Oracle® Banking Cash Management Services Installation Guide





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Preface

Purpose

This guide would help you to install the Oracle Banking Cash Management services on designated environment. It is assumed that all the prior setup is already done related with WebLogic installation, WebLogic managed server creation and Oracle Database installation. It is recommended to use dedicated managed server for each of the Oracle Banking Cash Management services.

Audience

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

List of Topics

This guide is organized as follows:

Table 1 List of Topics

| Topics | Description |
|--------------------------------------|--|
| Database Setup | This topic describes the database setup for Oracle Banking Cash Management Installation. |
| Product Installation using Installer | This topic provides the information to install all the product and Oracle Banking Microservices Architecture services using Installer. |
| Domain and Cluster Configuration | This topic describes the domain and cluster configuration for Oracle Banking Cash Management. |
| Data Source Creation | This topic describes about the data source creation for Oracle Banking Cash Management Installation. |
| Deployments | This topic describes about the deployments for Oracle Banking Cash Management Installation. |
| Restarts and Refresh | This topic provides the information about the restart and refresh. |
| Logging Area | This topic describes about the logging area of Plato applications in WebLogic server. |



Database Setup

This topic describes the database setup for Oracle Banking Cash Management Installation.

Pre-requisite

Before you proceed with the document, ensure Schema's are being created. It is recommended to have different schema for each application.

Database Schema Creation

Create the following database schema's. These schema names are recommended, but not mandatory.

- PLATO
- PLATO_UI_CONFIG
- PLATO_SECURITY
- PLATO_FEED
- PLATO REPORT SERVICE
- PLATORULE
- PLATO_BATCH
- PLATO_PASSWORD
- COMMON_CORE
- PLATOALERTS
- PLATO_TRANSPORT
- PLATOORCH
- SMSCD0
- OBSCFCM_ACCOUNTING
- OBSCFCM_ALERTS
- OBSCF_BATCH
- OBSCFCM CHARGES
- OBSCFCM_CORE_SERVICES
- OBSCFCM_FILTER
- OBSCFCM_INSTRUMENTS
- OBSCFCM_RECON
- OBSCFCM_REPORT
- OBSCFCM_WORKFLOWS_CONDUCTOR
- OBSCFCM_MASTER_MAINTENANCE
- OBSCFCM_FILE_PROCESSING



- OBCM_CASHFLOW_FORECASTING
- OBCM_CASHFLOW_PROJECTION
- OBCM_CASHFLOW_PREDICTION
- OBCM_COLLECTIONS_MASTERS
- OBCM_COLLECTIONS
- OBCM_NETTING
- OBCM_REPORT_SERVICES

Note:

For creating database schemas, refer to **Database Schema Creation** section in **Configuration and Deployment Guide**.

View Creation Grants (Oracle Banking Cash Management Cashflow Prediction)

The following grants are provided for Oracle Banking Cash Management Cashflow Prediction:

- grant create mining model to OBCM_CASHFLOW_PREDICTION;
- grant create any mining model to OBCM_CASHFLOW_PREDICTION;
- grant alter any mining model to OBCM_CASHFLOW_PREDICTION;
- grant drop any mining model to OBCM_CASHFLOW_PREDICTION;
- grant select any mining model to OBCM_CASHFLOW_PREDICTION;
- grant comment any mining model to OBCM_CASHFLOW_PREDICTION;
- grant execute on DBMS_DATA_MINING to OBCM_CASHFLOW_PREDICTION;
- grant create view to OBCM_CASHFLOW_PREDICTION;
- grant create table to OBCM_CASHFLOW_PREDICTION;
- grant drop table to OBCM_CASHFLOW_PREDICTION;
- grant create job to OBCM_CASHFLOW_PREDICTION;
- ALTER USER OBCM_CASHFLOW_PREDICTION ENABLE EDITIONS;



Product Installation using Installer

This topic describes the systematic information to install Oracle Banking Cash Management application using Installer.

Prerequisite

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

Installer Path

The following table provides the path of the installer in OSDC Package.

| Application | Archive Name | OSDC Path |
|---|--------------|---------------------------|
| Oracle Banking Microservices Architecture | obma.zip | OBCM_14.7.0.1.0/Installer |
| Oracle Banking Cash Management | obcm.zip | |
| Oracle Banking Supply Chain Finance Cash Management | obscfcm.zip | |



To install the application using installer, refer to **Oracle Banking Microservices Architecture Installer Guide**



Domain and Cluster Configuration

This topic describes the domain and cluster configuration for Oracle Banking Cash Management.

Pre-requisite

- Oracle Banking Microservices Architecture, SMS and Common core deployments are up and running. (Required)
- · Machine should have Java JDK installed.
- Oracle Fusion Middleware has to be installed on the machine.



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

Domain Creation and Configuration

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



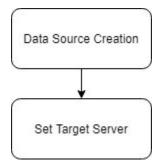
Data Source Creation

This topic describes about the data source creation for Oracle Banking Cash Management Installation.

Data Source Creation in WebLogic

Database and application setup for Oracle Banking Cash Management services has to be performed prior to deployment setup. 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 Oracle Banking Cash Management services and the steps to configure them in the server.

Figure 4-1 Data Source Creation



Data sources List

Database Connection Pool size to be defined - Oracle Banking Cash Management services pool configuration should be consistent with plato services.

The following list of the data sources has to be created on each domain before deployment of the applications onto the managed servers.

Table 4-1 Data Sources List

| Application | Data Source Name | Mapped Database Schema | Data source JNDI |
|---------------------------------|------------------------|---------------------------|---------------------------------|
| obscfcm-account- maintenance | OBSCFCM_ACCOUNTI NG | OBSCFCM_ACCOUNTI NG | jdbc/ OBSCFCM_ACCO UNTING |
| obscfcm-alerts-services | OBSCFCM_ALERTS | OBSCFCM_ALERTS | jdbc/ OBSCFCM_ALER TS |
| obscfcm-eod-batch | PLATO_BATCH | PLATO_BATCH | jdbc/EODBATCH |
| obscfcm-eod-batch | OBSCF_BATCH | OBSCF_BATCH | jdbc/EOD |

Table 4-1 (Cont.) Data Sources List

| Application | Data Source Name | Mapped Database Schema | Data source JNDI |
|--|---------------------------------|---------------------------------|--|
| obscfcm-eod-batch | PLATO_BATCH | PLATO_BATCH | jdbc/PLATOBATCH |
| obscfcm-auto-recon-batch | PLATO_BATCH | PLATO_BATCH | jdbc/ AUTORECONBAT CH |
| obscfcm-auto-recon-batch | PLATO_BATCH | PLATO_BATCH | jdbc/PLATOBATCH |
| obscfcm-charges-services | OBSCFCM_CHARGES | OBSCFCM_CHARGES | jdbc/ OBSCFCM_CHAR GES |
| obscfcm-core-services | OBSCFCM_CORE_SE RVICES | OBSCFCM_CORE_SE RVICES | jdbc/ OBSCFCM_CORE _SERVICES |
| obscfcm-filter-services | OBSCFCM_FILTER | OBSCFCM_FILTER | jdbc/ OBSCFCM_FILTE R |
| obscfcm-instruments- receivables-services | OBSCFCM_INSTRUME NTS | OBSCFCM_INSTRUME NTS | jdbc/ OBSCFCM_INST RUMENTS |
| obscfcm-manual-recon- services | OBSCFCM_RECON | OBSCFCM_RECON | jdbc/ OBSCFCM_RECO N |
| obscfcm-report-services | OBSCFCM_REPORT | OBSCFCM_REPORT | jdbc/ OBSCFCM_REPO RT |
| obscfcm-workflow- managementservices | OBSCFCM_WORKFLO WS_CONDUCTOR | OBSCFCM_WORKFLO WS_CONDUCTOR | jdbc/ OBSCFCM_WOR KFLOWS_CONDU CTOR |
| obscfcm- mastermaintenance-services | OBSCFCM_MAINTENA NCE | OBSCFCM_MAINTENA NCE | jdbc/ OBSCFCM_MAIN TENANCE |
| obcm-cashflow-forecasting- services | OBCM_CASHFLOW_F ORCAST | OBCM_CASHFLOW_F ORCAST | jdbc/ OBCM_CASHFLO W_FORCAST |
| obcm-cashflow-projection- services | OBCM_CASHFLOW_P ROJECTION | OBCM_CASHFLOW_P ROJECTION | jdbc/ OBCM_CASHFLO W_PROJECTION |
| obscfcm-batch-jobs | OBSCFCM-BATCH- JOBS | OBSCFCM-BATCH- JOBS | jdbc/OBSCFCM- BATCH-JOBS |
| obcm-collections-transaction- services | OBCM_COLLECTIONS | OBCM_COLLECTIONS | jdbc/ OBCM_COLLECTI ONS |
| obcm-report-services | OBCM_REPORT | OBCM_REPORT | jdbc/ OBCM_REPORT |
| obcm-collections- maintenance-services | OBCM_COLLECTION_ MAINT | OBCM_COLLECTION_ MAINT | Jdbc/ OBCM_COLLECTI ON_MAINT |
| obcm-cashflow-prediction- services | OBCM_CASHFLOW_P REDICTION | OBCM_CASHFLOW_P REDICTION | jdbc/ OBCM_CASHFLO W_PREDICTION |



Table 4-1 (Cont.) Data Sources List

| Application | Data Source Name | Mapped Database Schema | Data source JNDI |
|-----------------------|---------------------------------|---------------------------------|--|
| obcm-netting-service | OBCM_NETTING | OBCM_NETTING | jdbc/ OBCM_NETTING |
| | OBSCFCM_INSTRUME NTS | OBSCFCM_INSTRUME NTS | jdbc/ OBSCFCM_INST RUMENTS |
| | OBSCFCM_REPORT | OBSCFCM_REPORT | jdbc/ OBSCFCM_REPO RT |
| To be mapped with all | PLATO | PLATO | jdbc/PLATO |
| managed servers | PLATO_UI_CONFIG | PLATO_UI_CONFIG | jdbc/ PLATO_UI_CONFI G |
| | SMS | SMSCD0 | jdbc/sms |
| | CMNCORE | COMMON_CORE | jdbc/CMNCORE |
| | PLATO_FEED | PLATO_FEED | jdbc/PLATOFEED |
| obcm-day0-service | OBCM_CASHFLOW_F ORCAST | OBCM_CASHFLOW_F ORCAST | jdbc/ OBCM_CASHFLO W_FORCAST |
| | OBCM_COLLECTION_ MAINT | OBCM_COLLECTION_ MAINT | jdbc/ OBCM_COLLECTI ON_MAINT |
| | OBSCFCM_MAINTENA NCE | OBSCFCM_MAINTENA NCE | jdbc/ OBSCFCM_MAIN TENANCE |
| | PLATO_BATCH | PLATO_BATCH | jdbc/PLATOBATCH |
| obscfcm-day0-service | OBSCFCM_ACCOUNTI | OBSCFCM_ACCOUNTI NG | jdbc/ OBSCFCM_ACCO UNTING |
| | OBSCFCM_FILTER | OBSCFCM_FILTER | jdbc/ OBSCFCM_FILTE R |
| | OBSCFCM_INSTRUME NTS | OBSCFCM_INSTRUME NTS | jdbc/ OBSCFCM_INST RUMENTS |
| | OBSCFCM_RECON | OBSCFCM_RECON | jdbc/ OBSCFCM_RECO N |
| | PLATO_BATCH | PLATO_BATCH | jdbc/PLATOBATCH |
| | PLATO_SECURITY | PLATO_SECURITY | jdbc/ PLATOSECURITY |
| | OBSCFCM_WORKFLO WS_CONDUCTOR | OBSCFCM_WORKFLO WS_CONDUCTOR | jdbc/ OBSCFCM_WOR KFLOWS_CONDU CTOR |
| | OBSCFCM_REPORT | OBSCFCM_REPORT | jdbc/ OBSCFCM_REPO RT |



Table 4-1 (Cont.) Data Sources List

| Application | Data Source Name | Mapped Database Schema | Data source JNDI |
|-------------|-------------------------|---------------------------|----------------------------------|
| | OBSCFCM_MAINTENA NCE | OBSCFCM_MAINTENA NCE | jdbc/ OBSCFCM_MAIN TENANCE |



For creating data source, refer to the ${f Create\ Data source}$ section in ${f Configuration\ and\ Deployment\ Guide}.$



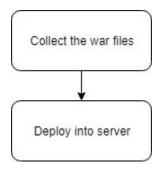
Deployments

This topic describes about the deployments for Oracle Banking Cash Management Installation.

Prerequisite

The database setup and data sources creation have to be performed prior to the application deployment stage. 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 Oracle Banking Cash Management service and the steps to deploy them into the server.

Figure 5-1 Deployments



- For any issues with fly configuration setup, refer to High Availability Setup Guide.
- For Oracle Banking Cash Management environment variables setup, refer to Environment Variable Setup Guide.
- If 'obscf-eod-batch' is already deployed, bring it down and deploy 'obscfcm-eod-batch' provided in the deployment list.

Deployments List

The following table provides the details of deployments required on each Server for the Plato application to run. Deploy one after other in the same given order.



INFRA Pre-requisites should be available before proceeding with the Application deployment process.

Application Startup and Deployment Sequence for new installation or Upgrades

 PLATO Domain <All Plato Infrastructure Services & Plato Services should be deployed as per respective installation document>

- Common Core <All SMS, Common Core and Mid-Office Common Core services should be deployed as per respective installation document>
- Domain services
 - All the services in any order except for the below mentioned services which are to be deployed at the end in the order stated in the below list.
 - * obscfcm-master-maintenance
 - * obcm-day0-service
 - * obscfcm-day0-service
- The recommended list of managed server names and the application distribution on the targets are listed below. But not mandatory, provided the managed server is configured as per the sizing recommendations during the implementation phase.
- It is recommended to deploy obcm-collections-maintenance-services first and then deploy obcm-collections-transaction-services war while deploying Oracle Banking Cash Management Services.



For the exact version and release numbers, refer to the OSDC file available as a part of the release.

Table 5-1 Deployments List

| Application | Archive name | OSDC path | Targets |
|---|---|--|-----------|
| obcm-cashflow- forecasting-services | obcm-cashflow- forecasting-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obcm- cashflow-forecasting- services-{version} \ARCHIVE | obcm_ms_1 |
| obcm-cashflow- projection-services | obcm-cashflow-projection- services-{version}.war | OBCM_{release} \OBCM_SERVICES\obcm- cashflow-projection- services-{version} \ARCHIVE | obcm_ms_1 |
| obcm-cashflow- prediction-services | obcm-cashflow-prediction- services-{version}.war | OBCM_{release} \OBCM_SERVICES\obcm- cashflow- prediction- services-{version} \ARCHIVE | obcm_ms_1 |
| obcm-collections- maintenance-services | obcm-collections- maintenance-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obcm- collections-maintenance- services-{version} \ARCHIVE | obcm_ms_2 |
| obcm-collections- transaction-services | obcm-collections- transaction-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obcm- collections-transaction- services-{version} \ARCHIVE | obcm_ms_1 |



Table 5-1 (Cont.) Deployments List

| A muliocation | A valais a va va - | OCDC moth | Taxast- |
|--|--|---|------------------|
| Application | Archive name | OSDC path | Targets |
| obcm-report-services | obcm-report-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obcm- report-services-{version} \ARCHIVE | obcm_ms_2 |
| obcm-netting-service | obcm-netting-service- {version}.war | OBCM_{release} \OBCM_SERVICES\obcm- netting-service-{version} \ARCHIVE | obcm_ms_1 |
| obscfcm-account- maintenance-services | obscfcm-account- maintenance-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-account-maintenance- services-{version} \ARCHIVE | obscfcm_ms _1 |
| obscfcm-alerts- services | obscfcm-alerts-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-alerts-services-{version} \ARCHIVE | obscfcm_ms _1 |
| obscfcm-batch-jobs | obscfcm-batch-jobs- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-batch-jobs-{version} \ARCHIVE | obscfcm_ms _1 |
| obscfcm-chatbot- services | obscfcm-chatbot-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-chatbot-services- {version}\ARCHIVE | obscfcm_ms _1 |
| obscfcm-eod-batch | obscfcm-eod-batch- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-eod-batch-{version} \ARCHIVE | obscfcm_ms _1 |
| obscfcm-auto-recon- batch | obscfcm-auto-recon-batch- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfa uto-recon-batch-{version} \ARCHIVE | obscfcm_ms _2 |
| obscfcm-charges- services | obscfcm-charges-services- {version}.war | OBCM_{release} \OBCM_SERVICE\obscfc m-charges-services- {version}\ARCHIVE | obscfcm_ms _2 |
| obscfcm-core- services | obscfcm-coreservices- {version}.war | OBCM_{release} \OBCM_SERVICE\obscfc m-core-services-{version} \ARCHIVE | obscfcm_ms _2 |
| obscfcm-filter-services | obscfcm-filter-services - {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-filter-services-{version} \ARCHIVE | obscfcm_ms _2 |
| obscfcm-instruments- receivables-services | obscfcm-instruments- receivables-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-instruments-receivables- services-{version} \ARCHIVE | obscfcm_ms _2 |



Table 5-1 (Cont.) Deployments List

| Application | Archive name | OSDC path | Targets |
|--|--|---|------------------|
| obscfcm-manual- reconservices | obscfcm-manual-recon- services{version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-manual-recon-services- {version}\ARCHIVE | obscfcm_ms _3 |
| obscfcm-report- services | obscfcm-report-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-report-services-{version} \ARCHIVE | obscfcm_ms _3 |
| obscfcm-workflow- management-services | obscfcm-workflow- management-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-workflow-management- services-{version} \ARCHIVE | obscfcm_ms _3 |
| obscfcm-master- maintenance-services | obscfcm-master- maintenance-services- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-master-maintenance- services-{version} \ARCHIVE | obscfcm_ms _3 |
| obcm-day0-service | obcm-day0-service- {version}.war | OBCM_{release} \OBCM_SERVICES\obcm- day0-service-{version} \ARCHIVE | obcm_DAY0 |
| obscfcm-day0-service | obscfcm-day0-service- {version}.war | OBCM_{release} \OBCM_SERVICES\obscfc m-day0-service-{version} \ARCHIVE | obscfcm_DA Y0 |

Note:

To deploy application, refer to $\bf Deploy\ Application\ section\ in\ Configuration\ and\ Deployment\ Guide.$



Restarts and Refresh

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

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



To restart the server, refer to **Restart Server** section in **Configuration and Deployment Guide**.

Restart Order

- Sequence in case of any configuration changes in the plato schema's -> properties table or server arguments (eg: port or host)
 - Restart the plato-config-service and plato-discovery-service.
 - Restart the impacted service
- Sequence in case of any configuration changes in the plato-ui-config schema (eg: port or host)
 - Restart plato-ui-config-service

Caching Impact

The following services use caching and if direct changes are done in database, then service needs to be bounced else cache eviction will happen in 2 hours or configured value in the server start up params:

- Obscfcm-master-maintenance
- 2. Obscfcm-filter-service
- 3. Obscfcm-manual-recon-service
- 4. Obscfcm-core-service

Logging Area

This topic describes about the logging area of Plato applications in WebLogic server.

Plato Application writes logs in the below area of the server:

<WEBLOGIC_DOMAIN_CONFIG_AREA>/ logs/plato-api-gateway.log

Let's assume a domain has been created cm_domain in the following area of the server:

/scratch/oracle/middleware/user projects/domains/platoinfra domain

Logging area for Plato would be /scratch/oracle/middleware/user_projects/domains/
cm domain/logs.



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