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Services Installation Guide

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Table of Contents

1. PF	REFACE	
1.1	Introduction	1-1
1.2	AUDIENCE	1-1
1.3	DOCUMENTATION ACCESSIBILITY	
2. DO	OMAIN AND CLUSTER CONFIGURATION	2-1
2.1	PLATO INFRASTRUCTURE DOMAIN CONFIGURATION	2-1
2.1	1.1 Prerequisites	2-1
2.1	1.2 Domain Creation and Configuration	
3. D A	ATABASE SETUP FOR OBSCF	3-1
3.1	INTRODUCTION	
3.2	DATABASE SCHEMA CREATION	
3.3	DATA SOURCE CREATION IN WEBLOGIC	
3.4	Data sources List	3-2
4. DI	EPLOYMENTS	4-1
4.1	Pre-requisite	
4.2	DEPLOYMENTS LIST	4-1
4.3	STEPS TO DEPLOY AS APPLICATION	4-3
5. RI	ESTARTS AND REFRESH	5-1
5.1	RESTARTING SERVERS	5-1
5.2	RESTART ORDER	5-1
5.3	CACHING IMPACT	5-1
6. LO	OGGING AREA	6-1
6.1	Introduction	6-1
6.2	LOGGING AREA	6-1

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.

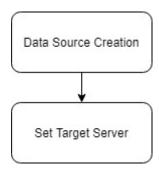
Database Schema Names
PLATO
PLATO_UI_CONFIG
PLATO_SECURITY
PLATO_FEED
PLATO_REPORT_SERVICE
PLATORULE
PLATO_BATCH
COMMON_CORE
PLATOALERTS
PLATO_TRANSPORT
PLATOORCH
SMSCD0
OBSCFCM_ACCOUNTING
OBSCFCM_ALERTS
OBSCF_BATCH
OBSCFCM_CHARGES
OBSCFCM_CORE_SERVICES
OBSCFCM_FILTER
OBSCFCM_INSTRUMENTS
OBSCFCM_RECON
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_ACCOU NTING	OBSCFCM_ACCOUNT ING	jdbc/OBSCFCM_A CCOUNTING
obscfcm-alerts- services	OBSCFCM_ALERT S	OBSCFCM_ALERTS	jdbc/OBSCFCM_A LERTS
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_CHARG ES	OBSCFCM_CHARGES	jdbc/OBSCFCM_C HARGES
obscfcm-core-services	OBSCFCM_CORE_ SERVICES	OBSCFCM_CORE_SE RVICES	jdbc/OBSCFCM_C ORE_SERVICES



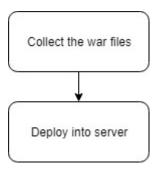
obscfcm-filter-services	OBSCFCM_FILTER	OBSCFCM_FILTER	jdbc/OBSCFCM_FI LTER
obscfcm-instruments- receivables-services	OBSCFCM_INSTR UMENTS	OBSCFCM_INSTRUM ENTS	jdbc/OBSCFCM_IN STRUMENTS
obscfcm-manual- recon-services	OBSCFCM_RECON	OBSCFCM_RECON	jdbc/OBSCFCM_R ECON
obscfcm-report- services	OBSCFCM_REPOR T	OBSCFCM_REPORT	jdbc/OBSCFCM_R EPORT
obscfcm-workflow- management services	OBSCFCM_WORK FLOWS_CONDUCT OR	OBSCFCM_WORKFLO WS_CONDUCTOR	jdbc/OBSCFCM_W ORKFLOWS_CON DUCTOR
obscfcm- mastermaintenance- services	OBSCFCM_MAINT ENANCE	OBSCFCM_MAINTEN ANCE	jdbc/OBSCFCM_M AINTENANCE
obscfcm-batch-jobs	OBSCFCM-BATCH- JOBS	OBSCFCM-BATCH- JOBS	jdbc/OBSCFCM- BATCH-JOBS
obscf-core-services	OBSCF_CORE	OBSCF_CORE	jdbc/OBSCF_COR E
obscf-finance-services	OBSCF_FINANCE	OBSCF_FINANCE	jdbc/OBSCF_FINA NCE
obscf-limits-services	OBSCF_LIMIT_UTI LIZ	OBSCF_LIMIT_UTILIZ	jdbc/OBSCF_LIMIT
obscf-report-services	OBSCF_REPORT	OBSCF_REPORT	jdbc/OBSCF_REP ORT
obscf-islamic- instruments-services	OBSCF-ISLAMIC- INSTRUMENTS	OBSCF-ISLAMIC- INSTRUMENTS	jdbc/OBSCF- ISLAMIC- INSTRUMENTS
obscf-fci-messaging- service	OBSCF_FCI_MESS AGES	OBSCF_FCI_MESSAG ES	jdbc/OBSCF_FCI_ MESSAGES
	PLATO	PLATO	jdbc/PLATO
To be mapped with all	PLATO_UI_CONFI G	PLATO_UI_CONFIG	jdbc/PLATO_UI_C ONFIG
managed servers	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:



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



- ii. obscf-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
obscf-core- services	obscf-core-services-7.5.0	OBSCF_OSDC_14.6.0.0.0\OBSC F_SERVICES\obscf-core- services-7.5.0\ARCHIVE	obscf_ms_2
obscf-finance- services	obscf-finnace-services- 7.5.0	OBSCF_OSDC_14.6.0.0.0\OBSC F_SERVICES\obscf-finance- services -7.5.0\ARCHIVE	obscf_ms_1
obscf-limits- services	obscf-limits-services- 7.5.0	OBSCF_OSDC_14.6.0.0.0\OBSC F_SERVICES\obscf-limits- services -7.5.0\ARCHIVE	obscf_ms_1
obscf-report- services	obscf-report-services- 7.5.0	OBSCF_OSDC_14.6.0.0.0\OBSC F_SERVICES\obscf-report- services -7.5.0\ARCHIVE	obscf_ms_1
obscf-day0- service	obscf-day0-service- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBSC F_SERVICES\obscf-day0- service-7.5.0\ARCHIVE	OBSCFDAY 0
obscf-fci- messaging- service	obscf-fci-messaging- service-7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBSC F_SERVICES\obscf-fci- messaging-service-7.5.0.war \ARCHIVE	obscf_ms_1
obscf-islamic- instruments- services	obscf-islamic- instruments-services- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBSC F_SERVICES\obscf-islamic- instruments-services-7.5.0.war \ARCHIVE	obscf_ms_1
obscfcm- account- maintenance- services	obscfcm-account- maintenance-services- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\ obscfcm-account- maintenance-services- 7.5.0\ARCHIVE	obscfcm_ms _1
obscfcm- alerts-services	obscfcm-alerts-services- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfcm-alerts- services-7.5.0\ARCHIVE	obscfcm_ms _1
obscfcm- batch-jobs	obscfcm-batch-jobs- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfcm-batch- jobs-7.5.0\ARCHIVE	obscfcm_ms _1
obscfcm- chatbot- services	obscfcm-chatbot- services-7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfcm-chatbot- services-7.5.0\ARCHIVE	obscfcm_ms _1
obscfcm-eod- batch	obscfcm-eod-batch- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfcm-eod- batch-7.5.0\ARCHIVE	obscfcm_ms _1
obscfcm-auto- recon-batch	obscfcm-auto-recon- batch- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfauto-reconbatch-7.5.0\ARCHIVE	obscfcm_ms _2
obscfcm- charges- services	obscfcm-charges- services-7.5.0.war	OBSCF_OSDC_14.6.0.0.0OBCM _SERVICE\obscfcm -charges- services-7.5.0\ARCHIVE	obscfcm_ms _2
obscfcm-core- services	obscfcm-coreservices- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0OBCM _SERVICE\obscfcm -core- services-7.5.0\ARCHIVE	obscfcm_ms _2



obscfcm-filter- services	obscfcm-filter-services - 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC 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_14.6.0.0.0\OBC M_SERVICES\obscfcm- instruments-receivables-services- 7.5.0\ARCHIVE	obscfcm_ms _2
obscfcm- manual- reconservices	obscfcm-manual-reconservices7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfcm-manual- recon-services-7.5.0\ARCHIVE	obscfcm_ms _3
obscfcm- report- services	obscfcm-report-services- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfcm-report- services-7.5.0\ARCHIVE	obscfcm_ms _3
obscfcm- workflowmana gement services	obscfcm- workflowmanagementser vices-7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC M_SERVICES\obscfc m- workflow-management- services7.2.0\ARCHIVE	obscfcm_ms _3
obscfcm- master- maintenance- services	obscfcm-master- maintenance-services- 7.5.0.war	OBSCF_OSDC_14.6.0.0.0\OBC 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_14.6.0.0.0\OBC 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_14.6.0.0.0\OBC M_SERVICES\obscfcm-day0- service-7.2.0\ARCHIVE	obscfcm_D AY0

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)
 - o 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)
 - o 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.

