# Oracle® Banking Payments WebLogic Deployment





Oracle Banking Payments WebLogic Deployment, Release 14.8.1.0.0

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# Contents

Preface		
1.1 Pu	ırpose	
1.2 Au	udience	1
1.3 Do	ocumentation Accessibility	1
1.4 Cı	itical Patches	2
1.5 Di	versity and Inclusion	2
1.6 Co	onventions	2
Donlo	ving Orgala Banking Dayments on Wohl agic	
<u> </u>	ying Oracle Banking Payments on WebLogic	
2.1 Bu	uilding Application	
2.1 Bu	uilding Application eploying Application in Oracle WebLogic	
2.1 Bt 2.2 De	uilding Application eploying Application in Oracle WebLogic L Deploying Dependency Library "Jersey-bundle"	1 1 1 3
2.1 Bt 2.2 De 2.2.2	uilding Application eploying Application in Oracle WebLogic L Deploying Dependency Library "Jersey-bundle" 2 Deploying Oracle Banking Application from WebLogic Remote Console	1 1 3 2

### **Preface**

- Purpose
- Audience

This manual is intended for the following User/User Roles:

- Documentation Accessibility
- Critical Patches
- Diversity and Inclusion
- Conventions

# 1.1 Purpose

This guide is designed to help acquaint you with the Oracle Banking Payments application.

This guide provides answers to specific features and procedures that the user need to be aware of the module to function successfully.

Administration of WebLogic Server is performed using the WebLogic Remote Console. Administration console is no longer supported in WebLogic Server 14.1.2.0.0 and has been removed.

WebLogic Remote Console documentation reference: <a href="https://oracle.github.io/weblogic-remote-console/overview/">https://oracle.github.io/weblogic-remote-console/overview/</a>

For general information on the application deployment process, refer <u>Understanding WebLogic</u> Server <u>Deployment</u> in Deploying Applications to Oracle WebLogic Server.

#### 1.2 Audience

This manual is intended for the following User/User Roles:

Table 1-1 User Roles

Role	Function
Implementation & IT Staff	Implementation & Maintenance of the Software

# 1.3 <u>Documentation Accessibility</u>

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

#### **Access to Oracle Support**

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <a href="http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info">http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info</a> or visit <a href="http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs">http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs</a> if you are hearing impaired.



# 1.4 Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at <u>Critical Patches</u>, <u>Security Alerts and Bulletins</u>. All critical patches should be applied in a timely manner to make sure effective security, as strongly recommended by <u>Oracle Software Security Assurance</u>.

# 1.5 Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

#### 1.6 Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Deploying Oracle Banking Payments on WebLogic

This chapter explains the steps to deploy Oracle Banking Payments application into Oracle WebLogic application server in centralized and decentralized modes. In centralized mode, branch and host are setup in a single PC. In decentralized mode, branch and host are setup in different PCs.

- Building Application
  - For building Oracle Banking Application refer to the following chapters:
- <u>Deploying Application in Oracle WebLogic</u>
   This section explains the method of deploying Oracle Banking Application Oracle WebLogic application server.

# 2.1 Building Application

For building Oracle Banking Application refer to the following chapters:

- Creating Property File
- Building WAR Files

# 2.2 Deploying Application in Oracle WebLogic

This section explains the method of deploying Oracle Banking Application Oracle WebLogic application server.

- Deploying Dependency Library "Jersey-bundle"
- Deploying Oracle Banking Application from WebLogic Remote Console
- API Gateway Router Deployment
- JVM Arguments to Configure

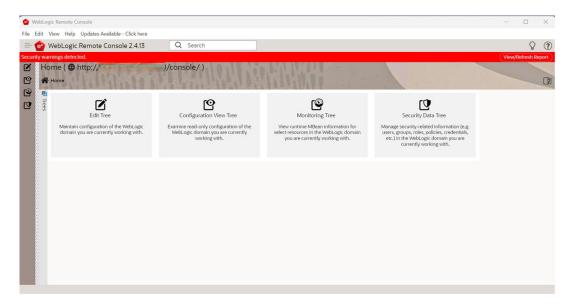
#### 2.2.1 Deploying Dependency Library "Jersey-bundle"

This library must be installed before deploying Application WARs. Follow the below steps:

Start the WebLogic Remote Console and login to WebLogic application server console.
 Oracle Remote Console screen is displayed.

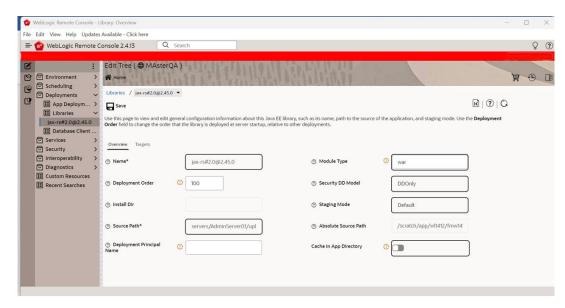


Figure 2-1 Oracle Remote Console - Welcome



- 2. In the Edit Tree, go to Deployments, then Libraries, Click New.
  - Specify a name jax-rs.
- Select the servers and clusters where you want to deploy the jax-rs library. Ensure that you target all servers and clusters where the modules or applications referencing the library are deployed.
- 4. Clear the Upload option to install the jax-rs library from the file system of the WebLogic Administration Server, and then enter the file path to the jax-rs library.
  - For ex: Oracle/Middleware/Oracle\_Home/wlserver/common/deployable-libraries/ jax-rs-2.0.war
- Click Create. The new library appears under the Libraries node. User can make additional changes to the Java library on this page.

Figure 2-2 Summary of Deployments





# 2.2.2 Deploying Oracle Banking Application from WebLogic Remote Console

To deploy Oracle Banking Application from WebLogic Remote Console, follow the following steps:

- 1. Start the WebLogic Remote Console and login to WebLogic application server console.
- 2. In the Edit Tree, go to **Deployments**, then **App Deployments**, select **New**.
- 3. Specify a name for the application. For ex: FCJNeoWeb.
- 4. Select the servers and clusters to which you want to deploy the application.
- 5. Make the archive file or exploded directory known to the Administration Server.
  - a. If the application is on your file system and you need to upload it to the Administration Server, enable the **Upload** option. Then, beside **Source**, click **Choose File** to browse to the application's location on your system.
  - b. If the application is already in the file system of the Administration Server, disable the **Upload** option. Then, in the **Source Path** field, enter the file path to the application.
- 6. To deploy Application WAR 'FCJNeoWeb.war', specify the file path to the application.
- 7. Click Create.

User's new application appears under the App Deployment node. User can make additional changes to the application on this page.

- 8. Similarly, to deploy all the WAR files follow the same steps as above.
- Start an application to make it available to WebLogic Server clients.
  - a. In the Monitoring Tree, go to Deployments, then Application Management
  - **b.** Select the application to start.
  - c. Click Start and select.
    - Servicing all requests: to make the application immediately available to all clients.
  - Import Note: Start services in following order (applicable for Restart of services also)
    - First set (can be started in parallel)
      - ODT Application (FCJNeoWeb, SMWeb)
      - plato-config
      - iii. plato-discovery
      - iv. plato-api-gateway
    - Wait till above services are up and running, then start all other remaining services (can be started in parallel).
    - iii. Start API-Gateway Router, refer section API Gateway Router Deployment.



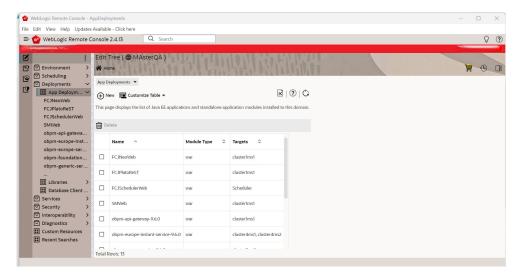


Figure 2-3 Summary of Deployments

### 2.2.3 API Gateway Router Deployment

- 1. Get the api-gateway router jar file from the obpm\_services tar zip file. Copy the jar file from <extracted folder>/obpm\_services/obpm-apigateway-router/obpm-apigateway-router-9.6.0.jar and place into deployment path in Linux for ex: /scratch/obpm\_installer\_router/deployables/apps/obpm
- **2.** Execute java -jar obpm-apigateway-router\_name with parameters listed below: obpm-apigateway-router\_name = "obpm-apigateway-router-9.6.0.jar"

Parameters to maintain in api-gateway-router deployment file	Comments
java -jar obpm-apigateway-router_name	Mention the router.jar name
plato.services.config.uri=http:/0.0.0.0:0000	Provide the host name and config- service deployed port
plato.service.logging.path=log_path	Provide the path for router log
-plato.services.eureka.uri=http://0.0.0.0:0000	Provide the host name and discovery- service deployed port
plato.services.discovery.port=0000	Provide the router unique port
logging.level.reactor.netty=DEBUG	
logging.level.org.springframework.cloud.gateway=DEBUG	
logging.level.org.springframework.web=DEBUG	

Sample router deployment sh file content:

export JAVA\_HOME="/scratch/obpm/jdk-11.0.14" export PATH=\$JAVA\_HOME/bin:\$PATH java -jar obpm-apigateway-router-9.6.0.jar --plato.services.config.uri=http://ip-address:port --plato.service.logging.path=/scratch/work\_area/logs\_router --plato.services.eureka.uri=http://ipadress:port --plato.services.discovery.port=5116 --logging.level.reactor.netty=DEBUG --logging.level.org.springframework.cloud.gateway=DEBUG --logging.level.org.springframework.web=DEBUG

#### 2.2.4 JVM Arguments to Configure

Maintain below parameter value in each manage server startup argument list.



"plato.services.discovery.port=managed-server-port"

2. Configure these parameters in the setUserOverride.sh of Weblogic. The values to be updated appropriate for the environment.

Parameters to populate under setUserOverrides File	Comments
LOG_PATH="" export LOG_PATH;	Writes Payments Service Logs
LOGGING_ENV="DEV" export LOG_PATH;	
APIGATEWAY_HOST="10.10.10.10" export APIGATEWAY_HOST;	Api-gateways service deployed ipaddress to be passes
APIGATEWAY_PORT="port" export APIGATEWAY_PORT;	Api-gateways service target manage server port
PLATO_SERVICES_CONFIG_URI="http:// 10.10.10.10:port" export PLATO_SERVICES_CONFIG_URI;	Keep plato config service port and ipaddress
PLATO_SERVICES_EUREKA_URI="http:// 10.10.10.10:port" export PLATO_SERVICES_EUREKA_URI;	Keep plato config service port
PLATO_CONFIG_PORT="port" export PLATO_CONFIG_PORT;	Keep plato config service port
-Dspring.main.allow-circular-references=true	
-Dplatologging.enabled=Y	Enabling the payment service Level Logs

Configure these parameters in the setUserOverride.sh of Weblogic. The values should be altered.

JAVA_OPTIONS="\${JAVA_OPTIONS} -Dmulti.entity.enabled=false"
JAVA_OPTIONS="\${JAVA_OPTIONS} -DflywayTask=migrate -Dflyway.enabled=false"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dplato.services.config.uri=\$ {PLATO_SERVICES_CONFIG_URI}"
JAVA_OPTIONS="\${JAVA_OPTIONS} - Dflyway.domain.placeholders.plato.service.logging.path=\${LOG_PATH}"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dplato.service.logging.path=\${LOG_PATH}"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dflyway.domain.placeholders.plato.service.env=\$ {LOGGING_ENV}"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dspring.flyway.enabled=false"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dplato-config.flyway.domain.locations=dummy"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dplato-config.flyway.domain.schemas=dummy"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dplato.services.eureka.uri=\$ {PLATO_SERVICES_EUREKA_URI}"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dplato.services.config.port=\$ {PLATO_CONFIG_PORT}"
JAVA_OPTIONS="\${JAVA_OPTIONS} -Dplato.services.gateway.port=\$ {APIGATEWAY_PORT}"

JAVA\_OPTIONS="\${JAVA\_OPTIONS} -Dapigateway.url=\${APIGATEWAY\_URL}"



This completes the deployment process.