

Services Installation Guide  
Oracle Banking Cash Management  
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## Services Installation Guide

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# **1. Preface**

## **1.1 Introduction**

This guide would help you to install the OBCM services on designated environment. It is assumed that all the prior setup is already done related with WebLogic 14c installation, WebLogic managed server creation and Oracle DB installation.

It is recommended to use dedicated managed server for each of the OBCM services.

## **1.2 Audience**

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

## **1.3 Documentation Accessibility**

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

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## 2. Domain and Cluster Configuration

### 2.1 Plato Infrastructure Domain Configuration

#### 2.1.1 Prerequisites

- Machine should have Java Java JDK 11.0.14 has installed.
- Oracle Fusion Middleware 14cR2 14.1.1.0.0 must be installed on the machine.
- Plato, common core, sms services are up and running.

#### 2.1.2 Domain Creation and Configuration

It is recommended to have different managed server in one domain for each application. For Creating Domain and Configuration please refer to ANNEXURE-1 “**How to create and Cluster Configuration**”.

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## 3. Database Setup for OBSCF

### 3.1 Introduction

In this section you are going to setup database related configuration for OBCM Installation. Before you proceed with the document, ensure Schema's are being created. It is recommended to have different schema for each application.

### 3.2 Database Schema Creation

For help in creating database schemas, refer to **ANNEXURE-1** section **Database Schema Creation**.

Create the following database schemas:

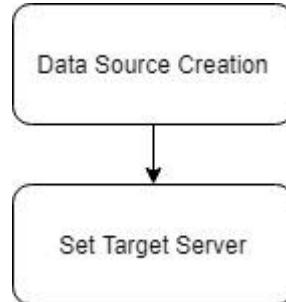
\*\*Schema Names mentioned below are recommended, but not mandatory.

Database Schema Names
PLATO
PLATO_UI_CONFIG
PLATO_SECURITY
PLATO_FEED
PLATO_REPORT_SERVICE
PLATORULE
PLATO_BATCH
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_REPORT_SERVICES

### 3.3 Data Source Creation in WebLogic

Database and application setup for OBCM 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 OBCM services and the steps to configure them in the server.



### 3.4 Data sources List

For creating data source in please refer ANNEXURE-1 “How to create Data sources section”.

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

**Database Connection Pool size to be defined - OBCM services pool configuration should be consistent with plato services.**

Application	Data Source Name	Mapped Database Schema	Data source JNDI
obscfcm-account-maintenance	OBSCFCM_ACCOUNTING	OBSCFCM_ACCOUNTING	jdbc/OBSCFCM_ACCOUNTING
obscfcm-alerts-services	OBSCFCM_ALERTS	OBSCFCM_ALERTS	jdbc/OBSCFCM_ALERTS
obscfcm-eod-batch	PLATO_BATCH	PLATO_BATCH	jdbc/EODBATCH
obscfcm-eod-batch	OBSCF_BATCH	OBSCF_BATCH	jdbc/EOD
obscfcm-eod-batch	PLATO_BATCH	PLATO_BATCH	jdbc/PLATOBATCH
obscfcm-auto-recon-batch	PLATO_BATCH	PLATO_BATCH	jdbc/AUTORECON_BATCH
obscfcm-auto-recon-batch	PLATO_BATCH	PLATO_BATCH	jdbc/PLATOBATCH
obscfcm-charges-services	OBSCFCM_CHARGES	OBSCFCM_CHARGES	jdbc/OBSCFCM_CHARGES
obscfcm-core-services	OBSCFCM_CORE_SERVICES	OBSCFCM_CORE_SERVICES	jdbc/OBSCFCM_CORE_SERVICES
obscfcm-filter-services	OBSCFCM_FILTER	OBSCFCM_FILTER	jdbc/OBSCFCM_FILTER
obscfcm-instruments-receivables-services	OBSCFCM_INSTRUMENTS	OBSCFCM_INSTRUMENTS	jdbc/OBSCFCM_INSTRUMENTS

obscfcm-manual-recon-services	OBSCFCM_RECON	OBSCFCM_RECON	jdbc/OBSCFCM_REC ON
obscfcm-report-services	OBSCFCM_REPORT	OBSCFCM_REPORT	jdbc/OBSCFCM_R EPORT
obscfcm-workflow-management--services	OBSCFCM_WORKFLOWS_CONDUCTOR	OBSCFCM_WORKFLOWS_CONDUCTOR	jdbc/OBSCFCM_WORKFLOWS_CONDUCTOR
obscfcm-mastermaintenance-services	OBSCFCM_MAINTENANCE	OBSCFCM_MAINTENANCE	jdbc/OBSCFCM_MAINTENANCE
obcm-cashflow-forecasting-services	OBCM_CASHFLOW_FORCAST	OBCM_CASHFLOW_FORCAST	jdbc/OBCM_CASHFLOW_FORCAST
obcm-cashflow-projection-services	OBCM_CASHFLOW_PROJECTION	OBCM_CASHFLOW_PROJECTION	jdbc/OBCM_CASHFLOW_PROJECTI ON
obscfcm-batch-jobs	OBSCFCM-BATCH-JOBS	OBSCFCM-BATCH-JOBS	jdbc/OBSCFCM-BATCH-JOBS
obcm-collections-transaction-services	OBCM_COLLECTIONS	OBCM_COLLECTIONS	jdbc/OBCM_COLLECTIONS
obcm-report-services	OBCM_REPORT	OBCM_REPORT	jdbc/OBCM_REPO RT
obcm-collections-maintenance-services	OBCM_COLLECTION_MAINT	OBCM_COLLECTION_MAINT	Jdbc/ OBCM_COLLECTION_MAINT
obcm-cashflow-prediction-services	OBCM_CASHFLOW_PREDICTION	OBCM_CASHFLOW_PREDICTION	jdbc/OBCM_CASHFLOW_PREDICTI ON
To be mapped with all managed servers	PLATO	PLATO	jdbc/PLATO
	PLATO_UI_CONFIG	PLATO_UI_CONFIG	jdbc/PLATO_UI_CONFIG
	SMS	SMSCD0	jdbc/sms
	CMNCORE	COMMON_CORE	jdbc/CMNCORE

### 3.5 View Creation Grants (OBCM\_CASHFLOW\_PREDICTION)

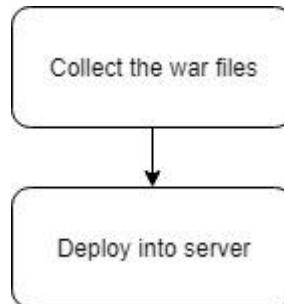
The following grants are provided for OBCM Cashflow Prediction.

- 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;
- ALTER USER OBCM\_CASHFLOW\_PREDICTION ENABLE EDITIONS;

## 4. Deployments

### 4.1 Pre-requisite

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 OBCM service and the steps to deploy them into the server.



- Environment variables need to be set. Refer **ANNEXURE-1**.
- For any issues with fly configuration setup, Refer **ANNEXURE-2**.
- For OBSCF environment variables setup, Refer **OBCM - Environment Variable Setup Guide Section 2.3**.
- If 'obscf-eod-batch' is already deployed, bring it down and deploy 'obscfcm-eod-batch' provided in the deployment list below.
- If the application is being deployed as standalone OBCM, then execute below (JobList.txt) script in OBSCF\_BATCH schema to ensure common core events are triggered from OBSCFCM EOD:



### 4.2 Deployments List

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

**Note:**

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 OBCM and OBSCFCM 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.
    - i. obsfcfm-master-maintenance

- ii. obcm-day0-service
  - iii. obscfcm-day0-service.
- Below is the recommended list of managed server names and the application distribution on the targets. But not mandatory, provided the managed server is configured as per the sizing recommendations during the implementation phase.

Application	Archive name	OSDC path	Targets
obcm-cashflow-forecasting-services	obcm-cashflow-forecasting-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obcm-cashflow-forecasting-services-7.5.0\ARCHIVE	obcm_ms_1
obcm-cashflow-projection-services	obcm-cashflow-projection-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obcm-cashflow-projection-services-7.5.0\ARCHIVE	obcm_ms_1
obcm-cashflow-prediction-services	obcm-cashflow-prediction-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obcm-cashflow-prediction -services-7.5.0\ARCHIVE	obcm_ms_1
obcm-collections-maintenance-services	obcm-collections-maintenance-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obcm-collections-maintenance-services-7.5.0\ARCHIVE	obcm_ms_2
obcm-collections-transaction-services	obcm-collections-transaction-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obcm-collections-transaction-services-7.5.0\ARCHIVE	obcm_ms_1
obcm-report-services	obcm-report-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obcm-report-services-7.5.0\ARCHIVE	obcm_ms_2
obcm-day0-service	obcm-day0-service-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obcm-day0-service-7.5.0\ARCHIVE	obcm_DAY0
obscfcm-account-maintenance-services	obscfcm-account-maintenance-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-account-maintenance-services-7.5.0\ARCHIVE	obscfcm_ms_1
obscfcm-alerts-services	obscfcm-alerts-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-alerts-services-7.5.0\ARCHIVE	obscfcm_ms_1
obscfcm-batch-jobs	obscfcm-batch-jobs-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-batch-jobs-7.5.0\ARCHIVE	obscfcm_ms_1
obscfcm-chatbot-services	obscfcm-chatbot-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-chatbot-services-7.5.0\ARCHIVE	obscfcm_ms_1
obscfcm-eod-batch	obscfcm-eod-batch-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-eod-batch-7.5.0\ARCHIVE	obscfcm_ms_1
obscfcm-auto-recon-batch	obscfcm-auto-recon-batch-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-auto-recon-batch-7.5.0\ARCHIVE	obscfcm_ms_2
obscfcm-charges-services	obscfcm-charges-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICE\obscfcm-charges-services-7.5.0\ARCHIVE	obscfcm_ms_2

obscfcm-core-services	obscfcm-coreservices-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICE\obscfcm-coreservices-7.5.0\ARCHIVE	obscfcm_ms_2
obscfcm-filter-services	obscfcm-filter-services - 7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-filter-services-7.5.0\ARCHIVE	obscfcm_ms_2
obscfcm-instruments-receivables-services	obscfcm-instruments-receivables-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-instruments-receivables-services-7.5.0\ARCHIVE	obscfcm_ms_2
obscfcm-manual-reconservices	obscfcm-manual-recon-services7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-manual-recon-services-7.5.0\ARCHIVE	obscfcm_ms_3
obscfcm-report-services	obscfcm-report-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-report-services-7.5.0\ARCHIVE	obscfcm_ms_3
obscfcm-workflowmanagement--services	obscfcm-workflowmanagementservices-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-workflow-management-services7.2.0\ARCHIVE	obscfcm_ms_3
obscfcm-master-maintenance-services	obscfcm-master-maintenance-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-master-maintenance-services-7.5.0\ARCHIVE	obscfcm_ms_3
obscfcm-workflow-management-services	obscfcm-workflow-management-services-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-workflow-management-services-7.5.0\ARCHIVE	obscfcm_ms_3
obscfcm-day0-service	obscfcm-day0-service-7.5.0.war	OBCM_OSDC_14.6.0.0.0\OBCM_SERVICES\obscfcm-day0-service-7.2.0\ARCHIVE	obscfcm_DAY0

### **4.3 Steps to Deploy as Application**

To deploy application please refer ANNEXURE-1. “How to deploy section”.

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## 5. Restarts and Refresh

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

### 5.1 Restarting Servers

To restart the server please refer to ANNEXURE-1.”How to restart” section.

### 5.2 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

### 5.3 Caching Impact

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:

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

---

## 6. Logging Area

### 6.1 Introduction

This part of the document will talk about the logs area where after deployment of Plato Applications in WebLogic server.

### 6.2 Logging Area

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**.