Oracle Banking Trade Finance Process Management
Process flow Installation Guide
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FINANCIAL SERVICES

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Process flow Services Installation Guide
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Table of Contents

1. Preface

1.1 Introduction

This guide would help you to configure the post installation steps of SOA component, installation of Process flow services on designated environment. It is assumed that all the prior setup is already done related with WebLogic 12c installation; WebLogic managed server creation, RCU creation for BPM Suite, BPM Suite installation and Oracle DB installation.
It is recommended to use dedicated managed server for each of the Plato infrastructure 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.

1.4 Organization

This installation user guide would allow you to install following services in same order:

- CMC-WORKFLOW-TASK-SERVICES Service
- CMC-SMS-AUTHENTICATOR-SERVICE Service
- CMC-SMS-JPSPROVIDER-SERVICE Service

1.5 Related Documents

Refer to application specific process management annexures and pre-installation guides.

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2. Database Setup

2.1 <u>Introduction</u>

In this section you are going to setup database related configuration for Mid Office Common Core Installation.

2.2 <u>Pre-requisite</u>

Below setup is dependent on Common Core Schema, Mid office core schema and SMS schema. So, before you proceed with below setup ensure MID Office Common Core Schema and SMS Schema is provided to you.

3. SOA Post Installation Configuration

3.1 Introduction

In this section, you are going to setup SOA related configuration for Workflow services Installation.

3.2 Pre-requisite

- Oracle Fusion Middleware 18c(18.3) 12.2.1.3 has to be installed on the machine.
- Oracle BPMN Suite 12.2.1.3 has to be installed on the machine

3.3 Authentication Configuration

Download the Authenticator jar cmc-sms-authenticator-service-1.0.3.war, cmc-sms-jpsprovider-service-1.0.3.jar) from the OSDC Pack.

Application	Archive name	OSDC Path	Targets
cmc-sms-authenticator-service	cmc-sms-authenticator-service-1.0.3.jar	MID_OFFICE_COMMON_CORE\cmc-sms-authenticator-service\APP\ARCHIVE	SOA Server
cmc-sms-jpsprovider-service	cmc-sms-jpsprovider-service-1.0.3.jar	MID_OFFICE_COMMON_CORE\cmc-sms-jpsprovider-service\APP\ARCHIVE	SOA Server

Apply the Authenticator in the below path

1. In cmc-sms-authenticator-service-1.0.3.jar, replace the corresponding SMS, Branch service url's in CISProperties.properties file

JNDI.Name=jdbc/fcjdevDS
GETROLES=http://10.184.153.185:7001/sms-core-service
GETUSERS=http://10.184.153.185:7001/sms-core-service
appId=sms
userId=<<WFUSER>>
source=EXTSYS
branch=<<BRANCH_CODE>>
GETBRANCHES=http://ofss220245:7001/cmc-branch-services/
appIdBranch=<<CMNCORE>>
BPELCREDENTIAL=SHA-512!1!3114808CAAE1DE602B038E6A4A8DDADC6514552608852554033880D12A09480A97D
EB0C7B4FAB06BBC3148D9090187260EF4F3F88EDF0E17E1FA596C3B1837D
BPELSALT=0A1FB843E1626F8C6B14286DC4C17030

2. Copy the cmc-sms-authenticator-service.jar file to
<ORACLE_HOME>\wlserver\server\lib\mbeantypes
3. Restart the Admin Server.

Note : Identify a user account and replace the valid user with <<WFUSER>> and make sure that user account has the sms - role configuration as mentioned below

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CMC_FA_CURRENCY_DEFN_VIEW
CMC_FA_CURRENCY_HOLIDAY_VIEW
CMC_FA_CUSTOMER_CATEGORY_VIEW
CMC_FA_EXT_CUSTOMER_VIEW
CMC_FA_EXT_BRANCH_PARAMETERS_VIEW
CMC_FA_EXT_BANK_PARAMETERS_VIEW
CMC_FA_LOCAL_HOLIDAY_VIEW
CMC_FA_SYSTEM_DATES_VIEW
CMC_FA_WF_VIEW
TFPM_FA_CMC_QUEUE_MA_VIEW
TFPM_FA_CMC_PRCODE_MA_VIEW

<<BRANCH_CODE>> - Home branch of the user <<WFUSER>>
Update the IP address of the service for the GETROLES,GETUSERS and GETBRANCHES.
<<CMNCORE>> App id of the common core services

3.4 SOA - View Compilation

1. Before compiling the CPVW_ATTRIBUTE_FIELD,
   CPVW_USERS,CPVW_BPMN_USERS and CPVW_BPMN_USERROLES views,
   Create the DBlink in the MIDOFFICE COMMON CORE schema using the below script
   (Use the same dblink name).

   **CREATE DATABASE LINK SMSDEMOLINK CONNECT TO <<SMS schema
   Username>> IDENTIFIED BY <<SMS schema Password>> USING '<<SID>>';**

2. CPVW_BPMN_USERS and CPVW_BPMN_USERROLES views are available in the
   cmc-workflow-task-sms-services-1.0.0.war.
3. Open the cmc-workflow-task-sms-services-1.0.0.war, navigate to the \WEB-
   INF\classes\db\migration\application\ path and compile all the views.

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3.5 Realm configurations

Follow the below steps for the Realm configurations.

1. Login to the Console of SOA server
2. Click on Security Realms.
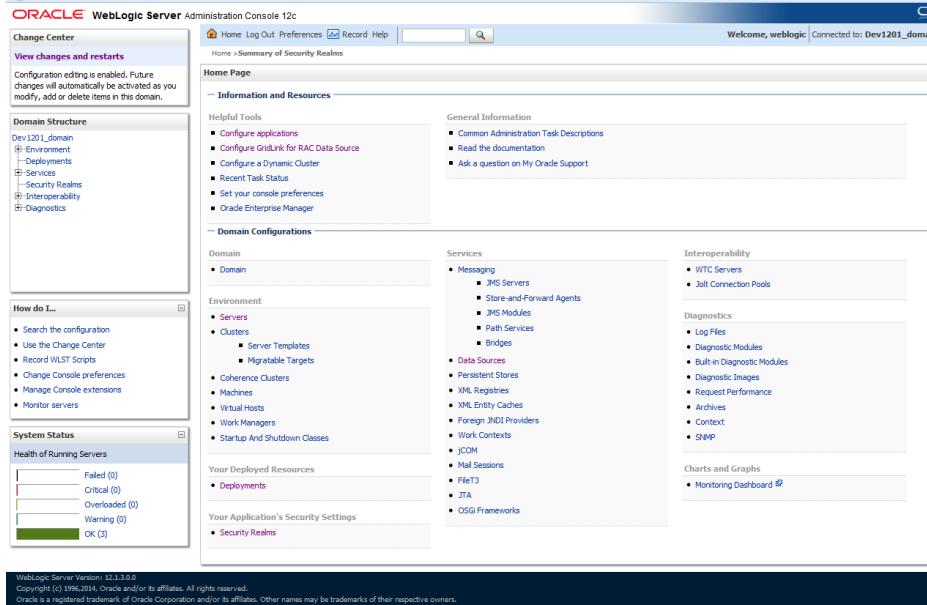
3. Click on myrealm.
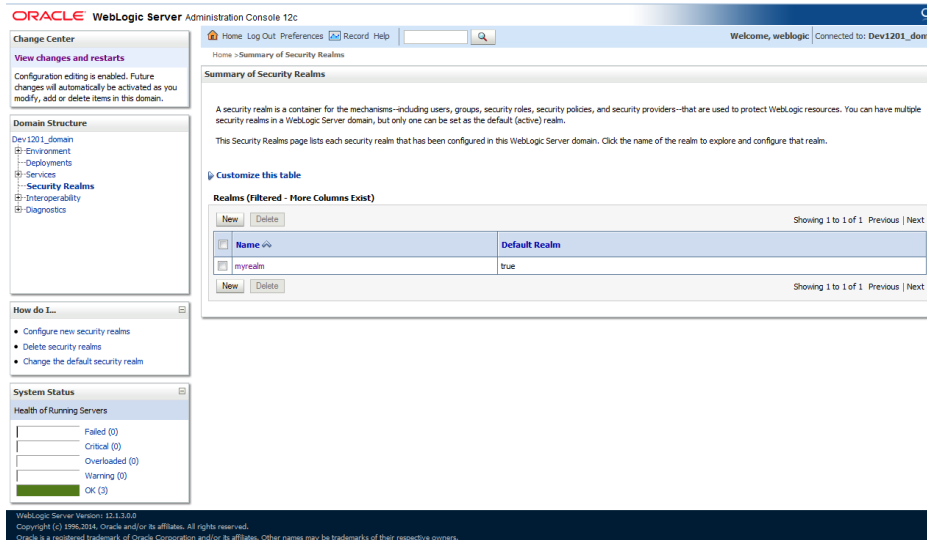
4. Click on Providers tab and click on "New" button to create new authentication provider (FCJCustomProvider). Provider name as CMCAuthenticator and type as

FCUBSUserAuthenticator.
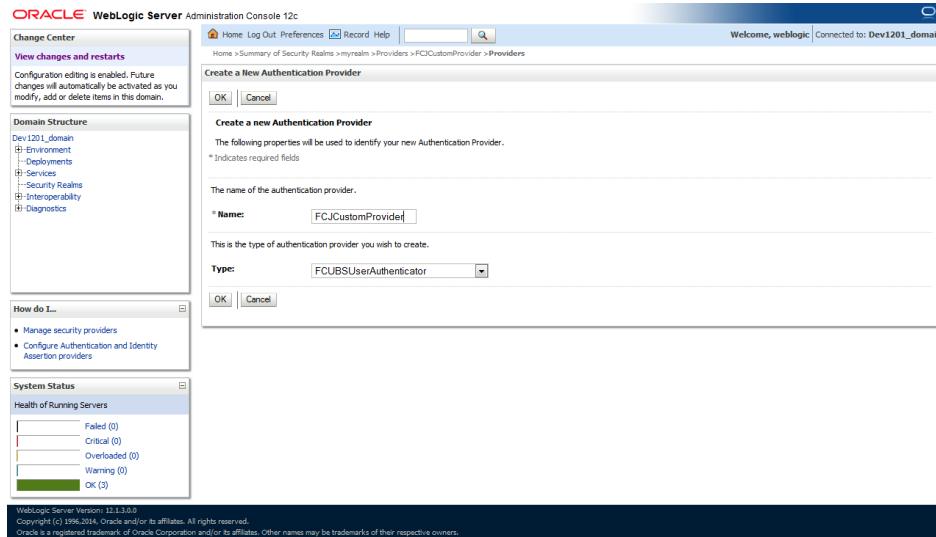
5. Click Reorder to bring provider to first of all providers and click OK.

6. Click on CMCAuthenticator.

7. In Common tab change the control flag to "SUFFICIENT".

8. Restart the Server.

3.6 __Jar Configuration__

Follow the below steps to configure the libovd details for SOA components

1. From the setup artifact copy the "cmc-sms-jpsprovider-service-1.0.3.jar" file into the OSDC Pack..
2. Create a folder by name 'classes' at the location '<MIDDLEWARE_HOME>soa\soa\modules\oracle.soa.ext_11.1.x'.
3. Extract the file 'cmc-sms-jpsprovider-service-1.0.jar' and copy the folder and sub folders of "oracle" from classes and move to: '<MIDDLEWARE_HOME>soa\soa\modules\oracle.soa.ext_11.1.x\classes'.
4. Navigate to the location '<MIDDLEWARE_HOME>soa\soa\modules\oracle.soa.ext_11.1.x\classes'. Edit the properties file 'CISProperties.properties' and update 'JNDI.name' with the JNDI name defined.Replace the corresponding SMS, Workflow TaskSMS and Workflow Scheduler url's in CISProperties.properties file in Oracle/Middleware/Oracle_Home/soa/soa/modules/oracle.soa.ext_11.1.1/classes/oracle/fsgbu/sms/provider/cac folder.
5. Replace the corresponding SMS, Workflow TaskSMS and Workflow Scheduler url's in CISProperties.properties file in cmc-sms-jpsprovider-service-1.0.3.jar
6. Copy "cmc-sms-jpsprovider-service-1.0.3.jar" to '<MIDDLEWARE_HOME>/user_projects/domains/<domain_name>/config/fmwconfig/ovd/plugins/lib.
7. in case the above folder is not avaialble Create the directory structure as mentioned.
8. Copy the "cmc_sms_adapter.xml" to '<MIDDLEWARE_HOME>/oracle_common/modules/oracle.ovd/templates/

cmc_sms_adapter.x
ml

- Search for <**CMCDATASOURCE**> in cmc_sms_adapter.xml and update it with jdbc/fcjdevDS Datasource name.
- Execute "libovdadapterconfig" script which is present in '<MIDDLEWARE_HOME>/oracle_common/bin' with below parameters.Update the admin server host name or ip ,admin server port ,weblogic user id,domain home and fcubs datasource

libovdadapterconfig.sh -adapterName cmcAdapter -adapterTemplate fcubs_adapter.xml -host <ADMIN_SERVER_HOST> -port <ADMIN_PORT> -userName <WEBLOGIC_USERID> -domainPath   <DOMAIN_HOME> -dataStore DB -root ou=cmc,dc=oracle,dc=com -contextName default -dataSourceJNDIName <CMCDATASOURCE>

1. Check whether appid mapped and SOA dependent("jdbc/fcjdevDS") JNDI's are created.
2. Make sure that the above JNDI's are not enabled with Supports Global Transactions.
3. Restart the server post configuration changes
4. Do the below changes and Deploy the cmc-workflow-task-service-1.0.3.war in the server.
    1. Open the cmc-workflow-task-service-1.0.3.war, navigate to the \WEB-INF\classes\ and do the required changes in the application.properties.

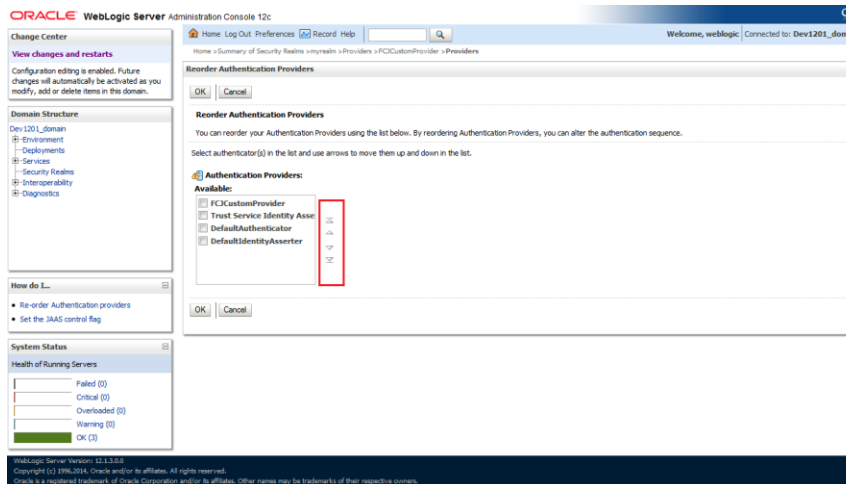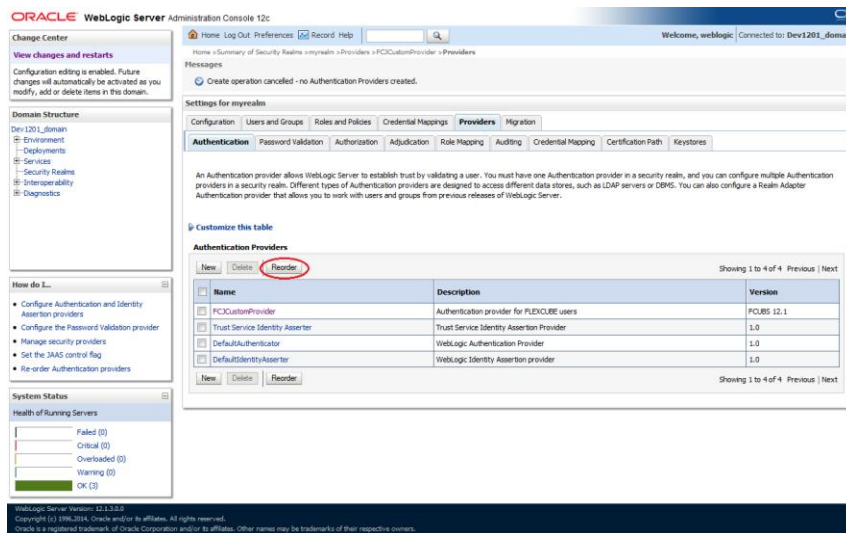providerUrl=t3://<<host name>>:<<SOA server-PORT>>/soa-infra
wlInitalContextFactory=weblogic.jndi.WLInitialContextFactory
security_principal=<<USERNAME>>

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security_credentials=<<PASSWORD>>
dedicationConnection=true
appId_maint=CMNCORE
header_branch=004
header_source=EXTSYS
appId_sms=sms

Note:

Check the users & groups are populated properly in realm. Make sure that SYSTEM user is created and populated in the realm.
(if user and roles are not properly populated , check the views (CPVW_BPEL_USERS) are properly configured in Core DB).
SYSTEM , WORKFLOWSYSTEM users are mandatory , should be maintained be available the CMC_TM_BPMN_USERS table (available Core DB).

4. Domain and Cluster Configuration

4.1 Common Core Domain Configuration

4.1.1 Prerequisites

- Machine should have Java JDK1.8.0_202 has installed.
- Oracle Fusion Middleware 18c(18.3) 12.2.1.3 has to be installed on the machine.

4.1.2 Steps to Create Domain

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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5. Data Sources Creation

5.1 <u>Prerequisite</u>

Database and application setup for PLATO has to be performed prior to deployment setup.

5.2 <u>Data Sources List</u>

Make sure that the following data sources are available on domain prior to deployment of applications onto managed servers.

Data Source Name	Data source JNDI	Targets
CMNCORE	jdbc/CMNCORE	Mid office Common Core Server

Steps to create data source in WebLogic is same for all the above except for the connection details and names. Check the below screenshots to understand data source creation.

5.3 <u>Creating Data Source</u>

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

6. Deployments

6.1 Pre-requisite

Before you proceed with below, please make sure previous steps are completed.

6.2 Deployments List

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

Application	Archive name	OSDC Path	Targets
cmc-workflow-task-service	cmc-workflow-task-service-1.0.3.war	MID_OFFICE_COMMON_CORE \cmc-workflow-task-services\APP\ARCHIVE	Mid office Common core server

6.3 SOA Process Deployments List

Below table give details of the deployments required on SOA process flow services for the Trade application to run. Deploy one after other in the same given order.

Sl	Archive name	OSDC Path	Component
1	sca_InitiateAMLCheckService.jar	\ OBTFPM_PROCESS\commonprocessflow \InitiateAMLCheckService	SOA
2	sca_InitiateAmountBlockService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiateAmountBlockService	SOA
3	sca_InitiateCurrencyConversionService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiateCurrencyConversionService	SOA
4	sca_InitiateHandOffService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiatehandOffService	SOA
5	sca_InitiateKYCCheckService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiateKYCCheckService	SOA
6	sca_InitiateLimitEarmarkingService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiateLimitEarmarkingService	SOA
7	sca_InitiateMailNotificationService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiateMailNotificationService	SOA
8	sca_InitiateReleaseAmountBlockService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiateReleaseAmountBlockService	SOA
9	sca_InitiateReleaseEarmarkingService.jar	\OBTFPM\commonprocessflow\InitiateReleaseEarmarkingService	SOA
10	sca_InitiateSanctionCheckService.jar	\OBTFPM_PROCESS\commonprocessflow\InitiateSanctionCheckService	SOA
11	sca_InitiateExportLCAdviseService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateExportLCAdviseService	SOA
12	sca_InitiateGuaranteeAdviceAPRService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateGuaranteeAdviceAPRService	SOA
13	sca_InitiateGuaranteeAdviceService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateGuaranteeAdviceService	SOA

14	sca_InitiateGuaranteeIssuanceAPRService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateGuaranteeIssuanceAPRService	SOA
15	sca_InitiateGuaranteeIssuanceService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateGuaranteeIssuanceService	SOA
16	sca_InitiateImportLCIssuanceService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateImportLCIssuanceService	SOA
17	sca_ImportLCAmendmentBeneficiaryConsent.jar	\OBTFPM_PROCESS\tradeprocessflow\ImportLCAmendmentBeneficiaryConsent	SOA
18	sca_ExportLCAmendmentBeneficiaryConsent.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateExportLCAmendmentBeneficiaryConsent	SOA
19	sca_InitiateExportLCAmendmentService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateExportLCAmendmentService	SOA
20	sca_InitiateImportLCAmendmentService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateImportLCAmendmentService	SOA
21	sca_InitiateImportLCDrawingsApplicantResponse.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateImportLCDrawingsApplicantResponse	SOA
22	sca_InitiateImportLCDrawingsCustomerAcceptance.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateImportLCDrawingsCustomerAcceptance	SOA
23	sca_InitiateImportLCDrawingsService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateImportLCDrawingsService	SOA
24	sca_InitiateImportLCLiquidation.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateImportLCLiquidation	SOA
25	sca_InitiateImportLCUpdateDrawings.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateImportLCUpdateDrawings	SOA
26	sca_InitiateImportDocumentaryCollectionService.jar	\OBTFPM_PROCESS\tradeprocessflow\nitiateImportDocumentaryCollectionService	SOA
27	sca_InitiateExportLCDrawingsService.jar	\OBTFPM_PROCESS\tradeprocessflow\InitiateExportLCDrawingsService	SOA
28	sca_InitiateExportLCDrawingsBeneficiaryResponse.jar	\PROCESSFLOWS\tradeprocessflow\InitiateExportLCDrawingsBeneficiaryResponse	SOA
29	sca_InitiateExportLCDrawingsCustomerAcceptance.jar	\PROCESSFLOWS\tradeprocessflow\InitiateExportLCDrawingsCustomerAcceptance	SOA
30	sca_InitiateExportLCLiquidation.jar	\PROCESSFLOWS\tradeprocessflow\InitiateExportLCLiquidation	SOA
31	sca_InitiateImportDocumentaryCollectionAcceptanceService.jar	\PROCESSFLOWS\tradeprocessflow\InitiateImportDocumentaryCollectionAcceptanceService	SOA
32	sca_InitiateImportDocumentaryCollectionAmendService.jar	\PROCESSFLOWS\tradeprocessflow\InitiateImportDocumentaryCollectionAmendService	SOA
33	sca_InitiateImportDocumentaryCollectionLiquidationService.jar	\PROCESSFLOWS\tradeprocessflow\InitiateImportDocumentaryCollectionLiquidationService	SOA

6.4 <u>Steps to Deploy as Application</u>

To deploy application please refer ANNEXURE-1. "**How to deploy section**".

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7. Restarts and Refresh

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

7.1 <u>Restarting Servers</u>

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

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8. Logging Area

8.1 Introduction

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

8.1.1 Logging Area

Mid office Common Core Application writes logs in the below area of the server-
<WEBLOGIC_DOMAIN_CONFIG_AREA>/servers/MIDCOREAPP/logs/MIDCOREAPP.out
Let's assume a domain has been created Mid**Core_domain** with **managed_server** name called **MIDCOREAPP** in the following area of the server

/scratch/oracle/middleware/user_projects/domains/**MidCore_domain**. Logging area for Common core would be **/scratch/oracle/middleware/user_projects/domains/ MidCore_domain/servers/MIDCOREAPP/logs/MIDCOREAPP.out.**