# Oracle® Banking Microservices Architecture

## Common Core Services Installation Guide

Release 14.6.0.0.0

ORACLE®

Oracle Banking Microservices Architecture Common Core Services Installation Guide, Release 14.6.0.0.0

F59268-01

# Contents

# Preface

**Introduction**

This guide helps to install the common core services on designated environment. It is assumed that all the prior setup is already done related to WebLogic installation, WebLogic managed server creation, and Oracle DB installation.

> ✏️ **Note:**
>
> For the exact version to be installed, refer to the **Tech Stack** section of Release Notes.

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

**Audience**

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

**Acronyms and Abbreviations**

The list of the acronyms and abbreviations used in this guide are as follows:

**Table 1    List of Acronyms and Abbreviations**

| Abbreviation | Description |
|---|---|
| SMS | Security Management System |
| CMC | Common Core |

**List of Topics**

This guide is organized as follows:

**Table 2    List of Topics**

| Topics | Description |
|---|---|
| **Database Setup** | The topic provides the information about the database setup. |
| **Domain and Cluster Configuration** | The topic provides the information about the domain and cluster configuration. |
| **Data Sources Creation** | The topic provides the information about the data sources creation. |
| **Deployments** | The topic provides the information about the deployments. |

**Table 2   (Cont.) List of Topics**

| Topics | Description |
| --- | --- |
| **Restarts and Refresh** | The topic provides the information about the restarts and refresh. |
| **Logging Area** | This topic provides the information about the logging area. |
| **Known Issues - Resolutions** | This topic provides the information about the known issues and its resolutions. |

**Organization**

This guide allows the user to install the following services:

1. CMC-ACCOUNT-SERVICES

2. CMC ADDITIONAL-ATTRIBUTES-SERVICES

3. CMC-ADVICE-SERVICES

4. CMC-BASE-SERVICES

5. CMC-BATCH-SERVICES

6. CMC-BRANCH-SERVICES

7. CMC-BUSINESSOVERRIDES-SERVICES

8. CMC-CHARGES-CALCULATION-SERVICES

9. CMC-COREBANKING-ADAPTER-SERVICE

10. CMC-CURRENCY-SERVICES

11. CMC-CUSTOMER-SERVICES

12. CMC-DATASEGMENT-SERVICES

13. CMC-EXTERNAL-CHART-ACCOUNT

14. CMC-EXTERNAL-SYSTEM-SERVICES

15. CMC-EXTERNAL-VIRTUAL-ACCOUNT-SERVICES

16. CMC-FACILITIES-SERVICE

17. CMC-FC-AI-ML-SERVICES

18. CMC-ML-INDB-SERVICES

19. CMC-NLP-DASHBOARD-WIDGET-SERVICES

20. CMC-NLP- MAINTENANCE-SERVICES

21. CMC-NLP-OPENNLP-SERVICES

22. CMC-NLP-PIPELINE-SERVICES

23. CMC-NLP-TEXT-EXTRACTION-SERVICES

24. CMC-OBCBS-SERVICES

25. CMC-OBRH-SERVICE

26. CMC-REPORT-SERVICE

27. CMC-RESOURCE-SEGMENT-ORCHESTRATOR-SERVICE

28. CMC-SCREENCLASS-SERVICES

**Related Documents**

For more information, refer to the following documents:

* *ANNEXURE-1*

# 1

# Database Setup

This topic describes the database setup related configuration for Common Core Installation.

**Prerequisites**

The below setup is dependent on Common Core Schema and SMS schema.

Before proceeding with the below setup, make sure that the Common Core Schema and SMS Schema is provided.

**Database Setup**

To set up Database, Common Core schema to be created.

**Table 1-1　List of Services**

| Service Name | Schema Required |
|---|---|
| CMC-ACCOUNT-SERVICES | Yes (Common Core Schema) |
| CMC-ADDITIONAL-ATTRIBUTES-SERVICE | Yes (Common Core Schema) |
| CMC-ADVICE-SERVICES | Yes (Common Core Schema) |
| CMC-BASE-SERVICES | Yes (Common Core Schema) |
| CMC-BATCH-SERVICES | Yes (Common Core Schema) |
| CMC-BRANCH-SERVICES | Yes (Common Core Schema) |
| CMC-BUSINESSOVERRIDES-SERVICES | Yes (Common Core Schema) |
| CMC-CHARGES-CALCULATION-SERVICES | Yes (Common Core Schema) |
| CMC-COREBANKING-ADAPTER-SERVICE | Yes (Common Core Schema) |
| CMC-CURRENCY-SERVICES | Yes (Common Core Schema) |
| CMC-CUSTOMER-SERVICES | Yes (Common Core Schema) |
| CMC-DATASEGMENT-SERVICES | Yes (Common Core Schema) |
| CMC-EXTERNAL-CHART-ACCOUNT | Yes (Common Core Schema) |
| CMC-EXTERNAL-SYSTEM-SERVICES | Yes (Common Core Schema) |
| CMC-EXTERNAL-VIRTUAL-ACCOUNT-SERVICES | Yes (Common Core Schema) |
| CMC-FACILITIES-SERVICE | Yes (Common Core Schema) |
| CMC-FC-AI-ML-SERVICES | Yes (Common Core Schema) |
| CMC-ML-INDB-SERVICES | Yes (Common Core Schema) |
| CMC-NLP-DASHBOARD-WIDGET-SERVICES | Yes (Common Core Schema) |
| CMC-NLP-MAINTENANCE-SERVICES | Yes (Common Core Schema) |
| CMC-NLP-OPENNLP-SERVICES | Yes (Common Core Schema) |
| CMC-NLP-PIPELINE-SERVICES | Yes (Common Core Schema) |
| CMC-NLP-TEXT-EXTRACTION-SERVICES | Yes (Common Core Schema) |
| CMC-OBCBS-SERVICES | Yes (Common Core Schema) |
| CMC-OBRH-SERVICE | Yes (Common Core Schema) |
| CMC-REPORT-SERVICE | Yes (Common Core Schema) |

**Table 1-1    (Cont.) List of Services**

| Service Name | Schema Required |
|---|---|
| CMC-RESOURCE-SEGMENT-ORCHESTRATOR-SERVICE | Yes (Common Core Schema) |
| CMC-SCREENCLASS-SERVICES | Yes (Common Core Schema) |
| CMC-SETTLEMENTS-SERVICES | Yes (Common Core Schema) |
| CMC-TRANSACTIONCONTROLLER-SERVICES | Yes (Common Core Schema) |
| CMC-TXN-CODE-SERVICES | Yes (Common Core Schema) |
| CMC-OPDS-SERVICES | Yes (Common Core Schema) |
| CMC-APPLICATIONCATEGORY-SERVICES | Yes (Common Core Schema) |
| CMC-CHECKLIST-SERVICES | Yes (Common Core Schema) |
| CMC-CHECKLISTMANAGEMENT-SERVICES | Yes (Common Core Schema) |
| CMC-COMMENTS-SERVICES | Yes (Common Core Schema) |
| CMC-DOCUMENT-SERVICES | Yes (Common Core Schema) |
| CMC-DOCUMENTMANAGEMENT-SERVICES | Yes (Common Core Schema) |
| CMC-KYCCHECK-SERVICES | Yes (Common Core Schema) |
| CMC-MAILNOTIFICATION-SERVICES | Yes (Common Core Schema) |
| CMC-PRIORITY-SERVICES | Yes (Common Core Schema) |
| CMC-PROCESSCODE-SERVICE | Yes (Common Core Schema) |
| CMC-SEQUENCEGENERATOR-SERVICES | Yes (Common Core Schema) |
| CMC-SLA-SERVICES | Yes (Common Core Schema) |

# 2

# Domain and Cluster Configuration

This topic describes the domain configuration for Common Core services.

**Prerequisites**

Before proceeding with the below setup, make sure that the below steps are done.

- The machine should have Java JDK installed.
- Oracle Fusion Middleware is installed on the machine.

> **Note:**
>
> Before proceeding with the below steps, complete Oracle Banking
> Microservices Architecture installation as guided.

- Steps for creating all Common core domains, properties like port numbers, names will be changing based on the domain. Screenshots provided for such deviations. The domain creation process remains the same.

> **Note:**
>
> For the exact version to be installed, refer to **Tech Stack** section of **Release Notes**.

**Steps to Create Domain**

It is recommended to have different managed server in one domain for each application. For Creating Domain and Configuration, refer to **Create Domain and Cluster Configuration** section in *ANNEXURE-1*.

# 3
# Data Sources Creation

This topic describes the data sources creation for Common Core services.

**Prerequisites**

Database and application setup for Oracle Banking Microservices Architecture must be performed before the deployment setup.

The data sources for the respective micro-services must be created before the application deployment. Each data source targets the corresponding server on which the application will be deployed.

The following sections describes the list of data sources required to be created for Common Core services and the steps to configure them in the server.

**Figure 3-1    Data Source Creation**
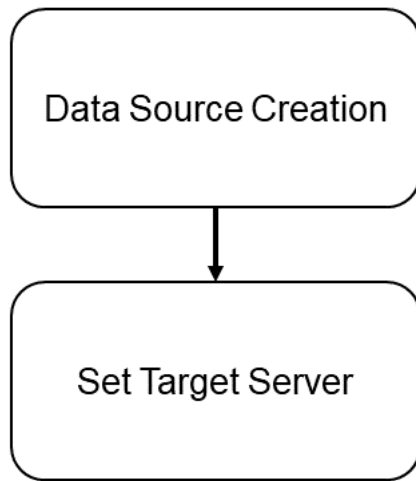


**Data Sources List**

The below list of the data sources must be created for each domain before the deployment of applications onto the managed servers.

**Table 3-1    Data Sources List**

| Data Source Name | Data Source JNDI | Targets |
|---|---|---|
| PLATO | jdbc/PLATO | Common Core Managed Server |
| CMNCORE | jdbc/CMNCORE | Common Core Managed Server, API Gateway Server |
| PLATOBATCH | jdbc/PLATOBATCH | Common Core Managed Server |

**Table 3-1    (Cont.) Data Sources List**

| Data Source Name | Data Source JNDI | Targets |
|---|---|---|
| SMS | jdbc/sms | Common Core Managed Server |
| PLATOUI | jdbc/PLATO_UI_CONFIG | Common Core Managed Server |
| PLATOFEED | jdbc/PLATOFEED | Common Core Managed Server |
| PLATOSECURITY | jdbc/PLATO_SECURITY | Common Core Managed Server |
| <PRODUCT PROJECTION SCHEMA> (Required only for DB based ML use cases) | jdbc/<PRODUCT PROJECTION SCHEMA> | Common Core Managed Server |

> **✎ Note:**
>
> Steps to create data source in WebLogic is same for all the above except for the connection details and names.

**Common Core Services using Plato-Feed**

The below listed common core services requires the data source to be created for plato-feeds on each domain prior to deployment of applications onto managed servers.

**Table 3-2    List of Services using Plato-Feed**

| Service Name | Data Source Name | Data Source JNDI | Targets |
|---|---|---|---|
| cmc-account-services | PLATOFEED | jdbc/PLATOFEED | Common Core Managed Server |
| cmc-base-services | PLATOFEED | jdbc/PLATOFEED | Common Core Managed Server |
| cmc-branch-services | PLATOFEED | jdbc/PLATOFEED | Common Core Managed Server |
| cmc-settlement-services | PLATOFEED | jdbc/PLATOFEED | Common Core Managed Server |
| cmc-currency-services | PLATOFEED | jdbc/PLATOFEED | Common Core Managed Server |
| cmc-customer-services | PLATOFEED | jdbc/PLATOFEED | Common Core Managed Server |

**Steps to create Data Source**

For creating data sources in managed server, refer to **Create Data Sources** section in *ANNEXURE-1*.

# 4

# Deployments

This topic describes the list of war files for the deployment and depreciation of the Common Core services, and the steps to deploy and undeploy them in the server.

**Prerequisites**

The database setup and data sources creation need to be performed before the application deployment stage. Each of the services corresponds to a specific war file that needs to be deployed into the server.

**Figure 4-1    Deployments**
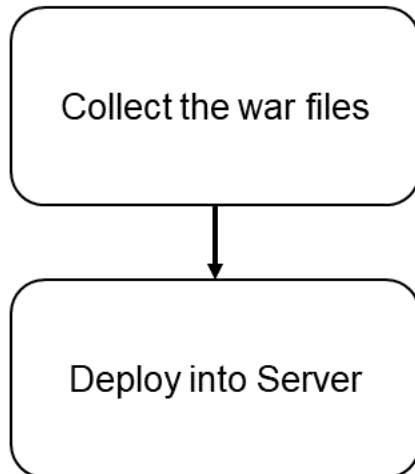


**Deployments List**

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

**Table 4-1    Deployments List**

| Application | Archive name | OSDC path | Targets |
|---|---|---|---|
| CMC-ACCOUNT-SERVICES | cmc-account-services-{version}.war | {Unzip OSDC Package}\cmc-account-services | Common Core Managed Server |
| CMC-ADDITIONAL-ATTRIBUTES-SERVICE | cmc-additional-attributes-services-{version}.war | {Unzip OSDC Package}\cmc-additional-attributes-services | Common Core Managed Server |
| CMC-ADVICE-SERVICES | cmc-advice-services-{version}.war | {Unzip OSDC Package}\cmc-advice-services | Common Core Managed Server |

**Table 4-1    (Cont.) Deployments List**

| Application | Archive name | OSDC path | Targets |
|---|---|---|---|
| CMC-BASE-SERVICES | cmc-base-services-{version}.war | {Unzip OSDC Package}\cmc-base-services | Common Core Managed Server |
| CMC-BATCH-SERVICES | cmc-batch-services-{version}.war | {Unzip OSDC Package}\cmc-batch-services | Common Core Managed Server |
| CMC-BRANCH-SERVICES | cmc-branch-services-{version}.war | {Unzip OSDC Package}\cmc-branch-services | Common Core Managed Server |
| CMC-BUSINESSOVERRIDES-SERVICES | cmc-businessoverrides-services-{version}.war | {Unzip OSDC Package}\cmc-businessoverrides-services | Common Core Managed Server |
| CMC-CHARGES-CALCULATION-SERVICES | cmc-charges-calculation-services-{version}.war | {Unzip OSDC Package}\cmc- charges-calculation -services | Common Core Managed Server |
| CMC-COREBANKING-ADAPTER-SERVICE | cmc-corebanking-adapter-service-{version}.war | {Unzip OSDC Package}\cmc-corebanking-adapter-service | Common Core Managed Server |
| CMC-CURRENCY-SERVICES | cmc-currency-services-{version}.war | {Unzip OSDC Package}\cmc-currency-services | Common Core Managed Server |
| CMC-CUSTOMER-SERVICES | cmc-customer-services-{version}.war | {Unzip OSDC Package}\cmc-customer-services | Common Core Managed Server |
| CMC-DATASEGMENT-SERVICES | cmc-datasegment-services-{version}.war | {Unzip OSDC Package}\cmc-datasegment-services | Common Core Managed Server |
| CMC-EXTERNAL-CHART-ACCOUNT | cmc-external-chart-account-{version}.war | {Unzip OSDC Package}\cmc-external-chart-account | Common Core Managed Server |
| CMC-EXTERNAL-SYSTEM-SERVICES | cmc-external-system-services-{version}.war | {Unzip OSDC Package}\cmc-external-system-services | Common Core Managed Server |
| CMC-EXTERNAL-VIRTUAL-ACCOUNT-SERVICES | cmc-external-virtual-account-services-{version}.war | {Unzip OSDC Package}\cmc-external-virtual-account-services | Common Core Managed Server |
| CMC-FACILITIES-SERVICE | cmc-facilities-service-{version}.war | {Unzip OSDC Package}\cmc-facilities-service | Common Core Managed Server |
| CMC-FC-AI-ML-SERVICES | cmc-fc-ai-ml-services-{version}.war | {Unzip OSDC Package}\cmc-fc-ai-ml-services | Common Core Managed Server |
| CMC-ML-INDB-SERVICES | cmc-ml-indb-services-{version}.war | {Unzip OSDC Package}\cmc-ml-indb-services | Common Core Managed Server |
| CMC-NLP-DASHBOARD-WIDGET-SERVICES | cmc-nlp-dashboard-widget-services-{version}.war | {Unzip OSDC Package}\cmc-nlp-dashboard-widget-services | Common Core Managed Server |
| CMC-NLP-MAINTENANCE-SERVICES | cmc-nlp-maintenance-services-{version}.war | {Unzip OSDC Package}\cmc-nlp-maintenance-services | Common Core Managed Server |
| CMC-NLP-OPENNLP-SERVICES | cmc-nlp-opennlp-services-{version}.war | {Unzip OSDC Package}\cmc-nlp-opennlp-services | Common Core Managed Server |
| CMC-NLP-PIPELINE-SERVICES | cmc-nlp-pipeline-services-{version}.war | {Unzip OSDC Package}\cmc-nlp-pipeline-services | Common Core Managed Server |

**Table 4-1    (Cont.) Deployments List**

| Application | Archive name | OSDC path | Targets |
|---|---|---|---|
| CMC-NLP-TEXT-EXTRACTION-SERVICES | cmc-nlp-text-extraction-services-{version}.war | {Unzip OSDC Package} \cmc-nlp-text-extraction-services | Common Core Managed Server |
| CMC-OBCBS-SERVICES | cmc-obcbs-services-{version}.war | {Unzip OSDC Package} \cmc-obcbs-service | Common Core Managed Server |
| CMC-OBRH-SERVICES | cmc-obrh-services-{version}.war | {Unzip OSDC Package}\ cmc-obrh-services | Common Core Managed Server |
| CMC-REPORT-SERVICE | cmc-report-service-{version}.war | {Unzip OSDC Package} \cmc-report-service | Common Core Managed Server |
| CMC-RESOURCE-SEGMENT-ORCHESTRATOR-SERVICE | cmc-resource-segment-orchestrator-service-{version}.war | {Unzip OSDC Package} \cmc-resource-segment-orchestrator-service | Common Core Managed Server |
| CMC-SCREENCLASS-SERVICES | cmc-screenclass-services-{version}.war | {Unzip OSDC Package} \cmc-screenclass-services | Common Core Managed Server |
| CMC-SETTLEMENTS-SERVICES | cmc-settlements-services-{version}.war | {Unzip OSDC Package} \cmc-settlements-services | Common Core Managed Server |
| CMC-TRANSACTIONCONTROLLER-SERVICES | cmc-transactioncontroller-services-{version}.war | {Unzip OSDC Package} \cmc-transactioncontroller-services | Common Core Managed Server |
| CMC-TXN-CODE-SERVICES | cmc-txn-code-services-{version}.war | {Unzip OSDC Package} \cmc-txn-code-services | Common Core Managed Server |
| CMC-APPLICATIONCATEGORY-SERVICES | cmc-applicationcategory-services-{version}.war | {Unzip OSDC Package} \cmc-applicationcategory-services | Mid-Office Managed Server |
| CMC-CHECKLIST-SERVICES | cmc-checklist-services-{version}.war | {Unzip OSDC Package} \cmc-checklist-services | Mid-Office Managed Server |
| CMC-CHECKLISTMANAGEMENT-SERVICES | cmc-checklistmanagement-services-{version}.war | {Unzip OSDC Package} \cmc-checklistmanagement-services | Mid-Office Managed Server |
| CMC-COMMENTS-SERVICES | cmc-comments-services-{version}.war | {Unzip OSDC Package} \cmc-comments-services | Mid-Office Managed Server |
| CMC-DOCUMENT-SERVICES | cmc-document-services-{version}.war | {Unzip OSDC Package} \cmc-document-services | Mid-Office Managed Server |
| CMC-DOCUMENTMANAGEMENT-SERVICES | cmc-documentmanagement-services-{version}.war | {Unzip OSDC Package} \cmc-documentmanagement-services | Mid-Office Managed Server |
| CMC-KYCCHECK-SERVICES | cmc-kyccheck-services-{version}.war | {Unzip OSDC Package} \cmc-kyccheck-services | Mid-Office Managed Server |
| CMC-MAILNOTIFICATION-SERVICES | cmc-mailnotification-services-{version}.war | {Unzip OSDC Package} \cmc-mailnotification-services | Mid-Office Managed Server |

**Table 4-1    (Cont.) Deployments List**

| Application | Archive name | OSDC path | Targets |
|---|---|---|---|
| CMC-PRIORITY-SERVICE | cmc-priority-service-{version}.war | {Unzip OSDC Package}\cmc-priority-service | Mid-Office Managed Server |
| CMC-PROCESSCODE-SERVICE | cmc-processcode-service-{version}.war | {Unzip OSDC Package}\cmc-processcode-service | Mid-Office Managed Server |
| CMC-SEQUENCEGENERATOR-SERVICES | cmc-sequencegenerator-services-{version}.war | {Unzip OSDC Package}\cmc-sequencegenerator-services | - |
| CMC-SLA-SERVICES | cmc-sla-services-{version}.war | {Unzip OSDC Package}\cmc-sla-services | - |
| CMC-OPDS-SERVICES | cmc-opds-services-{version}.war | {Unzip OSDC Package}\cmc-opds-services | Common Core Managed Server |

> **Note:**
>
> Refer to OSDC file for the exact version number for each service.
>
> For the instructions to deploy the application, refer to the **Deploy Application** section in *ANNEXURE-1* .

**Depreciated Services**

Deploy the common core service to clean up the depreciated service-related Database objects from common core / SMS / PLATO schemas.

**Table 4-2    Depreciation File**

| Application | Archive name | OSDC path | Targets |
|---|---|---|---|
| CMC-SERVICE-DEPRECATION-SVC | cmc-service-deprecation-svc-{version}.war | {Unzip OSDC Package}\cmc-service-deprecation-svc | Common Core Managed Server |

The below table provides the details of the depreciated services from the Common Core application and undeploy the services one after other in the same order as given below.

**Table 4-3    List of Depreciated services**

| Application | Archive name | Targets |
|---|---|---|
| CMC-EARMARK-SERVICES | cmc-earmark-services-{version}.war | Common Core Managed Server |
| CMC-QUEUE-SERVICES | cmc-queue-services-{version}.war | Common Core Managed Server |

**Table 4-3    (Cont.) List of Depreciated services**

| Application | Archive name | Targets |
| --- | --- | --- |
| CMC-SERVICE-DEPRECATION-SVC | cmc-service-deprecation-svc-{version}.war | Common Core Managed Server |

> **Note:**
>
> Refer to OSDC file for the exact version number for each service.
>
> For the instructions to undeploy the deprecated applications, refer to the **Undeploy Application** section in *ANNEXURE-1*.

# 5

# Restarts and Refresh

This topic provides the information to restart and refresh the application.

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

> ✏ **Note:**
>
> Refer to the **Restart Servers** section in *ANNEXURE-1* for the instruction to restart the server.

# 6
# Logging Area

This topic describes the logging area where the logs are found after deploying the Common Core applications in the WebLogic server.

Common Core Application writes logs in the below area of the server:

`<WEBLOGIC_DOMAIN_CONFIG_AREA>/servers/CMNCOREAPP/logs/CMNCOREAPP.out`

Let's assume a domain has been created **CommonCore_domain** with **managed_server** name called **CMNCOREAPP** in the following server area.

`/scratch/oracle/middleware/user_projects/domains/CommonCore_domain.`

**Logging area for Common core is** `/scratch/oracle/middleware/user_projects/domains/ CommonCore_domain/servers/CMNCOREAPP/logs/CMNCOREAPP.out`

# 7
# Known Issues - Resolutions

This topic describes the known issues encountered while using the application and its resolutions.

**cmc-ml-indb-services**

Troubleshooting deployment failure in cmc-ml-indb-services.war

**Deployment Error –**

1.  org.flywaydb.core.api.FlywayException: Validate failed: Migration checksum mismatch for migration version 101.32.5.0.0.4.101032004.1.1 -> Applied to database : 589007451 -> Resolved locally : -692687536 :org.flywaydb.core.api.FlywayException:Validate failed: Migration checksum mismatch for migration version 101.32.5.0.0.4.101032004.1.1 -> Applied to database : 589007451 -> Resolved locally : -692687536

2.  org.flywaydb.core.api.FlywayException: Validate failed: Migration checksum mismatch for migration version 101.32.5.0.0.4.101032004.1.1 -> Applied to database : -692687536-> Resolved locally : 589007451:org.flywaydb.core.api.FlywayException:Validate failed: Migration checksum mismatch for migration version 101.32.5.0.0.4.101032004.1.1 -> Applied to database : -> -692687536 Resolved locally : 589007451

**Resolution –**

1.  Error 1 should get resolved after applying the war from latest patchset.

2.  Error 2 results in case there are manual modifications made in table flyway_schema_history. That is, checksum of script/file V101_32_5.0.0_4_101032004_1_1__CMC_TM_ML_ALGO_REPO.sql has been manually changed/updated to -692687536 in flyway table. If so please delete all the entries in flyway_schema_history table for script V101_32_5.0.0_4_101032004_1_1__CMC_TM_ML_ALGO_REPO.sql then redeploy/re-run the latest cmc-ml-indb-services.war.

**cmc-branch-service**

Troubleshooting steps for failed cmc-branch-service-6.0.0

For branch service, the below steps needs to be executed for deploying the service over the March patchset.

1.  Run the following scripts on the SMS schema:
    delete from "flyway_schema_history" where "version" in ('101.4.5.11.0.1.00051001006.10.1');

    delete from SMS_TM_FUNC_ACTIVITY_DETAIL where ID in ('CMC_FA_BRANCH_WORKHR_GETALL','CMC_BRANCH_WORKHR_GETID','CMC_BRANCH_WORKHR_SAVE','CMC_FA_BRANCH_TIME_GETALL','CMC_BRANCH_WORKHR_AUTHQRY','CMC_BRANCH_WORKHR_AUTH','CMC_BRANCH_WORKHR_CLOSERECRD','CMC_BRANCH_WORKHR_DELETE','CMC_BRANCH_WORKHR_GETHISTRY', 'CMC_BRANCH_WORKHR_MODRECRD','CMC_BRANCH_WORKHR_ROPNRECRD');

commit;

2. Start the cmc-branch-service-6.0.0 application in the Weblogic.

# Index