

Deploying Oracle Banking Application on WebSphere
Oracle Banking Corporate Lending
Release 14.6.1.0.0
[Auguts] [2022]



Table of Contents

1.	DEPLOYING ORACLE FLEXCUBE ON WEBSPHERE	1-1
1.1	INTRODUCTION	1-1
1.2	DEPLOYING APPLICATION.....	1-1
1.2.1	<i>Shared Library Deployment.....</i>	<i>1-1</i>
1.2.2	<i>FCUBS Application Deployment</i>	<i>1-5</i>
1.2.3	<i>Link the adapter (Shared Libraries) to the Application.....</i>	<i>1-14</i>
1.2.4	<i>FCUBS Scheduler Application Deployment</i>	<i>1-21</i>
1.2.5	<i>FCUBS GWEJB Application Deployment</i>	<i>1-29</i>
1.2.6	<i>FCUBS GWMDB Application Deployment</i>	<i>1-38</i>
1.2.7	<i>FCUBS HTTP Application Deployment</i>	<i>1-50</i>
1.2.8	<i>FCUBS GWWebServices Application Deployment.....</i>	<i>1-57</i>

1. Deploying Oracle FLEXCUBE on WebSphere

1.1 Introduction

This document explains the steps to deploy the Oracle FLEXCUBE UBS application on IBM WebSphere application server.

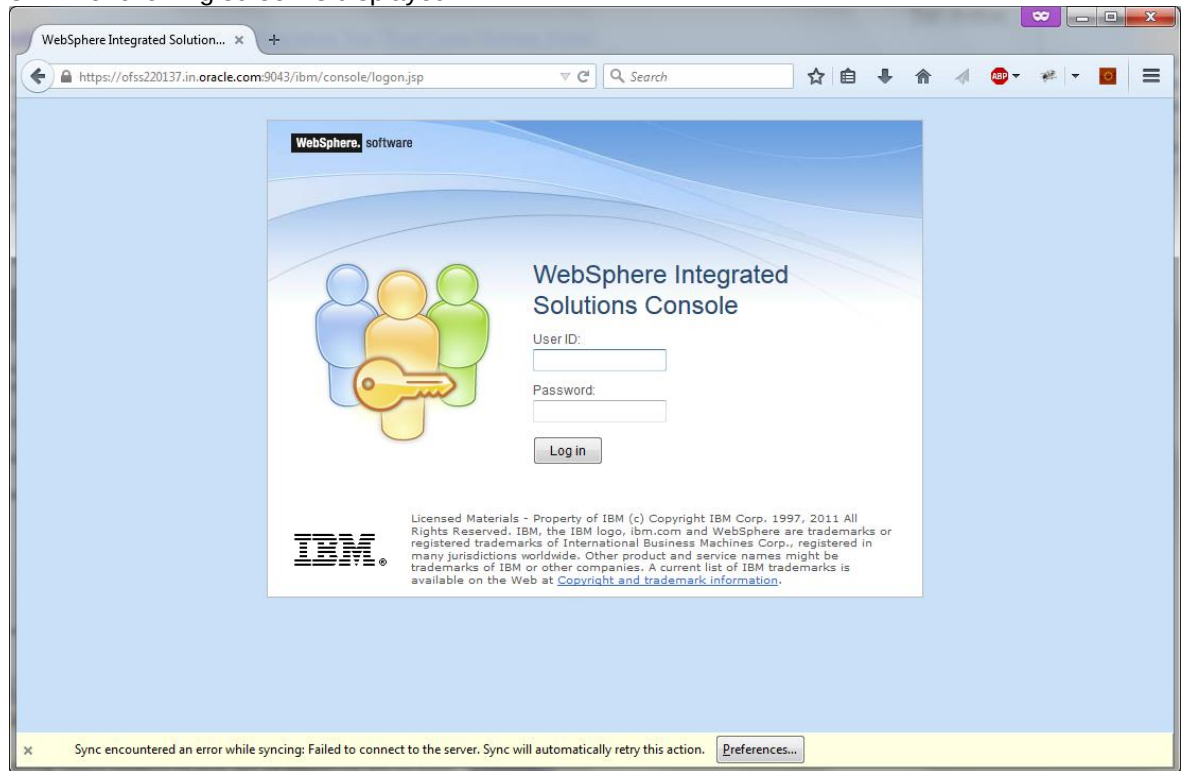
1.2 Deploying Application

1.2.1 Shared Library Deployment

To deploy Integration Adapter (OBCLExtAdapter.jar or ExtAdapter.jar) JAR on WebSphere application server, follow the steps given below:

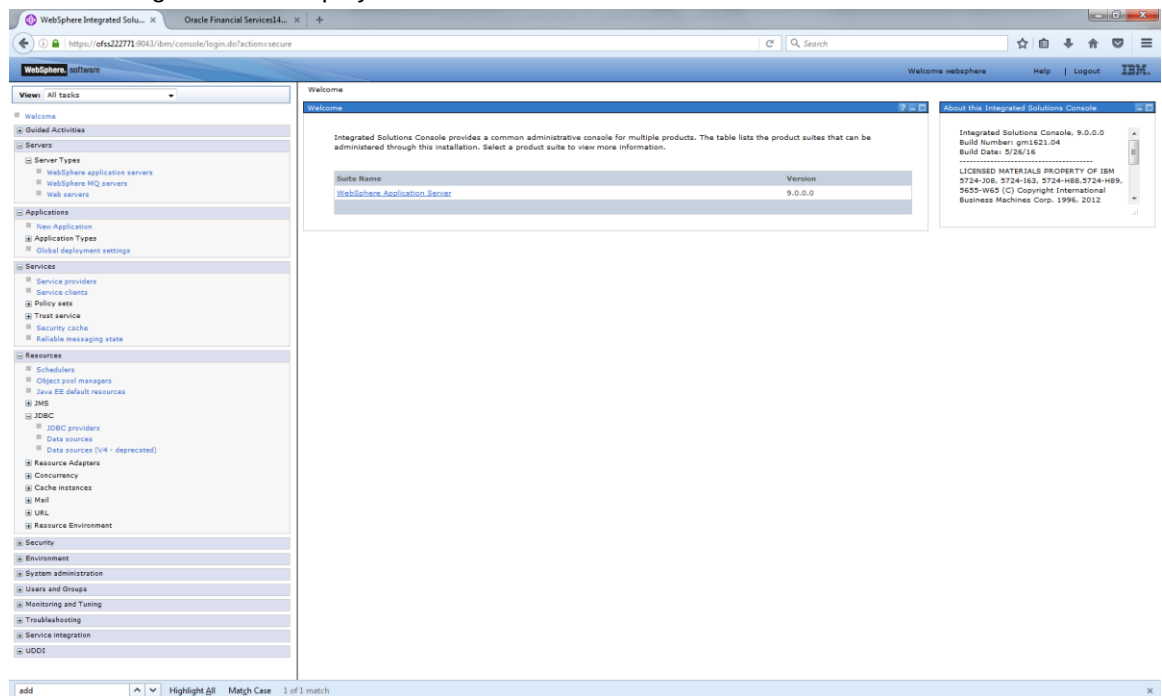
1. Copy Generated Integration Adapter (OBCLExtAdapter.jar or ExtAdapter.jar) to WebSphere Application server {Was_profile}/Extadapter. Eg:
/scratch/IBM8559/WebSphere/AppServer/profiles/BGV8559_01/Extadapter
2. Open the Administrative Console of WebSphere server:
 - Open an internet browser and type the WebSphere Admin Console URL
http://{Host}:{Port}/console.
 - Eg: https://10.10.10.10:1010/console
 - In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

3. The following screen is displayed:



4. Enter the user name and password and click 'Log In' to log in to the application server.
5. Navigate to the WebSphere Home Page.

The following screen is displayed.



6. Expand Environment from left-side menu and Click 'Shared Libraries'.

The following screen is displayed.

The screenshot shows the WebSphere Shared Libraries configuration page. The left sidebar contains a navigation menu with the following items: Welcome, Guided Activities, Servers, Applications, Services, Resources, Security, Environment (expanded), System administration, Users and Groups, Monitoring and Tuning, Troubleshooting, Service integration, and UDDI. The 'Environment' section is expanded, showing sub-items: Virtual hosts, Update global Web server plug-in configuration, WebSphere variables, Shared libraries (selected), SIP application routers, Replication domains, Naming, and OSGI bundle repositories. The main content area is titled 'Shared Libraries' and contains the following sections:
1. **Shared Libraries**: A heading followed by the instruction 'Use this page to define a container-wide shared library that can be used by deployed applications.'
2. **Scope**: A dropdown menu showing 'Cell=ofss2311694Node08Cell, Node=ofss2311694Node08, Server=server1'. Below it, a note states: 'Scope specifies the level at which the resource definition is visible. For detailed information on what scope is and how it works, [see the scope settings help.](#)'
3. **Preferences**: A section with 'New...' and 'Delete' buttons, and a table with columns 'Select', 'Name', and 'Description'.
4. **Resources**: A table with one row containing a checkbox, the name 'OBCLExtAdapter', and an empty description column.
5. **Total**: A row showing 'Total 1'.
On the right side of the page, there is a 'Help' panel with sections for 'Field help', 'Page help', and 'Command Assistance'.

7. Click on New

The following screen is displayed.

WebSphere, software Welcome infra Help | Logout IBM

Cell=ofss2311694Node08Cell, Profile=ELCMOBCLAPP Close page

View: All tasks

- » Welcome
- » Guided Activities
- » Servers
- » Applications
- » Services
- » Resources
- » Security
- » Environment
 - » Virtual hosts
 - » Update global Web server plug-in configuration
 - » WebSphere variables
 - » Shared libraries
 - » SIP application routers
 - » Replication domains
 - » Naming
 - » OSGI bundle repositories
- » System administration
- » Users and Groups
- » Monitoring and Tuning
- » Troubleshooting
- » Service integration
- » UDDI

Shared Libraries

Shared Libraries > New...

Use this page to define a container-wide shared library that can be used by deployed applications.

Configuration

General Properties

★ **Scope**
cells:ofss2311694Node08Cell:nodes:ofss2311694Node08:servers:server1

★ **Name**

Description

★ **Classpath**

Native Library Path

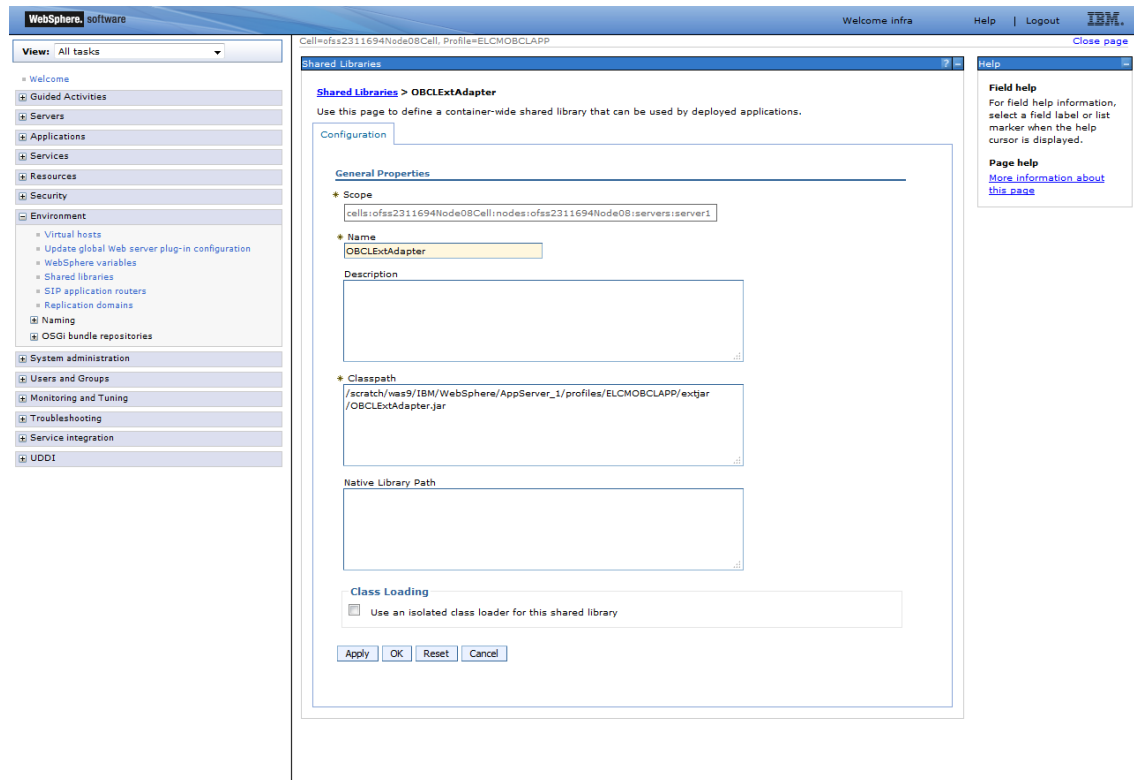
Class Loading
☐ Use an isolated class loader for this shared library

Apply OK Reset Cancel

Field help
For field help information, select a field label or list marker when the help cursor is displayed.

Page help
[More information about this page](#)

- Name : Name of the Adapter
- Description : provide description
- Classpath: provide ExtAdapter Jar path server {Was_profile}/Extadapter. Eg: /scratch/IBM8559/WebSphere/AppServer/profiles/BGV8559_01/Extadapter.



8. Click 'Apply' and 'save' the changes.

1.2.2 **FCUBS Application Deployment**

To deploy Oracle FLEXCUBE UBS application on WebSphere application server, follow the steps given below:

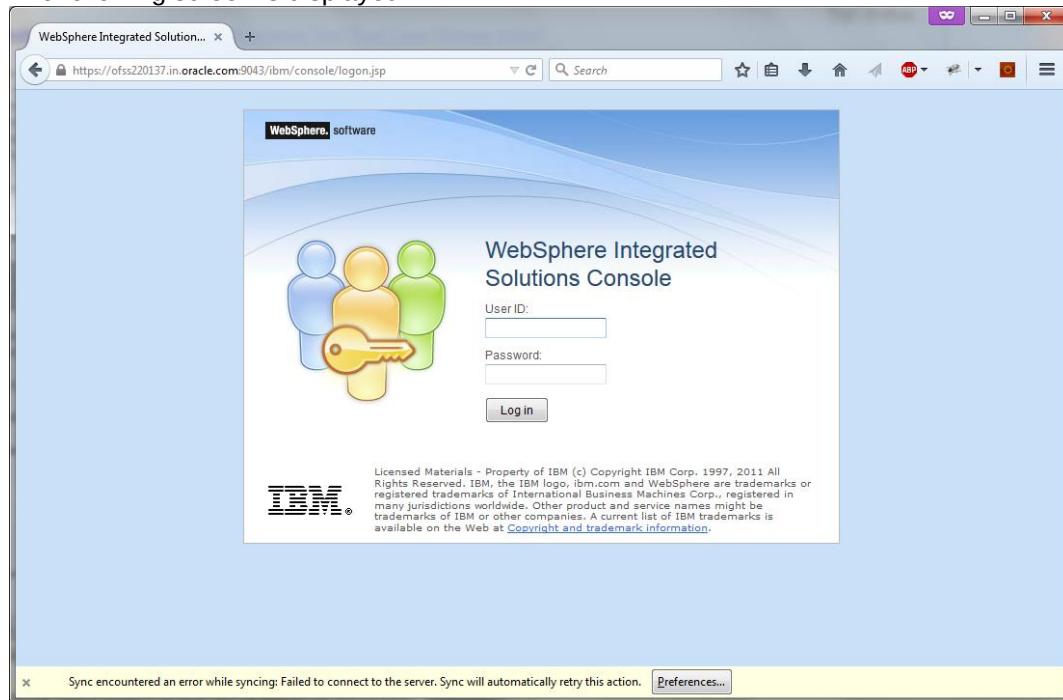
9. Open the Administrative Console of WebSphere server:

Open an internet browser and type the WebSphere Admin Console URL
http://{Host}:{Port}/console.

Eg: https://10.10.10.10:1010/console

In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

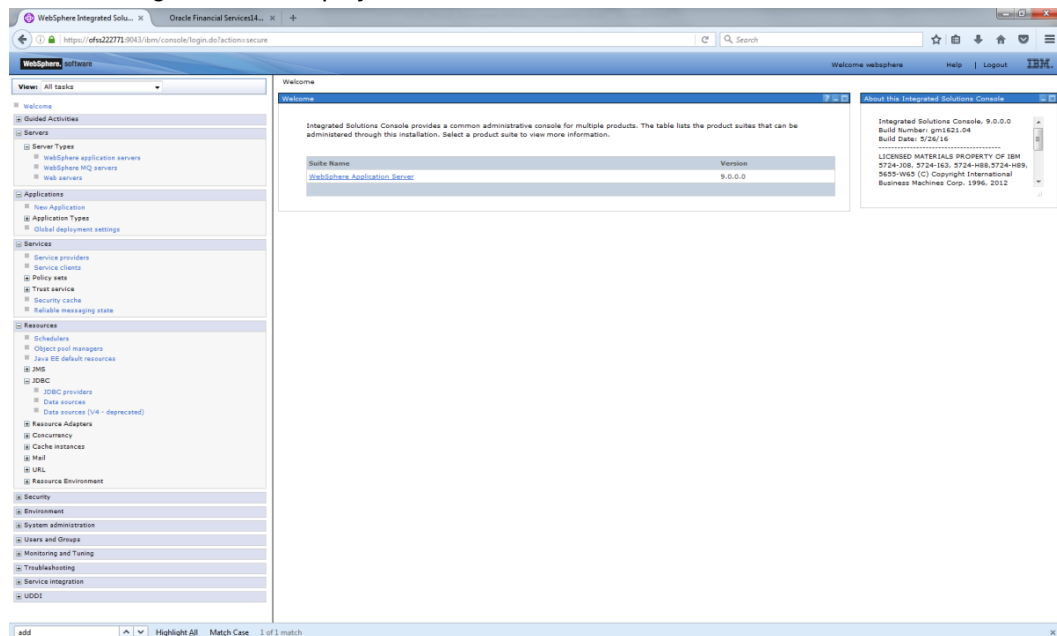
The following screen is displayed:



10. Enter the user name and password and click 'Log In' to log in to the application server.

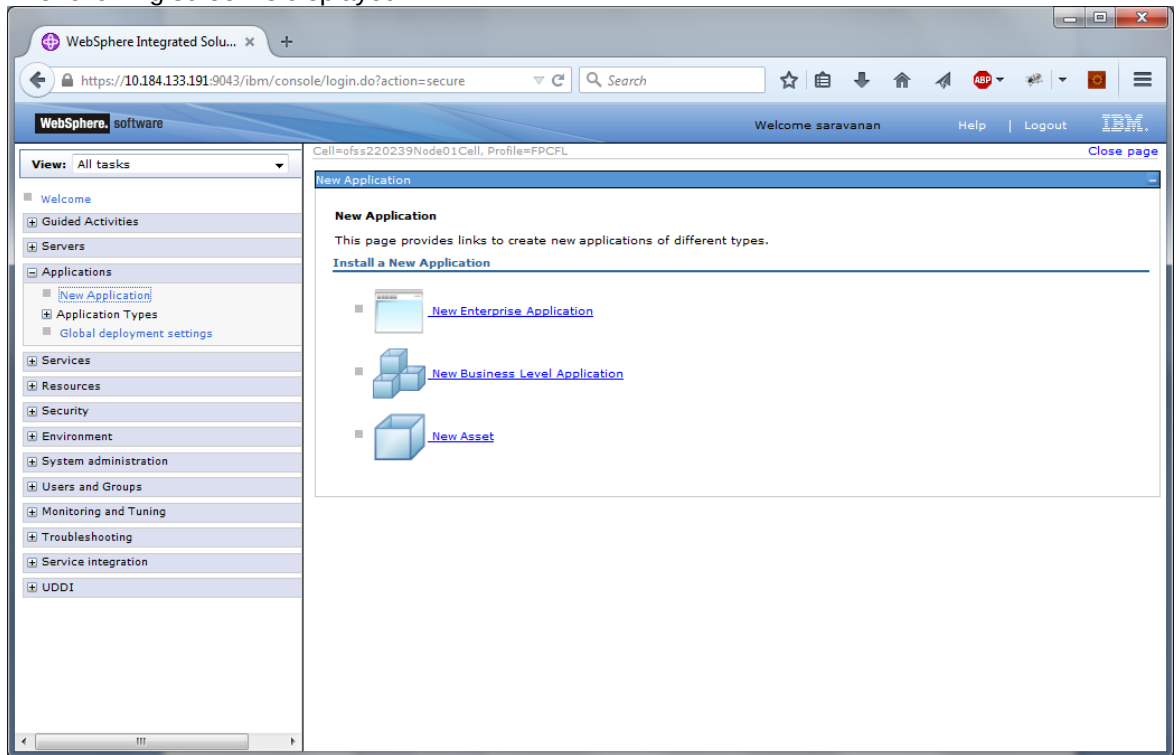
11. Navigate to the WebSphere Home Page.

The following screen is displayed.

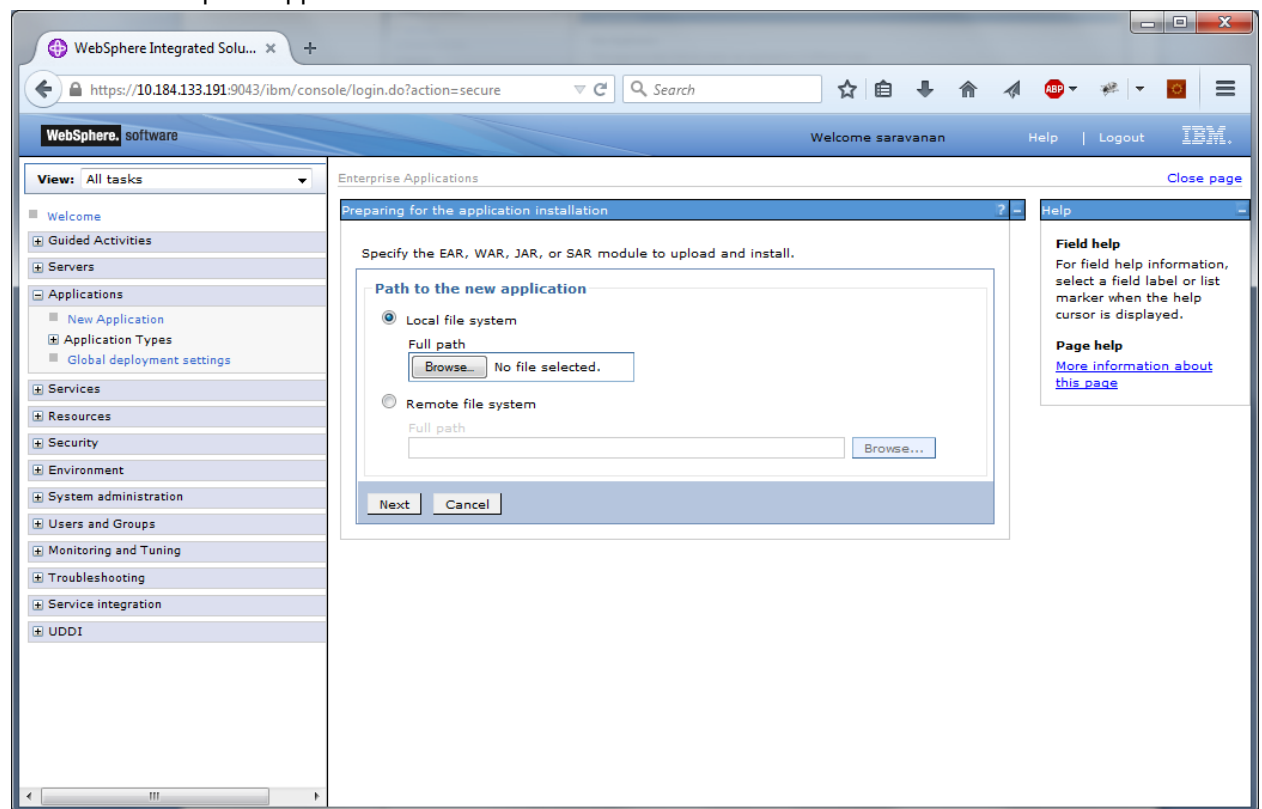


12. Expand Applications from left-side menu and Click 'New Application'.

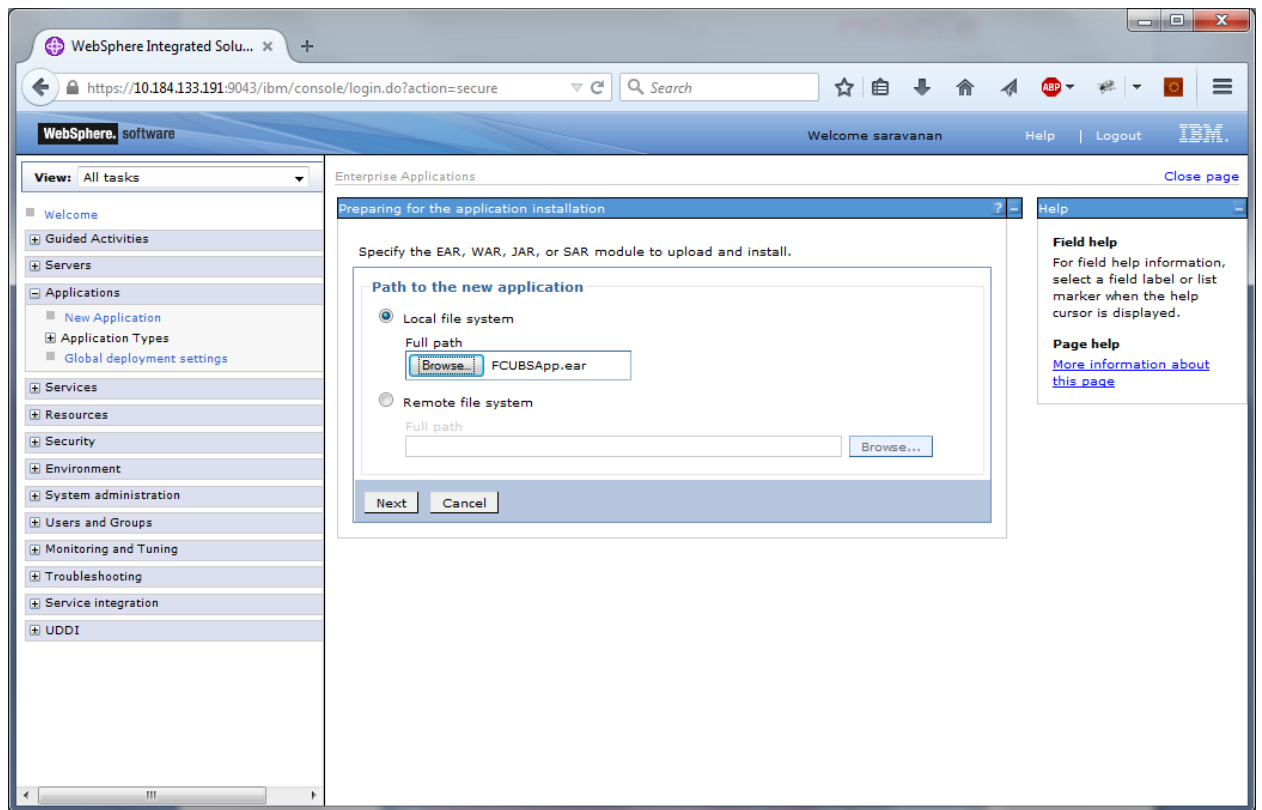
The following screen is displayed.



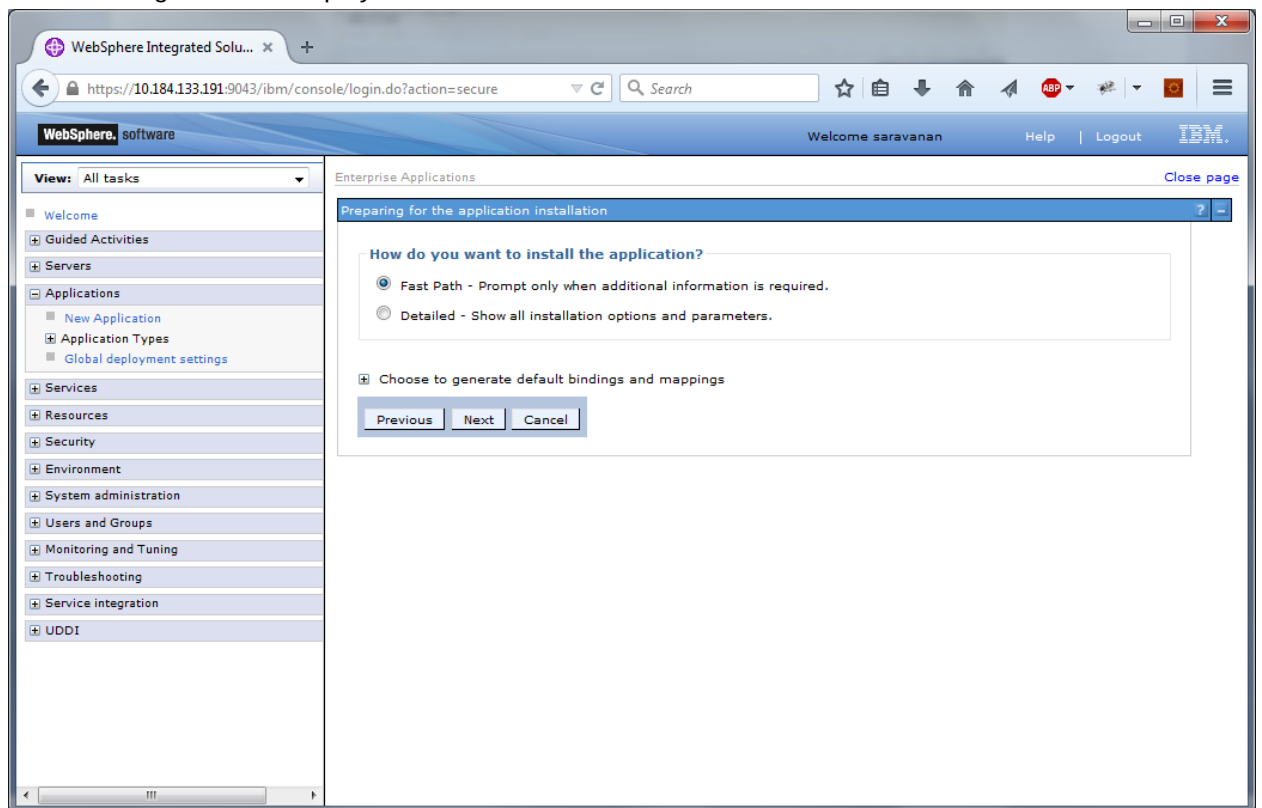
13. Click 'New Enterprise Application'.



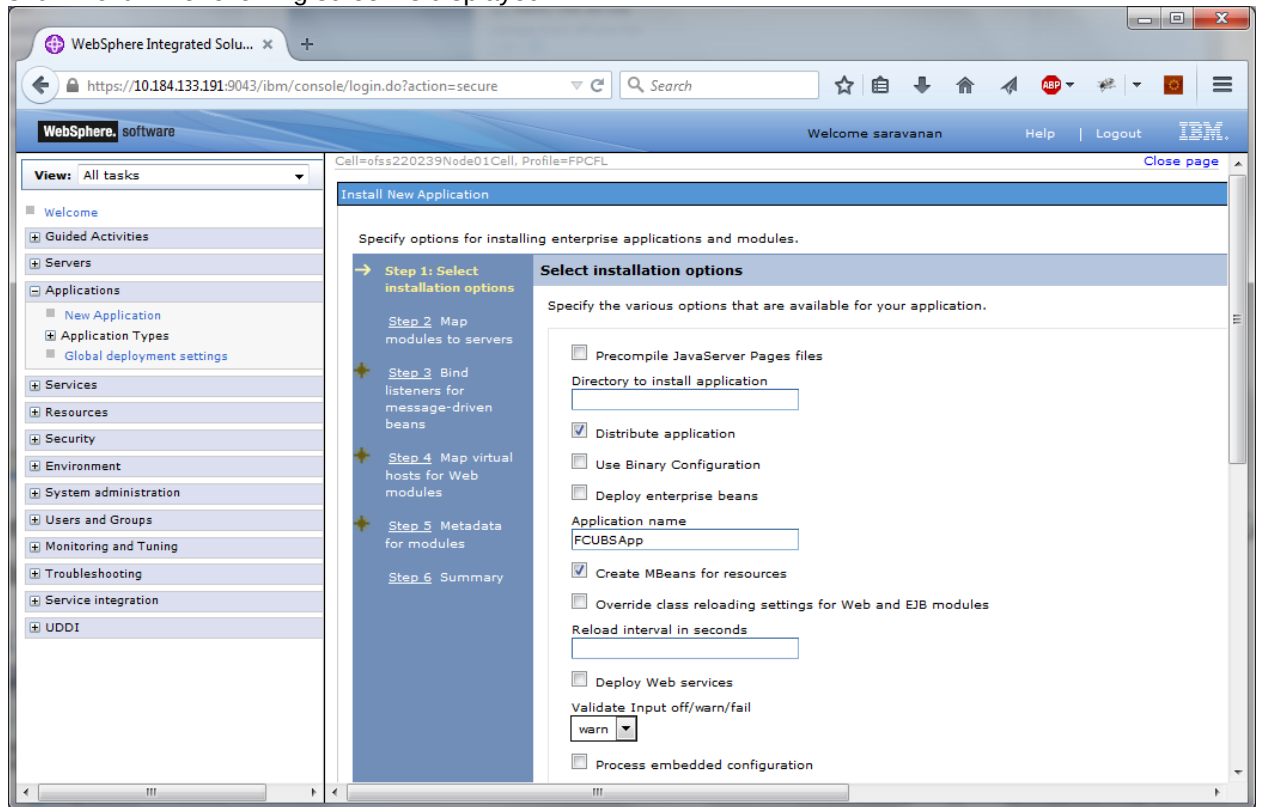
14. Browse the application EAR file and click next button



The following screen is displayed.

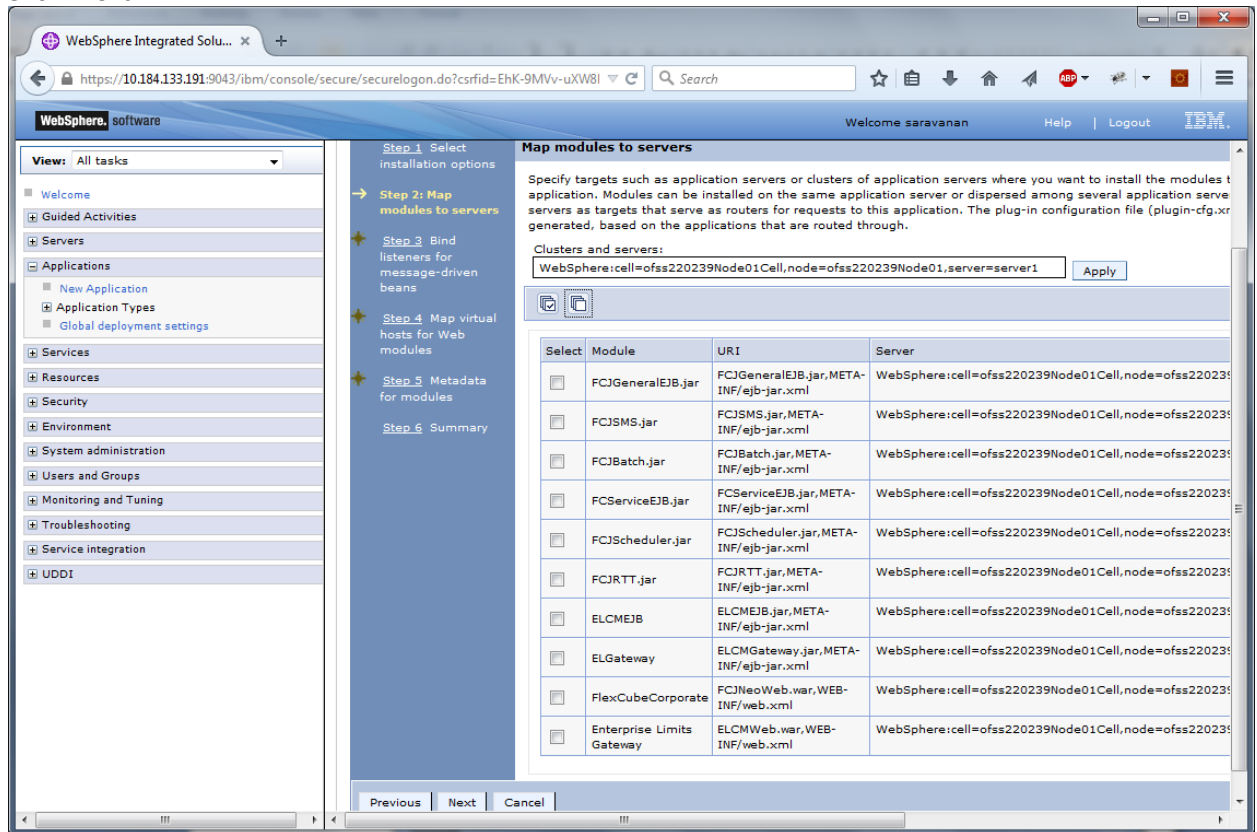


15. Click 'Next'. The following screen is displayed.

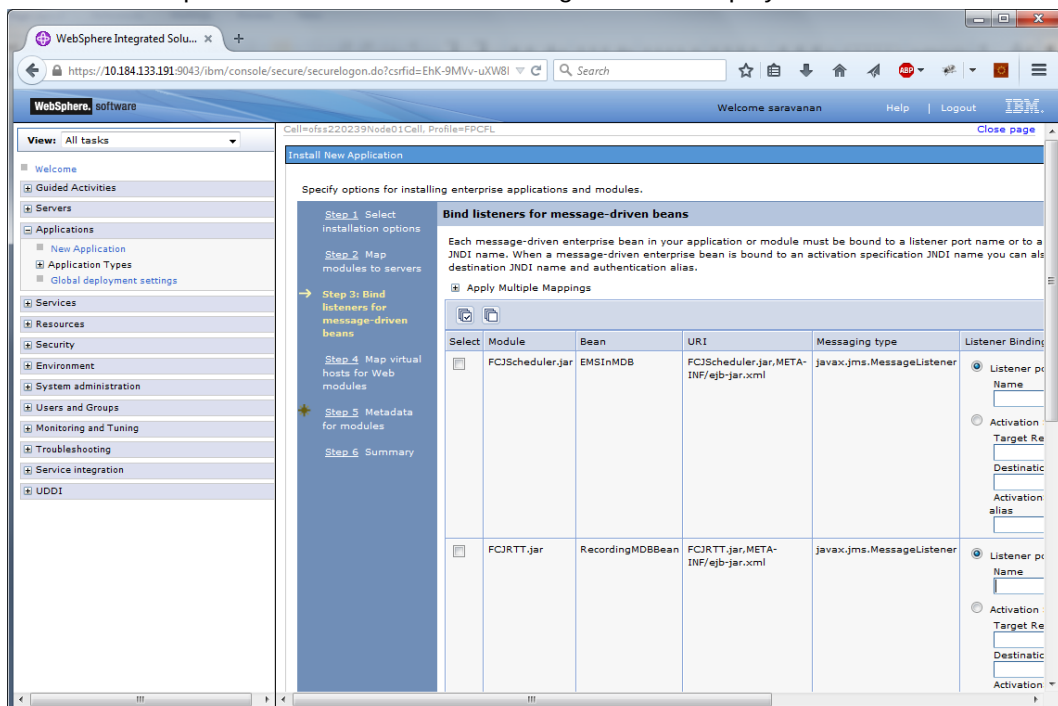


16. Enter the Application Name. This should be the application name mentioned as part of EAR building.

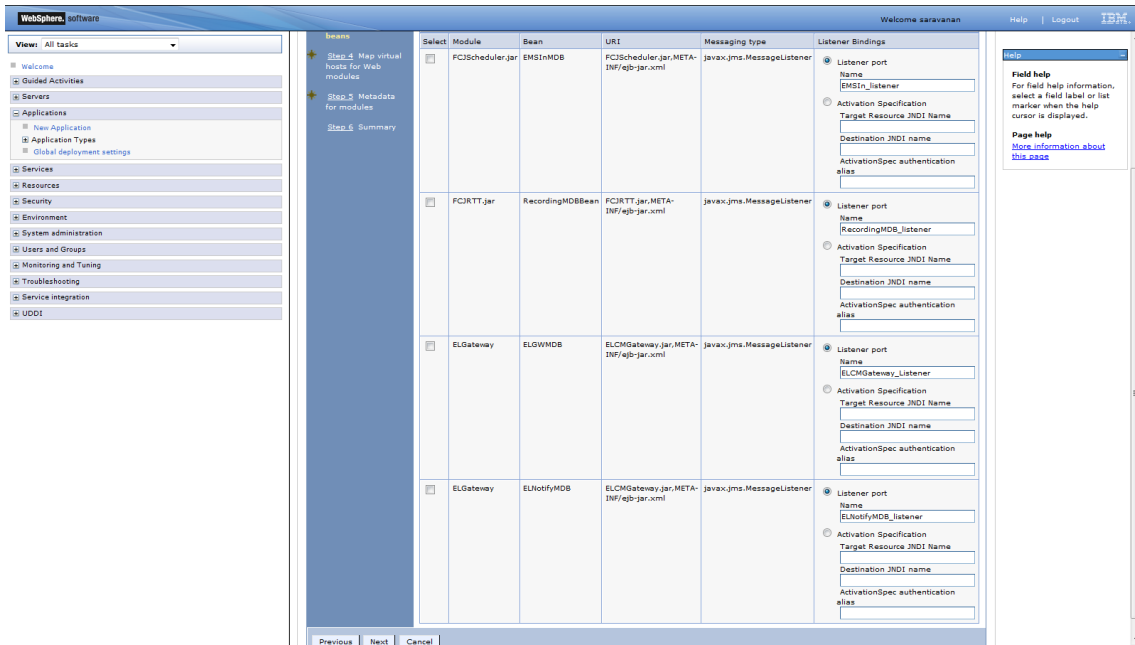
17. Click 'Next'.



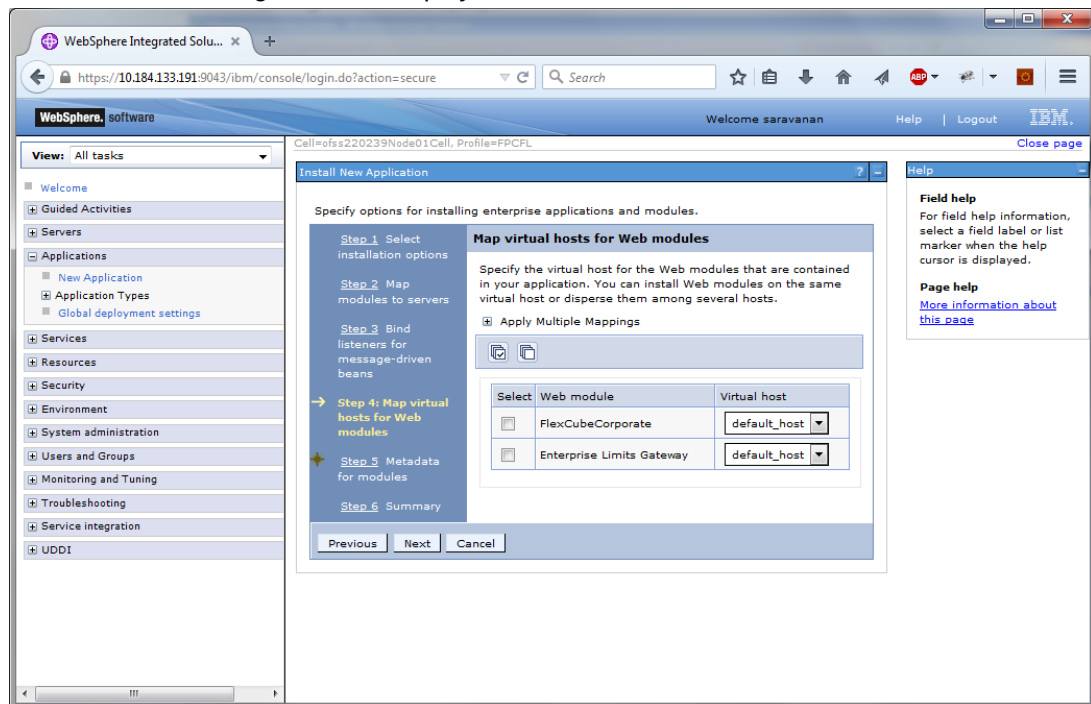
18. Check all the options. Click 'Next'. The following screen is displayed.



19. Specify the details as shown in the figure.

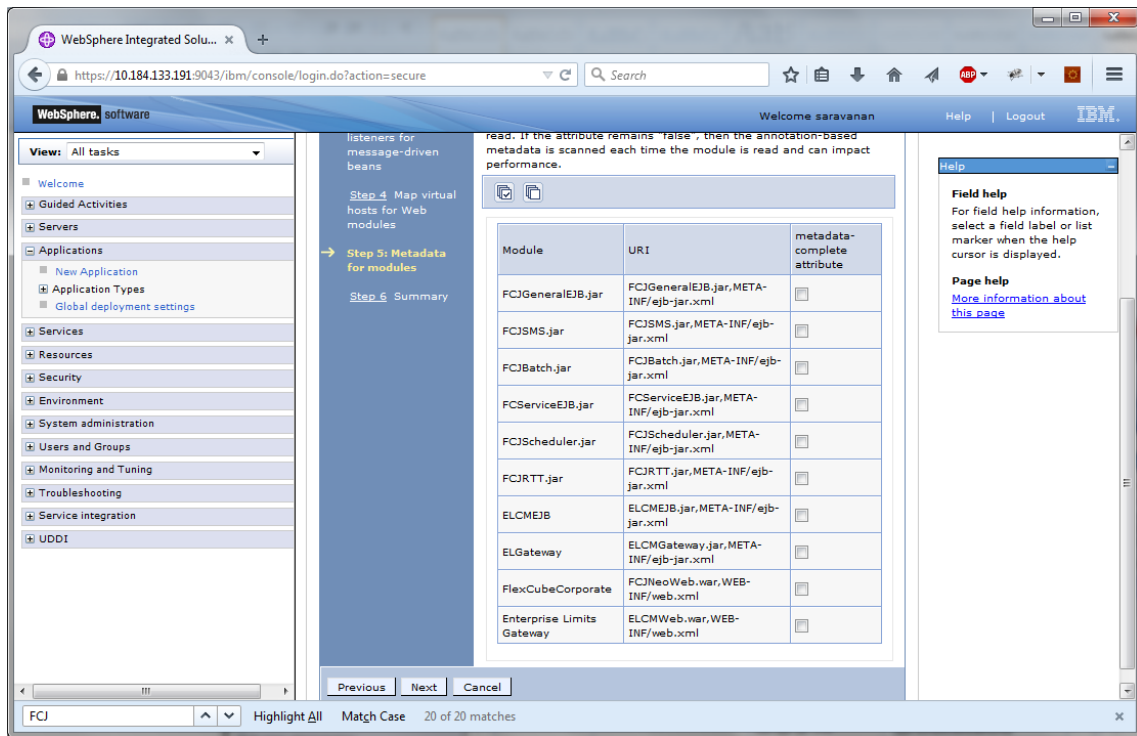


20. Click 'Next'. Following screen is displayed

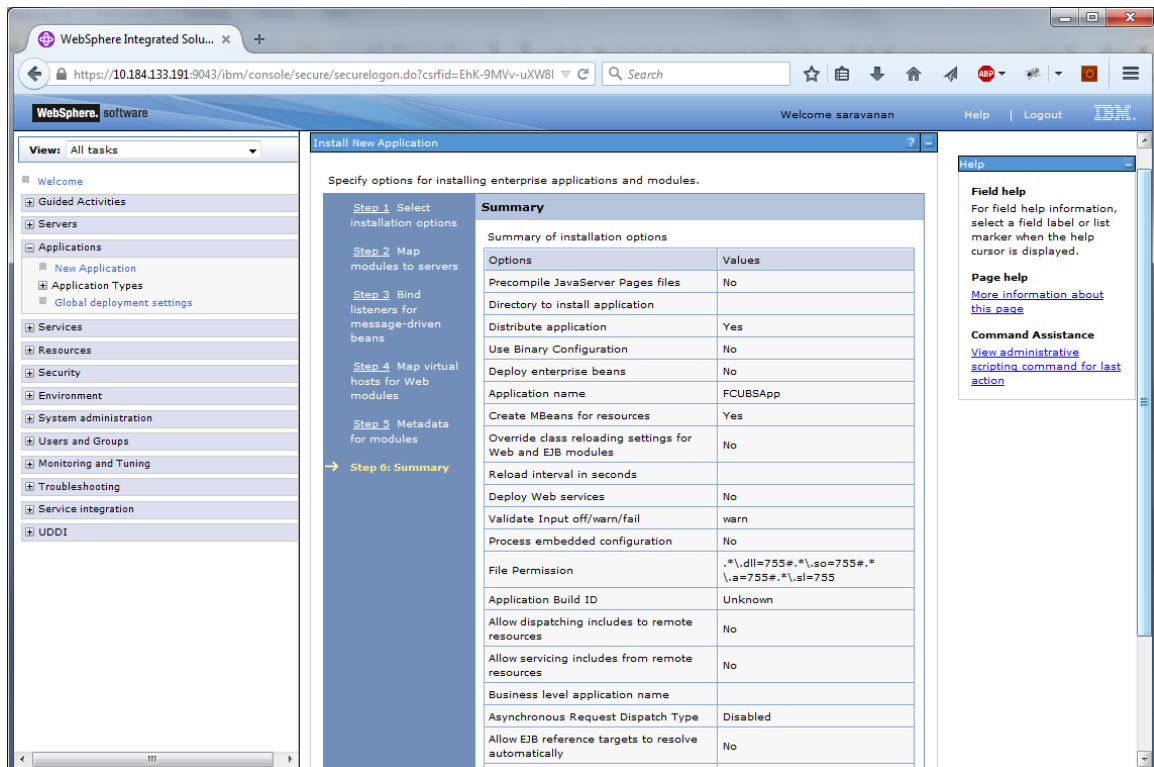


21. Click 'Next'.

The following screen is displayed.

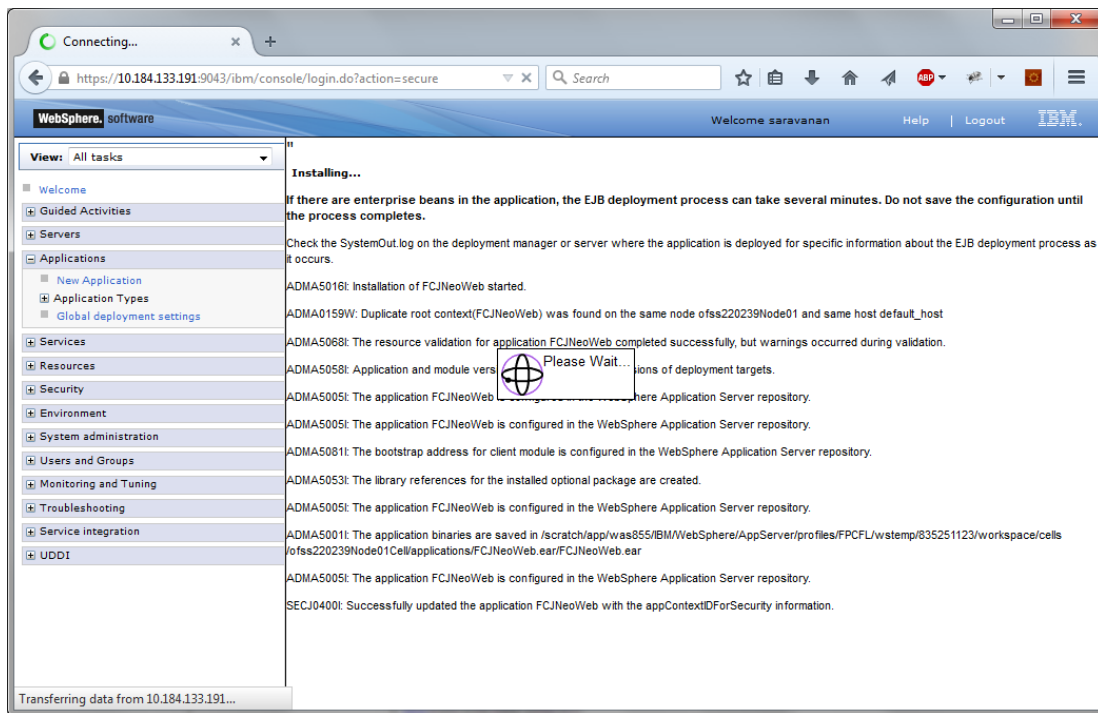


Click next.

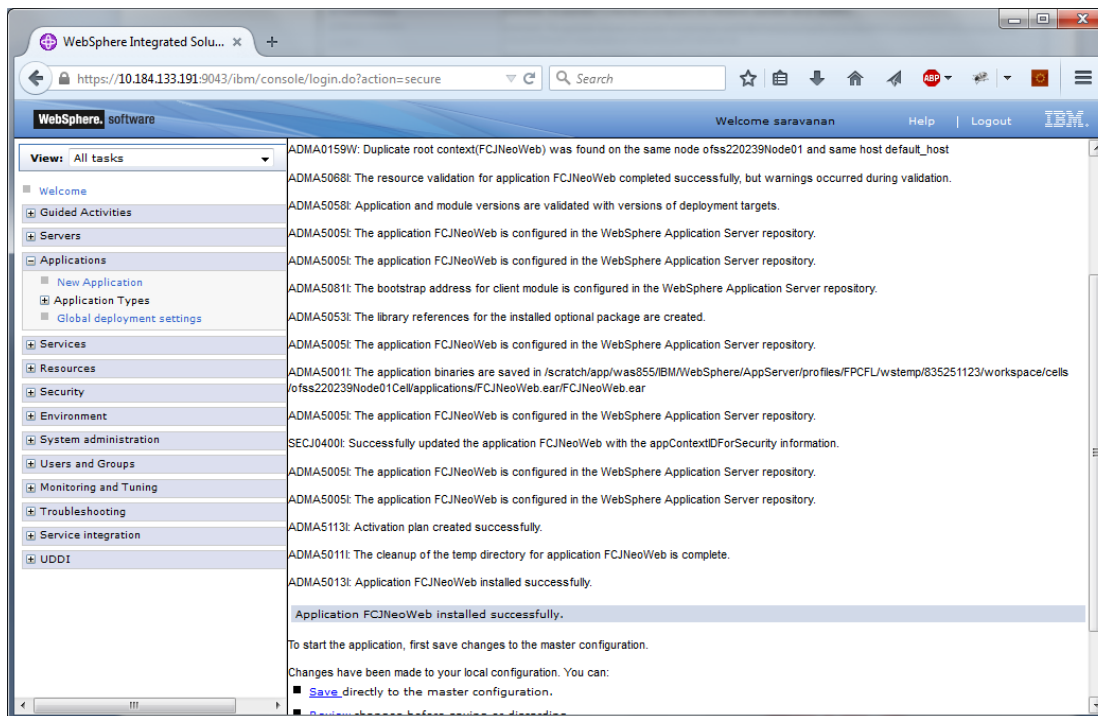


22. Click 'Finish'.

The following screen is displayed.

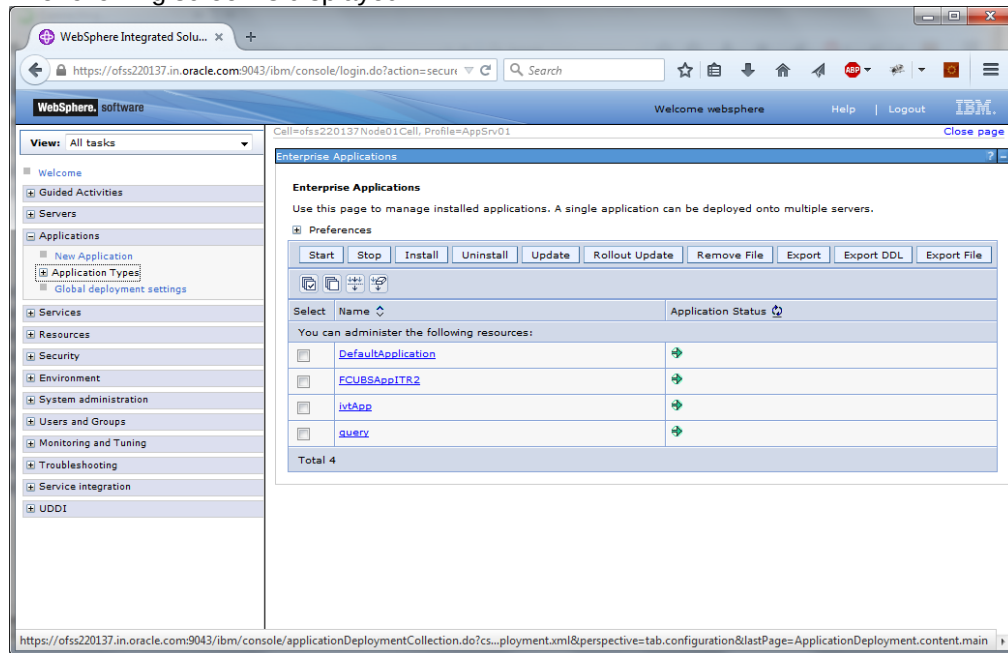


Wait for few seconds...



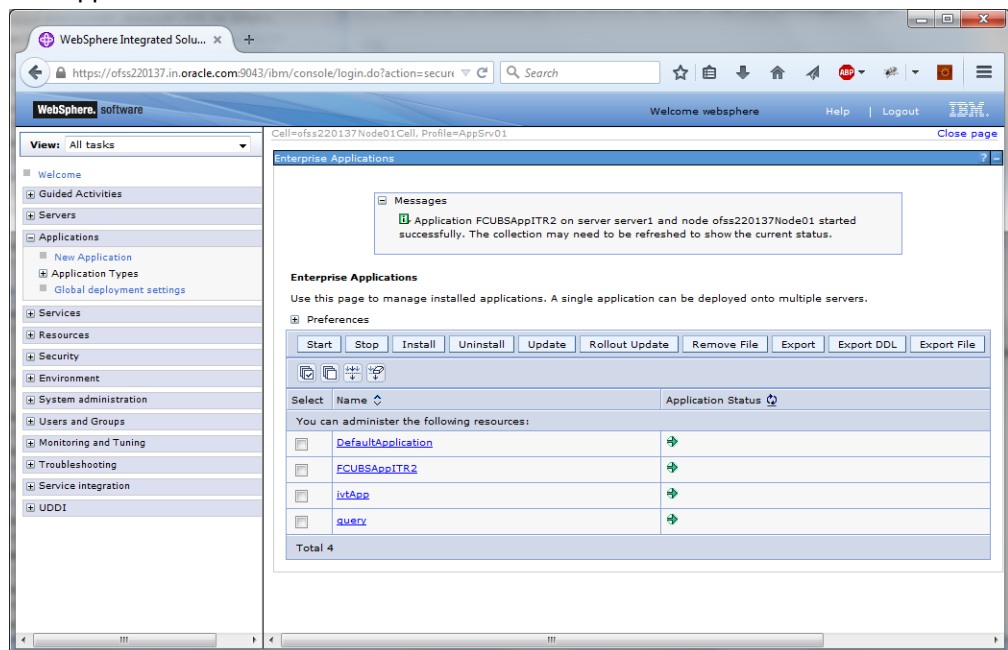
23. Click 'Save'.

The following screen is displayed.



24. Select the application and click 'Start'.

The application starts as shown below:



This completes the deployment of EAR (FCJNeoWeb.ear) on IBM WebSphere 9.0.0.0 Application Server from the Administration Console.

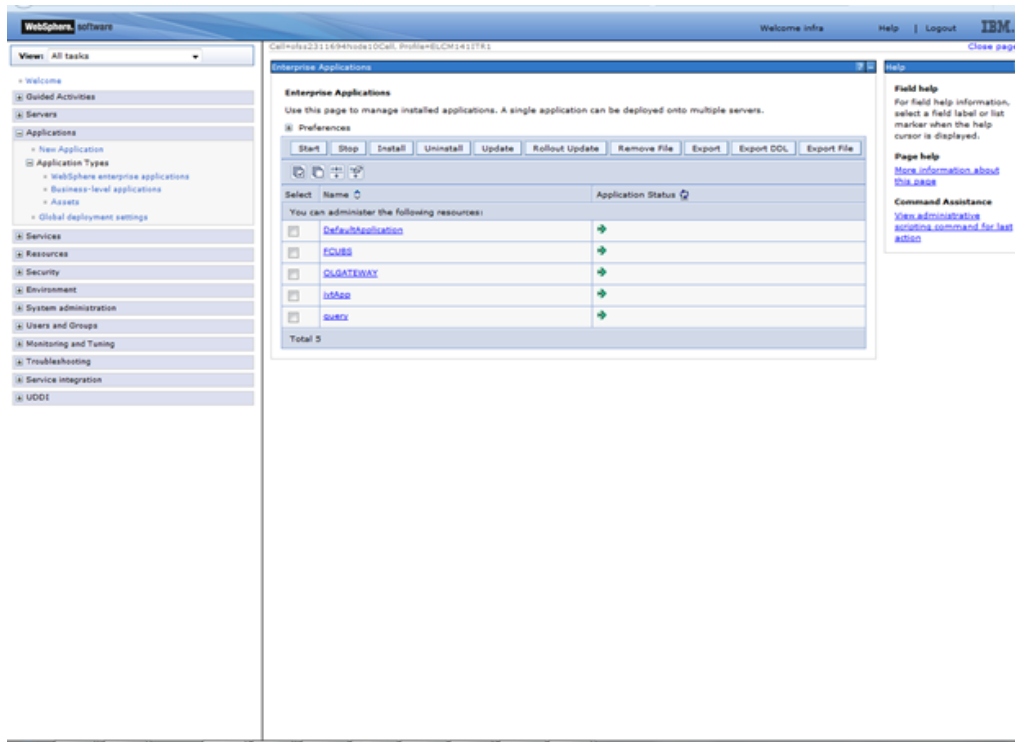
1.2.3 Link the adapter (Shared Libraries) to the Application

1. Open the Administrative Console of WebSphere server:
2. Open an internet browser and type the WebSphere Admin Console URL `http://{Host}:{Port}/console`.

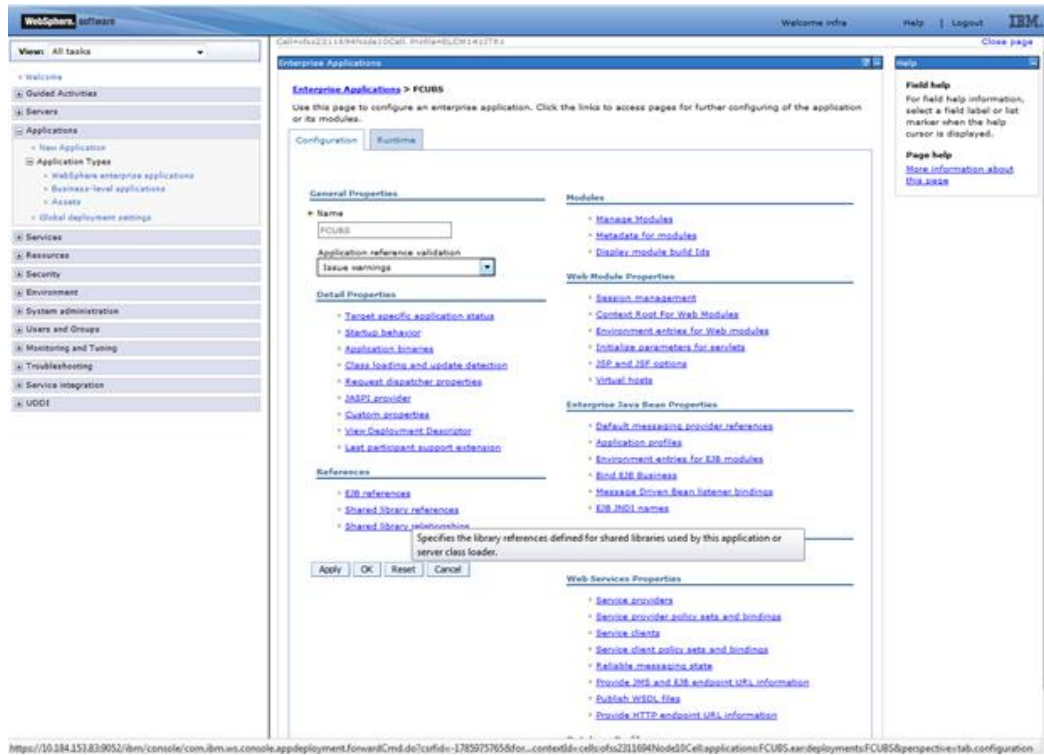
3. Eg: <https://10.10.10.10:1010/console>
4. In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running

Go to Applications → Application types → WebSphere enterprise applications →

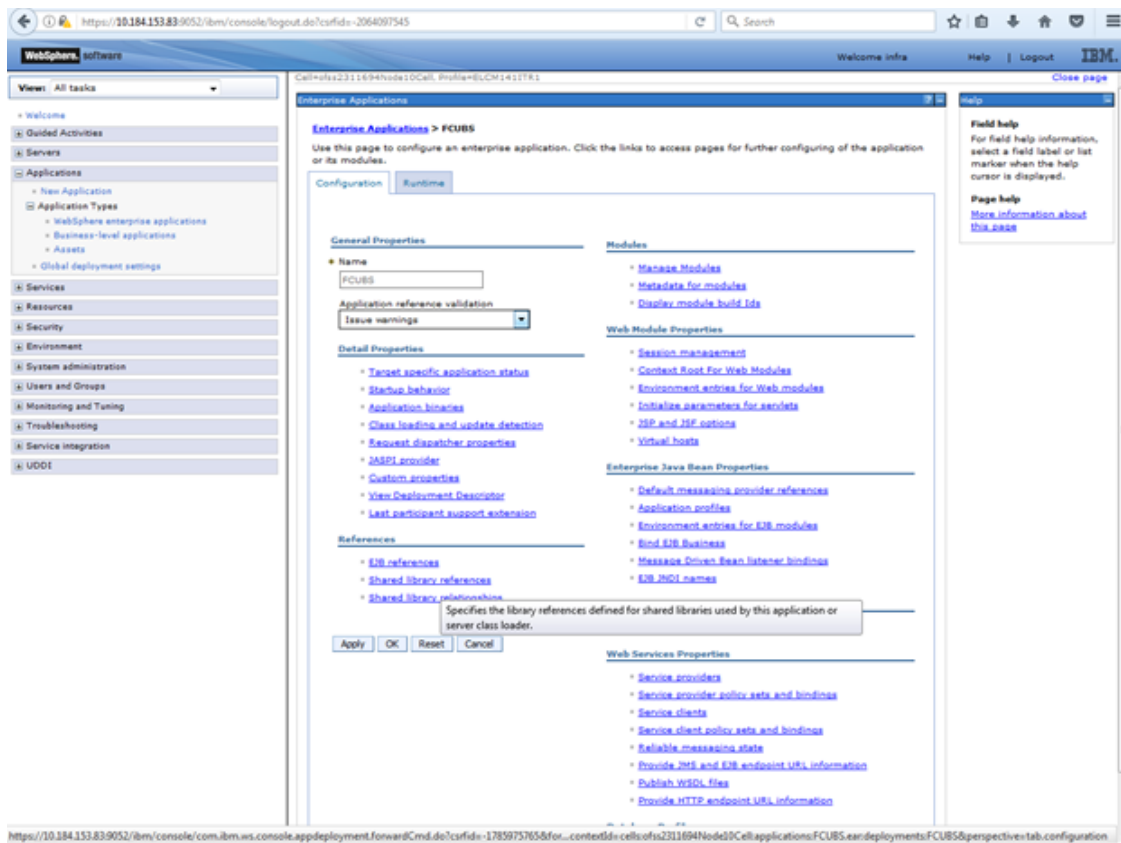
Click on the resource where the adapter to be added (here it is FCUBS)



It will open configuration page of FCUBS. Click on Reference > shared library reference



It will open the application > Shared library references page .Select the application (here FCUBS) and click on Reference shared libraries button.



The Shared Library Mapping window opens add the available library and click on OK button.

WebSphere, software

View: All tasks

- Welcome
- Guided Activities
- Servers
- Applications
 - New Application
 - Application Types
 - WebSphere enterprise applications
 - Business-level applications
 - Assets
 - Global deployment settings
- Services
- Resources
- Security
- Environment
- System administration
- Users and Groups
- Monitoring and Tuning
- Troubleshooting
- Service Integration
- UDOI

Enterprise Applications

Enterprise Applications > PCUBS

Use this page to configure an enterprise application. Click the links to access pages for further configuring of the application or its modules.

Configuration

Runtime

General Properties

Name

PCUBS

Application reference validation

Issue warnings

Detail Properties

- Target specific application status
- Startup behavior
- Application binades
- Class loading and update detection
- Request dispatcher properties
- JSP provider
- Custom annotations
- ViewDeployment Descriptor
- Last participant support extension

References

- EJB references
- Shared library references
- Shared library relationships

Modules

- Make Modules
- Metadata for modules
- Deploy module build file

Web Module Properties

- Session management
- Context Root For Web Modules
- Environment entries for Web modules
- Initialize parameters for servlets
- JSP and JSP options
- Virtual hosts

Enterprise Java Bean Properties

- Default messaging provider references
- Application profiles
- Environment entries for EJB modules
- EJB EJB Business
- Message Driven Bean listener bindings
- EJB JNDI names

Web Services Properties

- Service providers
- Service provider policy sets and bindings
- Service clients
- Service client policy sets and bindings
- Reliable messaging state
- Provide HTTP and EJB endpoint URLs information
- Publish WSDL files
- Provide HTTP endpoint URLs information

Apply

OK

Reset

Cancel

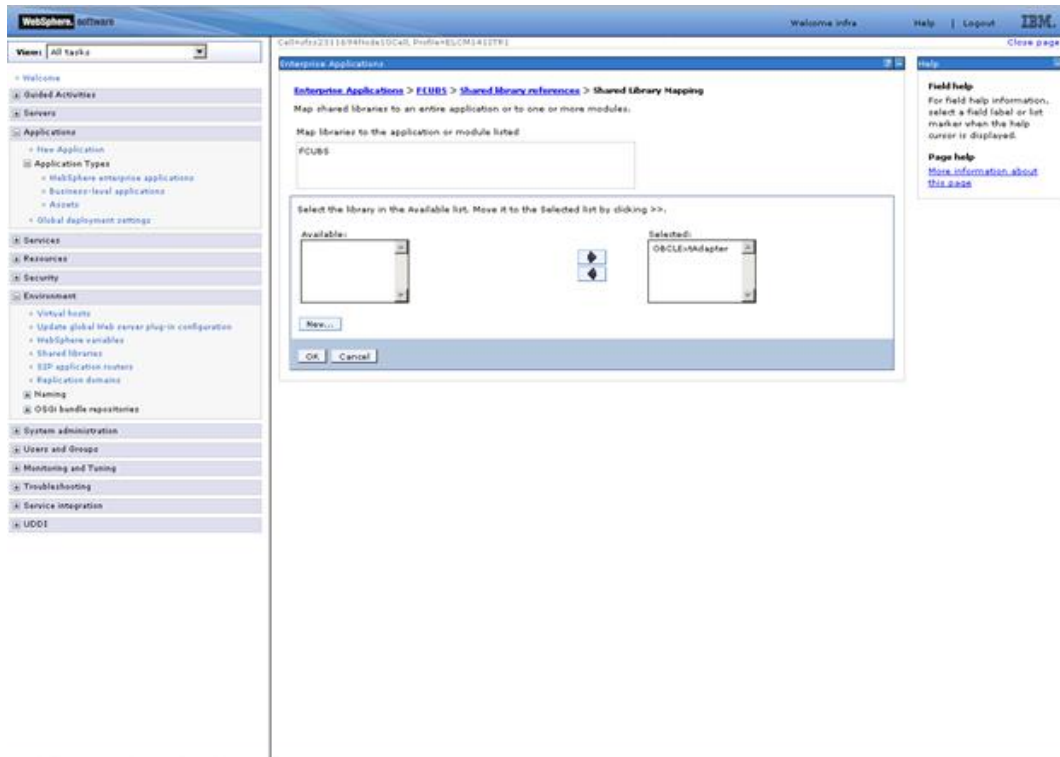
Specifies the library references defined for shared libraries used by this application or server class loader.

Field help

For field help information, select a field label or list marker when the help cursor is displayed.

Page help

More information about this page



Click ok

The screenshot shows the IBM WebSphere software console. The left sidebar contains a navigation tree with categories like Welcome, Guided Activities, Servers, Applications, Services, Resources, Security, Environment, System administration, Users and Groups, Monitoring and Tuning, Troubleshooting, Service integration, and UDDI. The main content area is titled 'Enterprise Applications > FCUBS > Shared library references'. It includes a 'Shared Library Mapping for Modules' section with a 'Reference shared libraries' button. Below this is a table with three columns: 'Selected', 'Application', and 'Shared Libraries'. The table lists four applications: FCUBS, FlexCubeCorporate, Enterprise Limits Gateway, and Security Management Gateway, each with its corresponding URI and shared libraries. At the bottom of the table are 'OK' and 'Cancel' buttons. A 'Help' sidebar on the right provides field and page help information.

WebSphere software

Welcome info Help Logout IBM

Cell=nlx2311694Node10Cell, Profile=EJCM431TR1

Views: All tasks

Enterprise Applications

Enterprise Applications > FCUBS > Shared library references

Shared Library Mapping for Modules

Specify shared libraries that the application or individual modules reference. These libraries must be defined in the configuration at the appropriate scope.

Reference shared libraries

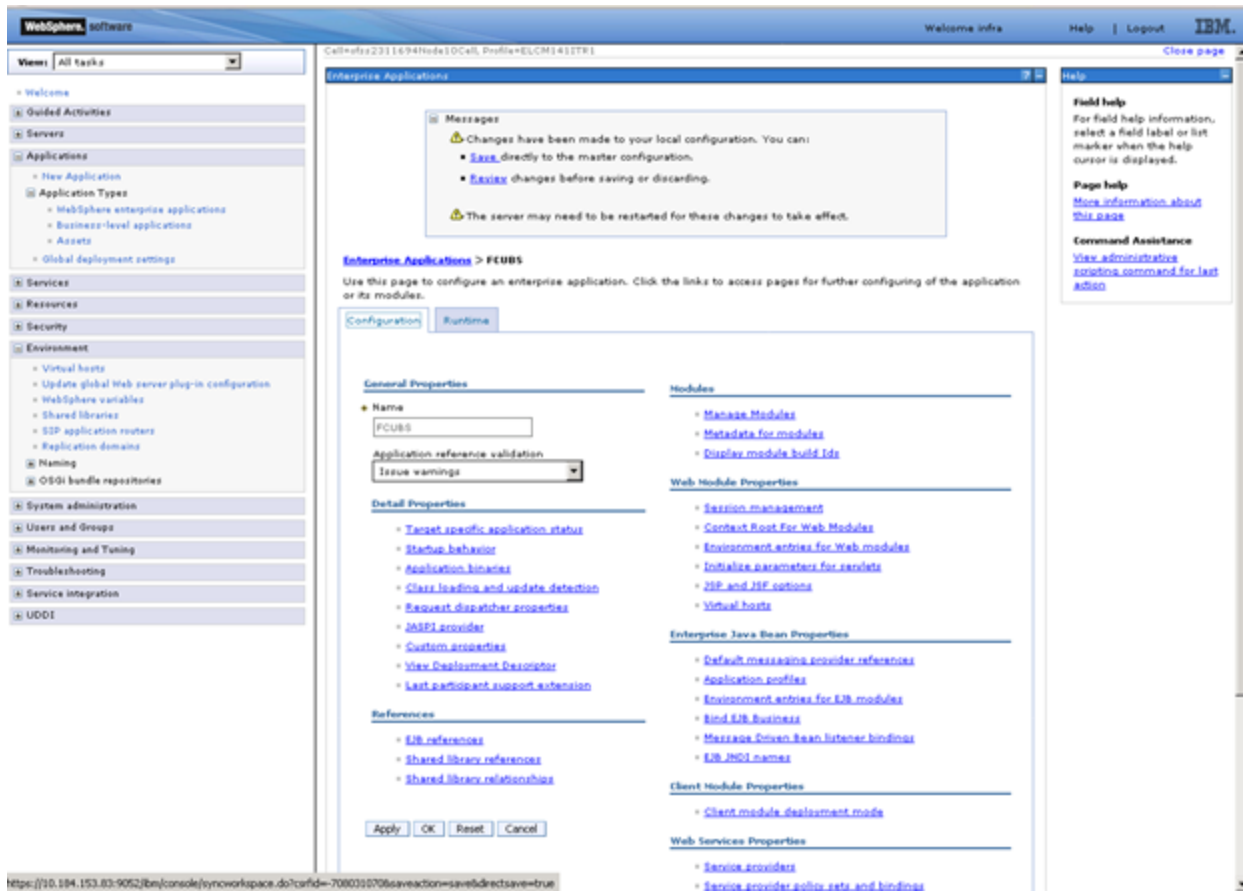
Selected	Application	URI	Shared Libraries
☐	FCUBS	META-INF/application.xml	OBCLExAdapter
☐	FlexCubeCorporate	FC2NeoWeb.var,WEB-INF/web.xml	Shared Libraries
☐	Enterprise Limits Gateway	EJCMWeb.var,WEB-INF/web.xml	
☐	Security Management Gateway	SMWeb.var,WEB-INF/web.xml	

OK Cancel

Field help
For field help information, select a field label or list marker when the help cursor is displayed.

Page help
[More information about this page](#)

Click save and restart the Application server .



1.2.4 FCUBS Scheduler Application Deployment

To deploy Oracle FLEXCUBE UBS application on WebSphere application server, follow the steps given below:

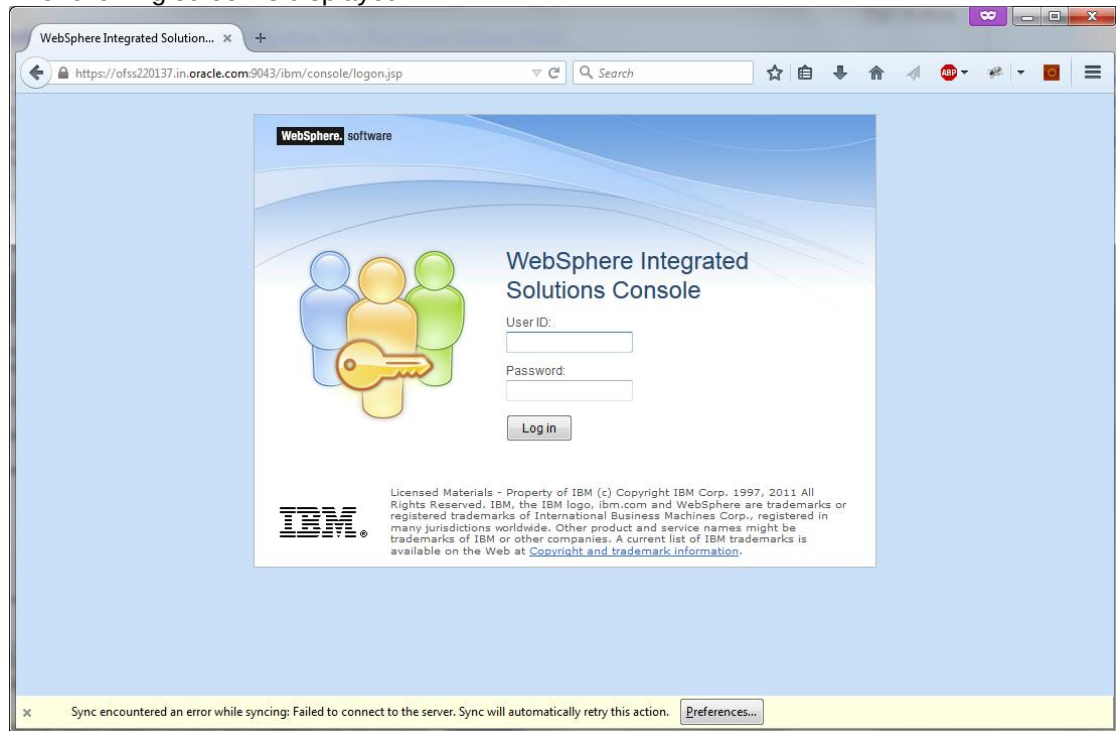
1. Open the Administrative Console of WebSphere server:

Open an internet browser and type the WebSphere Admin Console URL
<http://{Host}:{Port}/console>.

Eg: <https://10.10.10.10:1010/console>

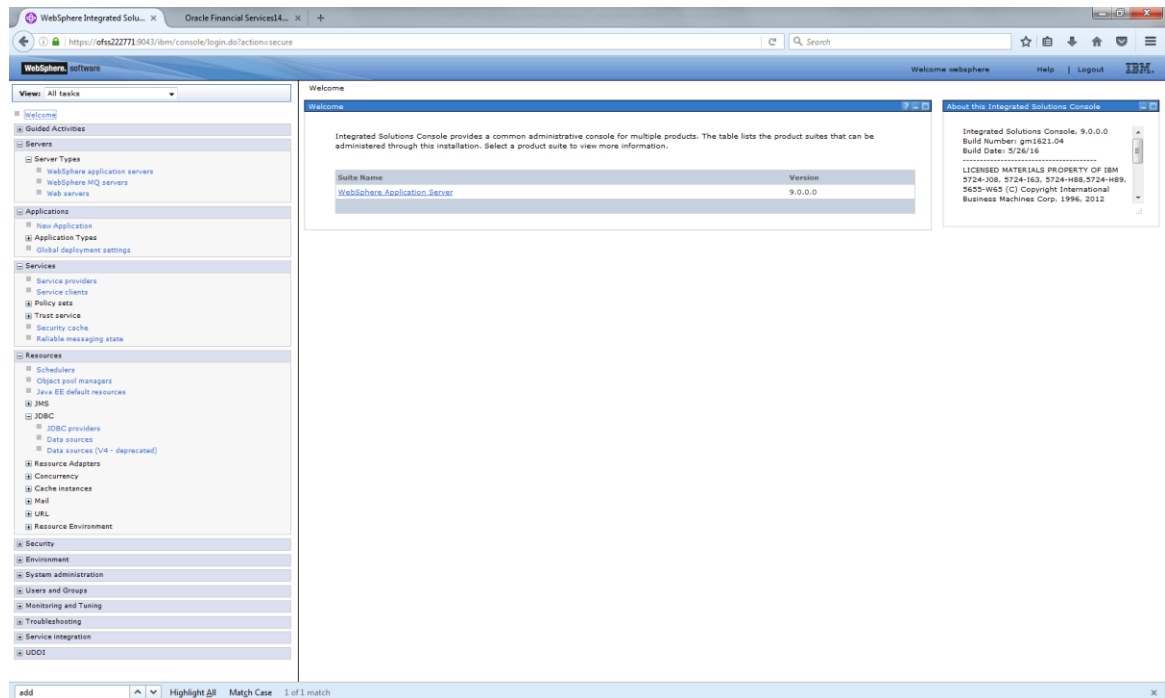
In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

The following screen is displayed:



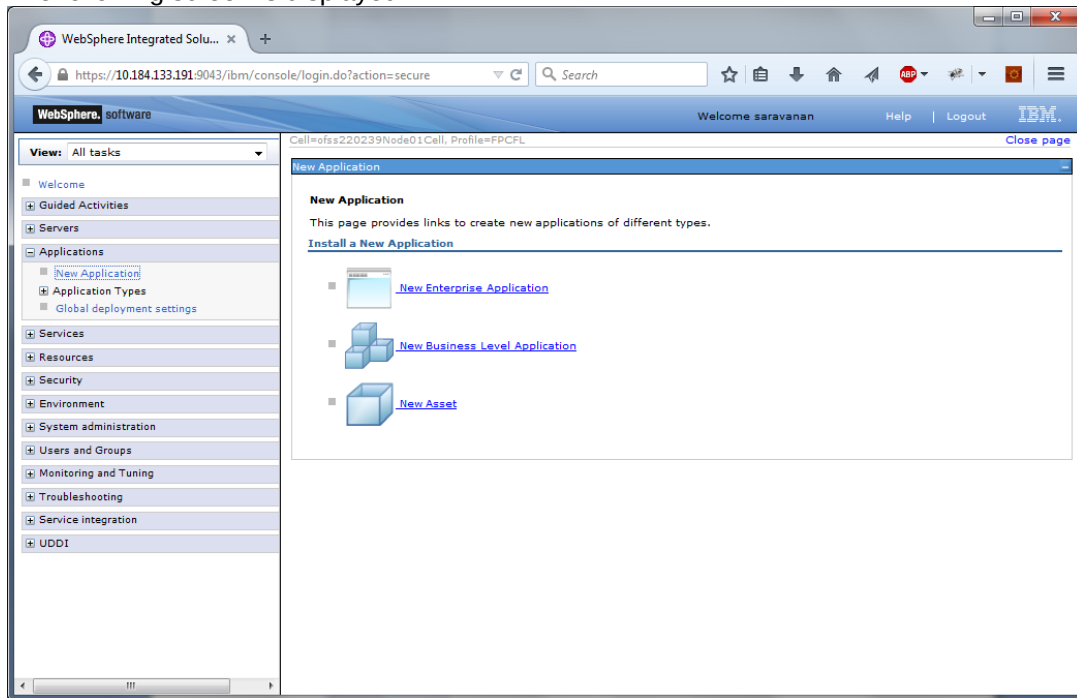
2. Enter the user name and password and click 'Log In' to log in to the application server.
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

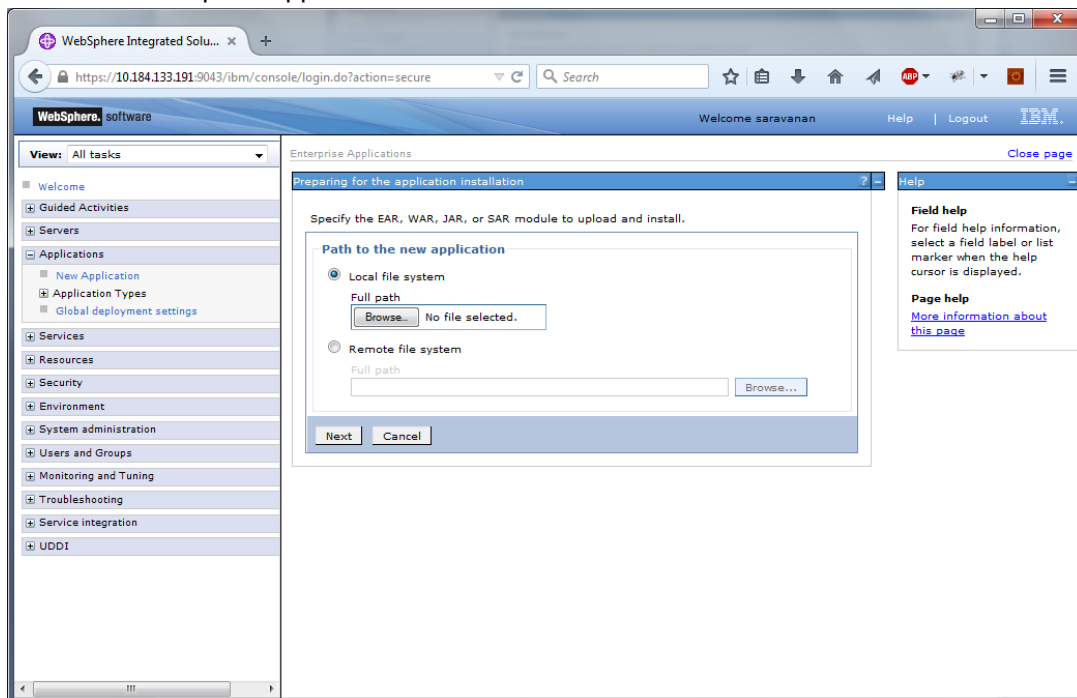


4. Expand Applications from left-side menu and Click 'New Application'.

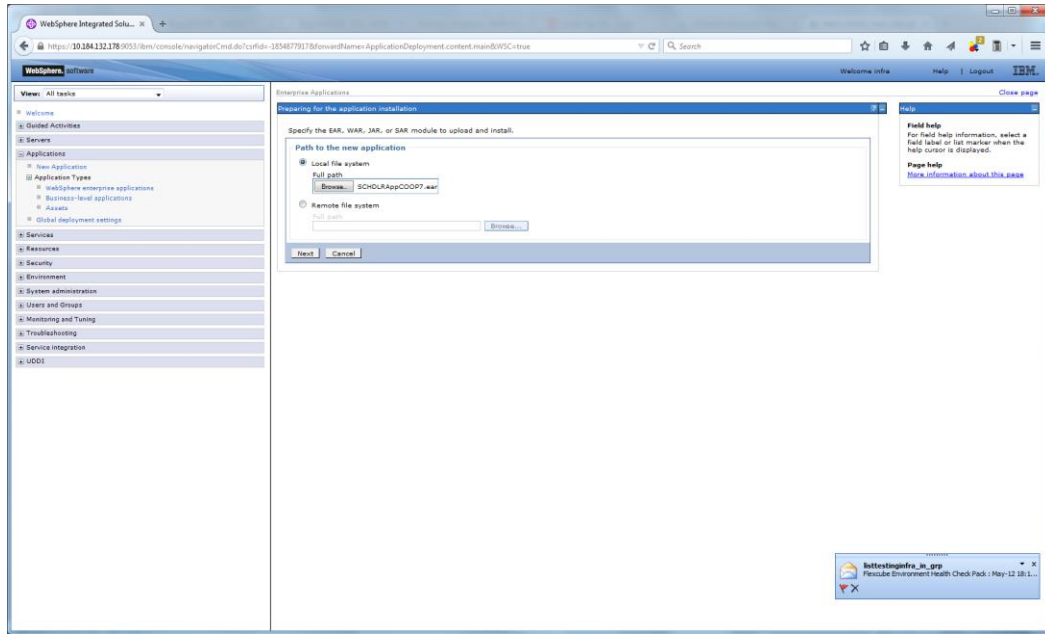
The following screen is displayed.



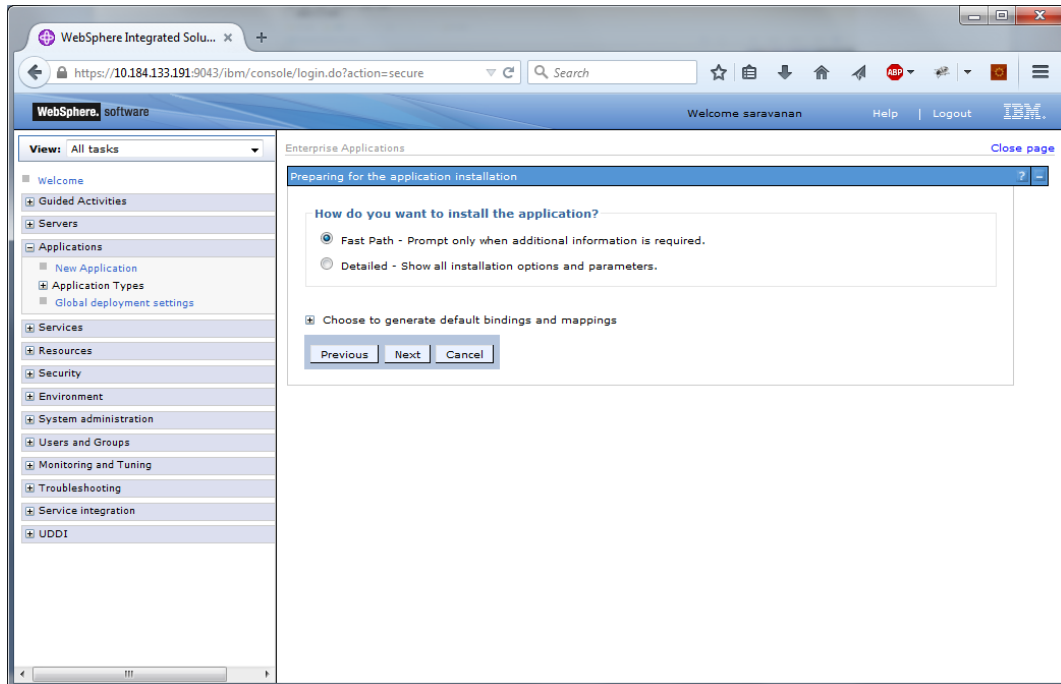
5. Click 'New Enterprise Application'.



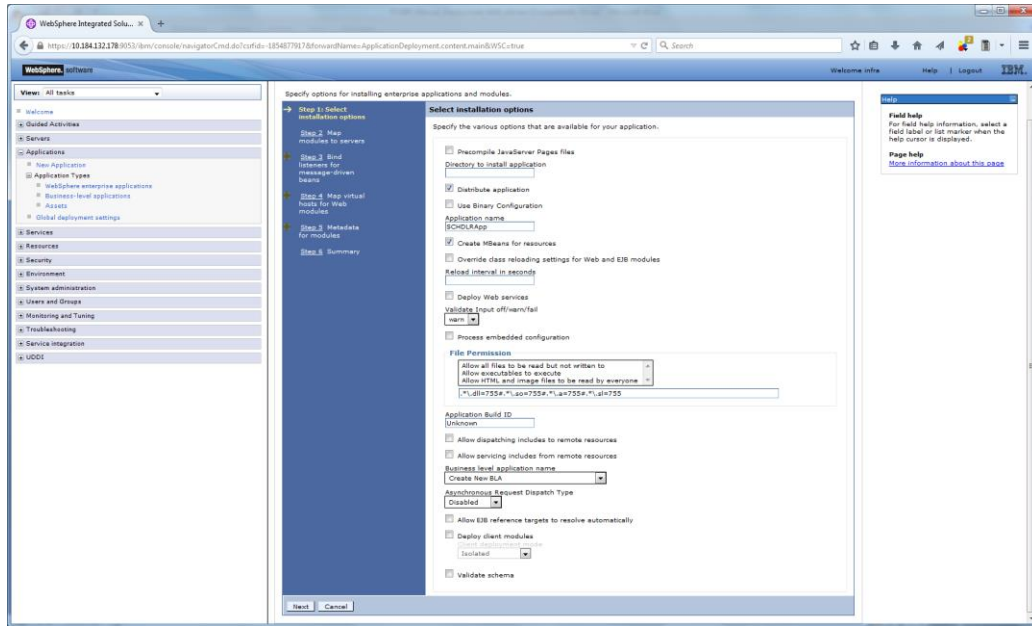
6. Browse the application EAR file and click next button



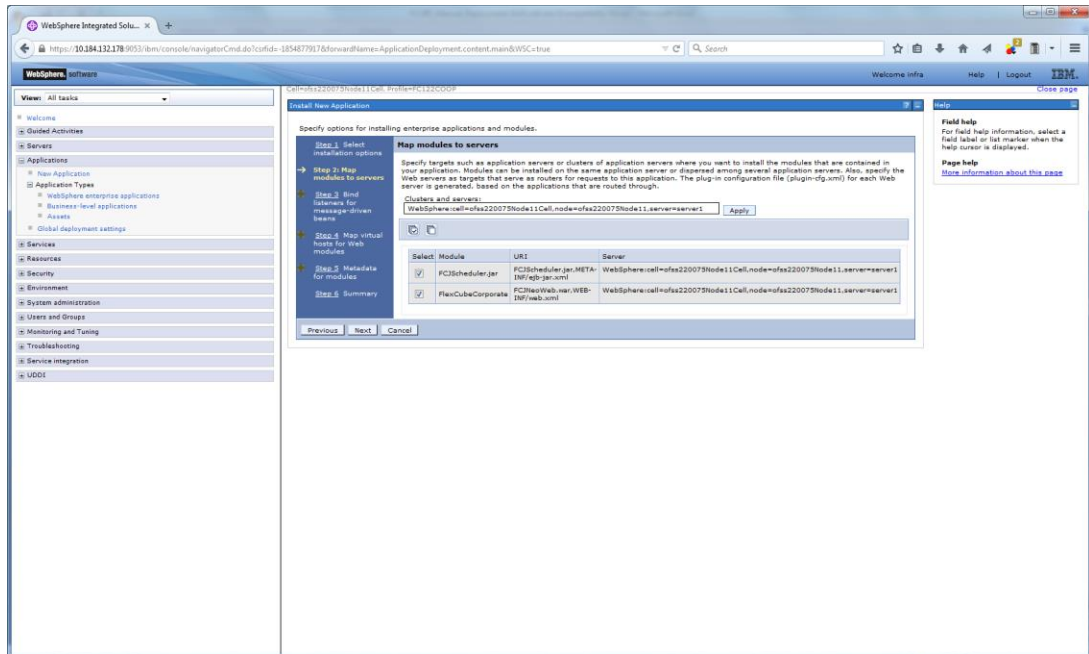
The following screen is displayed.



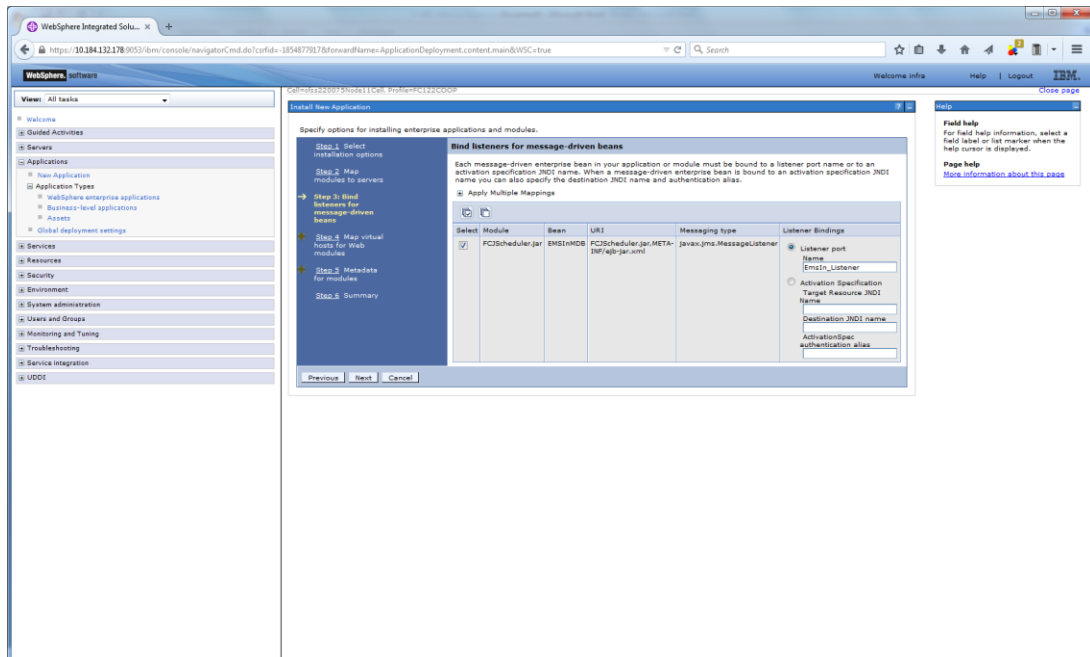
7. Click 'Next'. The following screen is displayed.



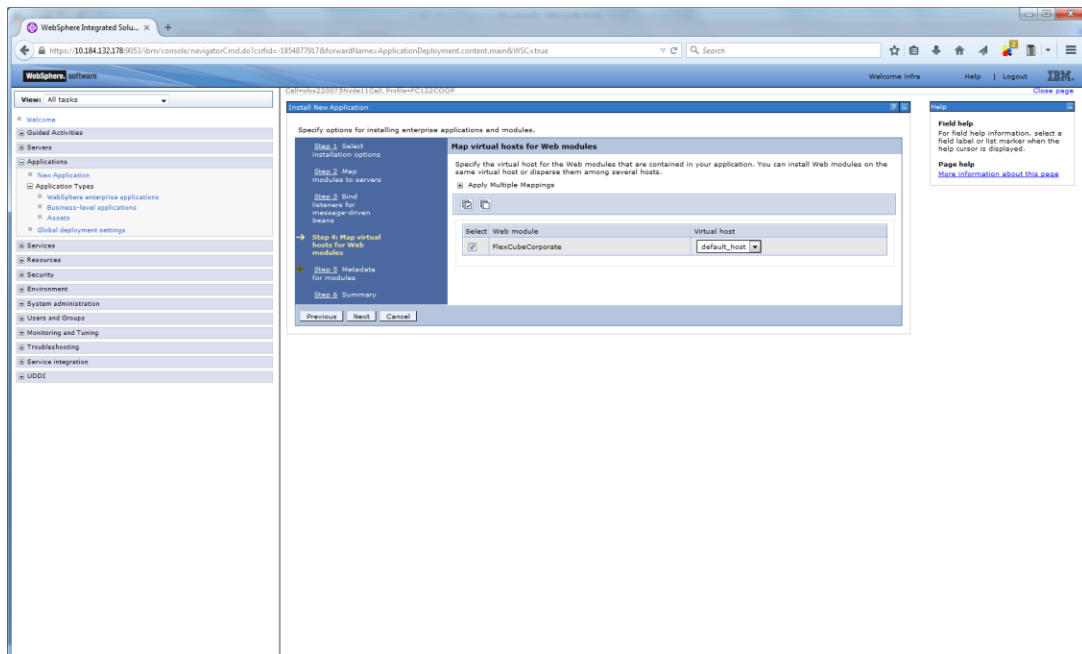
8. Enter the Application Name. This should be the application name mentioned as part of EAR building.



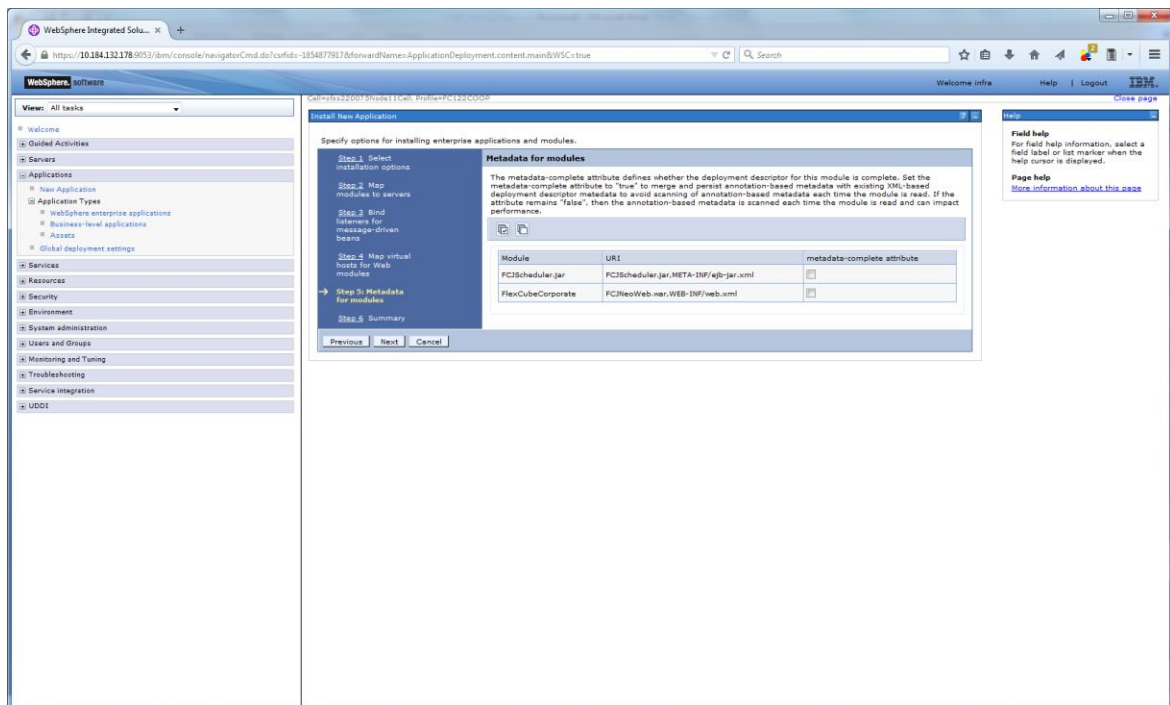
9. Check all the options. Click 'Next'. The following screen is displayed.



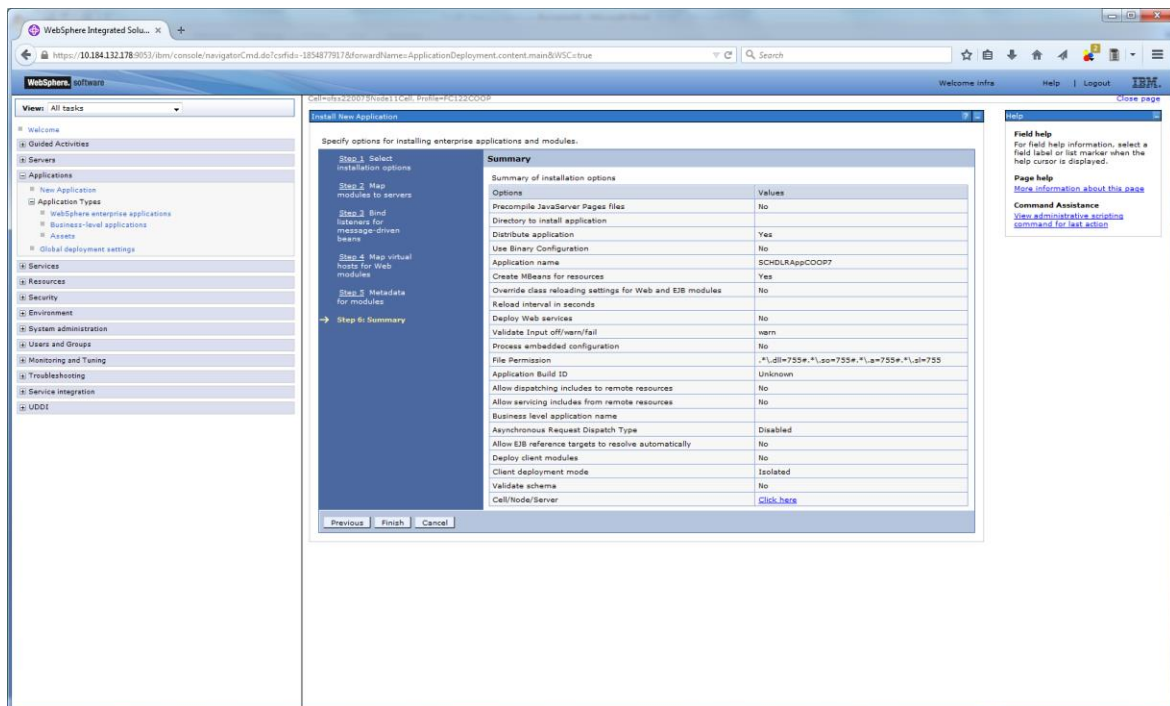
10. Specify the details as shown in the figure.



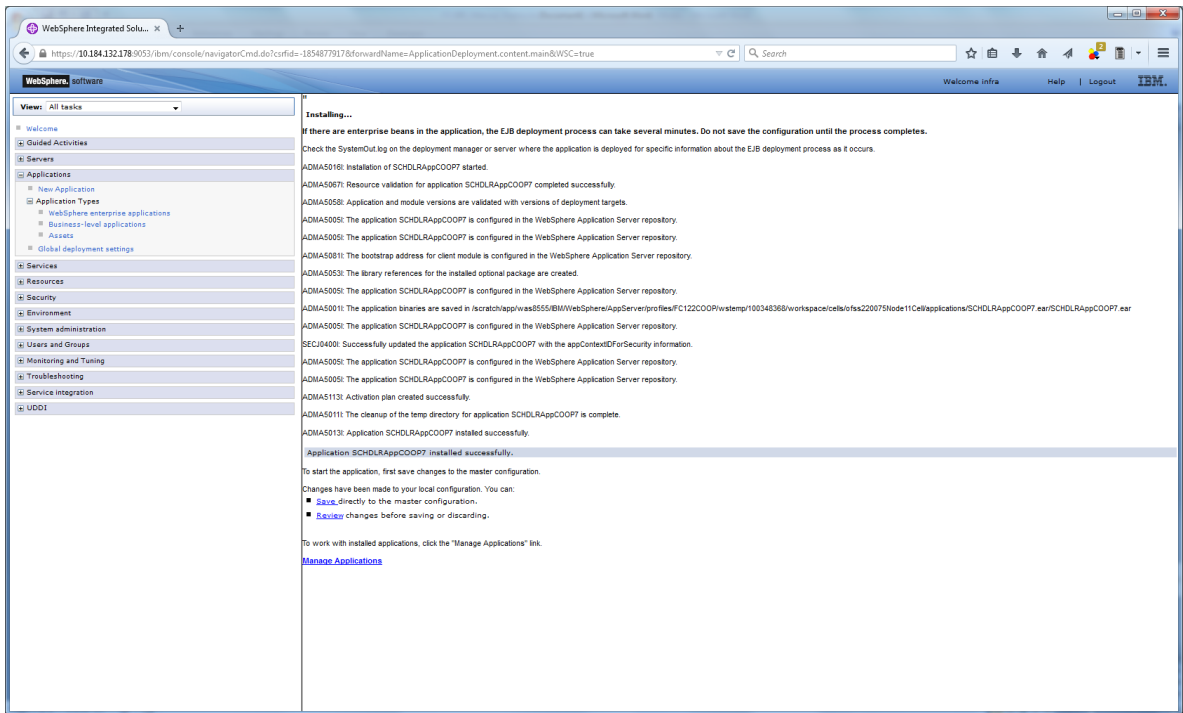
11. Click 'Next'. The following screen is displayed.



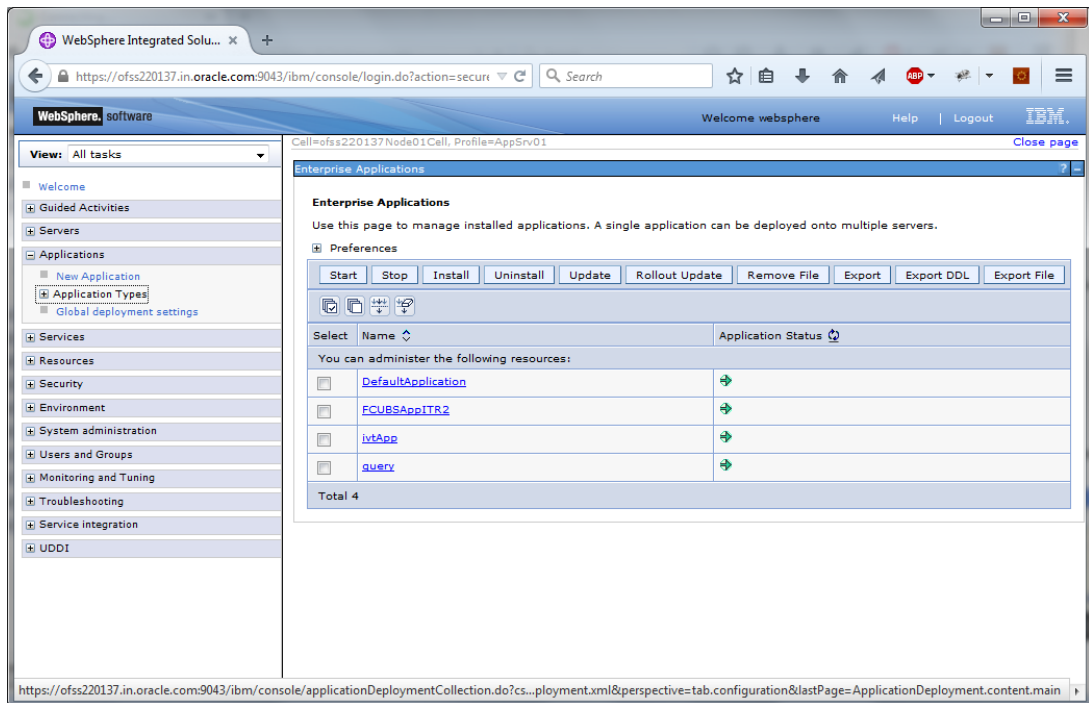
12. Click 'Next'. The following screen is displayed.



13. Click 'Finish'. The following screen is displayed.

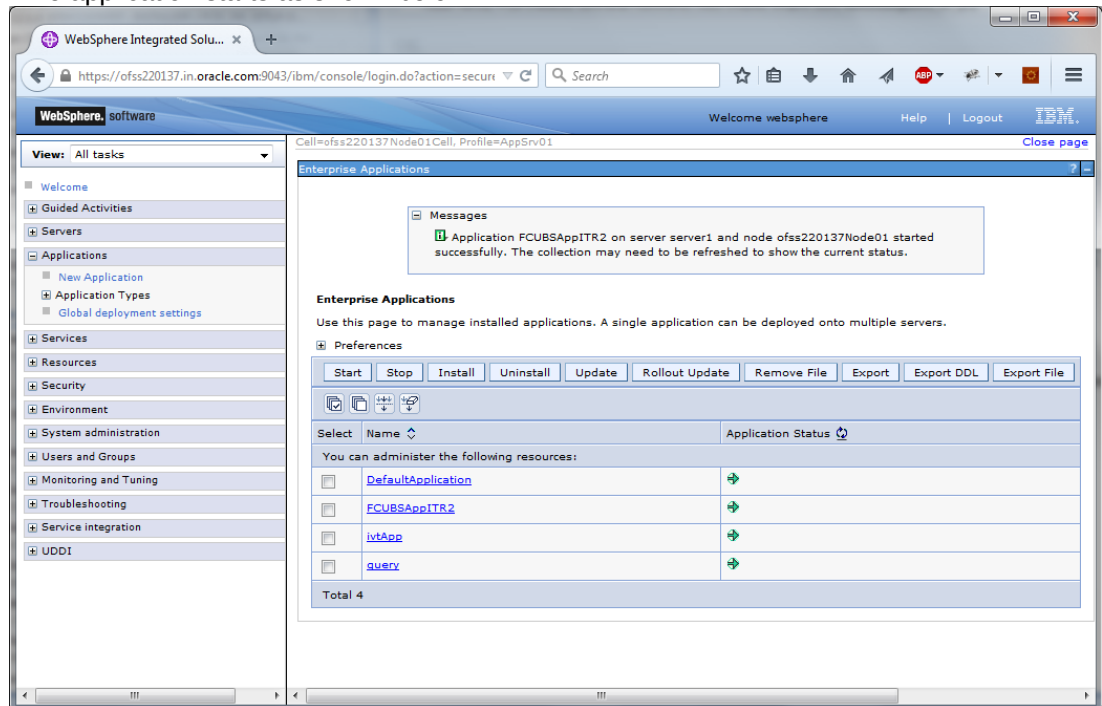


Click 'Save'. The following screen is displayed.



14. Select the application and click 'Start'.

The application starts as shown below:



1.2.5 FCUBS GWEJB Application Deployment

To deploy Oracle FLEXCUBE UBS application on WebSphere application server, follow the steps given below:

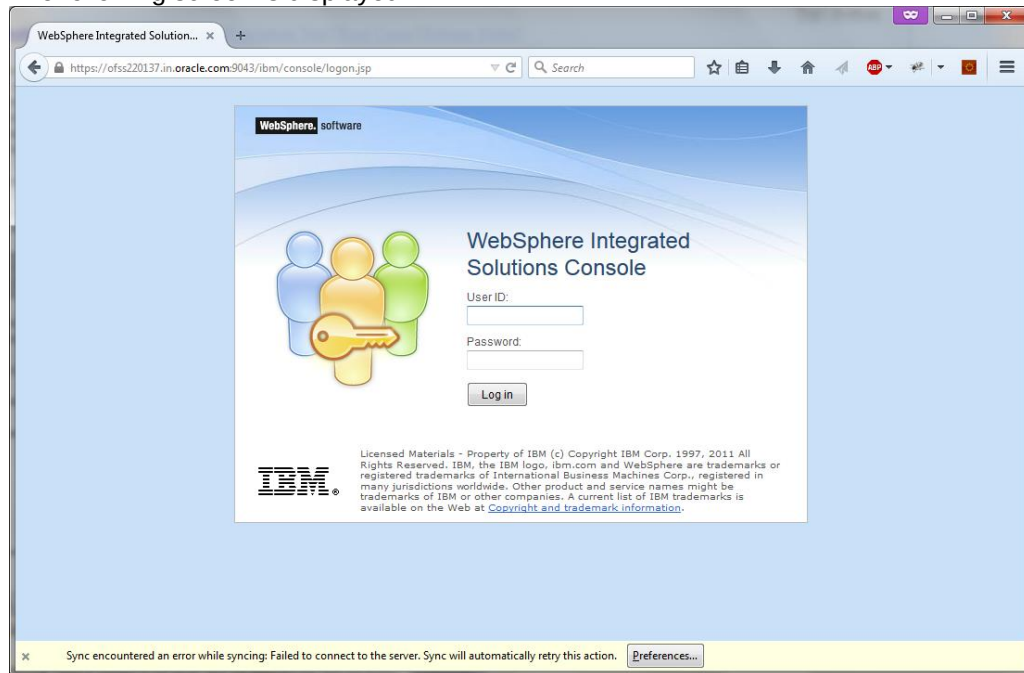
1. Open the Administrative Console of WebSphere server:

Open an internet browser and type the WebSphere Admin Console URL
`http://{Host}:{Port}/console`.

Eg: `https://10.10.10.10:1010/console`

In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

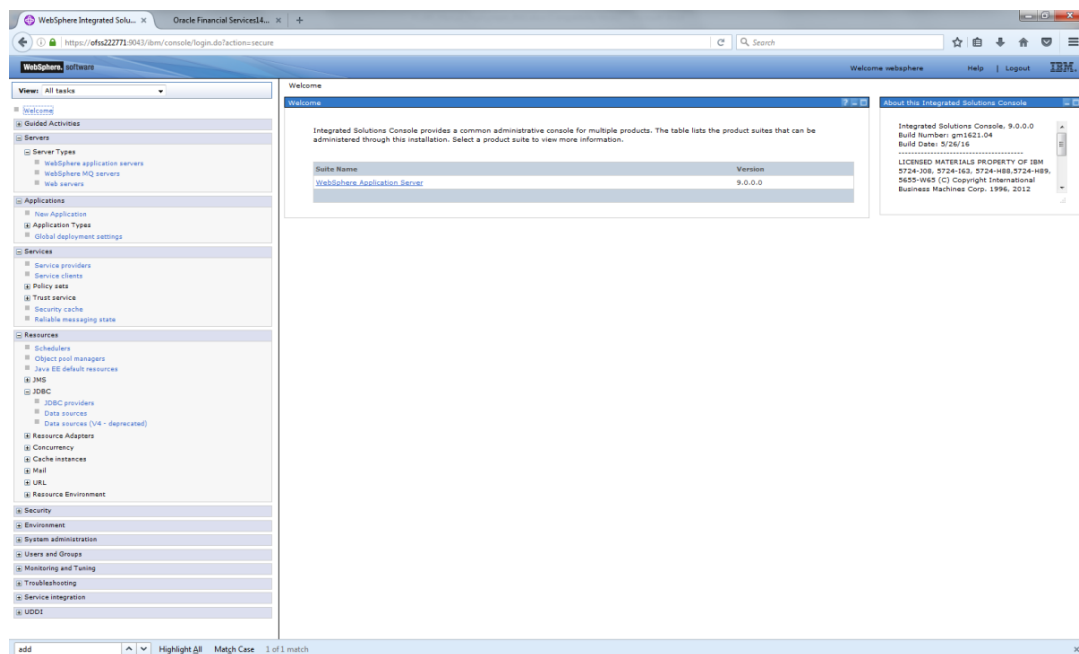
The following screen is displayed:



2. Enter the user name and password and click 'Log In' to log in to the application server.

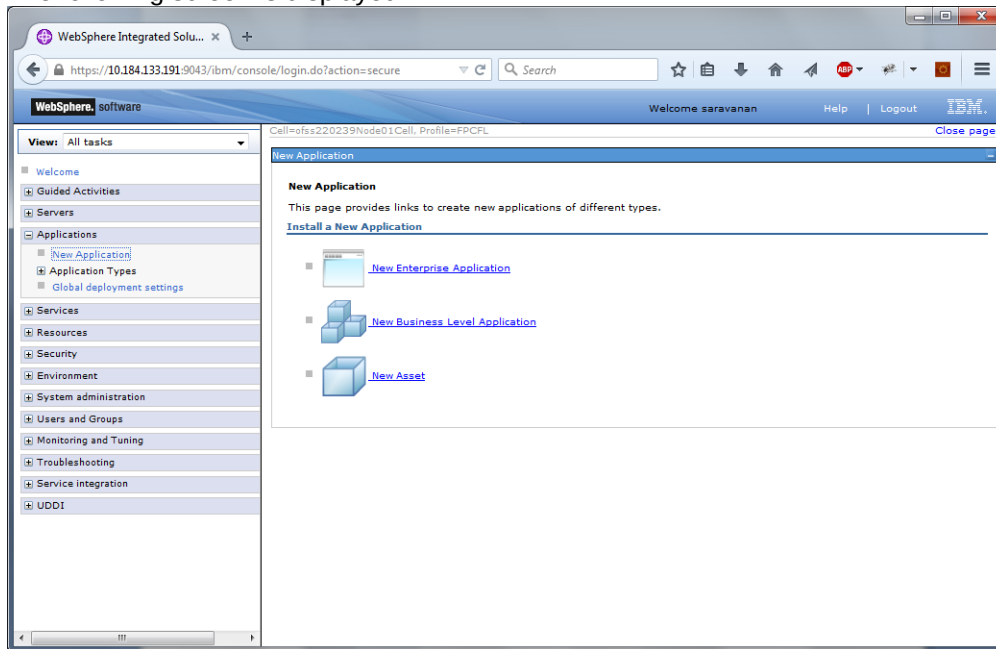
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

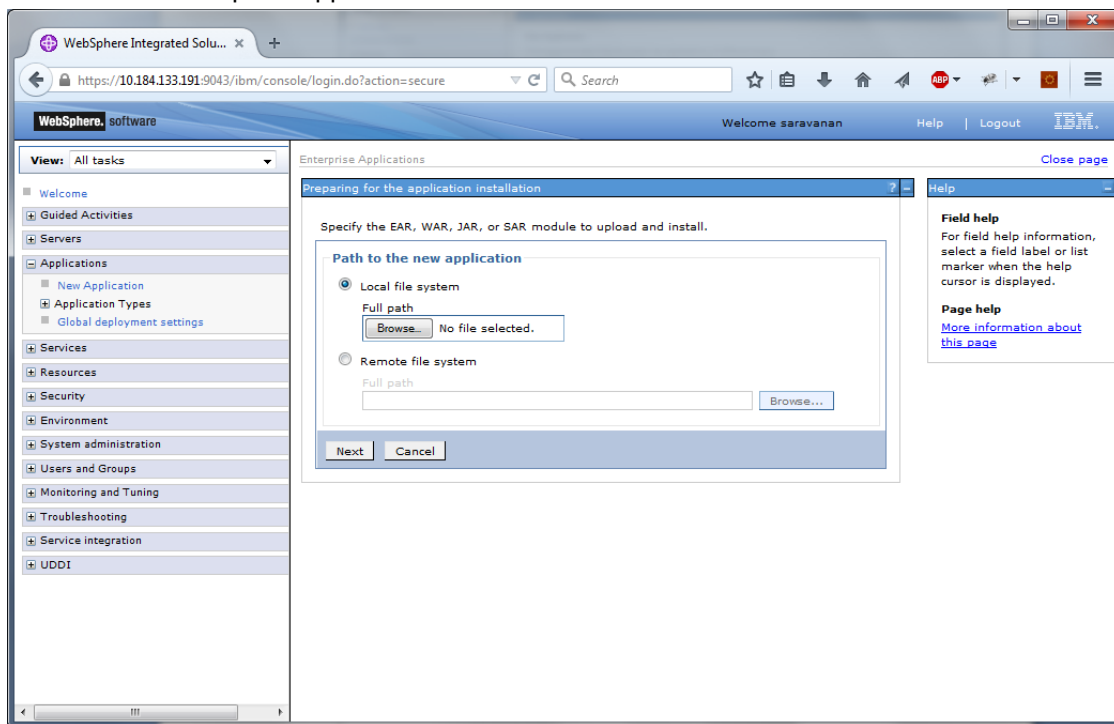


4. Expand Applications from left-side menu and Click 'New Application'.

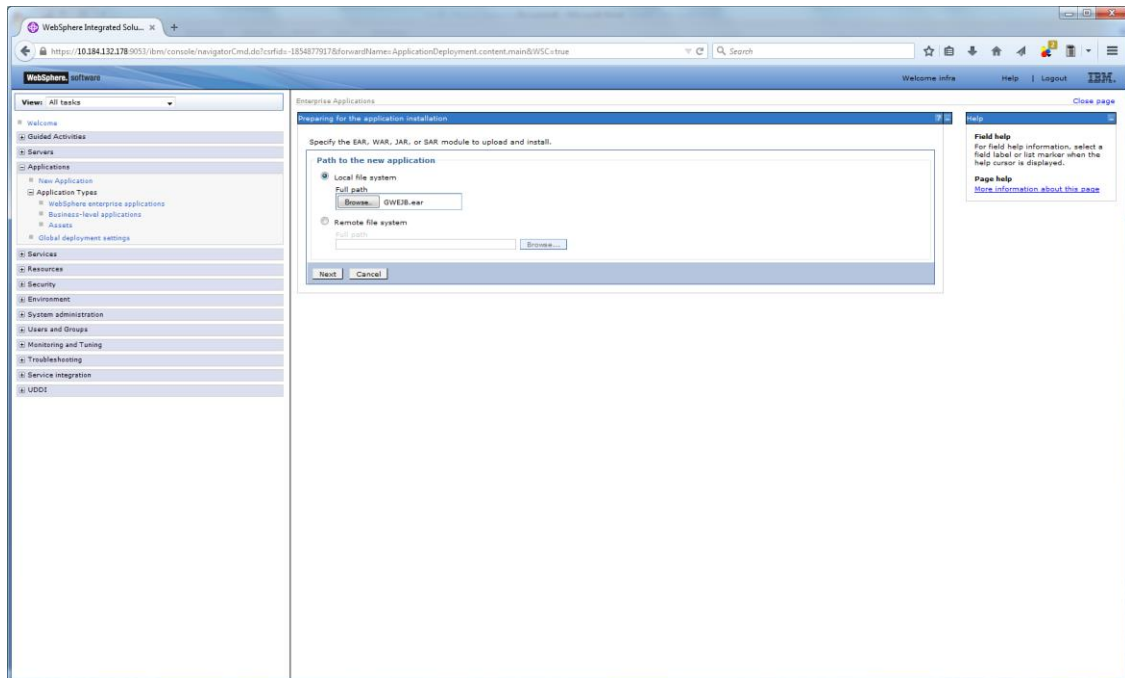
The following screen is displayed.



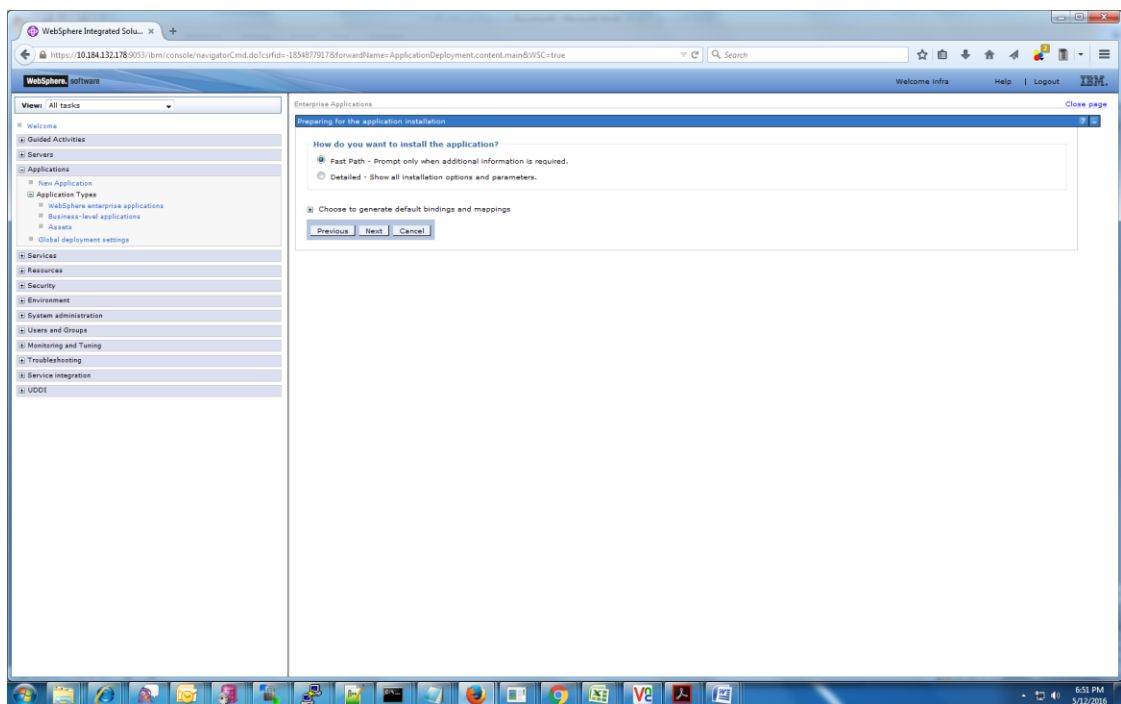
5. Click 'New Enterprise Application'.



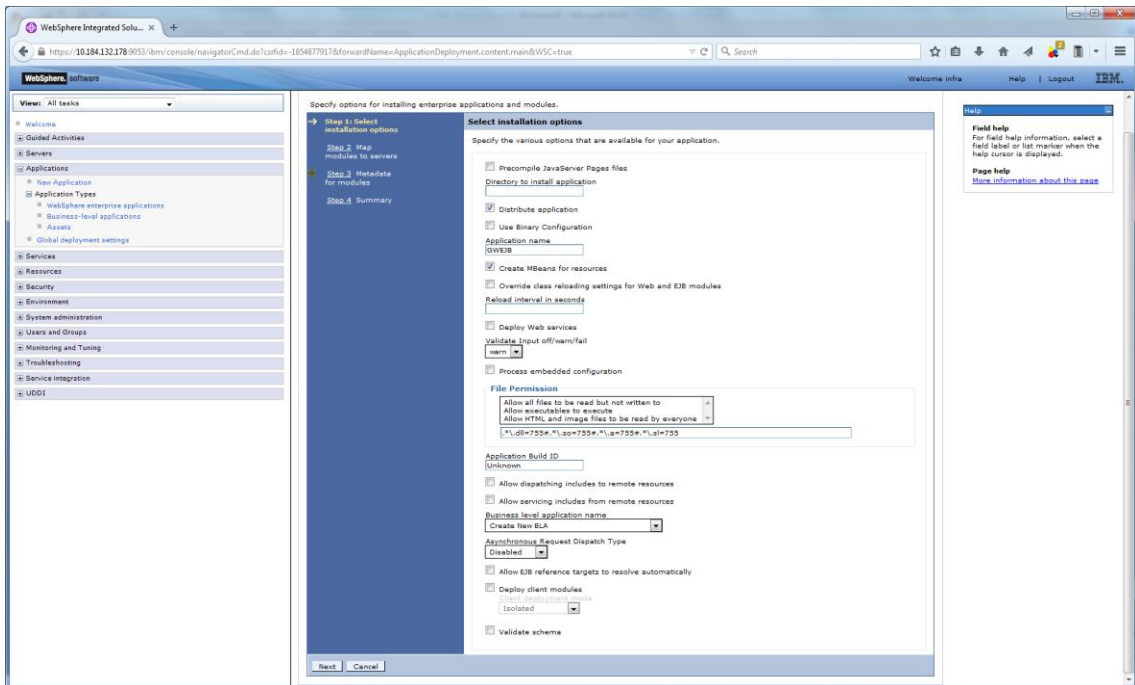
6. Browse the application EAR file and click next button



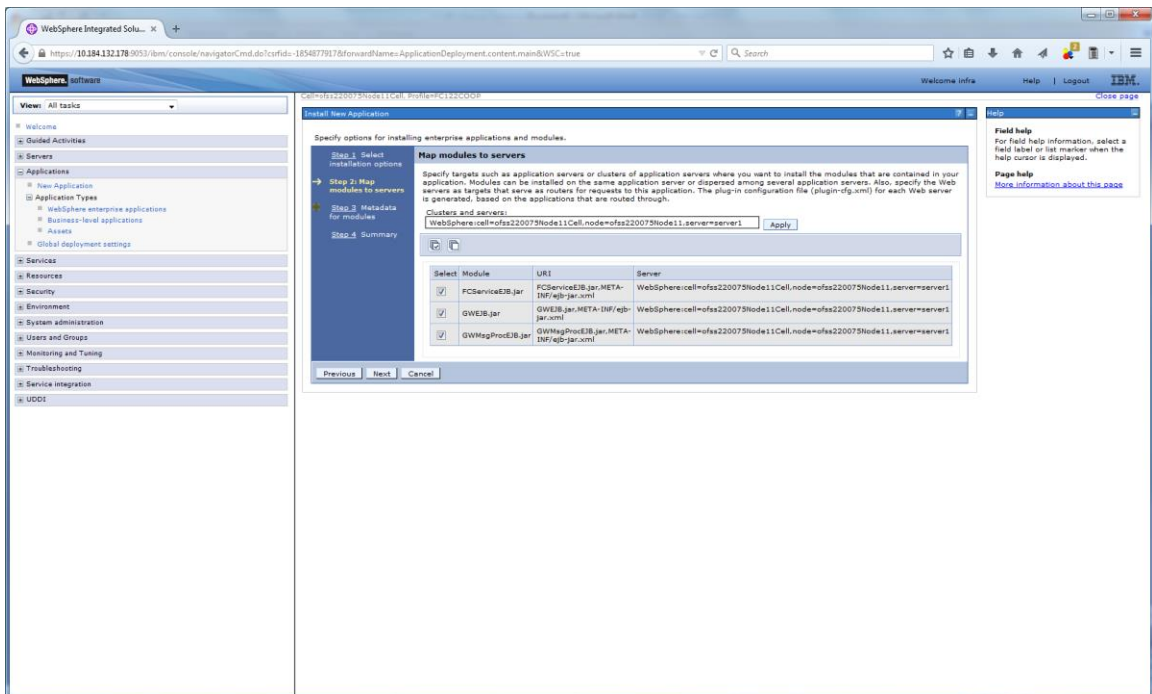
7. Click Next and the following screen is displayed.



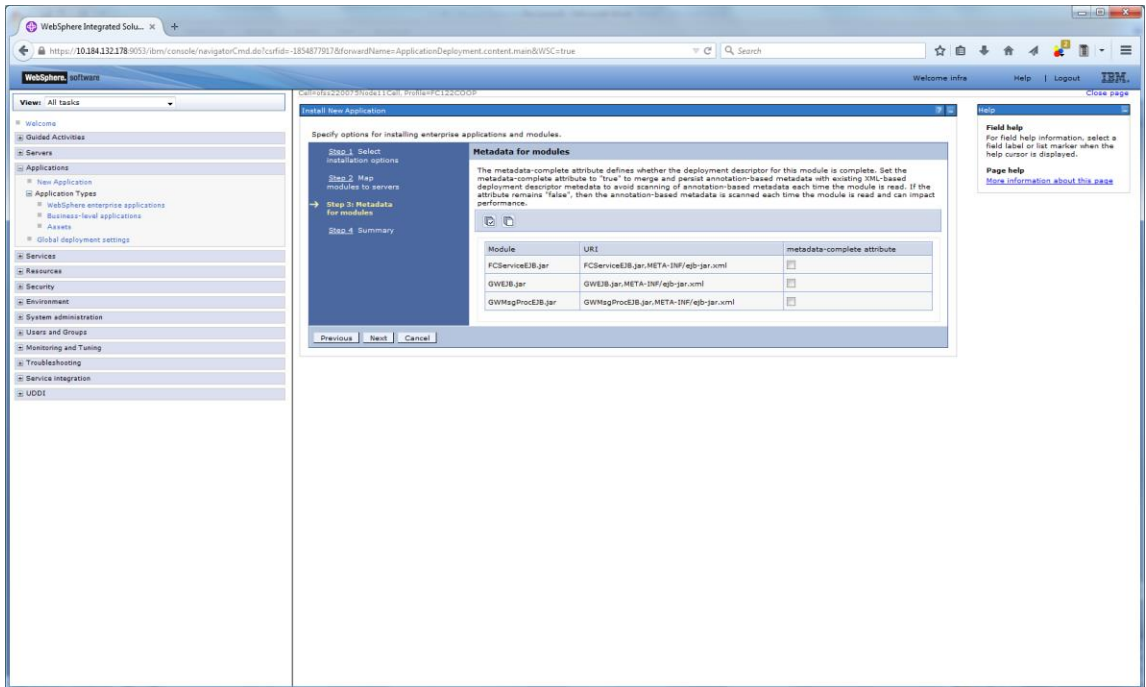
8. Click next and the following screen is displayed.



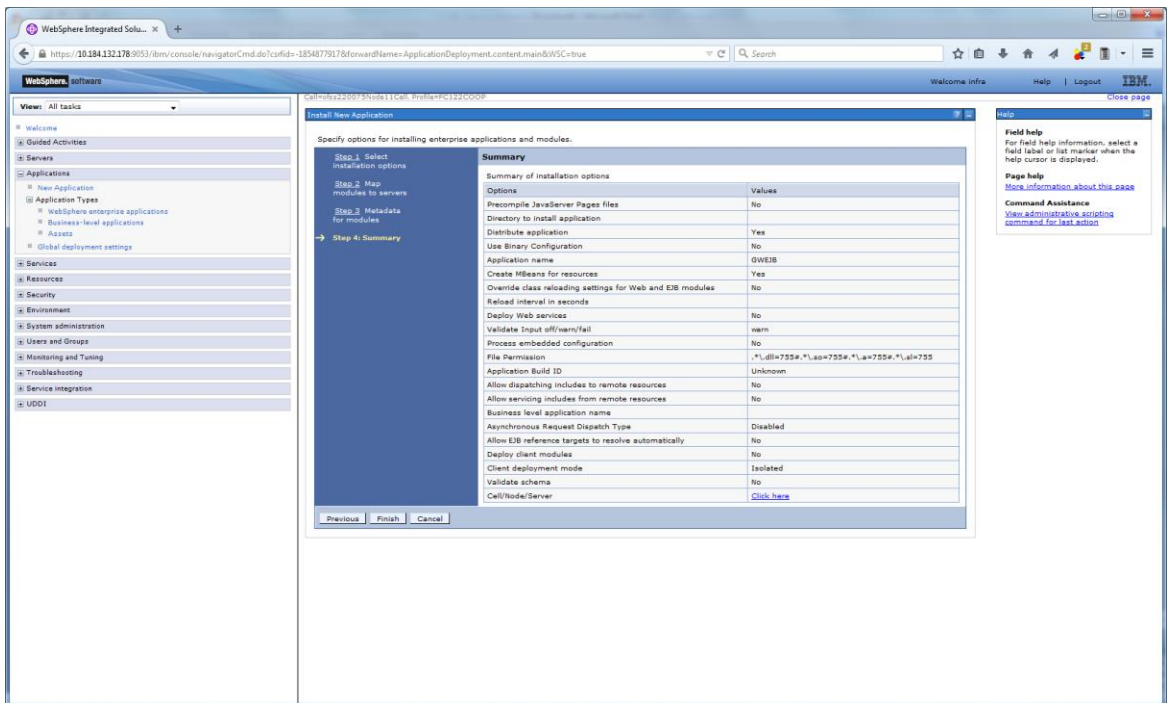
9. Click next and the following screen is displayed.



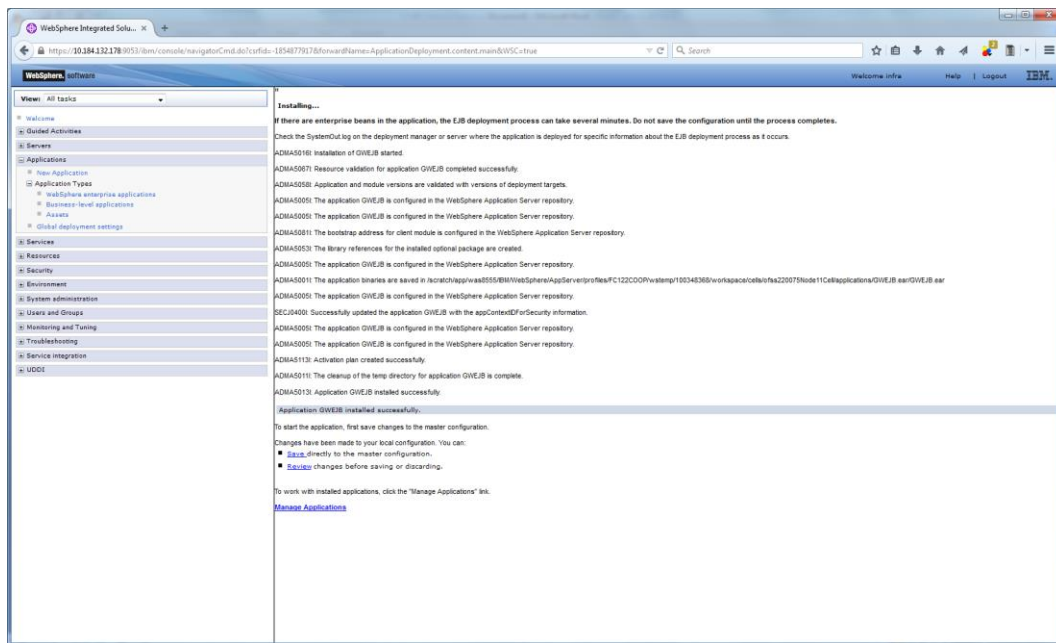
10. click next and the following Screen is displayed.



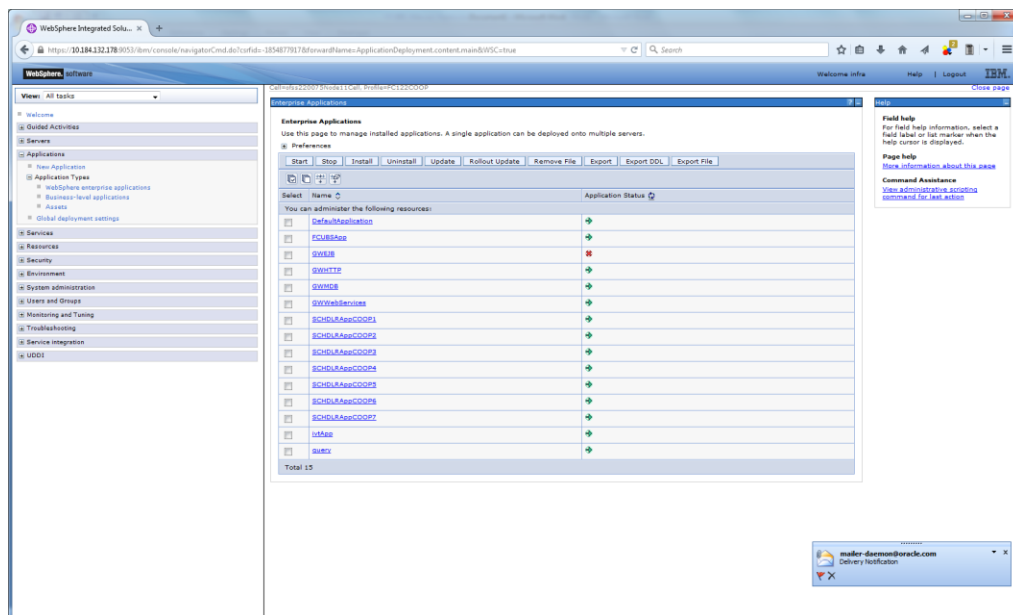
11. Click next and the following screen is displayed.



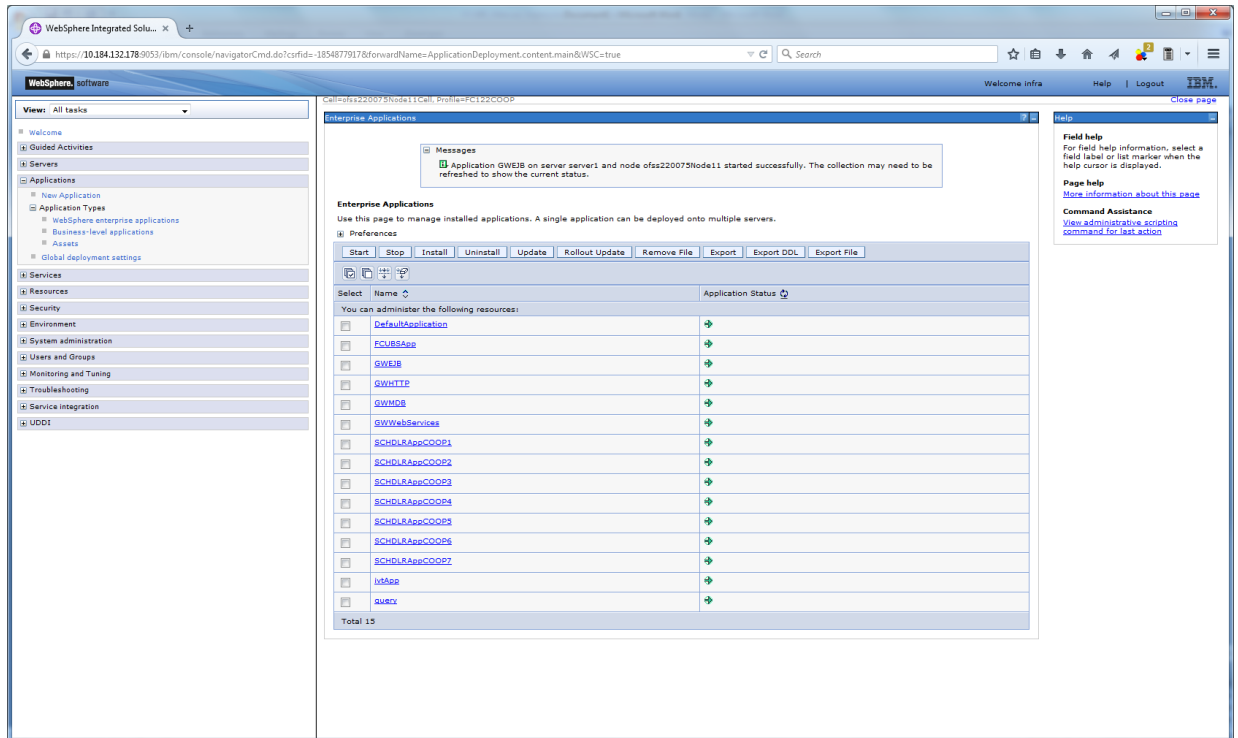
12. Click on finish and the following screen is displayed.



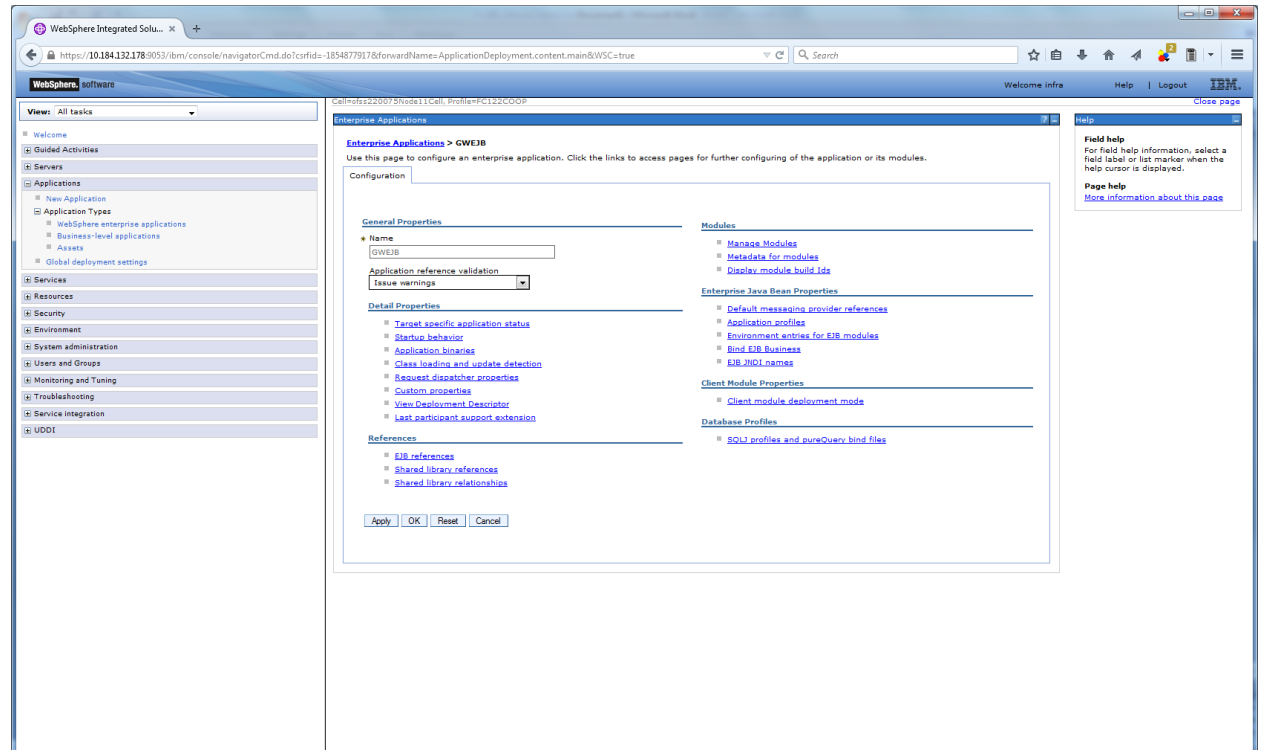
13. Click on save and the following screen is displayed.



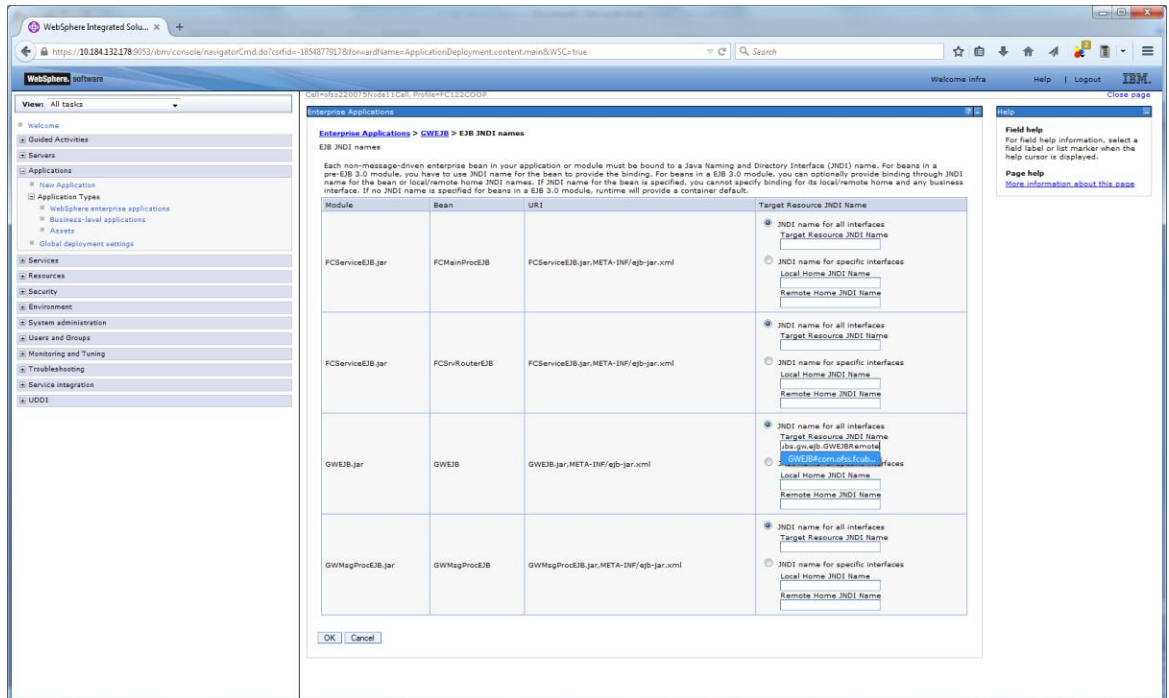
15. Select the deployed application and click on start



16. Click on the application and the following screen is displayed.

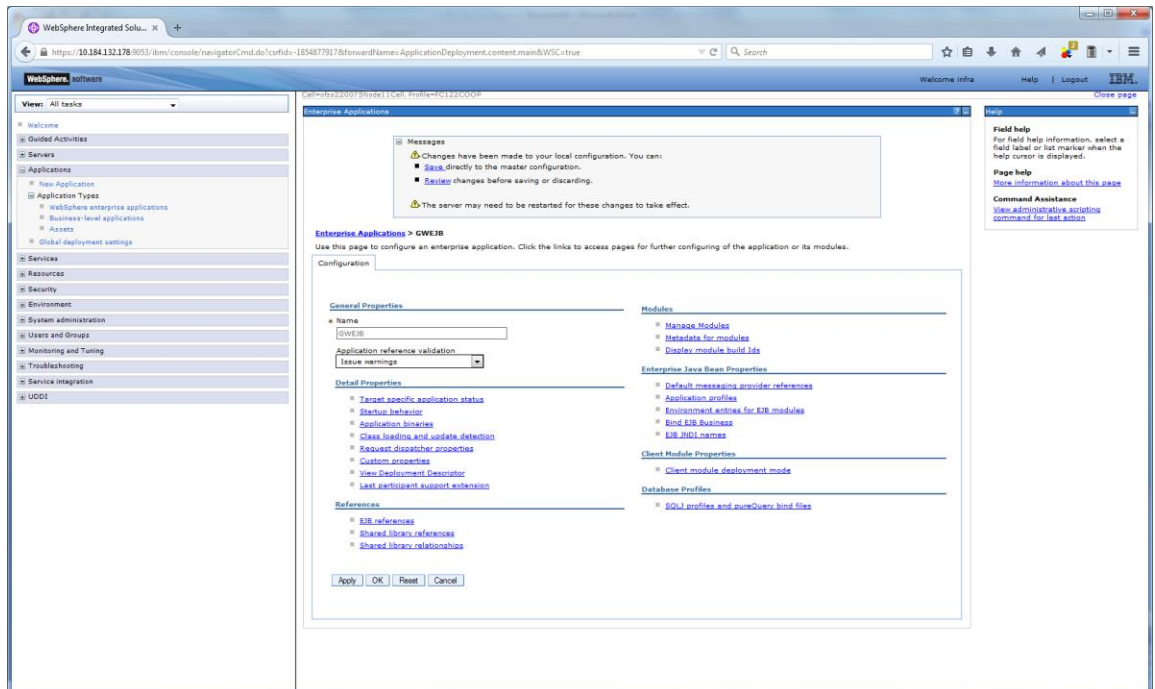


17. Click on EJB JNDI names and the following screen is displayed.



Provide the JNDI Name for GWEJB.jar as “GWEJB#com.ofss.fcubs.gw.ejb.GWEJBRemote”

18. Click on OK, and the following screen is displayed.



19. Click on save and the deployment is finished.

1.2.6 FCUBS GWMDB Application Deployment

To deploy Oracle FLEXCUBE UBS application on WebSphere application server, follow the steps given below:

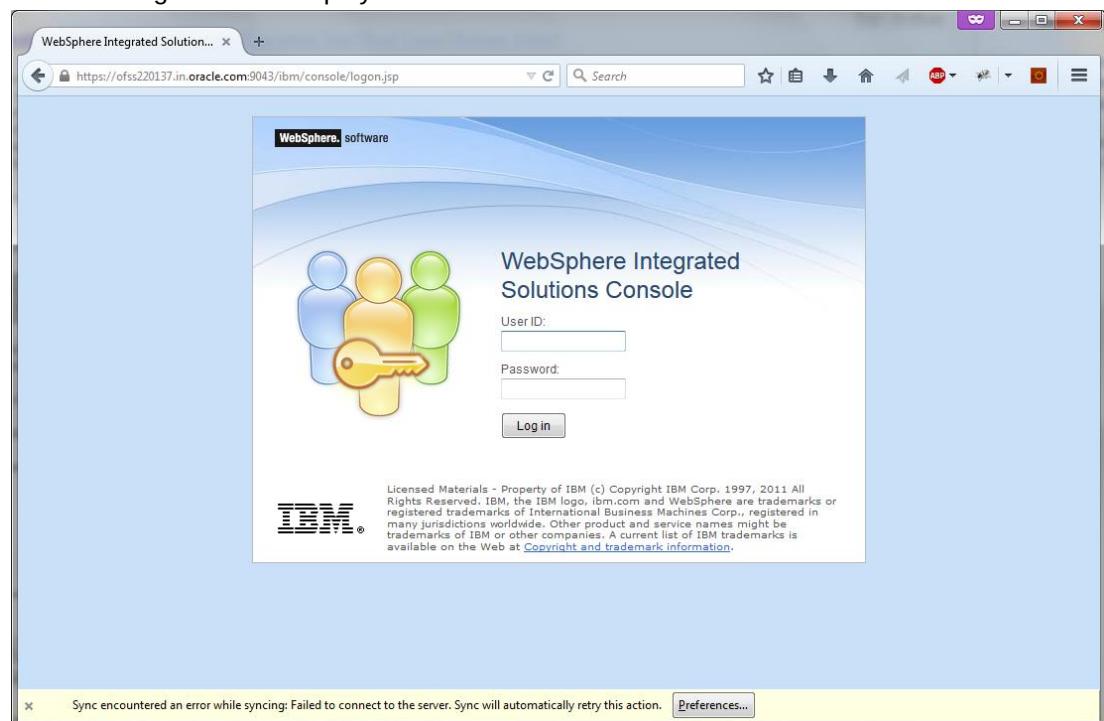
1. Open the Administrative Console of WebSphere server:

Open an internet browser and type the WebSphere Admin Console URL
`http://{Host}:{Port}/console.`

Eg: `https://10.10.10.10:1010/console`

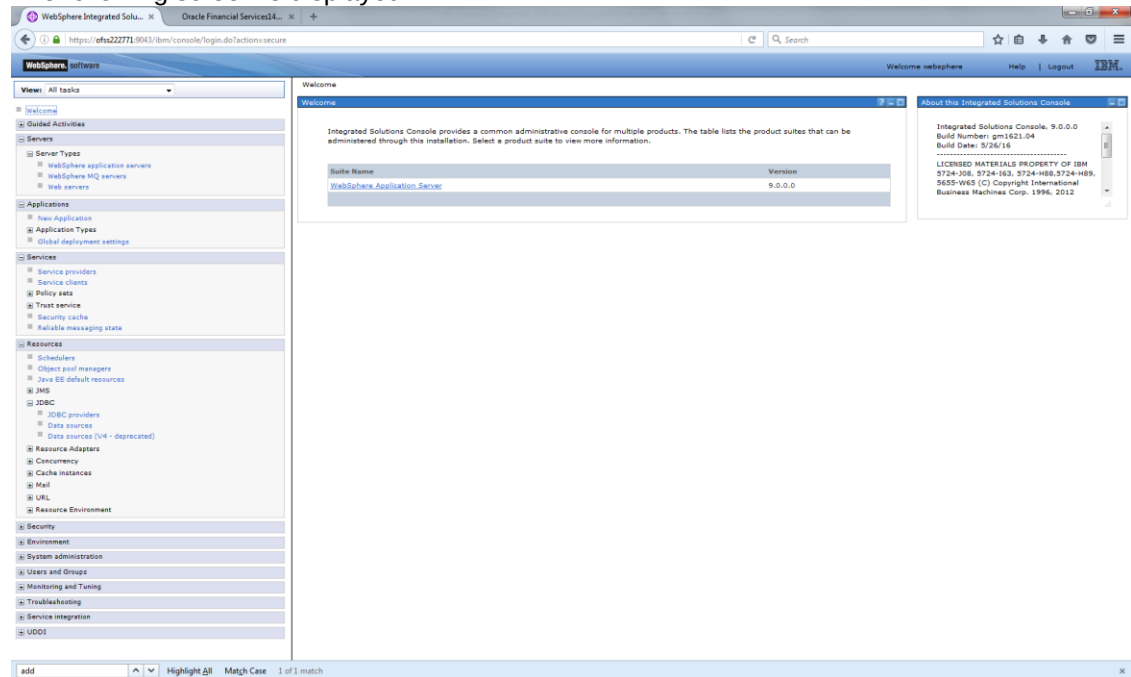
In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

The following screen is displayed:



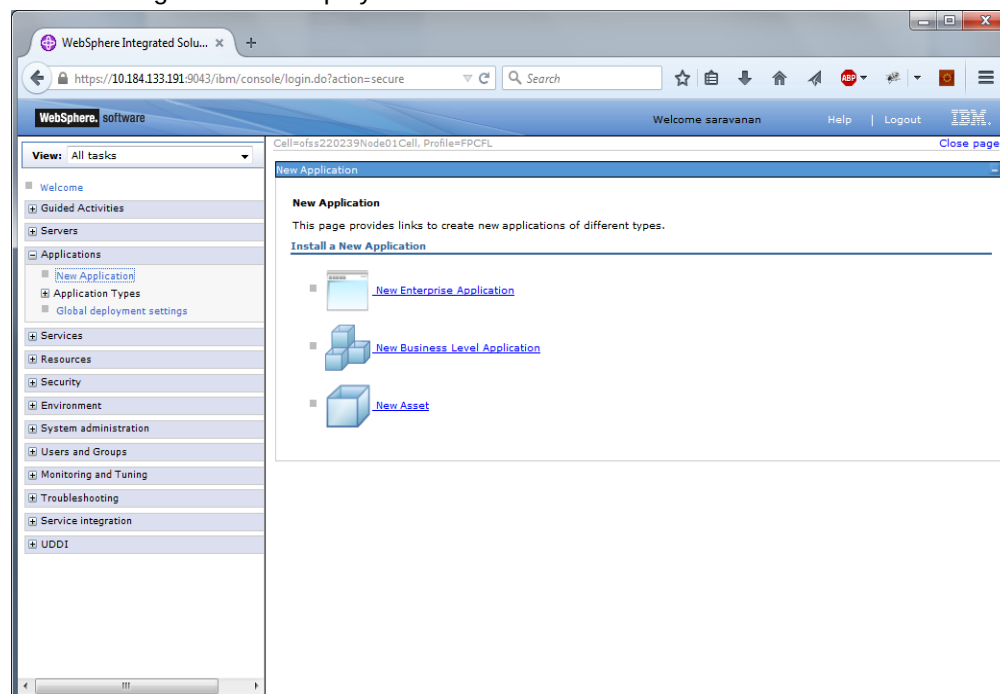
2. Enter the user name and password and click 'Log In' to log in to the application server.
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

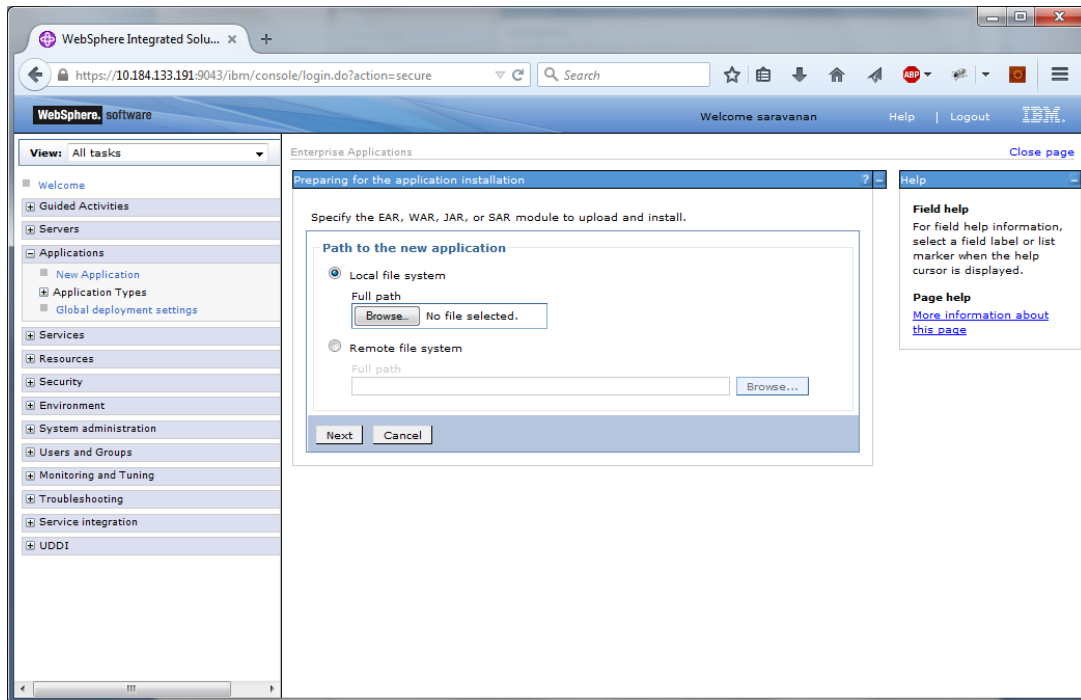


4. Expand Applications from left-side menu and Click 'New Application'.

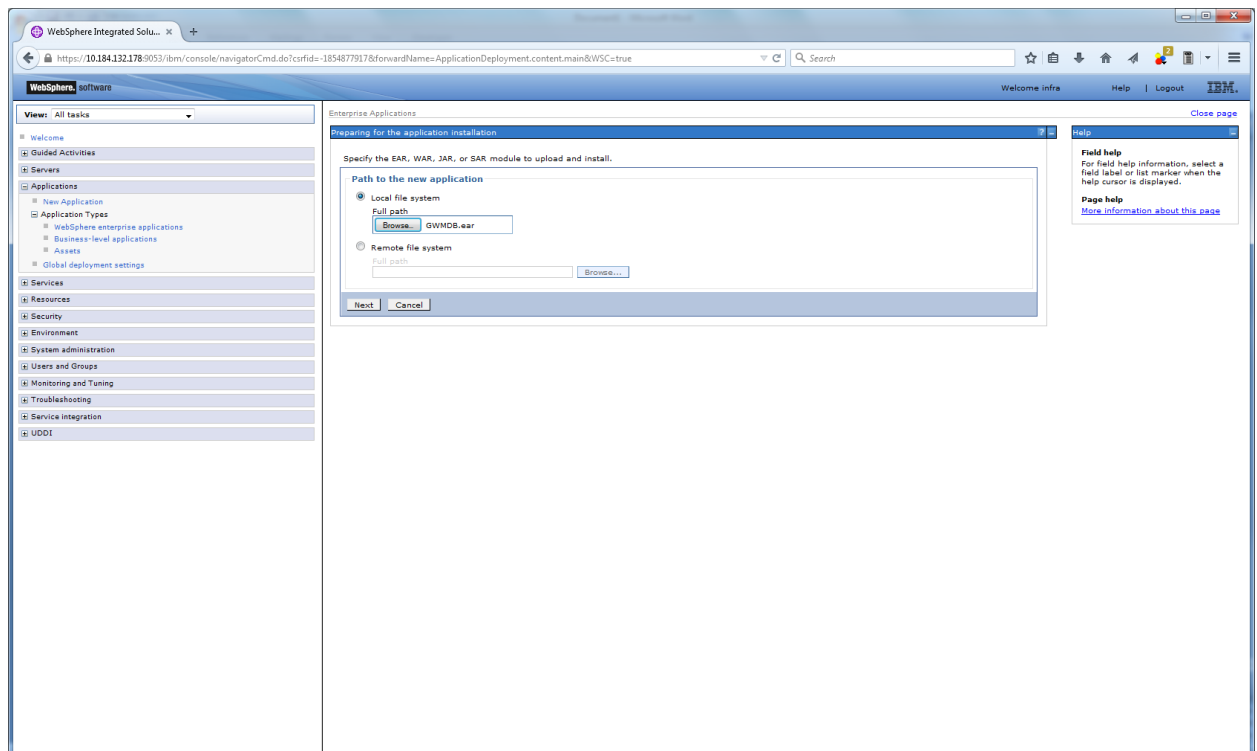
The following screen is displayed.



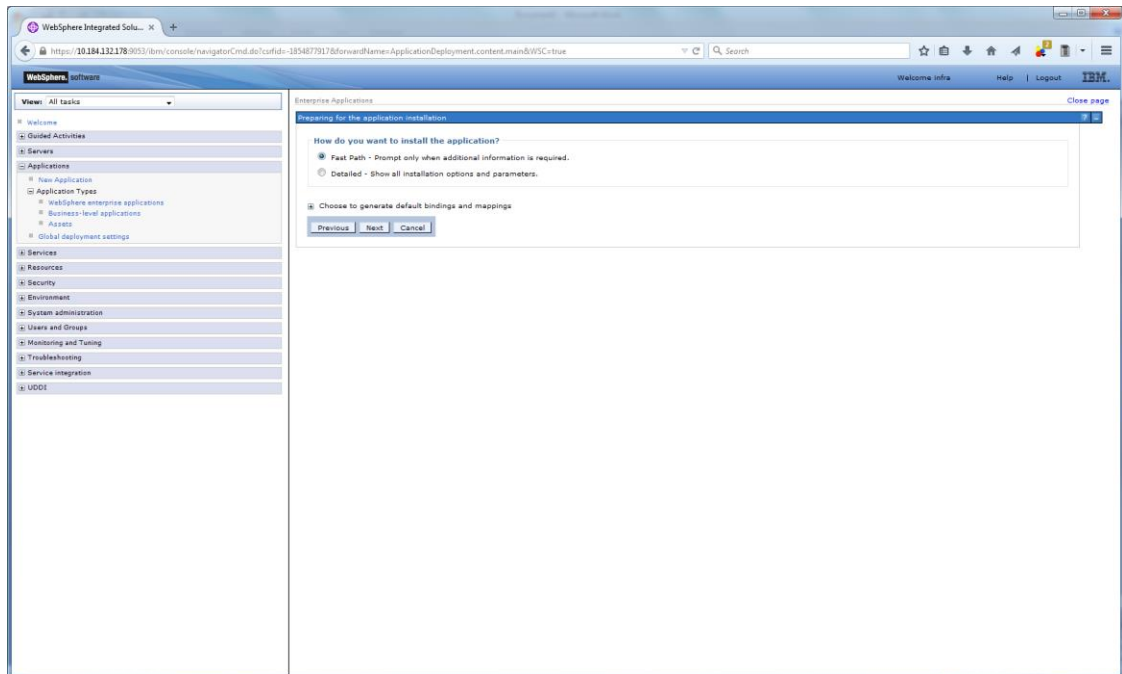
5. Click 'New Enterprise Application'.



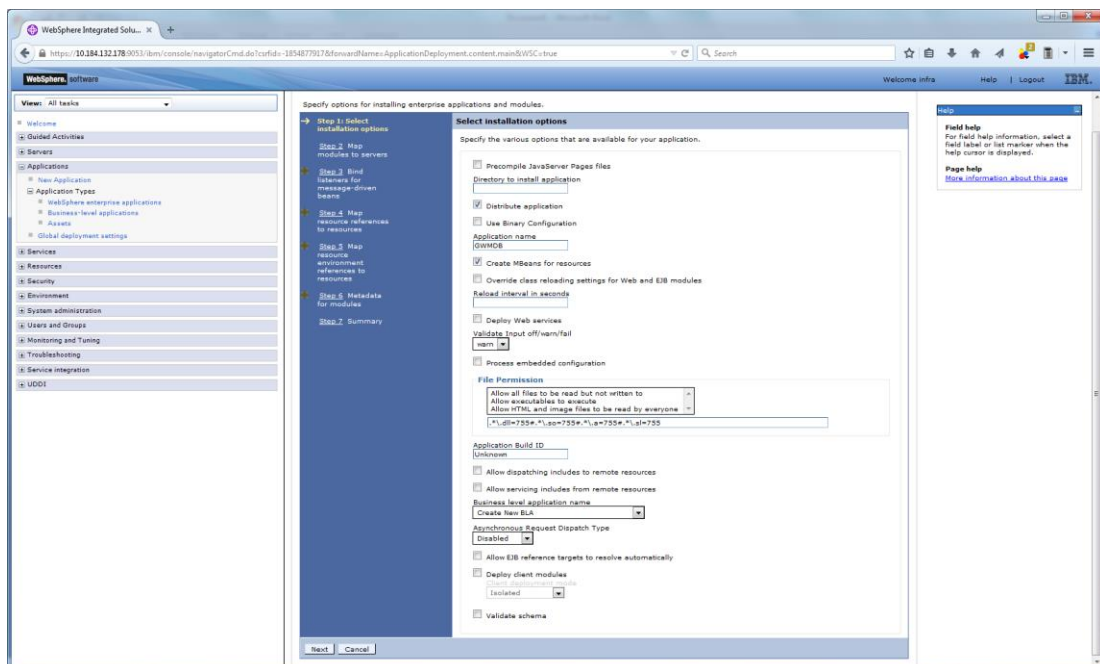
6. Click on Browse and select the MDB EAR and the following screen is displayed



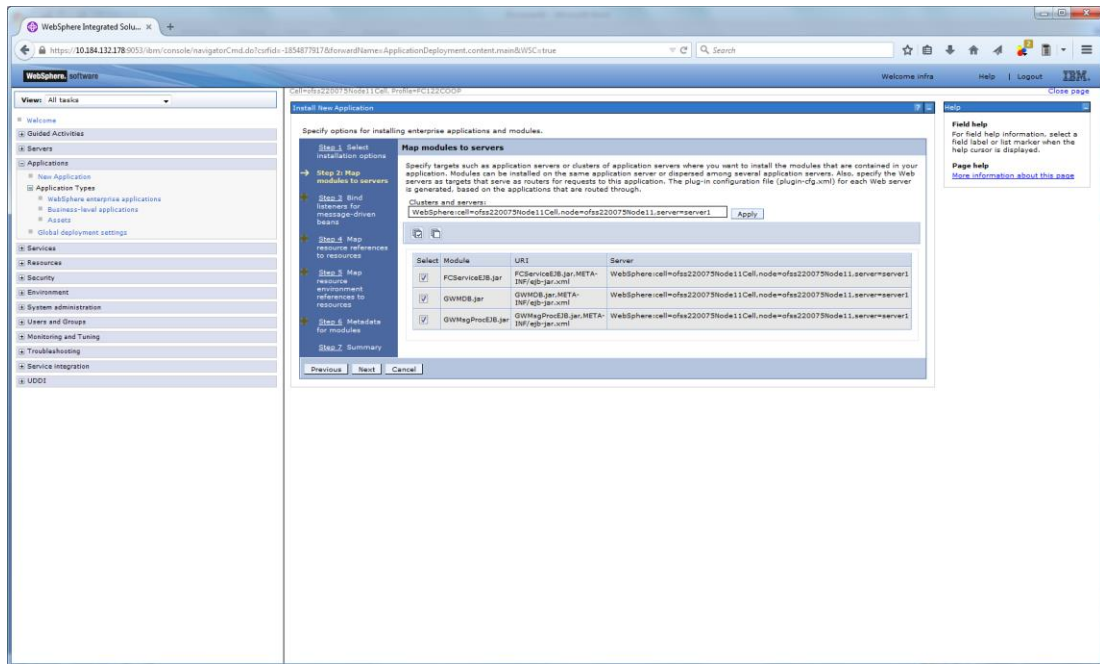
7. Click on next and the following screen is displayed.



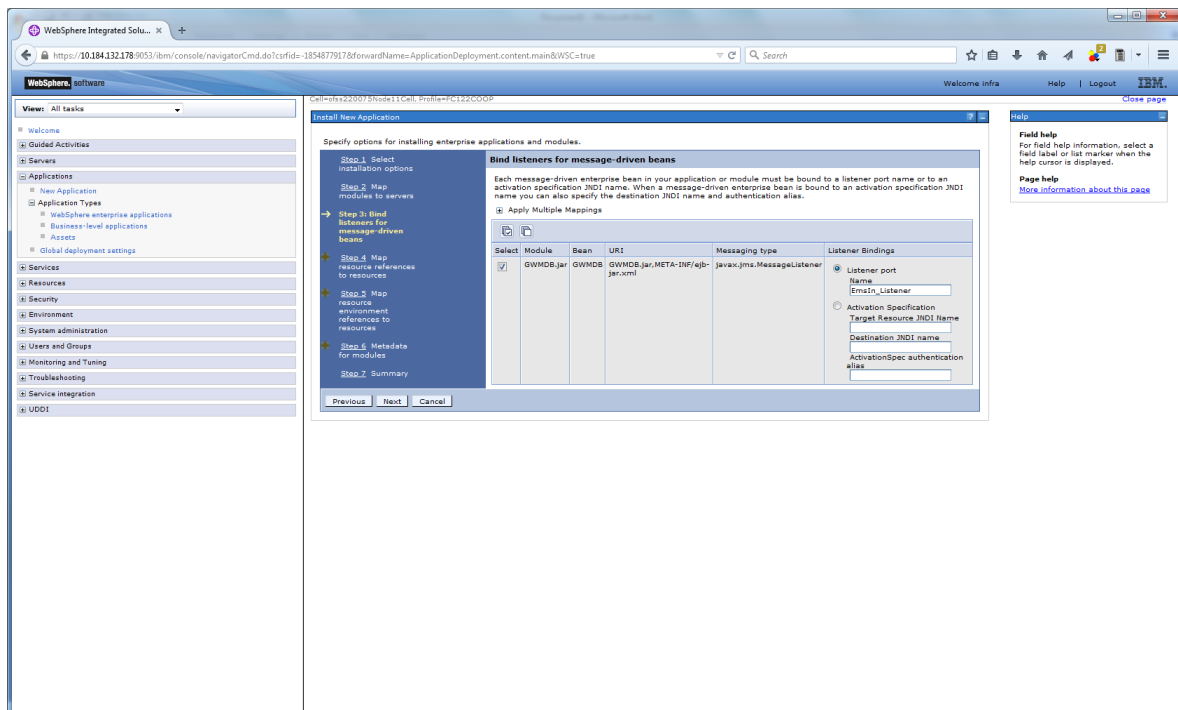
8. Click on next and the following screen is displayed.



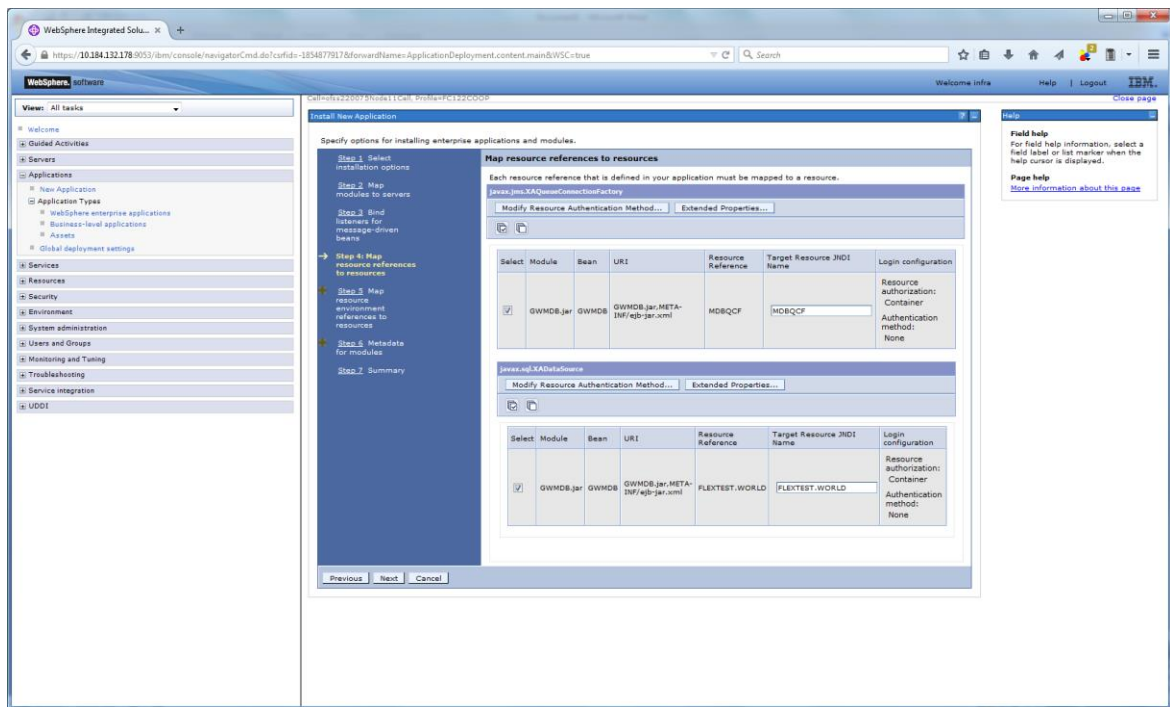
9. Click on next and the following screen is displayed.



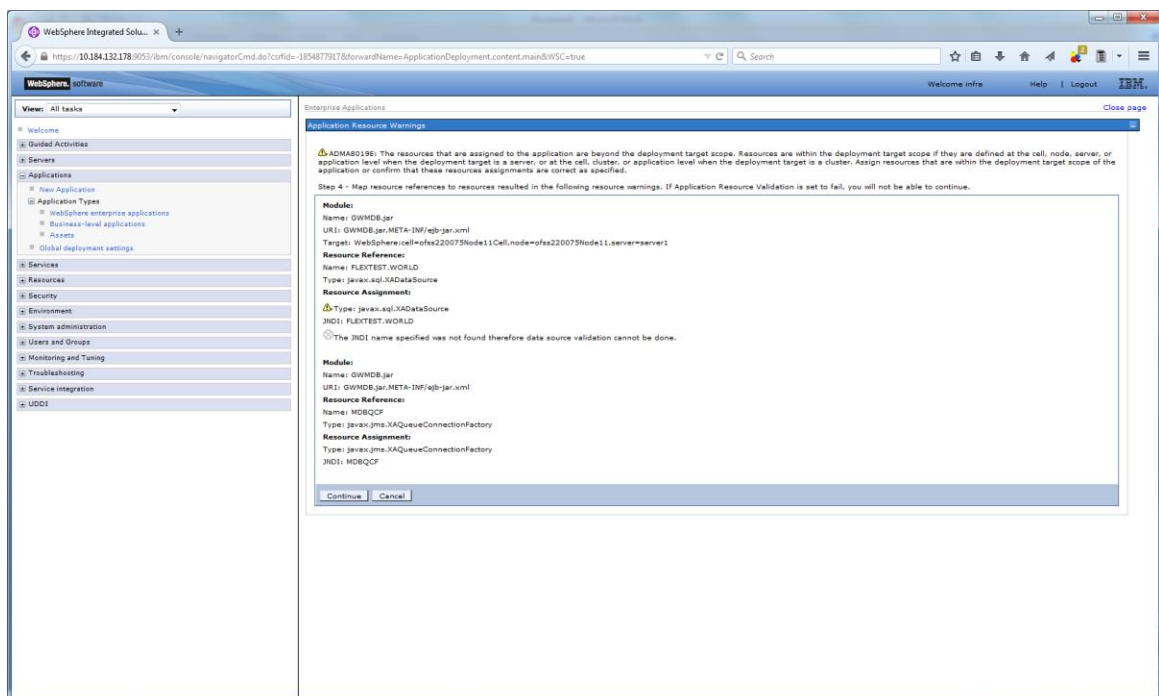
10. Click on next and the following screen is displayed.



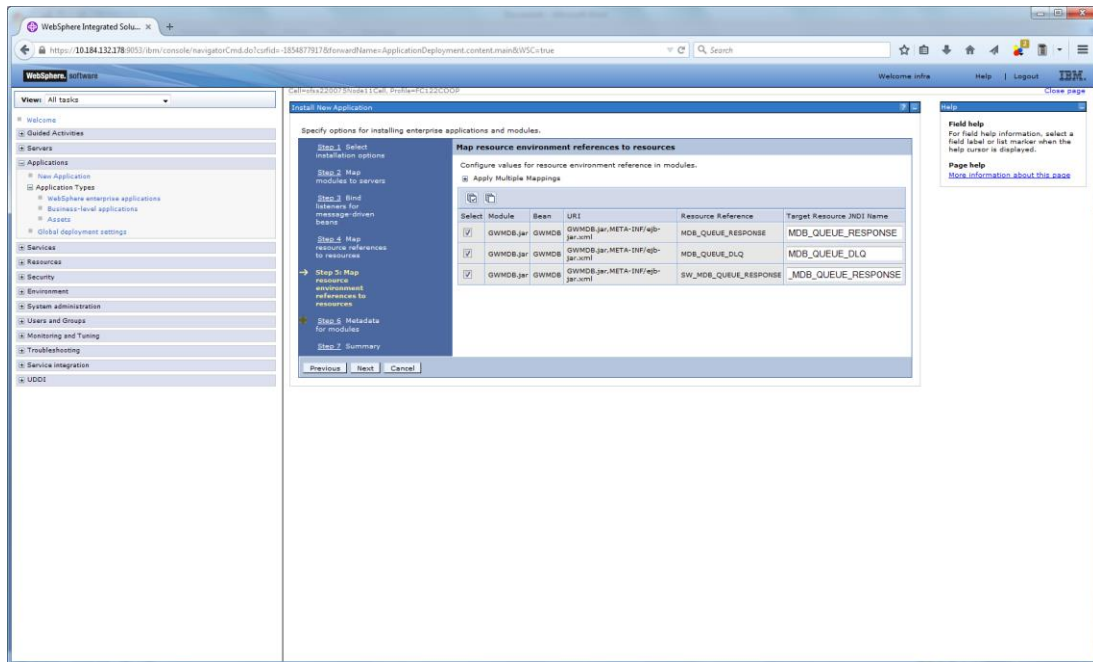
11. Input the listner name click next. Following screen is displayed.



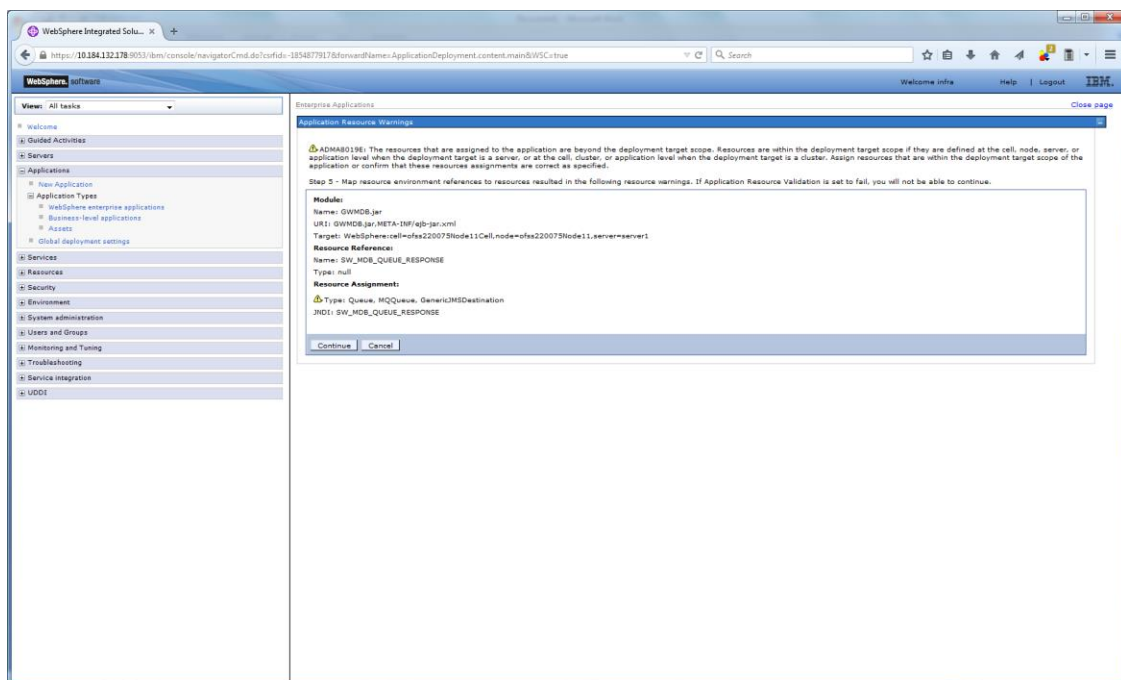
12. Enter the details as shown and click next.



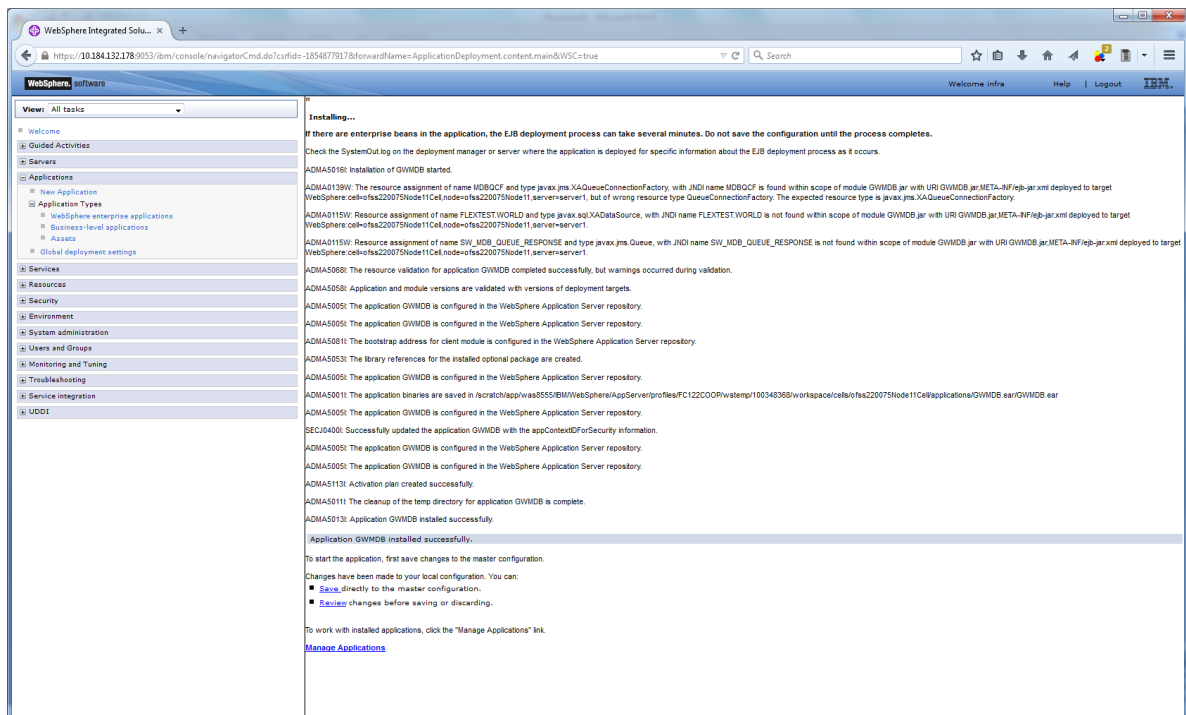
13. Click on continue and following screen is displayed.



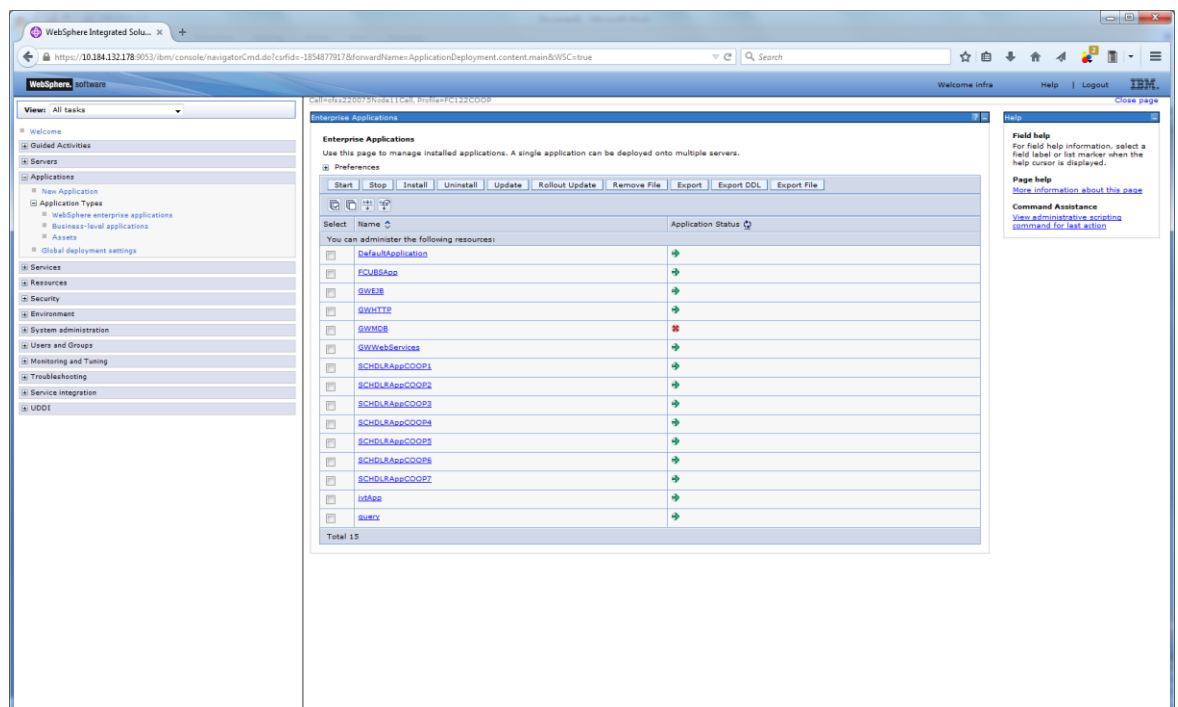
14. Give necessary details as shown and click next.



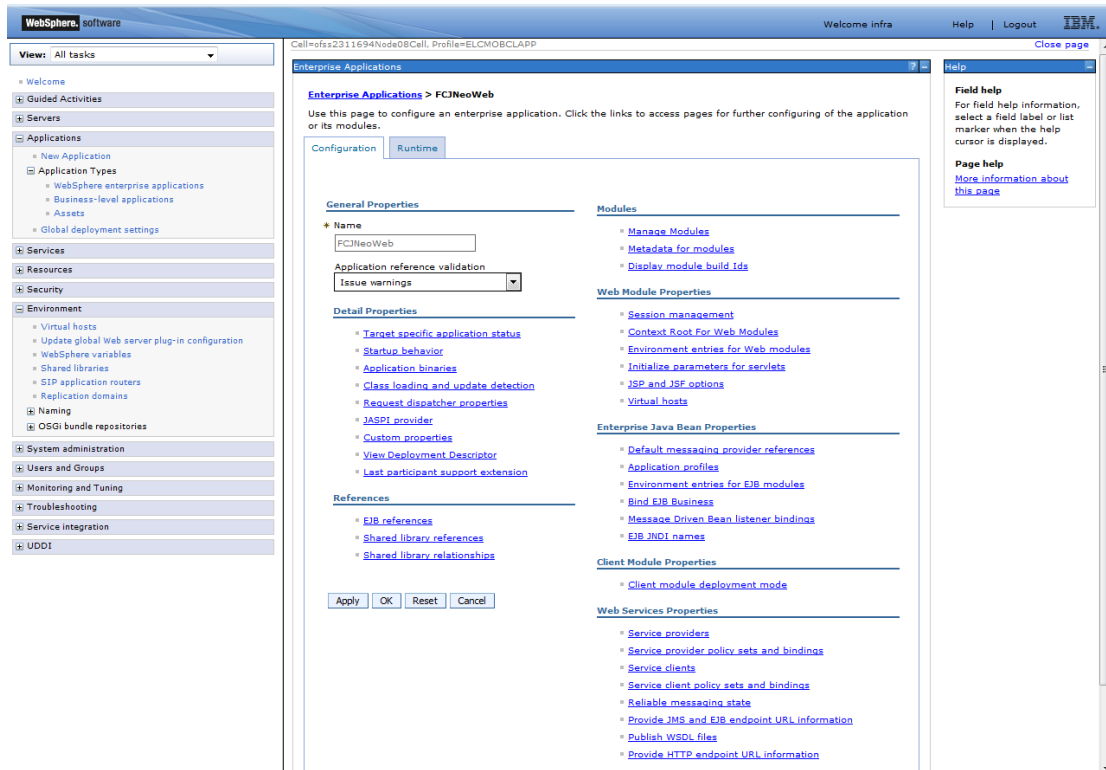
15. Click on continue and below screen is displayed.



18. Click on save and following screen is displayed.

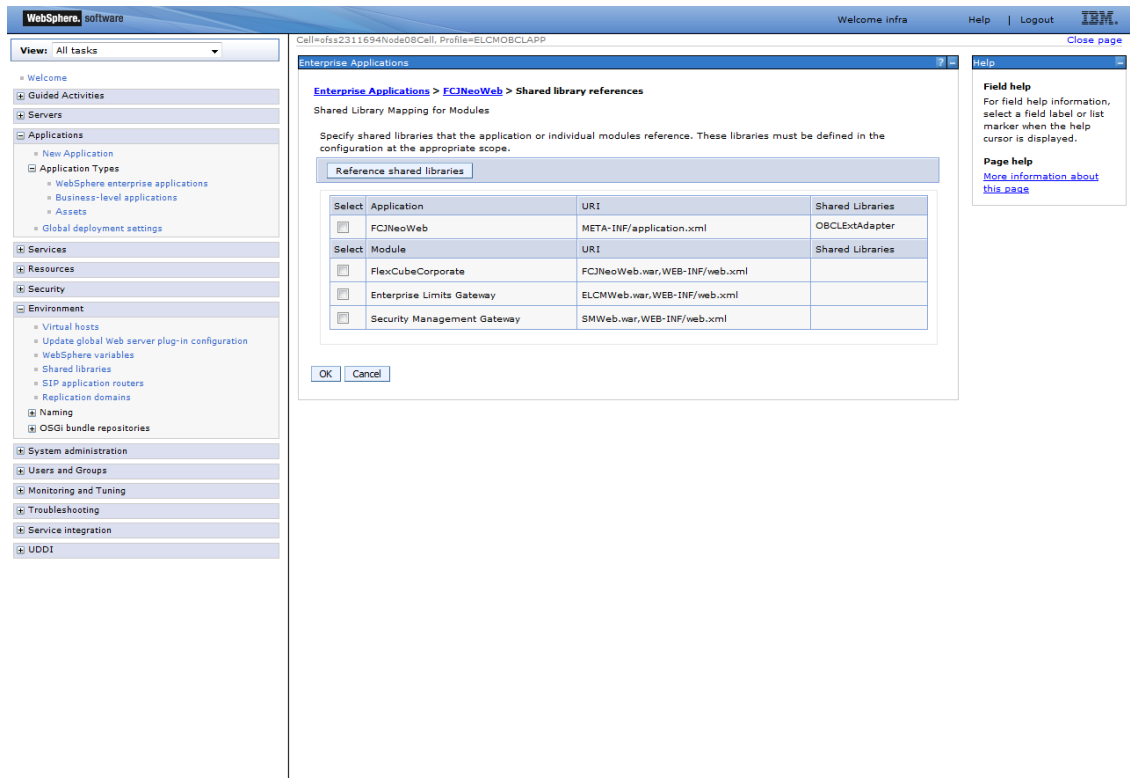


19. Click on installed FCUBS Application and the following screen is displayed.



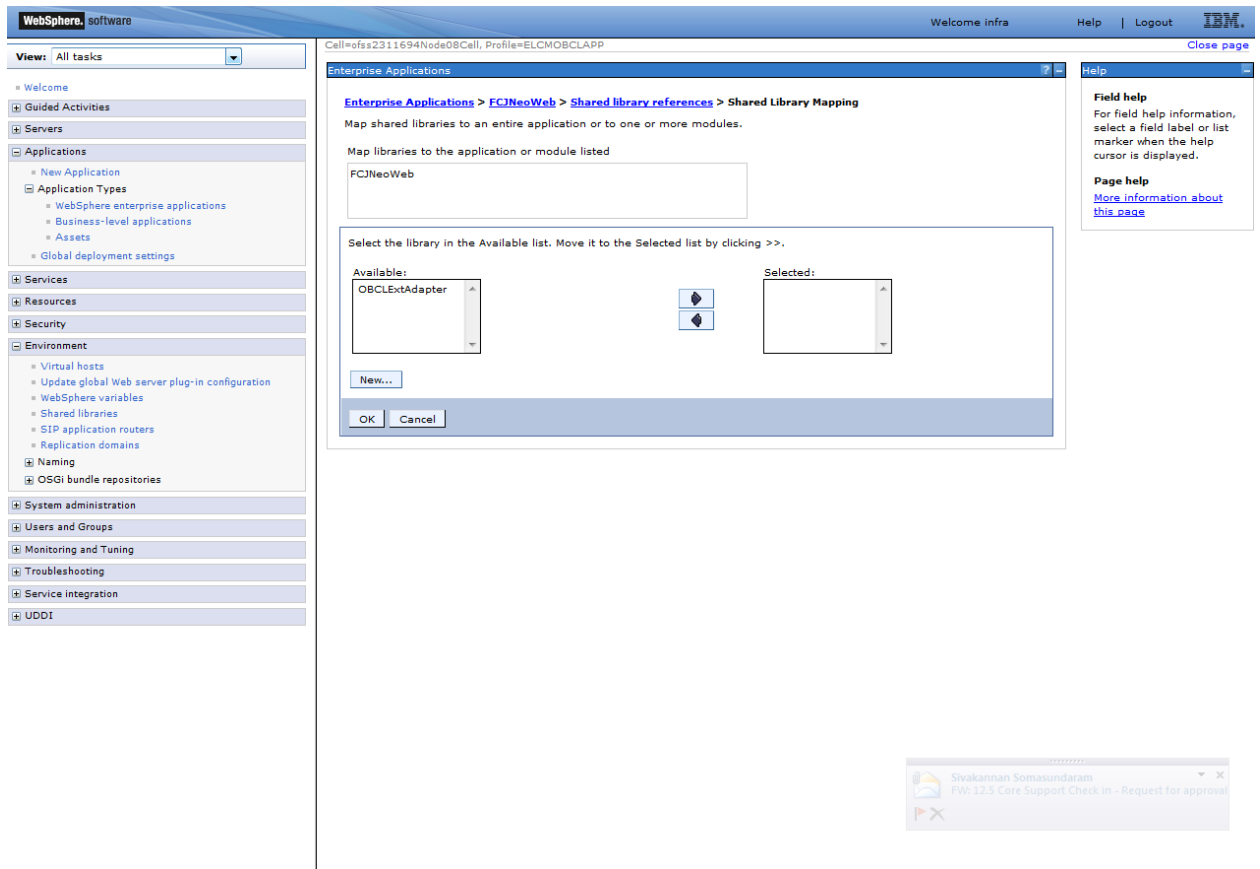
20. Click 'Shared library references' under 'References'.

The following screen is displayed.



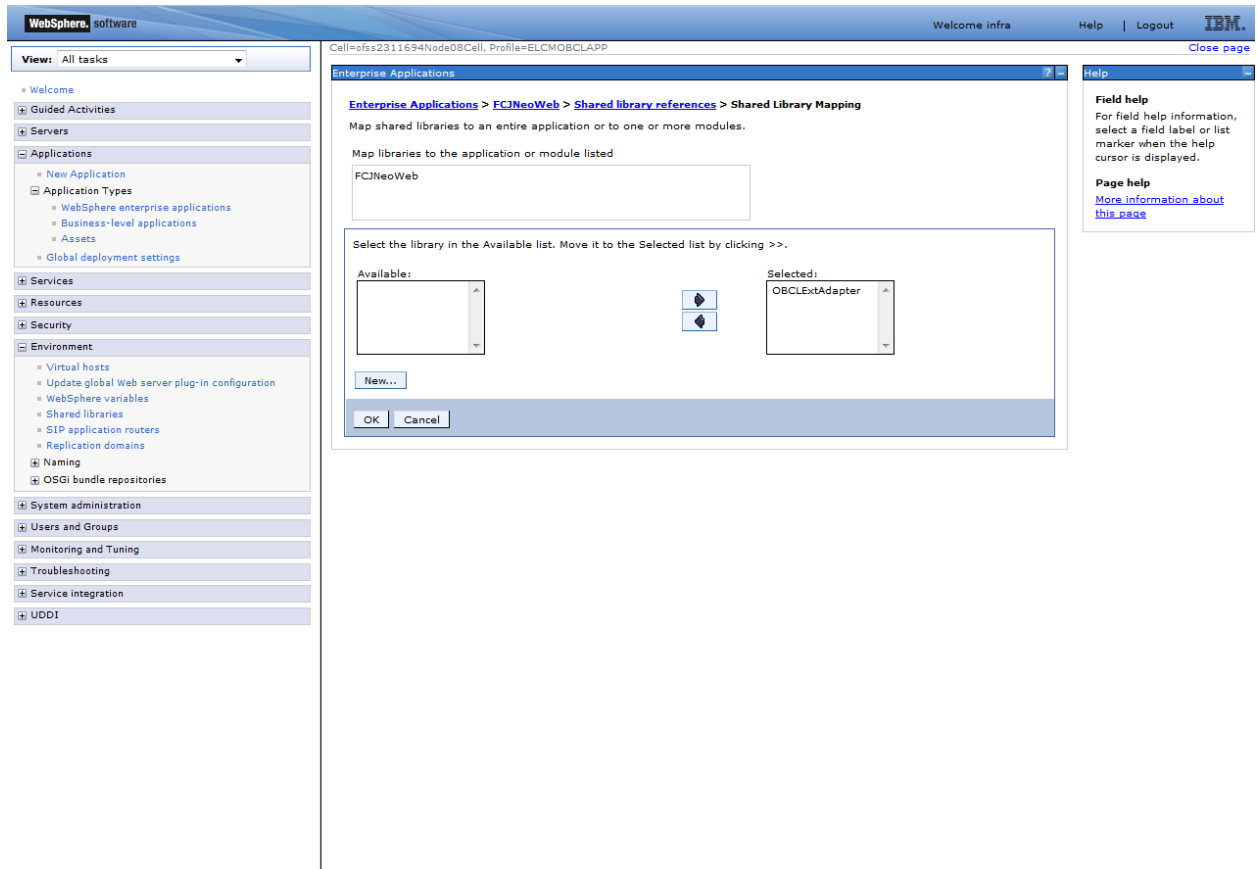
21. Select your Application and click 'Reference Shared Library'.

The following screen is displayed.



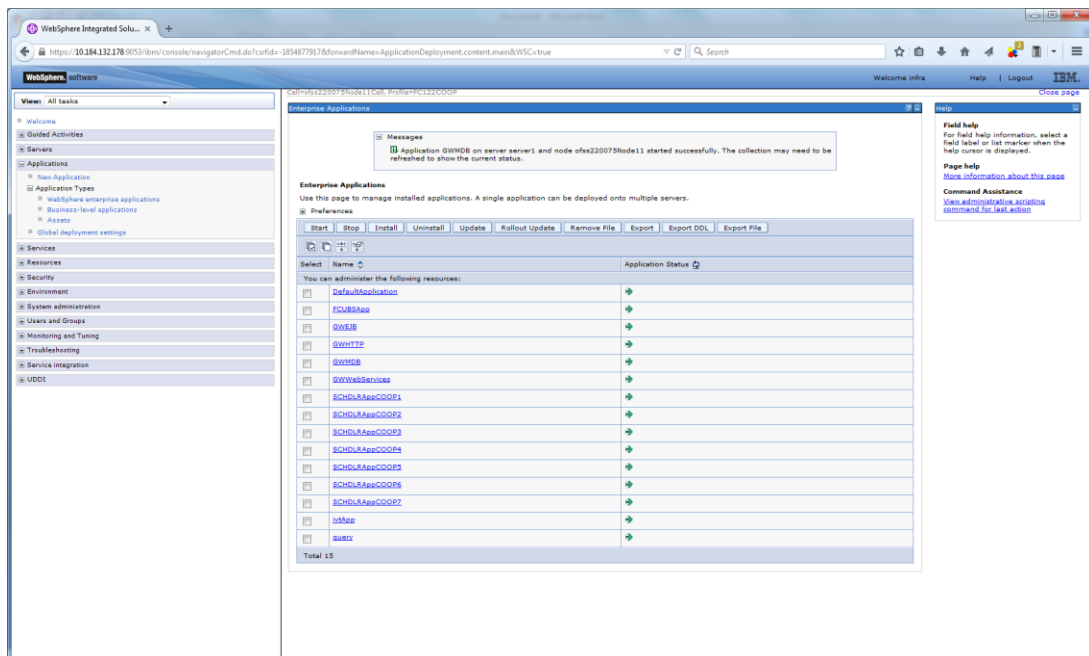
22. Click on right arrow button to add Available shared library reference.

The following screen is displayed.



23. .Click 'OK' and 'Save' the changes.

24. Select the deployed EAR and click 'Start'.



MDB EAR deployment is successfully finished.

1.2.7 FCUBS HTTP Application Deployment

To deploy Oracle FLEXCUBE UBS application on WebSphere application server, follow the steps given below:

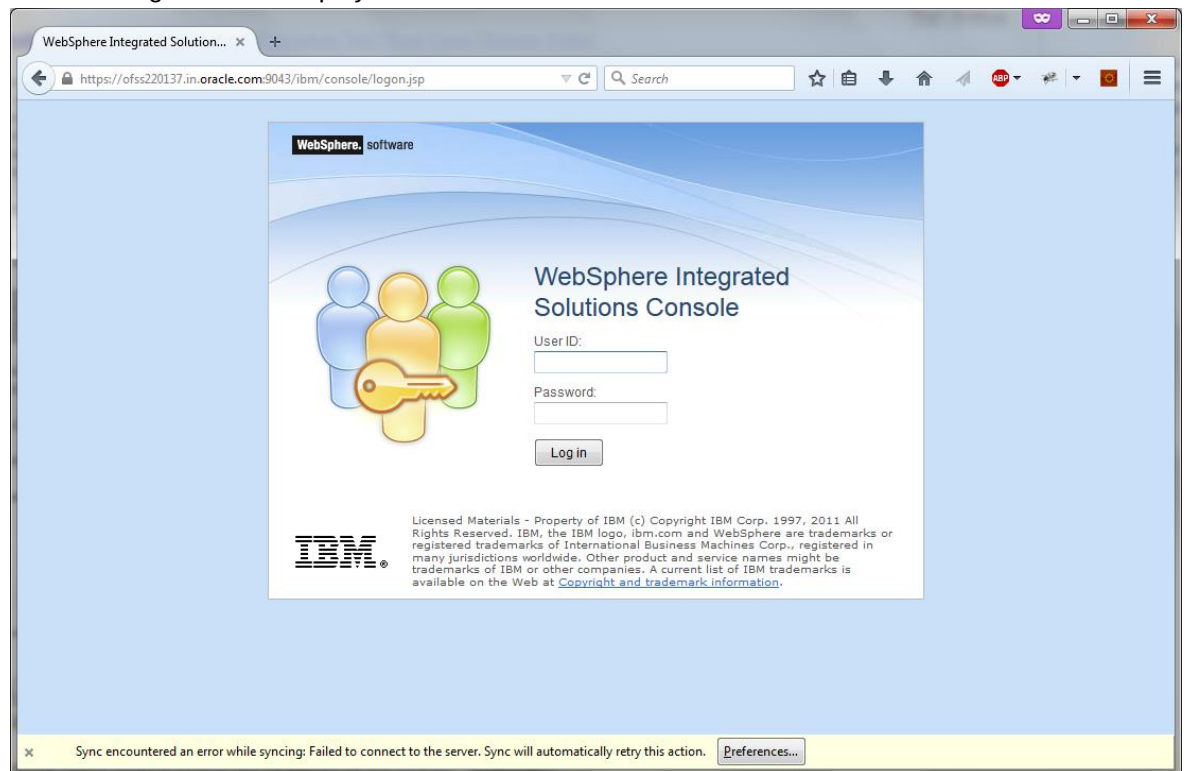
1. Open the Administrative Console of WebSphere server:

Open an internet browser and type the WebSphere Admin Console URL
`http://{Host}:{Port}/console`.

Eg: `https://10.10.10.10:1010/console`

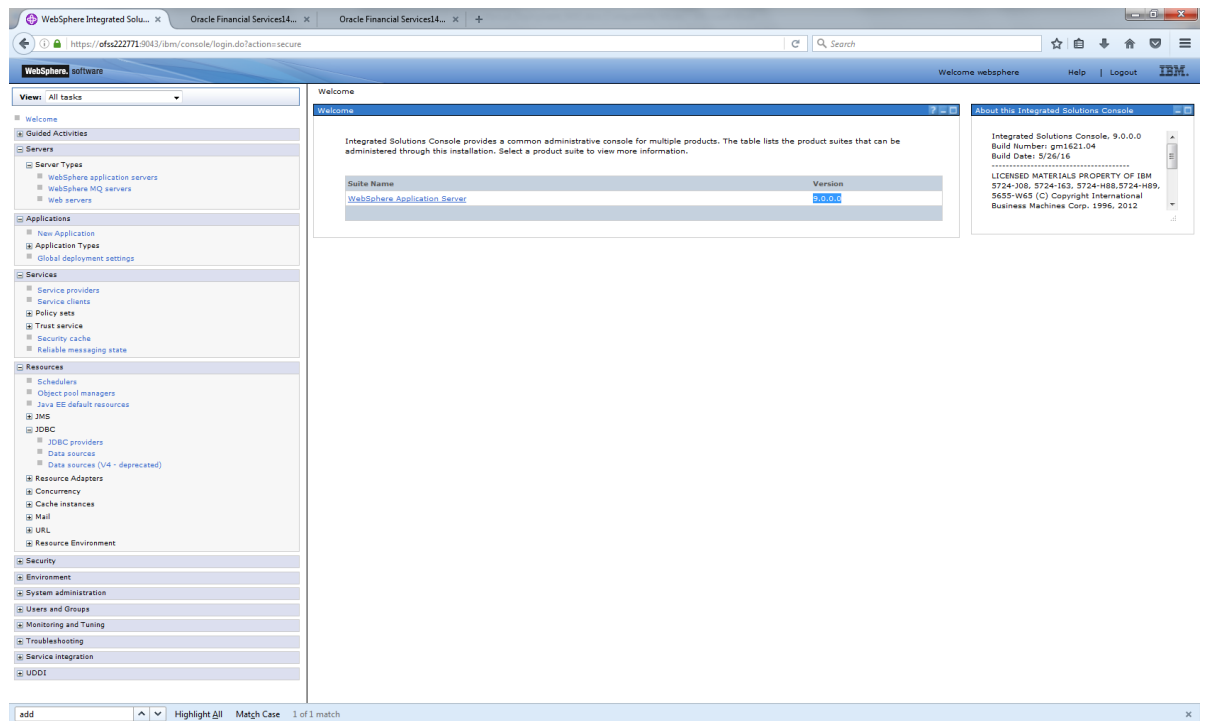
In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

The following screen is displayed:



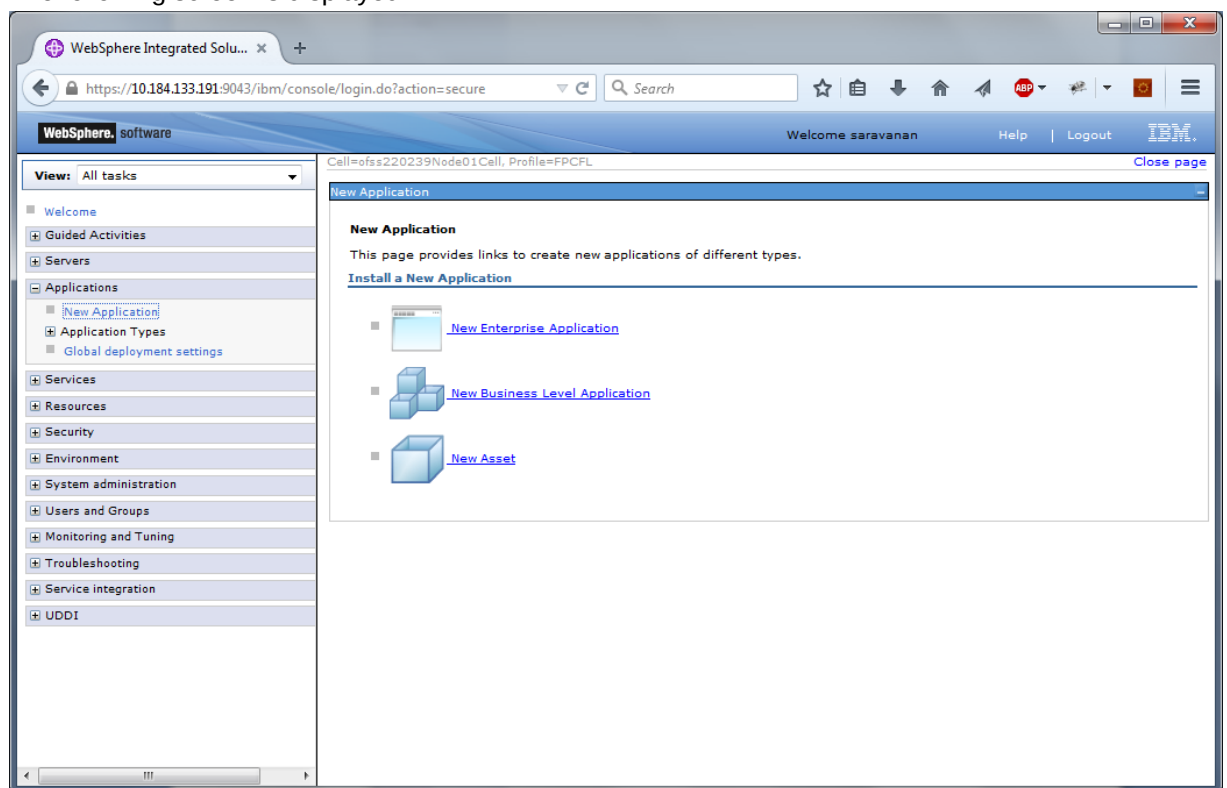
2. Enter the user name and password and click 'Log In' to log in to the application server.
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

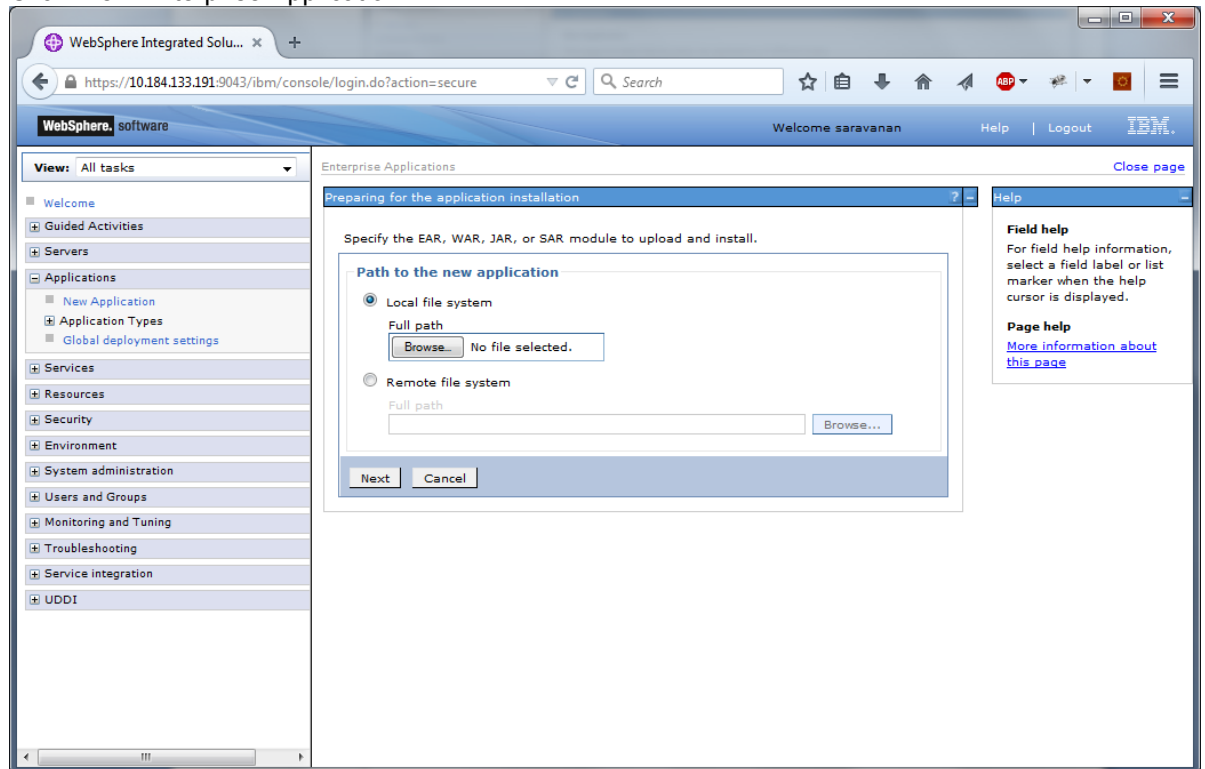


4. Expand Applications from left-side menu and Click 'New Application'.

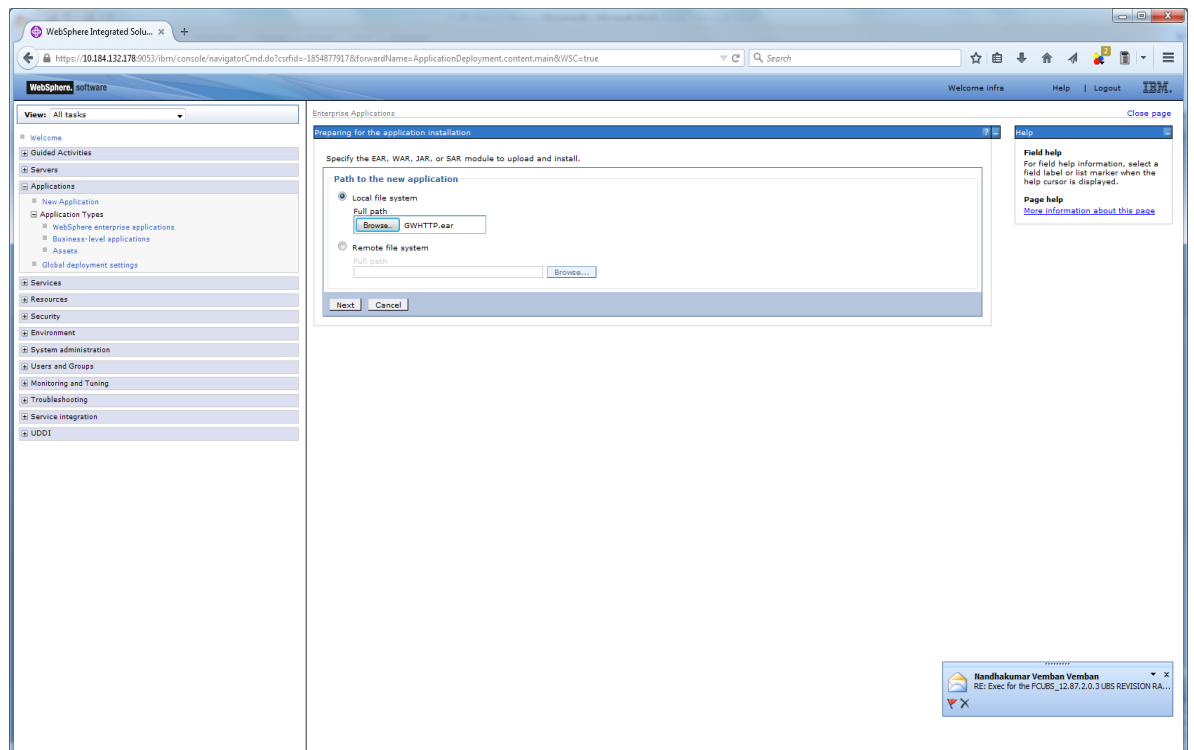
The following screen is displayed.



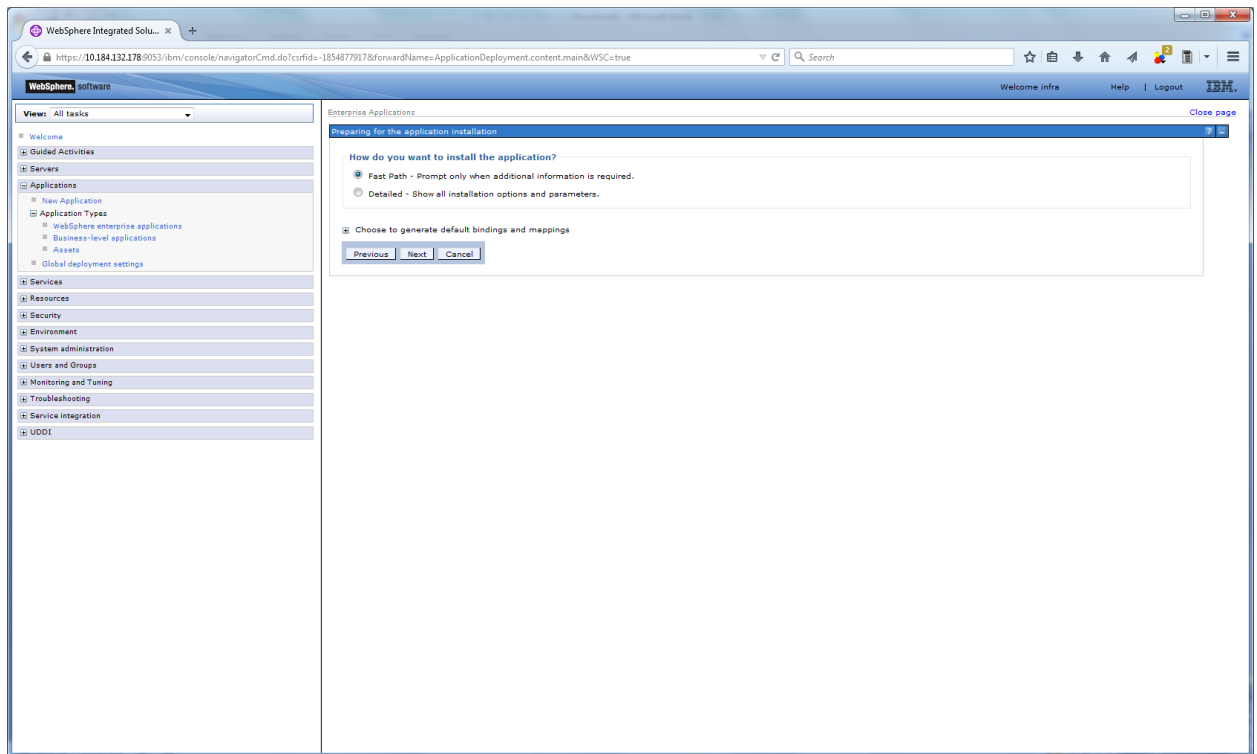
5. Click 'New Enterprise Application.'



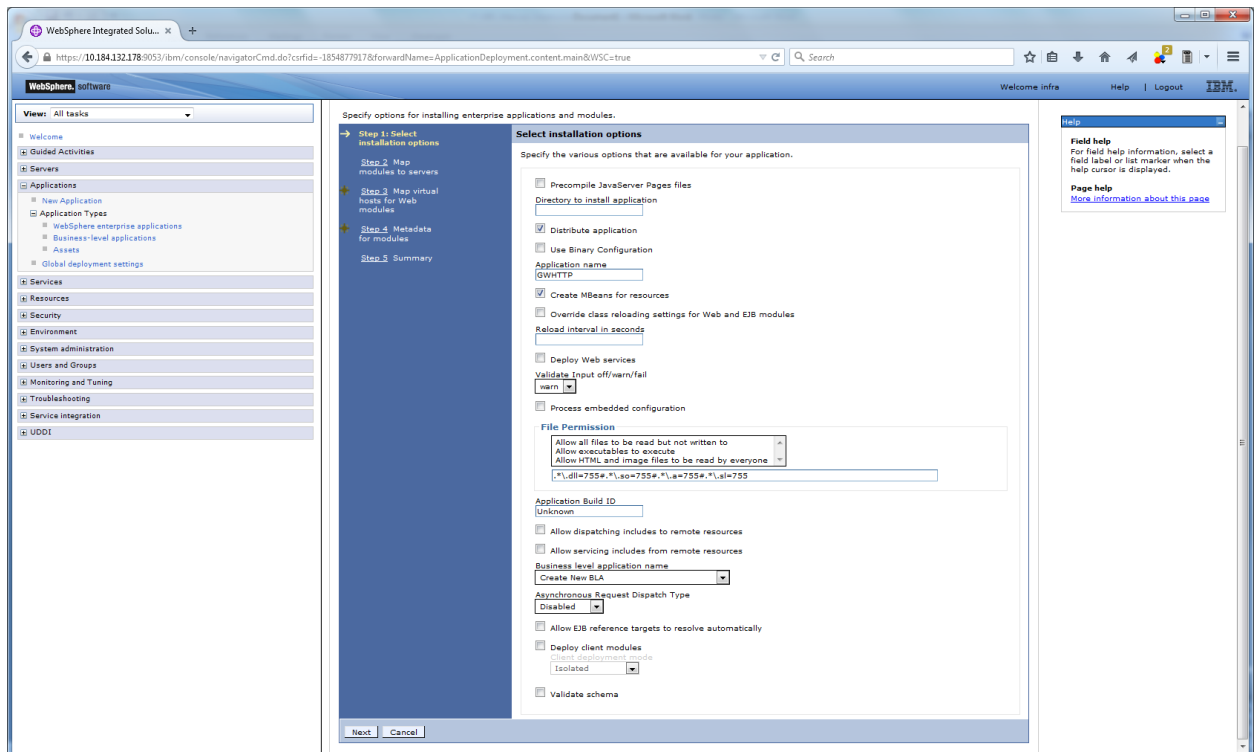
6. Browse the application EAR file and click next button



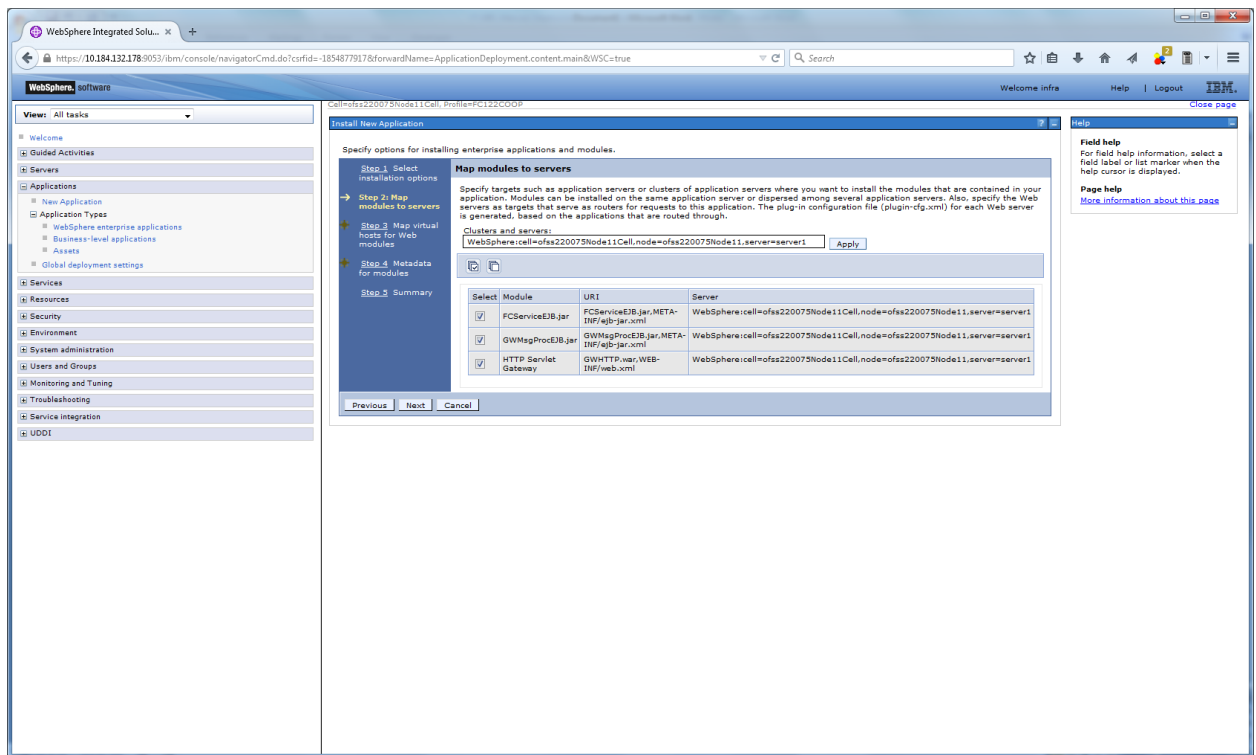
7. Click next and the following screen is displayed.



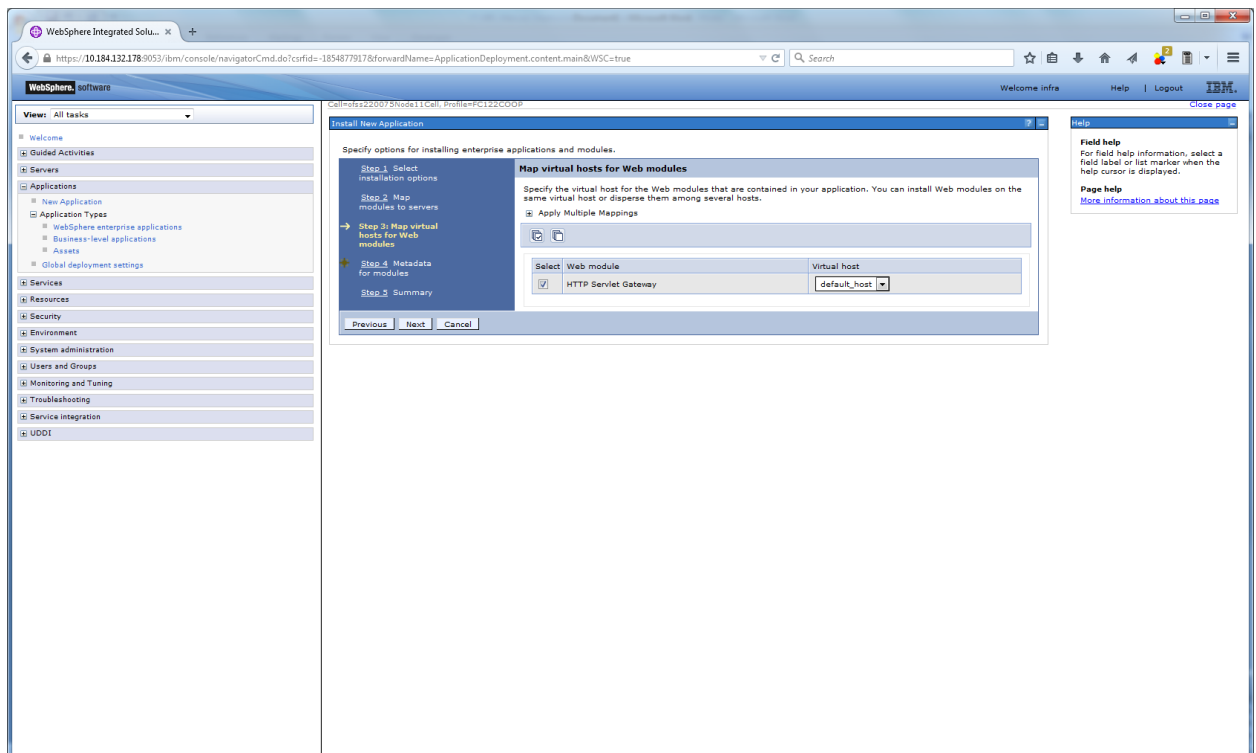
8. Click next and the following screen is displayed.



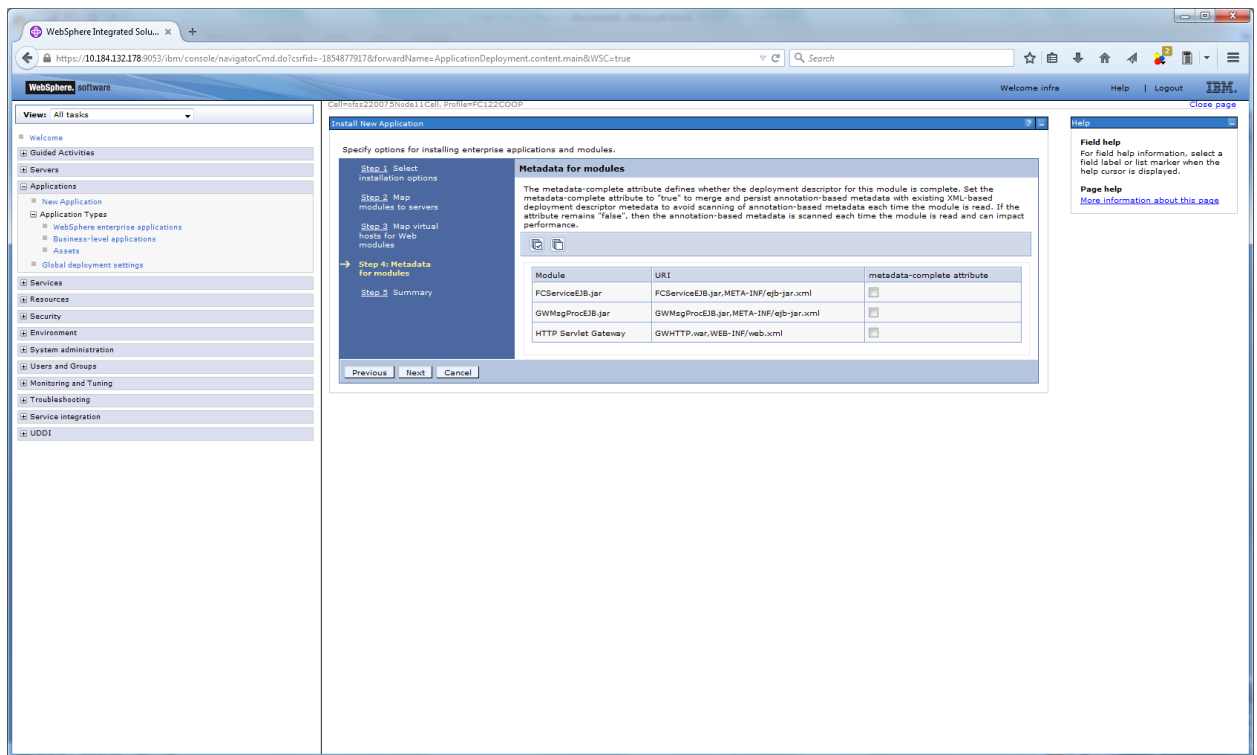
9. Click next and the following screen is displayed.



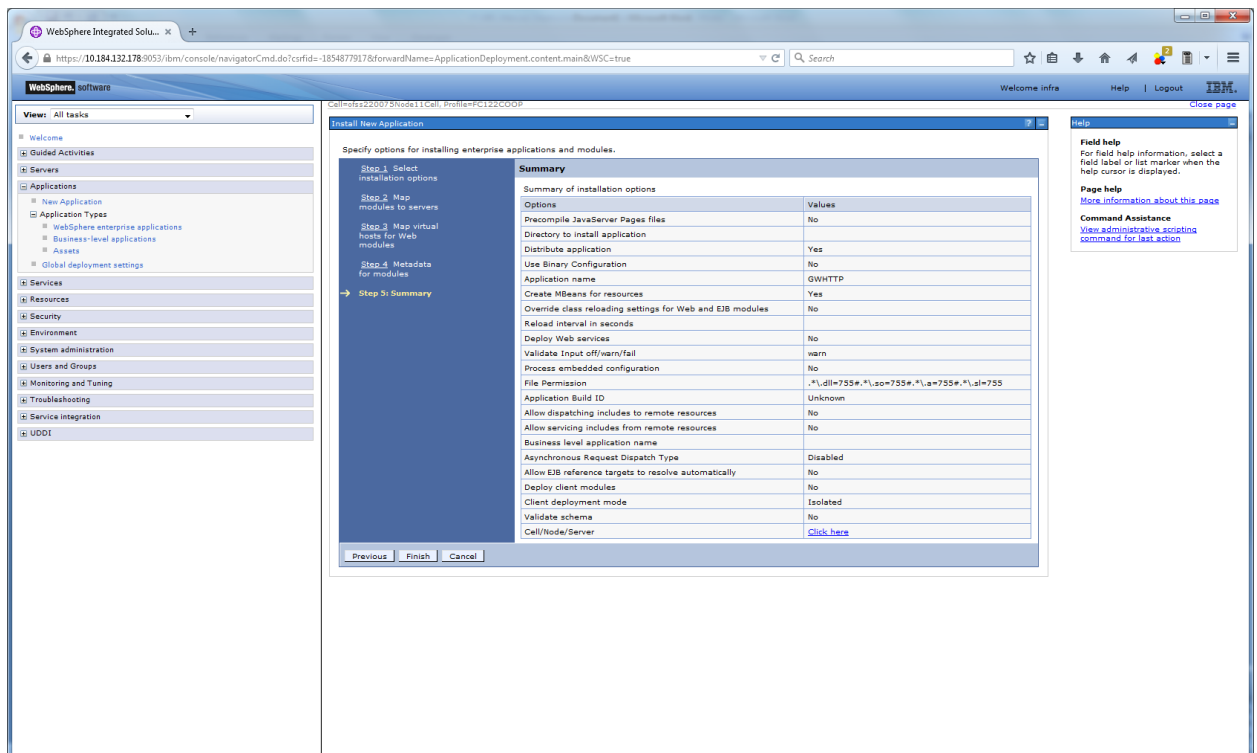
10. Click next and the following screen is displayed.



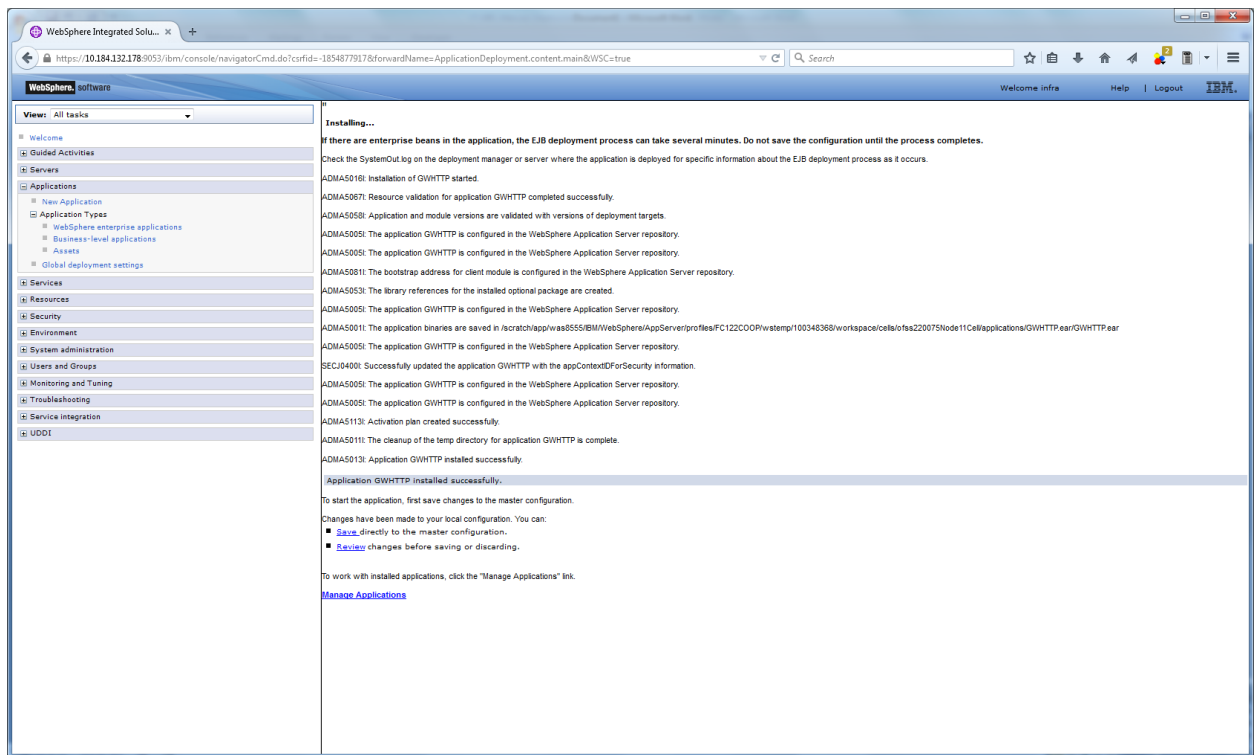
11. Click next and the following screen is displayed.



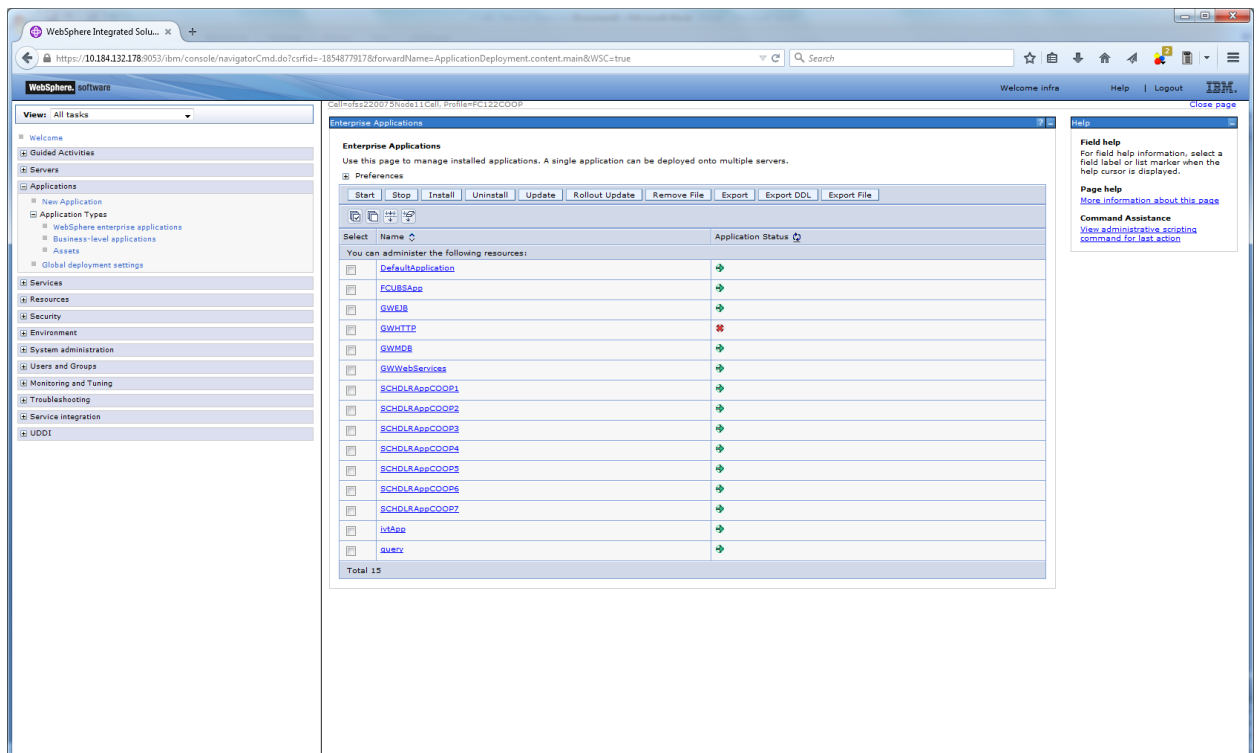
12. Click next and the following screen is displayed.



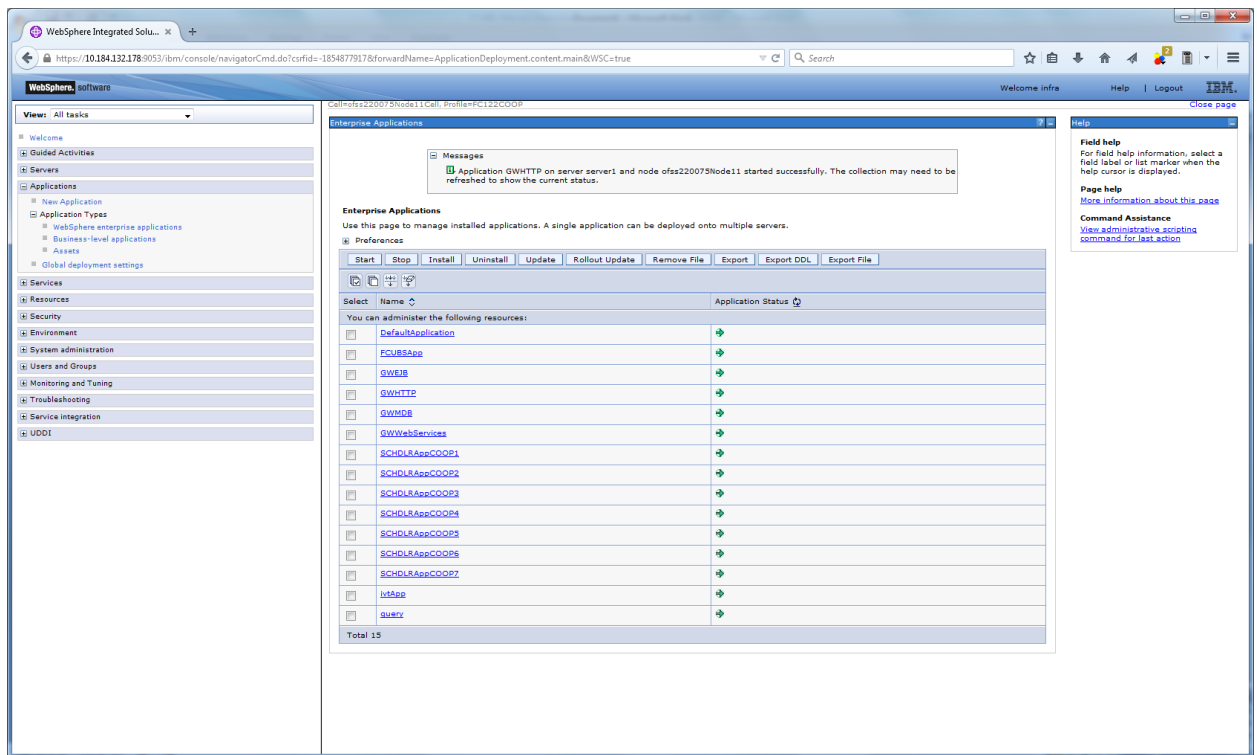
13. Click on finish and the following screen is displayed.



14. Click on save and the following screen is displayed.



15. Select the installed application and click on start.



GWHTTP application has been deployed successfully.

1.2.8 **FCUBS GWWebServices Application Deployment**

To deploy Oracle FLEXCUBE UBS application on WebSphere application server, follow the steps given below:

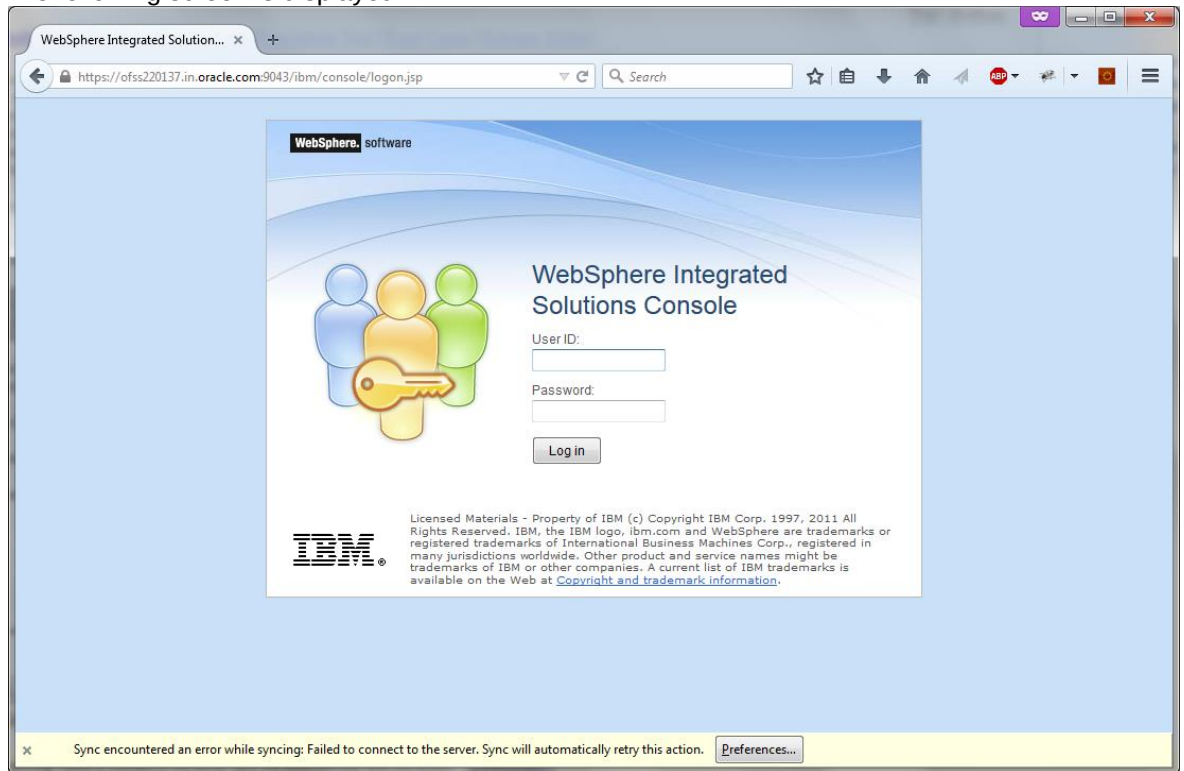
1. Open the Administrative Console of WebSphere server:

Open an internet browser and type the WebSphere Admin Console URL
`http://{Host}:{Port}/console`.

Eg: `https://10.10.10.10:1010/console`

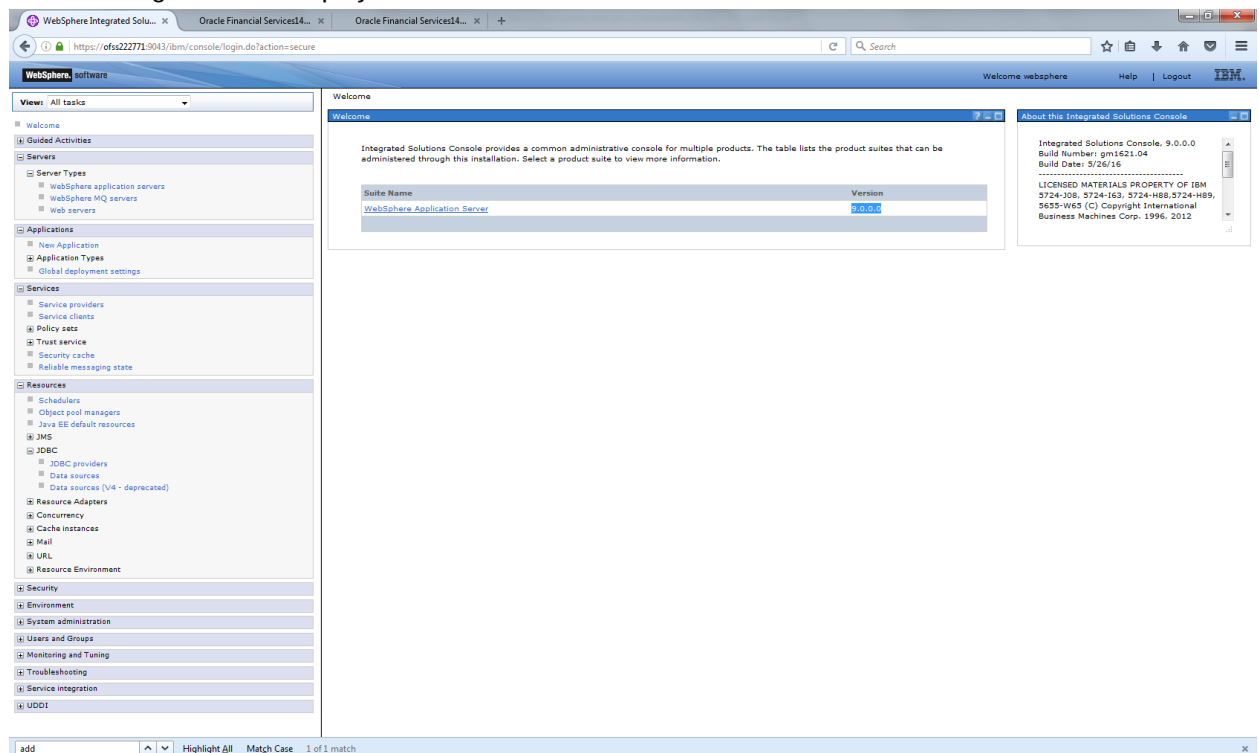
In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

The following screen is displayed:



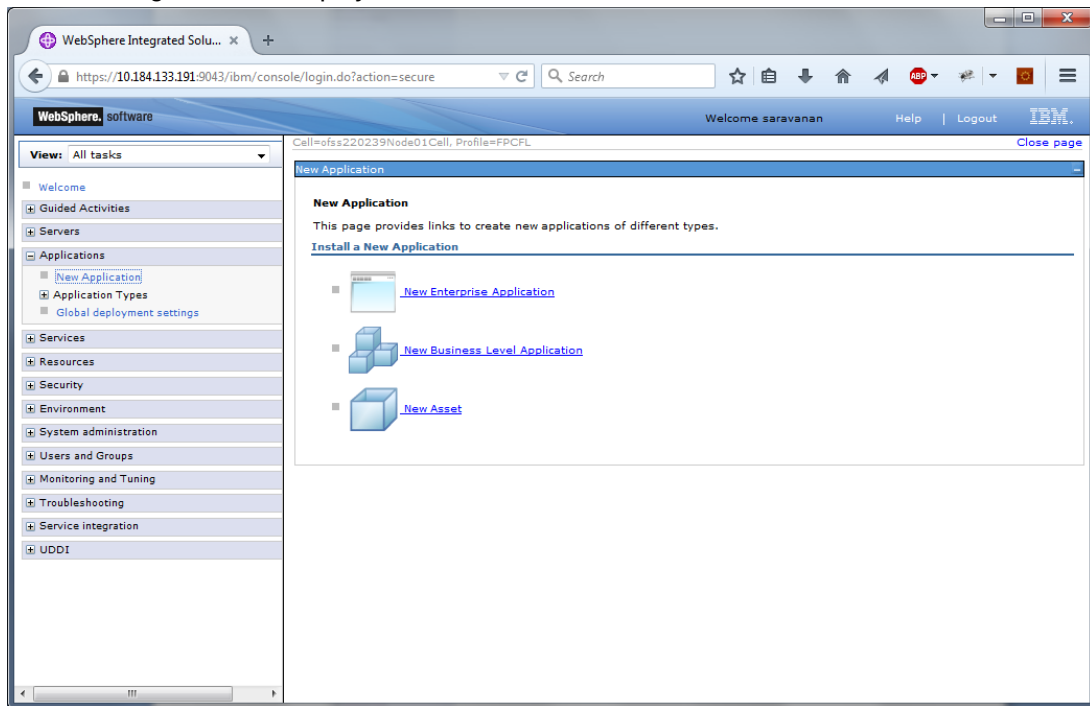
2. Enter the user name and password and click 'Log In' to log in to the application server.
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

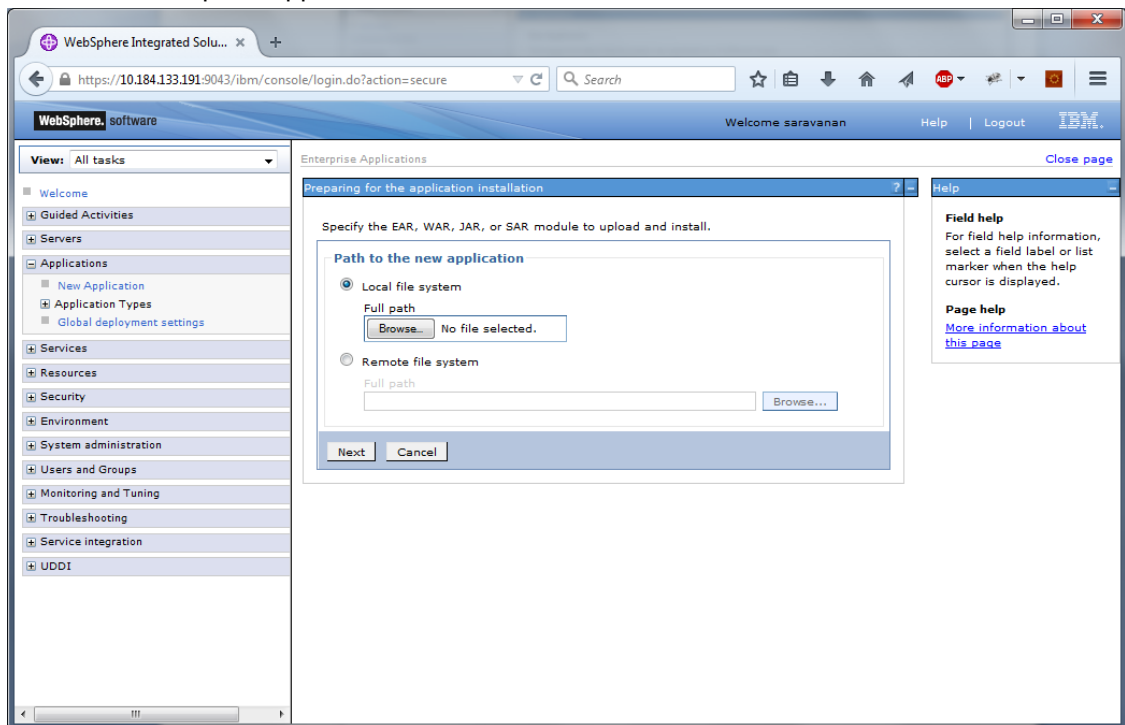


4. Expand Applications from left-side menu and Click 'New Application'.

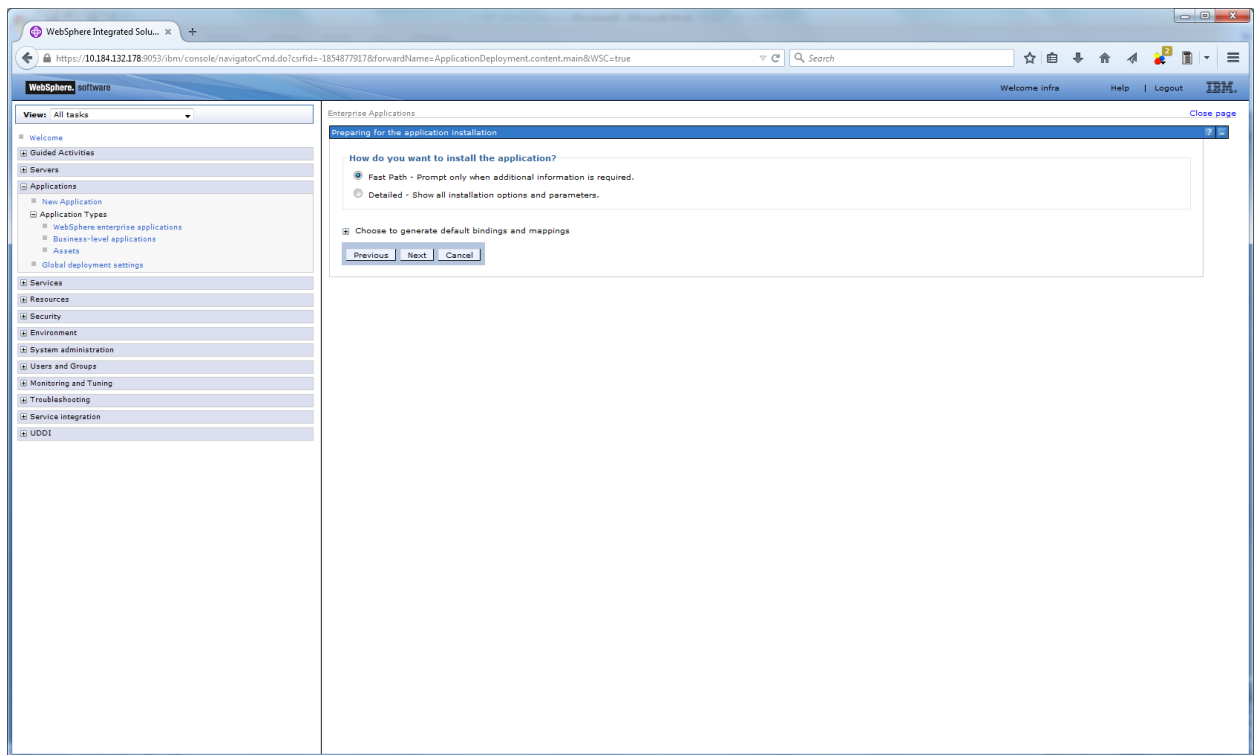
The following screen is displayed.



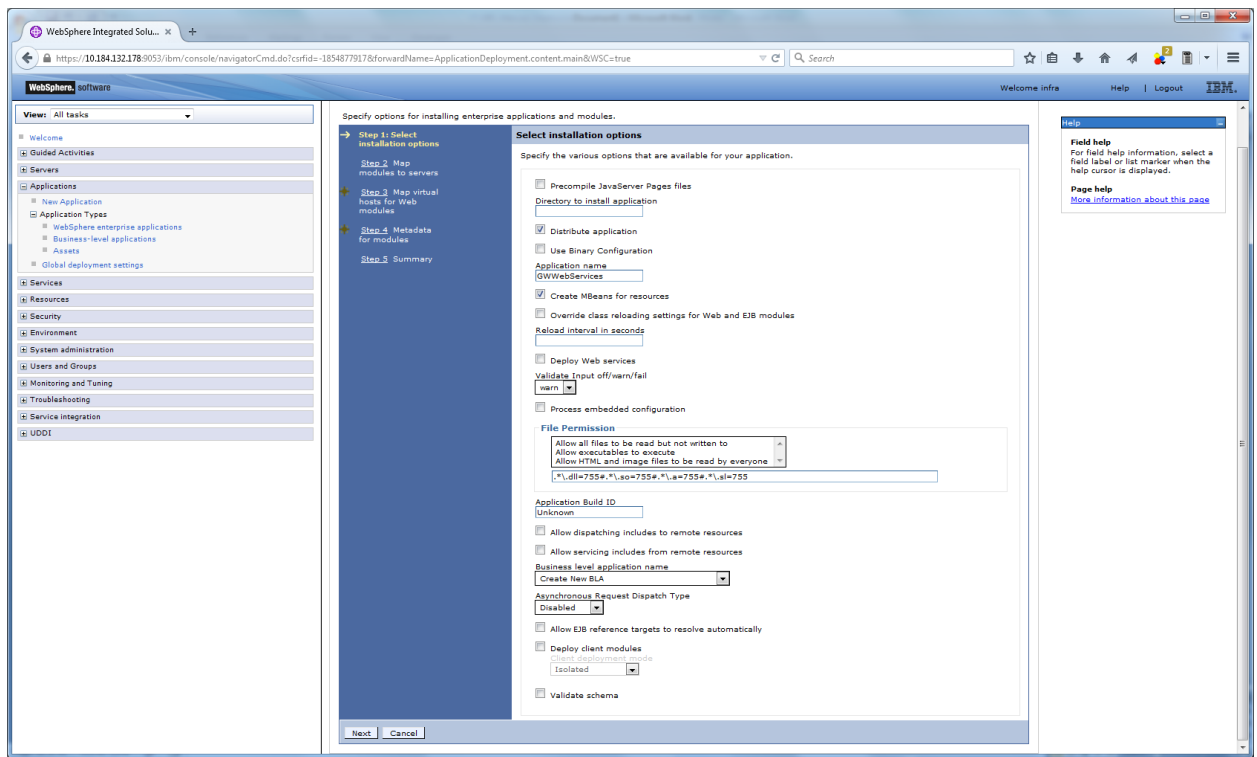
5. Click 'New Enterprise Application'.



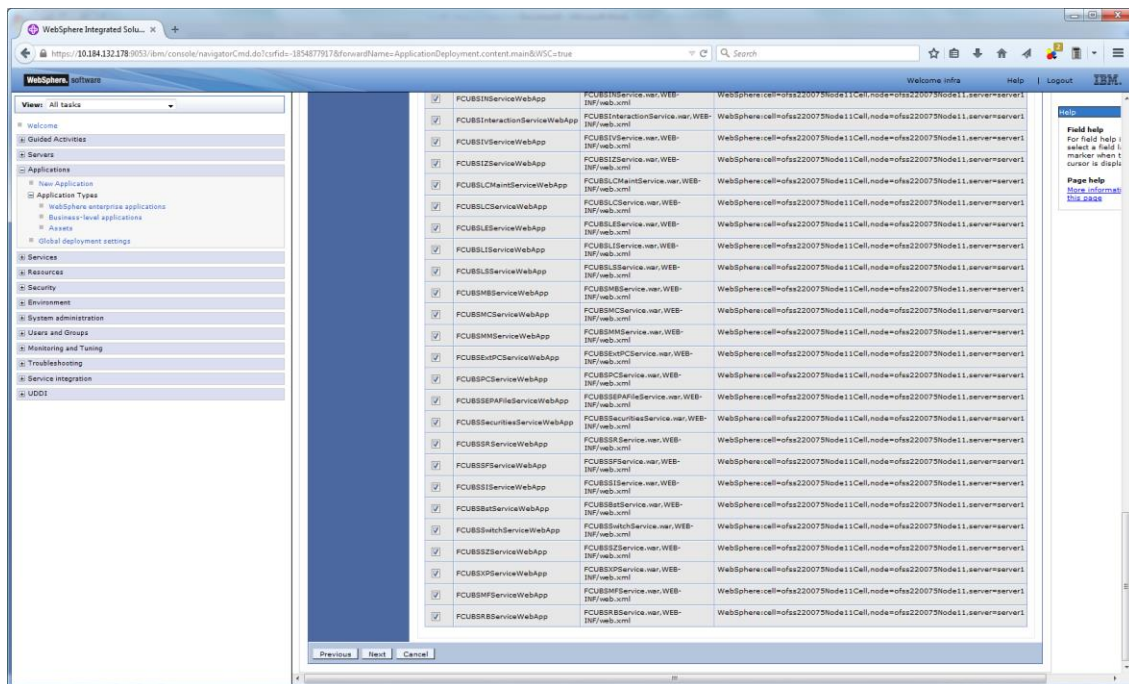
6. Browse the application EAR file and click next button.



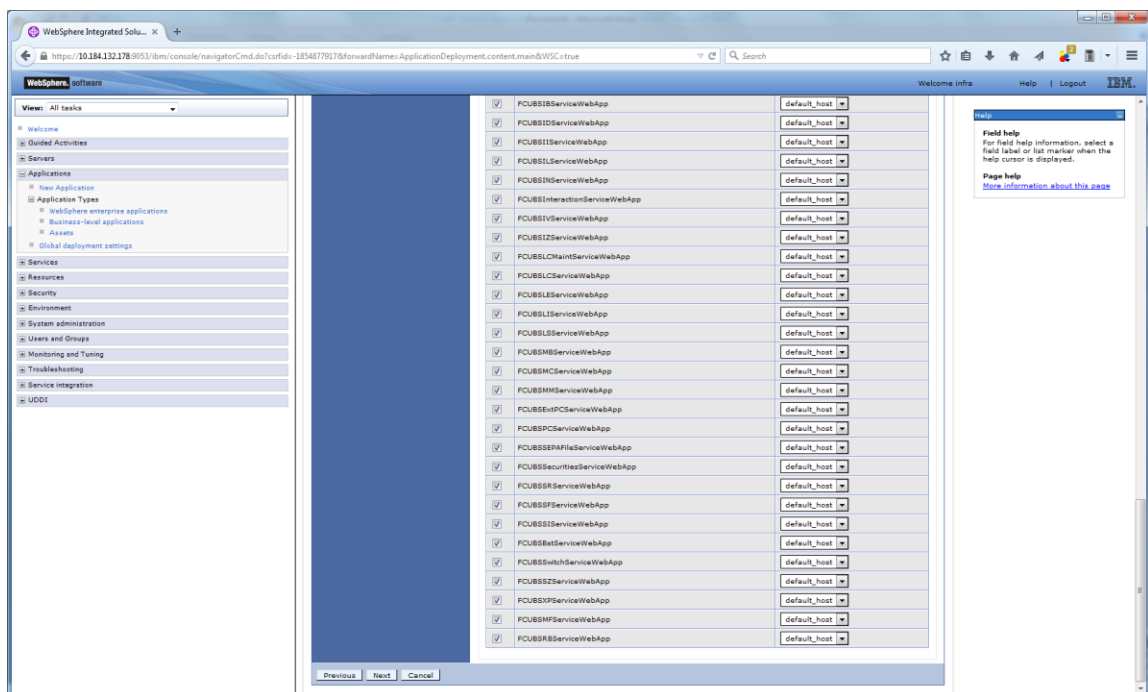
7. Click on next and the following screen is displayed.



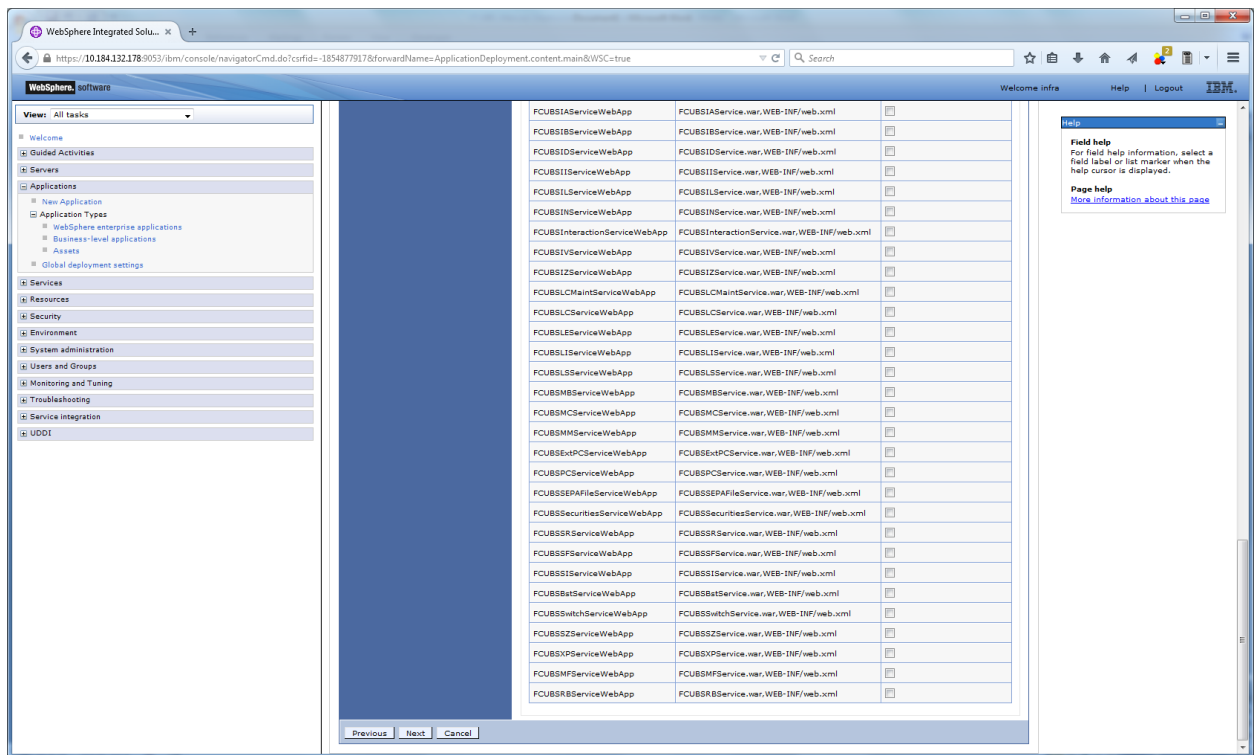
8. Click on next and the following screen is displayed.



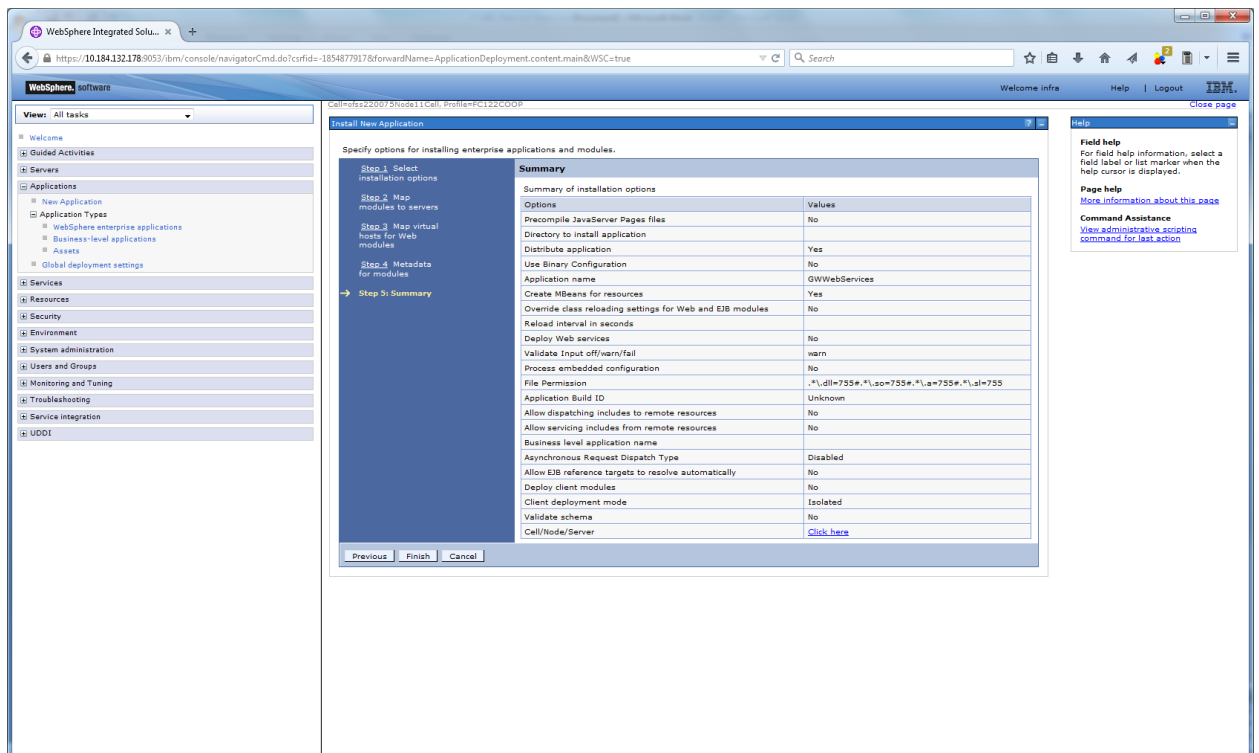
9. Click on next and the following screen is displayed.



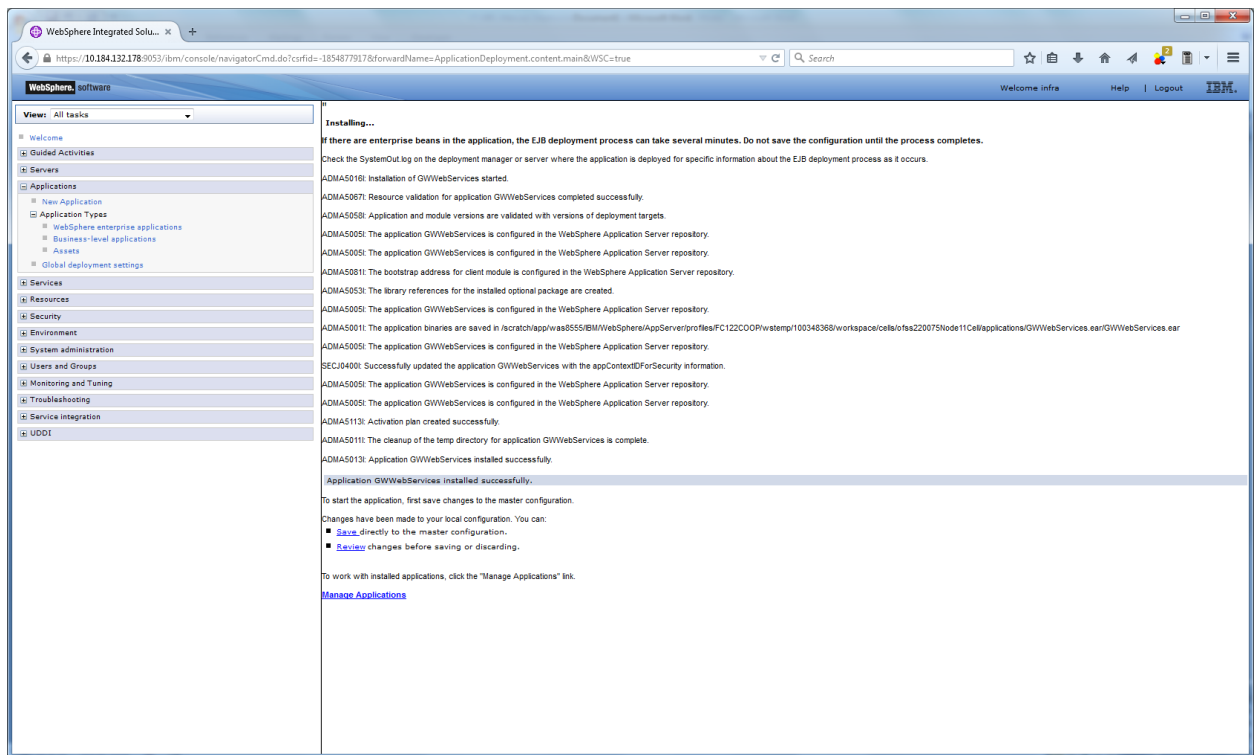
10. Click on next and the following screen is displayed.



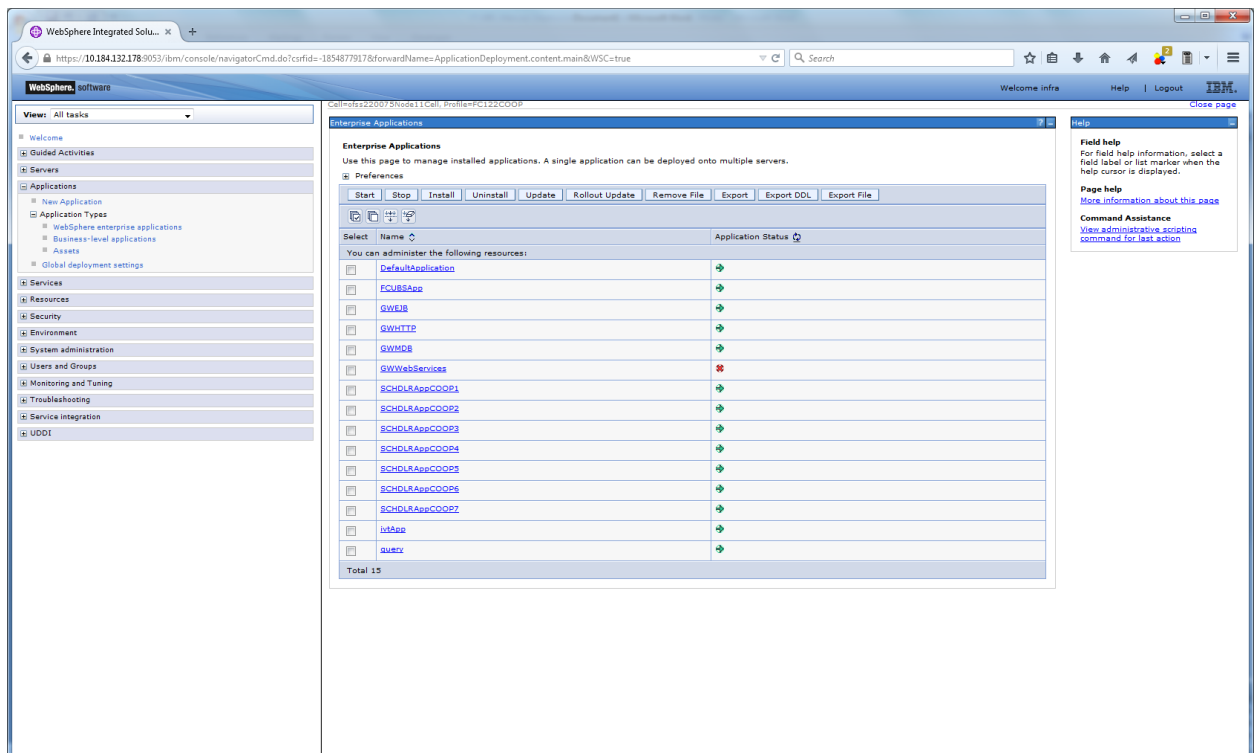
11. Click on next and the following screen is displayed.



12. Click on finish and the following screen displayed.



13. Click on save and the following screen is displayed.



The screenshot shows the IBM WebSphere Integrated Solutions console. The main content area is titled 'Enterprise Applications' and contains a message box stating: 'Application QWHTTP on server server1 and node ofss220073Node11 started successfully. The collection may need to be refreshed to show the current status.' Below this, there is a section for 'Enterprise Applications' with a description: 'Use this page to manage installed applications. A single application can be deployed onto multiple servers.' This section includes a 'Preferences' tab and a table of applications. The table has columns for 'Select', 'Name', and 'Application Status'. It lists 15 applications, including 'DefaultApplication', 'FCUBSApp', 'QWEJB', 'QWHTTP', 'QWMSB', 'QWWebServices', and several 'SCHDLRAppCOOP' instances. The left sidebar shows the navigation tree with 'Applications' selected. The top navigation bar includes 'Welcome infra', 'Help', and 'Logout'.

Select	Name	Application Status
☐	DefaultApplication	➔
☐	FCUBSApp	➔
☐	QWEJB	➔
☐	QWHTTP	➔
☐	QWMSB	➔
☐	QWWebServices	➔
☐	SCHDLRAppCOOP1	➔
☐	SCHDLRAppCOOP2	➔
☐	SCHDLRAppCOOP3	➔
☐	SCHDLRAppCOOP4	➔
☐	SCHDLRAppCOOP5	➔
☐	SCHDLRAppCOOP6	➔
☐	SCHDLRAppCOOP7	➔
☐	IntApp	➔
☐	IntECV	➔

Total 15



Deploying Oracle FLEXCUBE on WebSphere
[Aug] [2022]
Version 14.6.1.0.0

Oracle Financial Services Software Limited
Oracle Park
Off Western Express Highway
Goregaon (East)
Mumbai, Maharashtra 400 063
India

Worldwide Inquiries:
Phone: +91 22 6718 3000
Fax: +91 22 6718 3001
<https://www.oracle.com/industries/financial-services/index.html>

Copyright © [2007], [2022], Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

