

Deploying Oracle FLEXCUBE Application on WebSphere  
Oracle FLEXCUBE Universal Banking  
Release 14.3.0.0.0  
[May] [2019]



---

# Table of Contents

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

---

# 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.

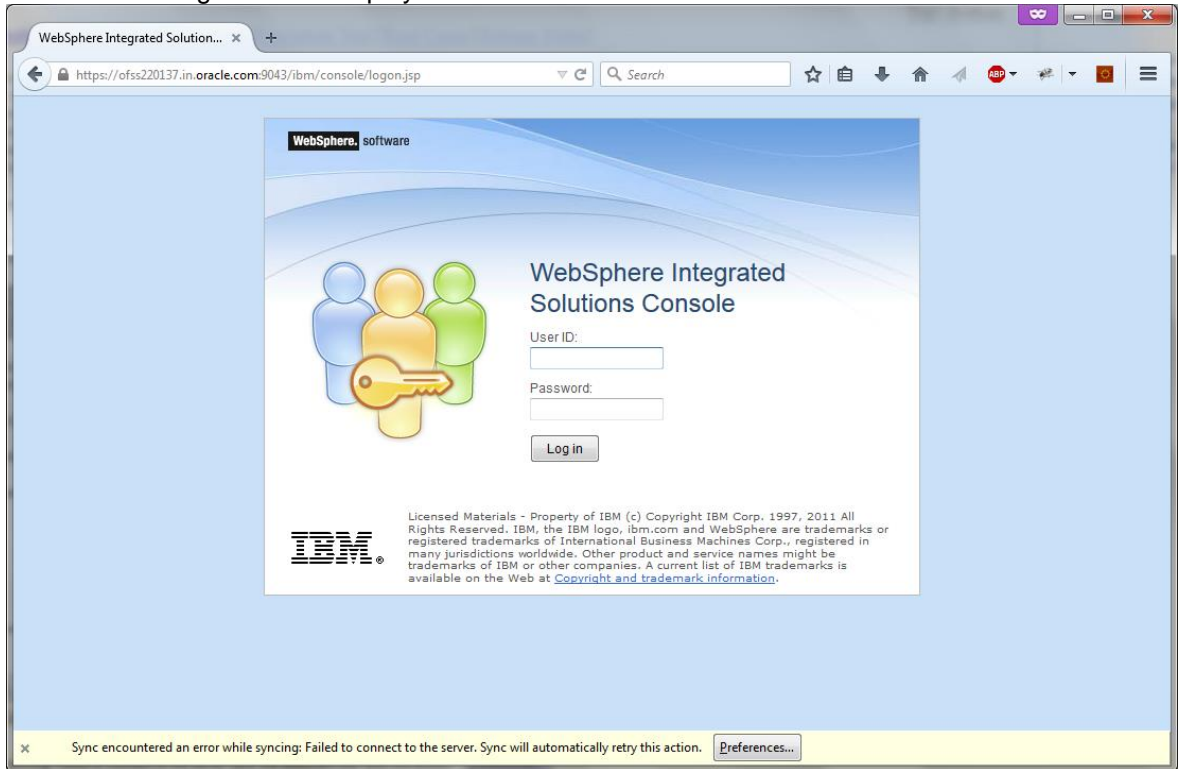
## 1.2 Deploying Application

### 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:

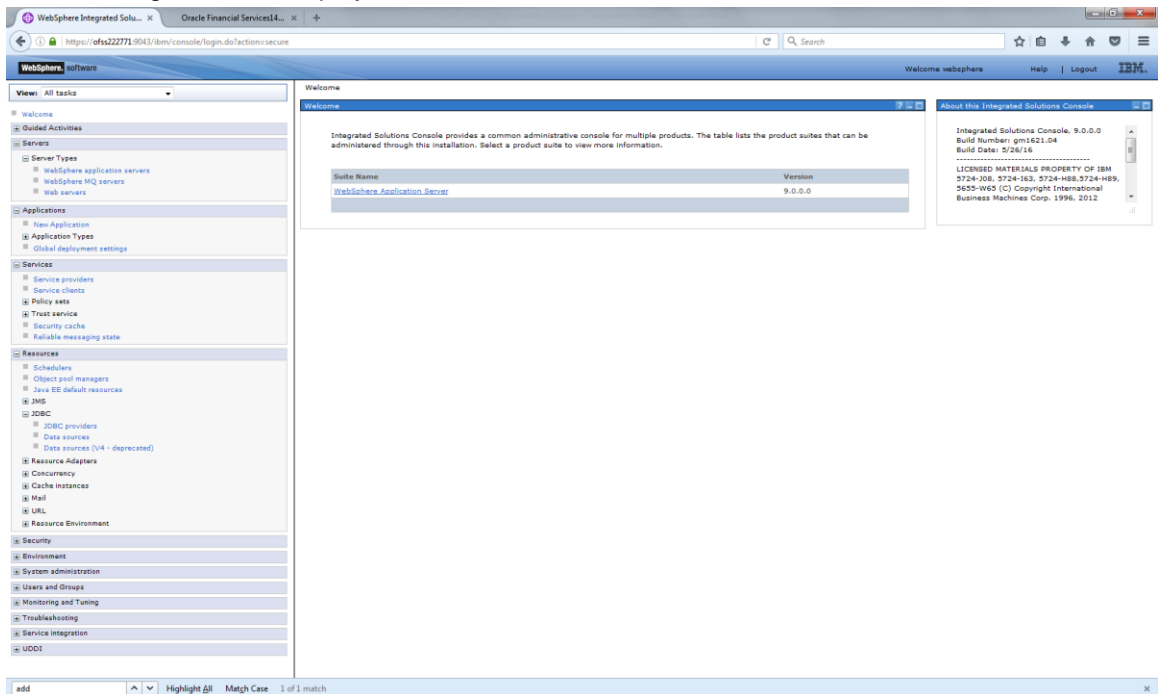
1. Copy Generated Integration Adapter (OBCLExtAdapter.jar or ExtAdapter.jar) to WebSphere Application server {Was\_profile}/Extadapter. Eg:  
/scratch/IBM8559/WebSphere/AppServer/profiles/BGV8559\_01/Extadapter
2. Open the Administrative Console of WebSphere server:
  - Open an internet browser and type 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-hand navigation menu is expanded to the 'Environment' section, with 'Shared Libraries' selected. The main content area displays the configuration for a shared library. The scope is set to 'Cell=ofss2311694Node08Cell, Profile=ELCMO8CLAPP'. Below this, there is a dropdown menu showing the selected scope: 'Node=ofss2311694Node08, Server=server1'. The 'Preferences' section contains a table with one entry, 'OBCLExtAdapter'. The table has columns for 'Select', 'Name', and 'Description'. The 'Total' row shows 'Total 1'. On the right side, there is a 'Help' panel with sections for 'Field help', 'Page help', and 'Command Assistance'.

WebSphere, software

Welcome infra Help | Logout

Cell=ofss2311694Node08Cell, Profile=ELCMO8CLAPP

View: All tasks

Shared Libraries

**Shared Libraries**

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

Scope: Cell=ofss2311694Node08Cell, Profile=ELCMO8CLAPP, Server=server1

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.

Node=ofss2311694Node08, Server=server1

Preferences

New... Delete

Select	Name	Description
<input type="checkbox"/>	OBCLExtAdapter	

You can administer the following resources:

Total 1

**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](#)

**Command Assistance**  
[View administrative scripting command for last action](#)

7. Click on New

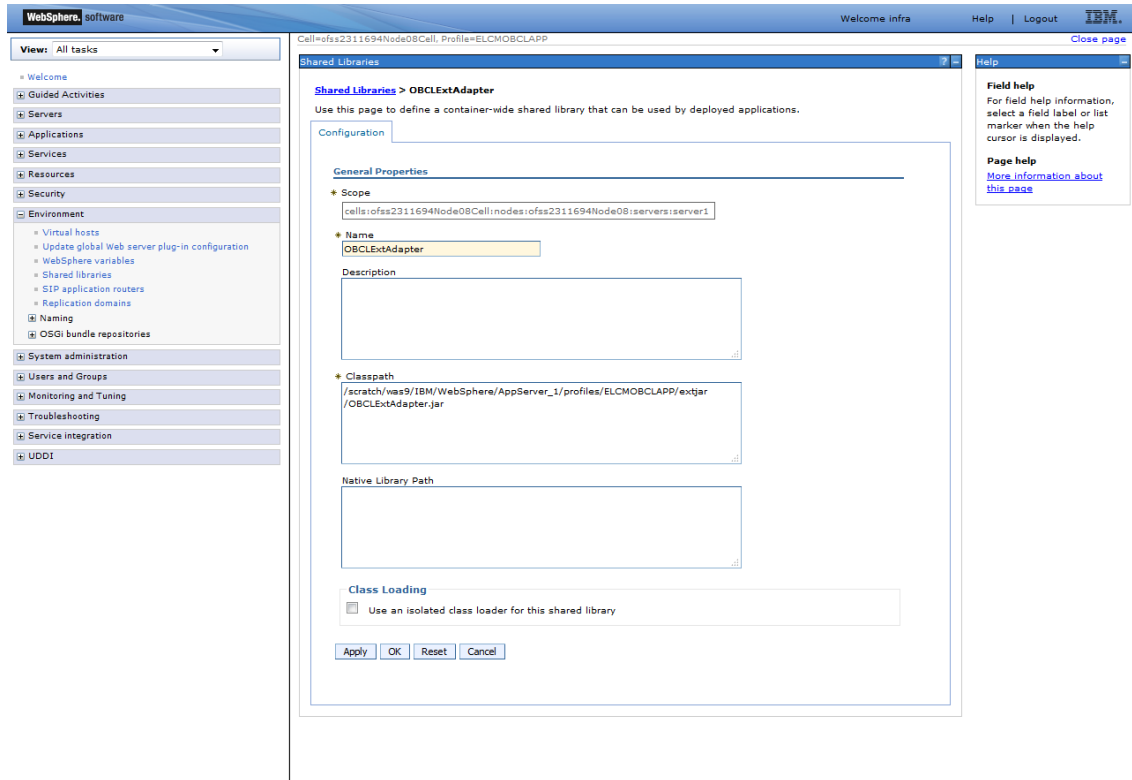
The following screen is displayed.

The screenshot displays the WebSphere Administration Console interface. The top header shows 'WebSphere, software' and 'Welcome infra'. The left navigation pane lists various administrative tasks. The main content area is titled 'Shared Libraries > New...' and contains a 'Configuration' section with the following fields:

- Scope:** cells:ofs2311694Node08Cell:nodes:ofs2311694Node08:servers:server1
- Name:** (empty text field)
- Description:** (empty text area)
- Classpath:** (empty text area)
- Native Library Path:** (empty text area)
- Class Loading:**  Use an isolated class loader for this shared library

At the bottom of the configuration area are buttons for 'Apply', 'OK', 'Reset', and 'Cancel'. A help panel on the right provides instructions on how to use field help.

- 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:

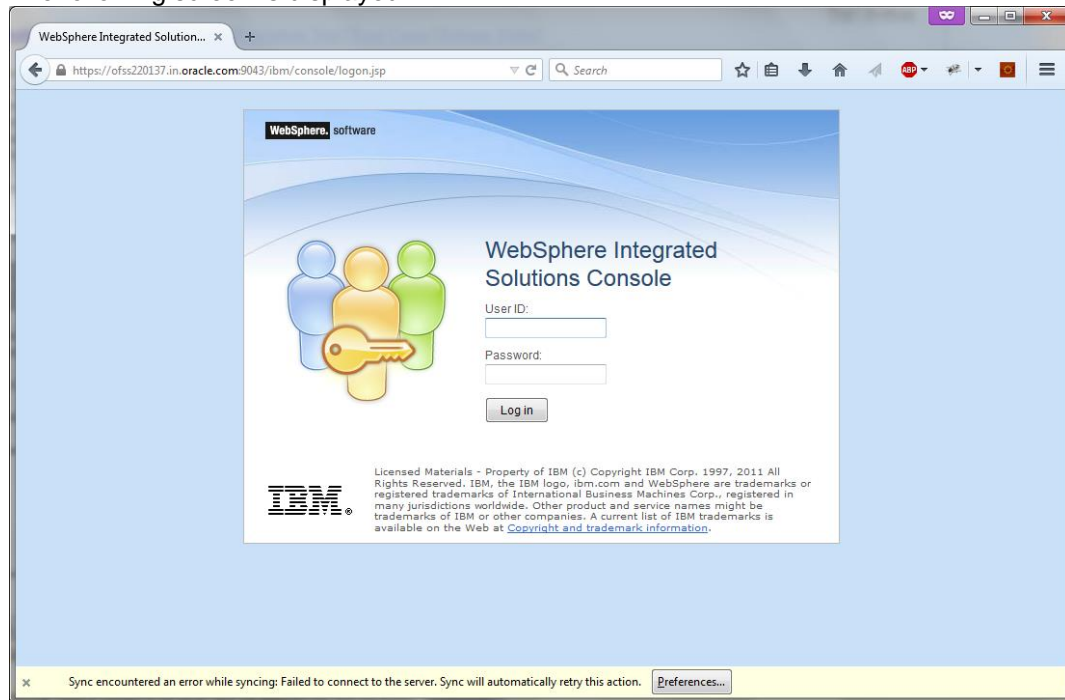
9. Open the Administrative Console of WebSphere server:

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.

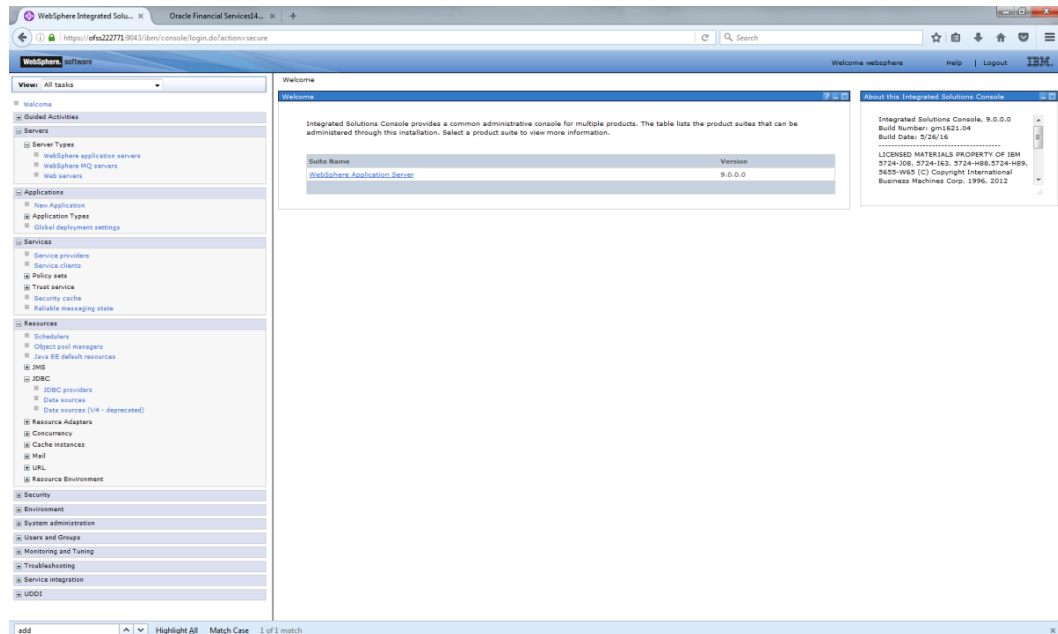
The following screen is displayed:



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

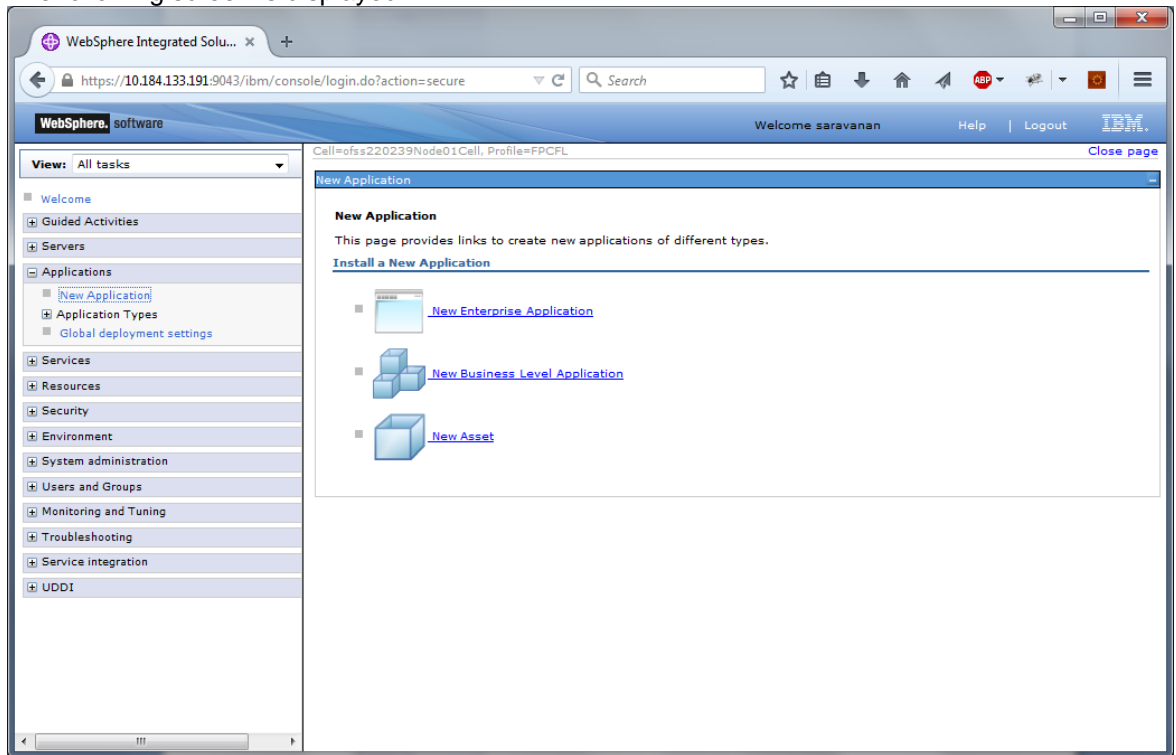
11. Navigate to the WebSphere Home Page.

The following screen is displayed.

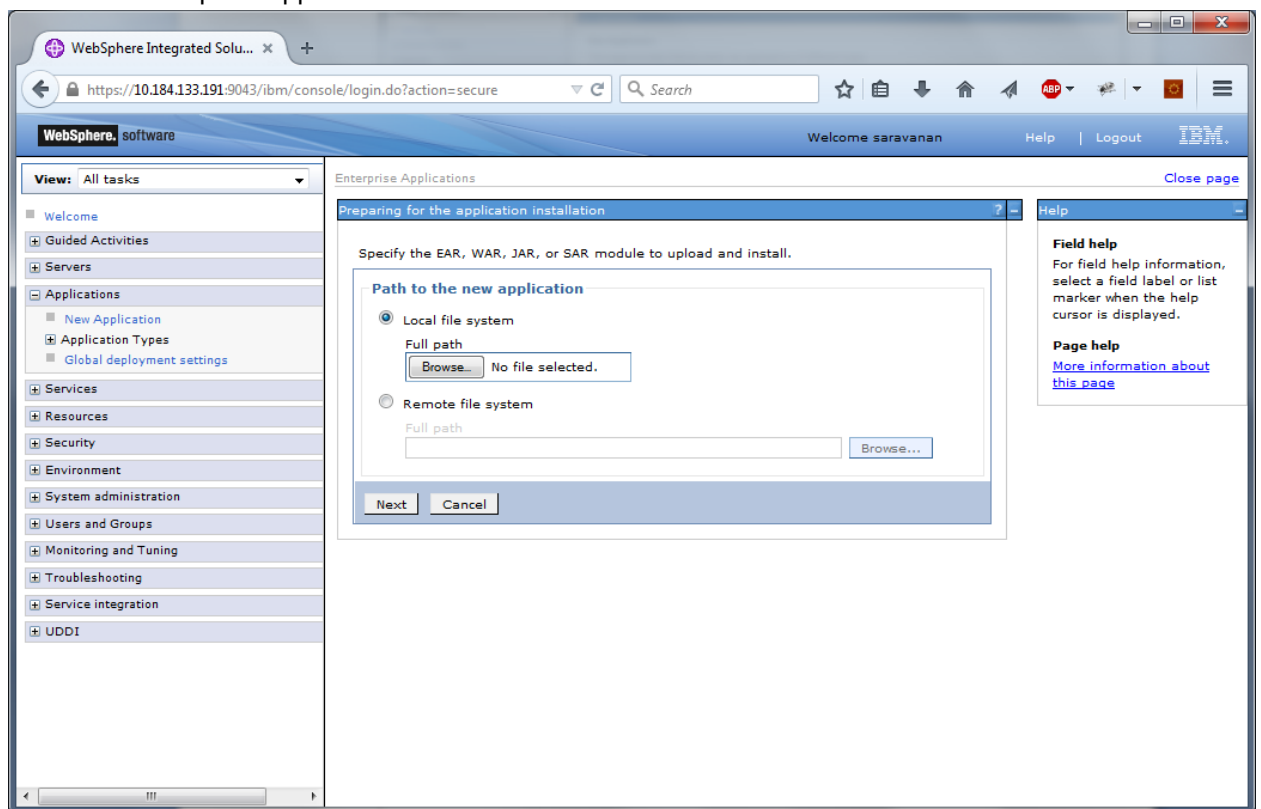


12. Expand Applications from left-side menu and Click 'New Application'.

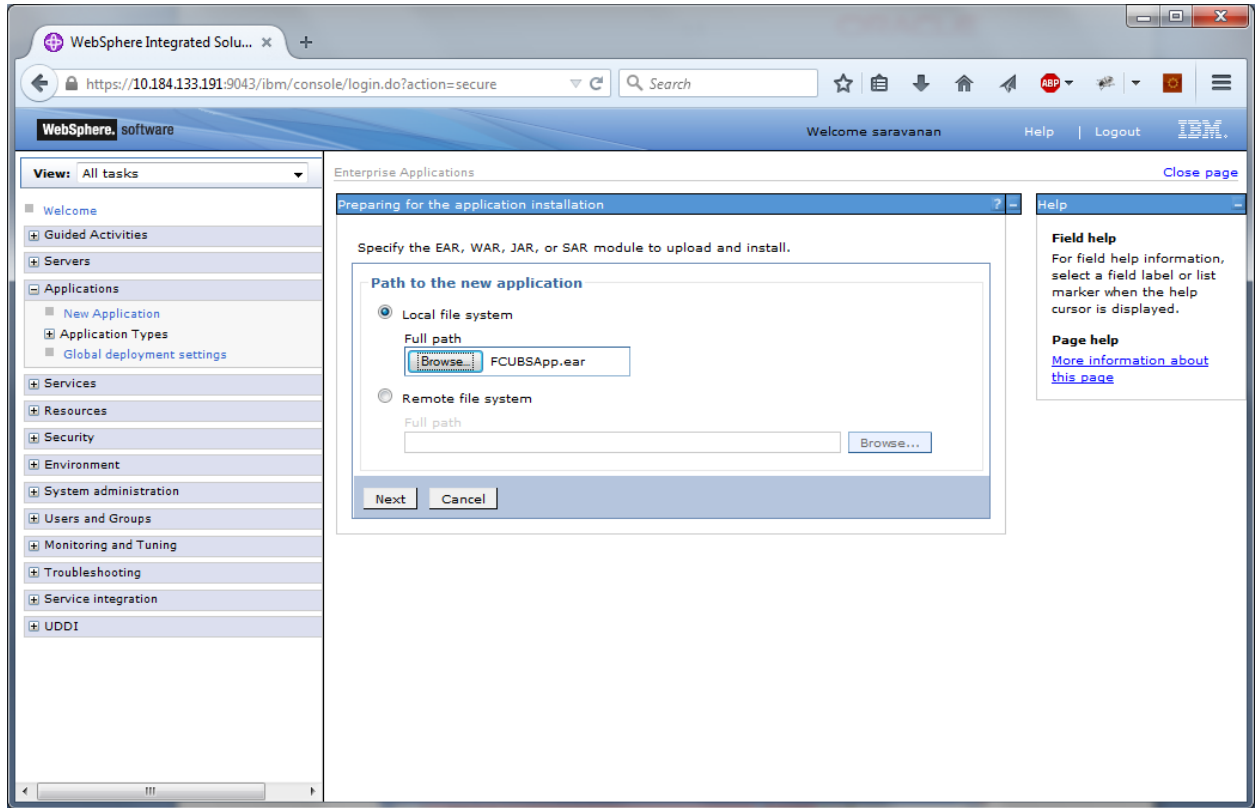
The following screen is displayed.



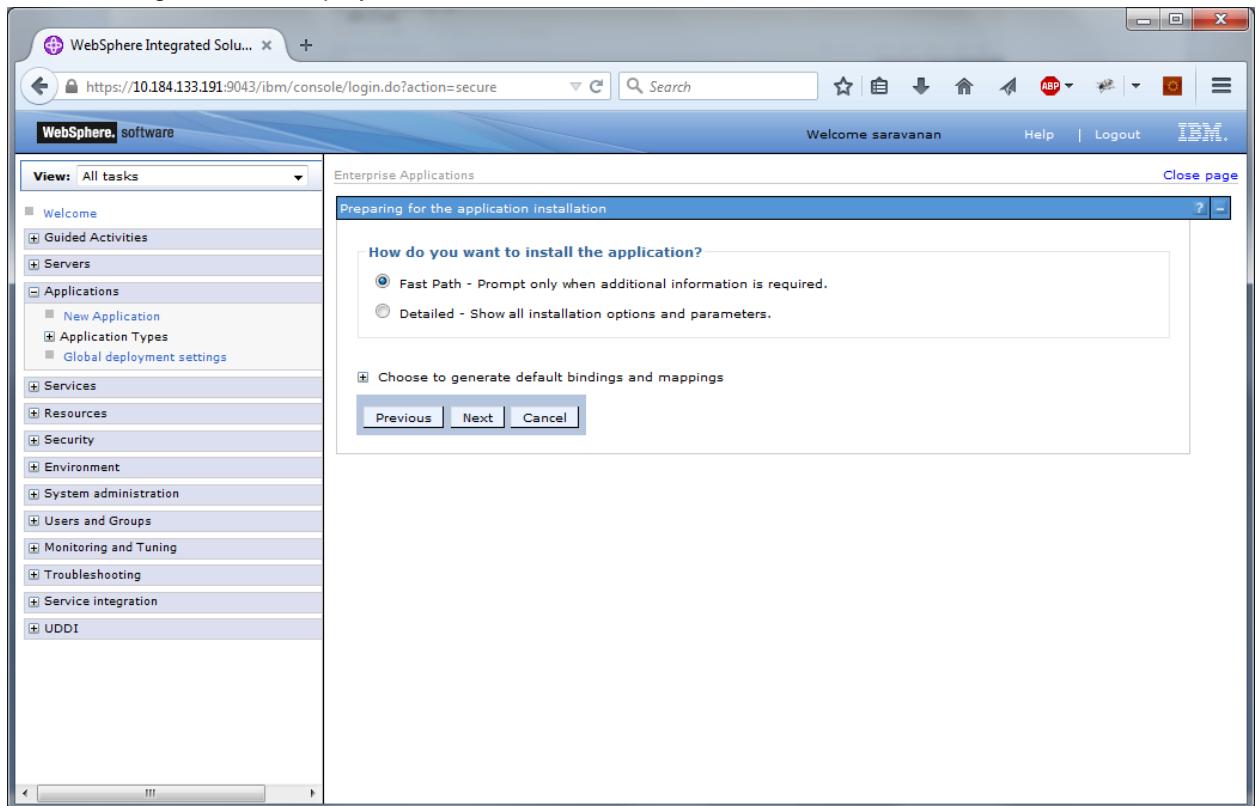
13. Click 'New Enterprise Application'.



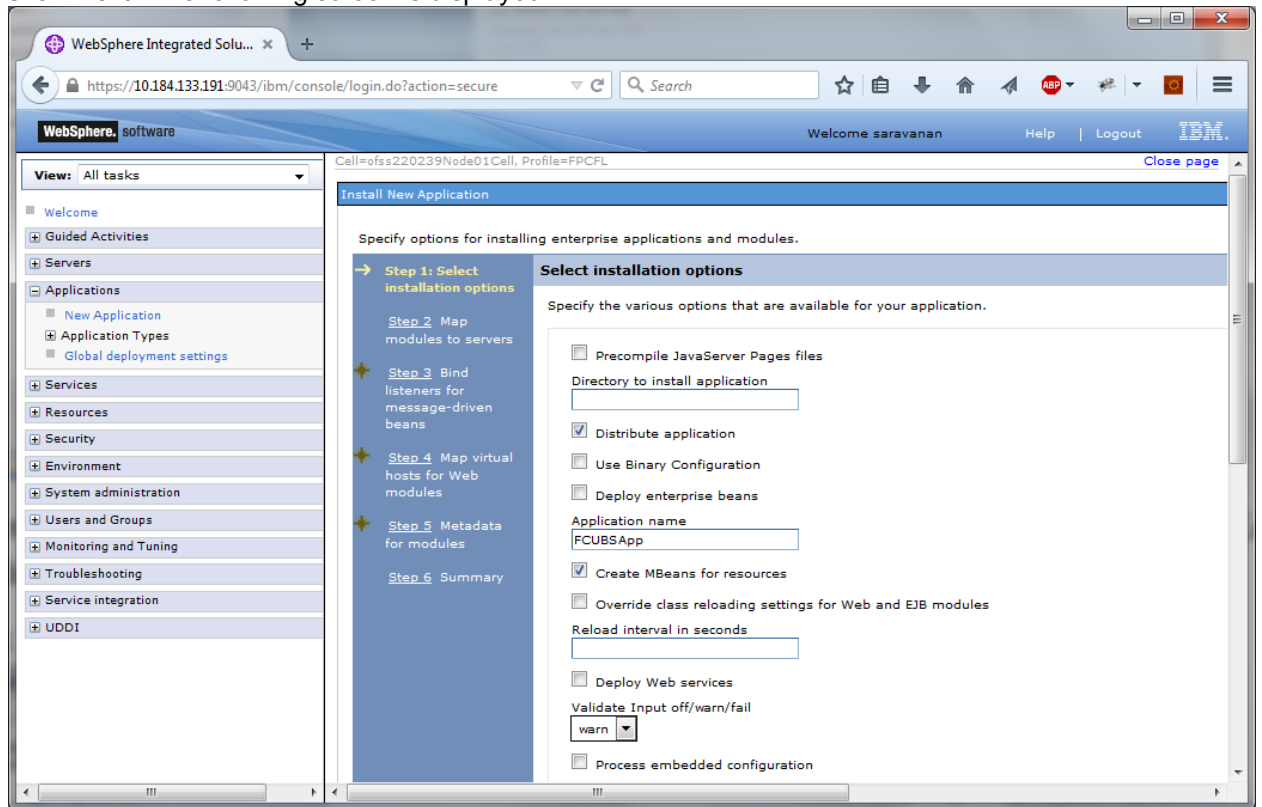
14. Browse the application EAR file and click next button



The following screen is displayed.

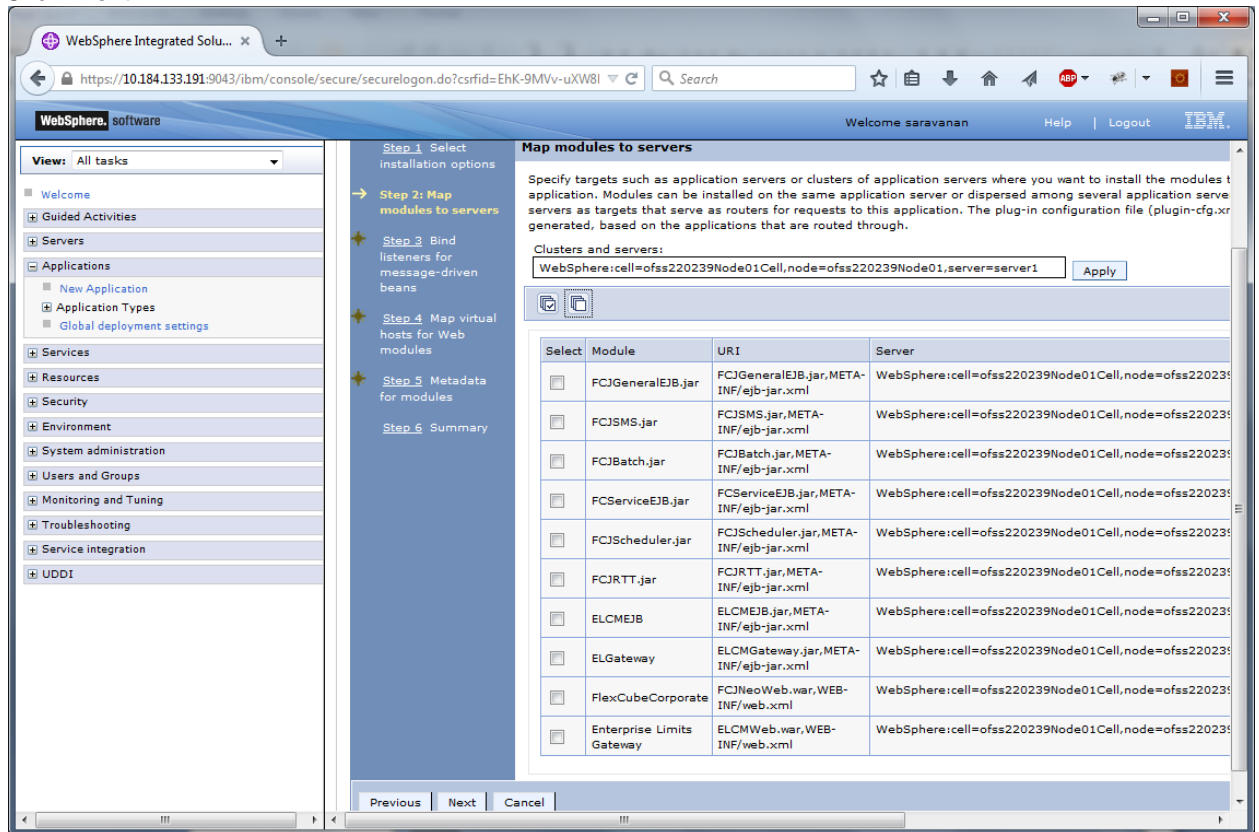


15. Click 'Next'. The following screen is displayed.

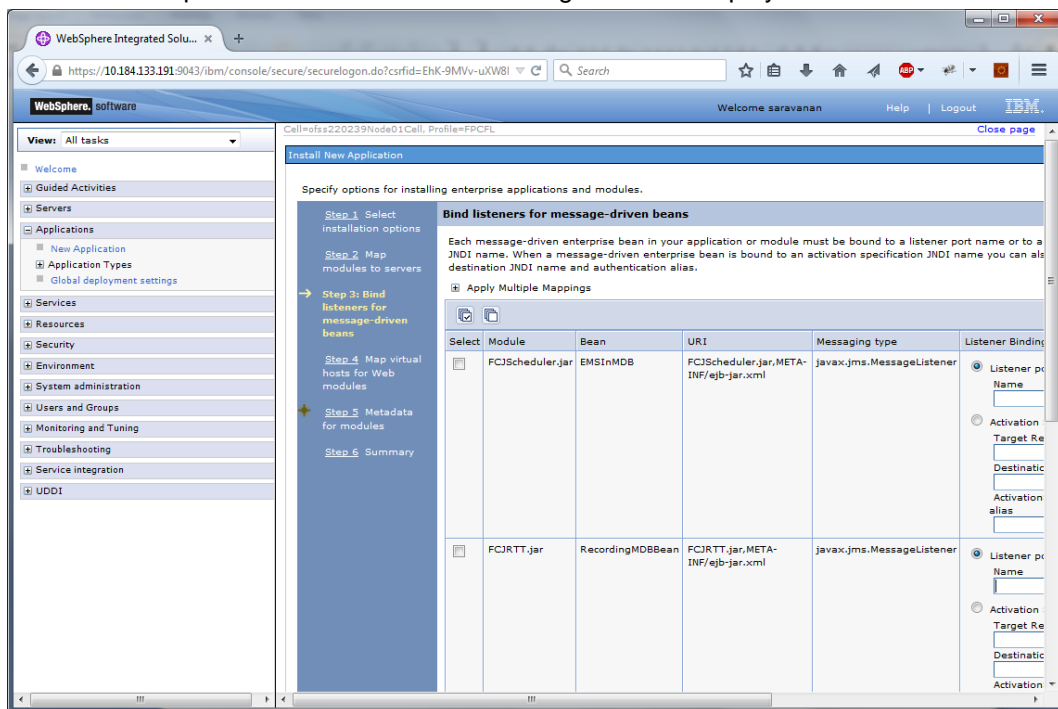


16. Enter the Application Name. This should be the application name mentioned as part of EAR building.

17. Click 'Next'.

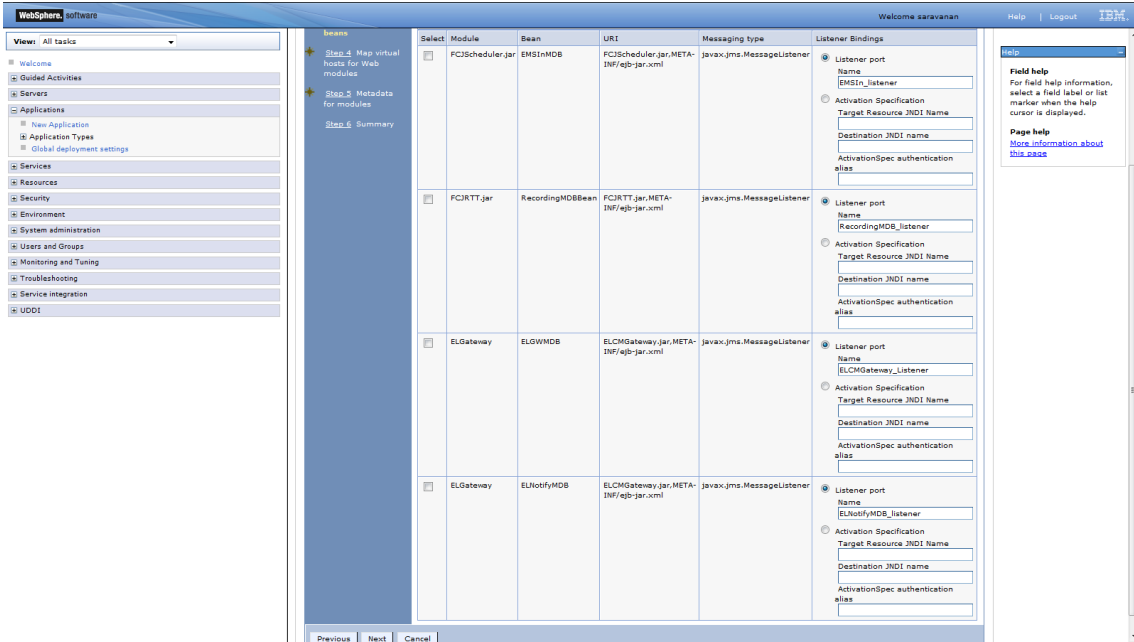


18. Check all the options. Click 'Next'. The following screen is displayed.

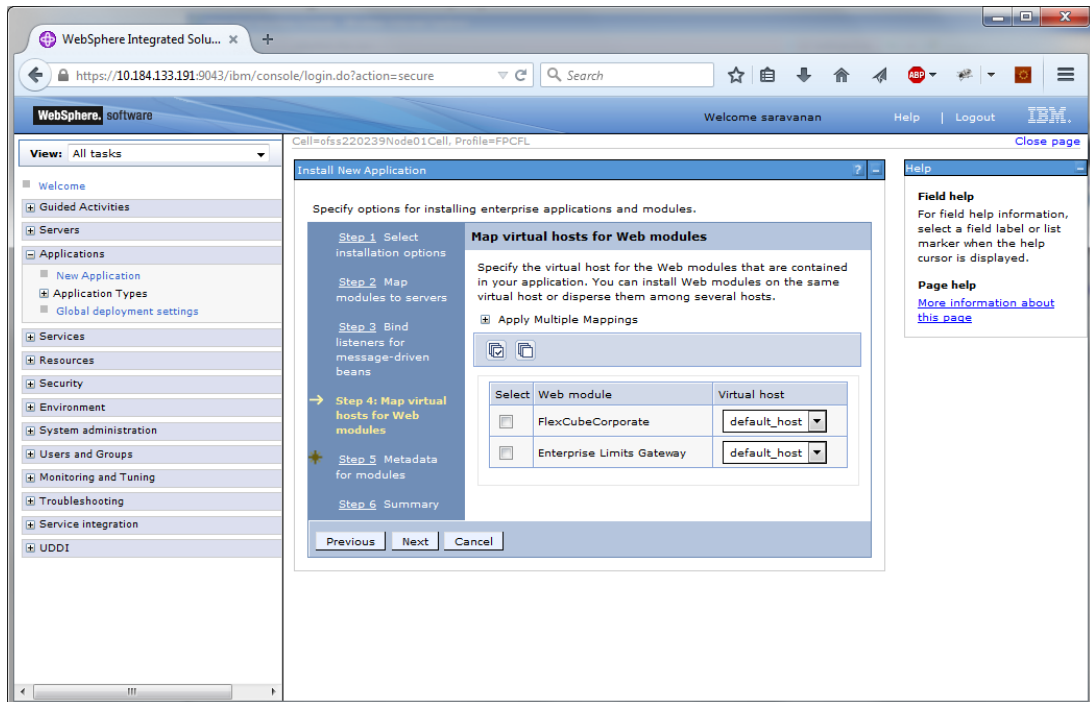


19. Specify the details as shown in the figure.



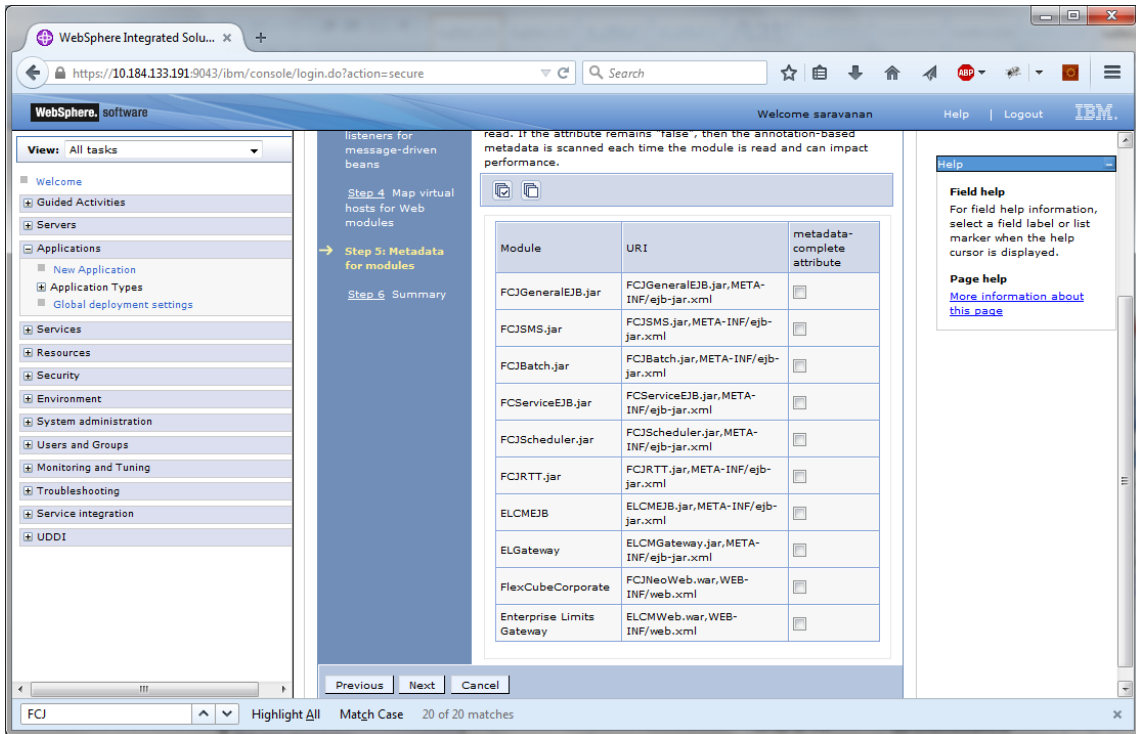


20. Click 'Next'. Following screen is displayed

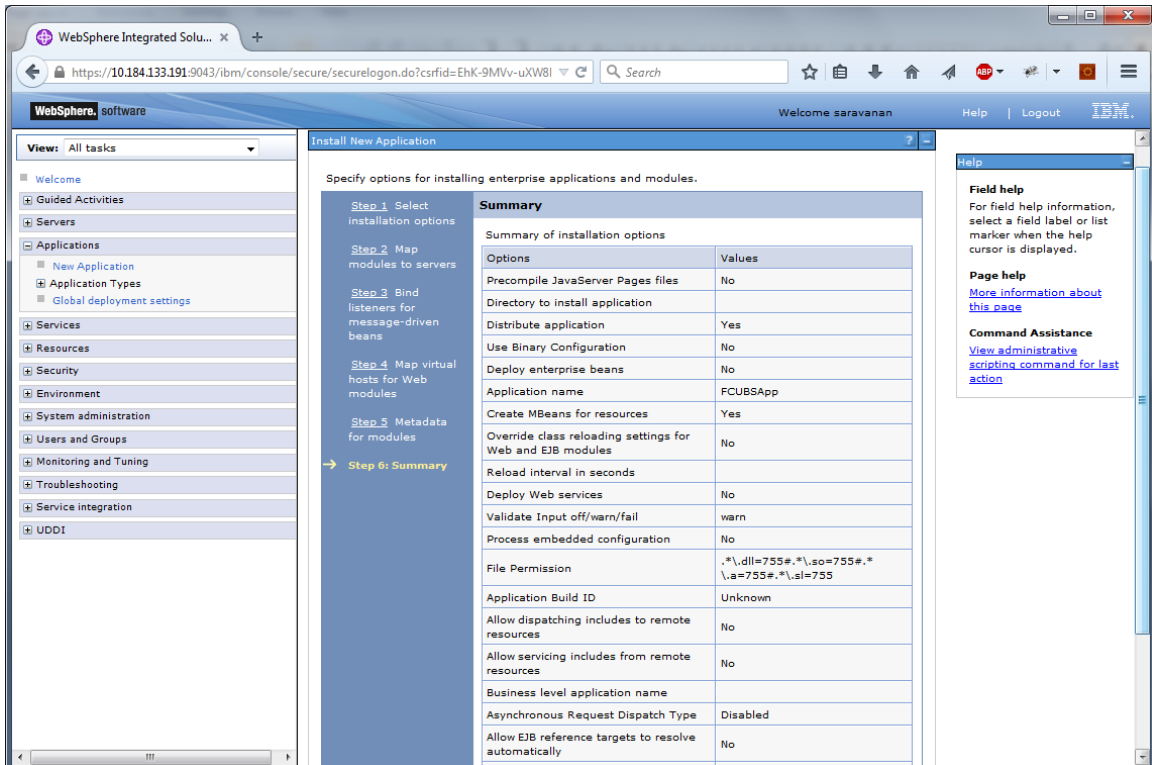


21. Click 'Next'.

The following screen is displayed.

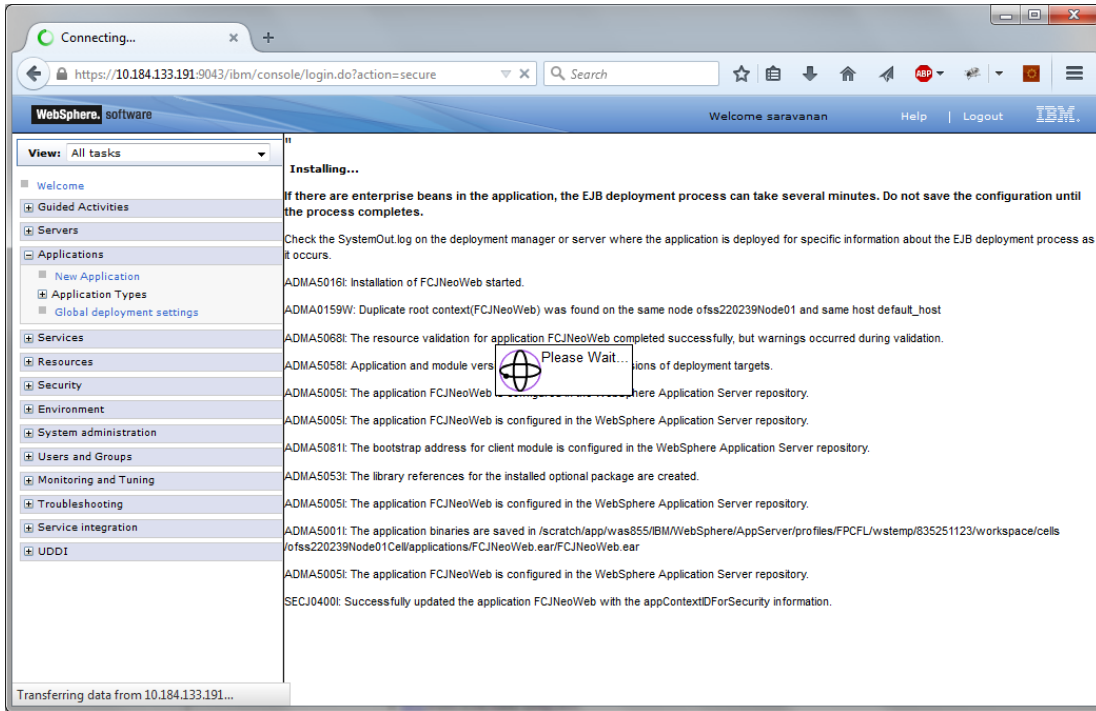


Click next.

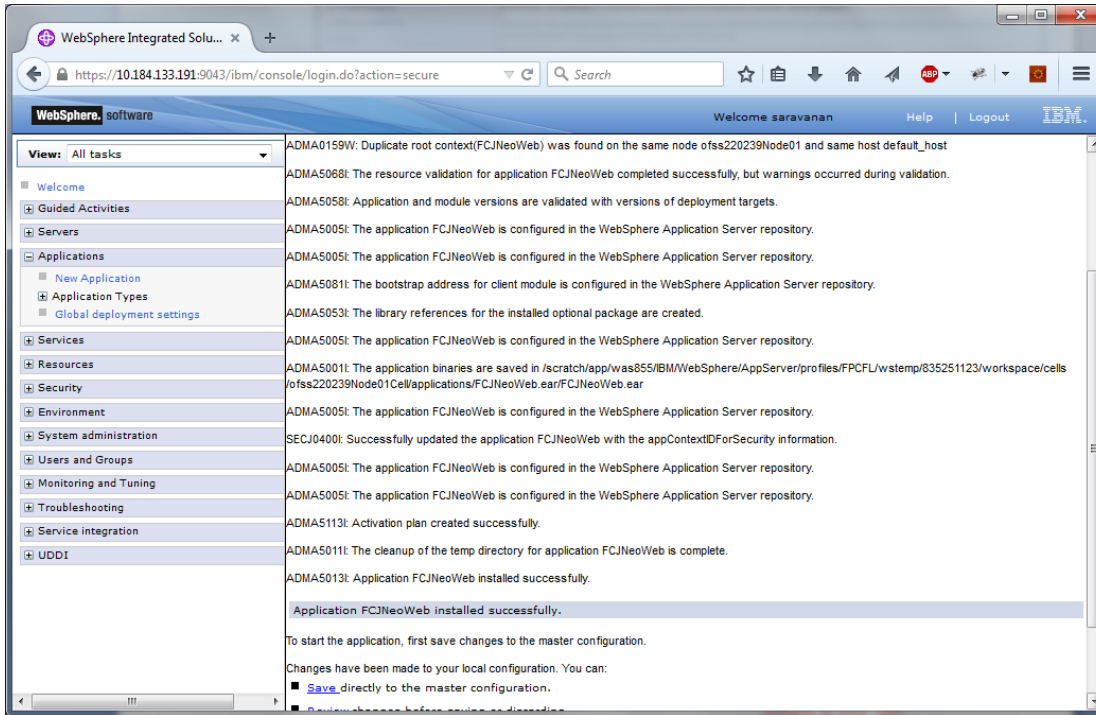


22. Click 'Finish'.

The following screen is displayed.

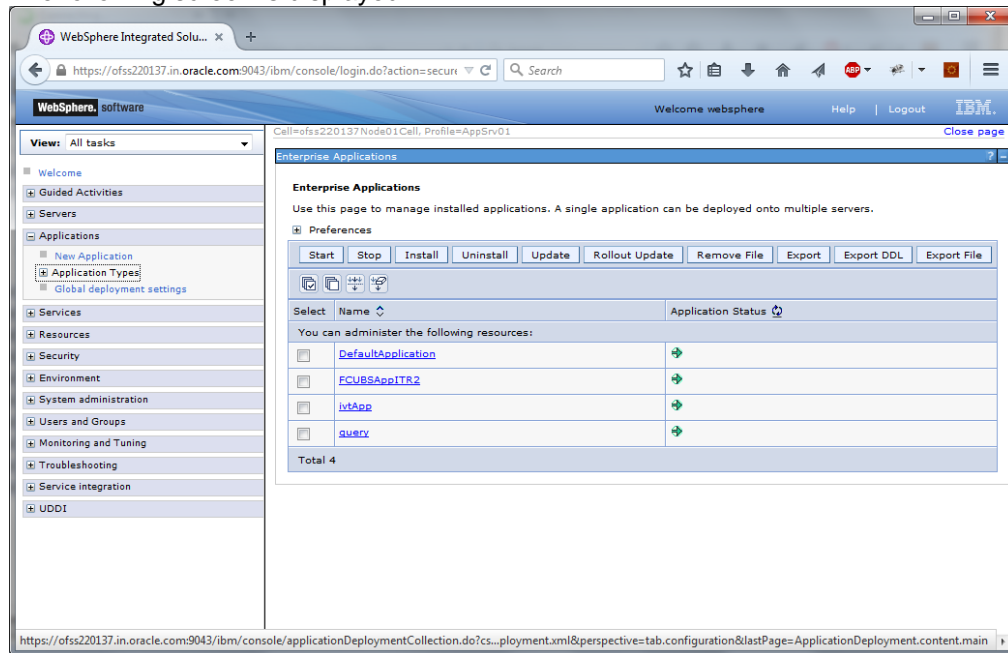


Wait for few seconds...



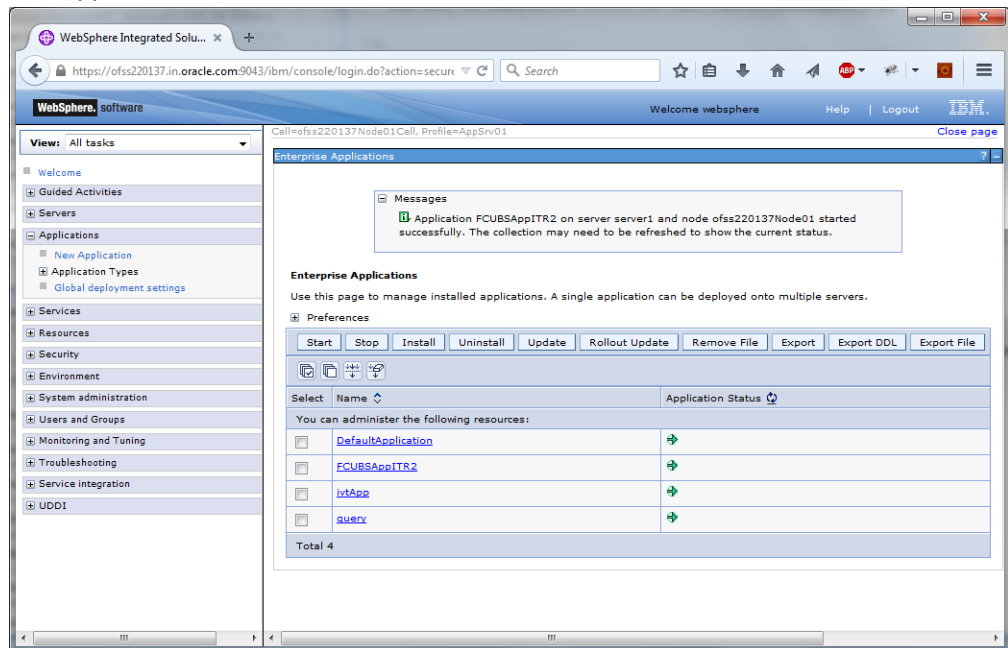
23. Click 'Save'.

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.

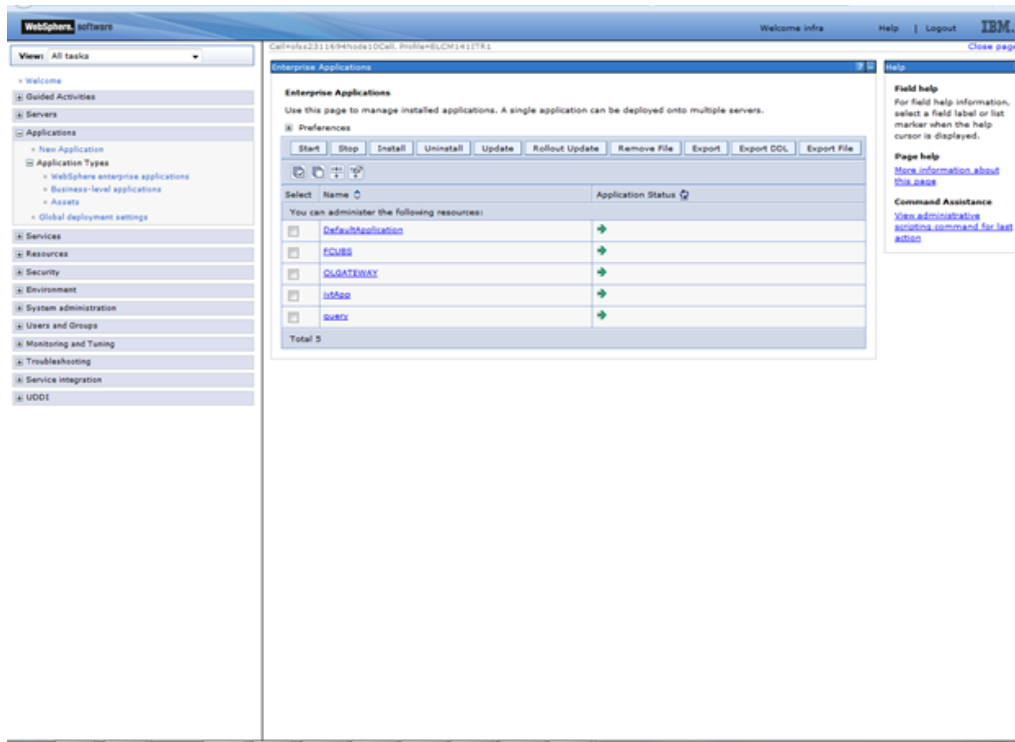
### 1.2.3 Link the adapter (Shared Libraries ) to the Application

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

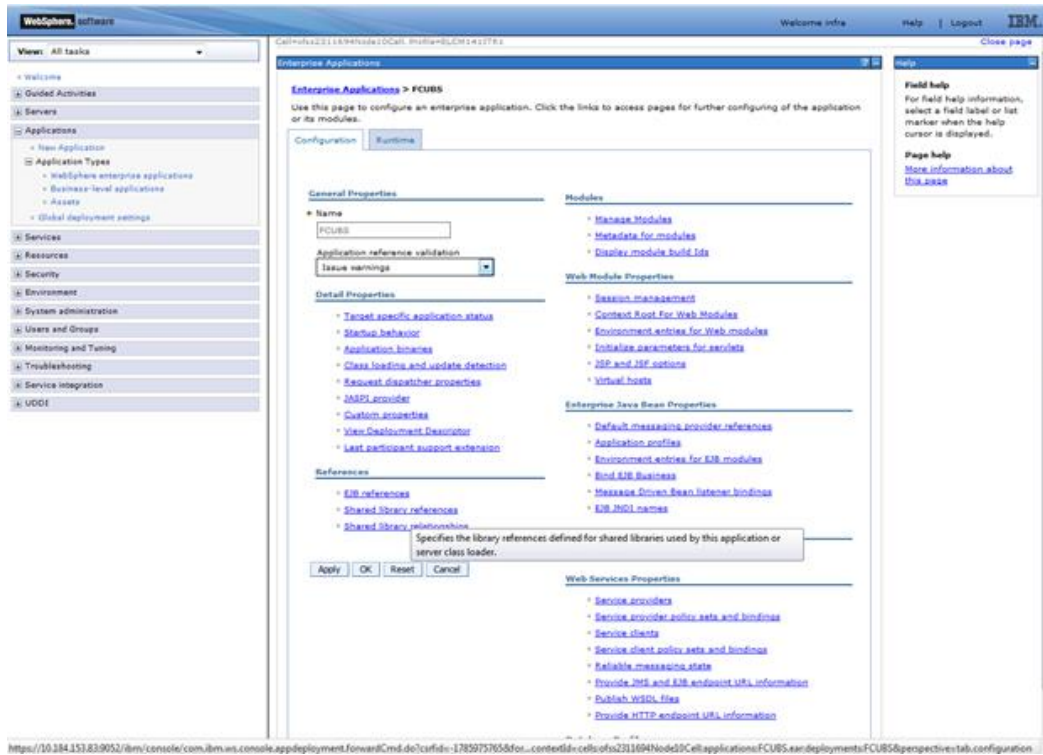
3. Eg: <https://10.10.10.10:1010/console>
4. In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running

Go to Applications → Application types → WebSphere enterprise applications →

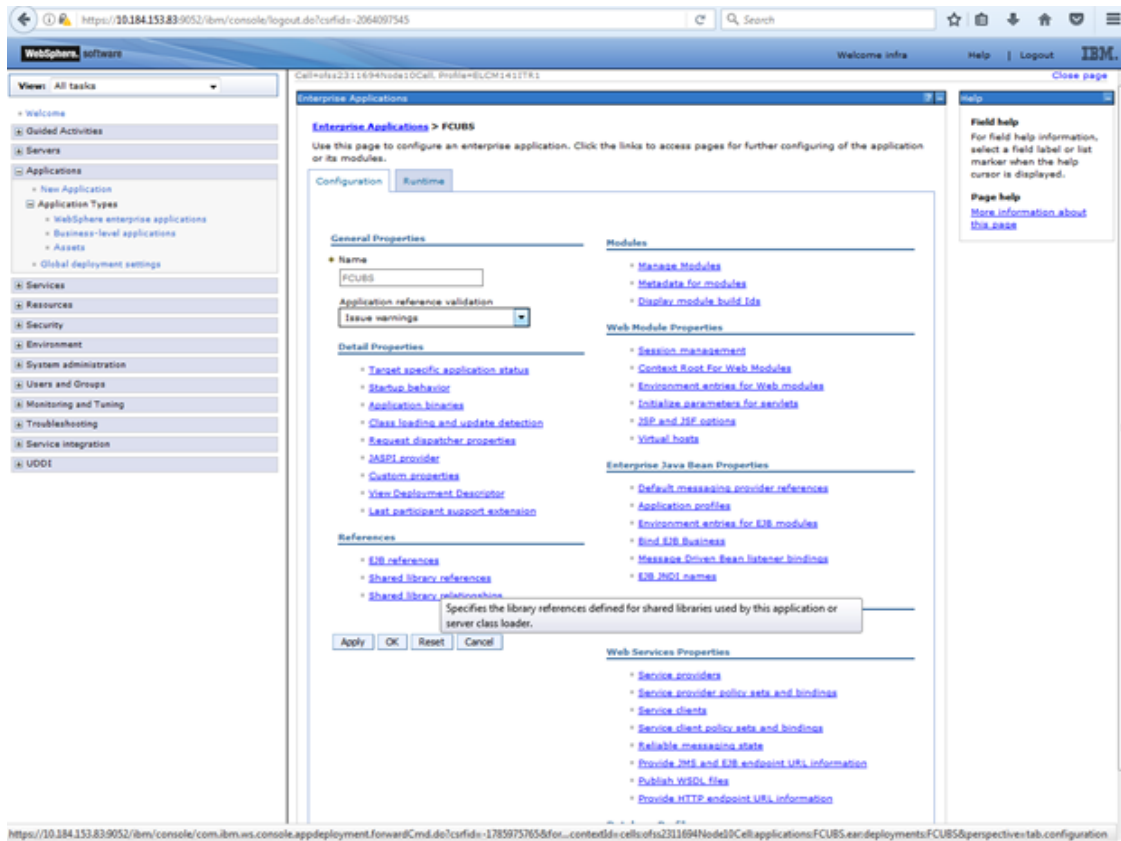
Click on the resource where the adapter to be added (here it is FCUBS)



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 Welcome info Help Logout IBM

View: All tasks Close page

- 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
- UDDI

Enterprise Applications

**Enterprise Applications > FCUBS**

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**

FCUBS

**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 properties
- View Deployment Descriptor
- Last participant support extension

**References**

- EJB references
- Shared library references
- Shared library relationships

**Modules**

- Manage 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 JMS and EJB endpoint URLs information
- Publish WSDL files
- Provide HTTP endpoint URLs information

**References**

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

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](#)



The screenshot displays the IBM WebSphere software interface. On the left is a navigation tree with categories like 'Welcome', 'Guided Activities', 'Servers', 'Applications', 'Services', 'Resources', 'Security', 'Environment', 'Naming', 'OSGI bundle repositories', 'System administration', 'Users and Groups', 'Monitoring and Tuning', 'Troubleshooting', 'Service integration', and 'UDDI'. The main window shows the 'Enterprise Applications' console with the breadcrumb 'Enterprise Applications > EEUBS > Shared Library references > Shared Library Mapping'. Below this, there is a text area for 'PCUBS' and a dialog box titled 'Select the library in the Available list. Move it to the Selected list by clicking >>.'. The dialog box contains two lists: 'Available:' (empty) and 'Selected:' (containing 'DBCLExAdapter'). A 'New...' button is located below the 'Available:' list. At the bottom of the dialog are 'OK' and 'Cancel' buttons. On the right side of the main window, there is a 'Help' section with 'Field help' and 'Page help' links.

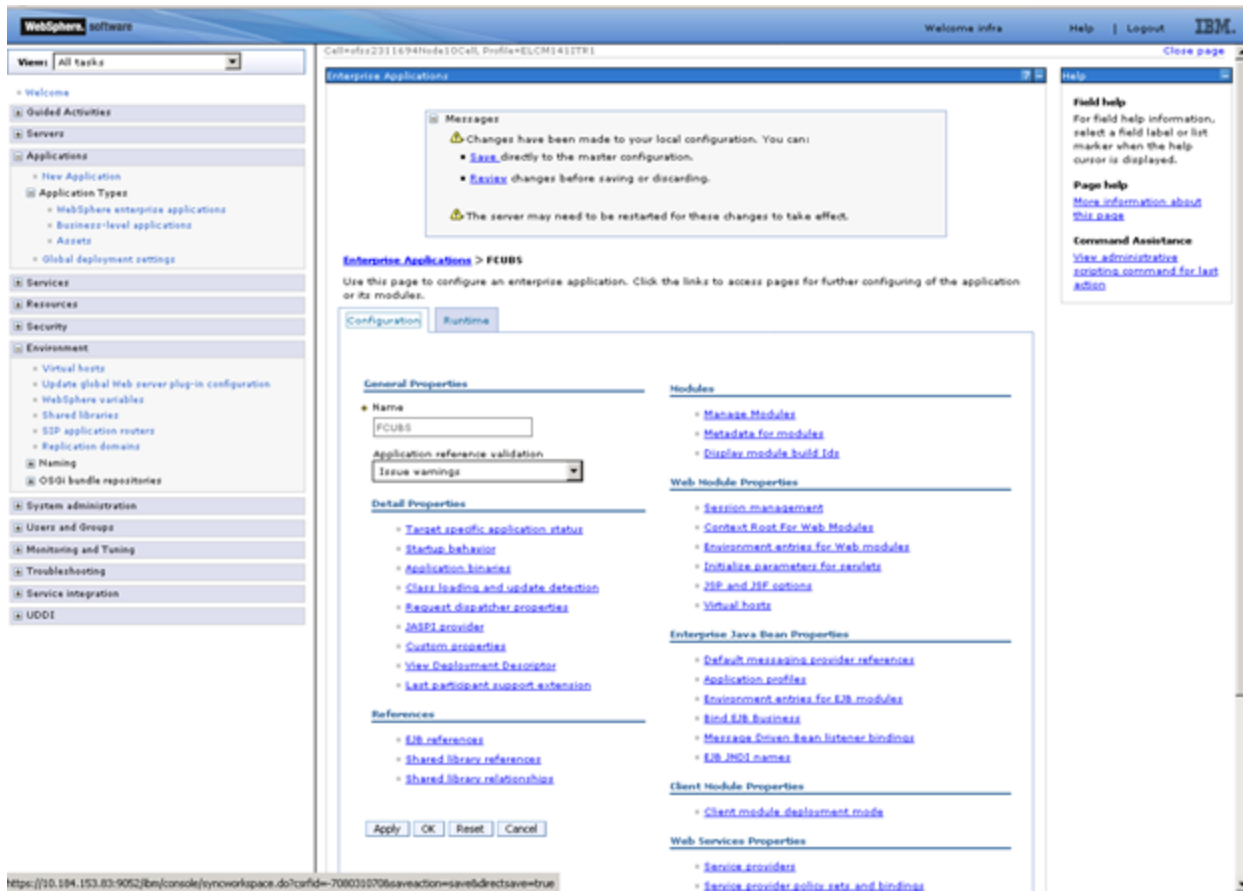
Click ok

The screenshot shows the WebSphere software administration 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'. Below this, there is a section 'Shared Library Mapping for Modules' with a sub-section 'Reference shared libraries'. A table lists the following mappings:

Select:	Application	URI	Shared Libraries
<input type="checkbox"/>	FCUBS	META-INF/application.xml	OB-CLV-Adapter
Select:	Module	URI	Shared Libraries
<input type="checkbox"/>	FlexCubeCorporate	FCNeoWeb.var,WEB-INF/web.xml	
<input type="checkbox"/>	Enterprise Limits Gateway	ELCMWeb.var,WEB-INF/web.xml	
<input type="checkbox"/>	Security Management Gateway	SMWeb.var,WEB-INF/web.xml	

At the bottom of the configuration area, there are 'OK' and 'Cancel' buttons. On the right side of the console, there is a 'Help' panel with 'Field help' and 'Page help' sections.

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:

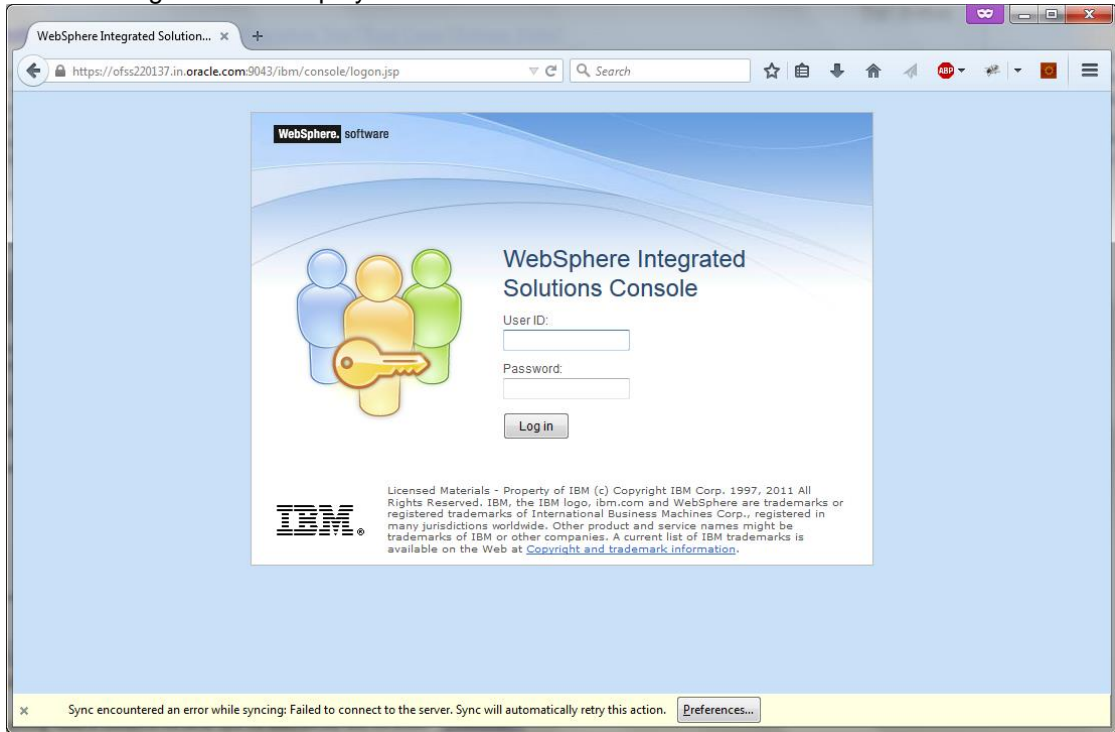
1. Open the Administrative Console of WebSphere server:

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

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

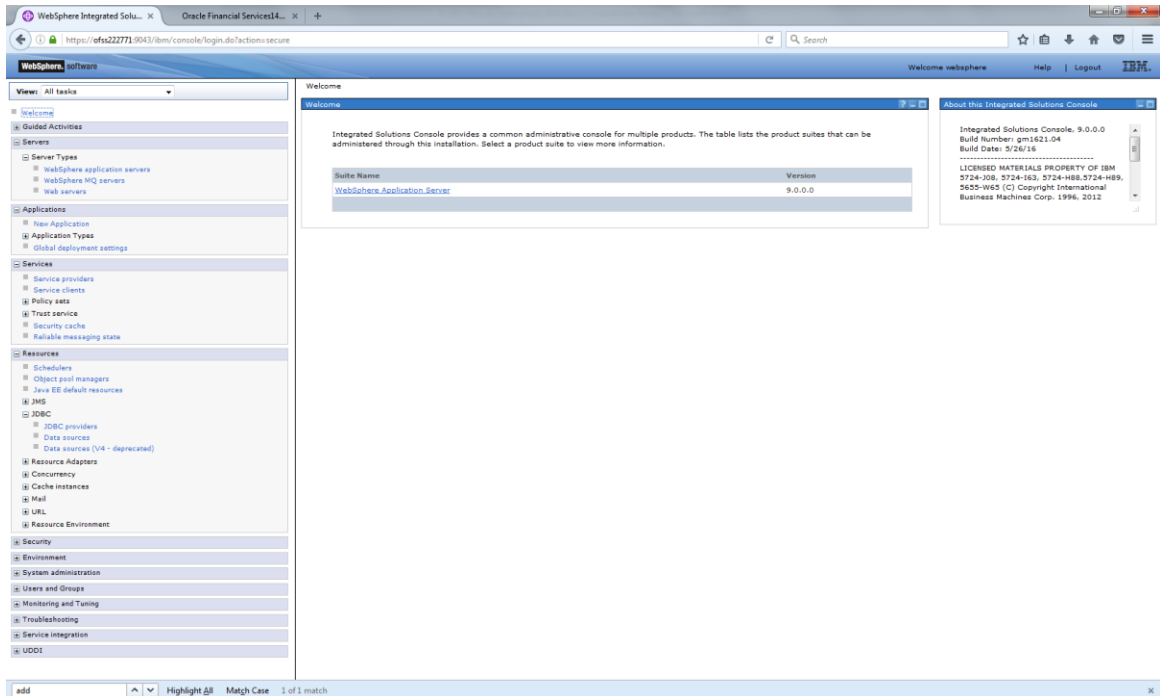
In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

The following screen is displayed:



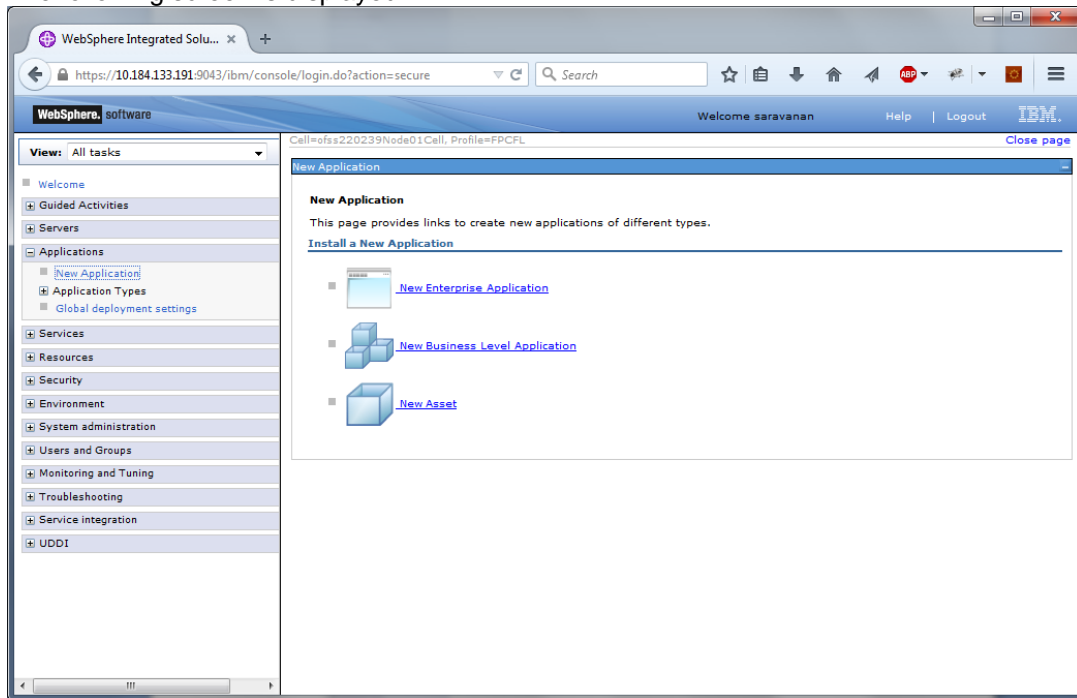
2. Enter the user name and password and click 'Log In' to log in to the application server.
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

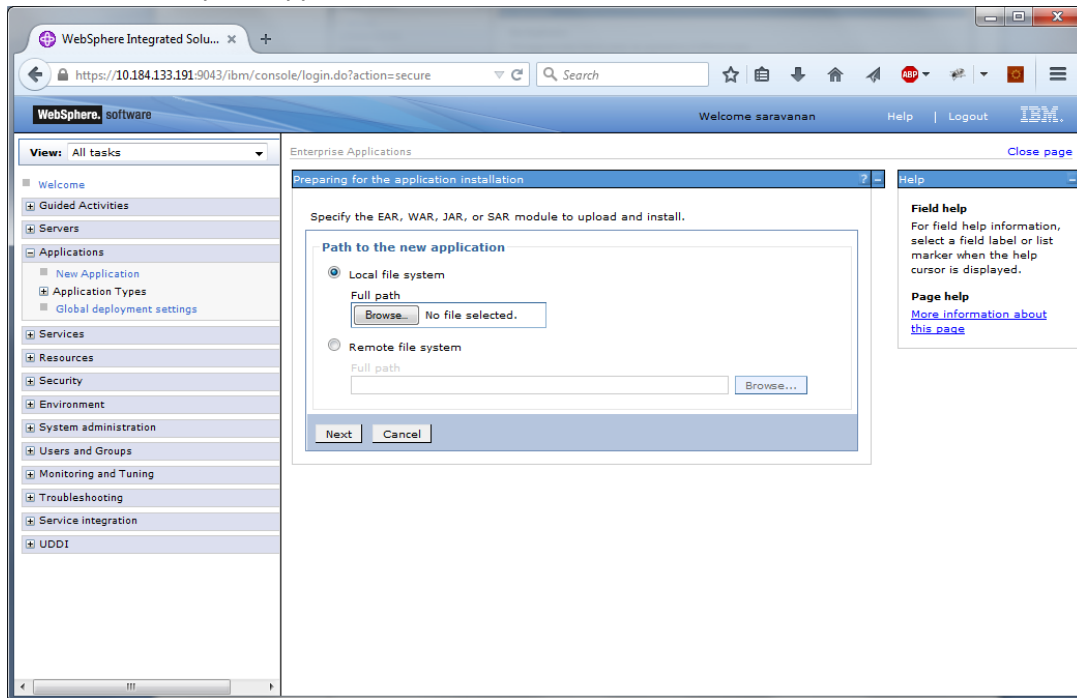


4. Expand Applications from left-side menu and Click 'New Application'.

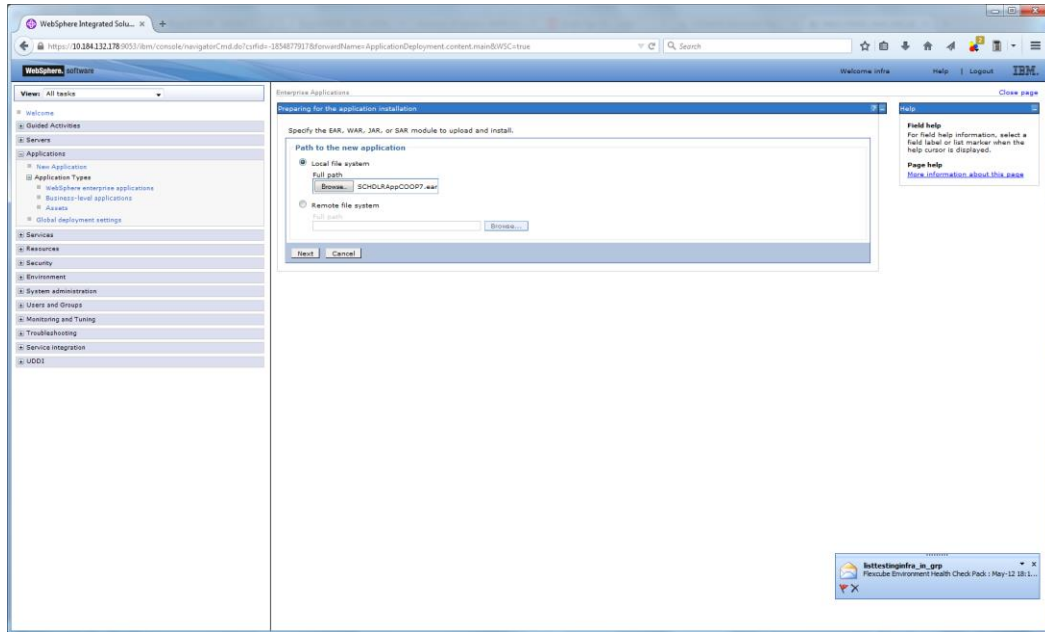
The following screen is displayed.



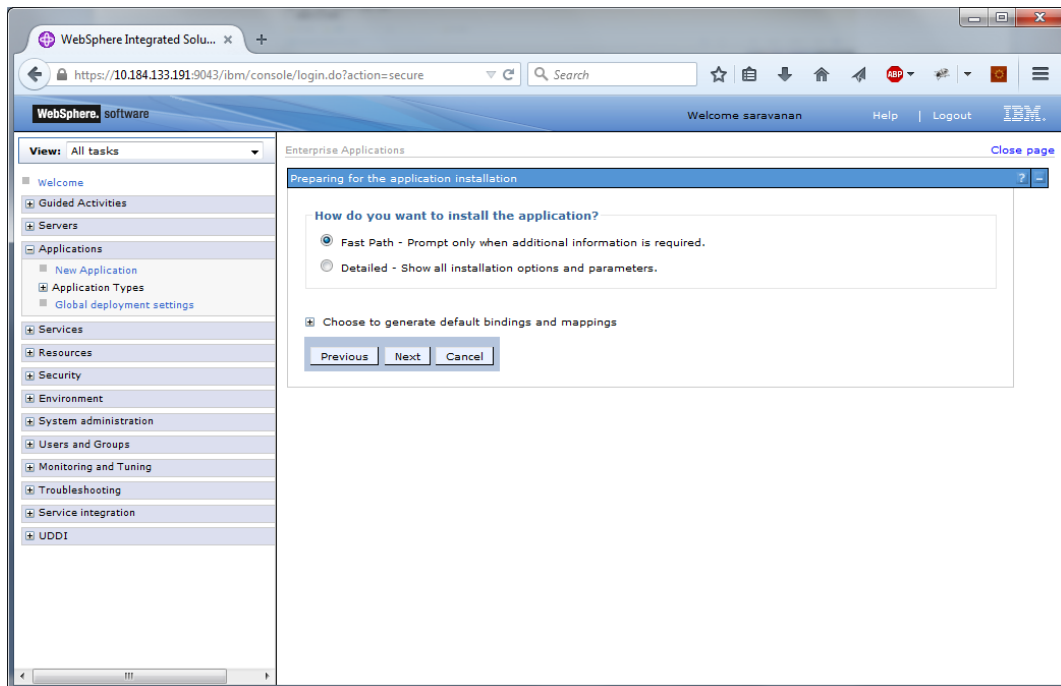
5. Click 'New Enterprise Application'.



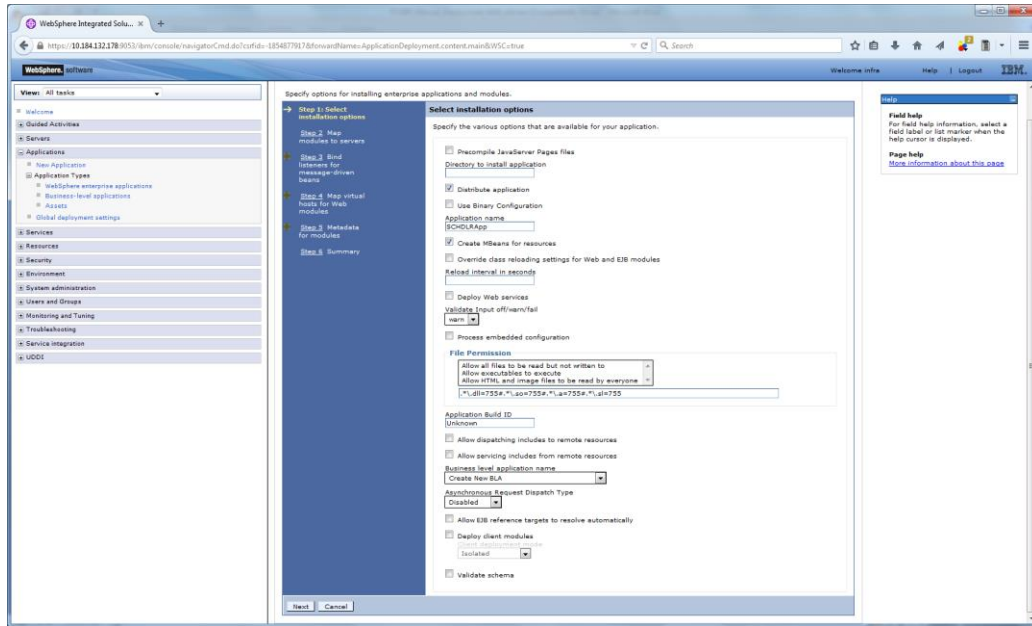
6. Browse the application EAR file and click next button



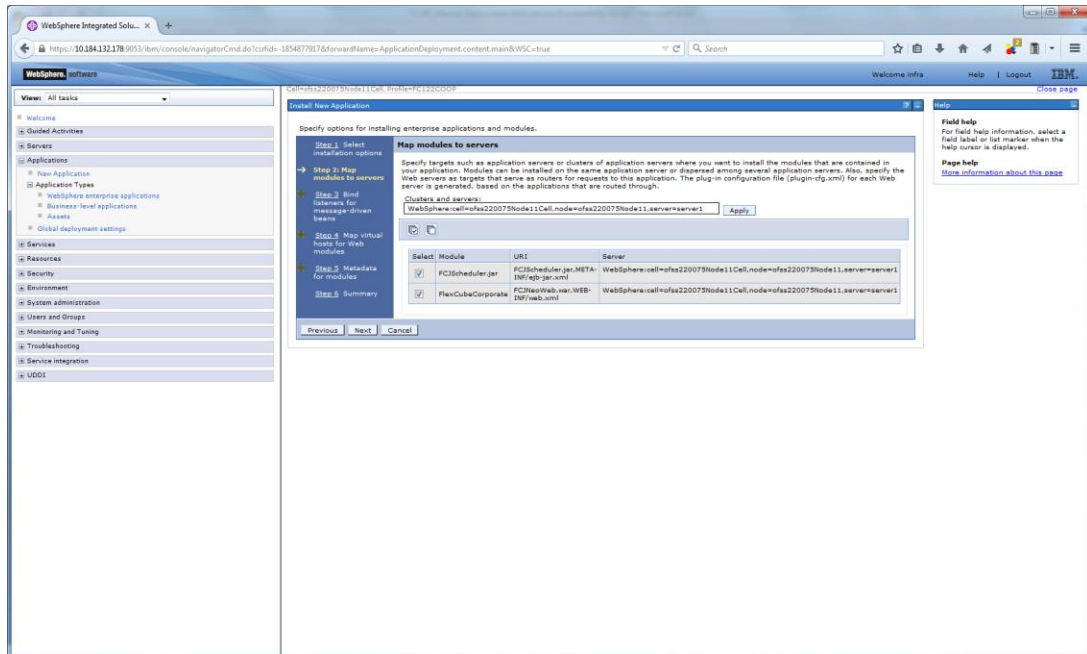
The following screen is displayed.



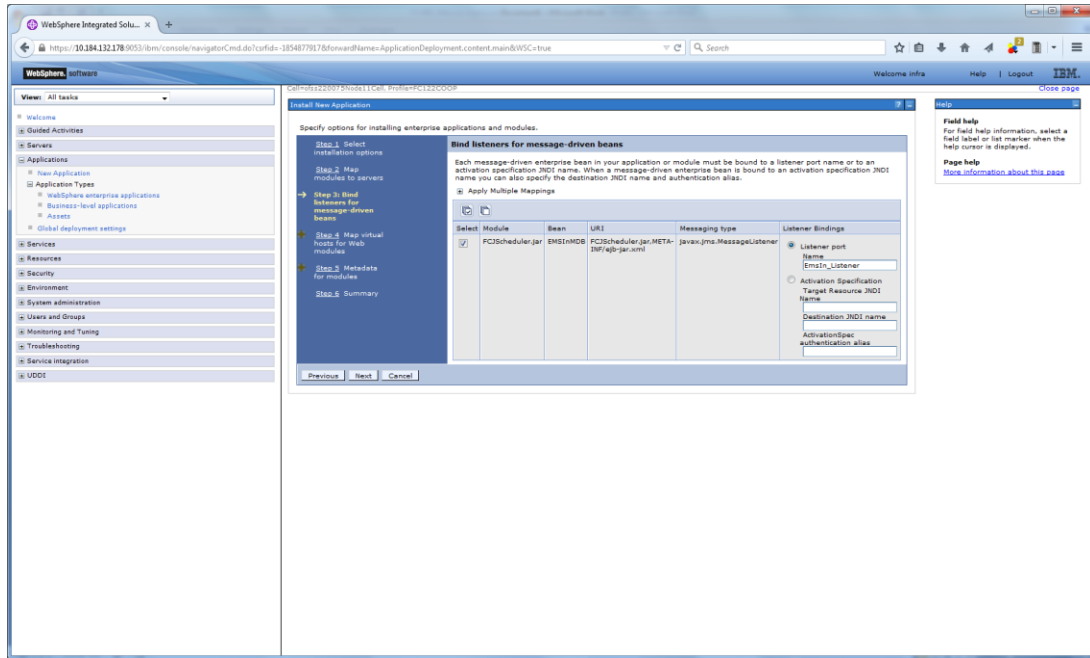
7. Click 'Next'. The following screen is displayed.



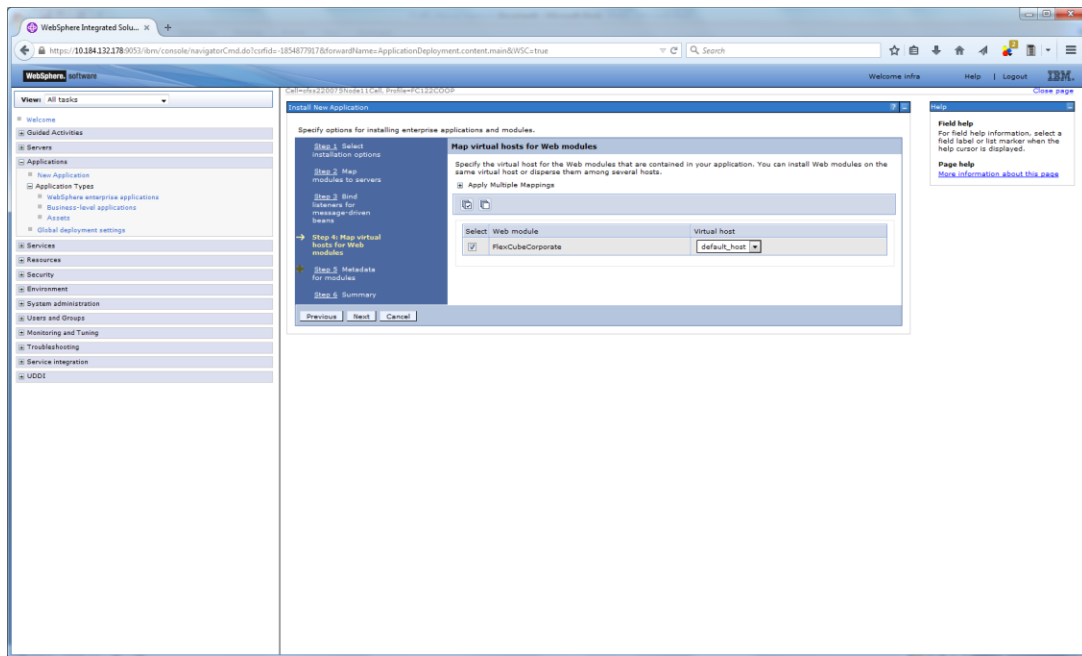
8. Enter the Application Name. This should be the application name mentioned as part of EAR building.



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

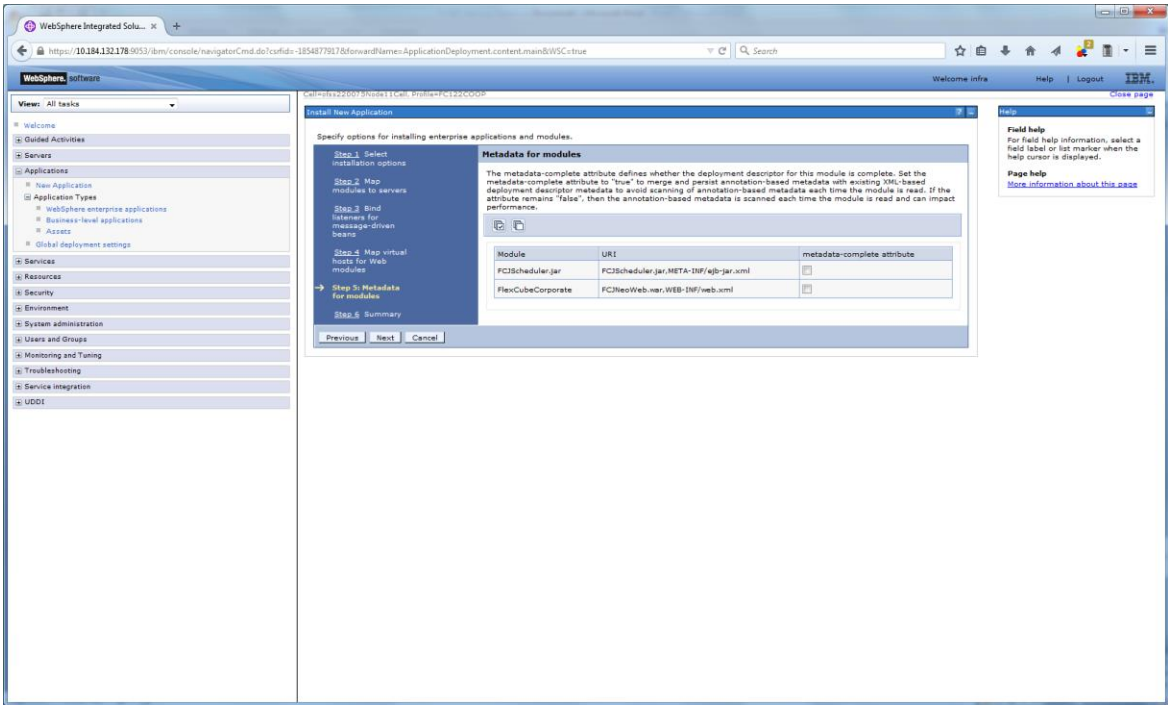


10. Specify the details as shown in the figure.

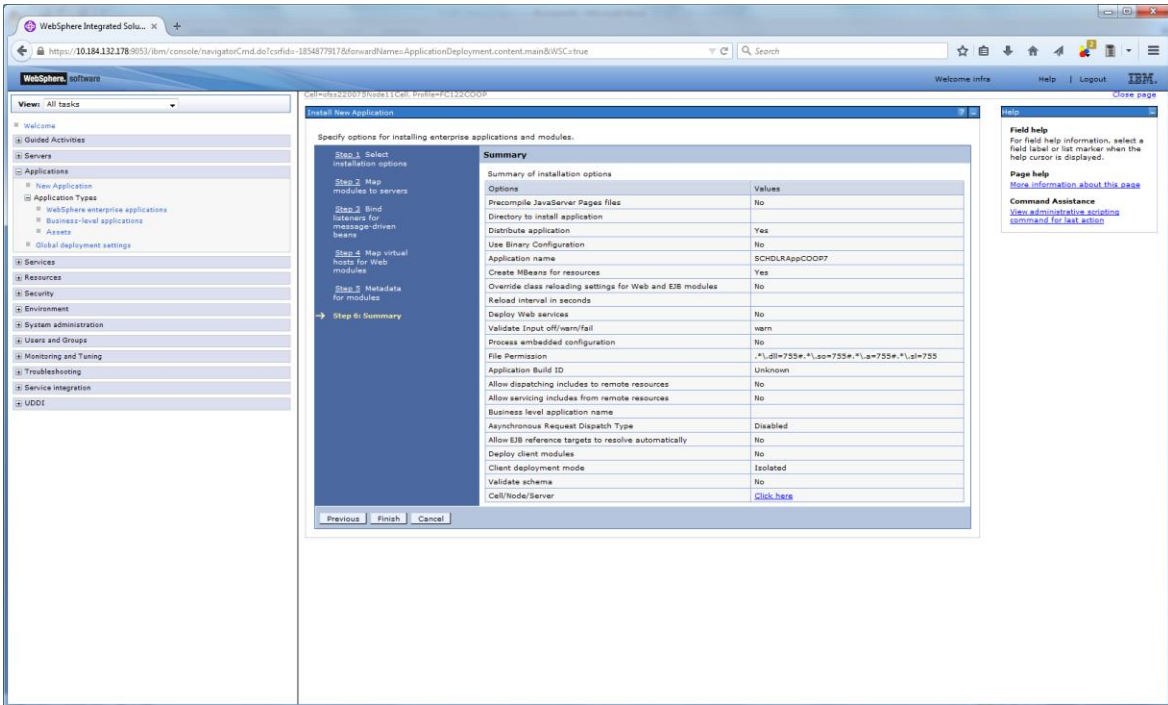


11. Click 'Next'. The following screen is displayed.

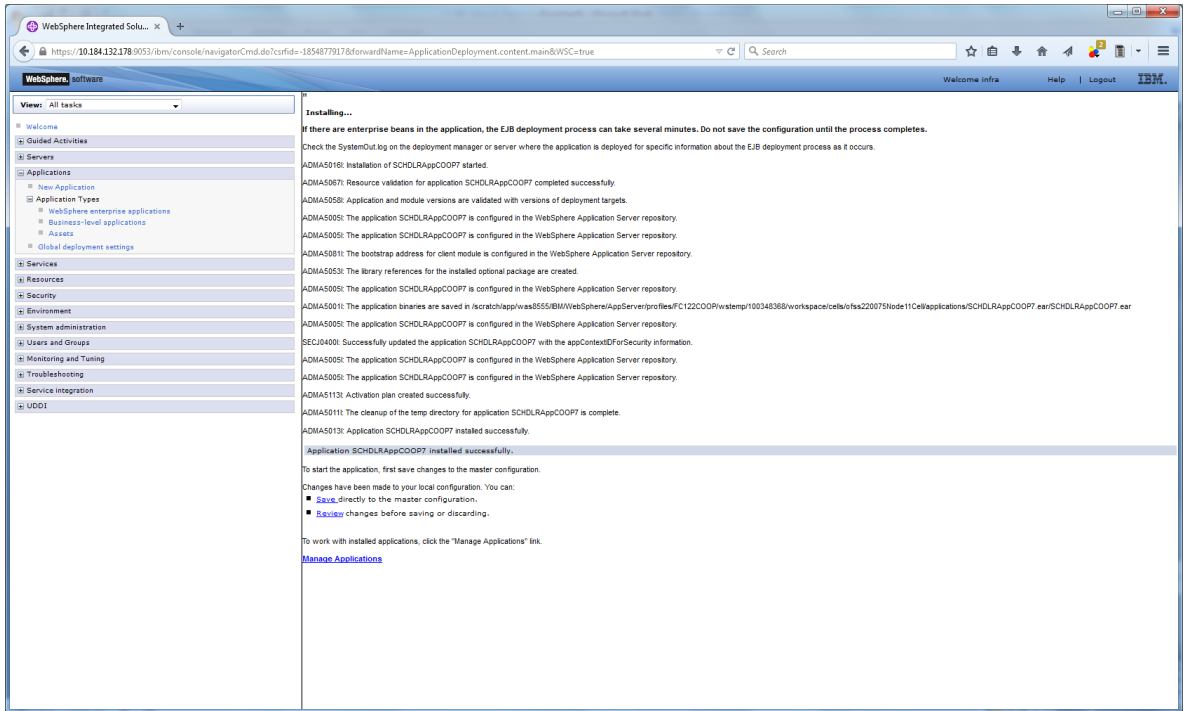




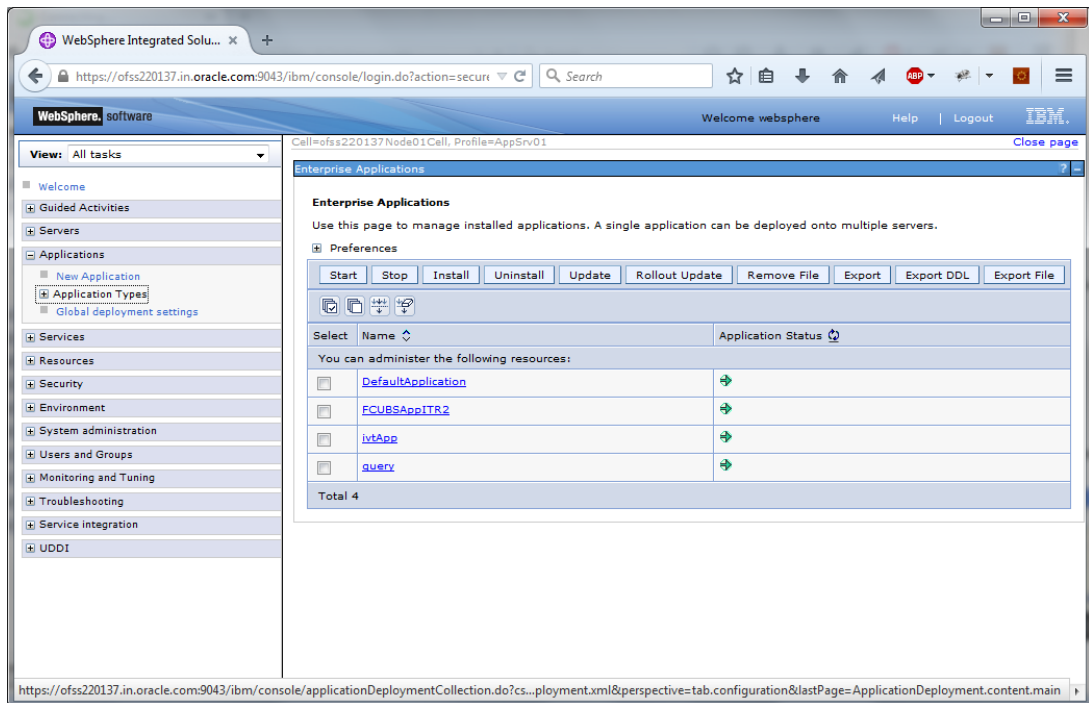
12. Click 'Next'. The following screen is displayed.



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

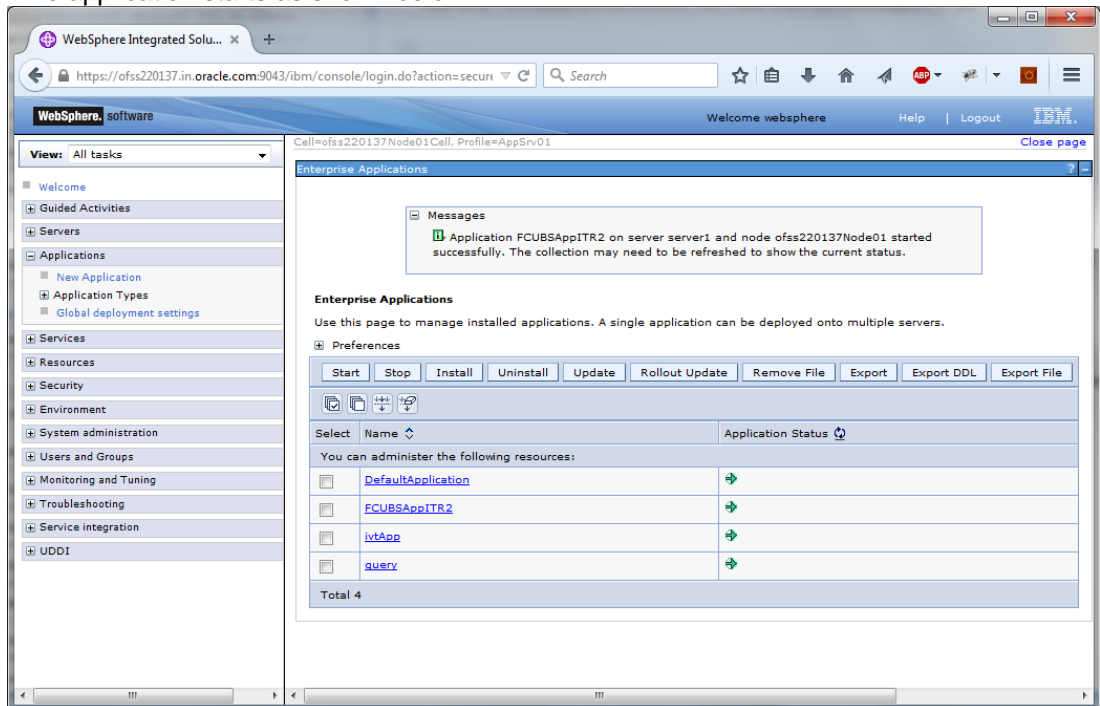


Click 'Save'. The following screen is displayed.



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:

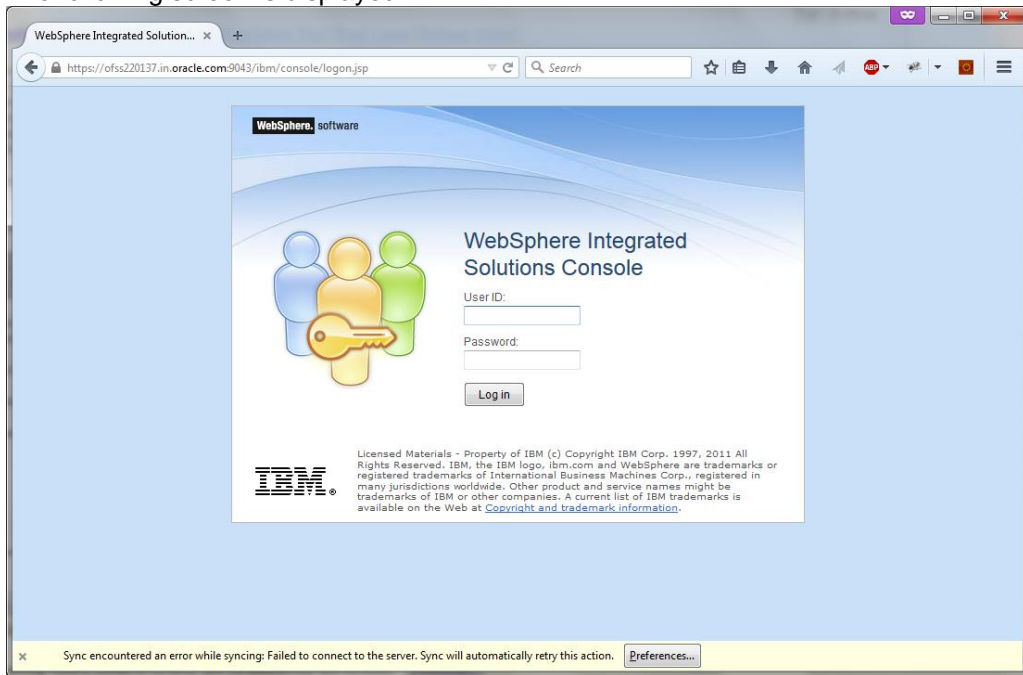
1. Open the Administrative Console of WebSphere server:

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.

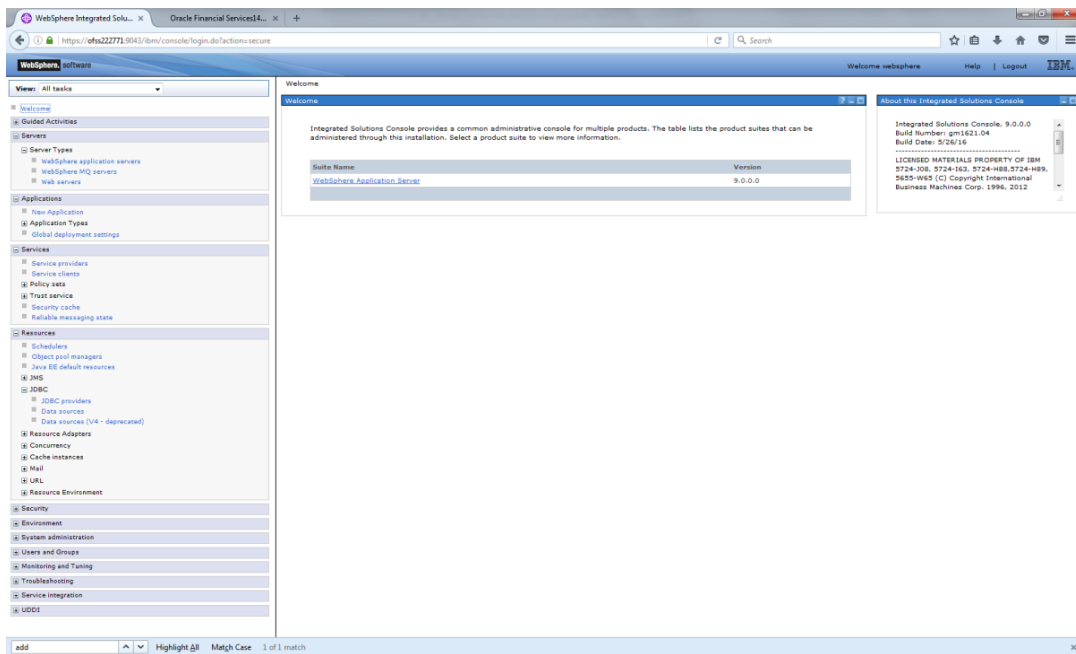
The following screen is displayed:



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

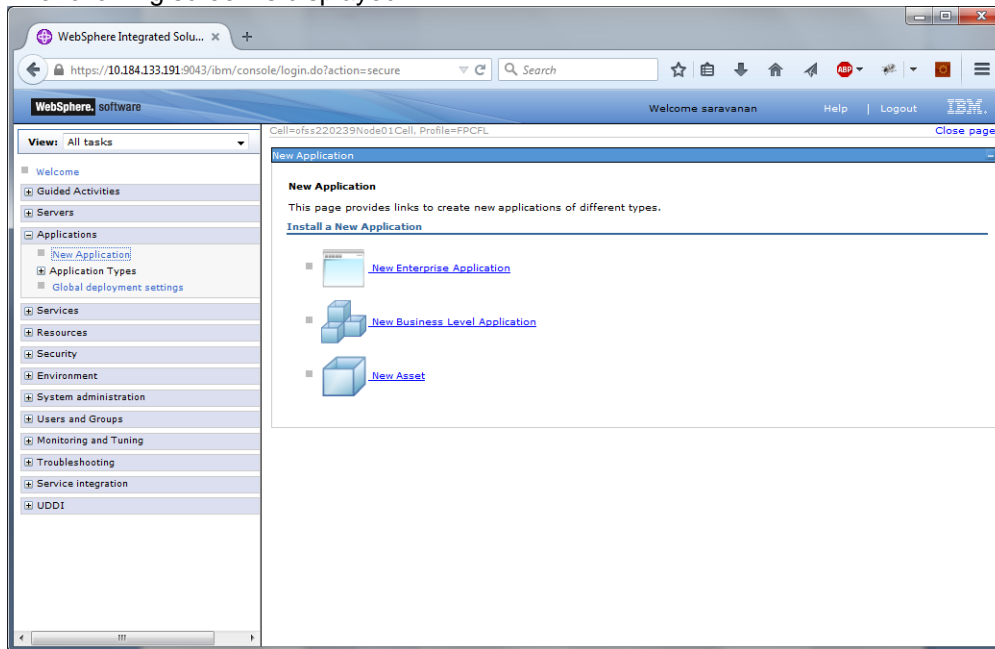
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

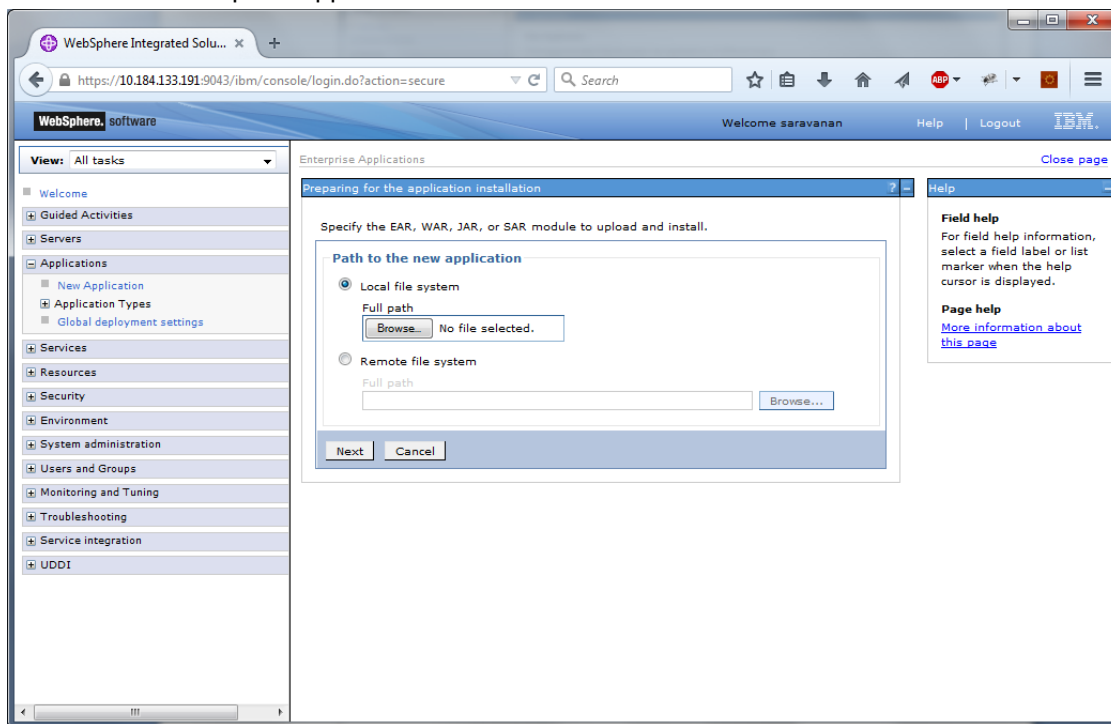


4. Expand Applications from left-side menu and Click 'New Application'.

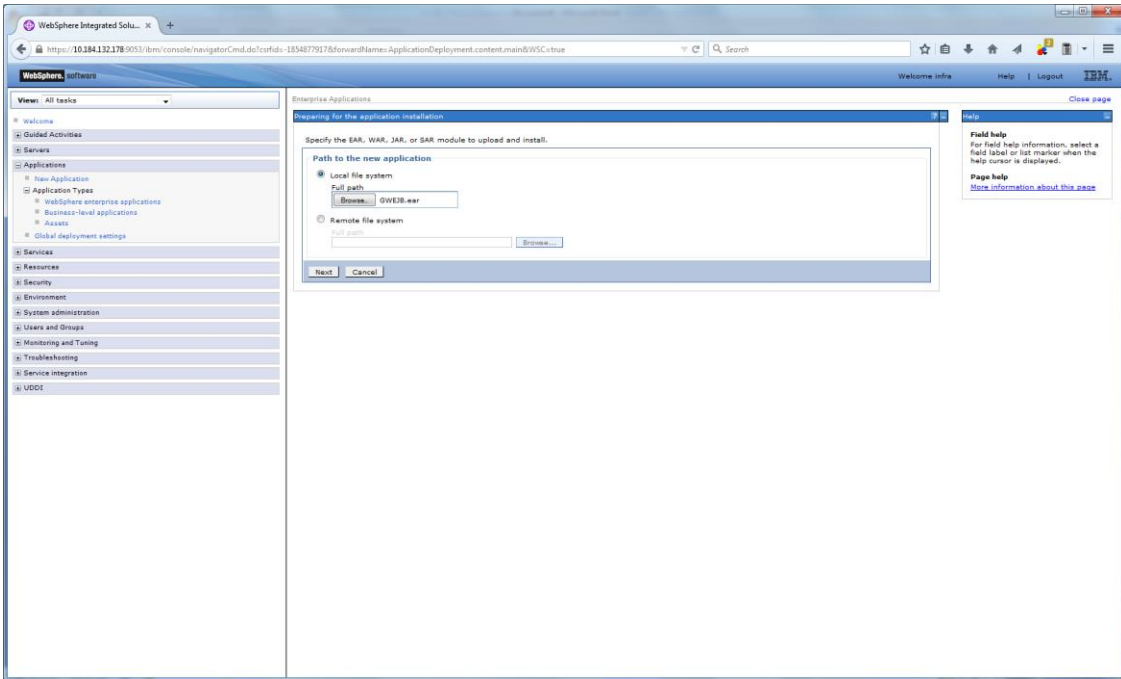
The following screen is displayed.



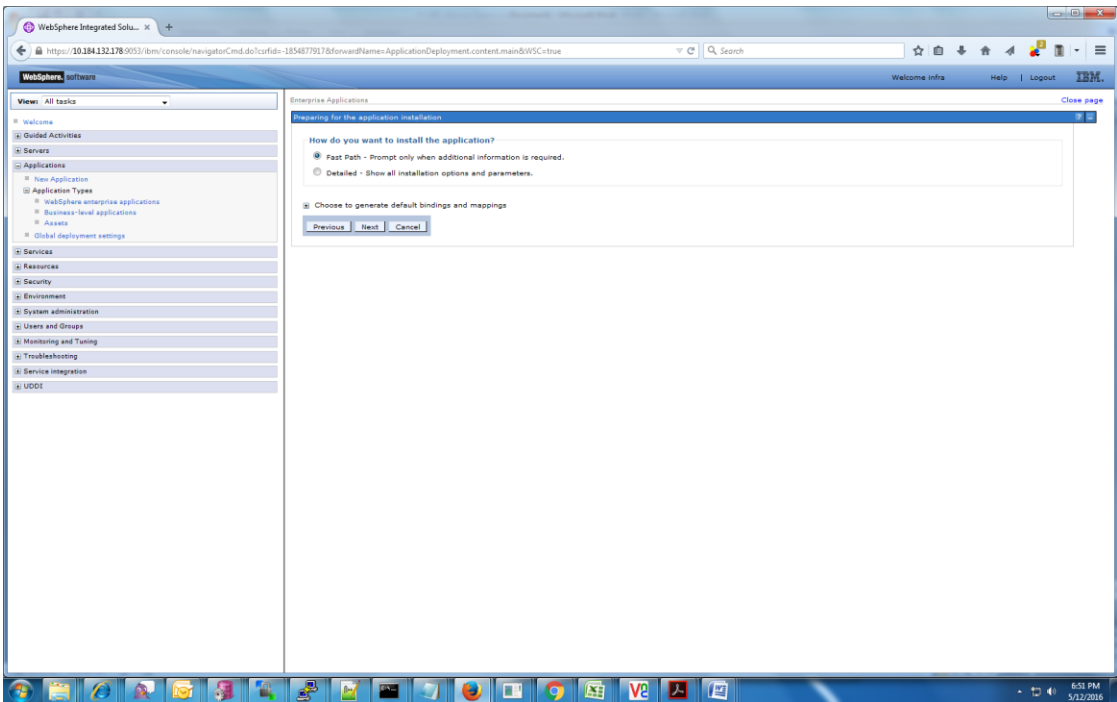
5. Click 'New Enterprise Application'.



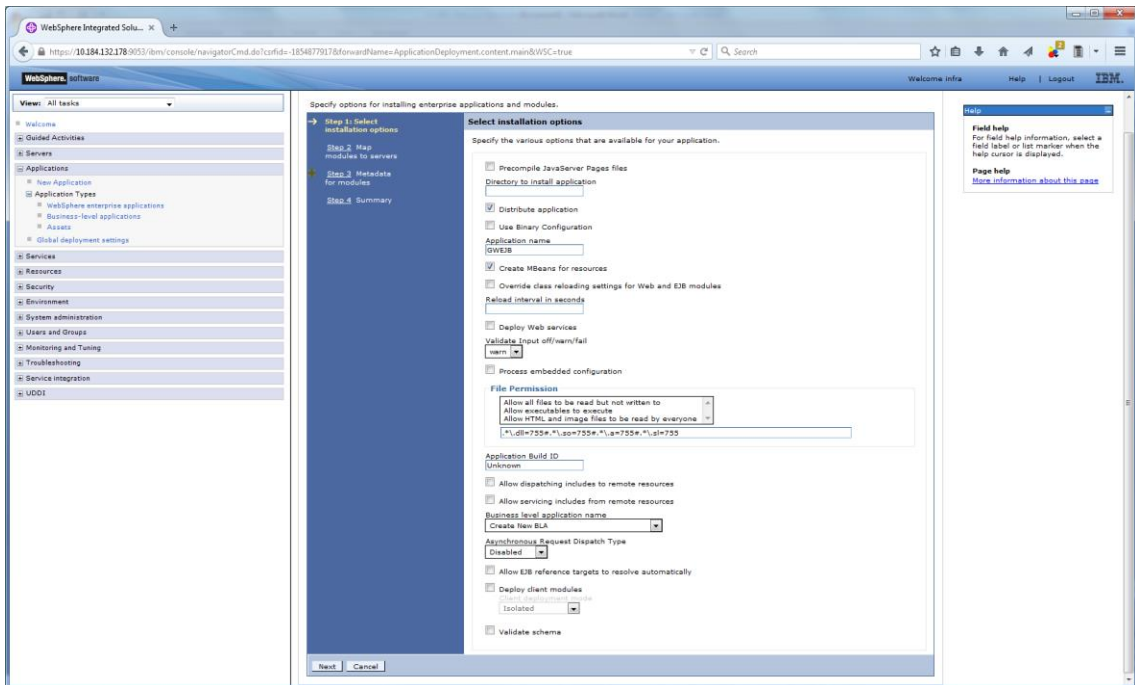
6. Browse the application EAR file and click next button



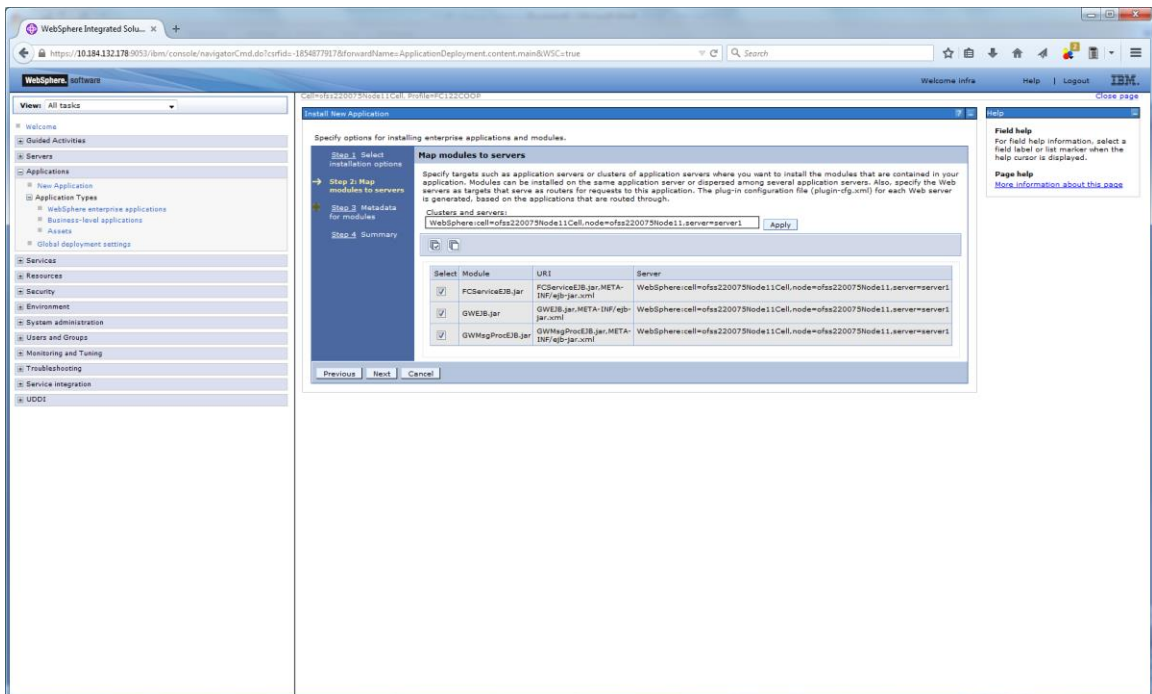
7. Click Next and the following screen is displayed.



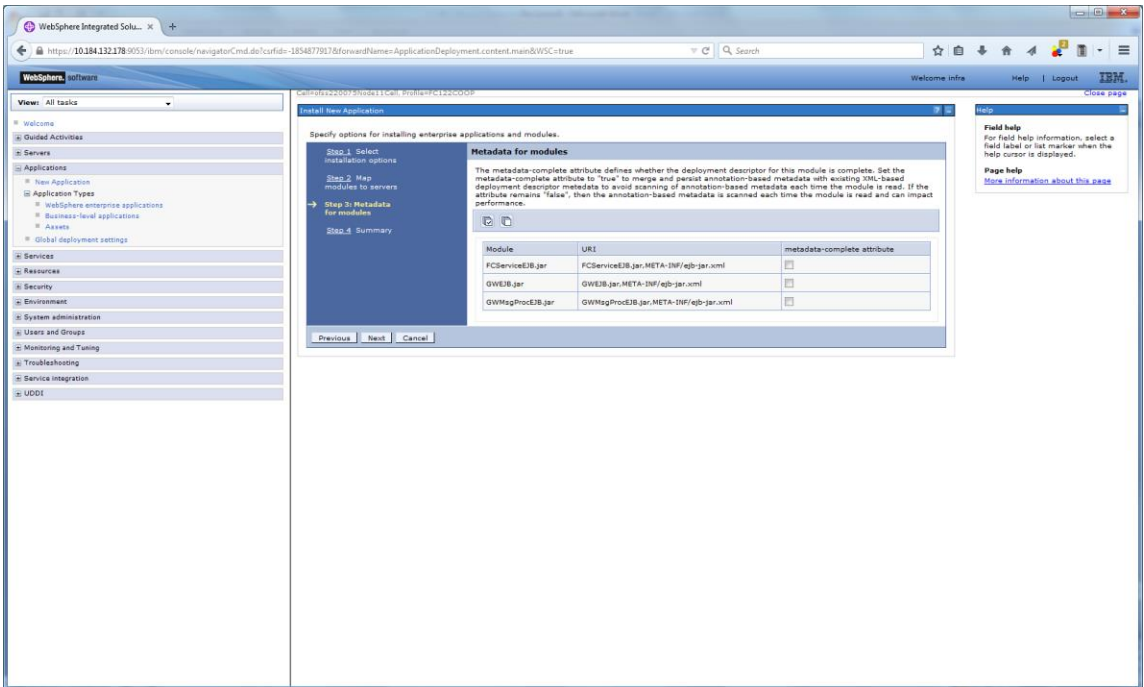
8. Click next and the following screen is displayed.



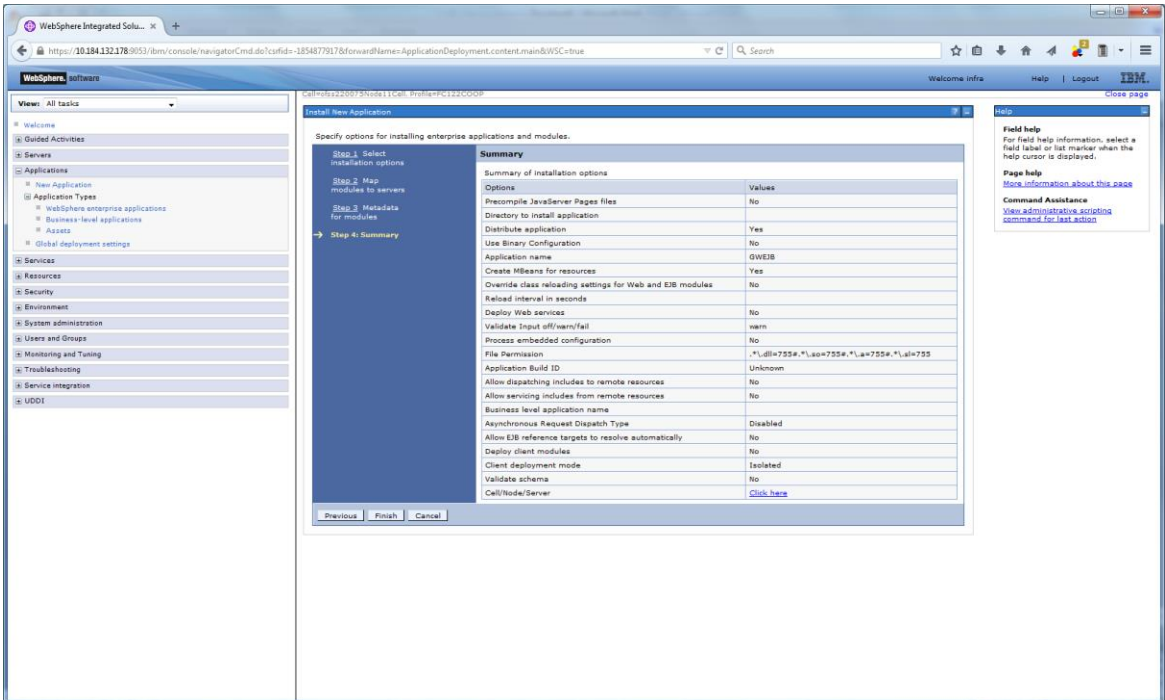
9. Click next and the following screen is displayed.



10. click next and the following Screen is displayed.

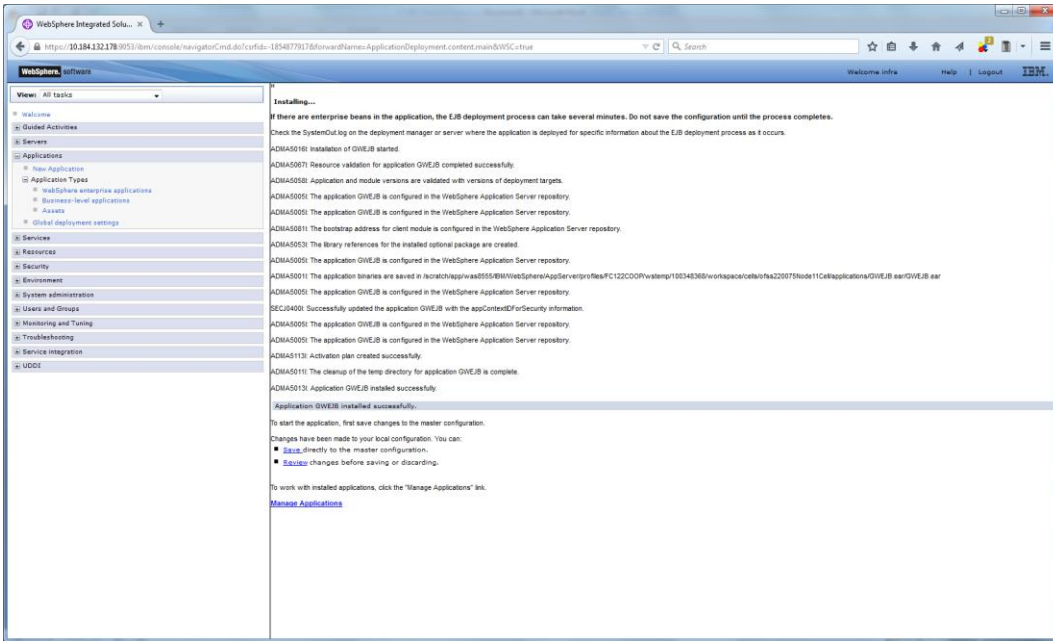


11. Click next and the following screen is displayed.

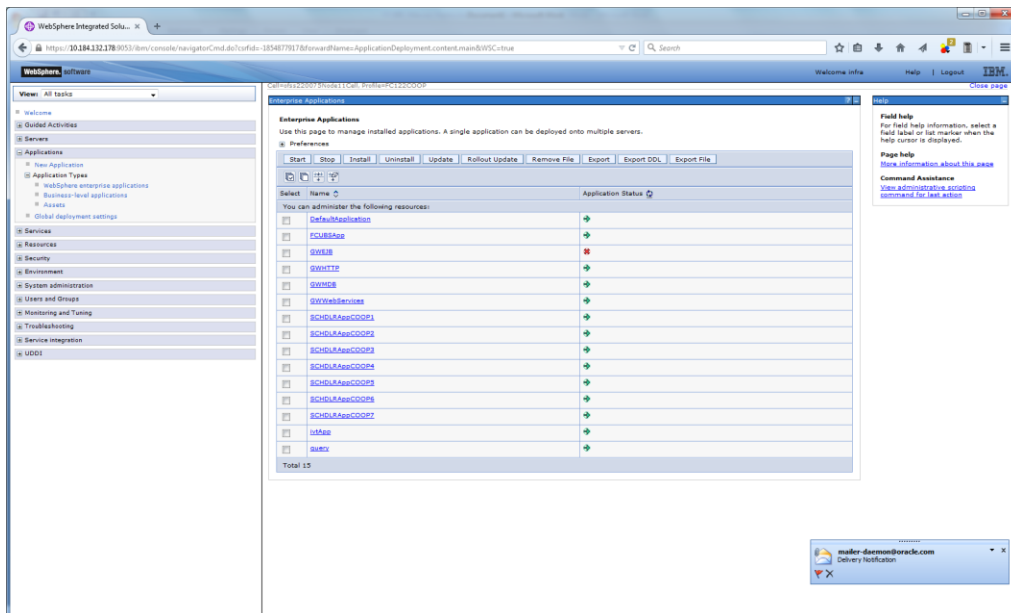


12. Click on finish and the following screen is displayed.

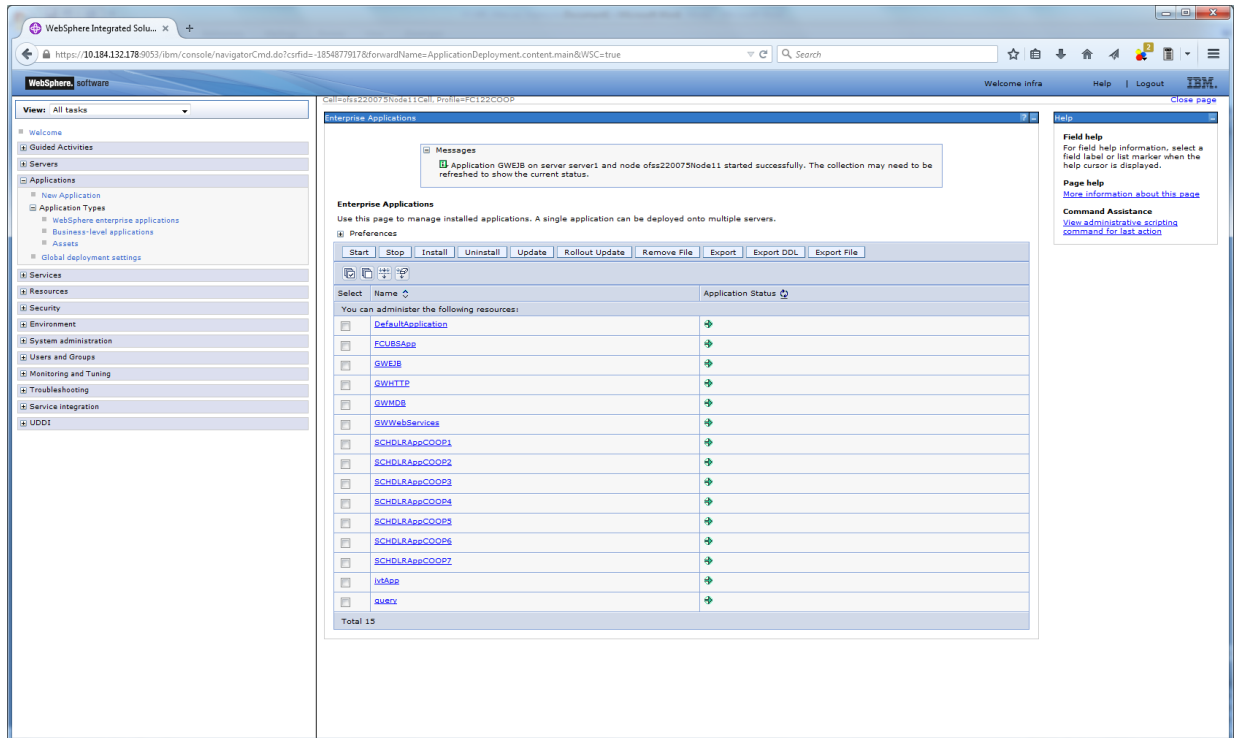




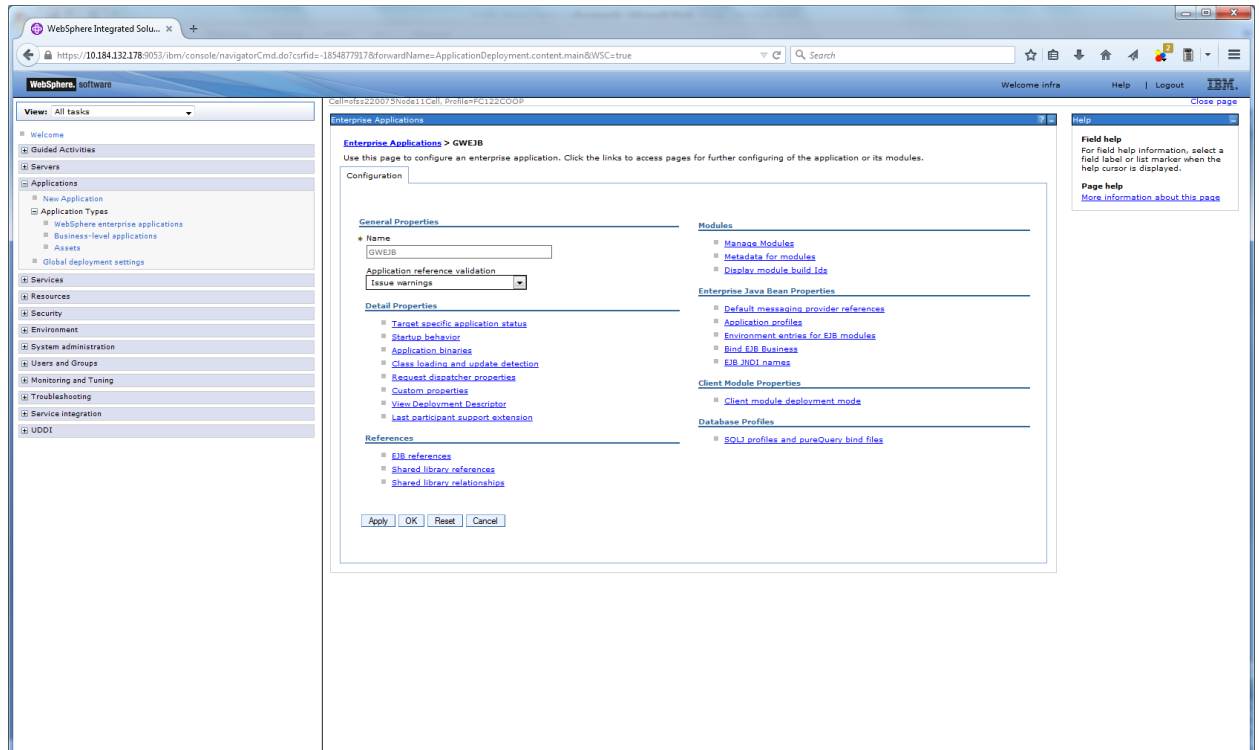
13. Click on save and the following screen is displayed.



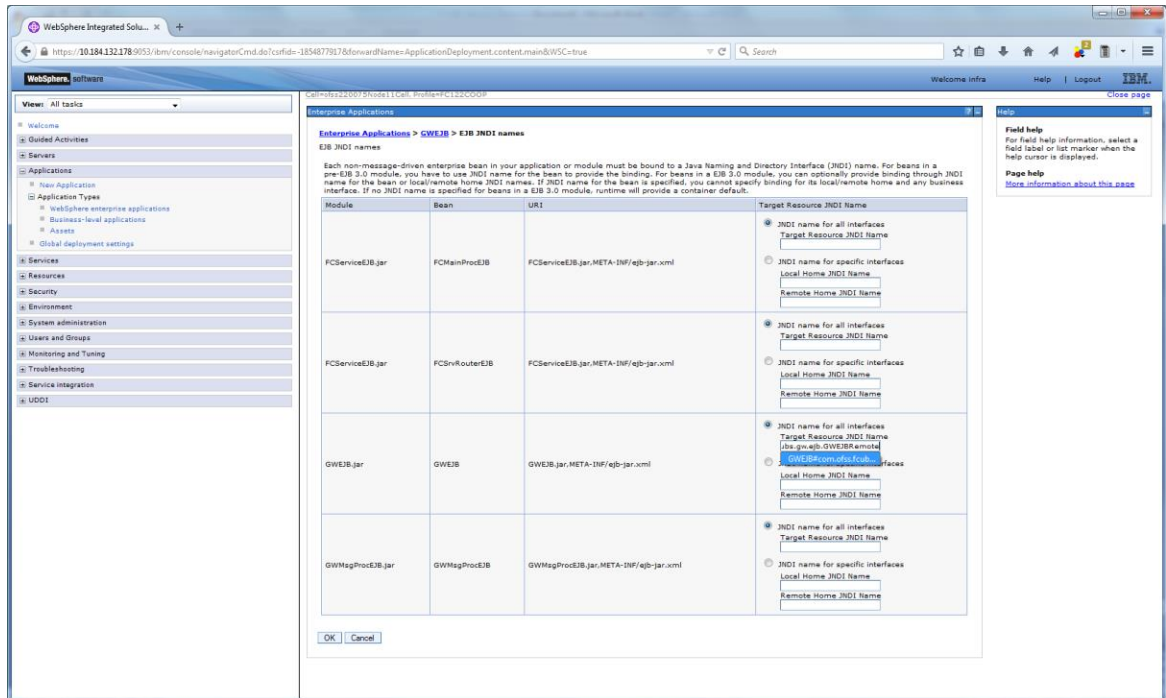
15. Select the deployed application and click on start



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

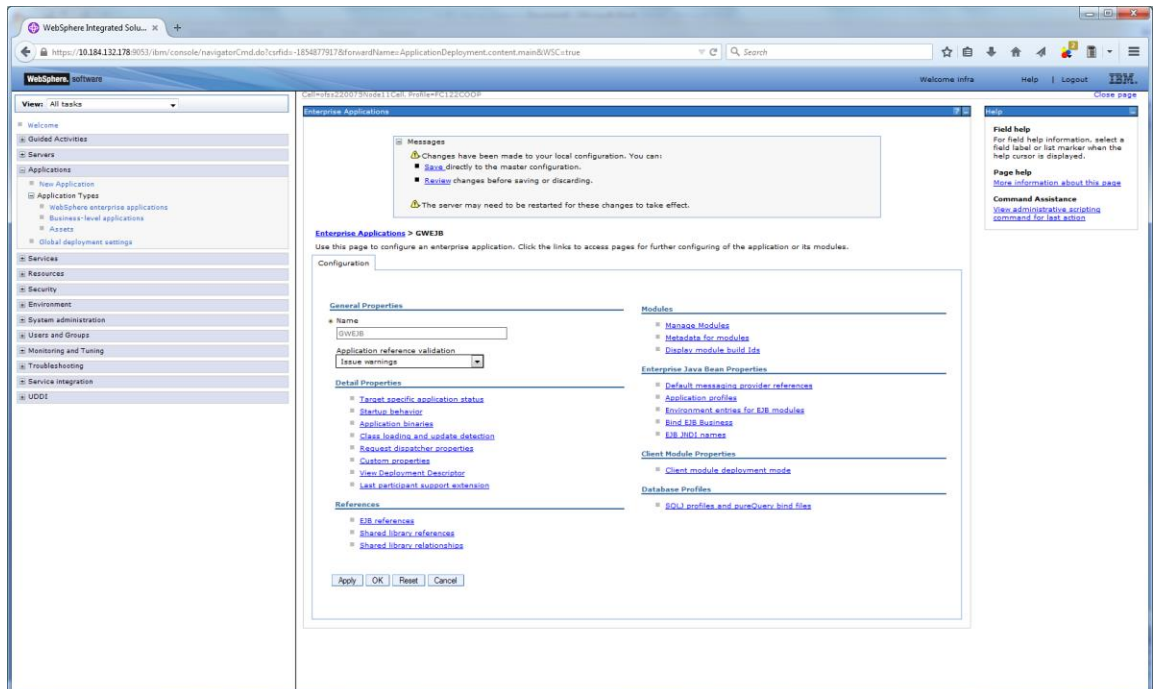


17. Click on EJB JNDI names and the following screen is displayed.



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:

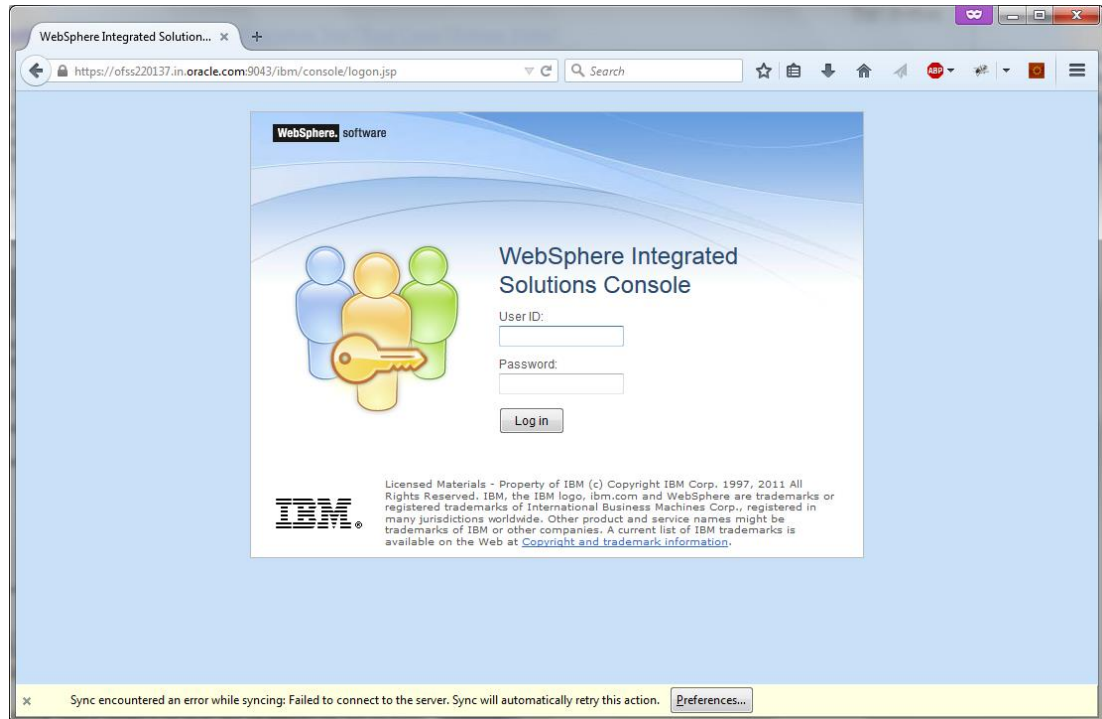
1. Open the Administrative Console of WebSphere server:

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

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

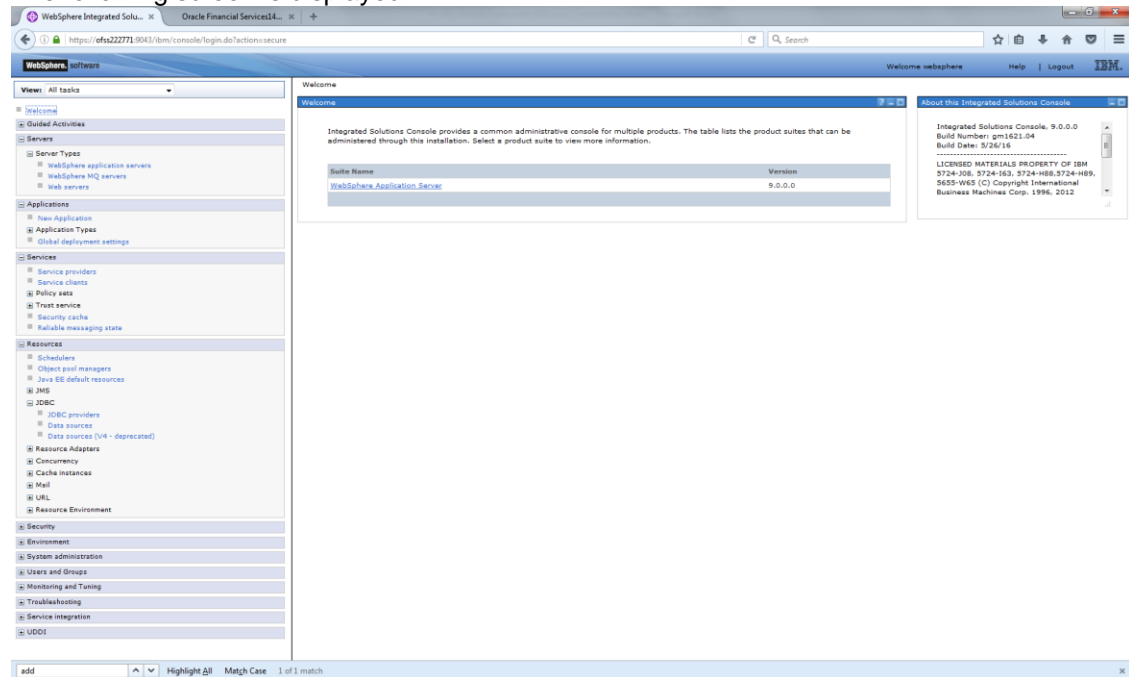
In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

The following screen is displayed:



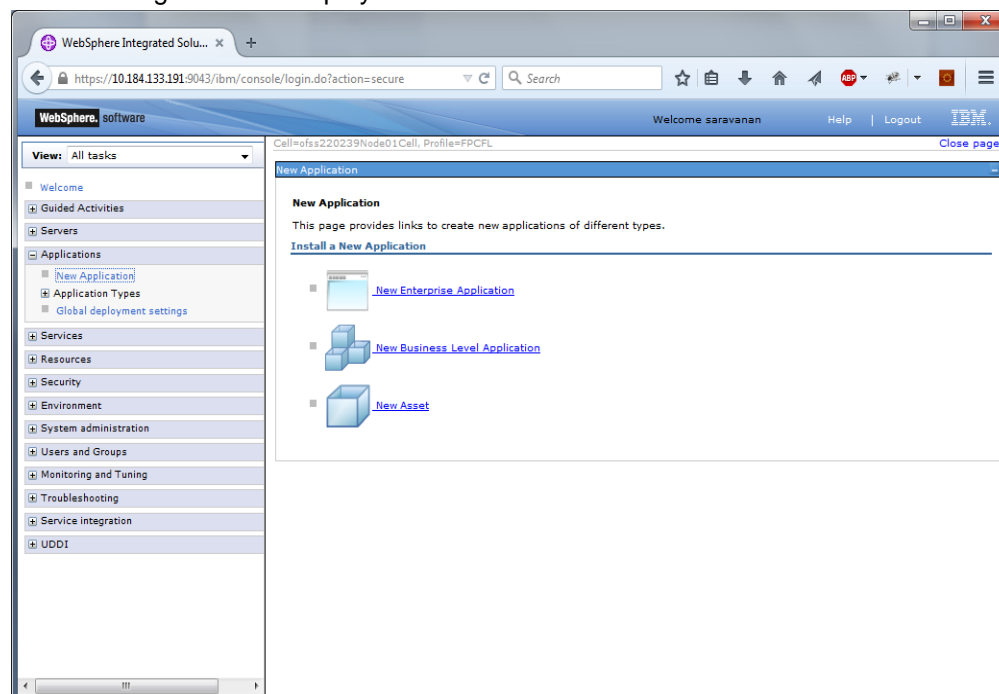
2. Enter the user name and password and click 'Log In' to log in to the application server.
3. Navigate to the WebSphere Home Page.

The following screen is displayed.

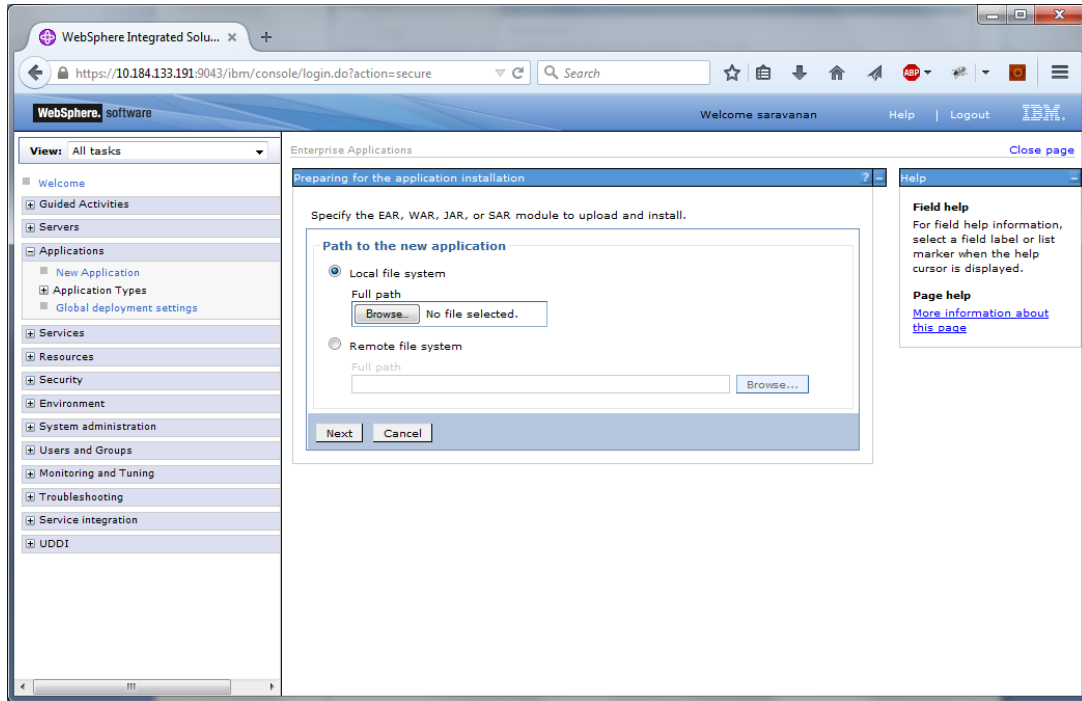


4. Expand Applications from left-side menu and Click 'New Application'.

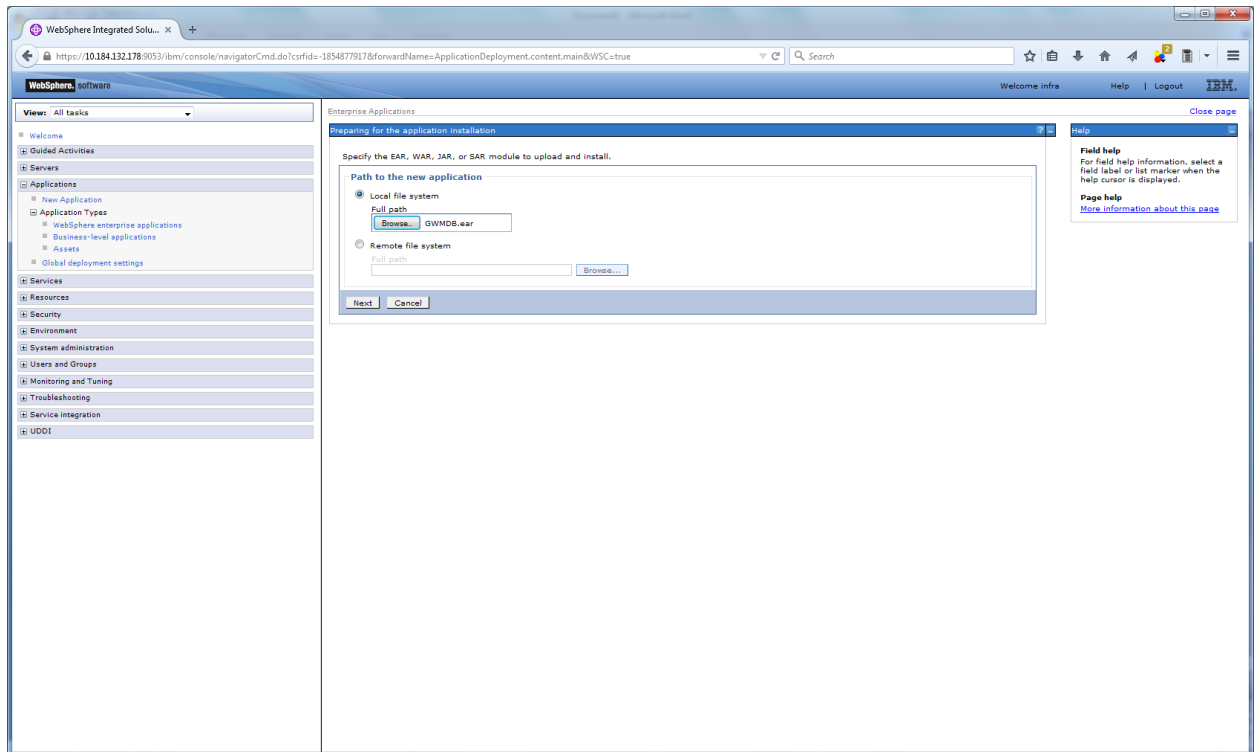
The following screen is displayed.



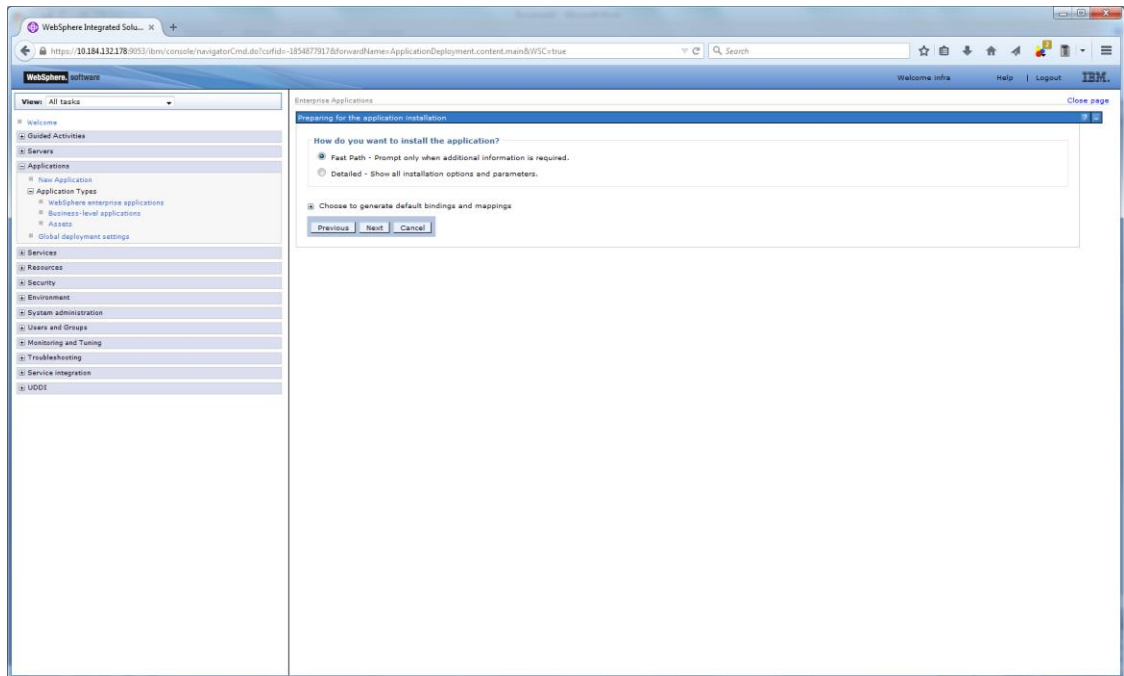
5. Click 'New Enterprise Application'.



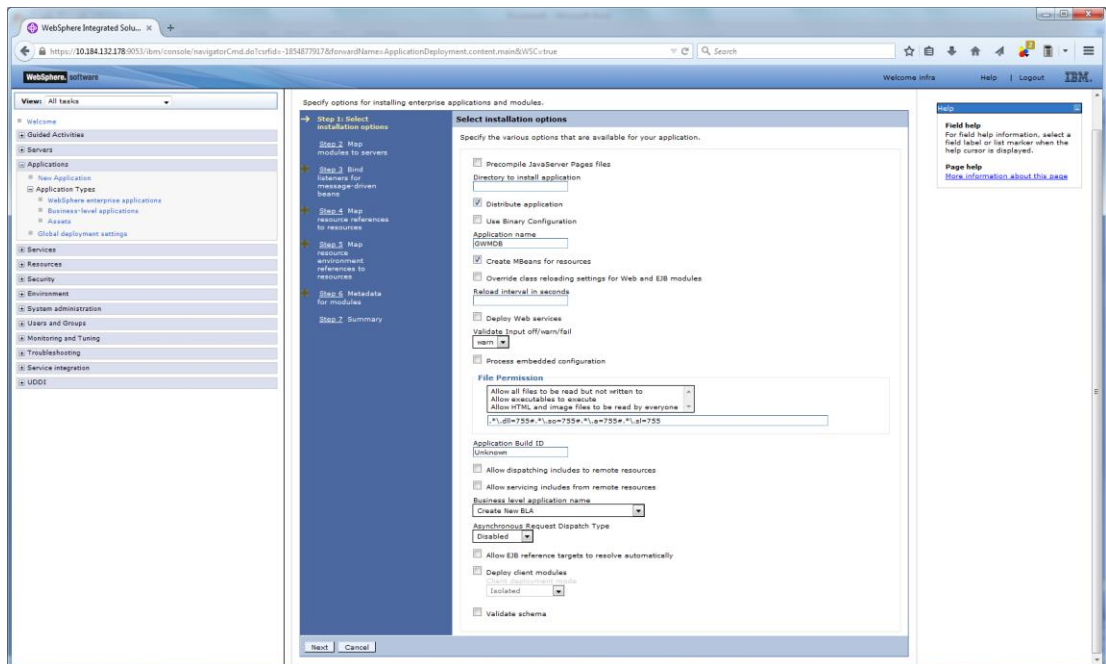
6. Click on Browse and select the MDB EAR and the following screen is displayed



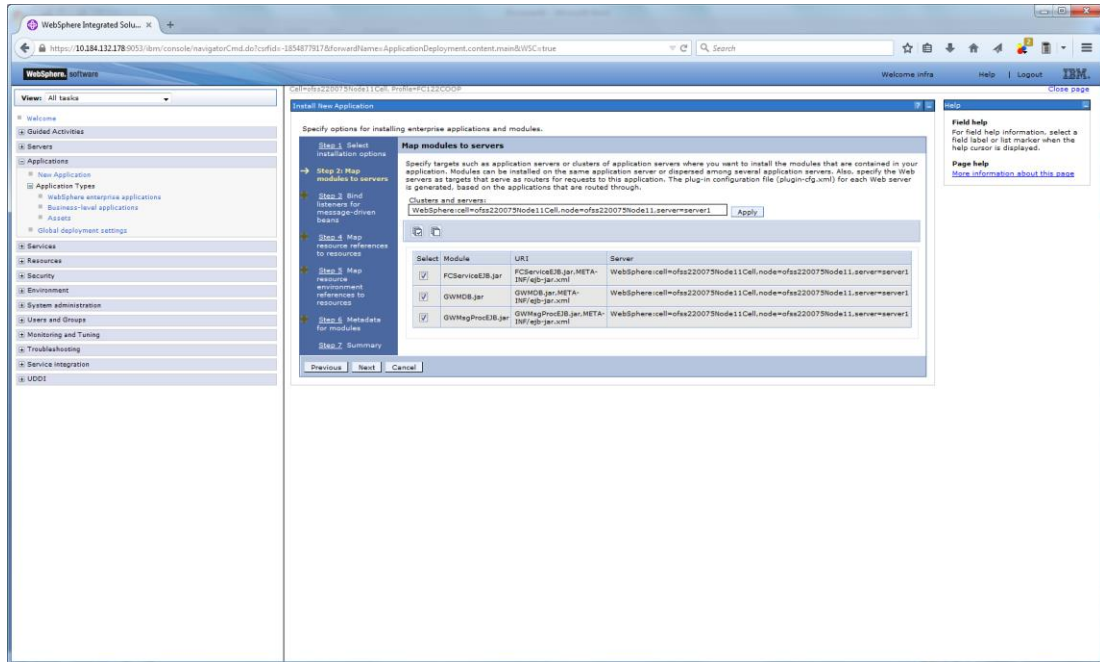
7. Click on next and the following screen is displayed.



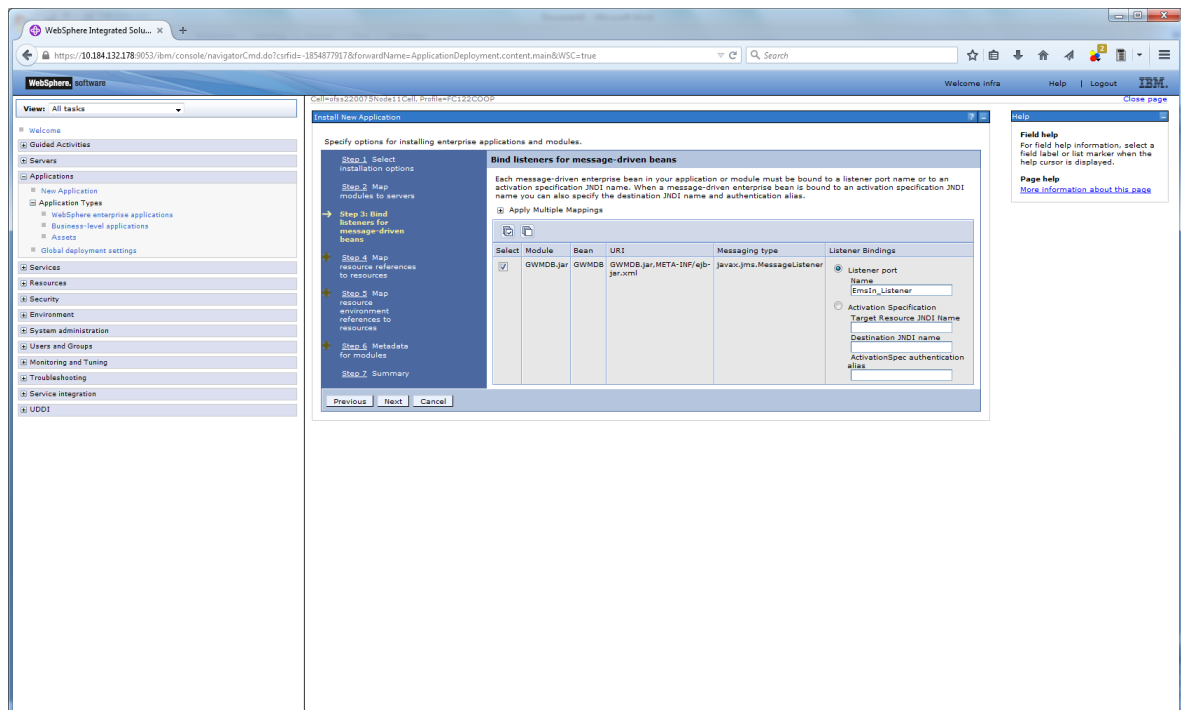
8. Click on next and the following screen is displayed.



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

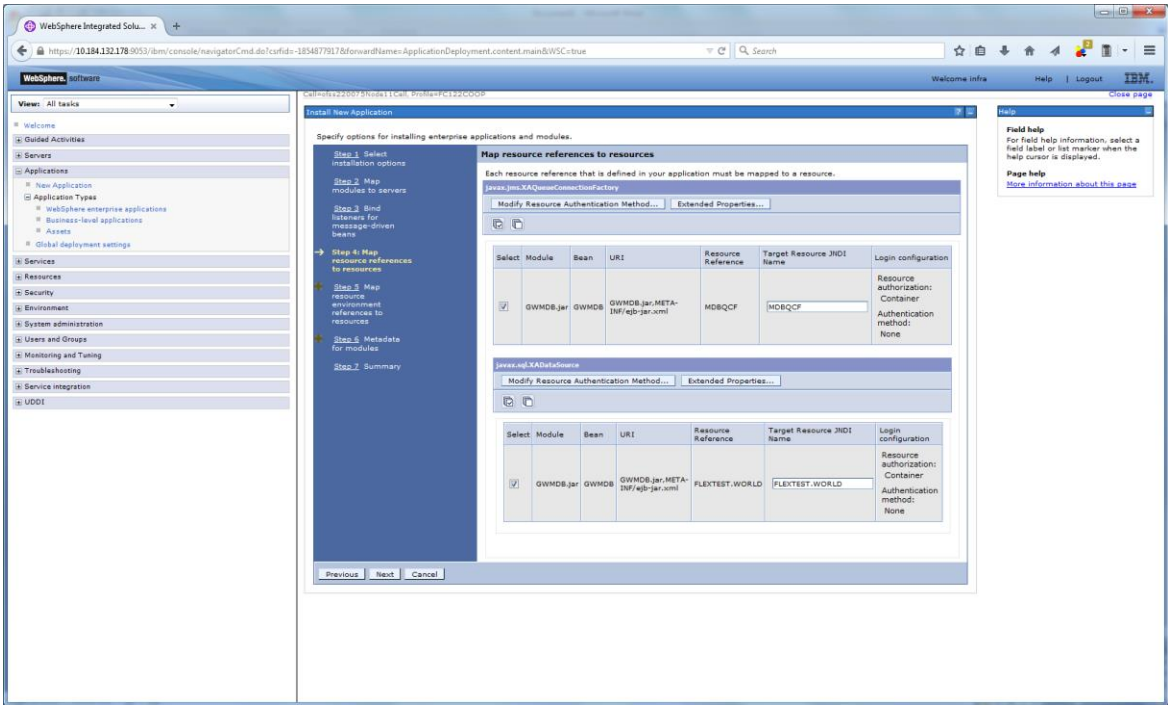


10. Click on next and the following screen is displayed.

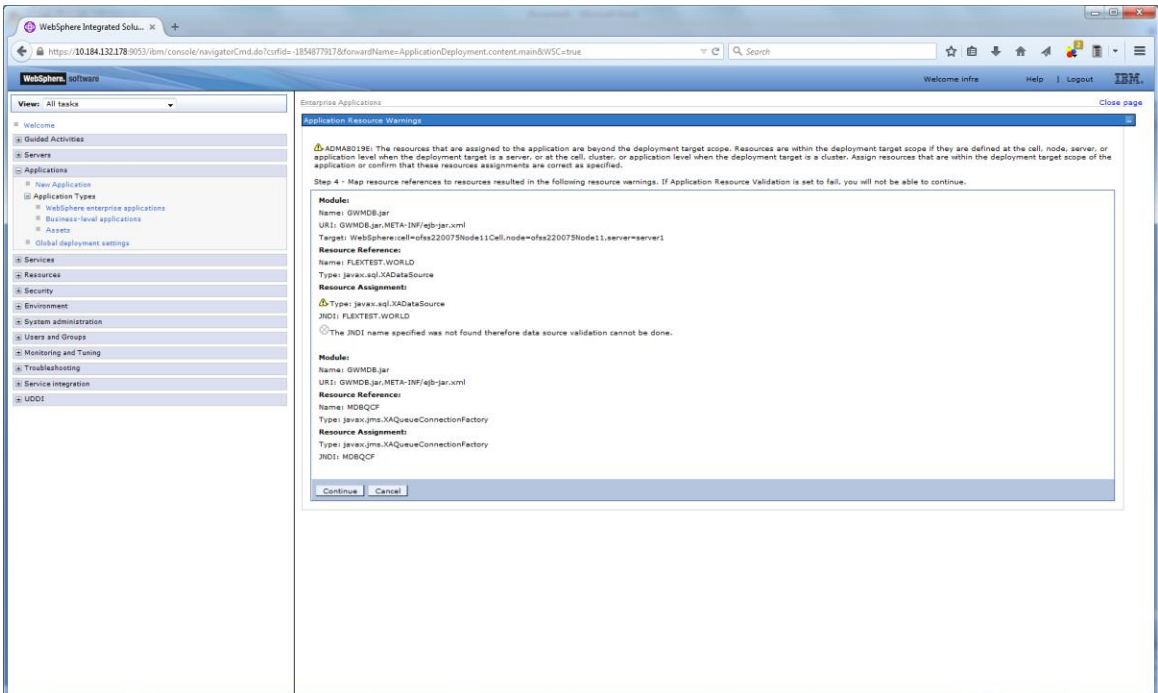


11. Input the listner name click next. Following screen is displayed.

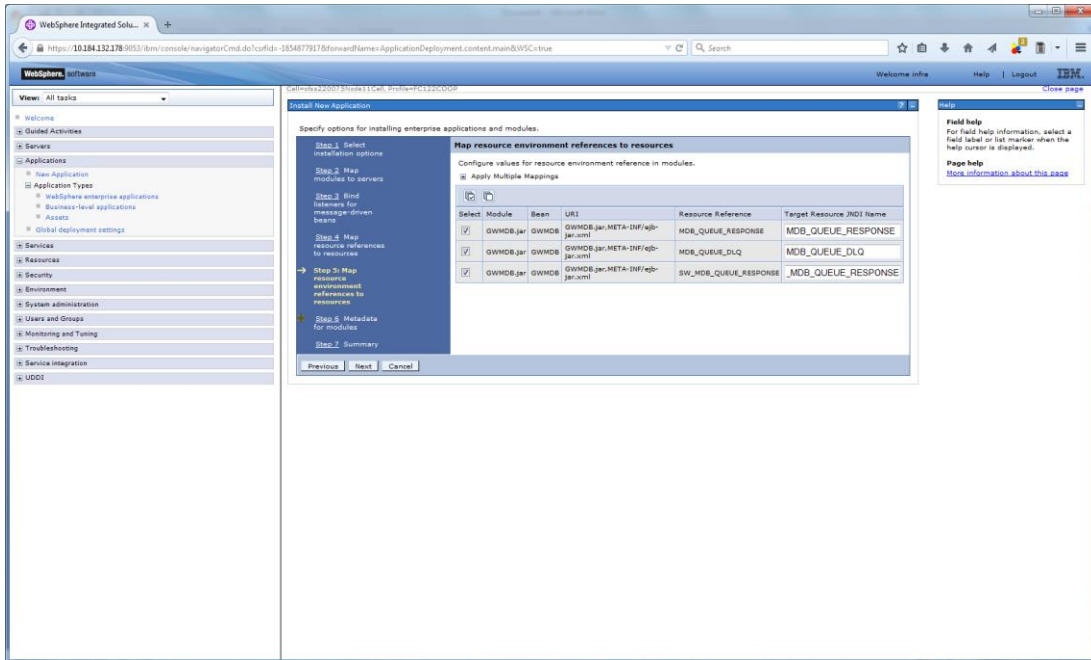




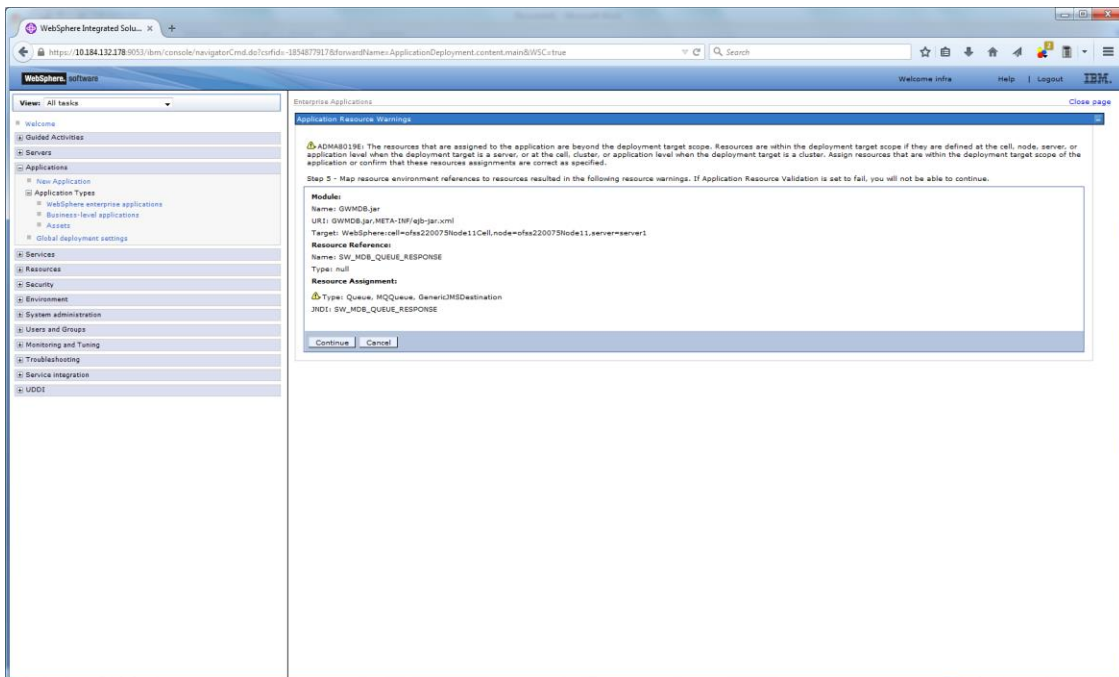
12. Enter the details as shown and click next.



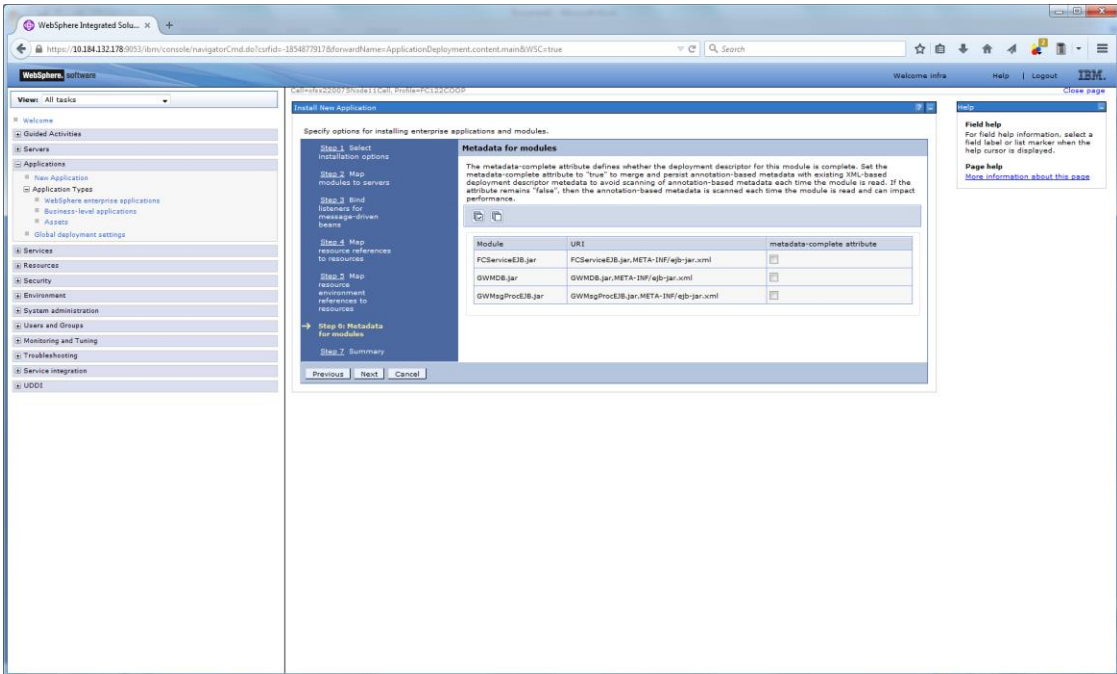
13. Click on continue and following screen is displayed.



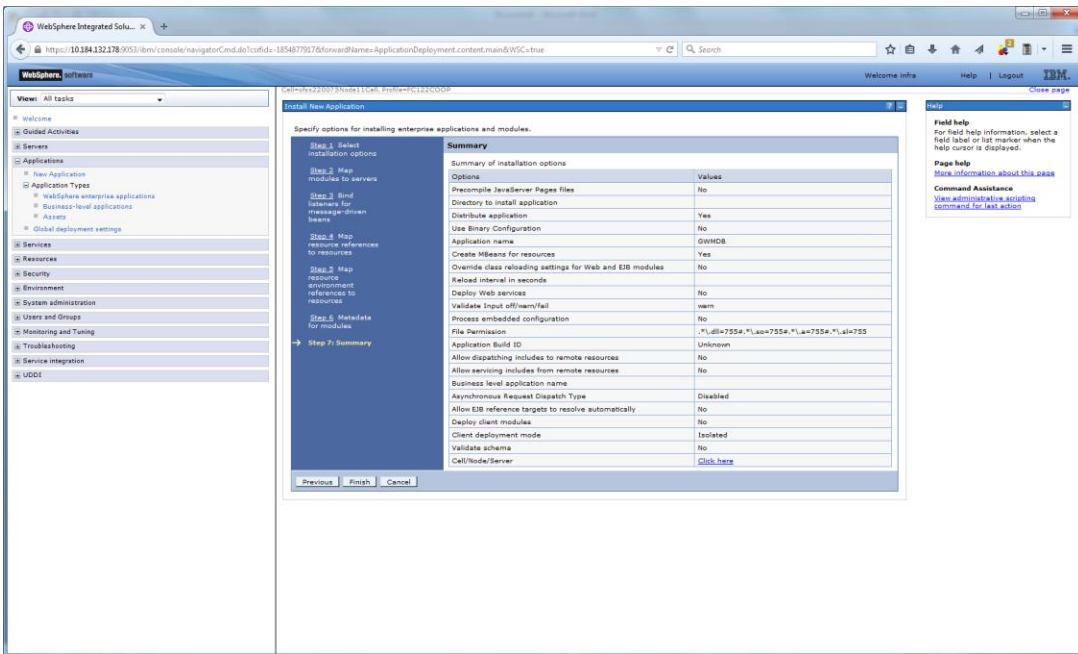
14. Give necessary details as shown and click next.



15. Click on continue and below screen is displayed.

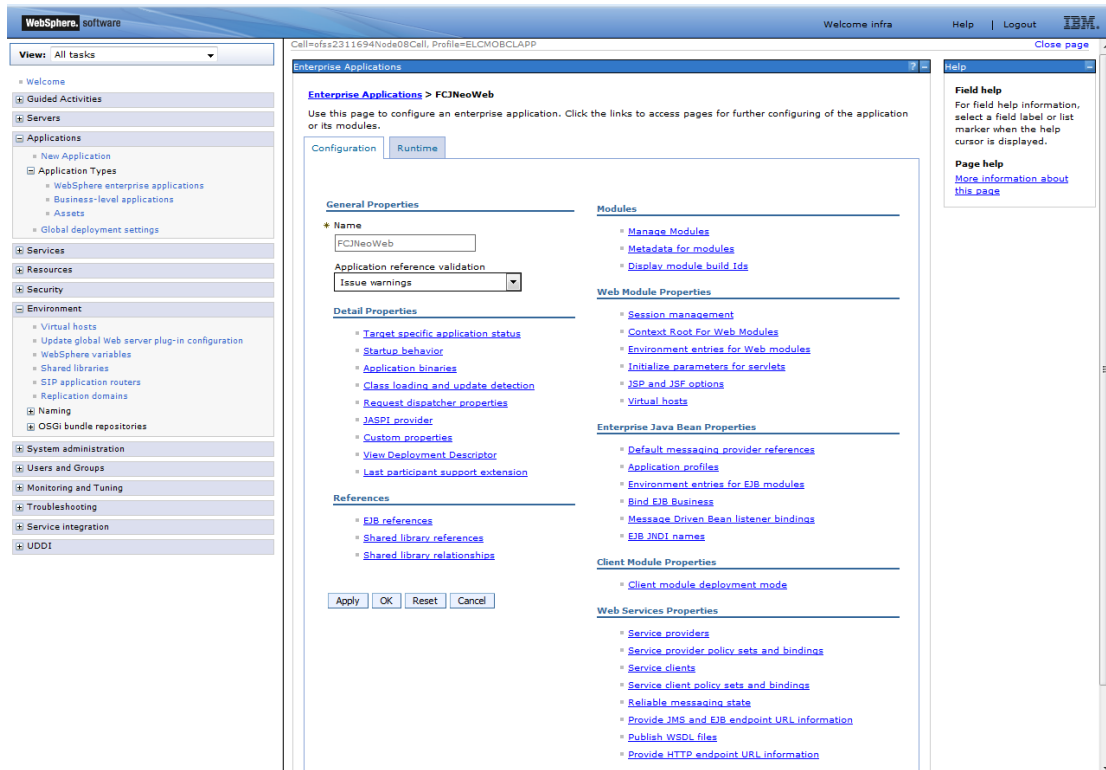


16. Click on next and following screen is displayed.



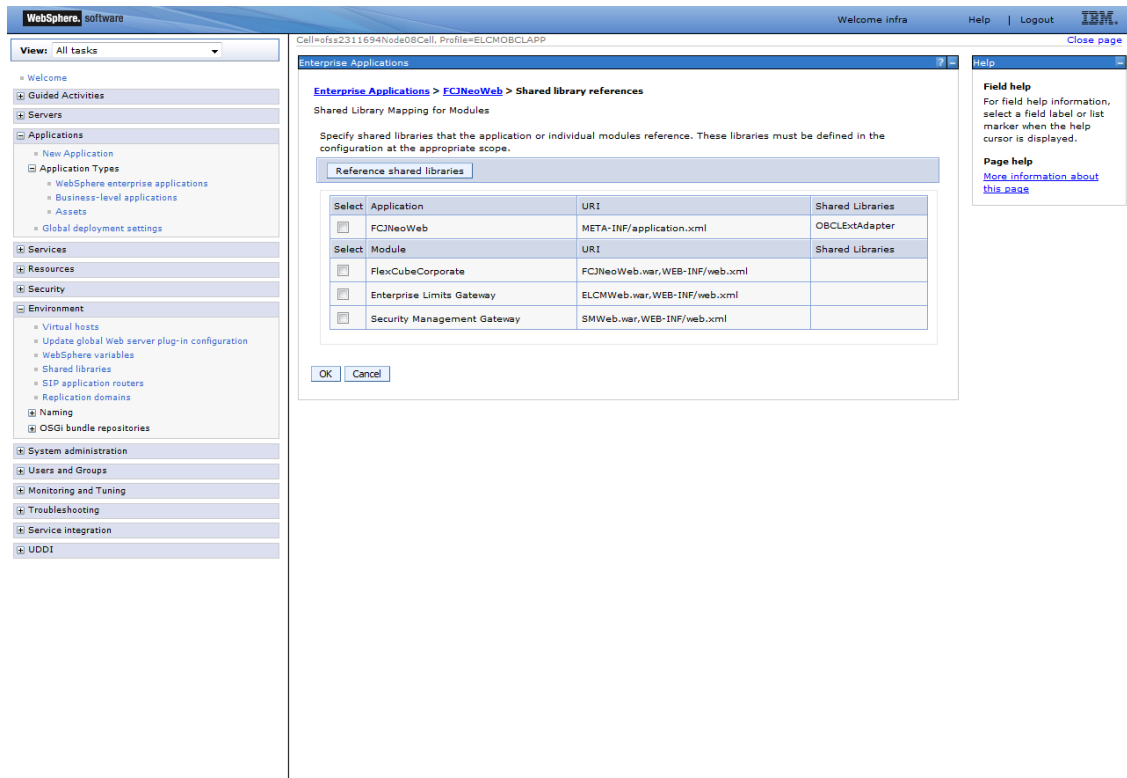
17. Click on Finish and following screen is displayed.





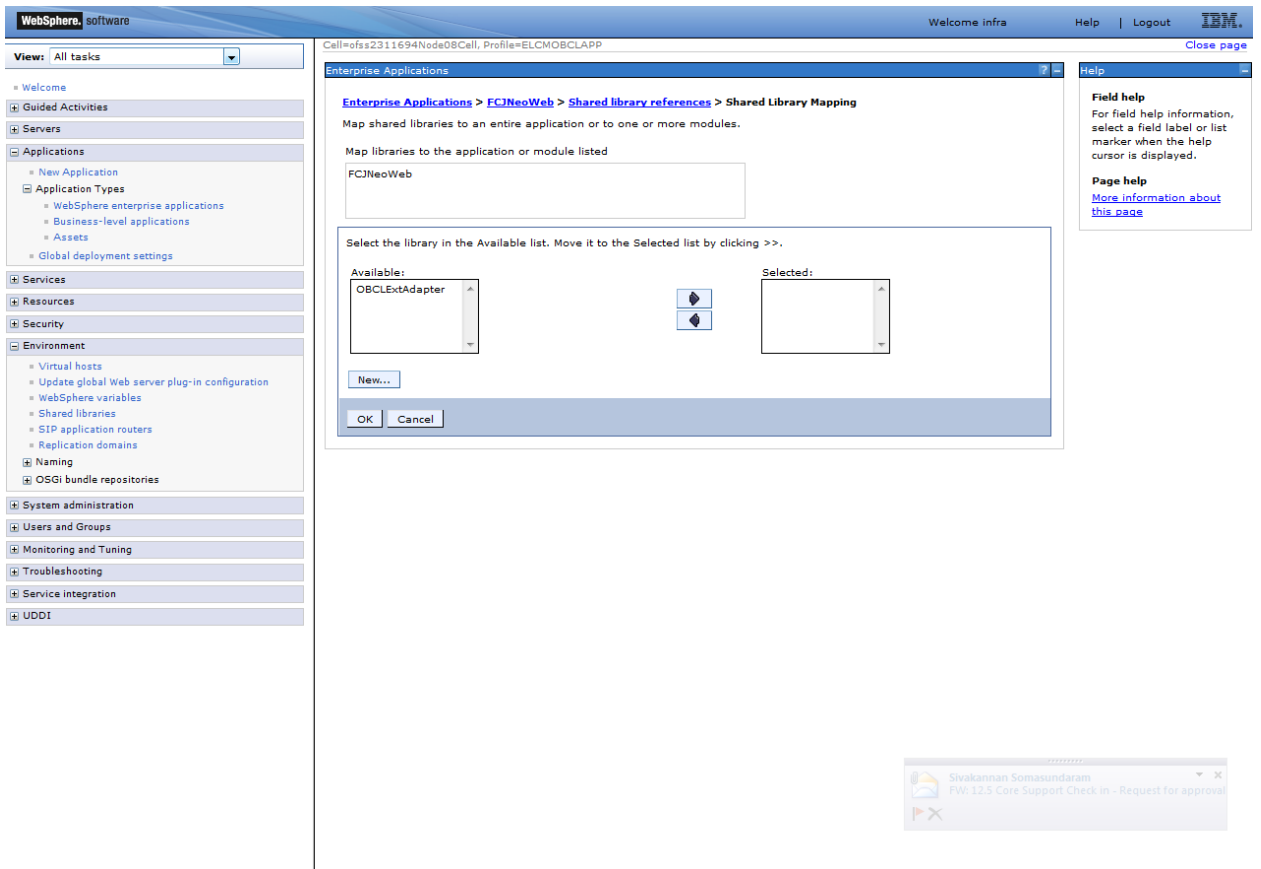
20. Click 'Shared library references' under 'References'.

The following screen is displayed.



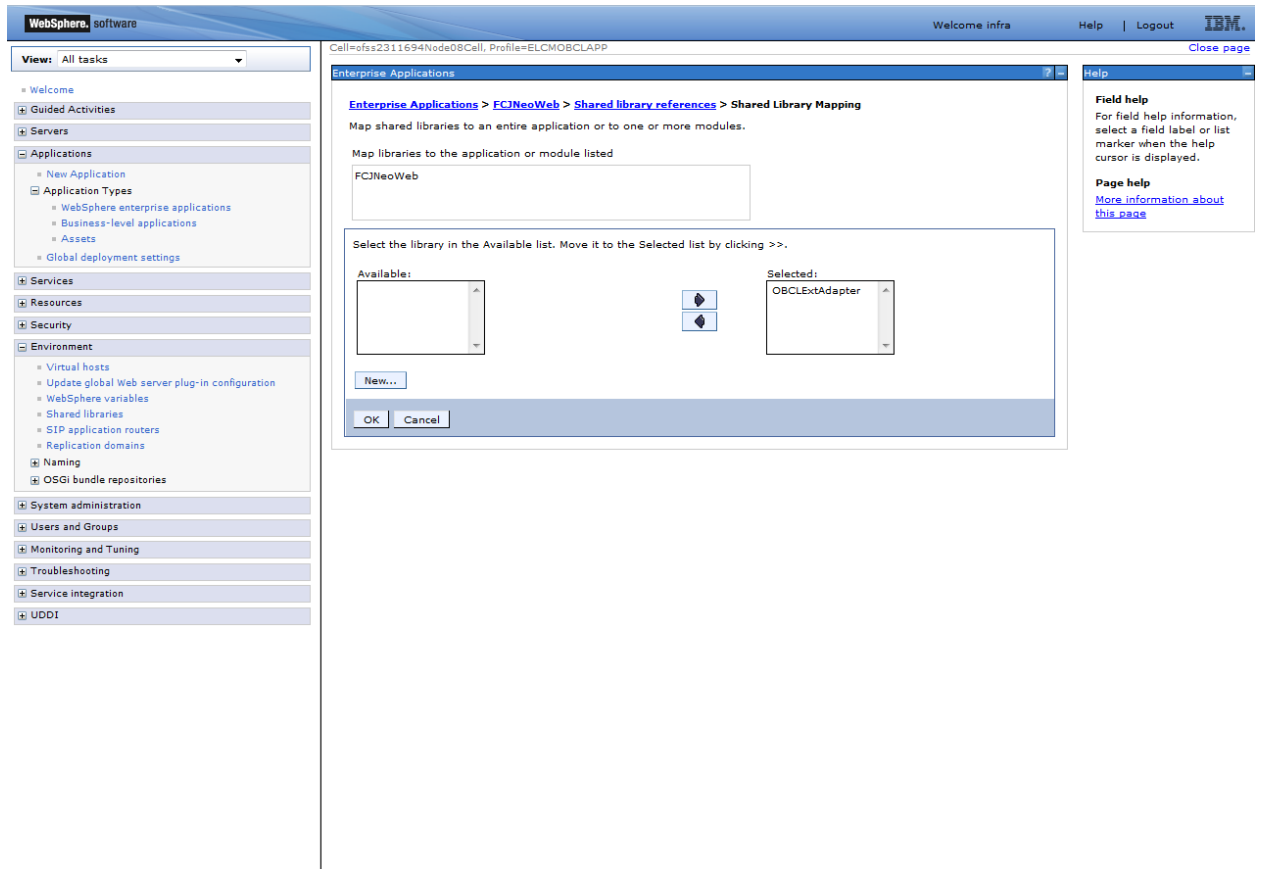
21. Select your Application and click 'Reference Shared Library'.

The following screen is displayed.



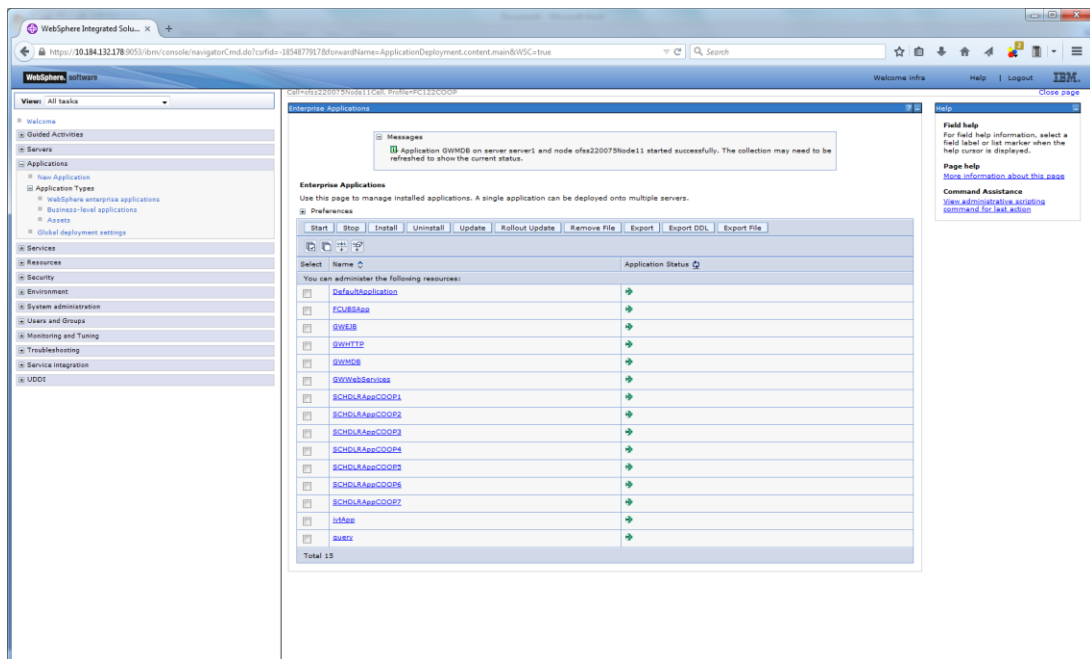
22. Click on right arrow button to add Available shared library reference.

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:

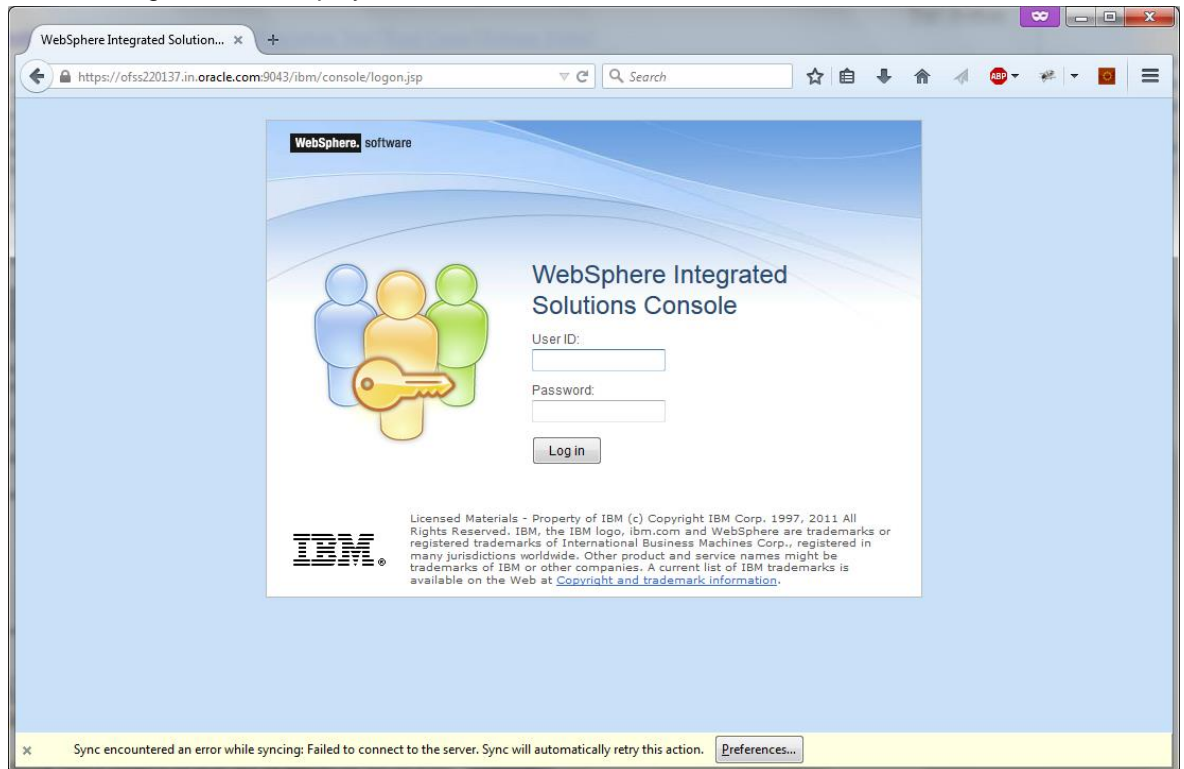
1. Open the Administrative Console of WebSphere server:

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.

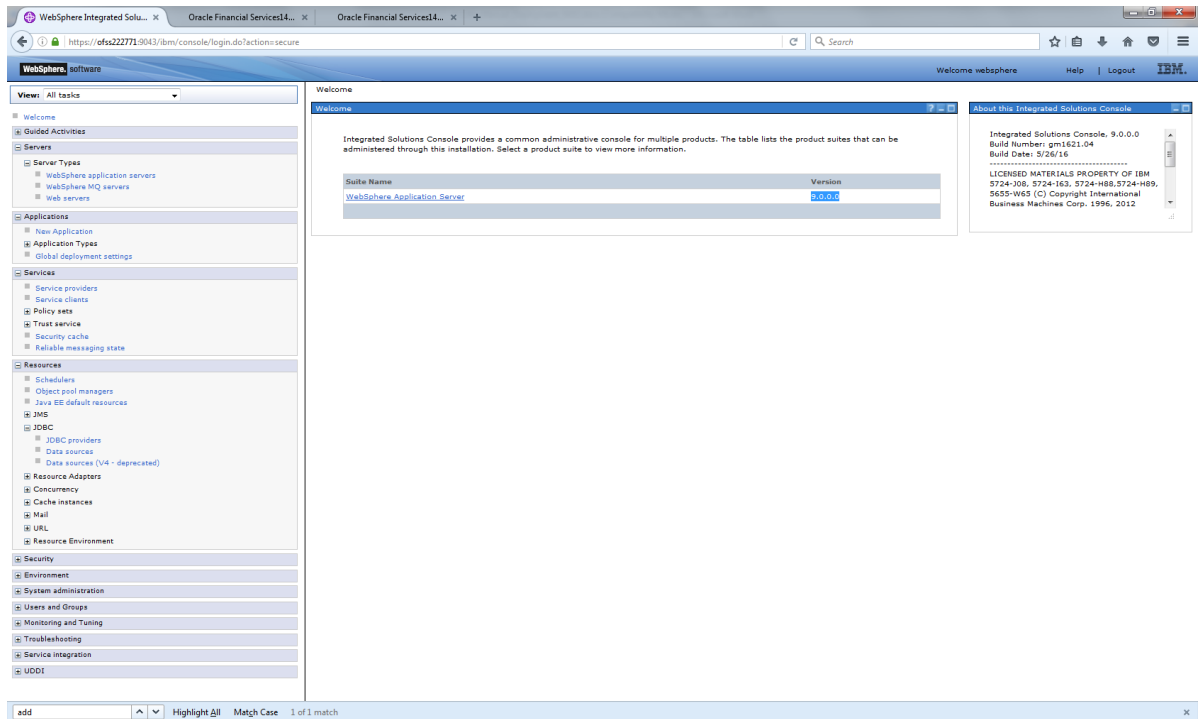
The following screen is displayed:



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.

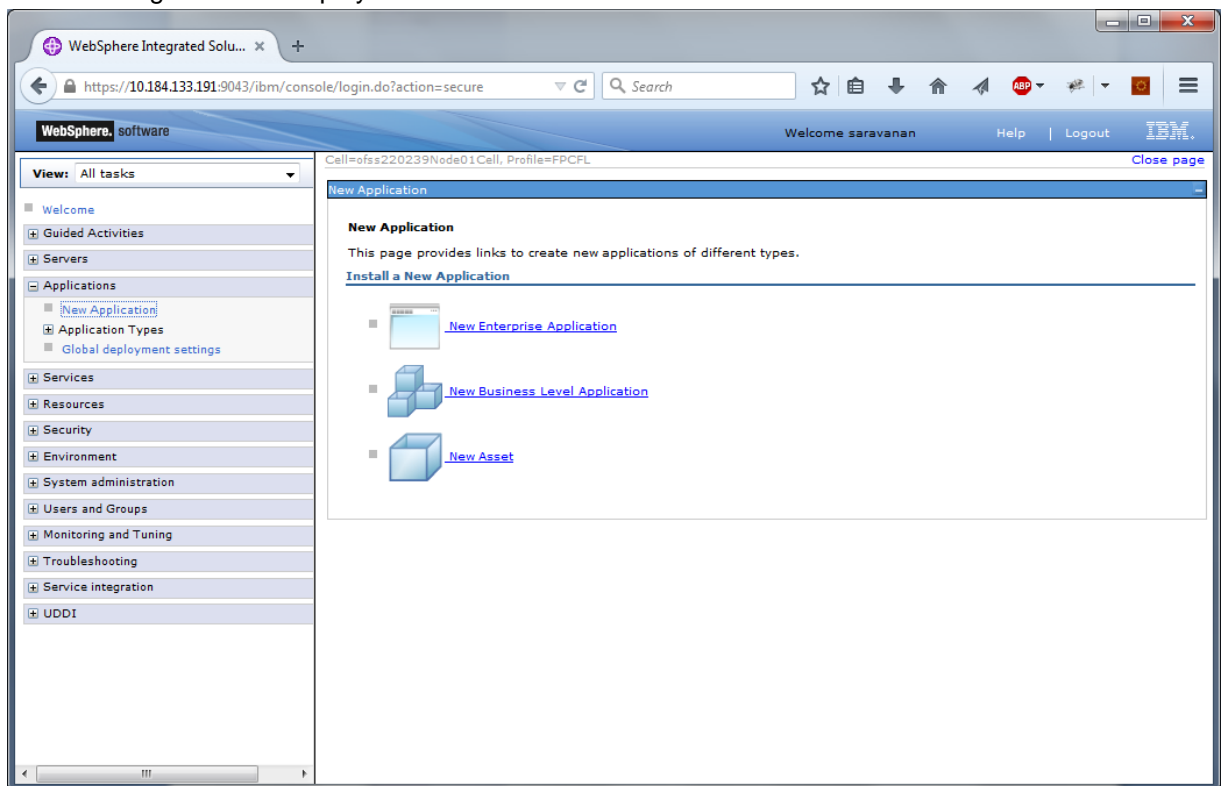
The following screen is displayed.



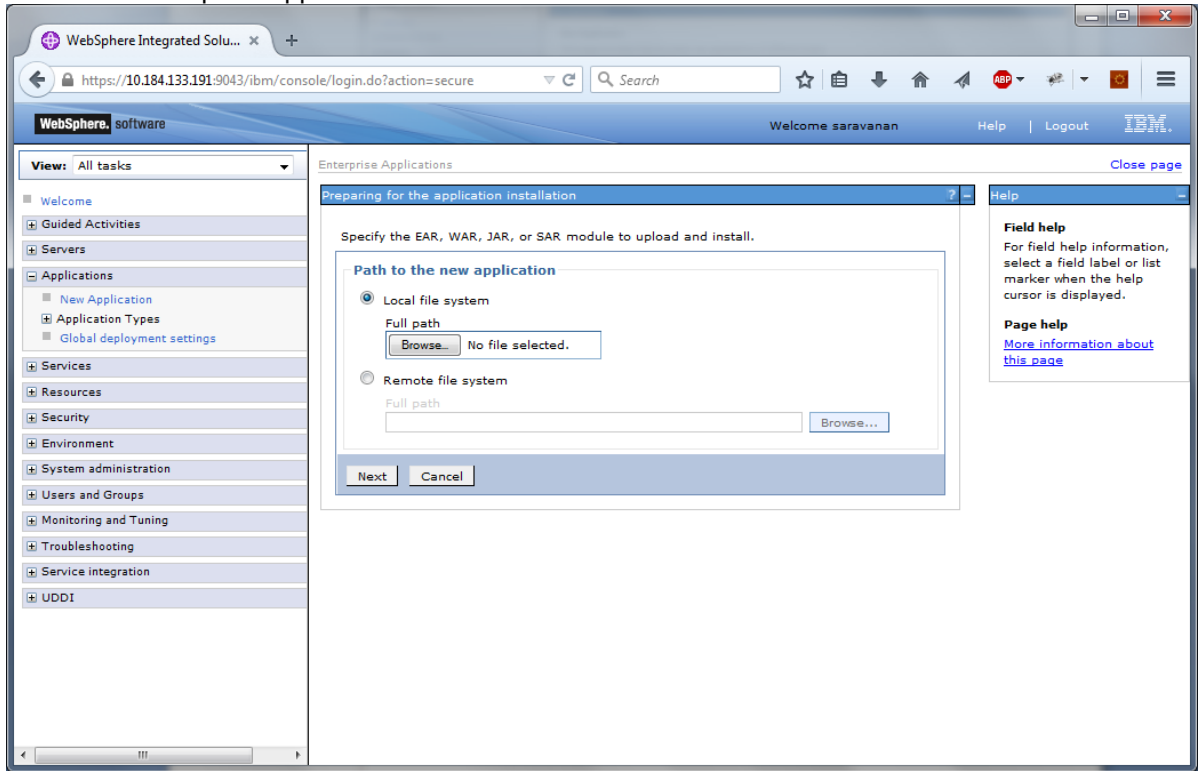


4. Expand Applications from left-side menu and Click 'New Application'.

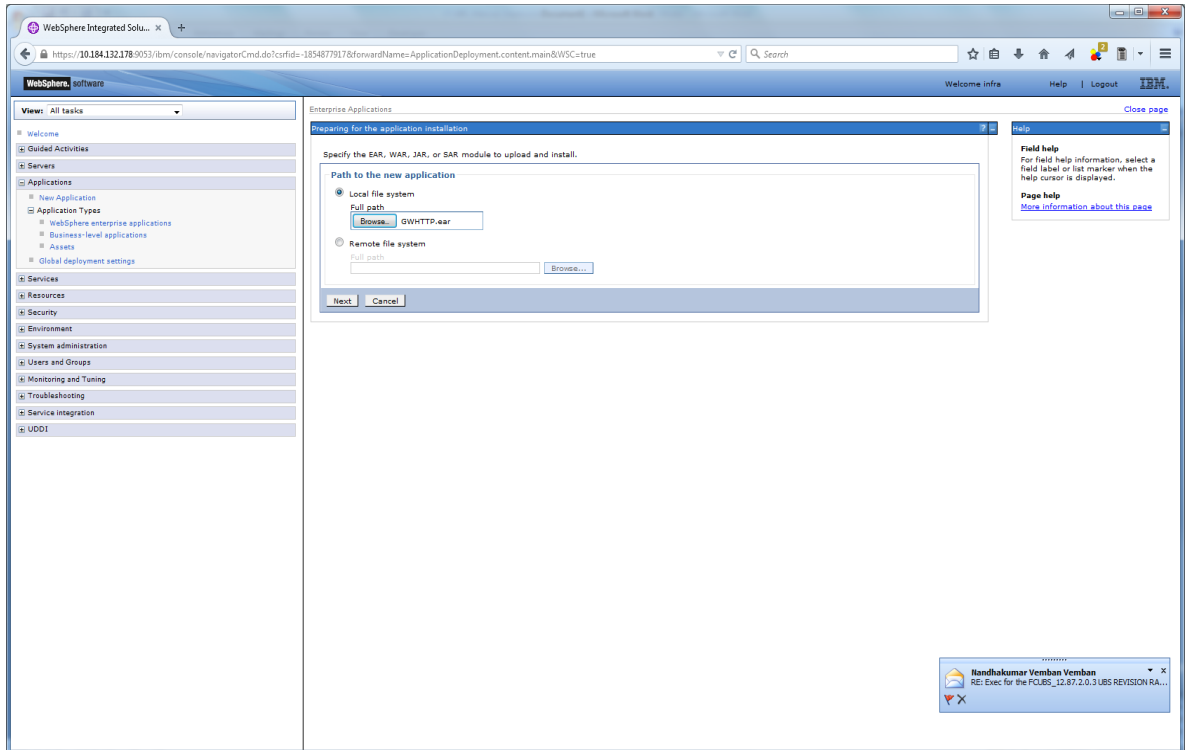
The following screen is displayed.



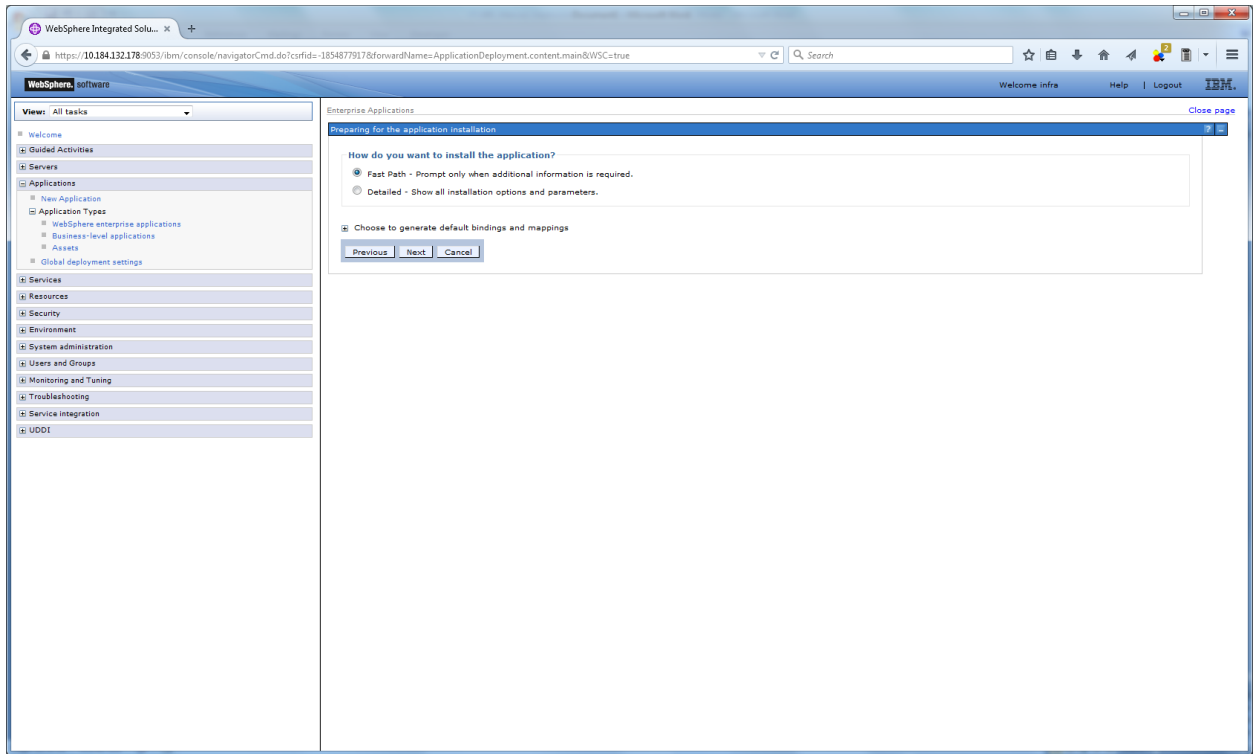
5. Click 'New Enterprise Application.'



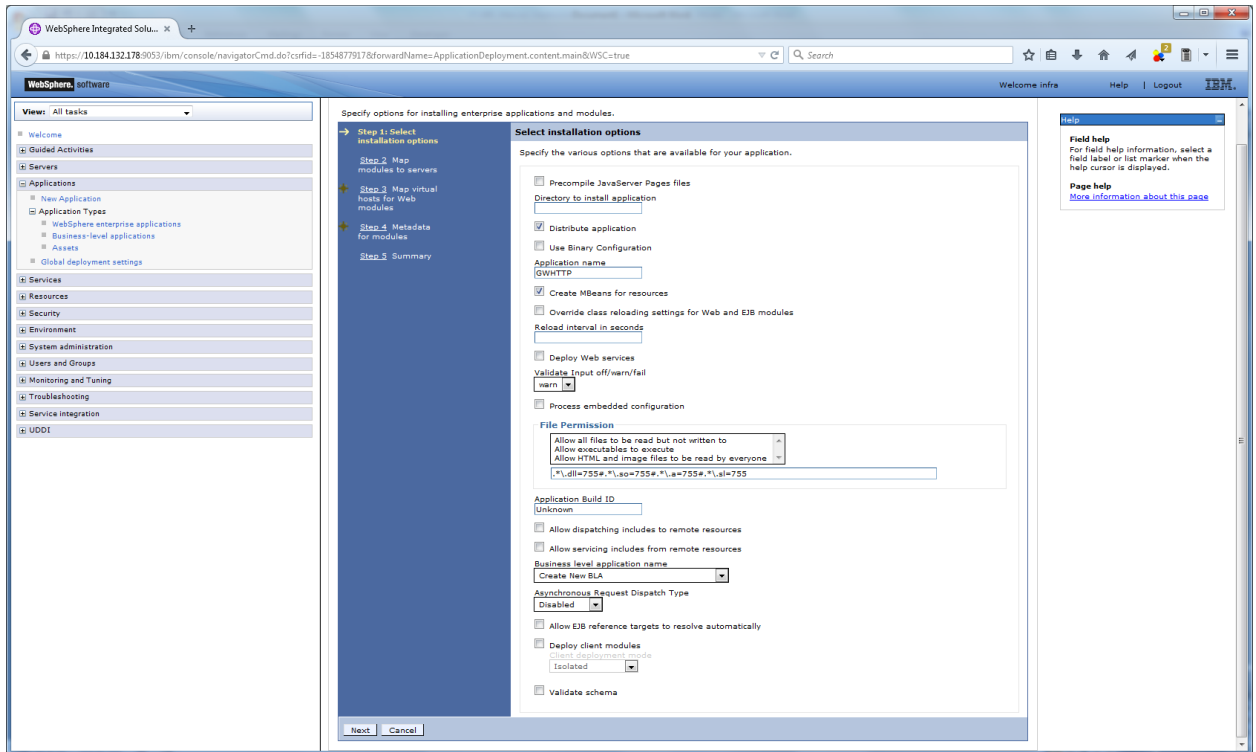
6. Browse the application EAR file and click next button



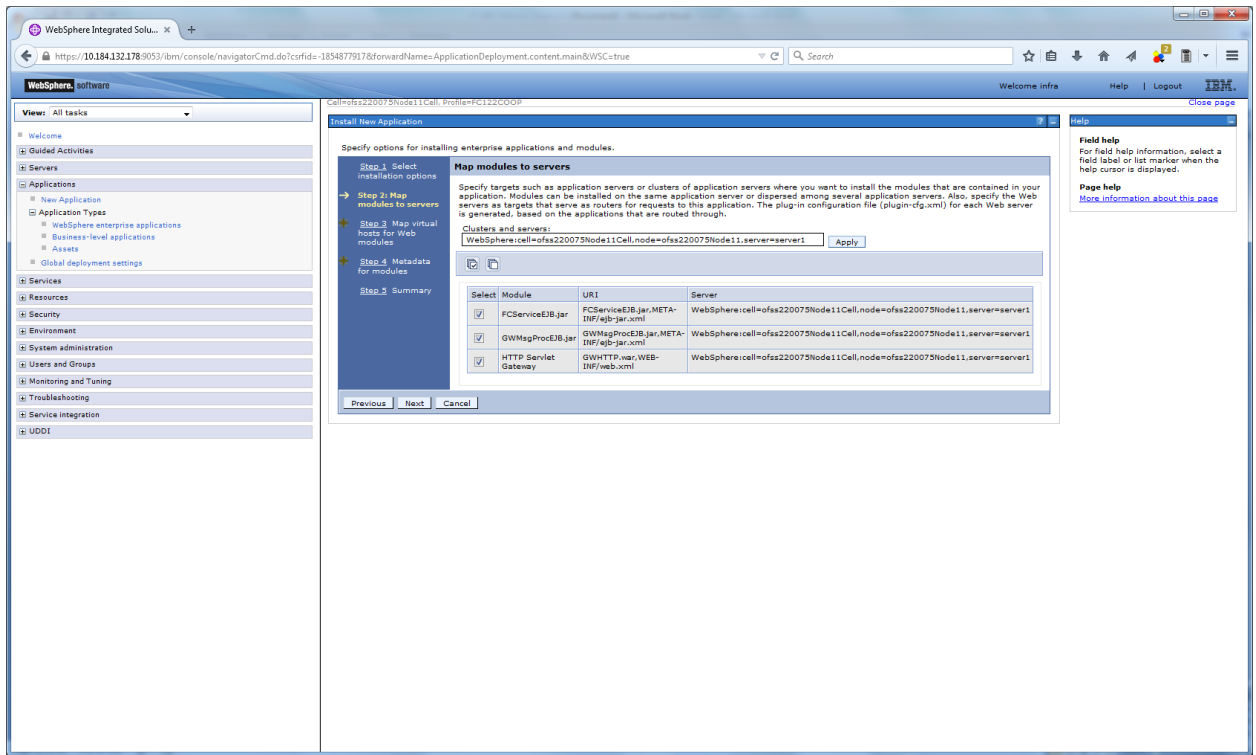
7. Click next and the following screen is displayed.



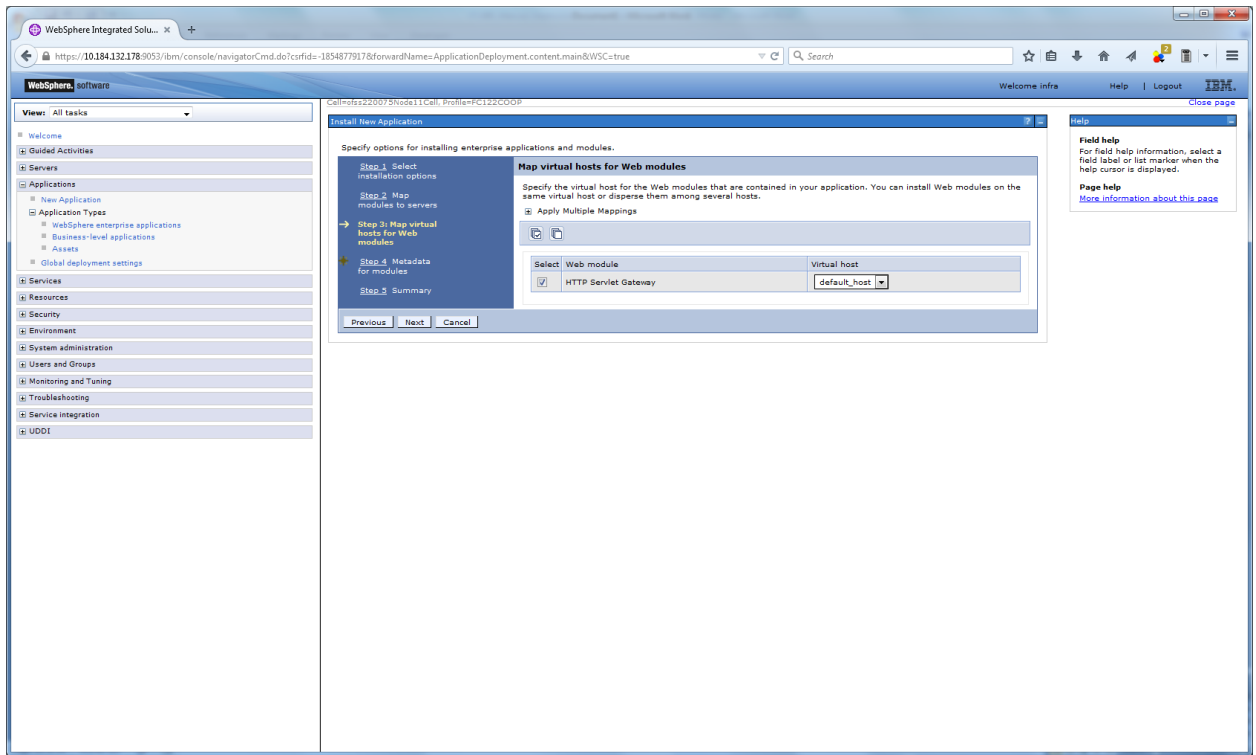
8. Click next and the following screen is displayed.



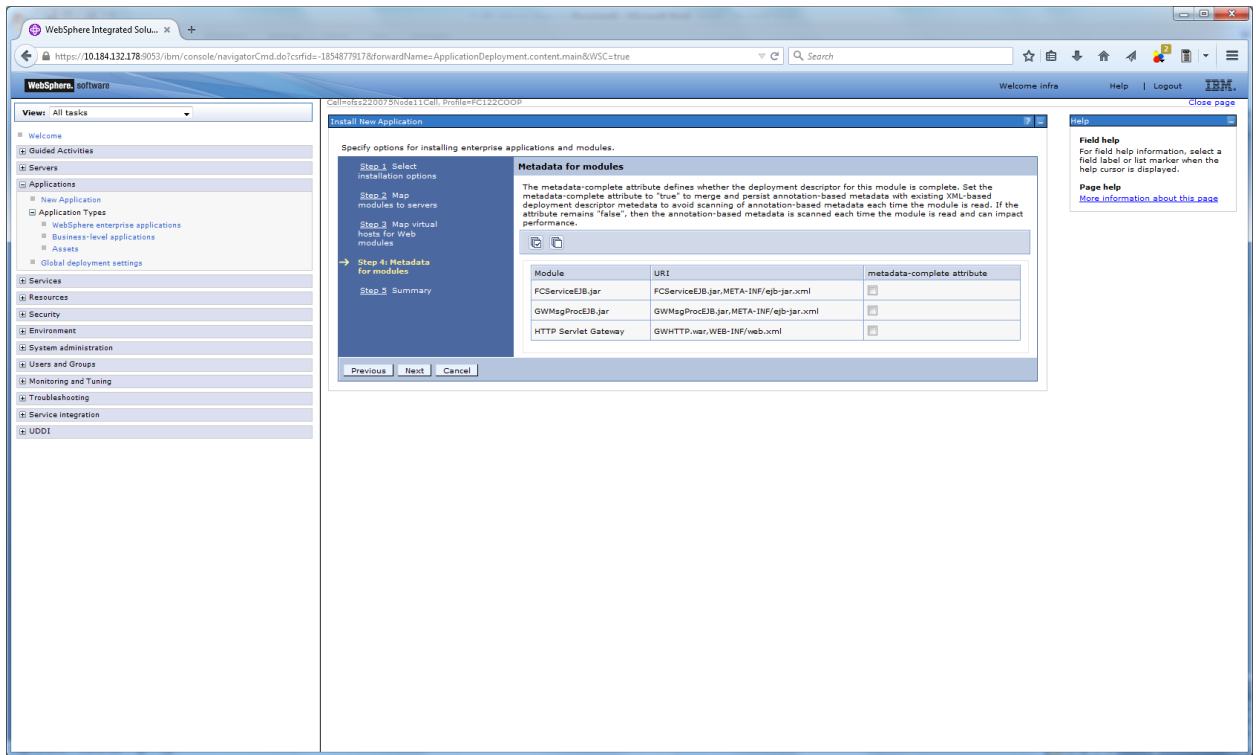
9. Click next and the following screen is displayed.



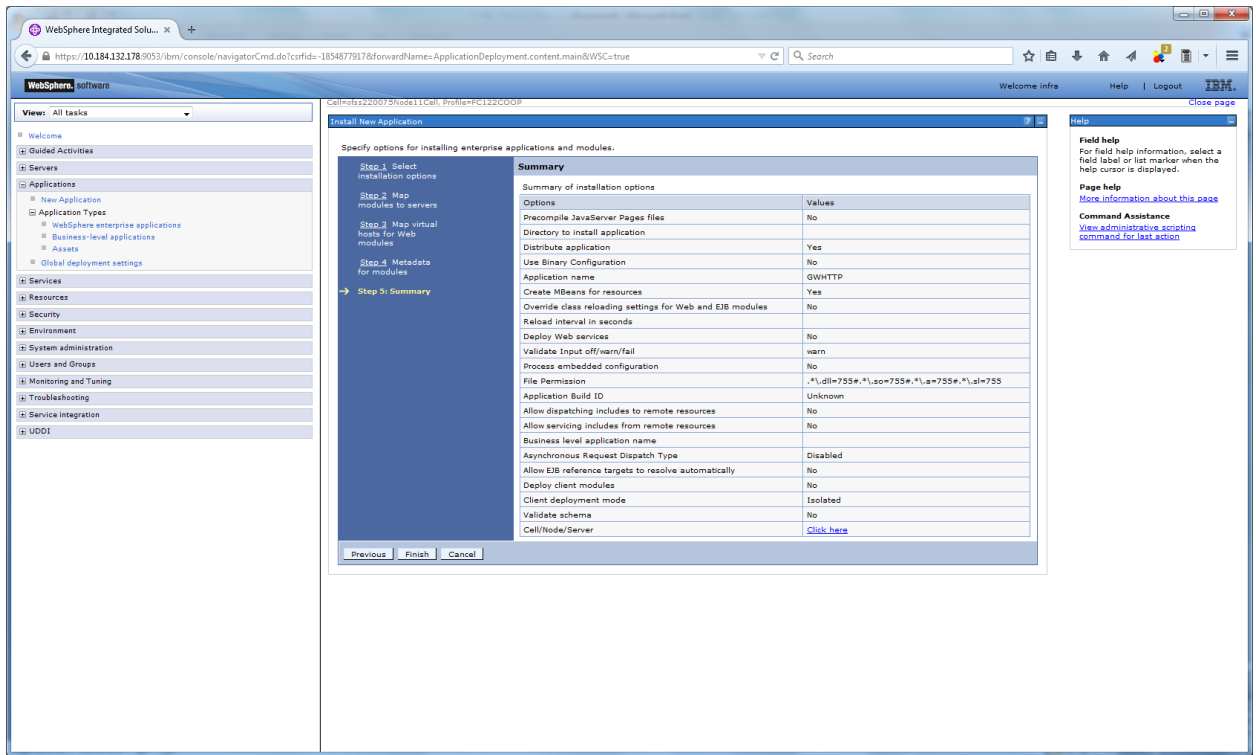
10. Click next and the following screen is displayed.



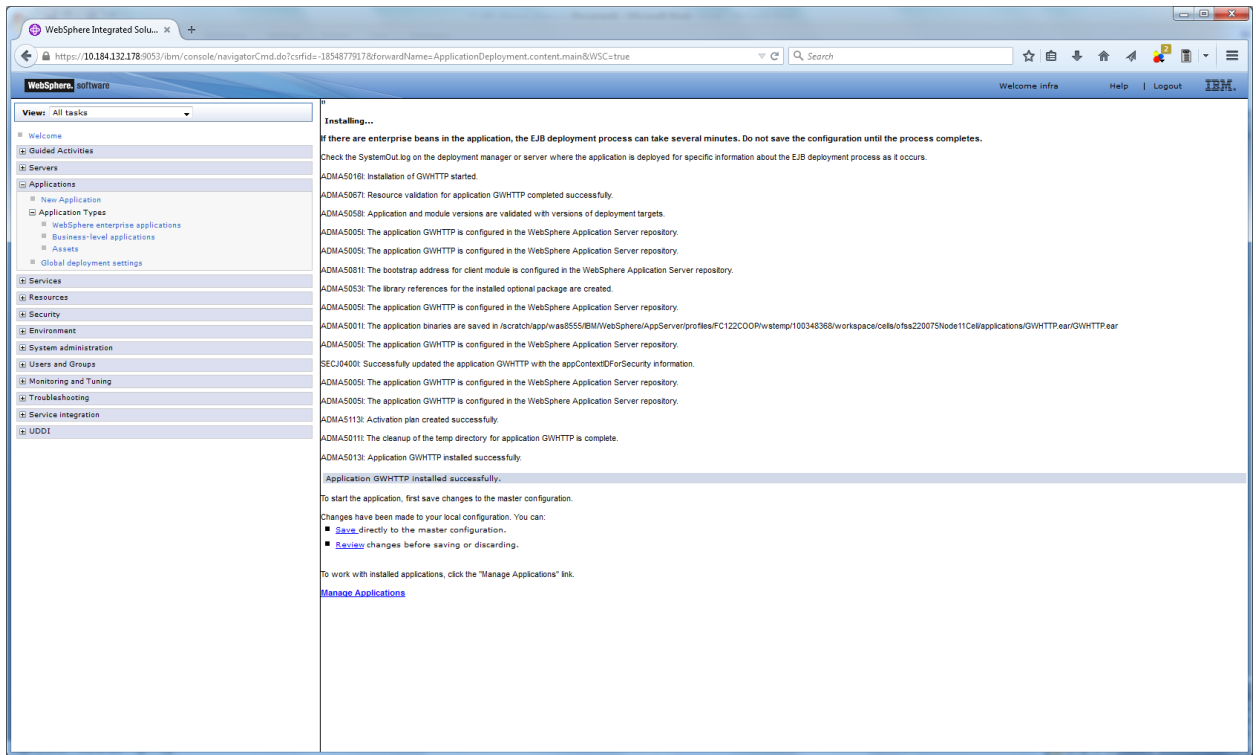
11. Click next and the following screen is displayed.



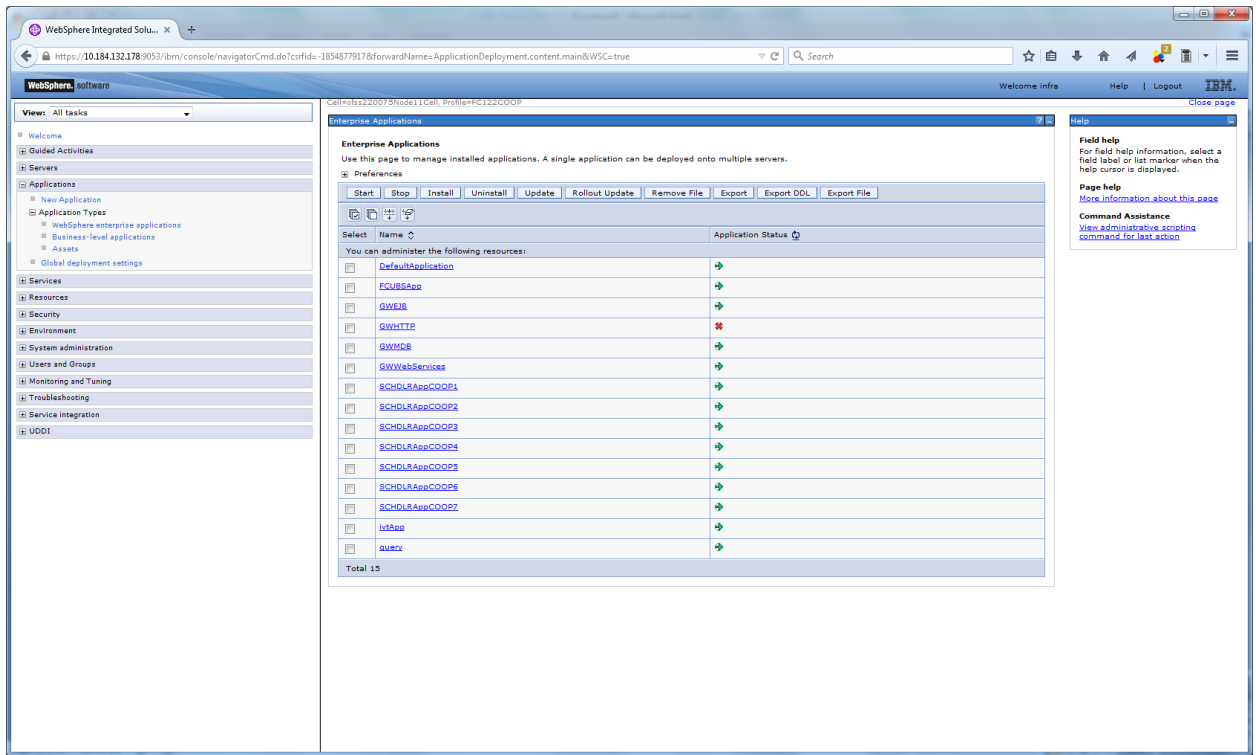
12. Click next and the following screen is displayed.



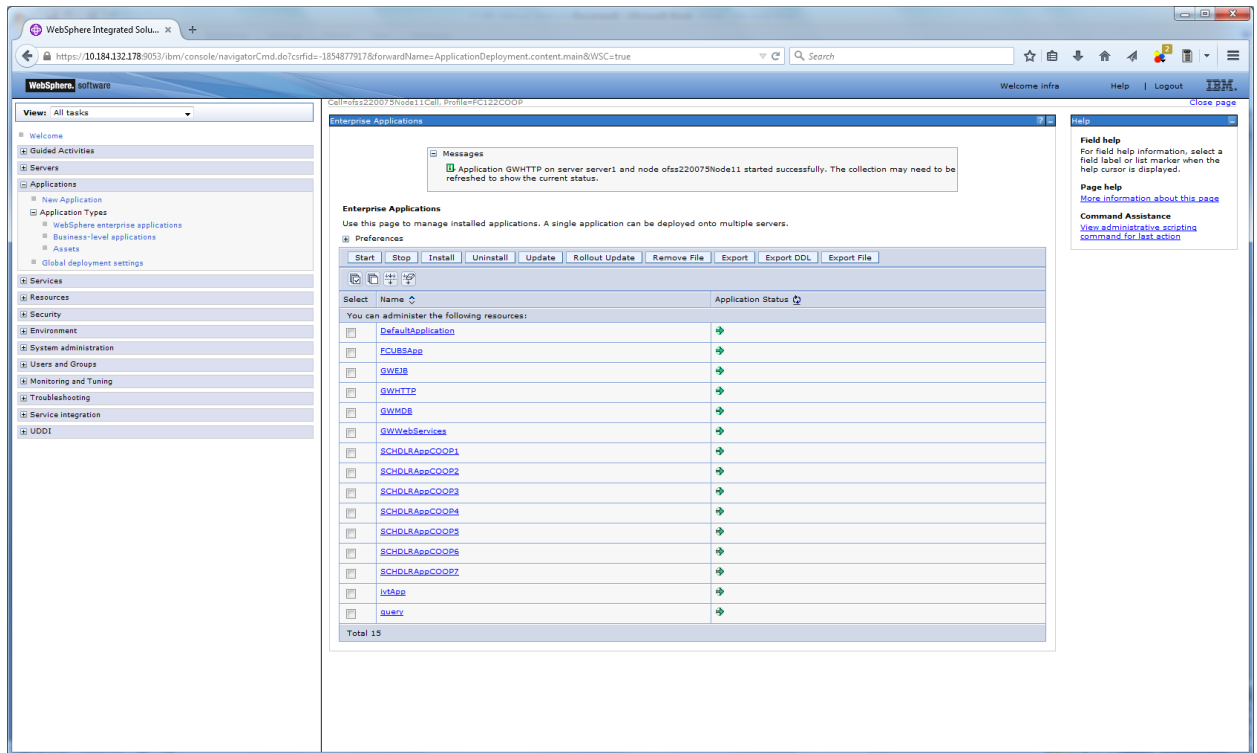
13. Click on finish and the following screen is displayed.



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:

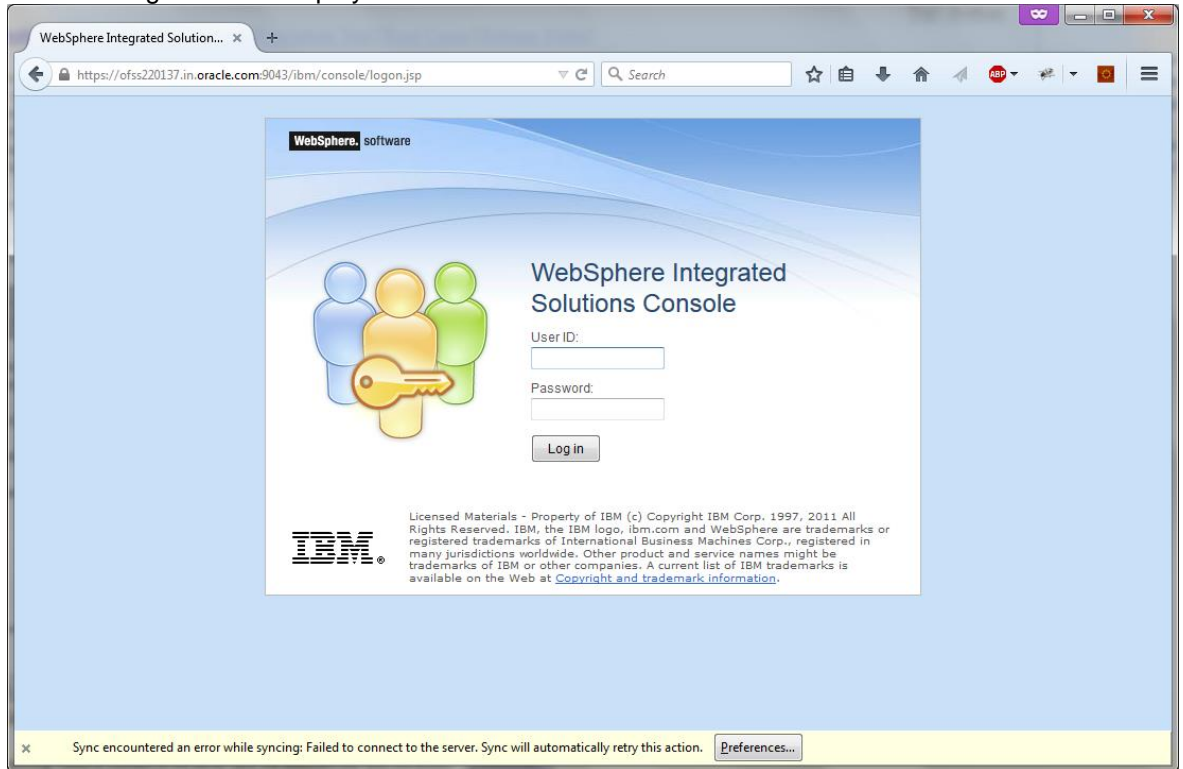
1. Open the Administrative Console of WebSphere server:

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

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

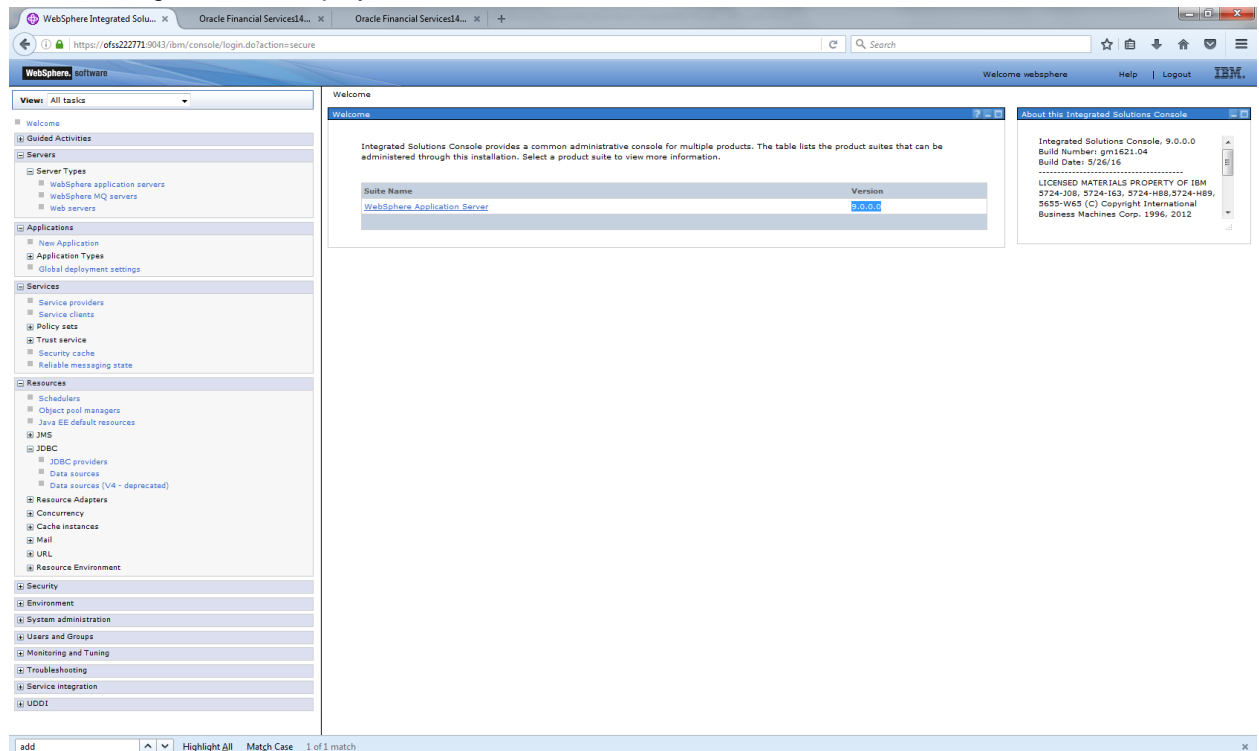
In the above example, 10.10.10.10 is the machine IP address on which WebSphere is running.

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.

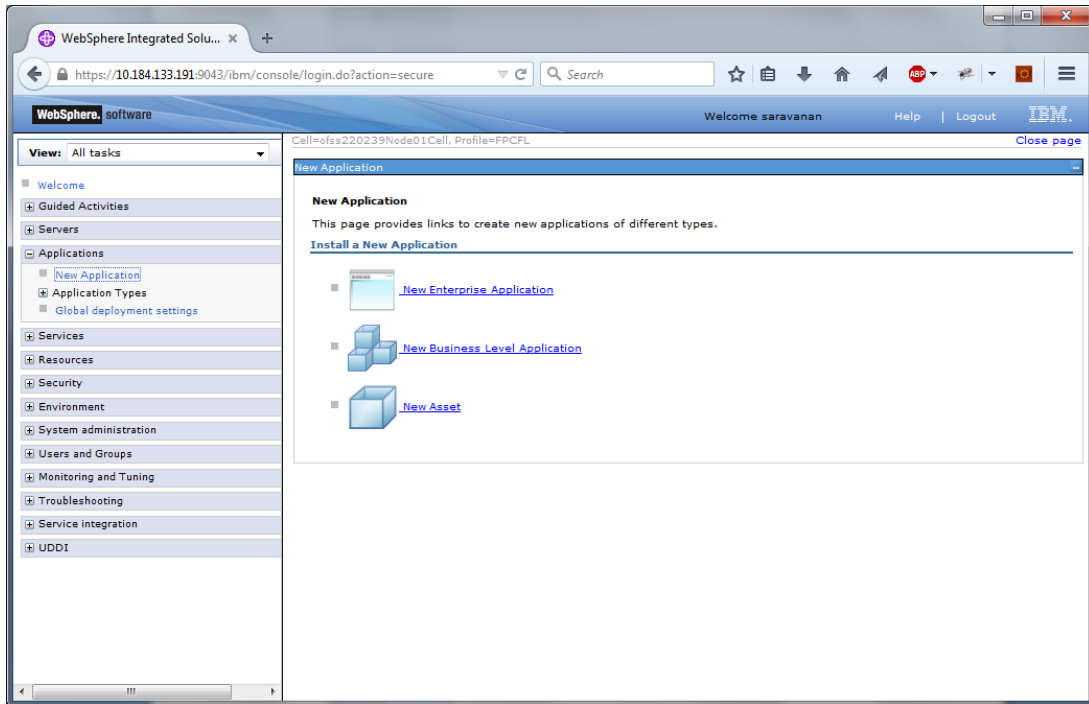
The following screen is displayed.



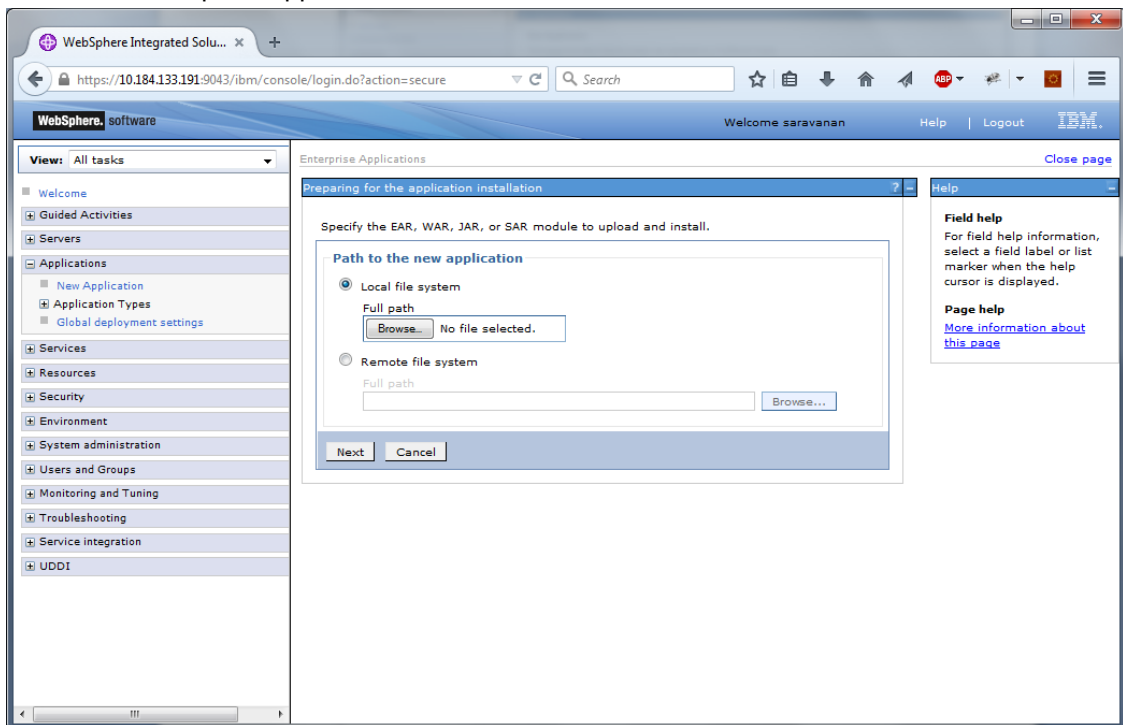


- Expand Applications from left-side menu and Click 'New Application'.

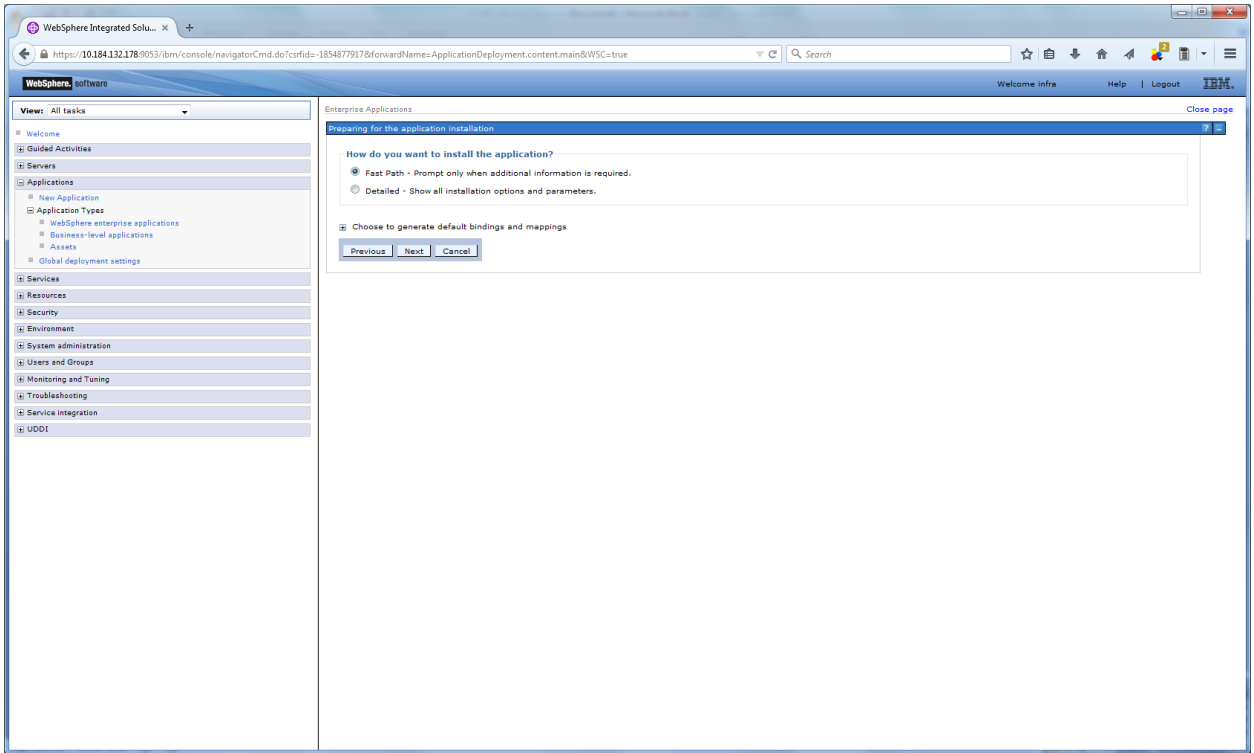
The following screen is displayed.



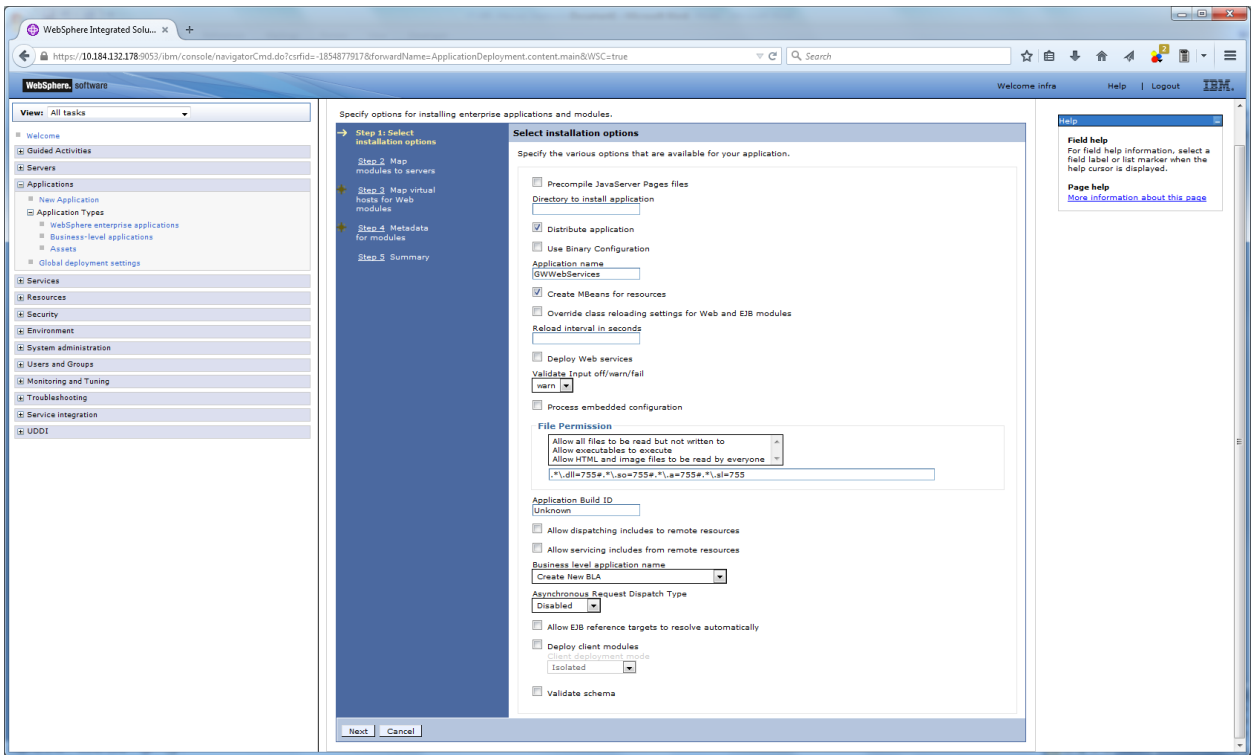
- Click 'New Enterprise Application'.



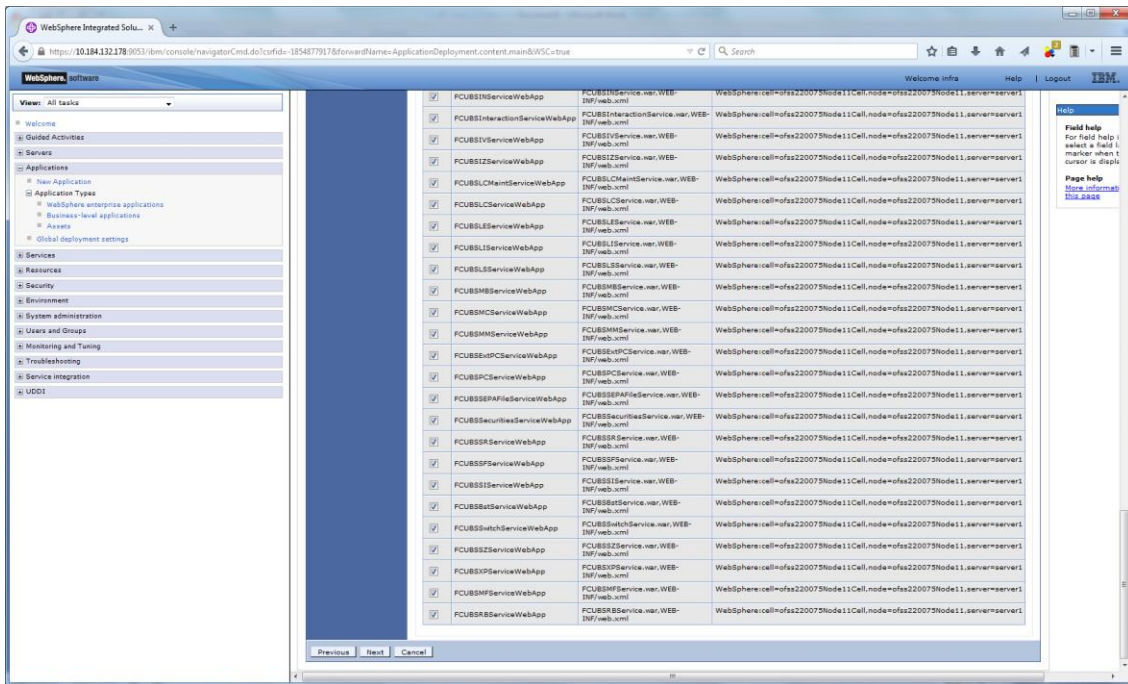
6. Browse the application EAR file and click next button.



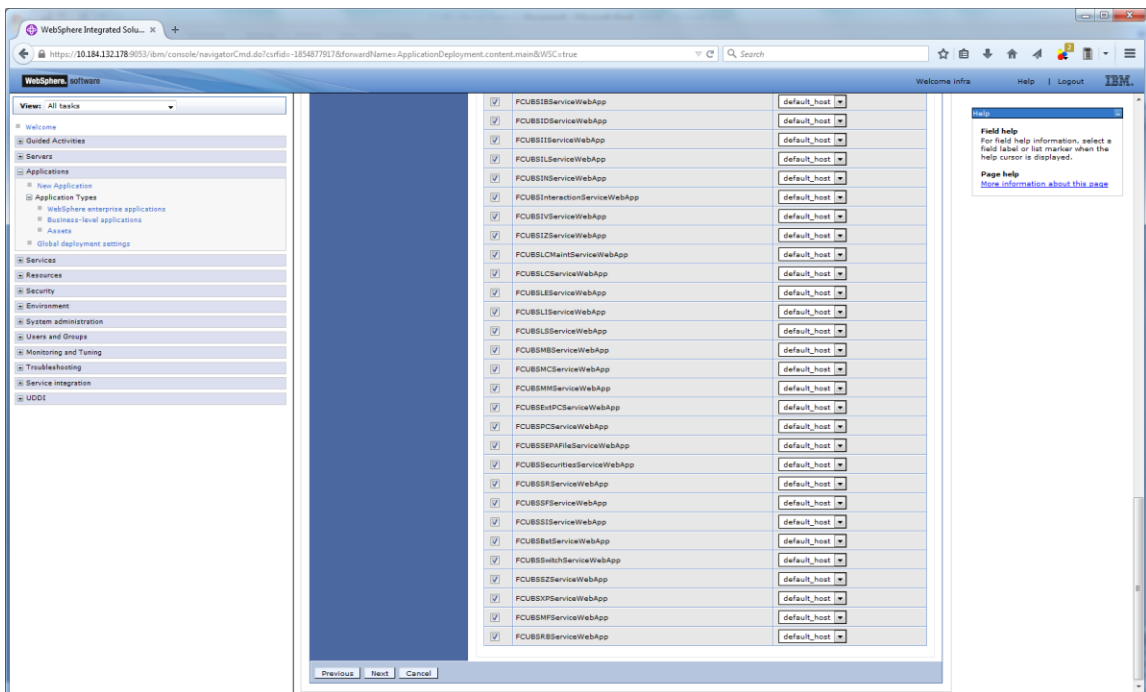
7. Click on next and the following screen is displayed.



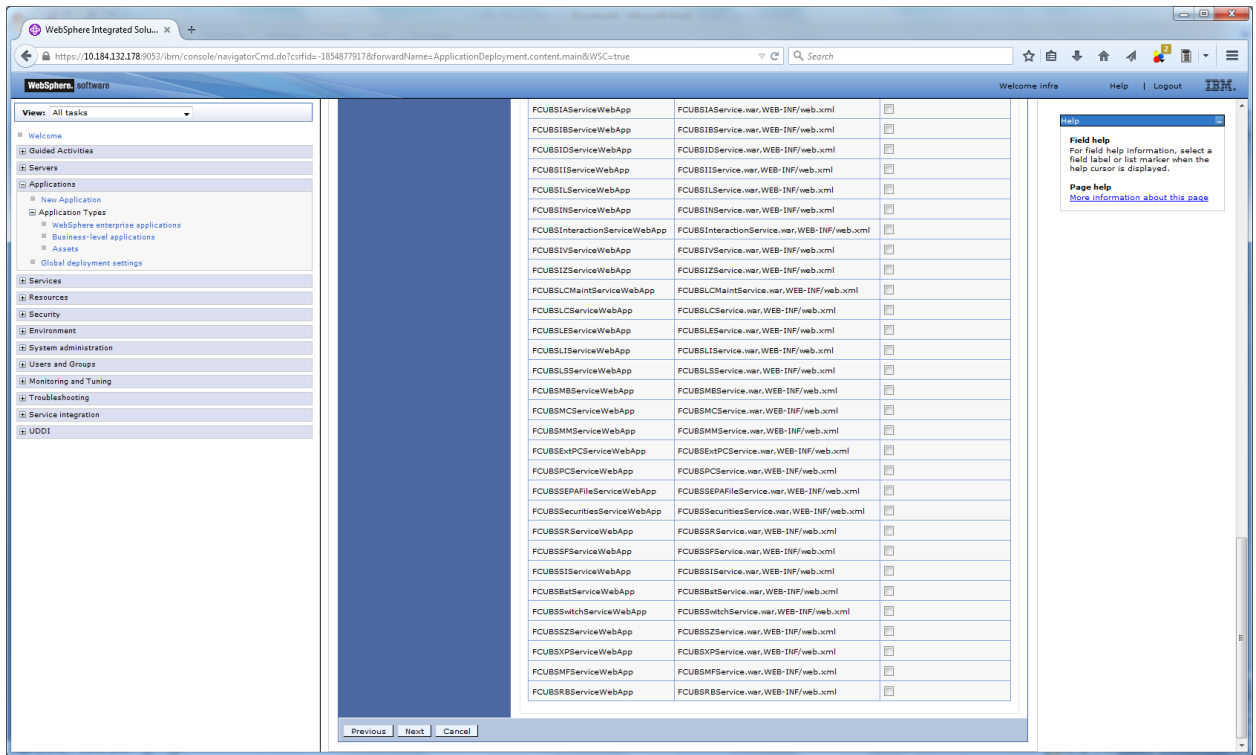
8. Click on next and the following screen is displayed.



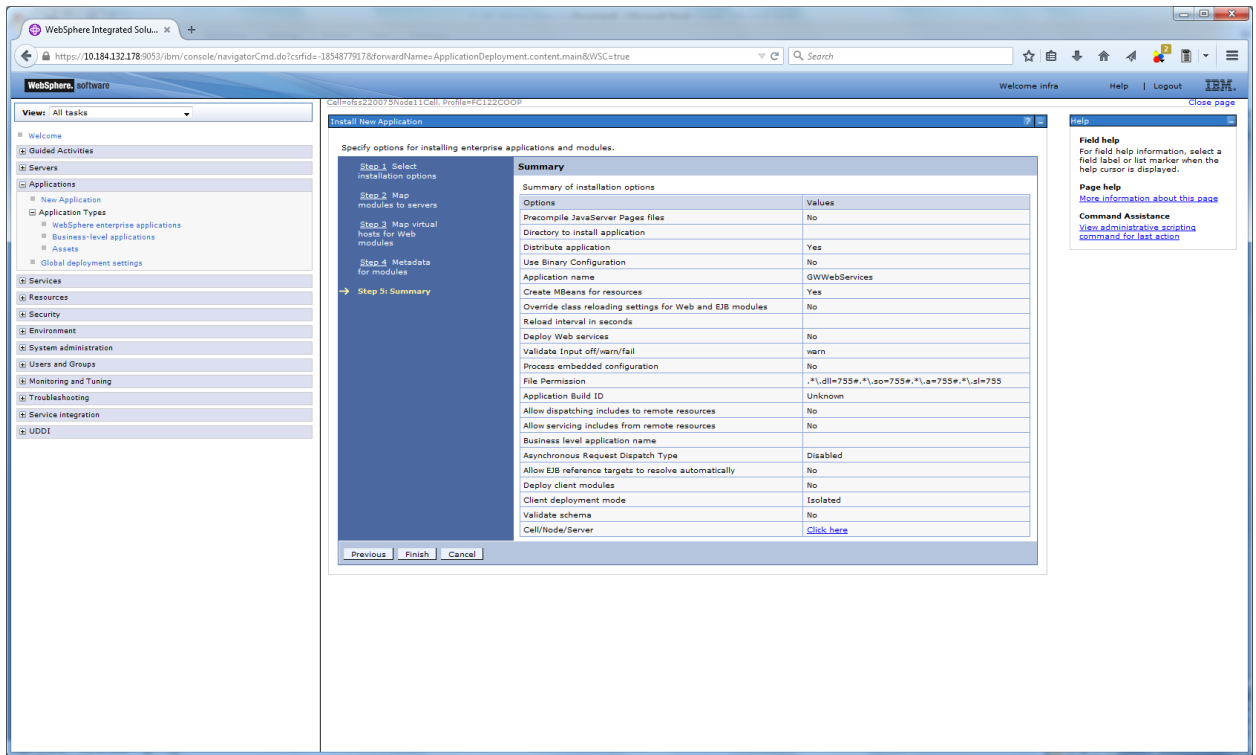
9. Click on next and the following screen is displayed.



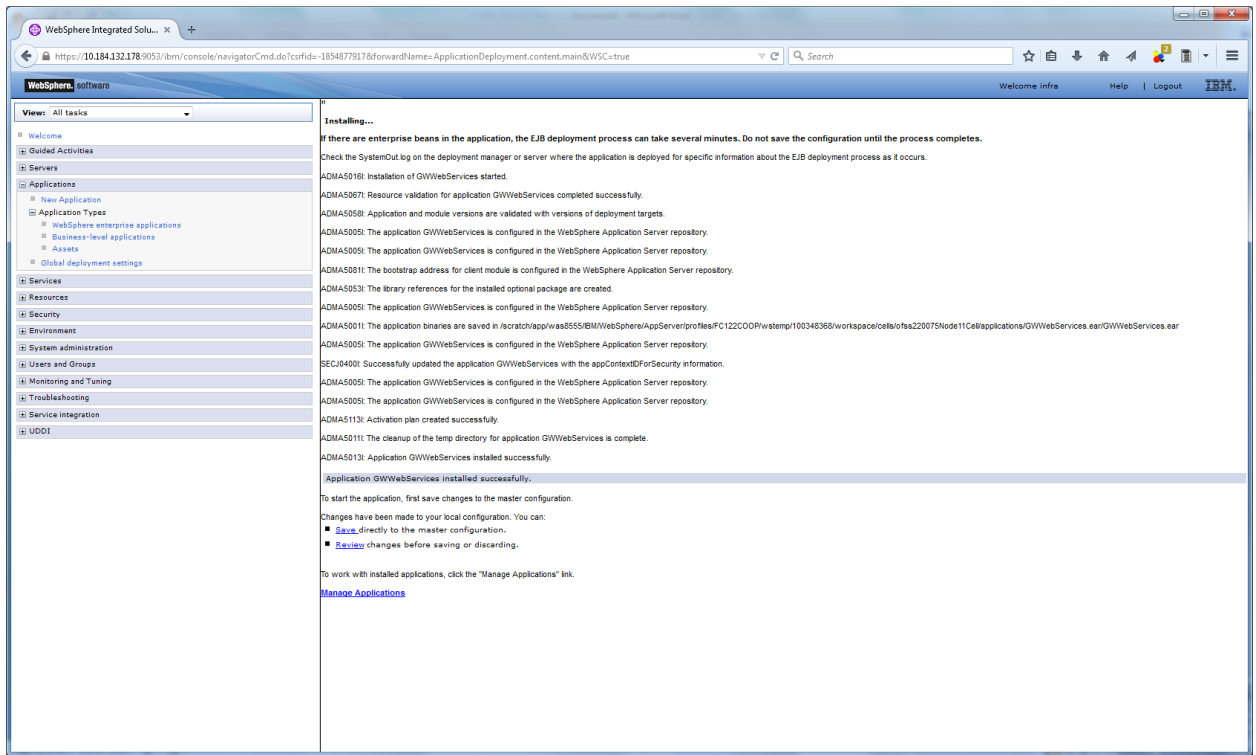
10. Click on next and the following screen is displayed.



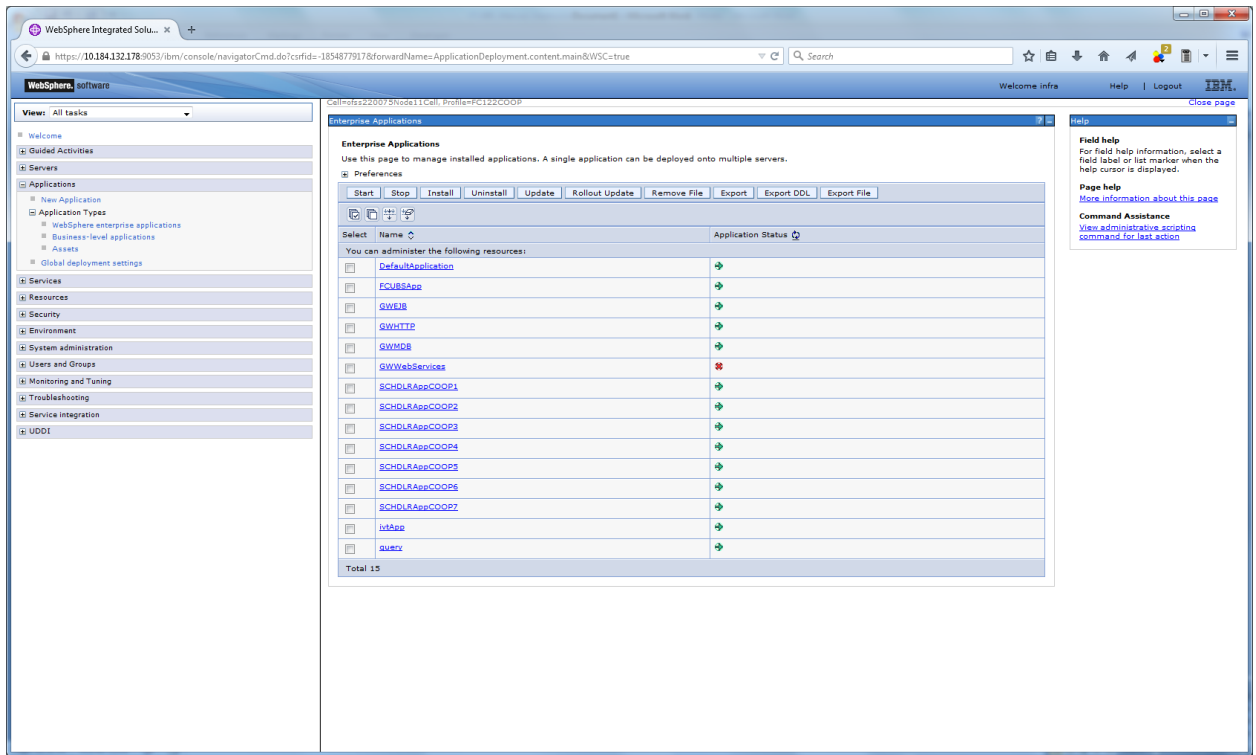
11. Click on next and the following screen is displayed.



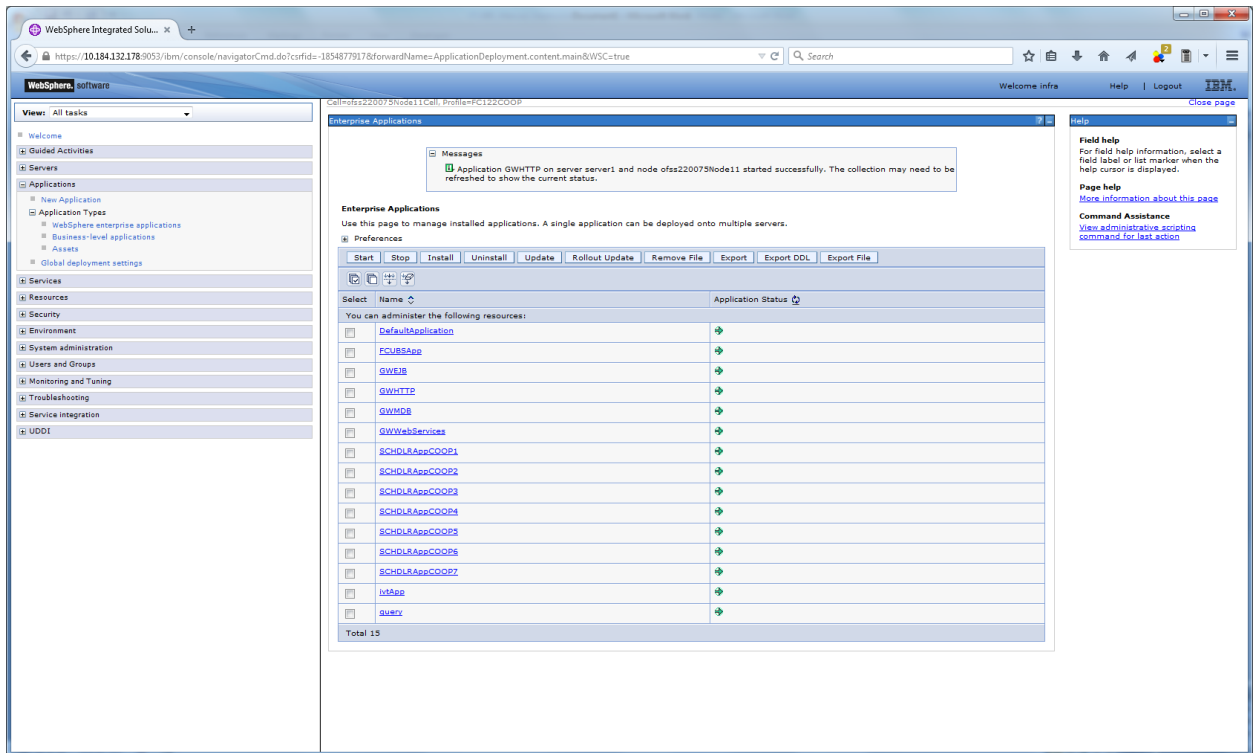
12. Click on finish and the following screen displayed.



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



14. Select the installed application and click on start.



GWWebServices application has been deployed successfully.



Deploying Oracle FLEXCUBE on WebSphere  
[May] [2019]  
Version 14.3.0.0.0

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], [2019], 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.

