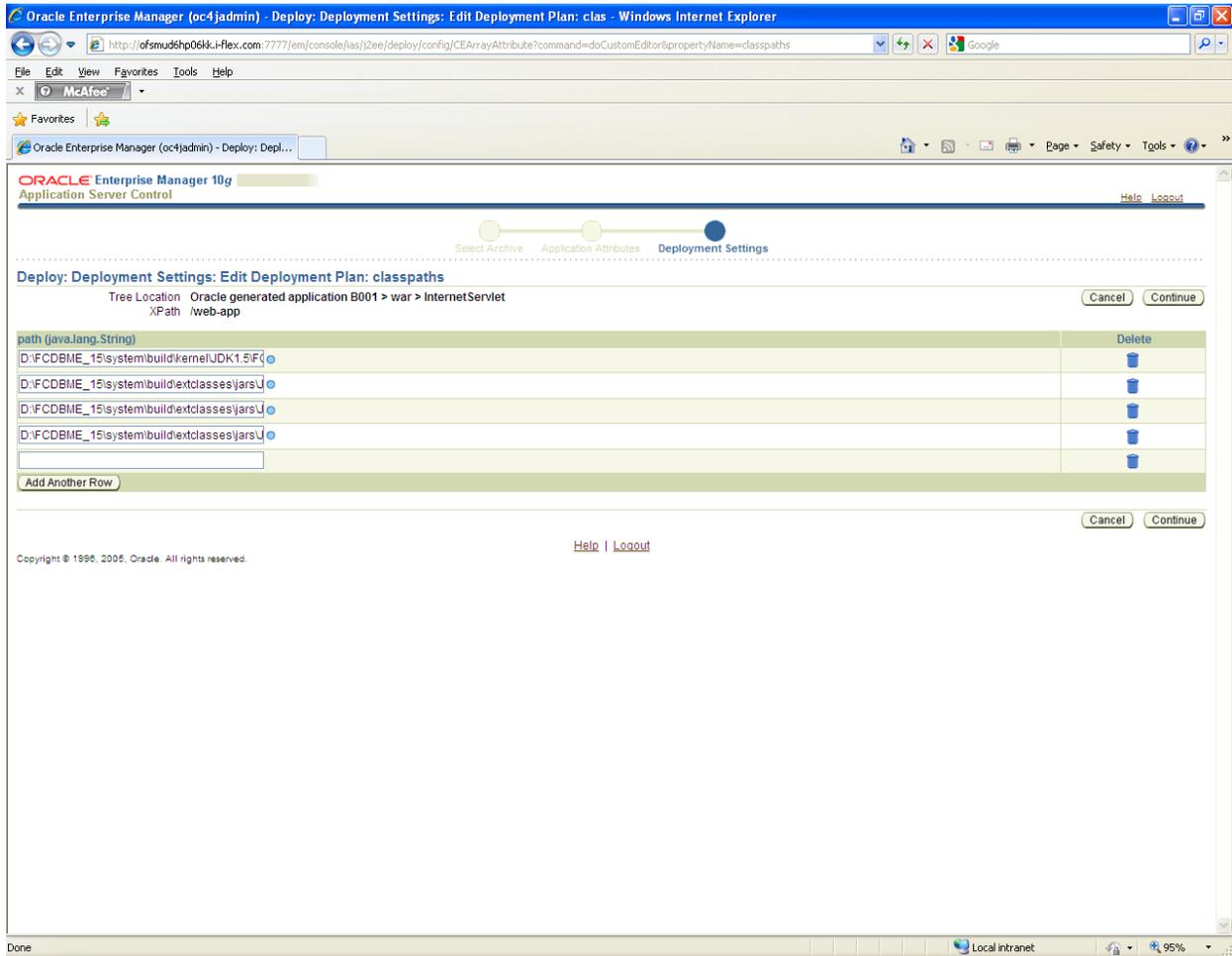
The screenshot shows the Oracle Enterprise Manager 10g Application Server Control interface. The main content area is titled "Deploy: Deployment Settings: Edit Deployment Plan". On the left, a tree view shows the application structure: "Oracle generated application B001" > "war" > "InternetServlet". The main area displays the configuration for the "InternetServlet" web application. The "Description" field is empty, and the "XPath" is "/web-app". Below this, there are tabs for "Edit OC4J Descriptor", "View OC4J Descriptor", and "View Standard Descriptor". A table lists various properties with their current values and descriptions.

Name	Value	Default Value	Description
accessMask	Edit accessMask		Specifies optional access masks for this application.
alwaysRedefine	false	false	Not supported.
autoJoinSession	true	true	Specifies whether users should be assigned a session as soon as they log in to the application.
classpaths	Edit classpaths		Specifies additional code sources for Web application classloading. These can be either library files or locations for individual class files.
contextRoot	/B001		Specifies the root context of the Web Module. If not specified defaults to the context-root specified in the parent application's application.xml descriptor.
defaultBufferSize		2048	Specifies the default size of the output buffer for servlet responses, in bytes.
defaultCharset		iso-8859-1	Specifies the ISO character set to use by default.
defaultMimeType			Specifies the default MIME type to use for files with unknown or unrecognized extensions.
deploymentVersion			Specifies the version of OC4J under which this Web application was deployed.
development	false	false	This property is a convenience for use during development. If true, OC4J checks a particular directory for updates to servlet source files.
directoryBrowsing	deny	deny	Specifies whether to allow directory browsing for a URL that ends in /.
enableJspDispatcherShortcut	true	true	Set to true to improve JSP container performance, particularly for JSP pages with numerous jsp:include tags.
expirationSettings	Edit expirationSettings		Defines the length of time before a specified set of resources - such as image files - will expire in the user's browser. Useful for caching policies, such as for not reloading images as frequently as documents.
fileModificationCheckInterval		1000	Defines the interval, in milliseconds, at which OC4J checks for modified files. Applicable only to static files, such as HTML files.
id			
iaznWebApp	Edit iaznWebApp		Configures the OracleAS, IAAS Provider and Single Sign-On (SSO)

7. Click on the “Edit Classpaths” link.



Add classpaths



Add the jars from the following location in the classpath.

Location	Description
<FCDBME BASE DIR>\system\build\kernel	Select the release jar FCDB_12.0.0_ME_JDK1.4.jar kept at this location.
<FCDBME BASE DIR>\system\build\extclasses\Jars	Select all the external or third-party jars within this folder.

8. Click on the “Continue” button.

Oracle Enterprise Manager (oc4jadmin) - Deploy: Deployment Settings: Edit Deployment Plan - Windows Internet Explorer

http://ofsmudshp06kku-flex.com:7777/enj/console/ias/j2ee/deploy/config/dpeEditor

File Edit View Favorites Tools Help

McAfee

Oracle Enterprise Manager (oc4jadmin) - Deploy: Depl...

ORACLE Enterprise Manager 10g
Application Server Control

Select Archive Application Attributes **Deployment Settings**

Deploy: Deployment Settings: Edit Deployment Plan Cancel OK

Search

Oracle generated application B001
war
InternetServlet

jspCacheDirectory	<input type="text"/>		security subject
jspCacheTlds	standard	standard	Specifies the JSP cache directory, which is used as a base directory for output files from the JSP translator. The location may be relative to the application deployment directory.
jspPrintNull	true	true	Indicates whether persistent TLD caching is enabled for JSP pages with the application. See the Oracle Containers for J2EE Support for JavaServer Pages Developer's Guide for values.
jspTaglibLocations	<input type="text"/>		Set to false to print an empty string instead of the default NULL string for null output from a JSP page.
jspTimeout	<input type="text"/>	0	Set at the container level.
mimeMappings	Edit mimeMappings		Specify an integer value, in seconds, after which any JSP page will be removed from memory if it has not been requested.
persistencePath	<input type="text"/>		Defines the path to a file containing MIME mappings to use.
requestTrackers	Edit requestTrackers		Indicates where to store servlet HttpSession objects for persistence across server restarts or application redeployments. Specify as a relative path.
servletChaining	Edit servletChaining		Specifies one or more servlets to use as dedicated request trackers, useful for logging information.
servletWebdir	<input type="text"/>	/servlet/	Specifies a servlet to call when the response of the current servlet is set to a specified MIME type.
sessionTracking	Edit sessionTracking		Specifies the path for invoking a servlet by class name, such as /servlet/. Anything appearing after this path in a URL is assumed to be a class name, including the package.
simpleJspMapping	false	false	Specifies the session-tracking settings for this application. Session tracking is accomplished using cookies.
sourceDirectory	<input type="text"/>		Set to true if *.jsp is mapped only to the OC4J front-end JSP servlet (oracle.jsp.runtime.v2.JspServlet.)
temporaryDirectory	<input type="text"/>	.temp	Specifies the location of servlet source files to auto-compile if the development property is set to true. Development mode setting only.
virtualDirectories	Edit virtualDirectories		Contains the path to a temporary directory that can be used by servlets and JSP pages for scratch files.
webAppClassLoader	Edit webAppClassLoader		Adds a virtual directory mapping for static content, such as an enterprise-wide error page linked into multiple WAR files.
			Contains class loading instructions passed to the OC4J server at Web module startup.

[Edit OC4J Descriptor](#) [View OC4J Descriptor](#) [View Standard Descriptor](#)

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Local intranet 95%

Click On Ok

Oracle Enterprise Manager 10g
Application Server Control

Information
Deployment plan has been updated successfully.

Deploy: Deployment Settings

Archive Type: Web Module (WAR file)
Archive Location: D:\FCDBME_15\deploy\B001.war
Deployment Plan: Creating a new plan

Application Name: R001
Parent Application: default
Bind Web Module to Site: default-web-site
Context Root: /B001

Deployment Tasks

The table below provides a set of common deployment tasks you might want to perform for this application. Only those tasks that apply to the current application are enabled.

Task Name	Go To Task	Description
Map Environment References		Map any environment references in your application (for example, data sources) to physical entities currently present on the operational environment.
Select Security Provider		A security provider acts as the source for available users and groups when mapping security roles.
Map Security Roles		Map any security roles exposed by your application to existing users and groups. The list of users and groups is obtained from the security provider you selected for this application.
Configure EJBs		Configure the Enterprise JavaBeans in your application.
Configure Clustering		Configure clustering of your application.
Configure Class Loading		Manipulate the classpath of your application.

Advanced Deployment Plan Editing
Click Edit Deployment Plan to set more advanced deployment options.

Save Deployment Plan
After you make changes, you can save the deployment plan to your local disk. You can then use the saved deployment plan to redeploy this application later.

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Click on Deploy

The screenshot shows the Oracle Enterprise Manager 10g Application Server Control interface in a Windows Internet Explorer browser. The page title is "Confirmation" and the main heading is "Confirmation". A message states: "The Application 'R001' has been successfully deployed." Below this, a "Progress Messages" section contains a list of log entries:

- [May 4, 2012 8:53:16 AM] Application Deployer for R001 STARTS.
- [May 4, 2012 8:53:16 AM] Copy the archive to D:\product10.1.3\OracleAS_2\2ee\fcdbme\applications\R001.ear
- [May 4, 2012 8:53:16 AM] Initialize D:\product10.1.3\OracleAS_2\2ee\fcdbme\applications\R001.ear begins...
- [May 4, 2012 8:53:16 AM] Unpacking R001.ear
- [May 4, 2012 8:53:17 AM] Done unpacking R001.ear
- [May 4, 2012 8:53:18 AM] Unpacking B001.war
- [May 4, 2012 8:53:26 AM] Done unpacking B001.war
- [May 4, 2012 8:53:26 AM] Initialize D:\product10.1.3\OracleAS_2\2ee\fcdbme\applications\R001.ear ends...
- [May 4, 2012 8:53:26 AM] Starting application : R001
- [May 4, 2012 8:53:26 AM] Initializing ClassLoader(s)
- [May 4, 2012 8:53:26 AM] Initializing EJB container
- [May 4, 2012 8:53:26 AM] Loading connector(s)
- [May 4, 2012 8:53:26 AM] Starting up resource adapters
- [May 4, 2012 8:53:26 AM] Initializing EJB sessions
- [May 4, 2012 8:53:26 AM] Committing ClassLoader(s)
- [May 4, 2012 8:53:26 AM] Initialize B001 begins...
- [May 4, 2012 8:53:26 AM] Initialize B001 ends...
- [May 4, 2012 8:53:26 AM] Started application : R001
- [May 4, 2012 8:53:26 AM] Binding web application(s) to site default-web-site begins...
- [May 4, 2012 8:53:26 AM] Binding B001 web-module for application R001 to site default-web-site under context root /B001
- [May 4, 2012 8:53:26 AM] Binding web application(s) to site default-web-site ends...
- [May 4, 2012 8:53:26 AM] Application Deployer for R001 COMPLETES. Operation time: 10281 msec

At the bottom of the page, there is a copyright notice: "Copyright © 1996, 2005, Oracle. All rights reserved." and a "Help | Logout" link. The browser's status bar shows "Done" and "Local intranet".

c. Deploying MobileEnabler Web App

After completing the setup for FCDB ME server instance and deploying the B001.war, one need to deploy “**MobileEnabler.war**” in the “**TGT App server**” instance i.e. one need to add a new web app MobileEnabler.war in their existing internet Banking server instance.

Deployable	Suggested Context	Path Location	Description
MobileEnabler.war	/MobileEnabler	< FCDBME BASE DIR>\MobileEnabler/TGT_App_deployment/2.9.X	This application to be deployed in TGT App server environment.

After successful deployment of this war file one need to update the URL of this app in FCDB ME environment setup. Property file “**mobileenabler.properties**” located at “<**FCDBME BASE DIR>\system\home**>” needs to be updated. Following parameter in this file needs to be updated

TGT.APP.INVOCATION.URL = http://<<IP Address of TGT App>>:<<PortNo>>/MobileEnabler/mobile

6. Setup JDBC data source and Connection Pooling

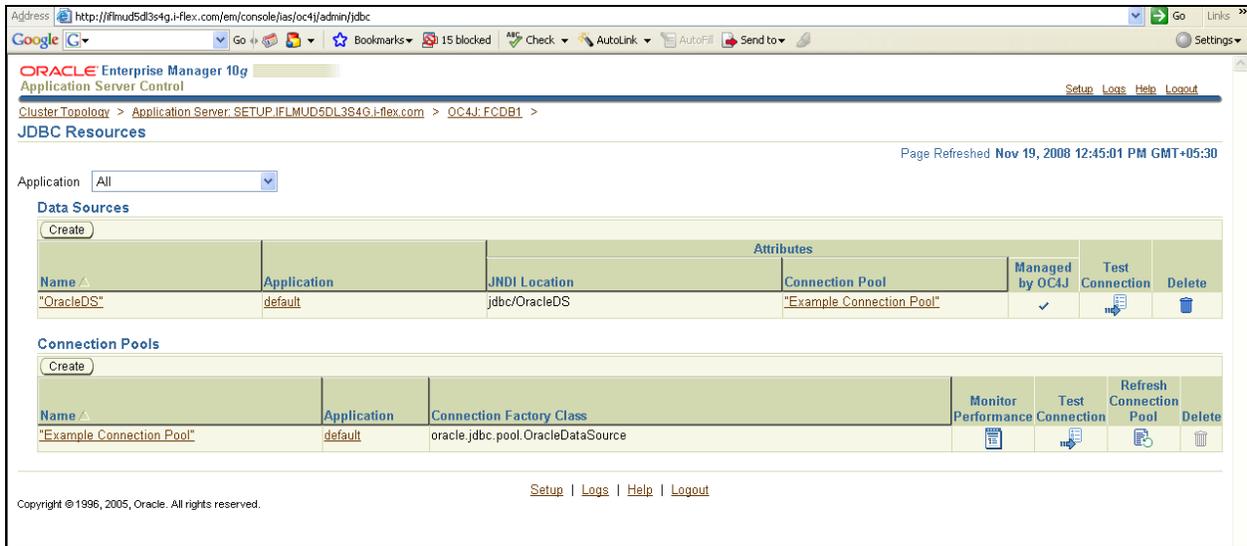
a. Creating Connection Pools

Click on the “Administration→JDBC Resources→Go to Task” link.

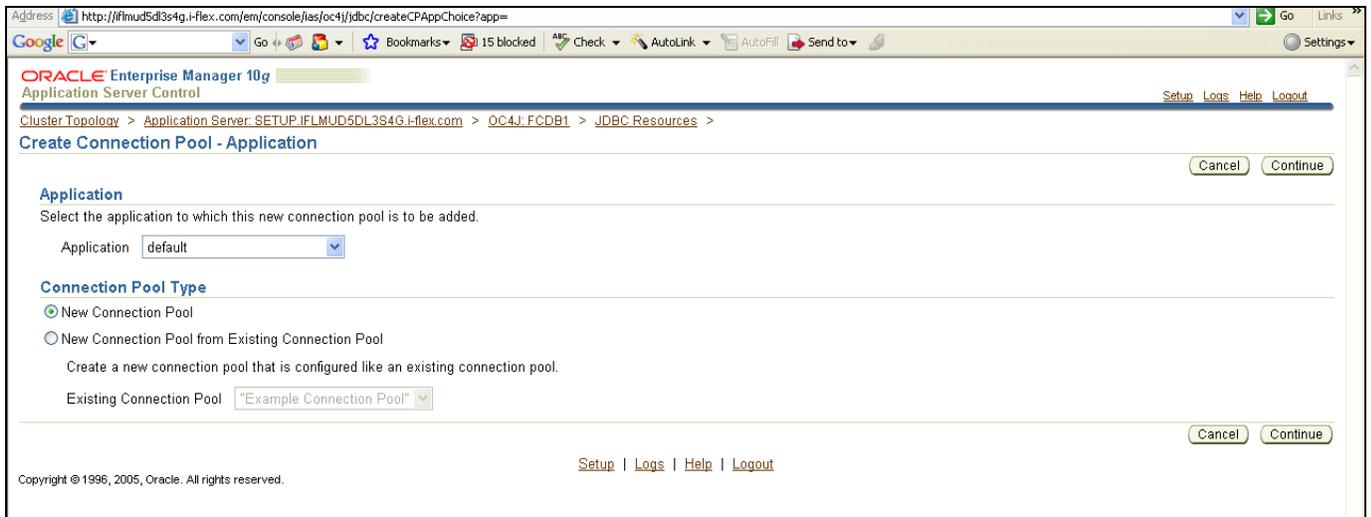
The screenshot shows the Oracle Enterprise Manager 10g Administration console. The browser address bar displays the URL: <http://ifmud5d3r4g.lflex.com/em/console/ias/oc4j/administration>. The page title is "ORACLE Enterprise Manager 10g Application Server Control". The breadcrumb navigation shows "Cluster Topology > Application Server: SETUP:IFLMUD5DL3S4G.lflex.com > OC4J: FCDB1". The "Administration" tab is selected, and the "JDBC Resources" link is highlighted in blue. Below the navigation, a table lists various tasks with their descriptions and "Go to Task" links.

Task Name	Go to Task	Description
Administration Tasks		
▼ Properties		
EJB Compiler Settings		Configure the EJB Compiler.
J2EE Websites		Manage the J2EE websites in this OC4J instance.
JSP Properties		Set JSP container properties.
Logger Configuration		Set log levels for all Loggers.
Thread Pool Configuration		Configure the thread pools of this OC4J instance.
Shared Libraries		Manage the shared libraries of this OC4J instance.
▼ Services		
JDBC Resources		Create/delete/view data sources and connection pools.
JMS Providers		Configure the OracleAS JMS Provider.
JNDI Browser		Browse the JNDI bindings of this OC4J instance.
Transaction Manager (JTA)		Configure and monitor transaction management capabilities.
▼ Security		
Security Providers		Configure security providers, create/delete/view users and roles.
Identity Management		Configure or change the Oracle Internet Directory associated with this OC4J instance.
Instance Keystore		Configure the keystore and keys to be used for this OC4J instance.
Trusted SAML Authorities		Configure trusted SAML assertion issuer names and keys to be used to secure webservice.
▼ JMX		
System MBean Browser		Browse the system MBeans exposed by this OC4J instance.
Notification Subscriptions		View/change subscriptions for notifications for all MBeans.
Notifications Received		View received notifications.

Click the “Create” button under the “Connection Pool” section.



Select property “default” under “Application” drop down. Select the option “New Connection Pool” under “Connection Pool Type” section. Click on the “Continue” button.



Give any name to the “Connection Pool”. Provide the Connection Factory Class as “oracle.jdbc.xa.client.OracleXADataSource” Select the second option “Generate URL from Connection Information” and configure the following properties.

Property Name	Description	Example
Driver Type	Type of DB driver used.	Thin
DB Host Name	<hostname or ip of the db location>	10.180.22.130
DB Listener Port	Port on which the DB is listening.	1521

DB Identifier Type	System Identifier	SID
SID/Service Name	SID or Service Name	FCDB
Username	Username used to connect to the database.	FCDBST
Use Cleartext Password	Password used to connect to the database.	fcatng

Click on the "Test Connection" button to test the connection.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: FCDBME.IFLMUD5HP0887.i-flex.com > OC4J:FCDBME > JDBC Resources >

Create Connection Pool

Cancel Back Finish

Page Refreshed May 10, 2012 5:13:07 PM IST

Home Attributes Proxy Interfaces

Name ME

Connection Factory Class oracle.jdbc.pool.OracleDataSource
Class must be available to the application's class loader.

URL

You can either specify a URL directly or have it generated from connection information. When you test a connection, the connection factory class and credentials specified on this page will be used to perform the test.

JDBC URL jdbc:oracle:thin:@localhost:1521/mydb.com Test Connection

Generate URL from Connection Information Test Connection

Driver Type Thin

DB Host Name 10.180.22.130

DB Listener Port 1521

DB Identifier Type SID

SID/Service Name FCDB

TNS Alias

Credentials

TIP For OracleDataSources, credentials must be entered if not already specified in the URL.

Username FCDBADMINDEV621

Use Cleartext Password
Password

Use Indirect Password
Indirect Password
example: Scott, customers/Scott

Connection Factory Properties

Specify any properties needed by the connection factory here.

Name	Value	Delete
(No properties found)		
Add Another Row		

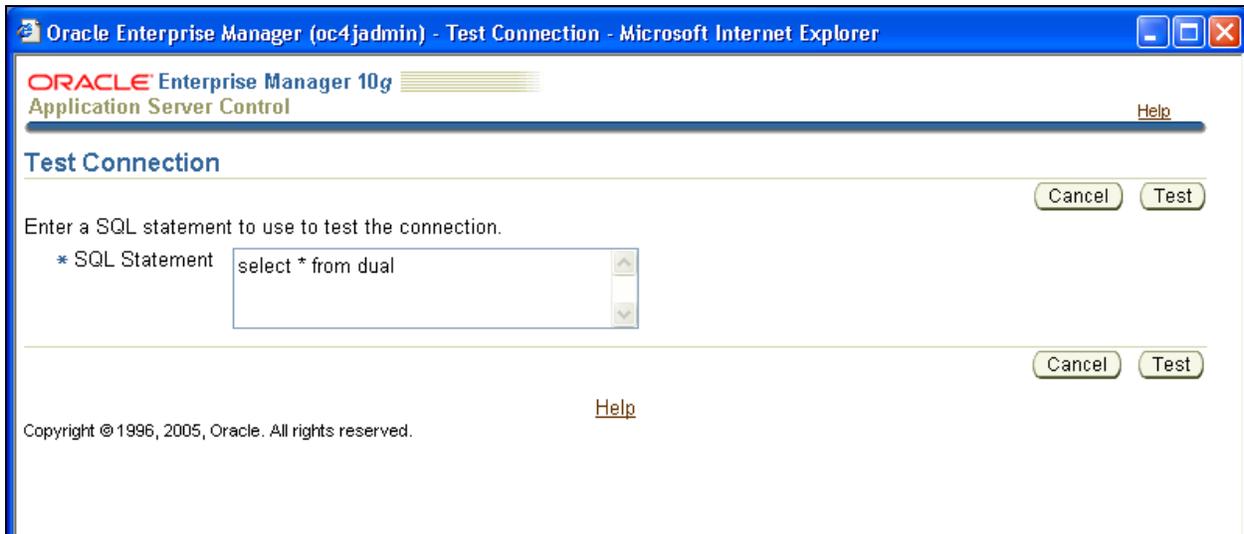
Home Attributes Proxy Interfaces

Cancel Back Finish

Setup | Logs | Help | Logout

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A pop up window will appear to query the database. Click on the “Test” button.



A success message “Connection established successfully” must appear. Click on “Finish” button.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: FCDBME.IFLMUD5HP0887.i-flex.com > OC4J: FCDBME > JDBC Resources >

Information
Connection established successfully.

Create Connection Pool Cancel Back Finish
Page Refreshed **May 10, 2012 5:18:24 PM IST**

Home | **Attributes** | **Proxy Interfaces**

* Name:

* Connection Factory Class:
Class must be available to the application's class loader.

URL
You can either specify a URL directly or have it generated from connection information. When you test a connection, the connection factory class and credentials specified on this page will be used to perform the test.

JDBC URL: Test Connection

Generate URL from Connection Information Test Connection

Driver Type:

DB Host Name:

DB Listener Port:

DB Identifier Type:

SID/Service Name:

TNS Alias:

Credentials
 TIP For OracleDataSources, credentials must be entered if not already specified in the URL.

Username:

Use Cleartext Password
Password:

Use Indirect Password ^(D)
Indirect Password:
example: Scott, customers/Scott

Connection Factory Properties
Specify any properties needed by the connection factory here.

Name	Value	Delete
(No properties found)		
Add Another Row		

Home | **Attributes** | **Proxy Interfaces** Cancel Back Finish

The newly created Connection Pool must appear in the list.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server:FCDBME,IFLMUD5HP0887,i-flex.com > OC4J:FCDBME >

Confirmation
Connection Pool ME has been created.

JDBC Resources Page Refreshed **May 10, 2012 5:04:57 PM IST**

Application:

Data Sources

Attributes						
Name	Application	JNDI Location	Connection Pool	Managed by OC4J	Test Connection	Delete
"OracleDS"	default	jdbc/OracleDS	"Example Connection Pool"	✓		

Connection Pools

Name	Application	Connection Factory Class	Monitor Performance	Test Connection	Refresh Connection Pool	Delete
"Example Connection Pool"	default	oracle.jdbc.pool.OracleDataSource				
"ME"	default	oracle.jdbc.pool.OracleDataSource				

Copyright © 1996, 2005, Oracle. All rights reserved. Setup | Logs | Help | Logout

b. Creating Data Sources

Click on the “Create” button under the “Data Sources” section.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: FCDBME.IFLMUD5HP0887.I-flex.com > OC4J: FCDBME >

Confirmation
Connection Pool ME has been created.

JDBC Resources Page Refreshed May 10, 2012 5:04:57 PM IST

Application: All

Data Sources

Name	Application	JNDI Location	Connection Pool	Managed by OC4J	Test Connection	Delete
"OracleDS"	default	jdbc/OracleDS	"Example_Connection_Pool"	✓		

Connection Pools

Name	Application	Connection Factory Class	Monitor Performance	Test Connection	Refresh Connection Pool	Delete
"Example_Connection_Pool"	default	oracle.jdbc.pool.OracleDataSource				
"ME"	default	oracle.jdbc.pool.OracleDataSource				

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Select property “default” under “Application” drop down. Select the first option “Managed Data Source”. Click on the “Continue” button.

Address: http://iflmud5dl3s4g.i-flex.com/em/console/ias/oc4j/jdbc/createDS?app=default&dsType=managed

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: SETUP.IFLMUD5DL3S4G.I-flex.com > OC4J: home > JDBC Resources >

Create Data Source - Application & Type

Cancel Continue

Application
Select the application to which this new data source is to be added.
Application: default

Data Source Type

Managed Data Source
A managed data source is one where OC4J provides critical system infrastructure such as global transaction management, connection pooling, statement caching and error handling.

Native Data Source
A native data source is one that implements the java.sql.DataSource interface and does not make use of OC4J's connection pooling or statement caching capabilities. A native data source can only participate in local transactions.

New Data Source from Existing Data Source
Create a new data source that is configured like an existing data source.
Existing Data Source: "OracleDS"

Cancel Continue

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Give any name to the data source under “Name” and configure the following properties. Do not enter anything in the “Credentials” section.

Property Name	Value
JNDI Location	ME
Transaction Level	Global and Local Transactions
Connection Pool	ME (Name Of Connection Pool created previously.)
Login Timeout	0

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: FCDBME.IFLMUD5HP0887.I-flex.com > OC4J: FCDBME > JDBC Resources >

Create Data Source - Managed Data Source

Application: default

* Name: FCDBDSN

* JNDI Location: ME

Transaction Level: Local Transactions Only

Connection Pool: ME

* Login Timeout (seconds): 0
Maximum time to wait while attempting to connect to a database.

Credentials

Credentials for managed data sources are typically already specified in the connection pool configuration, but you may override them here.

Username: FCDBADMINDEV621

Use Cleartext Password
Password: *****

Use Indirect Password
Indirect Password:
example: Scott, customers/Scott

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Click on the “Finish” button.

Test the connection by clicking the link under “Test Connection” column for the data source created above.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: FCDBME.IFLMUD5HP0887.I-flex.com > OC4J: FCDBME >

Confirmation
Connection to "FCDBDSN" established successfully.

JDBC Resources

Application: All

Data Sources

Name	Application	JNDI Location	Connection Pool	Managed by OC4J	Test Connection	Delete
"FCDBDSN"	default	ME	"ME"	✓		
"OracleDS"	default	jdbc/OracleDS	"Example_Connection_Pool"	✓		

Connection Pools

Name	Application	Connection Factory Class	Monitor Performance	Test Connection	Refresh Connection Pool	Delete
"Example_Connection_Pool"	default	oracle.jdbc.pool.OracleDataSource				
"ME"	default	oracle.jdbc.pool.OracleDataSource				

Page Refreshed May 10, 2012 5:24:52 PM IST

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It must display a success message “Connection to FCDBDSN established successfully.” where FCDBDSN is the data source name created.

The property files “fcat.properties” and “fcat-config.xml” located in system/home folder of FCDBME base dir needs to be updated with the data source and connection pool details.

7. Module Installation

a.

b. J2ME based Oracle FLEXCUBE Direct Banking Application

The following archives needs to be downloaded on user mobile to enable J2ME Based Oracle FLEXCUBE Direct Banking Application.

Deployable	Path Location
FCDBMidlet.jar	<FCDBME BASE DIR>\deploy\mobile
FCDBMidlet.jad	<FCDBME BASE DIR>\deploy\mobile

8. DB Creation

For completing the DB setup kindly refer to the doc
Oracle_FLEXCUBE_Direct_Banking_Database_Setup

9. Encryption and Decryption of property files

The property files <Identity>.xml , fcat-config.xml, mobileenabler.properties and fcat.properties mentioned in the [Appendix](#) will be stored in the encrypted format and decrypted later for reading them.

The system property “fcat.propfile.isencr” is set as “true”; if the property files are encrypted. It is set as “false”; if property files are in plain text format. If this property is not set at all as system property then all the property files are assumed to be in plain text format.

The usages of the tools are mentioned in the [Tools](#) section.

10. Appendix

After the successful installation of FCDB Mobile Enabler with the help of FCDB Mobile Enabler Installer, following folder structure will be created:

Folder Name	Comments
<FCDBME BASE DIR>\documents	Folder containing all FCDB Mobile Enabler documents
<FCDBME BASE DIR>\dbsetup	Folder containing scripts for FCDB Mobile Enabler Database setup
<FCDBME BASE DIR>\system	Folder containing FCDB Mobile Enabler application & properties files
<FCDBME BASE DIR>\system\build\kernel	Folder containing the application codebase in form of a jar called FCDB_12.0.0_ME_JDK1.4.jar.
<FCDBME BASE DIR>\system\build\extclasses\jars	Folder containing all requisite third-party jars. Separate folders will be created for all the third party jars. e.g. <FCDBME BASE DIR>\system\build\extclasses\jars\axis
<FCDBME BASE DIR>\system\home	Folder containing all the configuration/properties files of the application.
<FCDBME BASE DIR>\system\build\tools	Folder containing all the tools required to generate the GUI xsls, to encrypt/decrypt the property files and generation of password for db user.
<FCAT.LOGFILE.PATH>\logs	Property FCAT.LOGFILE.PATH is configured to locate the folder for storing the log files of the server. e.g. D:\FCDBMELogs. If this property is not set then logs are created at default location at <FCDBME BASE DIR>\logs.

Deployment of the war file is mandatory for both modes.

Deployable	Context	Path Location
B001.war	B001	<FCDBME BASE DIR>\deploy

The following archives needs to be downloaded on user mobile to enable J2ME Based Oracle FLEXCUBE Direct Banking Application.

Deployable	Context	Path Location
FCDBMidlet.jar		<FCDBME BASE DIR>\deploy\mobile
FCDBMidlet.jad		<FCDBME BASE DIR>\deploy\mobile

Configuration Files

The layers Presentation, channel & service in the system use property files as follow:

Property File	Purpose
<Identity Name>.xml	Each web application deployed has its own property file named as <daemonName>.xml. The daemon name can be configured by property 'FCAT.INTERNETSERVLET.DAEMON.NAME' in web.xml. If no daemon name is specified, default name 'INTERNETSERVLET' is used. (internetservlet.xml). The daemon name can be B001 hence B001.xml or F001 so F001.xml
fcac-config.xml	Configuration property used at the channel layer containing the db properties.
fcac.properties	Configuration property containing DB details for datasource "ME" and "AP".
mobileenabler.properties	This property file will contain the URL of TGT App. This file will also contain certain properties required by FCDB Mobile Enabler App to understand the response XPATH of TGT App for some common application behaviour.

11. Tools

Before using the tools ensure that the Java home path is set.

Encryption and Decryption of property files in home folder.

Change the working folder to <FCDBME BASE DIR>\system\build\tools. Pick up the following files for the respective platform and execute them at the command prompt:

File Name	OS
securepropertiesfiles.bat	Windows
securepropertiesfiles.sh	Linux,Unix etc..

The tool operates in the interactive mode. The arguments will be provided on execution of the files.

To encrypt or decrypt a file the arguments prompted are :

<Encryption or Decryption mode(E/D)> <Path of the input property file> <Path of the output property file>

e.g. E D:\FCDBME\system\home\fcac-config.xml D:\config

Once the file is encrypted set the system property "fcac.propfile.isencr" to "true".

Build the XSL templates to required language.

The templated xsls will be picked up from the location

<FCDBME BASE DIR>\system\datafiles\gui\<usertype>\<channel id>\template To generate the GUI xsls from the templated xsls the following tools must be executed at the command prompt.

File Name	OS
xslbuild.bat	Windows
xslbuild.sh	Linux

The tool will execute in the interactive mode and prompt for the user type, channel id, language id and format. After execution the generated files will be stored in the location

<FCDBME BASE DIR>\system\datafiles\gui\<usertype>\<channel id>\<language id>