Oracle Financial Services Behavior Detection Application

AAI Metadata Migration v8.0.1.0.0

Migration Guide

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FINANCIAL SERVICES

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Executive Summary

This document details about the migration of assumptions and rules as part of BD pack 8.0.1.0.0. Along with the application-specific data, the Migration Kit automatically migrates the relevant Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) metadata.

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About this Guide

This document describes the procedural execution of Oracle Financial Services Migration Tool to migrate the application metadata from FCCM 6.1.x|FCCM 6.2.x|KYC 1.2|CTR 1.2.1 to OFSAA 8.0.1.0.0. It includes detailed information about the migration process, source and target data models, and acceptance testing of the target system.

Acronyms and Terminologies

Acronyms

Acronym	Description
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure
OFSAA	Oracle Financial Services Analytical Applications
BD	Behavior Detection
ICC	
Atomic Schema	Database schema where the application data model is uploaded.
Config Schema	Database schema which contains setup related configurations and metadata.
ETL	
AMHM	
FCCM	Financial Crime and Compliance Management
UMM	
KYC	Know Your Customer
RRF	Run Rule Frame work

Terminologies

- **Source**: The OFSAA environment from which metadata needs to be migrated
- **Target**: The OFSAAI environment into which metadata needs to be imported
- **Database Schemas:**

- o **Config schema:** Refers to the configuration schema used by OFSAAI. The OFSAAI stores various information like users, user-privileges, ICC batches and so on in this schema.

- o **Atomic schema:** Refers to the schema corresponding to each information-domain in OFSAAI. This schema stores information like staging/processing/result data. Few applications also store their metadata within various tables in this schema.

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1 Introduction

1.1 Overview of Migration Tool

The Migration Tool is designed to allow customers to easily carry forward metadata to the Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) v8.0.1.0.0 instance. The procedure described in this guide is a general approach that a customer can follow during the migration.

If the Source OFSAAI instance contains multiple applications, you must migrate each of these applications separately using the respective application's migration kit. If any of the applications share object types, the migration kit re-migrates and overwrites such artifacts.

Implementation Note: For major release, there are functional differences that result in difficulty or the inability to migrate certain data. In these cases, this guide tries to recommend the best approach to the customer in order to either manually migrate or re-implement using the new application.

1.2 Recommendations

- The migration kit may modify the structure of some of the objects present on the Source Schemas. Therefore, you should consider cloning the source OFSAAI environment and then run the migration scripts against the clones.

- Below are the list of applications part of the Behavior Detection Application pack, from version 8.0.0.0.0 onwards.

  o Anti Money Laundering(AML)

  o Fraud(FR)

  o Trading Compliance(TC)

  o Broker Compliance(BC)

  o Energy and Commodity Trading Compliance(ECTC)

  o Enterprise Case Management(ECM)

  o Personal Trading Approval(PTA)

  o Foreign Account Tax Compliance Act Management(FATCA)

  o Know Your Customer(KYC)

  o Currency Transaction Reporting(CTR)

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- Therefore, if you have the following other applications on different OFSAAI instances on the Source, you should consider cloning / merging them into a single information domain using either the Object-Migration or Archive-restore module.

▪ You should also consider cleaning up the clone of source (remove any old/obsolete objects you do not wish to migrate) and taking backups of the Source Config and Atomic schema clones. This is required if you need to restore the Source Config and Atomic schemas from the backup and restart the migration.

   For more information regarding backup strategy and backup procedure, refer to [Prepare a Backup Strategy](#) section.

- During the migration process, no metadata changes should be done on the Source OFSAAI environment.

- There should be no time-lag between the migrations of all such applications. If there are any time lags, then the metadata belonging to the application that is migrated the last takes precedence.

- Ensure that you have sufficient free disk space available to store the migration artifacts.

1.3   What this Utility does not Migrate

▪ Modifications made to the metadata that comes packaged with the application installers. You should consider using the OFSAAI's Archive-Restore functionality to migrate such customizations.

   For example, applications seed many AAI artifacts such as T2Ts, Data Transformation Rules, ICC Batches, and so on. Such artifacts are not migrated. If you have customized them in your Source environment, you should make similar customizations in the Target environment. You can perform these as a post-migration activity.

▪ Data from the staging/processing/results tables:

   The scope of this document is restricted to metadata-migration, and does not include data-migration. It is recommended that you migrate the Data after metadata-migration is completed.

▪ OFSAAI 8.0.0.0.0 introduces considerable changes to the user-security model, as well as introduces the framework for supporting object-security. You should reassess your user-security configuration and reconfigure the same on OFSAAI 8.0.0.0.0 before metadata-migration is initiated.

▪ Any other object-types as listed in [Appendix C](#).

2 Preparing a Migration Plan

To execute migration scripts, follow these steps:

- Becoming Familiar with the New Release

- Understanding the Prerequisites

- Choosing an Upgrade Method

- Preparing a Backup Strategy

- Developing a Testing Plan

- Testing Migration Plan on a Test Database

2.1 Becoming Familiar with New Release

To execute acceptance tests, users involved in the migration process need to be familiar with the architecture, tools, and the user interface of the new release. For more information, refer OFSAA User Guides in **OTN**. Users want to become skilled at accessing similar objects such as business rules, dimensions, users, folders, and hierarchies in both source and target installations.

2.2 Understanding the Prerequisites

Following are the prerequisites to run the migration utility.

2.2.1 Software Versions on Source

- OFSAAI version must be v7.3.5.1.1 or a later 7.3.5.x version

- Source version should be any of the following FCCM suit of product Versions.

    o FCCM 6.1.x

    o FCCM 6.2.x

    o KYC 1.2

    o CTR 1.2.1

2.2.2 Software Versions on Target

Behavior Detection Application Pack v8.0.1.0.0 must be installed.

The migration kit expects that the data model customizations made on the Source are already present in the Target. For example, customizations could include user-defined dimensions, dimension attributes, instrument and transaction tables and columns, lookup tables and so on.

2.3   Upgrading Method

The existing upgrade method uses a manual script-driven process for the Migration Tool. This process is described in this guide.

As an alternative to use the migration tool, you can choose to manually reconfigure all the metadata on a fresh instance of Behavior Detection Application Pack 8.0.1.0.0

2.4   Preparing a Backup Strategy

The success of your migration depends heavily on the design and execution of an appropriate backup strategy.

To develop a backup strategy, consider the following questions:

- How long can the production database remain inoperable before business consequences become intolerable?

- What backup strategy should be used to meet your availability requirements?

- Are backups archived in a safe, offsite location?

- How quickly can backups be restored (including backups in offsite storage)?

- Have recovery procedures been tested successfully?

2.4.1   Backup Procedure

At a minimum, take a backup of the CONFIG and ATOMIC schemas. Ensure that the folder has necessary permissions to create dump and log files.

Use the following command to create a backup:

```
exp <schema  name>/<password>@<database  sid>  file=<export  filename>
log=<log filename> full=N
```

2.5   Preparing a Testing Plan

- You need a series of carefully designed tests to validate all stages of the upgrade process.

- Executed rigorously and completed successfully, these tests ensure that the process of upgrading the production database is well understood, predictable, and successful.

- Perform as much testing as possible before upgrading the production database. Do not underestimate the importance of a test program.

The testing plan must include the following types of tests:

- **Minimal Testing:** Entails moving application from the current database to the new database and running the application without enabling any new features. Minimal testing is a very limited type of

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testing that may not reveal potential issues that may appear in a "real-world" production environment. However, minimal testing immediately reveals any application startup or invocation problems.

- **Functional Testing:** Includes a set of tests in which new and existing functionality of the system are tested after the migration. Functional testing includes all database, networking, and business/application components. The objective of functional testing is to verify that each component in common between the source and target systems behaves properly, as well as confirming that new features are working.

- **Performance Testing:** Compares the performance of various business functions on both the source and target systems. Unlike volume or load stress testing, base performance testing is meant to provide a real-world comparison of common usage without the setup and long run times. Successful completion of base performance testing should be considered a prerequisite to volume or load stress testing.

2.6   Testing Migration Plan on a Test Environment

Create a test environment that does not interfere with the current production environment. Practice migration of the application metadata using the test environment. The best test, if possible, is performed on an exact copy of the database to be migrated, rather than on a downsized copy or test data. This familiarizes you with the migration process and minimize unexpected issues.

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3 Pre-Migration Activities

Prior to executing the Migration Tool scripts for specific object types, refer the latest release notes to identify any infrastructure and application issues that may impact migration.

For pre-migration activities, follow these steps:

- The migration kit may modify the structure of some of the objects present on the Source Schemas. Therefore, you should consider cloning the source OFSAAI environment and then run the migration scripts against the clones.

- Below are the lis of applications that are part of the Behavior Detection Application Pack, from version 8.0.0.0.0 onwards.

  - o Anti Money Laundering(AML)

  - o Fraud(FR)

  - o Trading Compliance(TC)

  - o Broker Compliance(BC)

  - o Energy and Commodity Trading Compliance(ECTC)

  - o Enterprise Case Management(ECM)

  - o Personal Trading Approval(PTA)

  - o Foreign Account Tax Compliance Act Management(FATCA)

  - o Know Your Customer(KYC)

  - o Currency Transaction Reporting(CTR)

- Therefore, if you have the above listed applications on different OFSAAI instances on the Source, you should consider cloning / merging them into a single information domain using either the Object-Migration or Archive-restore module.

  Note: Resolve any subsequent metadata conflicts arising out of this merge.

- Consider cleaning up the clone of source (remove any old/obsolete objects you do not wish to migrate) and taking backups of the Source Config and Atomic schema clones. This is required if you need to restore the Source Config and Atomic schemas from the backup and restart the migration.

- During the migration process, no metadata changes should be done on the Source OFSAAI environment.

- There should be no time-lag between the migration of all such applications.

  If there are any time lags, then the metadata belonging to the application that is migrated the last takes precedence.

- OFSAAI Folders (Segments), Groups, Users and their access privileges.

  OFSAAI 8.0.0.0.0 introduces considerable changes to the user-security model and the framework for supporting object-security. You should reassess your user-security configuration and reconfigure the same on OFSAAI 8.0.0.0.0 before metadata-migration is initiated.

- For the ETL object migration, the source and application in the target are expected to be the same as source.

- Ensure that you have sufficient free disk space available to store the migration artifacts.

- The SYSADMN user should be provided access to the existing segments in the source as well as the target environment.

- The DB Name for the Database server configuration should correspond to the actual SID of the target and source environment DB.

4   Migrating Metadata

This section outlines the migration process for the specific metadata of the applications that are part of BD application pack. Refer to [Appendix A](#) to view the list of metadata object-types that are migrated via this kit.

To migrate metadata, follow these steps:

- [Preparing the Source](#)

- [Metadata Extraction from the Source](#)

- [Metadata Import into the Target](#)

> **NOTE:** During the Import, if any metadata exists with the same code as in the source, it gets overwritten. For example, if two applications have a shared object type, the common object is overwritten when data for the second application is migrated.

4.1   Preparing for Migration

4.1.1   Activities on the Source

Perform the following activities on the Source:

1. Upgrade this cloned/merged environment to OFSAAI v7.3.5.1.0, and apply the following patches:

   Patch **20527601**

   Patch **20567446**

   Patch **21537078**

   Patch **21483558**

2. Ensure that the FCCM application version should be any of the following listed below.

   - o   FCCM 6.1.x

   - o   FCCM 6.2.x

   - o   KYC 1.2

   - o   CTR 1.2.1

3. Ensure you have access to the migration utility folder $FIC_HOME/utility/Migration where OFSAAI is installed.

4. Backup the Config and the Atomic schema(s).

5. Grant the SYSADMN user access to all the segments available.

4.1.2 Activities on the Target

Perform the following activities on the Target:

1. Install BD application pack version 8.0.1.0.0.

2. Identify the data model customizations that have been performed on the source. Repeat the customizations on the v8.0.1.0.0 data-models and upload the same in Sliced Model Upload mode.

3. If the customization involves new AMHM dimensions, complete leaf-registration for the same.

NOTE: Leaf-registration assigns a unique Dimension ID which may or may not be the same as that assigned to it on the source. If the Dimension IDs are not the same, the migration kit synchronizes the dimension IDs. That is, the Dimension IDs on the target are changed to reflect the IDs on the source.

4. Create the required number of OFSAAI users on the target – the user IDs should be the same as in the Source.

5. Create the required number of Infodom folders (or segments) on the target – the segments should be the same as in the Source.

6. Take the Backup of the Config and the Atomic schemas.

7. Apply the following patch:

   Patch **20567945**

   Patch **21470948**

8. Ensure you have access to the migration utility folder $FIC_HOME/utility/Migration where OFSAAI 8.0.1.0.0 is installed.

Note on Localization: Regardless of how many Language Packs are available on Source, all of the specified metadata is migrated to the Target. If you do not install Language Packs on the Target, some of the metadata may not be visible.

4.1.3 Performing the Migration

To perform migration, refer thefollowing chapters in the document *Oracle Financial Services Behavior Detection Application Migration Guide Release 8.0.1.0.0*

- o Chapter 19 AAI Application Metadata Migration -Export
- o Chapter 20 AAI Application Metadata Migration –Import

Please refer to the troubleshooting-section, if you encounter any issues while executing the scripts

5 Post Migration Activities

Follow these steps after executing migration script:

5.1   Activities after Migration

Modifications made to the metadata that comes packaged with the application installers are not be migrated by this migration kit. For example, applications seed many AAI artifacts such as T2Ts, Data Transformation Rules, ICC Batches, and so on. Such artifacts are not migrated. Once the migration kit has completed its activities, you should consider using the OFSAAI's Archive-Restore functionality to migrate such customizations, once the migration kit has completed its activities.

The migration kit folder from where the export was generated/imported can be cleared after the migration is deemed successful.

5.2   Application Preferences

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Appendix A

This appendix covers following topics:

- [Limitations/ Known issues](#)

- [List of metadata types](#)

Limitations/ Known issues

If same metadata resides in the target setup, the data is overwritten by the data from source setup. The source and target schema should be same.

List of metadata-types, supported by this kit

- UMM objects

  o Aliases

  o Datasets

  o Business Measures

  o Business Processors

  o Business Hierarchies

  o Derived Entity

  o Forms

  o Menu

  o Tab

  o Template

- RRF Objects

  o Rule

  o Process

  o Run

- ICC Batches

- ETL

- Mapper

- Data Trasnformations

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Appendix B - Troubleshooting and Logging

Once the execution is completed successfully, you can view the related log files from the $FIC_HOME/utility/Migration/logs folder.

NOTE: If any of the objects fails, then you need to perform a Command Line Utility migration. *For more information, refer to the Command Line Utility section in OFSAAI 8.0.0.0.0 User Guide shared at OTN Documentation Library*.

Appendix C - Objects Not Migrated

- Folders

- Download Data

- Stress Testing definitions

- Data Source mappings

- AMHM

- Filters

- Expressions

Limitation

For every execution of the archive/restore only one *LIST ID* is involved.

NOTE: For any errors please refer to the `FUSIONSUBSYSTEMSService.log` placed in the location
`/scratch/ofsaadb/apache-tomcat-7.0.19/webapps/OFSAAI/logs`.

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Oracle Financial Services Data Migration Scripts Metadata Migration from v6.1.x to v8.0.0.0.0

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