# Oracle® Banking Collections Installation Guide





Oracle Banking Collections Installation Guide, Release 14.8.1.0.0

G43362-01

Copyright © 2022, 2025, 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.

# Contents

Loggin	ig Area	
Patchs	set Setup	
8.1 Pre	erequisites	
8.2 Fou	undation Setup Upgrade	
8.2.1	Download Installer	
8.2.2	Update Properties File	
8.2.3	Update Roles File	
8.3 Ora	acle Banking Collections Patch Installation	
8.3.1	Update Properties File	
	Update Roles File	

Troubleshooting for plato-apigateway-router

9.2

1



### **Preface**

This guide helps to install the Oracle Banking Collections services on designated environment.

This guide facilitates you to install the following services in the specified sequence:

- 1. OBCR-ACTION-SERVICES
- 2. OBCR-ACTIVITY-SERVICES
- 3. OBCR-COMMON-SERVICES
- 4. OBCR-CORRESPONDENCE-SERVICES
- 5. OBCR-ENTITY-SERVICES
- OBCR-NOTES-SERVICES
- 7. OBCR-PTP-SERVICES
- 8. OBCR-SEGMENTATION-SERVICES
- 9. OBCR-SEGMENT-MAINT-SERVICES
- OBCR-STRATEGY-MAINT-SERVICES
- 11. OBCR-STRATEGY-SERVICES
- 12. OBCR-TASK-MAINT-SERVICES
- 13. OBCR-TASK-SERVICES
- 14. OBCR-USER-MANAGEMENT-SERVICES
- 15. OBCR-DASHBOARD-SERVICES
- 16. OBCR-FEES-CHARGES-SERVICES
- 17. OBCR-VENDOR-MANAGEMENT-SERVICES
- 18. OBCR-DATA-EXCHANGE-SERVICES
- 19. OBCR-SETTLEMENT-SERVICES
- 20. OBCR-ACCOUNTING-SERVICES



For the exact version to be installed, see section **System Requirements and Technology Stack** of *Oracle Banking Collections Release Notes*.

#### **User Interface**

Follow the below steps to migrate from existing app-shell build to Foundation app-shell. The UI war is split into individual component server war files. All the component server war files should be deployed in the same managed server.

For app-shell and components server, deploy the war files mentioned below:



- app-shell
- cmc-component-server
- moc-component-server
- · sms-component-server

For Domain Specific component server, deploy the following war file:

- obcr-component-server
- Purpose
- Before you Begin
- Audience
- Acronyms and Abbreviations
- Basic Actions
- Conventions
- Critical Patches
- Diversity and Inclusion
- Documentation Accessibility
- Related Resources
- Screenshot Disclaimer
- Symbols and Icons

### Purpose

This guide helps to install the Oracle Banking Collections services on designated environment. This guide helps the user to perform the initial setup for Oracle Banking Collections application. The procedures given in this document must be completed to run the application successfully.

### Before you Begin

Kindly refer to our getting started user guide for common elements, including Symbols and Icons, Conventions Definitions, and so forth.

### **Audience**

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

# Acronyms and Abbreviations

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

Table 1 Acronyms and Abbreviations

Abbreviation	Description
DDA	Demand Deposit Accounts



Table 1 (Cont.) Acronyms and Abbreviations

Abbreviation	Description
ECA	External Credit Approval
EOD	End of Day
IBAN	International Bank Account Number

### **Basic Actions**

The basic actions performed in the screens are as follows:

**Table 2 Basic Actions** 

Actions	Description
New	Click <b>New</b> to add a new record. The system displays a new record to specify the required data. The fields marked with asterisk are mandatory.  This button is displayed only for the records that are already created.
Save	Click <b>Save</b> to save the details entered or selected in the screen.
Unlock	Click Unlock to update the details of an existing record. The system displays an existing record in editable mode.  This button is displayed only for the records that are already created.
Authorize	Click Authorize to authorize the record created. A maker of the screen is not allowed to authorize the same. Only a checker can authorize a record.  This button is displayed only for the already created records. For more information on the process, refer Authorization Process.
Approve	Click <b>Approve</b> to approve the initiated record.  This button is displayed once the user click <b>Authorize</b> .
Audit	Click Audit to view the maker details, checker details of the particular record.  This button is displayed only for the records that are already created.
Close	Click <b>Close</b> to close a record. This action is available only when a record is created.
Confirm	Click <b>Confirm</b> to confirm the action performed.
Cancel	Click Cancel to cancel the action performed.
Compare	Click <b>Compare</b> to view the comparison through the field values of old record and the current record.  This button is displayed in the widget once the user click <b>Authorize</b> .
View	Click <b>View</b> to view the details in a particular modification stage.  • This button is displayed in the widget once the user click <b>Authorize</b> .
View Difference only	Click View Difference only to view a comparison through the field element values of old record and the current record, which has undergone changes.  This button is displayed once the user click Compare.
Expand All	Click <b>Expand All</b> to expand and view all the details in the sections.  This button is displayed once the user click <b>Compare</b> .



Table 2 (Cont.) Basic Actions

Actions	Description
Collapse All	Click Collapse All to hide the details in the sections.  This button is displayed once the user click Compare.
ок	Click <b>OK</b> to confirm the details in the screen.

### 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 or the glossary.
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.

### **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 ensure effective security, as strongly recommended by <u>Oracle Software Security Assurance</u>.

### **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.

# **Documentation Accessibility**

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.



### **Related Resources**

For more information, see these related Oracle resources:

- Oracle Banking Collections Initial Setup Guide
- Oracle Banking Collections Pre-Installation Guide

### Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes.

# Symbols and Icons

This guide has the following list of symbols and icons.

Table 3 Symbols and Icons - Common

Symbol/Icon	Function
J L	Minimize
7 Г	
гэ	Maximize
×	Close
	Perform Search
Q	Perioriii Searcii
•	Open a list
+	Add a new record
K	Navigate to the first record
>1	Navigate to the last record
4	Navigate to the previous record



Table 3 (Cont.) Symbols and Icons - Common

Symbol/Icon	Function
•	Navigate to the next record
and the same of th	Grid view
<b>=</b>	List view
G	Refresh
+	Click this icon to add a new row.
-	Click this icon to delete a row, which is already added.
	Calendar
Û	Alerts

Table 4 Symbols and Icons – Audit Details

Symbol/Icon	Function
00	A user
	Date and time
A	Unauthorized or Closed status
<b>✓</b>	Authorized or Open status



Table 4 (Cont.) Symbols and Icons – Audit Details

Symbol/Icon	Function
$\odot$	Rejected status

Table 5 Symbols and Icons - Widget

Symbol/Icon	Function
<b>E</b>	Open status
	Unauthorized status
<del>C</del>	Closed status
	Authorized status
Ľ <sub>x</sub>	Rejected status
	Modification Number

# **Database Setup**

This topic describes the database setup for Oracle Banking Collections installation.

It is recommended to create a different schema for each application. The below setup is designed to work with the separate schema for each application.

#### **Prerequisites**

Before proceeding with the below setup, make sure that the required schemas are provided.

# Product Installation Using Installer

This topic describes the information for Oracle Banking Collections installation using Installer.

#### **Prerequisites**

Before proceeding with the installation setup, make sure that the database installation is completed and the required schemas are created.

#### **Installer Path**

You can download the installer from Oracle Software Delivery Cloud (OSDC). The following table provides the download path of the installer.

Table 2-1 Installer Path

Application	Archive Name	OSDC Path
OBMA Installer	obma.zip	INSTALLER/
OBC Installer	obc.zip	INSTALLER/



#### (i) Note

To install OBMA foundation using Installer, refer to Oracle Banking Microservices Architecture Installer Guide. To install Oracle Banking Collections product using Installer, refer to the below steps.

**Product Setup** 

### 2.1 Product Setup

Please perform the steps mentioned in chapter **Download and Setup Installer** of *Oracle* Banking Microservices Architecture Installer Guide. Post completion of Download and Setup Installer tasks for VM identified for Product Setup, perform the below mentioned configurations.

This topic consists of following sections:

- **Update Properties File**
- **Update** Roles File
- **Execute Installer Script**

### 2.1.1 Update Properties File

#### To update properties file:

- Navigate to the path /scratch/obma\_installer/chef-repo/.
- Open the respective product properties file. Here, we will update obcr\_properties.rb with details as explained in further steps.



3. Update the local user and its group.

#### Figure 2-1 Update Local User and Group

```
#Standard Values
INSTALL USER = "USER NAME"
INSTALL_GROUP = "dba"

USER ROOT = "root"
GROUP_ROOT = "root"
INSTALL_BASE_DIR = "/scratch"
EXTRACT_LOC = "/scratch/extract"
```

Verify the version of java, update if required, and ensure the same version is available in the software's directory.

#### Figure 2-2 Verify Java Version

```
#Java Installation Details

JAVA_INSTALLER_SOURCE = "filesystem"

JAVA_INSTALLER_PATH = "/java/"

JAVA_INSTALLATION_DIR = INSTALL_BASE_DIR + "/obma"

JAVA_VERSION = "17.0"

JDK_INSTALLER_VERSION = "17.0.12"

JDK_INSTALLER_FILE = "jdk-17.0.12 linux-x64 bin.tar.gz"

CERTS_DIRNAME = INSTALL_BASE_DIR + "/ssl/cacerts"
```

Verify the version of weblogic server, update if required, and ensure the same version is available in the software's directory.

#### Figure 2-3 Verify Weblogic Server Version

```
#Weblogic Infra Installation Details
ORACLE_INVENTORY = "/scratch/app/oraInventory"
WLS_VERSION = "14.1.2"
WLS_INSTALLER_SOURCE = "filesystem"
WLS_INSTALLER_PATH = "/wls/"
WLS_PACKAGE_BASENAME = "fmw_14.1.2.0.0 wls_generic.jar"
WLS_INSTALLER_FILE = "fmw_14.1.2.0.0 wls_Disk1_lof1.zip"
WLS_INSTALLER_FILE = "fmw_14.1.2.0.0 wls_Disk1_lof1.zip"
WLS_INSTALL_DIR = INSTALL_BASE_DIR + "/obma/fmw"
WLS_INSTALLER_TYPE = 'Weblogic Server'
```

6. Update the OBMA Foundation host name and verify various ports, and update if required.

#### Figure 2-4 Update OBMA Foundation Host Name and Verify Ports

```
#Product specific parameters
PROTOCOL = "https"
PLATO_HOST = "ofss-mum-xxx.snbomprshared.gbucdsintbom.oraclevcn.com"
PLATO_CONFIG_PORT = "8002"
DISCOVERY_PORT = "8004"
API_GATEWAY_PORT = "8006"
SMS_PORT = "8026"
```



For Oracle Banking Collections, the default servers and their ports are already defined.
 Any new addition of server or data source details needs to be appended here under "OBC Flyway Placeholder Details".

#### Note

Snapshot of Oracle Banking Collections Configuration Details is given for reference.

#### Figure 2-5 Placeholder

```
# OBC FLYWAY PLACEHOLDER DETAILS
# OBCR Server Ports Details
OBCR1 MAN SERVER LISTEN PORT = "8501"
OBCR1 MAN SERVER SSL PORT = "8502"
OBCR2 MAN SERVER LISTEN PORT = "8503"
OBCR2 MAN SERVER SSL PORT = "8504"
#OBCR CR ACTIVITY Datasource Details
CR ACTIVITY SCHEMA = "CR ACTIVITY"
CR ACTIVITY JNDI = "jdbc/CR ACTIVITY"
CR ACTIVITY DS TARGET = "obcr cluster1, obcr cluster2"
#OBCR CR ACTION Datasource Details
CR ACTION SCHEMA = "CR ACTION"
CR ACTION JNDI = "jdbc/CR ACTION"
CR ACTION DS TARGET = "obcr cluster1"
#OBCR CR CMN Datasource Details
CR CMN SCHEMA = "CR CMN"
CR CMN JNDI = "jdbc/CR CMN"
CR CMN DS TARGET = "obcr cluster1"
#OBCR CR_ENTITY Datasource Details
CR ENTITY SCHEMA = "CR ENTITY"
CR ENTITY JNDI = "jdbc/CR ENTITY"
CR ENTITY DS TARGET = "obcr cluster1"
```

#### Note

The password for all the default schema's is "wlcome1". In case, there is change in the password for the schemas, user needs to update the same in databag. For more information, see section Password Update in Databag of Oracle Banking Microservices Architecture Installer Guide.

8. Update the database details under "#Database details for weblogic datasource configuration".



#### Figure 2-6 Update Database Details

```
#DB TNS details for weblogic datasource configuration
ORACLE PDB SID = "PDBXXXA"
ORACLE PDB HOSTNAME = "ofss-mum-xxxx.snbomprshared.gbucdsintbom.oraclevcn.com"
ORACLE PDB PORT = "XXXX"
ORACLE DRIVER = "oracle.jdbc.driver.OracleDriver"
```

Verify SQLCL details under "#SQLCL details".

#### Figure 2-7 Verify SQLCL Details

```
#SQLCL JAR NAME = "plato-sqlcl-deployer-10.1.0.jar"

SQLCL JAR NAME = "plato-sqlcl-deployer-10.1.0.jar"

SQLCL JAR LOCATION = SOFTWARE INSTALLER HOME + "/sqlcl"

SQLCL ZIP_LOCATION = "/scratch/obma_installer/deployables/apps/obcr/"

SQLCL JSON LOCATION = "/scratch/obma_installer/deployables/sqlcl/properties"

SQLCL TEMP DIR = "/scratch/obma_installer/sqlcl_deploy_temp"

SQLCL TEMP DIR = "/scratch/obma_installer/sqlcl_deploy_temp"

SQLCL EXPORT SH SOURCE PATH = "/scratch/obma_installer/chef-repo/setUserOverrides_obcr.sh.rb"

SQLCL EXPORT SH TEMPLATE PATH = "/scratch/obma_installer/chef-repo/cookbooks/obma_sqlcl/templates/default/export_params.sh.erb"

SECURITY TOOLKIT DIRECTORY = SOFTWARE_INSTALLER HOME + "/security_toolkit"

PLATO SECURITY TOOLKIT JAR NAME = SECURITY_TOOLKIT_DIRECTORY + "/plato-security-toolkit-10.1.0.jar"

PLATO SECURITY SALT_ENCRYPTION_TOOLKIT_JAR_NAME = SECURITY_TOOLKIT_DIRECTORY + "/plato-security-salt-encryption-toolkit-10.1.0.jar"

DBPASSWORD DATASOURCE="datasourceCred_obc"
```

### 2.1.2 Update Roles File

#### To update roles file:

- 1. Navigate to the path /scratch/obma\_installer/chef-repo/roles/ and open the OBC role file. Here, we will consider obcr\_mw.rb for reference.
- In case of addition or changes to the existing cluster configuration, modify the same under "cluster\_config".

Figure 2-8 Modify Cluster Configuration

```
plato_service_logging_path: APPLICATION_LOGGING_PATH,
    plato service env: APPLICATION ENVIRONMENT,
cluster configure: CONFIGURE WLS CLUSTER,
is node primary: "true"
    cluster config: {
        obcr cluster1:
        managed servers: {
        obcr_server1: {
            listen port: OBCR1 MAN SERVER LISTEN PORT,
                    ssl port: OBCR1_MAN_SERVER_SSL_PORT,
                    java_memory_min: "6144",
                    java memory max: "8192",
        obcr cluster2: {
        managed servers: {
            obcr server2: {
            listen port: OBCR2 MAN SERVER LISTEN PORT,
                    ssl port: OBCR2 MAN SERVER SSL PORT,
                    java memory min: "6144",
                    java_memory_max: "8192",
        }
```



In case of addition or changes to the existing data source configuration, modify the same under "datasource config".

Figure 2-9 Modify Datasource Configuration

```
datasource configure: "true",
datasource config: {
    PLATO: {
        database name: ORACLE PDB SID,
        driver class: "oracle.jdbc.OracleDriver",
        jndi name: PLATO JNDI,
        host name: ORACLE PDB HOSTNAME,
        port: ORACLE PDB PORT,
        global_transaction_protocol: "OnePhaseCommit",
        database_user_name: PLATO_SCHEMA,
        target: OBCR PLATO DS TARGET
       },
    PLATOBATCH: {
        database name: ORACLE PDB SID,
        driver class: "oracle.jdbc.OracleDriver",
        jndi_name: PLATO_BATCH_JNDI,
        host_name: ORACLE_PDB_HOSTNAME,
        port: ORACLE_PDB_PORT,
        global_transaction_protocol: "OnePhaseCommit",
        database user name: PLATO BATCH SCHEMA,
        target: OBCR PLATO BATCH DS TARGET
       },
    PLATORULE: {
        database_name: ORACLE_PDB_SID,
        driver class: "oracle.jdbc.OracleDriver",
        jndi name: PLATO RULE JNDI,
        host name: ORACLE PDB HOSTNAME,
        port: ORACLE PDB PORT,
        global transaction protocol: "OnePhaseCommit",
        database_user_name: PLATO_RULE_SCHEMA,
        target: OBCR PLATO RULE DS TARGET
       },
```

4. In case of addition or changes to the existing services or war files, modify the same under "app deployment".

Figure 2-10 Modify Wars in App Deployment

```
app_deployment: {
       app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-activity-services-10.1.0.war",
        app_target_name: "obcr_cluster1"
   app2: {
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-action-services-10.1.0.war",
        app_target_name: "obcr_cluster1"
   1.
   арр3: {
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-common-services-10.1.0.war",
        app_target_name: "obcr_cluster1"
   }.
   app4: {
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-entity-services-10.1.0.war",
        app_target_name: "obcr_cluster1"
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-ptp-services-10.1.0.war",
        app_target_name: "obcr_cluster1"
```



- 5. Navigate to the bottom of the file and verify the recipes to be executed. All the listed recipes will be executed in sequential order as shown below.
  - CASE 1: If both foundation and product are on same VM, use the below runlist.

```
run_list
['recipe[obma_weblogic::domain]','recipe[obma_weblogic::startadmin]','re
cipe[obma_weblogic::startnm]','recipe[obma_weblogic::ssl_admin]','recip
e[obma_weblogic::stopadmin]','recipe[obma_weblogic::ssl_nodemanager]','r
ecipe[obma_weblogic::restartadmin]','recipe[obma_weblogic::cluster]','re
cipe[obma_weblogic::addjdbcconnections_obcr]','recipe[obma_weblogic::set
useroverridesupdate]','recipe[obma_sqlcl::sqlcl_deployer]','recipe[obma_weblogic::startman]','recipe[obma_weblogic::deployapp]']
```

- CASE 2: If foundation and product are on separate VMs, perform the below steps.
  - a. Execute the below runlist.

```
run_list
['recipe[obma_java::_install_java]','recipe[obma_java::create_certs]
','recipe[obma_weblogic::install_wls]','recipe[obma_weblogic::install_wls_patch]','recipe[obma_weblogic::domain]','recipe[obma_weblogic::startadmin]','recipe[obma_weblogic::startadmin]','recipe[obma_weblogic::ssl_admin]','recipe[obma_weblogic::stopadmin]','recipe[obma_weblogic::ssl_nodemanager]','recipe[obma_weblogic::restartadmin]','recipe[obma_weblogic::cluster]','recipe[obma_weblogic::addjdbcconnections_obcr]','recipe[obma_weblogic::setuseroverridesupdate]','recipe[obma_sqlc1::sqlcl_deployer]','recipe[obma_weblogic::startman]']
```

- **b.** Perform steps mentioned in section <u>Certificate Sync Up between Foundation and Product VMs</u> of *Oracle Banking Microservices Architecture Installer Guide.*
- c. Execute below runlist.

```
run_list
['recipe[obma_weblogic::domain]','recipe[obma_weblogic::startadmin]'
,'re
cipe[obma_weblogic::startnm]','recipe[obma_weblogic::ssl_admin]','re
cip
e[obma_weblogic::stopadmin]','recipe[obma_weblogic::ssl_nodemanager]
','r
ecipe[obma_weblogic::restartadmin]','recipe[obma_weblogic::cluster]'
,'re
cipe[obma_weblogic::addjdbcconnections_obcr]','recipe[obma_weblogic::set
useroverridesupdate]','recipe[obma_sqlcl::sqlcl_deployer]','recipe[obma_weblogic::startman]','recipe[obma_weblogic::deployapp]']
```



### 2.1.3 Execute Installer Script

Perform the following steps for silent installation of Oracle Banking Collections:

- 1. Launch putty and login to product VM with NIS user and then switch to root user.
- 2. Navigate to the chef-repo path by executing the below command:

```
cd /scratch/obma_installer/chef-repo
```

**3.** Execute the installer script by executing the below command:

./obcr\_installer.sh

# **Data Source Verification**

This topic describes the data source verification for Oracle Banking Collections installation.

#### **Prerequisites**

Before proceeding with deployment setup, make sure that the database and application setup for Oracle Banking Microservices Architecture is done.

#### **Data Sources List**

The table below lists the data sources created as a part of product installation.

Table 3-1 Data Sources List

Serial Number	Data Source Name	Data Source JNDI	Targets
1	PLATO	jdbc/PLATO	obcr_server1
	PLATOBATCH	jdbc/PLATOBATCH	obcr_server1
	PLATOFEED	jdbc/PLATOFEED	obcr_server1
	PLATO_UI	jdbc/PLATO_UI_CONFIG	obcr_server1
	SMS	jdbc/sms	obcr_server1
	PLATORULE	jdbc/PLATORULE	obcr_server1
	PLATOSEC	jdbc/PLATOSECURITY	obcr_server1
	CMNCORE	jdbc/CMNCORE	obcr_server1
	PLATOFDT	jdbc/PLATOFDT	obcr_server1
	CR_ACTION	jdbc/CR_ACTION	obcr_server1
	CR_ACTIVITY	jdbc/CR_ACTIVITY	obcr_server1
	CR_TASK	jdbc/CR_TASK	obcr_server1
	CR_CMN	jdbc/CR_CMN	obcr_server1
	CR_CORR	jdbc/CR_CORR	obcr_server1
	CR_ENTITY	jdbc/CR_ENTITY	obcr_server1
	CR_NOTES	jdbc/CR_NOTES	obcr_server1
	CR_PTP	jdbc/CR_PTP	obcr_server1
	CR_SEG	dbc/CR_SEG	obcr_server1
	CR_FEECHRG	jdbc/CR_FEECHRG	obcr_server1
	CR_DATAEXCHNG	jdbc/ CR_ DATAEXCHNG	obcr_server1
	CR_SETLMNT	jdbc/CR_SETLMNT	obcr_server1
2	PLATO	jdbc/PLATO	obcr_server2
	PLATOFDT	jdbc/PLATOFDT	obcr_server2
	PLATOBATCH	jdbc/PLATOBATCH	obcr_server2
	PLATOFEED	jdbc/PLATOFEED	obcr_server2
	PLATO_UI	jdbc/PLATO_UI_CONFIG	obcr_server2
	SMS	jdbc/sms	obcr_server2
	PLATORULE	jdbc/PLATORULE	obcr_server2



Table 3-1 (Cont.) Data Sources List

Serial Number	Data Source Name	Data Source JNDI	Targets
	PLATOSEC	jdbc/PLATOSECURITY	obcr_server2
	CMNCORE	jdbc/CMNCORE	obcr_server2
	CR_SEGMAINT	jdbc/CR_SEGMAINT	obcr_server2
	CR_ACTIVITY	jdbc/CR_ACTIVITY	obcr_server2
	CR_STRTGY	jdbc/CR_STRTGY	obcr_server2
	CR_STRTGYMAIN T	jdbc/CR_STRTGYMAINT	obcr_server2
	CR_TASK	jdbc/CR_TASK	obcr_server2
	CR_TASKMAINT	jdbc/CR_TASKMAINT	obcr_server2
	CR_USERMGMT	jdbc/CR_USERMGMT	obcr_server2
	CR_DASHBOARD	jdbc/ CR_DASHBOARD	obcr_server2
	CR_VNDRMGMT	jdbc/ CR_VNDRMGMT	obcr_server2
	CR_ACCTNG	Jdbc/CR_ACCTNG	obcr_server2

#### ① Note

For creating data source, see section <u>Create Datasource</u> of *Configuration and Deployment Guide.* 

# **Deployments Verification**

This topic describes the deployments for Oracle Banking Collections installation.

#### **Prerequisites**

- Before proceeding with the below setup, make sure that Kafka is configured and the
  related properties are present in PLATO schema. See section "Oracle Banking
  Microservices Architecture Installer Guide" for information on setting up the Kafka
  Cluster in '10.2'.
- To avail feature of record level approval functionality in Plato-Feed, the below property
  would need to be maintained as part of weblogic VM argument by each product domain
  including plato. If not maintained, the default behavior will be of file level approval only.
   Property name feed.recordLevelApprovalRegd

Property value - true or false

Default value - false

#### **Deployments List**

The below table gives details of the deployments required on each domain to run the Oracle Banking Collections application. It also provides path where application war files are located at Oracle Software Delivery Cloud (OSDC).



For the exact version of the archive name, refer to the OSDC file available as part of the release.

**Table 4-1 Deployments List** 

		I	
Application	Archive Name	OSDC Path	Targets
Activity Services	obcr-activity-services- {version}.war	OBC_SERVICES/	OBCR Server1
Action Services	obcr-action-services- {version}.war	OBC_SERVICES/	OBCR Server1
Common Services	obcr-common-services- {version}.war	OBC_SERVICES/	OBCR Server1
Entity Services	obcr-entity-services- {version}.war	OBC_SERVICES/	OBCR Server1
PTP Services	obcr-ptp-services- {version}.war	OBC_SERVICES/	OBCR Server1
Segmentation Services	obcr-segmentation- services-{version}.war	OBC_SERVICES/	OBCR Server1
Correspondence Services	obcr-correspondence- services-{version}.war	OBC_SERVICES/	OBCR Server1
Segment Maintenance Services	obcr-segment-maint- services-{version}.war	OBC_SERVICES/	OBCR Server2



Table 4-1 (Cont.) Deployments List

Application	Archive Name	OSDC Path	Targets
Strategy Services	obcr-strategy-services- {version}.war	OBC_SERVICES/	OBCR Server2
Strategy Maintenance Services	obcr-strategy-maint- services-{version}.war	OBC_SERVICES/	OBCR Server2
Task Services	obcr-task-services- {version}.war	OBC_SERVICES/	OBCR Server2
Task Maintenance Services	obcr-task-maint- services-{version}.war	OBC_SERVICES/	OBCR Server2
User Management Services	obcr-user-management- services-{version}.war	OBC_SERVICES/	OBCR Server2
Notes Services	obcr-notes-services- {version}.war	OBC_SERVICES/	OBCR Server2
Dashboard Services	obcr-dashboard- services- {version}.war	OBC_SERVICES/	OBCR Server2
Fees Charges Services	obcr-fees-charges- services-{version}.war	OBC_SERVICES/	OBCR Server1
Vendor Management	obcr-vendor- management-services- {version}.war	OBC_SERVICES/	OBCR Server2
Data Exchange service	obcr-data-exchange- services{version}.war	OBC_SERVICES/	OBCR Server1
Settlement services	obcr-settlement-services	OBC_SERVICES/	OBCR Server1
Accounting services	obcr-accounting- services	OBC_SERVICES/	OBCR Server2
UI	<ul> <li>app-shell- {version}.war</li> <li>cmc-component- server-{version}.war</li> <li>sms-component- server-{version}.war</li> <li>obcr-component- server-{version}.war</li> </ul>	UI/	API Gateway Server

# **Initial Setup**

This topic describes the initial setup for Oracle Banking Collections installation.

Once everything is deployed, run the CMC and SMS initial setup scripts from the below mentioned paths at <u>Oracle Software Delivery Cloud</u> to create the required maintenances.

- OBC\_INITIAL\_SETUP/1\_obcr\_role\_creation.sql
   To be compiled in SMS schema for Collections specific admin role creation.
- OBC\_INITIAL\_SETUP/2\_cmc\_initial\_setup.sql To be compiled in Common Core schema.
- OBC\_INITIAL\_SETUP/3\_sms\_initial\_setup.sql To be compiled in SMS schema.
- OBC\_INITIAL\_SETUP/4\_obma\_role\_seed.sql To be compiled in SMS schema.
- OBC\_INITIAL\_SETUP/5\_obcr\_role.sql To be compiled in SMS schema.
- OBC\_INITIAL\_SETUP/6\_obcr\_field\_collector\_role.sql

  To be compiled in SMS schema for Collections specific field agent role creation.
- OBC\_INITIAL\_SETUP/7\_obma\_field\_collector\_role\_seed.sql To be compiled in SMS schema.
- OBC\_INITIAL\_SETUP/8\_obcr\_field\_collector\_role .sql To be compiled in SMS schema.
- OBC\_INITIAL\_SETUP/ dms\_properties\_script.sql To be compiled in PLATO schema.

#### **CMC Initial Setup**

This script would prompt a user to enter the below values.

Table 5-1 CMC Initial Setup - Field Description

Serial Number	Field	Description
1	Bank Code	A four-letter Bank Code.
2	Bank Description	Description of the Bank Code.
3	Branch Code	A three letter Branch Code.
4	Branch Name	Name of the Branch.
5	Branch Address Line 1	Address line 1 of the branch.
6	Branch Address Line 2	Address line 2 of the branch.
7	Branch Address Line 3	Address line 3 of the branch.
8	Branch Currency	A three letter ISO Currency Code.
9	Branch Currency Description	The description of the branch currency.
10	Country Code	A two letter ISO Country Code.



Table 5-1 (Cont.) CMC Initial Setup - Field Description

Serial Number	Field	Description
11	Walk-In Customer	Walk-in customer number.
12	Host Code	Host code of the Branch.
13	Host Description	Host code description.
14	Host Process Time Zone	Host code time zone (GMT+5.30).
15	Source System	External source system.
16	Source System Description	Source system description.
17	Source System Branch	Branch code as in the source system.
18	Previous Working Day	Previous working day of the Branch.
19	Current Working Day	Current working day of the Branch.
20	Next Working Day	Next working day of the Branch.

#### **OBC Role Creation**

The script would create an OBC specific admin role COLL\_MNGR\_ROLE.

#### **SMS Initial Setup**

This script would prompt the user to create two admin users.

Table 5-2 SMS Initial Setup - Field Description

Serial Number	Field	Description
1	User Login ID 1	Login ID of the first User.
2	User Name 1	Name of the first User.
3	User Login ID 2	Login ID of the second User.
4	User Name 2	Name of the second User.
5	Users Home Branch Code	A three letter Home-Branch Code of the users.
6	Users Locale	Users locale (2 letter ISO country code).
7	Start Date	Start date
8	End Date	End date

These users are assigned the default COLL\_MNGR\_ROLE, and the PLATO, SMS, CMC and the other functional activities are mapped.

#### **PLATO Additional Setup**

This script would prompt the user for the following details regarding correspondence.

Table 5-3 PLATO Additional Setup - Field Description

Serial Number	Field	Description
1	Sender email Id	Email Id of the sender for communication.
2	Branch Code	A three letter Branch Code.



Table 5-3 (Cont.) PLATO Additional Setup - Field Description

Serial Number	Field	Description
3	User ID	Admin User ID.

#### **DMS server Setup**

This script would prompt the user for the following details regarding correspondence. These scripts are to be run only if you are using DMS server of document upload. This script is to be executed only if the values for these fields are not already present/updated in the database.

Table 5-4 DMS server Setup - Field Description

Serial Number	Field	Description
1	Dms Service URL	URL of the document management server.
2	Dms Service Username	Login Id of the document management server.
3	Dms Service Password	Password of the document management server.

#### **PLATOFEED Additional Setup**

This script would prompt the user for the following details regarding plato feed.

Table 5-5 SMS Initial Setup - Field Description

Serial Number	Field	Description
1	Branch code	A three letter Branch Code

#### **Fact Creation**

For creating facts, download the obcr\_facts.csv file from this path:

OBC\_INITIAL\_SETUP/obcr\_facts.csv at Oracle Software Delivery Cloud. The

obcr\_facts.csv file contains the list of facts that are used to configure rules in the system.

#### To create facts:

- From the main menu in the Oracle Banking Collections application, navigate to Rule and then click Fact.
- 2. From the Fact menu , click Create Fact.
- 3. Click Bulk Upload.
- Click Drag and Drop to browse to the required folder and select the obcr\_facts.csv for upload.
- 5. Click Upload.

The obcr\_facts.csv file contains the list of facts as mentioned below.



Table 5-6 List of Facts for Oracle Banking Collections

Code	Description	Product Processor	Туре
AccountOpeningORIntitialDisbursementDate	Account Opening Date	OBCR	DATE
AccountWriteOffAmount	Account Write Off Amount	OBCR	NUMBER
AccountWriteOffDate	Account Write Off Date	OBCR	DATE
AccuralStatus	Accural Status	OBCR	TEXT
AddressCountry	Country Code	OBCR	TEXT
AddressState	State Code	OBCR	TEXT
ApplicationScore	Application Score	OBCR	TEXT
AssetClassificationCode	Asset Classification Code	OBCR	TEXT
AvailableForDisbursement	Available For Disbursement	OBCR	TEXT
BICOEFlag	BICOE Flag	OBCR	TEXT
BehaviourScore	Behavior Score	OBCR	NUMBER
BusinessDate	Business Date	OBCR	DATE
CaseID	Case Id	OBCR	Case Id
ChargeOffAmount	ChargeOff Amount	OBCR	NUMBER
CollateralType	Collateral Type	OBCR	TEXT
CollectionStatus	Collection Status	OBCR	TEXT
CustomerRiskScore	Customer Risk Score	OBCR	NUMBER
DaysChargeOff	Days Charge Off	OBCR	NUMBER
DaysPastDue	Days Past Due	OBCR	NUMBER
DaysSinceAccountLinkagetoCase	Days Since Account Linkage to Case	OBCR	NUMBER
DaysSinceCaseCreation	Days Since Case Creation	OBCR	NUMBER
DelinquencyStartDate	Delinquency Start Date	OBCR	DATE
DisbursedAmount	Disbursed Amount	OBCR	NUMBER
ExistPromiseCount	Existing Promise Amount	OBCR	NUMBER
ForcedAccountSwitch	Forced Account Flag	OBCR	TEXT
HomeBranchCode	Home Branch Code	OBCR	TEXT
InsuredSwitch	Insured Switch	OBCR	TEXT
InterestRate	Interest Rate	OBCR	NUMBER
LastPaymentAmount	Last Payment Amount	OBCR	NUMBER
LastPaymentDate	Last Payment Date	OBCR	DATE
LoanMaturityORLimitExpiryDate	Loan Maturity OR Limit Expiry Date	OBCR	DATE
MaxPTPInstallCount	Max PTP Instalment Count	OBCR	NUMBER
NewPromiseCount	New Promise Count	OBCR	NUMBER
OutstandingAmount	Outstanding Amount	OBCR	NUMBER
OverdueAmount	Overdue Amount	OBCR	NUMBER
PartyType	Party Type	OBCR	TEXT



Table 5-6 (Cont.) List of Facts for Oracle Banking Collections

			_
Code	Description	Product Processor	Туре
ProductProcessorCd	Product Processor Code	OBCR	TEXT
ProductSubType	Product Sub Type	OBCR	TEXT
ProductType	Product Type	OBCR	TEXT
PromiseAmount	Promise Amount	OBCR	NUMBER
PromiseDate	Promise Date	OBCR	DATE
SecuredSwitch	Secured Switch	OBCR	TEXT
Segmen	Segment Code	OBCR	TEXT
SystemAccountStatus	System Account Status	OBCR	TEXT
TotalCollateralAssessedValue	Total Collateral Assessed Value	OBCR	NUMBER
UnClearedPaymentAmount	UnCleared Payment Amount	OBCR	NUMBER
UserDefinedAccountStatus	User Defined Account Status	OBCR	TEXT
VIPFlag	VIP Flag	OBCR	TEXT
Legal	Legal Collection Status	OBCR	BOOLEAN
Bankruptcy	Bankruptcy Collection	OBCR	BOOLEAN
Deceased	Deceased Collection Status	OBCR	BOOLEAN
Hardship	Hardship Collection Status	OBCR	BOOLEAN
Re-Marketing	Re-Marketing Collection Status	OBCR	BOOLEAN
Forbearance	Forbearance Collection Status	OBCR	BOOLEAN
Repossession	Repossession Collection Status	OBCR	BOOLEAN
ExpiryDate	Expiry Date	OBCR	DATE
SettlementTerm	Settlement Term	OBCR	TEXT
SettlementStatus	Settlement Status	OBCR	TEXT
SettlementAmount	Settlement Amount	OBCR	NUMBER
SettlementDate	Settlement Date	OBCR	DATE
OfferDate	Offer Date	OBCR	DATE
InterestAmount	Interest Amount	OBCR	NUMBER
LPID	Last Promise Installment Date	OBCR	DATE
CBD	Current Business Date	OBCR	DATE
PrincipalAmount	Principal Amount	OBCR	NUMBER
ChargeoffDate	Chargeoff Date	OBCR	DATE
PromiseType	Promise Type	OBCR	TEXT
PaymentTransactionDate	Third Party Payment Transaction Date	OBCR	DATE
PaymentResponse	Third Party Payment Response	OBCR	TEXT



Table 5-6 (Cont.) List of Facts for Oracle Banking Collections

Code	Description	Product Processor	Туре
PaymentMode	Third Party Payment Mode	OBCR	TEXT
SourceAccount	Third Party Source Account	OBCR	TEXT
TaskCreationDate	Task Creation Date	OBCR	DATE
TaskUpdateDate	Task Update Date	OBCR	DATE

#### Config update for report service

Next, for the plato-report-service, please make sure the below configurations done on the OBMA server.



This step is to be performed if not already done.

Create a directory by the name report-fop-config under /scratch/env directory.

Then, copy the file fop.xconf from the location /THIRD\_PARTY\_SOFTWARE/report-fop-config inside the package to the above created location.

Once done please run the below command

chmod 0755 /scratch/env/report-fop-config/fop.xconf

#### **OBRH Template Setup**

You are responsible for validating the following configuration for the OBRH template screen after setting up OBRH.

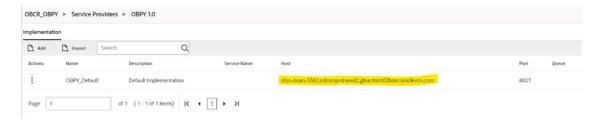
Update the host and port with the correct values for each template for the service provider.

Figure 5-1 External Service Provider Screen 1





#### Figure 5-2 External Service Provider Screen 2



# Restart and Refresh

This topic describes the procedure to restart and refresh the servers.

Once everything is deployed, restart all the managed servers. For each application, call path / refresh to refresh the configuration properties.

#### **Restart Server**

To restart the server, see chapter <u>Restart Server</u> of *Configuration and Deployment Guide*.

7

# Logging Area

This chapter describes the logging area of Oracle Banking Collections applications in server.

The logging area is configurable. The user can configure any path within the server, where you want to write the Oracle Banking Collections application logs. Oracle Banking Collections applications write the logs in the configured path with the name: <a href="#">Application name</a>>.logs. For example, if application name is **obcr-action-services**, then the logs file name would be obcr-action-servies.log.

# Patchset Setup

This topic describes about the Patchset setup using Oracle Banking Microservices Architecture Installer.

This section consists of following topics:

- Prerequisites
- Foundation Setup Upgrade
- Oracle Banking Collections Patch Installation

### 8.1 Prerequisites

Following are the Prerequisites:

- 1. Check for existing setup or the environment is available.
- 2. Updated Patch Set Installation script with respective to the current release upgrade is available in the respective VM's. If not copy the required scripts from SVN.

# 8.2 Foundation Setup Upgrade

#### **Installer Path**

You can download the installer from <u>Oracle Software Delivery Cloud (OSDC)</u>. The following table provides the download path of the installer.

Table 8-1 Installer Path

Application	Archive Name	OSDC Path
OBMA patch Installer	obma_patch.zip	INSTALLER/
OBC patch Installer	obc_patch.zip	INSTALLER/

This section consists of the following topics:

- Download Installer
- Update Properties File
- Update Roles File

### 8.2.1 Download Installer

The patch installer is available in OSDC zip of each product.

#### To download the installer:

1. Launch putty and login to the VM (where the installation is planned) with OS user.



Create a directory obma patch installer in /scratch.

```
mkdir -p /scratch/obcr_patch_installer
chmod 755 /scratch/obcr_patch_installer
```

- Navigate to the new directory obma\_patch\_installer. cd /scratch/obcr\_patch\_installer
- 4. Download the patch installer zip file from the OSDC zip to obma\_patch\_installer directory.
- 5. Unzip installer zip file by executing the below command.

```
unzip  product zip file>
```

Before you proceed, please refer section 'Kafka Databags Update' in Oracle Banking Microservices Architecture Installer Guide for Kafka SSL and Kafka scram passwords update.

### 8.2.2 Update Properties File

#### To update properties file:

- Navigate to the path /scratch/obcr\_patch\_installer/chef-repo/.
   Open the respective OBMA properties file and update the obcr\_patch\_properties.rb with below details.
- 2. Update the local user and its group.

#### Figure 8-1 Update Local User and Group

```
#Standard Values
INSTALL_USER = "USER_NAME"
INSTALL_GROUP = "dba"

USER_ROOT = "root"
GROUP_ROOT = "root"
INSTALL_BASE_DIR = "/scratch"
EXTRACT_LOC = "/scratch/extract"
```

3. Verify the version of java, update if required, and ensure the same version is available in the software's directory.

#### Figure 8-2 Verify Java Version

```
#Java Installation Details

JAVA_INSTALLER_SOURCE = "filesystem"

JAVA_INSTALLER_PATH = "/java/"

JAVA_INSTALLATION_DIR = INSTALL_BASE_DIR + "/obma"

JAVA_VERSION = "17.0"

JDK_INSTALLER_VERSION = "17.0.12"

JDK_INSTALLER_VERSION = "17.0.12"

JDK_INSTALLER_FILE = "jdk-17.0.12 __linux-x64_bin.tar.gz"

CERTS_DIRNAME = INSTALL_BASE_DIR + "/ssl/cacerts"
```

4. Verify the configuration service details, update if required.



#### Figure 8-3 Verify Configuration Details

```
#Path where Oracle Banking product bundle is extracted
PRODUCT BUNDLE HOME = "/scratch"
PLATO_CONFIG_SERVICES_URL = "https://ofss-mum-xxxx.snbomprsharedX.gbucdsintXXbom.oraclevcn.com"
PLATO_CONFIG_SERVICES_FORT = "8002"
APPLICATION_LOGGING_PATH = "/scratch/work_area/logs"
```

5. Verify the Java home and certificate names.

#### Figure 8-4 Verify Java Home and Certificate Names

```
#Java Path

JAVA HOME = "/scratch/obma/jdk-17.0.12"

CERTS_DIRNAME = "/scratch/ssl/cacrts"

CUSTOM_IDENTITY_JKS = "ofss-mum-xxxx.snbomprsharedX.gbucdsintXXbom.oraclevcn.com_identity.jks"

CUSTOM_TRUST_JKS = "ofss-mum-xxxx.snbomprshared1.gbucdsintXXbom.oraclevcn.com_trust.jks"

CUSTOM_TRUST_CKT = "ofss-mum-xxxx.crt" # This can be crt or cer

KEYSTORETYPE = "JKS"
```

6. Verify the Kafka details as below.

#### Figure 8-5 Verify Kafka Details

```
#ZOOKEEPER/KAFKA Installation Details (Upgrade Version)
KAFKA_ZOOKEEPER_INSTALLER_FILE = "kafka_2.13-3.9.1.tgz"
KAFKA_VERSION = "3.9.1"
KAFKA_SCALA_VERSION = "2.13"
KAFKA_INSTALL_USER_HOME = INSTALL_BASE_DIR
KAFKA_INSTALL_DIR = INSTALL_BASE_DIR + "/obma/kafka_zookeeper"
KAFKA_INSTALLER_PATH = SOFTWARE_INSTALLER_HOME + "/kafka_zookeeper"
KAFKA_CERTS_DIRNAME = INSTALL_BASE_DIR + "/ssl/kafka_cert"
```

7. Verify the plato router details, update if required.

#### Figure 8-6 Verify Plato Router

```
#APIGATEWAY ROUTER DETAILS

PLATO_APIGATEWAY_ROUTER_PORT = "8080"

APIGATEWAY_ROUTER_JAR_NAME = "plato-apigateway-router-10,1,0,3ar"

APIGATEWAY_ROUTER_JAR_LOCATION = "/scratch/obma_patch_installer/deployables/apps/platoinfra"

# Encrypted Values for Certificate and SALT are present in apigateway_router databag
```

8. Update database details under "#Database details for weblogic datasource configuration".

#### Figure 8-7 Update Database Details

```
#Database details for weblogic datasource configuration
ORACLE PDB SID = "PDBXXXA"
ORACLE PDB HOSTNAME = "ofss-mum-xxxx.snbomprsharedx.gbucdsintxxbom.oraclevcn.com"
ORACLE_PDB_PORT = "1521"
ORACLE_DRIVER = "oracle.jdbc.driver.OracleDriver"
```

Verify SQLCL details under "#SQLCL details".

#### Figure 8-8 Verify SQLCL Details

```
#SQLCL details

SQLCL_JAR_NAME = "plato-sqlcl-deployer-10.1.0.jar"

SQLCL_JAR_LOCATION = SOFTWARE_INSTALLER_HOME + "/sqlcl"

SQLCL_JIP_LOCATION = "/scratch/obma_installer/deployables/apps/obcr/"

SQLCL_JSON_LOCATION = "/scratch/obma_installer/deployables/sqlcl/properties"

SQLCL_TEMP_DIR = "/scratch/obma_installer/sqlcl_deploy_temp"

SQLCL_TEMP_DIR = "/scratch/obma_installer/sqlcl_deploy_temp"

SQLCL_EXPORT_SH_SOURCE_PATH = "/scratch/obma_installer/chef-repo/setUserOverrides_obcr.sh.rb"

SQLCL_EXPORT_SH_TEMPLATE_PATH = "/scratch/obma_installer/chef-repo/cookbooks/obma_sqlcl/templates/default/export_params.sh.erb"

SCUULITY_TOOLKIT_DIRECTORY = SOFTWARE_INSTALLER_HOME + "/security_toolkit_Toolkit_Jar_NAME = SECURITY_TOOLKIT_DIRECTORY + "/plato-security-toolkit-10.1.0.jar"

PLATO_SECURITY_SALT_ENCRYPTION_TOOLKIT_JAR_NAME = SECURITY_TOOLKIT_DIRECTORY + "/plato-security-salt-encryption-toolkit-10.1.0.jar"

DBPASSWORD_DATASOURCE="datasourceCred_obc"
```



### 8.2.3 Update Roles File

#### To update roles file:

- Navigate to the path /scratch/obcr\_patch\_installer/chef-repo/roles.
   Update the obcr\_patch\_install.rb with below details.
- 2. If you are upgrading from one version to another, then the version to be undeployed needs to be added in the below section app undeployment.

#### Figure 8-9 App Undeployment

```
app_undeployment: {
    app1: {
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-activity-services-9.6.0.war",
        app_target_name: "obcr_cluster1"
    },
    app2: {
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-action-services-9.6.0.war",
        app_target_name: "obcr_cluster1"
    },
    app3: {
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-common-services-9.6.0.war",
        app_target_name: "obcr_cluster1"
    },
```

3. In the app\_deployment section, update the new version to be deployed.

#### Figure 8-10 App Deployment

```
app_deployment: {
    app1: {
        app_file_path: "/obma_patch_installer/deployables/apps/obcr",
            app_file_name: "obcr-activity-services-10.1.0.war",
            app_target_name: "obcr_clusterl"
    },
    app2: {
        app_file_path: "/obma_patch_installer/deployables/apps/obcr",
            app_file_name: "obcr_action-services-10.1.0.war",
            app_target_name: "obcr_clusterl"
    },
    app file_path: "/obma_patch_installer/deployables/apps/obcr",
        app_file_name: "obcr_common-services-10.1.0.war",
        app_target_name: "obcr_clusterl"
    },
```

 Navigate to the bottom of the file and verify the recipes to be executed. All the listed recipes will be executed in sequential order as shown below.

```
For execution, please switch to root user from OS user and then run the below commands.
```

```
cd /scratch/obcr_patch_installer/chef-repo
sh obcr_patch_installer.sh
```

a. run\_list
 ['recipe[obma\_patchset::undeployapp]','recipe[obma\_patchset::stopman]','
 recipe[obma\_patchset::updatesetuseroverrides\_patch]','recipe[obma\_patchs
 et::startman]','recipe[obma\_patchset::deployapp]']



Once successfully run, please make sure all services are up. Upon verification, please make update the runlist to as below and re-run the <code>obma\_patch\_installer.sh</code> command.

b. run\_list ['recipe[obma\_patchset::deployapigateway\_router]']

This step would bring up the plato-apigateway-router at the port specified. To confirm the same please visit the router logs at the location <code>/scratch/work\_area/logs.</code>

### 8.3 Oracle Banking Collections Patch Installation

To upgrade the OBC product using patch installer, first perform steps mentioned in section Download Installer.

- Update Properties File
- Update Roles File

### 8.3.1 Update Properties File

#### To update properties file:

- Navigate to the path /scratch/obcr\_patch\_installer/chef-repo/.
   Open the respective product properties file and update the obcr\_patch\_properties.rb with below details.
- 2. Update the local user and its group.

#### Figure 8-11 Update Local User and Group

```
#Standard Values
INSTALL_USER = "obcrdev"
INSTALL_GROUP = "dba"
USER_ROOT = "root"
GROUP_ROOT = "root"
INSTALL_BASE_DIR = "/scratch"
EXTRACT_LOC = "/scratch/extract"
```

3. Verify Java home and certificate names.

#### Figure 8-12 Verify Java Home

```
#Java Path

JAVA HOME = "/scratch/obma/jdk-17.0.12"

CERTS DIRNAME = "/scratch/ssl/cacerts"

CUSTOM IDENTITY JKS = "ofss-mum-xxxxx.snbomprsharedX.gbucdsintXXbom.oraclevcn.com_identity.jks"

CUSTOM IDENTITY JKS = "ofss-mum-xxxxx.snbomprshared1.gbucdsintXXbom.oraclevcn.com_itentity.jks"

CUSTOM TRUST JKS = "ofss-mum-xxxx.snbomprshared1.gbucdsintXXbom.oraclevcn.com_trust.jks"

CUSTOM TRUST CKT = "ofss-mum-xxxx.crt" # This can be crt or cer

KEYSTORETYPE = "VKS"
```

### 8.3.2 Update Roles File

#### To update roles file:

1. Navigate to the path /scratch/obcr\_patch\_installer/chef-repo/roles and update obcr\_patch\_install.rb file with below details.



2. If you are upgrading from one version to another, then the version to be undeployed needs to be added in the below section app undeployment.

#### Figure 8-13 App Undeployment

```
app_undeployment: {
    app1: {
        app file_path: "/obma_installer/deployables/apps/obcr",
        app file_name: "obcr-activity-services-9.6.0.war",
        app_target_name: "obcr_cluster1"
    },
    app2: {
        app file_path: "/obma_installer/deployables/apps/obcr",
        app file_name: "obcr-action-services-9.6.0.war",
        app_target_name: "obcr_cluster1"
    },
    app3: {
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_path: "/obma_installer/deployables/apps/obcr",
        app_file_name: "obcr-common-services-9.6.0.war",
        app_target_name: "obcr_cluster1"
    },
```

In the app\_deployment section, update the new version to be deployed.

#### Figure 8-14 App Deployment

```
app_deployment: {
    app1: {
        app file_path: "/obma_patch_installer/deployables/apps/obcr",
            app_file_name: "obcr-activity-services-10.1.0.war",
            app_target_name: "obcr_clusterl"
    },
    app2: {
        app_file_path: "/obma_patch_installer/deployables/apps/obcr",
            app_file_name: "obcr-action-services-10.1.0.war",
            app_target_name: "obcr_clusterl"
    },
    app3: {
        app_file_path: "/obma_patch_installer/deployables/apps/obcr",
        app_file_name: "obcr-common-services-10.1.0.war",
        app_target_name: "obcr_clusterl"
    },
```

4. Navigate to the bottom of the file and verify the recipes to be executed. All the listed recipes will be executed in sequential order as shown below.

```
run_list
['recipe[obma_patchset::undeployapp]','recipe[obma_patchset::stopman]','rec
ipe[obma_sqlcl::sqlcl_deployer]','recipe[obma_patchset::startman]','recipe[
obma_patchset::deployapp]']
```

For execution, please switch to root user from OS user and then run the below commands.

```
cd /scratch/obcr_patch_installer/chef-repo
sh obcr_patch_installer.sh

run_list
['recipe[obma_patchset::undeployapp]','recipe[obma_patchset::stopman]','recip
e[obma_patchset::addjdbcconnections_plato]','recipe[obma_patchset::updatesetus
eroverrides_patch]','recipe[obma_patchset::startman]','recipe[obma_patchset::d
eployapp]']
```



Once everything is deployed, run the initial setup scripts from the below mentioned paths at Oracle Software Delivery Cloud to create the required maintenances. The descriptions for each of these have been provided in the Initial setup section of this document.

If a new role/user needs to be created, then run the below two scripts in Section-A followed by scripts from Section-B.

If no new role/user needs to be created, then only run scripts from Section-B.

Post Section-A & B please run Section-C & D if and only if you need to fill a certain maintenance for correspondence. Please read the descriptions for these scripts from Initial setup section of this document before executing.

#### Section-A

• OBC\_INITIAL\_SETUP/1\_obcr\_role\_creation.sql
To be compiled in SMS schema for Collections specific admin role creation.

#### Section-B

- OBC\_INITIAL\_SETUP/4\_obma\_role\_seed.sql
   To be compiled in SMS schema.
- OBC\_INITIAL\_SETUP/5\_obcr\_role.sql To be compiled in SMS schema.

# Troubleshooting

This section consists of the following topics:

- Troubleshooting for OBMA Patch Installation
- Troubleshooting for plato-apigateway-router

### 9.1 Troubleshooting for OBMA Patch Installation

If the OBMA services are not up after patch installation, please check the plato-config-server logs at the below location for further analysis.

```
/scratch/obma/domain/PlatoInfra/servers/Config_Server1/logs
```

If you see an error like "args list too long", please navigate to the below file setUserOverrides.sh at location /scratch/obma/domain/PlatoInfra/bin and remove the unwanted properties. Then, please restart Config\_Server1 on weblogic followed by the other managed servers. Once done, make OBMA services are up and running.

# 9.2 Troubleshooting for plato-apigateway-router

If you observe any SSL related issues in the plato-apigateway-router logs, then follow the below steps.

- 1. Stop the router by killing the router process.
- 2. Import the crt files into the java trust store on the VM on which the router is installed (the foundation machine ideally).
- 3. One crt file will be of the same foundation machine, while the other crt file(s) will be of the machine(s), the foundation machine has performed a sync with. Replace the password placeholder with the actual one.

```
cd /scratch/ssl/cacerts
keytool -importcert -file ofss-mum-xxxx.crt -keystore /scratch/obma/
jdk-17.0.12/lib/security/cacerts -storepass <password> -noprompt
keytool -importcert -alias domainCertForRouter -file ofss-mum-xxxx.crt -
keystore /scratch/obma/jdk-17.0.12/lib/security/cacerts -storepass
<password> -noprompt
```

4. Restart the router using through the OBMA installer using the below runlist.

```
run_list ['recipe[obma_weblogic::deployapigateway_router]']
```