Oracle® Hyperion Financial Data Quality Management, Enterprise Edition

Administrator's Guide

Release 11.1.2.4.00

Updated: September 2015

ORACLE®

FDMEE Administrator's Guide, 11.1.2.4.00

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1 Using FDMEE

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Oracle Hyperion Financial Data Quality Management, Enterprise Edition enables you to perform the following tasks:

- Integrate metadata and data from an Enterprise Resource Planning (ERP) source system, data from a file, or an Open Interface table into an Enterprise Performance Management (EPM) target application.
- Drill through from the EPM target application and view data in the Enterprise Resource Planning (ERP) source system.
- Data Synchronization between EPM applications—Moves data between EPM applications, for example, copying data from Financial Management to Essbase for reporting.
- Write back budget data to the source system from any Oracle Hyperion Planning, Oracle Essbase aggregate storage, or Essbase block storage application.
- Write back data from Oracle Hyperion Financial Management to Oracle E-Business Suite.

For information on supported EPM System versions, see the *Oracle Hyperion Enterprise Performance Management System Certification Matrix*.

For FDMEE issues and workarounds, see the *Oracle Hyperion Financial Data Quality Management Readme*.

Supported Source Systems

FDMEE supports general ledger data for:

- File-based data loads that enable users to import balances from delimited or fixed-width text files.
- Text files and Excel files
- Oracle E-Business Suite 11*i*
- Oracle E-Business Suite 12
- Oracle Fusion Financials
- PeopleSoft Enterprise Financial Management 9
- PeopleSoft Commitment Control
- SAP ERP Financial
- SAP BW (Business Warehouse)
- JD Edwards General Ledger system

FDMEE supports human resource data load for PeopleSoft Human Capital Management 9.

Integration includes data load and drill through. The integration is supported for the following SAP ERP Financial modules as well:

- Classic and new General Ledger
- Profit Center
- Cost Center
- Vendor Balances
- Customer Balances

In addition FDMEE provides support for Open Interface Adapter. The Open Interface Adapter enables you to import data from any source system using the interface table.

For information on supported technologies for each source system, see the *Oracle Hyperion Enterprise Performance Management System Certification Matrix*.

File-Based Data Loads

File-based imports and write back are supported for those users who do not have a direct connection to their Enterprise Resource Planning (ERP) source data, but have data available from their source in a text file. Any file, whether it is a fixed width file or a delimited file, can be easily imported into the target EPM application. For example, you can take a trial balance report generated from their source system, and map it into FDMEE by way of the import format feature. You can instruct the system where the account, entity, data values and so on reside in the file, as well as which rows to skip during the data import. This feature enables a business user to easily import data from any source, and requires limited technical help, if any, when loading into a target application.

You can also define data load rules which determine how you want to extract or write back data from an EPM system to a file system. For example, you may want to write back budget data.

Supported EPM Target Applications

Supported EPM target applications (Oracle Hyperion EPM Architect and Classic) are:

- Planning
- The Planning module, Oracle Hyperion Public Sector Planning and Budgeting
- Financial Management (including Tax Provision Application)
- Essbase aggregate storage and Essbase block storage—If Essbase has been deployed in standalone mode, it must be registered with Shared Services because it does not work directly with FDMEE. Planning applications that rely on the standalone Essbase application cannot work directly with FDMEE either.
- Oracle Hyperion Profitability and Cost Management
- Account Reconciliation Manager (ARM)

Key FDMEE Benefits

Key benefits supported in FDMEE include:

- Improved User Experience—Integrated in Oracle Enterprise Performance Management System. The FDMEE user interface is consistent with the Planning and Financial Management user interfaces.
- Improved performance—Improved user interface and data load performance
- Close Oracle Hyperion Shared Services integration—All native Shared Services features are supported (for example, user groups).
- Support for Internet Explorer and Firefox browsers
- Support for Oracle Hyperion Enterprise Performance Management System Lifecycle Management—Consistent Lifecycle Management support like other EPM System products

  You can migratea Lifecycle Management application from release 11.1.2.3 to release 11.1.2.4.
- Support for multiple platforms—All supported platforms.
- Consistent Scaling and Load Balancing—All scale out configuration and load balancing steps are consistent with other EPM System products.

  Also see the *Oracle® Enterprise Performance Management System Deployment Options Guide*.
- Data synchronization that enables you to easily move data between the EPM applications irrespective of the dimensionality of the application without having to create a data file from the EPM source application. You specify the source and target EPM application, and then map the data. Given the powerful mapping features already available, the data can be easily

transformed from one application to another application. For example, synchronizing data enables you to move data from Financial Management to Essbase for reporting.

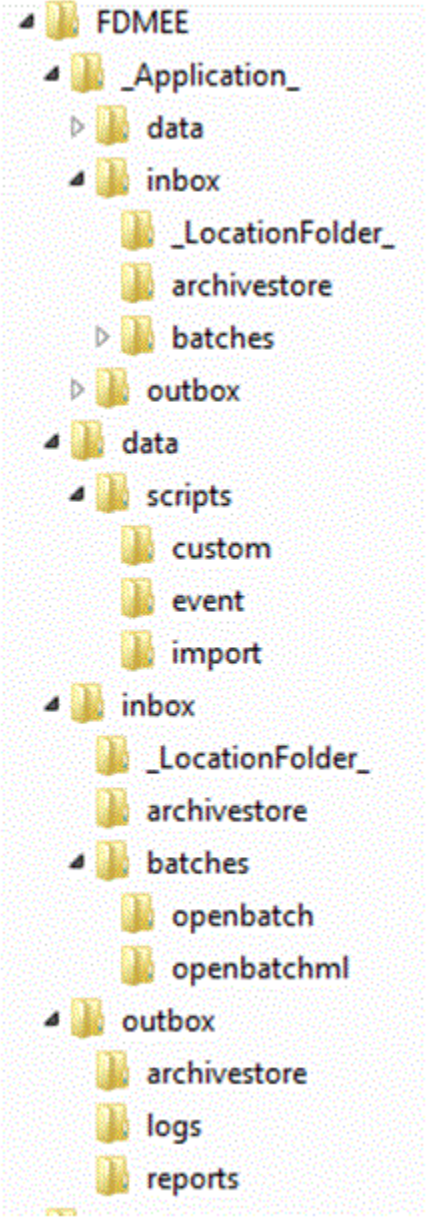
- Write-back support from all EPM applications (except the Accounts Reconciliation Manger) to Enterprise Resource Planning (ERP) applications. This feature offers significant advantages, such as writing back budgets created in Planning to Peoplesoft or E-Business Suite ERP GL, or moving adjustment journals from Financial Management to ERP Systems like Oracle E-Business Suite or Peoplesoft. Other target systems still need to use a custom application framework.

FDMEE Application Folder Architecture

FDMEE uses a set of folders that are created under the application root folder. The application root folder is created by the system administrator on the server where FDMEE is installed, and then defined in the System Settings under Configure in FDMEE.

To create the basic file structure click the“ Create Application Folders” button from the System Settings screen. In addition application folders and location folders can also be created. If application folders are not used, then location folders are created in the top level `inbox`. When application folders are used, then location folders are created in the related application folder.

Here is an example of a possible folder structure:



The standard FDMEE application uses the following folder structure:

Table 1 FDMEE Application Folder Structure

Folder	Descriptions
`data`	The "data" folder contains a copy of each file that is loaded by the system, and is also the root folder for the scripts directory. Each file in this folder is assigned a unique name, and can be opened from the Data Load Workbench by clicking an amount or from the Drill-through screen.
`scripts`	This is the top folder for the "custom," "event," and "import" folders. Scripts of these types are stored in these folders.

Folder	Descriptions
custom event import	custom—Contains custom scripts written in Visual Basic or Jython script. event—Contains scripts that are executed for the specified system event and are written in Visual Basic or Jython script. import—Contains scripts that are associated with an import format and are executed during the import processing step. These scripts are only written in Jython.
inbox	You can use the inbox default directory from which to import source files, as a central repository for all ledger extract files. Because source files can be retrieved from any accessible directory, you are not required to place import files in this directory. When you select the option to create a folder for every location created by the user, they are created in the inbox. The inbox includes the batches and archivestore directory.
archivestore	Reserved for future use.
batches	batches is a top level folder only and not used to store files.
openbatches	openbatches is the location where openbatch files are stored by the system. Openbatch files contain the "Point of View" in the file name so that one or more files can be picked up by the system and loaded without needing to set the POV in the user interface. This is very useful if there are a large number of files that need to be loaded at a single time.
openbatchesml	Similar to the openbatches folder; however, these files contain multiple periods in a single file.
outbox	The outbox folder stores export files created by FDMEE, any error log files from a target application, drill region load files, and drill load logs from the target.
archivestore	Reserved for future use.
logs	Stores logs generated by the load processes in the format EPM-APPLICATION-NAME_PROCESS-ID.log. These logs can be viewed using the Show Log link in the Process Details page of FDMEE.
reports	The reports folder stores report output generated by the batch reporting process in PDF, HTML or XLS. Also includes output from reports run in offline mode.

Note: To create the folder structure for applications, define the root folder in the Application Settings screen, and then select the Create Application folders option. For example, to run a set of scripts for a specified application, then the use of the application folders is required.

FDMEE Architecture

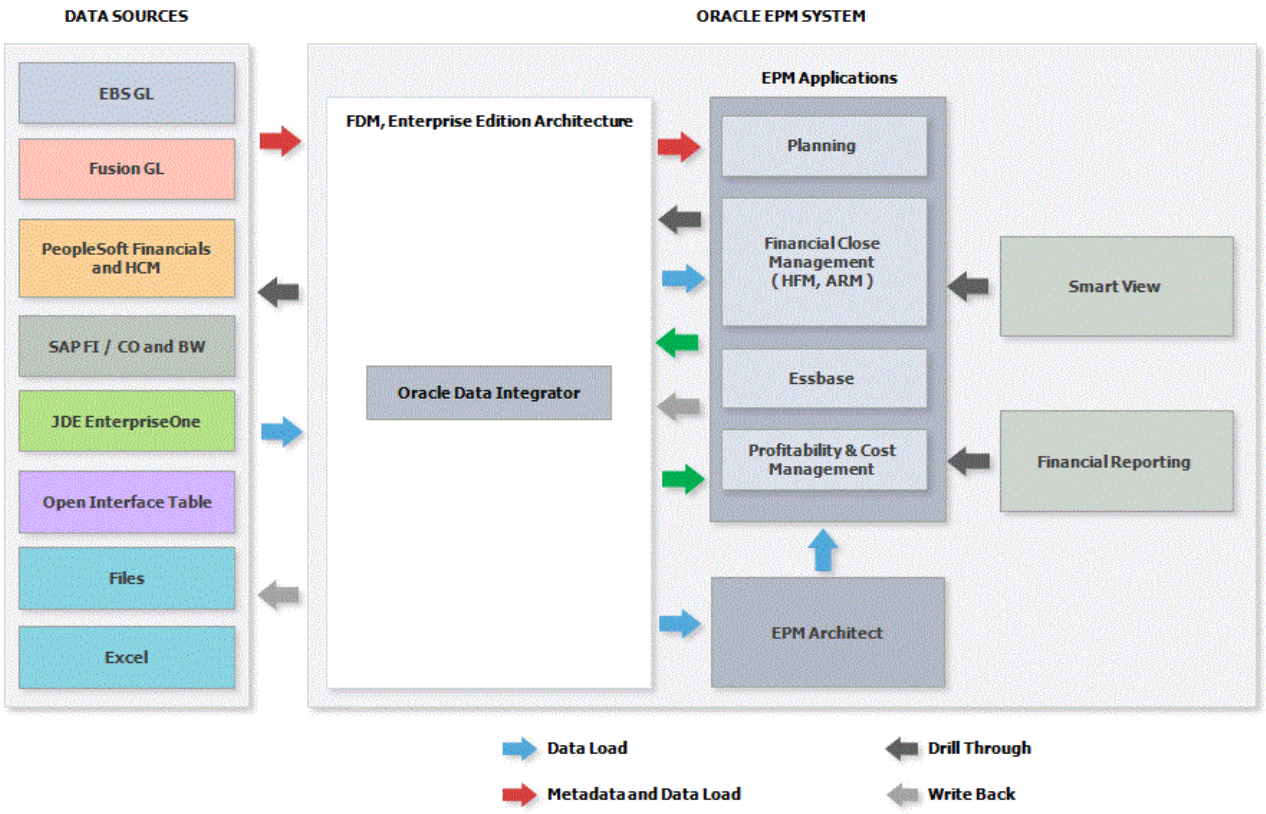
FDMEE is the key application for integrating Enterprise Resource Planning (ERP) systems with Oracle's Hyperion EPM applications. FDMEE is accessed through Oracle Hyperion Enterprise Performance Management Workspace, which uses Shared Services to authenticate users. The key to its integration lies within its underlying engine, Oracle Data Integrator.

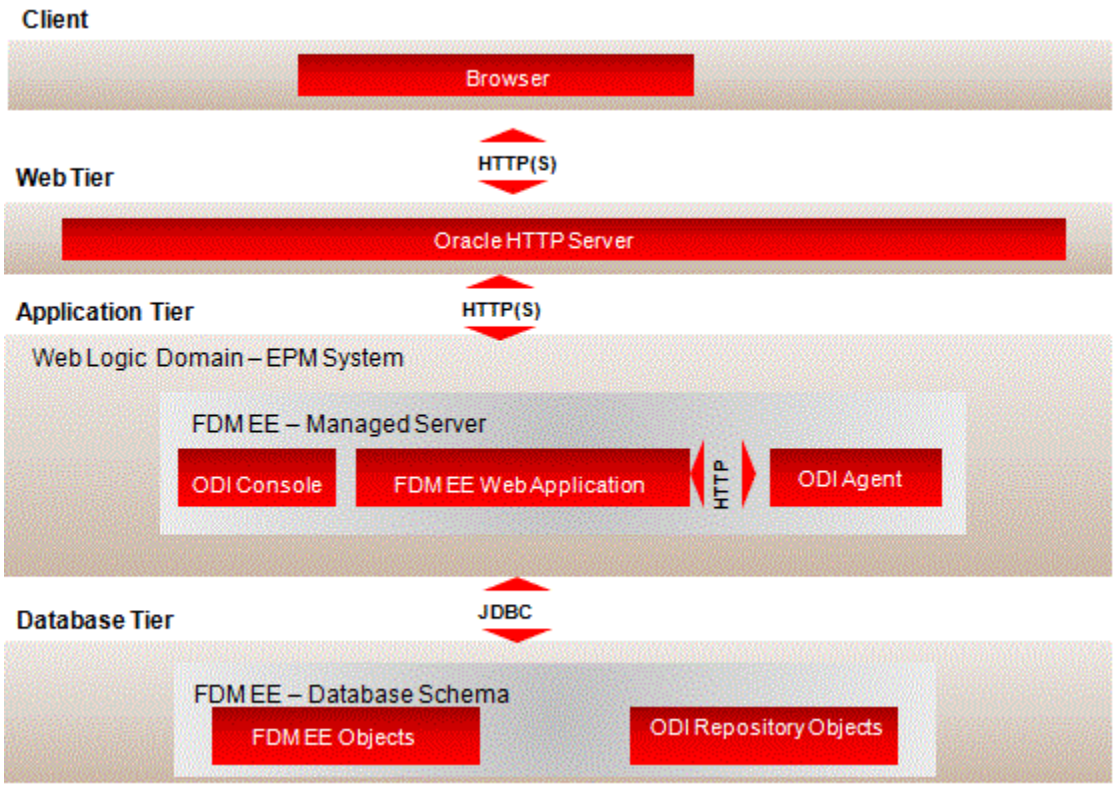
FDMEE sits on top of Oracle Data Integrator and orchestrates the movement of metadata and data into EPM applications. The application server can be deployed on multiple platforms (See the *Oracle Hyperion Enterprise Performance Management System Certification Matrix*) and

connects with EPM applications such as Financial Management, Planning, Profitability, Account Reconciliation Manager, and Essbase.

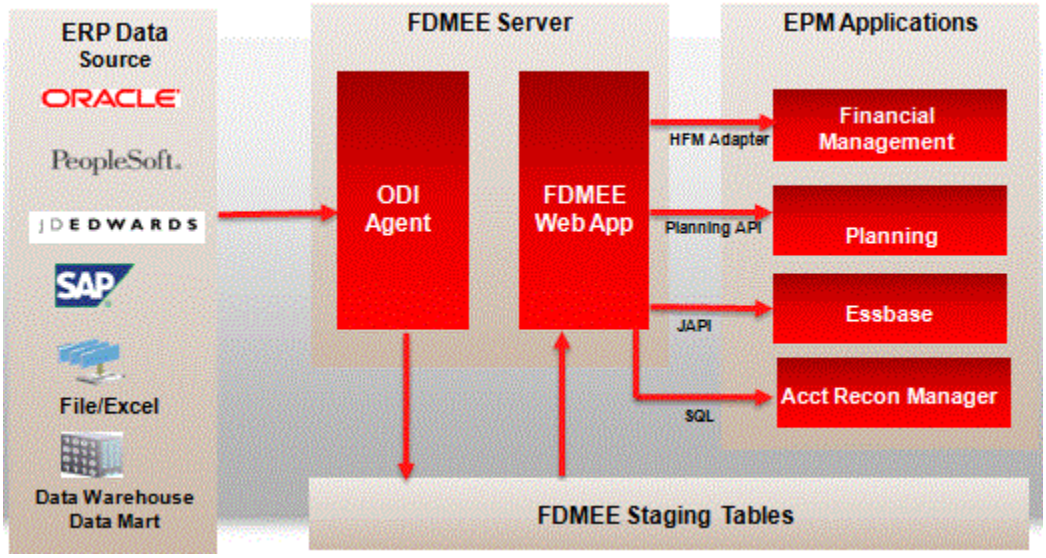
The ODI Agent installed and used by FDMEE is exclusively for processes launched as part of FDMEE processing, including the FDMEE user interface, FDMEE batches, or FDMEE jobs executed by way of a Windows or Linux batch. The FDMEE repository is for exclusive use of FDMEE objects shipped by Oracle, or for customizations made by the customer to these objects. The ODI agent or repository used by FDMEE cannot be used for any other purpose by the customer. Any other ODI work needs to use a separate agent and repository.

The following diagram shows the technical architecture structure of FDMEE:

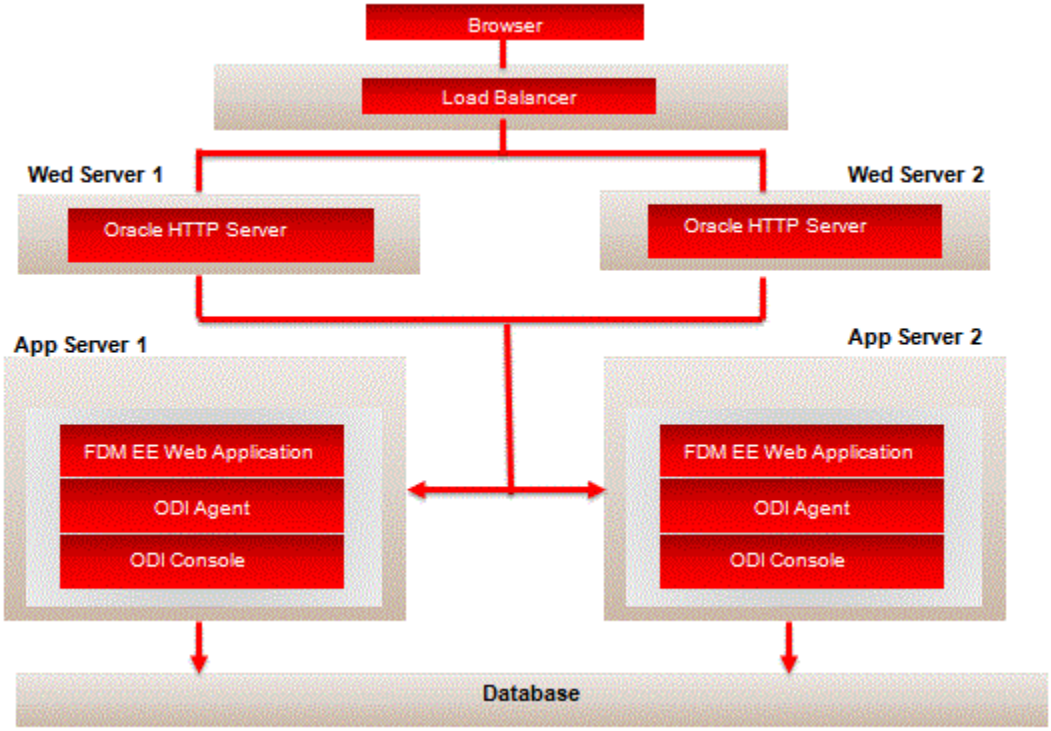




The following diagram shows the flow of data in FDMEE:



The following diagram shows FDMEE High Availability:



Drilling Through

FDMEE provides the framework to drill through from the EPM applications back to the general ledger source. Drill through is not supported for human resource data. Users can drill through to detail in the source system through FDMEE from the following products:

Note: If the source system is E-Business Suite/PeopleSoft and you have metadata rules, then the drill region is created based on the metadata rule. Otherwise, it is created based on the target members in the data load mappings. For Year, Period, and Scenario, FDMEE uses audit information to create the drill region.

Note: Drill through is not supported for Financial Management journals and intercompany transactions.

- Planning
- Financial Management
- Oracle Smart View for Office
- Oracle Hyperion Financial Reporting

Note: In Smart View and Financial Reporting, you can drill through only if the data source is Financial Management, Planning, Essbase, and Profitability and Cost Management.

Note: Drill through is not supported for Financial Management journals and intercompany transactions.

When you drill through, if data was loaded by FDMEE, a landing page is displayed in a new EPM Workspace tab or a new window. The landing page is a gateway to the data in the source system. See "Drilling Through to the FDMEE Landing Page" on page 24.

Drilling Through to the FDMEE Landing Page

The FDMEE landing page displays general ledger accounts and the hyperlinked balances that were used to populate the cells in the EPM application. When you click a linked data value, you can drill through to the source system and view the associated journal entries for the selected general ledger account.

You can drill through to balances to display data loaded from your source system. When you navigate to the Oracle General Ledger Balances page after login validation, you can view a table listing the general ledger accounts that contributed to the drilled value shown in the EPM application for the specific period.

This table includes a breakdown of all general ledger accounts values with hyperlinks, enabling users to further drill into the Journal Lines page in Oracle General Ledger. Users can then view the associated journal entries for the selected Oracle General Ledger account.

When you navigate to PeopleSoft Enterprise Financial Management, the Ledger Inquiry page is displayed after login validation. Users can then view information on the Journal Inquiry page. See *PeopleSoft Enterprise General Ledger 9.1 PeopleBook* for additional information on drill through capabilities.

Configuring Oracle Data Integrator With FDMEE

FDMEE relies on Oracle Data Integrator as the engine that extracts data and metadata from the defined sources, and then populates the Performance Management Architect interface tables or populates the Classic applications with the extracted artifacts. The Oracle Hyperion Enterprise Performance Management System Oracle Hyperion Enterprise Performance Management System Installer installs ODI when FDMEE is installed. The installer also configures the ODI Master and Work Repository and ODI J2EE Agent as part of install process.

In addition, you must perform some manual configuration steps in Oracle Data Integrator before using FDMEE.

Note: You only need to configure ODI when you load data from a source other than a file. File-based data loads work out of the box without additional ODI configurations.

1. Set up the data server based on the Enterprise Resource Planning (ERP) source system.
2. Set up the Physical Schemas.

3. Set up the ODI Context Code.

Set up the Data Server Based on the Enterprise Resource Planning (ERP) Source System

You must set up the appropriate data servers based on the Enterprise Resource Planning (ERP) source system used to source metadata and/or data.

When importing from Enterprise Resource Planning (ERP) sources (E-Business Suite/ PeopleSoft/Fusion/JDE/SAP), set up the applicable data servers listed below:

- EBS_DATA_SERVER—For E-Business Suite General Ledger
- PSFT_FMS_DATA_SERVER—For PeopleSoft General Ledger and Commitment Control
- PSFT_HCM_DATA_SERVER—For PeopleSoft Human Capital Management (HCM)
- FUSION_DATA_SERVER—For Fusion General Ledger
- JDE_DATA_SERVER—JD Edwards Enterprise (JDE) General Ledger
- SAP_SERVER—SAP FICO

➤ To update server connections information:

1 Access the Oracle Data Integrator Console.

2 Select the **Browse** tab.

3 Expand **Topology**.

4 Select the operating data server to update, and then click **Edit**.

For example, select **EBS_DATA_SERVER** or **PSFT_FMS_DATA_SERVER**.

5 In **Edit Data Servers**, under **JDBC Details**, enter the JDBC driver in **JDBC Driver**.

For example, enter `oracle.jdbc.OracleDriver`

6 In **JDBC URL**, enter the JDBC URL address.

For example, enter `jdbc:oracle:thin:@<host>:<port>:<sid>`

7 In **User**, enter the user name.

8 In **JDBC Password**, enter the password.

9 Click **Save**.

Setting up Physical Schemas

➤ To update a physical schema:

1 Access the Oracle Data Integrator Console.

2 Select the **Browse** tab.

3 Expand **Schemas**.

4 Expand **Physical Schemas**.

5 Select the schema to update, and then click **Edit**.

For example, select **EBS_DATA_SERVER** or **PSFT_FMS_DATA_SERVER**.

6 In **Schema Name**, enter the schema name in uppercase characters.

7 Click **Save**.

Caution! Extensive problems can occur if you switch the Enterprise Resource Planning (ERP) system connection information for the Physical Schema in the Oracle Data Integrator Topology Manager after you have completed initial configuration. For example, extensive problems can occur if you start using one physical schema (ERPTEST) pointing to ERP Test Instance1 in the Oracle Data Integrator Topology Manager, and then change to a connection information in this physical schema to point to ERP Test Instance2 without first creating a new context in Oracle Data Integrator. The correct procedure is to create two physical schemas (ERPTEST1 and ERPTEST2) each pointing to a different ERP instance. Then, create two contexts and associate the appropriate physical schema to the logical schema in the context.

Setting up the ODI Context Code

You can set up the default "GLOBAL" ODI context code. The ODI context code refers to the context defined in Oracle Data Integrator. A context groups the source and target connection information.

➤ To set up the default "GLOBAL" ODI context code:

1 Access the Oracle Data Integrator Console.

2 Select the **Browse** tab.

3 Expand **Contexts**.

4 Select **Global** update, and then click **Edit**.

5 In **Edit Context Global**, in **Context Name**, enter `GLOBAL`.

Enter the word "GLOBAL" in uppercase characters only, that is, enter **GLOBAL**.

6 Select **Default Context**.

7 Click **Save**.

Setting up ODI to Integrate with JD Edwards

➤ To set up ODI to integrate with JD Edwards:

1 Download the **JD Edwards EnterpriseOne Data Access Driver (DAD)** driver:

a. From **My Support**, click https://support.oracle.com/epmos/faces/PatchHome?_adf.ctrl-state=14et4iaabz_9&_afrLoop=500286860066687

b. Select the **Patches and Updates** tab, and then select **JD Edwards Patches**.

c. From **JDEdwards**, enter `EnterpriseOne Tools Releases`.

d. In **Release**, select **All Releases**.

e. In **Platform**, select **Multiplatform**.

f. In **Description** (*text*), enter ***Data Access Driver*** .

Include asterisks as it is a wildcard search.

g. Select the **License Agreement** check box.

h. Click **Search**.

i. Click the plus sign (**+**) to add **Tools 9.1,* Data Access Driver** to the Download Basket.

j. Click the Item(s) hyperlink and download the tools release specific item.

2 **To copy the DAD driver:**

The DAD driver has a `.par` extension, but it can be unzipped.

a. Unzip the archive file to a temporary directory.

b. Extract (or unzip) the JAR file `DADriver_EAR.jar`.

c. Copy the extracted contents of the `DADriver_EAR.jar` to the `EPM_MIDDLEWARE_HOME\odi\odi_misc` directory.

Typically, `EPM_MIDDLEWARE_HOME` is `C:\Oracle\Middleware`

3 **Request that the JD Edwards system administrator provide you with the following files:**

- `jdbj.ini`
- `jas.ini`
- `jdelog.properties`

These files are generated when you register the JD Edwards EnterpriseOne Data Access Driver using the JD Edwards Server Manager.

4 **Copy the `jas.ini`, `jdbj.ini`, and `jdelog.properties` files from the JDE Application Server to the `EPM_MIDDLEWARE_HOME\odi\odi_misc` directory.**

Typically, `EPM_MIDDLEWARE_HOME` is `C:\Oracle\Middleware`

5 **Ensure that the security server of the `jas.ini` file is set up correctly.**

6 **Review and edit the `jdbj.ini` file as follows:**

a. If the JD Edwards application database is Oracle, update the location in the `tnsnames.ora` file:

For example, modify `tns= C:\Oracle\Middleware\user_projects\config \dbclient/tnsnames.ora` in the `jdbj.ini` file.

Forward or backward slashes can be used.

b. Encrypt the `{JDBj-BOOTSTRAP SESSION]` stanza, and then the password value.

If the stanza has not changed, no update is required.

c. Modifications to the .INI file password encryption can be accomplished using the Server Manager.

d. Set the value of the following parameters under [JDBj-RUNTIME PROPERTIES] stanza to:

```
resultSetTimeout=-1
transactionTimeout=-1
usageExecutionThreshold=20000
usageResultSetOpenThreshold=120000
usageTracking=false
msSQLQueryTimeout=1800000
```

e. Edit the tnsnames.ora file.

If the tnsnames.ora entry exists, copy and rename it.

The tnsnames.ora file must include the reference to the JDE server, for example,

```
jra91dl =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = dene11x7.us.oracle.com)(PORT = 1530))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = jra91dl)
    )
  )
```

The tnsnames.ora file is located in C:\Oracle\Middleware\user_projects\config\dbclient/tnsnames.ora.

7 **Edit the** jdelog.properties **file, and set the log level as needed in all references in the file.**

In a production environment, set the log level to SEVERE so that only severe errors are reported in the log file.

8 **Change the file path in** jdelog.properties **for** .log **to** C:\Oracle\Middleware\user_projects\epmsystem1\tmp

For example: specify FILE=C:\Oracle\Middleware\user_projects\epmsystem1\tmp/at9062056.log in all instances found in the file.

9 **Ensure that you can access the server specified in the** jdbj.ini **file from the ODI Server.**

You can do so from the command line by issuing a ping to the server.

10 **Make sure that environmental variables** JAVA_HOME **and** TEMP **are set up correctly.**

JAVA_HOME is an environmental variable and points to java.exe under C:\Oracle\Middleware\jdk160_35\bin

TEMP is a user variable and points to %USERPROFILE%\AppData\Local\Temp.

Setting environmental variables might require restarting the machine.

11 **If you use JDE Tools 9.1.2 or 9.1.3, run the script** copyfilesJDE912.bat / sh **from the following directory:**

EPM_ORACLE_HOME \products\FinancialDataQuality\bin

If you use JDE Tools 9.1.4 or later, run the script: `copyfilesJDE914.bat / sh` from the `EPM_ORACLE_HOME \products\FinancialDataQuality\bin` directory.

When you run the script, the following is displayed:

```
C:\Users\hitinstall>C:\Oracle\Middleware\EPMSystem11R1\products\FinancialDataQua
lity\bin\copyfilesJDE914.bat
"Copy required JAR Files"
1 file(s) copied.
1 file(s) copied.
"Script completed successfully"
```

12 **If JD Edwards uses Microsoft SQL Server or IBM databases, then download the JDBC driver and copy it to the *DOMAIN HOME/lib* directory.**

Typically this is the `C:\Oracle\Middleware\user_projects\domains\EPMSystem \lib` directory.

Refer to the JD Edwards Tools documentation for the supported versions of the JDBC driver for the database platform.

13 **Look for the following information in `jdbj.ini` and verify that it is in the `tnsnames.ora` file.**

```
databaseType=O
serverPort=1530
name=System - 910
database=jra91dl
server=dene11x7
physicalDatabase=
owner=SY910
lob=true
unicode=true
```

Specifically, the database name is referenced in the `tnsnames.ora` file:

14 **In Oracle Data Integrator, perform a JDE Test Connection with the ODI Agent.**

a. From the **ODI Studio**, launch the **Oracle Data Integrator**.

b. From **Physical Architecture**, then **Technologies**, and then **Oracle**, select **JDE_Data_Server**.

Test the JDE Test Connection with the ODIAgent and not the local Agent.

c. Click **Test Connection**.

d. From **Test Connection for**, select **OracleDIAgent**, and then click **Test**.

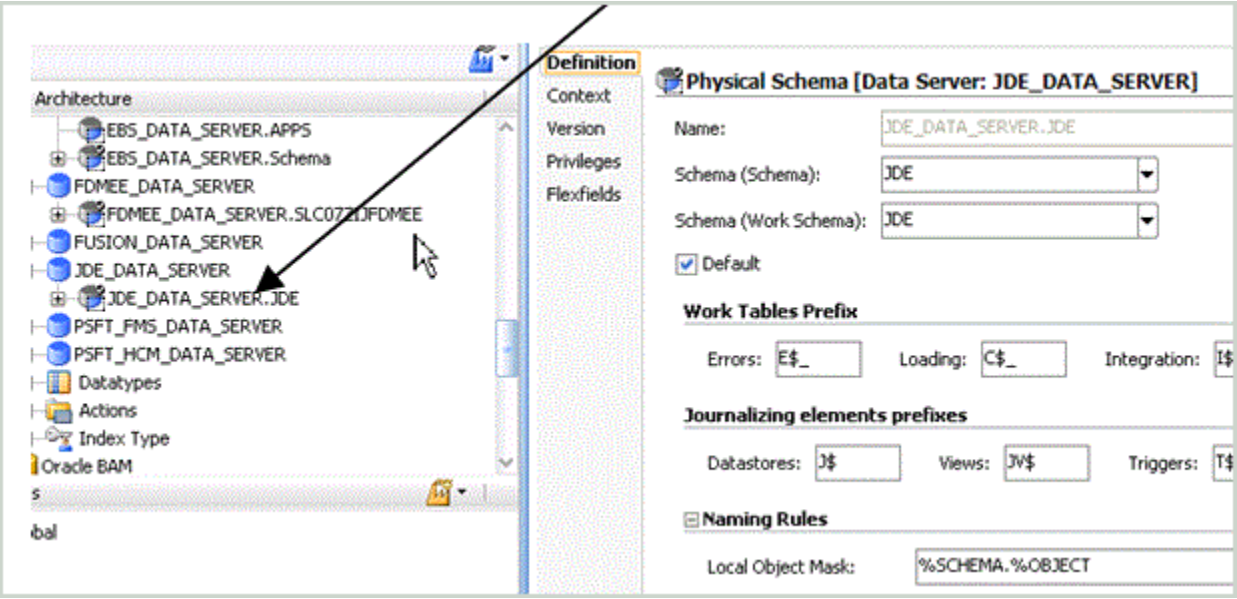
e. From **Physical Architecture**, then **Agents**, then **OracleDIAgent**, right click, and select **Test**.

An Information window displays when the test is successful.

f. Search for "environment" in the `jdbj.ini` file and note the environment values:

```
[JDBj-BOOTSTRAP SESSION]
user=EOSVM
password=ACHCJKEBHCJKBKEEGLDDFKBCLBCDBCGBDCMJMBPGKLNO
role=*ALL
environment=PY910
```

g. From **ODI Studio**, then **Topology**, then **Technologies**, and then **Oracle**, select **JDE_DATA_SERVER**.



h. In the **Definition** section, specify the following values:

   i. In **User**, specify **JDE_USER**.

   ii. In **Password**, specify **JDE_USER**.

i. In the **JDBC** section, specify the following values:

   i. In **JDBC Driver**, specify **JDBC Driver com.jdedwards.jdbc.driver.JDBCDriver**.

   ii. In **JDBC Password**, specify **JDBC URL jdbc:oracle:enterpriseone://PY910;RMNEQN=1;enterpriseone.role=*ALL**.

   - **JDBC Driver com.jdedwards.jdbc.driver.JDBCDriver**
   - **JDBC URL jdbc:oracle:enterpriseone://PY910;RMNEQN=1;enterpriseone.role=*ALL**

j. From **Physical Schema**, select **JDE** for the user.

   Select the second (indented) JDE server which is the Physical Schema.

15 **Restart the FDMEE service for the changes to take effect.**

16 **Verify the import of the JD Edwards source system.**

If the import did not occur, see "Importing a Source Adapter" on page 60.

Security

FDMEE supports the following roles:

FDMEE Roles	Tasks per Role
Administrator	Manages applications and performs any action in FDMEE. When you log in with the Administrator role, all links are visible in the Tasks pane.

FDMEE Roles	Tasks per Role
Create Integration	Creates FDMEE metadata and data rules. If you have the Create Integration role, you can: ● Create, delete, and edit metadata rules and data rules ● View process details ● Perform period mappings **Note:** You *cannot* run rules, view, create, edit, or delete source system registrations, target system registrations, or source accounting entities. When you log in with the Create Integration role, these links are visible in the Tasks pane: Data Load, Member Mapping, HR Data Load, Metadata, and Process Detail.
Drill Through	Controls the ability to drill through to the source system. In FDMEE, this role controls whether you can drill to the FDMEE landing page, which controls drilling to the source system.
Run Integration	Runs existing FDMEE metadata and data rules. If you log in with the Run Integration role, you can: ● Run metadata rules or data rules ● View process details **Note:** You *cannot* view, create, edit, or delete source system registrations, target system registrations or source accounting entities. FDMEE users who need to extract data from Oracle or PeopleSoft Enterprise Financial Management must be granted this role to run data rules. When you log in with the Run Integration role, links are visible in the Workflow tasks: Data Load Workbench, Data Load, Member Mapping, HR Data Load, Metadata, and Process Detail.
HR Integration	Runs Human Resource data rules and fills out runtime parameters. Can view transaction logs.
Intermediate 2-9	Roles 2-9 for intermediate levels are defined by the administrator.

Note: FDMEE users are enabled to define mappings only to target applications to which they have access.

Note: Planning and Essbase do not use member-level security at this time.

Integration Process Overview

You can use FDMEE to integrate metadata and data from your Enterprise Resource Planning (ERP) source system in three ways:

- "Extracting General Ledger Data" on page 32
- "Writing Back Data from EPM Applications" on page 32
- "Extracting Human Resource Data" on page 33

Extracting General Ledger Data

Follow this process to extract general ledger metadata and data and push into target EPM applications:

1. Register source systems in FDMEE by adding details for Oracle Data Integrator and FDMEE, which are specific to the source system.
2. Register target applications for use with FDMEE.
3. Select the Source Accounting Entities.
4. Define import formats and locations.
5. Create metadata rules.
6. Create period mappings for Year and Period dimensions.
7. Create category mappings.
8. Create the member mappings and data load rules.
9. Run the metadata rules to import metadata into Financial Management, Planning applications, and Profitability and Cost Management.

   If you use Performance Management Architect, you also deploy or redeploy the applications.
10. Run data rules to extract data from the source system and push into target applications. Data and/or metadata is staged in the FDMEE staging tables, extracted from the source system, and loaded into the target application.

    The data loaded is used for multiple purposes by the respective target applications (Planning, Financial Management, or Essbase). In addition, you can also use the sourced data to drill through from web forms in the applications or Smart View and Financial Reporting.

Writing Back Data from EPM Applications

Follow this process to write back data from EPM applications to your general ledger source system:

1. Perform steps 1-5 and step 7–8 in "Extracting General Ledger Data" on page 32.
2. Define write-back mappings for required segments or chartfields.

   You can select an EPM application as a source, and an Enterprise Resource Planning (ERP) as a target, and this writes to the journal interface table.
3. Run data load rules to push the data from supported target applications (Planning, Essbase aggregate storage, Essbase block storage, and Financial Management) into your general ledger source system.

Note: You cannot write back data to SAP General Ledger and PeopleSoft Human Capital Management source systems.

Note: Write-back from Financial Management is limited only to E-Business Suite General Ledger. To write back data from an EPM to legacy or any other unsupported Enterprise Resource Planning (ERP) systems, Oracle suggests that you extract data to a custom target application. After extracting the data, convert the data files to a format acceptable to those Enterprise Resource Planning (ERP) systems and import them there.

4. Load the data into E-Business Suite or PeopleSoft Enterprise Financial Management by running a process in Oracle General Ledger or PeopleSoft General Ledger.

Extracting Human Resource Data

Follow this process to extract metadata and data from human resource source systems into Public Sector Planning and Budgeting target applications:

1. Register Source systems in FDMEE by adding details for Oracle Data Integrator and FDMEE, which are specific to the PeopleSoft Human Capital Management source system.
2. Register your target application.
3. Select the Source Accounting Entities (Business Units).
4. Create the human resource data load rules.
5. Run human resource data rules to extract data and/or metadata from the source system and push into target applications.

   Data and metadata are staged in the FDMEE staging tables, extracted from the PeopleSoft Human Capital Management source system, and loaded into the target application.

Navigating FDMEE

Subtopics

- Toolbars
- Help Menu
- Task Pane Options
- Working with Data in Grids
- FDMEE User Interface Elements
- Advanced Search Options
- Using the POV Bar

From EPM Workspace, you can access FDMEE from the Navigate menu. (**Navigate**, **Administer**, **Data Management**)

Toolbars

Use the Standard toolbar is used for common Oracle Hyperion Enterprise Performance Management Workspace features. For additional information, see the *Oracle Enterprise Performance Management Workspace User's Guide*.

Help Menu

Use the Help menu to access FDMEE online help, Oracle technical support, the EPM documentation located on the Oracle Technology Network, Oracle website, and information about FDMEE.

Task Pane Options

The Tasks pane is a resizeable window to the left of FDMEE Workspace. It provides easy access to FDMEE options and features. The Tasks pane consists of the Workflow and Setup tabs.

Workflow Tasks

From the Workflow tab, you can integrate metadata and data from an Enterprise Resource Planning (ERP) source system into an Enterprise Performance Management (EPM) target application:

You can also load data from a file and other source systems.

- Data Load
  - Data Load Workbench
  - Data Load Rule
  - Data Load Mapping
- Metadata—Metadata Rule
- HR Data Load—HR Data Load Rule
- Other
  - Batch Execution
  - Report Execution
  - Script Execution
- Monitor—Process Details

Setup Tasks

From the Setup tab you can administer source and target systems, specify report and batch definitions, and manage application settings.

Available tasks:

- Configure
  - System Settings
  - Application Settings
  - Security Settings
  - User Settings
- Register
  - Source System
  - Target Application
  - Source Accounting Entity
  - Source Adapter
- Integration Setup
  - Import Format
  - Location
  - Period Mapping
  - Category Mapping
  - Excel Interface
- Data Load Setup
  - Logic Group
  - Check Rule Group
  - Check Entity Group
- Scripts
  - Script Editor
  - Script Registration
- Reports
  - Query Definition
  - Report Definition
- Batch—Batch Definition

Working with Data in Grids

Most screens display data in one or more grids. To manipulate grid data, perform one or more actions:

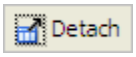
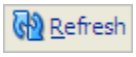
- To add a record, click **Add**.
- To delete, select a record, and then click **Delete**.
- To delete all records in a grid, click **Delete All**.

- To edit a record, click within its cell, and start typing. When applicable, you can also select the value to edit, and then click .
- To search items in a column, enter the search value in the blank field above the column of the value, and then press **Enter**. If the value is matched, it is displayed as the first item.
- To cancel all changes made to a row, select the row, and then click **Cancel**.
- To save all changes made to a row, select **Save**.

FDMEE User Interface Elements

The following elements are common on FDMEE pages.

Table 2 Elements Common on FDMEE Pages

Button	Description
	Customize your view. Options include: • **Columns**—You can choose "Show All" to display all columns or choose individual columns to display. • **Detach**—Use to detach the column grid. When you detach the grid, the columns display in their own window. To return to the default view, select **View**, and then click **Attach** or click **Close**. • **Reorder Columns**—Use to change the order of the columns that are displayed. You can select a column, and then use the buttons on the right to change the column order.
	Use to detach the column grid. When you detach the grid, the columns are displayed in their own window. To return to the default view, select **View**, and then click **Attach** or click **Close**.
	Refreshes the data. For example, if you submit a rule, refresh to see if the status changes from Running to Complete. **Note:** Refresh does not display on the FDMEE setup screens.
	Use to toggle the filter row. You can use the filter row to enter text to filter the rows that are displayed for a specific column. You can enter text to filter on, if available, for a specific column, and then press [Enter]. For example, on the Process Details page, to view only processes that failed, enter "FAILED" in the Status text box. The Query by Example button displays on the following FDMEE setup screens: Target Application, Source Accounting Entities, Import Format, Location, Data Load Workbench, and Process Details. To clear a filter, remove the text to filter by in the text box, and then press [Enter]. All text is case sensitive.
	Use to select an artifact on a page, such as a target application, member, or general ledger responsibility. When you click the Search button, the Search and Select dialog box is displayed. In some cases available advanced search options enable you to enter additional search conditions. See "Advanced Search Options" on page 36.

Advanced Search Options

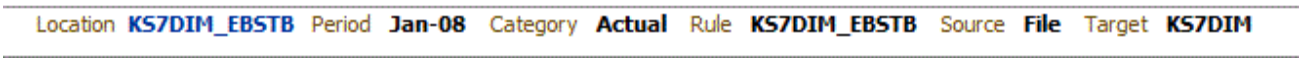
The Search button is common to many FDMEE pages. When you select the Search button, if the Advanced Search button is available, you can enter additional search conditions. The fields that are displayed in the advanced search options differ depending on what artifact you are selecting. The following operators are supported:

- Starts with
- Ends with
- Equals
- Does not equal
- Less than
- Greater than
- Less than or equal to
- Greater than or equal to
- Between
- Not between
- Contains
- Does not contain
- Is blank
- Is not blank

Using the POV Bar

For the Data Load Workbench, the POV bar shows the current:

- Location
- Period
- Category
- Data Rule



By default only the data rule assigned to the Category POV is displayed.

The Source System and Target Application are displayed as context information.

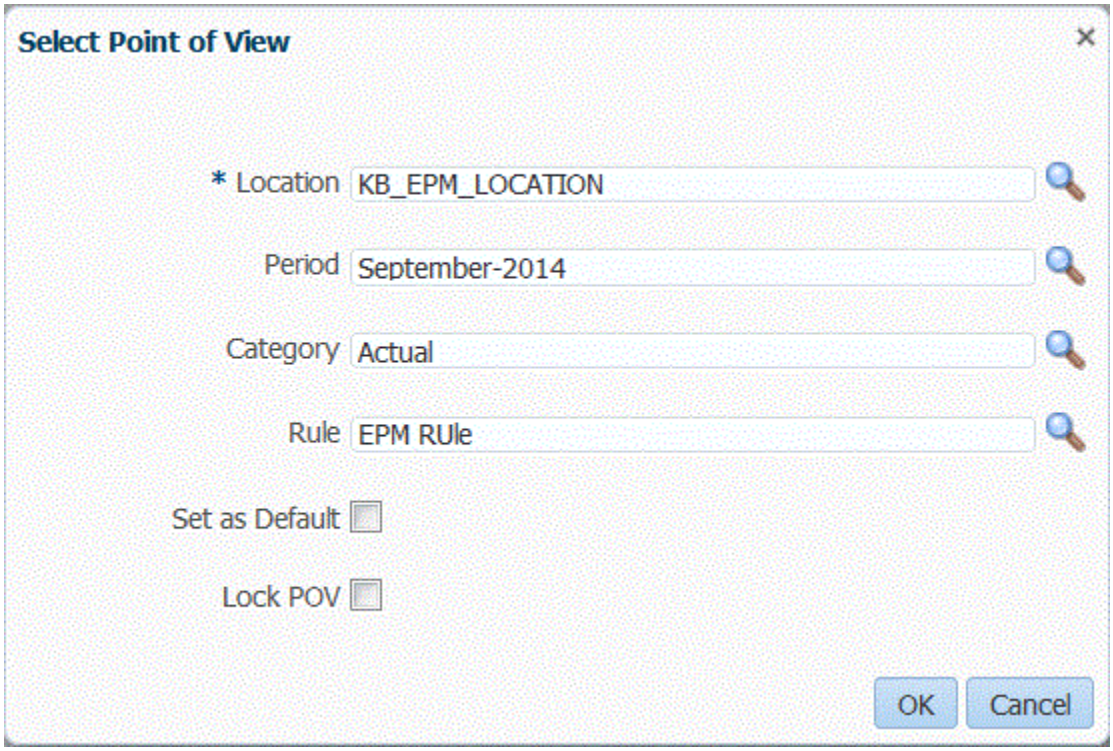
Selecting the Location POV

When you log on, the location POV is set to the default location of the user. Users can view only locations that they have permission to access. Location permission is determined and granted by system administrators.

➤ To select another Location POV:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

2 From the **POV** bar, double-click the **Location** field.



3 In **Select Point of View**, in **Location**, enter a full or partial string for the new location, and then click **OK**.

4 **Optional**: To search on another location, from the **Location** drop-down, click **More**, navigate to the location on the **Search and Select: Location** screen, and then click **OK**.

5 **Optional**: In **Select Point of View**, select **Set as Default** to use the new location as the default location.

When a POV selection is set as a default, the user profile is updated with the default selection.

6 Click **OK**.

Setting the Period POV

The FDMEE administrator controls which accounting period is active for all users. This feature prevents users from inadvertently loading data into incorrect periods. When you log on to FDMEE, the application identifies the global period value and automatically sets the POV to the current value.

➤ To select another Period POV:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

2 From the **POV** bar, double-click the **Location** field.

3 From **Select Point of View**, in **Period**, enter a full or partial string for the new period, and then click **OK**.

4 **Optional**: To search on another period, from the **Period** drop-down, click **More**, navigate to the period on the **Search and Select: period** screen, and then click **OK**.

5 **Optional**: In **Select Point of View**, select **Set as Default** to use the new period as the default period.

When a new POV selection is set as a default, the user profile is updated with the default selection.

6 Click **OK**.

Setting the Category POV

The FDMEE administrator controls the data category active for all users. This feature prevents users from inadvertently loading data to incorrect categories.

➤ To select another Category POV:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

2 From the **POV** bar, double-click the **Location** field.

3 In **Select Point of View**, in **Category**, select the new category, and then click **OK**.

4 **Optional**: In **Rule**, select the rule assigned to the Category POV.

5 Select **Set as Default** to use the new category as the default category.

When a POV is set as a default, the user profile is updated with the default selection.

6 Click **OK**.

Locking and Unlocking a POV

Locking the POV prevents locations from modifying the data. When a location has been locked for a particular period or category, users cannot import, validate, export, or rerun the validation report.

When a location is locked, a lock symbol ( ) is displayed in the POV bar.

Data in a locked POV can only be loaded when the locked POV is "unlocked."

The POV Lock options include:

- Lock POV
- Unlock POV
- Lock All Locations

  (The Lock All Locations and Unlock all Locations features are available only to administrators. See "Locking All (POV) Locations" on page 47).
- Unlock All Locations

The POV lock is referenced in:

- Data Load Workbench
- Data Load Rule
- Batch Execution

➤ To lock a POV:

1 **On the Workflow tab, under Data Load, select Data Load Workbench.**

The POV bar is also displayed on the Data Load Rule screen and Batch Execution screen

2 **On the POV bar, double-click the Location.**

3 **In Select Point of View, click Lock POV.**

The message: "Are you sure you want to lock selected POV? Data cannot be loaded to a locked POV." is displayed.

4 **From Lock POV Confirmation, click OK.**

An informational message shows that the POV is locked.

5 **Optional: To unlock a locked POV:**

a. From the **POV** bar, double-click the **Location** field.

b. From **Select Point of View**, click **Unlock POV**.

c. Click **OK**.

An informational message shows that the POV has been successfully unlocked.

Administration Tasks

Subtopics

- Predefining a List of Profiles
- Setting Up Source Systems
- Working with Source Adapters
- Registering Target Applications
- Selecting Source Accounting Entities
- Assigning General Ledger Responsibility
- Working with Source Accounting Entity Groups
- Working with Import Formats
- Defining Locations
- Defining Period Mappings
- Defining Category Mappings

Predefining a List of Profiles

FDMEE uses a predefined list of profiles. You can define values for these profiles to accommodate various business needs. Profiles can be set at the following levels:

- System (applies to the entire system)
- Application (applies to specific target application)
- User (applies to a specific user)
- Security (Role, Report, Batch, Custom Script, and Location)

Setting System-Level Profiles

Use the System Settings Option to update or clear System level profiles that apply to entire system. Only users with "Admin" role privileges can define system settings.

➤ To define system settings:

1 **On the Setup tab, under Configure, select System Settings.**

2 **In System Settings, in Profile Type, select the specific profile to list on the System Settings screen.**

Available profile types:

- All
- File— In addition to file-specific system settings, selecting the File profile type displays the “Create Application Folders” button. This feature instructs the system to create a folder structure in the path specified in the Application Root Directory setting.
- ODI—Use to set ODI password and repository connection information. When this information gas been added or changed, you can click **Check ODI Connection** to view if connection to the ODI agent was made successfully.
- Other—Use to set profiles associated with an EPMA data source, User Language, User Interface Theme, and Default Check Report.
- Point-of-View

The profile type that you select determines the settings that you can add or modify on the screen.

3 **Select the option and add the new value in Value.**

If is displayed in the Select field, you can search on the value.

System setting options are described in Table 3.

Note: When you install and configure FDMEE, Oracle Data Integrator is automatically installed and configured for you. The database for Oracle Data Integrator is in the same database as FDMEE and the Oracle Data Integrator agent deployed to the FDMEE Managed Server. You should be familiar with Oracle Data Integrator and review the Oracle Data Integrator documentation set before specifying or changing the installation defaults.

4 **Click Save.**

Table 3 System Setting Profile Options

Profile Type	Profile Option	Profile Description
All	Includes all profile types	

Profile Type	Profile Option	Profile Description

File	Application Root Folder	**Note:** The Application Root Directory must be set up on the server, specified in this field, and the Create Application Folder options must be executed as first steps when using FDMEE.
		
		The Application Root folder identifies the root directory of the FDMEE application. This folder is located on the FDMEE server and functions as the root folder for all FDMEE activities. Based on this parameter, FDMEE saves log files, generated files and reports to the appropriate folder under this root directory. Parameters must be set up on the server separately from this setup step.
		
		When you select the File profile type, the System Setting screen displays the "Create Application Folders" button. This features instructs the system to create a folder structure in the path specified in this field. The folder structure is (with sub-folders in each):
		
		`data`
		
		`inbox`
		
		`outbox`
		
		Within the `inbox`, locations are created when they are created in the Locations option. See also "FDMEE Application Folder Architecture" on page 18.
		
		When you specify a folder at the application level, and select the "Create Application Folders" option, a set of folders is created for the application that includes a scripts folder. Create scripts specific to an application in this folder. This is especially important for event scripts that are different between applications. If you do not set up an application level folder, then you cannot have different event scripts by application.
		
		If you specify an Universal Naming Convention (UNC) path, share permissions on the folder must allow access to the DCOM user for read/write operations. Use an Universal Naming Convention (UNC) path for the application root folder when Financial Management and FDMEE are on separate servers. Contact your server administrator to define the required UNC definition.
		
		If an UNC path is not entered, then you must enter the absolute path. For example, specify *`C:\Win-Ovu31e2bfie\fdmee`*

File	Create Location Folder	This setting instructs the system to create a location folder in the `inbox` when a location is created. Available values are **Yes** or **No**. Set this option once and do not change it. This setting is optional but recommended.
File	Archive Mode	Specifies whether archived files are copied or moved to the archive location. Enter **Copy**, **Move**, or **None**. If you select *Copy*, then the file is left in the `inbox`. If you select *Move*, then the file is copied to the archive folder and deleted from the `inbox`. The folder named `data` is the archive folder. When the file is moved to the archive location, it is renamed as follows: `<Process ID><Year><Month><Day>.<Original Extension>` For example, if the source file name is `BigFile.csv`, and it was loaded for period Mar-07 with a period key of 03/01/2007, and if the process id was 983, then the resulting file name is `98320070301.csv`.
File	Excluded File Upload Wild Cards	Specify file extensions that cannot be uploaded. Enter `*.*` to disallow all file uploads.

Profile Type	Profile Option	Profile Description
File	Batch Size	Specify the number of rows read at a time from the file to memory. This parameter is mainly used for performance. When data is loaded, this settings determines how many records are stored in the cache. For example, when 1000 is specified; the system stores 1,000 records in cache. Similarly, when 5000 is specified, the system stores 5,000 records in cache and commit. Determine this setting by Server Memory, and adjust as needed.
File	File Character Set	Specify the method for mapping bit combinations to characters for creating, storing, and displaying text. Each encoding has a name; for example, UTF-8. Within an encoding, each character maps to a specific bit combination; for example, in UTF-8, uppercase A maps to HEX41. Click to view available character sets. Encoding refers to mapping *bit* combinations to characters for creating, storing, and displaying text. Convert the encoding to UNICODE if your source file is not in one of the supported formats.
File	Encrypted Password Folder	Specify the directory where the files that store passwords in encrypted form is located. This encrypted password folder is used with the "Update Configuration File" button. See "Working with Batch Scripts" on page 289.
ODI	ODI User Name	Specifies the Oracle Data Integrator user name used to access the Oracle Data Integrator master repository. For example, enter `Supervisor`. This setting is defined automatically when ODI is configured, but you can customize it if necessary.
ODI	ODI Password	Specifies the Oracle Data Integrator database schema used to access the Oracle Data Integrator master repository. For example, enter `Master`. This setting is defined automatically when ODI is configured, but you can customize it if necessary.
ODI	ODI Execution Repository	Specifies the repository where all scenarios are stored. For example, enter `ERPI_REF`. This setting is defined automatically when ODI is configured, but you can customize it if necessary.
ODI	ODI Work Repository	Specifies the (execution) repository which contains runtime objects (for example, scenarios). The work repository can be linked with only one Master Repository. For example, enter `FDMEE_WORK_REF`
ODI	ODI Master Repository Driver	Specifies the driver of the ODI master repository. This setting is defined automatically when ODI is configured, but you can customize it if necessary.
ODI	ODI Master Repository URL	Specifies the URL of the server where the Oracle Data Integrator master repository is installed. This setting is defined automatically when ODI is configured, but it can be customized if necessary. For example, enter `jdbc:oracle:thin:@serverdatabase.oracle.com:1521:orcl`.
ODI	ODI Master Repository User	Specifies the Oracle Data Integrator master repository user name. This setting is defined automatically when ODI is configured, but you can customize it if necessary.
ODI	ODI Master Repository Password	Specifies the Oracle Data Integrator master repository password. This setting is defined automatically when ODI is configured, but you can customize it if necessary.
Other	EPMA Data Source Name	Specifies the EPMA Data Source name for the EPMA Interface Data Source.

Profile Type	Profile Option	Profile Description
Other	User Language	Specify the system default language of the user version of FDMEE. **Note:** FDMEE uses the user language to query the language data, for example, column titles, segment name, and so on.
Other	User Interface Theme	The default theme contains all the colors, styles, and general-use icons that are displayed in the user interface. FDMEE uses BLAF+ as the default value.
Other	Default Check Report	Specify the type of Check Report to use as the default check report. The following are pre-seeded check reports, but you can create a new one and specify it here: ● Check Report—displays the results of the validation rules for the current location (pass or fail status). ● Check Report Period Range (Cat, Start per, End per)—Displays the results of the validation rules for a category and selected periods. ● Check Report by Val. Entity Seq.—Displays the results of the validation rules for the current location (pass or fail status); sorted by the sequence defined in the validation entity group. ● Check Report with Warnings—Displays the results of the validation rules for the current location. Warnings are recorded in validation rules and shown if warning criteria are met. This report does not show rules that passed the validation.
Other	Default Intersection Report	Specify the type of Intersection Check Report to use as the default intersection check report at the system level. Intersection reports identify data load errors and are generated as part of the data validation step in the Data Load Workbench. The reports are available in two formats: *Dynamic Column* or *Fixed Column* format. The Fixed Column displays up to four custom dimensions.
Other	Batch Timeout in Minutes	When a batch job is run in sync mode (immediate processing), specify the maximum time the job can run. In sync mode, FDMEE waits for the job to complete before returning control.
Other	Enable Event Script Execution	Select **Yes** to enable the execution of application events such as before loading data (BefLoad) or after validation (AftValidate). Select **No** to disable the execution of application events.
Other	SQL Server Database Provider	Specify the name of the SQL Server database provider. The available SQL Server database provider is SQLOLEDB.
Other	Log Level	Specify the level of detail displayed in the logs. A log level of 1 shows the least detail. A log level of 5 shows the most detail. Logs are displayed in Process Details by selecting the **Log** link.
Other	Check Report Precision	Specify the total number of decimal digits for rounding numbers, where the most important digit is the left-most nonzero digit, and the least important digit is the right-most known digit.
Other	Display Data Export Option "Override All Data"	Specify **Yes** to display the "Override All Data" option from the Export Mode drop-down on the Execute Rule screen.
POV	Default POV Location	Specifies the default POV location. These preferences take precedence when no equivalent settings are in Application Settings or User Settings
POV	Default POV Period	Specifies the default POV Period. These preferences take precedence when no equivalent settings are in Application Settings or User Settings. screen.

Profile Type	Profile Option	Profile Description
POV	Default POV Category	Specifies the default POV Category. These preferences take precedence when no equivalent settings are in Application Settings or User Settings.
POV	Global POV Mode	When this is set to **Yes**, other POVs (Application Level and User Level POVs) are ignored.

Setting Application-Level Profiles

Use the Application Settings option to update or clear application-level profiles that apply to the target application.

➤ To set an application level profile:

1 **On the Setup tab, under Configure, select Application Settings.**

2 **In Application Settings, in the Target Application drop-down, select the target application to which the application profile applies.**

3 **Select application level profile settings.**

4 **Optional: To clear a setting, select the value, and then click Delete.**

The value is removed but is deleted only when you save it.

5 **Click Save.**

Table 4 Application Level Profile Options

Option	Description

Application Root Folder	The Application Root folder is the root folder for storing all files used to load data to this EPM application. You can use a separate root folder for each EPM application.
	
	Based on this parameter, FDMEE saves log files, generated files and reports to the appropriate folder under this root directory. Parameters must be set up on the server separately from this setup step.
	
	Selecting the **Create Application Folder** button instructs the system to create a folder structure in the path specified in this field. The folder structure is (with sub-folders in each):
	
	`data`
	
	`inbox`
	
	`outbox`
	
	When you specify a folder at the application level, and select the "Create Application Folders" option, a set of folders is created for the application that includes a scripts folder. Create scripts specific to an application in this folder. This is especially important for event scripts that are different between applications. If you do not set up an application level folder, then you cannot have different event scripts by application.
	
	If you specify an Universal Naming Convention (UNC) path, share permissions on the folder must allow access to the DCOM user for read/write operations. Use an Universal Naming Convention (UNC) path for the application root folder when Financial Management and FDMEE are on separate servers. Contact your server administrator to define the required UNC definition.
	
	If an UNC path is not entered, then you must enter the absolute path. For example, specify *`C:\Win-Ovu31e2bfie\fdmee`*

Option	Description
File Character Set	Specify the method for mapping bit combinations to characters for creating, storing, and displaying text. Each encoding has a name; for example, UTF-8. Within an encoding, each character maps to a specific bit combination; for example, in UTF-8, uppercase A maps to HEX41. Click to view available character sets. Encoding refers to mapping *bit* combinations to characters for creating, storing, and displaying text. Convert the encoding to UNICODE if your source file is not in one of the supported formats.
Default POV Location	Specify the default POV location.
Default POV Period	Specify the default POV Period.
Default POV Category	Specify the default POV Category.
User Language	Specify the application default language of the user version of FDMEE.
User Interface Theme	Set the Oracle design pattern for the applications. FDMEE uses BLAF+ as the default user interface value.
Default Intersection Report	Specify the type of Intersection Check Report to use as the default intersection check report at the application level. Intersection Check reports identify data load errors and are generated as part of the data validation step in the Data Load Workbench. The reports are available in two formats Dynamic Column or Fixed Column format. The Fixed Column displays up to four custom dimensions.
Default Check Report	Specify the type of Check Report to use as the default check report at the application level. The following are pre-seeded check reports, but you can create a new one and specify it here: ● Check Report—Displays the results of the validation rules for the current location (pass or fail status). ● Check Report Period Range (Cat, Start per, End per)—Displays the results of the validation rules for a category and selected periods. ● Check Report by Val. Entity Seq.—Displays the results of the validation rules for the current location (pass or fail status); sorted by the sequence defined in the validation entity group. ● Check Report with Warnings—Displays the results of the validation rules for the current location. Warnings are recorded in validation rules and shown if warning criteria are met. This report does not show rules that passed the validation.
Enable Event Script Execution	Select **Yes** to enable the execution of application events such as before loading data (BefLoad) or after validation (AftValidate). Select **No** to disable the execution of application events.
Log Level	Specify the level of detail displayed in the logs. A log level of 1 shows the least detail. A log level of 5 shows the most detail. Logs are displayed in Process Details by selecting the **Log** link.
Check Report Precision	Specify the total number of decimal digits for rounding numbers, where the most important digit is the left-most nonzero digit, and the least important digit is the right-most known digit.

Locking All (POV) Locations

The lock all locations feature prevents data from being loaded to a selected POV by locking all locations related to a target application for a given period and category. When you select the "Lock All Locations" button, a pop-up is displayed with populated Category and Period values based on the profile. You can update the category and period if desired, and then lock the POV.

When a location is locked, a lock symbol ( ) is displayed in the POV bar.

An "Unlock All Location" button is also available so that you can unlock all locked location. The Lock All Locations feature is referenced in the:

- Data Load Workbench
- Data Load Rule
- Batch Execution

For information on locking and unlocking an individual POV, see "Locking and Unlocking a POV" on page 39

➤ To lock all locations for a POV:

1 On the **Setup** tab, under **Configure**, select **Application Settings**.

2 In **Application Settings**, from the **Target Application** drop-down, select the target application to which the application profile applies.

3 Click **Lock All Locations**.

4 In **Optional:** in **Period**, select the period to lock.

5 **Optional:** in **Category**, select the category to lock.

6 Click **OK**.

All locations for the selected target application are locked.

➤ To unlock a POV for all locations:

1 On the **Setup** tab, under **Configure**, select **Application Settings**.

2 In **Application Settings**, from the **Target Application** drop-down, select the target application to which the application profile applies.

3 Click **Unlock All Locations**.

4 **Optional:** in **Period**, select the period to unlock.

5 **Optional:** in **Category**, select the category to unlock.

6 Click **OK**.

All locations for the selected target application are unlocked.

Setting User Level Profiles

Use the User Settings option to update or clear user level profiles that apply to the user.

Note: When the Global mode is defined, then user level profiles for the POV are not applicable.

➤ To set a user level profile:

1 **On the Setup tab, under Configure, select User Settings.**

2 **In User Setting, select the options to add or modify.**

3 **Optional: To clear a setting, select the value and from your keyboard, and then click Delete.**

The value is removed, but it is deleted only when you save it.

4 **Click Save.**

Table 5 User Level Profile Settings

Option	Description
File Character Set	Specify the method for mapping *bit* combinations to characters for creating, storing, and displaying text. Each encoding has a name; for example, UTF-8. Within an encoding, each character maps to a specific *bit* combination; for example, in UTF-8, uppercase A maps to HEX41. Click to view available character sets on the Search and Select screen. Encoding refers to mapping *bit* combinations to characters for creating, storing, and displaying text. You should convert the encoding to UNICODE if your source file is not in one of the supported formats.
Default POV Location	Specify the default POV location.
Default POV Period	Specify the default POV Period.
Default POV Category	Specify the default POV Category.
User Language	Select the default language of the user version FDMEE user interface.
User Interface Theme	Specify the default theme of the user version of the FDMEE user interface.
Default Check Report	Specify the type of Check Report to use as the default check report at the user level. The following are pre-seeded check reports, but you can create a new one and specify it here: ● Check Report—Displays the results of the validation rules for the current location (pass or fail status). ● Check Report Period Range (Cat, Start per, End per)—Displays the results of the validation rules for a category and selected periods. ● Check Report by Val. Entity Seq.—Displays the results of the validation rules for the current location (pass or fail status); sorted by the sequence defined in the validation entity group. ● Check Report with Warnings—Displays the results of the validation rules for the current location. Warnings are recorded in validation rules and shown if warning criteria are met. This does not show rules that passed the validation.
Default Intersection Report	Specify the type of Intersection Check Report to use as the default intersection check report at the user level. Intersection reports identify data load errors and are generated as part of the data validation step in the Data Load Workbench. The reports are available in two formats: *Dynamic Column* or *Fixed Column* format. The Fixed Column displays up to four custom dimensions.

Option	Description
Log Level	Specify the level of detail displayed in the logs. A log level of 1 shows the least detail. A log level of 5 shows the most detail. Logs are displayed in Process Details by selecting the **Log** link.

Setting Security Options

In FDMEE, administrators can secure almost any user interface and report feature. FDMEE supports five levels of security:

- Role level security—Controls access to components of the user interface that each user can access.
- Report security—Controls the reports that can be executed based on the report groups assigned to a role.
- Batch security—Controls the batches that can be executed based on the batch groups assigned to a role.
- Custom scripts security—Controls the custom scripts that can be executed based on the custom script groups assigned to a role.
- Location security—Controls access to locations.

Security levels apply to users. Role and Location security levels assigned to users are compared at runtime. If an user is assigned a level that is equal to the level assigned to the feature that the user is trying to access, the feature is available to the user.

Role Level Security

FDMEE security enables you to customize user access to user interface functions using the concept of roles. Roles are permissions that grant user access to functions. In FDMEE, default roles are assigned to functions that aggregate and tailor specific requirements. After the functions are assigned to a role, the corresponding role is mapped to users when provisioning users in Shared Services. The process of granting roles to users is described in the *Oracle® Enterprise Performance Management System User and Role Security Guide*.

➤ To add role level security:

1 **On the Setup tab, under Configure, select Security Settings.**

2 **In Security Setting, select the User Interface tab.**

3 **In Role, select the role category to which to assign access.**

A list of roles is described in Table 6, "Role and Descriptions," on page 50.

The role category determines the display of functions associated with the selected role.

4 **In Function, select the function to assign to the role.**

5 **Click Save.**

Table 6 Role and Descriptions

Role	Description
Administrator	Grants access to all FDMEE functions.
Create Integration	Creates FDMEE metadata and data load rules.
Run Integration	Runs FDMEE metadata and data rules and fills out runtime parameters. Can view transaction logs.
Drill Through	Controls whether you can drill to the FDMEE landing page, which controls drilling to the source system.
HR Integration	Runs Human Resource data rules and fills out runtime parameters. Can view transaction logs.
Intermediate 2-9	Roles for intermediate levels are defined by the administrator.

Defining User Interface Security

➤ To add batch security:

1 On the **Setup** tab, under **Configure**, select **Security Settings**.

2 Select the **Role Security** tab.

3 From **Role**, select the role to which to assign access.

A list of roles is described in Table 6, "Role and Descriptions," on page 50.

4 Select the **User Interface** tab.

5 In **Function**, select the user interface function to which to assign user interface security.

6 Click **Save**.

Defining Report Security

To define report security, you assign reports of a selected type to a group (see "Adding Report Groups" on page 359). Next you assign the report group to a role. The role has access to all reports in the groups at execution time.

➤ To add report level security:

1 On the **Setup** tab, under **Configure**, select **Security Settings**.

2 In **Role**, select the role to which to assign the report security.

A list of roles is described in Table 6, "Role and Descriptions," on page 50.

3 Select the **Report** tab.

4 In **Report Group**, select the report group to which to assign report security.

5 Click **Save**.

Defining Batch Security

To define batch security, you assign batches of a selected type to a group (see "Adding a Batch Group" on page 281). Next you assign the batch group to a role. The role has access to all batches in the groups at execution time.

➤ To add batch security:

1 On **Setup** tab, under **Configure**, select **Security Settings**.

2 From **Role**, select the role to which to assign batch security.

A list of roles is described in Table 6, "Role and Descriptions," on page 50.

3 Select the **Batch** tab.

4 In **Batch Group**, select the batch group to assign batch security.

5 Click **Save**.

Defining Custom Script Security

To define custom scrip security, you assign custom scripts of a selected type to a group (see "Adding a Custom Script Group" on page 318). Next you assign the custom scripts group to a role. The role has access to all custom scripts in the groups at execution time.

➤ To add role level security:

1 On the **Setup** tab, under **Configure**, select **Security Settings**.

2 From **Role**, select the role to which to assign custom script security.

A list of roles is described in Table 6, "Role and Descriptions," on page 50.

3 Select the **Custom Script** tab.

4 From **Custom Script Group**, select the custom script group to which to assign custom script security.

5 Click **Save**.

Defining Location Security

Location security (user access to locations) for FDMEE is configured and enforced by options on the Location Security Settings tab. You define the user groups to create for each location. When a location is created or updated, then you can create as many groups as defined in the system settings for the location. Additionally, a "Maintain User Groups" enables you to create user groups in mass for all the existing locations.

Several dependent processes must occur before Location Security is fully implemented:

1. When a Location is created, User Groups are created automatically in Oracle Hyperion Shared Services.

   The user group contains the name of the location and additional prefix and suffix information based on the user preference. In addition, roles are provisioned for User Groups.

2. The administrator provisions the users to the User Groups.

3. When the user logs in, FDMEE determines the groups assigned to the user.

   Based on the name of the group, FDMEE determines the accessible locations.

4. The POV region filters the locations based on the user access.

Note: If the web services and batch scripts are used, then location security is still maintained and enforced.

➤ To display the Location Security tab:

1 **On the Setup tab, under Configure, select Security Settings.**

2 **Select the Location Security tab.**

➤ To add a user group for location security:

1 **On the Setup tab, under Configure, select Security Settings.**

2 **Select the Location Security tab.**

3 **In the Location summary grid, click Add.**

A *LOCATION* name row is added. When the group is saved, the Group name is in the form of Prefix_Location_Suffix, for example, *FDMEE_LOCATION_DATA*.

The prefix and suffix help identify groups in Common Shared Services (CSS).

4 **In the Security Setting Details grid, enter a description of the user group in the Description field.**

For example, enter: `Group for Creating and Running Integration`.

5 **In the Prefix field, enter FDMEE.**

When the group is saved, the prefix is prepended to the group name.

6 **In the Suffix field, select the name of the function or rule that the user is provisioned to access.**

For example, specify:

- Data Rule Metadata Rule (Run Integration role)
- HR Rule (HR Integration role)
- Create Integration
- Drill Through

When the group is saved, the suffix is appended to the group name.

7 **Select the list of roles provisioned for the user group by selecting the appropriate roles:**

- Create Integration
- Drill Through
- Run Integration
- HR Integration
- Intermediate 2-9

The list of roles is described in Table 6, "Role and Descriptions," on page 50.

8 Click **Save**.

9 To create users groups in mass for the location, click **Maintain User Groups**.

➤ To disable security by location:

1 On the **Setup** tab, under **Configure**, select **Security Settings**.

2 Select the **Location Security** tab.

3 Click **Disable Security by location**.

When security by location is disabled, this message is displayed: `Security by Location is disabled. Would you like to enable the feature?`

4 Click **Save**.

Setting Up Source Systems

Subtopics

- Registering Enterprise Resource Planning (ERP) Source Systems
- Registering File-Based Source Systems
- Deleting Registered Source Systems
- Editing Registered Source System Details
- Adding File-Based Data Load Definitions

In some cases, you have multiple general ledger or human resource source systems. You can use FDMEE to extract data and metadata from any instance.

For information on the source systems that FDMEE supports, see the *Oracle Hyperion Enterprise Performance Management System Certification Matrix*.

Before you begin using FDMEE, you must register your source systems. Follow this process:

1. Register a source system. See "Registering Enterprise Resource Planning (ERP) Source Systems" on page 53.
2. Edit source system settings as necessary. See "Editing Registered Source System Details" on page 56.

   For information on removing a registered source system, see "Deleting Registered Source Systems" on page 55.

Note: For information on viewing FDMEE processes or jobs, see "Viewing Process Details" on page 202.

Registering Enterprise Resource Planning (ERP) Source Systems

The source system page displays all registered source systems in a table in the Summary pane. By default, the following columns are displayed:

- Name—Name of the source system
- Type—Type of source system
- Description—The description that you entered when the source system was registered.
- Drill URL—The drill URL you entered when the source system was registered.

➤ To add a source system:

1 On the **Setup** tab, under **Register**, select **Source System**.

2 In **Source System**, click **Add**.

3 Enter the source system details:

a. In **Source System Name**, enter the source system name.

b. In **Source System Description**, enter a description of the source system.

c. In **Source System Type**, select the source system type.

Available source systems:

- E-Business Suite Release 11*i*
- PeopleSoft Financials Release 9
- Peoplesoft HCM Release 9
- Fusion Applications
- SAP ERP Financial
- SAP BW (Business Warehouse)
- JD Edwards Enterprise One
- File
- Others

d. Enter the **Drill URL**.

The Drill-Through URL identifies the URL to use for drilling through. For example, `http://machinename.us.oracle.com:6362`

The URL is used to launch Fusion, E-Business Suite or PeopleSoft.

You can drill through to any location as long as a URL is available, or as long as the user can specify a JavaScript that provides the necessary drill-through options. Drill through is available for predefined adapters, files and open interface sources.

Additionally you can drill through to Oracle General Ledger or PeopleSoft Enterprise Financial Management from an Enterprise Performance Management (EPM) system application that displays data loaded from the source system. When you click a hyperlink, you can navigate to the Oracle General Ledger Balances page or PeopleSoft Enterprise Financial Management Inquiry page.

For JD Edward source systems, you can drill through to the JD Edwards balances page.

Note: Drill through is not supported for Financial Management journals and intercompany transactions.

e. In **ODI Context Code**, enter the context code.

The ODI context code refers to the context defined in Oracle Data Integrator. A context groups the source and target connection information.

The default context code is **GLOBAL**.

4 **Optional: If you use PeopleSoft's Commitment Control functionality, select Enable Commitment Control.**

See Appendix F, "PeopleSoft Commitment Control".

5 **Click Save.**

After you add a source system, you can select the source system in the table, and the details are displayed in the lower pane.

After you register a source system, you must initialize the source system. Initializing the source system fetches all metadata needed in FDMEE, such as ledgers, chart of accounts, and so on. It is also necessary to initialize the source system when there are new additions, such as chart of accounts, segments/chartfields, ledgers, and responsibilities in the source system.

6 **To initialize a source system, click Initialize.**

Note: Depending on the size of the source system, initializing might take several minutes.

Registering File-Based Source Systems

The source system page displays all registered source systems in a table in the Summary pane. By default, the following columns are displayed:

- Name—Name of the source system
- Type—A file-based source system is the only supported source system.
- Description—The description that you entered when you registered the source system.
- Drill URL—The drill URL you entered when you registered the source system.

➤ To add a file-based source system:

1 **On the Setup tab, under Register, select Source System.**

2 **Click Save.**

After you add a source system, you can select the source system in the table, and the details are displayed in the lower pane.

Deleting Registered Source Systems

You can delete registered source systems if you do not plan to use the source system with FDMEE.

Caution! Use caution when deleting registered source systems! Part of the procedure for deleting a source system is to delete the target application. When you delete the target application, other artifacts are deleted. When you delete a registered source system, the source system is removed from the **Source System** screen, and all import formats, locations, metadata rules, and data rules associated with the source system are removed.

➤ To remove a registered source system:

1 On the **Setup** tab, under **Register**, select **Target Application**.

Use the Target Application page to remove all target applications that have rules or mappings to the source system.

2 On the **Setup** tab, under **Register**, select **Source System**.

3 In **Source System**, select the source system to remove, and then click **Delete**.

Tip: To undo a deletion, click **Cancel**.

4 Click **OK**.

Editing Registered Source System Details

Sometimes, source system details change. You can edit the source system details as needed. Keep in mind that after you add a source system type, you should not modify it.

➤ To edit registered source system settings:

1 On the **Setup** tab, under **Register**, select **Source System**.

2 Select the source system.

3 Edit the source system details or ODI details as necessary.

4 Click **Save**.

If you make metadata changes in the source system, (for example, you add a new segment, chartfield values, or hierarchies), you must initialize the source system.

5 Click **Initialize**.

Adding File-Based Data Load Definitions

Source systems of the type "file" are used in import formats to import data from fixed and delimited files.

FDMEE creates a file-based data load system automatically. If you need to create an alternate file-based data load source system, follow the procedure below.

To use file-based import formats, you must define a file-based data load.

➤ To add a file-based data load definition:

1 On the **Setup** tab, under **Register**, select **Source System**.

2 In **Source System**, click **Add**.

3 Enter the source system details:

   a. In **Source System Name**, enter the file-based data load system name.

   b. In **Source System Description**, enter a description.

   c. In **Source System Type**, select **File**.

   d. In **Drill Through URL**, specify the URL that identifies the URL to use for drilling through.

   e. In **ODI Context Code**, enter the context code.

      The ODI context code refers to the context defined in Oracle Data Integrator. A context groups the source and target connection information.

4 Click **Save**.

   After you add a file-based data load system, select the source system in the table. The details of the system are displayed in the lower pane.

Working with Source Adapters

A source adapter is an integration framework in FDMEE that enables you to extract data from source system in a flexible and customizable manner. A source adapter consists of two components:

- Oracle Data Integrator (ODI) Project—Contains the code to extract and load the data from the source system to the FDMEE staging tables.
- Adapter Definition XML—Contains the definition of the integration. It contains three components: source columns, parameters and the drill URL.

Three pre-packaged integrations are delivered using this framework:

- SAP ERP Financials
- Open interface to load from any source system
- JD Edwards

Using a Prepackaged Integration for SAP

For prepackaged integrations for SAP, review the instructions in the readme to download the necessary information from Oracle's integration partner. Oracle delivers the Oracle Data Integrator (ODI) Project and an Adapter Definition XML file. For the SAP integrations, the integration partner delivers the ODI Project and Adapter XML.

➤ To use the prepackaged integration:

1 Use the ODI Console to import the **Project & Model definitions** into the Work Repository setup for FDMEE.

2 Copy the **Adapter Definition XML** to a location under the directory that has been set up as the Application Root directory in System Settings.

3 Use the Source Adapter screen to import the Adapter XML file.

To import a file:

a. On the **Setup** tab, under **Configure**, select **Source Adapter**.

b. In the **Source Adapter**, select **Import**.

c. In **Select file to import**, navigate to the file to import, and then click **OK**.

The file name depends on the adapter desired. For example, select:

- SAP_GLNew_Adapter.xml
- SAP_GLClassic_Adapter.xml
- SAP_PC_Adapter.xml
- SAP_CC_Adapter.xml
- SAP_AP_Adapter.xml
- SAP_AR_Adapter.xml

d. **Optional**: To browse for a file, select **Upload**.

e. In **Select a file to upload**, click **Browse** to navigate to the file to import, and then click **OK**.

4 Create an import format of new type **Source Adapter** that defines the mapping between the source columns (identified in the source adapter) and the target application dimensions.

5 Define the **Locations** and **Data Rule**.

When you execute the data rule, the new ODI Scenario associated with the import format is used to extract the data from the source and stage it in the FDMEE staging table (TDATASEG).

Adding Source Adapter Definitions

Use the Source Adapter screen to review prepackaged adapters or to customize prepackaged adapters. Do not directly modify the prepackaged adapters. As Oracle ships updates to the prepackaged adapter, the changes you make are overwritten. Always make a copy of the prepackaged adapter and make the necessary changes. You can also use this screen to create new custom adapters for custom load integrations.

The Source Adapter screen includes three sections:

- Source adapter information summary. See "Defining Source Adapter General Information" on page 59.
- Source adapter detail. See "Defining Source Adapter Detail" on page 62.

- Three sub-tabs from which you select: source columns information, parameters to pass to the ODI scenario, and URLs for drill through.

  See:

  - "Selecting Source Columns" on page 62
  - "Defining Parameters" on page 63
  - "Defining URLs for Drill Through" on page 64

Defining Source Adapter General Information

Use the Source Adapter Summary section to view, define, delete, export, import, and copy summary information about a source adapter.

Adding a Source Adapter

➤ To add a source adapter:

1 **On the Setup tab, under Register, select Source Adapter.**

2 **In Source Adapter, from the Source Adapter summary task bar, click Add.**

Blank entry rows are added to the Source Adapter summary section.

Complete the following steps in the Source Adapter details section.

3 **In Adapter Key, enter a user defined identifier for the adapter.**

For example, for an Open Interface source adapter, enter `OPENINT`. You cannot modify the value in this field after it has been created.

4 **In Adapter Name, enter a user defined name for the adapter.**

For example, enter **Open Interface Adapter**.

5 **In ODI Object Name, enter the name of the package or scenario.**

6 **In ODI Object Type, select Package or Scenario.**

- Package—A Package is a sequence of steps organized into an execution diagram. Packages are the main objects used to generate scenarios for production. When you select Package as the ODI object type, then the source columns are shown, and you can specify maps in the import format in which the scenario is generated.
- Scenario—ODI compiled code that must match exactly as specified in the ODI.

7 **In ODI Object Project code, enter the template ODI project code.**

8 **In Source System Type, select the source application type.**

9 **Click Save.**

Deleting a Source Adapter

Deleting a source adapter removes the parameters, drill-down URLs and source columns associated with the source adapter.

➤ To delete a source adapter:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In the **Source Adapter** summary grid, select the source adapter and click **Delete**.

The message is displayed: `This also deletes associated Parameters, Drill Down URLs and Source Columns. Delete Source Adapter?`

3 Click **OK**.

Exporting a Source Adapter

Use the Export feature to migrate an adapter definition from one environment to another in the XML file format.

➤ To export a file:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In **Source Adapter**, on the **Source Adapter** summary task bar, in **Export**, select **Export Current** or **Export All**.

- Export Current—Exports a selected source adapter from the Source Adapter Summary list.
- Export All—Exports all source adapters from the Source Adapter summary list.

3 To export a selected file, in **Specify file location**, navigate to the file to export, and then click **OK**.

You can enter the full path name and file name in the **File Name** field.

4 **Optional**: From **Open File**, save the file to a local directory on the desktop.

5 **Optional**: To browse for a file to export, select **Upload**, and then browse to the file to export. When the File Upload screen is displayed, navigate to the file to upload, and then click **Open**.

6 Click **OK**.

Importing a Source Adapter

➤ To import a source adapter:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In **Source Adapter**, on the **Source Adapter** summary task bar, select **Import**.

3 In **Specify file to import**, navigate to the file, and then click **OK**.

4 in **Open File**, open the XML file or save it to a directory of your choice.

5 **Optional**: To browse to a file, select **Upload**. When the **File Upload** screen is displayed, navigate to the file, and then click **Open**.

6 Click **OK**.

The source adapter is added to the summary list.

Copying a Source Adapter Key

You can copy a source adapter key and its associated detail to a new adapter key.

➤ To copy a source adapter key:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In **Source Adapter**, on the **Source Adapter** summary task bar, select **Copy**.

3 In **Copy**, enter the name of the new adapter key, and then click **OK**.

Using the SAP BW Source Adapter

You can use an SAP Business Warehouse (BW) source adapter to extract metadata and data from an SAP BW source system. The SAP BW integration with FDMEE differs from the standard and prepackaged integration frameworks. SAP (BW) comes with many predefined InfoCubes, or you can define your own InfoCubes.

Dimensions and hierarchies can be extracted from the SAP BW cube. After selecting the Infocube from the Source Adapter screen, metadata rules can be created to bring over dimensions and hierarchies.

➤ To add an SAP BW source adapter:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In **Source Adapter**, on the **Source Adapter** summary task bar, click **Add**.

Blank entry rows are added to the Source Adapter summary section.

3 In the **Source Adapter** details grid, in **Adapter Key**, enter a user defined identifier for the adapter.

For example, for an SAP BW source adapter, enter `NK_SAP`. The value in this field cannot be modified after it is created.

4 In **Adapter Name**, enter a user defined name for the SAP BW adapter.

For example, enter `NK_SAP`.

5 In **ODI Package Name**, enter the name of the package.

For example, enter `NK_SAP`.

6 In **ODI Project Code**, enter the template ODI project code name.

The ODI Object Project code identifies an object within the project.

7 In **Source System Type** select the **SAP BW** source system.

8 In **Cube Name**, enter the predefined InfoCube name.

9 Click **Import Cube Definition**.

The SAP BW cube information is imported into FDMEE, which creates the source columns in the Source Column tab.

10 In the **Source Column** grid, map each SAP BW cube column in the **Column Name** field to the type of data column in **Classification**.

For example, for the `IOPK_0FIGL_C101_0CO_AREA_PK_CO_AREA` column, select the `Fact` classification.

Classification types:

- Fact
- Year
- Period
- Period Number

11 In **Display Name**, enter the name to display for the column.

The name is shown on the Import Format screen and Data Load Workbench.

12 Select the **Parameters** tab, and specify any filter parameters.

See "Defining Parameters" on page 63.

13 In the **Source Adapter** summary grid, click **Generate Template Package**.

The template package is used to generate the final scenario based on the import format mappings. If any customizations are required, you can customize the auto generated template package.

14 Click **Save**.

15 Define the import format and generate the process.

Defining Source Adapter Detail

When you have associated the source adapter with a source system type, the next steps include:

- Selecting Source Columns. See "Selecting Source Columns" on page 62.
- Defining Parameters. See"Defining Parameters" on page 63.
- Defining URLs for drill through. See "Defining URLs for Drill Through" on page 64.

Selecting Source Columns

Use source columns to specify the columns that are available for mapping in the import format. There is no validation of the table or column names in this section—the source columns are registered so that they are available in import format for mapping.

Adding Source Columns

The source columns added in this section must match the columns specified in the data model for the source table in the Oracle Data Integrator.

➤ To add a source column:

1 **On the Setup tab, under Register, select Source Adapter.**

2 **In Source Adapter, select the Source Column tab.**

3 **From the Source Column task bar, select Add.**

Entry fields are displayed for the Column Name, Table Name, and Display Name columns.

4 **In Column Name, enter the source column name.**

For example, enter `SEGMENT1`. The source column name must have a corresponding column name in the ODI model.

5 **In Table Name, enter the table name.**

For example, enter `LOGICAL_BALANCES`. The table name must have a corresponding table name in the ODI model.

6 **In Display Name, enter the display name used for the import format.**

Defining Parameters

Use the Parameters tab to specify the list of parameters for a ODI Scenario. The parameter definition includes a non-translated parameter name and a translated prompt. The prompt is used for display on the data rule page.

This section includes information on:

- Adding Parameters. See "Adding Parameters" on page 63.
- Deleting Parameters. See "Deleting Parameters" on page 64.

Adding Parameters

When you add a parameter for the source adapter, a definition is created, which includes a non-translated parameter name and a translated prompt.

➤ To add a source column:

1 **On the Setup tab, under Register, select Source Adapter.**

2 **In Source Adapter, Select the Parameters tab.**

3 **From the Parameters task bar, select Add.**

Entry fields are displayed for the Parameter Name, Parameter Data Type, and Parameter Prompt columns.

4 **In Parameter Name, enter the parameter name.**

For example, enter `p_actual_flag`. This is the name of the parameter in the ODI project.

5 **In Parameter Data Type, select the data type of the parameter:**

- Char
- Number
- Date

6 In **Parameter Prompt**, enter the parameter prompt.

For example, enter `Balance Type` in this row.

Note: When a new parameter is added and you are in a multilanguage environment, then set the browser locale to the appropriate language and edit the prompts as needed in that language.

Deleting Parameters

➤ To delete a parameter:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In **Source Adapter**, select the **Parameters** tab.

3 On the **Parameters** task bar, select the parameter, and then click **Delete**.

4 Click **OK**.

Defining URLs for Drill Through

FDMEE provides a framework for using URLs for drill through. You click the hyperlink in the amount cell, and the source system is launched in a new EPM Workspace tab or a new window. Multiple drill through URLs are provided to drill to different pages in the source system based on the import format mapping.

See also "Drilling Through" on page 23.

Adding Drill Through URLs

To create a drill through URL, specify the URL name, URL, request method, and URL prompt.

➤ To add a drill through URL:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In **Source Adapter**, select the **Drill URL** tab.

3 On the **Drill URL** task bar, select **Add**.

Entry fields are displayed for the Drill URL Name, Drill URL, Request Method, and Drill URL Prompt columns.

4 In **Drill URL Name**, enter a user defined name for the drill through URL.

5 In **Drill URL**, enter the **URL** used for the drill through.

Enter the URL without the server and port information. The URL must contain the parameter name and column name from the `TDATASEG` table enclosed in the symbol `$`.

For example, enter: `LEDGER_ID=$ATTR1$&GL_PERIOD=$ATTR2$`.

In the above example the value of `ATTR1` is passed as a value for the `LEDGER_ID` parameter, and `ATTR2` is passed as the value for the `GL_PERIOD` parameter. Parameters are separated by the "&" character.

To specify the request-response between a client and server for the drill URL format, enter either:

- GET—Form data is encoded into the URL. For example, specify: `GET@http://www.oracle.com/`. If no method is specified, then GET is the assumed request-response.
- POST—Form data is displayed in the message body. For example, specify: `POST@http://www.oracle.com/`.

Note: A JavaScript specification can also be used for the drill-through. See "Drill Through using JavaScript" on page 65.

6 **In the Drill URL Prompt, enter a user-defined prompt for the drill-through prompt.**

For example, enter `Default`.

Drill Through using JavaScript

You can specify a JavaScript based drill through that enables you to drill through to a graphical user interface instead of an URL. To do this, you write a script in the Script Editor and store it in a custom script directory.

The JavaScript for the drill through is associated with the source adapter. You invoke JavaScript from the drill through link by specifying "#javascript" instead of "http URL" in the source system. You can also pass contextual parameters to a JavaScript function similar to the http drill URL.

➤ To add a drill through using JavaScript:

1 **On the Setup tab, under Register, select Source System.**

See "Setting Up Source Systems" on page 53.

2 **Select the source system file for the JavaScript based drill through.**

3 **In the detail section, from Drill Through URL, enter #javascript.**

4 **Click Save.**

5 **On the Setup tab, under Scripts, select Script Editor.**

6 **On the Script Editor, click New.**

7 **From the Create Script Options window, in Script Type, select Drill.**

Note: The Technology drop-down is JavaScript because drill through scripts can only be created based on JavaScript.

8 **In File Name, enter a name for the script.**

9 **Click OK.**

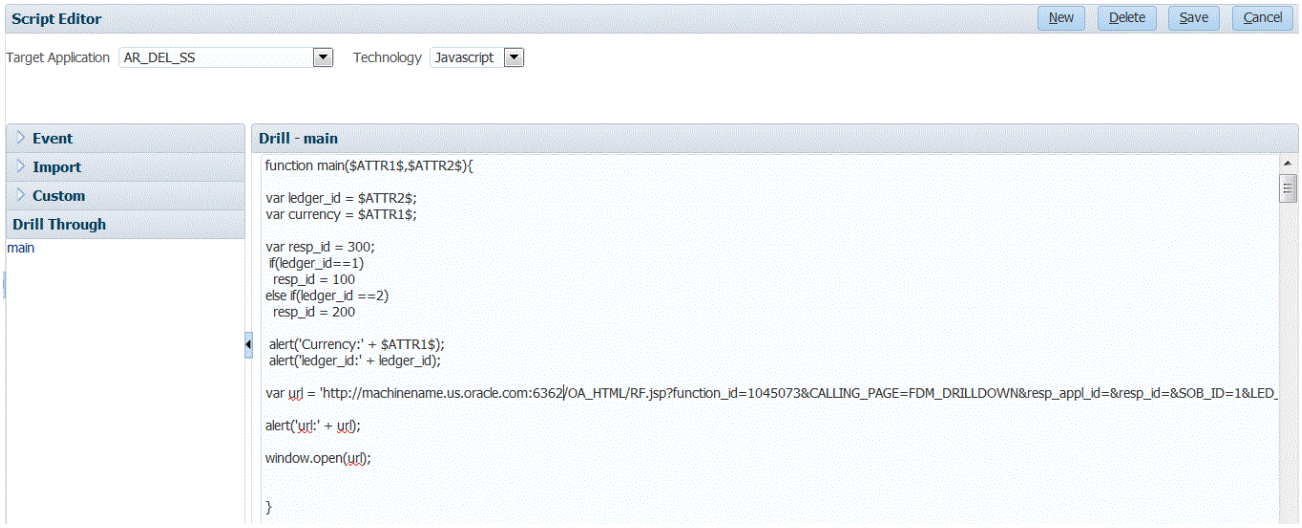
10 **In Target Application, select the target application for this drill through script.**

11 **Write the code for the custom in the Script Editor.**

Ensure the name of the JavaScript function is same as the file name.

For example,

```
function main($ATTR1$,$ATTR2$){

var ledger_id = $ATTR2$;
var currency = $ATTR1$;

var resp_id = 300;
 if(ledger_id==1)
  resp_id = 100
else if(ledger_id ==2)
  resp_id = 200

alert('Currency:' + $ATTR1$);
alert('ledger_id:' + ledger_id);

var url = 'http://machinename.us.oracle.com:6362/OA_HTML/RF.jsp?
function_id=1045073&CALLING_PAGE=FDM_DRILLDOWN&resp_appl_id=&resp_id=&SOB_ID=1&LED_I
D='+ledger-id+'&fdm_per=Jan-03&fdmccid=13098&fdm_currency+'+currency
+'fdm_balance_type=A

alert('url:' + url);

window.open(url);

}
```



12 Click **Save**.

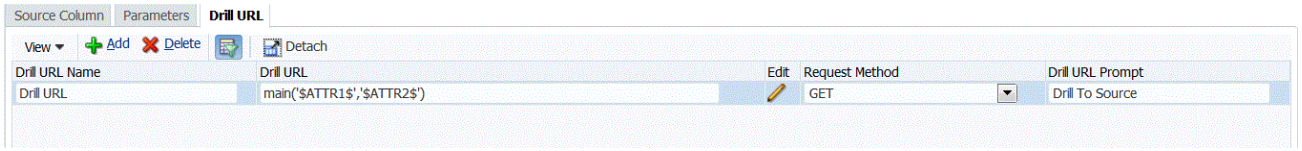
13 On the **Setup** tab, under **Register**, select **Source Adapter**.

See "Working with Source Adapters" on page 57.

14 In **Source Adapter**, select the **Drill URL** tab.

15 On the **Drill URL** task bar, select **Add**.

Entry fields are displayed for the Drill URL Name, Drill URL, Request Method, and Drill URL Prompt columns.



16 In **Drill URL Name**, enter a user defined name for the drill through URL.

17 In the **Drill URL**, enter the Function name of the drill through.

The Function name should be same as the file name.

For example, enter: `main($ATTR1$,$ATTR2$)`.

18 In **Drill URL Prompt**, enter a user-defined prompt for the drill-through prompt.

19 Click **Save**.

When you drill down from the workbench, a new window is launched with the specified URL.

Deleting Drill URLs

➤ To delete a drill through URL:

1 On the **Setup** tab, under **Register**, select **Source Adapter**.

2 In **Source Adapter**, select the **Drill URL** tab.

3 From the **Drill URL** summary area, select the drill-through URL, and then click **Delete**.

4 In **Delete Source Adapter Drill URL**, click **OK**.

Registering Target Applications

Subtopics

- Creating a Custom Target Application
- Adding Lookup Dimensions
- Defining Application Dimension Details
- Defining Application Options for Essbase and Planning
- Defining Application Options for Profitability and Cost Management (HPCM)
- Defining Application Options for Public Sector Planning and Budgeting
- Defining Application Options for Financial Management
- Deleting Registered Target Applications

You must register target applications for use with FDMEE. When you register target applications, you select the target application that requires metadata and/or data from one or more source systems.

➤ To register target applications:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 From the **Target Application** summary grid, click **Add**.

3. To create an on-premise target application, select **On-premise** target application.
4. In **Select Application**, from **Type**, select the application.

   Valid application types:

   - Financial Management and Tax
   - Planning
   - Essbase
   - Profitability (Hyperion Profitability & Cost Management (HPCM))
   - Account Reconciliation Manager
   - Custom Applications
5. In **Application Details**, enter the application name.
6. Click **OK**.

   For Financial Management, Planning, and Essbase, the Deployment Mode (the metadata load) is automatically detected when you select the application. The metadata load methods are:

   - **EPMA**—For EPMA deployed applications, FDMEE loads metadata to the EPMA interface table and creates an import profile. The import profile pulls from the interface tables for dimensions. The import profiles are named "FDMEE System Profile *xxx*" where *xxx* is the Rule ID, that is being run.
   - **Classic**—For Classic deployed applications, FDMEE loads metadata directly to the application.
7. If using an Essbase database, select the **Essbase Database Name**.
8. **Optional**: Click **Refresh Metadata** to synchronize the application metadata from the target application and display any new dimension.

   Once the new dimensions are displayed, then you can navigate to Import Format and map any new dimensions to a source column in Import Format. If necessary, the Metadata rule can be updated to bring in new metadata to a new application dimension.
9. **Optional**: Click **Refresh Members** to synchronize members from the target dimension.

   This feature enables you to see new members in a dimension for target members in a mappings.

   Once the new members in the dimensions are displayed, then you can navigate to Import Format and map any new dimensions to a source column in Import Format. If necessary, the Data Load Rule can be updated to bring in new members to a new application dimension.
10. In **Target Application**, click **Save**.
11. Define the dimension details.

    See "Defining Application Dimension Details" on page 72.

Note: Do not modify dimensions in the EPMA application after you have registered the target application in FDMEE. Any action such as sharing or removing the dimension, and then re-adding it, alters the dimensions ID and creates a mismatch between EPMA and FDMEE.

12 **Select the application options.**

For Essbase or Planning applications, see "Defining Application Options for Essbase and Planning" on page 73.

For Public Sector Planning and Budgeting, see "Defining Application Options for Public Sector Planning and Budgeting" on page 80.

For Financial Management, see "Defining Application Options for Financial Management" on page 81.

Note: No application options are available for the Account Reconciliation Manager.

Creating a Custom Target Application

A custom target application enables you to load data from an EPM supported source, and then extract the data into a flat file instead of loading it to Essbase, Planning, and Financial Management. You can define the custom target application with required dimensionality. Instead of exporting the data to a target application, FDMEE generates a data file that can be loaded to an external system using a custom process.

When creating a custom target application, note the following:

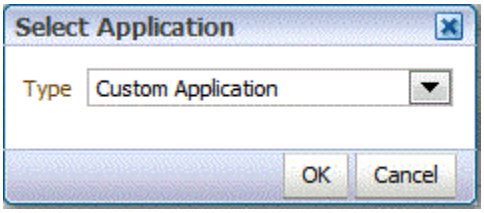
- Data is written to the file in the following predefined order: Account, Entity, UD1, UD2,..UD20, AMOUNT.
- The sequence that is specified when you create the custom app definition is used to order the dimensions for mapping processing. Note the sequence in case you have scripts that have an order of processing dependency.
- Metadata Rule—Metadata load is not applicable from custom target applications. The Location associated with a custom application is filtered in the metadata load POV.
- Data Rule—The POV category is not validated. Plan types are unavailable.
- Data Load Mapping—Target values are not validated for custom applications.
- Data Load Execution—When the option to export the data file is enabled, FDMEE creates an output data file using the `AIF_HS_BALANCES` view. The name of the data file is `<Target App Name>_<Process ID>.dat`, and it is written to the `<APPL ROOT FOLDER>/outbox` directory. In addition the `OUTPUT_FILE` column in the `AIF_PROCESSES` table is updated. The data file can be accessed from the Process Details page from the `OUTPUT file` column.
- Check Rules can be created from a custom target applications. Check rules cannot be based on target values.
- Write-back is not applicable from custom target applications.

➤ To define a custom target application:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 From the **Target Application** summary grid, click **Add**.

3 From **Select Application**, select **Custom Application**, and then click **OK**.



4 In **Application Details**, enter the application name.

5 Select the **Dimension Details** tab.

6 Specify the **Dimension Name**.

7 Select the **Target Dimension Class** or click to select the **Target Dimension Class** for each dimension that is not defined in the application.

The dimension class is a property that is defined by the dimension type. For example, if you have a Period dimension, the dimension class is also "Period." For Essbase applications, you must specify the appropriate dimension class for Account, Scenario, and Period. For Public Sector Planning and Budgeting applications, you must specify the dimension class for Employee, Position, Job Code, Budget Item, and Element.

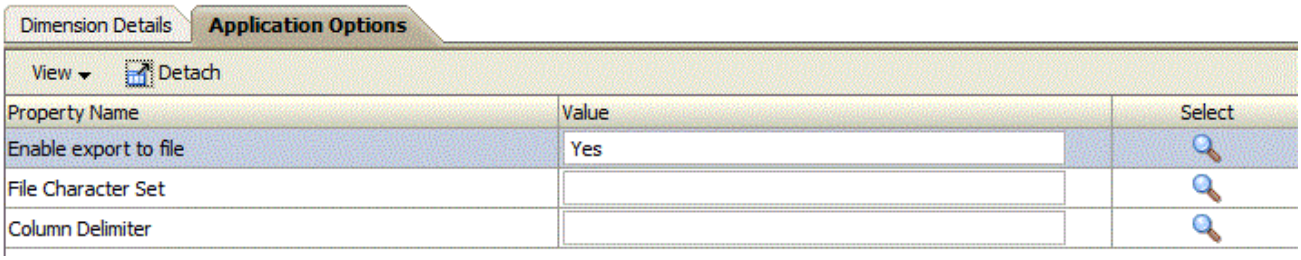
8 In **Data Table Column Name**, specify the table column name of the column in the staging table (TDATASEG) where the dimension value is stored.

Click to search and select a data table column name.

9 In **Sequence**, specify the order in which the maps are processed.

For example when Account is set to 1, Product is set to 2, and Entity is set to 3, then FDMEE first processes the mapping for Account dimension, followed by Product, and then by Entity.

10 Click **Application Options**.



11 In **Enable export to file**, select **Yes** to have FDMEE create an output data file for the custom target application.

A file is created in the `outbox` folder on the server with the following name format: <LOCATION>_<SEQUENCE>.dat. For example when the location is named "Texas" and

the next sequence is 16, then the file name is Texas_15.dat. The file is created during the export step of the workflow process."

When the **Enable export to file** option is set to **No**, then the Export to Target option is unavailable in the execution window.

12 In **File Character Set**, select the file character set.

The file character set determines the method for mapping bit combinations to characters for creating, storing, and displaying text. Each encoding has a name; for example, UTF-8. Within an encoding, each character maps to a specific bit combination; for example, in UTF-8, uppercase A maps to HEX41.

13 In **Column Delimiter**, select the character to use for delimiting columns in the output file.

Available column delimiters are:

- ,
- |
- !
- ;
- :

14 In **File Name to Download**, enter the file name to copy to the LCM folder.

You can then use the EPM Automate to download the file. The EPM Automate Utility enables Service Administrators to remotely perform Oracle Planning and Budgeting Cloud Service tasks.

15 Click **Save**.

Adding Lookup Dimensions

Lookup dimensions can be created and assigned with data columns for target applications. Lookup dimensions are used for mapping and reference. They can only be used in FDMEE and do not affect the dimensionality of a target application. They can also be used with member mapping functionality to cross-reference multiple source segments and chartfields and assign a target value.

➤ To add a lookup dimension:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 In the **Target Application** summary grid, select a target application.

3 Select the **Dimension Details** tab.

4 Click **Add**.

Blank dimension name and data table column name entry fields are displayed.

5 In **Dimension Name**, enter the lookup dimension name.

6 In **Data Table Column Name**, select the data column from which to base the lookup dimension.

7 Click **OK**.

The lookup dimension is added to the dimension detail list with the target dimension class name of "LOOKUP."

Defining Application Dimension Details

The dimension details differ for each application type. For Public Sector Planning and Budgeting and Essbase applications, you reclassify the dimensions and change the dimension class, as necessary.

➤ To define dimension details:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 In the **Target Application** summary grid, select the Planning application.

3 In the **Target Application** summary grid, select an Essbase or Planning application.

4 Select the **Dimension Details** tab.

5 Select the **Target Dimension Class** or click to select the **Target Dimension Class** for each dimension that is not defined in the application.

The dimension class is a property that is defined by the dimension type. For example, if you have a Period dimension, the dimension class is also "Period." For Essbase applications, you must specify the appropriate dimension class for Account, Scenario, and Period. For Public Sector Planning and Budgeting applications, you must specify the dimension class for Employee, Position, Job Code, Budget Item, and Element.

6 **Optional:** Click **Refresh Metadata** to synchronize the application metadata from the target application.

7 In **Data Table Column Name**, specify the table column name of the column in the staging table (TDATASEG) where the dimension value is stored.

Click to search and select a data table column name.

8 In **Sequence**, specify the order in which the maps are processed.

For example when Account is set to 1, Product is set to 2, and Entity is set to 3, then FDMEE first processes the mapping for Account dimension, followed by Product, and then by Entity.

9 **For Essbase applications and Profitability and Cost Management only:** Select the **Create Drill Region**.

The selection of the dimensions to create a drill-region defines the granularity for the drillable region. For example, if you only select the year dimension, you can drill on a cell that at least does not have a null for year.

10 Click **Save**.

The target application is ready for use with FDMEE.

Tip: To edit the dimension details, select the target application, then edit the application or dimension details, as necessary. To filter applications on the Target Application page, ensure that the filter row is displaying above the column headers. (Use the to toggle the filter row.) Then, enter the text to filter.

Defining Application Options for Essbase and Planning

After defining the application details and dimension details, for Essbase and Planning, define the application options.

Note: The user attempting to load data to Planning must be provisioned with Essbase administrator or Planning administrator rights.

➤ To define application options for Essbase or Planning applications:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 In the **Target Application** summary grid, select a Planning target application or Essbase target application.

3 After defining the application details and dimension details in **Application Detail**, select the **Application Options** tab.

4 Complete the application options as needed.

Planning application options are described in .

5 Click **Save**.

Table 7 Essbase and Planning Application Options and Descriptions

Option	Description
Purge Data File	When a file based data load to Essbase is successful, specify whether to delete the data file from the application `outbox` directory. Select **Yes** to delete the file, or **No** to retain the file.
Prefix Dimension for Duplicate Members	When set to **Yes** member names are prefixed by the Dimension Name. The member name that is loaded is in the format [Dimension Name]@[Dimension Member]. The prefixed dimension name is applied to all dimensions in the application when this option is enabled. You cannot select this option if there is a dimension in the target that has duplicate members. That is, only select this option when the duplicate members cross dimensions. If the application supports Duplicate Members and Prefix is set to **No**, then the user must specify the fully qualified member names. Refer to Essbase documentation for the fully qualified member name format. **Note:** Planning does not support duplicate members.
Global User for Application Access	Option to override the Single Sign-On logon to the Essbase and the Planning applications. When a user name is specified for this option, this user name is used to access Essbase/Planning applications instead of the FDMEE sign-on user name. Specify the user name of a user who has administrator access to the Planning application, and/or Application/Database Manager access to the Essbase applications.
Batch Size	Specify the batch size used to write data to file. The default size is 10,000.

Option	Description
Load Method	Specify the method for loading data from the TDATASEG staging table to Essbase. Available methods: ● File—Data is written to a data file in the `outbox` directory of the application (defined in System Settings). The file name is in the format `<APPLICATION NAME>_<PROCESS_ID>.dat`. It is then loaded to Essbase. The file load method creates an application file type of ESSFILE. ● SQL—Uses SQL Method to load data. The SQL load method is the default. The SQL method creates an application file type of ESSSQL.
Check Entity Calculation Method	Specify the calculation method for check entities. Available methods are: ● dynamic—Check entity data is calculated based on the data at retrieval time. If set to dynamic, then the default Essbase calculation is executed. ● calculation script—Check entity data is calculated based on a predefined calculation script.
Source Language for Member Description	Select the default language for the member descriptions. To understand how languages are processed, see "How Languages Are Processed" on page 130.
Drill Region	Select `Yes`, to create a drill region. A drillable region is created to use the drill through feature. **Note:** FDMEE does not support drilling through to human resource data. The drill region URL allows Essbase, Smart View, and Financial Reporting to drill to the proper landing page. When loading data from FDMEE, the drill region is loaded to Planning data. A drill region includes the Entity/Account/Scenario/Year/Period for Planning, a URL to get back to FDMEE, and a region name. For Essbase, you select the dimension to use for the drill region. Select **Yes** to enable or **No** to disable.

Working with Duplicate Members in Essbase

The table below provides details how duplicate members are referenced in an Essbase application

Table 8 How Duplicate members are referenced in an Essbase application

Scenario	Qualified Name Syntax	Example
Duplicate member names exist at generation 2	[DimensionMember].[DuplicateMember]	[Year].[Jan]
Duplicate member names exist in an outline but are unique within a dimension	[DimensionMember]@[DuplicateMember]	[Year]@[Jan]
Duplicate member names have a unique parent	[ParentMember].[DuplicateMember]	[East].[New York]
Duplicate member names exist at generation 3	[DimensionMember].[ParentMember].[DuplicateMember]	[Products].[Personal Electronics].[Televisions]

Scenario	Qualified Name Syntax	Example
Duplicate member names exist at a named generation or level, and the member is unique at its generation or level	DimensionMember]@[GenLevelName]|[DuplicateMember]	[2006]@[Gen1]|[Jan]
In some scenarios, the differentiating ancestor method is used as a shortcut.	DifferentiatingAncestor].[Ancestors...].[DuplicateMember]	[2006].[Qtr1].[Jan]

Using Calculation Scripts

When loading data to Essbase or Planning, FDMEE enables you to run custom calculation scripts. A calculation script is a series of calculation commands, equations, and formulas that enable you to define calculations other than those defined by the database outline. Calculation scripts are defined in Essbase and Planning.

Custom calculation scripts are supported in the target application and the check entity group. In the target application:

- Scripts can be parameterized so that you can specify a parameter for each script.
- Scripts can be assigned to run before or after the data load.
- Scripts are assigned a scope of applicability. The scope can be at the Application, Category, Location, and Data Rule level. If scripts are assigned at the lowest level, then they take precedence over script at higher level. Data Rule is the lowest level and Application is the highest level. Only scripts at one level are executed.

➤ To add a calculation script:

1. On the **Setup** tab, under **Register**, select **Target Application**.
2. From the **Calculation Script** tab, select a calculation script.
3. Click to display the Parameter window.
4. For Planning applications only, select the **Plan Type** to retrieve the parameters defined in the calculation script.
5. Click the **Add** to add a script parameter.
6. Select the parameter that has been defined for the script.

   You can also click **Browse**, select the parameter, and click **OK**. You can also manually type in the parameter name.
7. In **Script Value** select a predefined parameter value, or select **Custom** to specify your own script value.
8. **Optional:** If you selected **Custom** in the Script Value field, enter the value in **Custom**.

   For example, enter **0001**.
9. Click **OK**.

10 In **Script Name**, specify the name of the script.

11 Click to add the parameters for the calculation script.

See "Using Calculation Scripts" on page 75.

12 In **Script Scope**, select the scope of applicability,

Note that scripts assigned at the lowest level take precedence over scripts at higher level.

Available scopes in order of highest scope to lowest are:

- Application (default scope)
- Category
- Location
- Data Rule

13 In **Scope Entity**, select the specific value associated with the script scope.

For example, if the script scope is "Location," select the location associated with the application.

The Application script scope is disabled for the scope entity.

14 In **Event**, select the event that executes the calculation script.

Available events:

- Before Data Load
- After Data Load
- Before Check
- After Check

15 In **Sequence**, specify the order in which the script is executed.

Since multiple scripts can be executed for a event, this sequence value provides the numeric order in which each script is executed. You can enter any number, but the number has to be unique within an Event.

16 Click **Save**.

Adding Calculation Script Parameters

You parameterize calculation scripts by identifying and defining the list of values in the scripts. Parameter values can be predefined for a list of values, for example, the POV Period, POV Location, POV Category, Check Group Entity, and all data load entities.

You can also specify custom parameters, in which case, you can enter any Essbase filter syntax.

Additionally, you can reference values stored in the Integration Option 1-4 fields in the Location table to drive calculation logic. Location Option 1, Location Option 2, Location Option 3, and Location Option 4 values can be referenced. In this case, the exact string that is passed as a parameter has to be stored in the Integration Option field of the Location table.

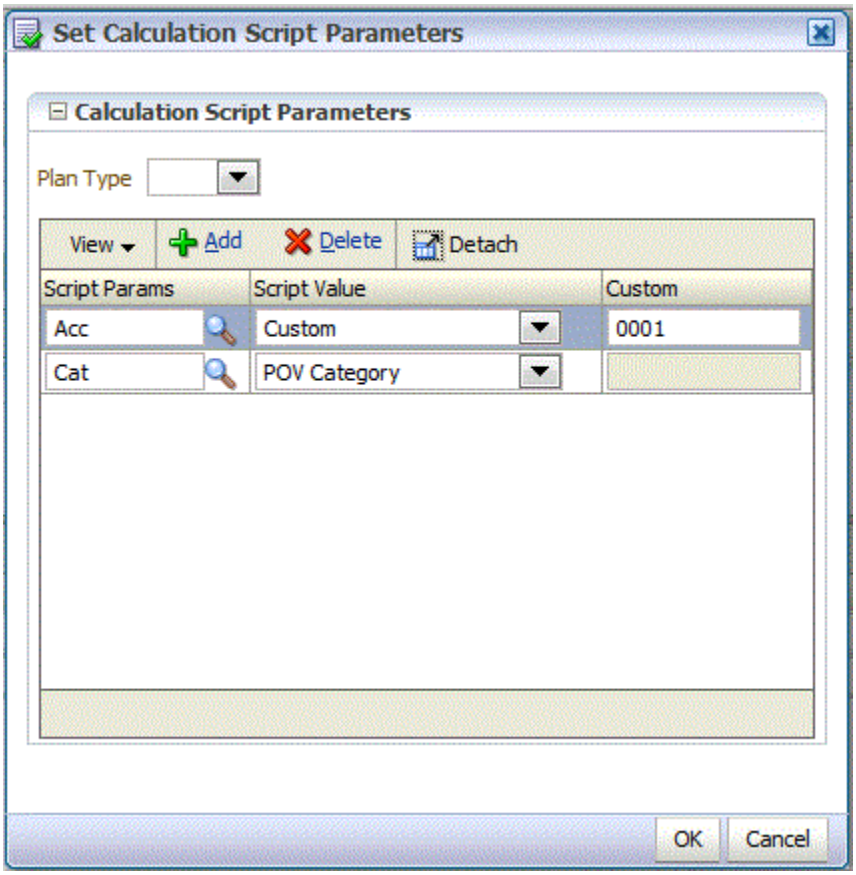
Similarly, you can reference four option fields in the Data Rule for parameters. These fields are Data Rule Option 1, Data Rule Option 2, Data Rule Option 3, and Data Rule Option 4. The column added to the Data Rule is called RULE_OPTION1, RULE_OPTION2, RULE_OPTION3 and RULE_OPTION4.

➤ To add calculation script parameters:

1 From the **Calculation Script** tab, add or select a calculation script.

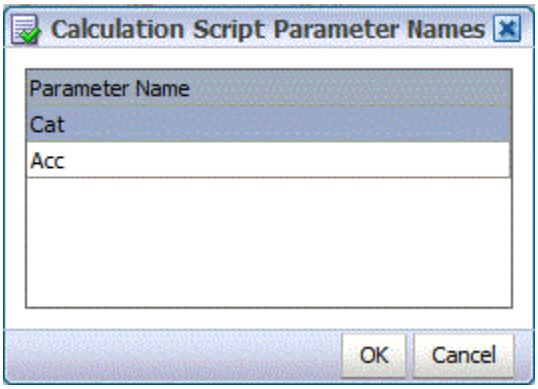
2 Click to add the parameters for the calculation script.

3 For **Planning applications only**: select the **Plan Type** for Accounting and Entity dimensions.



4 In **Script Parameters**, select the parameter that has been defined for the script.

You can click the **Browse** icon, select the parameter, and click **OK**.



5 In **Script Value**, select the value to which to apply the calculation script and click **OK**.

➤ To add a custom script parameter:

1 From the **Calculation Script** tab, add or select a calculation script.

2 Click to add the parameters for the calculation script.

3 In **Script Parameters**, select the parameter that has been defined for the script.

You can click the **Browse** icon, select the parameter, and click **OK**.

4 In **Script Value**, select **Custom** and click **OI**.

5 In **Custom**, enter the filter syntax for the custom value.

For example, enter **0001**.

Defining Application Options for Profitability and Cost Management (HPCM)

After defining the application details and dimension details, define the application options.

Profitability and Cost Management uses EPMA for application definition and metadata management. It uses Essbase for data storage and calculation

Profitability and Cost Management support only and EPMA deployment so for this reason, available Profitability and Cost Management applications must be registered from the EPMA Application Library.

➤ To define options for Profitability and Cost Managementa applications:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 In the **Target Application** summary grid, click **Add**.

3 In **Select Application**, in **Type**, select **Profitability**.

4 From **Name**, select the Profitability and Cost Managementa application and click **OK**.

5 After defining the application details and dimension details in **Application Detail**, select the **Application Options** tab.

6 Complete the application options as needed.

7 Click **Save**.

Table 9 Profitability and Cost Management Application Options and Descriptions

Property	Value
Drill Region	Select `Yes`, to create a drill region. A drillable region is created to use the drill through feature for Profitability and Cost Management data. **Note:** FDMEE does not support drilling through to human resource data. The drill region URL allows Essbase, Smart View, and Oracle Hyperion Financial Reporting to drill to the proper landing page. When loading data from FDMEE, the drill region is loaded to Planning data. A drill region includes the Entity/Account/Scenario/Year/Period for Planning, a URL to get back to FDMEE, and a region name. For Essbase, you select the dimension to use for the drill region. Select **Yes** to enable or **No** to disable.
Source Language for Member Description	Select the default language for the member descriptions. To understand how languages are processed, see "How Languages Are Processed" on page 130.
Batch Size	Specify the batch size used to write data to file. The default size is 10,000.
Check Entity Calculation Method	Specify the calculation method for check entities. Available methods are: ● dynamic—Check entity data is calculated based on the data at retrieval time. "dynamic" is the default check entity calculation method. ● calculation script—Check entity data is calculated based on a predefined calculation script. If the calculation method is set to "dynamic", the default calculation is performed during Essbase consolidation. If the method is set to "calculation script", then the script name given on check entity screen is used to perform the consolidation in target system.
Prefix Dimension for Duplicate Members	When set to **Yes** member names are prefixed by the Dimension Name. The member name that is loaded is in the format [Dimension Name]@[Dimension Member]. The prefixed dimension name is applied to all dimensions in the application when this option is enabled. You cannot select this option if there is a dimension in the target that has duplicate members. That is, only select this option when the duplicate members cross dimensions. If the application supports Duplicate Members and Prefix is set to **No**, then the user is responsible to specify the fully qualified member names. Refer to Essbase Documentation for fully qualified member name format. **Note:** Planning does not support duplicate members.
Load Method	Specify the method for loading data from the TDATASEG staging table to Essbase. Available methods: ● File—Data is written to a data file in the `outbox` directory of the application (defined in System Settings). The file name is in the format `<APPLICATION NAME>_<PROCESS_ID>.dat`. It is then loaded to Essbase. The file load method creates an application file type of ESSFILE. ● SQL—Uses SQL Method to load data. The SQL load method is the default. The SQL method creates an application file type of ESSSQL.
Purge Data File	When a file based data load to Essbase is successful, specify whether to delete the data file from the application `outbox` directory. Select **Yes** to delete the file, or **No** to retain the file.

Defining Application Options for Public Sector Planning and Budgeting

After defining the application details and dimension details, for Public Sector Planning and Budgeting applications, you define the application options. In FDMEE, you must specify a parent member to populate all dimensions applicable for your model. You can optionally enter a parent member for earnings and benefits.

➤ To define application options for Public Sector Planning and Budgeting Applications

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 In the **Target Application** summary grid, select a Public Sector Planning and Budgeting application.

3 After defining the application details and dimension details in **Application Detail**, select the **Application Options** tab.

4 Complete the application options as needed.

Public Sector Planning and Budgeting application options are described in Table 10 on page 80.

5 Click **Save**.

The target Public Sector Planning and Budgeting application is ready for use with FDMEE.

Table 10 Public Sector Planning and Budgeting Application Options and Descriptions

Option	Description
Budget Model Type	Enter the Public Sector Planning and Budgeting model. (For Employee only, enter `EMPLOYEE`. For Position only, enter `POSITION`, or for both Employee and Position, enter `Total Existing Positions`).
Parent Member for all Positions	Enter the parent member for all positions imported from your human resource source system. For example, enter `Total Existing Positions`.
Parent Member for all Entities	Enter the parent member for all departments imported from your human resource source system. For example, enter `Total Entity`.
Parent Member for all Employees	Enter the parent member for all employees imported from your human resource. For example, enter `Existing Employees`.
Parent Member for Salary Elements	Enter the parent member for salary grades imported from your human resource source system. For example, enter `Salary Grades`.
Parent Member for Earnings Elements	Enter the parent member for earnings codes imported from your human resource source system. For example, enter `Additional Earnings`. Specifying parent members for earnings and benefit elements is optional. If you do not specify a parent member, the corresponding elements are not loaded into the application when you run the human resource data load rule.
Parent Member for all Job	Enter the parent member for all job codes imported from your human resource source system. (The parent member for job is applicable only to Employee Only models.)
Parent Member for Benefit Elements	Enter the parent member for benefit codes imported from your human resource source system. For example, enter `Benefit Defaults`.

Option	Description
Source Language for Member Description	Select the default language for the member descriptions. To understand how languages are processed, see "How Languages Are Processed" on page 130.
Drill Region	FDMEE does not support drilling through to human resource data. Select **No** for this option.

Defining Application Options for Financial Management

After defining the application details and dimension details, for Financial Management application, you define the application options.

➤ To define Financial Management application options:

1 **On the Setup tab, under Register, select Target Application.**

2 **In the Target Application summary grid, select a Financial Management target application.**

3 **After defining the application details in Application Detail, select the Application Options tab.**

4 **Complete the application options as needed.**

Financial Management application options are described in Table 11 on page 81.

5 **Click Save.**

Table 11 Financial Management Application Options and Descriptions

Option	Description
Check Intersection	Enables the checking of Financial Management data intersections (account, entity, and so on) during the Validation step in the Data Load Workbench. The default setting is **Yes**.
Load Line Item Detail	Enables loading of line-item detail to Financial Management. Select **Yes** to enable or **No** to disable.
Line Item Detail Load Type	Specify whether line item detail or summary data is loaded for cells. The default is **Load Detail**, which displays details for the selected cell. (Specifies whether an account can have line items.) If this option is **Load Summarized**, cells show summarized information. ● Load Summarized ● Load Detail
Enable Data Load	Enables the data load process. Select **Yes** to enable or **No** to disable.
Load Process	Select the process for loading data. Select **Scan** to scan the file for invalid records before loading it to the application. Select **Load** to load the file only. ● **Scan**—Validates data and lists invalid records into the Log. When this option is selected, data is not loaded to the target application. ● **Load**—Validates and loads data to the target application.

Option	Description
Load Method	Select the method for loading a data file into an application. Available load methods: ● **Replace**—Replaces the data in the application with the data in the load file. For each unique combination of Scenario, Year, Period, Entity, and Value in the data file, the Replace option clears all account values from the application, then loads the value from the data file. **Note:** You may need to create several small files to load a data file using the Replace mode, especially if the data is very large or if the file contains ownership data. An error message is displayed if the file is too large when you try to load it. ● **Merge**—Overwrites the data in the application with the data in the load file. For each unique point of view that exists in the data file and in the application, the value in the data file overwrites the data in the application. Data in the application that is not changed by the data load file remains in the application. If you select the Accumulate In File option in conjunction with the Merge option, the system adds all values for the same point of view in the data file, and overwrites the data in the application with the total. For each unique point of view that is in the data file but does not have a value in the application, the value from the data file is loaded into the application. ● **Accumulate**—Select the Accumulate option to accumulate the data in the application with the data in the load file. For each unique point of view in the data file, the value from the load file is added to the value in the application. **Note:** Data for system accounts is not accumulated. ● **Replace by Security**—Performs a data load in Replace mode in which only the members to which you have access are loaded. This option enables you to perform a data load in Replace mode even if you do not have access to all accounts. When you perform the Clear operation for a period in a sub-cube, only the cells to which you have access are cleared. Data, cell text, and line item detail are cleared, but cell attachments are not cleared.
Accumulate in File	You use the Accumulate in File option in conjunction with the Merge and Replace options. When a data load file contains multiple lines of data for the same point of view, this option first accumulates the data in the file, and then loads the totals into the application based on the selected load option. For each unique point of view in the data file, the value from the load file is added to the value in the application. For example, if you have 10,20 and 30 in the file, 60 is loaded. Select **Yes** to enable or **No** to disable.
Has Ownership	If the file that you are loading contains ownership data, you must indicate this option. If you do not select this option and the data file contains ownership or shares data, an error occurs when you load the file. Select **Yes** to enable or **No** to disable.
Enable Data Protection	Enables FDMEE to protect target-system data from being overwritten during data loads; is based on a specified protection value. Use this option when data is entered into the target system through a method other than FDMEE. Select **Yes** to enable or **No** to disable.
Protection Value	The value that is to be protected during the Load step when Enable Data Protection is enabled. The value in this field is to be a dimension value inside of Financial Management across any dimension. For example, enter **Protect This**.
Protection Operator	Select operator (= or <>). This is used only when the Enable Data Protection option is enabled. The option enables you to state that the data to be protected is equal (=) or not equal (<>) to the “Protection Value”.

Option	Description
Enable Journal Load	Enables the loading of journal files. You can load working, rejected, submitted, approved, and posted journals as well as standard and recurring journal templates. You cannot load automated consolidation journals because they are created by the consolidation process. The default setting for this option is **No**. This setting is also used with the Data Value selected for the location on the Location screen to determine when and how data is loaded to Financial Management as journals. Select **Yes** to enable or **No** to disable.
Drill Region	Select **Yes** to create a drill region. Drillable region definitions are used to define the data that is loaded from a general ledger source system and specify the data drillable to FDMEE. In data grids and data forms, after the regions have been loaded, cells that are drillable are indicated by a light blue icon at the top left corner of the cell. The cell context menu displays the defined display name, which then opens the specified URL. A region definition load file consists of the following information: ● Scenario, Year, Period, Entity, Account ● Display Name (for cell context menu) and URL (to drill to)
Enable Cell Text Loading	Enables the loading of text and documents to a data cell. FDMEE archives documents in the `EPM_ORACLE_HOME/products/FinancialDataQuality/data` directory. Select **Yes** to enable or **No** to disable. **Note:** FDMEE does not load multiple cell text to an intersection in Financial Management. If a load using an append mode is run and new cell text is added to an intersection that already has cell text, the old cell text is replaced by the new cell text and not appended.
Enable Consolidation	Enables consolidation in the data load. Consolidation is the process of gathering data from dependent entities and aggregating the data to parent entities. Launching consolidation runs the consolidation process for the specified scenario, year, period, entity, and value. As a part of that process, consolidation for all descendant entities and all prior time periods within the same year is run, if it has not been run previously. The consolidation process runs all calculation rules functions for each affected entity and value, and the translation process runs as necessary to convert from child entities to parent entities. Select **Yes** to enable or **No** to disable.

Option	Description
Consolidation Type	Select the consolidation type for the data load. Available consolidation types: ● Impacted—The Consolidate (Impacted Consolidation) option is available for any parent entity with a calculation status of CN or CN ND. When you select this option for a parent entity, the system performs calculations (Calculate, Translate, Consolidate) for any dependent entity within the consolidation path of the selected parent that has a calculation status of CN, CN ND, CH, TR, or TR ND, on the current period or on any prior period in the current year. Consolidate is the most efficient option because only entities that require consolidation are updated. Process units with a status of NODATA on the current period and all prior periods are skipped. Process units with a status of OK or OK SC on the current period are not recalculated, retranslated, or reconsolidated. If the selected parent has a status of CN or CN ND in the prior period, consolidation runs for all periods from the first period in the current year where the parent is impacted until the current period. ● All with Data—The Consolidate All with Data option is available for any parent entity, regardless of its status. When you select this option for a parent entity, the system consolidates every dependent entity within the consolidation path of the selected parent that contains data, regardless of its status, in the current period or in any of the prior periods. The system also runs calculation rules for the dependent entities. It does not perform a consolidation on entities that contain zeroes or no data. This option is useful for updating system status from OK SC to OK after metadata changes. Process units with a status of NODATA on the current period and all prior periods are skipped. Consolidation Options units with a status of OK or OK SC on the current period are recalculated, retranslated, and reconsolidated. If the selected parent has a status of CN or CN ND in the prior period, consolidation runs for all periods from the first period in the current year where the parent is impacted until the current period. ● All—The Consolidate All option is available for any parent entity, regardless of its status. When you select this option for a parent entity, the system performs calculations for every process unit within the consolidation path of the selected parent, regardless of its status. It consolidates all entities whether they contain data or not. This option is useful when an update from prior periods is required, or when an entity with no data needs to be populated using allocations. This option should be used sparingly because the system does not omit entities with no data, which can have a significant impact on consolidation performance. Process units with a status of NODATA on the current period are calculated, translated, and consolidated. Process units with a status of OK or OK SC on the current period are recalculated, translated, and reconsolidated. If the selected parent has a status of CN or CN ND in the prior period, consolidation runs for all periods from the first period in the current year where the parent is impacted until the current period. ● Entity—Calculates the contribution of each entity to its parent, and then totals all contributions to arrive at the consolidated numbers. ● Force Entity Only—Forces calculation to run for all selected contribution values to arrive at the consolidation numbers.
Enable Force Calc	Enables the execution of the default calculation call prior to a consolidation run. Select **Yes** to enable or **No** to disable.
Enable Force Translate	Enable to force translation to run for all selected cells. Select **Yes** to enable or **No** to disable.

Option	Description
Translation Level	Determines the translation level (levels to include for translation) of rows and columns when loading data. Available levels: ● <Entity Curr Adjs> ● <Entity Curr Total> ● <Entity Currency> ● <Parent Curr Adjs> ● <Parent Curr Total> ● <Parent Currency> (Default)
Enable Multi-Load Zero Loading	Select **Yes** to load 0 values during a multiple period load.
Journal Status	To load journals with a specific status, select the status. The journal status indicates the current state of the journal. Available journal statuses: ● 1—Working: Journal is created. It has been saved, but it can be incomplete. For example, a label or single entity may need to be assigned. ● 2—Submitted: Journal is submitted for approval. ● 3—Approved: Journal is approved for posting. ● 4—Posted: Journal adjustments are posted to the database (default). ● 5—Journal is rejected or unposted.
Journal Default Value	Specify the default value of the journal. The default setting for this option is <Entity Curr Adjs>. Available values are: ● [Contribution Adjs] ● [Parent Adjs] ● <Entity Curr Adjs> ● <Parent Curr Adjs>
Journal Enable JV ID per Entity	Assign a journal id (journal numbering) to entities that are being loaded. Select **Yes** to assign one journal id for each entity in the POV. Select **No**, to assign one id for all data in the POV. This option is only used when loading journals. The default setting is **Yes**. This option only applies to FDMEE data that is imported as data and not through the Journal interface. Because regular data that is imported into FDMEE can be loaded to Financial Management as a journal and Financial Management requires all journal to have a JV ID, this option enables FDMEE to determine how the JV ID's are created.
Journal Balancing Attribute	Select the journal balancing attribute used in the journal subsection. Available attributes are: ● B—Balanced ● U—Unbalanced ● E—Balanced By Entity This option is only used when loading journals to Financial Management. The default setting is U-Unbalanced.

Option	Description
Source Language for Member Description	Indicates the source language for the description when members are loaded. Available languages are shown on the drop-down.

Enabling Intercompany Partner Dimensions for Financial Management

FDMEE supports intercompany partner (ICP) dimensions used by Financial Management. The ICP dimension represents a container for all intercompany balances that exist for an account. ICP is a reserved dimension used in combination with the account dimension and custom dimensions to track and eliminate intercompany transaction details.

When working with ICP transaction in FDMEE, note the following:

- ICP transactions can be loaded only from a file.
- If the import format contains a dimension of type "ICPTRAN, "then it is considered an ICP Transaction load.
- If the import format does not contain any dimension of type "ICPTRANS," then it is considered a standard data load.
- When ICP transactions are enabled, the following attributes are included:
  - Attr1 – Transaction ID
  - Attr2 – Transaction Sub ID
  - Attr3 – Reference ID
  - Attr4 – Transaction Date
  - Attr5 – Entity Currency Amount
  - Attr6 – Transaction Currency
  - Attr7 – Conversion Rate
  - Attr11 - Comment

  ICP transactions are included in the import format.

When registering a Financial Management application, an "Enable ICP Transactions" option is available. When this option is enabled, additional ICP dimensions are added to Dimension Details. These dimensions ware registered with dimension classification "ICPTRANS" (ICP Transactions) and the attributes of the values are stored in the data table column name "ATTR." Source values of the ICP dimensions cannot be transformed by mapping. If some transformation is required, then you use a script from another dimension map. Also see "Entity and Intercompany" on page 126.

Below is the list of dimensions to be added:

➤ To enable intercompany partner dimensions:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 In the **Target Application** summary grid, select a Financial Management application.

3 Select the **Dimension Details** tab.

4 Click **Enable ICP Transactions**.

5 When the Refresh Metadata Confirmation window is displayed, click **Continue and Save Later** to add the ICP transactions.

In this case, to save the ICP transactions, you need to click **Save** to save the transactions with the dimension details.

To add and save the ICP transactions immediately, click **Save**.

6 Click **Save**.

Deleting Registered Target Applications

Use caution when deleting registered target applications. When you delete a registered target application, the target application is removed from the Target Application screen, and all metadata and data rules associated with the application are removed.

Use caution when deleting registered target applications. When you delete a registered target application, the target application is removed from the Target Application screen.

➤ To delete a registered target application:

1 On the **Setup** tab, under **Register**, select **Target Application**.

2 In **Target Application**, select the target application, and then click **Delete**.

3 Click **OK**.

When you delete a target application, the application is marked for deletion and is unavailable for any metadata or data rule processes, including the import format and location creation options. All the existing rules involving the target application are removed.

Note: After a target application is deleted and the process has run successfully, use the Target Application screen to set up the same application and redefine the rules.

4 Click **Save**.

Selecting Source Accounting Entities

Select accounting entities to specify the Fusion Financials/E-Business Suite ledgers or PeopleSoft business units from which the metadata and/or data is extracted.

After you register and initialize your source systems for use with FDMEE, you select the source system accounting entities (ledgers or business units) to use for integration. Segments and chartfields are the terminologies specific to Fusion, E-Business Suite, and PeopleSoft.

➤ To select source accounting entities in a source system:

1 On the **Setup** tab, under **Register**, select **Source Accounting Entity**.

2 In **Source Accounting Entities**, select the **Entities** tab.

3 Select the source system type.

4 Select a source system.

The source accounting entities are displayed in a grid. You can click the column header to sort any column. The Entities tab displays the following columns:

For Fusion and E-Business Suite source systems:

- Select—A check mark indicates that the accounting entity (ledger) is available.
- Accounting Entity—Name of the ledger
- Chart of Accounts—Chart of accounts name
- Currency—The functional currency of the Fusion and E-Business Suite ledger
- Calendar—The Fusion and E-Business Suite ledger calendar. The Fusion and E-Business Suite ledger is a collection of chart of accounts, currency, and calendar. For example, 4–4–5, Weekly, Accounting, and so on.
- Responsibility Name—Displays the general ledger drill-through responsibility. The drill through responsibility must be set in FDMEE to enable users to drill through to E-Business Suite. The responsibility selected must have the authority to view summary journals and journal details for the selected ledger in the E-Business Suite.

For PeopleSoft source systems:

- Select—Select the check box to make the business unit available.
- Business Unit—Business unit name
- Currency—The base currency for the business unit

5 For Fusion and E-Business Suite source systems, select the general ledger **Responsibility Name**. See "Assigning General Ledger Responsibility" on page 88.

6 For each ledger or business unit that you want to make available in FDMEE, select the check box.

7 Click **Save**.

Tip: To filter by the business unit or accounting entity, ensure that the filter row is displayed above the column headers. (Click the to toggle the filter row.) Then, enter the text to filter.

Assigning General Ledger Responsibility

In the E-Business Suite General Ledger, the system administrator assigns users general ledger responsibility. General ledger responsibility provides the authentication required for FDMEE to drill through to the Fusion and E-Business Suite journal summary page.

➤ To assign general ledger responsibility:

1 In **Source Accounting Entities**, in the **Responsibility Name** column, click to select a **General Ledger Responsibility**.

The Responsibility Name is the Responsibility ID the user is logged in under when drilling through to the source system. Select the responsibility name *only* if you want to drill through: otherwise, leave it blank.

2 Repeat the above process as necessary for all selected ledgers in the source system.

3 Click **Save**.

Working with Source Accounting Entity Groups

An accounting entity group is a logical grouping of common accounting entities (for example, the same Chart of Accounts, the same Calendar, or the same currency). Accounting entity groups are used to extract data from multiple accounting entities in a single data rule execution. They facilitate sharing the same data because multiple accounting entities can belong to more than one accounting entity groups.

To work with accounting entity groups, note the following:

- Accounting entity groups can be used only with data rules.
- When a data rule in a location includes an accounting entity, then the rule is constrained by the accounting entity in the definition. In this case, the data rule in the location cannot use an accounting entity group.
- When a data rule in a location has no accounting entity, then an accounting entity or an accounting entity group must be specified in the definition. The data rule execution extracts data from a single accounting entity or from all the accounting entities in an accounting entity group.
- Data load to write-back rules accept only an accounting entity (and not an accounting entity group) in their definition.
- Metadata rules accept only an accounting entity (and not an accounting entity group) in their definition.
- FDMEE does not enforce that entities belong to the same Chart of Accounts.

You view and maintain accounting entity groups using the Entity Groups tab in the Source Accounting Entities feature. The Entity Groups tab consists of two regions: Entity Groups, to which you can add a new group, and the Entity Groups Entities, from which you can add accounting entities.

➤ To add an source accounting entity group:

1 On the **Setup** tab, under **Register**, select **Source Accounting Entity**.

2 In **Source Accounting Entities**, select the **Entity Groups** tab.

3 Select the source system type.

4 In the **Entity Groups** grid, click **Add**.

Blank Name and description rows are added at the top of the grid.

5 In **Name**, enter the name of the accounting entity group.

6 In **Description**, enter a description of the accounting entity group.

7 In the **Entity Group Entities** grid, select the accounting entities to add.

The source accounting entities are displayed in the Entity Group Entities grid. You can click the column header to sort any column. The Entity Group Entities grid displays the following columns:

For Fusion and E-Business Suite source systems:

- Select—A check mark indicates that the accounting entity (ledger) is available.
- Accounting Entity—Name of the ledger
- Chart of Accounts—Chart of accounts name
- Currency—The functional currency of the Fusion and E-Business Suite ledger
- Calendar—The Fusion and E-Business Suite ledger calendar. The Fusion and E-Business Suite ledger is a collection of chart of accounts, currency, and calendar. For example, 4–4–5, Weekly, Accounting, and so on.
- Responsibility Name—Displays the general ledger drill-through responsibility. The drill-through responsibility must be set in FDMEE to enable users to drill through to E-Business Suite. The responsibility selected must have the authority to view summary journals and journal details for the selected ledger in the E-Business Suite.

For PeopleSoft source systems:

- Select—Select the check box to make the business unit available for the accounting entity group.
- Business Unit—Business unit name
- Currency—The base currency for the business unit

8 Click **Save**.

Working with Import Formats

Subtopics

- Defining the Import Format
- Defining Import Format Mappings
- Defining the Import Format Mappings
- Concatenating Source Dimensions for Enterprise Resource Planning (ERP) Segments
- Adding Import Expressions
- Defining Import Formats for file-based Mappings
- Concatenating Source Dimensions for a File-Based Source
- Using the Import Format Builder
- Write-Back Mappings
- Defining Import Formats for Data Synchronization Between EPM Applications
- Defining Import Formats for Data Synchronization Between Enterprise Resource Planning (ERP) and EPM Applications
- Defining the Write-Back Mappings (E-Business Suite and PeopleSoft only)

Import Formats determine which fields (columns) are extracted from the source system and how the data is stored in the FDMEE staging table. Import Formats are created for a single accounting entity. However, if you are importing data from multiple accounting entities that have the same Chart of Accounts, you can define one Import Format using a representative accounting entity, and then use it for importing data for all accounting entities with the same Chart of Accounts.

You define import formats to map source segments or chartfields to target dimensions. You can create import formats to:

- Define the import format mapping between the source system segments or chartfields and the dimensions (used in the metadata load and data load process).
- Define the import format mapping between the EPM dimensions and the source system segments or chartfields (used in the write-back process).
- Define and maintain import format mapping information for source adapter based integrations
- Define and maintain import format mapping information between source and target EPM dimensions for data synchronization.

Note: You do not need to define import mappings for use with human resources source systems. This is only applicable to the rebuilt Peoplesoft HCM integration.

You work with import formats on the Import Format screen, which consists of three sections:

- Import Format Summary—Displays common information relevant to the source and target applications.
- Import Format Detail—Enables you to add and maintain import format information.
- Import Format Mappings—Enables you to add and maintain import format mapping information.

Defining the Import Format

Use the Import Format summary section to view, add, and delete import format summary information.

Viewing Import Format Information

Table 12 Import Format View Options and Descriptions

View Option	Description
View	Customizes views. Options include: ● **Columns**-Select the columns to display in the data grid including: ❍ Show All ❍ Name ❍ Source System ❍ Accounting Entity ❍ Source Adapter ❍ Target Application ● **Reorder Columns**-Use to change the order of the columns. When you select this option, the Reorder Columns screen is displayed. You can select a column, and then use the scroll buttons on the right to change the column order. ● **Detach/Attach**-Detaches columns from the data grid. Detached columns are displayed in their own window. To return to the default view, select **View**, and then click **Attach** or click **Close**. ● **Query by Example**-Use to toggle the filter row. You can use the filter row to enter text to filter the rows that are displayed for a specific column. To clear a filter, remove the text to filter by in the text box, and then the press [Enter] key. All text that you enter is case sensitive.

Adding Import Formats

Different kinds of import formats can be added based on the source type:

- Source Type—Enterprise Resource Planning (ERP)
  - Source ERP
  - Open Interface Adapter
  - File
- Source Type—EPM
  - Source EPM for Data Synchronization—If you select EPM, then you are presented with the list of registered EPM applications. Using a source of EPM lets you target another EPM application, or enables you to write back to a registered Enterprise Resource Planning (ERP) system that has an available interface table. The standard data load to write back is only supported for E-Business Suite and Peoplesoft.
  - Source EPM for data load to write back to the Enterprise Resource Planning (ERP) system

When adding import formats, note that specific import format detail fields are available or unavailable based on the source type.

Note: For the Enterprise Resource Planning (ERP) source type you can select an Enterprise Resource Planning (ERP) source or a file. If the Enterprise Resource Planning (ERP) source is E-Business Suite or Peoplesoft, you can select an accounting entity.

➤ To add an import format for an Enterprise Resource Planning (ERP) source:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In the **Import Format** summary task bar, select **Add**.

In the upper grid of the Import Formats screen, a row is added.

3 In **Name**, enter a user-defined identifier for the import format.

You cannot modify value in this field after a mapping is created for this import format.

4 In **Source Type**, select **ERP**, and then select the ERP type as the source.

For example, you can select **Fusion Financials**, **E-Business Suite**, or **PeopleSoft**.

5 In **Target Type**, select **EPM**, and then select any EPM application as a target.

6 **Optional**: In **Concatenation Character**, specify the character to use for concatenating two segments when multiple segments are specified for sources.

Set the concatenation member by specifying the concatenation character.

For non-ARM data loads and metadata loads, the underscore character "_" is used to concatenate two segments. For ARM data loads, you cannot use an underscore character with a mapping that uses the "Like" method. Therefore, for ARM mappings, specify a different concatenation character for the data load mapping details.

7 In **Description**, enter a description of the import format.

8 In **Accounting Entity**, select the accounting entity.

For Fusion and E-Business Suite source systems, the accounting entity is the ledger. For PeopleSoft source systems, the accounting entity is the business unit.

9 Define the import mappings from source to target.

See "Defining the Import Format Mappings" on page 98.

For information on one-to-one mappings and many-to-one mappings, see "Defining Import Format Mappings" on page 97.

➤ To add an import format for a source adapter (open interface adapter):

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 On the **Import Format** summary task bar, select **Add**.

In the upper grid of the Import Formats screen, a row is added.

3 In **Name**, enter a user defined identifier for the import format.

You cannot modify the value in this field after mapping is created for this import format.

Note: Do use non-ASCII characters in an import format name when the import source is an adapter.

4 In the **Description**, enter a description of the import format.

5 In **Source Type**, select **ERP**, and then select the source for the source adapter.

6 In **Source Adapter**, select the source adapter name.

7 In **Target Type**, select **EPM** and select any EPM application as a target.

8 In **Drill URL**, enter the URL that identifies the URL to use for drilling through when using this import format.

9 Define the import mappings from source to target. See "Defining the Import Format Mappings" on page 98.

For information on one-to-one mappings and many-to-one mappings, see "Defining Import Format Mappings" on page 97.

➤ To add an import format for a file-based data load system:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In the **Import Format** summary task bar, select **Add**.

In the upper grid of the Import Formats screen, a row is added.

3 In **Name**, enter a user-defined identifier for the import format.

You cannot modify the value in this field after a mapping has been created for this import format.

4 In **Description**, enter a description of the import format.

5 In **Source Type**, select **ERP**, and then select **File** for the source.

6 From **File Type**, select the format of the file.

- Fixed
- Delimited—Individual data values use delimiters, such as quotation marks or commas, to separate two names of data,
- Multiperiod—Delimited text or Excel files that can contain multiple periods.

7 If the file type is delimited, in the **File Delimiter** field, select a type of delimiter.

Available delimiter symbols:

- comma (,)
- exclamation (!)
- semicolon (;)
- colon (:)
- pipe (|)
- tab (~)

8 In **Target Type**, select **EPM** and select any EPM application as a target.

9 In **Drill URL**, enter the URL used for the drill-through.

To display the **Drill URL** editor, click

The Drill URL consists of the following values:

- URL Name
- URL Prompt
- URL—Enter the URL without the server and port information. The URL must contain the parameter name and column name from the `TDATASEG` table enclosed in the symbol `$`.

Enter the URL without the server and port information. The URL must contain the parameter name and column name from the `TDATASEG` table enclosed in the symbol `$`.

For example, enter: `LEDGER_ID=$ATTR1$&GL_PERIOD=$ATTR2$`

In the above example the value of `ATTR1` is passed as a value for the `LEDGER_ID` parameter, and `ATTR2` is passed as a value for the `GL_PERIOD` parameter. Note that parameters are separated by the `&` character.

In some cases, the you may want to refer to the column name in the FDMEE staging table based on the source mapping that is defined in the import format. When this is the case, you specify the source column name as the parameter for the URL, and this instructs the system to translate the source column name to the related column in `TDATASEG` when the URL is parsed. To specify a source column from the import format as the value for a parameter in the URL, enclose the value with `$$` on each side

For example, enter `COMPANY_CODE=$$RBUKRS$`

In the above example, the value for `COMPANY_CODE` parameter is determined using the import format. If `RBUKRS` is mapped to the `ENTITY` dimension, then the value of the `ENTITY` column is passed as the parameter.

To specify the request-response between a client and server for the drill URL format, type either:

- GET—Form data is encoded into the URL. For example, specify `GET@http://www.oracle.com/`. If no method is specified, then GET is the assumed request-response.
- POST—Form data is displayed in the message body. For example, specify `POST@http://www.oracle.com/`.

Note: A JavaScript specification can also be used for the drill-through. See "Drill Through using JavaScript" on page 65.

10 Click **Save**.

To define import formats for file-based mappings, see "Defining Import Formats for file-based Mappings" on page 103.

Import Formats and Data Load Rules

Depending on the source and target types that you select in import formats, different types of data load rules can be created.

Table 13 Data Load Rule

Source Type	Target Type
ERP	EPM

Table 14 Write-Back Rule

Target Type	Source Type
EPM	ERP

Table 15 Data Synchronization

Source Type	Target Type
EPM	EPM

Deleting an Import Format

➤ To delete an import format:

1. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
2. In **Import Format**, from the **Import Format** summary grid, select the import format, and then click **Delete**.
3. In **Delete Import Format**, click **OK**.

Querying by Example

You can filter the import formats in the Import Format summary section using the Query by Example feature. To filter by Import Format Name, ensure that the filter row is displayed above the column headers.

➤ To query by example:

1. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
2. In **Import Format**, on the **Import Format** task bar, select .

   A blank row is displayed above the column headers.
3. Enter text to filter the rows that are displayed.

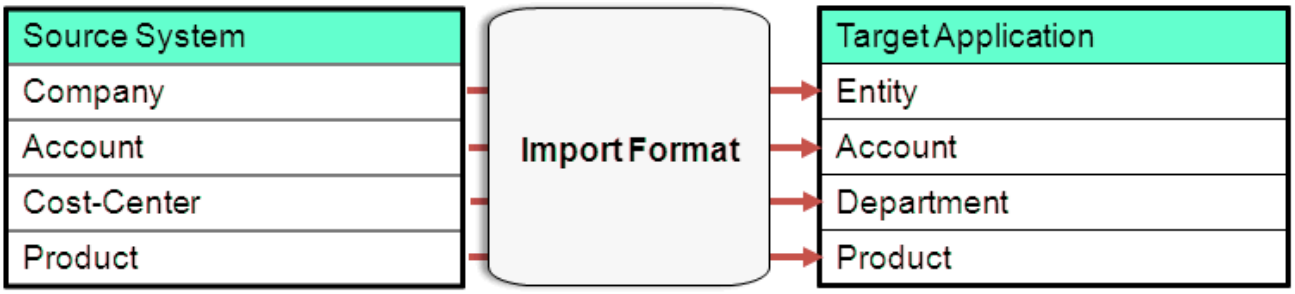
Defining Import Format Mappings

The import format identifies the content structure of the source file or system. When you create an import format, you define the settings and the import format mapping definition between the source and target system dimensions. You can create:

- **One-to-One Mappings**—Single Segment and Single Chartfield mappings:
  - Define a simple one-to-one mapping between source segments and target dimension members.
  - Pull all members from the source value set as members into the target dimension.

  Note: The topic is unavailable for file-based data load definitions.

  The following figure shows a one-to-one mapping between segments or chartfields in a source system and dimensions in a target EPM application.



  Note: Each member in the source is created as a single member in the target dimension.

  Note: When importing a mapping file that has maps for one dimension, the dimension name needs to be in the first field of the file.

- **Many-to-One Mappings**—You can concatenate segments or chartfields to map multiple segments or chartfields from the source into a single EPM dimension member.

  When dimensions are mapped as a concatenated segment, the new dimension is created based on the traversal order that you define for the source hierarchies into the concatenated member target dimension. An unlimited number segments may be concatenated into the target dimension. The following table shows an example of how the segments map to dimensions. In this example, two segments (Company and Department) map to one dimension (Entity).

Segment/Chartfield	EPM Dimension
Company	Entity
Department	
Product	Product

Segment/Chartfield	EPM Dimension
Account	Account

- Concatenations of any number of source segments for Enterprise Resource Planning (ERP) sources like E-Business Suite and PeopleSoft.

Defining the Import Format Mappings

When you define an import format, you define the import format mappings for the metadata and data rule from the Enterprise Resource Planning (ERP) source system.

➤ To define the Enterprise Resource Planning (ERP) system import format mappings:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 From the **Import Format Summary** section, select an import format.

3 Go to the **Import Format Mapping** section.

4 In **Add**, select the target.

5 From **Source Column**, specify the source column from which to map.

For Fusion and E-Business Suite source systems, you can concatenate segments to map multiple segments from the source into a single EPM target dimension. The drop-down list displays all of the source system segments for the accounting entity that you selected when you defined the import format details.

Note: Verify your entries and ensure that, if you enter Segment 1, Segment 2, and Segment 3 that, the segments are displayed in sequence. For example, Segment 3 should not come before Segment 1. Entering segments out of sequence can cause an error.

For Financial Management applications, concatenate segments are *not* available if your target dimension is an Entity dimension type. Typically, the intercompany segment in Fusion and E-Business Suite or affiliate in PeopleSoft is related to a company or business unit. If concatenation was enabled, you could not determine the ICP dimension value.

For PeopleSoft source systems, select chartfields as necessary. The drop-down list displays the source system chartfields for the Accounting Entity (business unit) that you selected for the import format.

When the target applications is an ARM data load type: you can set the concatenation member by specifying the concatenation character.

For non- ARM data and metadata loads, the underscore character "_" is used to concatenate two segments. For ARM data loads, you cannot use an underscore character with a mapping that uses the "Like" method. Therefore, for ARM mappings, specify a different concatenation character for the data load mapping details.

6 For EPM and file-based source systems, you can add expressions in the **Expression** field. See "Adding Import Expressions" on page 100.

7 Click **Save**.

Concatenating Source Dimensions for Enterprise Resource Planning (ERP) Segments

The Import Format enables you to concatenate Enterprise Resource Planning (ERP) segments and define mappings on the concatenated code combinations. Concatenation facilitates a simple set of data load mappings with an unlimited number of segments that can be concatenated.

The order of concatenation is based on the order columns are inserted.

For E-Business Suite metadata loads you load the concatenated dimension and the load does not require hierarchies to be associated with it. PeopleSoft sourced applications handle metadata loads differently than E-Business Suite. For PeopleSoft source applications you must have hierarchies associated with the concatenated dimension. This is a requirement for PeopleSoft metadata loads.

➤ To concatenate a source dimension:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In the **Import Format** summary task bar, select the import format.

3 In the **Import Format Detail** section, from the **Concatenation Character**, select the concatenation character.

For non-ARM data loads and metadata loads, the underscore character "_" is used to concatenate two segments. For ARM data loads, you cannot use an underscore character with a mapping that uses the "Like" method.

4 In **Data Load Mapping**, click **Add**.

5 Select **Dimension Row**, and then the *target dimension*.

6 In **Source Column**, select the first source column to concatenate to the target.

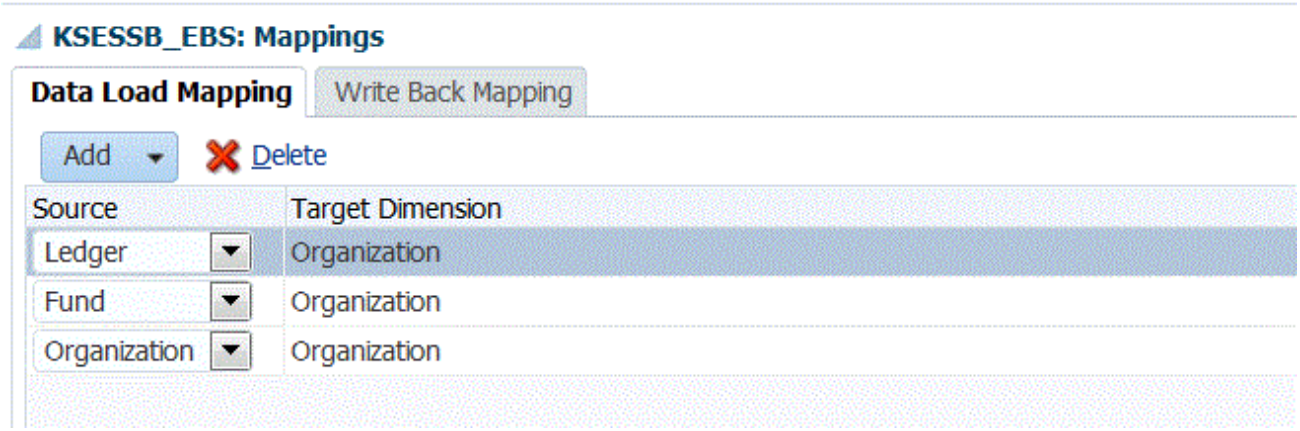
For example, to have two source columns (Company and Account separated by a dash), select the Company source columns.

7 In **Data Load Mapping**, click **Add**.

8 In **Source Column**, select the second source column to concatenate to the target.

Note: Only EPM source types enable you to specify a value in the Expression field.

9 Repeat steps 4-8 for each source column to concatenate.



10 Click **Save**.

Adding Import Expressions

FDMEE provides a set of powerful import expressions that enable it to read and parse virtually any trial balance file into the FDMEE database. Advanced expressions are entered into the Expression column of the field grid of the Import Formats screen. Import expressions operate on the value that is read from the import file.

Also see "Stacking Import Expressions" on page 102 and "Processing Order" on page 102.

➤ To add an import format expression:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In **Import Format**, from the **Import Format Mapping** grid, select the file-based source column.

3 In **Expression**, specify the import expression.

4 **Optional:** You can also specify the expression type and value on the **Add Expression** field.

   a. Click .

   b. In **Add Expression**, under **Expression Type**, select the expression type.

      The number and types of expressions available depend on the field that is being modified (for example, Account or Account Description).

   c. In **Expression Value**, enter the value to accompany the expression and click **OK**.

5 In **Import Format Mapping**, click **OK**.

Import Expression Types

Expressions supported by FDMEE:

- "Nonstandard Numeric Sign Conventions" on page 101
- "Converting from European to U.S. Notation" on page 101
- "Padding Fields with Leading Fills" on page 101

- "Padding Fields with Trailing Fills" on page 102
- "Multiplying by Whole-Number and Decimal Factors" on page 102
- "Disabling Zero Suppression" on page 102

Nonstandard Numeric Sign Conventions

The Sign expression is used to manage nonstandard numeric sign conventions. FDMEE interprets numbers with leading and trailing minus signs and numbers within parentheses as negative numbers. You can also use other leading and trailing characters to indicate negative numbers. To define custom signs, use expressions that follow this form: `Sign=[Positive String],[Negative String]`.

For example, if positive numbers are followed by `DR (1,000.00DR)`, and negative numbers are followed by `CR (1,000.00CR)`, the expression is `Sign=DR,CR`.

Numbers within <> are also treated as negative. For example, if you specify (100.00) and <100.00> both are treated as negative numbers.

If positive numbers are unsigned (`1,000.00`), and negative numbers are followed by `CR (1,000.00CR)`, the expression is `Sign=,CR`.

Displaying Debit and Credit Columns

The `DRCRSplit` expression is used to parse split numeric columns. By default, FDMEE assumes that numeric values in Amount fields are debits. However, you can position debit values on the left and credit values on the right.

Table 16 DRCRSplit expression example

Account Number	Description	Debit	Credit
1000-000-00	Cash-Operating Account	68,603.91	
1010-000-00	Cash-FANB-AP		177,216.16

`DRCRSplit`, which enables FDMEE to interpret left-right positioning and to assign the correct sign, follows the format `DRCRSplit=Mid Point of the DR and CR columns`.

When the file is imported, credit amounts are assigned negative signs (and thus are interpreted as positive), and debit amounts are unchanged (and thus are interpreted as negative).

Converting from European to U.S. Notation

The `Fill=EuroToUS` expression is used with the Amount field to trigger a number format conversion from (.,) to (,.) format.

Padding Fields with Leading Fills

The `FillL=LeadingFill` expression is used to fill fields with leading characters. Text values that are shorter than the specified fill expression are padded, as directed by the fill expression.

Padding Fields with Trailing Fills

The `Fill=TrailingFill` expression is used to fill fields with trailing characters. Text values that are shorter than the specified fill expression are padded, as directed by the fill expression. For example, if the account number is 103950- and the expression `Fill=000000000` is used, the account number after import is 103950-000. Another example is an account number of 243150 with the expression `Fill=111111111`. The account number after import is 243150111.

Multiplying by Whole-Number and Decimal Factors

The `Factor=Value` expression is used to factor source-file amounts by user-defined values.

Amounts can be multiplied by whole numbers or decimals; thus, for example, amounts can be doubled or halved.

Disabling Zero Suppression

The `NZP` expression is used to disable zero suppression during the data-load process. By default, FDMEE bypasses accounts in the trial balance that have zero balances. In certain circumstances, you may want to load all accounts, to ensure that values that should be zero are replaced. You enter `NZP` in the Expression column of the Amount field to disable zero suppression.

Stacking Import Expressions

One field can use multiple import expressions. To stack expressions, separate the expressions with a semicolon. Consider the order in which the layered expressions are processed.

For example, to stack the import expression for the General Ledger Amount column, enter the expression: `Script=ParseAcct.py;Fill=0000000`.

Defining a Multiple Period Data Load in Import Formats

When you define the mapping for an Amount column, you specify the number of amount columns in the Expression field. To do this, you specify the Columns=start,end values. For example when column 11 through 22 are amount columns, then specify Column=11,22.

Note: The Expression field ignores the Field Number value when you provide a column expression for a multiperiod data load.

Note: Amounts have to be in contiguous columns in the data file.

Processing Order

For all fields except the Amount field,FDMEE processes stacked expressions in the following order:

1. Script
2. Fill or FillL

For the Amount field, FDMEE processes stacked expressions in the following order:

1. DRCRSplit
2. Fill=EuroToUS
3. Script
4. Sign
5. Scale
6. NZP

Defining Import Formats for file-based Mappings

When the source is a file-based data load, you define the settings and the import format mapping definition.

You can add a mapping row to the import format definition based on the following options:

- Skip
- Currency
- Attribute
- Description
- Dimension Row

Table 17 Import format definition options

Import Definition Option	Description
Skip	The skip option is used to indicate rows in the input file that should be skipped. For example, rows with no data, negative numbers, or for specific accounts. The specification for a skip row is defined in the same way as that for a data row, and the system looks for the exact textual match for text entered in the expression field in the indicated location in the input file. The system automatically skips rows in the input file that have “spaces” and “non-numeric” characters in the amount location, so a skip specification is only needed when non-amount data is present in a row of the input file in the same location as the amount. For example, the input file may contain a label named “date.” Add an entry for a skip row to indicate the starting column of the text “date,” the length of the text, and the exact text to match. The Skip row option is only available when the file type is fixed, and not delimited.
Attribute	The TDATASEG table includes 13 attribute columns that you can load from the selected input file. You can provide the location of the attribute in the input file by specifying the starting location and length, or plug the value during processing by entering the value for the attribute in the expression field. If the value for the attribute is entered in the expression field, then a starting location and length are not needed. The attribute fields are generally used to help compose a drill-through URL or for history or documentation needs. You may want to populate the attribute field to support searching and filtering in the Data Load Workbench.
Description	The TDATASEG table includes two description columns, and you can load these columns in the same way as the attribute columns. You can specify the location in the input row that contains a description, or specify an explicit value by entering it in the expression field in the mapping table.

Import Definition Option	Description
Currency	FDMEE supports the ability to load data that is of a currency different from the default currency of the selected location. This option enables you to specify the location in the input line that specifies the currency for the related amount field. For the file import format, specify a currency on each row of data, or make sure that a currency is specified in the location that uses the selected import format. **Note:** You may encounter issues with loading data if the currency is not specified correctly.
Dimension	FDMEE supports multiple entries for a dimension in the import format when the dimension specification is spread between multiple locations on the same line. This feature enables you to concatenate fields for file-based data. To use this option, select the dimension, start and end positions, and the expression.

➤ To define an import format for data files with a fixed length:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In **Import Format**, from the **Import Format** summary grid, select the file.

3 In the **Import Format Detail** grid, select the type or row to add from the **Add** drop-down.

Available options:

- Skip Row
- Currency Row
- Attribute Row
- Description Row
- Dimension Row

4 In the **Start** field, specify where on the file the column starts.

5 In the **Length** field, enter the length of column.

6 In the **Expression** field, enter the expression that overwrites the contents of the column.

When entering a constant, enter a starting position and length. Use a start position of "1 " and a length of "1."

See "Adding Import Expressions" on page 100.

7 Click **Save**.

➤ To define an import format for delimited data files:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In **Import Format**, from the **Import Format** summary grid, select a file.

3 In the **Data Load Mappings** section, click **Add**, and select the type or row to add.

Available options are:

- Currency Row
- Attribute Row
- Description Row

- Dimension Row

4 In **Field Number**, enter the field to import.

The Expression field ignores the Field Number value when you provide a column expression for a multiple period data load.

5 In the **Expression** field, enter the expression that overwrites the contents of the field.

See "Adding Import Expressions" on page 100.

6 Click **Save**.

Concatenating Source Dimensions for a File-Based Source

The Import Format enables for the concatenation of file based dimensions as the source of target application dimensions. Concatenation facilitates a simple set of data load mappings with an unlimited number of fields that can be concatenated.

➤ To concatenate a file based source dimension:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In the **Import Format** summary task bar, select the import format of the file.

Source columns for both fixed and file delimited files can be concatenated.

3 In **Data Load Mapping**, click **Add**.

4 Select **Dimension Row**, and then specify the *target dimension*.

5 In **Source Column**, select the first source column to concatenate.

6 In **Field NUMBER**, enter the field number from the file to import (defaults to the field number from the file when text is selected).

7 In **Data Load Mapping**, click **Add**.

8 Select **Dimension Row**, and then specify the same *target dimension* as in step 4.

9 In **Source Column**, select the second source column to concatenate.

10 Repeat steps 5-6 for each source column to add to the concatenation.

11 To use a concatenation character between source columns:

a. Click **Add**, and then specify the *target dimension*.

b. In **Source Column** field, enter a name to identify the concatenation character.

For example, enter **Delimited**.

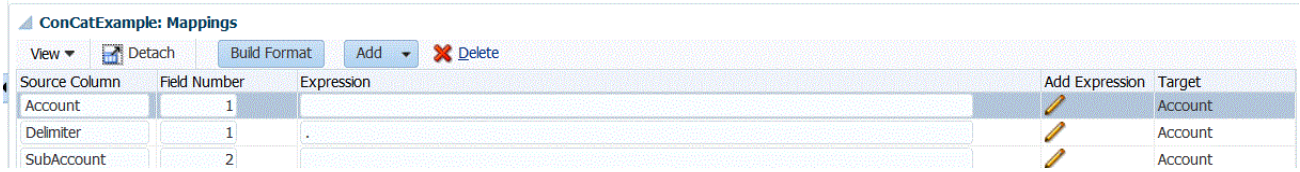
c. In **Field Number**, enter **1** or greater.

Do not enter **0** when specifying the field number for the concatenation character column

d. In **Expression** field, enter the concatenation character used to separate concatenated source columns.

For example, enter a **,** (comma) or a **.** (period).

12 Click **Save**.



Using the Import Format Builder

When the source system is a file-based data load, use the Import Format Builder feature to map source fields graphically to target dimension members instead of typing the starting position and the field length. This feature is available for both fixed and delimited files.

Note: The Import Format Builder does not support tab delimited files.

➤ To assign an import format using the Import Format Builder:

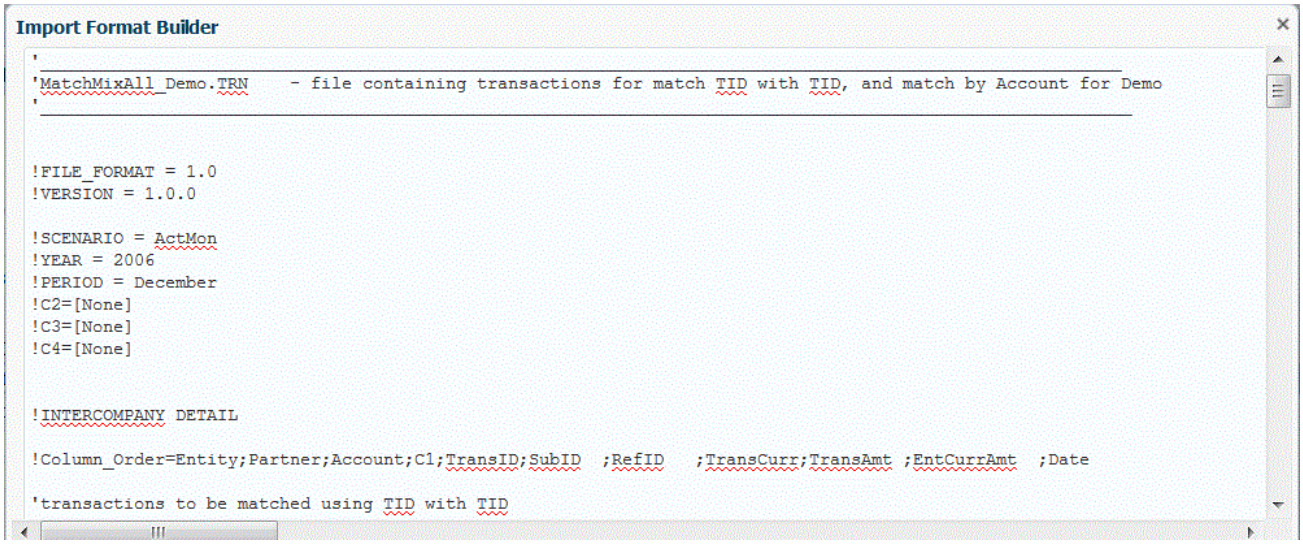
1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In the **Import Format** summary grid, select a file based source system.

3 In the **Import Format Mapping** detail grid, click **Build Format**.

4 In **Select file to Load**, locate and choose the file to import, and then click **OK**.

The file contents are shown on the Import Format Builder screen.



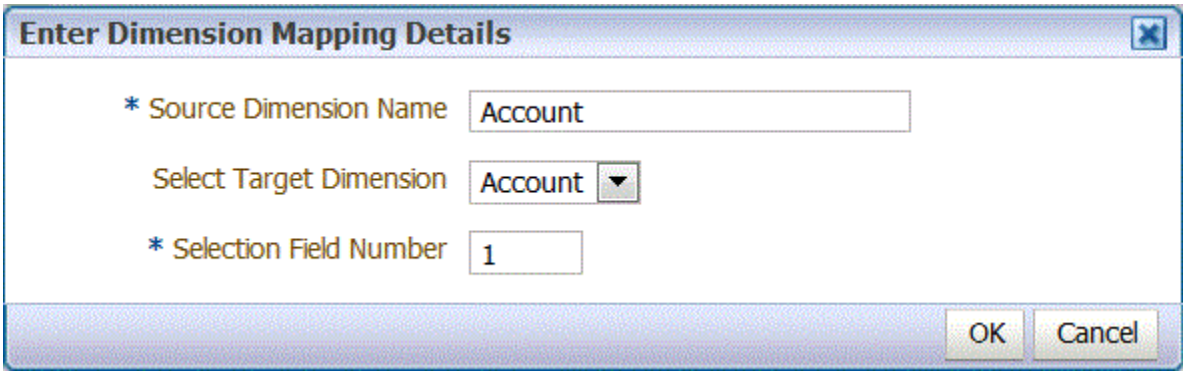
5 Select the text to import.

6 In **Assign selected text as Source Dimension Name**, select **N** to specify the source dimension name on the Enter Dimension Mapping Detail screen.

Select **Y** to use the selected text as the source dimension name and to use the one-to-one mapping between the source dimension and target dimension members.

7 To change dimension mappings details, click **Assign Dimension**.

You must add or change dimension details if you selected **N** in **Assign selected text as Source Dimension Name**.



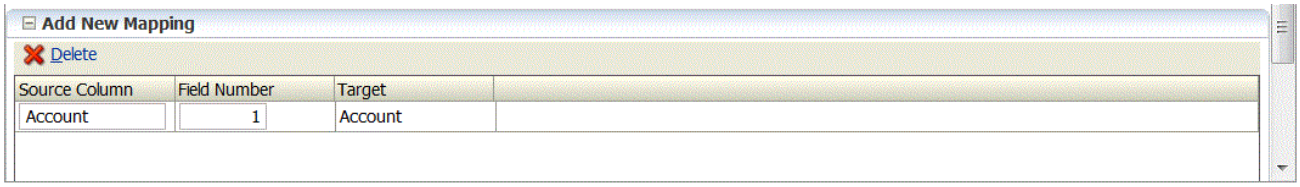
8 On **Enter Dimension Mapping Details**, from **Source Dimension Name**, specify the name of source dimension to which to assign the selected text.

9 In **Select Target Dimension**, select the target dimension to which to map the source dimension.

10 In **Selection Field Number**, specify the field number from the file to import (defaults to the field number from the file when text is selected).

11 Click **OK**.

When you assign or change source dimension information, the information is shown in the Add New Mapping summary grid.



12 Click **OK**.

Write-Back Mappings

When you are setting up an integration to pull from an EPM application and write back to E-Business Suite or PeopleSoft, consider the following:

- Before you create a data load rule to write back, create the write-back mappings. Write-back mappings occur at the member level. (For example, loading data from a Planning application to your Enterprise Resource Planning (ERP) source system.)
- You create write-back mappings to replace outgoing dimension members with source segment members. More specifically, during budget write-back, the write-back mapping is referred to when replacing outgoing dimension members with segment values.

The following interface tables require "write" security privileges for the data load to write-back process:

E-Business Suite

- GL_INTERFACE
- GL_INTERFACE_CONTROL
- GL_BUDGET_INTERFACE

Standard PeopleSoft—PS_HPYPB_ACCT_LN

PeopleSoft Commitment Control

- PS_HYP_KK_BD_HDR
- PS_HYP_KK_BD_LN

➤ To create write-back mappings:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In **Import Format**, if necessary, select the **Write Back Mapping** tab.

3 In **Source Dimension**, select the source dimension to map to the source dimension.

4 **Optional:** To have FDMEE create the write back mapping automatically, click **Auto Create**.

When prompted to create the write back mapping, click **OK**.

5 Click **Save**.

Defining Import Formats for Data Synchronization Between EPM Applications

The import format determines which fields (columns) to store and push between the source EPM System application dimension and the EPM System target application dimensions.

➤ To add an import format for data synchronization between EPM applications:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In the **Import Format** summary task bar, select **Add**.

In the upper grid of the Import Formats screen, a row is added.

3 In **Name**, enter a user-defined identifier for the import format.

The value in this field cannot be modified after a mapping is created for this import format.

4 In **Description**, enter a description of the import format.

5 In **Source Type**, select the **EPM** source system.

Depending on your selection in this field, the Source fields shows only registered Enterprise Resource Planning (ERP) sources and file for an ERP source type; or registered EPM applications (for example Financial Management or Planning, for an EPM source type.

6 In **Target Type**, select the target system.

7 In **Source**, select the source application.

For an EPM source system, select the EPM source application or file from which to move data.

For an Enterprise Resource Planning (ERP) source system, select the ERP source application (for example E-Business Suite, Peoplesoft Financials, Fusion) from which to move data.

8 In **Target**, select the target application.

For an EPM target system, select the EPM target application to which to move data.

For an Enterprise Resource Planning (ERP) target system, select the ERP target application to which to move data.

When you use an E-Business Suite and Fusion target system, you must enter the Chart of Accounts. The Accounting Entity is captured at the Location or Data Rule level.

9 From **Drill URL**, specify the drill information.

See "Adding Drill Through URLs" on page 64.

10 Define the import mappings from the EPM or Enterprise Resource Planning (ERP) application.

➤ To add an import mapping for an EPM source application to an EPM target application.

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In **Import Format**, from the **Import Format** summary grid, select an EPM source application.

3 In the **Import Format Detail** grid, and then in **Source Column**, select the dimension to map.

4 **Optional:** Add other dimensions as needed by selecting a dimension type from the **Add** drop-down.

Available options:

- Currency Row
- Attribute Row
- Description Row
- Dimension Row

5 In the **Expression** field, enter an expression or import script to the import format.

When entering a constant, you must still enter a starting position and length. Use a start position of "1 " and a length of "1."

See "Adding Import Expressions" on page 100.

6 Click **Save**.

Defining Import Formats for Data Synchronization Between Enterprise Resource Planning (ERP) and EPM Applications

Data synchronization also enables FDMEE to map the EPM System application dimension to the Enterprise Resource Planning (ERP) Segment/Chartfield.

➤ To create Enterprise Resource Planning (ERP) to EPM mappings:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In **Import Format**, from the **Import Format** summary grid, select an Enterprise Resource Planning (ERP) source application.

Depending on your selection in this field, the Source fields shows only registered Enterprise Resource Planning (ERP) sources and file for an ERP source type; or registered EPM applications.

For example, the Source field may be anFinancial Management or Planning for an EPM source type.

3 In the **Import Format Detail** grid, select the dimension to map from the **Source Column** drop-down.

4 **Optional:** Add other dimensions as needed by selecting a dimension type from the **Add** drop-down.

Available options:

- Currency Row
- Attribute Row
- Description Row
- Dimension Row

5 In the **Expression** field, enter an expression or import script to the import format.

When entering a constant, you must still enter a starting position and length. Use a start position of "1 " and a length of "1."

See "Adding Import Expressions" on page 100.

6 Click **Save**.

➤ To create EPM to Enterprise Resource Planning (ERP) (Write-back) mapping:

1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 In **Import Format**, from the **Import Format** summary grid, select an EPM source application.

3 Select the **Segment**.

4 Choose the type of mapping by selecting either the Explicit tab, Between tab, Multi-Dimension, or Like tab.

- **Explicit**—The source value is matched exactly and replaced with the target value. For example, the source value, "ABC" is replaced with the target value, "123." "Explicit" write-back mappings are created the same for data load and data write-back rules. See "Creating Mappings Using the Explicit Method" on page 144.
- **Between**—The range of source values are replaced with one target value. For example, a range from "001" to "010" is replaced as one value: "999." "Between" write-back mappings are created the same for data load and data write-back rules. See "Creating Mappings Using the Between Method" on page 145.
- **In**—In mappings enable a list of nonsequential source accounts to be mapped to one target account. In this case, multiple accounts are mapped to one account within one rule, eliminating the need to create multiple rules (as is required for an Explicit map).
- **Like**—The string in the source value is matched and replaced with the target value. For example, the source value, "Department" is replaced with the target value, 'Cost Center A. See "Creating Mappings Using the Like Method" on page 147.

Write-back mappings provide a means to remove or strip characters that were added during the data load process. "Like" write back mappings are created similar to, but reverse from the data load.

- **Multi-Dimension**—Define member mapping based on multiple source column values.

Tip: You can click Refresh Values to refresh the list of segment or chartfield values that appear in the drop-down list from the source system. This is especially helpful when creating "Explicit," "Between," "Like", and "Multi-Dimension" mappings for data write-back data loads.

Defining the Write-Back Mappings (E-Business Suite and PeopleSoft only)

When you define an import format, you can also define the import format mappings from the EPM application for the data write-back rule.

➤ To define the write-back import format mappings:

1 In **Import Format**, select the **Import Name**.

2 In **Source Type** select **EPM**, and then select **Planning** or **Essbase** as the source.

3 In **Target Type**, select **ERP**, and then select **EBS** or **PeopleSoft** as a target.

4 Select the **Accounting Entity**.

Select **Ledger** for E-Business Suite.

Select **Business Unit** for PeopleSoft.

5 Click **Save**.

Defining Locations

You define locations to specify where to load data to a target system. That is, a location is the level at which a data load is executed in FDMEE. A location is associated with one source system, but you can import data from multiple ledgers from that system. Each location is assigned an import format, one or more Data Load Rules, and a Data Load Mapping. Additionally, locations enable you to use the same import format for more than one target application where the dimensionality of the target applications is the same.

The Location feature also enables you to specify free form text or a value using the integration option feature. Text or values entered for a location can be used with your FDMEE scripts.

Note: You can create duplicate locations with the same source system and application combination.

➤ To create, edit, and delete import locations:

1 On the **Setup** tab, under **Integration Setup**, select **Location**.

2 In **Location**, click **Add**.

3 From **Location Details**, in the **Name**, enter the location name.

4 From **Import Format**, enter the import format.

You can also click and select an import format.

The source system is automatically populated based on the import format.

The Source field displays the source application based on the import format.

5 In **Accounting Entity**, specify the source system accounting entities (business units or ledgers) to use for the location.

For Fusion and E-Business Suite source systems, the Accounting Entity is the ledger. For PeopleSoft source systems, the Accounting Entity is the business unit.

If the accounting entity is selected here, then in the Data Load Rules, accounting entity populates automatically.

If the accounting entity is not specified here, you can specify the accounting entity in data rules. Doing so enables you to load data from multiple ledgers to business units from one location.

You can use locations with multiple import formats. For example, you can define the import format for the first location, Ledger 1. Then, define another import format for Ledger 2. In this case, you would create multiple locations with the same import format. You can also define multiple locations for target applications that are the same. In this case, you can define multiple locations for each business unit or ledger and reuse the import format.

6 In **Target Application**, specify the target application associated with this location.

You can also click to search for a target application.

7 **Optional**: Enter or click to select the **Accounting Entity**. (For E-Business Suite, select the ledger. For PeopleSoft, select the business unit.)

8 In **Functional Currency**, specify the currency of the location.

Note: When you create a location using a PeopleSoft Human Capital Management source system, the Functional Currency column displays "NA." Unlike PeopleSoft Enterprise Financial Management source systems, when FDMEE human resources data loads occur, there is no break out of amount by functional, entered, or translated currencies.

9 In **Parent Location**, enter the parent assigned to the location.

Parent mapping are used to share mappings with other locations. Enter mappings at the parent location, and the related locations can use the same mappings. Multiple locations can share a parent. This feature is useful when multiple locations use one chart of accounts. Changes to a child or parent mapping table apply to all child and parent locations.

10 In **Data Value**, specify the extra dimension that is used only for integration with multiple dimension target systems.

This dimension is associated with a data load location. In Financial Management, the data value is the value dimension. WhenFDMEE creates the load file, the dimension value is entered for every data line that is loaded by the location. For example, the Data Value dimension is associated with the Value dimension in Financial Management. By default, if no value is entered in this field, for integration with Financial Management, the Data Value <EntityCurrency> is the default value.

When Search is selected, FDMEE connects to the Financial Management to get a list of valid data values. FDMEE takes the values from Financial Management and adds rows created by FDMEE that are a concatenation of the original value and "Adjustment Data Values". FDMEE uses these newly created rows to manage journal loading to Financial Management.

The rows that FDMEE creates in the Data Value selection screen are:

- [Contribution Adjs];[Contribution Adjs]
- [Contribution Adjs];[Parent Adjs]
- [Contribution Adjs];<Entity Curr Adjs>
- [Contribution Adjs];<Parent Curr Adjs>
- [Parent Adjs];[Contribution Adjs]
- [Parent Adjs];[Parent Adjs]
- [Parent Adjs];<Entity Curr Adjs>
- [Parent Adjs];<Parent Curr Adjs>
- <Entity Curr Adjs>;[Contribution Adjs]
- <Entity Curr Adjs>;[Parent Adjs]
- <Entity Curr Adjs>;<Entity Curr Adjs>
- <Entity Curr Adjs>;<Parent Curr Adjs>

11 **Optional**: In **Logic Account Group**, specify the logic account group to assign to the location.

A logic group contain one or more logic accounts that are generated after a source file is loaded. Logic accounts are calculated accounts that are derived from the source data.

The list of values for a logic group is automatically filtered based on the Target Application under which it was created.

12 **Optional**: In **Check Entity Group**, specify the check entity group to assign to the location.

When a check entities group is assigned to the location, the check report runs for all entities that are defined in the group. If no check entities group is assigned to the location, the check report runs for each entity that was loaded to the target system. FDMEE check reports retrieve values directly from the target system, FDMEE source data, or FDMEE converted data.

The list of values for a check entity group is automatically filtered based on the Target Application under which it was created.

13 **Optional**: In **Check Rule Group**, specify the check rule group to assign to the location.

System administrators use check rules to enforce data integrity. A set of check rules is created within a check rule group, and the check rule group is assigned to a location. Then, after data is loaded to the target system, a check report is generated.

The list of values for a check rule group is automatically filtered based on the Target Application under which it was created.

14 Click **Save**.

15 **Optional:** Perform these tasks:

- To edit an existing location, select the location to modify, and then make changes as necessary. Then, click **Save**.
- To delete a location, click **Delete**.

  When a location is deleted, the location is removed from all other FDMEE screens, such as Metadata, and Data Load.

Tip: To filter by the location name, ensure that the filter row is displayed above the column headers. (Use to toggle the filter row.) Then, enter the text to filter.

➤ To specify free form text or values for use with scripts:

1 On the **Setup** tab, under **Integration Setup**, select **Location**.

2 In the **Location Detail**, click the **Integration Option** tab.

3 From **Integration Option**, in **Integration Option 1-4**, specify the free form text or value, and then click **OK**.

The information is accessible from the Integration Option fields in the Location table.

Defining Period Mappings

Subtopics

- Global Mappings
- Application Mappings
- Source Mappings

You have the flexibility to use various kinds of calendars (for example, monthly, weekly, or daily) based on your business and statutory requirements. In your EPM system, you can also use different calendars, based on your application requirements (for example, different levels of periods). Because FDMEE extracts the Enterprise Resource Planning (ERP) source system data to the target EPM application, establish the mapping relationship by defining a period mapping between the source ERP source system periods and the target EPM application periods.

Before you can define data rules, define the period mappings. Period mappings define the mapping between Enterprise Resource Planning (ERP) calendars and the EPM application year or periods. You can define period mappings in three ways:

- **Global Mapping**—You define a global mapping in cases where you do not have many target applications getting data from multiple source systems with different types of source calendars. Use a global mapping to ensure that various periods are accommodated in the individual mapping. As a first step, define a global mapping.
- **Application Mapping**—If you have multiple target applications, getting data from various source systems with complex period types, you can create application mappings in addition to global mappings. When you define an application mapping, you can modify the Target Period Month as necessary.
- **Source Mapping**—Specifies source period mapping for adapter based integrations.

Global Mapping—Sample Monthly Period Mapping

The following table shows how a monthly calendar from a source maps to monthly periods in a target application.

Note: You should define global mapping at the most granular level. For example, if you have a monthly calendar and a weekly calendar, define your global mapping at the lowest level of granularity. In this case, the period keys are at the week level. and you map weeks to months. You can create application mappings for the higher-level periods.

Table 18 Sample Monthly Period Mapping

Period Key	Prior Period Key	Period Name	Target Period Month	Target Period Quarter	Target Period Year	Target Period Day	Year Target
Jan 1 2010	Dec 1 2009	January 1, 2010	Jan	Q1			FY10
Feb 1 2010	Jan 1 2010	February 1, 2010	Feb	Q1			FY10
Mar 1 2010	Feb 1 2010	March 1, 2010	Mar	Q1			FY10
April 1 2010	March 1 2010	April 1, 2010	Apr	Q2			FY10
May 1 2010	April 1 2010	May 1, 2010	May	Q2			FY10

Global Mapping—Sample Weekly Period Mapping

The following table shows how a weekly calendar from an Enterprise Resource Planning (ERP) source system maps to monthly periods in the EPM application.

Table 19 Sample Weekly Period Mapping

Period Key	Prior Period Key	Period Name	Target Period Month	Target Period Quarter	Target Period Year	Target Period Day	Year Target
Jan 26 2009	Jan 19 2009	January 26, 2010	Jan	Q1			FY09
Feb 2 2009	Jan 26 2009	February 2, 2010	Feb	Q1			FY09

Period Key	Prior Period Key	Period Name	Target Period Month	Target Period Quarter	Target Period Year	Target Period Day	Year Target
Feb 9 2009	Feb 2 2009	February 9, 2010	Feb	Q1			FY09
Feb 16 2009	Feb 9 2009	February 16, 2010	Feb	Q1			FY09

Application Mapping—Sample Target Application Sourcing from a Monthly Calendar Source

The following table shows a sample where the target application is sourcing from a monthly calendar. This mapping is performed on the Application Mapping tab.

Table 20 Sample Application Mapping—Target Application #1 with a Monthly Calendar Source

Period Key	Target Period Month	Target Period Quarter	Target Period Year	Target Period Day	Year Target
Jan 1 2009	Jan	Q1			FY09
Feb 1 2009	Feb	Q1			FY09
Mar 1 2009	Mar	Q1			FY09

Application Mapping—Sample Target Application #2 Sourcing from a Weekly Calendar Source

The following table shows a sample where the target application is sourcing from a weekly calendar. This mapping is performed on the Application Mapping tab.

Table 21 Sample Application Mapping—Target Application #2 with a Weekly Calendar Source

Period Key	Target Period Month	Target Period Quarter	Target Period Year	Target Period Day	Year Target
Jan 26 2009	Jan	Q1			FY09
Feb 2 2009	Feb	Q1			FY09
Feb 9 2009	Feb	Q1			FY09
Feb 16 2009	Feb	Q1			FY09

Note: To avoid double counting on Income Statement accounts, be sure not to define a mapping where the adjustment period of one year goes into the period of the next fiscal year.

Adjustment Period Mapping—Mapping the Period Key to the Adjustment Period

Note: If YTD is selected as the Enterprise Resource Planning (ERP) source, then the adjustment period becomes the ending balance (replaces the period 12). If PTD, then the adjustment period gets added to period 12.

Table 22 Sample Adjustment Period Mapping—Mapping the period to the adjustment period

Period Key	Calendar	Adjustment Period	Description
Dec-2003	Accounting 13	13-03	Adj Period for 2003
Dec-2004	Accounting 13	13-04	Adj Period for 2004
Dec-2005	Accounting 13	13-05	Adj Period for 2005
Dec-2007	Accounting 13	13-07	Adj Period for 2007

Note: If the source is PeopleSoft General Ledger, set the adjustment period mapping with the related accounting year.

Global Mappings

You can define one global mapping to map various periods to the individual mapping.

➤ To define a global mapping:

1 **On the Setup tab, under Integration Setup, select Period Mapping.**

2 **Select the Global Mapping tab.**

3 **Click Add.**

4 **Select the Period Key.**

5 **Select the Prior Period Key.**

6 **Enter the following:**

a. Period Name; for example, August 2005.

b. Target Period Month; for example, August.

c. Target Period Quarter

d. Target Period Year

e. Target Period Day

f. Year Target

Note: Period dimension members in Performance Management Architect that have the "Data Storage" property set to "Label Only," "Dynamic Calc," or "DynamicCalcandStore " are not displayed.

7 **Click Save.**

Application Mappings

You can define application mappings in cases where you want to define a special period mapping for a specific target application. The mappings that you create here apply to an individual target application.

➤ To create period mappings for an application:

1 On the **Setup** tab, under **Integration Setup**, select **Period Mapping**.

2 Select the **Application Mapping** tab.

3 In **Target Application**, select the target application.

4 Click **Add**.

5 Select the **Period Key**.

6 Enter the following:

   a. Target Period Month

   b. Target Period Quarter

   c. Target Period Year

   d. Target Period Day

   e. Year Target

7 Click **Save**.

Source Mappings

Source mappings include explicit and adjustment period mappings. You can create explicit period mappings to ensure that the FDMEE periods map correctly to the source system calendar periods. An adjustment period mapping is used only when you select the **Include Adjustment Periods** option when creating the data load rule.

The Source Mapping tab consists of two areas:

- Master—Selects the source system and mapping type.
- Grid—Defines the period mapping. The mapping can be defined only for periods defined on the Global Mapping. New FDMEE periods cannot be created on this tab.

For (E-Business Suite, Fusion, and PeoplesSoft) source systems, you can select explicit or adjustment systems. For all other systems, you can select only an explicit mapping.

Note: In Data Rules, you can choose between Default period mapping and Explicit Period mapping. If you choose Period mapping, then source periods are mapped based on the period key and previous period.

➤ To create source mappings:

1 On the **Setup** tab, under **Integration Setup**, select **Period Mapping**.

2 Select the **Source Mapping** tab.

3 In **Source System**, select the source system.

4 In **Mapping Type**, select **Explicit**.

   For SAP and JD Edwards source systems, you must select **Explicit** period mappings.

For all other systems (for example, file based and Fusion), you can select **Explicit** or **Adjustment**.

5 Click **Add**.

6 Enter the source system **Period Name**, and then click **OK**.

Note: Period names cannot include spaces if used in a batch script.

7 Enter the source system **Period Key**, and then click **OK**.

8 Enter the source system **Calendar**, and then click **OK**.

9 Enter the source system **GL Period**, and then click **OK**.

The GL Period Number is prefilled based on the Period Name.

10 Enter the source system **GL Name**, and then click **OK**.

11 **Optional**: Enter a description for the mapping.

12 Click **Save**.

➤ To create source period mappings:

1 On the **Setup** tab, under **Integration Setup**, select **Period Mapping**.

2 In **Period Mapping**, select the **Source Mapping** tab.

3 In **Source Mapping**, select the source system.

4 Click **Add**.

5 Click to select the source system **Period Key**, and then click **OK**.

6 Click to select the source system **Calendar**, and then click **OK**.

7 Click to select the source system **Adjustment Period**, and then click **OK**.

8 **For PeopleSoft source systems only**: In **GL Period Year**, enter the general ledger period year.

The general ledger period year is required for PeopleSoft source systems because PeopleSoft Adjustment Periods definitions do not include a Year value. To properly map adjustment period data from PeopleSoft, define the source accounting period and fiscal year intersections for all PeopleSoft adjustment periods.

9 **Optional**: Enter a description for the mapping.

10 Click **Save**.

➤ To create budget period mappings (for PeopleSoft Commitment Control only):

1 Select **Source Mapping**.

2 In **Source Mapping**, select the source system.

3 Click **Add**.

4 In **Mapping Type**, select **Budget**.

Note: From PeopleSoft Commitment Control, only Budget Period data can be extracted. The source calendar/period are based on the control budget definition in PeopleSoft.

5 In **Period Name**, specify the period name.

You can also click to search for the period name.

Note: Period names cannot include spaces if used in a batch script.

6 Enter the source system **Calendar**, and then click **OK**.

You can also click to search for the calendar name.

7 Enter the source system **GL Period**, and then click **OK**. You can also or click to search for and select the GL period name.

The GL Period Number is prefilled automatically based on the Period Name.

8 **Optional**: Enter a description for the mapping.

9 Click **Save**.

Tip: To delete a mapping, select the mapping, and then click **Delete**.

Defining Category Mappings

Subtopics

- Global Mappings
- Application Mappings

You define category mappings for categorizing and mapping source system data to a target EPM Scenario dimension member. For example, in a Financial Management application, you may have a Scenario dimension member called "Actuals" for storing actual balances from a source system. In a Planning application, the same source system data is stored using the Scenario dimension member "Current." In FDMEE, you can create one category mapping to give both one name to represent their respective scenarios.

Global Mappings

You can define one global mapping to map various Scenario dimensions to the individual mapping.

The global category mappings lets you define mappings that cross multiple applications. For example, you may have a case where a source category of an actual may map to a target of an actual in the majority of the cases. But you may have a case where you have a target application where the actual may map to current. In this case, it provides the ability to override the global mapping on an application basis.

➤ To define a global category mapping:

1 On the **Setup** tab, under **Integration Setup**, select **Category Mapping**.

2 Select **Global Mapping**.

3 Click **Add**.

A blank entry row is displayed.

4 In **Category**, enter the name of the category.

5 In **Description**, enter a description of the category.

6 In **Frequency**, select the frequency of the category.

The category indicates the frequency defined in the period mapping, for example, Daily, Monthly, Quarterly, or Yearly.

7 Enter the target category.

8 Click **Save**.

9 **Optional:** Perform these tasks:

- To edit a mapping, select the mapping, make changes as necessary. and then click **Save**.
- To delete a mapping, click **Delete**.

Application Mappings

Unlike global mappings, application mappings can be defined for a target application.

➤ To define application category mappings:

1 On the **Setup** tab, under **Integration Setup**, select **Category Mapping**.

2 In **Category Mappings**, select the **Application Mapping** tab.

3 From **Target Application**, select the target application.

4 Click **Add**.

A blank entry row is displayed.

5 Select the category.

6 Enter the target category or click to search for a target category.

7 Click **Save**.

8 **Optional:** Perform these tasks:

- To edit an mapping, select the mapping, and then make changes as necessary. Then, click **Save**.
- To delete a mapping, click **Delete**.

2 Loading Metadata

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Understanding General Ledger Integration

FDMEE supports loading data into EPM applications from general ledger source systems and writing back data from target EPM Planning applications to general ledger source systems.

- Loading data from the General Ledger source system—FDMEE supports loading data from general ledger source systems. FDMEE can load both metadata (dimension members and hierarchies from E-Business Suite, Oracle Fusion Financials and PeopleSoft Enterprise Financial Management only) and data from the Enterprise Resource Planning (ERP) source systems.
- Writing back data to the General Ledger source system—FDMEE enables you to extract data from Planning, Essbase aggregate storage, Essbase block storage, Financial Management, and then load it into the General ledger source system.

  Data load to write-back is unavailable for SAP and JD Edwards. The suggested approach to write back to these Enterprise Resource Planning (ERP) systems and other legacy applications is to extract data to a custom application (data file) and converting them to a format acceptable to ERP systems and importing them as journals.

Requirements

Before you begin using FDMEE, consider the following:

- Verify that you have met the EPM *dimension* requirements:

You can build EPM applications with any combination of dimensions. The combination must include required dimensions for the selected application. "Member Properties Sourced from the Enterprise Resource Planning (ERP) System" on page 125 describes how member properties are sourced from the Enterprise Resource Planning (ERP) source system.

- Verify that you have met the EPM *member* requirements:
  - Duplicate Members—To avoid issues with duplicate member names, as a best practice, include a unique prefix or suffix for each dimension so each member is always unique.
  - Duplicate Alias Members—If your application has duplicate alias members, it is important to remove any duplicates in the target application or validation errors occur when you deploy the application in Performance Management Architect.

    Note: Source descriptions must be unique to avoid alias validation errors with Performance Management Architect.

When moving dimensions and members from a source system into a target EPM application, it is important to understand the naming restrictions. For Performance Management Architect, see the *Oracle Hyperion Enterprise Performance Management Architect Administrator's Guide*. For Planning, see the *Oracle Hyperion Planning Administrator's Guide*. For Financial Management, see the *Oracle Hyperion Financial Management Administrator's Guide*.

Required Dimensions

You can build EPM applications with any combination of dimensions, as long as the combination includes those required for the selected application. For example, Planning requires different dimensions to be present in an application than in Financial Management.

For detailed information on dimensions required and properties for Performance Management Architect applications, see the *Oracle Hyperion Enterprise Performance Management Architect Administrator's Guide*. For Classic Planning applications, see the *Oracle Hyperion Planning Administrator's Guide*. For Classic Financial Management applications, see the *Oracle Hyperion Financial Management Administrator's Guide*. For Classic Essbase, see the *Oracle Essbase Database Administrator's Guide*.

The following dimensions require special considerations when integrating with FDMEE:

- Account
- Currency
- Entity
- Scenario
- Version
- View
- Year
- Period

In addition to the above list, review properties set by FDMEE in the Custom dimension. See "Custom" on page 128.

For information on special considerations and requirements for Public Sector Planning and Budgeting, see Chapter 6, "Loading Human Resources Data".

Member Properties Sourced from the Enterprise Resource Planning (ERP) System

Subtopics

- Account
- Entity and Intercompany
- Scenario
- Version
- View
- Year and Period
- Alias
- Custom

For each required dimension, specific properties must be defined. The required dimension properties relate to Planning, Financial Management, or Essbase applications, and in some cases both.

Note: FDMEE sets some of the required properties, but not all.

Account

The Account dimension represents a hierarchy of natural accounts. Accounts store financial data for entities and scenarios in an application. Each account has a type, such as Revenue or Expense, that defines its accounting behavior. The Account dimension is mapped from the source accounting entity to the EPM Account dimension as defined in the dimension mapping definition for the selected chart of accounts or business unit. The properties set by FDMEE are shown below. (Any properties not set are defaulted by the application or Performance Management Architect).

Property	Application Type	Population Method/Value
Consolidation Account Type	Consolidation	Populated from the account type in the source accounting entity with the domain of revenue, expense, asset, or liability. If source type is equity, it is changed to liability for use by Financial Management applications.
Account Type	Planning	Populated from the account type in the source accounting entity with the domain of revenue, expense, asset, liability or equity.

Property	Application Type	Population Method/Value
Variance Reporting	Planning, Essbase aggregate storage, and Essbase block storage	Set to "Expense" if account type is expense, otherwise set to "NonExpense." (NonExpense is the default).
Description, Display String	System	Populate from source accounting entity description.
Time Balance	Planning, Essbase aggregate storage, Essbase block storage	For income statement accounts, (revenue and expenses) set to "Flow" for Planning applications. For Essbase aggregate storage and block storage applications, set to "Last." For balance sheet accounts (asset, liability, and equity), set to "Balance." These properties can be set when you create metadata rules. See "Defining Metadata Rules" on page 132.

Entity and Intercompany

The Entity dimension represents the organizational structure of the company, such as the management and legal reporting structures. Entities can represent divisions, subsidiaries, plants, regions, countries, legal entities, business units, departments, or any organizational unit. You can define unlimited entities.

The Intercompany dimension represents all intercompany balances that exist for an account. This is a reserved dimension that is used in combination with the Account dimension and any custom Financial Management dimension.

Financial Management requires that members of the Entity dimension have the IsICP property set for those members that are intercompany members. When an application is populated, Performance Management Architect populates the ICP (intercompany) dimension with the appropriate members based on the Entity members that are flagged as ICP (intercompany) entities.

For E-Business Suite has two scenarios for mapping source segments to the Entity dimension: 1) an intercompany segment exists in the source chart of accounts, and 2) an intercompany segment does not exist in the source chart of accounts. For PeopleSoft, the business unit is mapped to the entity and the affiliate is mapped to the ICP.

The properties set by FDMEE are shown below. (Any properties not set are defaulted by the application or Performance Management Architect.

Property	Application Type	Population Method/Value
Name	Consolidation, System	Populated from the code/value in the source accounting entity.
Description	System	Populated from the name in the source accounting entity.

Property	Application Type	Population Method/Value
IsICP	Consolidation	If the intercompany segment exists in the source, then this flag is set automatically per the rules defined. If the intercompany segment does not exist, then you specify how this property is set. See "Entity and Intercompany" on page 126. **Note:** For ICP transaction data to load correctly, you must manually set the property ISICP="Y" for those accounts participating in ICP. In Performance Management Architect, you can use the Property Grid to modify the property. If using Financial Management Classic application administration, extract the metadata, update, and then re-import it back. After modifying the property, you can load data correctly for ICP transactions.
Currency	Consolidation, Essbase, Planning	For Financial Management target applications: The entity currency is set based on the default defined in the mapping rule for the Entity dimension. (All members are assigned the same currency.) As the administrator, ensure that the functional currency of the source is consistent with the default Entity currency.

Note: These are the only properties that are set as part of the FDMEE integration, all others are defaults when you create new members. If a property was originally set by FDMEE, and you change it later, the property is overridden.

Scenario

The Scenario dimension represents a set of data, such as Budget, Actual, or Forecast. For example, the Actual scenario can contain data from a general ledger, reflecting past and current business operations. The Budget scenario can contain data that reflects the targeted business operations. The Forecast scenario typically contains data that corresponds to predictions for upcoming periods. A Legal scenario can contain data calculated according to legal GAAP format and rules.

Version

The Version dimension is specific to EPM applications and usually does not have a source in the source accounting entity. Since it is required, you must specify the necessary default value in the member mapping by using the "Like" mapping type. When defining the data rule in FDMEE, select the desired "Version" to include with the extracted data. Since the Version dimension is not extracted from the source system, it is not necessary to define specific properties.

View

The View dimension represents various modes of calendar intelligence; for example, Periodic, Year-to-Date, and Quarter-to-Date frequencies. FDMEE extracts only data that is below the quarter level. You select the view as part of the data rule definition, and when the data is extracted, it includes the View selection as the value for the dimension on each row. See "Defining Data Load Rules to Extract Data" on page 161. Since the View dimension is usually not extracted from the source system, it is not necessary to define specific properties. However, before the data extraction process, you must create all members in the View dimension manually.

Year and Period

The mapping between the source system calendar and the Year and Period dimensions is managed using the period mapping feature described in "Defining Period Mappings" on page 114. Before you perform period mapping, create the necessary Year and Period members. In FDMEE, you select the calendar periods to include in the data extraction process and on the Period Mapping page to define the appropriate target year and target period dimensions to assign to the data. Since the Year and Period dimensions are not extracted from the source system, you need not define specific properties.

Note: For Planning applications, it is required that you must have the same number of children in each branch of the Period dimension. For example, Q4 has October, November, December children and an adjustment period in Performance Management Architect.

Alias

For Planning and Essbase, the Alias dimension or table is required to support languages. Keep in mind these special considerations:

- The Alias dimension must include a member named "Default."
- If the dimension name is not the same as the Alias name in a Performance Management Architect Planning application, the drill through landing page does not return any data.
- When creating Alias table members in a dimension, define them with the same name that is displayed in Oracle Fusion, E-Business Suite, or PeopleSoft. This is the value of the NLS_LANGUAGE column.

Custom

The properties set by FDMEE are shown below. (Any properties not sets defaults in the application or in Performance Management Architect.)

Property	Application Type	Population Method/Value
Name	System	In E-Business Suite, this value is populated from the Segment Name. In PeopleSoft Enterprise Financial Management, this value is populated from the chartfield value.
Description	System	In E-Business Suite, this value is populated from the Segment Value. In PeopleSoft Enterprise Financial Management, this value is populated from the chartfield value.

How Dimensions Are Processed

For Performance Management Architect applications, the dimension extract process populates the interface tables with dimension members based on the mapping rule details created in FDMEE. For Classic Planning and Financial Management applications, the dimension extract

process populates dimension members directly into the application based on the mapping rule details created in FDMEE.

As part of the extract process, the dimension members are directly loaded into the target Performance Management Architect dimension, with specific properties defined as described in "Member Properties Sourced from the Enterprise Resource Planning (ERP) System" on page 125. In addition to loading dimension members, the related alias entries are also loaded to provide the appropriate language support.

Shared dimensions from EPMA are not selected directly from the shared library for loading. FDMEE presents the dimensions in the target application for inclusion in a metadata rule, and then updates the shared library automatically when updating the target application. Dimensions in the shared library cannot be directly loaded, but must be included in a target application to enable loading from an Enterprise Resource Planning (ERP) source.

The FDMEE dimension extract process:

1. Extracts the general ledger segment or chartfield value sets from the source system.
    - Only general ledger segment value set members or chartfield members that are relevant to the source chart of account segments or chartfields mapped to Classic Financial Management, or Planning are extracted.
    - The members are loaded into a staging table on the target instance. Before loading them into the staging table, FDMEE assigns the segment values a prefix defined for the corresponding EPM application dimension.
2. Processes dimensions mapped to single segments or chartfields.

    For Classic applications, dimensions are loaded directly into the target application. The interface tables for dimensions map to a single general ledger segment or chartfield. This consists of filtering the data from the staging table loaded in step 1, on the basis of the segment value set mapped to a particular dimension, and loading the corresponding dimension member interface table and dimension member property array table (for aliases).

    In most cases, dimensions are mapped as a single segment in Fusion and E-Business Suite source systems or single chartfield in PeopleSoft source systems from the source chart of accounts to a target dimension and you select the starting node in the source dimension as the basis for the new dimension.
3. Processes the dimensions mapped to multiple segments or chartfields.

    For Performance Management Architect, the member interface tables are populated for the dimensions mapped from more than one E-Business Suite general ledger chart of accounts segment or PeopleSoft chartfield. The individual segment values must be concatenated to create the dimension member values.

    The dimension extract process creates the required member entries, properties, and alias entries if they exist in the source system, and then applies defaults to those properties if they do not exist. Users should update member properties if the source system value was unavailable or in cases where a different value is desired.

    In some cases, you can sometimes create target dimension members based on the concatenation of one or more source segments. When dimensions are mapped as a

concatenated segment, the new dimension is created based on a user-defined traversal order of the source hierarchies into the concatenated member target hierarchy.

How Languages Are Processed

As part of the source system registration, FDMEE gets the list of available source system languages, in addition to the base language. The base language is typically the language selected when the Enterprise Resource Planning (ERP) source system is installed. Additional available languages that are not the base language are referred to as the "enabled languages."

Languages from the source system that are mapped to the languages defined in the target application are independent of the languages available for selection via the FDMEE browser selection. The languages available in the browser might be different from the languages available in the Enterprise Resource Planning (ERP) source system and the target EPM application. For information on languages that FDMEE supports, see the *Oracle Hyperion Enterprise Performance Management System Certification Matrix*.

When you register a target application for use with FDMEE, the Default Language column on the Target Application Registration page is used as follows:

- The languages displayed in the Default Language drop-down list are FDMEE supported languages. These languages are mapped behind the scenes to the Enterprise Resource Planning (ERP) source system languages.
- The Alias dimension in Essbase and Planning applications has a required "Default" member. The FDMEE language that you select when registering a target application is automatically mapped to the "Default" member. Because the FDMEE language is mapped to the source language for the member description, you map the base or enabled source language in the source system to the "Default" alias member. During processing, all other languages are mapped to the other alias members as long as the alias member exactly matches the FDMEE source language for the member description.

  Note: Language processing is the same for Essbase and Planning applications.

Note: Financial Management languages are processed based on the default language that you select on the Target Application Registration page.

See "Registering Target Applications" on page 67.

How Currencies are Processed

When you define a data rule, you can specify how to extract exchange rates from the ERP source system. If your target application has the multi-currency option enabled, you can specify how to process exchange rates.

All rates are extracted and inserted into the AIF_HS_EXCHANGE_RATES table. This table is populated using the ISO currency code for each currency from the source system. The ISO numeric code is not used in this processing.

Exchange rates are pushed into Planning based on a match between the ISO currency code in the AIF_HS_EXCHANGE_RATES table and the currencies defined in the multi-currency Planning application. (It is important to set up the currencies in the Planning application with ISO currency codes.) Then, perform any currency conversions with those rates, as nothing is recalculated as part of this process.

Any data that is coming in with the default currency of the Planning application is loaded to locale.

For Financial Management, data is loaded to value dimension specified in the Location. Typically it is set to <Entity Currency>.

Note: Exchange rates are not interfaced directly into Financial Management. You should manually access them from the AIF_HS_EXCHANGE_RATES table and insert them into Financial Management.

Loading Source System Hierarchies into EPM Dimensions

Metadata within the source system changes over time, as well as the metadata and hierarchies in the target system.

The management of hierarchies is an ongoing process, with frequent changes due to updates in business functions and organizations. When managing hierarchies between source and target systems, users generally create new hierarchies, replace old hierarchies with new hierarchies or update hierarchies.

Managing hierarchies between systems becomes difficult because of the size of the hierarchies, the latency between system updates, and the needs of operational systems versus analytical systems. When managing hierarchies as part of the general ledger integration process, consider:

- The only operations between hierarchy management in the source system and target application are creating and updating the hierarchies by merging in the target. FDMEE never deletes hierarchies or members in a target application. If additional members or hierarchies are not specified, FDMEE ignores them.
- When you integrate a hierarchy from the source system to the target system, select the node from the source that serves as the root node in the target.
- The integration pushes the hierarchy into the target system and reports any errors encountered during the process.

  You can use the Process Details page to view errors logged in FDMEE. You can also select the Log link to review the Oracle Data Integrator log file. For Performance Management Architect applications, you can also view profile creation errors in the Job Console. See

"Viewing Process Details" on page 202 or the appropriate product documentation for additional information.

- A hierarchy selection in the dimension mapping is optional; however, you must at least determine how to handle members not in a hierarchy. For example, you can create children of a selected node as orphans, or you can choose not to carry over orphans. (This option applies only to Performance Management Architect).

Defining Metadata Rules

Subtopics

- Defining the Metadata Rule Details
- Defining Dimension Attributes
- Managing Metadata Rules

You can create metadata rules once and rerun the rules as necessary.

For general ledger source systems:

- For Fusion and E-Business Suite source systems, the chart of accounts is the collection of general ledger segments with various value sets, which are mapped to the dimensions to pull the dimension members and hierarchies.
- Similarly for PeopleSoft Enterprise Financial Management, the chartfields are mapped to the dimensions to pull the dimension members and hierarchies.

Note: Metadata rules are not used in FDMEE integrations with human resources source systems.

Before you define metadata rules:

- Ensure that your source system data does not include special characters, which are not supported in Financial Management target applications.
- Register your source systems and target applications for use with FDMEE. See "Registering Enterprise Resource Planning (ERP) Source Systems" on page 53 and "Registering Target Applications" on page 67.
- Select the source accounting entities in the registered source system. See "Selecting Source Accounting Entities" on page 87.
- Define the import format. See "Working with Import Formats" on page 91.
- Define the location. See "Defining Locations" on page 111.

Note: Performance Management Architect supports Shared and Local dimensions. FDMEE also supports Shared and Local dimensions in applications.

At a high level, follow this process to define metadata rules:

1. Create the metadata rule.
2. Select the dimension.
3. Define the mapping details and determine how you want to handle intercompany segments.
4. Define dimension attributes. See "Defining Dimension Attributes" on page 136.
5. **Optional**: Define the segment hierarchies or chartfield trees to be extracted.
6. Save and run the metadata rule.
7. **Optional**: Check the status of the rule. See "Viewing Process Details" on page 202.

➤ To create metadata rules:

1 **On the Workflow tab, under Metadata, select Metadata Rule.**

Note: You cannot create multiple metadata rules for the same ledger or business unit for each target application.

2 **From the POV bar, select the location to use for the metadata rule.**

3 **Click Add.**

A blank line is displayed at the top of the Dimension Mappings summary grid.

4 **In the Mapping details area, from Dimension, select the dimension.**

The dimensions listed are based on the import format.

When a Dimension is selected, the Dimension Classification field prefills.

5 **Define the mapping details for each dimension that you select.**

6 **Repeat steps 4-6 for each dimension.**

7 **Click Save.**

Defining the Metadata Rule Details

Single segment or chartfield mappings define a simple one-to-one mapping between source and target dimension members. When you create single segment or chartfield mappings, you can optionally define:

- A member prefix or suffix type and value
- Segment hierarchies to extract from the source system
- Orphan member handling
- Statistical Account handling

➤ To define the mapping details:

1 **Optional: In Prefix/Suffix Type, select Prefix or Suffix.**

2 **In Prefix/Suffix Value, enter the member prefix or suffix.**

Member prefixes are inserted before the source member code. Although optional, it is important to prefix the segment values with a prefix defined for the corresponding dimension when those members do not exist in the target application.

Member suffixes are inserted after the source member code.

Note: When you perform the next steps to define the hierarchy region starting parent, consider that Planning, Essbase, and Financial Management do not allow members to roll up to the parent under the same root. When extracting, specify hierarchies where every node has one parent. Fusion and E-Business Suite support instances where a segment value can roll up to two parents.

3 Select **Concatenate Name to Alias** to concatenate the Name and Alias.

4 From **EPMA Option**, select the EPMA metadata load option.

Metadata load options:

- Merge as Primary—Merge as Primary processes all sections and adds new dimensions, members, relationships, properties and associations that exist in the source, but do not exist in the Shared Library or target application. No dimensions, members, relationships, properties, or associations are removed. If a dimension, relationship, member, or property specified in the source exists in the Shared Library or target application it is overwritten with the value specified in the source. (Members are not moved, but overwritten.) Properties not included in the source are unchanged in the Shared Library or target application.

  Note: If a member has multiple instances in a dimension, the IsPrimary column specifies which instance is primary and which instances are shared. The IsPrimary parameter is optional; however, Oracle strongly recommend that you use it. If left undefined, it defaults to "True", which assumes that the member is primary. If you do not define the IsPrimary parameter or when there are duplicate members defined as primary, a warning is displayed in the Import Results file.

- Merge as Move—This mode processes only members with IsPrimary set to true, and ignores any others. During processing, the first line specifying a primary location for a member is executed, any subsequent lines specifying a different primary location are ignored, and a warning message is displayed.

- Replace—All new elements are added and all property updates are made. Then, any members or member relationships that are not specified in the source are deleted from the Shared Library or target application. You can also use replace mode to reorder members under a parent. Properties not included in the source are unchanged in the Shared Library or target application.

  This mode does not create Shared members unless they are defined in the import file (IsPrimary=false). This mode can detect a primary member under a new parent and process it as a move.

  Note: The Replace option does not display the Reorder Type and Reorder Existing Members options.

5 **For Fusion and E-Business Suite source systems:**

a. For Planning and Essbase applications—Account dimension mapping details. Select the **Time Balance Property for Balance Sheet Accounts** and **Time Balance Property for Income Statement Accounts**.

The time balance property specifies how the value of summary time periods is calculated. If set to Flow, it is an aggregate of all values for a summary time period as a period total. If the time balance property is set to "Balance," it is considered an ending value in a summary time period for the period total.

b. From the **Hierarchy Region** tab, click **Add** to define the hierarchy region.

c. Click or enter the Starting Parent.

d. Select **Base Hierarchy**.

The base hierarchy indicates the part of the hierarchy that is the base and that other parts of the hierarchy that share the same parent are shared. All nonshared members of base hierarchies have the "Store Data" property set. However, shared members cannot be set to "Store Data."

e. Select a prefix or suffix for the hierarchy, and then enter a prefix/suffix value.

The parent prefix is applied only to the parent. To enable alternate rollup hierarchies, the Prefix/Suffix value applies only to parent members. Parent members cannot be shared and must have a unique name. In addition, parent members do not store data.

6 **For PeopleSoft source systems:**

a. From the **Hierarchy Region** tab, click **Add** to define the hierarchy region tree.

b. In **Tree**, enter the tree name for the hierarchical structure.

Trees depict hierarchical structures that represent a group of summarization rules for a particular database field. For example, a tree can specify how your manufacturing locations should be summarized, or rolled up, for reporting purposes. Or a tree can show the reporting relationships within an organization by specifying how the individual department should be summarized into territories, territories into regions, and regions into countries. Similarly, a tree can categorize items in a catalog.

c. in **Effective Date**, specify the effective date of the tree.

Using effective dates with trees enables you to specify new objects, departments, reporting relationships, or organizational structures in advance and have them take effect automatically. You can also use trees with past, present, or future effective dates when reporting on current or historic data.

d. Click or enter the Starting Parent.

e. Select **Base Hierarchy**.

In a base hierarchy, other parts of the hierarchy that share a parent are shared. They cannot be set to "Store Data." Unshared members; however, have the "Store Data" property set. All nonshared members of base hierarchies have the "Store Data" property set. However, shared members cannot be set to "Store Data."

f. Select a prefix or suffix for the hierarchy, and then enter a prefix/suffix value.

The parent prefix is applied only to the parent. To enable alternate rollup hierarchies, the Prefix/Suffix value applies only to parent members. Parent members cannot be shared and must have a unique name. In addition, parent members do not store data.

g. From **Select how to process source orphan members**, select the method for handling orphan members:

- Ignore—No orphan members from the source are extracted.
- Create as Root Member—Root members are created, and orphan members are not. All members are created at the top level of the hierarchy.
- Create as Children of—Orphan members are placed as children of the member specified in the entry field to the right "Create as Children of field."

7 **Planning only: Select the Plan Type for the Accounting and Entity dimensions.**

8 **Financial Management only: If you are mapping an Entity dimension, enter the following details for intercompany segments, depending on your source system:**

- Intercompany Segment Value
- For Intercompany Default, select **Yes** or **No**.

In the scenario where the Intercompany segment is defined, the Intercompany transactions are identified based on the Intercompany segment. Typically, one set of natural accounts is required for accounting the receivable and payable among the Intercompanies.

In the scenario where there is no Intercompany segment, identify the Intercompany transactions based explicitly on the natural account segment. Typically, all combinations of receivable and payable accounts exist among the transacting partner companies. Only with these natural accounts are the receivable and payable position between the Intercompanies known.

9 **Click Save.**

Defining Dimension Attributes

The Attribute tab provides a table with a list of attributes for dimension. For each attribute, you can specify a default value. Note that the attributes vary by application type and dimension as shown below.

Note: The default values are not validated. Refer to your application documentation for valid values.

Table 23 Dimension Attributes by Application Type

Application Type	Dimension	Attribute
Planning	Account	Time Balance for Balance Sheet

Application Type	Dimension	Attribute
		Time Balance for Income Statement
		Data Storage Parent (sets the default for a parent node that you want to make different from the child node. In some cases, the child and parent data storage attributes are not the same, and this lets you specify the appropriate default for this attribute for a parent.)
		Data Storage
		Expense Reporting
		Account Type
HFM	Account	Consolidation Account Type
		Custom 1 Top Member
		Custom 2 Top Member
		Custom 3 Top Member
		Custom 4 Top Member
HFM	Entity	IsICP
		Currency
Essbase	Account	

➤ To specify metadata attributes for a Peoplesoft source system:

1 **From the Attribute tab, click Add.**

2 **In Time Balance for Balance Sheet, Time Balance for Income Statement, and Expense Reporting, specify how the value of the summary time periods is calculated.**

"Flow" it is an aggregate of all values for a summary time period as a period total. If the time balance property is set to "Balance," then it is considered an ending value in a summary time period for the period total.

To use the system default, click **Use System Default**.

➤ To specify a custom default value:

1 **Select the Attribute tab.**

2 **Enter the default value for the attribute.**

3 **To use the custom default value, clear the Use System Default field.**

4 **Click Save.**

Managing Metadata Rules

You can perform the following tasks:

- Edit metadata rules—See "Editing Metadata Rules" on page 138.
- Run metadata rules—See "Running Metadata Rules" on page 138.
- Check the metadata rule process details—See "Deleting Metadata Rules" on page 138.
- Delete dimension mappings or hierarchies in metadata rules—See "Checking the Metadata Rule Status" on page 138.

Editing Metadata Rules

If the metadata rule is not running, you can modify the rule.

➤ To edit metadata rules:

1 On the **Workflow** tab, under **Metadata**, select **Location**.

2 Enter the **Location Name** or click to select the location.

3 Add or modify the dimension mappings or mapping details as necessary.

4 Click **Save**.

Running Metadata Rules

You can run the metadata rule to load updates and push the metadata into the target application. All submitted rules are processed by Oracle Data Integrator.

➤ To submit the metadata rule:

1 On the **Workflow** tab, under **Metadata**, select **Metadata Rule**.

2 In **Metadata**, enter the **Location Name** or click to select the location.

3 Select the metadata rule.

4 Click **Execute**, and then click **OK**.

Checking the Metadata Rule Status

After you run a metadata rule, you can check the status on the Process Details page. You can click the Status icon on the Metadata page to link to the Process Details page and view the process details. See "Viewing Process Details" on page 202.

Tip: You can also check the status of the rule in Oracle Data Integrator.

Deleting Metadata Rules

You can delete dimension mappings or hierarchies in the mapping details for metadata rules created in FDMEE.

➤ To delete dimension mappings or hierarchies in a metadata rule:

1 On the **Workflow** tab, under **Metadata**, select **Metadata Rule**.

2 In **Metadata**, enter the **Location Name** or click to select the location.

3 Select the row in the Dimension Mappings or Hierarchy Region area.

4 Click **Delete**.

3 Data Load, Synchronization and Write Back

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Synchronizing and Writing Back Data 218

Overview

FDMEE supports a variety of ways for importing data from a range of financial data sources, and then transforming and validating the data:

- Data Loading—define the mappings from a source system to a target system; drill through and view data in the ERP source system from an EPM target application; load data from file-based source systems to an EPM target application; and define data load rule, which describes how to extract and push data from source to target systems.
- Synchronizing—move data between the EPM applications irrespective of the dimensionality of the application without having to create a data file from the EPM source application.
- Write-back—write-back budget data to the source system from all EPM applications to ERP applications. This feature offers significant advantages, such as writing back budgets created in Planning to Peoplesoft or theE-Business Suite ERP GL, or moving adjustment journals from Financial Management to ERP systems like E-Business Suite or Peoplesoft. Write-back budget data is also available to a file-based source system from an Planning, Oracle Essbase ASO, and Essbase ESO applications.

Watch this tutorial video to learn more about loading data in Oracle Planning and Budgeting Cloud using Data Management.

Watch this tutorial video to learn about extracting data from Oracle Planning and Budgeting Cloud using Data Management.

Loading Data

Subtopics

- Creating Member Mappings
- Defining Data Load Rules to Extract Data
- Managing Data Load Rules
- Using the Data Load Workbench
- Viewing Process Details
- Using Excel Trial Balance Files to Import Data
- Using Journal Templates to Import Data
- Loading Excel Data
- Financial Close Management Integration with FDMEE

Creating Member Mappings

Subtopics

- Creating Mappings Using the Explicit Method
- Creating Mappings Using the Between Method
- Creating Mappings Using the In Method
- Creating Mappings Using the Multi-Dimension Method
- Using Special Characters in Multi-Dimensional Mapping
- Creating Mappings Using the Like Method
- Using Special Characters in the Source Value Expression for Like Mappings
- Automap Wildcarding
- Using Special Characters in the Target Value Expression
- Format Mask Mapping for Target Values
- Ignoring Member Mappings
- Importing Member Mappings
- Downloading an Excel Template (Mapping Template)
- Importing Excel Mappings
- Exporting Member Mappings
- Deleting Member Mappings
- Restoring Member Mappings

You use member mappings to derive the target members for each dimension based on source values. Member mappings are referenced during the data load, enabling FDMEE to determine how to dimensionalize the data that is loaded to the target application. They define relationships between source members and target dimension members within a single dimension. You must create a member mapping for each target dimension.

The five types of member mappings:

- **Explicit**—The source value is matched exactly and replaced with the target value.
- **Between**—The range of source values is replaced with one target value.
- **In**—Enables a list of nonsequential source accounts to be mapped to one target account.

- **Multi-Dimension**—Target value is assigned for a combination of source segment/ chartfields.
- **Like**—The string in the source value is matched and replaced with the target value.

The following table is an example of a member mapping, where three segment members, Cash-101, Cash-102, and Cash-103 map to one EPM member Cash.

Segment/Chartfield Member	EPM Member
Cash-101	Cash
Cash-102	Cash
Cash-103	Cash
Expense-1	Expense
Expense-2	Expense

You can use special characters for the source and target values. See "Using Special Characters in the Source Value Expression for Like Mappings" on page 148 and "Using Special Characters in the Target Value Expression" on page 151.

➤ To define member mappings:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 In **Data Load Mapping**, select the **Location**.

3 Select the **Dimension**.

4 Choose the type of mapping by selecting the Explicit tab, Between tab, Multi-Dimension tab, or Like tab.

Note: If you defined a metadata mapping for the dimension, FDMEE automatically creates a "Like" member mapping. If you entered a member prefix, the same member prefix is automatically entered as the target value in the member mapping. "DEFAULT" displays in the rule name and description field for system-generated mappings. When data is extracted, user-defined mappings are extracted first, and then system generated mappings.

Type options:

- **Explicit**—The source value is matched exactly and replaced with the target value. For example, source value "ABC" is replaced with target value "123." See "Creating Mappings Using the Explicit Method" on page 144.
- **Between**—The range of source values are replaced with one target value. For example, a range from "001" to "010" is replaced as one value: "999." See "Creating Mappings Using the Between Method" on page 145.
- **In**—In mappings enable a list of nonsequential source values to be mapped to one target value. In this case, multiple values are mapped to one value within one rule, eliminating

the need to create multiple rules (as is required for an Explicit map). For example, you could have source accounts 1503, 1510, and 1515 map to the target account 15000010.

- **Multi-dimension**—For the specified combination of multiple source values a target value is assigned.

  For example, for source value Entity-001,002 Department-ABC, XYZ Account-1222, 1333, for this source value combination, the target value assigned for Account Dimension is 1200.

- **Like**—The string in the source value is matched and replaced with the target value. For example, the source value "Department" is replaced with the target value "Cost CenterA." See "Creating Mappings Using the Like Method" on page 147.

When processing the source values for transformations, multiple mappings may apply to a specific source value. The order of precedence is Explicit, Between, In, Multi-Dimension, and Like. Within Between and Like types, mappings can overlap.

The rule name determines precedence within a mapping type. Rules are processed in alphabetical order of the rule name within a mapping type. Numbers may also be used to help with ordering. For example, if numbering by tens or one hundreds, you can insert new rules between existing ones. So if rules are numbered 10,20,30, you can add a rule that starts with 25 and need not rename other rules.

Tip: You can click **Refresh Values** to refresh the list of segment or chartfield values that are displayed. Doing so is helpful when you're creating Explicit mappings.

Creating Mappings Using the Explicit Method

Explicit mappings enable you to enter a source value to be matched exactly and replaced with a target value. Use an explicit mapping to explicitly map the members from the source to a target application. For example, you can map Account1 to the Account100 in your target application. This enables you to explicitly define how to dimensionalize the data file that is loaded into the target application.

➤ To create an Explicit mapping:

1. On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.
2. From **Dimensions**, select the dimension name.
3. Select the **Explicit** tab.
4. Click **Add**.
5. Enter the **Source Value** or click to select a value.

   See "Using Special Characters in the Source Value Expression for Like Mappings" on page 148.
6. **Optional:** Enter a description for the mapping.
7. Enter the **Target Value** or click to select a member.

See "Using Special Characters in the Target Value Expression" on page 151.

8 To reverse the sign of the target account specified, select **Change Sign**.

9 In **Description**, specify a description of the mapping.

10 Select **Apply to Rule** to apply the mapping only to the specific data rule in the location.

For other data rules in the location the mapping are not applied.

By default, mappings specified at a location are applicable to all data rules in a location.

11 Click **Save**.

Creating Mappings Using the Between Method

Between mappings enable you to enter a range of source values, separated with a comma. The range of source values are replaced with one target value. Use a between mapping to consolidate several accounts from your ledger to a single account in the plan.

➤ To create a Between mapping:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 From **Dimensions**, select the dimension name.

3 Select the **Between** tab.

4 Click **Add**.

5 Enter source values in the **Source Value** range.

6 Enter the **Target Value** or click to select a member.

The target value is the dimension member name. See "Using Special Characters in the Target Value Expression" on page 151.

7 To reverse the sign of the target account specified, select **Change Sign**.

8 Enter the **Rule Name**.

9 In **Description**, enter a description for the mapping.

10 Select **Apply to Rule** to apply the mapping only to the specific data rule in the location.

For other data rules in the location the mapping are not applied.

By default, mappings specified at a location apply to all data rules in a location.

11 Click **Save**.

Creating Mappings Using the In Method

In mappings enable a list of nonsequential source accounts to be mapped to one target account. In this case, multiple accounts are mapped to one account within one rule, eliminating the need to create multiple rules (as is required for an Explicit map).

➤ To create an In mapping:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 In **Data Load Mapping**, click **Add**.

A blank row is added.

3 From **Dimensions**, select the dimension name.

4 Enter source values in the **Source Value** range.

The source value is the Enterprise Resource Planning (ERP) segment value. In mappings enable you to specify nonsequential source values. Separate source values with a comma. For example `100,199`.

5 Enter the **Target Value** or click to select a member.

6 To reverse the sign of the target account specified, select **Change Sign**.

7 Enter the **Rule Name**.

8 Enter a description of the In mapping in the **Description**.

9 Select **Apply to Rule** to apply the mapping only to a specific data rule in the location.

For other data rules in the location the mapping are not applied.

By default, mappings specified at a location apply to all data rules in a location.

10 Click **Save**.

Creating Mappings Using the Multi-Dimension Method

Multi-dimension mapping enables you to define member mapping based on multiple source column values. This functionality provides you with the ability to load data into dimensions unavailable in the target application. For example, the mapping for Account dimension can be based on source values of Entity, Product, and Project. This mapping enables for the derivation of target values based on the combination of source values. In addition, Lookup dimensions are added to Target Application registration. These dimensions contain source dimension but do not exist in the target application. They provide even more flexibility in creating multi-dimension filters. It is a way to facilitate conditional data loading,

➤ To create mappings using multiple dimensions:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 From **Dimensions**, select the dimension name.

3 Select the **Multi-Dimension** tab.

4 In **Multi Dimension**, click **Edit**.

5 In **Rule Name**, enter the name of the rule.

6 Enter the **Target Value** or click to select a target value.

The target value is the EPM dimension member name.

7 To reverse the sign of the source account value, select **Change Sign**.

8 In **Description**, enter a description of the mapping.

9 Click **Add** to create blank rows for specifying mapping conditions.

10 In **Dimension**, select the dimension to add.

For context, the source Segment/Chartfield column and Data Table columns are shown.

11 In **Condition**, select the method for mapping values.

Available conditions:

- Explicit
- Between
- Like
- In

12 In **Value**, specify the dimension member name.

13 Repeat steps 9-12 to specify multiple conditions.

14 Select **Apply to Rule** to apply the mapping only to a specific data rule in the location.

For other data rules in the location the mapping are not applied.

By default, mappings specified at a location are applicable to all data rules in a location.

15 Click **Save**.

Using Special Characters in Multi-Dimensional Mapping

The Source and Target Value expressions can use special characters. These characters (typically ? and *) can be prefixed or suffixed by one or more characters, which filters the source value by that prefix or suffix.

For multiple dimensions, the source dimension is the value brought over and the wild card applies to it alone. the dimensions can be present in a multiple dimensional rule and use wild cards. The prefix/suffix applies only to the source, which equals the target dimension (the dimension on which the rule resides).

Creating Mappings Using the Like Method

Like mappings enable you to enter a string in the source value that is matched and replaced with the target value.

➤ To create a Like mapping:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 From **Dimensions**, select the dimension name.

3 Select the **Like** tab.

4 Click **Add**.

A blank row is added.

5 Enter the **Source Value** string.

The source value is the Enterprise Resource Planning (ERP) segment value. Like source write-back mappings support special characters. See "Using Special Characters in the Source Value Expression for Like Mappings" on page 148.

6 Select the **Target Value** or click to select a member.

The target value is the EPM dimension member name. Like target write-back mappings support special characters. See "Using Special Characters in the Target Value Expression" on page 151.

7 To reverse the sign of the target account specified, select **Change Sign**.

8 Enter the **Rule Name**.

9 In **Description**, enter a description of the Like.

10 Select **Apply to Rule** to apply the mapping only to a specific data rule in a location.

For other data rules in the location the mapping are not applied.

By default, mappings specified at a location apply to all data rules in a location.

11 Click **Save**.

Using Special Characters in the Source Value Expression for Like Mappings

The Source and Target Value expressions can have one or more special characters. Special characters are supported for Like mappings only.

- **Asterisk (*)**

  An asterisk (*) represents the source value. The asterisk (*) can be prefixed or suffixed by one or more characters, which filters the source value by that prefix or suffix. The wild card or strips (data load to write back) takes whatever is present in the source and puts it in the target column, usually adding a prefix.

- **Question Mark (?)**

  The question mark (?) strips a single character from the source value. You can use one or more question marks (?) in the expression. You can also use question marks in combination with other expressions. For example: A?? (finds members that start with A and have any two characters following and selects the members or strips off the two characters. You see these examples in the table below.)

- **<1>, <2>, <3>, <4>, <5>**

  Processes rows that have concatenated values and extracts the corresponding segment value (identified by the segment number). Each segment is separated by an underscore character (_). Only one segment value can be extracted in a source value expression. The source member must use the "_" character as the separator.

Note: <1>, <2>, <3>, <4>, <5> can be used with a question mark (?) but cannot be used with an asterisk (*).

- <BLANK>

  Processes only rows that contain the blank character (space).

  Note: The <BLANK> notation may be used in both source and target expressions. If used in a target expression, it writes a blank space to the target.

  Use the <BLANK> target when you need to write back to the Peoplesoft journal interface table for any blank fields.

  This is true for both single and concatenated segment or chartfield dimension mappings.

Table 24 Examples of Expressions Using Special Characters

Special Character(s) Used	Mapping Type	Source Value	Target Value	Result	Notes
*	Data Load	*	1000	`1000` returns `1000` `WXYZ` returns `1000`	In this example, FDMEE processes all rows and overrides the source value with a default value of 1000. In this expression, `WXYZ` also returns `1000`. Because you entered an asterisk for the source value FDMEE replaces any source value with the target value of 1000.
*	Data Load	*	*	`1000` returns `1000` `WXYZ` returns `WXYZ`	In this example, FDMEE processes all rows and replaces the source value as is.
*	Stripping	*	A*	`101` returns `A101`	Processes all source members, and adds an "A" as a prefix.
*	Stripping	*_DUP	*	`1000_DUP` returns `1000`	Processes and strips off only source values ending with "_DUP."
?	Stripping	?*	*	`A1000` returns `1000` `B2000` returns `2000`	This result processes only source values of one or more characters in length. Strips off the first character
?	Stripping	*????	*	`1000_DUP` returns `1000` `A1000` returns `A`	This result processes only source values of four or more characters in length. Strips off the last 4 characters
<1>, <2>, <3>, <4>, <5>	Data Load	<1>	*	`01_420` returns `01`	
<1>, <2>, <3>, <4>, <5>	Data Load	<2>	*	`01_420` returns `420`	

Special Character(s) Used	Mapping Type	Source Value	Target Value	Result	Notes
<1>, <2>, <3>, <4>, <5>	Data Load	<3>	*	`01_420_AB_CC1_001` returns `AB`	
<1>, <2>, <3>, <4>, <5>	Stripping	?<1>	*	`A01_420` returns `01`	
<BLANK>	Data Load	<BLANK>	[None]	`' '` returns `[None]` `'01_ '` returns `[None]`	Single quotation marks are shown for illustration only.

Automap Wildcarding

FDMEE enables target-account or target-entity derivation by permitting wildcard characters (* and ?) in source and target members. Mapping-table records that have wildcard characters in the source and target column are considered automapped.

FDMEE does not validate the target value.

Example Automap

Rule Name	Rule Description	Source Value	Target Account
w0011--	Cash Accts	`0011??`	Cash.??

Example General Ledger Trial Balance Records

GL Account	Center	Description	Amount
001100	0160000	Cash In Bank	1000.00
001101	0000000	Cash Corp LB	2000.00
001116	0001000	Petty Cash	1000.00
223500	0160000	AP	5000.00

Resulting Record Conversion

GL Account	Hyperion Account
001100 0160000	Cash.00
001101 0000000	Cash.01
001116 0160000	Cash.16

Explanation of the Conversion Process

The criteria for the Automap entry (Like `0011??`) retrieves the first three records from the general ledger trial balance. Because the Automap entry contains wildcard characters in the target account column, FDMEE must search the source account to replace the wildcard characters within the target account with actual characters from the source account.

The source-account characters represented by ?? marks (under Source Value) are used to replace the two question marks that follow `Cash` (under Target Account).

Conditional Mapping

With conditional mapping, source members are mapped to script expressions rather than to hard-coded target members. Conditional mapping is valid only for rule-based mapping (Between, In, and Like). You can activate conditional mapping by placing `#SCRIPT` or `#SQL` in the Target value column. Use `#SCRIPT` for Jython Script and `#SQL` for SQL script. Conditional mapping, in conjunction with dimension processing order, enables mapping that is based on the results of dimension mappings. That is, dimension mappings that have already been processed. See "Using Mapping Scripts" on page 310.

Using Special Characters in the Target Value Expression

You can us only an asterisk (*) in the target expression, and you can prefix or suffix any number of characters to the asterisk (*) character. When you run the rule, the asterisk (*) is replaced by the resulting source value (which may or may not have its own source expression), and is concatenated to any prefix or suffix that you have specified in the target expression. For example:

Target Value:

```
A*
```

Result:

```
1000 = A1000
```

Target Value:

```
*_DUP
```

Result:

```
1000 = 1000_DUP
```

Note: <BLANK> is supported in the target value expression in data mappings and can be used in all mapping types (Like, Between, and Explicit). When writing data to an Enterprise Resource Planning (ERP) GL interface table, the <BLANK> notation may be used for a target dimension mapping in order to successfully pass the validation step in the workflow process. For example, when writing back to the Peoplesoft journal interface table, the specification of <BLANK> can be used when the user does not want to provide a value for a chart field value, but needs to successfully validate the write-back data.

Format Mask Mapping for Target Values

FDMEE supports the ability to specify a format mask for a target member. The format mask defines the target member based on a combination of the source member details, and optional user defined text. This functionality is useful when designating the target member based on some part of the source member, an additional prefix, suffix, or replacement text for the target.

The format mask is available for the target member specification for all mapping types except explicit. Common usage of this mapping type falls into three categories: replacing segments from the source, replacing segments with string operations, and replacing segments with string operations using a prefix or a suffix.

#FORMAT Mapping Type Components

The #FORMAT mapping type consists of the following components:

Table 25 #Format Mapping Type Components

Component	Description
#FORMAT	Indicates that a mapping type of FORMAT is specified in the target member.
<format mask>	User defined format mask with the following characters used to define the format: ● "?"—Include a character from a specific position in the source member or segment within a member. ● "#"—Skip or drop a character from the source when creating the target member. ● "character"—Include the user defined character on the target "as- is". Used for prefixing, suffixing or any fixed string or required character. This can be used in conjunction with the special format mask characters. ● "*"—Include all characters from the source segment or source. When "*" is used as the only format mask character in a segment, then the entire segment value is copied from the source. When "*" is used in conjunction with "#" or the "?" character, then all remaining and unused characters are brought over. "*" is a wildcard character that takes the remaining characters not specified by "?" or "#". For example, when the source is "abcd" and "*" is used, then the target is "abcd". When the target is "?#*," then the result is "acd." If FDMEE encounters a "*" within a segment, then anything specified after the "*" is ignored other than the "character" specified on the format.
<segment delimiter>	The optional segment delimiter defines the character that is used to delimit the segments in the source and target member. For this rule type, the source and target delimiter must be the same. When the segment delimiter is not specified, then the format mask is applied to the entire member independent of any segment specification or delimiter.

#FORMAT Mapping Example

The following is an example that uses all options provided by #FORMAT:

Table 26 #Format Mapping Type Example

Source	Target	Result
12345-6789-012-3456ABC-001	#FORMAT("???-*-GROUP-AA##?#*X-GROUP","-") Explanation: Take the first three characters of the first segment, take the entire second segment, replace the third segment with the text "GROUP", prefix the fourth segment with AA, drop the third and fourth characters, keep the fifth character, drop the sixth character, keep ABC and add suffix "X, replace the fifth segment with the text "GROUP".	123-6789-GROUP-AA5ABCX-GROUP

Replacing Segments

You may want to use the format of the source member as the definition of the target member, but replace some of the source segments rather than reuse the values from the source. For example, you may have a requirement to filter the source by the value of the 4th segment, replace the 7th segment with an explicit value, and then retain the values of the other segments as in the following:

Source:

```
??????-??????-?-012000000-??????-???-???????-??????-??????-??????-???
```

Target:

```
??????-??????-?-012000000-??????-???-GROUP-??????-??????-??????-???
```

Replacing Segments with String Operations

You may also need to perform a string operation on a segment that is being replaced. For example, you may have a value of 11002293, but when the segments are written, you want to only take the last four digits, or the first six digits. Examples using the member 11002293:

- Ignore the first two characters and provide the result: 002293. Use #FORMAT("##*").
- Truncate the last three characters provide the result: 11002. Use #FORMAT("?????").
- Ignore the first two and truncate the last three with the result: 002. Use #FORMAT("##???").

Replace Segments with String Operations and Using an Prefix or Suffix

You may want to use the segment value from the source as-is in the corresponding segment in the target. For example, if the source is A100, you can map the value as the value in the target, and you can map this value as the value in the target. In this case, use a wildcard on the source, and then specify the explicit value for that segment in the target based on the source.

Note: If any other string operation is desired, then use scripting.

Using the #FORMAT Mapping Type

➤ To use the #FORMAT mapping type:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 In **Dimensions**, select the dimension name.

3 Select the **Between**, **In**, or **Like** tab.

4 Click **Add**.

5 In **Source Value**, enter the segment to map.

For example, on the **Like** tab, enter: `12345-6789-012-3456ABC-001` in the Source Value field.

6 Select the format map for the target member using the #FORMAT(<format mask>, <segment delimiter>).

For example, enter `#FORMAT("???-*-GROUP-AA##?#*X-GROUP","-")`.

See "#FORMAT Mapping Type Components" on page 152.

7 To reverse the sign of the target account specified, select **Change Sign**.

8 Enter the **Rule Name**.

9 In **Description**, enter a description of the mapping.

10 Select **Apply to Rule** to apply the mapping only to a specific data rule in a location.

By default, mappings specified at a location apply to all data rules in a location.

11 Click **Save**.

The result of applying format map created in steps 5 and 6: 123-6789-GROUP-AA5ABCX-GROUP.

Ignoring Member Mappings

You can ignore loading data to a particular dimension member.

➤ To ignore member mappings:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 Select a source value, and in **Target Value**, enter **IGNORE**.

For example, assume that a business user does not require extraction of data relating to Departments 101, 103 and 105. You specify an *In* mapping with the source values, 101, 103, and 105, and then in Target, you specify "IGNORE." In this way, data relating to Departments 101, 103 and 105 is extracted, but not written to the application in the Import Format option.

Importing Member Mappings

You can import member mappings from a selected .csv and .txt file. and then can create mappings. Import member mappings support merge or replace modes, along with validate or no validate options for target members.

Importing member mappings can be executed in either online or offline mode.

You can also import mappings from Excel or download an Excel template. See "Importing Excel Mappings" on page 158 and "Downloading an Excel Template (Mapping Template)" on page 156 .

➤ To import member mappings:

1 **On the Workflow tab, under Data Load, select Data Load Mapping.**

2 **From the Import drop-down, select one of the following:**

- Current Dimension
- All Dimensions
- Import from Excel

  See "Using Excel Trial Balance Files to Import Data" on page 204.
- Download Excel Template

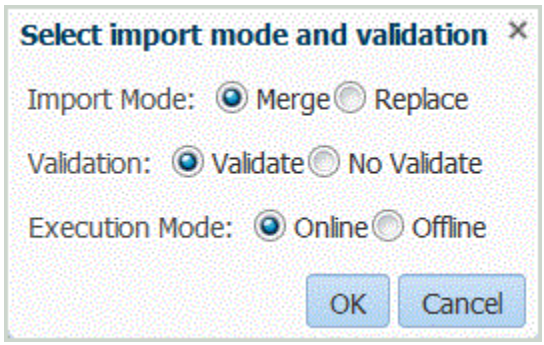
  See "Downloading an Excel Trial Balance Template" on page 204.

The Select file to import screen is displayed.

3 **Navigate to the file to import and click OK.**

4 **Optional: If necessary, click Upload to navigate to the file to import, and then click OK.**

The Select Import Mode and Validation screen is displayed.



5 **From Import Mode, select the import mode:**

- Merge—Overwrites the data in the application with the data in the data load file.
- Replace—Clears values from dimensions in the data load file and replaces it with values in the existing file.

6 **From Validate, select to validate the member mappings.**

Ensures that all data in the imported GL has a corresponding mapping.

7 In **Execution Mode**, select the mode for executing the import:

- Online—Process the import immediately.
- Offline—Runs the import in the background.

8 Click **OK**.

In the member mapping import files, FDMEE supports one of the following characters as column separators:

- ,
- |
- ;

The order of the columns:

- source value
- target value
- rule name
- rule description

Note: If you add a minus sign in front of a target account value, then it is imported with the "Change Sign" selected.

The mapping details are as follows:

Table 27 Supported Column Separators

Column	Mapping
100, Cash, R1, Explicit Mapping	Explicit Mapping
100>199, Cash, R2, Between Mapping '	">" indicates its BETWEEN mapping.
1*, Cash, R3, Like Mapping	"*" indicates its LIKE mapping.
#MULTIDIM ACCOUNT=[4*] AND UD3=[000],Cash,R4,Multi Dimension Mapping	"#MULTIDIM" indicates a multiple dimension mapping. The actual column name used for the mapping is the Data Table Column Name. The easiest way to create a multiple dimension mapping is to create a mapping through the user interface and export it to the file. You can then modify the file by additional mapping.
10, 20, In Mapping	Source values are enclosed with " " and separated by a comma (,) for the In mapping. For example IN 10, 20 is defined as "10,20" in the source column of the import file.

Downloading an Excel Template (Mapping Template)

In Data Load Mapping, using the import feature, you can select and import an Excel mapping, and specify whether to merge or replace the mappings. Excel map templates with correct

formatting are included in the `EPM_ORACLE_HOME/products/FinancialDataQuality/templates` directory.

The mapping template also includes a macro script that pulls Financial Management dimensions directly from the target application to which you are connecting.

When working with a mapping template in Excel:

- Do not have any blank lines in the map template.
- Do not insert lines in the map template.
- One mapping template is allowed per workbook.

➤ To download an Excel template:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 Select the **All Mapping** tab.

3 In the **Import** drop-down, select **Download Excel Template**.

A Maploader.xls file is downloaded. Copy or save the file to your hard drive.

4 Open the Maploader.xls file.

5 Select the **Map** tab.

6 Enter the **FDMEE Location name** in **cell B1** and the **Location ID** in cell **B2**.

7 Complete the following column fields:

a. In **Source**, enter the source dimension value.

You can specify wildcards and ranges when entering the source dimension.

- Wildcards for unlimited characters—Use asterisks (*) to denote unlimited characters. For example, enter 548* or *87.8.
- Wildcards for single character place holders—Use questions marks (?) to denote single character place holders. For example,
  - 548??98
  - ??82???
  - ??81*
- **Range**—Use commas (,) to denote ranges (no wildcard characters are allowed). For example, specify a range as 10000,19999.

  (this evaluates all values from 10000 to 19999 inclusive of both start and end values)

  In this case, FDMEE considers all values from 10000 to 19999 to include for both start and end values.
- **In map**—Use commas (,) to separate entries (no wildcard are characters allowed). You must have at least three entries or the map shows as a between map. For example, specify an In map as 10,20,30.
- **Multi-Dimension map**—Use #MULTIDIM to indicate its multidimensional mapping. Enter the DIMENSION NAME=[VALUE] and the value. The Value

follows the logic as Wildcard, Range, and In map. In the following example the search criteria is all ACCOUNT starting with 77 and UD1 = 240. For example, #MULTIDIM ACCOUNT=[77*] AND UD1=[240].

b. In **Source Description**, enter a description of the source value.

c. In **Target**, enter the target dimension value.

Note: FDMEE does not support #SQL and #SCRIPT for Excel mappings.

d. In **Change Sign**, enter **True** to change the sign of the Account dimension. Enter **False** to keep the sign of the Account dimension. This setting is only used when mapping the Account dimension.

e. In **Data Rule Name**, enter the data rule name when the mapping applies to a specific data rule name.

	A	B	C	D	E
1	FDM Location:	TEXAS			
2	FDM Location ID:	751			
3	Dimension:	Account			
4					
5					
6	Source	Source Description	Target	Rule Name	Convert (True/False)
7		tDataMap			
8		SrcDesc	TargKey		ChangeSign
9	1*	Acct Like 1	*	w1x9	FALSE
10	4110,4120,4140	Acct in 4110,4120,4140	4110	w411010	FALSE
11	6*	Acct in 6 range	6110	w6x11	FALSE
12	7000,7999	Acct in 7000 range	#SCRIPT	w700012	FALSE

Importing Excel Mappings

You can import Excel mappings by selecting the Import option and selecting an Excel mapping.

Note: The import of mapping rules using an Excel template does provides a place to specify a mapping script.

➤ To import an Excel mapping:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

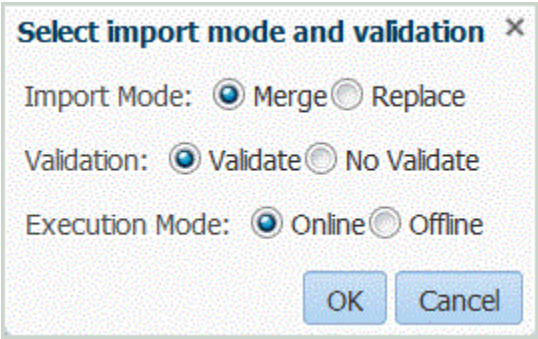
2 Select the **All Mapping** tab.

3 In the **Import** drop-down, select **Import from Excel**.

4 In **Select a file to import**, select the Excel file to import, and then click **OK**.

5 **Optional:** If necessary, click **Upload** to navigate to the file to import, and then click **OK**.

The Select Import Mode and Validation screen is displayed.



6 From **Import Mode**, select the import mode:

- Merge—Overwrites the data in the application with the data in the Excel data load file.
- Replace—Clears values from dimensions in the Excel data load file and replaces it with values in the existing file.

7 From **Validate**, select to validate the member mappings.

Ensures that all data in the imported GL has a corresponding mapping.

8 In **Execution Mode**, select the mode for executing the import:

- Online—Process the import immediately.
- Offline—Runs the import in the background.

9 Click **OK**.

10 Click **OK**.

The mapping inherits the default data load rule, and shows the description of "System Generated Mappings."

Exporting Member Mappings

You can export member mappings to a selected file, or an Excel file.

➤ To export member mappings:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 Select **Export**.

3 In the **Export** drop-down, select a method:

Export options:

- Current Dimension
- All Dimensions
- Export to Excel

4 From the **Specify file location** for **Current Dimension** and **All Dimensions** export methods, specify the file name in **File Name** , or navigate to the file to export, and then click **OK**.

For the **Export to Excel** method, mappings are exported to a Microsoft Excel spreadsheet. Open or save the XSL file as desired.

When you export to Excel, you cannot re-import in that format.

When the file has been exported, FDMEE displays the message: "File exported successfully."

5 **Optional**: Click **Upload** or **Download** and navigate to the file to export, and then click **OK**.

Deleting Member Mappings

You can delete all member mappings or only those mappings for which there is a tab in which mappings have been added. You can delete all the mappings in the dimension you are currently on, or just the row.

➤ To delete member mapping from a selected tab:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 Select the tab from which to delete mappings.

For example, select the **Explicit** tab to view explicit type mappings.

To view all mappings, select the **All Mappings** tab.

3 Select the mapping and click **Delete Mappings**.

To delete multiple mappings, use the **Shift** key to select multiple mappings.

To delete all mappings, use **Ctl**+**A** key.

4 In **Are you sure you want to delete the selected data load mapping(s)**, click **OK**.

5 Click **Save**.

Note: To delete all mappings, select "Delete All Mappings."

Restoring Member Mappings

Restoring member mappings deletes mappings made in the current session and restores mappings based on the point of view.

You can restore member mappings only from the last data load for the POV.

➤ To restore a member mapping:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.

2 Select **Restore Mapping**.

3 In **Restore Mapping Confirmation**, click **OK**.

Defining Data Load Rules to Extract Data

Subtopics

- Defining Data Load Rule Details
- Defining Data Load Rule Details for a File-Based Source System
- Defining Source Parameters for Planning and Essbase

After you define member mappings for the data load rule, define data load rules for ledgers or business units in your source system. Data load rules are defined for locations that you have set up. Data load rules are specific to:

- locations
- Ledgers for Fusion and E-Business Suite source systems
- Business units for PeopleSoft Enterprise Financial Management source systems

You can create multiple data load rules for a target application so that you can import data from multiple sources into a target application. Use the following high-level process to create a data load rule:

1. Create the data load rule.
2. Define data load rule details.
3. Execute the data load rule.

Defining Data Load Rule Details

You create and modify data load rules on the Data Load screen. The Data Load Rule screen window sections:

- Data Rule Summary
- Data Load Details
- Source Filters (which consists of three tabs: Source Options, Target Options, and Custom Options)

  See "Working with Target Options" on page 189 (by location) and "Registering Target Applications" on page 67.

  See "Creating Custom Options" on page 189.

Note: Before you create data load rules, ensure that your source system data does not include special characters, which are not supported in Financial Management target applications.

➤ To define the data load details for a source system:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In the **Data Load** summary area, click **Add**.

3 In **Details**, in **Name**, enter the data load rule name.

4 Select a **Category**.

The categories listed are those that you created in the FDMEE setup. See "Defining Category Mappings" on page 120.

5 In **Period Mapping Type**, select the period mapping type for each data rule.

Valid options:

- Default—The Data Rule uses the Period Key and Prior Period Key defined in FDMEE to determine the Source General Ledger Periods mapped to each FDMEE period included in a Data Rule execution.
- Explicit—The Data Rule uses the Explicit period mappings defined in FDMEE to determine the source GL Periods mapped to each FDMEE Period included in a Data Rule execution. Explicit period mappings enable support of additional GL data sources where periods are not defined by start and end dates.
- None—With source adaptors use this option to ignore source period mappings. Thus, all imported data rows are mapped to the FDMEE period selected in a Data Rule execution.

These options are unavailable for a file-based definition.

Table 28 Period Mapping Types

Location Type	Import Format Type	Period Mapping Default	Explicit Period Mapping Explicit	Period Mapping	Include Adjustment Periods
With Accounting Entity	Standard	Yes	Yes	N/A	Yes
Without Accounting Entity	Standard	Yes	Yes	N/A	Yes
With Accounting Entity	Source Adapter	N/A	N/A	Yes	Explicit: Yes None: N/A
Without Accounting Entity	Source Adapter	N/A	N/A	Yes	Explicit: Yes None: N/A

6 **Optional**: Enter a description.

7 Select the source options.

The following options may appear in the Details section or the Source Options section depending on the source system.

- Plan Type (Planning and Essbase)—Select the plan type which contains only the dimensions, members, and data values relevant to that plan type. The plan type applies to the source or target system depending on the POV location for this data load rule.
- Zero Balances—For SAP and JDE, select the zero balances option:
  - Include—Includes a zero balance for any reason.

For example when there is a debit of 5 and a credit of 5, then the zero amount is included.

- Exclude No Activity—Zero balances are excluded when the beginning balance debit, beginning balance credit, period debit and period credit equal 0 (begin_bal_dr, begin_bal_cr, period_dr, period_cr all have 0 for the YTD balance type, or the period debit and the period credit have a period for the period balance type (period_dr, period_cr equals 0 for the Periodic balance type).
- Exclude Zero Net Balance—Zero net balances are excluded when the beginning balance debit minus the beginning balance credit plus the period debit minus the beginning credit plus period debit minus the period credit equals 0 for the Year to Data balance type (begin_bal_dr – begin_bal_cr + period_dr – period_cr = 0 for the YTD balance type, or the period debit minus the period credit equals zero (period_dr – period_cr = 0 for the Periodic balance type).

The following example shows how each include zero balance option affects account balances.

Table 29 Zero Balance options

Amount	Opening Balance	Transaction Debit	Transaction Credit	Closing Balance
4000	40000	0	40000	0
5000	50000	25000	75000	0
6000	0	0	0	0
7000	0	35000	35000	0

When the Zero Balance is "Include," Accounts 4000, 5000, 6000 and 7000 qualify for this condition because all zero balanced accounts are included.

Note: The Include Zero Balance option is not applicable when pulling data from Peoplesoft.

When the Zero Balance is" Exclude No Activity" is selected, only Account 6000 is excluded because the Opening, Transaction and Closing balances are all zero and there is no activity. Accounts 4000, 5000, 7000 are extracted.

When the Zero Balance is "Exclude Net Zero" is selected, Accounts 4000, 5000, 6000 and 7000 are excluded because their closing balance is zero.

- Include Adjustment Periods—Select to include adjustment periods.

  Adjustment periods ensure that the FDMEE adjustment periods map correctly to the source system adjustment periods.

  When you explicitly map period 13 to December/Period 12, and select the Include Adjustment Period option, then the following occurs:

  - For YTD balances, period 13 becomes the ending balance.

- For PTD balances, period 13 and December/Period12, are added.

8 **For Planning and Essbase, select the Source Parameters tab, and specify any parameters.**

See "Defining Source Parameters for Planning and Essbase" on page 181.

➤ To define source options:

1 **On the Workflow tab, under Data Load, select Data Load Rule.**

2 **In Data Load Rule, select a data load rule or click Add.**

3 **Select the Source Options tab.**

4 **Complete the source options or source filter options based on the source system:**

Source filter option:

- For Fusion and E-Business Suite source systems, see "Defining Source Filter Options for E-Business Suite Source Systems" on page 164.
- For PeopleSoft Enterprise Financial Management source systems, see "Defining Source Filter Options for PeopleSoft Enterprise Financial Management Source Systems" on page 168.
- For PeopleSoft human resource source systems, see "Defining Human Resource Data Load Rules" on page 266.
- For JD Edwards GL, see"Defining Source Filter Options for JD Edwards GL Source Systems" on page 170.
- For SAP, see"Defining Source Filter Options for SAP Adapters" on page 171.
- For the Open Interface Adapter, see "Defining Source Filter Options for the Open Interface Adapter" on page 179.
- For file-based source systems, see "Defining Data Load Rule Details for a File-Based Source System" on page 179

5 **Click Save.**

Defining Source Filter Options for E-Business Suite Source Systems

When defining data load mapping details, you can define the data to extract, including whether or not to extract:

- The amount type—Only monetary, statistical, or both, monetary and statistical amounts
- Zero balance accounts where the debits and credits for an account total zero and there is not period activity.
- Adjustment periods—Determines whether to extract balances in the adjustment period
- Standard or Average balances—Average balances contain only balance sheet data.
- Source balance type—Actual, Budget, or Encumbrance

  In FDMEE, you classify the data to transfer with the valid types in the source accounting entity of Actual, Budget, and Encumbrance. Typically, you do not map a segment from the

chart of accounts to the Scenario dimension, so you choose a default member as part of the data rule definition.

You can extract functional balances, which are stored in the base currency of the selected ledger or business unit. For example, when transactions are entered in multiple currencies, the total of all transaction balances is expressed in the functional currency.

You can also extract entered balances, which are balances associated with a currency attached to a primary ledger other than functional/local currency.

Additionally, FDMEE can import the data in a currency specified by the user. In this case, the balances must be translated to the specified currency in the source system. This can be achieved by running the Currency Translation process in the source Enterprise Resource Planning (ERP) system. (FDMEE does not perform any currency translations.)

➤ To define the data load source filter for Fusion and E-Business Suite source systems:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In **Data Load Rule**, select a data load rule or click **Add**.

3 Select the **Source Options** tab.

4 In **Accounting Entity**, specify the accounting entity from the list of values of the source system.

You can select the accounting entity in this field, or when entering location detail. Data rules in locations without an accounting entity require you to select an Accounting Entity.

This functionality applies only to data rules in a location using a standard import format.

You cannot modify the accounting entity once the Data Rule has been executed.

5 In **Accounting Entity Group**, specify the accounting entity group name if the location is associated with an accounting entity group.

When a data rule in a location includes an accounting entity, then the rule is constrained by the accounting entity in the definition. In this case, the data rule in the location cannot use an accounting entity group.

6 In **Include Adjustment Periods**, select **yes** or **no**.

Adjustment periods ensure that FDMEE adjustment periods map correctly to the source system adjustment periods.

When you explicitly map period 13 to December/Period 12, and select the Include Adjustment Period option, then the following occurs:

- For YTD balances, period 13 becomes the ending balance.
- For PTD balances, period 13 and December/Period12, are added.

7 Select the **Amount Type**:

- Monetary
- Statistical—The balance selection of entered or functional currency does not apply.
- Monetary and Statistical

8 From **Currency Type**, select the currency type by which to extract balances:

9 In the **Zero Balances** drop-down, select the zero balances option:

- Include—Includes a zero balance for any reason.

  For example, when there is a debit of 5 and a credit of 5, then the zero amount is included.

- Exclude No Activity—Zero balances are excluded when the beginning balance debit, beginning balance credit, period debit and period credit equal 0 (begin_bal_dr, begin_bal_cr, period_dr, period_cr all have 0 for the YTD balance type, or the period debit and the period credit have a period for the period balance type (period_dr, period_cr equals 0 for the Periodic balance type).
- Exclude Zero Net Balance—Zero net balances are excluded when the beginning balance debit minus the beginning balance credit plus the period debit minus the beginning credit plus period debit minus the period credit equals 0 for the Year to Data balance type (begin_bal_dr – begin_bal_cr + period_dr – period_cr = 0 for the YTD balance type, or the period debit minus the period credit equals zero (period_dr – period_cr = 0 for the Periodic balance type).

The following example shows how each include zero balance option affects account balances.

Table 30 Zero Balance options

Amount	Opening Balance	Transaction Debit	Transaction Credit	Closing Balance
4000	40000	0	40000	0
5000	50000	25000	75000	0
6000	0	0	0	0
7000	0	35000	35000	0

When the Zero Balance is "Include," Accounts 4000, 5000, 6000, and 7000 qualify for this condition because all zero balanced accounts are included.

When the Zero Balance is" Exclude No Activity" is selected, only Account 6000 is excluded because the Opening, Transaction, and Closing balances are zero and there is no activity. Accounts 4000, 5000, 7000 are extracted.

When the Zero Balance is "Exclude Net Zero" is selected, Accounts 4000, 5000, 6000, and 7000 are excluded because their closing balance are zero.

10 In **Signage Method**, select the method for flipping the sign of amounts when data is loaded.

Available methods:

- Absolute—Loads the data based on the following rules:

Table 31 Absolute Signage rules

Account Type	GL (GAAP)	EPM (Absolute)
Revenue	naturally negative	signage flipped
Liability	naturally negative	signage flipped

Account Type	GL (GAAP)	EPM (Absolute)
Equity	naturally negative	signage flipped
Expense	naturally positive	signage unchanged
Asset	naturally positive	signage unchanged

- Same as source—Loads the same sign as recorded in the source system.
- Reverse from source—Loads the reverse of the sign as recorded in the source system.

11 Select the **Amount for Balance Sheet Accounts** and **Amount for Income Statement Accounts**:

- **YTD**—Year-to-date account balance, where account balances accumulate from the beginning of the year to the current period. Typically, balance sheet accounts (assets, liabilities, and equities) are specified with a YTD balance. (The default is YTD.)
- **Periodic**—Account balance for the specific period. Typically, income statement accounts (revenues and expenses) are specified with a periodic balance. (The default is PTD.)

12 From **Currency Type**, select the currency type by which to extract balances:

- Functional—Balances stored in the base currency of the selected ledger or business unit (local currency)
- Entered—Balances associated with a currency attached to primary ledger other than the functional/local currency that you specify in the Currency Code field.
- Translated—FDMEE can import the data in a currency specified by the user. In this case, the balances must be translated to the specified currency in the source system. This task can be achieved by running the Currency Translation process in the Enterprise Resource Planning (ERP) system. (FDMEE does not perform any currency translations.) Additionally, you need to specify the translated currency code in the Currency Code field.

13 From **Currency Code** (Entered and Translated currency types only), select the ISO 4217 currency code to use with an entered or translated currency type.

For example, enter `EUR` to select the EURO currency code.

14 Select the **Balance Method**:

- **Standard**—In Oracle General Ledger, accounting transaction balances are stored as-is, also known as standard balances.
- **Average**—Average balances only contain balance sheet data. If you selected Statistical as the amount type, the Balance Method is ignored.

15 Select the balance type to extract:

- **Actual**
- **Budget**—If you select the Budget source balance type, click **Add** to select budget types to include in the extraction.
- **Encumbrance**—If you select the Encumbrance source balance type, click **Add** to select encumbrance types to include in the extraction.

16 Select the segment values to extract.

If you do not want to extract all data from the source general ledger, filter data by the balancing segments of the source. Options:

- All
- Selected

  In Oracle E-Business Suite, the balancing segment ensures that at this level, balancing debits equal credits. When you create a data load rule, you can extract the general ledger balances relating to all the members of the balancing segment or for specific members of it.

  To select the balancing segment values, click , and then select segment values, and then click **OK**.

  To deselect a value, click , and then in the **Select Balancing Segment Values** dialog box, clear any values, and then click **OK**.

17 Select the **Beginning**, **Ending**, and **Average** exchange rate options.

Enterprise Resource Planning (ERP) source systems maintain comprehensive exchange rate information for transaction processing. Target applications can use this information by extracting the exchange rates. You can select a beginning, ending, and average rate type from the source system. (The types in the source system may not explicitly define those rates types but are mapped to the rates types in the FDMEE interface table.)

Note: For Planning applications, exchange rates are loaded only when the "Classic" data load method is selected.

Note: You define exchange rate options only when the target application is multicurrency.

Note: For Account Reconciliation Manager applications, you must not choose multiple rate options.

18 Click **Save**.

19 Define the target filter options.

After you define the target filter options, run the data rule. See "Running Data Load Rules" on page 183.

Defining Source Filter Options for PeopleSoft Enterprise Financial Management Source Systems

When defining data load rule details, you can specify various data extraction options as described below.

➤ To define the source filter options for PeopleSoft Enterprise Financial Management source systems:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In **Data Load Rule**, select a data load rule or click **Add**.

3 Select the **Source Options** tab.

4 Select the **Amount Type**:

- Monetary
- Statistical—The balance selection of entered or functional currency does not apply.
- Monetary and Statistical

5 In **Signage Method**, select the method for flipping the sign of amounts when data is loaded.

Available methods:

- Absolute—Loads the default debit or credit sign.

Table 32 Absolute Signage rules

Account Type	GL (GAAP)	EPM (Absolute)
Revenue	Naturally negative	Signage flipped
Liability	Naturally negative	Signage flipped
Equity	Naturally negative	Signage flipped
Expense	Naturally positive	Signage unchanged
Asset	Naturally positive	Signage unchanged

- Same as source—Loads the same sign as recorded in the source system.
- Reverse from source—Loads the reverse of the sign as recorded in the source system.

6 Select the **Amount for Balance Sheet Accounts** and **Amount for Income Statement Accounts**:

- **YTD**—Year-to-date account balance, where account balances are accumulated from the beginning of the year to the current period. Typically, balance sheet accounts (assets, liabilities, and equities) are specified with a YTD balance.
- **Periodic**—Account balance for the specific period. Typically, income statement accounts (revenues and expenses) are specified with a periodic balance.

7 From **Currency Type**, select the currency type by which to extract balances:

- Functional— Balances stored in the base currency of the selected ledger or business unit (local currency)
- Entered—Balances associated with a currency attached to primary ledger other than the functional/local currency that you specify in the Currency Code field.

Note: The default when FDMEE pulls from PSFT is POSTED_TOTAL_AMT. If you select an entered currency, FDMEE pulls from POSTED_TRAN_AMT. If you want the BASE amount, then create an alternate schema and create a view PS_LEDGER to switch the amount.

8 From **Currency Code**, select the ISO 4217 currency code to use with an entered currency type.

For example, enter **EUR** to select the EURO currency code.

9 Select the **Ledger Group**.

10 Select the **Ledger**.

In PeopleSoft, a business unit may have multiple ledger groups. In this list, FDMEE displays only the ledger groups associated with the ledger.

11 **Optional:** To select book code values, click , select book code values, and then click **OK**.

To clear a book code, click . Then, in the Select Book Code dialog box, clear book codes, and then click **OK**.

12 To select budget values, click , select budget values, and then click **OK**.

You specify the budget values when the ledger that you selected has the data table "Ledger_Budg."

To deselect budget values, click . Then, in Select Budget Scenario values, clear values, and then click **OK**.

13 Click **Save**.

14 Define target filter options.

After you define target filter options, run the data rule. See "Running Data Load Rules" on page 183.

Defining Source Filter Options for JD Edwards GL Source Systems

When defining data load mapping details, define the data to extract, including whether to extract the company code, ledger type, amount type.

➤ To define the source filter options for a JD Edwards GL source system:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In **Data Load Rule**, select a data load rule or click **Add**.

3 Select the **Source Options** tab.

4 Select the **Amount Type**.

Select **PTD** for Period to Date, or **YTD** for Year to Date balances.

5 Select the **Company Code**.

Specify the company code in four characters or less using alphanumeric characters.

6 **Select the Ledger.**

Specify the ledger in two characters or less using alphanumeric characters from the JD Edwards source system. For example, ledger types include:

- AA–Actual
- BA–Budget
- CA–Original Currency Transaction

7 **Click Save.**

Defining Source Filter Options for SAP Adapters

Subtopics

- SAP Integration Process Background
- Defining Source Filter Options for the SAP_FDM_GLBALANCES_CLASSICS Adapter
- Defining Source Filter Options for the SAP_FDM_GLBALANCES_NEW Adapter
- Defining Source Filter Options for the SAP_FDM_COST_CENTER Adapter
- Defining Source Filter Options for the SAP_FDM_PROFIT_CENTER Adapter
- Defining Source Filter Options for the SAP_FDM_CUSTOMER_BALANCES Adapter
- Defining Source File Options for the SAP_FDM_VENDOR_BALANCES Adapter

SAP Integration Process Background

Oracle Data Integrator creates an ABAP program to extract the data from SAP into a file and then transfers the file to a FTP Server or Shared File system. The ABAP program is generated based on the mappings in the import format and options defined in the rule. The ABAP program is created and uploaded to SAP system when you run a data load rule. In the SAP deployment, ABAP programs are created and modified in a development environment, and locked from modification in the production environment.

In order to support this requirement, ODI provides an option UPLOAD_ABAP_CODE in the SAP Load Knowledge Module. This option is set to "Yes" in a development environment, and "No" in a production environment. The ABAP programs are transferred from development to production using SAP Transport requests.

Because the ABAP code that is run in a production environment is not modified, users should create the import format in the exact format as the development environment. In addition there are options in the data rule that impact the logic of the ABAP program. These options must be set to the same value as they are set in the development environment. Changing these options in the data rule in a production environment does not have any impact on the extraction process. If changes are required to these options, make them in the development environment and the ABAP code transported to the production environment. The options that impact the ABAP code generation are noted in the SAP adapter sections.

Defining Source Filter Options for the SAP_FDM_GLBALANCES_CLASSICS Adapter

Before executing a data load rule using a SAP source adapter, you are required to have generated the Import Format's ODI Scenario. Once the ODI Scenario exists in the Execution Repository, you can execute the data load rule any number of times.

➤ To define the source filter options for the SAP_FDM_GLBALANCES_CLASSICS adapter:

1 In **Include Account Description**, select one of the following:

- **Yes**—include the GL Account description
- **No**—include all other conditions

Impacts ABAP program

2 In **Amount Type**, select one of the following:

- **PTD**—Period to Date
- **YTD**—Year to Date

No impact on ABAP program

3 In **Company Code**, specify the company code in four characters or less using alphanumeric characters.

No impact on ABAP program

4 In **Currency Type**, specify one of the following types:

- **00**—Transaction currency
- **10**—Company code currency
- **30**—Group currency

No Impact on ABAP program

5 In **Language**, specify the language code in two characters or less, using uppercase characters.

For example, specify "EN" for English.

Refer to the SAP documentation for the language code.

No impact on ABAP program

6 In **Ledger**, specify the ledger code in two characters or less using alphanumeric characters.

No impact on ABAP program

7 In **Record Type**, select one of the following record types:

- **0**—Actual
- **1**—Plan

Impacts ABAP program

Defining Source Filter Options for the SAP_FDM_GLBALANCES_NEW Adapter

Before executing a data load rule using a SAP source adapter, you are required to have generated the Import Format's ODI Scenario. Once the ODI Scenario exists in the Execution Repository, you can execute the data load rule any number of times.

➤ To define the source filter options for a SAP_FDM_GLBALANCES_NEW adapter:

1 In **Amount Type**, select one of the following:

- **PTD**—Period to Date
- **YTD**—Year to Date

No impact on ABAP program

2 In **Company Code**, specify the company code in four characters or less using alphanumeric characters.

No impact on ABAP program

3 In **Currency Type**, select one of the following types:

- **00**—Transaction currency
- **10**—Company code currency
- **30**—Group currency
- **40**—Hard currency
- **50**—Index based currency
- **60**—Global company currency

No impact on ABAP program

4 In **Include Account Description**, select one of the following:

- **Yes**—include the GL Account description
- **No**—include all other conditions

Impacts ABAP program

5 In **Language**, specify the language code in two characters or less, using uppercase characters.

For example, specify "EN" for English.

Refer to the SAP documentation for the language code.

No impact on ABAP program

6 In **Ledger**, specify the ledger code in two characters or less using alphanumeric characters.

No impact on ABAP program

7 In **Record Type**, select one of the following record types:

- **0**—Actual
- **1**—Plan

No impact on ABAP program

Defining Source Filter Options for the SAP_FDM_COST_CENTER Adapter

Before executing a data load rule using a SAP source adapter, you are required to have generated the Import Format's ODI Scenario. When the ODI Scenario exists in the Execution Repository, you can execute the data load rule any number of times.

➤ To define the source filter options for a SAP_FDM_COST_CENTER adapter:

1 In **Activity Type**, select one of the following:

- **Yes**—include the activity type
- **No**—exclude the activity type

Impacts ABAP program

2 In **Activity Type Description**, select whether to include or exclude the activity type description:

- **Yes**—include the activity type description
- **No**—exclude the activity type description

Impacts ABAP program

3 In **Amount Type**, select one of the following:

- **PTD**—Period to date balances
- **YTD**—Year to date balances

No impact on ABAP program

4 In **Controlling Area**, specify the controlling area in four characters or less using alphanumeric characters.

No impact on ABAP program

5 In **Include Cost Element Description**, select whether to include the cost element description:

- **Yes**—include the cost element description
- **No**—exclude the cost element description

Impacts ABAP program

6 In **Currency Type**, select one of the following:

- **20**—Controlling Area currency
- **00**—Transaction currency
- **70**—Cost Center currency
- (blank)—leave blankwhen the **Quantity** filter is **Yes** or the **Activity Type** filter is **Yes**.

Impacts ABAP program

7 In **Flow Check**, select one of the following:

- **External**—load external balances
- **Internal**—load internal allocations

Impacts ABAP program

8 In **Language Code**, specify the language code in two characters or less, using uppercase characters.

For example, specify "EN" for English.

No impact on ABAP program

9 In **Ledger Code**, specify the ledger code in two characters or less using alphanumeric characters.

No impact on ABAP program

10 In **Statistical Key Figure**, select to extract statistical key figure totals:

- **Yes**—extract the data for Statistical key figure totals
- **No**—extract data for activity type totals

Impacts ABAP program

11 In **Group Code**, select one of the following group codes:

For external balances, select:

- **0101**—data extracted is for the Cost Center Group
- **0102**—data extracted is for the Account Group

For internal balances, select:

- **0101**—data extracted is for the Cost Center Group
- **0102**—data extracted is for the Account Group
- **0104**—data extracted is for the Statistical Key Figure Group
- **0105**—data extracted is for the Account Group
- (Null)—no grouping is required

Impacts ABAP program

12 In **Value Type**, select one of the following:

- **04**—Actual
- **01**—Plan

No impact on ABAP program

Defining Source Filter Options for the SAP_FDM_PROFIT_CENTER Adapter

Before executing a data load rule using a SAP source adapter, you are required to have generated the Import Format's ODI Scenario. Once the ODI Scenario exists in the Execution Repository, you can execute the data load rule any number of times.

➤ To define the source filter options for a SAP_FDM_PROFIT_CENTER adapter:

1 In **Amount Type**, select one of the following:

- **PTD**—Period to date balances
- **YTD**—Year to date balances

No impact on ABAP program

2 In **Controlling Area**, specify the value for the controlling area.

No impact on ABAP program.

3 In **Currency Type**, select one of the following:

- **10**—Company code currency
- **00**—Transaction currency
- **70**—Profit Center currency
- (blank)—Select blank when **Quantity** is set to **YES**.

No impact on ABAP program

4 In **Dummy Prctr**, select:

- **Yes**—include balances related to the dummy profit center.
- **No**—include other conditions.

No impact on ABAP program

5 In **Language**, select the language code in two characters or less, using uppercase characters.

For example, specify "EN" for English.

No impact on ABAP program

6 In **Ledger**, select the ledger code in two characters or less using alphanumeric characters.

No impact on ABAP program

7 In **Statistical Key Figure**, select to extract statistical key figure totals:

- **Yes**—extract the data for Statistical key figure totals
- **No**—extract data for activity type totals

Impacts ABAP program

8 In **Group Code**, select one of the following group codes:

- **0106**—Profit Center Group
- **0109**—Account Group
- (blank)—no group is required

Impacts ABAP program

9 In **Record Type**, select one of the following types:

- **0**—Actual
- **1**—Plan

No impact on ABAP program

Defining Source Filter Options for the SAP_FDM_CUSTOMER_BALANCES Adapter

Before executing a data load rule using a SAP source adapter, you are required to have generated the Import Format's ODI Scenario. Once the ODI Scenario exists in the Execution Repository, you can execute the data load rule any number of times.

➤ To define the source filter options for a SAP_FDM_CUSTOMER_BALANCES adapter:

1 In **Amount Type**, select one of the following:

- **PTD**—Period to date balances
- **YTD**—Year to date balances

No impact on ABAP program

2 In **Company Code**, specify the company code in four characters or less using alphanumeric characters.

No impact on ABAP program

3 In **Currency Type**, select one of the following:

- **10**—Company code currency
- **00**—Transaction currency

No impact on ABAP program

4 In **Customer**, select the customer code in ten characters when the balance is required for a specific customer.

Otherwise, set to blank.

No impact on ABAP program

5 In **Customer Details**, select to include customer details:

- **Yes**—include customer details
- **No**—exclude customer details

Impacts ABAP program

6 In **Flow Check**, select one of the following:

- **Open**—load open item balances
- **Cleared**—load cleared item balances
- **All**—load all item balances

Impacts ABAP program

7 In **Special GL Transactions**, select one of the following:

- **Yes**—load special General Ledger balances
- **No**—load other balances

Impacts ABAP program

8 In **Trading Partner**, select to include trading partner balances:

- **Yes**—load trading balances
- **No**—load other conditions

No impact on ABAP program

Defining Source File Options for the SAP_FDM_VENDOR_BALANCES Adapter

Before executing a data load rule using a SAP source adapter, you are required to have generated the Import Format's ODI Scenario. Once the ODI Scenario exists in the Execution Repository, you can execute the data load rule any number of times.

➤ To define the source filter options for the SAP_FDM_VENDOR_BALANCES adapter:

1 In **Amount Type**, select one of the following:

- **PTD**—Period to date balances
- **YTD**—Year to date balances

No impact on ABAP program

2 In **Company Code**, specify the company code in four characters or less using alphanumeric characters.

No impact on ABAP program

3 In **Currency Type**, select one of the following:

- **10**—Company code currency
- **00**—Transaction currency

No impact on ABAP program

4 In **Flow Check**, select one of the following:

- **Open**—load open item balances
- **Cleared**—load cleared item balances
- **All**—load all item balances

Impacts ABAP program

5 In **Special GL Transactions**, select one of the following:

- **Yes**—load special General Ledger balances
- **No**—load other balances

Impacts ABAP program

6 In **Trading Partner**, select to include trading partner balances:

- **Yes**—load trading balances
- **No**—load other conditions

No impact on ABAP program

7 In **Vendor**, specify the vendor code in ten characters when the balance is required for a specific vendor.

Otherwise, set to blank.

No new ABAP code is uploaded for this filter.

8 Specify **Vendor Details**, select whether to include vendor details:

- **Yes**—include vendor details
- **No**—exclude vendor details

No impact on ABAP program

Defining Source Filter Options for the Open Interface Adapter

Before executing a Data Rule using open interface adapter, you are required to have generated the Import Format's ODI Scenario. Once the ODI Scenario exists in the Execution Repository, you can execute the Data Rule any number of times.

➤ To define the source filter options for an open interface adapter:

1 In **Batch Name**, enter the name of the batch used to identify the data in the interface table.

2 In **Record Type**, specify whether to delete data after importing the data by selecting **Y** (for yes) or **N**.

To delete the data, select **Y**. To retain the data, select **N**.

3 Click **Save**.

Defining Data Load Rule Details for a File-Based Source System

When defining data load detail for a file-based data load system, load data to a single period or a range of periods. For a single period, enter the file name in the data rule and run the rule for a single period. To load multiple periods, create a file for each period and append the period name or period key to the file name. When the rule is executed for a range of periods, the process constructs the file name for each period and uploads the appropriate data to the POV.

➤ To define the data load details for a file-based source system:

1 In **Name**, enter the data load rule name.

2 In **Category**, select a category.

The categories listed are those that you created in the FDMEE setup, such as "Actual." See "Defining Category Mappings" on page 120.

3 In **File Type**, select the type of period file:

- Single Period Load
- Multi-Period Text File (Contiguous Period)
- Multi-Period Text File (Non-Contiguous Period)
- Multi-Period Excel File (Contiguous Period)
- Multi-Period Excel File (Non-Contiguous Period)

4 Optional: In **Description**, specify a description of the data load rule.

5 Optional: From the **Target Plan Type** drop, select the plan type of the target system.

6 **Optional**: In **Import Format**, if the file type is a multiple period *text* file (with contiguous periods, or noncontiguous periods), select the import format to use with the file, so you can override the import format. For example, specify an import format for single and multiple period data rules, which enables you to load single or multiple period files from the same location. In this case, the import format selected must have the same target as the location selected in the POV. If the import format is unspecified, then the import format from the location is used.

The starting and ending period selected for the rule determine the specific periods in the file when loading a multiple period text file.

In the file, when amounts are unavailable for contiguous periods, then you can explicitly map the respective amount columns to required periods in the data rule in Data Load Mapping. When you execute the rule, the data is loaded to the periods as specified in the explicit mapping.

7 **Optional**: Enter a description.

8 In **Directory**, enter the relative path where the file is located.

9 Select the **Source Options** tab.

10 In the **File Name** field, enter the static name of the file.

When only the file name is provided, then data must be entered for a single period on the Rules Execution window.

To load multiple periods, create a file for each period and append a period name or period key to the file name. When the rule is executed for a range of periods, the process constructs the file name for each period and uploads it to the appropriate POV.

Note: If used in a batch script, period names cannot include spaces.

To navigate to a file located in a FDMEE directory, click **Select**, and then choose a file on the **Select** screen. You can also select **Upload** on the **Select** screen, and navigate to a file on the **Select a file to upload** screen.

If you do not specify a file name, then FDMEE prompts you for the file name when you execute the rule.

11 To load data into multiple periods, in the **File Name Suffix Type** drop-down, select **Period Description** or **Period Key**.

A suffix is appended to the file name, and FDMEE adds the file extension after adding the suffix. If you leave the file name blank, then FDMEE looks for a file with Suffix. When the file name suffix type is provided, then the file name is optional in this case, and it is not required on the Rule Execution window.

If the file name suffix type is a period key, the suffix indicator and period date format are required (as the suffix set) in the file name, and must be validated as a valid date format.

For example, specify:

a. 1_Jan-2013.txt

b. 1_Feb-2013.txt

c. 1_Mar-2013.txt

In this case, when you run the rule, enter 1_.txt in the file name field and select "Period Name" for the suffix indicator. Then run the rule for the January to March periods.

12 In **Period Key Date Format**, specify the data format of the period key that is appended to the file name in JAVA date format (SimpleDateFormat).

13 Click **Save**.

Defining Source Parameters for Planning and Essbase

In a data synchronization when Planning and Essbase are the source system, you can specify additional source parameters.

➤ To define source options:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In **Data Load Rule**, select a data load rule for an Planning and Essbase source, and then click **Add**.

3 Select the **Source Parameters** tab.

4 In **Extract Dynamic Calculated Data**, specify to include dynamically calculated data.

- **Yes**—Dynamically calculated values are included in the export.

  By default, dynamically calculated data is included.

- **No**—Dynamically calculated values are excluded in the export.

5 In **Data Precision**, specify the number of decimal places displayed in numbers to be exported.

Data precision refers to numeric data with the emphasis on precision (accuracy). Depending on the size of a data value and number of decimal positions, some numeric fields may be written in exponential format; for example, 678123e+008. You might consider using data precision when data ranges from very large to very small values. The output files typically are smaller and data values are more accurate.

The default value for this option is 16.

6 In **Data Number of Decimal**, specify the maximum number of decimal positions to be exported.

Specify a value between 0 and 16. If no value is provided, the number of decimal positions of the data to be exported is used, up to 16 positions, or a value determined by Data Precision option if that value is specified.

This parameter is used with an emphasis on legibility; output data is in straight text format. Regardless of the number of decimal positions in the data, the specified number is output. Note that it is possible the data can lose accuracy, particularly if the data ranges are from very large values to very small values, above and below the decimal point.

By default, 16 positions for numeric data are supported, including decimal positions. If both the Data Precision option and the Data Number of Decimal option are specified, the Data Precision option is ignored.

7 **Click Save.**

Managing Data Load Rules

Subtopics

- Editing Data Load Rules
- Running Data Load Rules
- Scheduling Data Load Rules
- Checking the Data Load Rule Status
- Deleting Data Load Rules
- Working with Target Options
- Creating Custom Options

You can perform the following tasks:

- Edit data load rules—See "Editing Data Load Rules" on page 182.
- Run data load rules—See "Running Data Load Rules" on page 183.
- Delete data load rules—See "Deleting Data Load Rules" on page 188.
- View data load rules before executing them—See "Using the Data Load Workbench" on page 190.
- Check the data rule process details—See "Viewing Process Details" on page 202.

Editing Data Load Rules

If the data load rule is not in the process of running, you can modify rule details.

➤ To edit data rules:

1 **On the Workflow tab, under Data Load, select Data Load Rule.**

2 **Select the data load rule.**

3 **Modify any of the data load rule details, as necessary.**

4 **Click Save.**

Running Data Load Rules

You run the data load rule to load updates and push the data into the target application. All submitted rules are processed by Oracle Data Integrator. When you submit a data load rule, specify the data extract options.

Data Load Rules can be executed by selecting one of the methods below:

- Execute command on the Data Load Rule screen.
- Import Source option in the Data Load Workbench option.
- Executing a batch. See "Executing Batches" on page 281.
- Running a batch script. See "Working with Batch Scripts" on page 289.

When a data load rule is run, it loads the data, and a drill region (optional) is created to enable users to drill through to the source data.

When you run a data load rule, you have several options.

- **Import from Source**—FDMEE imports the data from the source system, performs the necessary transformations, and exports the data to the FDMEE staging table.

  Select this option only when:

  - You are running a data load rule for the first time.
  - Your data in the source system changed. For example, if you reviewed the data in the staging table after the export, and it was necessary to modify data in the source system.

  In many cases, source system data may not change after you import the data from the source the first time. In this case, it is not necessary to keep importing the data if it has not changed.

  When the source system data has changed, you need to recalculate the data.

- **Export to Target**—Exports the data to the target application.

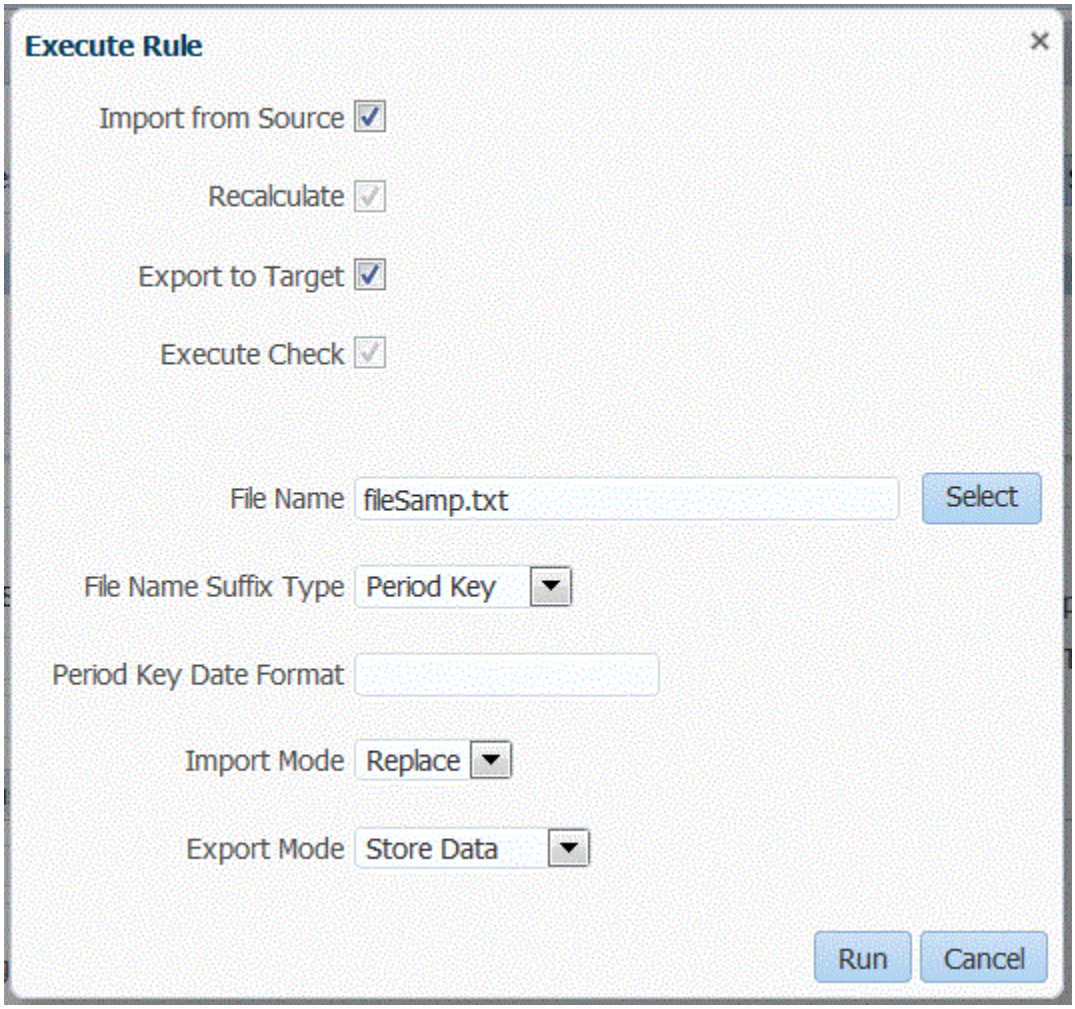
  Select this option after you have reviewed the data in the staging table and you want to export it to the target application.

Note: Select both options only when the data has changed in the source system *and* to export the data directly to the target application.

➤ To submit the data load rule for a file-based source system:

1. On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.
2. In **Data Load**, select the data load rule.
3. From **Execute Rule**, to extract data and/or metadata from the source system and push it into target applications, select **Import from Source**.

Tip: You can use a utility outside of FDMEE to view the data in the staging table. After you review the exported data, you can return to FDMEE, make modifications, and rerun the rule. If you are sure that the information in the staging table is what you want to export to the target application, rerun and select "Export to Target." See "Staging Table Used for Import from Source" on page 391.



4 Select **Recalculate** to remap all imported source data using the current mapping table and to recreate all logic accounts.

5 Select **Export to Target** to export data to the target application.

6 Select **Execute Check** to generate the date, and then run the Check Report.

7 For a file-based source system, in **File Name Suffix Type**, select to affix the period name or period key after the file name.

- Period Key—A unique identifier for the period. The period key is a date value. When the file name suffix type is the period key, specify the date format in the Period Key Data Format field.
- Period Name—A secondary identifier for the period. The value is unique, and may contain alpha-numeric characters.

Note: Period names cannot include spaces if used in a batch script.

8 In **Period Key Data Format**, specify the date format when a period key suffix is selected.

9 For a file-based source system, in **Import Mode**, select the method for loading data.

Available load methods:

- Append—Existing rows for the POV remain the same, but new rows are appended to the POV (that is, appends the new rows in TDATASEG).

  For example, a first time load has 100 rows and second load has 50 rows. In this case, FDMEE appends the 50 rows to TDATASEG. After this load, the row total for the POV is 150.

- Replace—Replaces the rows in the POV with the rows in the load file (that is, replaces the rows in TDATASEG).

  For example, a first time load has 100 rows, and a second load has 70 rows. In this case, FDMEE first removes the 100 rows, and loads the 70 rows to TDATASSEG. After this load, the row total for the POV is 70.

10 In **Export Mode**, select the method for exporting data.

This option is only available using the Export to Target option.

Available export modes:

- Store Data—Inserts the data from the source or file into the target application. This replaces any value that currently exists.
- Add Data—Adds the value from the source or file to the value that exists in the target application. For example, if you have 100 in the source, and 200 in the target, then the result is 300.
- Subtract Data—Subtracts the value in the source or file from the value that exists in the target application. For example, if you have 300 in the target, and 100 in the source, then the result is 200.
- Override All Data—Clears all data in the target, and then loads from the source or file. For example, if you have a year of data in your Planning application, but are only loading a single month, this option clears the entire year before performing the load.

Note: The Override All Data option is defined in "Setting System-Level Profiles" on page 41 and "Setting Application-Level Profiles" on page 45.

11 Click **Run**.

After you click Run, the rule is locked from any updates to ensure that the drill through path is intact. See "Checking the Data Load Rule Status" on page 188.

➤ To submit the data load rule for a Planning General Ledger or Enterprise Resource Planning (ERP):

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In **Data Load**, select the data load rule.

3 Click **Execute**.

When the data rule is run for Financial Management target applications, the Exchange Rates from the source are populated only up to the FDMEE interface table AIF_HS_EXCHANGE_RATES. The Core Exchange Rates table in Financial Management is not updated.

4 From **Execute Rule**, to extract data, metadata or both from the source system and push it into target applications, select **Import from Source**, and then select the **Start Period** and **End Period**.

Tip: You can use a utility outside of FDMEE to view the data in the staging table. After you review the exported data, return to FDMEE, make modifications, and run the rule again. If you are sure that the information in the staging table is correct, run the rule again and select "Export to Target."

5 Select **Recalculate** to remap all imported source data using the current mapping table and to recreate all logic accounts.

6 Select **Export to Target** to export data to the target application.

7 Select **Execute Check** to generate the date, and then run the Check Report.

8 In **Start Period**, select the beginning period of the POV from which to import the data from the source system.

9 In **End Period**, select the ending period of the POV to which to import the data from the source system.

10 In **Import Mode**, select the mode to extract data all at once for an entire period or incrementally during the period.

Note: The snapshot import mode is the only way data can be extracted from a SAP and JD Edwards source system.

Data extract types:

- **Snapshot**—Extracts everything for the selected source set for an entire period
  - When source data for the selected period has never been run, FDMEE extracts the data from the source.
  - When the source data for the selected period has been run, FDMEE extracts the data from the FDMEE staging tables and not from the source.

    When you have locations that extract from the same Enterprise Resource Planning (ERP) source, FDMEE extracts the data once. When you load data to Financial Management from the E-Business Suite for a selected period, and then run the integration to ARM for the same source and period, FDMEE does not pull again from E-Business Suite, but uses the data in the interface tables. This results in a significant performance gain for any subsequent data loads. The first extraction takes take the longest, but any other subsequent extractions are faster.
- **Incremental**—Extracts the records that were added after the previous data extract

- **Full Refresh**—Performs a clean extraction from the source system, thereby clearing any existing data rows in the appropriate FDMEE staging tables for a given source Ledger (or Business Unit) and source period.

  Note: The import mode options (Snapshot, Incremental, and Full Refresh) apply only to data rules in a location using a standard import format.

  Note: E-Business Suite and Fusion source imports require a full refresh of data load rules before export after upgrading from a 11.1.2.2 release.

Note: E-Business Suite and Fusion source imports require a full refresh of data load rules before export after upgrading from a 11.1.2.2 release.

11 In **Export Mode**, select the mode for exporting data:

- Store Data—Inserts the data from the source or file into the target application, replacing any current value.
- Add Data—Adds the value from the source or file to the value that exists in the target application. For example, if you have 100 in the source, and 200 in the target, then the result is 300.
- Subtract Data—Subtracts the value in the source or file from the value that exists in the target application. For example, if you have 300 in the target, and 100 in the source, then the result is 200.
- Override All Data—Clears all data in the target, and then loads from the source or file. For example, if you have a year of data in your Planning application, but are loading only a single month, this option clears the entire year before performing the load.

Available export modes for Financial Management:

- Merge—Overwrites the data in the application with the data in the load file. For each unique point of view that exists in the data file and in the application, the value in the data file overwrites the data in the application.

  Note: If the data load file includes multiple values in the file for the same point of view, the system loads the value for the last entry.

  Note: Data in the application that is not changed by the data load file remains in the application.
- Accumulate—accumulate the data in the application with the data in the load file. For each unique point of view in the data file, the value from the load file is added to the value in the application.
- Replace—Replaces the data in the application with the data in the load file. For each unique combination of Scenario, Year, Period, Entity, and Value in the data file, the Replace option clears all account values from the application, then loads the value from the data file.

- Replace by Security—Performs a data load in Replace mode in which only the members to which you have access are loaded. This option enables you to perform a data load in Replace mode even if you do not have access to all accounts. When you perform the Clear operation for a period in a sub-cube, only the cells to which you have access are cleared. Data, cell text, and line item detail are cleared, but cell attachments are not cleared.

12 Select **Include Exchange Rates** to load exchange rates.

13 Click **Run**.

After you click Run, the rule is locked from any updates to ensure that the drill through path is intact. To check the status of the rule, see "Checking the Data Load Rule Status" on page 188.

Scheduling Data Load Rules

The scheduling jobs feature provides a method to orchestrate the execution times of data load rules.

➤ To schedule data load rules to run:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In **Data Load**, select the data load rule.

3 Click **Schedule**.

For information on scheduling jobs, see "Scheduling Jobs" on page 287.

➤ To cancel a scheduled job:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 In **Data Load**, select the data load rule.

3 Click **Cancel Schedule**.

When you cancel a job from the FDMEE user interface, all instances of a schedule for the object selected are cancelled. To cancel a specific instance of a schedule, cancel the job from the ODI studio or ODI console.

Checking the Data Load Rule Status

After you run a data rule, you can check the status on the Process Details page. See "Viewing Process Details" on page 202.

Deleting Data Load Rules

You can delete data load rules created in FDMEE. You cannot delete data load rules if they are running.

When you delete a rule, all data loaded using the data rule are also deleted.

Note: After you delete data load rules, you can delete a source system. After you execute a deletion, users cannot drill through to an Enterprise Resource Planning (ERP) source.

➤ To delete a data load rule:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 Enter the **Location Name** or click to select the location.

3 Select the data load rule.

4 Click **Delete**.

Working with Target Options

When working with data load rules, you can specify target application options specific to a location. For example, using the Target Options feature, you can specify different data protection values for each location.

Note: For information on the required target options for data load rules to write back, see "Defining Application Options for Essbase and Planning" on page 73.

➤ To specify integration information:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 From the **POV** bar, select a location.

3 Select the **Target Options** tab.

4 Add or modify any options.

See "Registering Target Applications" on page 67.

5 Click **Save**.

Creating Custom Options

You can specify free form text or a value about a location or data load using the integration option feature. Text or values entered can be used with your FDMEE scripts.

➤ To specify integration information:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 Select the **Custom Options** tab.

3 In **Integration Option 1-4**, specify the free form text or value, and click **OK**.

The information that you specify is accessible from the Integration Option fields of the Location table.

Using the Data Load Workbench

The Data Load Workbench feature provides a framework to import, view and verify, and export data from source systems in the FDMEE.

Key features of the Workbench include:

- Interactive Load Process with options for Import, Validate, Export, and Check.
- Provision to view Source (All)/Source (Mapped)/Target/Source and Target values
- PTD/YTD Value display for ready reference
- Display options for Valid, Invalid, Ignored, and All Data
- Online and Offline Load process
- Query option for Historical Loads
- Historical Loads Export to Excel
- Drill back to source from the Workbench
- Load, check and post journals for Financial Management applications

Note: When you log in with the Run Integration role, these links are visible in the Tasks pane: Data Load Workbench, Data Load, Member Mapping, HR Data Load, Metadata, and Process Detail.

The Data Load Workbench consists of four sections:

- Workflow Grid
- POV Bar—See"Using the POV Bar" on page 37.
- Status
- Data Grid

Workflow Grid

The Workflow grid enables users to process data from start to finish in FDMEE. The Workflow grid items are displayed as headers in the FDMEE Workspace display and correspond to a Workflow step. The steps consists of Import (loading data from source), Validate (ensures that all members are mapped to a valid account), Export (loads the mapped members to the target application), and Check (verifies accuracy of data by processing data with user-defined check rules).

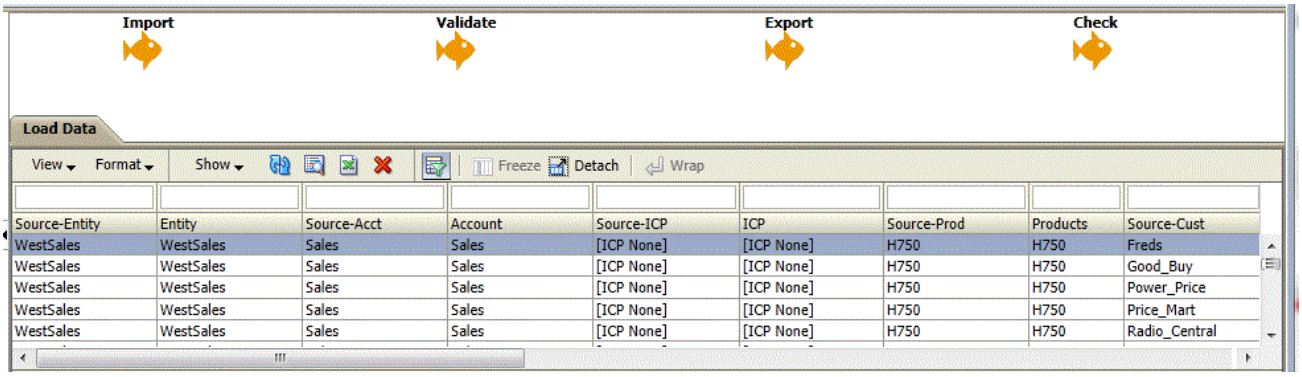
When you select a Workflow step, the following occurs:

- Import—Initiates the Import action.
- Validate—Initiates the Validate action (even if the Import process has not been run for the current POV) but does not validate the data.
- Export—Initiates the Export action (even if the current POV has not validated its data) but does not initiate the Export process.

- Check—Displays the Check report for the current POV (if there is no check report data for the current POV, a blank page is displayed.)

FDMEE uses fish icons to indicate the status of each step. When a Workflow step is completed successfully, the fish is orange. If the step is unsuccessful, the fish is gray .

Note: You can customize the icons that show a "successful process" and a "failed process" by replacing the ProcessSucceeded and ProcessFailed icons in the `%EPM_ORACLE_HOME%\epmstatic\aif\images\general` folder.



Source-Entity	Entity	Source-Acct	Account	Source-ICP	ICP	Source-Prod	Products	Source-Cust
WestSales	WestSales	Sales	Sales	[ICP None]	[ICP None]	H750	H750	Freds
WestSales	WestSales	Sales	Sales	[ICP None]	[ICP None]	H750	H750	Good_Buy
WestSales	WestSales	Sales	Sales	[ICP None]	[ICP None]	H750	H750	Power_Price
WestSales	WestSales	Sales	Sales	[ICP None]	[ICP None]	H750	H750	Price_Mart
WestSales	WestSales	Sales	Sales	[ICP None]	[ICP None]	H750	H750	Radio_Central

Processing Data

FDMEE process flow consists of four main operations:

1. Import—Imports the source data against a General Ledger or uploads a flat file.
2. Validate—Ensures that all data in the imported GL has a corresponding mapping. Unmapped items must be assigned to a target account before proceeding to the Export step.

   In addition you have the option to view mapping errors and fix them instantly when mapping errors have occurred.
3. Export—Loads the mapped GL data to the target application.
4. Check—Validates the data loaded to the target application using the validation rules (if applicable).

Step 1: Importing Source Data

The Import from Source feature enables the Oracle Data Integrator to import the data from the source system, performs the necessary transformation, such as import, map and validate the data. The Import from Source features also enables you to import the source online (immediate processing) or offline (runs in background).

Select this feature only when:

- Running a data load rule for the first time.

- Data in the source system has changed. For example, if you reviewed the data in the staging table after the export, and it was necessary to modify data in the source system.

In many cases, source system data may not change after you import the data from the source the first time. You don't need to keep importing unchanged data.

➤ To import source data:

1 **On the Workflow tab, under Data Load, select Data Load Workbench.**

2 **Optional: When you import a source file, FDMEE uses the current POV to determine location, category, and period.**

To import another source file, you must change the POV. For information on changing the POV, see "Using the POV Bar" on page 37.

3 **At the top of the screen, click Import.**

4 **In Execution Mode , select the mode of importing the source.**

- online—ODI processes the data in sync mode (immediate processing).
- offline—ODI processes the data in async mode (runs in background).

Click to navigate to the Process Detail page to monitor the ODI job progress.

5 **Click OK.**

The Import fish changes to orange.

Step 2: Validating Source Data

FDMEE Validation of the source data confirms that all members are mapped to a valid target system account. If there are any unmapped dimension maps within the source file, a validation error occurs. Validation compares the dimension mapping to the source file and identifies unmapped dimensions. The process flow cannot continue until all dimensions are properly mapped.

➤ To run the validation process:

1 **On the Workflow tab, under Data Load, select Data Load Workbench.**

2 **Select Validate.**

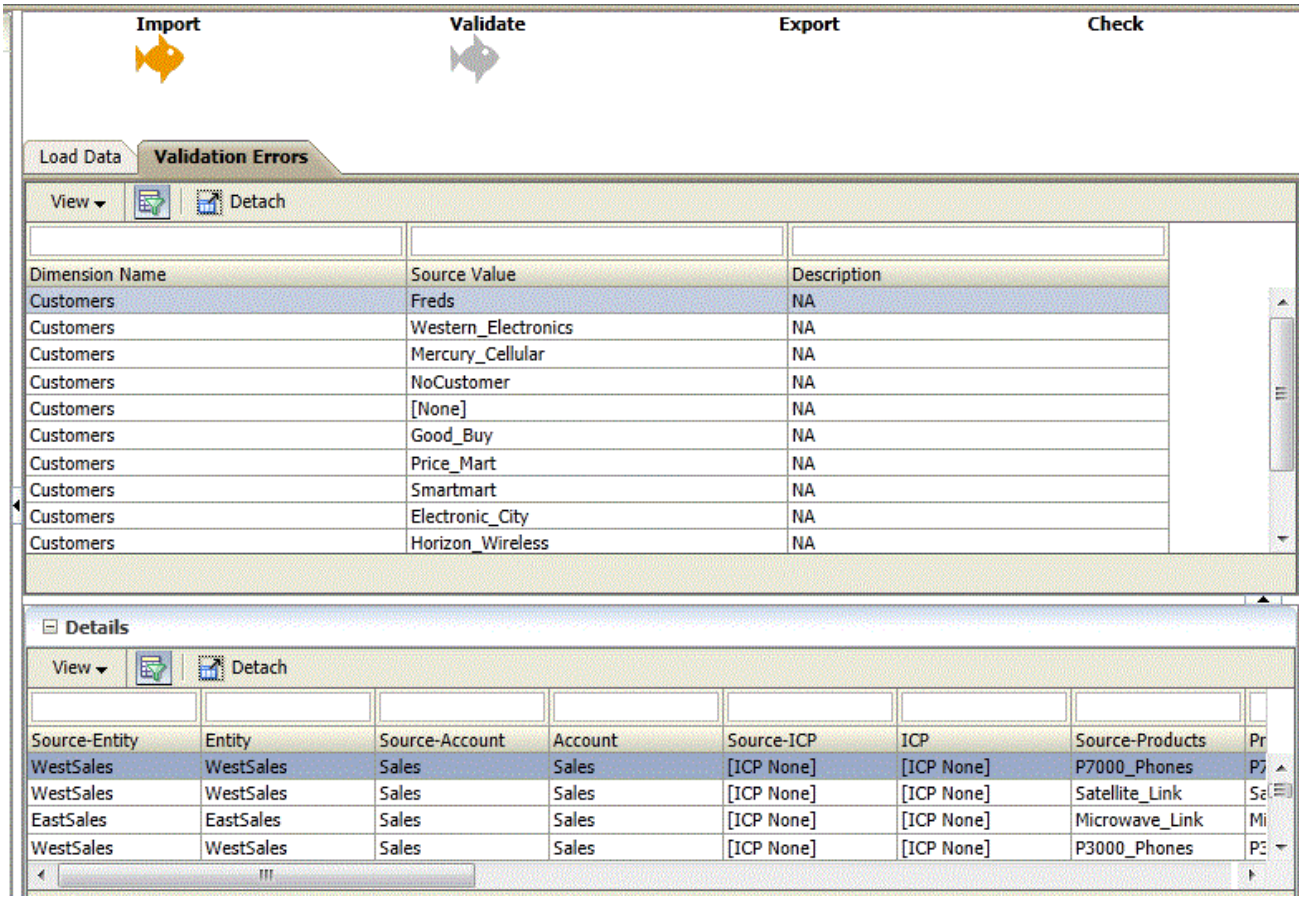
Validation with No Mapping Errors

When validation is successful, the orange Validate fish is displayed in the header of the FDMEE screen.

Validation with Mapping Errors

Because newly added dimension members may be unmapped, the addition of dimension members to source systems can produce validation errors. If a dimension member is unmapped, the Validate fish is grey and a Validation Error screen is launched in the Workbench, which

shows the number of dimension members that are not mapped (that are, therefore, undefined). You must correct any unmapped dimension members before running the validation again.



➤ To correct conversion-table errors:

1 **In the top region of the Validation screen, highlight a row that requires correction.**

2 **Correct any unmapped accounts.**

In the top region of the Validation Error screen, the unmapped item is inserted into the Source value, and the bottom region shows all row with that source value. For example if the top region displays a value of Entity dimension with Source Value 01, then bottom region should show all rows where ENTITY = '01'.

See "Defining the Import Format Mappings" on page 98.

3 **Click Validate to refresh the validation form.**

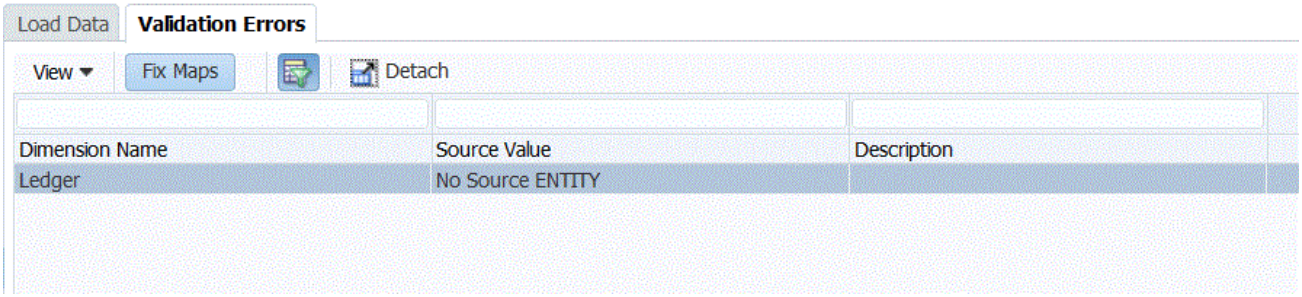
Source data that passes the validation process can be loaded to the target system.

Fixing the Mapping Errors

In the Data Load Workbench, you can view mapping errors and fix them instantly when mapping errors have occurred.

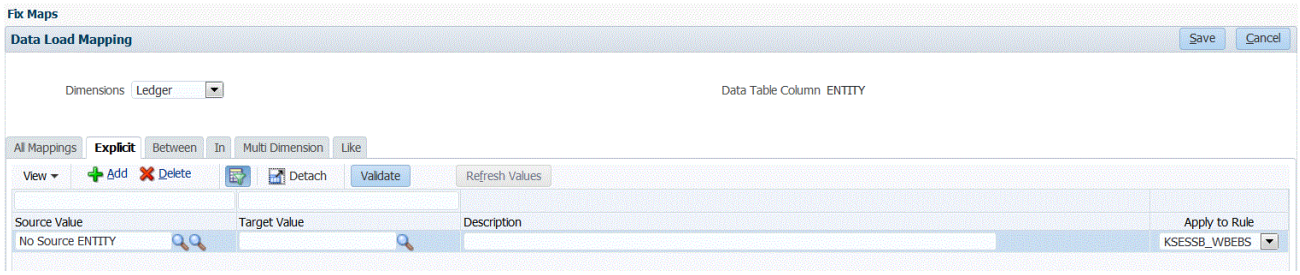
➤ To fix mapping errors:

1 From **Data Load Workbench**, select the **Validation Errors** tab.



2 Select **Fix Maps** to access the mappings.

3 From the **Data Load Mappings** screen, fix any errors.



4 Click **Validate**, and then click **Save**.

Validating Financial Management Data Intersections

When running the validation step, Financial Management you can run the Intersection Check Report to check the data. such as the data intersections (cell status of account, entity, and so on) from the Financial Management target application.

Intersection check reports are generated as part of the data validation step in the data load workflow.

This feature is enabled in the Check Intersection option in Application Options. See "Defining Application Options for Financial Management" on page 81.

➤ To run an intersection check:

1 In the top region of the **Validation** screen, click **Generate Intersection Check Report**.

2 When prompted, save or open the Intersection Check Report.

3 Correct validation errors and rerun the validation step.

Step 3: Exporting Data to Target Applications

After the source data has passed the validation process, use the Export option to export data to a target application. Select this option after you have reviewed the data in the data grid and are sure you want to export it to the target application.

When exporting data for Planning and Essbase, you can store, add, and subtract data. For Planning and Essbase, you can override all data.

For Financial Management, you can merge, accumulate, replace, and replace by security data.

When you use Lifecycle Management to export mapping rules, any related mapping scripts are included.

The export of mapping rules to a CSV or Excel format does not include any scripting.

➤ To submit the data load rule:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

2 **Optional:** When you import a source file, FDMEE uses the current POV to determine location, category, and period and conducts the following process: To import another source file, you must change the POV. See "Using the POV Bar" on page 37.

3 At the top of the screen, click **Export**.

4 In **Execution Mode** drop-down, select the mode for exporting the source data to the target application.

- online—ODI processes the data in sync mode (immediate processing).
- offline—ODI processes the data in async mode (runs in background).

  Click to navigate to the Process Detail page to monitor the ODI job progress.

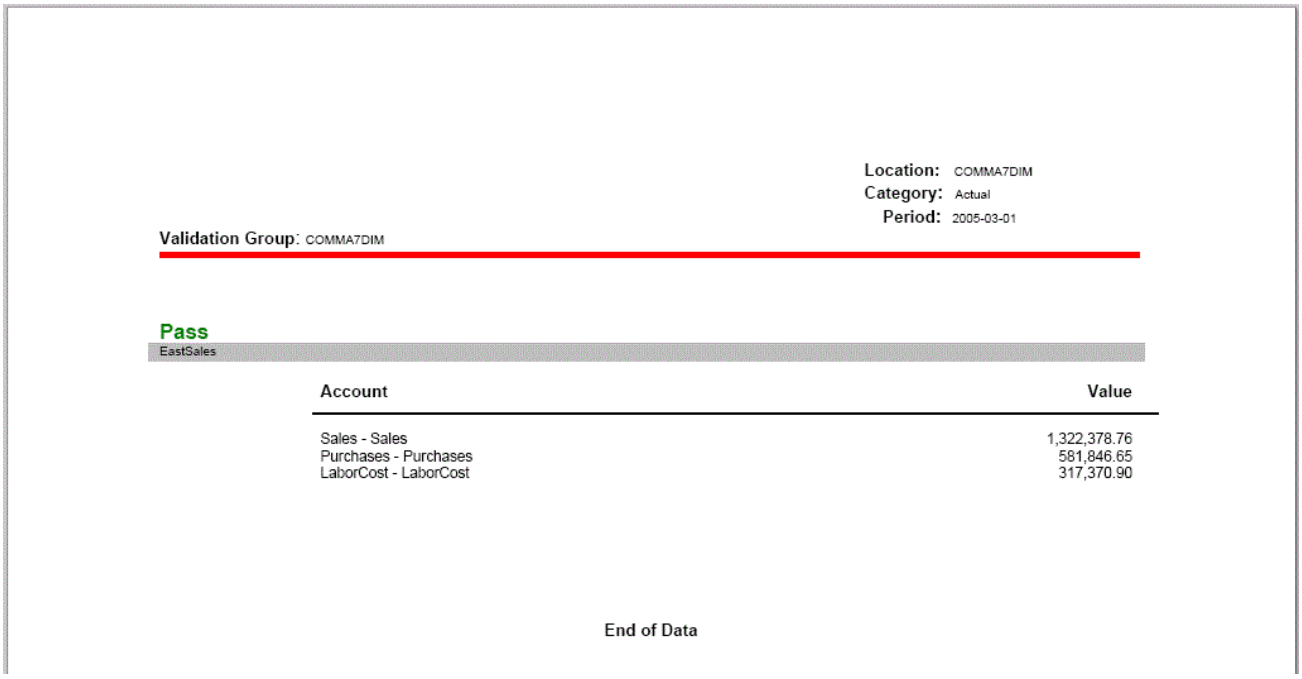
5 Click **OK**.

Step 4: Checking the Data

After exporting data to the target system, execute the Check step to display the Check report for the current POV. If check report data does not exist for the current POV, a blank page is displayed.

You can select the default report type that is used when Check reports are run. By default, the Publish Type field on the Reports page is set to the selected report-type value. Selections for this field are PDF, Excel, Word, Rich Text, and HTML.

Note: When you run and open the check report from the Workbench, it is not saved to the FDMEE folder on the server.



Using the Workbench Data Grid

The data grid includes two tabs in the main grid:

- Load Data/Load POV—Use to import, view and verify and export data from source systems.
- drill through to the source data
- view mapping details

You perform tasks on the data grid by selecting options on the Table Action including:

- "Viewing Data" on page 196
- "Formatting Data" on page 197
- "Showing Data" on page 198
- "Opening Loaded Data in Microsoft Excel" on page 199
- "Querying by Example" on page 200
- "Freezing Data" on page 200
- "Detaching Data" on page 200
- "Wrapping Text" on page 201
- "Attaching Cell Text and Documents to a Data Cell" on page 201

Viewing Data

The following View drop-down options provides multiple ways to view data.

Table 33 View Options and Descriptions

View Option	Description
View ▾	Customizes views. Options include: ● **Table**—Selects the source or target data to display in the grid including: ❍ Source (All)—Shows both mapped and unmapped source dimensions (ENTITY, ACCOUNT, UD1, UD2,... AMOUNT). ❍ Source (Mapped)—Shows only mapped source dimensions. ❍ Target—Shows only target dimensions (ENTITYX, ACCOUNTX, UD1X, UD2X,....AMOUNTX). ❍ Source and Target—Shows both source and target dimensions (ENTITY, ENTITYX, ACCOUNT, ACCOUNTX, UD1, UD1X, AMOUNT, AMOUNTX). ● **Columns**—Selects the columns to display in the data grid including: ❍ Show All ❍ Entity ❍ Account ❍ Version ❍ Product ❍ Department ❍ STAT ❍ Amount ❍ Source Amount **Note:** For E-Business Suite and PeopleSoft, the Account Descriptions is also available for viewing. ● **Freeze/Unfreeze**—Locks a column in place and keeps it visible when you scroll the data grid. The column heading must be selected to use the freeze option. To unfreeze a column, select the column and from the shortcut menu, select *Unfreeze*. ● **Detach/Attach**—Detaches columns from the data grid. Detached columns display in their own window. To return to the default view, select *View*, and then click *Attach* or click *Close*. ● **Sort**—Use to change the sort order of columns in ascending or descending order. A multiple level sort (up to three levels and in ascending and descending order) is available by selecting Sort, and then Advanced. From the Advanced Sort screen, select the primary "sort by" column, and then the secondary "then by" column, and then the third "then by" column. The search fields that are displayed in the advanced search options differ depending on what artifact you are selecting. ● **Reorder Columns**—Use to change the order of the columns. When you select this option, the Reorder Columns screen is displayed. You can select a column, and then use the scroll buttons on the right to change the column order. ● **Query by Example**—Use to toggle the filter row. You can use the filter row to enter text to filter the rows that are displayed for a specific column. You can enter text to filter on, if available, for a specific column, and then press [Enter]. To clear a filter, remove the text to filter by in the text box, then press [Enter]. All text you enter is case sensitive.

Formatting Data

You can resize the width of a column by the number pixel characters or a percentage. You can also wrap text for each cell automatically when text exceeds the column width.

➤ To resize the width of a column:

1 **Select the column to resize.**

2 From the table action bar, select **Format**, and then **Resize**.

3 In the first **Width** field, enter the value by which to resize.

You can select a column width from 1 to 1000.

4 In the second **Width** field, select **pixel** or **percentage** as the measure to resize by.

5 Select **OK**.

➤ To wrap the text of a column:

1 Select the column with the text to wrap.

2 From the table action bar, select **Format**, and then **Wrap**.

Showing Data

You can select the type of data to display in the data grid including:

- Valid Data—Data that was mapped properly and is exported to the target application.
- Invalid Data—One or more dimensions that was not mapped correctly and as a result, the data is not exported to target.
- Ignored Data—User defined explicit IGNORE maps to ignore while exporting to target. IGNORE maps are defined in the member mapping by assigning a special target member of IGNORE.
- All Data—Shows all valid, invalid and ignored data.

➤ To show a type of data:

1 Select **Show**.

2 Select from one of the following:

- Valid Data
- Invalid Data
- Ignored Data
- All Data

Drilling Through to Source Data and Viewing Mappings

When data has been displayed in the Data Load Workbench, you can drill through to the source, view mappings and open the source document.

Note: If the source system is E-Business Suite/PeopleSoft and you have metadata rules, then the drill region is created based on the metadata rule. Otherwise, it is created based on the target members in the data load mappings. For Year, Period, and Scenario, FDMEE uses audit information to create the drill region.

➤ To drill through to the source mapping:

1 Select the type of data to display in the data grid.

See "Showing Data" on page 198.

2 In **Source Amount** column, select an amount.

3 Click the source amount link and select **Drill through to source**.

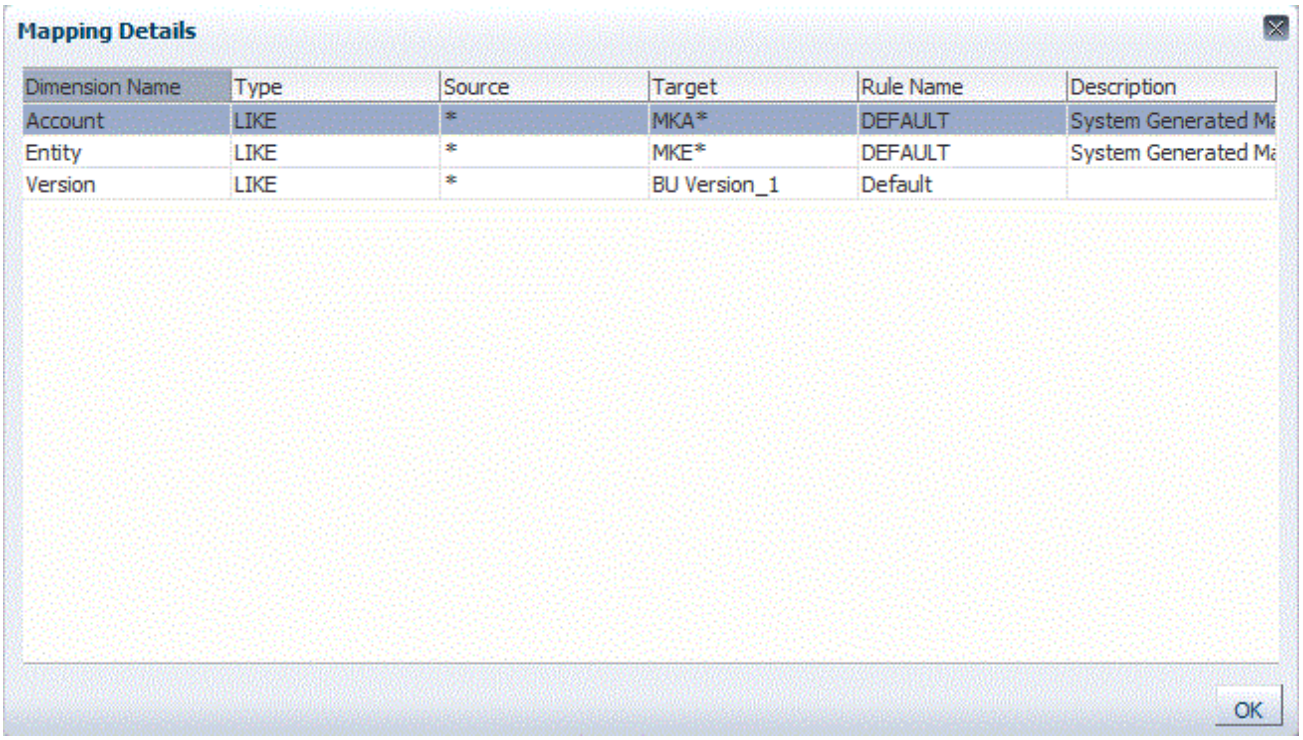
➤ To view the source mapping detail:

1 Select the type of data to display in the data grid.

See "Showing Data" on page 198.

2 From the **Source Amount** column, select an amount.

3 Click the source amount link and select **View Mappings**.



Opening Loaded Data in Microsoft Excel

When reviewing data in the workbench, users can drill down from the amount to Enterprise Resource Planning (ERP) source system. In the source system the data is displayed in the granularity with which it was loaded.

You can open loaded data in Microsoft Excel and review how the data is defined.

➤ To open loaded data in Microsoft Excel:

1 From the table action bar, click .

2 Open the loaded data in Microsoft Excel.

Querying by Example

Use the Query by Example feature to filter rows that are displayed for a specific column. You can enter text to filter on, if available, for a specific column, and then press [Enter]. To clear a filter, remove the text to filter by in the text box, then press [Enter]. All text you enter is case sensitive.

➤ To query by example:

1 From the table action bar, click to enable the filter row.

The filter row must appear above the columns to use this feature.

2 Enter the text by which to filter the values in the column and press [Enter].

Note: When entering text to filter, the text or partial text you enter is case-sensitive. The case must match exactly. For example, to find all target applications prefixed with "HR," you cannot enter "Hr" or "hr."

Freezing Data

Use the Freeze feature to lock a column in place and keeps it visible when you scroll the data grid.

➤ To freeze a column:

1 Select the column to freeze.

2 From the table action bar, click .

➤ To unfreeze a column:

1 Select the frozen column.

2 On the shortcut menu, select **Unfreeze**.

Detaching Data

Use the Detach feature to detach column from the data grid, When you detach the grid, columns display in their own window. To return to the default view, select **View**, and then click **Attach** or click **Close**.

➤ To detach columns:

1 Select the column to detach.

2 From the table action bar, click .

The data grid is displayed in a separate window.

➤ To reattach columns:

1 Select the column to reattach.

2 From the table action bar, select **View**, and then **Attach**.

Wrapping Text

You can wrap text for each cell automatically when text exceeds the column width.

➤ To wrap text for a column:

1 Select the column with the text to wrap.

2 Click .

Attaching Cell Text and Documents to a Data Cell

The cell text feature enables you to attach text and documents to a data cell. Multiple instances of cell text can be added as needed. FDMEE archives documents in `EPM_ORACLE_HOME/products/FinancialDataQuality/data` directory. Cell text can only be exported in Financial Management applications.

Note: FDMEE does not load multiple cell text to an intersection in Financial Management. If a load using an append mode is run and new cell text is added to an intersection that already has cell text, the old cell text is replaced by the new cell text and not appended.

➤ To assign cell text and attach documents:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

2 In **Data Load Workbench**, select the data cell.

3 From the memo column ( ) in the column heading, click the memo link ( ) to the left the data cell.

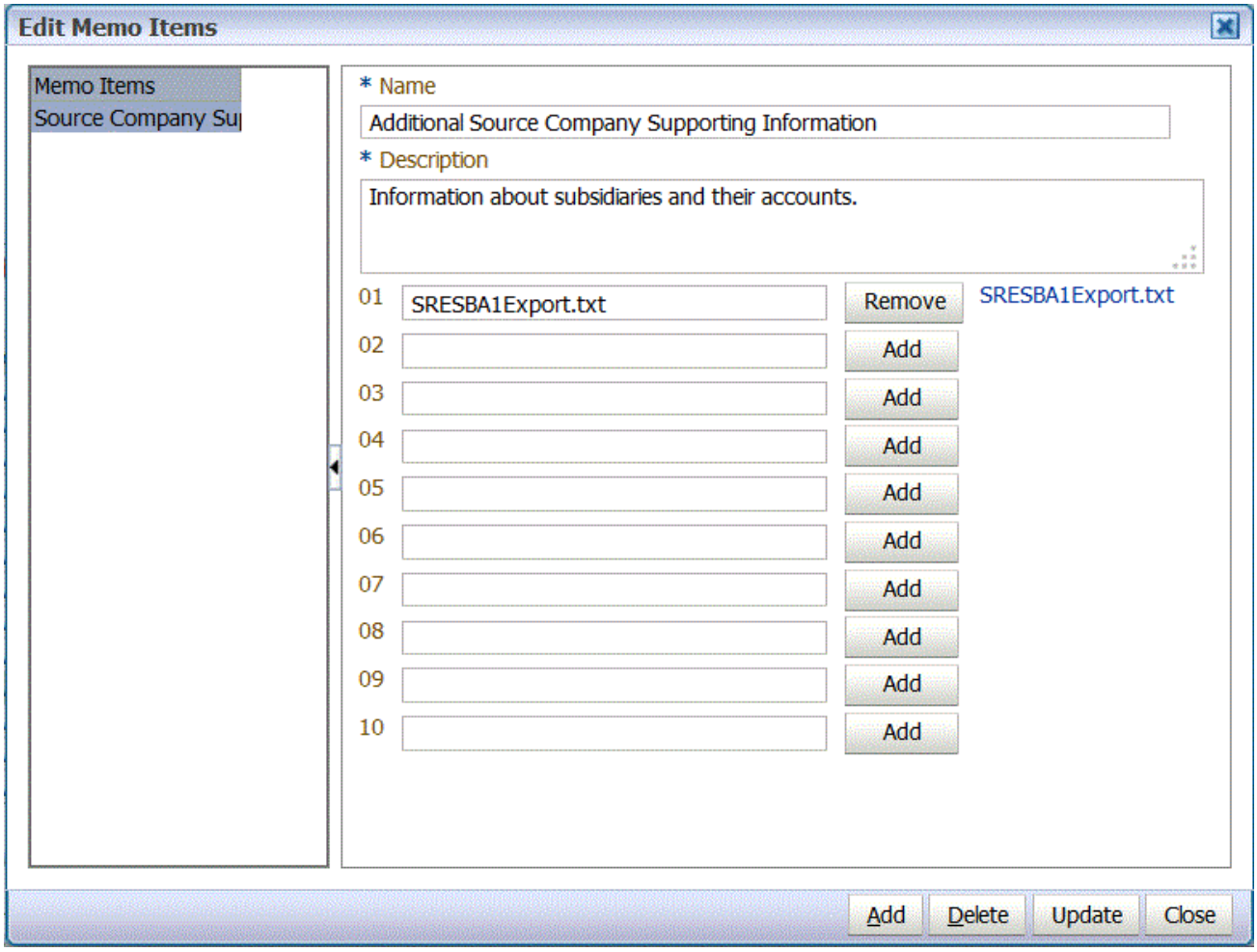
4 From **Edit Memo Items**, click **Add**.

5 In the **Name** field, enter a name of the memo.

6 In the **Description** field, enter a description of the memo.

7 Click **Add** (to the right of an Attachment field).

8 On the **Select** screen, browse and select an attachment, and then click **OK**.



9 Click **Update**.

10 Click **Close**.

11 **Optional:** To remove an attachment, click **Remove** (to the right of an Attachment field).

Viewing Process Details

You use the Process Details page to view submitted rule status and logs.

➤ To view data rule process details:

1 On the **Workflow** tab, under **Monitor**, select **Process Details**.

The Process Details page is displayed, showing processes for all source systems. The following columns are displayed for each process:

- **Process ID**—An automatically generated identification number
- **Status**—Displays a visual indicator for the status of the process. You can rest the cursor over the icon to view a Screen Tip. Available statuses:
  - ✔ —Rule Processed Successfully

- ❍ —Rule Execution did not complete successfully

- **Log**—Click **Show** to display the log file.
- **Location**—Displays the location name
- **Process Name**—Type of process

  Types of processes include:

  - ❍ **Data Load**—Initiated when you run a data load rule.
  - ❍ **Metadata Load**—Initiated when you run a metadata load rule.
  - ❍ **HR Load**—Initiated when you run an HR data load rule.
  - ❍ **Purge Process**—Initiated when you remove an artifact, such as a target application or source system.
  - ❍ **Initialize Source System**—Initiated when you initialize a source system.
- **Rule Name**—Name of the rule
- **Source System**—Name of the source system
- **Accounting Entity**—Name of the source accounting entity
- **Target Application**—Name of the target application
- **ODI Session Number**—The session number in Oracle Data Integrator. You can use this to look up a session in Oracle Data Integrator.

  Note: The ODI Session number is present in Process Details only when the data is processed during an offline execution.
- **Job ID**—The Performance Management Architect job ID

  Process By—The user ID who initiated the process
- **Reset Status**—Resets the status to failed if a process continues to stay in a running status for a long period of time.
- **Link**—Shows the log information for the process step. In the case of File Import, it shows skipped rows, and in the case of export to Planning, it shows rejected rows and so on.

2 **Select a process to display the details:**

- **Status**—For each process step, the status is displayed. You can troubleshoot a problem by viewing at which point the process failed.
- **Process Step**—Displays the steps in the process.
- **Process Start Time**—Time that the process step started.
- **Process End Time**—Time the process step ended.
- **Log**—If a log is available, you can click **Show** to display the log contents.

3 **Optional: To filter the rows that are displayed, ensure that the filter row appears above the column headers. (Use the to toggle the filter row.) Then, enter the text to filter.**

You can filter:

- Status—Enter SUCCESS, FAILED, or WARNING.
- Process ID
- Location
- Rule Name
- Source System
- Accounting Entity
- Target Application

Note: When entering text to filter, the text or partial text that you enter is case sensitive. For example, to find all target applications prefixed with "HR," you cannot enter "Hr" or "hr." For additional information on filtering, see "FDMEE User Interface Elements" on page 36.

Using Excel Trial Balance Files to Import Data

An Excel trial-balance file is an Excel spreadsheet that, through the import screen, is formatted to one period, category, and location.

An Excel trial-balance file is an Excel spreadsheet that, through the import screen, is formatted to one period, category, and location.

Text Trial Balance Files Versus Excel Trial Balance Files

Text trial-balance files and Excel trial-balance files are similar in two ways: They are both loaded to the current POV (category and period), and, on the import form, they use the same Append and Replace options.

Text trial-balance files and Excel trial-balance files differ in one way: text files can use only the standard import format, but Excel data files do not use any import formats.

When you an Excel Trail Balance template, the template can contain one or more periods. When doing a multiple period load, you need to create a dummy import format that indicates multiple periods. If just a single data value is in the Excel file, then you don't need an import format.

Downloading an Excel Trial Balance Template

➤ To download an Excel trial balance template:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

2 From the **Download Template** drop-down, select **Trial Balance**.

3 From the **Open** screen, open or save the template and click **OK**.

Defining Excel Trial Balance Templates

To define an Excel trial-balance template, you define the first row of the named region, which contains the metadata tags. Other information may be defined outside of the region, but the system only considers what is within the named region. For example, the template includes a title and an amount summary. These are outside the named region and are not processed when loading data.

To load data using a template, the system uses a named range definition to find the dimensions and the related data. For the trial balance template, the predefined range is called `upsTB`, and it can be seen using the "Name Manager" option in Excel.

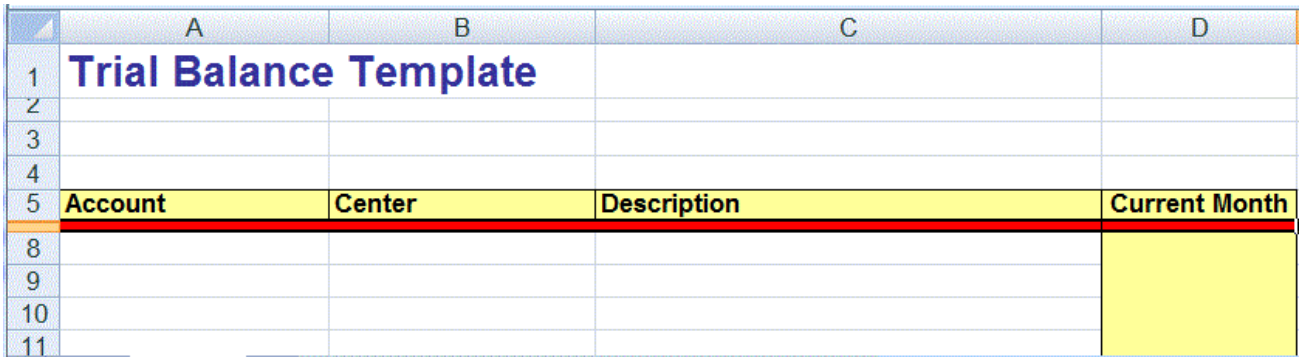
The following template contains one line of metadata (row 1) and three lines of imported data (rows 5–7).

Dimension Values and Amount should be populated in the respective columns as per the Tags defined in row 1. To add additional dimension tags, add columns. Add data by adding rows.

When adding rows or columns, add them within the named region. Excel updates the region definition automatically. If you add rows outside of the region, update the region to include these new rows or columns. When adding dimension columns, add a dimension tag to specify when the column is an account, entity, intercompany transaction, amount or user defined (UD) dimension. Note that the entity dimension is represented by the tag for "Center."

FDMEE Dimension	Valid Tags
Account (Required)	A, Account, SrcAcctKey
Center (Required)	C, Center, SrcCenterKey
Description (Optional)	D, Description, SrcAcctDesc
IC Counter Party (Optional)	I, IC, ICCoParty
User Defined 1-User Defined 20 (Optional)	1-20, UD1-UD20, UserDefined1-UserDefined20
Amount (Required)	V, Amount, SrcAmount

In the template that is provided with FDMEE, some of the rows are hidden. To update the columns and the column tags, you need to unhide these rows. To do this, select the row above and below the hidden rows, and then update the cell height. A setting of 12.75 is the standard height for cells, and this should show all of the hidden rows for the selected range in the sheet. You may want to re-hide the rows after you have made the necessary changes.



Adding a Multiple Period Data Load using Excel

You may also use the Excel Trial Balance template to load data to multiple periods. To do this, create a data rule using a multiple period import format. The import format does not have to contain any detail mappings, only the definition must have a multiple period. Using the multiple period data rule you can import the Excel Trial Balance File. You create a dummy import format and only select the specification for the multiple period. To load data for multiple periods, the column header must be in the format V1:PeriodKey, V2:Periodkey, etc. The period key must be specified in YYYY/MM/DD format You do not have to define the source period mapping in the data rule. You also need to update the range to make sure any additional columns are included in the range. Below is a sample of an Excel file.

5	Account	Center	Description	Jan	Feb
6	A	C	D	V1:2013/1/1	V2:2013/3/1
8	Revenue	100		110	1,300
9	Expense	100		500	500
10					

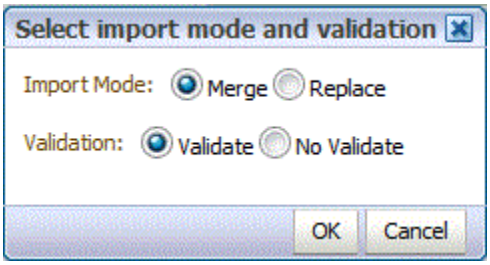
Importing Excel Mapping

You can import Excel mappings by selecting the Import option and selecting an Excel mapping.

Note: The import of mapping rules using an Excel template provides a place to specify a mapping script.

➤ To import an Excel mapping:

1. On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.
2. Select the **All Mapping** tab.
3. From the **Import** drop-down, select **Import from Excel**.
4. From **Select a file to import**, select the Excel file to import, and then click **OK**.
5. From **Select mode and validation**, in **Import mode**, select the import mode.



- Merge—Overwrites the data in the application with the data in the Excel data load file.
- Replace-Clears values from dimensions in the Excel data load file and replaces them with values in the existing file.

6. Click **Validate** to validate the mappings.
7. Click **OK**.

The mapping inherits the default data load rule, and the description of "System Generated Mappings."

Using Journal Templates to Import Data

In Financial Management, you use journals to adjust data after it has been entered or loaded into base level entities. Journals provide an audit trail of changes made in the application and indicate, which users made adjustments and which accounts, entities, and time periods are affected.

FDMEE enables you to load Financial Management journal entries with journal templates. These templates are Excel spreadsheets that are formatted as journal entry input screens.

FDMEE journal templates are typically used for the following types of adjustments:

- GAAP adjustments to general ledger files
- Transformations of gross balance accounts into roll-forward accounts (Beg, Add, Del, End)
- Supplemental data entries (Head Count, Ratios, and so on)

Additional Considerations for Loading Journal Templates

Note the following when loading journal templates:

1. Journals may only be loaded manually by way of the FDMEE user interface. You cannot load journals in offline or batch mode.
2. The Financial Management journal group is not supported, only the journal label. The journal ID from the journal template is used as the journal label when loading to Financial Management, and the group is left blank.
3. Only one description per journal is loaded, and the load process uses the last description it finds as the description for the journal.

Integrating Financial Management Journals

The integration Financial Management journal feature with FDMEE involves setting up the FDMEE application options, and integrating data values.

Financial Management Application Options

The following Financial Management application options must be configured before using the Journal feature in FDMEE:

- Enable Journal Load
- Journal Enable JV ID per Entity
- Journal Balancing Attribute
- Journal Status

For information on setting up any of the above options, see "Defining Application Options for Financial Management" on page 81.

Data Values

Data value is an extra dimension that is only used when integrating with a Financial Management multi-dimension target system. The name of the dimension is "Value". The members in this dimension are: [Contribution Adjs], and [Parent Adjs]. When data is loaded to Financial Management, specify a member of the value dimension to indicate where the data is loaded. In the Location definition in FDMEE, specify an entry for the value dimension in the Data Value field. The Data Value is set on the Location screen by selecting the Search link.

When FDMEE creates the load file, this dimension value is entered for every data line loaded by this location. You must enter a value in this field to integrate with Financial Management, or else the validation fails. The default value is Data Value <Entity Currency>.

If you load journals to Financial Management, you can specify the value dimension member for data loads and for journal loads. The first ";" is the value member used for data loads, and the second field by ";" is the value member for journal loads.

When using the template, the system picks up the value member by looking for the second field delimited by" ;" in the value member field in the location

When Search is selected, FDMEE connects to the Financial Management to get a list of valid data values. FDMEE takes the values from Financial Management and adds rows created by FDMEE that are a concatenation of the original value and "Adjustment Data Values". FDMEE uses these newly created rows to manage journal loading to Financial Management.

The rows that FDMEE creates in the Data Value selection screen are:

- [Contribution Adjs];[Contribution Adjs]
- [Contribution Adjs];[Parent Adjs]
- [Contribution Adjs];<Entity Curr Adjs>
- [Contribution Adjs];<Parent Curr Adjs>
- [Parent Adjs];[Contribution Adjs]
- [Parent Adjs];[Parent Adjs]
- [Parent Adjs];<Entity Curr Adjs>
- [Parent Adjs];<Parent Curr Adjs>
- <Entity Curr Adjs>;[Contribution Adjs]
- <Entity Curr Adjs>;[Parent Adjs]
- <Entity Curr Adjs>;<Entity Curr Adjs>
- <Entity Curr Adjs>;<Parent Curr Adjs>

Downloading a Journal Template

➤ To download a Journal template:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

2 In **Download Template**, select **Journal**.

3 On the **Open** screen, open or save the template, and then click **OK**.

Defining Journal Templates

You define an FDMEE journal template by specifying the metadata header that FDMEE uses to interpret the data contained in the template. Metadata consists of a series of tags that tell FDMEE what column contains the account number or what period in which to load. A named range is used to tell the system where to look for the header information and the data to load. For the journal template, the named region is called upsJournal, and the following details relate to the relative rows within the named range. The template that comes with FDMEE has a range that starts at row 16, but the metadata starts at row 1 within the range. See below for an example of the template that is provided with FDMEE.

The sample journal template below has two lines of actual imported data, and five lines of metadata. Rows 1-5 contain metadata and rows 6 and 7 contain the data values.

	A	B	C	D
1	ID-Texas100		1_Texas	
2			ACTUAL05	
3			1/31/2005	
4			A	
5	A	C	V	D
6	1100	Texas	500.00	Reclass Cash
7	1210	Texas	(500.00)	Reclass Cash

Metadata Structure

The metadata header (Row 1-5) instructs FDMEE on how to find the relevant segments of data that it handles in this template. The following Row 1-5 topics explain how each piece of metadata is used by FDMEE.

Row 1 (Journal ID and Location Tag)

The tag in row 1 is used to set the Journal ID and the FDMEE location that the data should be loaded into. The Journal ID must be placed in row 1 of the Account column. Place the Location tag in row 1 of the Amount column.

Note: Limit the journal ID to ten characters.

Row 2 (FDMEE Category Tag)

The tag in row 2 sets the FDMEE category into which the journal loads. The category must be a valid FDMEE category. The FDMEE Category tag must be placed in the Amount column.

Row 3 (FDMEE Period Tag)

The tag in row 3 sets the period that the data should be loaded into. The period must be a valid FDMEE period. This tag must be placed in the Amount column.

Row 4 (Load Method Tag)

The tag in row 4 sets the journal load method within FDMEE. To append to an existing journal with the same Journal ID, type the letter **A**. If a journal exists with the same Journal ID within the same FDMEE point of view, then the new journal is appended to the previously submitted journal. To replace an existing journal with the same Journal ID, type the letter **R**.

If a journal exists with the same journal ID within the same FDMEE point of view, then the new journal replaces the old journal. This tag must be placed in the Amount column. The table below defines the possible tags. The "AZ" and "RZ" settings work the same as the "A" and "R" methods except that all zero value amounts are suppressed.

Method	Valid Tags
Append Journal	A, Append
Replace Journal (default)	R Replace
Append journal - Zero Suppress	AZ
Replace journal - Zero Suppress	RZ

Row 5 (Dimension Tags)

The tags in row five define the dimension that the amounts are loaded into. The table below defines the possible dimension tags.

FDMEE Dimension	Valid Tags
Account (Required)	A, Account, SrcAcctKey
Center (Required)	C, Center, SrcCenterKey
Description (Optional)	D, Description, SrcAcctDesc
IC Counter Party (Optional)	I, IC, ICCoParty
User Defined 1-User Defined 20 (Optional)	1-20, UD1-UD20, UserDefined1-UserDefined20
Amount (Required)	V, Amount, SrcAmount

Creating Range Names Within Journal Templates

To define a journal template, you create a range name that includes all metadata and data cells and that begins with the prefix *ups*. For example, for a standard template, create the range name `[upsStandardJV (A1 to D7)]`.

A journal template requires a named range. You can specify as many named ranges as needed. To do this, duplicate the original range included with the template. FDMEEFDMEE processes as many named ranges as the template file contains.

The following template references upsJournal, which starts at row 16. Therefore, rows 16–20 are the first five rows (the metadata header) of ups.journal. And, therefore, the metadata of the template is placed in rows 16–20.

Rows 4–14 provide an interface that facilitates creation of the metadata header. Metadata information is input in rows 4–14 and referenced by the metadata header.

(Enter journal data against the respective columns and by adding more rows within the range. The easiest thing to do is to add rows to the existing range and just use a single range, and use the default upsJournal. You add columns to the spreadsheet based on the dimensionality of the target application.)

	A	B	C	D	E	F	G	H	I	J
1		**HFM Journal Entry**								23-Jul-13
2										
3		Journal Voucher								
4										
5		Journal ID:		Enter the Journal ID. It must 10 or less characters						
6										
7		Location:	SRESBA2_EP900SB	Enter the Location Name. It must match the value in POV in the User Interface						
8										
9		Category:	Current	Enter the Category Name. It must match the value in POV in the User Interface						
10										
11		Period:	3/1/2003	Enter the Period Name. It must match the value in POV in the User Interface						
12										
13		Load Method:	R	A = Append, R = Replace						
14										
15		Account	Center	Amount	Description	IC	UD1	UD2	UD3	UD4
16		0		SRESBA2_EP900SBA						
17				Current						
18				3/1/2003						
19				R						
20		A	C	V	D	I	1	2	3	4
22										
23										
24										
25										
26										
27										
28										
29										
30										
34			Balance:	$0.00						

Processing Journals

The process for processing journals is:

1. Load the journal file in Excel format from the `inbox` directory.
2. Check whether the POV entered in the journal matches the current POV in FDMEE. The `ups` range is also checked.

When a journal is checked in, FDMEE examines the template for all ranges with names beginning with `ups`. It then examines and validates the metadata tags found in each `ups` range. FDMEE does not check in metadata segments that include an invalid range.

3. Post the journal.

Loading Journals

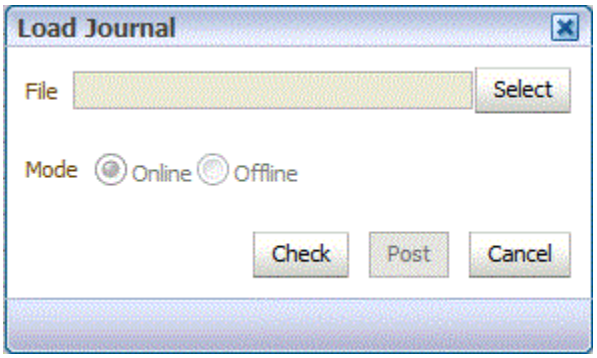
➤ To load a journal:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

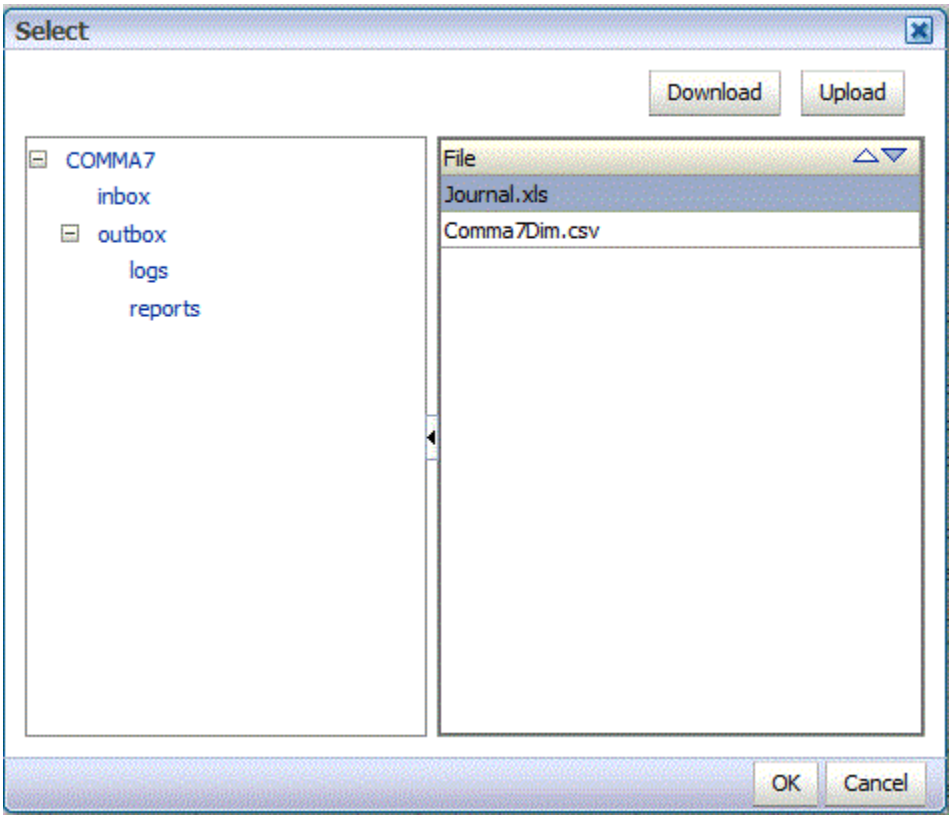
2 **Optional:** When you load a journal, FDMEE uses the current POV to determine location, category, and period. To use another POV, select another POV. For information on changing the POV, see "Using the POV Bar" on page 37.

3 Click **Load Journal**.

When a journal has been successfully loaded, the **Check** button is enabled. Complete the steps described in the "Checking In Journals" on page 213.



4 **Optional:** On the **Load Journal** screen, to browse for a journal file, click **Select**.



a. On the **Select** screen, navigate to the journal file to load.

   The journal file must be an Excel file (.xls).

b. **Optional**: To download a journal file, click **Download** and open or save the journal file.

c. **Optional**: To upload a journal file, click **Upload**, then navigate to the file to upload, and click **OK**.

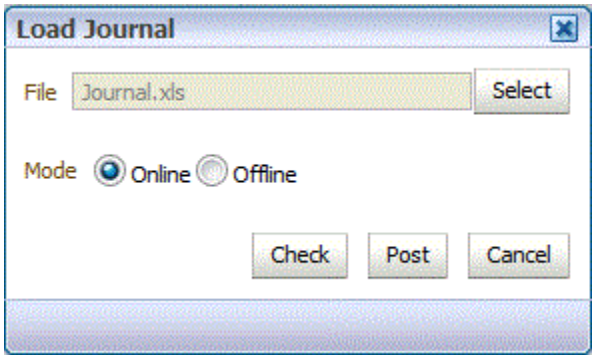
Checking In Journals

Before journals can be posted, they must be checked in. This process verifies whether the POV entered in the Excel file for the journal matches the current POV. It also ensures that the `ups` range is valid. If the validation is successful, the Post button is enabled.

➤ To check in journals, from the Load Journal screen:

1 **Make sure that a successfully loaded journal file is in the File field.**

   The journal file must be an Excel (.xls) file type.



2 Click **Check**,

3 Select **Online** or **Offline** for the processing method.

Online checking runs immediately, and offline checking runs in the background.

4 Click **Check**.

When a journal is checked in, FDMEE examines the journal file for all ranges with names beginning with `ups`. It then examines and validates the metadata tags found in each `ups` range. FDMEE does not check in metadata segments that include an invalid range.

Posting Journals

After a journal has been checked in successfully, you can post the journal. Posting a journal appends or replaces the data displayed in the Import Format screen (as determined by the load method specified in the journal).

➤ To post the journal:

1 Select the journal.

2 Click **Post**.

Journal Security

If the POV Lock option is enabled, FDMEE administrators and end users are restricted to posting journals to the FDMEE global POV.

Loading Excel Data

Use the Load from Excel feature to load data to and from a Microsoft Excel workbook. This feature enables you to load large amounts of application information and entity types without having to enter each line manually, and to push data into tables without SQL access.

Available options include:

- Download to Excel—Select an entity and download the data from the corresponding table to an Excel spreadsheet.
- Upload from Excel—Import source data representing one more ranges from an Excel speadsheet.

Caution! When loading data using this method, FDMEE does not validate the data. It is the responsibility of the user to validate the date using this method.

Downloading to Excel

You can select a FDMEE entity and download the data from the corresponding table to an Excel spreadsheet.

When downloading to Excel, note that the format of the Excel file must include:

- table name
- Column names in the second row
- Data from the table

The following example shows how a Period entity is mapped in Excel:

TPOVPERIOD					<- Table Name
PERIODKEY	PRIORPERIODKEY	PERIODDESC	PERIODTARGETM	YEARTARGET	<- Column Name
1/1/2013	12/1/2012	Jan-13	Jan	2013	<- Data
2/1/2013	1/1/2013	Feb-13	Feb	2013	
3/1/2013	2/1/2013	Mar-13	Mar	2013	

➤ To download data to an Excel spreadsheet:

1 On the **Setup** tab, under **Integration Setup**, select **Excel Interface**.

2 From **Excel Interface**, then **Download to Excel**, and then from **Entity Type**, select the FDMEE entity from which to download data.

Available entity types:

- Application Category Mapping
- Application Period Mapping
- Batch Definition
- Batch Groups
- Batch Jobs
- Category Mapping
- Check Entity Group
- Check Entity Item
- Check Entity Detail
- Check Entity Header
- Data Rule
- Data Rule Parameters
- Import Format Detail-Adapter

- Import Format Detail-ERP
- Import Format Detail-File
- Import Format Header
- Location
- Logic Group Detail
- Logic Group Header
- Period Mapping
- Source Period Mapping
- User Setting
- Other (prompts for table name)

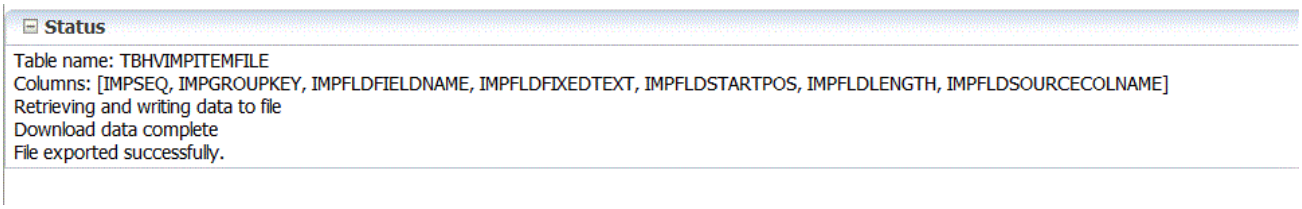
3 **Optional:** If you selected an "Other" entity type, enter the name of the table in the **Table Name** field.

4 In **File**, enter the name of the Excel file towhich to download the data.

You can also download a file by clicking **Select**, navigating to the file on the Select screen, entering the new file name, and then clicking **Download**.

5 Click **Download**.

When the Excel spreadsheet is uploaded. the names of the tables and columns that have been downloaded are shown, and the message: "File imported successfully" is displayed.



6 **Optional:** To open the downloaded Excel file, next to the File name field, click **Select**.

From the **Select** screen, choose the Excel spreadsheet and click **Download**.

Save or open the Excel spreadsheet.

Uploading from Excel

An Excel spreadsheet that is used as an import source represents one or more ranges. The first cell of a range contains the name of the FDMEE table to be imported. The second row of a range contains the column names of the table identified in the first row. Rows 3 and higher contain the data to be loaded to FDMEE.

Range names begin with the FDMEE import identifier *ups*, for example, *upsCategory*. When imported tables are related, the parent table must be imported prior to the child table. Range names process in alphabetical order. To ensure the correct parent-child order, assign range names such as *upsAParentand upsBChild*.

Also note the following behavior when uploading data from Excel:

- Data is only inserted. It cannot updated or deleted.

- Data is not validated.
- When FDMEE encounters a duplicate row, the row is skipped.

➤ To upload data from an Excel spreadsheet:

1 **On the Setup tab, under Integration Setup, select Excel Interface.**

2 **From Excel Interface, and then Upload from Excel, in File, enter the name of the Excel file to upload.**

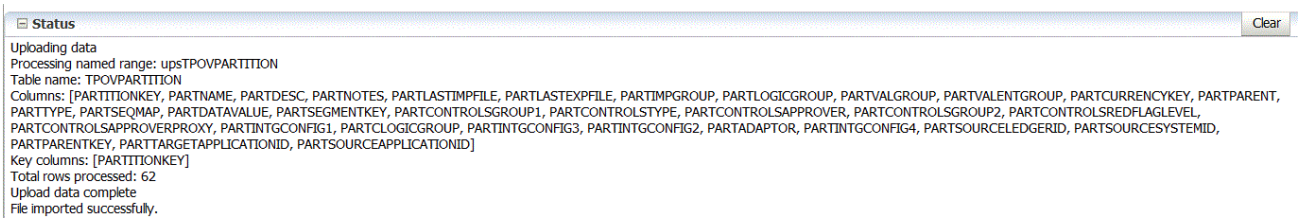
You can also select a file by clicking **Select**, navigating to the file on the Select screen, and clicking **OK**.

3 **Click Upload.**

4 **Optional: To open the downloaded Excel file, next to the File name field, click Select.**

5 **Optional: You can also click Upload and browse to and select an Excel spreadsheet from an alternate directory.**

When the Excel spreadsheet is uploaded correctly, the Status pane shows the processed ranges, and the message: "File imported successfully" is displayed.



Financial Close Management Integration with FDMEE

As part of the overall Financial Close process, FDMEE enables data load from Enterprise Resource Planning (ERP) systems and files to EPM Applications. Oracle Hyperion Financial Close Management, which manages the period end close activities, initiates data load activities from within Financial Close Management. As the financial close processes are time-bound and work flow driven, Financial Close Management users trigger the processes based on task alerts and notifications.

Integration between FDMEE and Financial Close Management is achieved using the interactive mode. This type of intergration enables Financial Close Management users to reach the Data Load Workbench of FDMEE by clicking a task link (URL) in Financial Close Management.

In this scenario, a user may respond to an email notification of a task to load data. When a user clicks the link (URL) in the mail, he or she can access the FDMEE from which to load data.

The Financial Close Management user transfers control to the Data Load Workbench and can continue with the rule execution process in an interactive way.

An example of the link (URL) is:

```
http://<YourServer>:19000/workspace/index.jsp?
module=aif.launch&povLocationName=COMMA7DIM&povPeriodName=Jan-05&povCat
egoryName=Actual&povRuleName=COMMA7DIM
```

Parameters passed to the Data Load Workbench are:

- povRuleName—Data Rule Name
- povLocation—Location
- povCategory—Category
- povPeriodName—Period

When the URL is defined in Oracle Hyperion Financial Close Management, note the following:

- The URL requires all parameters.
- When a parameter has a space, enter the parameter with the spaces, but do not specify quotation marks (“”) around the parameter. (Parameters are passed in a standard URL request format).
- The delimiter is “&” in the URL.

Synchronizing and Writing Back Data

Subtopics

- Data Synchronization
- Write-Back

Data rules must be defined to load from an Enterprise Resource Planning (ERP) to an EPM application, synchronize data between two EPM applications, or write back from an EPM to an ERP system.

- EPM Applications to EPM Applications (data synchronization)—Moves data between EPM applications, for example, copying data from Financial Management to Essbase for reporting.
- EPM Applications to Enterprise Resource Planning (ERP) Applications (write-back)—Moves data from EPM Applications to ERP applications, for example, writing back budgets created in Planning to Peoplesoft or E-Business Suite ERP GL, or moving Adjustment Journals from Financial Management or the Accounts Reconciliation Manager to ERP Systems like E-Business Suite or Peoplesoft.

Data Synchronization

Data synchronization enables you to synchronize and map data between EPM source to target applications irrespective of the dimensionality of the application simply by selecting the source and target EPM application, and then mapping the data. Given the powerful mapping features already available, the data can be easily transformed from one application to another application. For example, synchronizing data enables you to take the data loaded from your General Ledger to Planning, and then transformed into budget information, back to the General Ledger.

Tasks enabled by the data synchronization:

- Create and modify synchronizations.
- Select source and target applications.
- Define mappings between sources and targets.
- Copy data from Financial Management to Essbase for reporting purposes.
- Copy consolidated data from Financial Management to Planning for future planning.
- Copy from one Financial Management application to anotherFinancial Management used for different statutory reporting purposes.
- Write data from EPM System to Enterprise Resource Planning (ERP) applications.
- Validate synchronizations.
- Execute synchronizations.
- View logs of synchronization activities.

Data synchronization enables you to create synchronizations between Financial Management, Planning, Profitability and Cost Management, Essbase (ASO), and Essbase (BSO) as destinations, and the following sources:

- Financial Management
- Planning
- Profitability and Cost Management
- Essbase (ASO)
- Essbase (BSO)

At a high level, the steps to synchronize data in FDMEE include:

1. **Import Format**—Select the source and target EPM System applications

   The dimensional mapping is also defined in the import format. You map the dimensions that comprise each source and target application so that the synchronization can recognize all relevant elements.
2. **Data Load Rule**—Define the source filter parameters.
3. **Execute**—When the data rule is executed, data from the source EPM System is extracted to a file. The data can be imported and processed using the data load workflow process.
4. **Export**—Synchronizes the data.

Using Data Load Rules for Synchronization

When synchronizing data, you specify which records (rows) are extracted from the source EPM Application to the target EPM Application.

Additionally, you can:

- Specify the source filter option to select a dimension, and then enter the filter criteria for each dimension.
- Browse and select members within a dimension.

- Load data to a single period or a range of periods.
- Add or change any target options for the Planning application.

➤ To define the data load details for a target EPM or Enterprise Resource Planning (ERP) system (file-based source system):

1 In **Name**, enter the data load rule name.

2 In **Category**, select a category.

The categories listed are those that you created in the FDMEE setup, such as "Actual." See "Defining Category Mappings" on page 120.

3 **Optional**: Enter a description.

4 In **Plan Type**, select the plan type.

5 In **Period Mapping Type**, select **Default** or **Explicit**.

6 **Optional**: Add or change any source filter options.

See "Defining Source Filters" on page 222.

7 **Optional**: Add or change any target options.

See "Registering Target Applications" on page 67.

8 Click **Save**.

Using Default or Explicit Period Mapping Types

You can run data rules for one period or a range of them. The global or application period mappings of the target application are used as in the standard data load process.

Note: When specifying a period range, make sure the start and ending periods are within a single fiscal year. When data ranges cross fiscal years, duplicate data results.

The source periods to be extracted are determined by the period mapping type.

Default Period Mapping

Default period mappings default to the list of source application periods using the application or global period mappings based on the period key. The list of source periods is added as Year and Period filters. For example, you can load data loading from Financial Management to Essbase.

In the following example, Financial Management Application Period Mapping are loaded to Essbase Application Period Mapping for the period Jan-14 to Mar-15:

Table 34 Financial Management Application Period Mapping

Period	Year	Month
1/1/2014	2014	Jan

Period	Year	Month
2/1/2014	2014	Feb
3/1/2014	2014	Mar

Table 35 Essbase Application Period Mapping

Period	Year	Month
1/1/2014	FY14	January
2/1/2014	FY14	February
3/1/2014	FY14	March

Using the example above, when the data is loaded, FDMEE:

1. Uses the Essbase period mapping to determine the list of period keys: 1/1/2014, 2/1/2014, and 3/1/2014.
2. Determines the Financial Management period mapping, and inserts them into the AIF_PROCESS_PERIODS table.

   Note: You can have multiple source Financial Management period mappings to a given target Essbase period when the target application has a larger time frame (for example, Quarter) than the source period (for example, by Month).

3. Adds 2014 as a *Year* filter and Jan, Feb, Mar as *Period* filters.

Explicit Period Mapping

The Explicit method for loading data is used when the granularity of the source periods and target application periods are not the same.

For example, you need to load data from a Financial Management application with monthly periods and a Planning with quarterly periods.

In the following example, Financial Management Application Period Mapping are loaded to Essbase Application Period Mapping for the period Jan-14 to Mar-15:

Table 36 Financial Management Application Period Mapping

Period	Year	Month
1/1/2014	2014	Jan
2/ 1/2014	2014	Feb
3/1/2014	2014	Mar
4/1/2014	2014	April
5/1/2014	2014	May

Period	Year	Month
6/1/2014	2014	June

Table 37 Planning Application Period Mapping

Period	Year	Month
1/1/2014	FY14	Q1
4/1/2014	FY14	Q2

The result of this method of mapping:

Table 38 Result of loading Financial Management Application Period Mapping to Planning Application Period Mapping

Period	Year	Month	Fiscal Year	Quarter
1/1/2014	2014	Jan	FY14	Q1
2/1/2014	2014	Feb	FY14	Q1
3/1/2014	2014	Mar	FY14	Q1
4/1/2014	2014	April	FY14	Q2
5/1/2014	2014	May	FY14	Q2
6/1/2014	2014	June	FY14	Q2

Using the example above, when the data is loaded, FDMEE:

1. Determines the period key which is 1/1/2014, 4/1/2014.
2. Determines the Financial Management from the Financial Management period mapping to these period keys.

   This mapping returns Year: 2014 and Periods: Jan. Feb, Mar, Apr, May, and Jun.
3. Adds Year and Period as source filters.

Defining Source Filters

Source filters enable you select a dimension, and then enter a filter criteria for each dimension.

You can define source filter options to specify the subset of budget data to extract from your Planning application and load it to the general ledger.

➤ To define the EPM source filter options:

1 In the **Source Filters** area, click .

2 Select the **Dimension Name**.

3 To assign a filter condition, perform an action:

- Enter a member name or filter condition in the Filter Condition text box.

  For example, enter a member name or filter condition using Essbase syntax. Depending on the dimension, you can select one or more members as a filter condition used for extracting the budget data. For example, for the Entity dimension, you may select the following members: E1, E5, E6. For information on Essbase syntax, see the *Oracle Essbase Database Administrator's Guide*.

- Click to display the Member Select screen and select a member using the member selector. Then, click **OK**.

The Member Selector dialog box is displayed. The member selector enables you to view and select members within a dimension. Expand and collapse members within a dimension using the [+] and [-].

The Selector dialog box has two panes—all members in the dimension on the left and selections on the right. The left pane, showing all members available in the dimension, displays the member name and a short description, if available. The right pane, showing selections, displays the member name and the selection type.

You can use the V button above each pane to change the columns in the member selector.

You can also click **Refresh Members** to show the latest member list.

Note: Assign filters for dimensions. If you do not assign filters, numbers from the summary members are also retrieved.

To use the member selector:

a. In the list of available dimensions and members on the left, select a member and click .

b. To deselect a member from the list of members, click .

c. To add special options for the member, click and select an option.

   In the member options, "I" indicates inclusive. For example, "IChildren" adds all children for the member, including the selected member, and "IDescendants" adds all the descendants including the selected member. If you select "Children," the selected member is not included and only its children are included.

   The member is moved to the right and displays the option you selected in the Selection Type column. For example, "Descendants" displays in the Selection Type column.

   Tip: To clear all members from the list of selections, click .

d. Click **OK** twice to continue defining the source filter details.

The selected member is displayed in Essbase syntax in the Filter Condition field.

4 Click **Save**.

5 **Optional**: Change or add any target options.

Defining Target Options

Target options define the options for importing a journal.

Note: For information on the required target options for data load rules to write back, see "Defining Application Options for Essbase and Planning" on page 73..

➤ To define target Enterprise Resource Planning (ERP) source system options:

1 For Oracle Fusion and E-Business Suite source systems:

a. Select whether to create a budget journal.

b. Enter the **Budget** or click to select the budget.

c. Enter the **Budget Organization** or click to select the budget organization.

2 Click **Save**.

3 For PeopleSoft Enterprise Financial Management source systems, enter or click to make selections:

a. **Budget Scenario**

b. **Ledger Group**

c. **Ledger**

4 Click **Save**.

5 Execute the data load rule.

Executing Data Synchronization

You execute the data synchronization by clicking **Execute** on the Data Load Rule screen. When the data load rule is executed, the data extraction extracts data from the EPM System application based on the filter criteria specified in the data rule. The data extracted is written to a data file. If multiple periods are specified in the source filter, then the amount, columns are written as multiple columns. The data file contains the header record with the list of dimensions in the order in which they appear in the file. The file is created in the data folder with the name: *EPM App Name_PROCESS_ID*.dat.

Data Import

The data import process imports the data file created during the extraction process. The import process evaluates the import format based on the header record in the file and mapping of the source to target dimension.

When the number and order of columns is determined, the column position is stored in the import format tables. File import expressions and scripts remain available during import.

Mapping and Export

During the mapping and export, FDMEE:

- Imports data from Planning and writes it to FDMEE staging table.
- Applies the necessary transformation in the staging table.
- Imports data from Planning and writes it to FDMEE staging table.
- Applies the necessary transformation in the staging table.
- Exports data from the FDMEE staging table to a general ledger interface table.

  You use the mapping to format data in journal import tables.
- For Financial Management, FDMEE extracts data and ICP transactions. FDMEE does not extract cell text or line-item detail.

After a successful execution of the data load rule used to write back data, log in to the general ledger source system and run the budget import process in the general ledger.

Drill-Through to Source

FDMEE provides the framework to drill through from the EPM System applications back to the general ledger from the Oracle Enterprise Performance Management System source. Drill through works only for data loaded through FDMEE.

For example, you can drill through from where data was loaded from E-Business Suite to Financial Management, and then from Financial Management to Essbase. When you viewing Essbase data in Oracle Smart View for Office, you can drill from the Essbase data cell and go to the FDMEE landing page.

Write-Back

Financial budgeting information often must be compared with and controlled with actuals and stored in the general ledger system. In FDMEE, write-back functionality is available with the Export step of the data load process. In this way both loading to the Planning application and write-back to General Ledger are performed in as a single consistent process.

Data Load Rules for Write-Back

You can write back budgets created in Planning to their ERP General Ledger or a flat file. The write-back functionality is available with the Export step of the data load process. In this way both loading to the Planning application and write-back to General Ledger are performed in as a single consistent process.

For E-Business Suite, multiple ledgers can be used for the data load to write back with the following criteria:

- Ledgers must share the same chart of accounts.
- "Actuals" can be posted to multiple ledgers.
- "Budget" is associated with one ledger. One ledger can be posted from only one data load rule.

For Peoplesoft, "Actuals" can be posted without specifying the Budget Scenario. In addition, the write-backs can be made to multiple business units.

Available Source to Target Write-Backs

The target system for a write back must be a file-based application that uses dimensions that match the General Ledger Chart of Accounts. You can create the file-based application using the Custom Target Application feature (see "Creating a Custom Target Application" on page 69). When creating the application, ensure that the Export to File option is "Yes."

You can define data load rules to write back for Planning, Essbase aggregate storage (ASO), and Essbase block storage (BSO) 11.1.2.x applications only as the source and for these target source systems:

- PeopleSoft Enterprise Financial Management
- Oracle E-Business Suite
- Fusion General Ledger
- Financial Management to E-Business Suite

Budget & Actuals may be exported to Peoplesoft interface table: PS_HPYPB_ACCT_LN. Peoplesoft provides a Generate Journal Process only for Budget data. There is no process pre-defined to Generate Journal for Actual data. You must write a custom Journal template for the actual data.

Other Considerations:

- Data load to write back is supported only for Planning, Essbase aggregate storage, and Essbase block storage 11.1.2.x applications only. Applications created in earlier releases are not supported.
- For BSO Essbase applications, FDMEE requires that the Period dimension be designated as "Dense." Other dimensions can be Dense, but Period must be designated as dense to write back.
- Data load rules to write back are not supported for EPMA deployed aggregate storage Essbase cubes.
- For E-Business Suite source systems, you can post to budgets with or without budget journals.
- Only monetary and statistical amounts can be written back to the general ledger.

- You cannot create data load rules to write back to PeopleSoft Human Capital Management source systems.
- FDMEE loads data into the specific data interface table. You must then run the budget load routines provided by Oracle Fusion, E-Business Suite, or PeopleSoft Enterprise Financial Management.
- Allocation from a source amount to multiple target amounts is not provided.
- Data Load rules to write-back can be performed without first loading data from a GL source to an EPM target.
- The category assigned to upgraded and write back rules is randomly assigned and plays no role in the function of the rule. To view an upgraded rule, select Show All Categories, which may reveal "hidden" rules.
- When specifying a period range, make sure the start and ending periods are within a single fiscal year. When data ranges cross fiscal years, duplicate data results.

This table shows available source-to-target write-back combination:

Table 39 Available Source to Target Write Backs

	E-Business Suite Budget	E-Business Suite Actual	PeopleSoft Budget	PeopleSoft Commitment Control	PeopleSoft Actual	SAP	JD Edwards
Planning	Out of Box	Out of Box	Out of Box	Out of Box	Custom	Use custom application.	Use custom application.
Essbase	Out of Box	Out of Box	Out of Box	Not supported	Custom	Use custom application.	Use custom application.
Financial Management	Out of Box	Out of Box	Out of Box	Not supported	Custom	Use custom application.	Use custom application.
Profitability and Cost Management	Out of Box	Out of Box	Out of Box	Not supported	Custom	Use custom application.	Use custom application.
ARM	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported

Write-Back Security Access

The following interface tables require “write” security privileges for the data load rules to write back process:

E-Business Suite

- GL_INTERFACE
- GL_INTERFACE_CONTROL
- GL_BUDGET_INTERFACE

Standard PeopleSoft—PS_HPYPB_ACCT_LN

PeopleSoft Commitment Control

- PS_HYP_KK_BD_HDR
- PS_HYP_KK_BD_LN

See also Appendix B, "Source System Tables Used by FDMEE".

Creating Write-Back Mappings

➤ To create write-back mappings:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 Enter the **Location Name** or click to navigate and select the location.

3 Select the **Segment**.

4 Choose the type of mapping by selecting one of the following tabs: Explicit tab, Between tab, In Multi-Dimension, or Like tab.

- **Explicit**—The source value is matched exactly and replaced with the target value. For example, the source value, "ABC" is replaced with the target value, "123." "Explicit" write-back mappings are created the same for data load and data load to write back rules. See "Creating Mappings Using the Explicit Method" on page 144.
- **Between**—The range of source values is replaced with one target value. For example, a range from 001 to 010 is replaced with 999. "Between" write-back mappings are created the same for data load and data load to write back rules. See "Creating Mappings Using the Between Method" on page 145.
- **In**—In mappings enable a list of nonsequential source accounts to be mapped to one target account. In this case, multiple accounts are mapped to one account within one rule, eliminating the need to create multiple rules (as is required for an Explicit map).
- **Multi-Dimension**—Define member mapping based on multiple source column values.
- **Like**—The string in the source value is matched and replaced with the target value. For example, source value Department is replaced by Cost Center A. See "Creating Mappings Using the Like Method" on page 147.

  Write-back mappings provide a means to remove or strip characters that were added during the data load process. "Like" write-back mappings are created like a reverse data load.

Tip: You can click Refresh Values to refresh the list of segment or chartfield values that appear in the drop-down list from the source system. This is especially helpful when creating "Explicit," "Between," "Like," and "Multi-Dimension" mappings for data load rules to write back.

Defining Data Load Rules for Write-Back Scenarios (Data from EPM Planning/Essbase to Oracle Enterprise Resource Planning (ERP) Sources)

You create a data load rules to write back to extract budget data from application to a general ledger instance and ledger source.

You can create data load rules to write-back in these ways:

- Choose the Planning application.
- Choose the Essbase aggregate storage (ASO) or Essbase block storage application (BSO).
- Choose the Planning application.
- Choose the Essbase aggregate storage (ASO) or Essbase block storage application (BSO).
- For Public Sector Planning and Budgeting applications where you have consolidated personnel (HR) and non-personnel expenses in the aggregate storage cube, you pull information from the aggregate storage application. For nonpersonnel-related expenses you see only the total number (combination) in the aggregate storage application.

Note: Public Sector Planning and Budgeting require that you combine the regular planning results from an Essbase block storage cube, with the personnel position budget information in an Essbase aggregate storage cube to a new aggregate storage cube.

When performing the data load rule to write back for a Public Sector Planning and Budgeting application, you select the aggregate storage cube that you created in Public Sector Planning and Budgeting. You can also select a Planning application as the source for the write-back.

The process at a high level:

1. FDMEE imports data from Planning and writes it to a FDMEE staging table.
2. FDMEE applies the necessary transformation in the staging table.
3. Data is exported from the FDMEE staging table to a file based application.
4. After a successful execution of the data load rule to write back, view the results of the balances transfer from Planning to the file using the Data Load Workbench.

➤ To define data load rules to write back:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 Select the **Location Name** or click to select the location name.

3 Click **Add** to add a data load to write-back rule.

4 Enter the **Name**.

5 **For Planning applications**: Select the **Plan Type**.

6 **Optional**: Enter a description.

7 Click **Save**.

8 Define the source and target options.

Defining the Source Filter Options

You can define source filter options to specify the subset of budget data to extract from your Planning application and load it to the general ledger.

➤ To define the source filter options:

1 On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

2 From the **Data Load Summary**, select the data load rule.

3 Select the **Source Options** tab.

4 In the **Source Filters** area, click .

5 Select the **Dimension Name**.

6 To assign a filter condition, perform an action:

- Enter a member name or filter condition in the Filter Condition text boxThe selection syntax is based on the source type.

  For example, if Essbase is the source type, enter the member name or filter condition using Essbase syntax. Depending on the dimension, you can select one or more members as a filter condition used for extracting the budget data. For example, for the Entity dimension, you may select the following members: E1, E5, E6. For information on Essbase syntax, see the *Oracle Essbase Database Administrator's Guide*.

- Click to select a member using the member selector, and then click **Browse**.

The Selector dialog box is displayed. The member selector enables you to view and select members within a dimension. Expand and collapse members within a dimension using the [+] and [-].

The Selector dialog box has two panes—all members in the dimension on the left and selections on the right. The left pane, showing all members available in the dimension, displays the member name and a short description, if available. The right pane, showing selections, displays the member name and the selection type.

You can use the Menu button above each pane to change the columns in the member selector.

Note: Assign filters for dimensions. If you do not assign filters, numbers from the summary members are also retrieved.

To use the member selector:

a. In the list of dimensions and members on the left, select a member, and then click .

b. To clear a member from the list of members, click .

c. To add special options for the member, click , and then select an option.

In the member options, "I" indicates inclusive. For example, "IChildren" adds all children for the member, including the selected member. If you select "Children," the selected member is not included, only its children are included.

The member is moved to the right and displays the option you selected in the Selection Type column. For example, "Descendants" displays in the Selection Type column.

Tip: To clear all members from the list of selections, click .

d. Click **OK** twice to continue defining the source filter details.

The member that you selected is displayed in an Essbase syntax in the Filter Condition field.

7 **Click Save.**

8 **Define the target options.**

Defining Target Options (for Data Load Rules to Write back)

To write back to an E-Business Suite target, FDMEE captures the Enterprise Resource Planning (ERP) options (such as "Budget," "Journal Source," and "Journal Category") on the Target Options tab. For example, if you are writing back to the E-Business Suite Actual, you must select the balance type "A," and then you also need to specify the journal source and journal category. Or if you are writing back to the E-Business Suite Budget journal, then select balance type "B," specify "Y" for the "Create Journal" option, and specify the journal source.

Required data rule E-Business Suite target options are shown in the table below.

Table 40 Required E-Business Suite Target Options

E-Business Suite Target	Balance Type	Budget Option
E-Business Suite Actual	A	Journal Source, Journal Category
E-Business Suite Budget Journal	B	Create Journal = Y, Journal Source, Journal Category, Budget
E-Business Suite Budget	B	Create Journal = Y, Budget

Required data load rule Peoplesoft target options are in the table below.

Table 41 Required Peoplesoft Target Options

PeopleSoft Target	Option
Peoplesoft Budget	Ledger Group, Ledger, Budget Scenario
Peoplesoft Actual	Ledger Group, Ledger

The target options define the options for importing a journal.

➤ To define target Enterprise Resource Planning (ERP) source system options:

1 For Oracle Fusion and E-Business Suite source systems:

   a. Select whether to create a budget journal.

   b. Enter the **Budget** or click to select the budget.

   c. Enter the **Budget Organization** or click to select the budget organization.

2 Click **Save**.

3 For PeopleSoft Enterprise Financial Management source systems, enter or click to make selections:

   a. **Budget Scenario**

   b. **Ledger Group**

   c. **Ledger**

4 Click **Save**.

5 Run the data load rule for the write back.

   After you run the rule, perform required tasks in Fusion, E-Business Suite, and PeopleSoft Enterprise Financial Management.

Defining Financial Management to E-Business Suite Data Load Rules to Write-Back

Note: For required E-Business Suite target options, see Table 40 on page 231.

➤ To define Financial Management to E-Business Suite data load rules to write back:

1 On the **Workflow** tab, under **Data Load Rule**, select **Data Load Rule**.

2 From the **Data Load Summary**, select the data load rule.

3 Select the **Target Options** tab.

4 In **Create Budget Journal**, select **Yes** or **No** to create the Budget Journal.

5 In **Budget**, select the budget value.

6 In **Journal Source**, select the source value.

7 In **Journal Category**, select the category value.

8 In **Budget Organization**, select the organization value.

9 In **Balance Type** select the **Actual** or **Budget** balance type.

10 Click **Save**.

Defining PeopleSoft Commitment Control Data Load Rules to Write-Back

➤ To define PeopleSoft Commitment Control data load rules to write back:

1 **Make sure that the PS_HYP_KK_BD_HDR and PS_HYP_KK_BD_LN interface tables have "write" privileges.**

2 **When writing back to PeopleSoft Commitment Control, in Data Load Rule, define a data load rule to write back by selecting parameters for the following:**

- Ledger Group
- Ledger
- Accounting Date
- As of Date
- Transaction Type—Select "check" to validate the rules or "post" to validate and post the rules.
- Budget Transaction Type
- Generate Parent Budget
- Parent Budget Transaction Type
- Default Entry Date

3 **In Data Load Rule, define the source filters that identify the portions of budget data to load to PeopleSoft.**

4 **Optional: Delete previous data load rules to write back by selecting Delete on the Execute Rules Options screen.**

5 **Run the PeopleSoft Commitment Control data load rule to write back.**

If you have selected a transaction type of "post," the rules are validated, the budget is written to Commitment Control interface tables and the posting process is initiated after writing the data. Any errors are forwarded to Public Sector Planning and Budgeting.

Running Data Load Rules to Write Back

After you create a data load rule to write back, you must run the data load rule to write back the data from the Planning application to the general ledger system.

➤ To run a data load rule to write back:

1 **From Data Rule Summary, select the data load rule.**

2 **Click Execute.**

After the extraction process is successful, you must log in to Oracle General Ledger or PeopleSoft General Ledger and import the budget data.

3 **To load data from the source EPM application, select Import from Source.**

Select this option to review the information in a staging table, before exporting directly to the target general ledger system.

When you select "Import from Source," FDMEE imports the data from the EPM target application, performs the necessary transformations, and exports the data to the FDMEE staging table.

4 **To export data to the target general ledger system**, select **Export to Target**.

FDMEE transfers the data into the general ledger system.

5 Click **Run**.

Note: After the rule runs successfully, view the information in the staging table. See "Staging Table Used for Import from Source" on page 391.

6 **After the rule runs, perform the required tasks in your general ledger system.**

Exporting to Target

Use the Export to Target feature to export data to a target application, which is the Enterprise Resource Planning (ERP) application. Select this option after you have reviewed the data in the data grid and need to export it to the target application.

Export options:

- Current Dimension
- All Dimensions
- Export to Excel

When exporting data for Essbase, you can store, add, and subtract data.

When exporting data for Planning, the following options are available:

- Store Data—Inserts the data from the source or file into the target application, replacing any value that currently exists.
- Add Data—Adds the value from the source or file to the value in the target application. For example, when you have 100 in the source, and 200 in the target, then the result is 300.
- Subtract Data—Subtracts the value in the source or file from the value in the target application. For example, when you have 300 in the target, and 100 in the source, then the result is 200.
- Override All Data—Clears all data in the target, and then loads from the source or file. For example, when you have a year of data in your Planning application but are only loading a single month, this option clears the entire year before performing the load.

➤ To submit the data load rule:

1 **From the table action bar, in Data Rule, and choose the data load rule.**

2 Click .

3 **In Execution Mode, select the mode of exporting to the target.**

Execution modes:

- online—ODI processes the data in sync mode (immediate processing).
- offline—ODI processes the data in async mode (runs in background).

  Click to navigate to the Process Detail page to monitor the ODI job progress.

4 In **Export**, select the export method.

  Export options:

  - Current Dimension
  - All Dimensions
  - Export to Excel

5 For **Current Dimension** and **All Dimensions** export methods, in **Select file location**, navigate to the file to export, and then click **OK**.

  For the **Export to Excel** method, mappings are exported to a Microsoft Excel spreadsheet.

6 Click **OK**.

  After you exported data to the target, the status of the export is shown in the Status field for the data load rule in the Data Load Summary.

Loading Data into Supported Source Systems

Subtopics

- Loading Data into Oracle E-Business Suite
- Loading Data into PeopleSoft Enterprise Financial Management

To complete the data load to write back process, you must perform required tasks in your supported source system.

Loading Data into Oracle E-Business Suite

If the target source system is Oracle E-Business Suite, you must import the budget data using Oracle General Ledger.

Refer to the Oracle Fusion and E-Business Suite user documentation for detailed information. At a high level, follow this process:

1. Launch Oracle General Ledger.
2. Run the Journal Import process.

   If you select the Create Journal option:

   - Data is extracted to the journal interface table (GL_INTERFACE).
   - FDMEE stores the process ID in the GROUP_ID column. You can check the data that was created by filtering on the process ID.
   - If no errors occur, a journal entry is created.

If you clear the Create Journal option:

- Data is extracted to the budget interface table (GL_BUDGET_INTERFACE).
- Carefully select Budget Name (BUDGET_NAME) and Budget Organization (BUDGET_ENTITY_NAME) when loading data into the GL_BUDGET_INTERFACE table.
- If no errors occur, the budget balances are posted.

3. Review the journal or budget balances.

Loading Data into PeopleSoft Enterprise Financial Management

If the target is PeopleSoft, you must import the budget data using PeopleSoft General Ledger.

Refer to the PeopleSoft Enterprise Financial Management user documentation for detailed information. At a high level, follow this process:

1. Launch PeopleSoft General Ledger.
2. Run the Generate Journals process.
3. When generating a journal request, define these required options:
   - Accounting Definition Name—Select HYPDEFN
   - Template—Select HYP_STDBUD

   The data is staged in the PS_HPYPB_ACCT_LN interface table. FDMEE stores the process ID in the JRNL_LN_REF table. You can check the data that was created by filtering on the process ID.
4. Run the process.

   If the process runs without errors, the journals are created.
5. Review the journal, create balancing entries, and then post the journal.

4 Logic Accounts

In This Chapter

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Creating a Logic Group 237
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Creating Complex Logic Accounts 244

Overview of Logic Accounts

Logic accounts are dynamically generated accounts, and are used to calculate supplemental values that are not provided in source files. Logic groups are associated with a target applications. (The logic group list of values is filtered in the location user interface based on the target application in was created.) Like all other source accounts, logic accounts can be mapped and loaded into target systems. Logic accounts are used for various functions:

- **Statistical loading**—Map one source account to multiple target accounts
- **Conditional mapping**—Map a source account based on its value
- **Arithmetic mapping**—Perform arithmetic operations on source values

Creating a Logic Group

The first step in creating logic accounts is to create a logic group. The logic group is then assigned to one or more locations. When a source file or source system is loaded to a location, logic accounts are generated when the logic group is assigned to a location.

A logic group must be defined as simple or complex. A simple logic group enables you to derive logic items only from the source account dimension. A complex logic group enables you to derive logic items from any combination of dimensions.

➤ To create a logic group:

1 On the **Setup** tab, under **Data Load Setup**, select **Logic Group**.

2 In **Target Applications**, select the target application for this logic group.

3 In **Logic Group**, select **Add**.

A row is added to the grid.

4 In **Logic Group Name**, enter a unique name.

Optional: In **Description**, enter a description of the logic group.

5 In **Logic Type**, select **Simple Logic** or **Complex Logic**.

6 Click **Save**.

Creating Accounts In A Simple Logic Group

Within a simple logic group, you can create individual logic accounts.

➤ To create accounts in a simple logic group:

1 On the **Setup** tab, under **Data Load Setup**, select **Logic Group**.

2 From the **Logic Group** summary grid, select the logic group.

The logic accounts currently contained in with the selected logic group are listed.

3 From the **Logic Items** grid, click **Add**.

4 Provide the requested information.

See "Logic Group Fields" on page 238.

Logic Group Fields

Logic accounts consist of the following fields:

- Item
- Description
- Criteria Type
- Criteria Value
- Operator
- Value/Expression
- Seq
- Export

Item

Specify the name of the logic account using the item field. The logic account that is named in the item field is displayed in the Workbench grid as the source account. This same account can be used as a source in a mapping rule. Oracle recommends that you prefix the names of logic accounts with an "L" or some other character to indicate that an account came from a source file, or was generated from a logic rule. Logic accounts can only be loaded to a target application when they are mapped to a target account.

Description

The description that you enter in the Description field is displayed in the Account Description field in the Workbench.

Criteria Type and Criteria Value

The operator in the Criteria Type field works with the source account that is specified in the Criteria Value field to determine from which source accounts the logic account is derived. One logic account can be derived from multiple source accounts.

Valid values for the Type field:

- Between
- Like
- In

Specifying Source Accounts

Between (Criteria Type)—Used when a range of source accounts is specified in the Criteria Value field. Separate the accounts that specify the range by a comma.

Type Field	Criteria Value Field
Between	1000,1999

Like (Criteria Type)—Used when the source accounts in the Criteria Value field contain wildcard characters. Use question marks (?) as placeholders and asterisks (*) to signify indeterminate numbers of characters.

Type Field	Criteria Value Field
Like	1??0
Like	10*

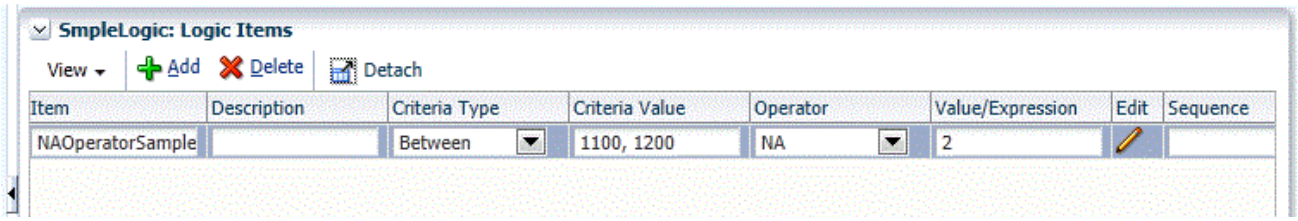
In (Criteria Type)—Used to include one source account or a list of nonsequential source accounts.

Type Field	Criteria Value Field
In	1000
In	1000,1005,2001

Operator and Value/Expression

NA Operator

NA (no operator)—If NA is specified, the source accounts that are specified in the Criteria Value field are summed. For example when the Type = Between and the Criteria Value = "1100,1200," then FDMEE creates one new account summarizing the values for source accounts that are between 1100 and 1200 for each entity where the accounts exist in the source file.

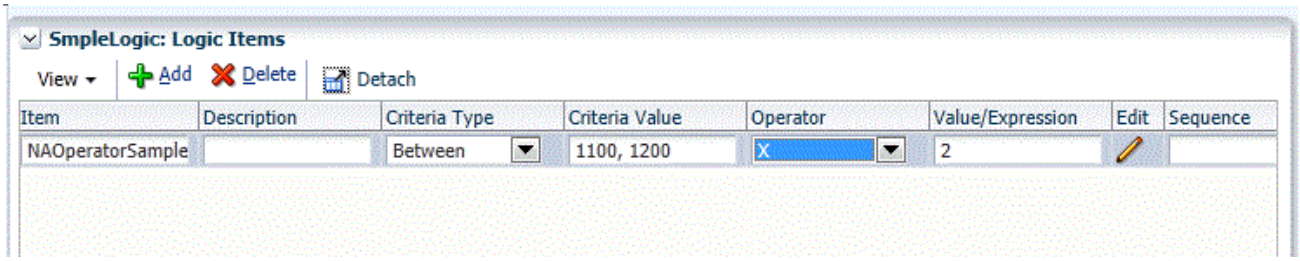


Math Operator

Math Operators (+, -, x, /)—If a math operator is selected, then the new logic records has an amount that equals the original amount is calculated with the specified Value/Expression. For example, when the operator "x" was selected and 2 is entered in the Value/Expression field, then the new record has an amount two times the original amount.

Use a numeric operator to perform simple mathematical calculations:

- NA (no operator)
- + (addition)
- - (subtraction)
- X (multiplication)
- / (division)
- Exp (expression operators)
- Function—see "Function" on page 241



In this example, one logic account is created because one Entity had a row meeting the account criteria.

Expressions and Functions

An expression enables you to perform the following in the Value/Expression field:

- Execute a simple math equation.
- Use a CURVAL parameter to specify the value of a logic account operation. The CURVAL parameter can be used within expressions, as it can within logic functions, except that, with expressions, CURVAL must be enclosed in pipes. For example, the CURVAL expression includes the specification of an account using the notation of |Account| and the specification of a value using POV details of entity, category, period and account.

Functions enable the use of simple logic with if/else using Jython syntax. Jython commands can be used in a function and can be more complex than an expression.

Exp

Use Expression operators to execute custom logic expressions, which are defined in the Value/Expression field. Logic expressions, which cannot use variables or `If` statements, are simpler than logic functions. Except for `|CURVAL|`, expressions do not have built-in parameters. For expressions, you do not need to assign a value to `RESULT`.

Expressions execute faster than logic functions. You can use the FDMEELookup function within expressions, as it is used within logic functions. To write a custom expression, double-click the Value/Exp field to open the expression editor.

```
|CURVAL| + |810| + |238|
```

The function above uses the FDMEE Lookup function to add two source accounts to the value of the logic account. Notice that the `CURVAL` parameter can be used within expressions, as it can within logic functions, except that, with expressions, `CURVAL` must be enclosed in pipes.

```
(|CURVAL| + |000,10,09/30/01,810|) * 100
```

The function above uses the FDMEE Lookup function to add a source account (810) and a source account from a specified center, FDMEE category, and FDMEE period to the value of the logic account, and then multiplies the resulting sum by 100.

Function

Use function operators to execute a custom logic function defined in the Value/Expression field.

To write a function, select Function from the Operator drop-down list in the Logic Item line, and then click the edit icon to open the edit window. Logic functions are usually used for conditional mapping and other complex operations that involve multiple source accounts. Logic functions enable the use of Jython commands including variables, if/elif/else statements, numeric functions, and other Jython constructs.

The logic function enable the use of predefined function parameters, and also requires that you assign a value to the RESULT variable so that a value can be updated for the newly created logic account. The following function parameters can be used in a logic function, and these do not require using the "|" notation:

Table 42 Function Operators and descriptions

Function Operator	Description
CURVAL	Source value of the logic account operation
StrLocation	Active location name
StrCenter	Logic account entity
StrCatKey	Active category key, not the name. You need too lookup the category key in the database to use this parameter.
StrPerKey	Active period
Entity, Category, Period, Account|	Lookup notation may be used in a logic function. This is the same notation provided in the logic expression.
Skip	If "Skip" is assigned to the keyword RESULT, then the logic account is not created.

You can define function parameters in uppercase, lowercase, or mixed case letters. However, the keyword RESULT must be in uppercase letters.

Assigning Function Return Values

The result of a Logic Function must be assigned to the keyword `RESULT`. If a return value is not assigned to the RESULT keyword, then the logic engine automatically sets the value of result to zero. This causes the calculation to be skipped and the logic account is not created.

The following function assigns the result of the logic account calculation (using the CURVAL parameter) to the logic account (RESULT) when the logic account calculation returns a value greater than zero. If the first condition is not met, then the logic account is not created because of the keyword "Skip."

```
if CURVAL > 0:
   RESULT = CURVAL
else:
    RESULT = "Skip"
```

Note: You must use the Jython notation and indentation for the logic function.

The following function only assigns the result of the logic account calculation to the logic account when "10" is the active FDMEE category key.

```
if StrCatKey == "10":
    RESULT = CURVAL
else:
    RESULT="Skip"
```

This function assigns the result of the logic account calculation to the logic account only when the Criteria Account Entity is "000."

```
if StrCenter == "000":
```

```
    RESULT = CURVAL * 100

else:

    RESULT="Skip"
```

This function uses the FDMEE Lookup function to add a source account (810) to the value of the logic account if the current FDMEE period is "Dec 2013."

```
if StrPerKey == "12/31/2013":
    RESULT = CURVAL + |810|
else:
    RESULT="Skip"
```

This function uses the FDMEE Lookup function to add another source account from a different Entity, FDMEE category, and FDMEE period to the value of the logic account when the active location is "Texas."

```
If StrLocation == "Texas":
    RESULT = CURVAL + |000,10,09/30/13,810|
else:
    RESULT="Skip"
```

Value/Expression

To perform calculations and thereby, to derive values for a logic account, you select an operator, from the Operator field, to work with the Value/Expression value.

Seq

This field specifies the order in which the logic accounts are processed. Order specification enables one logic account to be used by another logic account, provided that the dependant account is processed first.

Export

A Yes-No switch determines whether a logic account is considered an export account and therefore is subjected to the conversion table validation process. If the switch is set to Yes, then you must map the logic account.

Creating Summarized Logic Accounts

By default, a logic account is created for each center in the trial balance. For example, when the Criteria Value field is 12300, the result is a logic account created for each source center that is associated with account 12300.

You can create a logic account that summarizes multiple source centers by, in the Criteria Value field, placing a semicolon after the account name and entering the number that identifies the number of characters to group by.

For example, when the value in the Criteria Value field is 12300;4, the result is a summarized account that includes all source centers that have the same first four characters in the source

center name. The source center assigned to account 12300 is the four characters that start at position 1. In addition, when the value in the Criteria Value field is 12300;3;4, the result is a summarized account that includes all source centers that have the same three characters in the source center, starting at position 4. The source center assigned to account 12300 is the three characters that start at position 4.

To create a logic account that summarizes all source centers by, in the Criteria Value field, place a semicolon after the account name and enter a text value. This hard-coded text value becomes the center for the summarized logic account. For example, when the value in the Criteria Value field is 12300;Dept100, then the result is a summarized account that includes all source centers. The source center assigned to account 12300 is Dept100.

Creating Complex Logic Accounts

Individual logic items are defined within a complex logic group. Each of the fields for a complex logic rule operates the same as a simple logic rule except for the Criteria Value and Include Calc fields. Complex logic accounts enable the user to enter a criteria value that includes other dimensions besides the account dimension. In addition, you can specify a "group by" and "group level" to alter how the generated logic accounts are displayed within the Workbench.

Criteria Value

To enter criteria for each dimension, click the Criteria Value icon to open the criteria form. The logic item is created only from the source line items that meet the specified criteria for each dimension. Descriptions of each complex logic criteria field is as follows:

Dimension

This field enables the selection of any enabled source dimension. You can select each dimension only once.

Criteria Type

This field works in conjunction with the Source Dimension and Criteria Value fields to determine from which source values the logic items are derived. Criteria types available are In, Between, and Like. The Criteria Type determines how the criteria value is interpreted.

Criteria Value

The criteria type uses this field to determine to determine what members to include in the logic calculation for any given logic dimension.

Group By

When viewing the derived logic item in the Workbench, the Group By field enables the logic item to override the displayed member in the appropriate dimensions field. You can override to group the dimension based on the value entered in the Group By field. Use this field to hard code the returned member, or append hard-coded values to the original members by entering a hard-coded member and an asterisk (*) in the Group By field.

For example, by placing the word "Cash" in the row with account selected for dimension, the Import form displays "Cash" in the Account field for the logic item. If you place "L-*" in the Group By field, the import form displays "L-1100" where 1100 is the original account that passed the logic criteria.

If you enter no value in the Group By field, no grouping occurs for this dimension, and a separate logic item is created for each unique dimension member.

Group Level

When viewing the logic item in the Workbench, the Group Level field works with the Group By field to override the displayed member in the appropriate dimensions field. This field accepts only numeric values.

When you enter a value of `3` in the Group Level field, the left three characters of the Group By field are returned. If no value is entered in the Group By field, then when you specify `3` in the Group Level field, first three characters of the original source dimension member are returned. The logic items displayed on the Import form can be grouped to the desired level.

For example, when you enter `L-*` in the Group By field, the logic item displays in the Import form as "L-1100," where 1100 is the original account that passed. When viewing the logic item in the Workbench, the Group Level field works with the Group By field to override the displayed member in the appropriate dimensions field. This field accepts only numeric values.

+ displays "L-11." If you enter the Group level`1` for this row, then the Import form displays "L-1."

Include Calc

If it meets the logic item criteria, the Include Calc field enables the logic item to include previously calculated FDMEE values in its calculations.

Note: Each logic item has a sequence attached, and the logic items are calculated in this sequence. If the second, or later, logic item has this field enabled, then any previously calculated logic items are included, provided they meet the logic criteria.

Complex Logic Example 1: CashTx

Table 43 Complex Logic Example 1: CashTx

Dimension	Criteria Type	Criteria Value	Group By	Group Level
Account	Like	11*	Cash	0
Entity	Like	Tx	Texas	0
ICP	Between	00,99	ICP	0
UDI	In	00,01,02	UD1	0

The first row specifies that any accounts that begin with "11" are included in the calculated result for "Calc Item: CashTx."

The second row further qualifies the results by specifying that the source record must also have the entity like "TX."

The third line reduces the results to only those source records that have an ICP value between 00 and 09.

The last line reduces the results to only those source records that have a Custom 1 (UD1) of either: 00, 01 or 02. Imported lines that do not meet the listed criteria are excluded from the calculated results.

In the following table, only one new logic item is derived from multiple source records. Using the preceding graphic example as the logic criteria, and the first grid that follows as the source line items, you can see how FDMEE derives the value of a single logic item. Note the Group By field. Each Group By field includes a hard-coded value. Therefore, for every line that passes the specified criteria, the original imported member is replaced with the member listed in the Group By field.

Sample Imported Values

Account	Entity	ICP	UD1	Amount	Include or Exclude
1150	Tx	07	01	50,401.07	Include
1176	Tx	04	02	10,996.00	Include
1201	Tx	01	00	500.00	Exclude

Sample Imported Account Names

Account	Entity	ICP	UD1	Amount
Cash	Texas	ICP	UD1	50,401.07
Cash	Texas	ICP	UD1	10,996.00

FDMEE groups and summarizes the rows that include identical member combinations and thus creates the following result:

Final Result

Account	Entity	ICP	UD1	Amount
Cash	Texas	ICP	UD1	61,397.07

Complex Logic Example 2: CashTx

Table 44 Complex Logic Example 2

Dimension	Criteria Type	Criteria Value	Group By	Group Level
Account	Like	11*	Cash	0
Entity	Like	Tx	Texas	0
ICP	Between	000,100	*	2
UDI	In	00,01,02	UD1-*	0

The first row in the preceding table specifies accounts that begin with "11" are to be included in the calculated result for "Calc Item: CashTx."

The second row further qualifies the results by specifying that the source record must also have the entity like "TX."

The third line reduces the results to only those source records that have an ICP value between 000 and 100.

The last line reduces the results to only those source records that have a Custom 1 (UD1) of either: "00," "01." or "02." Any imported line that does not meet all of the listed criteria is excluded from the calculated results.

In the following tables, two logic items are derived from the source records because of the values entered in the Group By and Group Level fields. Two of the Group By fields have hard-coded values listed and two have an asterisk. Therefore, for every line that passes the specified criteria, the original imported members for the Account and Entity dimensions are replaced with the member listed in the Group By field. The other dimensions return all or part of the original members based on the Group Level entered.

Sample Imported Values

Account	Entity	ICP	UD1	Amount	Include or Exclude
1150	Tx	070	01	50,401.07	Include

Account	Entity	ICP	UD1	Amount	Include or Exclude
1176	Tx	040	02	10,996.00	Include
1121	Tx	045	02	9,050.41	Include
1201	Tx	100	00	500.00	Exclude

Logic Members

Account	Entity	ICP	UD1	Amount
Cash	Texas	07	UD1-01	50,401.07
Cash	Texas	04	UD1-02	10,996.00
Cash	Texas	04	UD1-02	9,050.41

FDMEE groups and summarizes the rows that include identical member combinations and thus creates the following result.

Final Result

Account	Entity	ICP	UD1	Amount
Cash	Texas	07	UD1-01	50,401.07
Cash	Texas	04	UD1-02	20,046.41

5 Check Rules

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Overview of Check Rules

System administrators use check rules to enforce data integrity. A set of check rules is created within a check rule group, and the check rule group is assigned to a location. Then, after data is loaded to the target system, a check report is generated.

If a check entities group is assigned to the location, then check report runs for all entities that are defined in the group. If no check entities group is assigned to the location, the check report runs for each entity that was loaded to the target system. FDMEE check reports retrieve values from the target system, FDMEE source data, or FDMEE converted data.

FDMEE analyzes the check report and inserts a status entry in the process monitoring table. The location associated with the report shows a status of True only when all rules within the check report pass. For rules used only for warning, no rule logic is assigned.

Check reports run as data is loaded. You can also run the reports manually.

Note: Check rules are not applicable when loading to Accounts Reconciliation Manager.

Creating Check Rule Groups

➤ To create check rule groups:

1 On the **Setup** tab, under **Data Load Setup**, select **Check Rule Group**.

2 In the **Check Rule Group** summary grid, click **Add**.

A row is added to the top grid.

3 In **Check Rule Group Details**, enter a name for the group in the **Name** field.

Optional: In **Description**, enter a description of the group.

4 Click **Save**.

Creating a Check Rule

Each line of a Check Rule report represents a check rule.

➤ To create check rules:

1 On the **Setup** tab, under **Data Load Setup**, select **Check Rule Group**.

2 Optional: In **Check Rules**, select the POV Location, POV Period, or POV Category.

See "Using the POV Bar" on page 37.

3 In the **Check Rule Group** summary grid, select the check rule group.

4 In the **Rule Item** details grid, click **Add**.

A row is added to the grid.

5 In each field, enter check rule information:

- **Display Value**—See "Display Value" on page 250.
- **Description** (optional)—See "Description" on page 251.
- **Rule Name**—See "Rule Name" on page 251.
- **Rule Text**—See "Rule Text" on page 251.
- **Category**—See "Category" on page 251.
- **Sequence**—See "Sequence" on page 252.
- **Rule Logic** (optional)

6 Click **Save**.

Display Value

The Display Value field, which controls how FDMEE formats the data rows of check reports, is used to select target accounts or report format codes, or to create custom expressions.

Rules used to process Display Value field:

- For fields that contain report format codes, no value lookup is attempted.
- For fields that contain data other than report format codes, the result of the custom expression (rule logic) is displayed in the Value column. The Value column is limited to 75 characters.

Browse for Target Account

This option, which displays the **Search and Select: Target Value** screen, enables you to search and insert a target account (from a list of target-system application accounts) into the check rules form.

Select Format Code

This option enables you to enter format codes into the Target Account column.

Format codes determine the display of check reports.

Format Code	Action Performed on Check Reports
`#ModeList`	Sets the report to display the Display Value, Description, and Amount column values. The system defaults to #ModeRule if nothing is specified.
`#ModeRule`	(Default) Sets the report to display the Rule Name, Rule Text, and Amount column values. The report evaluates each expression of the Rule Logic column and tests the True or False condition of each rule. The status of each rule (`OK` or `Error`) is displayed in the report.
`#Title`	Inserts the text of the associated Description field as a title line on the check report.
`#Subtitle`	Inserts the text of the associated Description field as a subtitle line on the check report.

Description

Displayed only for check reports in `#ModeList` mode, the Description column displays account descriptions (which may be designated as titles or subtitles).

Example—Description

```
Out-of-Balance Account
```

Rule Name

Displayed only for check reports in `#ModeRule` mode, the Rule Name column, stores identifiers for check rules. Rule Name values should be unique and easy to identify.

Example—Rule Name

```
Out-of-Balance Check
```

Rule Text

Displayed only for reports in `#ModeRule` mode, the Rule Text column defines the logic behind rules. In check reports, the primary statement for a rule is the text of the Rule Text field associated with the rule.

Example—Rule Text

```
This account must be between [+10 and -10].
```

Category

In the Category column, select an FDMEE category to restrict a check rule to one FDMEE category. The rule is displayed in the check report only when the FDMEE category that is selected

in the Category field associated with the rule is the FDMEE category set in the POV. To display the check rule in the check report regardless of the category set in the POV, you must select All.

Sequence

Sequence column values (numbers) determine the order in which format codes and rules are processed. It is good practice to increment sequence numbers by 10—to provide a range for the insertion of format codes and rules.

Rule Logic

The Rule Logic column is used to create multidimensional lookups and check rule expressions. Rule Logic columns are processed for reports only in #ModeRule or #ModeList mode. After a rule logic is processed for a rule in the check report, FDMEE flags the rule as passing or failing.

Check Rule Expressions

Check rule expressions are used primarily to validate target-system account balances when performing a multidimensional lookups. The expressions return a True or False result.

For example, the following returns true (OK) if Cash (a target account) has a positive balance, and false (Error) when it does not:

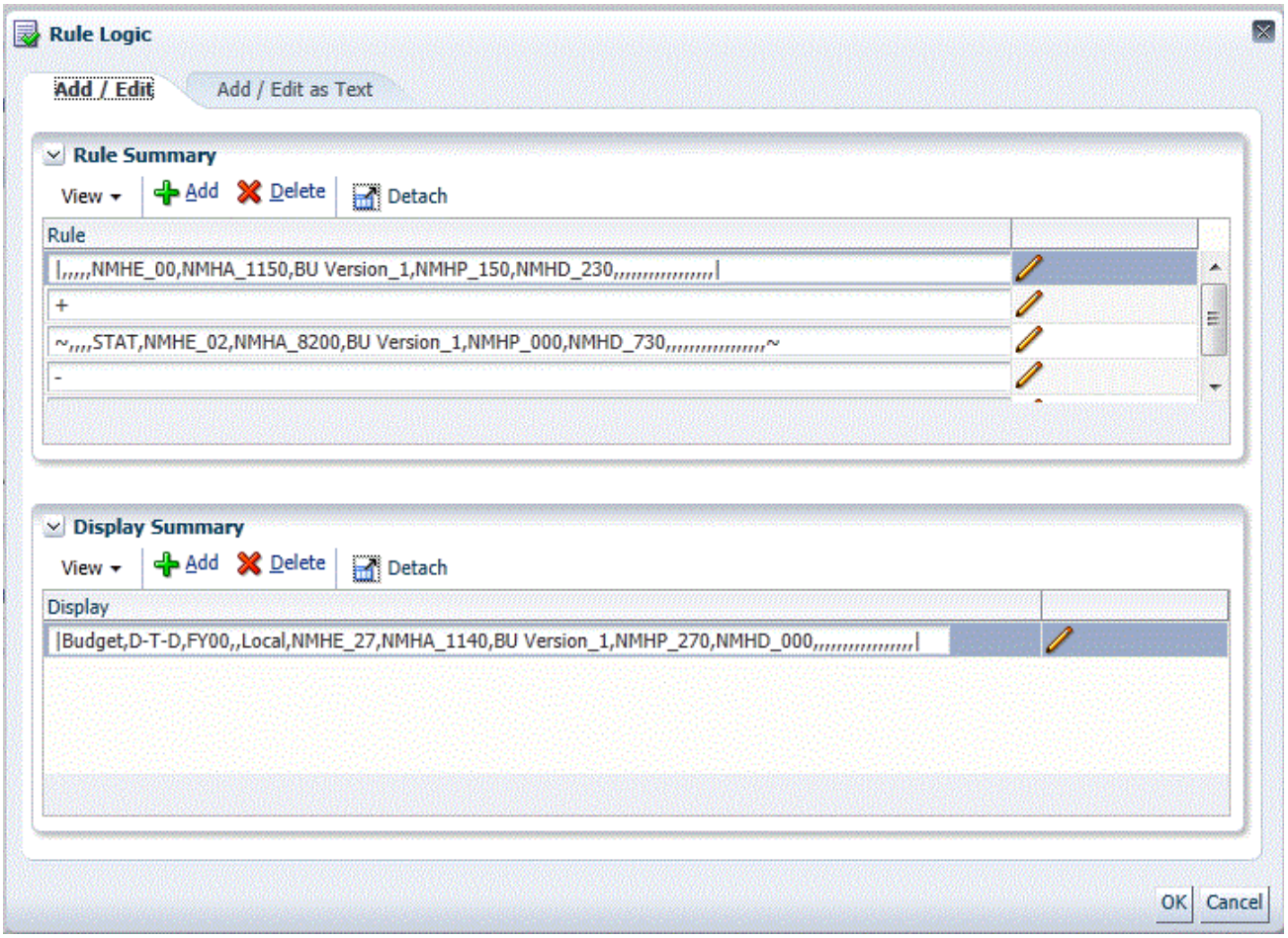
```
|,,,YTD,<Entity Currency>,,Cash,[ICP None],[None],[None],[None],
[None],,,,,,,,,,,,,,,|>0
```

In this example, the check rule expression returns true (OK) when the value of Cash (a target account) plus $1000 is greater or equals the value of AccruedTax (another target account), and false (Error) when it does not:

```
|,,,YTD,<Entity Currency>,,Cash,[ICP None],[None],[None],[None],
[None],,,,,,,,,,,,,,,|+1000>=|,,,YTD,<Entity Currency>,,AccruedTax,
[ICP None],[None],[None],[None],[None],,,,,,,,,,,,,,,|
```

Using the Rule Logic Editor to Create Check Rules

The Rule Logic Editor facilitates creation of check rules. It helps you develop rule logic and enables you to create rules from the Rule Logic Editor, rather than from the **Check Rules** screen. You can also use the **Rule Logic Editor** to modify check rules.



➤ To open the Rule Logic Editor:

1 On the **Setup** tab, under **Data Load Setup**, select **Check Rule Group**.

2 From **Check Rules**, in the **Check Rule Group** summary grid, select a check rule group.

3 From the **Rule Item Details** grid, click **Add**.

A row is added to the grid.

4 In each field, enter check rule information:

- **Display Value**—See "Display Value" on page 250
- **Description**—(optional) See "Description" on page 251.
- **Rule Name**—See "Rule Name" on page 251.
- **Rule Text**—See "Rule Text" on page 251.
- **Category**—See "Category" on page 251.
- **Sequence**—See "Sequence" on page 252.

5 Click .

The **Rule Logic** screen includes two tabs:

- Rule Logic Add/Edit
- Rule Logic Add/Edit as Text

Adding Rule Logic

Use the Rule Logic Add/Edit tab to add each row for the rule logic statement with a list of member values.

The Rule Logic Add/Edit tab consists of these elements:

- **Rule Summary**—Provides the logic for the check rule.
- **Display Summary**—Enables the specification of a multiple-dimensional lookup to be used as the display value when you want to display an amount different from the display value on the previous screen. The display summary is optional.
- **Add**—Adds the contents of the Rule and Display areas to the check rule being created or modified.
- **Delete**—Closes the Rule Logic Editor without saving changes.

➤ To add a rule logic statement:

1 On **Rule Logic Editor**, select the **Rule Logic Add/Edit** tab.

2 From the **Rule** summary grid, click **Add**.

A blank line is displayed.

3 Enter the rule to test.

Note: When using the equal sign for evaluating amounts, use double equal signs (==).

4 **Optional:** Click .

5 From **Rule Logic** in the **Intersection Type** field, select the intersection type for the multidimensional lookup.

Available intersection types:

- Source intersection—Values are enclosed by the " ~" character.
- Converted source intersection—Values are enclosed by the ' character.
- Target intersection—Values are enclosed by the " |" character.

See "Multidimensional Lookup" on page 256.

6 From **Dimension**, select the dimension from which to retrieve values.

7 From **Member Value**, select a value from the dimension.

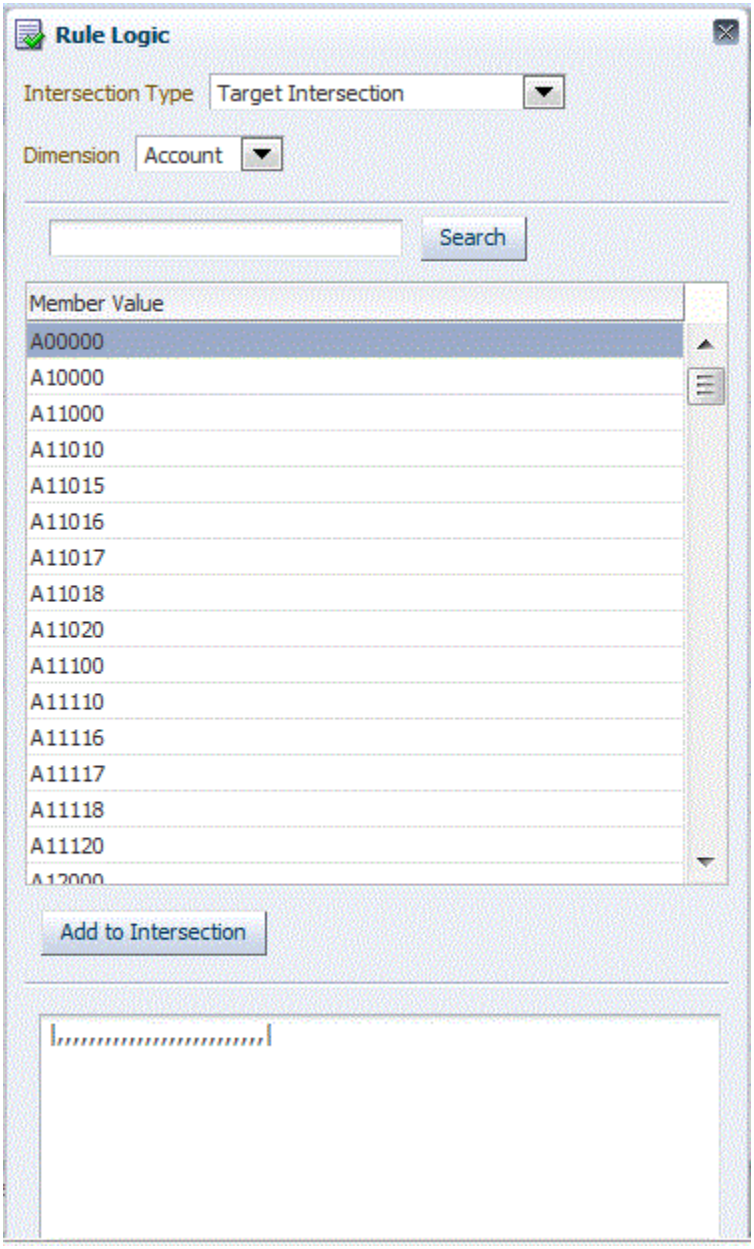
8 Click **Add to Intersection**.

The member value is added to the Display area.

9 Click **OK**.

Rule Logic Tab

Use the **Rule Logic** tab, from which you can select "retrieve "dimensions directly from the target system, to ensure that required dimensions are entered and ordered correctly.



Display the Rule Logic tab by clicking from the Rule Summary or Display summary grid on the Rule Logic Add/Edit screen.

The Rule Logic tab contains the following elements:

- **Rule** and **Display**—Areas that, respectively, display the rule and the display rule that are being created.
- **Intersection Type**—Enables you to select the type of retrieval format for the target dimensions.

FDMEE uses the intersection type when multidimensional lookups are selected for a rules logic statement. The multidimensional lookup retrieves account values from the target system, FDMEE source data, target data or FDMEE source converted data. See "Multidimensional Lookup" on page 256.

Multidimensional Lookup

The multidimensional lookup retrieves account values from the target system, FDMEE source data, or FDMEE converted data. You can use multidimensional lookups in Rule Logic columns and in the Display columns of check rules forms.

Rule Data Sources

FDMEE can retrieve data from three sources:

- Target-system data
- FDMEE source data
- FDMEE converted data

Target System Data

The following format, which begins and ends the rule with the pipe character (|), enables FDMEE to retrieve target-system values for any dimension.

Unless otherwise specified, parameters are optional.

```
|Scenario, Period, Year, View, Value, Entity, Account (Required), ICP, Custom1,
Custom2,Custom3, Custom4, Custom5, Custom6, Custom7, Custom8, Custom9, Custom10,
Custom11, Custom12, Custom13, Custom14, Custom15, Custom16, Custom17, Custom18,
Custom19, Custom20|
```

The following examples illustrate ways that target-system values can be retrieved. In each example, Balance is a target account. For dimensions that are not referenced, you must use commas as placeholders.

Example 1

Look up the value of Balance for the target period and scenario (category) set in the POV and for each entity of the FDMEE check entity group that is assigned to the location. The example rule passes the check when the target account is less than $10.

```
|,,,,,Balance,,,,,,,,,,,,,,,,,,,,,| > -10.00 and |,,,,,Balance,,,,,,,,,,,,,,,,,,,,,| <
10.00
```

Example 2

Look up the value of Balance for the specified dimensions.

```
|Actual,March,2002,YTD,Ohio,Balance,Michigan,Engines,Ford,Trucks,
[None],,,,,,,,,,,,,,,,USD| > 0
```

Example 3

Look up the value of Balance for the specified dimensions and the previous period.

```
|Actual,-1,2002,YTD,Ohio,Balance,Michigan,Engines,Ford,Trucks,
[None],,,,,,,,,,,,,,,,,USD| > 0
```

Example 4

Look up the value of Balance for the target scenario (category) set in the FDMEE POV, the previous target period, and each entity of the FDMEE check entity group that is assigned to the location.

All missing custom dimensions default to [None]. The ICP dimension defaults to [ICP-None]. The Year dimension defaults to the year set in the POV. The Currency dimension defaults to 0. The View dimension defaults to YTD.

```
|,-1,,,,Balance,,,,,,,,,,,,,,,,,,,,,| > 0
```

FDMEE Source Data

The following format, which begins and ends the rule with the tilde character (~), retrieves values from data that was mapped to a target member, and then loaded into FDMEE.

Unless otherwise specified, parameters are optional. Parameters designated `UD#` are user-defined.

```
~FDMEE Category, FDMEE Period, Year (Field Not Applicable), FDMEE View, FDMEE Location,
Source Entity(Required), Source Account(Required), Source ICP, Source UD1,Source UD2,
Source UD3, Source UD4, Source UD5, Source UD6, Source UD7,Source UD8, Source UD9,
Source UD10, Source UD11, Source UD12, Source UD13,Source UD14, Source UD15, Source
UD16, Source UD17, Source UD18, Source UD19, Source UD20~
```

FDMEE Converted Data

The following format, which begins and ends the rule with the grave accent character (`), retrieves pull values from data that was loaded into FDMEE. Unless otherwise specified, the parameters are optional.

```
`FDMEE Category, FDMEE Period, Year (Field Not Applicable), FDMEE View, FDMEE Location,
Entity(Required), Account(Required), ICP, Custom1, Custom2, Custom3, Custom4, Custom5,
Custom6, Custom7, Custom8, Custom9, Custom10, Custom11, Custom12, Custom13, Custom14,
Custom15, Custom16, Custom17, Custom18, Custom19, Custom20`
```

Math Operators

Math Operators (+, -, x, /)—If you select a math operator, then the check rule has an amount that equals the original amount calculated with the specified expression. For example, when you select the operator "x" and enter `2` in the rule field, then the new record is an amount two times the original amount. The math operators available in the expressions:

- + (addition)
- - (subtraction)
- * (multiplication)
- / (division)
- math.abs ()

If/Then/Else

Check rules accept `If/Then/Else` statements after you perform a multidimensional lookups. This statement provides a primary path of execution when the `if` statement evaluates to "true," and a secondary path of execution when the `if` statement evaluates to "false."

Using the If/Then/Else statement, you can use custom-field values within reports as warning messages and flags.

In the following example, when the Result is between 100 to 1500, the Check Report with Warning prints "Amount between 100 and 1500." The example references three data accounts:

1. 24000050: 1000
2. 24000055: 500
3. 24000060: 10

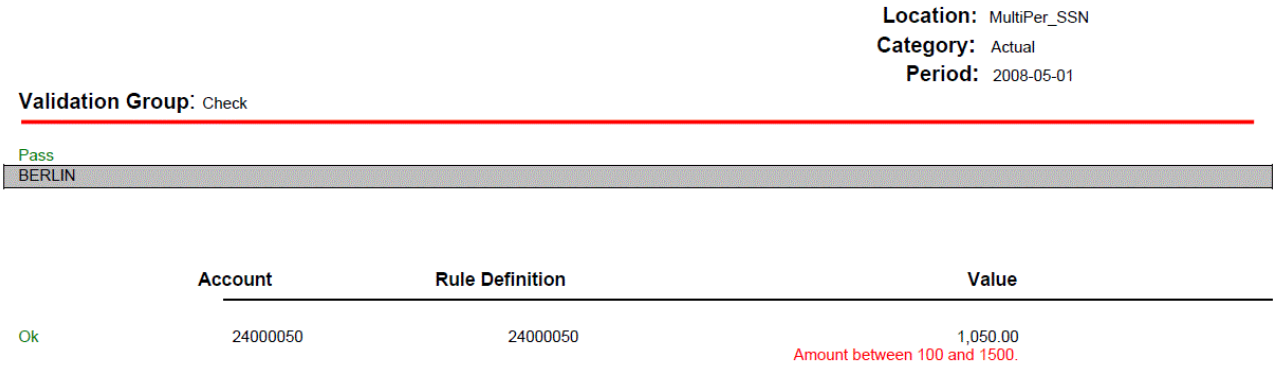
This calculation for this example is 1000 + 500/10, with the result of 1050.

The script is written using Jython code:

```
 def runVal():
       dbVal=abs((|,,,,,BERLIN,24000050,[ICP None],[None],[None],[None],
[None],,,,,,,,,,,,,,,|)+(|,,,,,BERLIN,24000055,[ICP None],[None],[None],[None],
[None],,,,,,,,,,,,,,,|)/(|,,,,,BERLIN,24000060,[ICP None],[None],[None],[None],
[None],,,,,,,,,,,,,,,|))
       PstrCheckMessage1=''
msg2=''
msg3=''
       if(dbVal<100):
          RESULT=True
          PstrCheckMessage1='Amount < 100.'
       elif(dbVal>100  and dbVal<=1500):
          RESULT=True
          PstrCheckMessage1='Amount between 100 and 1500.'
       elif(dbVal>1500  and dbVal<=9999):
          RESULT=True
          PstrCheckMessage1='Amount between 1501 and 9999.'
       else:
          RESULT=False
          PstrCheckMessage1='Amount greater than 9999!'
       return [RESULT,PstrCheckMessage1,msg2,msg3]
```

Note: You must include three message parameters with the return statement to write data to the status table. Regardless you are only writing a single message, the other two message parameters are required.

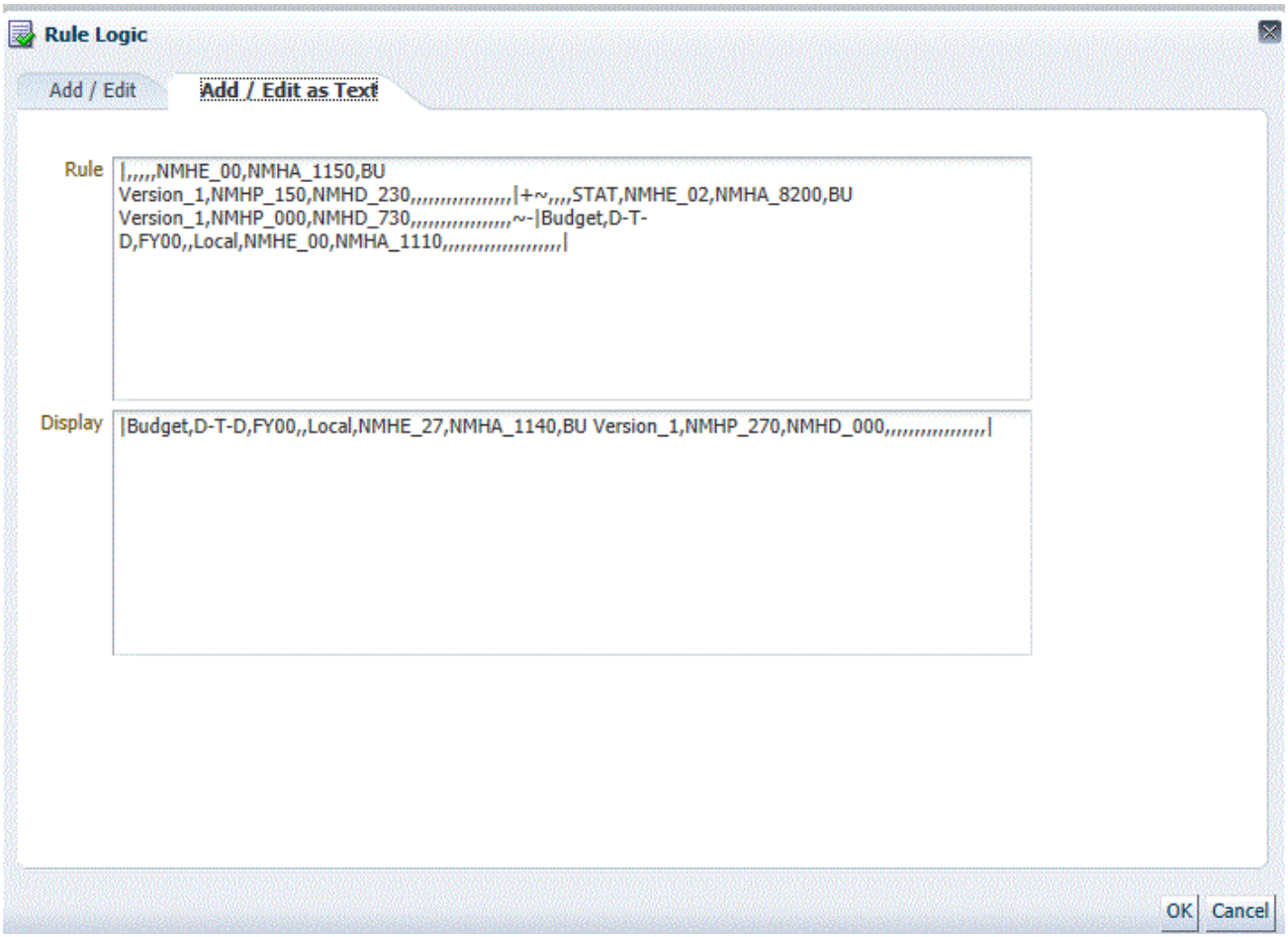
The result of running this script is shown in the Check Report with Warnings:



Adding a Rule Logic Statement as Free Form Text

Use the **Rule Logic Add/Edit as Text** screen to add the rule to test manually as free-form text. This feature enables you to instruct the system how to display the actual value from the check rule logic. If you do not specify a display summary, then the report shows an unrelated value.

When the Display area is active, all interaction takes place in the Display area. For example, pasting a tree copies all tree members to the Display area. When the Rule area is active, all interactions take place in the Rules area. Changes made on the Lookup tab are reflected on the Rule tab in related editors.



➤ To add a rule logic statement:

1 On the **Rule Logic Editor**, select the **Rule Logic Add/Edit as Text** tab.

2 In **Rule**, enter the rule.

Do not use a semicolon (;) in check rules. The semicolon is a reserved as the separator between the rule value and the display value.

When using the equal sign for evaluating amounts, use double equal signs (==) instead of the single equal sign (=). For example, use a – b == 0, and not a - b=0.

3 Click **OK**.

Running Check Reports for Profitability and Cost Management BSO Essbase Cube

Before running a Check Report for a Oracle Hyperion Profitability and Cost Management BSO Essbase cube, make sure that a fully qualified name is used to differentiate any duplicate members used within dimensions or across dimensions. To construct a fully qualified name from a duplicate member name, add the fully qualified name as a rule logic statement on the Rule Logic Add/Edit as Text screen (see "Adding a Rule Logic Statement as Free Form Text" on page 259).

Note that a fully qualified member name comprises the duplicate member or alias name and all ancestors up to and including the dimension name. Each name must be enclosed in brackets ([ ]) and separated by a period (.). The syntax is as follows:

```
[DimensionMember].[Ancestors...].[DuplicateMember]
```

For example:

```
[Market].[East].[State].[New York]
```

```
[Market].[East].[City].[New York]
```

See *Oracle® Essbase Database Administrator's Guide*.

Creating Check Entity Groups

A check entity group consists of one or more target-system entities. When a check report is generated, the entities of the entity groups that are assigned to the report location are consolidated and displayed in the report. You activate check entity groups by assigning them to locations. You define the check entities of a check entity group by entering values in the fields of the check entities form of the **Check Entities** screen.

The Check Entity Group screen consists of three grids:

- Check Entity Group Summary—Summary area that lists the names of the check entity group, and enables you to create a new check entity group.
- Check Entity Group Details—Detail area where you can name and describe the check entity group.
- Entity Details—Detail area where you can add information about the entity.

➤ To add a check entity group:

1 **On the Setup tab, under Data Load Setup, select Check Entity Group.**

2 **On the Check Entity Group grid, click Add.**

A blank row is added at the top of the grid.

3 **From the Check Entity Group Detail area, enter the check entity group name in the Name field.**

Optional: In the **Description** field, enter a description of the check entity group.

4 **Click Save.**

➤ To add an entity detail:

1 **In Check Entity Group summary grid, select a check entity group.**

2 **In Entity details grid, click Add.**

Blank options lines are displayed.

3 **Complete the following fields:**

- Parent

- Entity
- Consolidate
- On Report
- Sequence

4 **Click Save.**

Table 45 Entity Detail Options and Descriptions

Option	Description
Parent	Specify the organization in which the entity is consolidated. For other target systems, you select the parent of the entity. If the Consolidate option is not selected, the selection is irrelevant.
Script Name	For Planning and Essbase calculation scripts, specify the calculation script name to execute. This field is only available when the Check Entity Calculation method is set to “calculation script” in the Essbase or Planning application options.
Calc Script Parameters	Click to browse and set the script for the calculation script on the Set Calculation Script Parameters screen. You can also add a calculation script on the Set Calculation Script Parameters screen. As part of the check rule process, FDMEE references any calculation script parameters included in custom calculation scripts. A calculation script is a series of calculation commands, equations, and formulas that enable you to define calculations other than those defined by the database outline. Calculation scripts are defined in Essbase and Planning target application options, see “Using Calculation Scripts” on page 75. This field is only available when the Check Entity Calculation method is set to“ calculation script” in the Essbase or Planning application options. If the Check Entity Calculation method is set to “dynamic”, this field is unavailable.
Entity	Specify the target entity to consolidate and display in the check report. If the Consolidate option is selected, the entity is consolidated before it is displayed in the check report.
Consolidate	Select to consolidate an entity prior to displaying it in the check report. Planning—Runs the default calculation or calculation script specified in the Calc Script Name depending on the “Check Entity Calculation Method” property of the target Application. Essbase—Runs the default calculation or calculation script specified in the Calc Script Name depending on the “Check Entity Calculation Method” property of the target Application. Financial Management—The consolidation of data occurs in the Financial Management database.
On Report	The option selected in the On Report column determines whether an entity is displayed in the check report. If On Report is not selected and Consolidate is selected, the entity is consolidated but not displayed.
Sequence	Specify the order in which entities are consolidated and displayed in the check report. It is good practice to increment the sequence number by 10, to provide a range for the insertion of entities.

6 Loading Human Resources Data

In This Chapter

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Understanding Human Resource Data Integration

FDMEE supports loading human resource data from your PeopleSoft Human Capital Management source system into Public Sector Planning and Budgeting applications.

You load human resource data by creating mappings in FDMEE to map the data from your PeopleSoft Human Capital Management source system to Public Sector Planning and Budgeting accounts.

FDMEE supports loading human resource data into Public Sector Planning and Budgeting applications. At this time, no other application types are supported.

If you have made revisions to properties in your Public Sector Planning and Budgeting application, loading human resource data from your source system into the application automatically overrides any modified application properties.

FDMEE supports loading data into the following Public Sector Planning and Budgeting models:

- Employee
- Position
- Employee and Position (both)

For a high-level process overview of the human resource integration, see "Extracting Human Resource Data" on page 33.

Requirements

Before you begin your human resource integration, you must complete the following prerequisites:

- Run specific processes in PeopleSoft Human Capital Management. See "Running Processes in PeopleSoft Human Capital Management" on page 264.
- Specify parameters in Planning to enable data to be loaded into Essbase. See "Defining the Data Load Settings in Planning" on page 264.

Running Processes in PeopleSoft Human Capital Management

To load future-dated salary data from PeopleSoft Human Capital Management, perform these steps in PeopleSoft Human Capital Management.

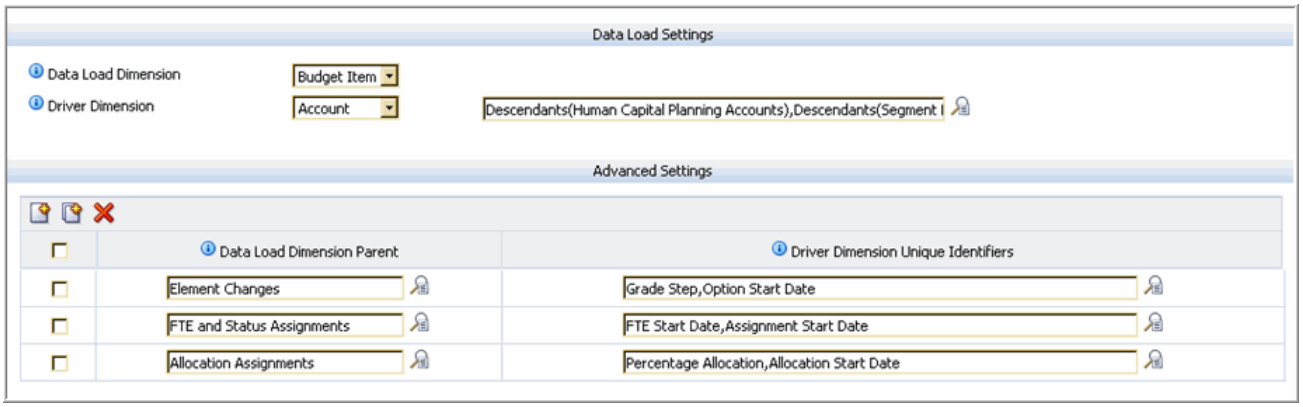
Refer to the PeopleSoft Human Capital Management user documentation for detailed information.

1. Run the Copy Job Data process (BPJBCOPY) to put a copy of data in PS_JOB, PS_COMPENSATION and PS_JOB_EARNS_DIST in PS_BP_JOB, PS_BP_COMPENSATION and PS_BP_JOB_ERN_DIST. Copies of these tables are used instead of human resource tables to ensure that the step increment additions to the data only occur in Public Sector Planning and Budgeting tables and do not affect current human resource data when you run the step increment process.
2. Run the optional Load Step Increment (BPCMP107) process for budgets to generate future-dated job data in PS_BP_JOB and PS_BP_JOB_ERN_DIST.

Defining the Data Load Settings in Planning

In Planning, you must define the data load settings before you can use FDMEE to extract metadata and data from PeopleSoft Human Capital Management.

Data load settings enable you to choose the primary keys based of driver dimension members selected. You can specify other members that are not included in the selected driver dimension members. The data values of these members selected from the driver dimension as primary key are used to uniquely identify a row while finding the next available member from children of the selected member on the left hand side. The following figure shows the Data Load Settings window in Planning.



See *Oracle Hyperion Planning Administrator's Guide* for detailed information.

Public Sector Planning and Budgeting Dimensions

The following Public Sector Planning and Budgeting dimensions are populated by FDMEE:

- Position
- Employee
- Element
- Job Code
- Entity

These dimensions are associated with the following tables:

Dimension	Database Table
Position	AIF_PS_POSITION_DATA_STG
Employee	AIF_PS_JOB_STG
Job Code	AIF_PS_JOBCODE_TBL_STG
Element	AIF_PS_SAL_PLAN_TBL_STG AIF_PS_SAL_GRADE_TBL_STG AIF_PS_SAL_STEP_TBL_STG AIF_PS_EARNINGS_TBL_STG AIF_PS_BENEF_PLAN_TBL_STG
Entity	AIF_PS_DEPT_TBL_STG

For a complete list of Public Sector Planning and Budgeting tables, see Appendix D, " Staging Tables."

Smart Lists

Human Resource data such as salary information, union codes, and status are Smart Lists in Public Sector Planning and Budgeting applications. FDMEE automatically recognizes Smart Lists and populates the data accordingly.

FDMEE enables you to assign a prefix to Smart Lists in the Compensation Allocation point of view (POV). For general ledger integrations, you create metadata mappings and can optionally define member prefixes. For human resource integrations, you can optionally assign a Smart List prefix in the rule line mapping definition. You should ensure that member prefixes (used in a general ledger metadata mapping) are identical to Smart List prefixes (used in a human resource data rule mapping). For information on human resource rule mappings, see "Creating Mapping Definitions" on page 269. For information on general ledger metadata mappings, see "Defining Metadata Rules" on page 132.

For information about using Smart Lists in Planning and Public Sector Planning and Budgeting, see the *Oracle Hyperion Planning Administrator's Guide* and the *Oracle Hyperion Public Sector Planning and Budgeting User's Guide*.

Using Loaded Data in Public Sector Planning and Budgeting

After loading human resource data, perform these tasks:

- For Classic Planning applications, in Planning, refresh the application database as required. See the *Oracle Hyperion Planning Administrator's Guide*.
- For Planning applications administered in Enterprise Performance Management Architect, navigate to the Application Library and redeploy the application. See the *Oracle Hyperion Enterprise Performance Management Architect Administrator's Guide*.
- To view the data and use it as part of Public Sector Planning and Budgeting, see the *Oracle Hyperion Planning Administrator's Guide* and the *Oracle Hyperion Public Sector Planning and Budgeting User's Guide*.

Defining Human Resource Data Load Rules

Subtopics

- Defining the Rule Details
- Creating Rule Line Definitions by Copying
- Creating Rule Line Definitions by Using a Template Mapping
- Creating Rule Line Definitions
- Creating Mapping Definitions

At a high level, creating human resource data load rules that enable you to populate metadata and in Public Sector Planning and Budgeting applications involves these steps:

- Create the human resource data rule and define the rule details. See "Defining the Rule Details" on page 267.
- Create the rule line definitions and mappings manually or by running a script. See "Creating Rule Line Definitions by Using a Template Mapping" on page 268 and "Creating Rule Line Definitions" on page 269.
- "Creating Mapping Definitions" on page 269.

Before you begin, ensure that you have performed all required tasks described in Chapter 6, "Loading Human Resources Data".

- "Running Processes in PeopleSoft Human Capital Management" on page 264.
- "Defining the Data Load Settings in Planning" on page 264.

Before you create a human resource data load rule:

1. Register your human resource source system.
2. Register your target Public Sector Planning and Budgeting application.
3. Review the selected Source Accounting Entities.
4. Define import formats and locations.

For a high-level process overview, see "Extracting Human Resource Data" on page 33.

Defining the Rule Details

➤ To define rule details:

1 On the **Workflow** tab, under **HR Data Load**, select **HR Data Load**.

2 Enter or click to select the **Location**.

3 In the Rule Name area, click **Add**.

4 In the Rule Definition area, enter the **Rule Name**.

5 Enter or click to select the value of the **Scenario** dimension you identified when you registered the application. This enables you to classify and collect time-specific data.

6 **Optional**: Enter a **Description**.

7 Select the **Salary Assignment Option** to specify the salary assignment details to load by the database table.

Salary Assignment Options:

- **Standard**—Load data from PS_JOB table that is live on a given "As of Date."
- **Auto Increment**—Load data from PS_BP_JOB table that is live on a given "As of Date" or is later than it.

Note: To use this option, perform these steps in "Running Processes in PeopleSoft Human Capital Management" on page 264.

- **Standard - Include Future Dated**—Load data from PS_JOB table that is live on a given "As of Date" or is later than it.

8 Enter or click to select the member of the **Version** dimension.

9 Click **Save**.

10 Next, create the rule line definition.

You have three options to create the rule line definition:

- Copy a rule—See "Creating Rule Line Definitions by Copying" on page 268.
- Use a template to create the rule line definitions—See "Creating Rule Line Definitions by Using a Template Mapping" on page 268.
- Create the rule line definitions manually—See "Creating Rule Line Definitions" on page 269.

Creating Rule Line Definitions by Copying

You can create a rule line definition by copying a human resource data rule. Copying a rule copies all the POV rules and their mapping details.

Note: You cannot copy rules across applications.

➤ To create rule line definitions by copying:

1 Perform the steps in "Defining the Rule Details" on page 267.

2 In the Rule Definition area of the HR Data Load page, select **Create Mapping**, and then **Copy from another rule**.

3 Select the source rule.

4 Click **Copy**.

5 Click **OK**.

The POV rules and their mapping details are displayed in the Rule Line area.

6 Edit the mappings as necessary. See "Creating Mapping Definitions" on page 269.

Creating Rule Line Definitions by Using a Template Mapping

You can use a template mapping to automatically create rule line definitions for Public Sector Planning and Budgeting dimensions.

➤ To create rule line definitions using a template:

1 Perform the steps in "Defining the Rule Details" on page 267.

2 Select **Create Mapping**, and then select **Create Template Mapping**.

3 Select the **Language**.

4 Click **OK**.

5 Click **OK**.

The Rule Line Definition area is populated with POVs from the template.

6 Edit the rule line definitions or add new rule line definitions, as necessary. See "Editing Human Resource Data Load Rules" on page 271.

7 Run the data load rule. See "Running Human Resource Data Load Rules" on page 271.

Creating Rule Line Definitions

You create rule line definitions to map dimension members to a Planning account.

➤ To create rule line definitions:

1 In the Rule Line area, click .

2 In **POV Name**, enter a descriptive name for the point of view.

3 In **POV Type**, select the set of dimensions:

- **Position Property**—Position dimension member properties
- **Employee Property**—Employee dimension member properties
- **Position and/or Employee Assignment**—Property and salary data associated with positions and employees.
- **Compensation Allocation**—Allocation of salary costs to general ledger accounts for positions and employees.
- **Jobcode Property**—Available if you created an Employee Only application in Planning, this dimension provides position and employee member properties.
- **Salary Grade**—Rates for Element dimension members that correspond to salary grades.
- **Salary Step**—Rates for Element dimension members that correspond to salary steps.

4 Define the mappings for the POV. See "Creating Mapping Definitions" on page 269.

5 Repeat steps 1 - step 3 through for each POV you want to define.

Creating Mapping Definitions

You define mapping definitions to specify which Public Sector Planning and Budgeting accounts to load with the extracted human resource data. For each dimension in the point of view, you must select a member, and then map the column in the source system to a Planning account.

➤ To create mapping definitions:

1 **In the Rule Line area, click to add a rule line mapping.**

The Rule Line Mapping page is displayed.

2 **In the Rule Line Point of View area, enter or click to search for a member and map the members for dimensions in the point of view (POV).**

You must enter a member for:

- **Budget Item**—For Budget Item dimensions, you may want FDMEE to automatically create the budget item values. This option is available only for the Unspecified Budget Member. You must select a parent member if you plan to select the optional **Auto create flag** setting.

  Note: The parent member that you select must match what you selected in the Planning Data Load Settings window. See "Defining the Data Load Settings in Planning" on page 264.

- **Year**
- **Period**

Selecting a member for all other dimensions is optional. If you do not select a member for a dimension, FDMEE loads the values as-is from the source system.

3 **In the Rule Line Mapping area, define the source column to account mappings. To add a mapping, click .**

4 **Enter or click to select the Source Column.**

You select the source column in the PeopleSoft Human Capital Management table that contains the human resource data to load. For example, if you are creating a rule line mapping for Salary Grade, select the source column "Grade" in the PeopleSoft human resource table. The source columns are specific to the POV Type that you selected when you created the rule line definition.

5 **Enter or click to select the Account.**

You select the Public Sector Planning and Budgeting account into which to load the extracted human resource data. For example, to load employee names and IDs, select Employee Name and Employee Number. For a list of all tables and columns, see Appendix D, " Staging Tables."

The Data Type and Smart List Name fields are automatically populated based on the Account you selected.

Note: Several Smart Lists in Public Sector Planning and Budgeting applications are paired (for example, Account Segment and Account Segment Description). When you map from the source system to a paired Smart List, map one of the paired Smart List members (for example, Account Segment, but not Account Segment Description).

6 Click **Save**.

7 Click **Back** to return to the HR Data Load page.

8 Next, run the data load rule. See "Editing Human Resource Data Load Rules" on page 271.

Managing Human Resource Data Load Rules

Perform the following tasks to manage your data rules:

- Edit data load rules—Typically, if you used a script to create the rule line definitions, you may want to add or edit the mappings. See "Editing Human Resource Data Load Rules" on page 271.
- Run data load rules. See "Editing Human Resource Data Load Rules" on page 271.
- Delete data load rules. See "Deleting Human Resource Data Load Rules" on page 273.
- Check the data rule process details. See "Checking the Human Resource Data Load Rule Status" on page 273.

Editing Human Resource Data Load Rules

➤ To edit human resource data load rules:

1 On the **Workflow** tab, under **HR Data Load**, select **HR Data Load**.

2 Enter or click to select the **Location**.

3 Select the rule to modify and change the rule details, rule line definition, and mapping settings. See "Editing Human Resource Data Load Rules" on page 271.

4 Click **Save**.

Running Human Resource Data Load Rules

To extract and load data from PeopleSoft Human Capital Management, run the human resource data load rule that you defined.

When you run a human resource data load rule, you have several options.

- **Import from Source**—FDMEE imports the data from the source system, performs the necessary transformations, and loads the data to the FDMEE staging table.

  Select this option only in these situations:

  - You are running a data load rule for the first time.

- Your data in the source system changed. For example, if you reviewed the data in the staging table after the export and it was necessary to modify data in the source system.

In many cases, your source system data may not change after you import the data from the source the first time. Therefore, you need not import the data.

- **Export to Target**—Exports the data to the target application.

  Select this option after you have reviewed the data in the staging table and are sure you want to export it to the target application.

Note: Select both options only in cases where you want to load the data directly into the target application.

➤ To run human resource data load rules:

1 On the HR Data Load page, select the rule.

2 Click **Execute**.

3 Enter or select the **As of Date** from which to load data from the human resource source system.

4 To extract data from the source system, select **Import from Source**.

For information on staging tables, see "Staging Table Used for Import from Source" on page 391.

5 To seed loaded data into your target Public Sector Planning and Budgeting application, select **Export to Target**.

Selecting export to target exports the data to the target application.

6 If you selected **Export to Target**, perform these actions:

a. **To load data and/or metadata into a Classic Public Sector Planning and Budgeting application**: Select the **Load Type**:

- Data—Loads only the data.
- Metadata—Loads only the Public Sector Planning and Budgeting metadata.
- Both—Loads the data and metadata.

Note: Choose Metadata or Both as the load type on a new application; otherwise the data load fails.

b. **To load data and/or metadata into an Enterprise Performance Management Architect Public Sector Planning and Budgeting application**:

i. Select **Metadata** and run the data load rule.

ii. After the rule runs successfully, in Oracle Hyperion EPM Architect, deploy the application.

iii. Return to FDMEE. On the HR Data Load page, locate the rule.

iv. Click **Execute** to run the data load rule, and then select **Data**.

c. Select the **Department Load Option** to indicate whether to load all or specific departments and department data in the business unit:

- **All**—Load data for all departments to the target application.
- **Selected**—Load data for departments that you select to the target application. You can press the [Ctrl] key and select multiple departments.

Note: FDMEE merges data and does not "replace" balance data in a target application.

7 **Click Run.**

Data is loaded into your Oracle Hyperion Public Sector Planning and Budgeting accounts.

Deleting Human Resource Data Load Rules

When you delete a human resource data rule, only the rule is removed. The extracted data or dimensions are not removed. You cannot delete a data rule if it is running.

➤ To delete human resource data rules:

1 **From the Workflow tab, under HR Data Load, select HR Data Load.**

2 **Enter or click** **to select the Location.**

3 **Select the rule to remove, and then click Delete.**

The Delete Confirmation dialog box is displayed.

4 **Click Yes.**

The rule is deleted.

Checking the Human Resource Data Load Rule Status

➤ To check data load rule status:

1 **On the Workflow tab, under Monitor, select Process Details.**

2 **From Process Name, select the HR load rule to check.**

Note: See the aif_<process_id>.log in the java.io.tmpdir folder (for example, `C:\Oracle\Middleware\user_projects\epmsystem1\tmp\aif_2548.log`) to view details of any rows rejected during the export step.

7 Batch Processing

In This Chapter

Working with Batch Definitions 276
Adding a Batch Group 281
Executing Batches 281
Using Open Batches 281
Scheduling Jobs 287
Working with Batch Scripts 289

Using the FDMEE batch processing feature, you can:

- Combine one or more load rules in a batch and execute it at one time.
- Run jobs in a batch in serial or parallel mode.
- Define the parameters of the batch.
- Derive the period parameters based on POV settings.
- Create a "master" batch that includes multiple batches with different parameters.

  For example, you can have one batch for metadata rules run in serial mode, and a second batch for the data rule run in parallel mode.
- Associate a batch with a batch group for ease of use and security.
- Instruct the batch to submit included jobs in parallel mode and return control.
- Instruct the batch to submit included jobs in parallel mode and return control only when *all* jobs are complete.

Batch processing options are available on the FDMEE task pane, or by executing batch scripts.

If you process batches from the FDMEE task pane, use the Batch Definition option to create a batch, and specify its parameters and tasks included in the batch. See "Working with Batch Definitions" on page 276. Use the Batch Execution option to execute batches. See "Executing Batches" on page 281.

Note: FDMEE batch load features are unavailable to the Account Reconciliation Manager. For Accounts Reconciliation Manager load and scheduling features, see the *Oracle Hyperion Financial Close Management User's Guide*.

Working with Batch Definitions

A batch definition is used to define the batch jobs and parameters, and the type of rules included in the batch. A batch can contain one type of rule only. Valid types of rules are:

- metadata
- data
- batch
- open batch

Note: Only an administrator can create batch definitions.

The Batch Definition features consist of three regions:

- Batch Definition detail—Enables you to add and delete a batch definition. If adding or modifying a definition, specify the definition name, target application, process method, return control method, and wait parameters.
- Batch Definition parameters—Enables you to derive period parameters based on the Import to Source, Export to Target, POV period, and to indicate data extract parameters. The parameter definition is unavailable for the batch types "batch" and "metadata (rules)."
- Batch Definition jobs—Enables you to add and delete jobs to a batch. Based on the type of batch, specific types of rules are allowed.

➤ To add a batch definition:

1. On the **Setup** tab, under **Batch**, select **Batch Definition**.
2. In the **Batch Definition** summary section, click **Add**.

   Use the blank Name and Target Application fields in the Batch Definition summary grid to enter a batch name or target application on which to search.
3. In **Batch Definition** detail section, select the **Definition** tab.
4. In **Name**, specify the name of the batch definition.

   The name must contain only alpha, numeric or underscore characters. Do not enter spaces or any other character.
5. From **Target Application**, select the name of the target application.
6. From **Type** select the type of rule for the definition.

   Available types are:

   - metadata
   - data
   - batch
   - open batch—file based data sources

- open batch Multi-Period–file based data sources that include starting and ending periods.

The Open Batch type is used only for file-based data sources and does not contain any batch jobs. When you run this type of batch, the process reads the files automatically from the `openbatch` directory and imports them into the appropriate POV based on the file name. When the open batch is run, the master folder is emptied.

7 From **Execution Mode**, select the batch process method.

- Serial—Processes files sequentially, requiring that one file complete its process before the next file starts its process.
- Parallel—Processes files simultaneously.

8 For batch processing run in parallel mode, complete the following fields

- **Wait for Completion**—Select **Wait** to return control only when the batch has finished processed.

  Select *No Wait* to run the batch in the background. In this case, control is returned immediately.

- **Timeout**—Specify the maximum time the job can run. FDMEE waits for the job to complete before returning control.

  The Timeout can be in seconds or minutes. Enter a number followed by a **S** for seconds or **M** for minutes.

9 In **Open Batch Directory** for an open batch type, specify the folder under `inbox\batches\openbatch` where the files to be imported are copied. If this field is blank or null, all files under `inbox\batches\openbatch` are processed.

10 In **File Name Separator** for an open batch, select the character to use when separating the five segments of an open batch file name.

Options:

- ~
- @
- ;
- _

11 Select **Auto Create Data Rule** to create the data rule automatically for file-based data loads.

Note: The Auto Create Data Rule option is available when the rule type is "open batch."

When FDMEE assigns the data rule name, it checks when a data rule with the name " Location_Category " exists. If this name does not exist, FDMEE creates the data rule using the following file naming conventions:

- Rule Name—Location_Category
- Description—"Auto created data rule"

- Category—Category
- File Name—Null
- Mode—Replace

12 **Optional:** In the **Description** field, enter a description of the batch definition.

13 Click **Save**.

14 **Optional:** In **Batch Group**, select the batch group to associate with the batch.

15 **Optional:** In **Before Batch Script**, enter the name of the custom script to run before the batch.

You can browse and select, or upload a custom script on the Select screen by clicking .

The custom script can be written in Jython or Visual Basic script.

16 **Optional:** In **After Batch Script**, enter the name of the custom script to run after the batch.

You can browse and select, or upload a custom script on the Select screen by clicking .

The custom script can be written in Jython or Visual Basic script.

17 Click **Save**.

➤ To add batch definition parameters:

1 On the **Setup** tab, under **Batch**, select **Batch Definition**.

2 In **Batch Definition**, under **Batch Definition Detail**, select the **Parameter** tab.

3 In **Parameters**, select **Import From Source** to import the data from the source system, perform the necessary transformations, and export the data to the FDMEE staging table.

4 Select **Export To Target** to export the data to the target application.

5 Select **POV Period** to derive the period parameters based on POV settings.

If the POV period is selected, the period key start and end period fields are disabled.

This field is only available for a data load batch.

When setting up a batch, you can choose the POV to drive the period, or enter the periods explicitly. If you select the POV, it is pulled from the Default POV Period setting in System/ Application, or User settings.

6 Specify dates in the **Start Period** and **End Period** to derive period parameters through which the data is processed.

Use the date format based on the locale settings for your locale. For example, enter the date using the format MM/DD/YY.

If the Start Period and End Period fields are selected, the POV Period field is disabled.

This field is only available for a data load batch.

7 In the **Import Mode** drop-down, select the mode to extract data all at once for an entire period or incrementally during the period.

Option are:

- **Snapshot**—Extracts everything for the selected source set for an entire period.

  Note the following behavior of Snapshot mode:

  - When the source data for the selected period *has never been run*, data is extracted from the source.
  - When the source data for the selected period *has been run*, data is extracted from the FDMEE staging table, and not from the source. This means that if a user has two locations that extract from the same Enterprise Resource Planning (ERP) source, data is extracted from the source only once (and the first time only).

    For example, if you load data to Financial Management from the E-Business Suite for a selected period, but you run the integration to ARM for the same source and period, use what is in the interface tables since data is only extracted the first time from the source. This result in a significant performance gain for any subsequent data loads. The first extraction take the longest, but any other subsequent extractions are fast.

- **Incremental**—Extracts those records that were added after the prior data extract
- **Full Refresh**—Performs a clean extraction from the source system, thereby clearing any existing data rows in the appropriate FDMEE staging tables for a given source Ledger (or Business Unit) and source period.

  When defining the file name for an open batch that uses multi-periods, specify the starting and ending periods in the file name, for example, `10~Filerule~Jan03~Mar03~FR.txt`.

  When defining the file for an open batch that uses a single period, specify the period in the file name, for example, `10-OBFilerule-Jan03-FR.txt`.

  Note: The import mode options (Snapshot, Incremental and Full Refresh) are only applicable to Data Rules in a Location using a Standard Import Format. Data Rules in a Location with a Source Adapter Import format always perform a full data extraction (similar to Full Refresh) directly into the TDATASEG_T table.

Note: The import mode options mode options (Snapshot, Incremental and Full Refresh) are only applicable to Data Rules in a Location using a Standard Import Format. Data Rules in a Location with a Source Adapter Import format always perform a full data extraction (similar to Full Refresh) directly into the TDATASEG_T table.

Note: E-Business Suite and FUSION source imports require a full refresh of data load rules before export after upgrading from a 11.1.2.2 release.

This field is only available for a data load batch.

8 Select **Extract Exchange Rate** to extract the exchange rate.

(This option is not applicable for file-based source systems).

9 **For Essbase and Planning applications, in the Export Mode drop-down, select the mode of exporting data.**

For Planning applications, in the **Export Mode** drop-down, select the mode of exporting data.

Options for Essbase and Planning applications:

- STORE_DATA
- ADD_DATA
- SUBTRACT_DATA
- OVERRIDE_ALL_DATA

This field is only available for a data load batch.

10 **For Essbase and Planning applications, in the Export Mode drop-down, select the mode of exporting data.**

For Planning applications, in the **Export Mode** drop-down, select the mode of exporting data.

Options for Essbase and Planning applications are:

- STORE_DATA
- ADD_DATA
- SUBTRACT_DATA
- OVERRIDE_ALL_DATA

Options for the Financial Management applications:

- Accumulate
- Replace
- Merge

This field is only available for a data load batch.

11 **Click Save.**

➤ To add a batch job:

1 **On the Setup tab, under Batch, select Batch Definition.**

2 **In Batch Definition, under Batch Jobs, click Add.**

3 **In Rule Name, specify the rule name associated with the batch job.**

You can also select the to navigate to and select the rule name.

4 **In Job Sequence, specify the order in which to sequence the batch.**

5 **Click Save.**

Adding a Batch Group

Batch groups enable you to determine security eligibility when executing batches.

See "Setting Security Options" on page 49.

➤ To add a batch group:

1 On the **Setup** tab, under **Batch**, select **Batch Definition**.

2 Select the **Batch Group** tab.

3 Click **Add**.

4 In **Name**, specify the batch group name.

5 Click **Save**.

6 **Optional**: Associate a batch with a batch group:

   a. Select the **Batch** tab.

   b. From the **Batch** summary section, select the batch to associate with a batch group.

   c. From the **Batch** detail section, select the **Definition** tab.

   d. In **Batch Group**, select the batch group to associate with the batch.

   e. Click **Save**.

Executing Batches

Use the Batch Execution feature to show all batches that you have accessed based on the batch group assigned. You can also use the Batch Execution feature to select a batch and execute a rule after parameters passed with the rule have been validated.

Batch Exec shows all batches you have access based on batch group assigned.

Note: The Batch Execution option is only accessible to a user with a Run Integration role.

➤ To execute a rule:

1 On the **Workflow** tab, under **Other**, select **Batch Execution**.

2 In the **Batch Execution** summary area, select a batch name, and then click **Execute**.

3 **Optional:** You can also schedule a job (see "Scheduling Jobs" on page 287) and check the status of the batch (see "Viewing Process Details" on page 202).

Using Open Batches

The open batch functionality is used to read file-based data sources and import them into the appropriate POV based on the file name. This feature enables you to automate the process of

loading large number of files. Open batches cannot contain jobs. Additionally, open batches can be scheduled to run periodically.

The high-level process overview of the Open Batches function consists of:

1. In Batch Definition, create an `openbatch` folder in the application `inbox\batches` subdirectory where the files to be imported are copied.
2. Select the File Name Separator character.

   This character is used to separate the five segments of an open batch file name.
3. Select the Auto Create Data Rule option.
4. Stage the open batch files by copying files to the `inbox\batches\openbatch` folder using the name format for batch files.
5. In Batch Execution, process the batch.

   After a batch is processed, a directory is created, all files within the `openbatch` directory are moved into the new directory, and the new directory is assigned a unique batch ID

Creating Open Batches

➤ To create and process open batch:

1 **On the Setup tab, under Batch, select Batch Definition.**

2 **In the Batch Definition summary section, click Add.**

Use the blank Name and Target Application fields in the Batch Definition summary grid to enter a batch name or target application on which to search.

3 **In Batch Definition Detail section, select the Definition tab.**

4 **In Name, specify the name of the batch definition.**

5 **From the Target Application drop-down, select the name of the target application.**

6 **In the Type drop-down, select Open Batch.**

7 **In the Execution Mode drop-down, select Serial.**

The serial execution mode processes files sequentially, requiring that one file complete its process before the next file starts its process.

8 **In Open Batch Directory, specify the folder under `inbox\batches\openbatch` subdirectory where the files to be imported are copied. If this field is blank or null, all files under `inbox\batches\openbatch` are processed.**

9 **In File Name Separator, for an open batch type, select the character to use when separating the five segments of a batch file name.**

Options:

- ~
- @
- _

- ;

10 **Select Auto Create Data Rule to create the data rule automatically for file-based data loads.**

When FDMEE assigns the data rule name, it checks whether a data rule with the“ Location_Category ” name exists. If the name does not exist, FDMEE creates the data rule using the following file naming conventions:

- Rule Name–Location_Category
- Description–“Auto-created data rule”
- Category–Category
- File Name–Null
- Mode–Replace

To use predefined data rules that load data based on specific categories, leave this field blank.

11 **Optional: In the Description field, enter a description of the batch definition.**

12 **Click Save.**

13 **Stage the file-based data source files by copying them to `inbox\batches\openbatch` using one of the following methods:**

- Predefined Data Load Rule—To use a predefined data rule that loads data based on specific categories, leave the Auto Create Data Rule field blank on the Batch Definition screen and create the data load rule (see “Defining Data Load Rules to Extract Data” on page 161).

  Next, create the open batch file name using the following format: `FileID_RuleName_Period_LoadMethod`. The file id is a free-form field that you can use to control the load order. Batch files load in alphabetic order by file name.

  The load method is defined using two-character code identifying the load method where the first code represents the append or replace method for the source load, and second character represents the accumulate or replace method for the target load.

  For the source load method, available values are:

  - A—Append
  - R—Replace

  For the target load method, available values are:

  - A—Accumulate
  - R—Replace

  Examples of an open batch file name are: `a_Texas_Actual04_Jan-2004_RR.txt` and `b_Texas_Actual04_Jan-2004_RR.txt`

- Auto-Created Data Load Rule—To load data to any location category and have FDMEE create the data load rule automatically, create the open batch file name using the following format: “FileID_Location_Category_Period_LoadMethod”. In this case

FDMEE looks for the data rule with the name "Location_Category". If it does not exist, FDMEE creates the data rule automatically with the name "Location_Category"

14 **Optional:** Apply any scheduling conditions to the open batch file.

See "Scheduling Jobs" on page 287.

15 On the **Workflow** tab, under **Other**, select **Batch Execution**.

16 In the **Batch Execution** summary area, select the open batch file, and then click **Execute**.

After an open batch is processed, a directory is created, all files within the `openbatch` directory are moved into the new directory, and the new directory is assigned a unique batch ID.

Note: The Open batch feature is unavailable for the Account Reconciliation Manager.

Creating an Open Batch to Run an Integration with E-Business Suite

You can use Open Batch functionality to run an integration with E-Business Suite. To do this, you create an empty file with the POV and the data load rule in the file name, and then save it to the open batch folder on the server. When you run the open batch process, FDMEE runs the E-Business Suite integration for the specified rule and POV.

Creating Open Batches for Multiple Periods

You can use the open batch functionality to read file-based data sources with multiple periods and import them into the appropriate POV based on the file name. This feature enables you to automate the process of loading large number of files. Open batches for multiple periods cannot contain jobs. Additionally, open batches for multiple periods can be scheduled to run periodically.

Files for an open batch multiple period load stored in the `inbox\batches\openbatchml` directory.

The names of multiple period batch files consist of the following segments in the following order:

- File ID—A free-form field used to control load order. Batch files load in alphabetic order by file name.
- Location
- Category
- Start Period
- End Period
- Load Method—A two-character item (Character 1 = append or replace, and Character 2 = target append or replace). Valid values are **A** and **R**.

Examples of open batch for a multiple period file name:

`a_Texas_Actual_ Jan-2004_ Jun-2004_RR.txt (Loc, Cat, Start Period, End Period)`

and

`b_TexasDR1_ Jan-2004_ Jun-2004_RR.txt (Data Rule, Start Period, End Period)`

➤ To create and process open batch:

1 On the **Setup** tab, under **Batch**, select **Batch Definition**.

2 In the **Batch Definition** summary area, click **Add**.

Use the blank Name and Target Application fields in the Batch Definition summary grid to enter a batch name or target application on which to search.

3 In **Batch Definition Detail** section, select the **Definition** tab.

4 In **Name**, specify the name of the batch definition.

5 From **Target Application**, select the name of the target application.

6 From **Type**, select **Open Batch Multi-Period**.

7 In the **Execution Mode** drop-down, select **Serial**.

The serial execution mode processes files sequentially, requiring that one file complete its process before the next file starts its process.

8 In **Open Batch Directory**, specify the folder under `inbox\batches\openbatchml` subdirectory where the files to be imported are copied. If this field is blank or null, all files under `inbox\batches\openbatchml` are processed.

9 In **File Name Separator**, for an open batch type, select the character to use when separating the five segments of a batch file name.

Options:

- ~
- @
- ;
- _

10 Select **Auto Create Data Rule** to create the data rule automatically for file-based data loads.

When FDMEE assigns the data rule name, it checks whether a data rule with the "Location_Category " name exists. If the name does not exist, FDMEE creates the data rule using the following file name convention:

- Rule Name–Location_Category
- Description–"Auto-created data rule"
- Category–Category
- File Name–Null
- Mode–Replace

To use predefined data rules that load data based on specific categories, leave this field blank

11 **Optional:** In the **Description** field, enter a description of the batch definition.

12 Click **Save**.

13 Stage the file-based data source files by copying them to `inbox\batches\openbatch` using one of the following methods:

- Predefined Data Load Rule—To use a predefined data rule that loads data based on specific categories, leave the Auto Create Data Rule field blank on the Batch Definition screen and create the data load rule (see "Defining Data Load Rules to Extract Data" on page 161).

  If you have to load to noncontiguous periods in the open batch, create the data rule in which the source period mapping are defined, and use this option.

  Next, create the open batch file name using the following format: `FileID_RuleName_Period_LoadMethod`. The file id is a free-form field that you can use to control the load order. Batch files load in alphabetic order by file name.

  The load method is defined using two-character code identifying the load method where the first code represents the append or replace method for the source load, and second character represents the accumulate or replace method for the target load.

  For the source load method, available values are:

  - A—Append
  - R—Replace

  For the target load method, available values are:

  - A—Accumulate
  - R—Replace

  Examples of an open batch file name are: `a_Texas_Actual04_Jan-2004_RR.txt` and `b_Texas_Actual04_Jan-2004_RR.txt`

- Auto-Created Data Load Rule—To load data to any location category and have FDMEE create the data load rule automatically, create the open batch file name using the following format: "FileID_Location_Category_Period_LoadMethod". In this case FDMEE looks for the data rule with the name "Location_Category." If it does not exist, FDMEE creates the data rule automatically with the name "Location_Category."

  Auto-create data rule is only applicable for contiguous period loads. If you have to load to noncontiguous periods, create the data rule in which the source period mapping are defined.

14 **Optional:** Apply any scheduling conditions to the open batch file.

See "Scheduling Jobs" on page 287.

15 On the **Workflow** tab, under **Other**, select **Batch Execution**.

16 In the **Batch Execution** summary area, select an open batch file, and then click **Execute**.

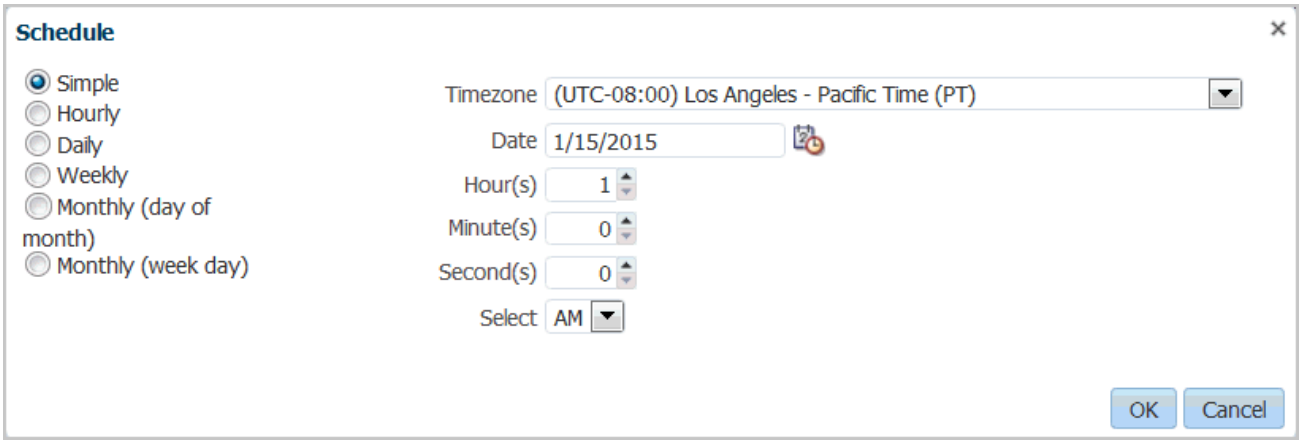
After an open batch is processed, a directory is created, all files within the `openbatch` directory are moved into the new directory, and the new directory is assigned a unique batch ID.

Note: The Open batch feature is unavailable for the Account Reconciliation Manager.

Scheduling Jobs

The scheduling jobs feature provides a method to orchestrate the execution times of metadata load rules and data load rules.

Note: When you cancel a job from the FDMEE user interface, all instances of a schedule for the object selected are cancelled. To cancel a specific instance of a schedule, cancel the job from the ODI studio or ODI console.



➤ To schedule a job:

1 From the **Batch Execution** screen, **Metadata** screen, or **Data Load Rule** screen, select the batch name (from the Batch Execution screen) or rule (from the Metadata screen or Data Load Rule screens) to schedule and click **Schedule**.

2 In **Schedule**, select any rule feature specific options.

For example, if you select the **Schedule** option from the **Data Load Rule** screen, specify the Import from Source, Recalculate, Export to Target, and so on options.

For Data Load Rule scheduling specific options, see "Running Data Load Rules" on page 183.

3 Specify the type of scheduling and select the associated date and time parameters.

See Table 46 on page 288.

4 Click **OK**.

Table 46 Schedule Types and Parameters

Schedule Type	Data and Time Parameters
Simple	Submits the job for execution at a specific day and time, but does not repeat: Options are: ● Timezone ● Date ● Hour(s) ● Minute(s) ● Second(s) ● Select (AM/PM)
Hourly	Executes at the specified minutes and seconds after the top of the hour every hour until cancelled. Options are: ● Timezone ● Minute(s) ● Second(s)
Daily	Executes at the same time each day. Options are: ● Timezone ● Hour(s) ● Minute(s) ● Second(s) ● Select (AM/PM)
Weekly	Executes at the specific time for each day selected. Options are: ● Timezone ● Monday-Sunday ● Hour(s) ● Minute(s) ● Second(s) ● Select (AM/PM)
Monthly (day of month)	Execute at the specific time for the day of the month selected. Also enables you to select the “Last Day of Month” or “Day Before End of Month”. Options are: ● Timezone ● Monthly Date ● Hour(s) ● Minute(s) ● Second(s) ● Select (AM/PM)

Schedule Type	Data and Time Parameters
Monthly (week day)	You can select the first, second, third, fourth, fifth, last, and then the specific day or the week on which to execute the job. Options are: ● Day of Month ● Day ● Hour(s) ● Minute(s) ● Second(s) ● Select (AM/PM) **Note:** The Timezone option is unavailable for the Monthly (week day) schedule type.

Canceling a Scheduled Job

When you cancel a scheduled job from FDMEE, all instances of the scheduled job for the object selected are cancelled. To cancel a specific instance of a schedule, use the ODI Studio or ODI Console.

➤ To can a scheduled job:

1 **On the Batch Execution screen, select the batch.**

2 **Click Cancel Schedule.**

Working with Batch Scripts

Subtopics

- Using Password Encryption
- Executing the Batch Script for Data Load Rules
- Executing the Batch Script for Metadata Rules
- Executing the Batch Script for HR Data Rules
- Executing the Batch Script to Import Mapping Rules
- Executing the Batch Script for Data Load Rules to Write Back
- Running a Batch

FDMEE provides a set of Windows batch/UNIX shell scripts that enable users to execute data load rules from a command line or schedule loads from any scheduler without writing Java code. Batch scripts can be invoked from the command line. In turn, scripts call the data load and metadata load API in the FDMEE application server that execute the rules using the normal process used in data rule and workbench. Batch scripts are located under a`<EPM_ORACLE_INSTANCE>/FinancialDataQuality` directory (<EPM_ORACLE_INSTANCE> is typically is located at: `C:\Oracle\Middleware\user_projects\epmsystem1`)

Using a batch script to run data load rules includes:

- Executing the batch script for data load rules. See "Executing the Batch Script for Data Load Rules" on page 290.
- Executing the batch script for metadata rules.

Note: Period names cannot include spaces if used in a batch script.

Using Password Encryption

FDMEE provides a Win/UNIX script to encrypt a password and store in a file. Script encryptpassword.bat/sh is located in `EPM ORACLE INSTANCE/FinancialDataQuality` directory.

➤ To encrypt a password:

1 **Navigate to the directory that has the batch files.**

Typically, the batch file directory is `EPM ORACLE INSTANCE/FinancialDataQuality` directory

2 **From the `EPM ORACLE INSTANCE/FinancialDataQuality` directory, at a command prompt, run the script encryptpassword.bat <passwordfile>.**

3 **When prompted, enter the password, and then click Enter.**

Note the following:

- The password is masked when you type it.
- When running the batch script, you can provide the password by file name as a parameter in the following format: `-f:passwordfile`. The file name used as a parameter is placed in the location defined in "Encrypted Password Folder" option of System Settings.
- Do not include a disk or directory specification as part of the file name, just enter a file name with or without an extension.
- Replace the [file] with the actual file name, and do not include the brackets.
- The script encrypts the password and writes it to the file provided as a parameter.
- For information on running a data load rule batch script with a password from a file, see "Executing the Batch Script for Data Load Rules" on page 290.
- For information on running a metadata load rule batch script with a password from a file, see "Executing the Batch Script for Metadata Rules" on page 292.

Executing the Batch Script for Data Load Rules

➤ To run the data load rule batch script with a plain text password:

1 **Display a Windows command window or UNIX shell.**

2 **Paste and run the following command:** `loaddata USER PASSWORD RULE_NAME IMPORT_FROM_SOURCE EXPORT_TO_TARGET EXPORT_MODE IMPORT_MODE LOAD_FX_RATE START_PERIOD_NAME END_PERIOD_NAME SYNC_MODE`

➤ To run the data load rule batch script with a password from a file:

1 **Display a Windows command window or UNIX shell.**

2 **Paste and run the following command:** `loaddata USER -f:PASSWORD_FILE RULE_NAME IMPORT_FROM_SOURCE EXPORT_TO_TARGET EXPORT_MORE IMPORT_MODE LOAD_FX_RATE START_PERIOD_NAME END_PERIOD_NAME SYNC_MODE`

Setting the Parameters for Data Load Rules

The parameters used to execute a batch script for data load rules are:

Table 47 Parameters for Data Load Rules

Parameter	Value
User	Username
Password	Password or –f:Password file name
IMPORT_FROM_SOURCE	Y or N
EXPORT_TO_TARGET	Y or N
EXPORT_MODE	Essbase and Planning applications export modes: ● STORE_DATA ● ADD_DATA ● SUBTRACT_DATA ● REPLACE_DATA ● OVERRIDE_ALL_DATA The Financial Management application export mode: ● Accumulate ● Replace ● Merge ● Replace_By_Security

Parameter	Value
IMPORT_MODE	• Snapshot • Incremental • Full Refresh The file-based source system export modes: • Append • Replace **Note:** E-Business Suite and FUSION source imports require a full refresh of data load rules before export after upgrading from a 11.1.2.2 release.
START_PERIOD_NAME	Period Name or POV if the POV specified period value is retrieved from the period profile.
END_PERIOD_NAME	Period Name or POV if the POV specified period value is retrieved from the period profile.
SYNC_MODE	SYNC/ASYNC • SYNC—Process runs immediately and control returns when process completes. • ASYNC—When the ODI job is submitted, control returns. The load process continues to execute in ODI.

Executing the Batch Script for Metadata Rules

➤ To run the metadata load rule batch script with a plain text password:

1 **Display a Windows command window or UNIX shell.**

2 **At a Windows command window or UNIX shell, paste and run the following command:**

```
loadmetadata USER PASSWORD LOCATION_NAME SYNC_MODE
```

➤ To run the metadata load rule batch script with a password from a file:

1 **Display a Windows command window or UNIX shell.**

2 **At a Windows command window or UNIX shell, paste and run the following command:**

```
loadmetadata USER -f:PASSWORD_FILE LOCATION_NAME SYNC_MODE
```

Setting the Parameters for Metadata Rules

The parameters used to execute a batch script for metadata rules are:

Table 48 Parameters for Metadata Rules

Parameter	Value
User	Username
Password	Password or –f:Password file name

Parameter	Value
Location	Location Name
SYNC_MODE	SYNC/ASYNC ● SYNC—Process run immediately and control returns when the process completes. ● ASYNC—When ODI job is submitted, control returns. The load process continues to execute executed in ODI.

Executing the Batch Script for HR Data Rules

➤ To run the HR data rule batch script with a plain text password:

1 **Display a Windows command window or UNIX shell.**

2 **Paste and run the following command:** `loadhrdata USER PASSWORD LOCATION_NAME SYNC_MODE`

➤ To run the HR data d rule batch script with a password from a file:

1 **Display a Windows command window or UNIX shell.**

2 **Paste and run the following command:** `loadhrdata USER -f:PASSWORD_FILE LOCATION_NAME SYNC_MODE`.

Setting the Parameters for HR Data Rules

The parameters used to execute a batch script for HR data rules are:

Table 49 Parameters for Human Resources Rules

Parameter	Value
User	Username
Password	Password or –f:Password file name
Rule Name	HR data rule name
IMPORT_FROM_SOURCE	Y or N
EXPORT_TO_TARGET	Y or N
As of Date	Date used to determine applicable effective date. Date must be in the YYYY-MM-DD format.
Load Type	Specify the load type: ● Data—Loads only the data ● Metadata—Loads only the Public Sector Planning and Budgeting metadata ● Both—Loads the data and metadata.

Executing the Batch Script to Import Mapping Rules

You can use the `importmapping` batch script to import mappings rules from a command line.

➤ To run the import mapping rule batch script with a password from a file:

1 **Display a Windows command window or UNIX shell.**

2 **Paste and run the following command:** `importmapping USER_NAME ENCY_PASS LOCATION_NAME DIMENSION_NAME FILE_PATH REPLACE VALIDATE SYNC_MODE`

Setting the Parameters to Import Mappings Rules

The parameters used to execute a batch script for importing mapping rules:

Table 50 Parameters for Data Load Rules

Parameter	Value
USER_NAME	Username
ENCY_PASS	Password or –f:Password file name
LOCATION_NAME	Location Name
DIMENSION_NAME	Name of the dimension
File_PATH	Directory from which to import source files.
Replace	Import mode load method: ● A—Append ● R—Replace
Validate	Y or N
SYNC_MODE	SYNC/ASYNC ● SYNC—Process runs immediately and control returns when process completes. ● ASYNC—When the ODI job is submitted, control returns. The load process continues to execute in ODI.

Executing the Batch Script for Data Load Rules to Write Back

Use the "Loaddata" script to extract data from source EPM applications to target Enterprise Resource Planning (ERP) systems. See "Executing the Batch Script for Data Load Rules" on page 290.

Running a Batch

➤ To run the batch with a plain text password:

1 **Display a Windows command window or UNIX shell.**

2 **Paste and run the following command:** `runbatch USER PASSWORD LOCATION_NAME SYNC_MODE`.

➤ To run the batch with a password from a file:

1 **Display a Windows command window or UNIX shell.**

2 **Paste and run the following command:** `runbatch USER -f:PASSWORD_FILE LOCATION_NAME SYNC_MODE`.

Setting the Parameters for Running the Batch

The parameters used to run the batch are:

Table 51 Parameters for running a batch.

Parameter	Value
User	Username
Password	Password or -f:Password file name
Rule Name	Batch Name

8 Creating and Using Scripts

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Overview

FDMEE offers a powerful extensibility framework by providing Jython and Visual Basic based scripting. Using the rich set of the API library, users can extend and customize the product to best fit their needs. FDMEE supports four types of scripts:

- Import scripts—Executed as source files are imported. Uses Jython script only.
- Mapping scripts—Used to build mapping logic to derive target members based on multiple source column and IF THEN logic. Uses Jython and SQL script.
- Event script—Executed in response to FDMEE such as before or after an import. Uses Jython and Visual Basic script.
- Custom script—Enables manual execution of scripts. Uses Jython and Visual Basic script.

FDMEE provides a set of Java APIs that enable you to look up frequently used data load properties or to perform a common action. FDMEE also supports Visual Basic based event scripts.

Key Jython Concepts

Before using scripts, be familiar with the following important Jython concepts:

- Code Indentation
- No Data Type Declaration
- Array Index starts at 0

- Substring is str[Start Position: Start Position + Length].
- ability to access any Java library

For information on Jython concepts: see:

- www.jython.org
- www.python.org

For information on using exception handling mechanisms in Jython, see www.jython.org.

For an example of how a "try-except block" is used in an Event script, see "Events Script Sample" on page 316.

Using the Script Editor

Overview

The Script Editor is used to define Jython scripts that run in response to FDMEE events or during the file import processes. Scripts are saved in the `data\scripts` directory of the FDMEE application (with a `.py` extension for Jython scripts or a `.vbs` extension for Visual Basic scripts). Import scripts are saved to the `data\scripts\import` subdirectory, event scripts are saved to the `data\scripts\event` subdirectory, and custom scripts are saved to the `data\scripts\custom` subdirectory. Scripts can be copied to other FDMEE environments and edited using a text editor.

Launching the Script Editor

➤ To access the Script Editor:

1 **On the Setup tab, select Scripts.**

2 **Select Script Editor.**

Script Editor Layout

The left pane of the Script Editor lists the directories that contain the two types of FDMEE scripts: Import and Event. The right pane enables you to write and copy the code for script.

Using Import Scripts

Overview

Note: FDMEE import integration is implemented using the Jython scripting engine. The Visual Basic scripting engine cannot be used with import scripts.

When working with import scripts, note the following considerations:

- Import scripts are executed as source files are imported.
- Import scripts are only valid for file-based data loads.
- Import scripts must be created using Jython functions only. The format is "def <name>(parm1, parm2)" and a return value.
- Import script pass two parameters by FDMEE:
  - a dimension value defined by the import format
  - an entire record from the source

  For example, when the account column is defined as position 2 to position 4 characters, then this value gets passed as the value for the field, and the whole input line is passed as the second parameter. In the sample script (see "Import Script Sample" on page 309) these parameters are specified by the StrField and StrRec values, but can be any names as long as you remember that the first parameter is the field, and the second one is the entire record.
- An import script on the Amount column is always executed first.
- The file name and the function name must be the same.
- The return value from the function populates the source column in the `TDATASEG` table for the specified dimension. You can only return a single value.
- It is recommended that you use a text editor to edit your script, and then copy and paste it into FDMEE.
- Import scripts are not handled in Lifecycle Management.

Creating Import Scripts

➤ To create import scripts:

1. On the **Setup** tab, under **Scripts**, select **Script Editor**.
2. On the **Script Editor** screen, click **New**.
3. From **Script Type**, select **Import**.
4. In **File Name**, enter a name for the script.
5. Click **OK**.

6 Write the code for the custom script in the Script Editor.

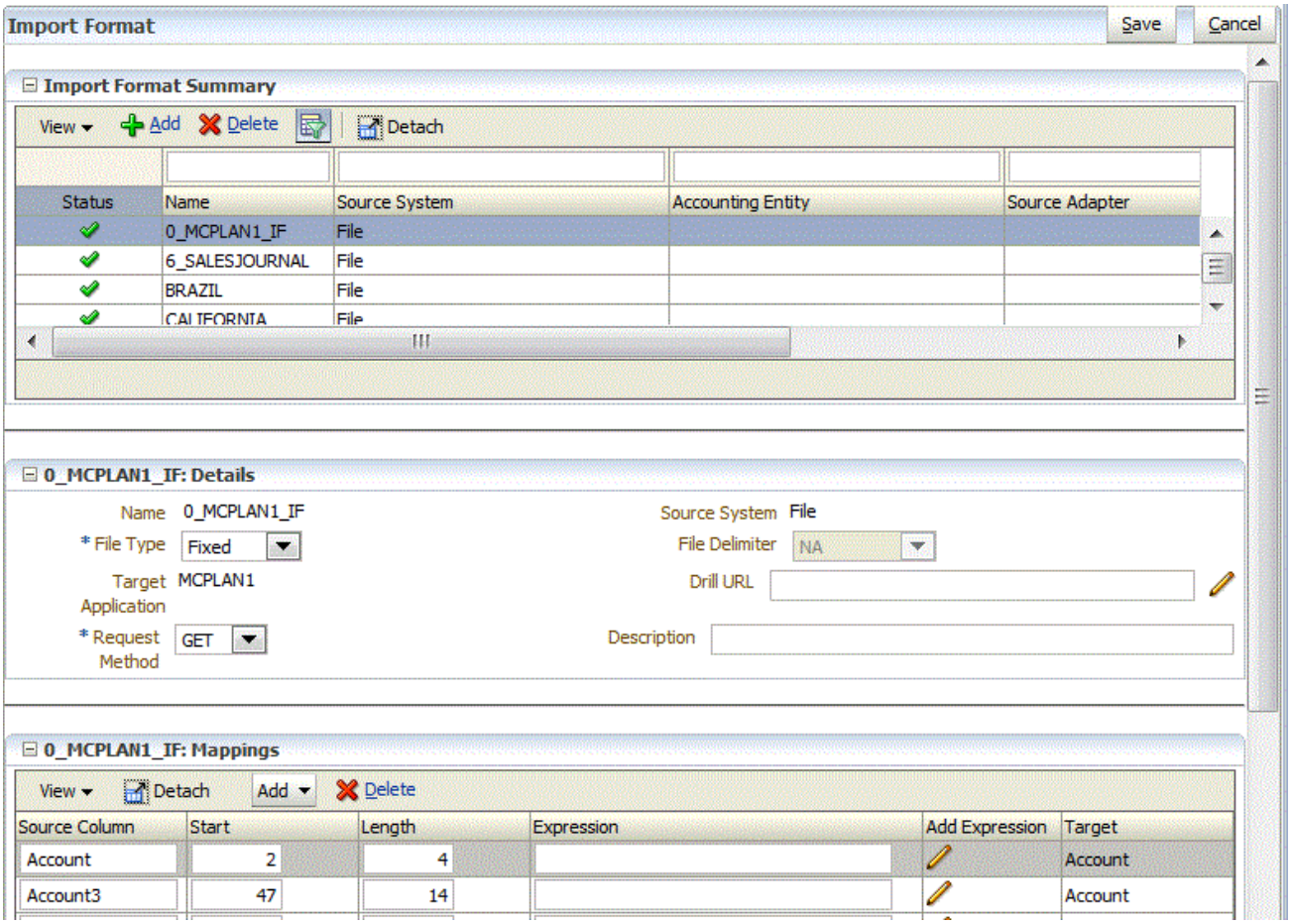
7 Click **Save**.

Import Script Parameters

The import format script is defined as a Jython function. The Jython function name should be same as the script file name. This function accepts two parameters: the current Field and current row being processed.

- **strField**—The values of the source-file column that is defined in the import format (For example, for import scripts assigned to the Amount column, `strField` contains amount values, and, for import scripts assigned to the Account column, `strField` contains account values.
- **strRecord**—The source-file line (record) that is being scanned.

In following example, the script concatenates the account code with the account description from the source file. For example, the first data line of the file is account code 1110 with a description of "Cash". This script concatenates 1110 with "Cash" and creates a source account in the TDATASEG table named "1110-Cash". (See "TDATASEG Table Reference" on page 419). In the script, you select the field that is defined by the import format, and then the field defined by places 14 through 34 in the current record. (Jython starts numbering columns with 0 rather than 1.)



Assigning Import Scripts to Import Formats

After creating and saving a script in the Script Editor, you assign the script to an import field—any import field within any import format.

➤ To assign import scripts to import fields:

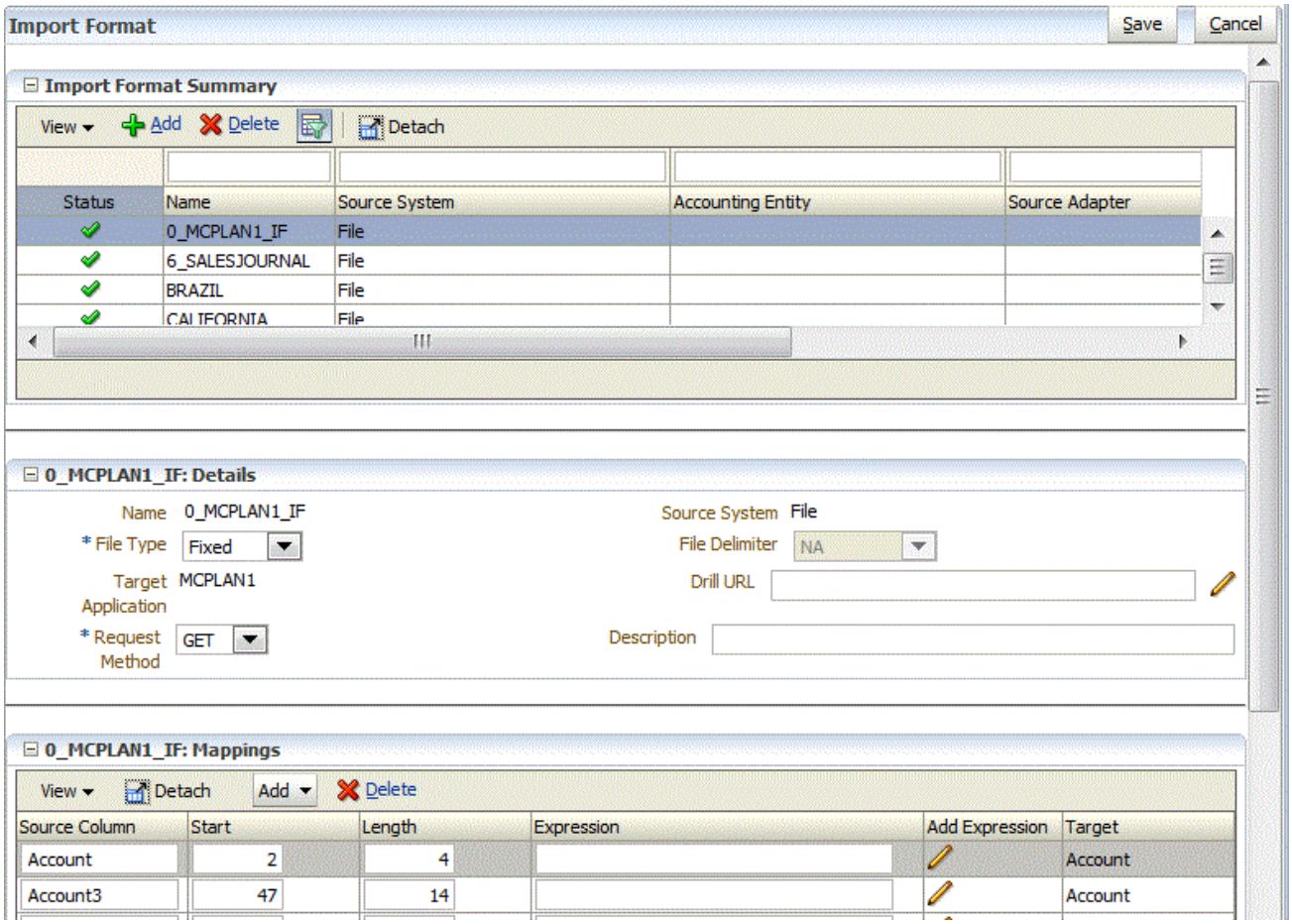
1 On the **Setup** tab, under **Integration Setup**, select **Import Format**.

2 From the **Import Format summary grid**, select the import format name.

Note: Use non-ASCII characters in an import format name when the import source is an adapter.

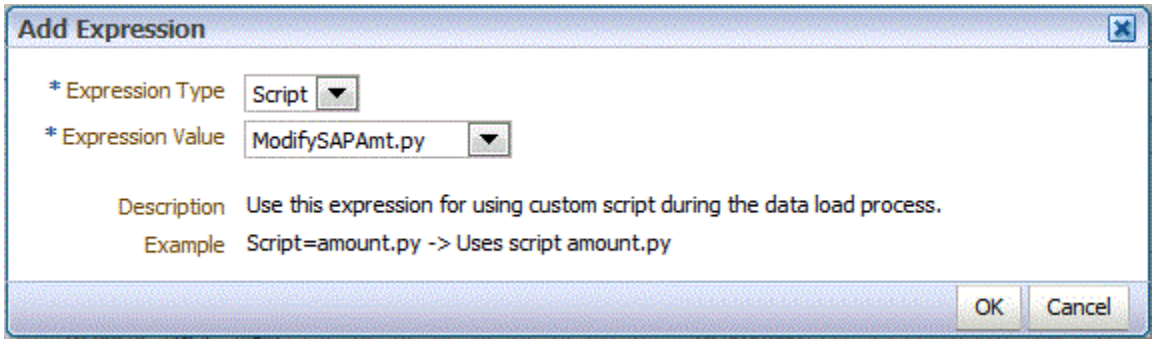
3 From the **Import Format detail grid**, select the **Add Expression** icon.

You can also type the value directly in the field rather than use the Expression editor.



4 From **Add Expression**, and then from **Expression Type**, select **Script**.

5 In **Expression Value**, browse to and select the script.



6 Click **OK**.

The script is assigned to the import field. The name of the import script is displayed in the Expression column.

0_MCPLAN1_IF: Mappings

View | Detach | Add | Delete

Source Column	Start	Length	Expression	Add Expression	Target
Account	2	4	Script=ModifySAPAmt.py		Account
Account3	47	14			Account
Amount	114	18			Amount

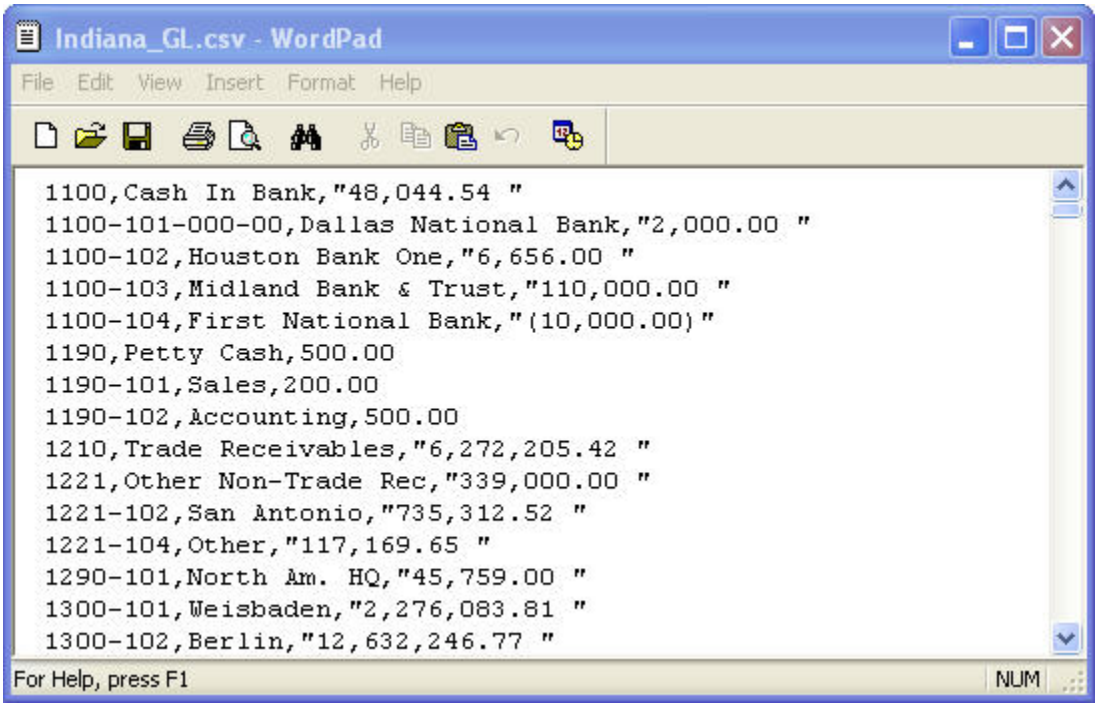
Using Import Script Functions

Within import scripts, you use functions to manipulate the data that FDMEE imports.

This section uses a problem/solution format to explain how to use the various import script functions.

Extracting Beginning Characters

Problem: The account numbers of the `Indiana_GL` screen, which are in the first field of each line, include varying numbers of digits. However, the mapping associated with the file uses only four digits.



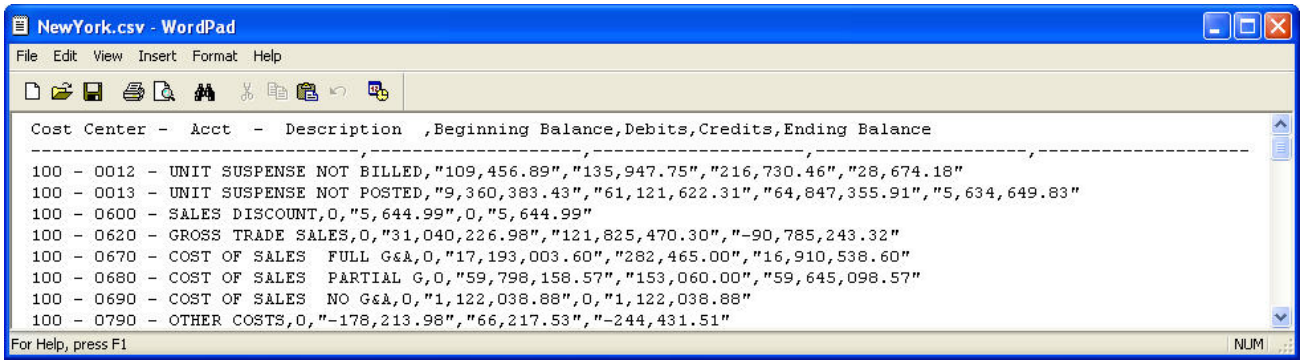
Solution: In the Import Scripts screen, assign the following script to the Expression field of the Account row. The script assigns the first four digits of each account number (the first four digits on the left) to `Parse_Account`:

```
def Parse_Account (strfield, strrecord):
        return strField[:4]
```

Result: The import file displays only the first four digits of each account number.

Extracting Middle Characters

Problem: The `NewYork` file presents cost center, account, and account description as a continuous string, rather than as three strings. You want to separate the account strings from the cost center and account description strings.



Solution: In the Import Formats screen, assign the following script to the Expression field of the Account row. : In the Import Formats screen, assign the following script to the Expression field of the Account row. The script extracts and returns the characters of the account strings (the characters from positions 7 to 10 of the string):

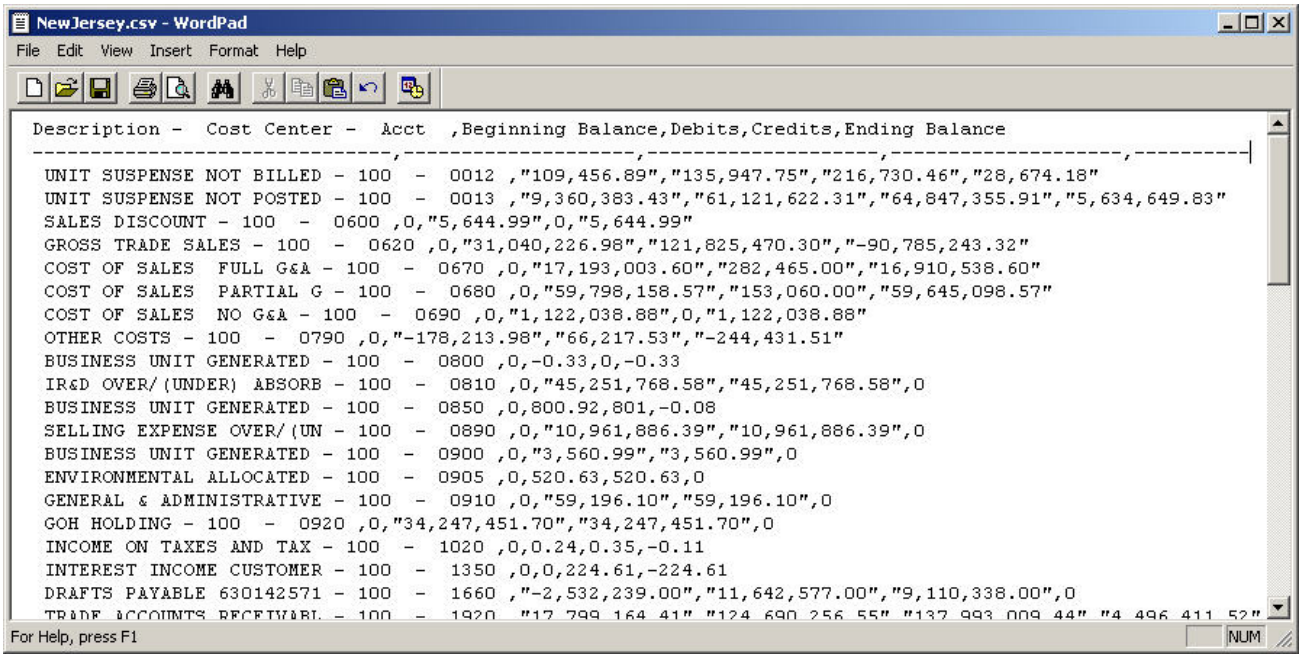
```
def Parse_Account (strfield, strrecord):
   return strField[6:10]
```

Result: Account strings are separated from cost center and account description strings.

Result: In the Account column of the import file, only account numbers are displayed.

Extracting End of String

Problem: The `NewJersey` screen presents account numbers as the last four characters of account fields. You want to extract only account numbers.



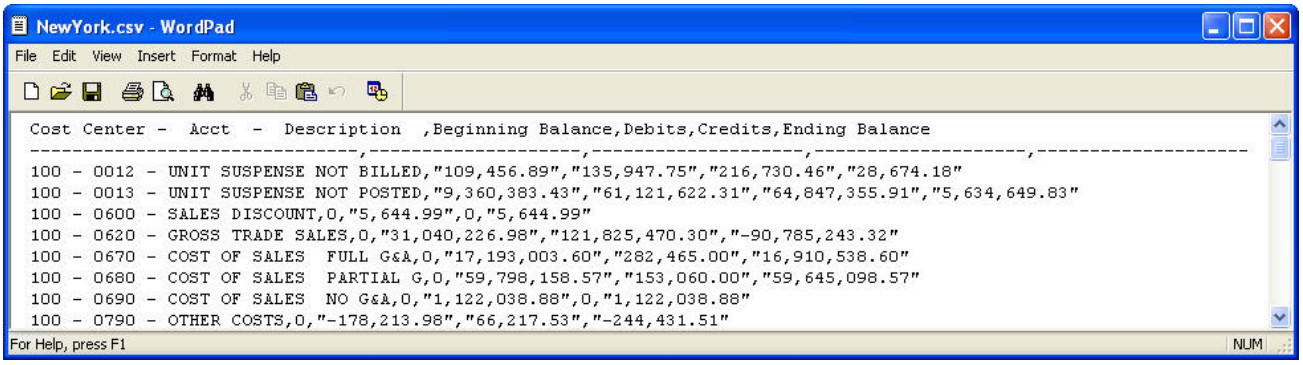
Solution: In the Import Formats screen, assign the following script to the Expression field of the Account row. The script extracts and returns the account numbers (the last four characters of the account fields):

```
def Parse_Account (strfield, strrecord):
return strField[-4:]
```

Result: In the Account column of the import file, only account numbers are displayed.

Using Split Functions

Problem: The `NewYork` screen presents cost center, account, and account description in one field, rather than in three fields. The three strings are separated by dashes (-). You want to present the three strings as three fields.



Solution: In the Import Formats screen, assign the following scripts, each of which uses the split function, to the Expression fields of the Entity, Account, and Account Description rows (first script to Entity, second script to Account, and third script to Account Description). The first script returns the set of characters before the first hyphen (a cost center value), the second script

returns the set of characters after the first hyphen (an account value), and the third script returns the set of characters after the second hyphen (an account description value).

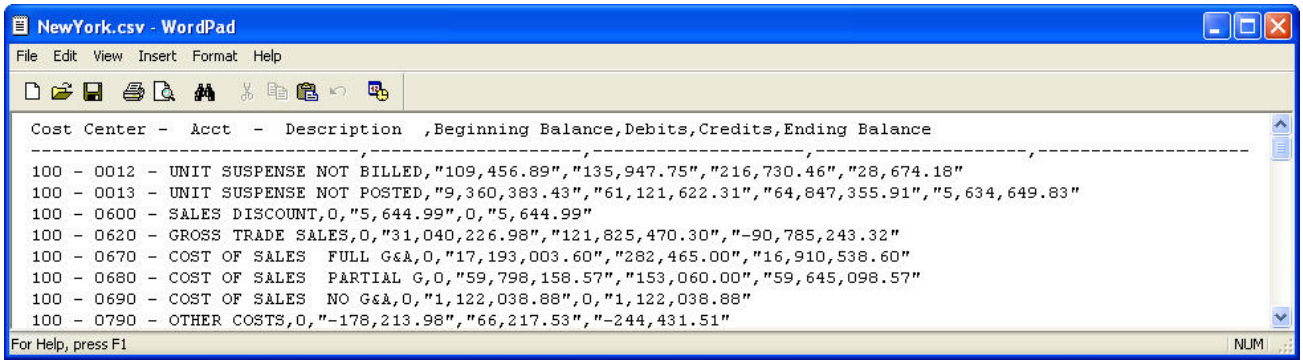
```
def NY_ParseCenter (strfield, strrecord):
    seglist = strfield.split("-")
    return seglist[0].strip()

def NY_ParseAccount (strfield, strrecord):
    seglist = strfield.split("-")
    return seglist[1].strip()

def NY_ParseDesc (strfield, strrecord):
    seglist = strfield.split("-")
    return seglist[2].strip()
```

Result: In the import file, cost center, account and account description strings are presented in three separate fields.

Using the Skip Function (Conditional Skip)

Problem: You want FDMEE to skip all lines of the NewYork screen that contain an entity value that begins with `06`.

You must specify `fdmSkip` as the return value from your function in order to skip a line in the file that is being processed in your import script. You specify `fdmSkip` as the return argument from an import script by entering `return fdmSkip`. `fdmSkip` is only available for import scripts.



Solution: In the Import Scripts screen, you assign the following script to the Expression field of the Entity row. The script parses the entity column and uses a local variable that is discarded after the script executes:

```
def NY_Skip06Center(strField, strrecord):
   if strfield.count("-") > 0:
      seglist = split(strField, "-")
      strEntity = seglist[0]
      if strEntity[:2] == "06":
          return fdmSkip
      else:
          return strEntity
```

Result: No line that contains entity values that begin with *06* is imported.

Storing and Retrieving Temporary Variables

When FDMEE imports a source file, it skips lines that do not contain valid amounts but executes all import scripts assigned to the Amount column first regardless of whether amounts are valid. Therefore, you can use scripts that run for lines that FDMEE would otherwise skip to store global variables that can be retrieved by other scripts.

Storing Temporary Variables

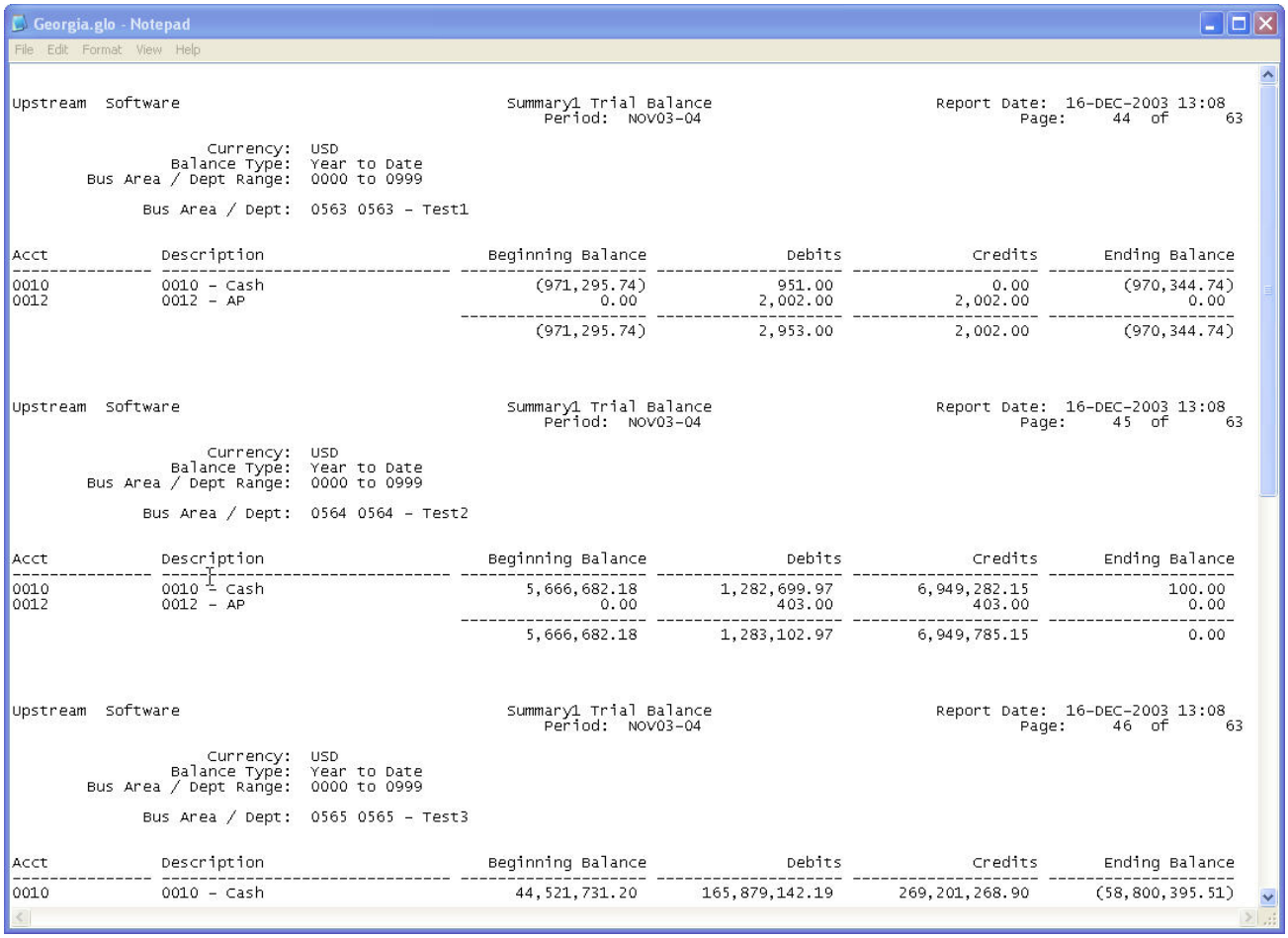
Within source files, not all lines contain all fields. For example, in the Georgia screen shown below, entity values, such as `0565 0565 Test 3`, are presented in the header of each report section after the Bus Area/Dept label, but are not presented in every line. Therefore, entity values must be stored in global variables and assigned to the lines of the source file.

For the `Georgia` file, to store entity values in global variables, in the Import Formats screen, you assign the following script to the Expression field of the Amount row. The script uses an `if..` statement and the `string` function to determine whether lines contain the `Bus Area / Dept:` label. If a line contains the label, the script stores the entity value (located in position 33 and including 4 characters) in a global variable. If a line does not include the label, `strfield` returned.

To use a global variable, define a string variable outside the import function. When assigning a value to the variable inside the import function, designate it as global. By defining a variable outside the function, it is available to any function used in that session.

The global variables remain available throughout the current FDMEE data load process (unlike local variables, which lose their values when the current script is closed). Therefore, values stored from within one script can be retrieved by other scripts.

```
GeorgiaCenter = ""
def GeorgiaGetCenter (strfield, strrecord):
    if strrecord[15:31] == "Bus Area / Dept:":
        global GeorgiaCenter
        GeorgiaCenter = strrecord[32:36]
    return strfield
```



Georgia.glo - Notepad

File Edit Format View Help

Upstream Software — Summary1 Trial Balance — Report Date: 16-DEC-2003 13:08
Period: NOV03-04 — Page: 44 of 63

Currency: USD
Balance Type: Year to Date
Bus Area / Dept Range: 0000 to 0999

Bus Area / Dept: 0563 0563 - Test1

Acct	Description	Beginning Balance	Debits	Credits	Ending Balance
0010	0010 - Cash	(971,295.74)	951.00	0.00	(970,344.74)
0012	0012 - AP	0.00	2,002.00	2,002.00	0.00
		(971,295.74)	2,953.00	2,002.00	(970,344.74)

Upstream Software — Summary1 Trial Balance — Report Date: 16-DEC-2003 13:08
Period: NOV03-04 — Page: 45 of 63

Currency: USD
Balance Type: Year to Date
Bus Area / Dept Range: 0000 to 0999

Bus Area / Dept: 0564 0564 - Test2

Acct	Description	Beginning Balance	Debits	Credits	Ending Balance
0010	0010 - Cash	5,666,682.18	1,282,699.97	6,949,282.15	100.00
0012	0012 - AP	0.00	403.00	403.00	0.00
		5,666,682.18	1,283,102.97	6,949,785.15	0.00

Upstream Software — Summary1 Trial Balance — Report Date: 16-DEC-2003 13:08
Period: NOV03-04 — Page: 46 of 63

Currency: USD
Balance Type: Year to Date
Bus Area / Dept Range: 0000 to 0999

Bus Area / Dept: 0565 0565 - Test3

Acct	Description	Beginning Balance	Debits	Credits	Ending Balance
0010	0010 - Cash	44,521,731.20	165,879,142.19	269,201,268.90	(58,800,395.51)

Retrieving Temporary Variables

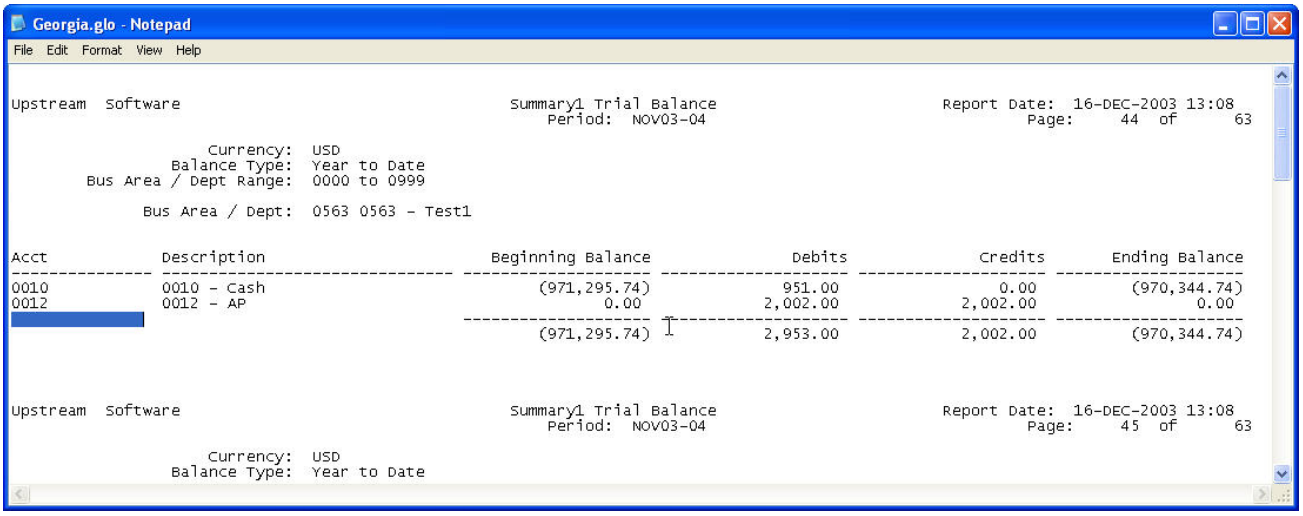
You use scripts to assign global, stored variables to the fields of a column. For example, if you are working with the Georgia screen, you begin by using the following script to assign the global variable `GeorgiaCenter` to the **GeorgiaPutCenter** function.

```
def GeorgiaPutCenter (strfield, strrecord)
return GeorgiaCenter
```

Then, in the Import Formats screen, you assign the script to the Expression field of the Entity row and, thus, assign the values of the global variables to the Entity fields. In this case, entity values are not read from the source file.

Because the `Georgia` file includes subtotal lines that must not be imported, the `Skip` function is required.

To direct FDMEE to skip lines without account numbers, you configure a Skip Row in the Import Format to recognize blank Account fields (15 blank spaces) by defining appropriate start and length fields for the expression.



Import Script Sample

This sample import script returns the location as a value for the column.

```
#--------------------------------------------------------------------
# Sample shows how to use the value from the fdmContext map, In
# this sample return the Location as value for the column
#--------------------------------------------------------------------

def getOrgfromLoc(strfield, strrec):
    org = fdmContext['LOCNAME']
    return org

#--------------------------------------------------------------------
# Sample to show the Jython string function. The script below is
# used to parse an account column 01-205-4110-0000-000 and return the
# third string
#--------------------------------------------------------------------

def getSegfromAcct(strfield, strrec):
  if strfield.count("-") > 0:
    seglist = strfield.split('-')
    result = seglist[2]
    return result

#--------------------------------------------------------------------
# Sample to process header record in Trial Balance report and
# store value in global variable to be used during detail row
# This should be called from the Amount column in import format
#--------------------------------------------------------------------

globalorg = ""
globalcur = ""

def copyglobal(strfield, strrec):
  if strrec[18:27] == "Currency:" :
    global globalcur
    globalcur = strrec[29:32]
```

```
  if strrec[14:27] == "Organization:" :
    global globalorg
    globalorg = strrec[29:32]
  if strrec[42:47].strip() == 'Total' or strrec[29:34].strip() == 'Total' :
    return fdmSkip
  return strfield

#--------------------------------------------------------------
# Sample to return the global variable set during amount process
#--------------------------------------------------------------

def getCurrfromGlobal(strfield, strrec) :
    return globalcur
```

Using Mapping Scripts

Overview

Mapping Scripts are used to build mapping logic to derive target members based on multiple source columns and IF THEN logic. Mapping scripts are added in the Data Load Mapping screen, and are available for: Between, IN, Like types. They are stored in the TDATAMAP table.

When you use Lifecycle Management to export mapping rules, any related mapping scripts are included.

Creating Mapping Scripts

➤ To create a mapping script:

1 From the **Workflow** tab, select **Data Load Mapping**.

2 **Optional:** Select the desired location.

3 Select the **Like**, **Between**, or **In** tab.

Mapping scripts are unavailable for "Explicit" and "Multi-dimension" mapping types.

4 Select the **Source Value**.

5 In **Target Value**, select one of the following:

- For a Jython based mapping script, enter **#SCRIPT**.
- For a SQL based mapping script, enter **#SQL**.

Note: For SQL based mappings, FDMEE specifies the special value #SQL to the "Target Value." For this reason, this field cannot be used to specify a value of "IGNORE", which is otherwise used to set the VALID_FLAG to Yes or No. For SQL based mappings, you must include the VALID_FLAG in the SQL script and specify the value of "I" based on the user selected criteria.

6 In **Rule Name**, enter the data rule name for the mapping.

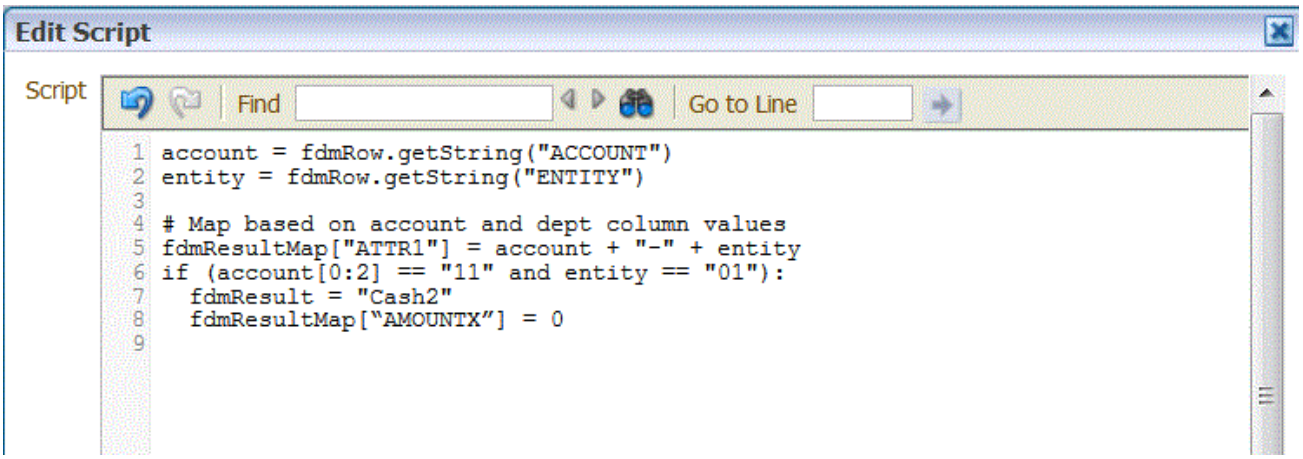
7 **Click Save.**

The Script Editor icon ( ) is enabled.

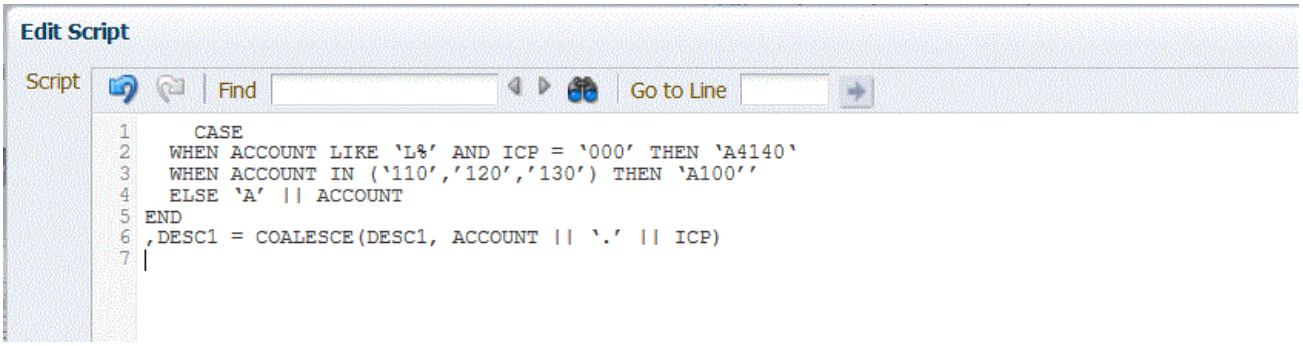
8 **Click the Script Editor icon.**

9 **In Edit Script, enter the mapping script, and click OK.**

For example the following Jython based mapping script checks when the first two characters of the account equals 11 and the entity equals 01. When a match occurs, then the target is set to Cash2 and the target amount is set to 0. In addition, the script also updates the `attribute1` column in the TDATASEG table. (See "TDATASEG Table Reference" on page 419). This script uses the `fdmResultMap` object (see "Using Jython Objects with Mapping Scripts" on page 312).



In the next example, use the SQL script where logic is implemented in a SQL CASE statement. The CASE statement is used in the SET command of the internal UPDATE statement. he mapping statement below is converted to the UPDATE statement listed




```
UPDATE TDATASEG

SET ACCOUNTX =

CASE
        WHEN ACCOUNT LIKE 'L%' AND ICP = '000' THEN 'A4140'
        WHEN ACCOUNT IN ('110','120','130') THEN 'A100''
        ELSE 'A' || ACCOUNT
END
,DESC1 = COALESCE(DESC1, ACCOUNT || '.' || ICP)
```

```
WHERE ACCOUNT …..
```

Using Jython Objects with Mapping Scripts

Use the following predefined FDMEE Jython objects within mapping scripts.

Table 52 Using Jython Objects with mapping scripts

Jython Object	Description
`fdmRow`	`fdmRow` id used to access any column in the current row being processed by the mapping process. You can access any column in the TDATASEG table. To access a value in a column you specify the following: `fdmRow.getString("<COLUMN NAME>")`. For example, to get the value of the ENTITY column you specify `fdmRow.getString("ENTITY")`.
`fdmResult`	`fdmResult` is used to return the value from the mapping function. You can set the value as follows `fdmResult = "Cash"`. The `fdmResult` is used to update the value for the target dimension, which is also referred to as the "X" column. For every dimension in the `TDATASEG` table there are two columns, one for source and another for target. For example, `ENTITY` provides the source value, and `ENTITYX` provides target value that is the result of the mapping process.
`fdmResultMap`	`fdmResultMap` is used to update any column in the TDATASEG table. The column name in the TDATASEG table is used as the key in the map. For example, to update the ATTR1 column use `fdmResultMap["ATTR1"] = "Asset Acct"`. To set the target amount to 0 use `fdmResultMap["AMOUNTX"] = 0`.

Mapping Script Sample

This sample mapping script evaluates the account and entity columns and assigns a value for the target column. It also shows how to update the other columns of the current row using the fdmResult map:

```
#-------------------------------------------------------------------
# Sample Jython Mapping Script. Script evaluates account and entity
# columns and assign value for the target column. In addition it
# also shows how to update the other columns of current row using
fdmResultMap
#-------------------------------------------------------------------

account = fdmRow.getString("ACCOUNT")
entity = fdmRow.getString("UD1")

# Map based on account and dept column values
fdmResultMap["ATTR1"] = account + "-" + entity
if (account[0:2] == "71"):
  fdmResult = "7110"
elif (account[0:2] == "72"):
  fdmResult = "7210"
elif (account[0:2] == "77" and entity == "205"):
  fdmResult = "7710"
  fdmResultMap["AMOUNTX"] = 0
else:
  fdmResult = "7310"

#-------------------------------------------------------------------
```

```
# Sample SQL script. Script uses SQL CASE statement to conditionally
# process assign value for the target column.
#-----------------------------------------------------------------


  CASE
    WHEN ACCOUNT LIKE '61%'    AND ud1 = '205'    THEN '6110'
    WHEN ACCOUNT LIKE '61%'    AND ud1 = '240'    THEN '6120'
    ELSE '6130'
END
```

Using Event Scripts

Overview

Event scripts are executed in response to FDMEE events. You can invoke any custom logic. For example, custom logic could be invoked to send an email notification after a successful load, or send an email when a validation error occurs. Or an email could be sent when you download data from Financial Management and load data to Essbase for reporting. Event scripts are based on Jython or Visual Basic. Jython scripts have a `.py` extension, and Visual Basic scripts have a `.vbs` extension. Events associated with a script are highlighted in the list of events. Any event that includes a script is executed for that event in selected location.

Note: Event scripts are not handled in Lifecycle Management.

FDMEE Supported Event Scripts

FDMEE supports the following events for execution, during the data load process:

Table 53 FDMEE Events

Event	Description
BefImport	This event is the initial state of the system before any processing for the selected location has begun. If the user defines import scripts, they are run between the BefImport and AftImport events. This step in the processing loads data into the TDATASEG_T table.
AftImport	Data is present in the TDATASEG_T table after this event is processed.
BefCalculate	Called for a validation run only, and called before the validation process.
AftCalculate	Called for a validation run only, and called after the validation process.
BefProcLogicGrp	Called before Logic Account is processed.
AftProcLogicGrp	Called after the Logic Account is processed.
BefProcMap	Called before the mapping process is started in the TDATASEG_T table. Mapping scripts are executed between the BefProcMap and AftProcMap events. Data is moved from the TDATASEG_T table to the TDATASEG table between these events after all data has been mapped. Updates to audit tables are also included as part of this process.

Event	Description
AftProcMap	Called after all the mapping has been completed. When this event runs, the data has already been moved from the TDATASEG_T table to the TDATASEG table.
BefValidate	Checks if data mapped in the TDATASEG table.
AftValidate	Called after the BefValidate event.
BefExportToDat	Called before you write to the file for export. It is also executed for Essbase in the export to file mode feature. **Note:** This event is unavailable for the Accounts Reconciliation Manager.
AftExportToDat	Called after the file is created. **Note:** This event is unavailable for the Accounts Reconciliation Manager.
BefLoad	Called before you load to a target application. **Note:** This event is unavailable for the Accounts Reconciliation Manager.
AftLoad	Called after data is sent to the target application, but does not wait for the target application to complete the load process. **Note:** This event is unavailable for the Accounts Reconciliation Manager.
BefConsolidate	Oracle Hyperion Financial Management and Oracle Essbase only: This event executed when a check rule is included in the location that is being processed. **Note:** This event is unavailable for the Accounts Reconciliation Manager.
AftConsolidate	Called after the BefConsolidate event. **Note:** This event is unavailable for the Accounts Reconciliation Manager.
BefCheck	Called before the Check Rule. **Note:** This event is unavailable for the Accounts Reconciliation Manager.
AftCheck	Called after the Check Rule. **Note:** This event is unavailable for the Accounts Reconciliation Manager.

Creating Event Scripts

➤ To create event scripts:

1 **On the Setup tab, under Scripts, select Script Editor.**

2 **Single or double-click an event.**

3 **Write the script in the Script Editor.**

Note: Before creating event scripts, make sure you check the Application Root Folder setting in Application Settings. When you specify a folder at the application level , then select the "Create Application Folders" option. A set of folders is created for the application that includes a scripts folder. Create scripts specific to an application in this folder. This is especially important for event scripts that are different between applications. When you do not set up an application level folder, then you cannot have different event scripts by application.

Stopping the Execution of FDMEE from within a Script

➤ To halt the execution of FDMEE from within a script:

1 **On the Setup tab, under Scripts, select Script Editor.**

2 **Single or double-click an event.**

3 **Add the raise RuntimeError script and the message to display.**

For example,

```
if (categoryName == ""):
raise RuntimeError, "Category name is invalid"
```

4 **Save the script.**

Dynamically Changing Import Formats

You can use the `BefFileImport` event to modify the import format for a location dynamically. The following script changes the import group; the change is based on the file name.

To implement the script, you create two import formats and assign one of them to the FDMEE location. The script evaluates the file name and, if necessary, changes the import format.

```
if fdmContext["LOCNAME"] == "ITALY":
  filename = fdmContext["FILENAME"]
  if filename[:12] == "ProductSales":
    fdmAPI.updateImportFormat("SALESJOURNAL", fdmContext["LOADID"])
```

Using the File System Object in Event Scripts

You can use the Jython file system object to process files and folders. The following example uses the file system object to create a file and to copy the contents of an existing file to the new file.

```
Read the following Input File
Entity,Currency,ICP,Product,Store,Channel,Custom4,Custom5,Custom6,Custom7,UnitsSold,Sale
s
EastSales, USD, [ICP None], H740, Comma_Phone_Stores, Retail_Direct, [None],[None],
[None],[None],127,9954.103768
EastSales, USD, [ICP None], H740, Freds, National_Accts, [None],[None],[None],[None],112,
6610.371552
EastSales, USD, [ICP None], H740, Good_Buy, National_Accts, [None],[None],[None],[None],
112,6610.371552
```

```
Write the following Output File
EastSales, USD, [ICP None], H740, Comma_Phone_Stores, Retail_Direct, [None],[None],
[None],[None],UnitsSold,127
EastSales, USD, [ICP None], H740, Comma_Phone_Stores, Retail_Direct, [None],[None],
[None],[None],Sales,9954.103768
EastSales, USD, [ICP None], H740, Freds, National_Accts, [None],[None],[None],
[None],UnitsSold112
EastSales, USD, [ICP None], H740, Freds, National_Accts, [None],[None],[None],
[None],Sales6610.371552
EastSales, USD, [ICP None], H740, Good_Buy, National_Accts, [None],[None],[None],
[None],UnitsSold,112
EastSales, USD, [ICP None], H740, Good_Buy, National_Accts, [None],[None],[None],
[None],Sales,6610.371552

infilename = fdmContext["INBOXDIR"]+"/InputFile.txt"
outfilename = fdmContext["INBOXDIR"]+"/DataFile.txt"
infile = open(infilename, "r")
outfile = open(outfilename, "w")
for line in infile:
  column = line.rsplit(',',2)
  if column[2].strip() != "Sales" :
    outfile.write(column[0] + ",UnitsSold," + column[1] + "\n")
    outfile.write(column[0] + ",Sales," + column[2])
outfile.close()
```

Events Script Sample

This sample Event script updates the table_xyz table during the data load execution:

```
#--------------------------------------------------------------------------
# Sample to update table_xyz table during data load rule execution
#--------------------------------------------------------------------------

query = "UPDATE table_xyz SET accountx = 'SCRIPT_' || account WHERE loadid = ? and
accountx is NULL"
params = [ fdmContext["LOADID"] ]
print fdmAPI.executeDML(query, params, False)
fdmAPI.commitTransaction()

#--------------------------------------------------------------------------
# Sample to import data from a custom SQL source and upload into FDMEE
# open interface table. This script should be called in BefImport Event.
# This is alternate to the FDMEE integration import script.
#--------------------------------------------------------------------------

import java.sql as sql

batchName = "Batch_" + str(fdmContext["LOCNAME"])
insertStmt = """
INSERT INTO AIF_OPEN_INTERFACE (
   BATCH_NAME
  ,COL01
  ,COL02
  ,AMOUNT
  ,DESC1
) VALUES (
```

```
?
,?
,?
,?
,?
)
"""
sourceConn = sql.DriverManager.getConnection("jdbcUrl", "user", "password");
# Limiting number of rows to 5 during the test runs.
selectStmt = "SELECT * FROM orders WHERE rownum < 6"
stmt = sourceConn.prepareStatement(selectStmt)
stmtRS = stmt.executeQuery()
while(stmtRS.next()):
  params = [ batchName, stmtRS.getBigDecimal("Customer_Id"),
             stmtRS.getString("Ship_Country"),
             stmtRS.getBigDecimal("Freight"), stmtRS.getString("Ship_Name") ]
  fdmAPI.executeDML(insertStmt, params, False)
fdmAPI.commitTransaction()

stmtRS.close()
stmt.close()
sourceConn.close()

#-------------------------------------------------------------------------------
# Sample to send email messages using Jython SMTP library
-------------------------------------------------------------------------------

import smtplib
sender = "from@gmail.com"
receivers = "to@gmail.com"
message = """ This is a test e-mail message.
              This is a test e-mail message.  """
try:
  smtpServer = smtplib.SMTP('smtp.gmail.com:587')
  smtpServer.starttls()
  smtpServer.login("user", "password")
  smtpServer.sendmail(sender, receivers, message)
  print "Successfully sent email"
  smtpServer.quit()
except Exception, e:
  print "Error: unable to send email: " + str(e)
```

Note: See the online Jython documentation at the following link that explains the list of Jython exceptions, and the syntax to use when trapping exceptions in your scripts: http://www.jython.org/jythonbook/en/1.0/ExceptionHandlingDebug.html

This note applies to all script types.

Using Custom Scripts

Overview

FDMEE enables you to perform FDMEE tasks on an "as needed" basis such as executing data load rules using custom scripts.

FDMEE supports custom scripts in Jython and Visual Basic. To execute a custom ODI process, then use a Jython script. FDMEE stores custom scripts in the `<APP DIR>/data/scripts/custom` folder.

Note: Custom scripts are not handled in Oracle Hyperion Enterprise Performance Management System Lifecycle Management.

Creating a Custom Script

➤ To create a custom script:

1. On the **Setup** tab, under **Scripts**, select **Script Editor**.
2. On the **Script Editor** screen, click **New**.
3. From **Script Type**, select **Custom**.
4. From **Technology**, select **Jython** or **Visual Basic**.

   Scripts created in Jython are saved with a `.py` extension. Scripts created in Visual Basic are saved with a `.vbs` extension.
5. In **File Name**, enter a name for the script.
6. Click **OK**.
7. Write the code for the custom script in the Script Editor.
8. Click **Save**.

Working with Custom Scripts

You must create custom script groups before registering custom scripts.

You register custom scripts to select the parameters to pass when the script is executed.

Adding a Custom Script Group

Custom scripts groups enable you to assign similar types of custom scripts under a group for ease of use. They are also used to determine security eligibility when executing custom scripts.

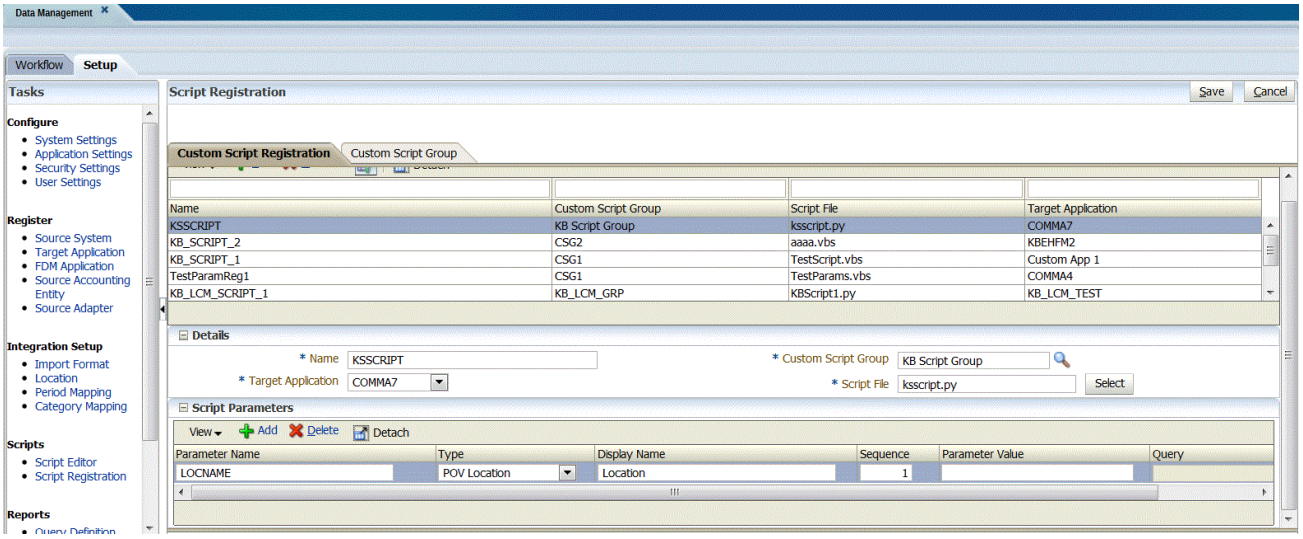
➤ To add a custom group:

1. On the **Setup** tab, under **Scripts**, select **Script Registration**.
2. Select the **Custom Script Group** tab.
3. Click **Add**.
4. In **Name**, specify the custom script group name.
5. In **Sequence**, enter the display order used when custom script groups are shown during registration and execution.

6 Click **Save**.

Registering Scripts

Registered scripts are associated with a script file (which consists of Jython or Visual Basic script) and a target application. When the custom script is executed, you are prompted with a list of values from which to complete the parameters of the script.



➤ To register a script:

1 **On the Setup tab, under Scripts, select Script Registration.**

The Custom Script Registration screen consists of three regions:

- Summary—Lists all custom scripts.
- Details—Shows the script name, associated target application, and script file.
- Parameters—Shows the parameter name and type, display name, sequence, parameter value, and any query definition used to supply a list of values for a given custom script.

2 **Above the Summary grid, click Add.**

3 **In the Details grid, in Name, enter the name of the custom script.**

4 **In Target Application, select the target application associated with the custom script.**

5 **To associate the custom script with a custom script group, in Custom Script Group, select the group.**

6 **In Script File, select the script file to associate with the custom script.**

To search on a script file, click **Select** and choose a script file from the **Select Script File** screen.

To upload a script file, click **Select**. On the **Select Script File**. click **Upload**. Then click **Browse** to navigate to the script file to upload and click **OK**.

7 **Click Save.**

➤ To define the parameters of the custom script:

1 **From the Summary grid, select the name of the custom script to which to add parameters.**

2 **In the Script Parameters grid, click Add.**

A blank line is displayed to which to add parameters.

3 **In Parameter Name, enter the name of the parameter that you reference in the script.**

For example, enter `POVLOC`, for the POV location, `POVPeriod` for the POV period, `POVCAT` for POV category, or `POVTARGET` for the target category.

The parameter name is user-defined. You can select a prefix or suffix to distinguish them in the custom script.

4 **In Type, select the type of parameter.**

Available types:

- POV—Prompts for the POV location, period, category or rule. The POV values default from the users' POV when the custom script is executed.
- Query—The Query type enables you to create a query that populates a list of values that a user can select from when the custom script is executed.
- Static—A Static type indicates that the parameter is a constant or a predefined value, and the parameter value is supplied by the user. When the custom script is executed, you can supply a different value to the parameter.

You can use any name for the parameter and also use a prefix or suffix with the name to distinguish them in the custom script.

The parameter name must exactly match what is provided in the script registration

5 **In Display Name, enter the name to display for the parameter for the Execute Script screen.**

6 **In Parameter Value, enter the value for the "Static" parameter type.**

The parameter value must be retrieved in the custom script using the following API:

```
fdmAPI.getCustomScriptParameterValue("PARAMETER NAME"))
```

7 **In Sequence, enter the display order of the parameter on the Execute Script screen.**

8 **In Query, specify the query definition that provides a list of values for the parameter.**

For example, to show a list of data rules for the user to select on the Generate Report screen, specify the query definition to define these queries.

9 **Click Save.**

Executing a Custom Script

➤ To execute a custom script:

1 **On the Workflow tab, under Other, select Script Execution.**

2 **In Script Execution, and then in Custom Script Group, select a custom script group.**

3 From the **Scripts** grid, select the custom script.

4 Click **Execute**.

5 When prompted, enter parameter values on the Execute Script screen.

a. If applicable, modify the **Period**, **Category**, and **Location** values.

b. From **Execution Mode**, select the online method of running the report.

The online method processes the report immediately.

c. Click **OK**.

Custom Script Sample using Jython

This sample custom script provides information about the contents of the custom script:

```
#
This sample Jython script provides code related to custom scripts. All the messages
being
logged (meaning printed) are visible in the process log file as per Log Level profile.
#

# Log the beginning of the script, at the INFO level
fdmAPI.logInfo("====================================================================")
fdmAPI.logInfo("Custom Script: Begin")
fdmAPI.logInfo("====================================================================")

# Log the target application name from the context, at the DEBUG level
fdmAPI.logDebug("Target App Name    = " + fdmContext["TARGETAPPNAME"])

# Log the script name from the context at the DEBUG level
fdmAPI.logDebug("Custom Script name = " + fdmContext["SCRIPTFILE"])


# Get all  script parameters and log their names and values at the DEBUG level
fdmAPI.logDebug("Custom script parameter values by name: begin")
fdmAPI.logDebug("The value of parameter CUSTOM_LOCATION is  = " +
fdmAPI.getCustomScriptParameterValue("CUSTOM_LOCATION"))
fdmAPI.logDebug("The value of parameter CUSTOM_YEAR is = " +
fdmAPI.getCustomScriptParameterValue("CUSTOM_YEAR"))
fdmAPI.logDebug("Custom script parameter values by name: end")

# Example submitting a data rule
import os
import subprocess
os.chdir("C:/Oracle/Middleware/user_projects/epmsystem1/FinancialDataQuality")
myScriptName = "C:/Oracle/Middleware/user_projects/epmsystem1/FinancialDataQuality/
loaddata.bat"
command = '%s "%s" "%s" "%s" "%s" "%s" "%s" "%s" "%s" "%s" "%s" "%s"' % (myScriptName,
"admin", "password", "SRESBA1_DR1", "Y", "N", "STORE_DATA", "SNAPSHOT", "N", "Jan-2003",
"Jan-2003", "ASYNC")
fdmAPI.logDebug("Submitting a data rule via a script using the following command: " +
command)
retcode = subprocess.Popen(command)
fdmAPI.logDebug("Data rule submitted fine.")
```

```
# Close the connection and log the end of the script, at INFO level
fdmAPI.closeConnection()
fdmAPI.logInfo("========================================================================")
fdmAPI.logInfo("Custom Script: end")
fdmAPI.logInfo("========================================================================")
```

The output for the executed custom script is:

```
2013-09-25 08:12:26,080 INFO  [AIF]:
========================================================================
2013-09-25 08:12:26,081 INFO  [AIF]: Custom Script: Begin
2013-09-25 08:12:26,082 INFO  [AIF]:
========================================================================
2013-09-25 08:12:26,083 DEBUG [AIF]: Target App Name    = SRESBA1
2013-09-25 08:12:26,084 DEBUG [AIF]: Custom Script name = SRCustomScript1.py
2013-09-25 08:12:26,087 DEBUG [AIF]: CUSTOM_LOCATION = 1
2013-09-25 08:12:26,087 DEBUG [AIF]: CUSTOM_YEAR = 2013
2013-09-25 08:12:26,088 DEBUG [AIF]: Custom script parameter values by name: begin
2013-09-25 08:12:26,091 DEBUG [AIF]: The value of parameter CUSTOM_LOCATION is  = 1
2013-09-25 08:12:26,093 DEBUG [AIF]: The value of parameter CUSTOM_YEAR is = 2013
2013-09-25 08:12:26,094 DEBUG [AIF]: Custom script parameter values by name: end
2013-09-25 08:12:26,535 DEBUG [AIF]: Submitting a data rule via a script using the
following command: C:/Oracle/Middleware/user_projects/epmsystem1/FinancialDataQuality/
loaddata.bat "admin" "*****" "SRESBA1_DR1" "Y" "N" "STORE_DATA" "SNAPSHOT" "N" "Jan-2003"
"Jan-2003" "ASYNC"
2013-09-25 08:12:26,596 DEBUG [AIF]: Data rule submitted fine.
2013-09-25 08:12:26,635 INFO  [AIF]:
========================================================================
2013-09-25 08:12:26,636 INFO  [AIF]: Custom Script: end
2013-09-25 08:12:26,637 INFO  [AIF]:
========================================================================
```

Using the JAVA API

Overview

FDMEE automatically initializes the data load workflow context information prior to invoking the Import, Mapping and Event scripts. The fdmContext object is initialized with the list of properties listed below. The properties can be accessed by referencing `fdmContext["<PROPERTY NAME>"]`. For example to access Location Name, use `fdmContext["LOCNAME"]`. To execute a script for a specific data load, write something like the following:

```
if fdmContext["LOCNAME"] == "ITALY":
     Write script logic here
```

FDM object properties include:

- APPID
- BATCHSCRIPTDIR
- CATKEY

- CATNAME
- CHKSTATUS
- EPMORACLEHOME
- EPMORACLEINSTANCEHOME
- EXPORTFLAG
- EXPORTMODE
- EXPSTATUS
- FILEDIR
- FILENAME
- IMPORTFLAG
- IMPORTFORMAT
- IMPORTMODE
- IMPST
- IMPSTATUS
- INBOXDIR
- LOADID
- LOCKEY
- LOCNAME
- MULTIPERIODLOAD
- OUTBOXDIR
- PERIODNAME
- PERIODKEY
- PROCESSSTATUS
- RULEID
- RULENAME
- SCRIPTSDIR
- SOURCENAME
- SOURCETYPE
- TARGETAPPDB
- TARGETAPPNAME
- VALSTATUS

JAVA API List

Table 54 JAVA API List

API	Description
BigDecimal getPOVLocation(BigDecimal pLoadId)	Returns the Partition Key based on the LOADID.
BigDecimal getPOVCategory(BigDecimal pLoadId)	Returns the Category Key based on the LOADID.
Date getPOVStartPeriod(BigDecimal pLoadId)	Returns the Period Key of the start period based on the LOADID.
Date getPOVEndPeriod(BigDecimal pLoadId)	Returns the Period Key of the end period based on the LOADID when loading a single period, and the start period and end period are the same.

API	Description
getBatchJobDetails	The getBatchJobDetails returns the following column for each job submitted by the batch: ● BATCH_ID ● BATCH_NAME ● APPLICATION_ID ● BATCH_TYPE ● BATCH_EXECUTION_MODE ● BATCH_WAIT_TIMEOUT ● USER_POV_PERIOD ● OPEN_BATCH_FOLDER ● PLAN_TYPE ● FILENAME_SEPARATOR ● BATCH_GROUP_ID ● BEF_PROCESS_BATCH_SCRIPT ● AFT_PROCESS_BATCH_SCRIPT ● EXECUTION_DATE ● EXECUTED_BY ● LOADID ● BATCH_LOADID ● PARENT_BATCH_LOADID ● PARTITIONKEY ● CATKEY ● START_PERIODKEY ● END_PERIODKEY ● IMPORT_FROM_SOURCE_FLAG ● EXPORT_TO_TARGET_FLAG ● RECALCULATE_FLAG ● CHECK_FLAG ● JOURNAL_FLAG ● IMPORT_MODE ● EXPORT_MODE ● IMPGROUPKEY ● PROCESS_NAME ● RULE_TYPE ● LOG_FILE ● OUTPUT_FILE ● EPM_ORACLE_INSTANCE ● ODI_SESSION_NUMBER ● STATUS
int executeDML(String query,Object[] parameters)	Execute any DML Statement. Provide the query and parameter. The parameter is provided as a list.

API	Description
logDB(String pEntityType, String pEntityName, int pLogSequence, String pLogMessage)	Log messages to a database table AIF_PROCESS_LOGS.
logFatal(String pLogMessage)	Log a message when a fatal error occurs. This message is displayed at all log levels.
logError(String pLogMessage)	Log a message when an error occurs. This message is displayed at log level 2 or higher.
logWarn(String pLogMessage)	Log a message when a warning condition error occurs. This message is displayed at log level 3 or higher.
logInfo(String pLogMessage)	Log an informational message. This message is displayed at log level 4 or higher.
logDebug(String pLogMessage)	Log a debug message. This message is displayed at log level 5.
Map getProcessStates(BigDecimal pLoadId)	Returns status of Workflow process. Available statuses: ● IMPSTATUS—Returns the status of the import process. A *0* status indicates that the process has not yet started, or the process failed. A *1* status indicates the process is successful. ● VALSTATUS—Returns the status of validation process. A *0* status indicates that the process has not yet started, or the process failed. A *1* status indicates the process is successful. ● EXPSTATUS—Returns the status of export process. A *0* status indicates that the process has not yet started, or the process failed. A *1* status indicates the process is successful. ● CHKSTATUS—Returns the status of check process. A *0* status indicates that the process has not yet started, or the process failed. A *1* status indicates the process is successful. ● PROCESSSTATUS—Returns the exact error code. The detail for the error code can be found in the tlogprocessstates table.
Map getPeriodDetail(Date pPeriodKey,String pApplicationName) //returns PERIODTARGET and YEARTARGET	Returns the Target period mapping for a given Period key.
Object getCustomScriptParameterValue(BigDecimal pLoadId, String pParameterName)	Returns the value for given custom script parameter name and loadID.
Object getCustomScriptParameterValue(String pParameterName)	Returns the value for given custom script parameter name and context initialized loaded,
ResultSet getBatchDetails()	Returns batch definition information from AIF_BATCHES table.
ResultSet getBatchJobDetails(BigDecimal pLoadId)	Retrieves error messages logged to the database table AIF_PROCESS_LOGS for the given loadid.
ResultSet getCategoryList()	Returns a list of Categories in a result set.
ResultSet getCheckEntityGroupList(BigDecimal pApplicationId)	Returns a list of Check Groups in a result set.

API	Description
ResultSet getCheckEntityForGroup(String pValGroupKey)	Return a list of entities in a Check Group in a result set.
ResultSe tgetCheckEntityGroupList(BigDecimal pApplicationId)	Return a list of Check Rule Groups in a result set.
ResultSet getCheckEntityForGroup	Return a list of Check Rule Group rules in a result set.
ResultSet getCustomDBLog()	Retrieve error messages logged to the database table AIF_PROCESS_LOGS for the current process.
ResultSet getCustomDBLog(BigDecimal pLoadId)	Returns the log statements from DB for a given loadID
ResultSet getCustomScriptParameters()	Returns the list of custom script parameters in a result set for the context initialized loadID.
ResultSet getCustomScriptParameters(BigDecimal pLoadId)	Returns the list of custom script parameters in a resultset for the given loadID
ResultSet getPeriodList()	Returns a list of Periods in a result set.
ResultSet executeQuery(String query, Object[] parameters)	Execute any SQL Query Statement. The query results are returned in a result set. Provide the query and parameter. The parameter is provided as a list.
ResultSet getImportFormatDetails(String pImpGroupKey)	Return the Import Format details in a result set based on the Import Format key.
ResultSet getImportFormatMapDetails(String pImpGroupKey)	Return the Import Format Mapping details in a result set for a given Import Format key. This currently supports only file based import formats.
ResultSet getLocationDetails(BigDecimal pPartitionKey)	Return the Location details in a record set for a given Location key.
ResultSet getRuleDetails(BigDecimal pRuleId)	Returns the Data Rule details in a record set for a given Data Rule ID.
showCustomDBLog()	Show a list of custom messages in the user interface after completion of a process. Message can be displayed at the end of a data load workflow step like import, validate, export, check or at the end of a custom script execution. Note messages are displayed only when the process are run in online mode.
showCustomFile(String filePath)	Show a custom file (log file, report file) in the user interface after completion of a process. Message can be displayed at the end of a data load workflow step like import, validate, export, check or at the end of a custom script execution. Note messages are displayed only when the process are run in online mode.
showCustomMessage(String message)	Show a custom message in the user interface after completion of a process. Message can be displayed at the end of a data load workflow step like import, validate, export, check or at the end of a custom script execution. Note messages are displayed only when the process are run in online mode.
String getCategoryMap(BigDecimal pCatKey,String pApplicationName)	Returns the Scenario for a given Category and Application Name.
String getCustomMessage()	Retrieves the last custom message raised for the current process.

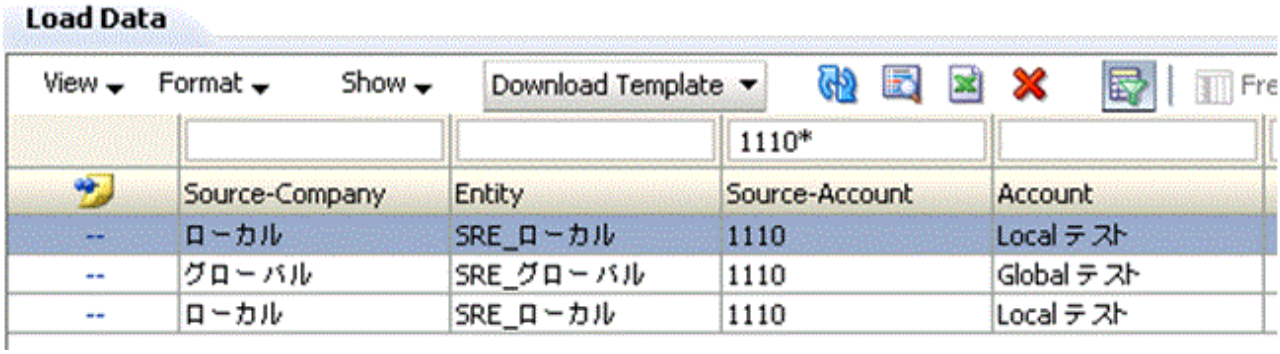
API	Description
String getCustomMessage(BigDecimal pLoadId)	Retrieves the last custom message raised for the given loadid.
String getCustomFile()	Retrieves the custom file created for the current process.
String getCustomFile(BigDecimal pLoadId)	Retrieves the custom file created for the given loadid.
String getPOVDataValue(BigDecimal pPartitionKey)	Returns the data value of the Location.
String getDirTopLevel(BigDecimal pApplicationId)	Returns the Top Level directory based on the Application.
String getDirInbox(BigDecimal pApplicationId)	Returns the `Inbox` directory based on the Application.
String getDirOutbox(BigDecimal pApplicationId)	Returns the `Outbox` directory based on the Application.
String getDirScripts(BigDecimal pApplicationId)	Returns the `Scripts` directory based on the Application.
String getProcessLogFile(BigDecimal pLoadId)	Returns the log file name for the given loadID.
String getProfileOptionValue(String pProfileOptionName, BigDecimal pApplicationId, String pUserName)	Returns the value set for an option. Options can be set at the System Setting, Application Setting, and User Setting. The order of precedence is: User, Application, and System. The API determines the appropriate applicable value and returns the value.
void writeToProcessLogsDB(BigDecimal pLoadId, String pEntityType, String pEntityName, int pLogSequence,String pLogMessage)	Writes the log information to the AIF_PROCESS_LOGS table. Use Entity Type and Entity Name to group the logged messages. Logs can be created only from a data load workflow process.
void writeToProcessLogsFile(BigDecimal pLoadId, String pLogMessage)	Writes the log information to the Data Load Process log file. The logs is written based on the process log level. Logs can be created only from a data load workflow process. **Note:** It is recommended that you use the logging API, for example logDebug or, logInfo API, instead of using the writeToProcessLogsFile API.
void closeConnection()	Use to close the database connection.
void closeResultSet(ResultSet resultSet)	Use to close result object.
void updateImportFormat(String pImpgroupKey,BigDecimal pLoadId)	Update the import format for the current run. This is applicable only for File-based import formats.

Working with UNICODE Characters in Jython Scripts

When writing script code in Jython technology, specify any non-English strings in UNICODE by prefixing the letter “u” before the string in double quotes. This means instead of defining a string as "MyValue" define it as u"MyValue". See the following example used in data load mapping script for the Account dimension:

```
entity = fdmRow.getString("ENTITY")
account = fdmRow.getString("ACCOUNT")
if (entity == u"グローバル" and account == "1110"):
  fdmResult = u"Global テスト"
elif (entity == u"ローカル" and account == "1110"):
  fdmResult = u"Local テスト"
else:
  fdmResult = account
```

The scripts above uses the “u” prefix for the user defined strings. You can optionally specify the u prefix for English/ASCII strings (that is, you can use "1110" or u"1110"). The following shows the result of the mapping applied on the workbench.



Using JAVA IDE to Develop Scripts

You can use popular Java IDE tools like Oracle jDeveloper, or Eclipse to develop and test scripts. Before using Eclipse to develop scripts you must install and configure the PyDev Interpreter. Refer to http://pydev.org for more details. After you have configured the IDE environment, copy the following JAR files from the EPM Server where FDMEE is installed (File location EPM_ORACLE_HOME/products/FinancialDataQuality/lib):

1. aif-apis.jar
2. aif-custom.jar

In addition, download appropriate (Oracle or SQL Server) JDBC driver JAR. After you have copied these files to the Project working directory, include them in the Project you create. Below is sample of the initialization steps required when running from your selected IDE:

```
#Start Initialize Code
#Required for Dev Mode. Not required in production script
import java.math.BigDecimal as BigDecimal
import java.sql as sql
import com.hyperion.aif.scripting.API as API

fdmAPI = API()
conn = None
conn = sql.DriverManager.getConnection("jdbc:oracle:thin:@server:1521:orcl", "user",
"password");
conn.setAutoCommit(False)
```

```
fdmAPI.initializeDevMode(conn);
print "SUCCESS CONNECTING TO DB"
fdmContext = fdmAPI.initContext(BigDecimal(1720))
#End Initialize Code Required for Dev Mode. Not required in production script

#Code to be added to production script
print fdmContext["LOCNAME"]
print fdmContext["LOCKEY"]
print fdmContext["APPID"]
```

Using Visual Basic API and Samples

Overview

This section includes:

- "Registering the Visual Basic API DLL Manually" on page 330
- "Visual Basic API List" on page 330
- "Visual Basic Sample Scripts" on page 348

Registering the Visual Basic API DLL Manually

If you use the Visual Basic API, then you must register the Visual Basic API DLL manually. FDMEE does not register the Visual Basic API DLL at installation.

➤ To register the Visual Basic API DLL manually:

1 **Open a command window.**

2 **Navigate to:** `EPM_HOME\products\FinancialDataQuality\lib\Windows`

3 **Execute RegisterVBAPI.vbs.**

The RegisterVBAPI.vbs script requires one parameter to be passed to it. The parameter must be the path (wrapped in quotes) to the Oracle Instance Path.

For example, RegisterVBAPI.vbs "C:\Oracle\Middleware\user_projects\epmsystem1"

Visual Basic API List

The API list below shows the objects you can use to programmatically extend FDMEE using Visual Basic.

API Class (clsAppServerDM)

fdmAPI.API Call

Table 55 API Class (clsAppServerDM)

API Call	Method/ Property/ Object Reference	Description
fInitializeMainAPI	Method	Initialize the VB API. This function must be called first in order to use the VB API. Input: ByVal LoadID As String, ByVal Token As String, ByVal OracleInstancePath As String, ByVal JavaHomePath As String, ByVal DatabaseProvider As String Output: True or False
URLDecodeString	Method	Decode a URL Encoded string. Input: ByVal value as String Output: String
Dispose	Method	Initiates the .Net garbage collection process to destroy the API object.

Application Class (clsApp)

fdmAPI.API.DataWindow.Connection.PobjApp.API Call

Table 56 Application Class (clsApp)

API Call	Method/Property/Object Reference	Description
PstrConnInfoCacheFile	Property	Returns the path to the ccs file stored in the user projects directory under the FDM folder. This file contains the connection information returned by COMJNI. This file is encrypted.
PstrConnInfoTempFilePath	Property	Path of ccs file only
PstrDatabaseName	Property	Database name
PstrDatabasePassword	Property	Database password
PstrDatabaseServer	Property	Database server
PstrDatabaseUserName	Property	Database user name
PstrDataDir	Property	Data directory for the LoadID
PstrDBConnectionString	Property	DB connection string returned from COMJNI
PstrDBPort	Property	DB port
PstrDBProvider	Property	DB provider

API Call	Method/Property/Object Reference	Description
PstrInboxDir	Property	Inbox directory for Load ID
PstrJavaHomePath	Property	Java Home Path Load ID
PstrLoadID	Property	Load ID
PstrOracleHomePath	Property	Oracle Home
PstrOracleInstancePath	Property	Oracle Instance Path
PstrOutboxDir	Property	Outbox directory for Load ID
PstrScriptsDir	Property	Scripts directory for Load ID
PstrToken	Property	Token
PstrTopLevelDir	Property	Top level directory for Load ID

Connection Class (clsConnection)

fdmAPI.API.DataWindow.Connection.API Call

Table 57 API.DataWindow.Connection

API Call	Method/Property/Object Reference	Description
GlngErrNo	Property	Contains the error number in the event of an error.
GstrError	Property	Contains the error number in the event of an error.
PblnEncodingUnicode	Property	Returns “True” if set to UTF-8, but “false” for all others.
PblnUseTrans	Property	This property defaults to “False.” If it is set to “True,” the query executed in ExecuteDML is executed as a transaction.
PobjApp	Object Reference	Reference to the clsAPP class
PstrConnection	Property	Returns the connection string to FDMEE.
PstrDatabase	Property	Connection string database catalog name
PstrDatabaseUserID	Property	Contains the database user ID.
PstrDirData	Property	Returns the path to the Data directory.
PstrDirInbox	Property	Returns the path to the Inbox directory.
PstrDirOutbox	Property	Returns the Outbox directory based on LoadID.
PstrDirReport	Property	Returns blank. Needs to point to where the “templates” directory is installed.
PstrDirScripts	Property	Returns Scripts directory for LoadID.

API Call	Method/Property/Object Reference	Description
PstrLanguageCode	Property	Returns FDMEE API language code. Returns “en” (for English) only. This property cannot be changed in the user interface.
PstrProvider	Property	Returns the provider used by FDMEE API.
PstrQueryDateMask	Property	Get/Set Query Date mask which is used through the API for queries involving date fields. The default is “yyyMMdd.”
PstrResourceFileDirectory	Property	Points to the FDM API localization files directory path.
PstrServer	Property	Prints the database server name.
fGenerateRnd	Method	Returns the random number (short type).
fGetOSUserID	Method	Returns the OS user of the current process.

DataManipulation Class

fdmAPI.API.DataWindow.DataManipulation.API Call

Table 58 DataManipulation Class

API Call	Method/Property/Object Reference	Description
fExecuteDML	Method	Execute DML Query. Inputs: ByVal strSQL As String Output: Boolean
PlngRecordsAffected	Property	Returns the number of records affected by the query executed in fExecuteDML.

Utilities Class (clsUtilities.cls)

fdmAPI.API.DataWindow.Utilities.API Call

Table 59 Utilities Class (clsUtilities.cls)

API Call	Method/ Property/ Object Reference	Description
fParseString	Method	Extract a substring from a delimited string based on its field position within the total number of fields. Inputs: ByVal strRecord As String, ByVal intFldCount As Integer, ByVal intFldToReturn As Integer, ByVal strDelimiter As String Output: String

API Call	Method/ Property/ Object Reference	Description
fGetRandomNumber	Method	Get a random number based on a two integer range. Inputs: ByRef intUpper As Short, ByRef intLower As Short Output: Short

Data Access Class (clsDataAccess)

fdmAPI.API.DataWindow.DataAccess.API Call

Table 60 Data Access Class (clsDataAccess)

API Call	Method/ Property/ Object Reference	Description
farsFireHose	Method	Open an ADO forward only/read only recordset for fast data streaming. Inputs: ByVal strSQL As String, Optional ByVal blnServerCursor As Boolean, Optional ByVal lngMarshalType As Long ● strSQL—SQL statement to execute ● blnServerCursor—Optional, Cursor location switch (True=Database Server,False=Client) ● lngMarshalType—Optional, Value used to control how the recordset is returned Output: ADODB Recordset
farsKeySet	Method	Open an ADO keyset type recordset based on the specified lock type. Inputs: Inputs: ByVal strSQL As String, Optional ByVal lngLockType As Long, Optional ByVal blnServerCursor As Boolean, Optional ByVal lngMarshalType As Long ● strSQL—SQL statement to execute ● lngLockType—ADO LockTypeEnum (adLockReadOnly=1;adLockPesimistic=2;adLockOptimistic=3;adLockBatch Optimistic=4) ● blnServerCursor—Optional, cursor location switch (True=Database Server,False=Client) ● lngMarshalType—Optional, Value used to control how the recordset is returned. Output: ADODB.Recordset

API Call	Method/ Property/ Object Reference	Description
farsPage	Method	Open an ADO BatchOptimistic recordset limited to the records found on the specified page. The record set returned is programmatically created and is disconnected. Inputs: ByVal strSQL As String, ByVal lngPageSize As Long, ByVal lngPage As Long, lngOPRecordCount As Long, Optional ByVal lngMarshalType As Long ● strSQL—SQL statement to execute ● lngPageSize—Number of records per page ● lngPage—Desired page number ● lngOPRecordCount—Output parameter containing record set record count ● lngMarshalType—Optional, Value used to control how the record set is returned Output: ADODB.Recordset
farsPageFind	Method	Open an ADO BatchOptimistic recordset limited to the records found on the specified page and for the specified criteria. The recordset returned is programmatically created and is disconnected. Inputs: ByVal strSQL As String, ByVal strCriteria As String, ByVal lngStartPosition As Long, ByVal lngPageSize As Long, lngOPRecordCount As Long, lngOPFindPostion As Long, Optional ByVal lngMarshalType As Long ● strSQL—SQL statement to execute ● strCriteria—ADO recordset FIND criteria statement (See ADO FIND method) ● lngStartPosition—Record index to begin the search ● lngPageSize—Number of records per page ● lngPage—Desired page number ● lngOPRecordCount—Output parameter containing recordset record count ● lngOPFindPostion—Output parameter containing position where record was found ● lngMarshalType—Optional, Value used to control how the recordset is returned Output: ADODB.Recordset

API Call	Method/ Property/ Object Reference	Description
farsPageFindFromKey	Method	Open an ADO BatchOptimistic recordset limited to the records found on the specified page and for the specified criteria. The recordset returned is programmatically created and is disconnected. Inputs: ByVal strSelect As String, ByVal strFrom As String, ByVal strWhere As String, ByVal strGroupBy As String, ByVal strHaving As String, ByVal strOrderBy As String, ByVal strKeyFieldName As String, ByVal strFindFieldName As String, ByVal strCriteria As String, ByVal lngStartPosition As Long, ByVal lngPageSize As Long, lngOPRecordCount As Long, lngOPFindPostion As Long, Optional ByVal ● lngMarshalType—As Long ● strSelect—Select clause of SQL statement to execute ● strFrom—From clause of SQL statement to execute ● strWhere—Where clause of SQL statement to execute ● strGroupBy GroupBy—Clause of SQL statement to execute ● strHaving—Having clause of SQL statement to execute ● strOrderBy OrderBy—Clause of SQL statement to execute ● strKeyFieldName—Name of key field used for fast page location ● strFindFieldName—Name of the field used in the find criteria ● strCriteria—Find criteria statement ● lngStartPosition—Record index to begin the search ● lngPageSize—Number of records per page ● lngPage—Desired page number ● lngOPRecordCount—Output parameter containing recordset record count ● lngOPFindPostion—Output parameter containing position where record was found ● lngMarshalType—Optional, Value used to control how the recordset is returned Output: ADODB.Recordset

API Call	Method/ Property/ Object Reference	Description
farsPageFromKey	Method	Open an ADO BatchOptimistic recordset limited to the records found on the specified page. This method is optimized for high volume queries. The recordset returned is programmatically created and is disconnected. Inputs: ByVal strSelect As String, ByVal strFrom As String, ByVal strWhere As String, ByVal strGroupBy As String, ByVal strHaving As String, ByVal strOrderBy As String, ByVal strKeyFieldName As String, ByVal lngPageSize As Long, ByVal lngPage As Long, lngOPRecordCount As Long, Optional ByVal lngMarshalType As Long ● strSelect—Select clause of SQL statement to execute ● strFrom—From clause of SQL statement to execute ● strWhere—Where clause of SQL statement to execute ● strGroupBy—GroupBy clause of SQL statement to execute ● strHaving—Having clause of SQL statement to execute ● strOrderBy—OrderBy clause of SQL statement to execute ● strKeyFieldName—Name of key field used for fast page location ● lngPageSize—Number of records per page ● lngPage—Desired page number ● lngOPRecordCount—Output parameter containing recordset record count ● lngMarshalType—Optional, Value used to control how the recordset is returned Output: ADODB.Recordset
farsSnap	Method	Open an ADO static type read only recordset. Inputs: ByVal strSQL As String, Optional ByVal blnServerCursor As Boolean, Optional ByVal lngMarshalType As Long ● strSQL—SQL statement to execute ● blnServerCursor—Optional, cursor location switch (True=Database Server,False=Client) ● lngMarshalType—Optional, Value used to control how the recordset is returned Outputs:ADODB.Recordset
farsTableAppend	Method	Open an ADO keyset type recordset based on the specified lock type using the ADO “Table Direct ”command directive and with the “Append-Only Rowset ” property set to true. Inputs: ByVal strTableName As String, Optional ByVal lngMarshalType As Long ● strTableName—Name of table to open ● lngMarshalType—Optional, Value used to control how the recordset is returned Outputs: ADODB.Recordset

SQL Manager Class (clsSQLMgr)

fdmAPI.API.SQLMgr.API Call

Table 61 SQL Manager Class (clsSQLMgr)

API Call	Method/ Property/ Object Reference	Description
fImpFieldsForGroup	Method	Returns a recordset containing all of the records ("Mappings") for the Import Format name (string) passed in at runtime. Inputs: ByVal strGroupKey As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 ● strGroupKey—Name of Import group key to return field parsing instructions ● blnReadOnly—Optional, Flag to create a read only recordset (Type=farsSnap) ● blnSQLOnly—Optional, Switch for generating SQL only ● lngMarshalType—Optional, Value used to control how the recordset is returned.
fImpGroup	Method	Returns a recordset containing all records in TBHVIMPGROUP table for the Import Format name (string) passed in. Inputs: ByVal strGroupKey As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 ● strGroupKey—Name of Import group key to return field parsing instructions for ● blnReadOnly—Optional, Flag to create a read only recordset (Type=farsSnap) ● blnSQLOnly—Optional, Switch for generating SQL only ● lngMarshalType—Optional, Value used to control how the recordset is returned
fImpGroupList	Method	Returns a recordset containing all import format groups based on group type. Inputs: ByVal lngGroupType As Integer, Optional ByVal blnIncludeNone As Boolean = False, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fIntDimensionList	Method	Returns a recordset of dimensions used in the Target Application. ByVal strApplicationID As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fLoadDetails	Method	Return load details for specified Load ID. Inputs: ByVal strLoadID as String, Optional ByVal blnReadOnly as Boolean = False, Optional ByVal blnSQLOnly as Boolean = False, Optional ByVal lngMarshalType as Integer = 0 Output: ADODB.Recordset

API Call	Method/ Property/ Object Reference	Description
fPartition	Method	Returns a recordset containing all of the properties of the location passed into the function. ByVal strLoc As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fPartitionList	Method	Returns a recordset containing all properties of all locations that exist. Inputs: Optional ByVal strLocNoRelatives As String = "", Optional ByVal strLocChildren As String = "", Optional ByVal blnNoParent As Boolean = False, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fPeriodKeyList	Method	Returns a recordset containing the list of period keys for the loadid passed to the function. Inputs: ByVal strLoadID As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.RecordsetOutput: ADODB.Recordset
fPOVDataValue	Method	Return the data value for the specified partition key. Inputs: ByVal strPartitionKey As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fProcessBalImpFile	Method	Return a recordset containing the name of the imported file for a given load id. For all non-file based imports, this function returns an empty string. Inputs: ByVal strLoadID As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fProcessLogForPOV	Method	Return a single process status record for the specified POV value/intersection. Inputs: ByVal strLoc As String, ByVal strCat As String, ByVal strPer As String, ByVal strRuleID As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fTrialBalanceConverted	Method	Returns a recordset containing all records pulled from: tDataSeg based on LoadID, Loc, Scenario, and Period. Inputs: ByVal strLoadID As String, ByVal strLoc As String, ByVal strCat As String, ByVal strPer As String, Optional ByVal blnExcludeIgnore As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngPageSize As Integer = 0, Optional ByVal lngPage As Integer = 0, Optional ByRef lngOPRecordCount As Object = Nothing, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset

API Call	Method/ Property/ Object Reference	Description
fTrialBalanceLite	Method	Return a recordset listing the DataKey field from the data segment table assigned to the specified location. The data is returned based on the specified POV values and calculation types. The purpose of this recordset is to create a fast/light weight recordset that you can use to execute a looping cursor delete. nput: ByVal strLoadID As String, ByVal strLoc As String, ByVal strCat As String, ByVal strPer As String, ByVal strCalcTypes As String, Optional ByVal lngStartCalcType As Integer = 0, Optional ByVal lngEndCalcType As Integer = 0, Optional ByVal strJournalID As String = "", Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fValEntGroupList	Method	Returns a recordset containing all validation entity group records. Input: Optional ByVal blnIncludeNone As Boolean = False, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fValEntitiesForGroup	Method	Return a recordset containing validation entity specifications for the specified validation entity group. Inputs: ByVal strGroupKey As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False,Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fValGroup	Method	Return a recordset containing a single validation rule group. Inputs: ByVal strGroupKey As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset
fValGroupList	Method	Return a recordset containing all validation rule group records. Inputs: Optional ByVal blnIncludeNone As Boolean = False, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0 Output: ADODB.Recordset

SQL Class (clsSQL)

fdmAPI.API.DataWindow.SQL.API Call

Table 62 SQL Class (clsSQL)

API Call	Methods/ Properties/ Object Reference	Description
fGetAppID	Method	Return the application ID for the Load ID passed in. Inputs: ByVal strLoadID As String Output: String
fGetLanguageCode	Method	Returns the language code. Inputs: ByVal AppID As String Output: String
fGetTopLevelDirectory	Method	Return top level directory. Inputs: ByVal AppID As String Output: String
fOptionLIstForKey	Method	Returns a recordset containing one record with values for the specified option name. Inputs: ByVal strOptionName As String, Optional ByVal blnReadOnly As Boolean = False, Optional ByVal blnSQLOnly As Boolean = False, Optional ByVal lngMarshalType As Integer = 0, Optional ByVal blnTranslateCaptions As Boolean = False Output: ADODB.Recordset

DB Tools Class (clsDBTools)

fdmAPI.API.DataWindow.DBTools.API Call

Table 63 DB Tools Class (clsDBTools)

API Call	Methods/ Properties/ Object Reference	Description
fGlobalOptionExists	Method	Determine when the global system option exists. Inputs: ByVal strOptionName As String Output: Boolean
fGlobalOptionGet	Method	Retrieve a global system option as a string containing the current value of the option. Inputs: ByVal strOptionName As String Output: String

API Call	Methods/ Properties/ Object Reference	Description
mLog	Method	Write an entry to the database activity log (AIF_PROCESS_LOGS table). Inputs: ByVal intProcessID As Integer, ByVal strEntityType As String, ByVal strEntityName As String, ByVal intLogSequence As Integer, ByVal strLogMessage As String Output: None
mLogError	Method	Write an error to a user runtime error log. The log is located in the `outbox` directory of the application under the file name "LoadID_FDM_API.log". Inputs: ByVal lngErrorCode As Integer, ByVal strErrorDesc As String, ByVal strErrorSource As String Output: None

Maintenance Manager Class (clsMaintenanceMgr)

fdmAPI.API.MaintenanceMgr.API Call

Table 64 Maintenance Manager Class (clsMaintenanceMgr)

API Call	Methods/ Properties/ Object Reference	Description
fProcessStatus	Method	Retrieve the current workflow process status for the specified POV values. The process status is returned as a COM object of the type "objProcessStatus". The best way to determine the current status is to check the lngStatus property of the return object, which contains a value that can be checked against the enumeration "enmProcessState". Inputs: ByVal strLoc As String, ByVal strCat As String, ByVal strPer As String, ByVal strRuleID As String Output: objProcessStatus object objProcessStatus Properties: ● strLoc ● strCat ● strPer ● blnImp ● strImp ● blnTBVal ● strTBVal ● blnExp ● strExp ● blnEntLoad ● strEntLoad ● blnEntVal ● strEntVal ● lngStatus ● dteLastActive ● blnCert ● strCert ● blnAsses ● strAsses ● blnChildDone ● strChildDone ● blnUD1 ● strUD1 ● blnUD2 ● strUD2 ● blnUD3 ● strUD3

API Call	Methods/ Properties/ Object Reference	Description
		• blnUD4 • strUD4 • blnValDirty • blnWCDirty • blnLogicDirty • intLockState

POV Manager Class (clsPOVMgr)

fdmAPI.API.POVMgr.API Call

Table 65 POV Manager Class (clsPOVMgr)

API Call	Methods/ Properties/ Object References	Description
fCategoryKey	Method	Return the numerical category key for the specified category name. Inputs: ByVal strCat As String Output: Integer
fCategoryName	Method	Return the text name of a category for the specified category key. Inputs: ByVal lngCatKey As Integer Output: String
fCheckLocParent	Method	Check when the requested location is assigned as the MAPPING parent to any other location. Inputs: ByVal strLoc As String Output: Boolean

API Call	Methods/ Properties/ Object References	Description
fCheckLocProf	Method	Return all behavior attributes for the specified location as a COM object of type “objLocProfile”. This object also contains the key information of the location and the data segment assignment. Inputs: ByVal strLoc As String Output: objLocProfile objLocProfile Properties: ● blnAdapterImport ● blnChild ● blnExists ● blnScriptImport ● blnSeq ● lngControlsType ● lngLocKey ● lngParentLocKey ● lngRedFlagLevel ● lngSegKey ● lngType ● strAdaptor ● strCLogicGrp ● strControlsApprover ● strControlsApproverProxy ● strControlsGrp1 ● strControlsGrp2 ● strControlsParent ● strCurrency ● strDataValue ● strImportGrp ● strIntgConfig1 ● strIntgConfig2 ● strIntgConfig3 ● strIntgConfig4 ● strLogicGrp ● strNotes ● strParent ● strValEntityGrp ● strValRuleGrp
fGetLocationName	Method	Return the text name of a location based on its numeric key. Inputs: ByVal lngPartKey As Integer Output: String

API Call	Methods/ Properties/ Object References	Description
fPeriodKey	Method	Return attributes associated with the specified period value as a COM object of type "objPeriod". Use this procedure to return the prior period of a location by setting the optional parameter "blnPriorPer" to true. By default the procedure returns the target period associated with the 'M' or 'Monthly' frequency, but the optional parameter "strFreq" can be used to retrieve a target value associated with a different frequency. Inputs: ByVal strPer As String, Optional ByVal blnPriorPer As Boolean = False, Optional ByVal strFreq As String = "" Output: objPeriod objPeriod Properties: ● dblSerialKey ● dteDateKey ● strDateKey ● strSerialKey ● strTarget ● strTargetYear

State Class (clsState)

API State

Table 66 State Class (clsState)

API Call	Methods/Properties/Object Reference	Description
AppID	Property	Returns the Application ID for the LoadID
bstMaintenanceMgr	Object Reference	Reference to the clsMaintenanceMgr class
bstSQLMgr	Object Reference	Reference to the clsSQLMgr class
CatKey	Property	Returns the Category Key for the LoadID.
CatName	Property	Returns the Category Name for the LoadID.
DataValue	Property	Returns the DataValue assigned to the Location for the LoadID.
dstConnection	Object Reference	Reference to the clsConnection class
dstDataAccess	Object Reference	Reference to the clsDataAccess class
dstDataManipulation	Object Reference	Reference to the clsDataManipulation class
dstDBTools	Object Reference	Reference to the clsDBTools class
dstSQL	Object Reference	Reference to the clsSQL class

API Call	Methods/Properties/Object Reference	Description
dstUtilities	Object Reference	Reference to the clsUtilities class
EndPeriodKey	Property	Returns the End Period for the LoadID.
ExportFlag	Property	Returns Y or N. If the Data Rule is executed with Export checked, this property returns Y.
ExportMode	Property	Returns Y or N. If ExportFlag is Y, this property returns the selected mode for Export (Replace or Append). Otherwise, it returns an empty string.
FileDir	Property	Returns the FILE_PATH field from the AIF_BAL_RULE_LOADS table.
FileName	Property	Returns a string containing the name of the file that was imported.
GstrDateMask	Property	Returns the date mask.
ImportFlag	Property	Returns the IMPORT_FROM_SOURCE_FLAG from the AIF_BAL_RULE_LOADS table. If LoadID initiates the Import Process, this flag is set to Y. Otherwise it is set to F.
ImportFormat	Property	Returns the Import Format used for the Load ID being processed.
ImportMode	Property	Returns REPLACE or APPEND based on the LoadID. This property returns null if the LoadID did not Import data (that is, Validate only).
LoadID	Property	Returns the Load ID.
LocKey	Property	Returns the Location Key for the Location being processed for the LoadID.
LocName	Property	Returns the Location Name for the location being processed for the LoadID.
MultiPeriodLoad	Property	Returns True or False. This property is True if multiple periods are being processed. Otherwise, returns False.
PeriodKey	Property	Returns the Period Key for the LoadID.
RuleID	Property	Returns the Rule ID for the Data Rule being processed.
RuleName	Property	Returns the Rule Name for the Data Rule being processed.
SourceName	Property	Returns the SOURCE_SYSTEM_NAME for the data rule.
SourceType	Property	Returns the SOURCE_SYSTEM_TYPE for the data rule.
TargetAppDB	Property	Returns "NA" for HFM. If the target application type is HPL then this property returns the PLAN_TYPE. If the target application type is ESSBASE this property returns the ESSBASE_DB_NAME.
TargetAppName	Property	Returns the APPLICATION_NAME for the target system.

Visual Basic Sample Scripts

Sample Visual Basic scripts in this section include:

- "Visual Basic Script to Send Email" on page 348
- "Visual Basic Script to Copy a File to the Inbox" on page 350
- "Visual Basic Script to Execute SQL" on page 351
- "Visual Basic Script to Access Various Properties" on page 352

Visual Basic Script to Send Email

The following script shows how to send an email:

```
'*************************************************************************************
'REVIEW INPUT PARAMETERS
'*************************************************************************************
If WScript.Arguments.Count <> 5  Then
            Wscript.Echo "You must supply 5 runtime variables." & vbNewLine & "Usage:
HFM_LOAD.vbs LoadID CSS_Token OracleInstancePath JavaHomePath OLE_DB_PROVIDER"
            WSCript.Quit -1
Else
            LoadID = Wscript.Arguments.Item(0)
            CSSToken = WScript.Arguments.Item(1)
            OracleInstancePath = WScript.Arguments.Item(2)
            JavaHomePath = WScript.Arguments.Item(3)
            Provider = WScript.Arguments.Item(4)
    End If
'*************************************************************************************

'*************************************************************************************
'Initialize FDMEE VB API
'*************************************************************************************
Set objFDMAPI = CreateObject("fdmapi.clsAppServerDM")
WScript.Echo "FDMEE VB API created."
blnInit = objFDMAPI.fInitializeMainAPI(CStr(LoadID), CStr(CSSToken),
CStr(OracleInstancePath), CStr(JavaHomePath), CStr(Provider))
If blnInit Then
            WScript.Echo "FDMEE VB API initialized."
Else
            WScript.Quit -1
            WScript.Echo "fInitializeMainAPI failed."
End If
'*************************************************************************************
WScript.Echo CBool(True)

'*************************************************************************************
'Sample Code
'*************************************************************************************
If objFDMAPI.API.POVMgr.PPOVLocation = "LOCATION_NAME" Then
            'Check Status of LoadID
            Set objProcessStatus =
objFDMAPI.API.MaintenanceMgr.fProcessStatus(objFDMAPI.API.State.GstrPOVLoc,
objFDMAPI.API.State.GstrPOVCat, objFDMAPI.API.State.GstrPOVPer)
            If objProcessStatus.blnImp Then
                        'Import was successful
```

```
                        'Send an email
                       SendEmail("FromUser@domain.com", "ToUser@domain.com", "Subject",
"Import was successful"
            End If
End If
'*******************************************************************************

'*******************************************************************************
'Destroy objects
'*******************************************************************************
objFDMAPI.Dispose
Set objFDMAPI = Nothing
'*******************************************************************************
Sub SendEmail(strFromAddress, strToAddress, strSubject,strEmailMsgLine)
     'Declare local variables
     Dim strFromAddress
     Dim strToAddress
     Dim strSubject
     Dim strEmailMsgLine
     Dim objMsg
     Dim objConfig
     Dim intSendUsing
     Dim strSMTPServer
     Dim intSendPort

     'Initialize Mail Server variables
     'SMTP server name
     strSMTPServer = "YourMailServer"
     'CdoSendUsing enumeration-1=use smtp on local machine, 2=use smtp over network
     intSendUsing = 2
     'SMTP port on server
     intSMTPPort = 25

     'Create CDO configuration object
     Set objConfig = CreateObject("CDO.Configuration")
     'Set Config object settings
     With objConfig.Fields
          .Item("http://schemas.microsoft.com/cdo/configuration/sendusing") =
intSendUsing
          .Item("http://schemas.microsoft.com/cdo/configuration/smtpserver") =
strSMTPServer
          .Item("http://schemas.microsoft.com/cdo/configuration/smtpserverport")=
intSMTPPort

     .Item("http://schemas.microsoft.com/cdo/configuration/smtpconnectiontimeout") = 10
          .Update
     End With

     'Create CDO message object
     Set objMsg = CreateObject("CDO.Message")
     'Assign config object to configuration property of message object
     Set objMsg.Configuration = objConfig
     'Set Message object settings and send mail
     With objMsg
           .To = strToAddress
           .From = strFromAddress
           .Subject = strSubject
           .TextBody = strEmailMsgLine
```

```
            .Send
      End With

      'Destroy message objects
      Set objMsg = Nothing
      Set objConfig = Nothing
End Sub
```

Visual Basic Script to Copy a File to the Inbox

The following script shows how to copy a file to the Inbox:

```
'*************************************************************************************
'REVIEW INPUT PARAMETERS
'*************************************************************************************
If WScript.Arguments.Count <> 5  Then
       Wscript.Echo "You must supply 5 runtime variables." & vbNewLine & "Usage:
HFM_LOAD.vbs LoadID CSS_Token OracleInstancePath JavaHomePath OLE_DB_PROVIDER"
WScript.Quit -1
Else
       LoadID = Wscript.Arguments.Item(0)
       CSSToken = WScript.Arguments.Item(1)
       OracleInstancePath = WScript.Arguments.Item(2)
       JavaHomePath = WScript.Arguments.Item(3)
    Provider = WScript.Arguments.Item(4)
End If
'*************************************************************************************

'*************************************************************************************
'Initialize FDMEE VB API
'*************************************************************************************
Set objFDMAPI = CreateObject("fdmapi.clsAppServerDM")
WScript.Echo "FDMEE VB API created."
blnInit = objFDMAPI.fInitializeMainAPI(CStr(LoadID), CStr(CSSToken),
CStr(OracleInstancePath), CStr(JavaHomePath), CStr(Provider))
If blnInit Then
       WScript.Echo "FDMEE VB API initialized."
Else
       WScript.Quit -1
       WScript.Echo "fInitializeMainAPI failed."
End If
'*************************************************************************************

'*************************************************************************************
'Sample Code
'*************************************************************************************
If objFDMAPI.API.State.LocName = "MT_COMMA7" Then
       ********************************************************************************
***
       'Copy file to Inbox
       ********************************************************************************
***
       strFileDir = "C:\"
       strFileName = "CopyThisFile.txt"

       'Create FileSystemObject
       Set objFSO = CreateObject("Scripting.FileSystemObject")
```

```
        If objFSO.FileExists(strFileDir & strFileName) Then
                'Copy the file
        End If

        Set objFSO = Nothing
End If
'*************************************************************************************
```

Visual Basic Script to Execute SQL

The following script shows how to execute SQL:

```
'*************************************************************************************
'REVIEW INPUT PARAMETERS
'*************************************************************************************
If WScript.Arguments.Count <> 5  Then
        Wscript.Echo "You must supply 5 runtime variables." & vbNewLine & "Usage:
HFM_LOAD.vbs LoadID CSS_Token OracleInstancePath JavaHomePath OLE_DB_PROVIDER"
        WScript.Quit -1
Else
            LoadID = Wscript.Arguments.Item(0)
        CSSToken = WScript.Arguments.Item(1)
            OracleInstancePath = WScript.Arguments.Item(2)
        JavaHomePath = WScript.Arguments.Item(3)
        Provider = WScript.Arguments.Item(4)
End If
'*************************************************************************************

'*************************************************************************************
'Initialize FDMEE VB API
'*************************************************************************************
Set objFDMAPI = CreateObject("fdmapi.clsAppServerDM")
WScript.Echo "FDMEE VB API created."
blnInit = objFDMAPI.fInitializeMainAPI(CStr(LoadID), CStr(CSSToken),
CStr(OracleInstancePath), CStr(JavaHomePath), CStr(Provider))
If blnInit Then
        WScript.Echo "FDMEE VB API initialized."
Else
        WScript.Quit -1
        WScript.Echo "fInitializeMainAPI failed."
End If
'*************************************************************************************

'*************************************************************************************
'Sample Code
'*************************************************************************************
If objFDMAPI.API.State.LocName = "MT_COMMA7" Then
        '*************************************************************************************
****
        'Delete one record from tdataseg
        '*************************************************************************************
****
        strDeleteSQL = "DELETE FROM TDATASEG_T WHERE LOADID = " & CStr(LoadID) & " AND
ENTITY = 'EastSales'"
        'Execute SQL
        objFDMAPI.API.DataWindow.DataManipulation.fExecuteDML CStr(strDeleteSQL)
End If
```

```
      '*************************************************************************************
***

'*************************************************************************************
'Destroy objects
'*************************************************************************************
objFDMAPI.Dispose
Set objFDMAPI = Nothing
WScript.Echo "FDMEE VB API  destroyed."
'*************************************************************************************
```

Visual Basic Script to Access Various Properties

The following script shows how to access various properties:

```
'*************************************************************************************
'REVIEW INPUT PARAMETERS
'*************************************************************************************
If WScript.Arguments.Count <> 5  Then
       Wscript.Echo "You must supply 5 runtime variables." & vbNewLine & "Usage:
HFM_LOAD.vbs LoadID CSS_Token OracleInstancePath JavaHomePath OLE_DB_PROVIDER"
       WSCript.Quit -1
Else
       LoadID = Wscript.Arguments.Item(0)
       CSSToken = WScript.Arguments.Item(1)
       OracleInstancePath = WScript.Arguments.Item(2)
       JavaHomePath = WScript.Arguments.Item(3)
       Provider = WScript.Arguments.Item(4)
End If
'*************************************************************************************

'*************************************************************************************
'Initialize FDMEE VB API
'*************************************************************************************
Set objFDMAPI = CreateObject("fdmapi.clsAppServerDM")
WScript.Echo "FDMEE VB API created."
blnInit = objFDMAPI.fInitializeMainAPI(CStr(LoadID), CStr(CSSToken),
CStr(OracleInstancePath), CStr(JavaHomePath), CStr(Provider))
If blnInit Then
       WScript.Echo "FDMEE VB API initialized."
Else
       WScript.Quit -1
       WScript.Echo "fInitializeMainAPI failed."
End If
'*************************************************************************************

'*************************************************************************************
'Sample Code
'*************************************************************************************

WScript.Echo "AppID = " & objFDMAPI.API.State.AppID
WScript.Echo "CatKey = " & objFDMAPI.API.State.CatKey
WScript.Echo "CatName = " & objFDMAPI.API.State.CatName
WScript.Echo "DataValue = " & objFDMAPI.API.State.DataValue
WScript.Echo "EndPeriodKey = " & objFDMAPI.API.State.EndPeriodKey

'Need to test this during Export process
```

```
WScript.Echo "ExportFlag = " & objFDMAPI.API.State.ExportFlag
WScript.Echo "ExportMode = " & objFDMAPI.API.State.ExportMode
WScript.Echo "FileDir = " & objFDMAPI.API.State.FileDir
WScript.Echo "FileName = " & objFDMAPI.API.State.FileName
'WScript.Echo "GblnPOVLocal = " & objFDMAPI.API.State.GblnPOVLocal
WScript.Echo "GdtePOVPerKey = " & objFDMAPI.API.State.GdtePOVPerKey
WScript.Echo "GlngPOVCatKey = " & objFDMAPI.API.State.GlngPOVCatKey
WScript.Echo "GlngPOVLocKey = " & objFDMAPI.API.State.GlngPOVLocKey
WScript.Echo "GlngPOVLocType = " & objFDMAPI.API.State.GlngPOVLocType
WScript.Echo "GstrDateMask = " & objFDMAPI.API.State.GstrDateMask
WScript.Echo "GstrMethodID = " & objFDMAPI.API.State.GstrMethodID
WScript.Echo "GstrMsg = " & objFDMAPI.API.State.GstrMsg
WScript.Echo "GstrPOVCat = " & objFDMAPI.API.State.GstrPOVCat
WScript.Echo "GstrPOVLoc = " & objFDMAPI.API.State.GstrPOVLoc
WScript.Echo "GstrPOVPer = " & objFDMAPI.API.State.GstrPOVPer
WScript.Echo "ImportFlag = " & objFDMAPI.API.State.ImportFlag
WScript.Echo "ImportFormat = " & objFDMAPI.API.State.ImportFormat

WScript.Echo "ImportMode = " & objFDMAPI.API.State.ImportMode
WScript.Echo "LoadID = " & objFDMAPI.API.State.LoadID
WScript.Echo "LocKey = " & objFDMAPI.API.State.LocKey
WScript.Echo "LocName = " & objFDMAPI.API.State.LocName
WScript.Echo "MultiPeriodLoad = " & objFDMAPI.API.State.MultiPeriodLoad
WScript.Echo "PeriodKey = " & objFDMAPI.API.State.PeriodKey
WScript.Echo "RuleID = " & objFDMAPI.API.State.RuleID
WScript.Echo "RuleName = " & objFDMAPI.API.State.RuleName
WScript.Echo "Scenario = " & objFDMAPI.API.State.Scenario
WScript.Echo "SourceName = " & objFDMAPI.API.State.SourceName
WScript.Echo "SourceType = " & objFDMAPI.API.State.SourceType
WScript.Echo "TargetAppDB = " & objFDMAPI.API.State.TargetAppDB
WScript.Echo "TargetAppName = " & objFDMAPI.API.State.TargetAppName

If objFDMAPI.API.POVMgr.PPOVLocation = "LOCATION_NAME" Then
       'Enter Sample Code HERE
Else
       'Enter Sample Code HERE
End IF
'*******************************************************************************

'*******************************************************************************
'Destroy objects
'*******************************************************************************
objFDMAPI.Dispose
Set objFDMAPI = Nothing
'*******************************************************************************
```

9 FDMEE Reports

In This Chapter

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FDMEE provides prebuilt reporting tools that capture business-critical operations and revenue-generating activities within your organization. These reports provide key information on how metadata and data are integrated from the source to the target.

The FDMEE reporting framework represents a unified solution that incorporates source and target data, templates, and user-defined SQL queries. Templates, created in Oracle Business Intelligence Publisher, consume data in XML format and generate reports dynamically. You can add SQL queries to extract data from tables, or couple them with the report parameters to extend the definition of a standard report.

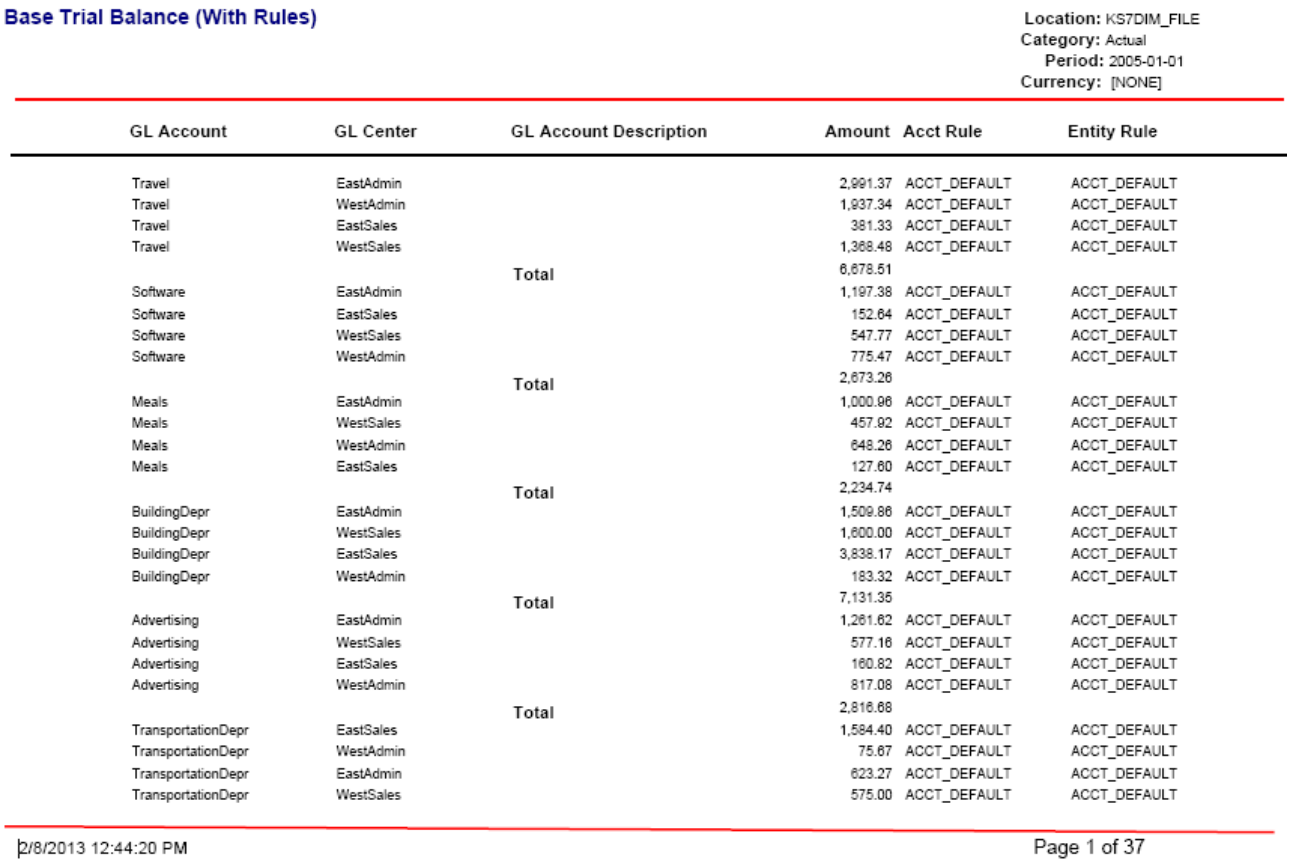
The FDMEE reporting framework has the following components:

FDMEE reports can be generated as PDF, Excel, Word, or HTML output.

- Query Definition
- Report Group
- Report Definition
- Report Execution

FDMEE Reports

The standard FDMEE report groups are described below. For information on the subcategories of each report, see "FDMEE Detail Reports" on page 365.



Base Trial Balance (With Rules)

Location: KS7DIM_FILE
Category: Actual
Period: 2005-01-01
Currency: [NONE]

GL Account	GL Center	GL Account Description	Amount	Acct Rule	Entity Rule
Travel	EastAdmin		2,991.37	ACCT_DEFAULT	ACCT_DEFAULT
Travel	WestAdmin		1,937.34	ACCT_DEFAULT	ACCT_DEFAULT
Travel	EastSales		381.33	ACCT_DEFAULT	ACCT_DEFAULT
Travel	WestSales		1,368.48	ACCT_DEFAULT	ACCT_DEFAULT
		Total	6,678.51		
Software	EastAdmin		1,197.38	ACCT_DEFAULT	ACCT_DEFAULT
Software	EastSales		152.64	ACCT_DEFAULT	ACCT_DEFAULT
Software	WestSales		547.77	ACCT_DEFAULT	ACCT_DEFAULT
Software	WestAdmin		775.47	ACCT_DEFAULT	ACCT_DEFAULT
		Total	2,673.26		
Meals	EastAdmin		1,000.96	ACCT_DEFAULT	ACCT_DEFAULT
Meals	WestSales		457.92	ACCT_DEFAULT	ACCT_DEFAULT
Meals	WestAdmin		648.26	ACCT_DEFAULT	ACCT_DEFAULT
Meals	EastSales		127.60	ACCT_DEFAULT	ACCT_DEFAULT
		Total	2,234.74		
BuildingDepr	EastAdmin		1,509.86	ACCT_DEFAULT	ACCT_DEFAULT
BuildingDepr	WestSales		1,600.00	ACCT_DEFAULT	ACCT_DEFAULT
BuildingDepr	EastSales		3,838.17	ACCT_DEFAULT	ACCT_DEFAULT
BuildingDepr	WestAdmin		183.32	ACCT_DEFAULT	ACCT_DEFAULT
		Total	7,131.35		
Advertising	EastAdmin		1,261.62	ACCT_DEFAULT	ACCT_DEFAULT
Advertising	WestSales		577.16	ACCT_DEFAULT	ACCT_DEFAULT
Advertising	EastSales		160.82	ACCT_DEFAULT	ACCT_DEFAULT
Advertising	WestAdmin		817.08	ACCT_DEFAULT	ACCT_DEFAULT
		Total	2,816.68		
TransportationDepr	EastSales		1,584.40	ACCT_DEFAULT	ACCT_DEFAULT
TransportationDepr	WestAdmin		75.67	ACCT_DEFAULT	ACCT_DEFAULT
TransportationDepr	EastAdmin		623.27	ACCT_DEFAULT	ACCT_DEFAULT
TransportationDepr	WestSales		575.00	ACCT_DEFAULT	ACCT_DEFAULT

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Table 67 Report Groups and Descriptions

Report Group	Description
Audit Reports	An audit report displays all transactions for all locations that comprise the balance of a target account. The data returned in these reports depends on the location security assigned to the user. The subcategories of the Audit Reports: ● Account Chase ● Account Chase with Wildcards ● Intersection Drill Down
Base Trial Balance Reports	The base Trial Balance reports represent account balance source data in a General Ledger system. You use a base Trial Balance report to validate and compare balances as data is loaded from the source system to the target applications. The subcategories of base Trial Balance reports: ● Trial Balance Location, With Targets (Cat, Per) ● Trial Balance Current Location, With Rules (Cat, Per) ● Trial Balance Current Location, All Dimensions-Target Entity-Acct (Cat, Per) ● Trial Balance Converted Current Location, By Target Entity-Acct (Cat, Per) ● Trial Balance Current Location, with Target Entity-Acct (Cat, Per) ● Trial Balance Current Location, All Dimension-Targets (Cat, Per) ● Trial Balance Current Location, by Target Acct (Cat, Per)

Report Group	Description
Check Reports	Check reports provide information on the issues encountered when data load rules are run. Check reports return target system values that include aggregation or calculations from the target system. The subcategories of Check reports: ● Check Report—Displays the results of the validation rules for the current location (pass or fail status). ● Check Report Period Range (Cat, Start per, End per)—Displays the results of the validation rules for a category and selected periods. ● Check Report by Validation Entity Sequence—Displays the results of the validation rules for the current location (pass or fail status); sorted by the sequence defined in the validation entity group. ● Check Report with Warnings—Displays the results of the validation rules for the current location. Warnings are recorded in validation rules and shown if warning criteria are met. This report does not show rules that passed the validation.
Listing Reports	Listing reports summarize metadata and settings (such as the import format, or check rule) by the current location. The subcategories of Listing reports: ● Import Format by Location ● Location Listing
Location Analysis Reports	Location Analysis reports provide dimension mapping and system log information by the current location. The subcategories of Location Analysis reports: ● Dimension Map for POV (Dimension, Cat, Per) ● Dimension Map (Dimension)
Process Monitor Reports	A Process Monitor report displays, for the current report, a list of locations and their positions within the data conversion process. You can use the process monitor report to monitor the status of the closing process. The report is time-stamped. Therefore, it can be used to determine to which locations and at which time data was loaded. The subcategories of Process Monitor reports: ● Process Monitor (Cat, Per) ● Process Monitor All Categories (Cat, Per) ● Process Monitor with Lock (Cat, Per) ● Process Status Period Range (Cat, Start Period, End Period)
Variance Reports	A Variance report displays source/trial balance accounts for one target account, showing over two periods or categories. The subcategories of Variance reports: ● Account Chase Variance (Target Account, Cat1, Per1, Cat2, Per2) ● Trial Balance Variance (Cat1, Per1, Cat2, Per2)

Working with Query Definitions

Two types of SQL queries can be used in a report definition: a base query and a parameter query.

A base query enables users to pull data from various tables and display the data as report output. The base extends the definition of a standard report, and can be reused with multiple reports. For example, using one query definition, you can show different columns or groupings. In one report, you can list amounts by account and group by entity, and in another list amount by entity and group by account.

The parameter SQL query enables you to run a query against the parameters in the report definition. For example, use the query to select the Location, Period, Category, or Account.

For information on the tables and joins you can use to build your SQL queries, see "TDATASEG Table Reference" on page 419 and"TLOGPROCESS Table Reference" on page 423 in Appendix G. The TDATASEG table is used to store the data loaded by the user, the transformation between the source dimension members, and the results of the mapping process. The TLOGPROCESS table is used to store the workflow process status for a location, category, and period.

You can save a query definition as an XML file, which, in turn, you can use to create custom templates using BI Publisher or the BI Publisher desktop addin for Microsoft Word.

➤ To add a query definition:

1 On the **Setup** tab, under **Reports**, select **Query Definition**.

2 In **Query Definition**, click **Add**.

3 In **Name**, enter the name of the query definition.

Oracle recommends that you assign a name that corresponds to the report definition in which the SQL is embedded.

4 In **Select Clause**, specify the SQL Select clause used to query the database and return the data that corresponds to your selected criteria.

5 In **Where Clause**, specify the SQL Where clause used to restrict the data that is returned to only the specific criteria that you specify.

6 In **Group by/Order by Clause**, specify the Group by or Order by clause.

The ORDER BY clause sorts the records in the result set. The ORDER BY clause can be used only in SQL SELECT statements.

The GROUP BY clause fetches data across multiple records and returns the results grouped by one or more columns.

7 Click **Validate Query**.

If the query definition is validated, FDMEE returns the message: "Query validation successful."

If the query definition is not validated, FDMEE indicates that an error was found in the SQL. You must fix the error before validating the query again.

8 Click **Save**.

9 **Optional:** To save the query definition to an XML file, click **Generate XML**.

Working with Report Definitions

Report definitions are the attributes that determine the content and structure of a report. Using the Report Definition option, you can:

- Associate a report to a Report Group.
- Associate a query definition with the report.

- Associate a Rich Text Format template (RTF) with the report.
- Define report parameters.

Adding Report Groups

Report groups enable you to assemble similar types of reports into one category for ease of use.

➤ To add a report group:

1 On the **Setup** tab, under **Reports**, select **Report Definition**.

2 In **Report Definition**, select the **Report Group** tab.

3 In **Report Group**, click **Add**.

4 In the blank **Name** field, enter the title of the report group.

For example, enter "Base Trial Balance Reports."

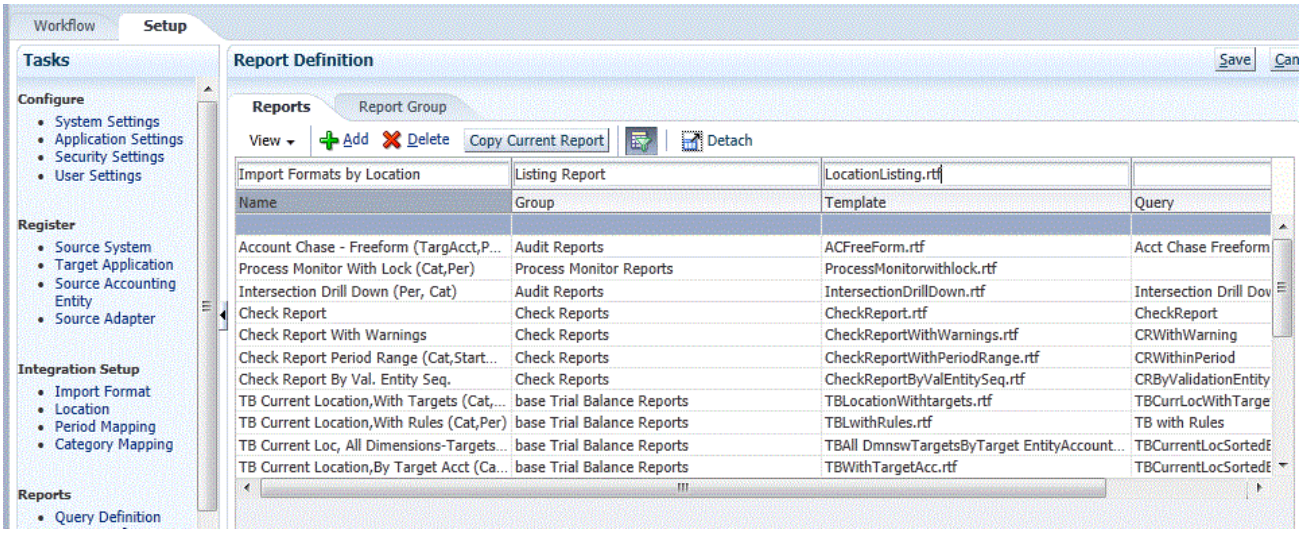
5 In **Sequence**, enter a numeric value that identifies the display order of the report group on the Report Definition screen.

For example, to display the Check Report group before the Location Listing group, enter `1` in the Sequence field for the Check Report group, and `2` for the Location Listing group.

6 Click **Save**.

Working with Report Definitions

A report definition can include a query definition created in SQL and any RTF template set up for use with a selected report. Additionally, you can associate a report with the query definition that prompts the user with a list of values when selecting the parameters of the report.



➤ To add a report definition:

1 On the **Setup** tab, under **Reports**, select **Report Definition**.

2 In **Report Definition**, select the **Reports** tab.

The Report tab consists of three regions:

- Summary—Lists all report definitions.
- Details—Shows the report name, associated base query definition, report group, and associated template.
- Parameters—Shows the parameter name and type, display name, sequence, parameter value, and any query definition used to supply a list of values for a given report parameter.

3 In the summary grid, click **Add**.

4 In the detail grid, in **Name**, enter the name of the report definition.

5 In **Group**, select the report group name associated with the definition.

To search on a report group, click and choose a report group from the Search and Select: Group screen.

Report groups are created on the Report Group tab. See "Adding Report Groups" on page 359.

6 In **Query**, select the name of the query definition to associate with the report definition.

To search on a query definition, click and choose a query definition from the Search and Select: Query screen.

Query definitions are defined in the Query Definition option. See "Working with Query Definitions" on page 357.

7 In **Template**, select the RTF template to associate with the report definition.

To search on a template, click and choose a template from the Search and Select: Template screen.

FDMEE report templates are saved with a Rich Text Format (RTF) file type. The RTF file type is a specification used by common word processing applications, such as Microsoft Word. The templates available to the FDMEE report are created in BI Publisher. See the *Report Designer's Guide for Oracle Business Intelligence Publisher*. To download the Oracle BI Publisher Desktop for Microsoft Office, see http://www.oracle.com/technetwork/middleware/bi-publisher/downloads/index.html.

Note: You can view report descriptions and parameters in the language selected for your user interface. Language templates are available at: `\Oracle\Middleware\EPMSystem11R1\products\FinancialDataQuality\templates` for you to select and associate with a report definition.

To upload a template, click . In **Search and Select: Template**. click **Upload**. Then click **Browse** to navigate to the template to upload and click **OK**.

8 Click **Save**.

➤ To define the parameters of the report definition:

1 From the summary grid, select the name of the report definition to which to add parameters.

2 In the detail grid, click **Add**.

A blank line is displayed to which to add report parameters.

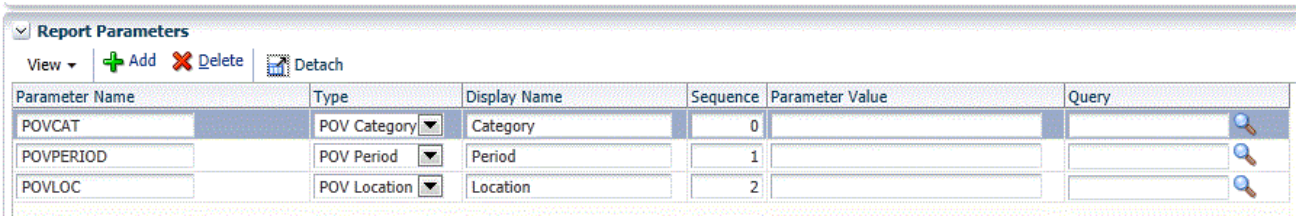
3 In **Parameter Name**, enter the POV category to which the parameter belongs.

For example, enter `POVLOC`, for the POV location, `POVPeriod` for the POV period, `POVCAT` for POV category, and `POVTARGET` for the target category.

4 In **Type**, select the type of parameter for the report.

Available types:

- POV—Prompts for the POV location, period, category or rule. The POV values default from the users POV when they run the report parameter.
- Query—The Query type enables you to create a query that populates a list of values that a user can select from when running the report. The parameter name entered by the user must match a parameter used in the assigned query. For example, if the parameter name is "California", a corresponding parameter in the query must be named California. The name in the query must have a "~" character as a prefix so that the system can parse the query correctly.
- Static—A Static type Indicates that the parameter is a constant or a predefined value, and the parameter value is supplied by the user. When the parameter is supplied and the report is executed, the query uses this parameter as part of the Select statement.
- Title (indicates the header part of column title)



5 In **Display Name**, enter the name to display for the parameter on the Generate Report screen.

6 In **Parameter Value**, enter the value for the "Static" parameter type. For example, if you have an aging report for 30 days, enter `30` in this field.

7 In **Sequence**, enter the display order of the parameter on the Generate Report screen.

8 In **Query**, specify the query definition that provides a list of values for the parameter. For example, to show a list of data rules for the user to select in the Generate Report screen, specify the query definition to define these queries.

9 Click **Save**.

➤ To copy a report:

1 On the **Setup** tab, under **Reports**, select **Report Definition**.

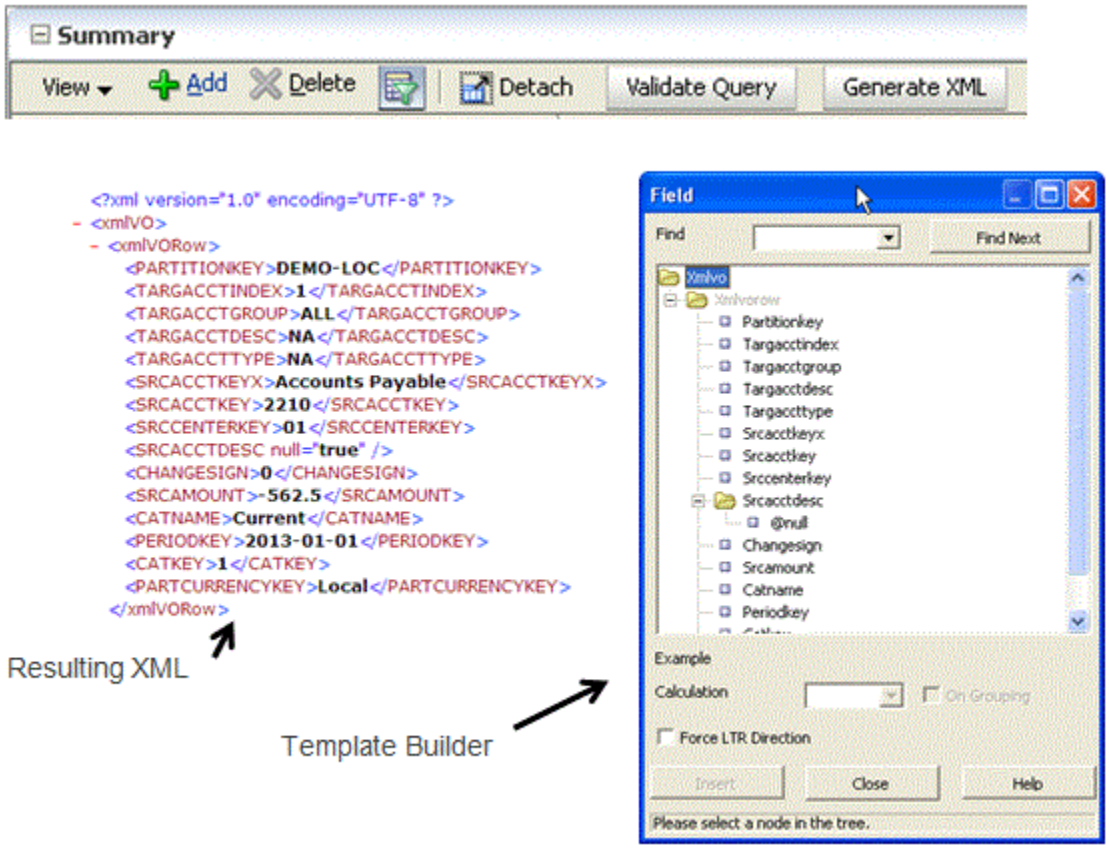
2 In **Report Definition**, in the **Report** summary grid, select the report.

3 In the **Report** summary grid, click **Copy Current Report**.

The copied report is added to the list of reports. The name of the report takes the original report name appended with "_copy."

Creating a Report Template

Report templates, created in Oracle Business Intelligence Publisher, consume data in XML format and generate reports dynamically.



➤ To create a report template:

1 Create a query definition for the report.

a. On the **Setup** tab, under **Reports**, select **Query Definition**.

b. In **Query Definition**, click **Add**.

c. In **Name**, enter the name of the query definition.

Oracle recommends that you assign a name that corresponds to the report definition in which the SQL is embedded.

d. In **Select Clause**, specify the SQL Select clause used to query the database and return the data that corresponds to your selected criteria.

e. In **Where Clause**, specify the SQL Where clause used to restrict the data that is returned to only the specific criteria that you specify.

f. In **Group by/Order by Clause**, specify the Group by or Order by clause.

The ORDER BY clause sorts the records in the result set. The ORDER BY clause can be used only in SQL SELECT statements.

The GROUP BY clause fetches data across multiple records and returns the results grouped by one or more columns.

g. Click **Validate Query**.

If the query definition is validated, FDMEE returns the message: "Query validation successful."

If the query definition is not validated, FDMEE indicates that an error was found in the SQL. You must fix the error before validating the query again.

h. Click **Save**.

2 Click **Generate XML**.

3 Create the report template.

a. Install the XML Publisher Desktop.

See the *Report Designer's Guide for Oracle Business Intelligence Publisher*. To download the Oracle BI Publisher Desktop for Microsoft Office, see http://www.oracle.com/technetwork/middleware/bi-publisher/downloads/index.html.

b. Load the XML created in step 2.

Reference the template builder tutorial as needed.

c. Save the template, and then upload it to the server.

4 Create report definition with group, query and template.

Running Reports

➤ To run reports:

1 On the **Workflow** tab, under **Other**, select **Report Execution**.

2 In **Report Execution**, in **Report Groups**, select a report group.

3 In **Reports**, select a report.

To filter the display listing by a report name within a report group, enter the name of the report in the blank entry line above the **Name** field and press Enter. For example, to view only reports beginning with **Account**, enter **Account** and press Enter.

To filter the display listing by a base query name within a report group, enter the query name in the blank entry line above **Query**.

4 Click **Execute**.

5 When prompted, enter parameter values on the **Generate Report** screen.

a. If applicable, modify the **Period**, **Category**, and **Location** values.

b. From the **Report Output Format**, select the output format.

Available output formats are:

- PDF
- HTML
- EXCEL (.XLS)

c. From **Execution Mode**, select the online method of running the report.

The online method processes the report immediately.

d. **Optional**: To create a report batch script that generates a report when the scripts are executed, click **Create Report Script**.

e. Click **OK**.

➤ To create a report script:

1 On the **Workflow** tab, under **Other**, select **Report Execution**.

2 In **Report Execution**, in **Report Groups**, select a report group.

3 In **Reports**, select a report.

To filter the display listing by a report name within a report group, enter the name of the report in the blank entry line above the **Name** field and press Enter. For example, to view only reports beginning with **Account**, enter **Account** and press Enter.

To filter the display listing by a base query name within a report group, enter the query name in the blank entry line above **Query**.

4 Click **Create Report Script**.

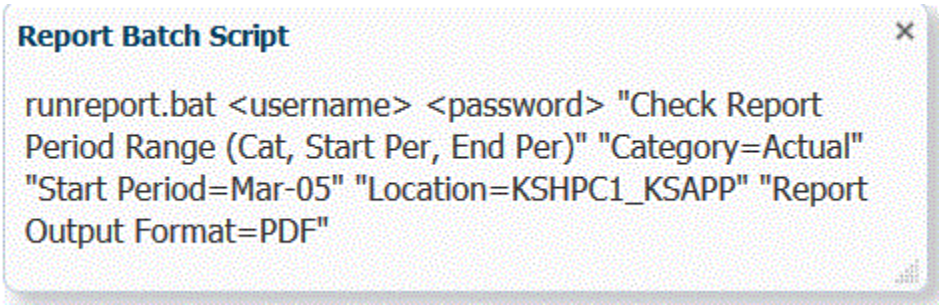
Note: Make sure that password encryption has been set up before creating a report script. See "Using Password Encryption" on page 290.

5 On the **Generate Report Script** screen, select the parameter values.

6 In **Report Output Format**, select the output format of the batch.

7 Click **OK**.

A Report Batch Script window is displayed showing the parameters of the reports script.



Scripts are located in the `EPM Oracle Instance/FinancialDataQuality` directory.

8 **Copy the script that FDMEE generates, and on a Window command window or UNIX shell, paste the script, and then run it.**

For example at a Windows command line, specify:

```
runreport.bat <username><password> "Check Report With Warnings" "Category=Actual"
"Period=March-05" "Location=PKA_TEST" "Report Output Format=PDF"
```

Note: When passing program arguments for a batch file execution, Jython removes double quotes (“) unless arguments have a leading space in them. Jython uses double quotes for escaping. To avoid conflicts, add a leading space in the argument. For example, instead of passing “Period=Mar-2003”, pass “ Period=Mar-2003”.

Note: You can use a file with an encrypted password when executing reports from batch report scripts, for example, `runreport.bat <username><password> file`...

FDMEE Detail Reports

The following reports are available in FDMEE.

Audit Reports

An audit report displays all transactions for all locations that compose the balance of a target account. The data returned in this report depends on the location security assigned to the user.

Account Chase Wildcard (TargAcct, Per, Cat)

Shows imported accounts for all FDMEE locations, subtotaled by FDMEE location, based on an account selection that enables use of wildcards.

Runs for

All FDMEE locations

Parameters

Target account, Period, Category

Query

Account Chase Wildcard

Template

Account Chase WildCard.rtf

Account Chase - Freeform (TargAcct, Per, Cat)

Shows one imported account for all FDMEE locations; subtotaled by FDMEE location.

Runs for

All FDMEE locations

Parameters

Target account, Period, Category

Query

Account Chase Freeform

Template

Account Chase Free Form.rtf

Intersection Drill Down (Per, Cat)

Shows target accounts and amounts; and includes drill-down list of source accounts and amounts that are mapped to target accounts.

Runs for

Current FDMEE location

Parameters

Period, Category

Query

Intersection Drill Down

Template

Intersection Drill Down.rtf

Check Reports

Check reports provide information on the issues encountered when data load rules are run. Note that Check reports return target system values that include aggregation or calculations from the target system.

Note the following when using check reports:

- When the check report is run and opened from the Workbench, it is not saved to the FDMEE folder on the server.
- When you run a data rule, a check rule report is not generated automatically. In this case, run the data rule before executing the check report.
- If you run the report in offline mode, the report is saved to the `outbox` on the FDMEE server.
- To run a data rule and report in batch mode, run the data load rule from a BAT file, and then the report from a BAT file. In this case, you can put each in the same BAT file, or call each of them from a BAT file.

Check Report

Shows the results of the validation rules for the current location (indicates pass or fail status).

Runs for

Current FDMEE location

Parameters

Period, Location and Category

Query

Check Report

Template

Check Report.rtf

Check Report Period Range (Cat, Start Per, End Per)

Shows the results of the validation rules for selected periods.

Runs for

Current FDMEE location

Parameters

Category, Start Period, End Period

Query

Check Report Within Period Query

Template

Check Report With Period Range.rtf

Check Report With Warnings

Shows the results of the validation rules for the current location (warnings are recorded in validation rules).

Runs for

Current FDMEE location

Parameters

None

Query

Check Report With Warning

Template

Check Report With Warning.rtf

Check Report By Validation Entity Seq.

Shows the results of the validation rules for the current location (indicates pass or fail status); sorted by the sequence defined in the validation entity group.

Runs for

Current FDMEE location

Parameters

None

Query

Check Report By Validation Entity

Template

Check Report By Validation Entity Sequence.rtf

Base Trial Balance Reports

The Trial Balance reports provide detail on how source data is processed in FDMEE. Typically, the Trial Balance is used to display account balances in the General ledger system. As data is loaded from the source General Ledger system to the target EPM application, you can validate and compare the balances loaded with the source Trial Balance amounts.

Note: Before running the base Trial Balance Reports, confirm that the user who runs the base Trial Balance reports has access to the location associated with the report. (See "Defining Location Security " on page 51).

TB Current Location, with Targets (Cat, Per)

Shows imported source accounts (departments) and their corresponding accounts (entities).

Runs for

Current FDMEE location

Parameters

Category, Period

Query

Current Trial Balance With Location with Targets

Template

TB Location With Targets.rtf

TB Current Location with Rules (Cat, Per)

Shows imported source accounts (departments) and the mapping entity rule (map wildcard) in which the accounts are included.

Runs for

Current FDMEE location

Parameters

Category, Period

Query

TB Location With Query

Template

TB Location with Rules.rtf

TB Current Locations, All Dimensions-Targets, by Target Entity-Account (Cat, Per)

Shows all imported records with all dimensions and their respective targets: grouped by target entity and account.

Runs for

Current FDMEE location

Parameters

Category, Period

Query

Trial Balance Current Location with Targets

Template

TB/(All Dimensions with Targets) by Target Entity Account.rtf

TB Current Locations, All Dimensions-Targets (Cat, Per)

Shows all imported records with all dimensions and their respective targets.

Runs for

Current FDMEE location

Parameters

Category, Period

Query

Trial Balance Location All Dimension.

Template

TB with Transaction Currency.rtf

TB Current Location, by Target Acct (Cat, Per)

Shows imported accounts: subtotaled by target accounts.

Runs for

Current FDMEE location

Parameters

Category, Period

Query

Trial Balance Current Location Sorted By Target Account

Template

TB With Target Account.rtf

TB Current Location, By Target Entity Account (Cat, Per)

Shows all imported records with all dimensions and their respective targets; grouped by target entity and account.

Runs for

Current FDMEE location

Parameters

Category, Period

Query

Trial Balance Base Transaction Currency

Template

Base Trial Balance (All Dimensions with Targets).rtf

TB Converted Current Location by Target Entity/Account

Shows imported accounts and entities in addition to original and converted accounts: subtotaled by target entity.

Runs for

Current FDMEE location

Parameters

Category, Period

Query

Trial Balance Converted by Target Entity/Account Query

Template

TB Converted Current Location by Target Entity Account.rtf

Listing Reports

Listing reports summarize metadata and settings (such as the import format, or check rule) by the current location.

Import Formats by Location

Displays a list of all import formats; sorted by FDMEE location.

Runs for

N/A

Parameters

None

Query

Import Format By Location

Template

Import Format by Location.rtf

Location Listing

Shows a list of all mapping rules for a selected period, category, or dimension.

Runs for

Current FDMEE location

Parameters

Any FDMEE Dimension, Period, Category

Query

Location Listing Query

Template

Location Listing.rtf

Location Analysis

Location Analysis reports provide dimension mapping by the current location.

Dimension Map (Dimension)

Displays a list of all mapping rules for a selected dimension.

Runs for

Current FDMEE location

Parameters

Current FDMEE dimension

Query

Dimension Map

Template

Dimension Map.rtf

Dimension Map For POV (Dimension, Cat, Per)

Shows a list of all mapping rules for a selected period, category, or dimension.

Runs for

Current FDMEE location

Parameters

Any FDMEE Dimension, Period, Category

Query

Dimension Map for POV

Template

Dimension Map.rtf

Process Monitor Reports

The Process Monitor Reports shows locations and their positions within the data conversion process. You can use the process monitor report to monitor the status of the closing process. The report is time-stamped. Therefore, it can be used to determine to which locations at which time data was loaded.

Process Monitor (Cat, Per)

Shows all locations and their current status (import, validate, export, load, or check). (Locations are displayed alphabetically.)

Runs for

All FDMEE locations

Parameters

Category, Period

Query

Process Monitor

Template

Process Monitor.rtf

Process Monitor With Lock (Cat, Per)

Shows a list of all locations and their current status (import, validate, export, load, or check), including the lock status of the locations.

Runs for

All FDMEE locations

Parameters

Category, Period

Query

ProcessMonitorwithLock

Template

ProcessMonitorwithlock.rtf

Process Status Period Range (Cat, Start Per, End Per)

Shows a list of all locations and the current load status of each location for each period of a period range.

Runs for

All FDMEE locations, period range

Parameters

Category, Start Period, End Period

Query

PMPeriodRange

Template

PMPeriodRange.rtf

Process Monitor All Categories (Cat, Per)

Shows a list of all locations and the current load status of every location for every category.

Runs for

All FDMEE categories and locations

Parameters

Period

Query

Process Monitor All Categories

Template

Process Monitor All Category.rtf

Variance Reports

The Variance reports display source and trial balance accounts for one target account, showing data over two periods or categories.

Account Chase Variance

Displays source input accounts for one target input account, showing variances over two periods or categories.

Runs for

All FDMEE locations

Parameters

Target Account, Category 1, Period 1, Category 2, Period 2.

Query

Account Chase Variance

Template

Account Chase Variance.rtf

Trial Balance Variance

Shows source input accounts, subtotaled by target accounts, showing variances over two periods or categories.

Runs for

Current FDMEE location

Parameters

Category 1, Period 1, Category 2, Period 2

Query

Trial Balance Variance

Template

TB Variance.rtf

A FDMEE Web Service

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unlockPOV 382

This appendix describes the FDMEE web service.

Note: It is recommended that you use batch scripts rather than the web services, See "Working with Batch Scripts" on page 289.

Access the FDMEE Web Services WSDL at `http://server:19000/oracle-epm-erpi-webservices/RuleService?wsdl`, where *`Host Name`* is the name of the host where Workspace is deployed.

To use the Web Service, configure the Oracle Web Services Manager. For more details, refer to Configuring Oracle Web Services Manager for EPM System Products in the *Oracle Enterprise Performance Management System Deployment Options Guide*.

executeDataRule

The executeDataRule method executes a data rule after validating the parameters passed with the rule. If the parameter is invalid, error messages are displayed.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pUserName String pPassword String pSSOToken		AIF_ERR_00002:Invalid User Name/ Password combination. AIF_ERR_00001:Invalid Token	For these three parameters pass the username and password or a valid sso_ token.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pImportFromSource	Y/N	AIF_ERR_00005:Invalid value for Import From Source Parameter	
String pExportToTarget	Y/N	AIF_ERR_00006:Invalid value for Export to Target Parameter	
String pRuleName		AIF_ERR_00004:Invalid Data Rule Name	The name of the data rule for a location.
String pExecutionMode	INCREMENTAL/SNAPSHOT	AIF_ERR_00007:Invalid value for Execution mode	Data rule execution mode
String pLoadExchangeRateFlag	Y/N	AIF_ERR_00008:Invalid value for Load Exchange Rate Flag	This parameter can be used only in case of multi-currency applications.
String pStartPeriodName	Start Period name	AIF_ERR_00010:Invalid Period Keys	
String pEndPeriodName	End Period name	AIF_ERR_00010:Invalid Period Keys	
String pSyncMode	TRUE/FALSE	AIF_ERR_00009:Invalid value for sync mode	This parameter represents where the execution should take place synchronously or asynchronously. Value of True executes the job synchronously.

executeMetaDataRule

The executeMetaDataRule method executes a metadata rule after validating the locationName parameter. If the parameter is invalid, error messages are displayed.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pUserName String pPassword String pSSOToken		AIF_COMMON_ERR_00001:Invalid token. AIF_COMMON_ERR_00002:Invalid User Name/Password combination.	Of these three parameters pass either the username and password or a valid sso_ token.
String locationName		AIF_ERR_00015: Invalid Location Name	The location name
String pSyncMode	TRUE/FALSE	AIF_ODI_ERR_00002:Invalid value passed for synchronous mode parameter.	This parameter represents where the execution should take place synchronously or asynchronously. Value of True executes the job synchronously.

getDataRuleNames

The getDataRuleNames method retrieves a list of data rule names for the location. If no location is passed, an empty array is returned.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pUserName String pPassword String pSSOToken		AIF_COMMON_ERR_00002:Invalid User Name/Password combination. AIF_COMMON_ERR_00001:Invalid token.	Fpr these three parameters pass either the username and password or a valid sso_token.
String locationName			The location name.

getLocationNames

Provides a list of locations for the executeMetaDataRule web service.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pUserName String pPassword String pSSOToken		AIF_COMMON_ERR_00002:Invalid User Name/Password combination. AIF_COMMON_ERR_00001:Invalid token.	

getPeriodNames

Provides a list of period names for the pStartPeriodName and pEndperiodName parameters of the executeDataRule service.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pUserName String pPassword String pSSOToken		AIF_COMMON_ERR_00002:Invalid User Name/Password combination. AIF_COMMON_ERR_00001:Invalid token.	

lockPOV

Returns `true` if this POV is locked, otherwise returns `false` for the RuleService web services.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pLocationName String pPeriodName String pCategoryName	Accepts Location Name, Period Name, Category Name as input parameters.		

unlockPOV

Returns `true` if this POV is unlocked, otherwise returns `false` for the RuleService web services.

Parameter Name	Valid Values	Associated Error Codes	Comments
String pLocationName String pPeriodName String pCategoryName	Accepts Location Name, Period Name, Category Name as input parameters.		

B Source System Tables Used by FDMEE

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Creating Synonyms for E-Business Suite Tables 387

This section lists the source system tables used by FDMEE. FDMEE reads all tables listed and writes to GL_BUDGET_INTERFACE and GL_TRACK_DELTA_BALANCES.

It also describes how to create synonyms for E-Business Suite tables.

Fusion and E-Business Suite Source System Tables

These Fusion and E-Business Suite source system tables are used by FDMEE. All tables require read privileges, unless noted otherwise.

Table/View Name	Schema	Object Type	Privilege	Comments
FND_FLEX_VALIDATION_QUALIFIERS	APPLSYS	Table	Read only	
FND_FLEX_VALIDATION_TABLES	APPLSYS	Table	Read only	
FND_FLEX_VALUES	APPLSYS	View	Read only	
FND_FLEX_VALUES_TL	APPLSYS	View	Read only	
FND_FLEX_VALUE_CHILDREN_V	APPS	View	Read only	View based on FND_FLEX_VALUE_NORM_HIERARCHY, FND_FLEX_VALUE_SETS, and FND_FLEX_VALUES_VL
FND_FLEX_VALUE_NORM_HIERARCHY	APPLSYS	Table	Read only	
FND_FLEX_VALUE_SETS	APPLSYS	Table	Read only	
FND_FORM_FUNCTIONS	APPLSYS	Table	Read only	

Table/View Name	Schema	Object Type	Privilege	Comments
FND_ID_FLEXS	APPLSYS	Table	Read only	
FND_ID_FLEX_SEGMENTS	APPLSYS	Table	Read only	
FND_ID_FLEX_SEGMENTS_TL	APPLSYS	Table	Read only	
FND_ID_FLEX_STRUCTURES	APPLSYS	Table	Read only	
FND_ID_FLEX_STRUCTURES_TL	APPLSYS	Table	Read only	
FND_KF_LABELED_SEGMENTS	FUSION	Table	Read-only	
FND_KF_SEGMENT_LABELS_B	FUSION	Table	Read-only	
FND_LANGUAGES	APPLSYS	Table	Read only	
FND_MESSAGES_TL	FUSION	Table	Read-only	
FND_NEW_MESSAGES	APPLSYS	Table	Read only	
FND_NUMBER	APPLSYS	PL/SQL Package	Execute	
FND_RESPONSIBILITY	APPLSYS	Table	Read only	
FND_RESPONSIBILITY_TL	APPLSYS	Table	Read only	
FND_SEGMENT_ATTRIBUTE_ VALUES	APPLSYS	Table	Read only	
GL_BALANCES	GL	Table	Read only	
GL_BALANCES_DELTA	GL	Table	Read only	
GL_BUDGETS	GL	Table	Read only	
GL_BUDGET_ENTITIES	GL	Table	Read only	
GL_BUDGET_INTERFACE	GL	Table	Read and write privileges are required.	
GL_BUDGET_VERSIONS	GL	Table	Read only	
GL_CODE_COMBINATIONS	GL	Table	Read only	
GL_CODE_COMBINATIONS_KFV	APPS	View	Read only	View based on GL_CODE_ COMBINATIONS
GL_DAILY_BALANCES	GL	Table	Read only	
GL_DAILY_CONVERSION_TYPES	GL	Table	Read only	
GL_DAILY_CONVERSION_TYPES_V	APPS	View	Read only	View based on GL_DAILY_ CONVERSION_TYPES
GL_DAILY_RATES	GL	Table	Read only	

Table/View Name	Schema	Object Type	Privilege	Comments
GL_ENCUMBRANCE_TYPES	GL	Table	Read only	
GL_INTERFACE	GL	Table	Read/Write	
GL_JE_CATEGORIES	GL	Table	Read only	
GL_JE_CATEGORIES_TL	GL	Table	Read only	
GL_JE_SOURCES_TL	GL	Table	Read only	
GL_LEDGERS		Table	Read only	Table (R12 only)
GL_PERIODS	GL	Table	Read only	
GL_PERIOD_SETS	GL	Table	Read only	
GL_PERIOD_STATUSES	GL	Table	Read only	
GL_PERIOD_TYPES	GL	Table	Read only	
GL_PERIOD_TYPES_V	APPS	View	Read only	View based on GL_PERIOD_TYPES
GL_SETS_OF_BOOKS	GL/APPS	View	Read only	Table (11i)/View based on GL_ LEDGERS (R12)
GL_STAT_ACCOUNT_UOM	GL	Table	Read only	
GL_TRACK_DELTA_BALANCES	GL	Table	Read/Write	Read and write privileges are required.

PeopleSoft Enterprise Financial Management Source System Tables

These PeopleSoft Enterprise Financial Management source system tables are used by FDMEE. All tables require read privileges, unless noted otherwise.

Table/View Name	Table/View Name	Table/View Name	Table/View Name
PS_AFFILIATE_LANG	PS_CHARTFIELD1_TBL	PS_LEDGER	PSDBFLDLABL
PS_AFFILIATE_VW	PS_CHARTFIELD2_TBL	PS_LEDGER_BUDG	PSDBFLDLABLLANG
PS_AFFINTRA1_LANG	PS_CHARTFIELD3_TBL	PS_LOCATION_TBL	PSKEYDEFN
PS_AFFINTRA1_VW	PS_CLASS_CF_LANG	PS_NAMES	PSOPTIONS
PS_AFFINTRA2_LANG	PS_CLASS_CF_TBL	PS_OPER_UNIT_LANG	PSRECDEFN
PS_AFFINTRA2_VW	PS_DEPT_TBL	PS_OPER_UNIT_TBL	PSRECFIELD
PS_ALTACCT_LANG	PS_DEPT_TBL_LANG	PS_PAYGROUP_TBL	PSTREEDEFN

Table/View Name	Table/View Name	Table/View Name	Table/View Name
PS_ALTACCT_TBL	PS_EARNINGS_TBL	PS_PC_BU_GL_VW	PSTREEDEFNLANG
PS_BD_SCENARIO_TBL	PS_FS_CF_TEMPLATE	PS_PC_INT_TMPL_GL	PSTREELEAF
PS_BOOK_CODE_TBL	PS_FS_FLD_PROMPT	PS_POSITION_DATA	PSTREENODE
PS_BU_BOOK_TBL	PS_FUND_LANG	PS_PROD_TBL_LANG	PSTREESTRCT
PS_BU_LED_GRP_TBL	PS_FUND_TBL	PS_PRODUCT_TBL	PSXLATITEM
PS_BUD_REF_LANG	PS_GL_ACCOUNT_LANG	PS_PROGRAM_LANG	PSXLATITEMLANG
PS_BUD_REF_TBL	PS_GL_ACCOUNT_TBL	PS_PROGRAM_TBL	
PS_BUS_UNIT_LANG	PS_HPYPB_ACCT_LN (Read and write privileges are required.)	PS_PROJECT	
PS_BUS_UNIT_TBL_FS	PS_HYP_KK_BD_HDR (Write privileges are required. Used for PeopleSoft Commitment Control)	PS_PROJECT_TBL	
PS_BUS_UNIT_TBL_GL	PS_HYP_KK_BD_LN (Write privileges are required. Used for PeopleSoft Commitment Control)	PS_REC_GROUP_REC	
PS_BUS_UNIT_TBL_HR	PS_JOB	PS_REC_GROUP_TBL	
PS_CAL_ADJP_TBL	PS_JOBCODE_TBL	PS_RT_DFLT_VW	
PS_CAL_DEFN_TBL	PS_LED_DEFN_LANG	PS_RT_INDEX_TBL	
PS_CAL_DETP_TBL	PS_LED_DEFN_TBL	PS_RT_TYPE_TBL	
PS_CAL_SUMP_TBL	PS_LED_GRP_LANG	PS_SET_CNTRL_REC	
PS_CF1_LANG	PS_LED_GRP_LED_TBL	PS_SET_CNTRL_TBL	
PS_CF2_LANG	PS_LED_GRP_TBL	PS_SET_CNTRL_TREE	
PS_CF3_LANG	PS_LED_TMPLT_TBL	PS_SETID_TBL	

PeopleSoft Human Capital Management Source System Tables

These PeopleSoft Human Capital Management source system tables are used by FDMEE. All tables require read privileges.

Table/View Name	Table/View Name	Table/View Name	Table/View Name
PS_ACCT_CD_TBL	PS_CHARTFIELD3_TBL	PS_JOB_EARNS_DIST	PS_SAL_PLAN_TBL
PS_AFFILIATE_VW	PS_CLASS_CF_TBL	PS_JOBCODE_TBL	PS_SAL_STEP_TBL
PS_ALTACCT_TBL	PS_DEPT_BUDGET_ERN	PS_LOCATION_TBL	PS_SET_CNTRL_REC

Table/View Name	Table/View Name	Table/View Name	Table/View Name
PS_BENEF_PLAN_TBL	PS_DEPT_CF_TBL	PS_NAMES	PS_UNION_TBL
PS_BP_JOB	PS_DEPT_TBL	PS_OPER_UNIT_TBL	PSOPTIONS
PS_BUD_REF_TBL	PS_EARNINGS_TBL	PS_PAYGROUP_TBL	PSRECFIELD
PS_BUS_UNIT_TBL_FS	PS_FREQUENCY_TBL	PS_POSITION_DATA	PSXLATITEM
PS_BUS_UNIT_TBL_GL	PS_FUND_TBL	PS_PRODUCT_TBL	PSXLATITEMLANG
PS_BUS_UNIT_TBL_HR	PS_GL_ACCOUNT_TBL	PS_PROGRAM_TBL	
PS_CHARTFIELD1_TBL	PS_GL_ACCOUNT_VW	PS_PROJECT_TBL	
PS_CHARTFIELD2_TBL	PS_JOB	PS_SAL_GRADE_TBL	

PeopleSoft Commitment Control Source System Tables

These PeopleSoft Commitment Control source system tables are used by FDMEE. All tables require read privileges.

Table/View Name
PS_KK_BUDGET_TYPE
PS_KK_SUBTYPE
PS_KK_FILTER
PS_KK_KEY_CF
PS_KK_BD_OFFSET
PS_CAL_BP_TBL
PS_LEDGER_KK
PS_HYP_KK_BD_HDR (Used for PeopleSoft Commitment Control)
PS_HYP_KK_BD_LN (Write privileges are required. Used for PeopleSoft Commitment Control)

Creating Synonyms for E-Business Suite Tables

If a user other than the “apps” user is referenced, you can create synonyms for E-Business Suite tables.

Note: Synonyms are required for a PeopleSoft setup since PeopleSoft administrators typically do not provide PeopleSoft schema applications to users for configurations.

➤ To create synonyms for E-Business Suite tables:

1 **Create synonyms for the E-Business Suite tables listed in this appendix.**

2 **Assign read access to all the synonyms that you created.**

3 **Assign write access to the following tables:**

- GL_Interface
- GL_Budget_Interface
- GL_Track_Delta_Balances

In ODI Topology for EBS_Data_Server, you can use the synonym for both the user and the schema.

C Creating an Alternate Schema in an Enterprise Resource Planning (ERP) Source System

Prebuilt integrations to an Enterprise Resource Planning (ERP) source system in FDMEE use a basic filter for data extraction, and assume that appropriate security has been defined to enable access by FDMEE. In some environments, direct access to the source systems tables is prohibited because of system policies, or you want to define a source system filter that is more detailed than what is provided in the FDMEE user interface.

For example, in the Account Reconciliation Manager (ARM) you want to extract balance sheet accounts or active accounts only from the source system. To do this, create an alternate schema in the source system. This method provides a desired level of security, a different source system filter, or both.

➤ To create an alternate hierarchy for E-Business Suite and Peoplesoft (PSFT) systems:

1 **Create a new schema or user in the source system database.**

2 **Grant SELECT or SELECT/INSERT access to the list of source tables used by FDMEE to the new schema.**

Refer to the source table list provided in Appendix B, "Source System Tables Used by FDMEE".

3 **For E-Business Suite systems, create a new view named GL_CODE_COMBINATIONS, which includes the desired source filter.**

For **Peoplesoft** systems, create a view using the **PS_LEDGER** table.

All columns from the source table must be included in the view.

4 **Create synonyms for all remaining source tables that FDMEE references from the source system in the new schema.**

Synonyms point to the base tables in the source system schema.

5 **Update Oracle Data Integrator (ODI) to use the new schema in the physical schema for the related data server.**

For example, the view created on the EBS GL_CODE_COMBINATIONS table may look like:

```
CREATE VIEW GL_COMBINATIONS (SEGMENT1, SEGMENT2,…….)
SELECT SEGMENT1, SEGMENT2,…..
FROM APPS.GL_CODE_COMBINATIONS
WHERE "ADD FILTERS"
```

Any views created in the new schema or synonyms must use the exact same name as specified in Appendix B, "Source System Tables Used by FDMEE". Because the table and view names are

the same as the core schema, FDMEE can access the updated contents with a change to the schema specification in ODI.

For SAP or JDE source systems, change the filter definition in the adapter rather than creating an alternate schema.

Before making any changes, it is recommended that you contact Oracle support to review the process to ensure a smooth update to the system.

D

Staging Tables

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FDMEE Staging Tables

Subtopics

- Staging Table Used for Import from Source
- Data Tables Used for Drill Through
- Views Used for Export to Target

The following sections describe FDMEE staging tables.

Staging Table Used for Import from Source

Table/View Name	Description
TDATASEG_T	Temporary data table used for transforming data from source to target in a data rule execution. To ensure read consistency, data is extracted from the corresponding staging table (for example, AIF_EBS_GL_BALANCES_STG, AIF_EBS_GL_DAILY_BAL_STG, or AIF_PS_LEDGER) and copied to TDATASEG_T (partitioned by LOADID), which is then used for transforming source data to target data based on the data mappings specified in TDATAMAP_T.

Data Tables Used for Drill Through

Table/View Name	Description
TDATASEG	Audit table describing the data transformations in a data rule execution. Only in a successful data rule execution data transformations stored in TDATASEG_T be copied over to TDATASEG.

Views Used for Export to Target

Table/View Name	Description
AIF_HS_BALANCES	Interface view used for exporting data to a target application in a data rule execution. This view queries the TDATASEG_T table directly by summarizing the target amounts across the unique target dimension member combinations.
AIF_EBS_GL_INTERFACE_V	Interface view used for exporting data back to the Fusion and E-Business Suite general ledger system in a data load to write back rule execution. This view queries the TDATASEG table directly by summarizing the target amounts across the unique target segment value combinations.
AIF_PS_GL_INTERFACE_V	Interface view used for exporting data back to the PeopleSoft Enterprise Financial Management system in a data load rule to write back rule execution. This view queries the TDATASEG table directly by summarizing the target amounts across the unique target ChartField value combinations.

PeopleSoft Human Capital Management Staging Tables

Subtopics

- PS90HCM
- CHARTFIELD

The following sections describe the columns in each PeopleSoft Human Capital Management staging table used by FDMEE.

PS90HCM

Table 68 AIF_PS_POSITION_DATA_STG Table

Column Name	Column Description
DESCR	Position Description

Table 69 AIF_PS_JOBCODE_TBL_STG Table

Column Name	Column Description
COMP_FREQUENCY	Compensation Frequency
DESCR	Description
EFFDT	Effective Date
EFF_STATUS	Status
STD_HOURS	Standard Hours

Table 70 AIF_PS_JOB_STG Table

Column Name	Column Description
ABSENCE_SYSTEM_CD	Absence System
ACCDNT_CD_FRA	Work Accident Code
ACCT_CD	Account Code
ADDS_TO_FTE_ACTUAL	Adds to FTE Actual Count
ANNL_BENEF_BASE_RT	Annual Benefit Base Rate
APPT_TYPE	Appointment Type
ASGN_END_DT	Assignment End Date
ASGN_START_DT	Assignment Start Date
AUTO_END_FLG	Auto End Job
BARG_UNIT	Bargaining Unit
BAS_ACTION	Benefits Administration Action
BAS_GROUP_ID	Benefits Administration Group ID
BENEFIT_SYSTEM	Benefits System
BORDER_WALKER	Cross Border Worker
CHANGE_AMT	Change Amount
CHANGE_PCT	Change Percent
CLASS_INDC	Classified/Unclassified Indicator
COBRA_ACTION	COBRA Action
COMPANY	Company
COMPRATE	Compensation Rate
COMP_FREQUENCY	Compensation Frequency
CONTRACT_NUM	Contract Number
CTG_RATE	Category Rate
CURRENCY_CD1	Currency Code 1
CUR_RT_TYPE	Currency Rate type
DAILY_RT	Daily Rate
DEPT_ENTRY_DT	Department Entry Date
DIRECTLY_TIPPED	Directly Tipped

Column Name	Column Description
EARNS_DIST_TYPE	Earnings Distribution Type
EEO_CLASS	EEO Class
ELIG_CONFIG1	Eligibility Configuration Field 1
ELIG_CONFIG2	Eligibility Configuration Field 2
ELIG_CONFIG3	Eligibility Configuration Field 3
ELIG_CONFIG4	Eligibility Configuration Field 4
ELIG_CONFIG5	Eligibility Configuration Field 5
ELIG_CONFIG6	Eligibility Configuration Field 6
ELIG_CONFIG7	Eligibility Configuration Field 7
ELIG_CONFIG8	Eligibility Configuration Field 8
ELIG_CONFIG9	Eligibility Configuration Field 9
EMPL_CTG	Employee Category
EMPL_CTG_L1	Employee Subcategory
EMPL_CTG_L2	Employee Subcategory 2
ENCUMB_OVERRIDE	Encumbrance Override
ENTRY_DATE	Entry Date
ESTABID	Establishment ID
EXEMPT_HOURS_MONTH	Exempted Hours Month
EXEMPT_JOB_LBR	Exempted
EXPECTED_END_DATE	Expected Job End Date
EXPECTED_RETURN_DT	Expected Return Date
FLSA_STATUS	FLSA Status
FORCE_PUBLISH	Force Publish
FUNCTION_CD	Function Code
GL_PAY_TYPE	GL Pay type
GP_ASOF_DT_EXG_RT	Use Rate As Of
GP_DFLT_CURRTTYP	Use Pay Group Rate Type
GP_DFLT_ELIG_GRP	Use Pay Group Eligibility

Column Name	Column Description
GP_DFLT_EXRTDT	Use Pay Group As Of Date
GP_ELIG_GRP	Eligibility Group
GP_PAYGROUP	Pay Group
GRADE_ENTRY_DT	Salary Grade Entry Date
HIRE_DT	Hire Date
HOLIDAY_SCHEDULE	Holiday Schedule
HOURLY_RT	Hourly Rate
HOURLY_RT_FRA	Hourly Rate France
HR_STATUS	HR Status
INTERCTR_WRKS_CNCL	Works Council Role Role that the worker has in the union group
JOB_DATA_SRC_CD	Job Source Code
JOB_ENTRY_DT	Job Entry Date
JOB_INDICATOR	Job Indicator
LABOR_AGREEMENT	Labor Agreement
LABOR_FACILITY_ID	Labor Facility ID
LABOR_TYPE_GER	Labor Type Germany
LASTUPDDTTM	Last Update Date/Time
LASTUPDOPRID	Last Update User ID
LAST_DATE_WORKED	Last Date Worked
LAST_HIRE_DT	Last Hire Date
LAYOFF_EXEMPT_FLAG	Layoff Exempt Flag
LAYOFF_EXEMPT_RSN	Layoff Exempt Reason
LBR_FAC_ENTRY_DT	Labor Facility Entry Date
LDW_OVR	Override Last Date Worked
LST_ASGN_START_DT	Last Assignment Start Date
LUMP_SUM_PAY	Lump Sum Pay
MAIN_APPT_NUM_JPN	Main Appointment Number
MATRICULA_NBR	Matricula Number

Column Name	Column Description
MONTHLY_RT	Monthly Rate
OFFICER_CD	Officer Code
PAID_FTE	Paid FTE
PAID_HOURS	Paid Hours
PAID_HRS_FREQUENCY	Paid Hours Frequency
PAYGROUP	Pay Group
PAY_SYSTEM_FLG	Pay System Flag
PAY_UNION_FEE	Pay Union Fee
PERFORM_GROUP_GER	Perform Group Germany
PER_ORG	Organizational Relationship
POI_TYPE	Person of Interest Type
POSITION_ENTRY_DT	Position Entry Date
POSITION_OVERRIDE	Position Override
POSN_CHANGE_RECORD	Position Change Record
PRORATE_CNT_AMT	Prorate Contract Change Amount
REG_REGION	Regulatory Region
REPORTS_TO	Reports To
SETID_DEPT	SetID Department
SETID_JOBCODE	SetID Job Code
SETID_LBR_AGRMNT	SetID Labor Agreement
SETID_LOCATION	SetID Location
SETID_SALARY	SetID Salary
SETID_SUPV_LVL	SetID Supervisor Level
SHIFT	Shift
SHIFT_FACTOR	Shift Factor
SHIFT_RT	Shift Rate
SOC_SEC_RISK_CODE	Social Security Risk Code
SPK_COMM_ID_GER	Spokesman Committee ID

Column Name	Column Description
STD_HRS_FREQUENCY	Standard Hours Frequency
STEP_ENTRY_DT	Step Entry Date
SUPERVISOR_ID	Supervisor ID
SUPV_LVL_ID	Supervisor Level ID
TARIFF_AREA_GER	Tariff Area Germany
TARIFF_GER	Tariff Germany
TAX_LOCATION_CD	Tax Location Code
TERMINATION_DT	Termination Date
UNION_FEE_AMOUNT	Union Fee Amount
UNION_FEE_END_DT	Union Fee End Date
UNION_FEE_START_DT	Union Fee Start Date
UNION_FULL_PART	Union Participation
UNION_POS	Union Position
UNION_SENIORITY_DT	Union Seniority Date
VALUE_1_FRA	Value 1
VALUE_2_FRA	Value 2
VALUE_3_FRA	Value 3
VALUE_4_FRA	Value 4
VALUE_5_FRA	Value 5
WORK_DAY_HOURS	Work Day Hours
WPP_STOP_FLAG	Stop Wage Progression
WRKS_CNCL_FUNCTION	Work Council Function
WRKS_CNCL_ROLE_CHE	Work Council Role

Table 71 AIF_PS_POSITION_DATA_STG Table

Column Name	Column Description
ADDS_TO_FTE_ACTUAL	Adds to FTE Actual Count
BARG_UNIT	Bargaining Unit
CLASS_INDC	Classified/Unclassified Indicator

Column Name	Column Description
COMPANY	Company
CONFIDENTIAL_POSN	Confidential Position
COUNTRY_CODE	Country Code
DESCRSHORT	Position Short Description
EG_ACADEMIC_RANK	Academic Rank
EG_GROUP	Service Calculation Group
ENCUMBER_INDC	Encumbrance Indicator
ENCUMB_SAL_AMT	Encumbrance Salary Amount
ENCUMB_SAL_OPTN	Encumbrance Salary Option
FLSA_STATUS	FLSA Status
FRI_HRS	Friday Hours
GRADE_FROM	Grade From
GRADE_TO	Grade To
GVT_AUDITED_BY_ID	Position Audited By
GVT_COMP_AREA	Competitive Area
GVT_COMP_LEVEL	Competitive Level
GVT_DRUG_TEST_REQ	Drug Test (Applicable)
GVT_DT_POSN_ESTAB	Date Position Established
GVT_EXEC_FIN_DISCL	Executive Financial Disclosure
GVT_FUND_SOURCE	Fund Source
GVT_INTEL_POSN	Intelligence Position
GVT_LAST_AUDIT_DT	Position Audit Date
GVT_LEO_POSITION	LEO/Fire Position
GVT_MAINT_REVIEWCD	Maintenance Review
GVT_MANTREV_RESULT	Maintenance Review Results
GVT_MOB_POSN_IND	Mobility Position
GVT_NFC_FUNCTN_CD	NFC Function Code (NFC - National Finance Center)
GVT_NFC_PI_IND_OVR	Override NFC Indicator

Column Name	Column Description
GVT_NTE_DATE	Not to Exceed Date
GVT_OBLIGATED_TO	Obligated To ID
GVT_OBLIG_EXPIR_DT	Obligation Expiration
GVT_OCC_SERIES	Occupational Series
GVT_ORG_NUMCD1	Numeric Code 1
GVT_ORG_NUMCD2	Numeric Code 2
GVT_ORG_NUMCD3	Numeric Code 3
GVT_ORG_NUMCD4	Numeric Code 4
GVT_ORG_NUMCD5	Numeric Code 5
GVT_ORG_NUMCD6	Numeric Code 6
GVT_ORG_NUMCD7	Numeric Code 7
GVT_ORG_SUBAGENCY	Organizational Structure
GVT_ORG_TTL_CD	Organization Position Title Code
GVT_ORG_TTL_DESCR	Organization Position Title
GVT_PAREN_TITLE	Parenthetical Title
GVT_PAR_NBR	Personnel Action Request Number
GVT_PAY_PLAN	Pay Plan
GVT_PERF_PLAN	Performance Plan
GVT_PI_UPD_IND	PI Update Indicator
GVT_POI	Personnel Office ID
GVT_POSN_LOC	Position Location
GVT_POSN_OCCUPIED	Position Occupied
GVT_POSN_SENS_CD	Sensitivity Code
GVT_PRESIDENT_APPT	Presidential Appointment Position
GVT_PROC_INTEG_PSN	Procurement Integration Position
GVT_STAFF_LINE	Staff/Line Position
GVT_STATUS_TYPE	Status Type
GVT_SUB_AGENCY	Sub-Agency

Column Name	Column Description
GVT_TARGET_GRADE	Target Grade
GVT_VACY_REVW_CD	Vacancy Review Code
GVT_WIP_STATUS	Work-In-Progress Status
GVT_WORK_SCHED	Work Schedule
HEALTH_CERTIFICATE	Health Certificate
INCLUDE_SALPLN_FLG	Include Salary Plan Flag
JOB_SHARE	Job Share
KEY_POSITION	Key Position
LANGUAGE_SKILL	Language Skill
LASTUPDDTTM	Last Update Date/Time
LASTUPDOPRID	Last Update User ID
LOCATION	Location
MAIL_DROP	Mail Drop
MANAGER_LEVEL	Manager Level
MILITARY_SERVICE	Military Service
MIL_RANK	Military Rank
MIL_SVC_COMP_CD	Military Service Component
MON_HRS	Monday Hours
ORGCODE	Organization Hierarchy Code
ORGCODE_FLAG	Organization Hierarchy Flag
PHONE	Phone
PKG_RULE_ID	Package Rule ID
PKG_TEMPLATE_ID	Package Template ID
POSITION_POOL_ID	Position Pool ID
REG_REGION	Regulatory Region
REPORTS_TO	Reports To
REPORT_DOTTED_LINE	Report Dotted Line
SAT_HRS	Saturday Hours

Column Name	Column Description
SEASONAL	Seasonal
SEC_CLEARANCE_TYPE	Security Clearance Type
SHIFT	Shift
SIGN_AUTHORITY	Signing Authority
STATUS_DT	Status Date
STD_HRS_FREQUENCY	Standard Hours Frequency
STEP_FROM	Step From
STEP_TO	Step To
SUN_HRS	Sunday Hours
SUPV_LVL_ID	Supervisory Level ID
THURS_HRS	Thursday Hours
TRN_PROGRAM	Training Program
TUES_HRS	Tuesday Hours
UPDATE_INCUMBENTS	Update Incumbents
WED_HRS	Wednesday Hours

Table 72 AIF_PS_SAL_GRADE_TBL_STG Table

Column Name	Column Description
DESCR	Grade Description
DESCRSHORT	Grade Description Short
EFFDT	Effective Date
EFF_STATUS	Effective Status
ELIGIBILITY_POINTS	Eligibility Points
EMPL_CTG	Employee Category
EMPL_CTG_L1	Employee Subcategory
EMPL_CTG_L2	Employee Subcategory 2
GRADE	Grade
GRADE_TITLE_JPN	Grade Title Japan
GVT_MAX_RT_BIWK	Maximum Pay Rate - Bi-weekly

Column Name	Column Description
GVT_MID_RT_BIWK	Midpoint Pay Rate - Bi-weekly
GVT_MIN_RT_BIWK	Minimum Pay Rate - Bi-weekly
LABOR_AGREEMENT	Labor Agreement
MAX_YRS_GRADE	Max Years Grade
MIN_GRD_AGE	Minimum Grade Age
MIN_YRS_GRADE	Minimum Years Grade
REG_REGION	Regulatory Region
REVIEW_COUNT	Review Count
SALARY_MATRIX_CD	Salary Matrix Code
SAL_ADMIN_PLAN	Salary Administration Plan
SETID	SetID
STEP_INCREM_ACCUM	Step Increment Accumulated
STEP_INCREM_TYPE	Step Increment Type

Table 73 AIF_PS_SAL_STEP_TBL_STG Table

Column Name	Column Description
APS_MAX_CLS_AUS	Maximum Classification
APS_MIN_CLS_AUS	Minimum Classification
CLASSN_CURRENT_AUS	Job Classification
DAILY_RT	Daily Rate
EFFDT	Effective Date
GRADE	Grade
GVT_BIWEEKLY_RT	Bi-weekly Rate
GVT_INCREM_DAYS	Days to Next Step Increment
GVT_INCREM_WEEKS	Weeks to Next Step Increment
GVT_STEP	US Federal Step
GVT_WGI_ADJ	Within Grade Increase (WGI) Adjustment
INCREM_HOURS	Increment Hours
INCREM_MONTHS	Increment Months

Column Name	Column Description
SAL_ADMIN_PLAN	Salary Administration Plan
SETID	SetID
STEP_DESCR	Step Description

Table 74 AIF_PS_BP_JOB_STG Table

Column Name	Column Description
ACCDNT_CD_FRA	Account Code France
ACCT_CD	Account Code
ACTION	Action
ACTION_DT	Action Date
ACTION_REASON	Action Reason
ADDS_TO_FTE_ACTUAL	Adds to FTE Actual Count
ANNL_BENEF_BASE_RT	Annual Benefit Base Rate
ANNL_BEN_BASE_OVRD	Annual Benefit Base Overhead
ANNUAL_RT	Annual Rate
APPT_TYPE	Appointment Type
BARG_UNIT	Bargaining Unit
BAS_ACTION	Benefits Administration Action
BAS_GROUP_ID	Benefits Administration Group ID
BENEFIT_PROGRAM	Benefit Program
BENEFIT_SYSTEM	Benefit System
BEN_STATUS	Benefit Status
BORDER_WALKER	Cross Border Worker
BUSINESS_UNIT	Business Unit
CHANGE_AMT	Change Amount
CHANGE_PCT	Change Percent
CLASS_INDC	Classified/Unclassified Indicator
COBRA_ACTION	COBRA Action
COMPANY	Company

Column Name	Column Description
COMPRATE	Compensation Rate
COMP_FREQUENCY	Compensation Frequency
CONTRACT_NUM	Contract Number
CTG_RATE	Category Rate
CURRENCY_CD	Currency Code
CURRENCY_CD1	Currency Code 1
CUR_RT_TYPE	Currency Rate type
DAILY_RT	Daily Rate
DEPTID	Department
DEPT_ENTRY_DT	Department Entry Date
DIRECTLY_TIPPED	Directly Tipped
EARNS_DIST_TYPE	Earnings Distribution Type
EEO_CLASS	EEO_Class
EFFDT	Effective Date
EFFSEQ	Effective Sequence
ELIG_CONFIG1	Eligibility Configuration Field 1
ELIG_CONFIG2	Eligibility Configuration Field 2
ELIG_CONFIG3	Eligibility Configuration Field 3
ELIG_CONFIG4	Eligibility Configuration Field 4
ELIG_CONFIG5	Eligibility Configuration Field 5
ELIG_CONFIG6	Eligibility Configuration Field 6
ELIG_CONFIG7	Eligibility Configuration Field 7
ELIG_CONFIG8	Eligibility Configuration Field 8
ELIG_CONFIG9	Eligibility Configuration Field 9
EMPLID	Employee ID
EMPL_CLASS	Employee Classification
EMPL_CTG	Employee Category
EMPL_CTG_L1	Employee Subcategory

Column Name	Column Description
EMPL_CTG_L2	Employee Subcategory 2
EMPL_RCD	Employee Record Number
EMPL_STATUS	Employee Status
EMPL_TYPE	Employee Type
ENCUMB_OVERRIDE	Encumbrance Override
ENTRY_DATE	Entry Date
ESTABID	Establishment ID
EXEMPT_HOURS_MONTH	Exempted Hours Month
EXEMPT_JOB_LBR	Exempted
FICA_STATUS_EE	FICA Status
FLSA_STATUS	FLSA Status
FORCE_PUBLISH FTE	Force Publish FTE
FULL_PART_TIME	Full or Part-Time
FUNCTION_CD	Function Code
GL_PAY_TYPE	GL Pay type
GP_ASOF_DT_EXG_RT	Use Rate As Of
GP_DFLT_CURRTTYP	Use Pay Group Rate Type
GP_DFLT_ELIG_GRP	Use Pay Group Eligibility
GP_DFLT_EXRTDT	Use Pay Group As Of Date
GP_ELIG_GRP	Eligibility Group
GP_PAYGROUP	Pay Group
GRADE	Grade
GRADE_ENTRY_DT	Grade Entry Date
GVT_ANNL_RT_NO_LOC	Annuity Rate
GVT_ANNUITY_OFFSET	Annuity Offset
GVT_ANNUIT_COM_DT	Annuity Date
GVT_ANN_IND	Annuity
GVT_BASIC_LIFE_RED	Basic Life Red

Column Name	Column Description
GVT_BIWEEKLY_RT	Biweekly Rate
GVT_BW_RT_NO_LOC	Biweekly Rate No Location
GVT_CHANGE_FLAG	Change Flag
GVT_COMPRATE	Compensate Rate
GVT_CONT_EMPLID	Contract Employee ID
GVT_CSRS_FROZN_SVC	CSRS Frozen Service
GVT_DAILY_RT	Daily Rate
GVT_DED_PRORT_DT	DED Prorate Date
GVT_DETL_POSN_NBR	Position Number
GVT_DLY_RT_NO_LOC	Daily Rate No Location
GVT_EFFDT	Effective Date
GVT_EFFDT_PROPOSED	Effective Date Proposed
GVT_ELIG_FEHB	Eligibility FEHB
GVT_FEGLI	FEGLI Code
GVT_FEGLI_BASC_PCT	FEGLI Basic Percent
GVT_FEGLI_LIVING	FEGLI Living Benefits
GVT_FEGLI_OPT_PCT	FEGLI Opted Percent
GVT_FEHB_DT	FEHB Date
GVT_FEHB_PCT	FEHB Percent
GVT_FERS_COVERAGE	FERS Coverage
GVT_HRLY_RT_NO_LOC	Hourly Rate No Location
GVT_LEG_AUTH_1	Legal Authority 1
GVT_LEG_AUTH_2	Legal Authority 2
GVT_LEO_POSITION	LEO/Fire Position (LEO - Law enforcement officer)
GVT_LIVING_AMT	Living Amount
GVT_LOCALITY_ADJ	Locality Adjustment
GVT_MNLY_RT_NO_LOC	Monthly Rate No Location
GVT_NID_CHANGE	NID Change

Column Name	Column Description
GVT_NOA_CODE	NOA Code
GVT_OTH_PAY_CHG	Other Pay Change
GVT_PAR_AUTH_D1	Authority 1 Description - Part 1
GVT_PAR_AUTH_D1_2	Authority 1 Description - Part 2
GVT_PAR_AUTH_D2	Authority 2 Description - Part 1
GVT_PAR_AUTH_D2_2	Authority 2 Description - Part 1
GVT_PAR_NTE_DATE	NTE Date
GVT_PAY_BASIS	Pay Basis
GVT_PAY_FLAG	Pay Flag
GVT_PAY_PLAN	Pay Plan
GVT_PAY_RATE_DETER	Pay Rate Determinant
GVT_PI_UPD_IND	PI Update Indicator
GVT_POI	Personnel Office ID
GVT_POSN_OCCUPIED	Position Occupied
GVT_PREV_RET_COVRG	Previous Retirement Coverage
GVT_RETIRE_PLAN	Retire Plan
GVT_RETRO_BSE_FLAG	Retrospective Base Flag
GVT_RETRO_DED_FLAG	Retrospective Deduction Flag
GVT_RETRO_FLAG	Retrospective Flag
GVT_RETRO_JOB_FLAG	Retrospective Job Flag
GVT_ROUTE_NEXT	Route to Next
GVT_RTND_GRADE	Retained Grade
GVT_RTND_GVT_STEP	Retained Government Step
GVT_RTND_PAY_PLAN	Retained Pay Plan
GVT_RTND_SAL_PLAN	Retained Salary Plan
GVT_RTND_STEP	Retained Step
GVT_S113G_CEILING	S113G Ceiling
GVT_SF52_NBR	SF52 Number

Column Name	Column Description
GVT_STATUS_TYPE	Status Type
GVT_STEP	Step
GVT_SUB_AGENCY	Sub Agency
GVT_TRANS_NBR	Transaction Number
GVT_TRANS_NBR_SEQ	Transaction Number Sequence
GVT_TSP_UPD_IND	TSP Status
GVT_TYPE_OF_APPT	Type of Appointment
GVT_WIP_STATUS	WIP Status
GVT_WORK_SCHED	Work Schedule
GVT_XFER_FROM_AGCY	Transfer From Agency
GVT_XFER_TO_AGCY	Transfer To Agency
HOLIDAY_SCHEDULE	Holiday Schedule
HOURLY_RT	Hourly Rate
HOURLY_RT_FRA	Hourly Rate France
INTERCTR_WRKS_CNCL	Works Council Role
JOBCODE	Job Code
JOB_DATA_SRC_CD	Job Source Code
JOB_ENTRY_DT	Job Entry Date
JOB_INDICATOR	Job Indicator
LABOR_AGREEMENT	Labor Agreement
LABOR_FACILITY_ID	Labor Facility ID
LABOR_TYPE_GER	Labor Type Germany
LAYOFF_EXEMPT_FLAG	Layoff Exempt Flag
LAYOFF_EXEMPT_RSN	Layoff Exempt Reason
LBR_FAC_ENTRY_DT	Labor Facility Entry Date
LOCATION	Location
LUMP_SUM_PAY	Lump Sum Pay
MAIN_APPT_NUM_JPN	Main Appointment Number

Column Name	Column Description
MATRICULA_NBR	Matricula Number
MONTHLY_RT	Monthly Rate
OFFICER_CD	Officer Code
PAID_FTE	Paid FTE
PAID_HOURS	Paid Hours
PAID_HRS_FREQUENCY	Paid Hours Frequency
PAYGROUP	Pay Group
PAY_SYSTEM_FLG	Pay System Flag
PAY_UNION_FEE	Pay Union Fee
PERFORM_GROUP_GER	Perform Group Germany
POSITION_ENTRY_DT	Position Entry Date
POSITION_NBR	Position Number
POSITION_OVERRIDE	Position Override
POSN_CHANGE_ RECORD	Position Change Record
PRORATE_CNT_AMT	Prorate Contract Change Amount
REG_REGION	Regulatory Region
REG_TEMP	Regular or Temporary
REPORTS_TO	Reports To
SAL_ADMIN_PLAN	Salary Administration Plan
SETID_DEPT	SetID Department
SETID_JOBCODE	SetID Job Code
SETID_LBR_AGRMNT	SetID Labor Agreement
SETID_LOCATION	SetID Location
SETID_SALARY	SetID Salary
SHIFT	Shift
SHIFT_FACTOR	Shift Factor
SHIFT_RT	Shift Rate
SOC_SEC_RISK_CODE	Social Security Risk Code

Column Name	Column Description
SPK_COMM_ID_GER	Spokesman Committee ID
STD_HOURS	Standard Hours
STD_HRS_FREQUENCY	Standard Hours
STEP	Frequency Step
STEP_ENTRY_DT	Step Entry Date
SUPERVISOR_ID	Supervisor ID
TARIFF_AREA_GER	Tariff Area Germany
TARIFF_GER	Tariff Germany
TAX_LOCATION_CD	Tax Location Code
UNION_CD	Union Code
UNION_FEE_AMOUNT	Union Fee Amount
UNION_FEE_END_DT	Union Fee End Date
UNION_FEE_START_DT	Union Fee Start Date
UNION_FULL_PART	Union Participation
UNION_POS	Union Position
UNION_SENIORITY_DT	Union Seniority Date
UPDATE_PAYROLL	Update Payroll
VALUE_1_FRA	Value 1
VALUE_2_FRA	Value 2
VALUE_3_FRA	Value 3
VALUE_4_FRA	Value 4
VALUE_5_FRA	Value 5
WORK_DAY_HOURS	Work Day Hours
WPP_STOP_FLAG	Stop Wage Progression
WRKS_CNCL_FUNCTION	Work Council Function
WRKS_CNCL_ROLE_CHE	Work Council Role

CHARTFIELD

Table 75 Table Type—CHARTFIELD

Table Name	Column Name	Column Description
AIF_PS_GL_ACCOUNT_TBL_STG	ACCOUNT	Account
AIF_PS_AFFILIATE_VW_STG	AFFILIATE	Affiliate
AIF_PS_ALTACCT_TBL_STG	ALTACCT	Alternate Account
AIF_PS_BUD_REF_TBL_STG	BUDGET_REF	Budget Ref
AIF_PS_CHARTFIELD1_TBL_STG	CHARTFIELD1	Chartfield 1
AIF_PS_CHARTFIELD2_TBL_STG	CHARTFIELD2	Chartfield 2
AIF_PS_CHARTFIELD3_TBL_STG	CHARTFIELD3	Chartfield 3
AIF_PS_CLASS_CF_TBL_STG	CLASS_FLD	Class
AIF_PS_DEPT_CF_TBL_STG	DEPTID_CF	Department
AIF_PS_FUND_TBL_STG	FUND_CODE	Fund Code
AIF_PS_OPER_UNIT_TBL_STG	OPERATING_UNIT	Operating Unit
AIF_PS_PRODUCT_TBL_STG	PRODUCT	Product
AIF_PS_PROGRAM_TBL_STG	PROGRAM_CODE	Program
AIF_PS_PROJECT_TBL_STG	PROJECT	Project

E

Working with Open Interface Adapters

In This Appendix

Setting up the Open Interface Adapter.....413

Setting up the Open Interface Adapter

The Open Interface Adapter is used to map data from the open interface table (AIF_OPEN_INTERFACE) to the FDMEE staging tables. Typically, the Open Interface Adapter is used to load from a source not supported with a pre-packaged adapter. The Open Interface Adapter eliminates the need to process and manage data files, but the user is responsible for loading the table. Load methods include:

- Event script in FDMEE
- ODI
- SQL Loader
- anything

You configure this adapter using FDMEE to populate the staging table with the related data from the open interface table. You load the open interface table with the tool of your choice like a pl/sql routine, a sql loader script or a custom program. When you use ODI to load the open interface table, you can customize the Open Interface Adapter ODI package shipped with FDMEE to call a custom ODI interface to load the open interface table as a step in the data load process.

Using the Open Interface Table

The open interface table is called AIF_OPEN_INTERFACE. The table definition is as follows:

Table 76 AIF_OPEN_INTERFACE Table Definitions

Column Name	Data Type	Comment
BATCH_NAME	VARCHAR2(200 BYTE)	Required. Used to filter the data
YEAR	NUMBER(15,0)	Optional. Required if period mapping is Explicit
PERIOD	VARCHAR2(30 BYTE)	Optional. Required if period mapping is Explicit
PERIOD_NUM	NUMBER(15,0)	Optional. Required if period mapping is Explicit

Column Name	Data Type	Comment
CURRENCY	VARCHAR2(10 BYTE)	Required.
DATAVIEW	VARCHAR2(8 BYTE)	Used for HFM applications. Assign value of YTD or Periodic. Default value is YTD
DESC1	VARCHAR2(75 BYTE)	Optional. Mapped to DESC1
DESC2	VARCHAR2(75 BYTE)	Optional. Mapped to DESC2
AMOUNT	NUMBER(29,12)	Required. Mapped to AMOUNT
AMOUNT_YTD	NUMBER(29,12)	Optional. Mapped to AMOUNT_YTD
AMOUNT_PTD	NUMBER(29,12)	Optional. Mapped to AMOUNT_PTD
COL01	VARCHAR2(75 BYTE)	Input Source Column 1
COL02	VARCHAR2(75 BYTE)	Input Source Column 2
COL03	VARCHAR2(75 BYTE)	Input Source Column 3
....		
COL30	VARCHAR2(75 BYTE)	Input Source Column 30
ATTR1	VARCHAR2(20 BYTE)	Optional. Mapped to ATTR1
ATTR2	VARCHAR2(20 BYTE)	Optional. Mapped to ATTR2
...		
ATTR13	VARCHAR2(20 BYTE)	Optional Mapped to ATTR13
ATTR14	VARCHAR2(20 BYTE)	Reserved. Do not map.

Loading Source Data using Custom Loaders

➤ To load data using the Open Interface Table and Adapter:

1 **Populate the Open Interface table as needed.**

2 **Create any new period mappings as needed.**

3 **Create a new source system:**

a. On the **Setup** tab, under **Register**, then **Source System**.

b. Select **Add** to add a new source system.

c. Specify the **Name**, **Source System Type**, and **ODI Context Code**.

The ODI context code refers to the context defined in Oracle Data Integrator. A context groups the source and target connection information.

For the Source system Type, select "Others," and for the ODI Context Code, enter the default "GLOBAL." If the ODI has been set up differently from the defaults, enter the appropriate ODI Context Code if it is not "GLOBAL."

4 **From Source Adapter, copy the Open Interface Adapter to a new adapter.**

a. Provide a new adapter key.

The adapter key is ten characters long. Once the adapter key has been created, it cannot be modified.

b. Change the "Adapter Name" so that it is different from the copied adapter name.

The adapter name is used in pick lists, and needs to be changed so that the copied adapter can be distinguished from the original adapter.

5 **On the Import Format screen, define a new import format.**

a. Select the source system created in Step 3 and the adapter from Step 4.

b. Map the source columns to the appropriate target dimensions.

6 **When the import format mappings are complete, select Regenerate ODI Scenario.**

This step generates the ODI Scenario based on the import format mappings.

7 **On the Locations screen, define a new location using the import format.**

8 **On the Data Rule screen, define the new data rule.**

a. Select the appropriate period mapping type.

Provide a value for the batch name. The batch name is used by the system as a filter on the open interface table. This enables multiple users to load data into a single interface table but then segregate the data by the batch name.

b. Enter **Y** or **N** for the Delete Data After Import option.

9 **Execute the data rule using one of three methods:**

- Data Rule Execution
- Workbench
- Batch Execution Script

Customizing ODI to Load Data from a Custom Source

You can modify the Open Interface Adapter to meet your business needs, and then once fully tested, move the updated content to a different environment for further testing or use in production. The steps to perform the customization and migration are listed below.

Use ODI Studio to perform the following steps. Before performing these steps, backup you work repository, custom project, and model.

When exporting and importing objects, use the following options:

- When exporting, select the **Child Components Export** option.
- When importing, use **Synonym Mode INSERT_UPDATE** as the Import Type.

➤ To modify the Open Interface Adapter:

1 In the FDMEE repository, export the **Open Interface Adapter Model** and **ERPI Target Model** folders.

2 In the FDMEE repository, export the **Open Interface Adapter Project**.

3 Create a new work repository with a new ID.

Use a repository ID of 900 or higher to avoid conflicts with Oracle shipped components. This is your development repository when performing customization. It is referred to as the "custom repository" in the following steps.

4 In the custom repository, import the model folders named: **Open Interface Adapter Model** and **ERPI Target Model**.

5 In the custom repository, import the **Open Interface Adapter Project**.

6 Perform any customizations in the custom repository.

When customizing objects, do not modify FDMEE seeded objects imported from the FDMEE repository. Instead, copy needed objects, use the" Custom" suffix in names to identify them, and then modify them.

For example, copy the "Open Interface Balances" package as "Open Interface Balances Custom," and make any edits to it.

7 Export customized objects (for example, Project, Packages, Interfaces) from the custom repository and import them into the FDMEE repository.

8 Using the FDMEE Source Adapter user interface, copy the **Open Interface Adapter** to a new adapter and complete the following:

- For the new adapter, provide a new adapter key. The adapter key can be ten characters long. Once it has been created, it cannot be modified.
- Make any necessary modifications to the Display Names. Display Name are shown in the Import Format and Data Load Workbench.
- Specify the ODI Package Name and ODI Project Code as specified in the custom project.

Migrating the Customization

➤ To migrate a customization from a test or production repository:

1 Export the model and project from the custom repository.

2 Import the model and project into the target FDMEE repository (using the Synonym Mode INSERT_UPDATE as the Import Type).

F

PeopleSoft Commitment Control

PeopleSoft's Commitment Control is a budgetary control feature in the PeopleSoft General Ledger product, which supports the posting of budgets and tests transactions against budgetary balances according to the rules configured by users. Using Commitment Control, you can define an alternate structure from the General Ledger to manage budgets based on the Chartfield (account segments) and calendars. For example, you can choose to control budgets at a Division level by Quarter whereas actual expenses are recorded at the Cost Center level by month.

Additionally, you can make large scale changes to budgets, and write revisions as journals back to source systems for posting while maintaining distinctions in PeopleSoft budgets between original proposals, adjustments, revisions, and adjusted budgets. Oracle Hyperion Planning, for example, can be used to prepare the initial budget at the start of the fiscal year. It can also be used to make revisions to the budgets throughout the fiscal year. As budgets are prepared and revised, they have to be validated and posted to Commitment Control, which manages and controls the actual revenue and expenses.

FDMEE integrates with Commitment Control by enabling you to use Hyperion Planning to prepare and maintain the budgets. The integration involves:

- loading the Actual from Commitment Control
- validating budgets during preparation and revision against Commitment Control budget definitions
- posting the initial budget to Commitment Control
- posting ongoing budget revisions to Commitment Control

To use Commitment Control within the context of FDMEE, complete the following:

1. In **Source System**, register your General Ledger and HRMS source systems.
2. In **Source System**, to use PeopleSoft Commitment Control, select **Enable Commitment Control**.
3. In **Target Application**, register the target application.
4. In **Import Format**, define an import format that specifies how to map PeopleSoft chart fields to dimensions in the Public Sector Planning and Budgeting applications.
5. In **Data Load Rule**, define a location that identifies the PeopleSoft accounting entity (business unit) from which to load data.
6. In **Data Load Rule**, specify a period mapping type of "Budget."
7. In **Data Load Rule** define global, application, and source mappings that specify how period keys in the PeopleSoft calendar and time periods correspond to periods in your Public Sector

Planning and Budgeting budget application such as months, quarters, and years. Options include:

- Select an "As of Date."

  The "As of Date" to determine effective dated records, for example, Budget Definition.

- Select a "Target for Blank Period" if the budget is based on a project period.

- Optionally, in **Period Mappings**, map a budget period by mapping a calendar and period to an FDMEE period.

  Commitment Control enables different calendars to be used for different rules. The calendar can be of different granularity and duration. For example, you can map the Chartfield used for rule ranges to the Hyperion Planning Entity dimension. When you specify an explicit period mapping, you can map a Budget period by pointing to a calendar and period to an FDMEE period. The same FDMEE period can be mapped to multiple source periods from different calendars.

8. Run the data load rules.
9. In **Import Format** define an import format that contains write back mappings that identify the Public Sector Planning and Budgeting data to write to the PeopleSoft accounting entity chart fields.
10. In **Data Load Rule**, define a data load rule to write back.

    Write-back period mapping is based on explicit period maps. Every Entity is associated with a different Budget Calendar.

11. Run the data load rule to write.

G

Report Query Table Reference

In This Appendix

TDATASEG Table Reference 419
TLOGPROCESS Table Reference 423

When creating reports, you can use a base SQL query and a parameter SQL query to enhance the data shown in the report. The base SQL query can be used to pull data from various tables and display the data as report output. For example, using one query definition, you can show different columns or groupings. In one report, you can list amounts by account and group by entity, and in another list amount by entity and group by account.

The parameter SQL query enables you to run a query against the parameters in the report definition. For example, the query can be used to select the Location, Period, Category, or Account groupings. In one report, you can list amounts by account and group by entity, and in another list amount by entity and group by account.

The FDMEE tables that are used in the base and parameter SQL query are:

- TDATASEG
- TLOGPROCESS

TDATASEG Table Reference

The TDATASEG table is used to store the data loaded by the user, and the transformation between the source dimension members and results of the mapping process.

Table 77 TDATASEG Table Reference

Column Name	Definition	Description
DATAKEY	NUMBER(31,0) NOT NULL ENABLE	System generated unique key for each row of data
PARTIONNKEY	NUMBER(10,0) NOT NULL ENABLE	Location key. Join to TPOVPARTITION to retrieve location information.
CATKEY	NUMBER(10,0) NOT NULL ENABLE	Category Key. Join to TPOVCATEGORY to retrieve category information.
PERIODKEY	DATE NOT NULL ENABLE	Period Key. Join to TPOVPERIOD to retrieve FDMEE to EPM period mapping details.

Column Name	Definition	Description
DATAVIEW	VARCHAR2(8 CHAR) DEFAULT 'YTD' NOT NULL ENABLE	Hard coded to YTD for file, and set to YTD for balance sheet and PTD for income statement when pulling data from an Enterprise Resource Planning (ERP) system.
CURKEY	VARCHAR2(10 CHAR) DEFAULT	Currency code of the data.
CALCACCTTYPE	NUMBER(6,0) DEFAULT 9 NOT NULL ENABLE	Indicates if row was imported from source or computed by Logic Group: ● 9=Imported ● 5=Calculated and Exported ● 1=Calculated, and Not Exported
CHANGESIGN	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Indicates that the sign of the imported amount should be reversed: ● 0=No Change ● 1=Reverse Sign
JOURNALID	VARCHAR2(10 CHAR) DEFAULT	ID for the Journal. User provided value
AMOUNT	NUMBER(29,12) DEFAULT 0 NOT NULL ENABLE	Amount loaded from source
AMOUNTX	NUMBER(29 12) DEFAULT 0 NOT NULL ENABLE	Amount after any transformation rules. This value is loaded to the target application.
DESC1	VARCHAR2(240 CHAR) DEFAULT	Description can be imported from file
DESC2	VARCHAR2(75 CHAR) DEFAULT	Description can be imported from file
ACCOUNT	VARCHAR2(75 CHAR) NOT NULL ENABLE	Account member from source
ACCOUNTX	VARCHAR2(4000 CHAR) DEFAULT	Account member after mapping rules processed
ACCOUNTR	NUMBER(10,0) DEFAULT 0 NOT NULL ENABLE	Key to Mapping used for this dimension. Refers to DATAKEY in TDATAMAPSEG.
ACCOUNTF	NUMBER(6,0) DEFAULT 0 NOT NULL ENABLE	Map types: ● 1=Exception ● 3=Between ● 4=Range
ENTITY	VARCHAR2(75 CHAR) DEFAULT	Entity member from source
ENTITYX	VARCHAR2(75 CHAR) DEFAULT	Entity member after mapping rules processed. This value is exported.
ENTITYR	NUMBER(10,0) DEFAULT 0 NOT NULL ENABLE	Key to Mapping used for this dimension. Refers to DATAKEY in TDATAMAPSEG
ENTITYF	NUMBER(6,0) DEFAULT 0 NOT NULL ENABLE	Map types: ● 1=Exception ● 3=Between ● 4=Range

Column Name	Definition	Description
ICP	VARCHAR2(75 CHAR) DEFAULT	ICP from source
ICPX	VARCHAR2(75 CHAR) DEFAULT	ICP after mapping rules processed. This value is exported.
ICPR	NUMBER(10,0) DEFAULT 0 NOT NULL ENABLE	Key to mapping used for this dimension. Refers to DATAKEY in TDATAMAPSEG.
ICPF	NUMBER(6,0) DEFAULT 0 NOT NULL ENABLE	Map type: ● 1=Exception ● 3=Between ● 4=Range
UD1	VARCHAR2(75 CHAR) DEFAULT	UD1 from source
UD2	VARCHAR2(75 CHAR) DEFAULT	UD2 from source
UD3	VARCHAR2(75 CHAR) DEFAULT	UD3 from source
UD4	VARCHAR2(75 CHAR) DEFAULT	UD4 from source
UD5	VARCHAR2(75 CHAR) DEFAULT	UD5 from source
UD6	VARCHAR2(75 CHAR) DEFAULT	UD6 from source
UD7	VARCHAR2(75 CHAR) DEFAULT	UD7 from source
UD8	VARCHAR2(75 CHAR) DEFAULT	UD8 from source
UD9	VARCHAR2(75 CHAR) DEFAULT	UD9 from source
UD10	VARCHAR2(75 CHAR) DEFAULT	UD10 from source
UD11	VARCHAR2(75 CHAR) DEFAULT	UD11 from source
UD12	VARCHAR2(75 CHAR) DEFAULT	UD12 from source
UD13	VARCHAR2(75 CHAR) DEFAULT	UD13 from source
UD14	VARCHAR2(75 CHAR) DEFAULT	UD14 from source
UD15	VARCHAR2(75 CHAR) DEFAULT	UD15 from source
UD16	VARCHAR2(75 CHAR) DEFAULT	UD16 from source
UD17	VARCHAR2(75 CHAR) DEFAULT	UD17 from source
UD18	VARCHAR2(75 CHAR) DEFAULT	UD18 from source
UD19	VARCHAR2(75 CHAR) DEFAULT	UD19 from source
UD20	VARCHAR2(75 CHAR) DEFAULT	UD20 from source
UD1X	VARCHAR2(75 CHAR) DEFAULT	UD1 after mapping rules processed. This value is exported.

Column Name	Definition	Description
UD1R	NUMBER(10,0) DEFAULT 0 NOT NULL ENABLE	Key to Mapping used for this dimension. Refers to DATAKEY in TDATAMAPSEG
UD1F	NUMBER(6,0) DEFAULT 0 NOT NULL ENABLE	Map type: ● 1=Exception ● 3=Between ● 4=Range
ARCHIVEID	NUMBER(31,0) DEFAULT 0 NOT NULL ENABLE	Future use
HASMEMOITEM	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Future use
STATICDATAKEY	NUMBER(31,0) DEFAULT 0 NOT NULL ENABLE	Future use
ATTR1	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR2	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR3	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR4	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR5	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR6	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR7	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR8	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR9	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR10	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR11	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR12	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR13	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through

Column Name	Definition	Description
ATTR14	VARCHAR2(20 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
CODE_COMBINATION_ID	VARCHAR2(155 CHAR)	Used for integration with E-Business Suite.
AMOUNT_YTD	NUMBER(29,12)	YTD Amount. Used for E-Business Suite, Peoplesoft, Fusion data sources
AMOUNT_PTD	NUMBER(29,12)	PTD Amount. Used for Oracle E-Business Suite, Peoplesoft, Fusion data sources
LOADID	NUMBER(15,0)	Process ID that created or updated this row.
RULE_ID	NUMBER(15,0)	Data Rule ID used to create this row. Join to AIF_BALANCE_RULES for details.
STAT_BALANCE_FLAG	VARCHAR2(1 CHAR)	Indicates if balance is a statistic: ● Y=Stat ● N=Balance
VALID_FLAG	VARCHAR2(1 CHAR)	Indicates if row has valid mappings: ● Y=Valid ● N=Not Valid ● I=Ignore

TLOGPROCESS Table Reference

The TLOGPROCESS table is used to store the workflow process status for a location, category, and period.

Table 78 TLOGPROCESS Table Reference

Column Name	Definition	Description
PARTITIONKEY	NUMBER(10,0) NOT NULL ENABLE	Location key. Join to TPOVPARTITION to retrieve location information.
CATKEY	NUMBER(10,0) NOT NULL ENABLE	Category Key. Join to TPOVCATEGORY to retrieve category information.
PERIODKEY	DATE NOT NULL ENABLE	Period Key. Join to TPOVPERIOD to retrieve FDMEE to EPM period mapping details.
RULE_ID	NUMBER(15,0) NOT NULL ENABLE	Data Rule ID. Join to AIF_BALANCE_RULES for details.
PROCESSIMP	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Status for Import step: ● 0=Not started or failed ● 1=Successful

Column Name	Definition	Description
PROCESSIMPNOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Textual note on Validate status: ● Import Successful ● Recalculated OK ● Import Error ● Recalculate Failed ● MultiLoad ● BypassDataLoad ● Logic Calc Err ● Map Calc Err
PROCESSVAL	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE,	Status for Validate step: ● 0=Not started or failed ● 1=Successful
PROCESSVALNOTE	VARCHAR2(50 CHAR) DEFAULT NULL,	Textual note on Validate step: ● Validate Successful ● Error= x records (Where X = how many members did not have map rules) ● BypassDataLoad
PROCESSEXP	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE,	Status for Export step: ● 0=Not started or failed ● 1=Successful
PROCESSEXPNOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Textual note on Export step: ● Last successful export ● Export -B Successful ● Export Successful ● BypassDataLoad
PROCESSENTLOAD	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Status for Load step: ● 0=Not started or failed ● 1=Successful
PROCESSENTLOADNOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Textual note on Load status: ● Time Date stamp for success ● Load Error ● BypassDataLoad
PROCESSENTVAL	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE,	Status for Check step: ● 0=Not started or failed ● 1=Successful

Column Name	Definition	Description
PROCESSENTVALNOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Textual note on Check step: ● Check Successful ● Check Error ● BypassDataLoad
PROCESSCERT	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE,	Status for Certification step: ● 0=Not started or unsubmitted ● 1=Submitted
PROCESSCERTNOTE	VARCHAR2(50 CHAR) DEFAULT NULL,	Textual note on Load status: ● Controls Submitted ● Controls Cleared ● Not Submitted ● No Controls Found for Profile ● No Controls Group Assigned ● Error Setting Status
PROCESSASSES	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE,	Status for Assessment (process explorer) step: ● 0=Not started or unsubmitted ● 1=Submitted
PROCESSASSESNOTE	VARCHAR2(50 CHAR) DEFAULT NULL,	Textual note on Load status: ● Controls Submitted ● Controls Cleared ● Not Submitted ● No Controls Found for Profile ● No Controls Group Assigned ● Error Setting Status
PROCESSCHILDDONE	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Status for Certification status for parent locations step: ● 0=Not started or all children not complete ● 1=All children complete
PROCESSCHILDDONENOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Textual note on Certification status for parent location: ● Children Submitted ● No Children
PROCESSUD1	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Not used
PROCESSUD1NOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Not used
PROCESSUD2	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Not used

Column Name	Definition	Description
PROCESSUD2NOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Not used
PROCESSUD3	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Not used
PROCESSUD3NOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Not used
PROCESSUD4	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Not used
PROCESSUD4NOTE	VARCHAR2(50 CHAR) DEFAULT NULL	Not used
PROCESSENDTIME	DATE DEFAULT TO_ DATE('01/01/1900', 'MM/ DD/YYYY') NOT NULL ENABLE	Last update time/date
BLNWCDIRTY	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Flag used to indicate that maps (WC = WildCard) must be recalculated prior to validating: ● 0=OK ● 1=Re-caculate location Map rules have changed after data was imported. This causes the Calculate flag to be displayed
BLNLOGICDIRTY	NUMBER(1,0) DEFAULT 0 NOT NULL ENABLE	Flag used to indicate the LOGIC must be recalculated prior to validating
BLNVALDIRTY	NUMBER(1,0) DEFAULT 1 NOT NULL ENABLE	Flag used to indicate when Validation workflow must be re-run: ● 0=OK ● 1=re-process validations Map rules have changed after data was imported. This causes the Calculate flag to be displayed.
INTLOCKSTATE	NUMBER(6,0) DEFAULT 50 NOT NULL ENABLE	Location POV lock status: ● 50=open ● 60=locked
PROCESSSTATUS	NUMBER(10,0) DEFAULT 0 NOT NULL ENABLE	Current state of workflow for location/category/per. Valid status from tLogProcessStates

H

Setting up Jython, Eclipse and Python

This appendix explains how to set up Jython, Eclipse and PyDev for use with the FDMEE scripting component.

This section is specific to the 11.1.2.3.100 release of Oracle Hyperion Financial Data Quality Management, Enterprise Edition. Because Jython, Eclipse and Python are not Oracle products, always refer to these products' documentation for the latest updates and changes. Also see http://pydev.org/manual_101_root.html.

➤ To set up Jython:

1 **Create a working directory.**

For example, create: `C:\FDMEE`.

2 **Download Jython to the working directory.**

The download is available at http://www.jython.org/downloads.html

Double-click the Jython installer jar and select the following options:

- English Language
- Standard Install
- Default Location (`C:\FDMEE\jython2.5.1`)
- Current Java Home

3 **Download Eclipse to working directory and extract.**

The Eclipse download is available at http://www.eclipse.org/downloads

Note: In addition to Eclipse, users may also use Notepad++ with the Jython add-in, or the http://pythonfiddle.com site to write and test scripts. Pythonfiddle is a good site for writing event scripts, and the Chrome browser is recommended for pythonfiddle. For more advanced scripts, Eclipse or Jdeveloper are recommended

4 **Launch Eclipse from the `C:\FDMEE\eclipse\eclipse.exe`.**

5 **Select the directory and select a default location for your Workspace.**

For example select `c:\FDMEE\Workspace`

6 **If the Welcome page is displayed, skip it by selecting the Workbench link in the top right corner.**

7 **Select the following menu option to update your preferences:**

a. Select **Windows**, and then select **Preferences**.

b. Add **PyDev** to the Available Software Sites:

To do this:

i. Select **Install/Update**, then select **Available Software Sites**, and then click **Add**.

ii. In **Name**, enter **PyDev**.

iii. In **Location**, enter: http://pydev.org/updates/

8 **Change the default text editor options:**

To do this:

a. Select **General**, then select **Editors**, and then select **Text Editors**.

b. For the **Displayed tab width**, enter **2**.

c. Enable the **Insert spaces for tabs** option.

d. Enable the **Show print margin** option.

e. Enable the **Show line numbers** option.

9 **Select the Menu option.**

To do this:

a. Select **Help**, and then select **Install New Software...**

b. In **Work with**, select **PyDev**.

c. From **PYDev** available software list, select the **PyDev** node, and then click **Next**.

d. Confirm the PyDev for Eclipse installation, and then click **Next**.

e. Accept the licensing terms, and then click **Finish**.

f. Once the install starts, you are prompted about Aptana PyDev; and PyDev; Aptana certificates. Make sure you select the certificates, and then click **OK**.

g. Restart **Eclipse** to complete the PyDev installation.

10 **Update your PyDev preferences:**

To do this:

a. Select **Windows**, and then select **Preferences**.

b. Configure the Jython interpreter used by PyDev:

i. Select **PyDev**, and then select **Interpreter-Jython**.

ii. Click **New**.

iii. Click **Browse**.

iv. Select `C:\FDMEE\jython2.5.1\jython.jar`

v. Click **OK**.

vi. When prompted to select the folders to add to the SYSTEM python path, do not change any selection, and then click **OK**.

vii. Click **OK** to close the Preferences window.