

Oracle® Banking Corporate Lending Process Management Installation Guide



Release 14.7.3.0.0

F94788-01

February 2024

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

Copyright © 2018, 2024, Oracle and/or its affiliates.

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.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. 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 fail-safe, 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.

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

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about 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 unless otherwise set forth in an applicable agreement between you and Oracle. 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, except as set forth in an applicable agreement between you and Oracle.

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>.

Contents

Preface

Introduction	iv
Audience	iv
Acronyms and Abbreviations	iv
List Of Topics	iv

1 Database Setup

2 Domain and Cluster Configuration

3 Data Source Creation

4 Deployments

5 Restarts and Refresh

6 Logging Area

7 Integration Routing using OBRH

Index

Preface

This topic contains following sub-topics:

- [Introduction](#)
- [Audience](#)
- [Acronyms and Abbreviations](#)
- [List Of Topics](#)

Introduction

This guide would help you to install the 'Oracle Banking Corporate Lending Process Management' OBCLPM services on designated environment. It is assumed that all the prior setup is already done related with WebLogic 12.2.1.4 installation, WebLogic managed server creation and Oracle DB installation. It is recommended to use dedicated managed server for the OBCLPM services.

Audience

This document is intended for admin or ops-web team who are responsible for installing the Oracle Financial Services Software Limited banking products.

Acronyms and Abbreviations

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

Table 1 Acronyms and Abbreviations

Abbreviation	Description
CMC	Common Core
EOD	End of Day
LDAP	Lightweight Directory Access Protocol
OBRH	Oracle Banking Routing Hub
SMS	Security Management System

List Of Topics

This manual is organized into the following topics.

Table 2 List of Topics

Topics	Description and Cross References
Database Setup	This topic helps you to set up database related configuration for OBCLPM Installation.
Domain and Cluster Configuration	This topic helps you to set up domain and cluster configuration.
Data Sources Creation	This topic helps you to create data sources.
Deployments	This topic helps you to setup database and data sources creation that needs to be performed prior to the application deployment stage.
Restarts and Refresh	This topic helps you to restart all the managed servers.
Logging Area	This topic discusses about the log area where after deployment of Common Core Applications in WebLogic server.
Integration Routing using OBRH	This topic discusses about integration routing using OBRH.

1

Database Setup

Use OBCLPM service schemas and SMS schemas to setup database.

Introduction

This section explains about setting up database related configuration for OBCLPM Installation.

Pre-requisite

Below setup is dependent on OBCLPM service schemas and SMS schema. So, before you proceed with below setup ensure OBCLPM service schemas and SMS Schema is provided to you.

Database Setup

To setup DB for OBCLPM schema's to be created.

Table 1-1 Database Setup

Service Name	Schema Required
CLMO-CMC-PARTY-SERVICES	Yes
CLMO-PARTY-SERVICES	Yes
CLMO-LOANAPPLICATION-SERVICES	Yes
CLMO-BACKOFFICE-SERVICES	Yes
CLMO-BUSINESSPROCESS-SERVICES	Yes
CLMO-BUSINESSPRODUCT-SERVICES	Yes
CLMO-HANDOFF-SERVICES	Yes
CLMO-MAINTENANCE-SERVICES	Yes
CLMO-ORCHESTRATION-SERVICES	Yes
CLMO-SYNDICATIONAPPLICATION-SERVICES	Yes
CLMO-TRANSACTIONORCHESTRATOR-SERVICES	Yes
CLMO-CONDITIONSUBSEQUENT-SERVICES	Yes
CLMO-COVENANTS-SERVICES	Yes
CLMO-BATCH-FORGETCUSTOMER-SERVICES	Yes
CLMO-NLP-PROCESSING-SERVICES	Yes
CLMO-PAYMENT-SERVICES	Yes

2

Domain and Cluster Configuration

Use domain and cluster configuration to create Oracle Banking Corporate Lending Process Management domain.

Prerequisites

1. Machine should have Java JDK11.0.14 has installed.
2. Oracle Fusion Middleware 14c 14.1.1 has to be installed on the machine.

 **Note:**

Before proceeding with below steps complete *Oracle Banking Microservices Platform Foundation Installation Guide*.

3. Steps for creating OBCLPM domain, properties like port numbers, names are changed based on the domain. Screenshots provided for such deviations. Domain creation process remains the same.

Steps to Create Domain

It is recommended to have different managed server in one domain for each application. For creating domain and configuration, refer *How to create and Cluster Configuration* section in *Configuration and Deployment Guide*.

3

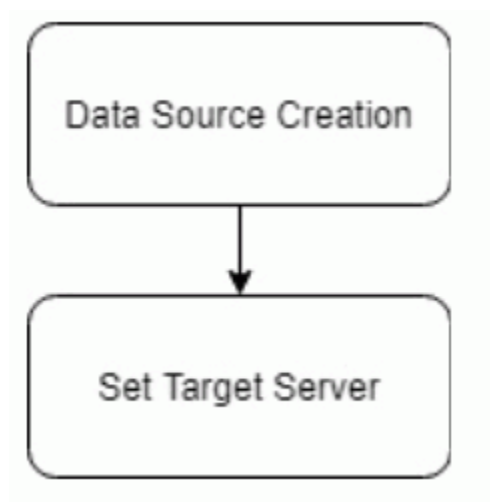
Data Source Creation

Use database and application setup for OBCLPM services has to be performed prior to deployment setup.

Prerequisite

The data sources for the respective micro-services must be created first before the application deployment. Each of the data source target to their corresponding servers on which the application will be deployed. The following sections explain the list of data sources required to be created for OBCLPM services and the steps to configure them in the server.

Figure 3-1 Data Source Creation



Data sources List

The table below lists the data sources to be created on each domain prior to deployment of applications onto managed servers.

Table 3-1 Data sources List

Data source Name	Data source JNDI	Targets
OBCLPMPRTYAPP	jdbc/OBCLPMPRTYAPP	OBCLPM Managed Server
OBCLPMLOANAPP	jdbc/OBCLPMLOANAPP	
OBCLPMBACKOFF	jdbc/OBCLPMBACKOFF	
OBCLPMBUSSPRC	jdbc/OBCLPMBUSSPRC	
OBCLPMBUSSPRD	jdbc/OBCLPMBUSSPRD	
OBCLPMHANDOFF	jdbc/OBCLPMHANDOFF	
OBCLPMMMAINTCE	jdbc/OBCLPMMMAINTCE	

Table 3-1 (Cont.) Data sources List

Data source Name	Data source JNDI	Targets
OBCLPMORCHESN	jdbc/OBCLPMORCHESN	
OBCLPMSYNDAPP	jdbc/OBCLPMSYNDAPP	
OBCLPMTXNORCH	jdbc/OBCLPMTXNORCH	
OBCLPMCNDSSUB	jdbc/OBCLPMCNDSSUB	
OBCLPMCOVMN	jdbc/OBCLPMCOVMN	
OBCLPMNLPPRCNGAPP	jdbc/OBCLPMNLPPRCNGAPP	
OBCLPMPAYAPP	jdbc/OBCLPMPAYAPP	
OBCLPM	jdbc/OBCLPM	
OBCLPMBUSSOVR	jdbc/OBCLPMBUSSOVR	

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

For creating data source, refer How to create Data sources section in *Configuration and Deployment* guide.

4

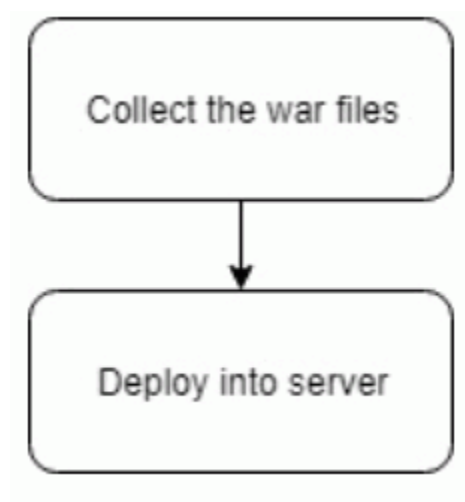
Deployments

Use database setup and data sources creation prior to the application deployment stage.

Pre-requisite

Each of the services corresponds to a specific war file that needs to be deployed into the server. The following sections explain the list of war files of the OBCLPM service and the steps to deploy them into the server.

Figure 4-1 Deployments



- Environment variables need to be set, refer *Configuration and Deployment Guide*.
- For any issues with fly configuration setup, refer *Observability Guide*.

Deployments List

Below table gives details of the deployments required on each domain for the OBCLPM applications to run. Deploy one after other in the same given order.

 **Note:**

Prior to deploying CLMO-ORCHESTRATION-SERVICES, ensure that the conductor workflows are deployed. Refer to *Oracle Banking Corporate Lending Process Management Conductor Process Installation Guide* for deployment of conductor workflows.

Table 4-1 Deployments List

Application	Archive name	OSDC path	Targets
CLMO-BACKOFFICE-SERVICES	clmo-backoffice-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\clmo-backoffice-services\	OBCLPM Managed Server
CLMO-BUSINESSPROCESS-SERVICES	clmo-businessprocess-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-businessprocess-services	OBCLPM Managed Server
CLMO-BUSINESSPRODUCT-SERVICES	clmo-businessproduct-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-businessproduct-services\	OBCLPM Managed Server
CLMO-CMC-PARTY-SERVICES	clmo-cmc-party-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-cmc-party-services\	OBCLPM Managed Server
CLMO-CONDITIONSUBSEQUENT-SERVICES	clmo-conditionsubsequent-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-conditionsubsequent-services\	OBCLPM Managed Server
CLMO-COVENANTS-SERVICES	clmo-covenants-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-covenants-services\	OBCLPM Managed Server
CLMO-HANDOFF-SERVICES	clmo-handoff-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-handoff-services	OBCLPM Managed Server
CLMO-LOANAPPLICATION-SERVICE	clmo-loanapplication-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-loanapplication-services\	OBCLPM Managed Server
CLMO-MAINTENANCE-SERVICES	clmo-maintenance-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-maintenance-services\	OBCLPM Managed Server

Table 4-1 (Cont.) Deployments List

Application	Archive name	OSDC path	Targets
CLMO-ORCHESTRATION-SERVICES	clmo-orchestration-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-orchestration-service	OBCLPM Managed Server
CLMO-PARTY-SERVICES	clmo-party-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-party-services\	OBCLPM Managed Server
CLMO-SYNDICATIONAPPLICATION-SERVICES	clmo-syndicationapplication-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-syndicationapplication-services\	OBCLPM Managed Server
CLMO\TRANSACTIONORCHESTRATOR-SERVICES	clmo-transactionorchestrator-services-x.x.x.war	{Unzip OSDC Package} \\OBCLPM_SERVICE S\ clmo-transactionorchestrator-services\	OBCLPM Managed Server
app-shell	obclpm-app-shell-14.x.0.0.0.war	{Unzip OSDC Package} \UI\obclpm-app-shell	OBCLPM Managed Server

To deploy application, refer *How to deploy* section in *Configuration and Deployment Guide*.

5

Restarts and Refresh

Use restart for restarting all the managed servers and refresh for refreshing the configuration properties.

Once everything is deployed, restart all the managed servers. And for each application call path “/refresh” for refreshing the configuration properties.

To restart the server, *How to restart* section refer to *Configuration and Deployment Guide*.

6

Logging Area

Use logging area for deployment of Common Core Applications in WebLogic server.

Introduction

This section talks about the logs area where after deployment of Common Core Applications in WebLogic server.

Logging Area

Common Core Application writes logs in the below area of the server-

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

Let's assume a domain has been created OBCLPM_domain with managed_server name called OBCLPM in the following area of the server

```
/scratch/oracle/middleware/user_projects/domains/CommonCore_domain
```

Logging area for Common core would be

```
/scratch/oracle/middleware/user_projects/domains/ OBCLPM_domain/servers/  
OBCLPMAPP/logs/OBCLPMAPP.out
```

7

Integration Routing using OBRH

Use integration of Oracle Banking Corporate Lending Process Management with Oracle Banking Routing Hub (OBRH) product for seamless and standardized integration.

OBCLPM as service consumer in OBRH

Following landing page is where OBCLPM would be registered as service consumer of any internal / external integration touch points.

Figure 7-1 OBRH Dashboard

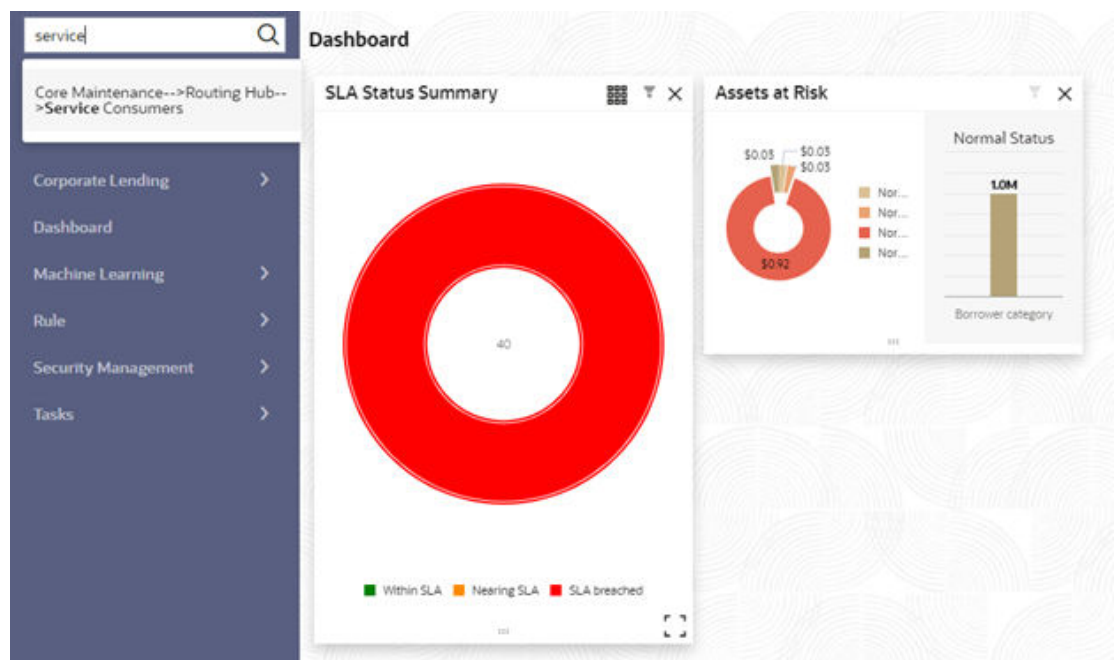
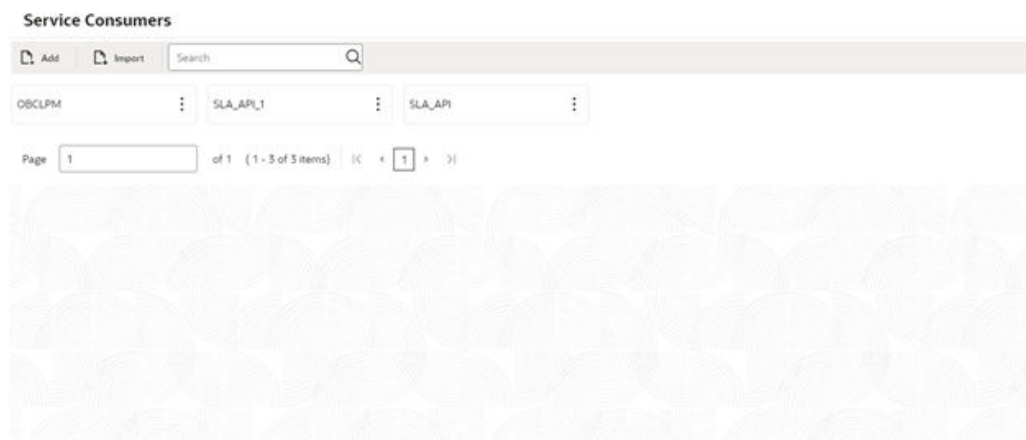


Figure 7-2 OBRH Dashboard Service Consumers



Importing OBRH configuration

Importing OBCLPM configurations by clicking import in below page and then select the json file from the below path and click **Extract**.

OBCLPM_14.4.0.1.0_ROLLED_UP/OBRH_CONFIGURATION/OBCLPM_consumer.json

Figure 7-3 Import Service Consumer

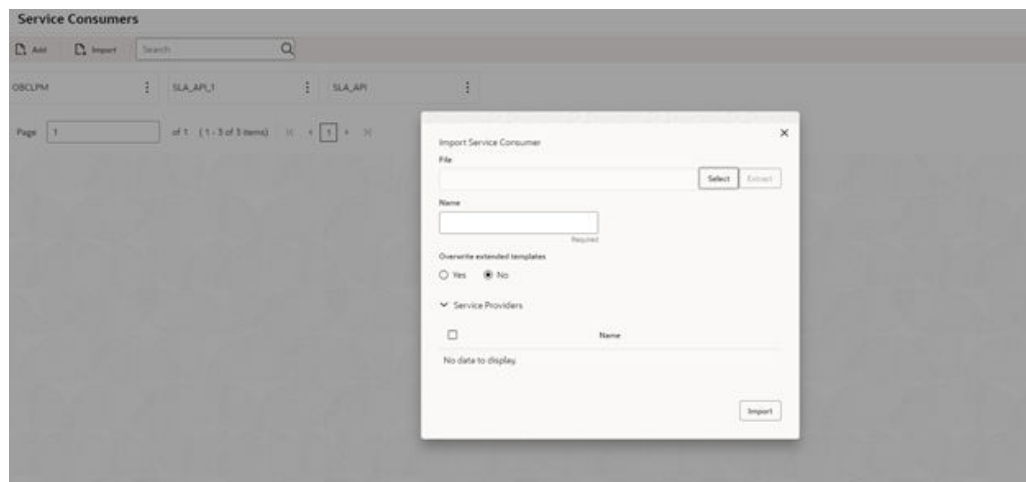


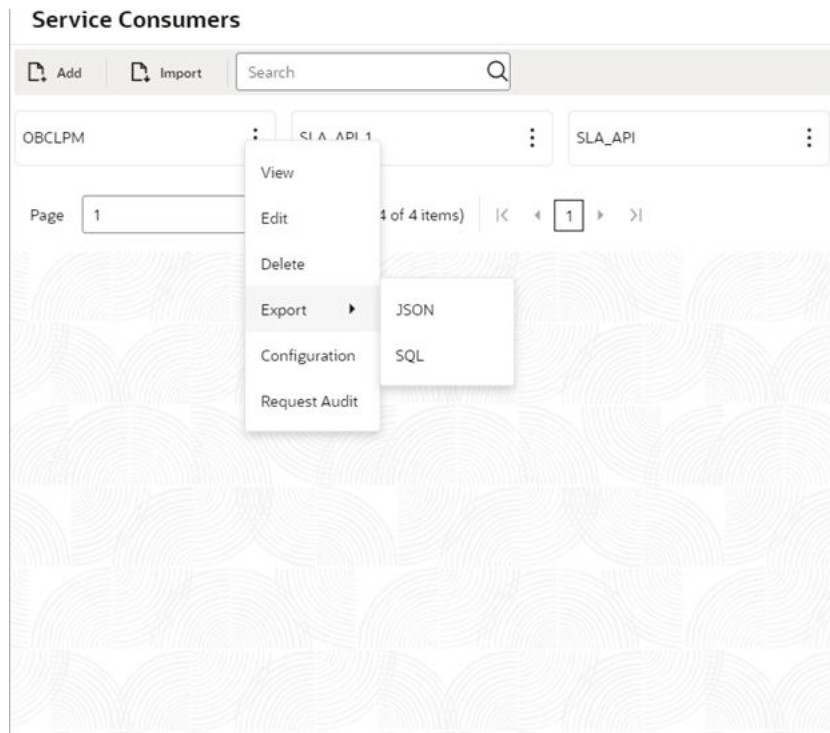
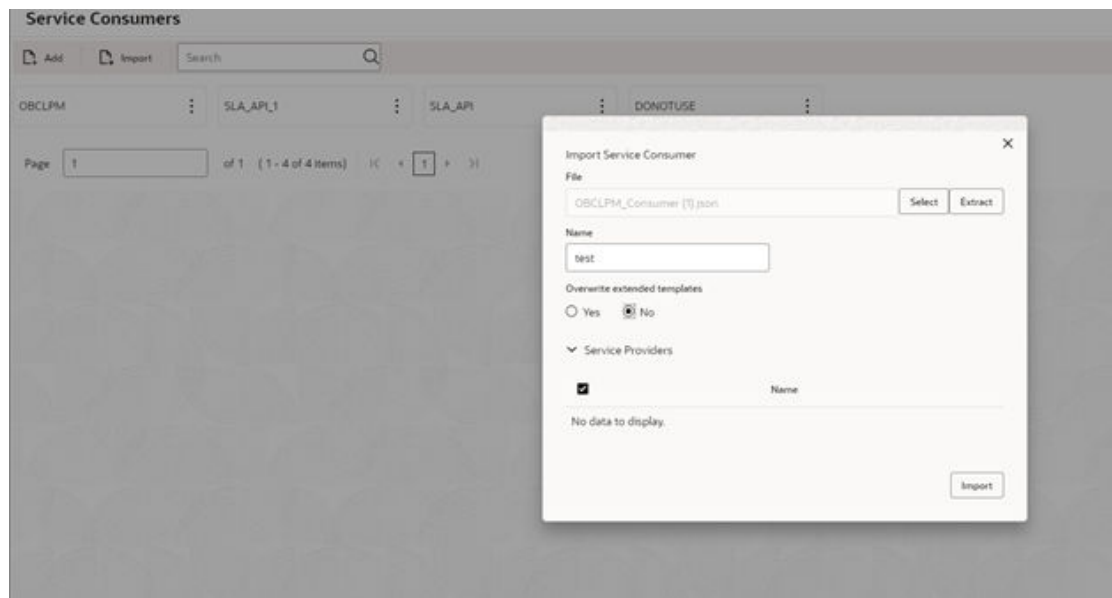
Figure 7-4 Import Service Consumer Success Message**Figure 7-5 OBCL Import**

Figure 7-6 Import Service Consumers Confirm

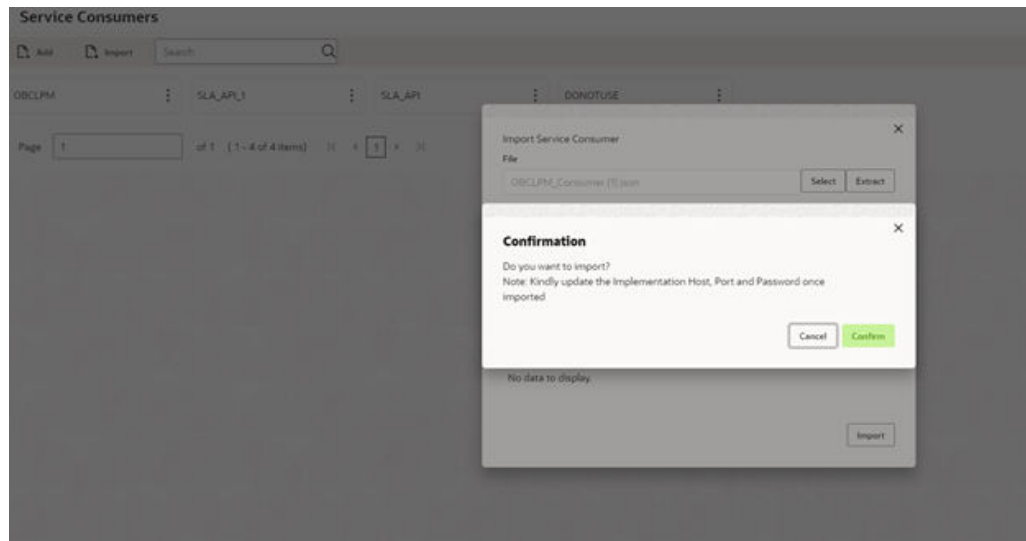


Figure 7-7 Import Service Consumers Success

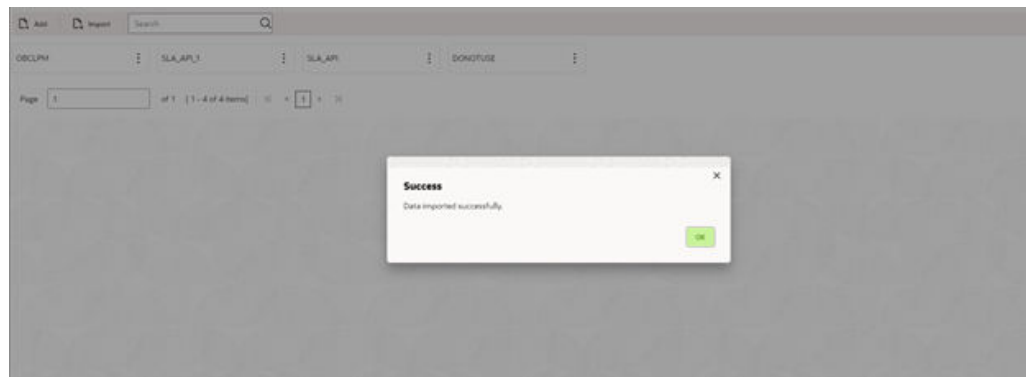
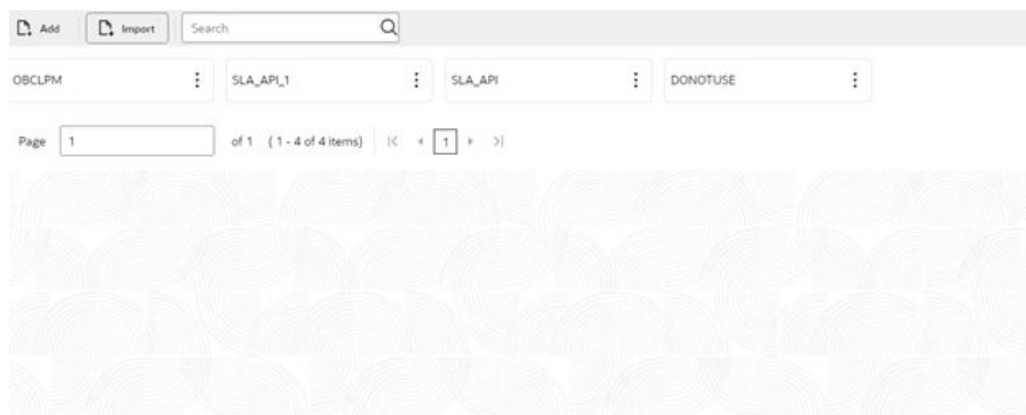
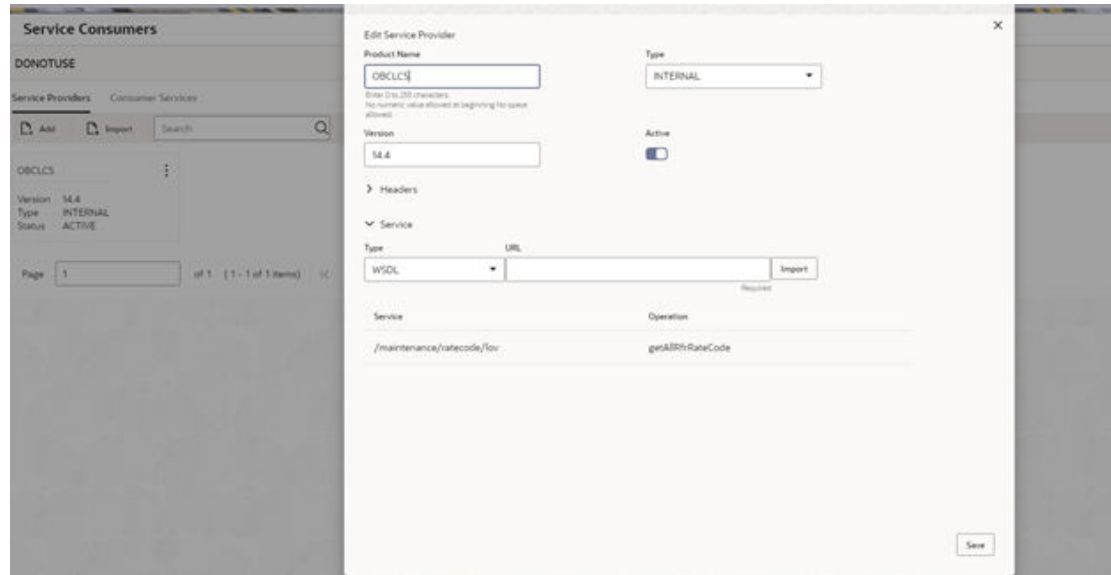


Figure 7-8 Service Consumers



After successful import of OBRH configuration for OBCLPM, update the host and port as per requirement for every implementation of configured service provider.

Figure 7-9 Edit Implementation



Index

D

Data Source Creation, [3-1](#)
Database Setup, [1-1](#)
Deployments, [4-1](#)
Domain and Cluster Configuration, [2-1](#)

I

Integration Routing using OBRH, [7-1](#)

L

Logging Area, [6-1](#)

R

Restarts and Refresh, [5-1](#)