

Procedure to merge Oracle Hyperion Financial Close Management Single Node Environment (11.1.2.3) FCM and ARM split database's into 1 single FCM SQL Server database

Purpose

This document explains how to merge an 11.1.2.3 Financial Close Management split database's into a single database.

Note: For SQL Server Databases only.

Known Limitations:

1. These procedures do not apply to multi-node installations of FCM. A second set of procedures will be published for this use case.
2. This document assumes balance data is loaded from flat files. Additional FDMEE post steps would be required to migrate data load configuration for other source types.
3. Prior to performing these procedures, all ARM Periods must be locked. Administrators can re-open the periods following the database merge procedure. Workflow can resume on reconciliations once periods have been re-opened.
4. These procedures were tested on an 11.1.2.3.000 environment. We are aware of no limitations preventing these procedures from being used on 11.1.2.3 patch set updates.

References:

Oracle® Fusion Middleware Administrator's Guide: 16.3 performing a Backup - http://docs.oracle.com/cd/E14571_01/core.1111/e10105/br_bkp.htm#CEGBGIEG

Financial Close Management Oracle By Example (OBE) for Single Node Document

<http://www.oracle.com/webfolder/technetwork/tutorials/obe/hyp/FCM11.1.2.3-SingleNodeInstall/FCMSingleNodeInstall.htm>

Prerequisites:

Single node environment that has FCM and ARM in separate (split) database's setup by following the OBE reference above.

Environment Assumptions:

It is assumed that your Financial Close Management environment is in proper working order and that your environment was installed using the OBE doc listed above in the references section.

Environment details:

Database Used: SQL Server 2008

Single node: 11.1.2.3.000 EPM server

Applications installed: FCM, HSS, FDMEE (Version: 11.1.2.3.000) and SOA (Version: 11.1.1.7.000)

Web server: OHS (Oracle HTTP Server)

Web application server: Weblogic

Deployment: Traditional (Non-Compact)

OS: Windows

High level Sequence of steps:

Ensure your current environment is in proper working order and validator tool is successful. If not successful correct all issues before proceeding.

- 1) Backup all databases. FCM, HSS, FDMEE and SOA databases
- 2) Create a backup of the Middleware and Oracle Inventory directory.
- 3) Manually create ARM tables in the existing FCM database.
- 4) Export (split) existing database 'arm' into existing database called 'fcm' in order to merge tables together.
- 5) The value of the 'NEXT_ID' column in S_ROW_ID table should be the larger value of the 2 values in each of the 'fcm' and 'arm' databases.
- 6) Re-run config tool to point to merged single database 'fcm'. Please select to 'Reuse the existing database' option.
- 7) Confirm datasources are pointing to correct fcm database in weblogic.
- 8) Post steps for FDMEE

Detailed Sequence of Steps:

- 1) Have your database administrator perform a full database backup using 'Copy database' utility in SQL Server Management Studio.
 - a. In SQL Server Management Studio right click on FCM database and select Tasks > Copy Database

2) **Create a zip of the entire Middleware and Oracle Inventory directories. (For backup purposes only - optional)**

Navigate to <Middleware Home> (e.g. C:\Middleware) and use 7zip to zip the Middleware folder. You may also reference the below link for other methods. Make sure that all EPM related services are shutdown before zipping. It will take close to 40 minutes to zip the entire Middleware folder.

Navigate to the Oracle Inventory Location (e.g. C:\Program Files\Oracle) and use 7zip to zip the Oracle folder.

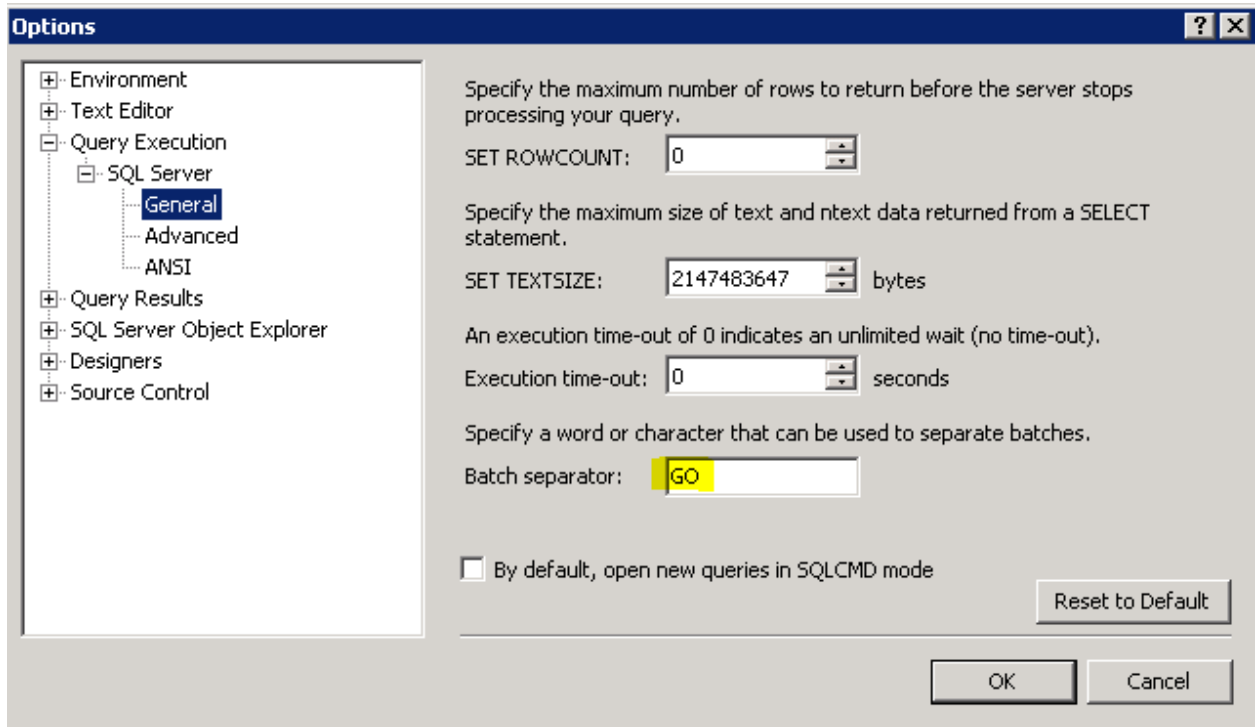
Oracle® Fusion Middleware Administrator's Guide: 16.3 Performing a Backup - http://docs.oracle.com/cd/E14571_01/core.1111/e10105/br_bkp.htm#CEGBGIEG

It's assumed that your EPMSys11R1 folder is also under your Middleware folder as per instructions in the OBE (Oracle By Example).

3) **Manually create ARM tables in existing FCM database**

- a. Before running the script please ensure that your SQL Server Query Execution Batch Separator option is set as the default GO. This can be changed in menu Tools > Options > Query Execution > SQL Server > Batch Separator:

Example:



- b. Run the ARM sql scripts on FCM DB in order from:
<epm_home>\products\AccountReconciliation\database\MSSQLServer for example:
C:\Oracle\Middleware\EPMSys11R1\products\AccountReconciliation\database\MS
SQLServer

i. createARMTables.sql

Result -Warning messages like this can be ignored:

```
Msg 2714, Level 16, State 6, Line 3
There is already an object named 'S_ROW_ID' in the database.
Warning! The maximum key length is 900 bytes. The index 'ARM_SUMMARY_AMOUNTS_PK' has maximum
length of 8026 bytes. For some combination of large values, the insert/update operation will
fail.
Warning: The maximum length of the row exceeds the permissible limit of 8060 bytes. For some
combination of large values, the insert/update operation will fail.
Warning! The maximum key length is 900 bytes. The index 'ARM_SETTINGS_PK' has maximum length of
1020 bytes. For some combination of large values, the insert/update operation will fail.
Warning! The maximum key length is 900 bytes. The index 'ARM_BALANCES_PK' has maximum length of
4062 bytes. For some combination of large values, the insert/update operation will fail.
Msg 2714, Level 16, State 4, Line 2
There is already an object named 'AUXSTART_LESS_THAN_AUXMAX' in the database.
Msg 1750, Level 16, State 0, Line 2
Could not create constraint. See previous errors.
Msg 2714, Level 16, State 4, Line 2
There is already an object named 'AUX_MAIN_DONT_OVERLAP' in the database.
Msg 1750, Level 16, State 0, Line 2
Could not create constraint. See previous errors.
Msg 2714, Level 16, State 4, Line 2
There is already an object named 'NEXT_LESS_THAN_MAX' in the database.
Msg 1750, Level 16, State 0, Line 2
Could not create constraint. See previous errors.
Msg 2714, Level 16, State 4, Line 2
There is already an object named 'START_LESS_THAN_NEXT' in the database.
Msg 1750, Level 16, State 0, Line 2
Could not create constraint. See previous errors.
Warning! The maximum key length is 900 bytes. The index 'ARM_RECONCILIATIONS_N1' has maximum
length of 4009 bytes. For some combination of large values, the insert/update operation will
fail.
Warning! The maximum key length is 900 bytes. The index 'ARM_SUMMARY_REC_CHILDREN_PK' has maximum
length of 4009 bytes. For some combination of large values, the insert/update operation will
fail.
Warning! The maximum key length is 900 bytes. The index 'ARM_SUMMARY_BALANCES_PK' has maximum
length of 4013 bytes. For some combination of large values, the insert/update operation will
fail.
Warning! The maximum key length is 900 bytes. The index 'ARM_TRANSACTIONS_N2' has maximum length
of 4000 bytes. For some combination of large values, the insert/update operation will fail.
Caution: Changing any part of an object name could break scripts and stored procedures.

(0 row(s) affected)

(0 row(s) affected)
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ii. UpgradeData.sql

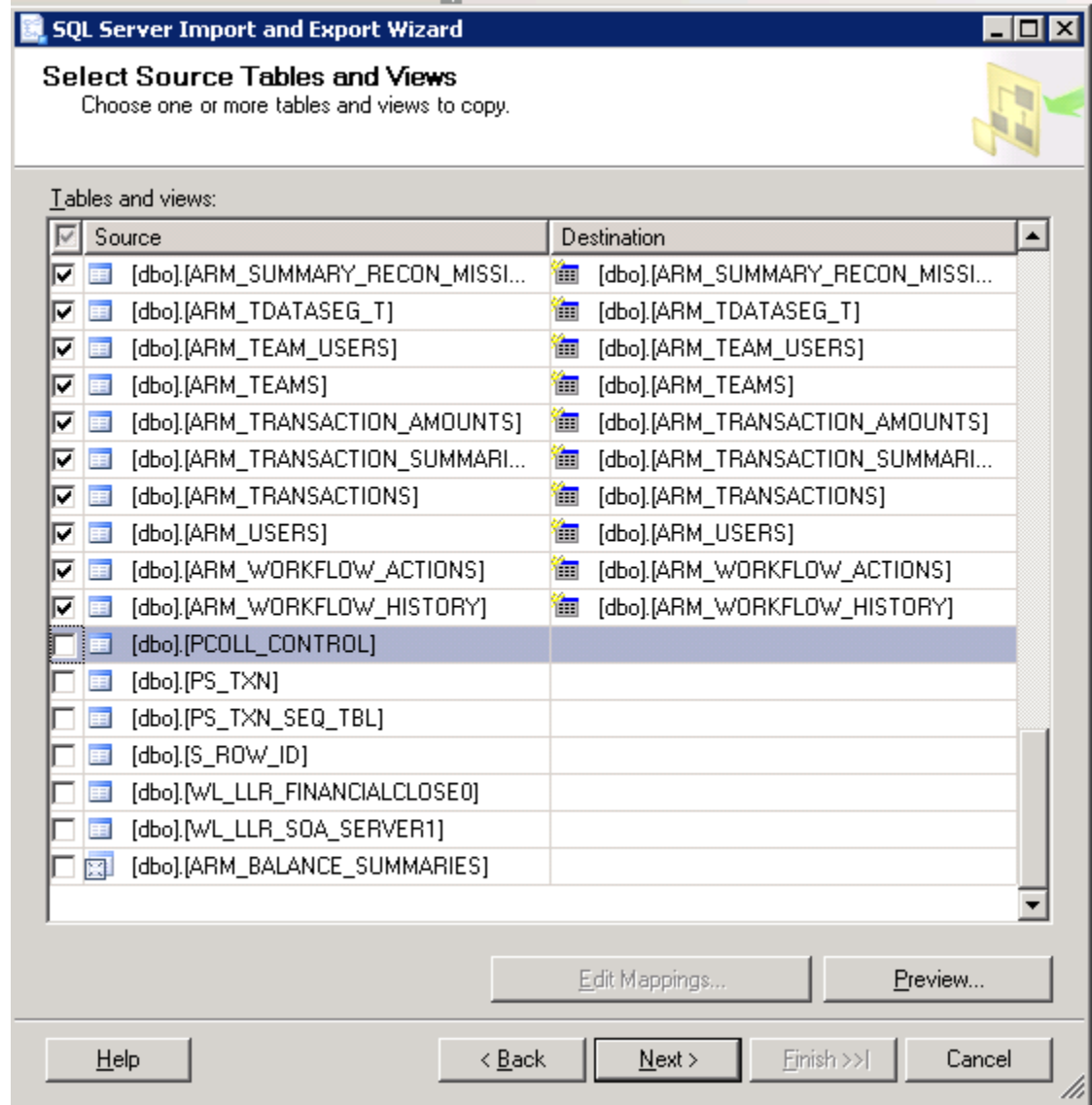
Should be successful without errors

4) Export (split) existing database 'arm' into existing database called 'fcm' in order to merge tables together.

Export existing 'arm' tables into existing 'fcm' database.

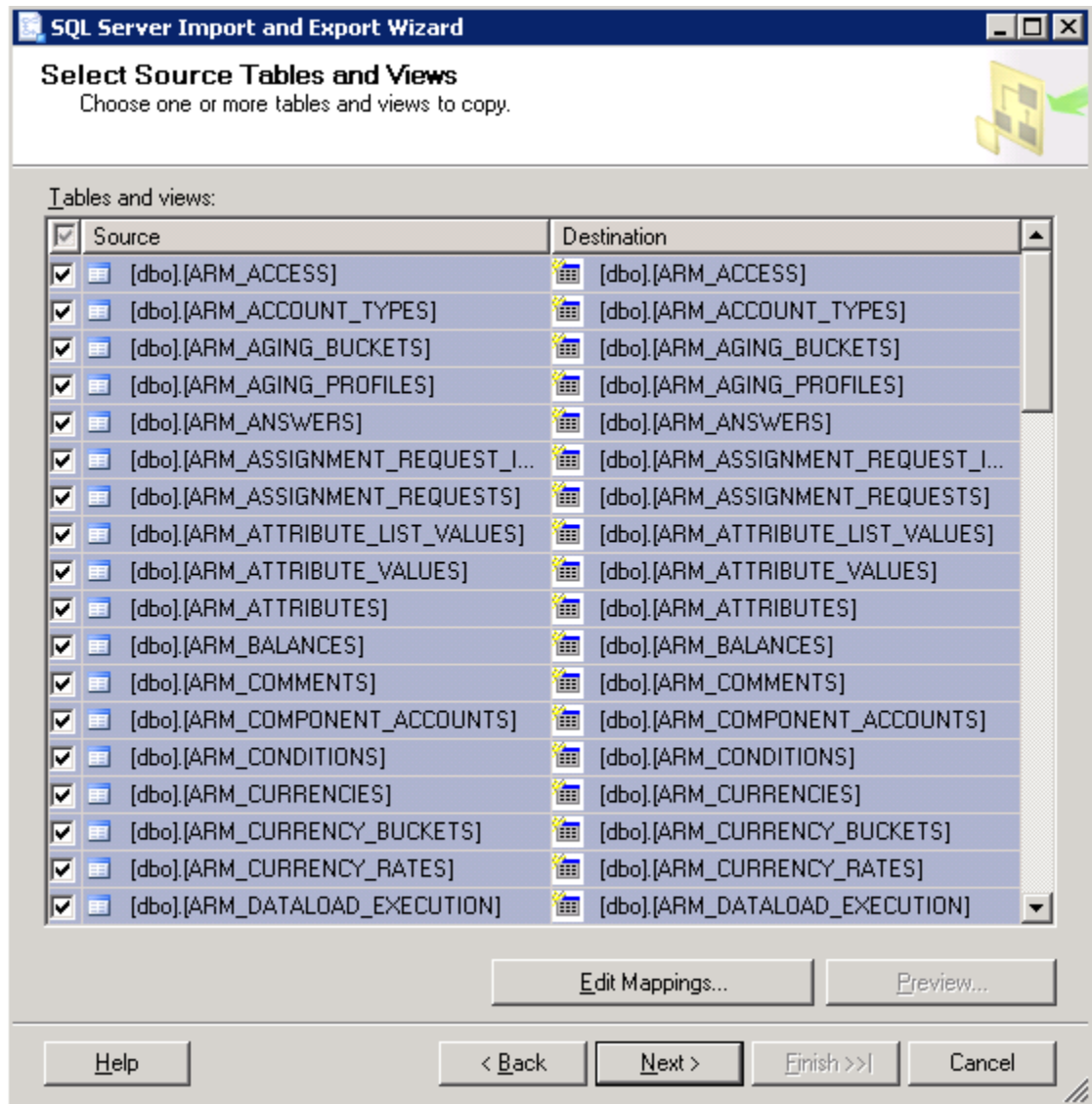
- a) Launch Microsoft SQL Server Management Studio.
- b) Right click on database 'arm' and select Tasks > Export Data
- c) Click next at welcome screen.
- d) At Choose a Datasource screen accept defaults and click next.

- e) At Choose a Destination screen enter server name, enter authentication credentials and database named 'fcm' then click next.
- f) At Specify Table Copy or Query screen Leave default option Copy data from one or more tables or views and click next.
- g) At Select Source Tables and Views screen select top left check box to select all ARM_XXX tables. Scroll down to uncheck all non ARM_XXX tables.
 - a. Should look like this:



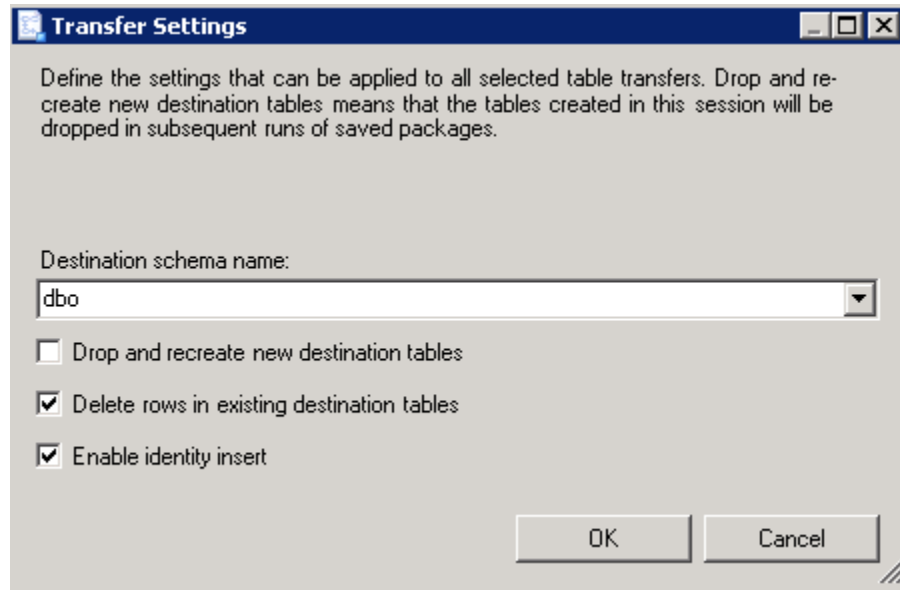
- h) At the same screen highlight all selected ARM_XXX tables. Click on the last table ARM_WORKFLOW_HISTORY and then scroll to the very top and shift click top ARM_XXX table called ARM_ACCESS.

- a. Should look like this:

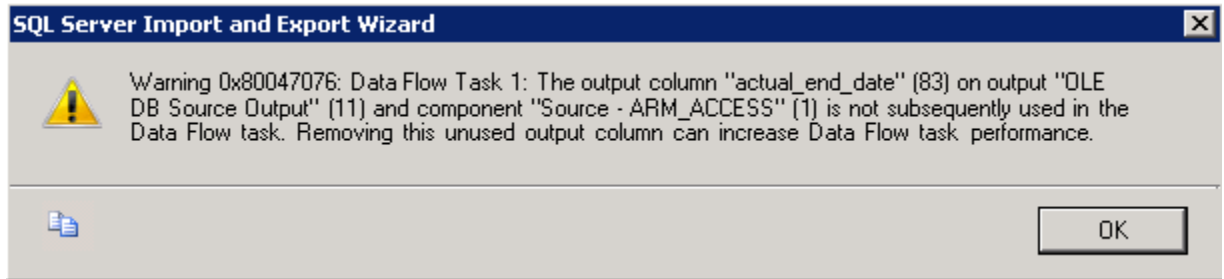


- b. Click on Edit Mappings and select check boxes 'Delete rows in existing destination tables' and 'Enable identity insert' then click ok and next.

i. Should look like this:



- i) At Save and Run Package leave Run Immediately selected and click Finish, then Finish again.
- j) At The execution was successful screen click close. (please correct issue's that were not successful before proceeding)
- k) It's ok to ignore this warning:



5) The value of the 'NEXT_ID' column in the S_ROW_ID table should be the larger value of the 2 values in each of the 'fcm' and 'arm' databases.

Example:

If your fcm database shows the value of '100000000004001' in the 'NEXT_ID' column and your arm database shows the value of '100000000001001' then you must have the larger of the 2 values entered in your fcm database. In our case the fcm value is the larger then the value in the arm table and what should be displayed in our 'NEXT_ID' table in the fcm database. If your arm value is higher you can copy the value and paste it into the fcm table manually.

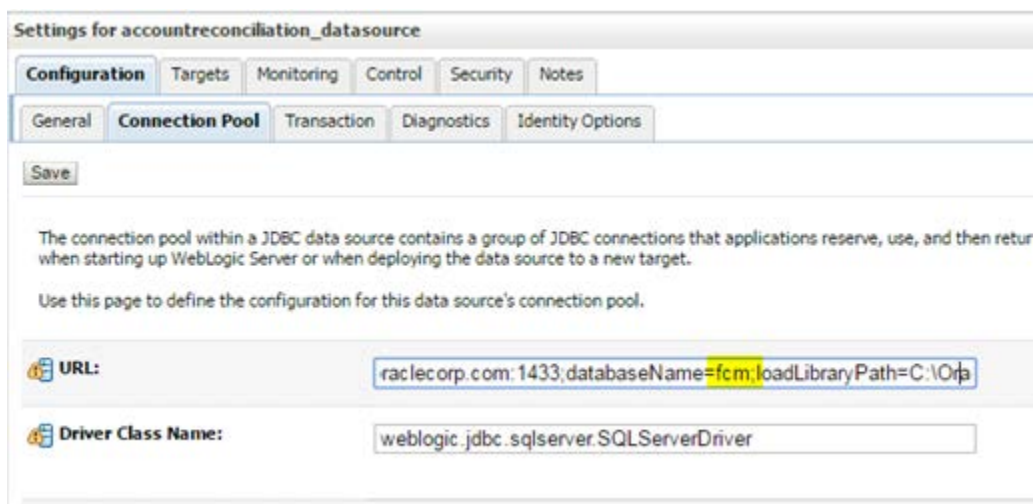
To edit table: Right click on table S_ROW_ID and select Edit Top 200 Rows. Highlight value in NEXT_ID column and paste the higher value from arm Refresh database node and double check the higher value was retained. Otherwise leave it as is if fcm has the higher value.

6) Re-run config tool to point to new single database 'fcm'. Please select to 'Reuse the existing database' option.

Re-run config tool to point both fcm and arm applications to existing database 'fcm'. Please select to 'Reuse the existing database' option. Do not select to drop tables. If at 11.1.2.3.000 base without any patches please select Deploy to Application Server in addition to Configure Database for both FCM and ARM.

7) Confirm datasources are pointing to correct fcm database in weblogic.

Start weblogic server and launch weblogic console. Check datasources for arm (accountreconciliation_datasource) and fcm (financialclose_datasource) and ensure they are both pointing to database fcm.



8) Post steps for FDMEE

You may need to sync up the physical 'arm' database to point to the 'fcm' database. This can be done in ODI studio.

If data is being imported via flat file, you'll need to create ERPI folder via system settings and also copy over the FlatFile.txt used for import.

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