

REST API Services Deployment in WebSphere  
Oracle FLEXCUBE Universal Banking  
Release 12.87.06.0.0  
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# 1. FLEXCUBE Universal Banking Solutions

This document describes step to install REST Services into WebSphere application server in full.

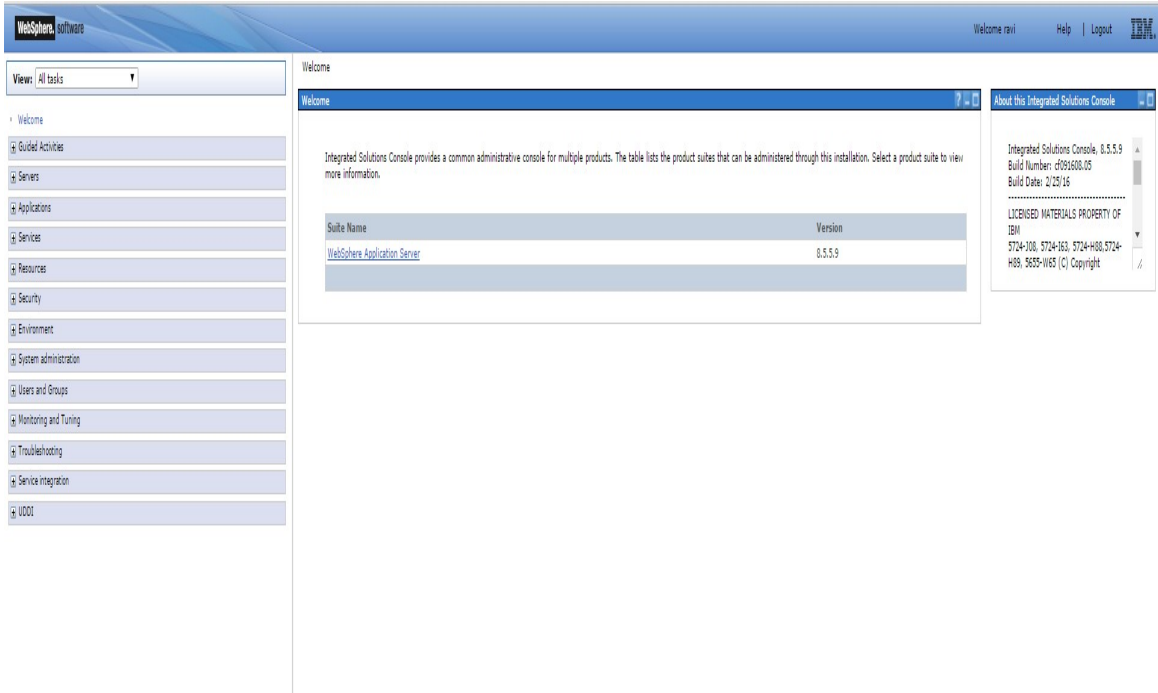
## 1.1 REST API Services Full Deployment

1. The following jars must be placed in the {WAS\_Installed\_Location}/IBM/WebSphere/AppServer/lib/ext folder of the server and restart.
  - a. **ojdbc6.jar**
  - b. **eclipselink.jar**
  - c. **jettison-1.3.7.jar**
2. Before deploying the EAR, please create an XA Datasource **jdbc/fcliteAPIDS** that will be referring to the API DB
3. Launch WebSphere console following screen will be displayed.

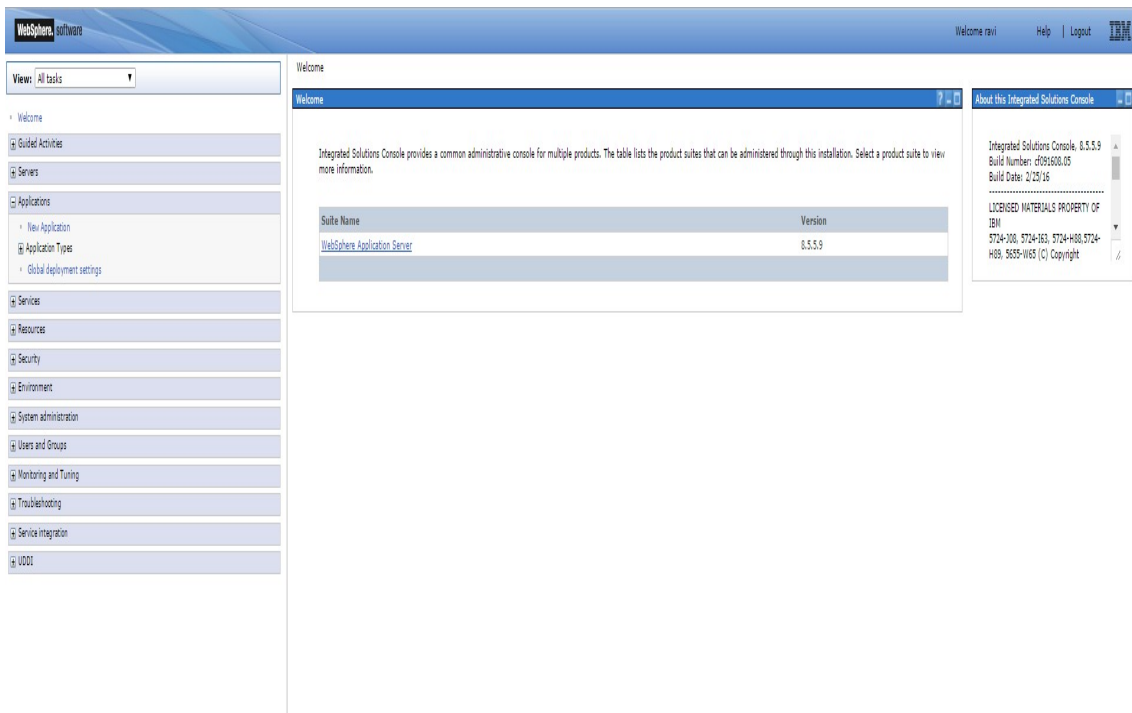


**UserId:** Enter user name

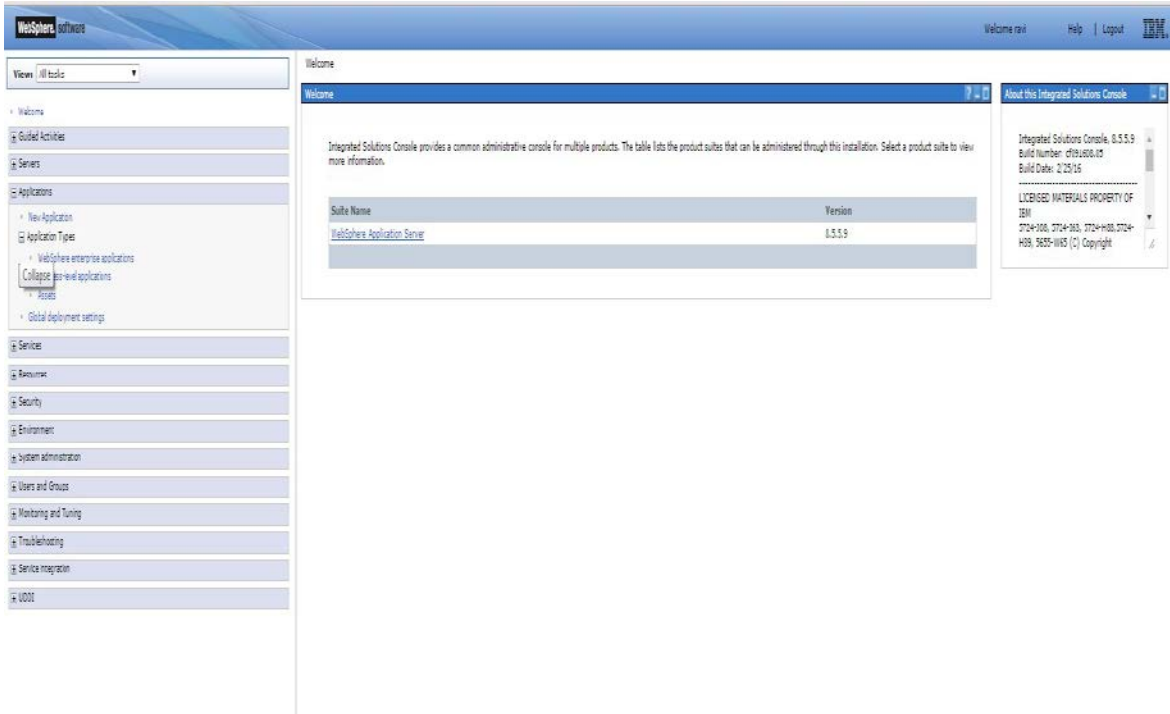
4. Click on 'Log in' and the following screen is displayed:



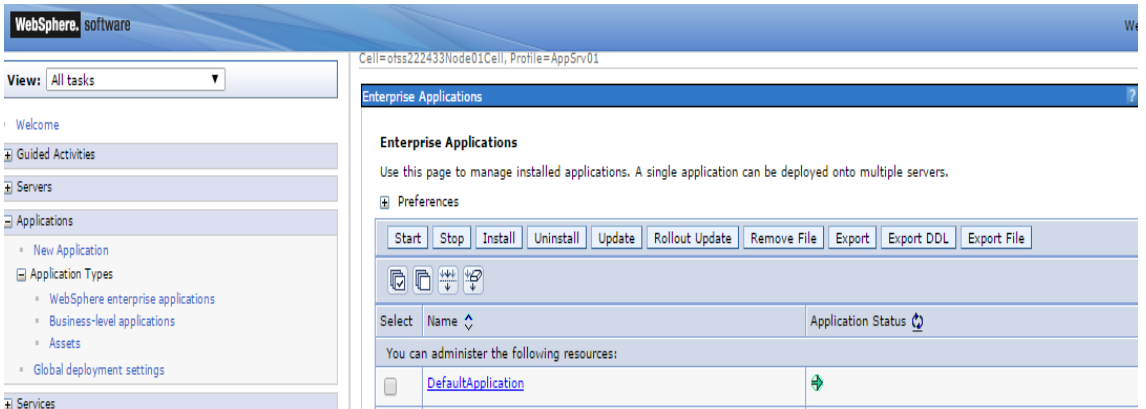
5. Expand Applications from the left panel and the following screen will be displayed.



6. Expand Application Types from the left panel and the following screen will be displayed.



7. Select WebSphere enterprise allocations and the following screen will be displayed.



8. Click on Install and the following screen will be displayed.

Preparing for the application installation

Specify the EAR, WAR, JAR, or SAR module to upload and install.

**Path to the new application**

Local file system

Full path

Choose File FCLiteAPIEAR.ear

Remote file system

Full path

Browse...

Next Cancel

**Choose File**

Browse and select the EAR file.

9. Click Next and the following screen will be displayed.

Enterprise Applications

Preparing for the application installation

**How do you want to install the application?**

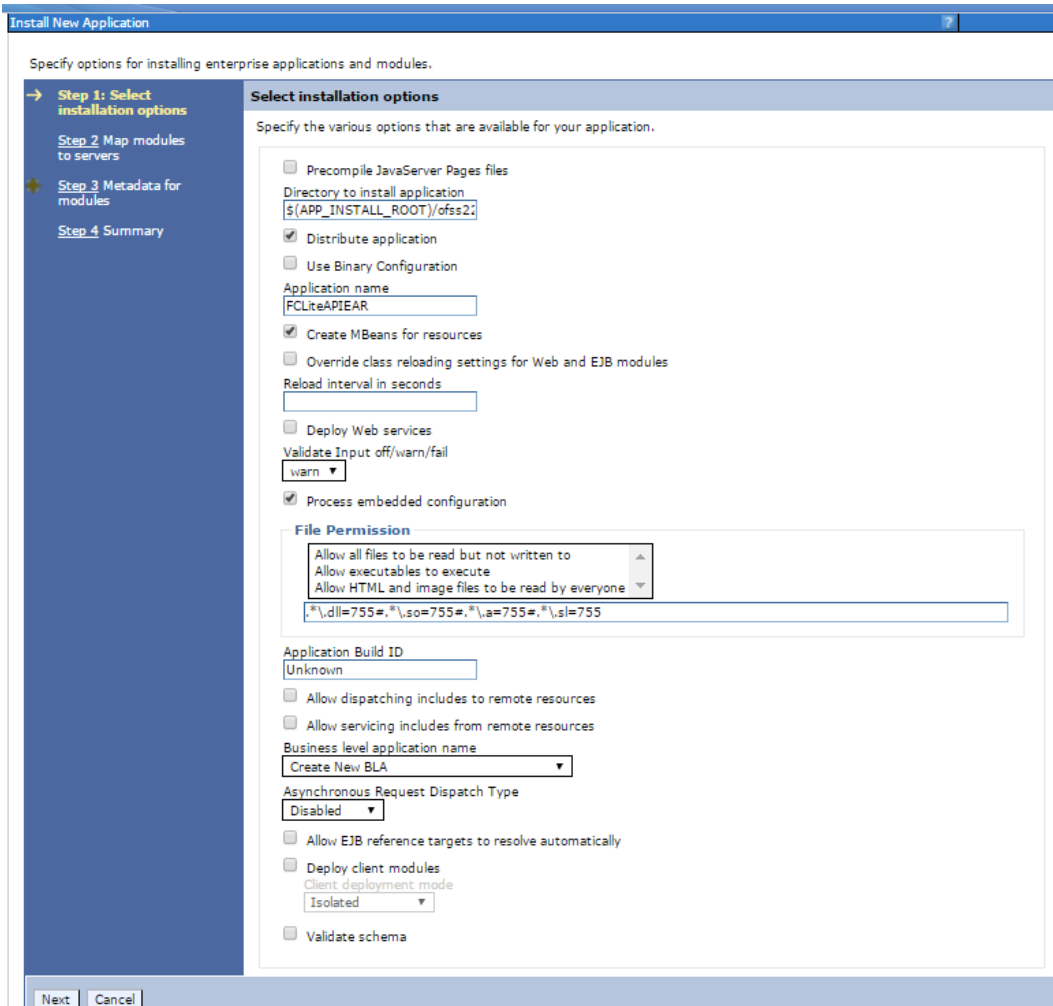
Fast Path - Prompt only when additional information is required.

Detailed - Show all installation options and parameters.

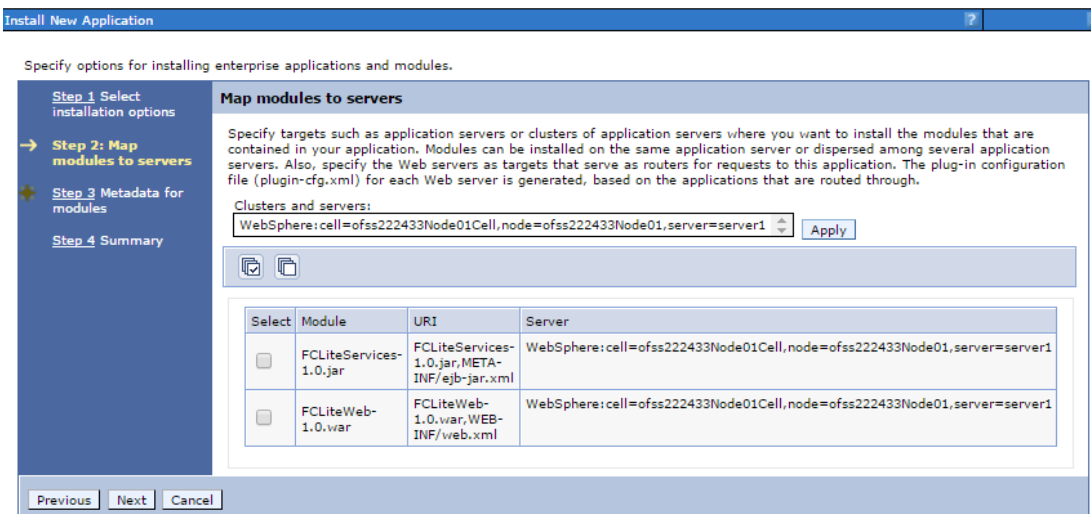
Choose to generate default bindings and mappings

Previous Next Cancel

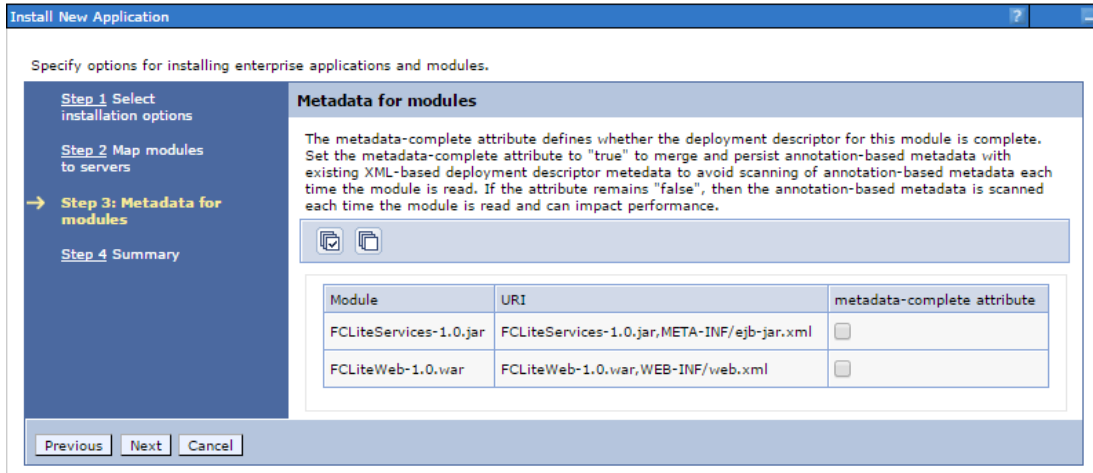
10. Click Next and the following screen will be displayed.



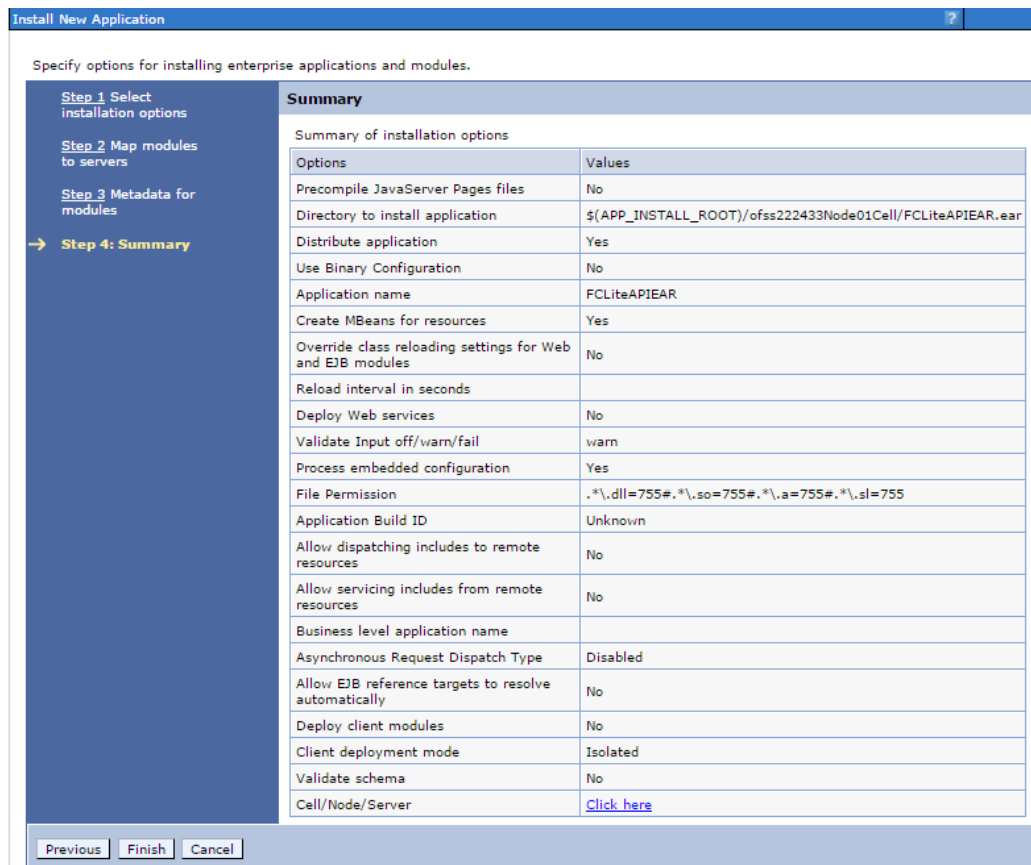
11. Click Next and the following screen will be displayed.



12. Click Next and the following screen will be displayed.



13. Click Next and the following screen will be displayed.



14. Click Finish and the following screen will be displayed and Save the EAR deployed.



If there are enterprise beans in the application, the EJB deployment process can take several minutes. Do not save the configuration until the process completes.

Check the SystemOut.log on the deployment manager or server where the application is deployed for specific information about the EJB deployment process as it occurs.

ADMA5016: Installation of FCLiteAPIEAR started.

ADMA5067: Resource validation for application FCLiteAPIEAR completed successfully.

ADMA5058: Application and module versions are validated with versions of deployment targets.

ADMA5005: The application FCLiteAPIEAR is configured in the WebSphere Application Server repository.

ADMA5005: The application FCLiteAPIEAR is configured in the WebSphere Application Server repository.

ADMA5081: The bootstrap address for client module is configured in the WebSphere Application Server repository.

ADMA5053: The library references for the installed optional package are created.

ADMA5005: The application FCLiteAPIEAR is configured in the WebSphere Application Server repository.

ADMA5001: The application binaries are saved in /scratch/programs/BMW/IBM/WebSphere/AppServer/profiles/AppSrv01/wstemp/0/workspace/cells/ofs222433Node01Cell/applications/FCLiteAPIEAR.ear/FCLiteAPIEAR.ear

ADMA5005: The application FCLiteAPIEAR is configured in the WebSphere Application Server repository.

SECJ0400: Successfully updated the application FCLiteAPIEAR with the appContextIDForSecurity information.

ADMA5005: The application FCLiteAPIEAR is configured in the WebSphere Application Server repository.

ADMA5005: The application FCLiteAPIEAR is configured in the WebSphere Application Server repository.

ADMA5113: Activation plan created successfully.

ADMA5011: The cleanup of the temp directory for application FCLiteAPIEAR is complete.

ADMA5013: Application FCLiteAPIEAR installed successfully.

Application FCLiteAPIEAR installed successfully.

To start the application, first save changes to the master configuration.

Changes have been made to your local configuration. You can:

- [Save](#) directly to the master configuration.
- [Review](#) changes before saving or discarding.

To work with installed applications, click the "Manage Applications" link.

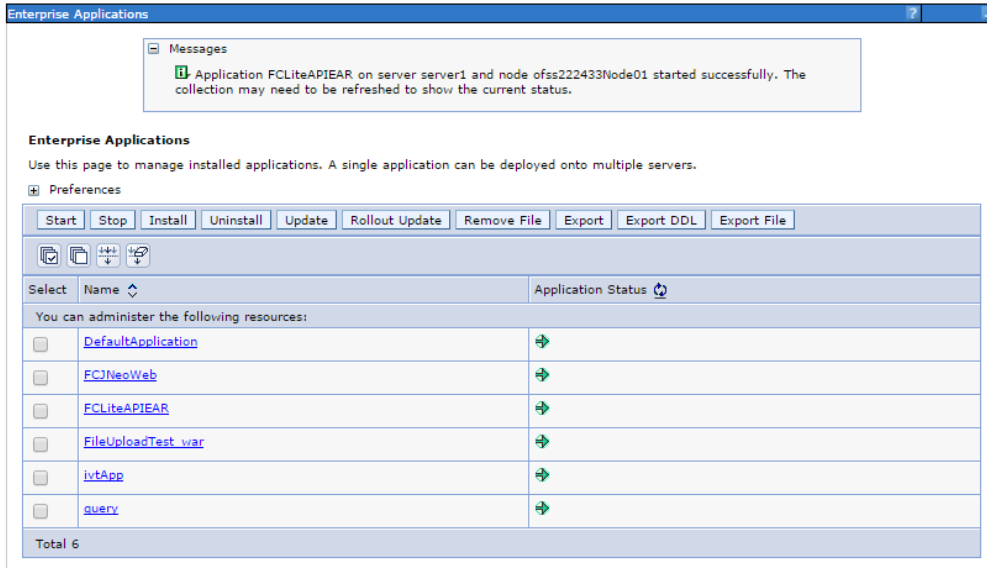
[Manage Applications](#)

15. Once the EAR is deployed click on WebSphere enterprise applications following screen will be displayed where the deployed EAR can be found in resources column.

Select	Name	Application Status
<input type="checkbox"/>	<a href="#">DefaultApplication</a>	➔
<input type="checkbox"/>	<a href="#">FCJNeoWeb</a>	➔
<input type="checkbox"/>	<a href="#">FCLiteAPIEAR</a>	✘
<input type="checkbox"/>	<a href="#">FileUploadTest_war</a>	➔
<input type="checkbox"/>	<a href="#">ivtApp</a>	➔
<input type="checkbox"/>	<a href="#">query</a>	➔

Total 6

16. Check the application/EAR and click on Start the following screen will be displayed and your application will be in running.



**Note:** Before deploying the EAR, please create an XA Datasource **jdbc/fcliteAPIDS** that will be referring to the API DB. More details of creating the data source can be found in the Resource Creation document.

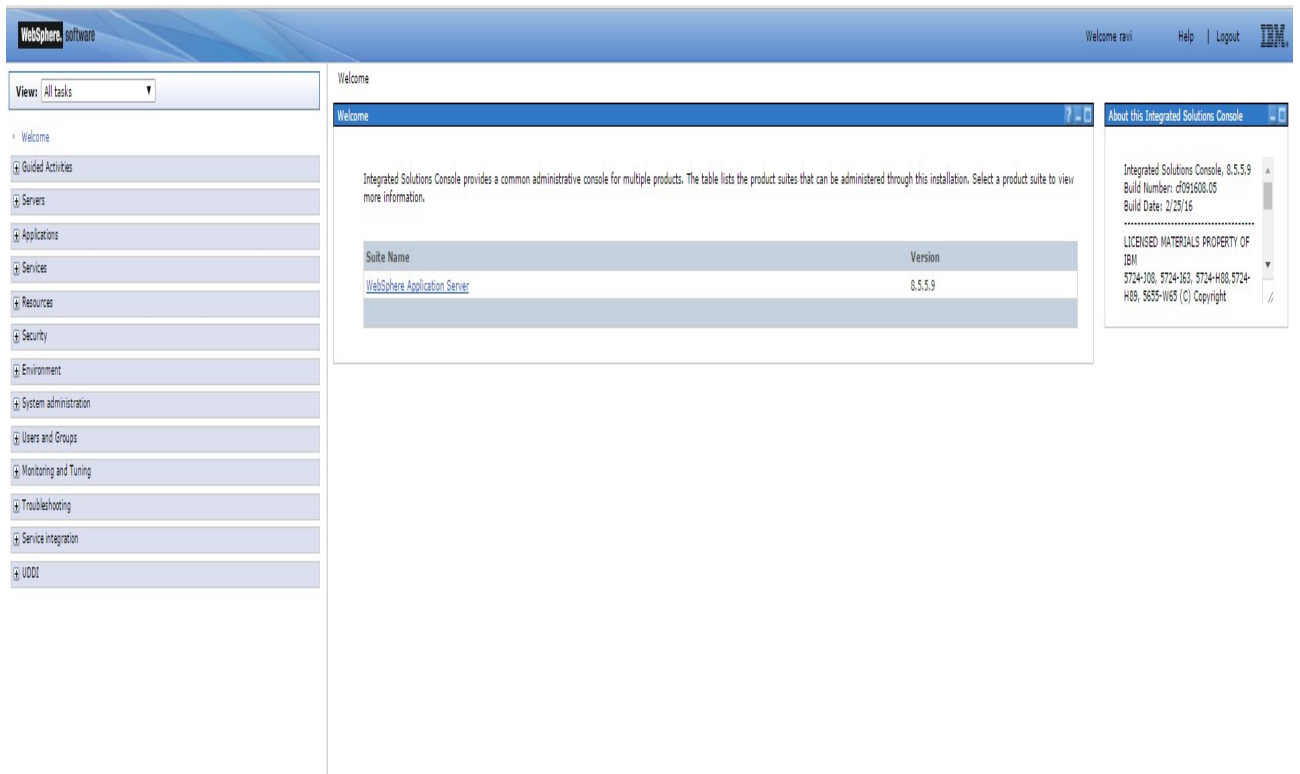
## 1.2 Enabling logs for REST Application

1. Launch WebSphere console following screen will be displayed.

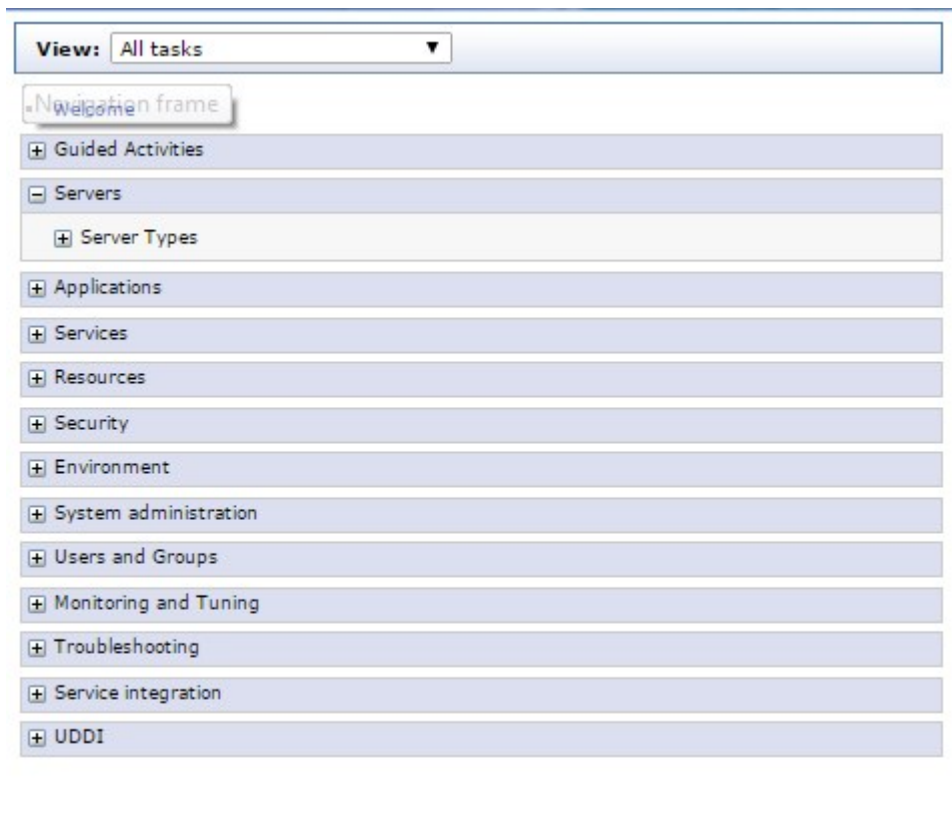


**UserId:** Enter user name

2. Click on 'Log in' and the following screen is displayed:



3. Expand 'Servers' from the left panel and the following screen is displayed:



- Expand 'Server Type' and Click WebSphere application servers and the following screen is displayed:

The screenshot shows the WebSphere Administration Console interface. On the left, a navigation pane is visible with 'Server Types' expanded to 'WebSphere application servers'. The main content area is titled 'Application servers' and contains a table with the following data:

Name	Node	Host Name	Version
server1	ofss22433Node01	ofss22433.in.oracle.com	ND 8.5.5.9
Total 1			

- Click server1 and the following screen is displayed:

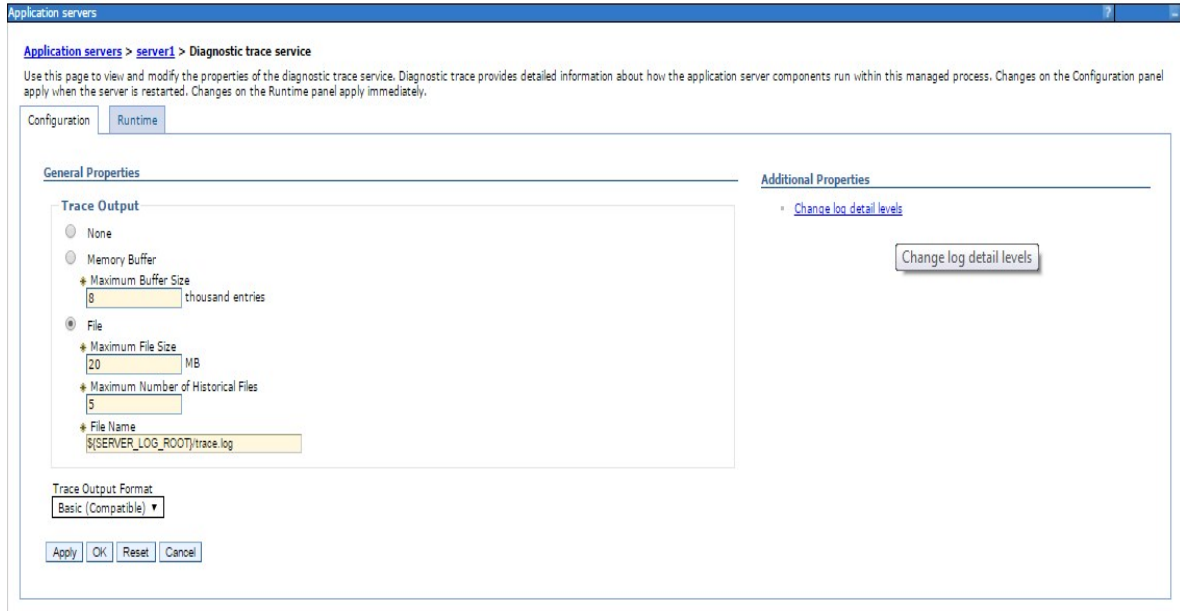
The screenshot displays the configuration page for 'server1'. The 'General Properties' section includes the following settings:

- Name: server1
- Node name: ofss22433Node01
- Run in development mode
- Parallel start
- Start components as needed
- Access to internal server classes: Allow
- Server-specific Application Settings:
  - Class loader policy: Multiple
  - Class loading mode: Classes loaded with parent class loader first

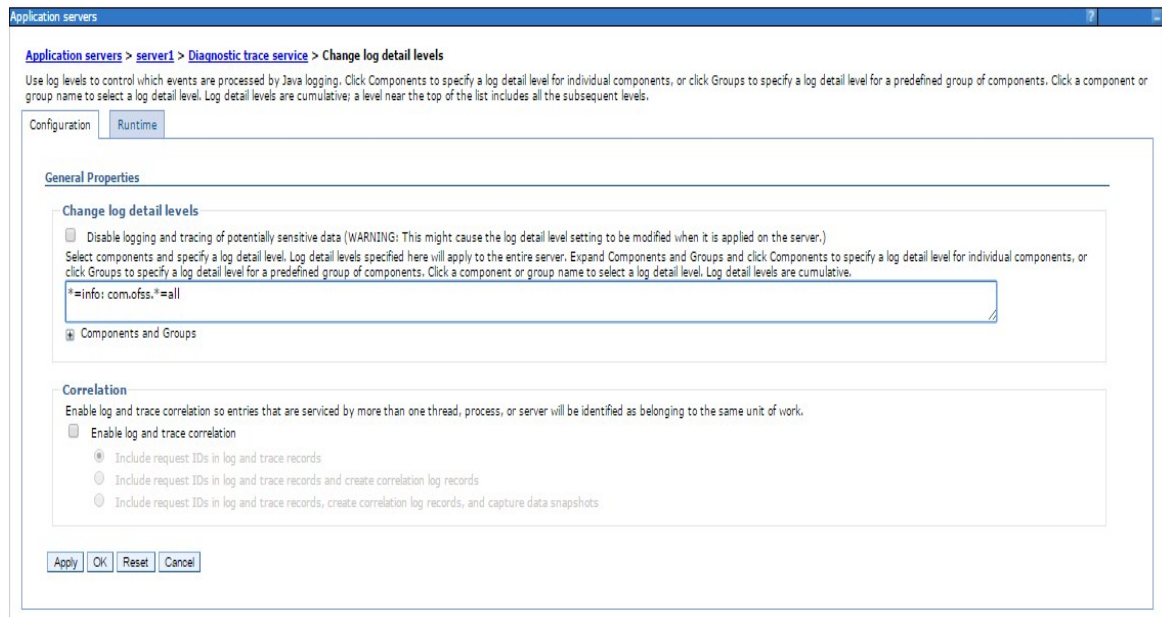
The right-hand side of the page lists various configuration categories with expandable options:

- Container Settings:** Session management, SIP Container Settings, Web Container Settings, Portlet Container Settings, EJB Container Settings, Container Services, Business Process Services.
- Applications:** Installed applications.
- Server messaging:** Messaging engines, Messaging engine inbound transports, WebSphere MQ link inbound transports, SIB service.
- Server Infrastructure:** Java and Process Management, Administration, Java SDKs.
- Communications:** Ports, Messaging, Communications Enabled Applications (CEA).
- Performance:** Performance Monitoring Infrastructure (PMI), Performance and Diagnostic Advisor Configuration.
- Security:** Security domain, Default policy set bindings, JAX-WS and JAX-RPC security runtime.
- Troubleshooting:** NCSA access and HTTP error logging, Diagnostic trace service, Logging and tracing, Change log detail levels (Use this page to view and modify the properties for the diagnostic trace service).
- Additional Properties:** Class loader viewer service, Endpoint listeners, Debugging service, Thread pool, Reliable messaging state, Web server plug-in properties.

- Click Diagnostic trace service and the following screen is displayed:



7. Click Change log detail levels and the following screen is displayed:



### Change log detail levels

Add the entry com.off.\*=all to the existing entry (i.e., now it will be \*=info: com.ofss.\*=all)

8. Restart the server post the change

9. The logs will now be written into the log area that is specified in the configuration **Application servers > server1 > Diagnostic trace service**.



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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>

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