

# Oracle® Banking Microservices Architecture

## Product Manufacturing Unit Installation Guide



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## Purpose

This guide helps to install the product manufacturing unit services on designated environment. It is assumed that all the prior setup is already done related to WebLogic installation, WebLogic managed server creation, and Oracle DB installation.

### Note

For the exact version to be installed, refer to the **Tech Stack** section of Release Notes.

It is recommended to use the dedicated managed server for each of the product manufacturing unit services.

## Before You Begin

Kindly refer to the **Getting Started User Guide** for information on common functionalities like login, navigation, and general settings before proceeding with this guide.

## Module Definitions

**Table    Terms & Definitions**

Terms	Definitions
<b>Consumer Application</b>	The product that requires integration with another product for retrieving information or posting transactions does not need to know the following details while coding.
<b>Service Consumer</b>	It is an Oracle banking solution that utilizes the Oracle Banking Routing Hub API for integration purposes. Analyze the Oracle Banking Routing Hub and assess the destination product processor.

Table (Cont.) Terms &amp; Definitions

Terms	Definitions
<b>Import Service Consumer</b>	The user can create a service consumer by importing the JSON file and manually selecting the service providers or select all providers that needs to be imported.
<b>Environment Variables</b>	A set of variables that will be accessible across the particular configuration of the consumer.
<b>Service Providers</b>	Service Providers are systems designed to handle requests sent by the Oracle Banking Routing Hub for service consumers. They include information about destination integration.
<b>Parameter Group</b>	Parameter mapping is used to establish the relationship between parameters of 2 different systems i.e., consumer and provider.
<b>Import Implementation</b>	The user can create an implementation by importing the JSON file.
<b>Consumer Services</b>	It specifies the service ID that is transmitted by the service consumer. It also handles transitions and route definitions, including the details for source integration.
<b>Transformation</b>	It involves gathering and changing data from one source to another and back again. This process occurs within consumer services. It changes the data from the service consumer into a format suitable for the service provider.
<b>Routing</b>	It determines which service provider receives the actual request by considering maintenance and assessment factors.
<b>Chaining</b>	The sequence of transformations for each routing in which the request needs to be processed.
<b>Template Extensibility</b>	It is achieved by specifying the extended templates for request and response kernel transformation templates. And as part of extensibility, Routing Hub merges the output of kernel template and custom template in terms of JSON / XML merging.
<b>SPI</b>	It is used to make Routing Hub more extensible. SPI provides an option to extend interfaces without modifying the core application.
<b>Monitoring dashboard</b>	It provides to System integrators and IT administrators to review the health of the integrations. It displays data using different type of widgets to help users to assess the performance of integrations and identify the areas that requires attention.

## Module Pre-requisite

Specify **User Id** and **Password**, and login to the **Home** screen.

## Audience

This guide is intended for the WebLogic admin or ops-web team who are responsible for installing the OFSS banking products.

## Documentation Accessibility

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

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## Related Resources

For more information, refer to the following documents:

- *Configuration and Deployment Guide*

## Acronyms and Abbreviations

The list of the acronyms and abbreviations used in this guide are as follows:

**Table List of Acronyms and Abbreviations**

Abbreviation	Description
PMU	Product Manufacturing Unit
CMC	Common Core
SMS	Security Management System

## Module Post-requisite

After finishing all the requirements, log out from the **Home** screen.

# 1

## Database Setup

This topic describes the database setup related configuration for Product Manufacturing Unit Installation.

### Prerequisites

The below setup is dependent on PMU schema.

Before proceeding with the below setup, make sure that the PMU is provided.

### Database Setup

To set up Database, PMU schema to be created.

**Table 1-1 List of Services**

Service Name	Schema Required
pmu-bd-maintenance-service	Yes (PMU Schema)

# 2

## Domain and Cluster Configuration

This topic describes the domain configuration for Product Manufacturing Unit services.

### Prerequisites

Before proceeding with the below setup, make sure that the below steps are done.

- The machine should have Java JDK installed.
- Oracle Fusion Middleware is installed on the machine.

#### Note

Before proceeding with the below steps, complete Oracle Banking Microservices Architecture installation as guided.

- Steps for creating all product manufacturing unit domains, properties like port numbers, names will be changing based on the domain. Screenshots provided for such deviations. The domain creation process remains the same.

#### Note

For the exact version to be installed, refer to **Tech Stack** section of **Release Notes**.

### Steps to Create Domain

It is recommended to have different managed server in one domain for each application. For Creating Domain and Configuration, refer to **Create Domain and Cluster Configuration** section in *Configuration and Deployment Guide*.



# 3

## Data Sources Creation

This topic describes about the data sources creation for Product Manufacturing Unit services.

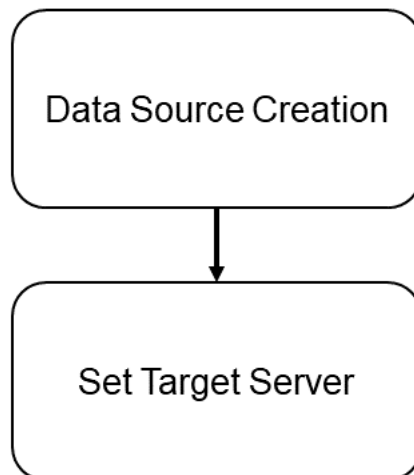
### Prerequisites

Database and application setup for Oracle Banking Microservices Architecture must be performed before the deployment setup.

The data sources for the respective micro-services must be created before the application deployment. Each data source targets the corresponding server on which the application will be deployed.

The following sections describes the list of data sources required to be created for Product Manufacturing Unit services and the steps to configure them in the server.

**Figure 3-1 Data Source Creation**



### Data Sources List

The below list of the data sources must be created for each domain before the deployment of applications onto the managed servers.

**Table 3-1 Data Sources List**

Data Source Name	Data Source JNDI	Targets
PLATO	jdbc/PLATO	PMU Managed Server
PMU	jdbc/PMU	PMU Managed Server
SMS	jdbc/sms	PMU Managed Server
PLATOUI	jdbc/PLATO_UI_CONFIG	PMU Managed Server

**Table 3-1 (Cont.) Data Sources List**

Data Source Name	Data Source JNDI	Targets
CMNCORE	jdbc/CMNCORE	PMU Managed Server

**Note**

Steps to create data source in WebLogic is same for all the above except for the connection details and names.

**Steps to create Data Source**

For creating data sources in managed server, refer to **Create Data Sources** section in *Configuration and Deployment Guide*.

# 4

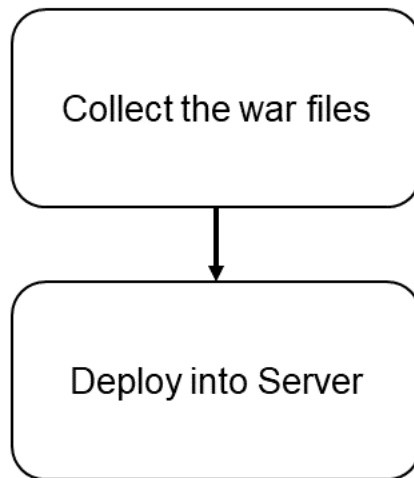
## Deployments

This topic describes the list of war files for the deployment and depreciation of the Common Core services, and the steps to deploy and undeploy them in the server.

### Prerequisites

The database setup and data sources creation need to be performed before the application deployment stage. Each of the services corresponds to a specific war file that needs to be deployed into the server.

**Figure 4-1 Deployments**



### Deployments List

The below table provides the details of the deployments required on each domain for the Product Manufacturing Unit application to run. Deploy one after the other in the same order as given below.

**Table 4-1 Deployments List**

Application	Archive name	OSDC path	Targets
PMU-BD-MAINTENANCE-SERVICE	pmu-bd-maintenance-service-9.6.0.war	{Unzip OSDC Package} \\pmu-bd-maintenance-service-9.6.0.war	PMU Managed Server

**Note**

Refer to OSDC file for the exact version number for each service.

For the instructions to deploy the application, refer to the **Deploy Application** section in *Configuration and Deployment Guide* .

# 5

## Restarts and Refresh

This topic provides the information to restart and refresh the application.

Once the application is deployed, restart all the managed servers. For each application, call path `/refresh` for refreshing the configuration properties.

### **Note**

Refer to the **Restart Servers** section in *Configuration and Deployment Guide* for the instruction to restart the server.

# 6

## Logging Area

This topic describes the logging area where the logs are found after deploying the Product Manufacturing Unit applications in the WebLogic server.

Product Manufacturing Unit Application writes logs in the below area of the server:

```
<WEBLOGIC_DOMAIN_CONFIG_AREA>/servers/PMU/logs/PMU.out
```

Let's assume a domain has been created **Productmanufacturingunit\_domain** with **managed\_server** name called **PMU** in the following server area.

```
/scratch/oracle/middleware/user_projects/domains/PMU_domain.
```

Logging area for Product Manufacturing Unit is `/scratch/oracle/middleware/user_projects/domains/Productmanufacturingunit_domain/servers/PMU/logs/PMU.out`

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