

## RELEASE 9.3.1.1

# ORACLE DATA INTEGRATOR ADAPTER FOR HYPERION FINANCIAL MANAGEMENT GETTING STARTED

**ORACLE** I Hyperion

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# **Sample Files for Practice**

This document guides you through the use of the sample files that are included with Oracle® Data Integrator Adapter for Hyperion Financial Management. The sample files are intended to familiarize you with the adapter and provide practice in using it to load and extract metadata and data and consolidate data in Oracle's Hyperion® Financial Management – System 9 applications.

The sample files are delivered in the odiafm\_93110\_samples.zip file, which you can extract to any folder. The odiafm\_93110\_samples.zip file contains these folders:

- data, which contains these files:
  - o LoadAccounts.csv
  - o LoadCurrencies.csv
  - o LoadCustom1.csv
  - o LoadCustom2.csv
  - LoadCustom3.csv
  - o LoadCustom4.csv
  - o LoadEntities.csv
  - o LoadScenarios.csv
  - o alldata.dat
  - o extractData.dat
- work\_repository, which contains financial\_management\_samples.zip

# **Financial Management Sample Application Prerequisites**

Using the sample files requires that you have a Financial Management application called Comma. If you do not have the Comma application, you must create it. For instructions on creating applications, see the *Hyperion Financial Management* — *System 9 Administrator's Guide*.

To create the Comma application, you require sample security, metadata, data, rules, and member list files. If you installed the Sample Applications component from the Typical or Custom installation process, the files are in the directory where you installed Financial Management. If you did not install the sample files, you can obtain them by reinstalling Financial Management and selecting the Sample Applications component during the installation.

When you create the Comma application, you can load sample security, metadata, data, rules, and member list files from the Sample Apps/Comma directory. Instructions for loading the sample files are included in the Sample Apps/Comma/Documentation directory.

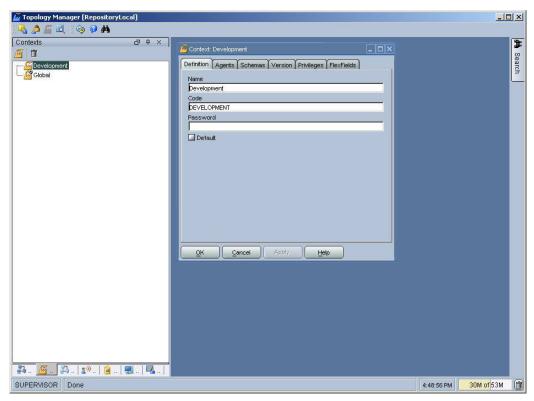
# **Setting Up an Environment**

Before you load the metadata from the sample files, you must set up the sample environment in Oracle Data Integrator, as described in the following topics.

# **Creating the Context**

Launch the Topology Manager, and create a context called Development, as shown in Figure 1. See the *Oracle Data Integrator User's Guide* for instructions.

Figure 1 Creating a Context



# **Setting Up the Hyperion Financial Management Data Server**

Use Oracle Data Integrator to create a data server for the Hyperion Financial Management technology and create a physical schema and logical schema for the data server.

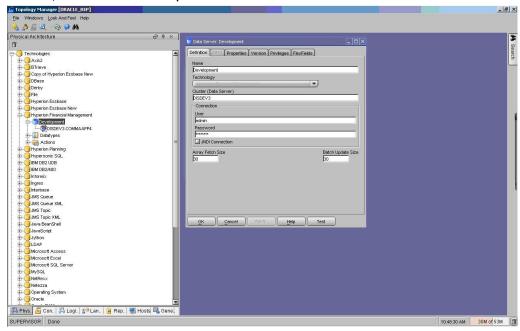
See the Oracle Data Integrator User's Guide for more information about creating data servers.

- To set up a Hyperion Financial Management data server:
- 1 Using the Topology Manager, create a data server under the Hyperion Financial Management technology:

## Note:

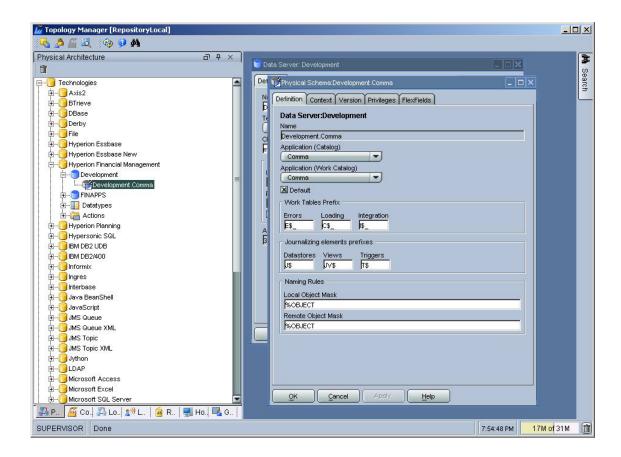
If the Hyperion Financial Management technology is not listed in the Topology Manager, you must import it. See the *Oracle Data Integrator User's Guide* for instructions.

2 In **Name**, enter the name Development for the data server.



3 Create the physical schema to point to your Financial Management application.

In this figure, the physical schema points to the Comma application:



#### 4 On the Context tab:

- a. Set the Context to Development.
- b. Enter the logical schema name SampleHFMApp.

#### Caution!

If you give the logical schema a different name, update the models and interfaces to point to the name that you used. Otherwise, you might be unable to run the packages and interfaces after importing the work repository.

c. Click OK.

See the Oracle Data Integrator User's Guide for more information about setting up a data server.

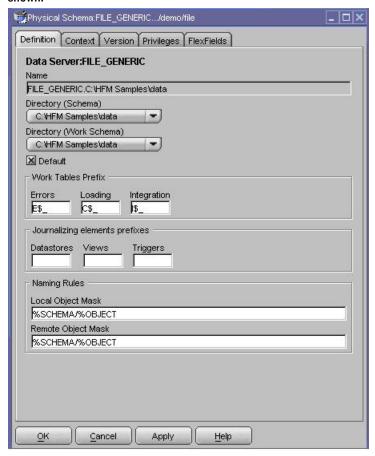
# **Setting Up a File Physical Schema**

Use Oracle Data Integrator to create a physical schema for the File technology, and create a physical schema for the File data server.

#### Note:

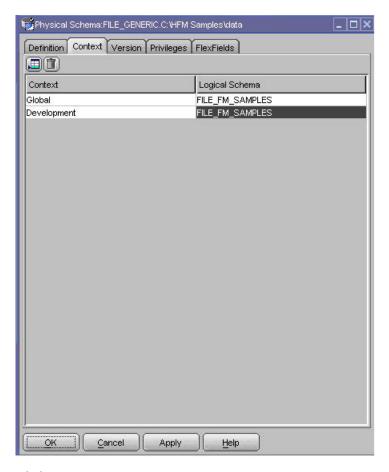
This procedure is required because the sources for the samples are delimited flat files.

- To set up a File physical schema:
- 1 Using the Topology Manager, create a physical schema under the File technology for the FILE\_GENERIC data server.
- 2 In Directory (Schema), select the data directory (extracted from odiafm\_93110\_samples.zip), as shown:



The data folder contains the samples source files.

- 3 On the Context tab:
  - a. Set the **Context** to Development.
  - b. For Logical Schema, enter FILE\_FM\_SAMPLES, as shown:



c. Click OK.

## **Setting Up a Work Repository**

The odifm\_93110\_samples.zip that is delivered with Oracle Data Integrator Adapter for Hyperion Financial Management includes a work repository export file called financial\_management\_samples.zip. (For more information about odifm\_93110\_samples.zip, see "Sample Files for Practice" on page 2.)

The financial\_management\_samples.zip file contains the Oracle Data Integrator models, interfaces, packages, and KMs that are required for loading and extracting metadata and data in the sample Financial Management application. Use Oracle Data Integrator to create a work repository for your work with the Adapter for Hyperion Financial Management samples and import financial\_management\_samples.zip into the work repository.

- To set up a work repository:
- Using the Topology Manager, connect to a master repository and create a work repository named ODI\_FINANCIAL\_MANAGEMENT\_SAMPLE. See the Oracle Data Integrator User's Guide for instructions.
- 2 Launch Designer, and connect to the ODI\_FINANCIAL\_MANAGEMENT\_SAMPLE work repository.
- 3 Select File > Import > Work Repository.
- 4 Select an import mode.

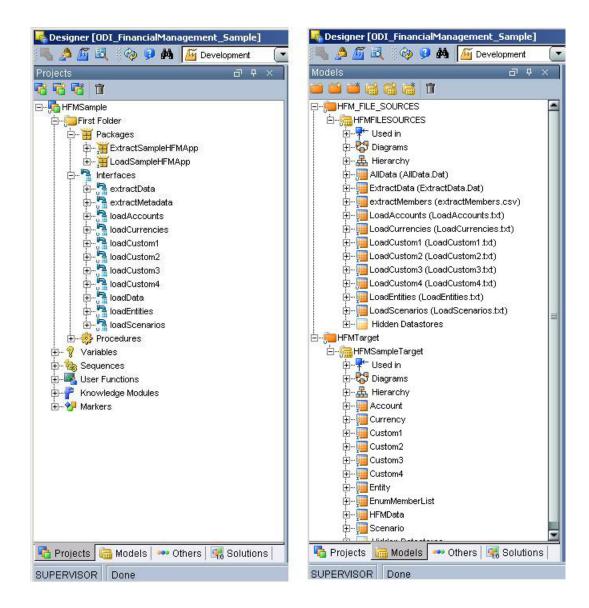
The INSERT\_UPDATE mode is recommended.

- 5 Navigate to the folder containing financial\_management\_samples.zip, and click OK.
  - These interfaces are added to the work repository:
  - loadAccounts
  - loadCurrencies
  - loadCustom1
  - loadCustom2
  - loadCustom3
  - loadCustom4
  - loadEntities
  - loadScenarios
  - loadData
  - extractData
  - extractMetadata

The import also adds two packages:

- LoadSampleHFMApp, which chains the interfaces for loading metadata and data
- ExtractSampleHFMApp, which chains the interfaces for extracting data and members

This figure shows how the Projects and Models trees look when the import succeeds:



# **Loading and Extracting Data Using Sample Interfaces**

The work repository, which was set up as part of the environment, contains interfaces for loading and extracting Financial Management application data.

# **Loading Metadata into the Sample Application**

Load the Financial Management sample application with metadata following the procedures in the following topics.

## **Loading Account Dimension Metadata**

The sample package includes an interface called loadAccounts, which loads metadata into the Account dimension.

#### Note:

For instructions on building this interface or others like it, see "Creating an Interface to Load Metadata" on page 15.

- To load metadata into the Account dimension:
- 1 Run the loadAccounts interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Account dimension from Financial Management Windows client.

## **Loading Currency Dimension Metadata**

The sample package includes an interface called loadCurrencies, which loads metadata into the Currency dimension.

- To load metadata into the Currency dimension:
- 1 Run the loadCurrencies interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Currency dimension from Financial Management Windows client.

## **Loading Custom1 Dimension Metadata**

The sample package includes an interface called loadCustom1, which loads metadata into the Custom1 dimension.

- To load metadata into the Custom1 dimension:
- 1 Run the loadCustom1 interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Custom1 dimension from Financial Management Windows client.

## **Loading Custom2 Dimension Metadata**

The sample package includes an interface called loadCustom2, which loads metadata into the Custom2 dimension.

- To load metadata into the Custom2 dimension:
- 1 Run the loadCustom2 interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Custom2 dimension from Financial Management Windows client.

## **Loading Custom3 Dimension Metadata**

The sample package includes an interface called loadCustom3, which loads metadata into the Custom3 dimension.

- To load metadata into the Custom3 dimension:
- 1 Run the loadCustom3 interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Custom3 dimension from Financial Management Windows client.

## **Loading Custom4 Dimension Metadata**

The sample package includes an interface called loadCustom4, which loads metadata into the Custom4 dimension.

- To load metadata into the Custom4 dimension:
- 1 Run the loadCustom4 interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Custom4 dimension from Financial Management Windows client.

## **Loading Entity Dimension Metadata**

The sample package includes an interface called loadEntities, which loads metadata into the Entity dimension.

- To load metadata into the Entity dimension:
- 1 Run the loadEntities interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Entity dimension from Financial Management Windows client.

## **Loading Scenario Dimension Metadata**

The sample package includes an interface called loadScenarios, which loads metadata into the Scenario dimension.

- To load metadata into the Scenarios dimension:
- 1 Run the loadScenarios interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the Scenarios dimension from Financial Management Windows client.

## **Loading Data into the Sample Application**

The sample package includes an interface called loadData, which loads data into the Financial Management application.

#### Note:

Before completing the following procedure, verify that the Financial Management application contains the required metadata. If it does not, load the metadata from Financial Management Windows client.

- To load data into a Financial Management application:
- 1 Run the loadData interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the data load from Financial Management Windows client.

## **Extracting Data from the Sample Application**

The sample package includes an interface called extractData, which extracts data from the Financial Management application and writes the data to a file.

- To extract data from a Financial Management application:
- 1 Run the extractData interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the extracted data in the file extractData.dat in the data directory (extracted from odiafm\_93110\_samples.zip).

## **Extracting Member Lists from the Sample Application**

The sample package includes an interface called extractMetadata, which extracts member lists from the Financial Management application and writes them to a file.

- To extract member lists from a Financial Management application:
- 1 Run the extractMetadata interface.
- 2 Check the Operator log to see whether the interface ran successfully.
- 3 Validate the extracted data in the file extractMembers.csv in the data directory (extracted from odiafm\_93110\_samples.zip).

# **Creating Models**

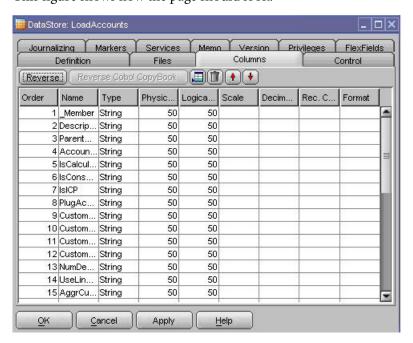
You must create source and target models before you creating interfaces.

## **Creating and Reverse-Engineering the Sample Source Models**

Use Oracle Data Integrator Designer to create and reverse-engineer the Adapter for Hyperion Financial Management sample source models.

- To create and reverse-engineer the sample source models:
- 1 In the Models view, insert a new model folder called HFM\_File\_Sources.
- 2 Right-click the HFM\_File\_Sources model folder, and select Insert Model.
- 3 Name the model HFMFileSources, and set Technology to File and Logical Schema to FILE\_FM\_SAMPLES.
- 4 On the Reverse tab, set Context to Development, and click OK.
- 5 Right-click **HFMFileSources**, and select **Insert DataStore**.
- 6 Set Name to Account, Currency, Custom1, Custom2, Custom3, Custom4, Entity, Scenario, or DataLoad, depending on which file source you are defining.
- 7 Next to Resource Name, click Browse, and select the file for the source that you are defining (Account, Currency, Custom1, Custom2, Custom4, Entity, or Scenario).
- 8 Select the **Files** tab.
- 9 Set File Format to Delimited, Heading (Number of lines) to 1, and Field Separator to , (comma) for .txt and .csv files and ; (semicolon) for .dat files.
- 10 On the Columns tab, click Reverse.

This figure shows how the page should look:

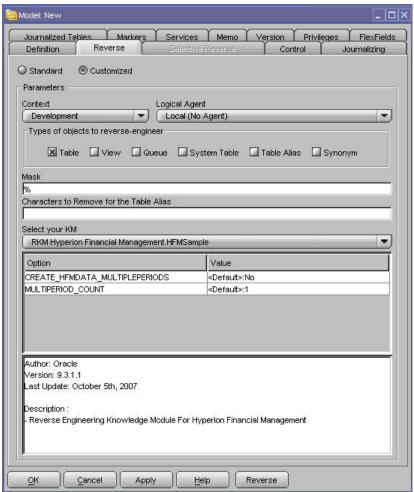


- 11 Ensure that the fields corresponding to numeric fields in the Financial Management application are set as numeric, with the correct length and scale.
- 12 Repeat step 5 through step 11 for each remaining file source.

# **Creating and Reverse-Engineering the Sample Target Models**

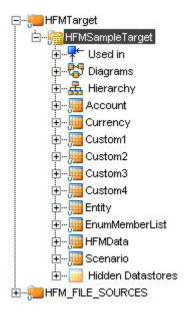
Use Oracle Data Integrator Designer to create and reverse-engineer the Adapter for Hyperion Financial Management target models.

- To reverse-engineer the sample target models:
- 1 In the **Models** view, insert a new model folder called HFMTarget.
- 2 Right-click the **HFMTarget** model folder and select **Insert Model**.
- 3 Name the model HFMSampleTarget, set **Technology** to Hyperion Financial Management, and set **Logical Schema** to SampleHFMApp.
- 4 On the Reverse tab, select Customized (at the top of the page).
- 5 Set Context to Development, and select RKM Hyperion Financial Management, Financial Management Sample, as shown:



- 6 Set RKM options.
- 7 Click Reverse, click Yes to validate the changes, and click OK.

This figure shows how the HFMSampleTarget models are displayed when reverse-engineering has succeeded:



If the HFMSampleTarget models are not displayed, check the Operator log to determine why reverse-engineering failed.

# **Creating Interfaces and Packages**

# **Creating an Interface to Load Metadata**

You can create an interface for loading the Account dimension into the sampleFinancial Management application. Using this interface as a model, you can create interfaces for loading the Currency, Custom1, Custom2, Custom3, Custom4, Entity, and Scenario dimensions with corresponding sources and targets.

You can also chain the interfaces into a package so that you can run them in a single process. See "Creating a Package to Load Metadata and Data" on page 22.

- To create an interface for loading the Account dimension:
- 1 Launch Designer, and expand the **Interfaces** node under the **HFMSample** project.
- 2 Right-click and select Insert Interface.
- 3 Name the interface loadAccounts, and set Context to Development.
- 4 Select Staging Area Different from Target, and select a staging area that is appropriate to your environment.

## Note:

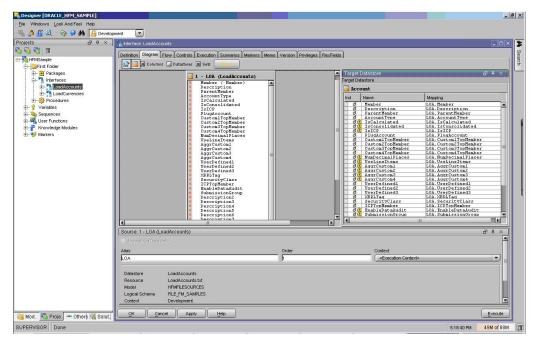
If no data server defined in your topology can be used as a staging area, use Sunopsis Memory Engine as the staging area.

- 5 Select the **Diagram** tab.
- 6 In the Models view, drag Account DataStore from the HFMTarget/HFMSampleTarget model to the Target DataStore pane.
- 7 Drag the Accounts source from the HFM\_File\_Sources/HFMFileSource model to the Sources area.

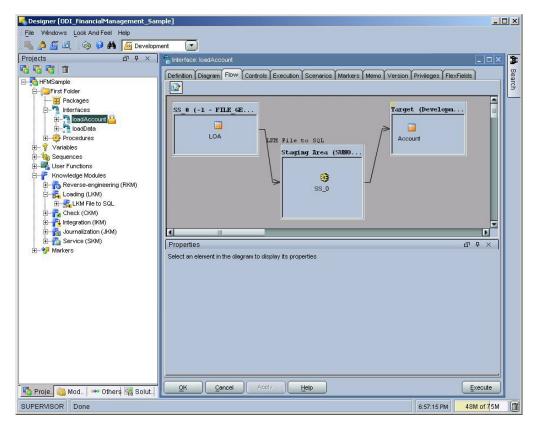
A message that prompts you to use automatic mapping is displayed.

- 8 Click Yes.
- 9 Manually map any columns that were not mapped automatically.

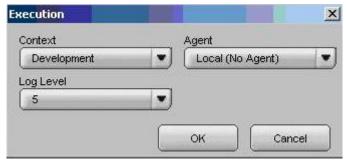
This figure shows how the page should look:



- 10 On the Flow tab, select the SS\_0, and ensure that LKM is set to LKM File to SQL.
- 11 Select **Target**, and ensure that **IKM** is set to IKM SQL to Hyperion Financial Management Dimension.
- 12 Set IKM options.

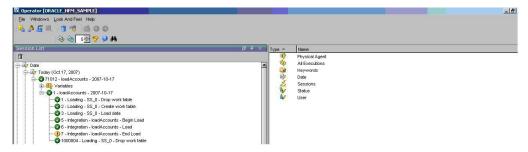


- 13 Click Apply.
- 14 Click Execute to run the LoadAccounts Interface, and, under Context, select Development.



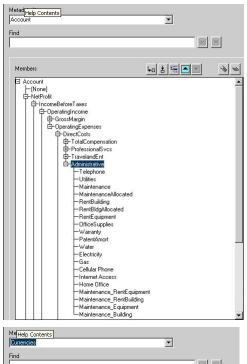
15 View the results of running the interface in Oracle Data Integrator Operator.

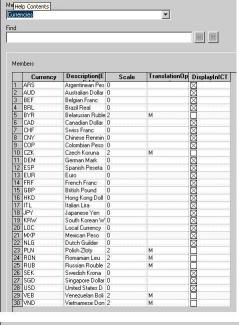
This figure shows how the results should look:

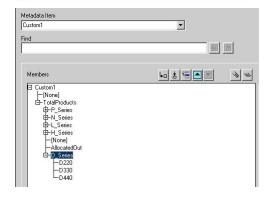


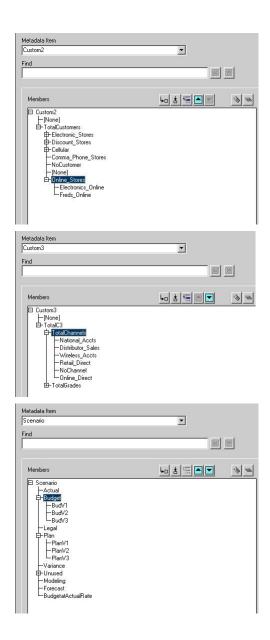
16 Validate the Account dimension from Financial Management Windows client.

These figures show the hierarchies created in Financial Management:









## **Creating an Interface to Load and Consolidate Data**

- To create an interface for loading and consolidating data:
- 1 Launch Designer, and expand the Interfaces node under the HFMSample project.
- 2 Right-click, and select Insert Interface.
- 3 Name the interface loadData, and set Context to Development.
- 4 Select Staging Area Different from Target, and select a staging area that is appropriate to your environment.

#### Note:

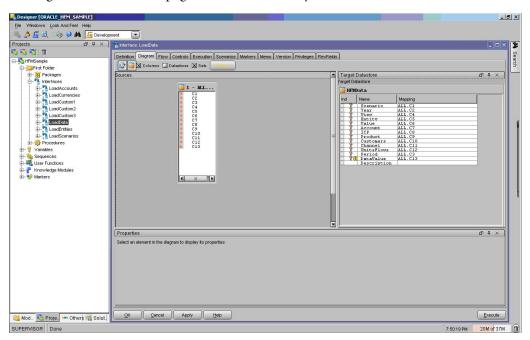
If no data server defined in your topology can be used as a staging area, use Sunopsis Memory Engine as the staging area.

- 5 Select the **Diagram** tab.
- 6 In the Models view, drag HFMData DataStore from the HFMTarget/HFMSampleTarget model to the Target DataStore pane.
- 7 Drag the alldata source from the HFM\_File\_Sources/HFMFileSource model to the Sources area.

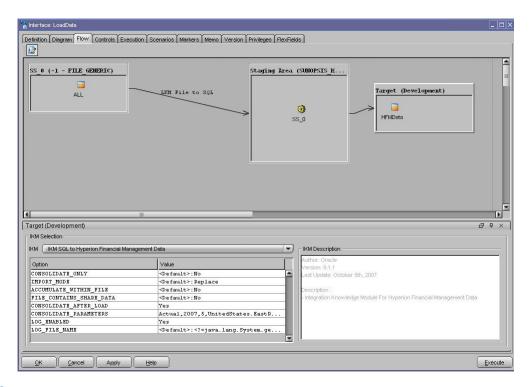
A message that prompts you to use automatic mapping is displayed.

- 8 Click Yes.
- 9 Manually map any columns that were not mapped automatically.

This figure shows how the page should look when you finish:

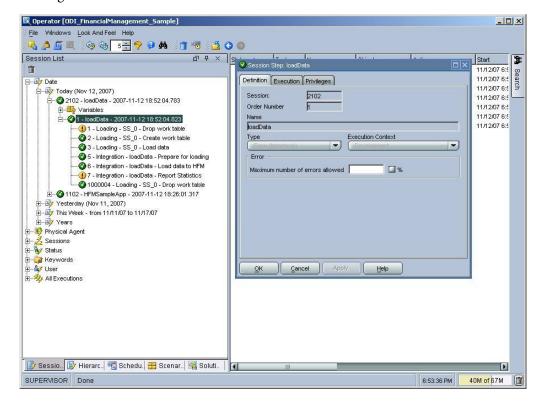


- 10 On the Flow tab, select the SS\_0, and ensure that LKM is set to LKM File to SQL.
- 11 Select Target, and ensure that IKM is set to IKM SQL to Hyperion Financial Management Data.
- 12 Set these IKM options:
  - CONSOLIDATE\_AFTER\_LOAD=YES
  - CONSOLIDATE\_PARAMETERS='ACTUAL,2007,5,United States.EastRegion,A'



- 13 Click Apply.
- 14 Click **Execute** to run the loadData interface, and select **Development** as the context.
- 15 View the results of running the interface in Oracle Data Integrator Operator.

This figure shows how the results should look:

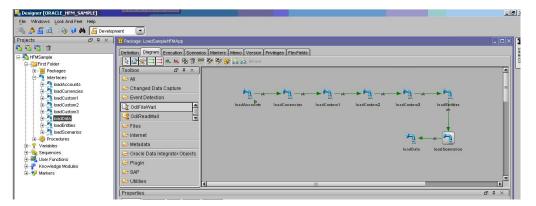


## **Creating a Package to Load Metadata and Data**

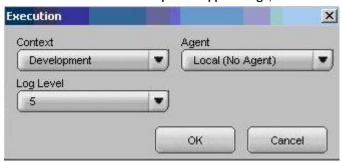
You can chain interfaces into a package so that you can run them in a single process.

- To create a package for loading metadata and data:
- 1 Launch Designer.
- 2 Right-click Packages, and select Insert Package.
- 3 Name the package LoadSampleHFMApp (or any other name).
- 4 Select the Diagram tab.
- 5 Drag the loadAccounts, loadCurrencies, loadCustom1, loadCustom2, loadCustom3, loadEntities, loadScenarios, and loadData interfaces into the diagram area.
- 6 Connect the interfaces in sequence, using the **ok->** green arrows.
- 7 Click Apply.

This figure shows how the page should look:

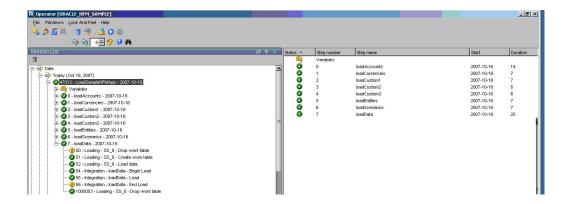


8 Click Execute to run LoadSampleHFMApp Package, and select Development as the context.



9 View the results of running the LoadSampleHFMApp package in Oracle Data Integrator Operator.

This figure shows how the results should look in Operator:



# **Creating an Interface to Extract Data**

- ➤ To create an interface for extracting data:
- 1 Launch Designer, and expand the Interfaces node under the HFMSample project.
- 2 Right-click, and select Insert Interface.
- 3 Name the interface extractData, and set Context to Development.
- 4 Select Staging Area Different from Target, and select a staging area that is appropriate to your environment.

#### Note:

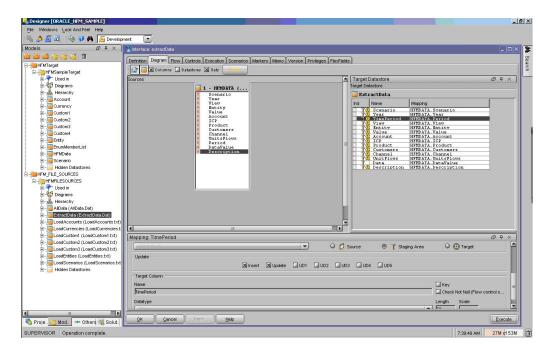
If no data server defined in your topology can be used as a staging area, use Sunopsis Memory Engine as the staging area.

- 5 Select the **Diagram** tab.
- 6 In the Models view, drag extractData DataStore from the HFM\_FILE\_SOURCES/HFMFILESOURCES model to the Target DataStore pane.
- 7 Drag the HFMData source from the HFMTarget/HFMSampleTarget model to the **Sources** area.

A message that prompts you to use automatic mapping is displayed.

- 8 Click Yes.
- 9 Manually map any columns that were not mapped automatically.

This figure shows how the page should look:

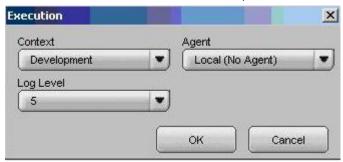


- 10 On the Flow tab, select the SS\_0, and ensure that LKM is set to LKM Hyperion Financial Management Data to SQL.
- 11 Select **Target**, and ensure that **IKM** is set to IKM SQL to File.
- 12 Set the LKM option SCENARIO\_FILTER to Actual.

## Note:

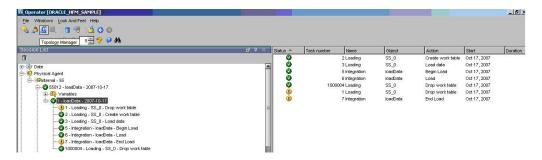
You can set other LKM options to further limit what data is extracted.

- 13 Click Apply
- 14 Click Execute to run the extractData interface, and select Development under Context.



15 View the results of running the extractData interface in Oracle Data Integrator Operator.

This figure shows how the results should look in Operator:



16 Verify that the extractData.dat file contains the data extracted from the Financial Management application.

## **Creating an Interface to Extract Member Lists**

You can create an interface for extracting member lists from the sample Financial Management application.

- To create an interface for extracting member lists:
- 1 Launch Designer, and expand the Interfaces node under the HFMSample project.
- 2 Right-click, and select Insert Interface.
- 3 Name the interface extractMetadata, and set Context to Development.
- 4 Select Staging Area Different from Target, and select a staging area that is appropriate to your environment.

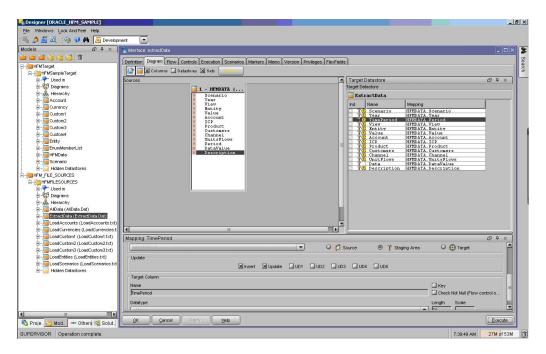
## Note:

If no data server defined in your topology can be used as a staging area, use Sunopsis Memory Engine as the staging area.

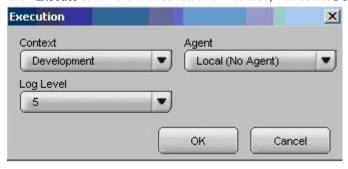
- 5 Select the **Diagram** tab.
- 6 In the Models view, drag extractMembers DataStore from the HFM\_FILE\_SOURCES/HFMFILESOURCES model to the Target DataStore pane.
- 7 Drag the EnumMemberList source from the HFMTarget/HFMSampleTarget model to the Sources area.

A message that prompts you to use automatic mapping is displayed.

- 8 Click Yes.
- 9 Manually map any columns that were not mapped automatically.
  - This figure shows how the page should look:



- 10 On the Flow tab, select the SS\_0, and ensure that LKM is set to LKM Hyperion Financial Management Members to SQL.
- 11 Select Target, and ensure that IKM is set to IKM SQL to File.
- 12 Set these IKM options:
  - MEMBER\_LIST\_NAME=[Base]
  - DIMENSION\_NAME=Account
- 13 Click Apply.
- 14 Click Execute to run the extractMetadata interface, and select Development under Context.



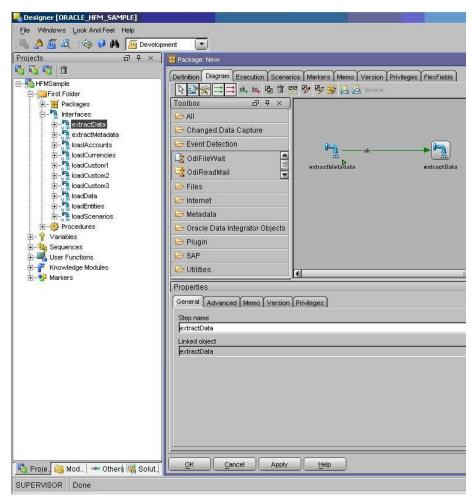
- 15 View the results of running the extractMetadata interface in Oracle Data Integrator Operator.
- 16 Verify that the extractMembers.csv file contains the dimension members extracted from the Financial Management application.

## **Creating a Package to Extract Metadata and Data**

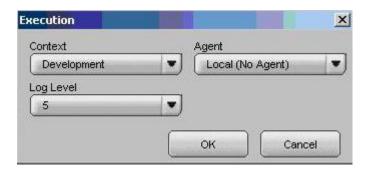
You can chain interfaces into a package so that you can run them in a single process.

- To create a package for extracting metadata and data:
- 1 Launch Designer.
- 2 Right-click Packages, and select Insert Package.
- 3 Enter a name for the package, such as ExtractSampleHFMApp.
- 4 Select the Diagram tab.
- 5 Drag the extractMetadata and extractData interfaces into the diagram area.
- 6 Connect the interfaces in sequence, using the ok—> green arrows.
- 7 Click Apply.

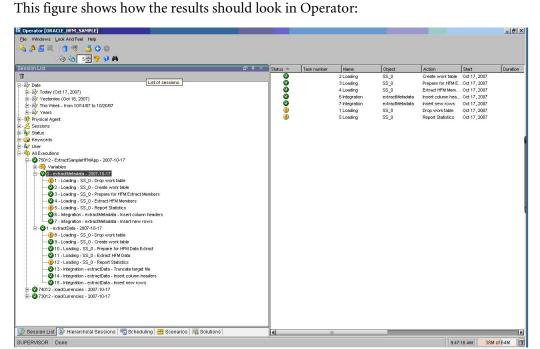
This figure shows how the page should look:



8 Click Execute to run the ExtractSampleHFMApp package, and select Development under Context.



9 View the results of running the ExtractSampleHFMApp package in Oracle Data Integrator Operator.



10 Verify that the extractData.dat and extractMembers.csv files contain the data and members, respectively, that were extracted from the Oracle's Hyperion® Financial Management – System 9 application.

#### COPYRIGHT NOTICE

Oracle Data Integrator Adapter for Hyperion Financial Management Getting Started, 9.3.1.1

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