

Oracle FLEXCUBE Direct Banking Mobile Enabler

Installation Manual On
Weblogic Application Server

Release 12.0.3.0.0

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Table of Contents

1. PREFACE	4
1.1. INTENDED AUDIENCE	4
1.2. DOCUMENTATION ACCESSIBILITY.....	4
1.3. ACCESS TO OFSS SUPPORT	4
1.4. STRUCTURE	4
1.5. RELATED INFORMATION SOURCES.....	4
2. ABBREVIATIONS	5
3. PRE- REQUISITES	6
4. APPLICATION SERVER CONFIGURATION	7
4.1. CREATING AND MANAGING A SERVER INSTANCE	8
4.1.1. <i>Creating a WebLogic domain</i>	8
4.1.2. <i>BEA WebLogic server administrative console</i>	18
4.1.3. <i>Creating a Managed Server</i>	19
4.1.4. <i>Configurations to Start/Stop managed server from Administrative Console</i>	22
4.2. DEPLOYING APPLICATIONS	36
4.2.1. <i>Starting Application</i>	44
4.3. DEPLOYING MOBILEENABLER WEB APP	47
5. SETUP JDBC DATA SOURCE AND CONNECTION POOLING	48
6. DB CREATION	65
7. ENCRYPTION AND DECRYPTION OF PROPERTY FILES	66
8. APPENDIX	67
9. TOOLS	69

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 explains deployment and configuration of Oracle FLEXCUBE Direct Banking ME

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

2. 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
ME	Mobile Enabler
TGT App	Target Internet Banking Application (for e.g. 2.9.X)
App Server	Application Server

3. Pre- requisites

Oracle FLEXCUBE Direct Banking Mobile Enabler application is installed successfully using Oracle FCDB ME Installer.

4. Application Server Configuration

a. Creating and Managing a Server Instance

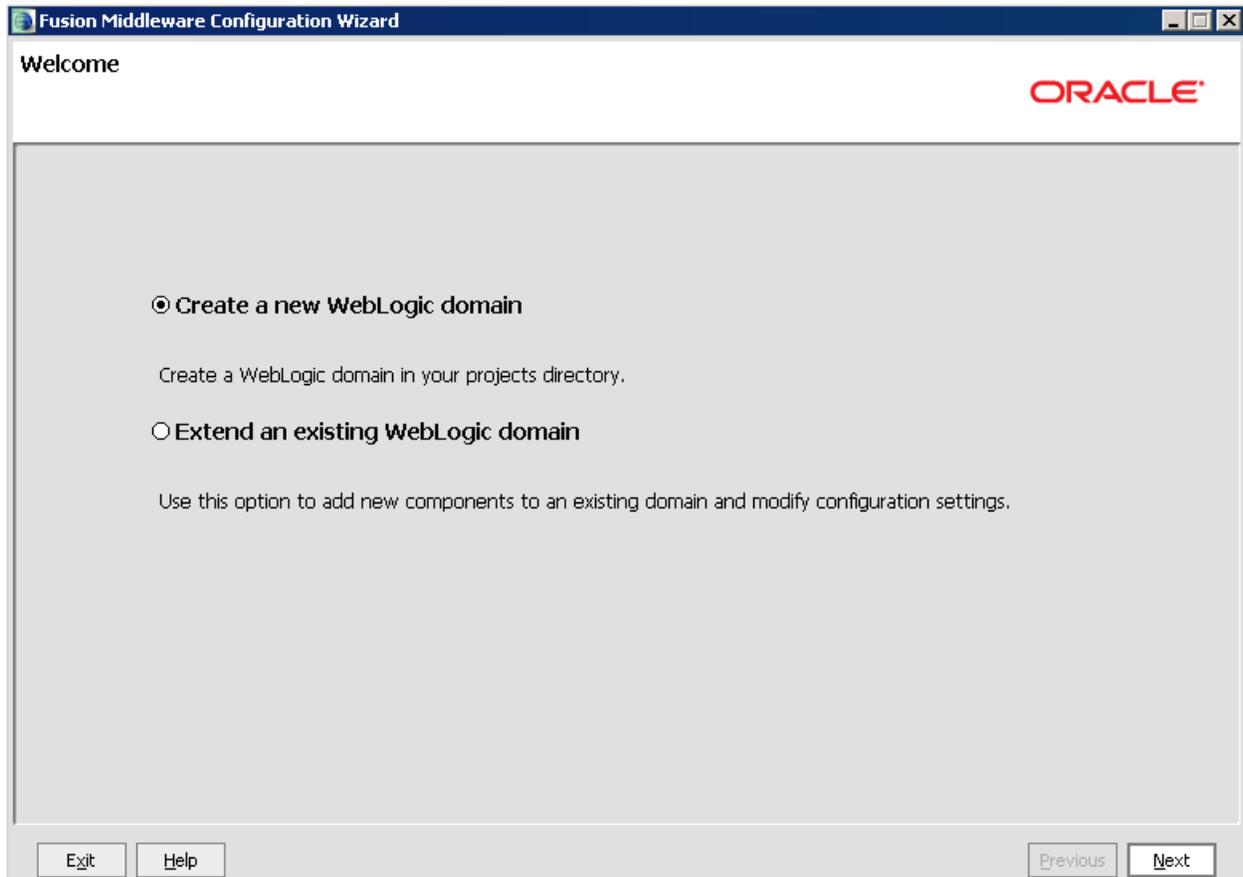
i. Creating a WebLogic domain

A domain consists of one or more server instances that can be managed with a single administration server. When the administration server is used to perform a configuration task, the changes made apply only to the domain managed by that administration server. To manage another domain, the administration server for that domain must be used.

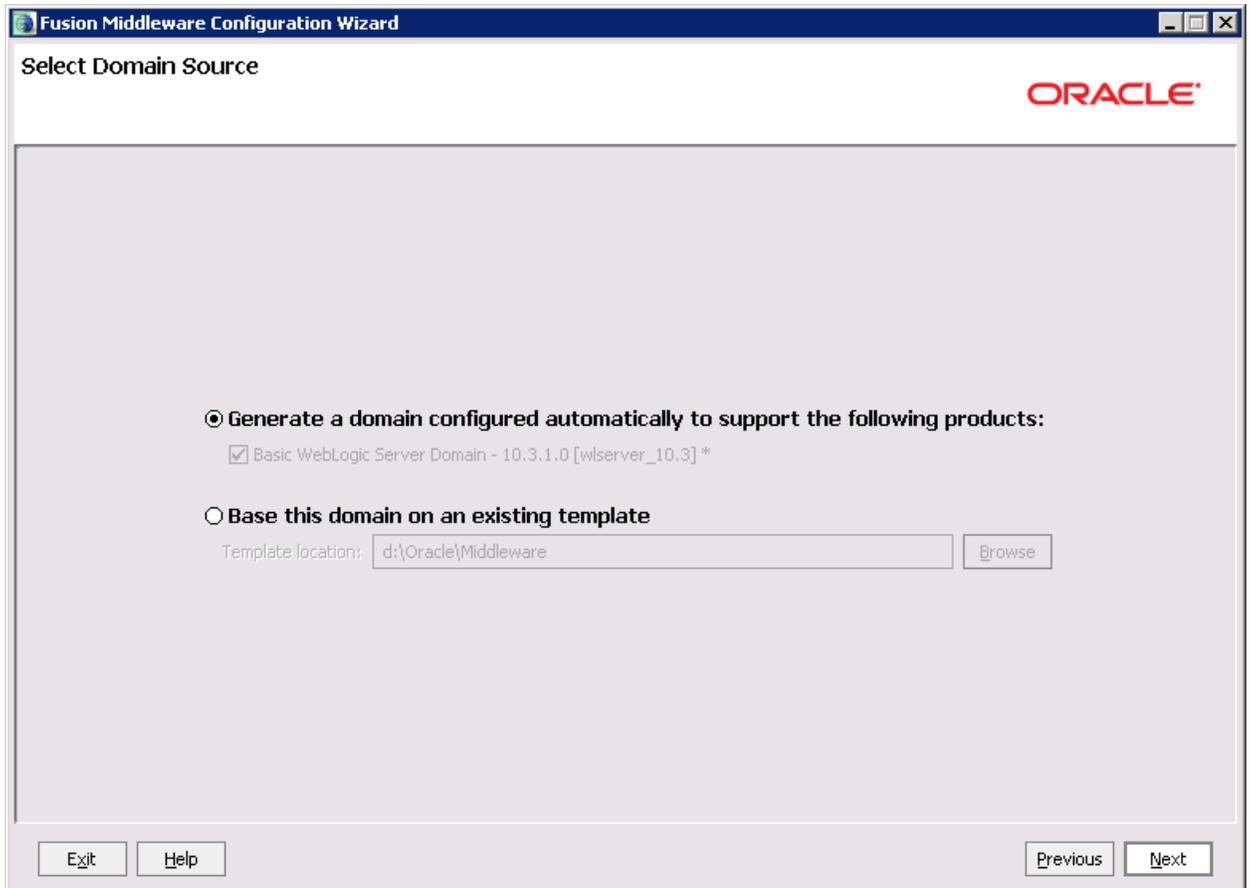
Through Wizard:

1. Go to Start Menu → Oracle WebLogic → WebLogic Server 11g R1 → Tools → Configuration Wizard in Windows.

Select “Create a new WebLogic Domain” and click “Next”.



Select "Generate a domain configured automatically to support the following Products" and click "Next"



Specify Domain Name and Location

The screenshot shows a window titled "Fusion Middleware Configuration Wizard" with the subtitle "Specify Domain Name and Location". The Oracle logo is in the top right corner. The main area contains the instruction "Enter the name and location for the domain:". Below this, there are two input fields: "Domain name:" with the value "FCDBME" and "Domain location:" with the value "D:\Oracle\Middleware\user_projects\domains". A "Browse" button is next to the domain location field. At the bottom, there are buttons for "Exit", "Help", "Previous", and "Next".

Enter the following values and click "Next"

Field	Value
User Name	<Enter username>
User password	<Enter password>
Confirm user password	<Repeat same password>

Fusion Middleware Configuration Wizard

Configure Administrator User Name and Password

ORACLE

Disgard Changes

*User name:

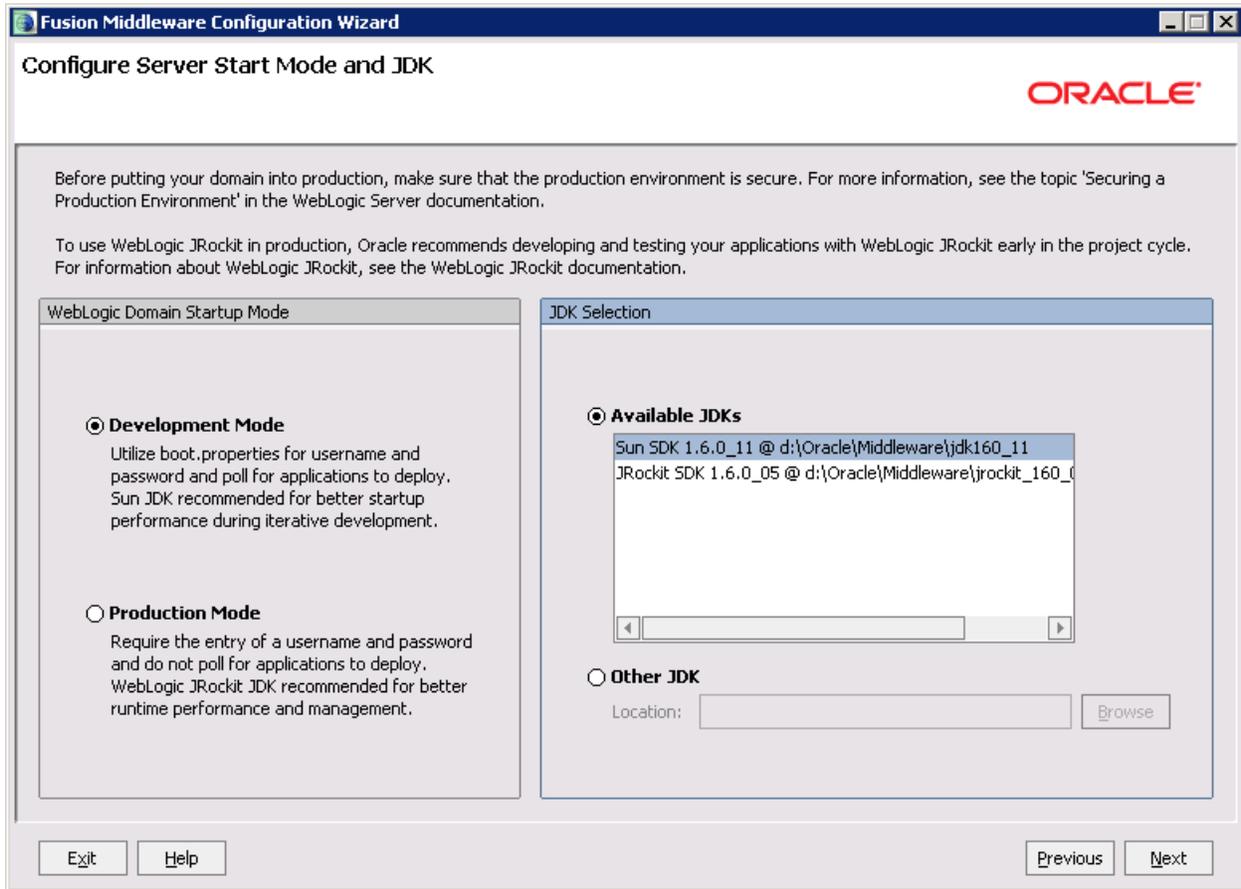
*User password:

*Confirm user password:

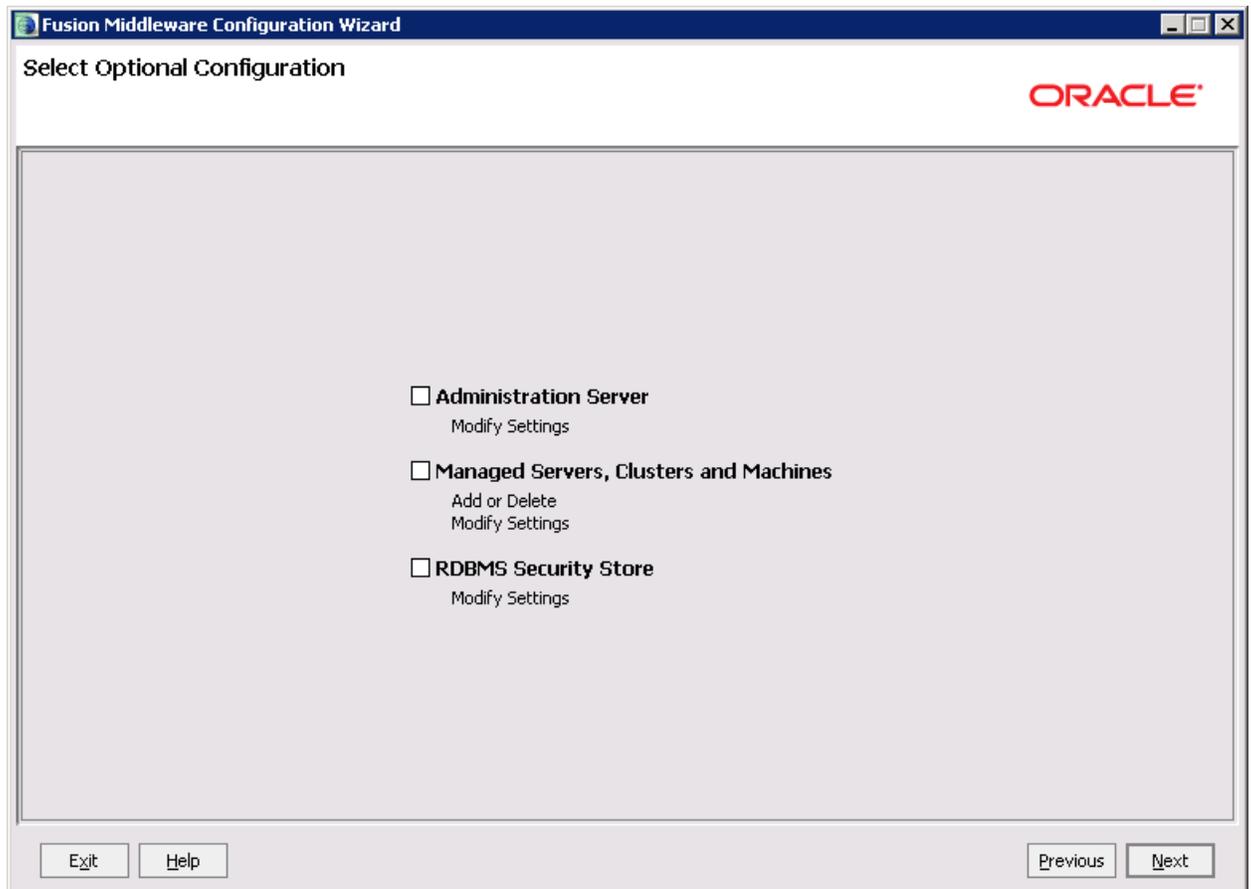
Description:

Exit Help Previous Next

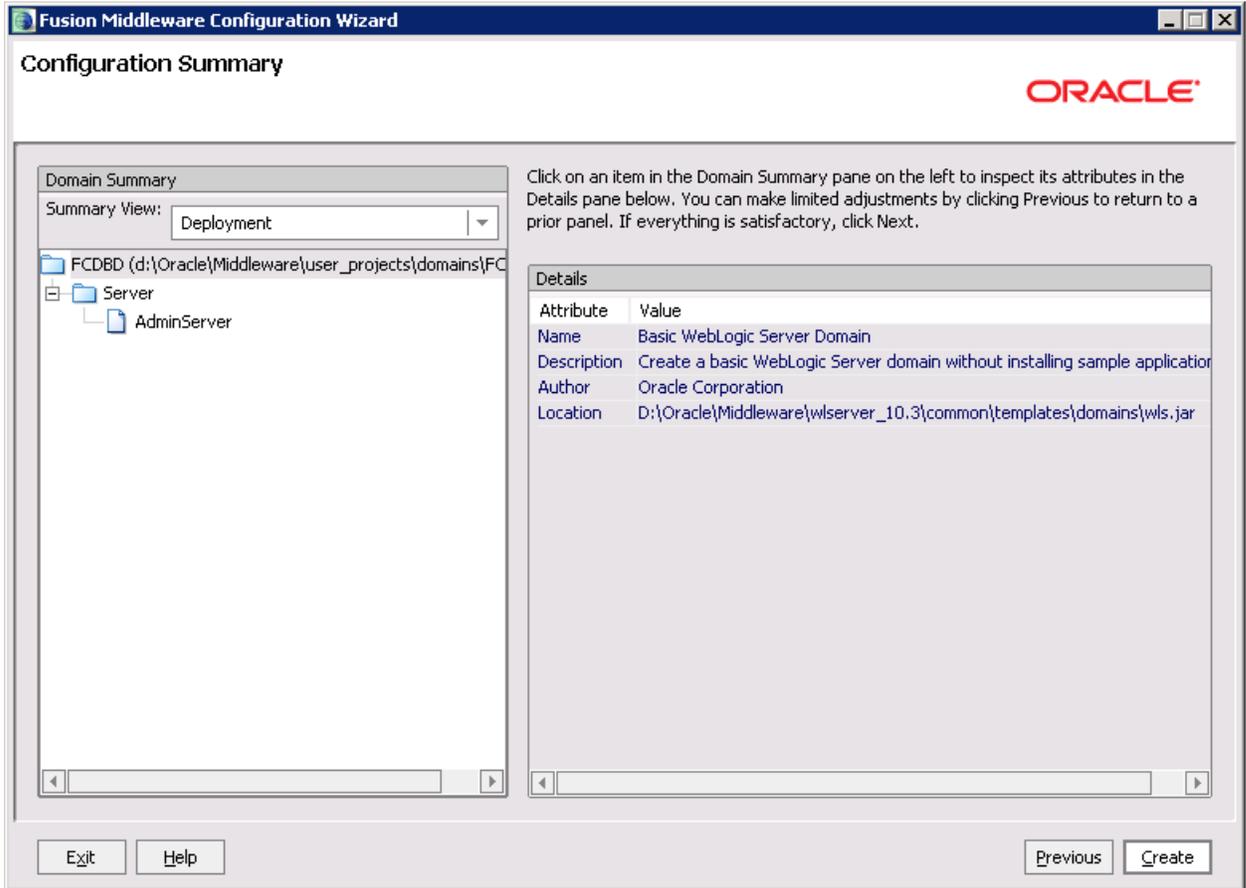
Select “Development Mode” under “Web Logic Domain Startup Mode”,
Select “Available JDKs” in JDK selection and select “Sun SDK 1.6.0_11” and click “Next”



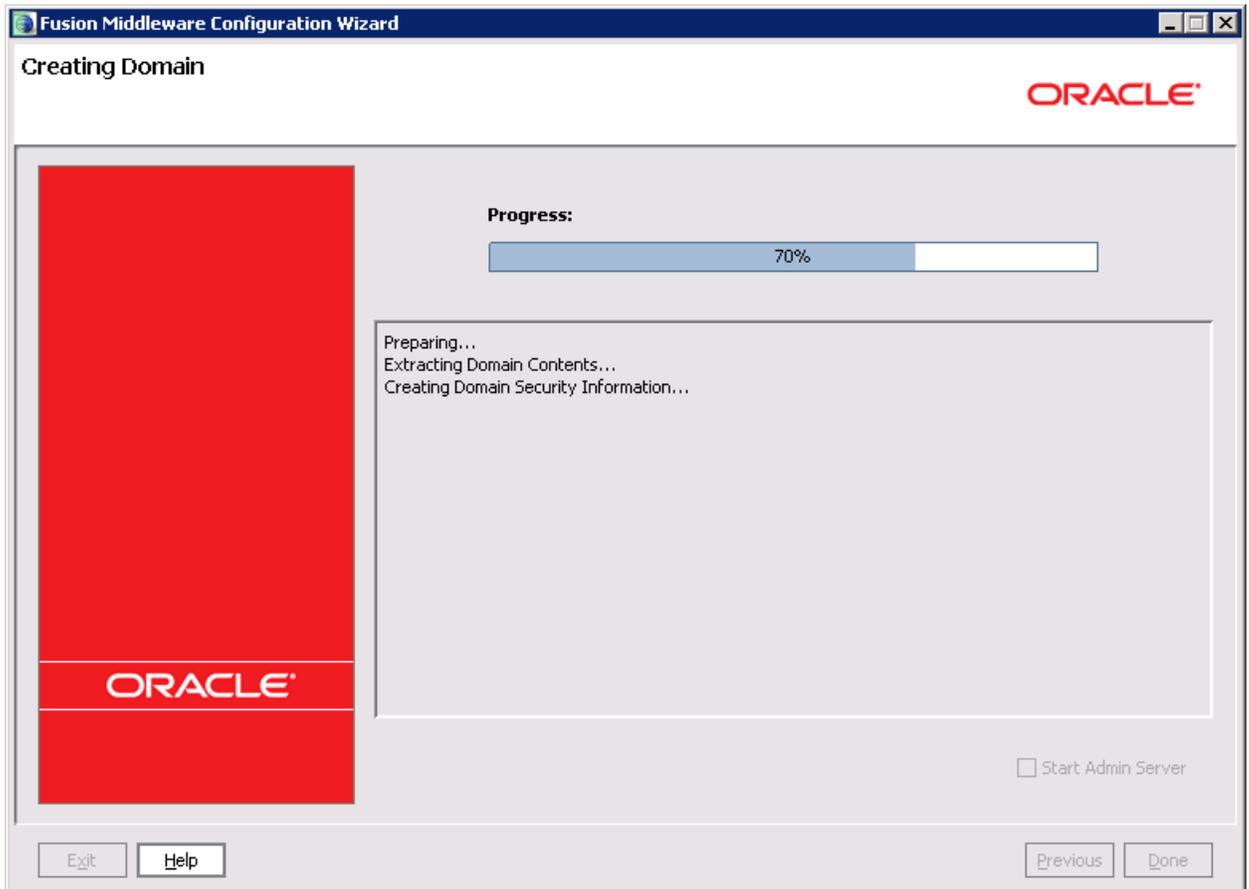
Do not select any of the check boxes and click "Next"



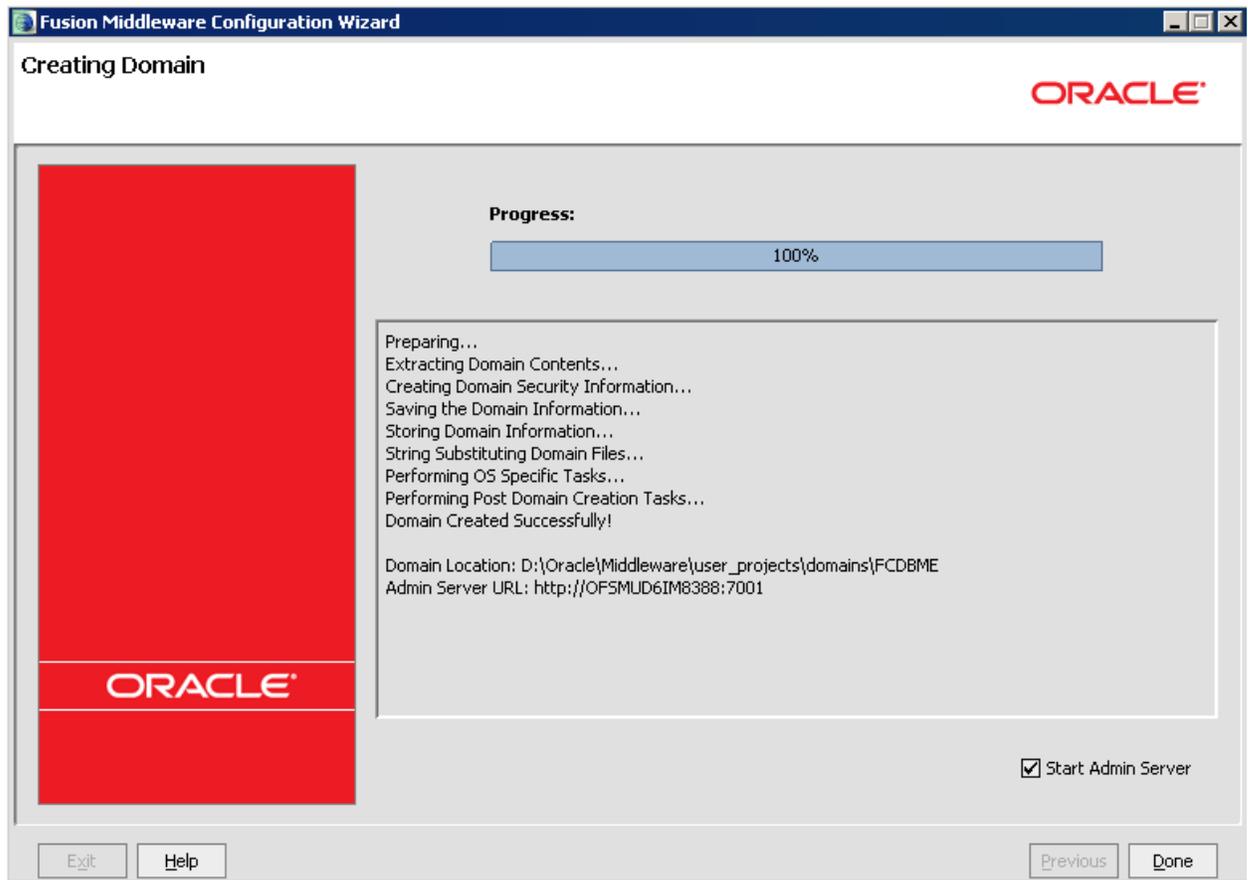
Click on "Create"



The screen displayed below show the progress



Click "Done"



Using command prompt.

- a) Through the command prompt go to the <Bea Base Folder>/<WLS home directory>/common/bin
e.g If the base folder is **bea** , the path will be D:\bea\wlserver_10.0\common\bin
- b) Execute the batch file inside it wlst.bat (on Windows) or wlst.sh(on Unix)
- c) The environment will be set and the prompt changes to wls:/offline>
- d) Give the following command to create the domain.

```
createDomain(domainTemplate, domainDir, user, password)
```

Argument	Definition
domainTemplate	Name and location of the domain template from which you want to create a domain.
domainDir	Name of the directory to which you want to write the domain configuration information.
user	Name of the default user.
password	Password of the default user.

For e.g.:

```
createDomain('D:/bea/wlserver_10.0/common/templates/domains/wls.jar','D:/bea/user_projects/domains/trial', '<username>','<password>')
```

This will create a domain under the location D:/bea/user_projects/domains.

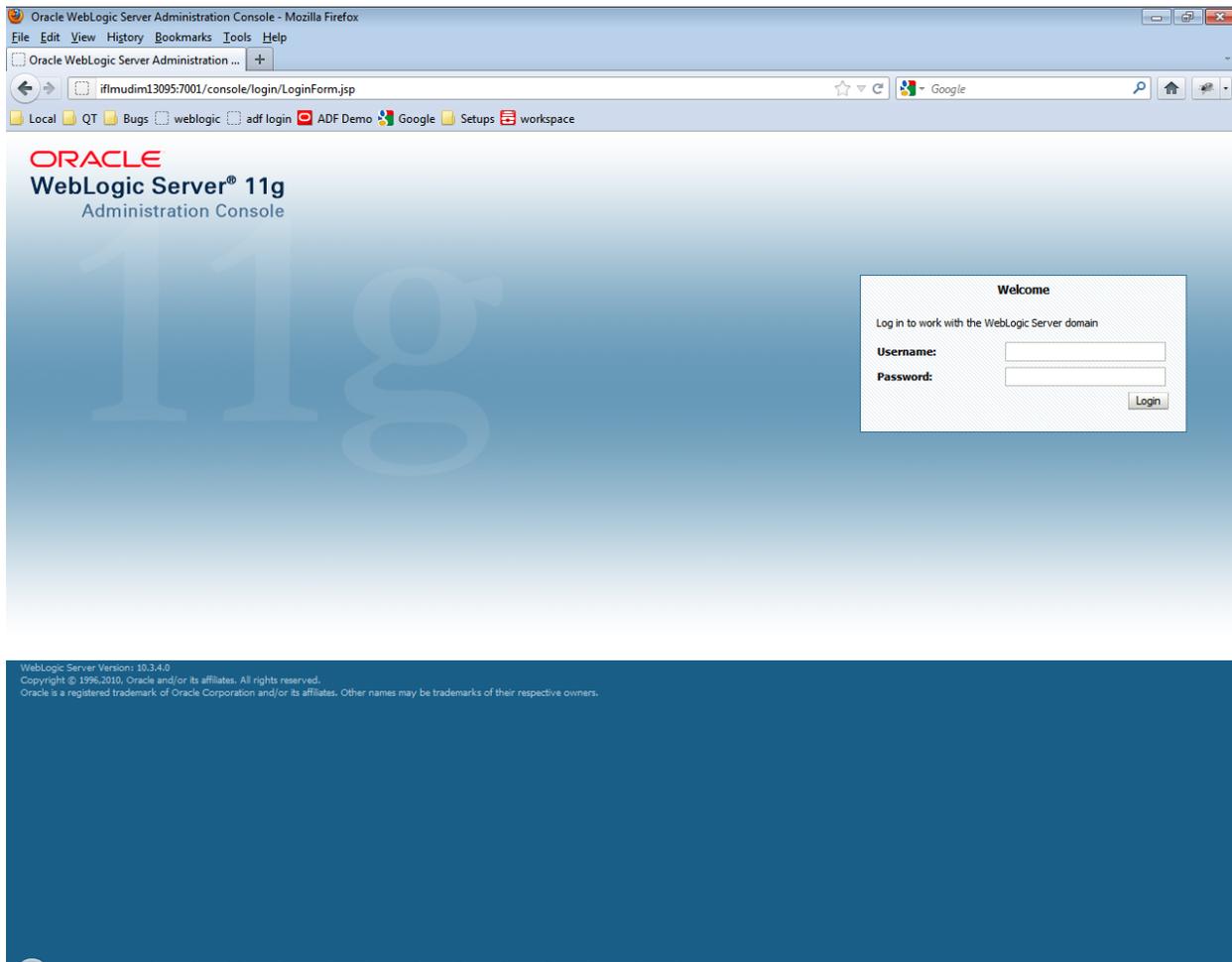
ii. BEA WebLogic server administrative console.

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

1. To start the BEA WebLogic Server Administration Console in Windows ,click BEA Products →User Projects →<domain_name>

To open Administration Console, type `http://<hostname OR IP>:<port>/console` in browser window.

Enter User Id and Password set during domain creation and click Log In.



iii. Creating a Managed Server

1. In the BEA WebLogic Server Administration Console, click Environment → Servers

Click “New”

The screenshot shows the Oracle WebLogic Server Administration Console interface. The browser title is "Summary of Servers - FCDB62_DOMAIN - WLS Console - Mozilla Firefox". The URL is "ifimudim13095:7001/console/console.portal?_nfpb=true&_pageLabel=CoreServerServerTablePage". The page header includes "ORACLE WebLogic Server® Administration Console" and "Welcome, weblogic | Connected to: FCDB62_DOMAIN".

The main content area is titled "Summary of Servers" and has two tabs: "Configuration" (selected) and "Control". Below the tabs, there is a description: "A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration. This page summarizes each server that has been configured in the current WebLogic Server domain." Below this is a search bar and a "Customize this table" link.

The table shows a list of servers. The table has columns: Name, Cluster, Machine, State, Health, and Listen Port. The table is filtered to show 1 server.

Name	Cluster	Machine	State	Health	Listen Port
AdminServer (admin)			RUNNING	OK	7001

The footer of the page contains the following text: "WebLogic Server Version: 10.3.4.0. Copyright © 1996, 2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

Enter the "Server Name" as "FCDBMserver", set the Server listen Port to "7002" or any free port that is not in use.

Select the radio button against No; this is a stand-alone server and click "Finish"

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main window is titled "Create a New Server" and contains the following elements:

- Change Center:** A sidebar on the left with a "View changes and restarts" section and a "Domain Structure" tree showing the hierarchy from FCDBDomain down to Security Realms.
- System Status:** A section below the Change Center showing the "Health of Running Servers" with a bar chart indicating 0 Failed, 0 Critical, 0 Overloaded, 0 Warning, and 3 OK servers.
- Create a New Server Wizard:** The central area with a "Server Properties" section. It includes:
 - Buttons: Back, Next, Finish, Cancel.
 - Text: "The following properties will be used to identify your new server. * Indicates required fields."
 - Question: "What would you like to name your new server?" with a text input field containing "FCDBMserver".
 - Question: "Where will this server listen for incoming connections?" with a "Server Listen Address" input field.
 - Question: "Server Listen Port:" with a text input field containing "7002".
 - Question: "Should this server belong to a cluster?" with two radio buttons: "No, this is a stand-alone server." (which is selected) and "Yes, create a new cluster for this server."
 - Buttons: Back, Next, Finish, Cancel.

At the bottom of the console, there is a footer with the text: "WebLogic Server Version: 10.3.5.0. Copyright © 1996, 2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

Server created successfully is displayed and summary of servers is shown.

The screenshot displays the Oracle WebLogic Server Administration Console interface. The top navigation bar includes 'Home', 'Log Out', 'Preferences', 'Record', and 'Help'. The user is logged in as 'weblogic' and connected to the 'FCDBME' domain. The breadcrumb trail indicates the current path: 'Home > Summary of Servers > Summary of Deployments > Summary of Servers > FCDBMEServer > Summary of Servers > FCDBMEServer > Summary of Servers'.

Messages: A green message states 'All changes have been activated. No restarts are necessary.' and a blue message states 'Server created successfully.'

Summary of Servers: The 'Configuration' tab is active. It provides a definition of a server and a summary of configured servers in the current domain.

Customize this table: A link to customize the table is provided.

Servers (Filtered - More Columns Exist): A table lists the servers with columns for Name, Cluster, Machine, State, Health, and Listen Port. The table shows two servers: 'AdminServer(admin)' in a 'RUNNING' state with 'OK' health on port 7001, and 'FCDBMEServer' in a 'SHUTDOWN' state on port 7002.

System Status: A section titled 'Health of Running Servers' shows a bar chart with the following counts: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (1).

Footer: The footer contains the version 'WebLogic Server Version: 10.3.2.0', copyright information 'Copyright © 1996, 2009, Oracle and/or its affiliates. All rights reserved.', and a trademark notice for Oracle Corporation.

iv. Configurations to Start/Stop managed server from Administrative Console

Creating Machine

It is required to create a machine in order to Start/Suspend/Resume/Stop the Managed Servers in Weblogic using Administration Console.

1. Click Environment → Machines

Click “New” button

The screenshot displays the Oracle WebLogic Server Administration Console interface. The browser window title is "Summary of Machines - FCDB62_DOMAIN - WLS Console - Mozilla Firefox". The URL is "http://ifmudim13095:7001/console/console.portal?_nfpb=true&_pageLabel=CoreMachineMachineTablePage". The page content includes:

- Change Center:** View changes and restarts. Configuration editing is enabled.
- Domain Structure:** A tree view showing the hierarchy: FCDB62_DOMAIN > Environment > Servers > Machines.
- How do I...:** A list of links: Create and configure machines, Assign server instances to machines, Clone machines, Delete machines.
- System Status:** Health of Running Servers: Failed (0), Critical (0), Overloaded (0), Warning (0), OK (1).
- Summary of Machines:** A section with a description of a machine and a table. The table has columns for Name and Type, but it is currently empty with the message "There are no items to display".

At the bottom of the console, the version information is displayed: "WebLogic Server Version: 10.3.4.0. Copyright © 1996, 2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

Enter the Name as “FCDBMEmachine” and click “Next”

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main window is titled "Create a New Machine - FCDB62_DOMAIN - WLS Console - Mozilla Firefox". The browser address bar shows the URL: `ifmudim13095:7001/console/console.portal?_nfpb=true&_pageLabel=CoreMachineCreateMachine`. The console header includes "ORACLE WebLogic Server® Administration Console" and "Welcome, weblogic Connected to: FCDB62_DOMAIN".

The "Create a New Machine" wizard is displayed in the center. It has a progress bar with "Next" highlighted. The "Machine Identity" section contains the following fields:

- Machine Identity**: The following properties will be used to identify your new Machine. * Indicates required fields.
- Name**: A text input field containing "FCDBMEmachine".
- Machine OS**: A dropdown menu set to "Other".

Navigation buttons "Back", "Next", "Finish", and "Cancel" are visible at the bottom of the wizard. On the left side, there are several panels: "Change Center" (View changes and restarts), "Domain Structure" (FCDB62_DOMAIN tree), "How do I..." (Create and configure machines, Assign server instances to machines, Delete machines), and "System Status" (Health of Running Servers: Failed (0), Critical (0), Overloaded (0), Warning (0), OK (1)).

At the bottom, the footer text reads: "WebLogic Server Version: 10.3.4.0 Copyright © 1996-2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

Select "Type" as "Plain" from the drop down list and click Finish.

The screenshot shows the Oracle WebLogic Administration Console interface. The main content area is titled "Create a New Machine" and contains the following sections:

- Node Manager Properties:** A section with a question: "What type of Node Manager is running on this server, and what protocol should be used to communicate with it?". Below this is a dropdown menu labeled "Type" which is currently set to "SSL". A red box highlights this dropdown menu.
- Listen Address:** A text input field containing "localhost".
- Listen Port:** A text input field containing "5556".
- Additional Properties:** A section with the text "Depending on the Node Manager type, additional properties may be configured." and two empty text input fields for "Node Manager Home" and "Shell Command".
- Debug Enabled:** A checkbox that is currently unchecked.

At the bottom of the console, there is a footer with the text: "WebLogic Server Version: 10.3.4.0 Copyright © 1996-2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

Machine created successfully message is displayed.

The screenshot displays the Oracle WebLogic Server Administration Console interface. The top navigation bar includes 'Home', 'Log Out', 'Preferences', 'Record', and 'Help'. The user is logged in as 'weblogic' and connected to the 'FCDBME' domain. The breadcrumb trail shows 'Home > Summary of Servers > Summary of Machines'. A message box at the top indicates that all changes have been activated and no restarts are necessary, followed by a 'Machine created successfully' notification. The 'Summary of Machines' section provides a description of a machine and a table listing the configured machines. The table contains one entry: 'FCDBMEmachine' of type 'Machine'. The left sidebar contains sections for 'Change Center', 'Domain Structure', 'How do I...', and 'System Status'.

Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure
FCDBME
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics

How do I...

- Create and configure machines
- Assign server instances to machines
- Clone machines
- Delete machines

System Status
Health of Running Servers

	Failed (0)
	Critical (0)
	Overloaded (0)
	Warning (0)
	OK (1)

Summary of Machines

A machine is the logical representation of the computer that hosts one or more WebLogic Server instances (servers). WebLogic Server uses configured machine names to determine the optimum server in a cluster to which certain tasks, such as HTTP session replication, are delegated. The Administration Server uses the machine definition in conjunction with Node Manager to start remote servers.

This page displays key information about each machine that has been configured in the current WebLogic Server domain.

Machines

Name	Type
FCDBMEmachine	Machine

Click on Newly created FCDBMEmachine.

The screenshot displays the Oracle WebLogic Server Administration Console interface. At the top, the title bar reads "ORACLE WebLogic Server® Administration Console". The breadcrumb navigation path is "Home > Summary of Servers > Summary of Machines > FCDBMEmachine". The user is logged in as "weblogic" and is connected to the "FCDBME" domain.

On the left side, there are three main panels:

- Change Center:** Includes a "View changes and restarts" link and a note: "Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain."
- Domain Structure:** A tree view showing the hierarchy: FCDBME > Environment > Deployments > Services > Security Realms > Interoperability > Diagnostics.
- How do I...:** A list of links: "Create and configure machines", "Delete machines", and "Assign server instances to machines".
- System Status:** A "Health of Running Servers" section with a progress bar showing: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (1).

The main content area is titled "Settings for FCDBMEmachine" and has tabs for "Configuration", "Monitoring", and "Notes". Under the "Configuration" tab, there are sub-tabs for "General", "Node Manager", and "Servers". The "General" sub-tab is active, displaying the text: "This page displays the name of the physical machine which hosts one or more Managed Servers." Below this, a table shows the machine name:

Name:	FCDBMEmachine	The name of this machine. More Info...
--------------	---------------	--

At the bottom of the console, a footer contains the following text: "WebLogic Server Version: 10.3.2.0. Copyright © 1996-2009, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

Click Servers under the “Configuration tab.

The screenshot displays the Oracle WebLogic Server Administration Console interface. The top navigation bar includes 'Home', 'Log Out', 'Preferences', 'Record', and 'Help'. The user is logged in as 'weblogic' and connected to 'FCDBME'. The breadcrumb trail is 'Home > Summary of Machines > Summary of Servers > Summary of Machines > FCDBMEmachine'.

The main content area is titled 'Settings for FCDBMEmachine' and has three tabs: 'Configuration', 'Monitoring', and 'Notes'. The 'Configuration' tab is active, and the 'Servers' sub-tab is selected. Below the tabs, there are sub-tabs for 'General', 'Node Manager', and 'Servers'. The 'Servers' sub-tab is active, displaying the following text: 'This page displays the servers that have been assigned to this Machine. You can select a server to configure from the list of available servers.'

Below this text is a section titled 'Customize this table' with a link to 'Servers (Filtered - More Columns Exist)'. There are 'Add' and 'Remove' buttons. The table below has columns: Name, Cluster, Machine, State, Health, and Listen Port. The table is currently empty, with the text 'There are no items to display' centered. Below the table, there are 'Add' and 'Remove' buttons and pagination information: 'Showing 0 to 0 of 0 Previous | Next'.

On the left side of the console, there are several panels:

- Change Center:** View changes and restarts. Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
- Domain Structure:** A tree view showing the hierarchy: FCDBME > Environment > Servers > Clusters > Virtual Hosts > Migratable Targets > Machines > Work Managers > Startup & Shutdown Classes > Deployments > Services > Security Realms > Interoperability > Diagnostics.
- How do I...:** A list of tasks: Create and configure machines, Create Managed Servers, Delete machines, Assign server instances to machines.
- System Status:** Health of Running Servers. A bar chart shows: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (1).

At the bottom of the console, there is a footer with the following text: 'WebLogic Server Version: 10.3.2.0 Copyright © 1996-2009, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.'

Click Add button to add a server to machine

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main content area is titled "Add a Server to Machine" and contains the following elements:

- Navigation buttons: Back, Next, Finish, Cancel.
- Section: **Identify Server**
- Text: Identify the server to be added.
- Text: How would you like to proceed?
- Radio button (selected): **Select an existing server, and associate it with this machine**
- Text: **Select a server:** FCBMEmserver (dropdown menu)
- Radio button: **Create a new server and associate it with this machine**
- Navigation buttons: Back, Next, Finish, Cancel.

On the left side, there are three panels:

- Change Center**: View changes and restarts. Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.
- Domain Structure**: A tree view showing the hierarchy: FCBME > Environment > Deployments > Services > Security Realms > Interoperability > Diagnostics.
- How do I...?**: No help task found.
- System Status**: Health of Running Servers. A bar chart shows: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (1).

At the bottom, a footer contains the following text:

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Check the radio button against “Select an existing server, and associate it with this machine”.
 Select FCDBMEmachine from the “Select a Server” drop down and click on “Finish”. Server created successfully message is displayed.

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: FCDBME

Home > Summary of Servers > Summary of Machines > FCDBMEmachine

Messages

- All changes have been activated. No restarts are necessary.
- Server created successfully.

Settings for FCDBMEmachine

Configuration Monitoring Notes

General Node Manager **Servers**

This page displays the servers that have been assigned to this Machine. You can select a server to configure from the list of available servers.

Customize this table

Servers (Filtered - More Columns Exist)

Add Remove Showing 1 to 1 of 1 Previous Next

<input type="checkbox"/>	Name ↕	Cluster	Machine	State	Health	Listen Port
<input type="checkbox"/>	FCDBMEmachine		FCDBMEmachine	SHUTDOWN		7002

Add Remove Showing 1 to 1 of 1 Previous Next

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Configuring Managed Server

1. Click on Environment→Server in the left menu.

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: FCDBME

Home > Summary of Servers > Summary of Machines > FCDBMEmachine > Summary of Servers

Summary of Servers

Configuration Control

A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration. This page summarizes each server that has been configured in the current WebLogic Server domain.

Customize this table

Servers (Filtered - More Columns Exist)

Name	Cluster	Machine	State	Health	Listen Port
AdminServer(admin)			RUNNING	OK	7001
FCDBMServer		FCDBMEmachine	SHUTDOWN		7002

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Click on server name with FCDBMEmserver

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main content area is titled 'Settings for FCDBMEmserver' and is divided into several tabs: Configuration, Protocols, Logging, Debug, Monitoring, Control, Deployments, Services, Security, and Notes. The 'Configuration' tab is active, and within it, the 'General' sub-tab is selected. The configuration page includes a 'Save' button at the top left and a 'Save' button at the bottom. The main configuration area contains several fields and checkboxes:

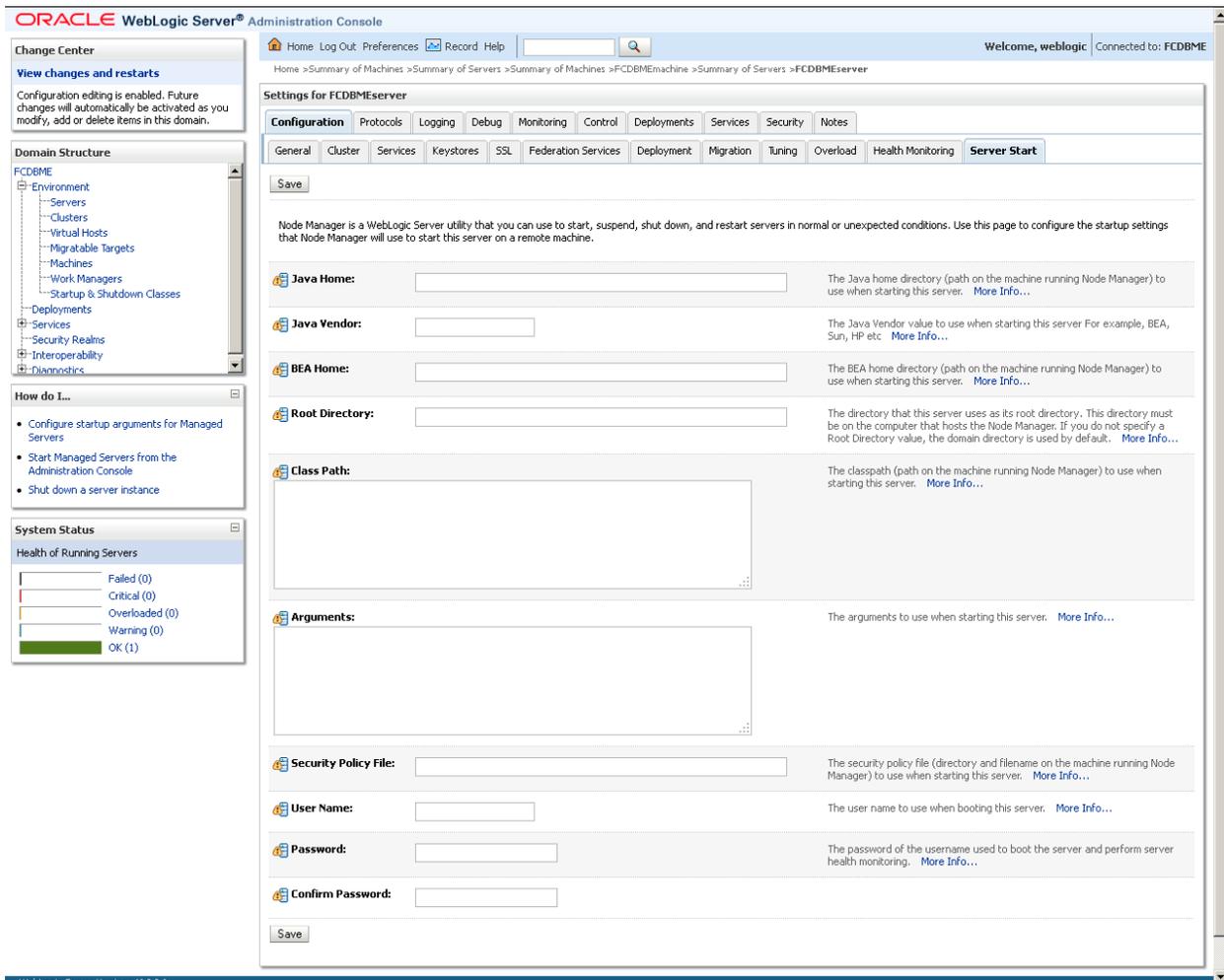
- Name:** FCDBMEmserver (An alphanumeric name for this server instance. [More Info...](#))
- Machine:** FCDBMEmachine (The WebLogic Server host computer (machine) on which this server is meant to run. [More Info...](#))
- Cluster:** (Stand-Alone) (The cluster, or group of WebLogic Server instances, to which this server belongs. [More Info...](#))
- Listen Address:** (The IP address or DNS name this server uses to listen for incoming connections. [More Info...](#))
- Listen Port Enabled:** (Specifies whether this server can be reached through the default plain-text (non-SSL) listen port. [More Info...](#))
- Listen Port:** 7002 (The default TCP port that this server uses to listen for regular (non-SSL) incoming connections. [More Info...](#))
- SSL Listen Port Enabled:** (Indicates whether the server can be reached through the default SSL listen port. [More Info...](#))
- SSL Listen Port:** 7003 (The TCP/IP port at which this server listens for SSL connection requests. [More Info...](#))
- Client Cert Proxy Enabled:** (Specifies whether the HttpClusterServlet proxies the client certificate in a special header. [More Info...](#))
- Java Compiler:** javac (The Java compiler to use for all applications hosted on this server that need to compile Java code. [More Info...](#))

On the left side, there are three panels: 'Change Center' with a 'View changes and restarts' link, 'Domain Structure' showing a tree view of the domain hierarchy, and 'System Status' showing the health of running servers with a bar chart indicating 1 OK server.

At the bottom of the console, there is a footer with the following text: 'WebLogic Server Version: 10.3.2.0. Copyright © 1996-2009, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.'

On General tab, please ensure that the 'SSL Listen Port Enabled' feature is enabled (as it is mandatory).

Click on Server Start under Configuration tab.



Enter the following values and click “Save”

Assuming the <FCDBME BASE DIR> as Base Working Directory specify the path for all the jars from the following location.

Location	Description
<FCDBME BASE DIR>\system\build\kernel	Select the release jar FCDB_12.0.0_ME_JDK1.6.jar kept at this location.
<FCDBME BASE DIR>\system\build\extclasses\jars	Select all the external or third-party jars within this folder.

Also mention the path for the home folder and logs.

Example, configure the following properties.

Property Name	Value	Description
Java Home	<Bea Base Folder>\jdk160_24	The Java home directory
Class Path	<FCDBME BASE DIR>\system\build\classes; <FCDBME BASE DIR>\system\build\kernel\ FCDB_12.0.0_ME_JDK1.6.jar; <Bea Base Folder>\jdk160_24\lib\tools.jar; <Bea Base Folder>\wlsrver_10.0\server\lib\weblogic.jar; <Bea Base Folder>\wlsrver_10.0\server\lib\webservices.jar;< FCDBME BASE DIR>\system\build\extclasses\jars\<Include all jars residing in this path>;%classpath%;	
Arguments	-Dfcat.basedir=<BASE FOLDER> -Dfcat.propfile.isencr=false -Dfcat.jvm.id=1 -Dweblogic.Stdout=<FCAT.LOGFILE.PATH>\logs\ FCDBMEServerOut.log - Dweblogic.Stderr=<FCAT.LOGFILE.PATH>\logs\ FCDBMEServerErr.log -XX:PermSize=256m - XX:MaxPermSize=512m -Xms256M -Xmx512M - Dweblogic.ext.dirs= <Bea Base Folder>\jdk150_11\ lib	Path to all folders holding application relevant jar files , location of class files generated, logs and home folder which will be used when starting the server. Note: Property “fcat.propfile.isencr” indicates the properties file’s encryption status. Set as ‘true’ if files are encrypted, else set as ‘false’. Refer to point 8 in this document for more details.

Execute the following command at the command prompt under the directory where the installAdminServerSvc.cmd file has been copied to.

```
installAdminServerSvc <username> <password>
```

FCDBMEServer

Copy the installFCDBMEServerSvc.cmd to the following location.

<Bea Base Folder>\user_projects\domains\DOMAIN_NAME

Execute the following command at the command prompt under the directory where the installFCDBMEServerSvc.cmd file has been copied to.

```
installFCDBMEServerSvc <username> <password>
```

Property	Description
DOMAIN_NAME	Name of the domain as specified in domain creation.
username	The user name specified at domain creation.
password	The password specified at domain creation.

Check the path in My Computer→Environment Variables→Path (Variable). It must not contain any spaces. This can be verified by giving the command at the command prompt

```
echo %PATH%
```

Starting Admin Server and Managed Server using command prompt

1. In a command prompt, set up the required environment variables by running the following script:

```
WL_HOME\server\bin\setWLSEnv.cmd (on Windows)
```

```
WL_HOME/server/bin/setWLSEnv.sh (on UNIX)
```

where WL_HOME is the home directory for WebLogic.

In the command prompt, change to the root of the domain directory, usually

<BEA_HOME>\user_projects\domains\<DOMAIN_NAME>

To start an Administration Server, enter the following command:

```
java weblogic.Server
```

You can start a Managed Server as follows:

```
java -Dweblogic.Name=<managed-server-name>
```

```
Dweblogic.management.server=<url-for-Administration-Server> weblogic.Server
```

For example, if you create a Managed Server named FCDBMEServer in the fcdb_domain, you can enter the following command:

```
java -Dweblogic.Name= FCDBMEServer
```

```
Dweblogic.management.server=localhost:7001 weblogic.Server
```

Starting the Node Manager through Windows

Start the Node Manager from the Program Files→<Bea Folder>→Tools→Node Manager.

Starting Managed Server using Administrative Console

1. Click on “Environment→ Servers.”

Click on the server that is to be started.

Note: Only those servers which have been assigned a machine can be controlled through Administration console

Click on “Control” tab.

Select the checkbox against the server name and click on the “Start” button.

Click “Yes” in the confirmation screen.

b. Deploying Applications

Web Application Deployment

Following section explains deploying Web application on Weblogic. For details and different options of deployment refer to documentations provided by BEA Weblogic.

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 “Deployments” in the left menu.

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic Connected to: FCDBME

Home > Summary of Machines > Summary of Servers > Summary of Machines > FCDBMEachine > Summary of Servers > FCDBMEserver > Summary of Servers > Summary of Deployments

Change Center

View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

- FCDBME
 - Environment
 - Servers
 - Clusters
 - Virtual Hosts
 - Migratable Targets
 - Machines
 - Work Managers
 - Startup & Shutdown Classes
 - Deployments
 - Services
 - Security Realms
 - Interoperability
 - Diagnosics

How do I...

- Install an Enterprise application
- Configure an Enterprise application
- Update (redeploy) an Enterprise application
- Start and stop a deployed Enterprise application
- Monitor the modules of an Enterprise application
- Deploy EJB modules
- Install a Web application

System Status

Health of Running Servers

- █ Failed (0)
- █ Critical (0)
- █ Overloaded (0)
- █ Warning (0)
- █ OK (1)

Summary of Deployments

Control | Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.

To install a new application or module for deployment to targets in this domain, click the Install button.

Customize this table

Deployments

Showing 0 to 0 of 0 Previous | Next

<input type="checkbox"/>	Name ↕	State	Health	Type	Deployment Order
There are no items to display					

Showing 0 to 0 of 0 Previous | Next

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Click "Install" button.

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: FCDBME

Home > Summary of Machines > Summary of Servers > Summary of Machines > FCDBMEmachine > Summary of Servers > FCDBMEserver > Summary of Servers > Summary of Deployments

Change Center

View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

FCDBME

- Environment
 - Servers
 - Clusters
 - Virtual Hosts
 - Migratable Targets
 - Machines
 - Work Managers
 - Startup & Shutdown Classes
- Deployments
- Services
 - Security Realms
 - Interoperability
 - Diagnostics

How do I...

- Start and stop a deployed Enterprise application
- Configure an Enterprise application
- Create a deployment plan
- Target an Enterprise application to a server
- Test the modules in an Enterprise application

System Status

Health of Running Servers

Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Install Application Assistant

Back Next Finish Cancel

Locate deployment to install and prepare for deployment

Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the Path field.

Note: Only valid file paths are displayed below. If you cannot find your deployment files, [upload your file\(s\)](#) and/or confirm that your application contains the required deployment descriptors.

Path: D:\

Recently Used Paths: (none)

Current Location: ofsmdim8388 \ D:

- app
- Archit_MailPST
- Bus Pass
- Check-In
- Documents
- DRIVERS
- Ebooks
- Eclipse
- Eclipse Ganymede
- FCDB
- FCDBLogs
- Installers
- java_space
- Leap
- Mobile Banking
- MyBackUp
- Oracle
- Program Files
- RECYCLER
- SharedFolder
- SWN_FCDB
- SWN_source
- Workspace_Ganymede

Back Next Finish Cancel

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Navigate to the location where the war is stored on the machine and select the radio button against the deployable .war file. Click “Next”

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main window is titled "Install Application Assistant" and is in the "Locate deployment to install and prepare for deployment" step. The "Path" field contains "D:\FCDB\deploy\B001.war". Below this, the "Current Location" is shown as "ofsmd6sim8388 \D: \FCDB \deploy". A file browser view shows a directory structure with various files and folders. The file "B001.war" is selected, indicated by a radio button. Other files in the list include "AsyncMdb.jar", "AsyncResponseHandlerMDB.jar", "B002.war", "B003.war", "B004.war", "Bulk.ear", "ClonedQueueReceiverMDB.jar", "ClonedQueueResourceAdapter.rar", "Copy (2) of B001.war", "Copy of B001.war", "Copy of F001.war", "EJBChannelController.jar", "F001.war", "fcslpasswordprint.jar", "help.war", "HostSimulator.jar", "Reset.war", "ServiceEndPointRI.jar", "sim_jar.ear", "SMS.war", "T001.war", and "Timer ResourceAdapter.rar".

Check the radio button against “Install this deployment as an application” and click “Next”.

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main window is titled "Install Application Assistant" and contains the following elements:

- Change Center:** A sidebar on the left with a "View changes and restarts" section and a "Domain Structure" tree showing a hierarchy from Environment to Diagnostic.
- How do I...:** A list of help topics including starting/stopping applications, configuration, deployment plans, targeting, and testing modules.
- System Status:** A "Health of Running Servers" section showing a bar chart with categories: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (1).
- Install Application Assistant Dialog:** The central focus, featuring a "Next" button, a "Choose targeting style" section with two radio buttons (the first is selected), and a "Back" button.

At the bottom of the console, the following text is visible:

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Select the server FCDBMEmserver to be mapped and click on Next

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic | Connected to: FCDBME

Home > Summary of Servers > Summary of Machines > FCDBMEmachine > Summary of Servers > FCDBMEmserver > Summary of Deployments

Install Application Assistant

Back Next Finish Cancel

Select deployment targets

Select the servers and/or clusters to which you want to deploy this application. (You can reconfigure deployment targets later).

Available targets for B001 :

Servers
<input type="checkbox"/> AdminServer
<input checked="" type="checkbox"/> FCDBMEmserver

Back Next Finish Cancel

Change Center

View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

FCDBME

- Environment
 - Servers
 - Clusters
 - Virtual Hosts
 - Migratable Targets
 - Machines
 - Work Managers
 - Startup & Shutdown Classes
- Deployments
- Services
 - Security Realms
- Interoperability
- Diagnostics

How do I...

- Start and stop a deployed Enterprise application
- Configure an Enterprise application
- Create a deployment plan
- Target an Enterprise application to a server
- Test the modules in an Enterprise application

System Status

Health of Running Servers

Failed	(0)
Critical	(0)
Overloaded	(0)
Warning	(0)
OK	(1)

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Click Finish.

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: FCDBME

Home > Summary of Machines > Summary of Servers > Summary of Machines > FCDBEmachine > Summary of Servers > FCDBMEmachine > Summary of Servers > Summary of Deployments

Change Center

View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

FCDBME

- Environment
 - Servers
 - Clusters
 - Virtual Hosts
 - Migratable Targets
 - Machines
 - Work Managers
 - Startup & Shutdown Classes
- Deployments
- Services
 - Security Realms
 - Interoperability
- Diagnostics

How do I...

- Start and stop a deployed Enterprise application
- Configure an Enterprise application
- Create a deployment plan
- Target an Enterprise application to a server
- Test the modules in an Enterprise application

System Status

Health of Running Servers

Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Install Application Assistant

Back Next Finish Cancel

Optional Settings

You can modify these settings or accept the defaults

General

What do you want to name this deployment?

Name:

Security

What security model do you want to use with this application?

DD Only: Use only roles and policies that are defined in the deployment descriptors.

Custom Roles: Use roles that are defined in the Administration Console; use policies that are defined in the deployment descriptor.

Custom Roles and Policies: Use only roles and policies that are defined in the Administration Console.

Advanced: Use a custom model that you have configured on the realm's configuration page.

Source accessibility

How should the source files be made accessible?

Use the defaults defined by the deployment's targets

Recommended selection.

Copy this application onto every target for me

During deployment, the files will be copied automatically to the managed servers to which the application is targeted.

I will make the deployment accessible from the following location

Location:

Provide the location from where all targets will access this application's files. This is often a shared directory. You must ensure the application files exist in this location and that each target can reach the location.

Back Next Finish Cancel

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Confirmation Page is displayed

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic Connected to: FCDBME

Home > Summary of Machines > Summary of Servers > Summary of Machines > FCDBMEmachine > Summary of Servers > FCDBMEserver > Summary of Servers > Summary of Deployments

Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure
FCDBME
Environment
- Servers
- Clusters
- Virtual Hosts
- Migratable Targets
- Machines
- Work Managers
- Startup & Shutdown Classes
Deployments
Services
- Security Realms
- Interoperability
- Diagnostics

How do I...
• Install an Enterprise application
• Configure an Enterprise application
• Update (redeploy) an Enterprise application
• Start and stop a deployed Enterprise application
• Monitor the modules of an Enterprise application
• Deploy EJB modules
• Install a Web application

System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Messages
✔ All changes have been activated. However 1 items must be restarted for the changes to take effect.
✔ The deployment has been successfully installed.

Summary of Deployments
Control Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.

To install a new application or module for deployment to targets in this domain, click the Install button.

Customize this table

Deployments
Install Update Delete Start Stop Showing 1 to 1 of 1 Previous Next

<input type="checkbox"/>	Name	State	Health	Type	Deployment Order
<input type="checkbox"/>	B001	New		Web Application	100

Install Update Delete Start Stop Showing 1 to 1 of 1 Previous Next

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i. Starting Application

1. Click “Deployments” in the left menu
Select the applications that are to be started.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The browser address bar indicates the URL: `iflmdim13095:7001/console/console.portal?_nfpb=true&_pageLabel=AppDeploymentsControlPage`. The page title is "Summary of Deployments - FCDB62_DOMAIN - WLS Console - Mozilla Firefox".

The main content area is titled "Summary of Deployments" and includes a "Control" tab. Below the tab, there is a table of deployed applications. The table has columns for "Name", "State", "Health", "Type", and "Deployment Order". One application is listed: "B001", which is a "Web Application" with a "New" state and "OK" health. The table also shows "Showing 1 to 1 of 1" items.

On the left side, the "Domain Structure" tree is visible, with "Deployments" selected under the "FCDB62_DOMAIN" environment. Below the tree, there are sections for "How do I..." (listing tasks like installing and configuring applications) and "System Status" (showing the health of running servers).

At the bottom of the console, the version information is displayed: "WebLogic Server Version: 10.3.4.0. Copyright © 1996-2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

Click "Servicing all requests" in the drop down list under "Start" tab

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled "Summary of Deployments" and contains a table of installed applications. A dropdown menu is open over the "Start" button for the application "B001", showing the option "Servicing all requests" selected.

Summary of Deployments

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.

To install a new application or module for deployment to targets in this domain, click the Install button.

Customize this table

Name	State	Health	Type	Deployment Order
B001	New		Web Application	100

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Confirmation screen displayed

The screenshot displays the Oracle WebLogic Server Administration Console interface. The browser window title is "Summary of Deployments - FCDB62_DOMAIN - WLS Console - Mozilla Firefox". The address bar shows the URL: "ifimudim13095:7001/console/console.portal?_nfpb=true&_pageLabel=AppDeploymentsControlPage". The page header includes "ORACLE WebLogic Server® Administration Console" and "Welcome, weblogic | Connected to: FCDB62_DOMAIN".

The main content area is titled "Summary of Deployments" and has two tabs: "Control" (selected) and "Monitoring". Below the tabs, there is a message: "Start requests have been sent to the selected Deployments." The text below explains that the page displays a list of Java EE applications and stand-alone application modules that have been installed to the domain. It also provides instructions on how to start, stop, update, or delete applications.

The "Customize this table" section shows a table of deployments. The table has columns for "Name", "State", "Health", "Type", and "Deployment Order". There is one entry in the table:

Name	State	Health	Type	Deployment Order
B001	New		Web Application	100

Below the table, there are buttons for "Install", "Update", "Delete", "Start", and "Stop".

The left sidebar contains several sections:

- Change Center:** View changes and restarts. Configuration editing is enabled.
- Domain Structure:** A tree view showing the hierarchy of the domain, including Environment, Servers, Clusters, Virtual Hosts, Migratable Targets, Coherence Servers, Coherence Clusters, Machines, Work Managers, Startup and Shutdown Classes, Deployments, Services, and Security Realms.
- How do I...:** A list of tasks such as "Install an Enterprise application", "Configure an Enterprise application", "Update (redeploy) an Enterprise application", "Start and stop a deployed Enterprise application", "Monitor the modules of an Enterprise application", "Deploy EJB modules", and "Install a Web application".
- System Status:** Health of Running Servers. A progress bar shows the status: Failed (0), Critical (0), Overloaded (0), Warning (0), and OK (1).

The footer of the page contains the following text: "WebLogic Server Version: 10.3.4.0. Copyright © 1996-2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

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

5. Setup JDBC data source and Connection Pooling

XA Enabled Data Source:

The XA-aware data source implementation allows connections to participate in distributed transactions.

Following are the steps to configure the XA data source.

1. Go to the “Services→JDBC→Data Sources”.
2. Click New to create a new JDBC Data Source

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: FCDBME

Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure
FCDBME
Environment
Servers
Clusters
Virtual Hosts
Migratable Targets
Machines
Work Managers
Startup & Shutdown Classes
Deployments
Services
Messaging
JDBC
Data Sources

How do I...
• Create JDBC data sources
• Delete JDBC data sources

System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Summary of JDBC Data Sources

A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

Customize this table

Data Sources(filtered - More Columns Exist)

New Delete Showing 0 to 0 of 0 Previous | Next

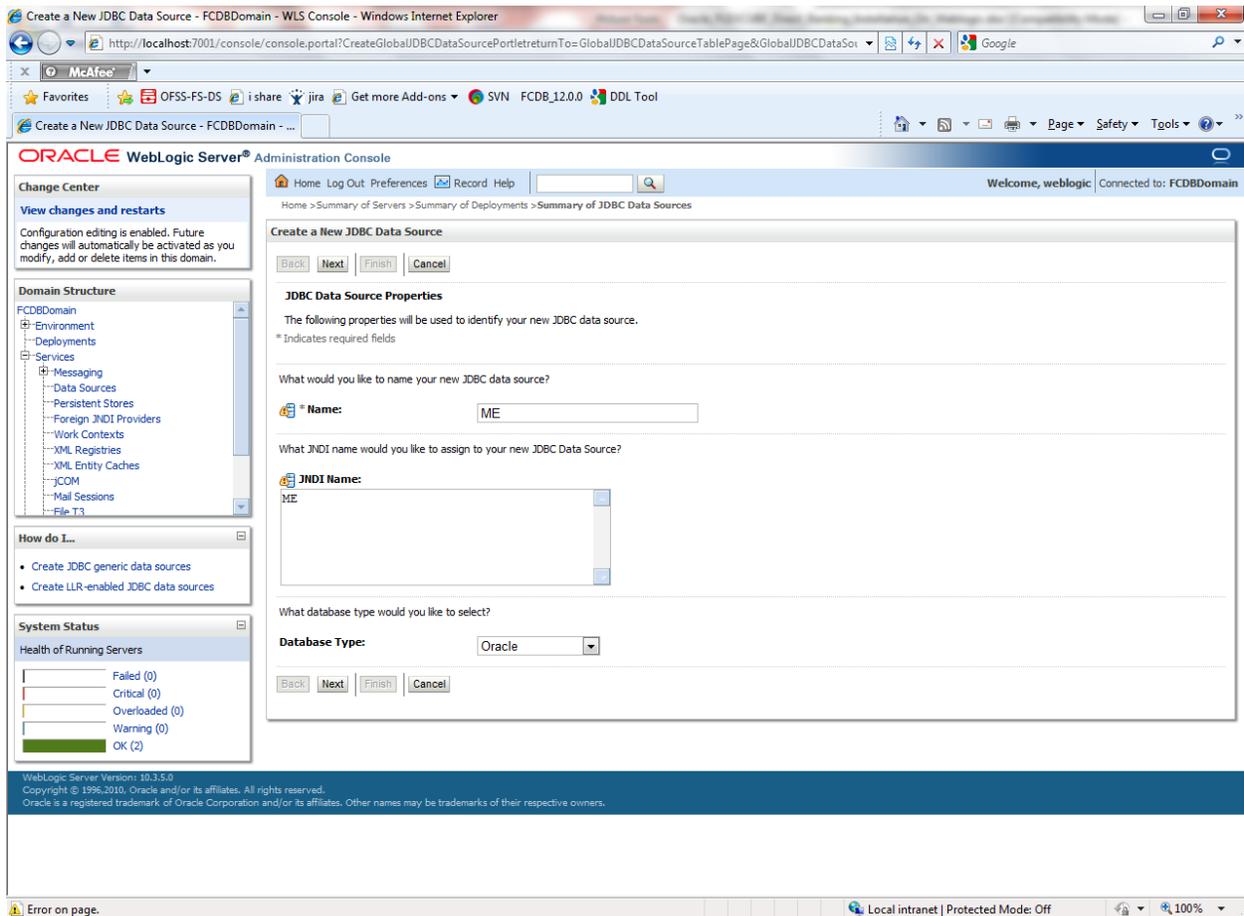
Name	JNDI Name	Targets
There are no items to display		

New Delete Showing 0 to 0 of 0 Previous | Next

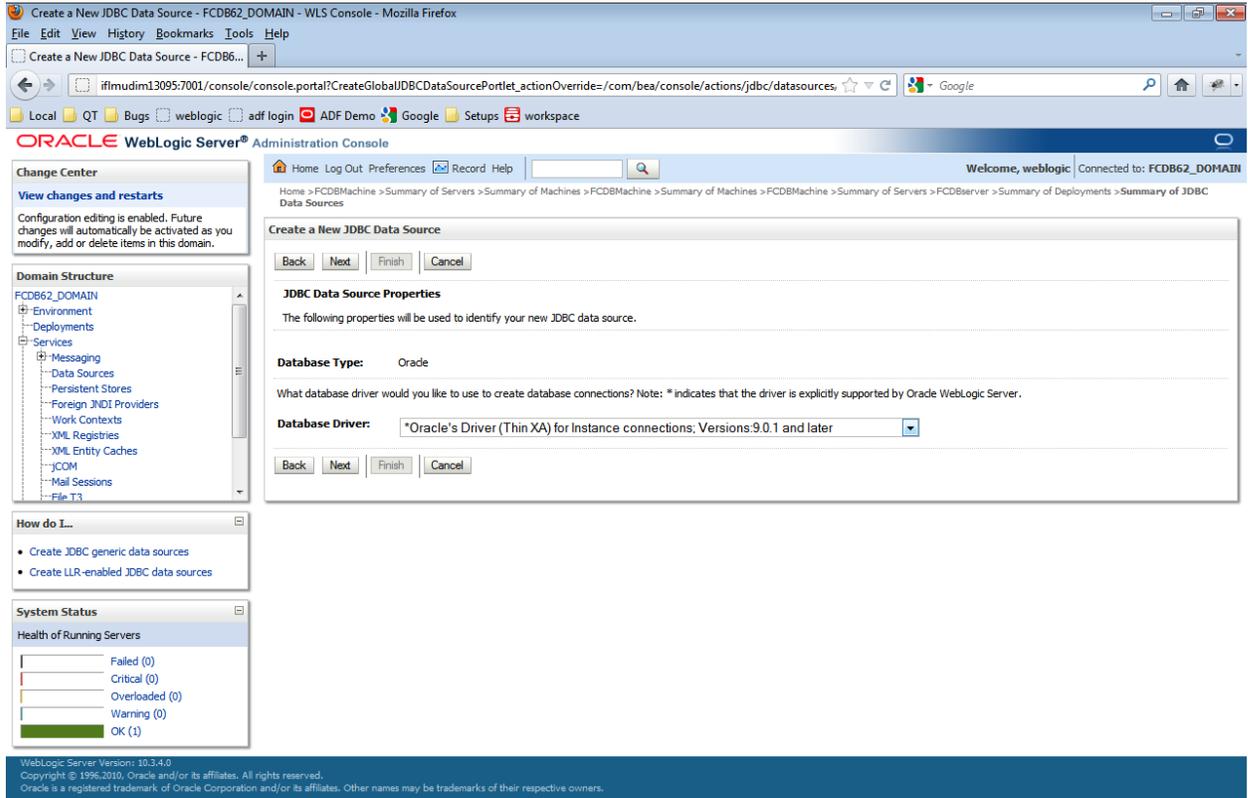
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Configure the following properties for Data Source creation and click “Next”.

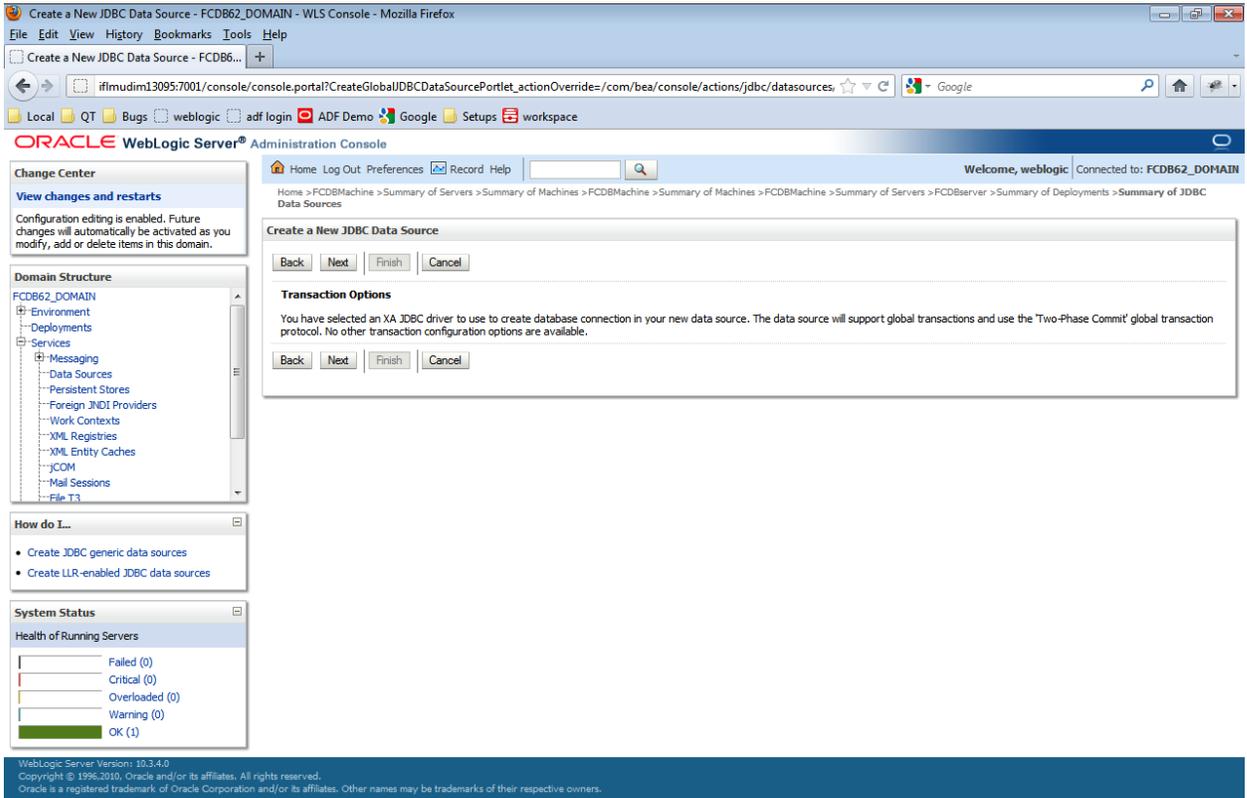
Property	Value
Data Source Name	<FCDBME data source name>
JNDI Name	ME
Database Type	Oracle



Select Database Driver as Oracle's Driver (Thin XA) Versions: 9.0.1 and later and click Next.



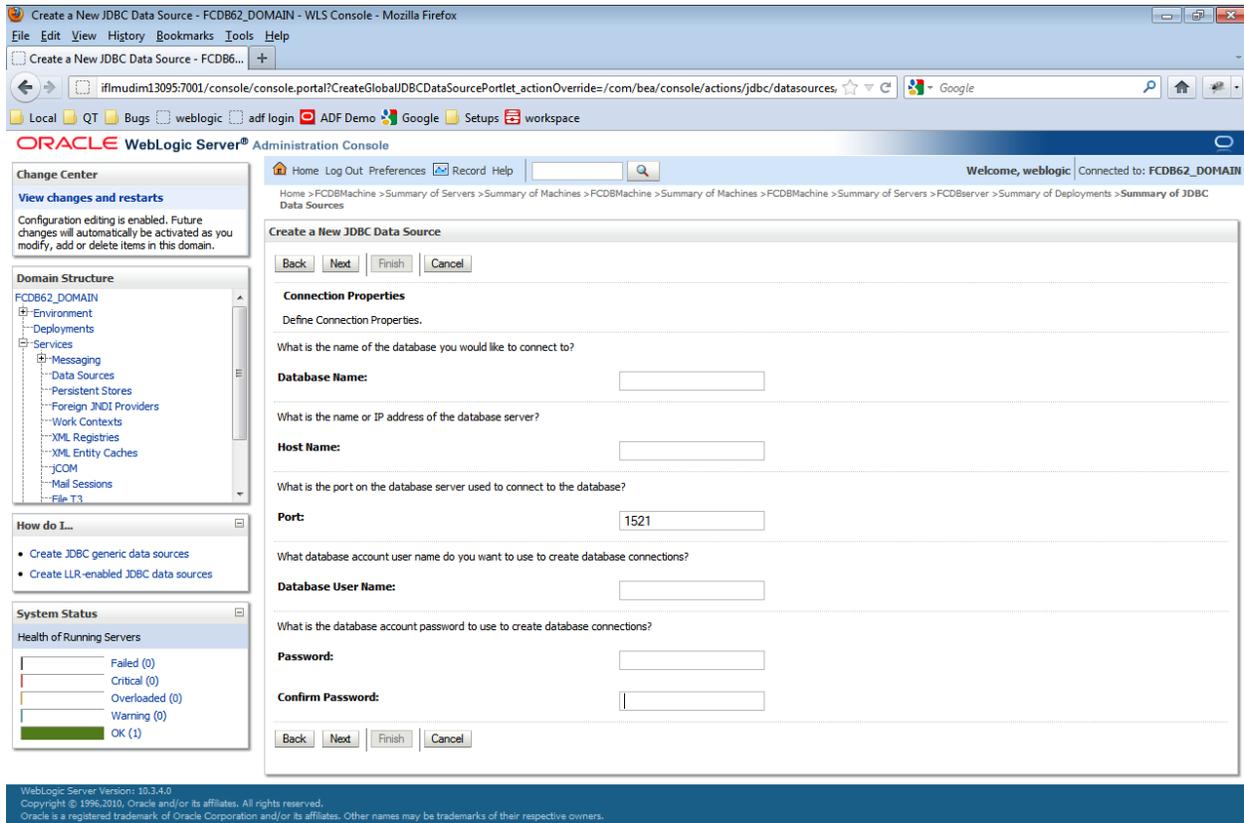
Click Next.



Click “Next” button.

Give the following database details to which you need to connect. For e.g:

Property	Description
Database Name	Name of the database to be connected to
Host Name	ip address or hostname
Port	Port number of the database
Database User Name	Username used to connect to the database.
Password	Password used to connect to the database.
Confirm Password	Same password used to connect to the database.



Click "Next" button.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area displays the 'Create a New JDBC Data Source' wizard. The navigation bar at the top of the wizard includes buttons for 'Back', 'Next', 'Finish', and 'Cancel'. The 'Next' button is highlighted in blue, indicating it is the current step. The wizard form contains the following fields:

- Database Name:** FCDB
- Host Name:** 10.180.47.236
- Port:** 1521
- Database User Name:** FCDBAPPQT62R2
- Password:** (masked with dots)
- Confirm Password:** (masked with dots)

On the left side of the console, there are several panels: 'Change Center' with a 'View changes and restarts' link, 'Domain Structure' showing a tree view of the domain hierarchy, 'How do I...' with links to generic and LLR-enabled data sources, and 'System Status' showing the health of running servers (OK (1)).

At the bottom of the console, the following text is visible:

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Click "Test Configuration" below.

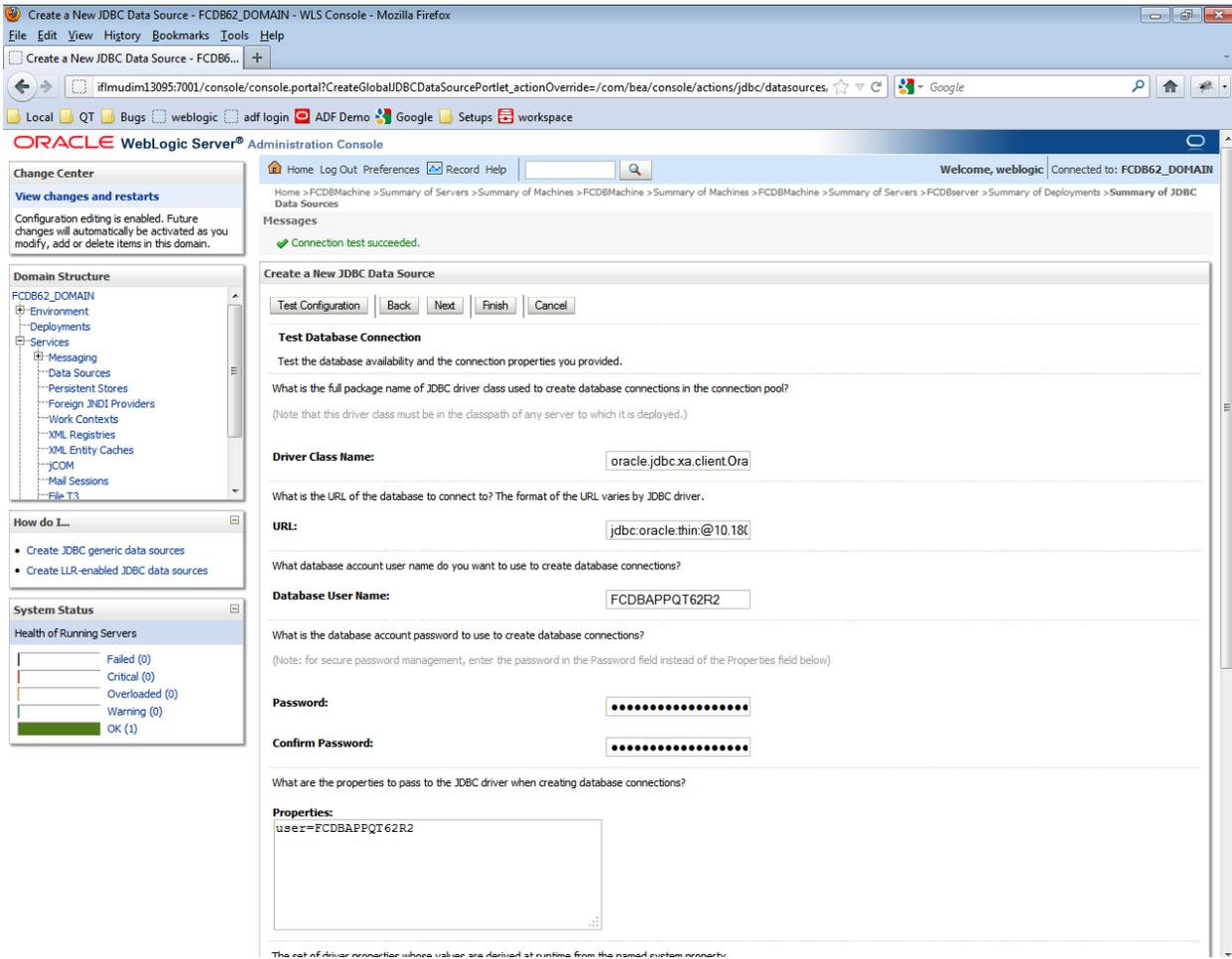
The screenshot displays the Oracle WebLogic Server Administration Console interface. The main content area shows the 'Create a New JDBC Data Source' wizard, currently at the 'Test Database Connection' step. The wizard includes the following fields and instructions:

- Test Configuration:** Buttons for 'Test Configuration', 'Back', 'Next', 'Finish', and 'Cancel'.
- Test Database Connection:** A section with instructions to test database availability and connection properties.
- Driver Class Name:** A text field containing 'oracle.jdbc.xa.client.Ora'. A note below states: '(Note that this driver class must be in the classpath of any server to which it is deployed.)'
- URL:** A text field containing 'jdbc:oracle:thin@10.181...'. A note below states: 'What is the URL of the database to connect to? The format of the URL varies by JDBC driver.'
- Database User Name:** A text field containing 'FCDBAPPQT62R2'. A note below states: 'What database account user name do you want to use to create database connections?'
- Password:** A masked text field (represented by dots). A note below states: 'What is the database account password to use to create database connections? (Note: for secure password management, enter the password in the Password field instead of the Properties field below)'
- Confirm Password:** A masked text field (represented by dots).
- Properties:** A text area containing 'user=FCDBAPPQT62R2'. A note below states: 'What are the properties to pass to the JDBC driver when creating database connections?'
- System Properties:** A section for properties derived at runtime from the named system property.

On the left side of the console, there are several panels:

- Change Center:** A section for viewing changes and restarts.
- Domain Structure:** A tree view showing the hierarchy of the domain, including Environment, Deployments, Services, and various sub-services like Data Sources, Persistent Stores, and Work Contexts.
- How do I...:** A list of links for creating JDBC generic and LLR-enabled data sources.
- System Status:** A section showing the health of running servers, with a bar chart indicating 'Failed (0)', 'Critical (0)', 'Overloaded (0)', 'Warning (0)', and 'OK (1)'.

A success message must appear with “Connection test succeeded”.



Click on the “Next” button.

The screenshot displays the Oracle WebLogic Server Administration Console interface. The main window is titled "Create a New JDBC Data Source" and is in the "Select Targets" step. The breadcrumb navigation shows "Home > Summary of Deployments > Summary of JDBC Data Sources". The "Select Targets" section includes a descriptive paragraph and a table of servers with checkboxes. The "Next" button is highlighted in blue.

Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure
FCDBME
- Environment
- Deployments
- Services
 - Messaging
 - JDBC
 - Data Sources
 - Multi Data Sources
 - Data Source Factories
 - Persistent Stores
 - Foreign JNDI Providers
 - Work Contexts
 - WML Registries
 - XML Entity Caches

How do I...
• Create JDBC data sources
• Create LLR-enabled JDBC data sources

System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Create a New JDBC Data Source
Back Next Finish Cancel

Select Targets
You can select one or more targets to deploy your new JDBC data source. If you don't select a target, the data source will be created but not deployed. You will need to deploy the data source at a later time.

Servers
 AdminServer
 FCDBMEServer

Back Next Finish Cancel

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Select the server as 'FCDBMEmserver' and click on Finish.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main window displays the 'Create a New JDBC Data Source' wizard. The 'Servers' section is expanded, showing a list of servers: 'AdminServer' (unchecked) and 'FCDBMEmserver' (checked). The 'Finish' button is highlighted, indicating the next step in the process.

Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure
FCDBME
Environment
Deployments
Services
Messaging
JDBC
Data Sources
Multi Data Sources
Data Source Factories
Persistent Stores
Foreign JNDI Providers
Work Contexts
XML Registries
XML Entity Caches

How do I...
• Create JDBC data sources
• Create LLR-enabled JDBC data sources

System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Create a New JDBC Data Source
Back Next Finish Cancel
Select Targets
You can select one or more targets to deploy your new JDBC data source. If you don't select a target, the data source will be created but not deployed. You will need to deploy the data source at a later time.
Servers
 AdminServer
 FCDBMEmserver
Back Next Finish Cancel

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The data source is created successfully. Click on the newly created data source under Data Sources menu option.

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: FCDBME

Change Center
View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure
FCDBME
Environment
Deployments
Services
Messaging
JDBC
Data Sources
Multi Data Sources
Data Source Factories
Persistent Stores
Foreign JNDI Providers
Work Contexts
XML Registries
XML Entity Caches

How do I...
Create JDBC data sources
Delete JDBC data sources

System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Home > Summary of Deployments > Summary of JDBC Data Sources

Messages
All changes have been activated. No restarts are necessary.

Summary of JDBC Data Sources
A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.
This page summarizes the JDBC data source objects that have been created in this domain.

Customize this table

Data Sources (Filtered - More Columns Exist)

New Delete Showing 1 to 1 of 1 Previous | Next

<input type="checkbox"/>	Name ↕	JNDI Name	Targets
<input type="checkbox"/>	ME	ME	FCDBMServer

New Delete Showing 1 to 1 of 1 Previous | Next

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Click "Connection Pool" under "Configuration" tab on the top.

Home > Summary of JDBC Data Sources > ME > Summary of Servers > Summary of Machines > FCDBMEmachine > Summary of Machines > Summary of Servers > FCDBMEmachine > Summary of JDBC Data Sources > ME

View changes and restarts
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure
FCDBME
Environment
Servers
Clusters
Virtual Hosts
Migratable Targets
Machines
Work Managers
Startup & Shutdown Classes
Deployments
Services
Messaging
JDBC
Data Sources

How do I...
• Create JDBC data sources
• Configure testing options for a JDBC data source
• Configure the statement cache for a JDBC connection pool
• Configure credential mapping for a JDBC data source

System Status
Health of Running Servers
Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

Messages
All changes have been activated. No restarts are necessary.
Settings updated successfully.

Settings for ME
Configuration Targets Monitoring Control Security Notes
General **Connection Pool** Transaction Diagnostics Identity Options
Save

The connection pool within a JDBC data source contains a group of JDBC connections that applications reserve, use, and then return to the pool. The connection pool and the connections within it are created when the connection pool is registered, usually when starting up WebLogic Server or when deploying the data source to a new target.
Use this page to define the configuration for this data source's connection pool.

URL: jdbc:oracle:thin:@10.180.47.236:1521:FCDB The URL of the database to connect to. The format of the URL varies by JDBC driver. [More Info...](#)

Driver Class Name: oracle.jdbc.xa.client.OracleXADataSource The full package name of JDBC driver class used to create the physical database connections in the connection pool. (Note that this driver class must be in the classpath of any server to which it is deployed.) [More Info...](#)

Properties: user=FCDBAPP&PPQT62R2 The list of properties passed to the JDBC driver that are used to create physical database connections. For example: server=dbserver1. List each property=value pair on a separate line. [More Info...](#)

Password: The password attribute passed to the JDBC driver when creating physical database connections. [More Info...](#)

Confirm Password:

Initial Capacity: 1 The number of physical connections to create when creating the connection pool. [More Info...](#)

Maximum Capacity: 15 The maximum number of physical connections that this connection pool can contain. [More Info...](#)

Capacity Increment: 1 The number of connections created when new connections are added to the connection pool. [More Info...](#)

Statement Cache Type: LRU The algorithm used for maintaining the prepared statements stored in the statement cache. [More Info...](#)

Statement Cache Size: 10 The number of prepared and callable statements stored in the cache. (This may increase server performance.) [More Info...](#)

Advanced
Save

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Click on the “Advanced” link below.

Advanced	
<input type="checkbox"/> Test Connections On Reserve	Enables WebLogic Server to test a connection before giving it to a client. (Requires that you specify a Test Table Name.) More Info...
Test Frequency: <input type="text" value="120"/>	The number of seconds between when WebLogic Server tests unused connections. (Requires that you specify a Test Table Name.) Connections that fail the test are closed and reopened to re-establish a valid physical connection. If the test fails again, the connection is closed. More Info...
Test Table Name: <pre>SQL SELECT 1 FROM DUAL</pre>	The name of the database table to use when testing physical database connections. This name is required when you specify a Test Frequency and enable Test Reserved Connections. More Info...
Seconds to Trust an Idle Pool Connection: <input type="text" value="10"/>	The number of seconds within a connection use that WebLogic Server trusts that the connection is still viable and will skip the connection test, either before delivering it to an application or during the periodic connection testing process. More Info...
Shrink Frequency: <input type="text" value="900"/>	The number of seconds to wait before shrinking a connection pool that has incrementally increased to meet demand. More Info...
Init SQL: <pre></pre>	SQL statement to execute that will initialize newly created physical database connections. Start the statement with SQL followed by a space. More Info...
Connection Creation Retry Frequency: <input type="text" value="0"/>	The number of seconds between attempts to establish connections to the database. More Info...
Login Delay: <input type="text" value="0"/>	The number of seconds to delay before creating each physical database connection. This delay supports database servers that cannot handle multiple connection requests in rapid succession. More Info...
Inactive Connection Timeout: <input type="text" value="0"/>	The number of inactive seconds on a reserved connection before WebLogic Server reclaims the connection and releases it back into the connection pool. More Info...
Maximum Waiting for Connection: <input type="text" value="2147483647"/>	The maximum number of connection requests that can concurrently block threads while waiting to reserve a connection from the data source's connection pool. More Info...
Connection Reserve Timeout: <input type="text" value="10"/>	The number of seconds after which a call to reserve a connection from the connection pool will timeout. More Info...
Statement Timeout: <input type="text" value="-1"/>	The time after which a statement currently being executed will time out. More Info...
<input checked="" type="checkbox"/> Ignore In-Use Connections	Enables the data source to be shutdown even if connections obtained from the pool are still in use. More Info...
<input type="checkbox"/> Pinned-To-Thread	PinnedToThread is an option that can improve performance by enabling execute threads to keep a pooled database connection even after the application closes the logical connection. More Info...
<input checked="" type="checkbox"/> Remove Infected Connections Enabled	Specifies whether a connection will be removed from the connection pool after the application uses the underlying vendor connection object. More Info...

You can specify the required parameters for connection pooling. In the second section check the option against “Test Connections On Reserve” and click Save.

The screenshot displays the 'Settings for ME' configuration page for a JDBC connection pool. The left sidebar shows the 'Domain Structure' with 'Data Sources' expanded. The main content area is titled 'Settings for ME' and includes a 'Messages' section with a success notification: 'All changes have been activated. No restarts are necessary.' Below this, the 'Configuration' tab is selected, and the 'Connection Pool' sub-tab is active. The page contains several configuration fields with descriptive text and 'More Info...' links:

- URL:** jdbc:oracle:thin:@10.180.47.236:1521:FCDB
- Driver Class Name:** oracle.jdbc.xa.client.OracleXADataSource
- Properties:** user=FCDB&PP&PPQT62R2
- Password:** [Redacted]
- Confirm Password:** [Redacted]
- Initial Capacity:** 1
- Maximum Capacity:** 15
- Capacity Increment:** 1
- Statement Cache Type:** LRU
- Statement Cache Size:** 10

At the bottom of the configuration area, there is an 'Advanced' section and a 'Save' button. The footer of the console shows 'WebLogic Server Version: 10.3.2.0' and copyright information.

The server should be running to perform the remaining steps.
 On the same screen next to the Configuration tab, select the “Monitoring” tab on the top.
 Select Testing tab under Monitoring tab and then select the radio button against the server and click “Test Data Source”.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled "Settings for ME" and has tabs for Configuration, Targets, Monitoring, Control, Security, and Notes. Under the Monitoring tab, the "Testing" sub-tab is active. The page contains the following elements:

- Change Center:** A section on the left with a "View changes and restarts" link and a note about configuration editing.
- Domain Structure:** A tree view on the left showing the hierarchy: Environment > Servers > Clusters > Virtual Hosts > Migratable Targets > Machines > Work Managers > Startup & Shutdown Classes > Deployments > Services > Messaging > JDBC > Data Sources.
- How do I...:** A section with links for "Test JDBC data sources" and "Configure testing options for a JDBC data source".
- System Status:** A section titled "Health of Running Servers" with a legend: Failed (0), Critical (0), Overloaded (0), Warning (1), and OK (2).
- Settings for ME:**
 - Navigation tabs: Configuration, Targets, **Monitoring**, Control, Security, Notes.
 - Sub-tabs: Statistics, **Testing**.
 - Text: "Use this page to test database connections in this JDBC data source."
 - Link: "Customize this table".
 - Section: "Test Data Source (Filtered - More Columns Exist)".
 - Buttons: "Test Data Source" (top left and bottom left), "Showing 1 to 1 of 1 Previous | Next" (top right and bottom right).
 - Table:

Server	State
<input checked="" type="radio"/> FCDBMServer	Running

At the bottom of the console, there is a footer with the following text:

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A success message with the connection tested successfully must appear.

The screenshot displays the Oracle WebLogic Server Administration Console interface. The top navigation bar includes 'ORACLE WebLogic Server® Administration Console', user information 'Welcome, weblogic', and 'Connected to: FCDB'. The left sidebar contains a 'Domain Structure' tree with 'FCDB' expanded to show 'Data Sources'. The main content area shows a 'Messages' section with a green success message: 'Test of ME on server FCDBMEServer was successful.' Below this is the 'Settings for ME' section, with the 'Monitoring' tab selected. The 'Testing' sub-tab is active, displaying a table titled 'Test Data Source (Filtered - More Columns Exist)'. The table has columns for 'Server' and 'State', with one entry for 'FCDBMEServer' in a 'Running' state. A 'Test Data Source' button is visible below the table. The bottom status bar shows 'WebLogic Server Version: 10.3.2.0' and copyright information.

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

6. DB Creation

For completing the DB setup kindly refer to the doc
“Oracle_FLEXCUBE_Direct_Banking_Database_Setup“

7. Encryption and Decryption of property files

The property files <Identity>.xml , fcat-config.xml 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 usage of the tools is mentioned in the [Tools](#) section.

8. Appendix

After the successful installation of FCDB ME with the help of FCDBME 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_JDK1.6.jar.
<FCDBME BASE DIR>\system\build\extclasses\jars	Folder containing all requisite third-party jars. Seperate folders will be created for all the third party jars. e.g. <FCDBME BASE DIR>\system\build\extclasses\jars\fcr
<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.

The following archives should 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/Property Files

The layers presentation, channel & mobileenabler interfacing tier in the system use the following property files:

Property File	Purpose
<Identity>.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.
fcat-config.xml	Configuration property used at the channel layer containing the db properties.
fcat.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 ME App to understand the response XPATH of TGT App for some common application behaviour.

9. 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

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 templatized xls will be picked up from the location

<FCDBME BASE DIR>\system\datafiles\gui\<usertype>\<channel id>\template To generate the GUI xls from the templatized xls 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>