

Services Installation Guide
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Services Installation Guide

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1. Preface

1.1 Introduction

This guide would help you to install the SCF 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 SCF 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>.

2. Domain and Cluster Configuration

2.1 Plato Infrastructure Domain Configuration

2.1.1 Prerequisites

- Machine should have 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**”.

3. Database Setup for OBSCF

3.1 Introduction

In this section you are going to setup database related configuration for SCF 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:

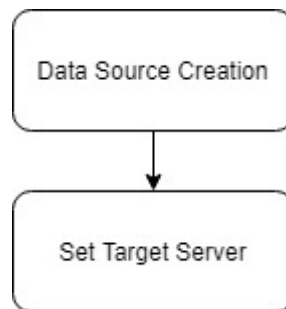
**Schema Names mentioned below are recommended, but not mandatory.

| 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 |
| OBSCF_CORE |
| OBSCF_FINANCE |

| |
|---------------------------|
| OBSCF_LIMIT_UTILIZ |
| OBSCF_REPORT |
| OBSCF_FCI_MESSAGES |
| OBSCF_ISLAMIC_INSTRUMENTS |

3.3 Data Source Creation in WebLogic

Database and application setup for OBSCF 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 OBSCF 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 - OBSCF services pool configuration should be consistent with plato services.

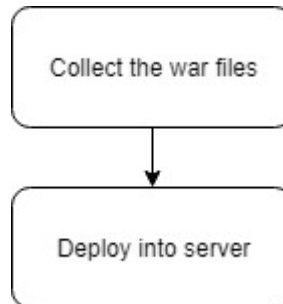
| Application | Data Source Name | Mapped Database Schema | Data source JNDI |
|-----------------------------|-----------------------|------------------------|----------------------------|
| obscfcm-account-maintenance | OBSCFCM_ACCOUNTING | OBSCFCM_ACCOUNTING | jdbc/OBSCFCM_ACCOUNTING |
| obscfcm-alerts-services | 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/AUTORECONBATCH |
| 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_RECON |
| obscfcm-report-services | OBSCFCM_REPORT | OBSCFCM_REPORT | jdbc/OBSCFCM_REPORT |
| obscfcm-workflow-management--services | OBSCFCM_WORKFLOWS_CONDUCTOR | OBSCFCM_WORKFLOWS_CONDUCTOR | jdbc/OBSCFCM_WORKFLOWS_CONDUCTOR |
| obscfcm-mastermaintenance-services | OBSCFCM_MAINTENANCE | OBSCFCM_MAINTENANCE | jdbc/OBSCFCM_MAINTENANCE |
| obscfcm-batch-jobs | OBSCFCM-BATCH-JOBS | OBSCFCM-BATCH-JOBS | jdbc/OBSCFCM-BATCH-JOBS |
| obscf-core-services | OBSCF_CORE | OBSCF_CORE | jdbc/OBSCF_CORE |
| obscf-finance-services | OBSCF_FINANCE | OBSCF_FINANCE | jdbc/OBSCF_FINANCE |
| obscf-limits-services | OBSCF_LIMIT_UTILIZ | OBSCF_LIMIT_UTILIZ | jdbc/OBSCF_LIMIT |
| obscf-report-services | OBSCF_REPORT | OBSCF_REPORT | jdbc/OBSCF_REPORT |
| obscf-islamic-instruments-services | OBSCF-ISLAMIC-INSTRUMENTS | OBSCF-ISLAMIC-INSTRUMENTS | jdbc/OBSCF-ISLAMIC-INSTRUMENTS |
| obscf-fci-messaging-service | OBSCF_FCI_MESSAGES | OBSCF_FCI_MESSAGES | jdbc/OBSCF_FCI_MESSAGES |
| 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 |

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 OBSCF 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 **OBSCF - 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 OBSCF, then execute below (JobList.txt) script in OBSCF_BATCH schema to ensure common core events are triggered from OBSCFCM EOD:



JobList.txt

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 OBSCF 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. obscfcm-master-maintenance-service
 - ii. obscfcm-day0-service
 - iii. obscf-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 |
|--|--|---|----------------|
| obsconf-core-services | obsconf-core-services-7.5.0 | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconf-core-services-7.5.0\ARCHIVE | obsconf_ms_2 |
| obsconf-finance-services | obsconf-finance-services-7.5.0 | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconf-finance-services-7.5.0\ARCHIVE | obsconf_ms_1 |
| obsconf-limits-services | obsconf-limits-services-7.5.0 | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconf-limits-services-7.5.0\ARCHIVE | obsconf_ms_1 |
| obsconf-report-services | obsconf-report-services-7.5.0 | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconf-report-services-7.5.0\ARCHIVE | obsconf_ms_1 |
| obsconf-day0-service | obsconf-day0-service-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconf-day0-service-7.5.0\ARCHIVE | OBSCFDAY0 |
| obsconf-fci-messaging-service | obsconf-fci-messaging-service-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconf-fci-messaging-service-7.5.0.war\ARCHIVE | obsconf_ms_1 |
| obsconf-islamic-instruments-services | obsconf-islamic-instruments-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconf-islamic-instruments-services-7.5.0.war\ARCHIVE | obsconf_ms_1 |
| obsconfcm-account-maintenance-services | obsconfcm-account-maintenance-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconfcm-account-maintenance-services-7.5.0\ARCHIVE | obsconfcm_ms_1 |
| obsconfcm-alerts-services | obsconfcm-alerts-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconfcm-alerts-services-7.5.0\ARCHIVE | obsconfcm_ms_1 |
| obsconfcm-batch-jobs | obsconfcm-batch-jobs-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconfcm-batch-jobs-7.5.0\ARCHIVE | obsconfcm_ms_1 |
| obsconfcm-chatbot-services | obsconfcm-chatbot-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconfcm-chatbot-services-7.5.0\ARCHIVE | obsconfcm_ms_1 |
| obsconfcm-eod-batch | obsconfcm-eod-batch-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconfcm-eod-batch-7.5.0\ARCHIVE | obsconfcm_ms_1 |
| obsconfcm-auto-recon-batch | obsconfcm-auto-recon-batch-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICES\obsconfcm-auto-recon-batch-7.5.0\ARCHIVE | obsconfcm_ms_2 |

| | | | |
|--|--|---|--------------|
| obscfcm-charges-services | obscfcm-charges-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICE\obscfcm -charges-services-7.5.0\ARCHIVE | obscfcm_ms_2 |
| obscfcm-core-services | obscfcm-coreservices-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_SERVICE\obscfcm -core-services-7.5.0\ARCHIVE | obscfcm_ms_2 |
| obscfcm-filter-services | obscfcm-filter-services -7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_SERVICES\obscfcm-filter-services-7.5.0\ARCHIVE | obscfcm_ms_2 |
| obscfcm-instruments-receivables-services | obscfcm-instruments-receivables-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_SERVICES\obscfcm-instruments-receivables-services-7.5.0\ARCHIVE | obscfcm_ms_2 |
| obscfcm-manual-reconservices | obscfcm-manual-reconservices7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_SERVICES\obscfcm-manual-reconservices-7.5.0\ARCHIVE | obscfcm_ms_3 |
| obscfcm-report-services | obscfcm-report-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_SERVICES\obscfcm-report-services-7.5.0\ARCHIVE | obscfcm_ms_3 |
| obscfcm-workflowmanagement-services | obscfcm-workflowmanagementservices-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_SERVICES\obscfcm-workflow-management-services7.2.0\ARCHIVE | obscfcm_ms_3 |
| obscfcm-master-maintenance-services | obscfcm-master-maintenance-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_SERVICES\obscfcm-master-maintenance-services-7.5.0\ARCHIVE | obscfcm_ms_3 |
| obscfcm-workflow-management-services | obscfcm-workflow-management-services-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_SERVICES\obscfcm-workflow-management-services-7.5.0\ARCHIVE | obscfcm_ms_3 |
| obscfcm-day0-service | obscfcm-day0-service-7.5.0.war | OBSCF_OSDC_14.7.0.0.0\OBSCF_M_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”.

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

6. Logging Area

6.1 Introduction

This part of the document will talk about the logs area 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 **scf_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/scf_domain/logs**.