Oracle® Fusion Cloud EPM

Administering Data Management

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1

Creating and Running an EPM Center of Excellence

A best practice for EPM is to create a CoE (Center of Excellence).

An **EPM CoE** is a unified effort to ensure adoption and best practices. It drives transformation in business processes related to performance management and the use of technology-enabled solutions.

Cloud adoption can empower your organization to improve business agility and promote innovative solutions. An EPM CoE oversees your cloud initiative, and it can help protect and maintain your investment and promote effective use.

The EPM CoE team:

- Ensures cloud adoption, helping your organization get the most out of your Oracle Fusion Cloud EPM investment
- Serves as a steering committee for best practices
- Leads EPM-related change management initiatives and drives transformation

All customers can benefit from an EPM CoE, including customers who have already implemented EPM.

How Do I Get Started?

Click to get best practices, guidance, and strategies for your own EPM CoE: Introduction to EPM Center of Excellence.

Learn More

- Watch the Cloud Customer Connect webinar: Creating and Running a Center of Excellence (CoE) for Cloud EPM
- Watch the videos: Overview: EPM Center of Excellence and Creating a Center of Excellence.
- See the business benefits and value proposition of an EPM CoE in *Creating and Running an EPM Center of Excellence*.

2
Using Data Management

Starting with the September (23.09) update, the user interface pages listed in the table below will no longer be available in Data Management, but will be available in Data Integration. Data Integration is available now from the Data Exchange card from the home screen in the Oracle Fusion Cloud Enterprise Performance Management Business Process, and users can access these features in the current Cloud EPM update. Data Management is not going away in 23.09 – only the features which have 100% parity with Data Integration will be moved.

Table 2-1 Data Management Feature Migration to Data Integration

Data Management	Data Integration	Data Integration Migration Path
Source System	Configure Connections	From the **Data Integration** user interface, select the **Actions** drop down, and then select **Applications**. Then select the **Configure Connections** icon ( ). For more information, see: Configuring Source Connections in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.
Target Application	Applications	From the **Data Integration** user interface, select the **Actions** drop down, and then **Applications**. For more information, see: Registering Applications in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.
Period Mapping	Period Mapping	From the **Data Integration** user interface, select the **Actions** drop down, and then **Period Mapping**. For more information, see: Managing Period Mappings in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

Table 2-1 (Cont.) Data Management Feature Migration to Data Integration

Data Management	Data Integration	Data Integration Migration Path
Category Mapping	Category Mapping	From the **Data Integration** user interface, select the **Actions** drop down, and then **Category** Mapping. For more information, see: Managing Category Mappings in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

The following business processes will be impacted by the Data Management to Data Integration migration:

- Planning
- Planning Modules
- Financial Consolidation and Close
- Tax Reporting
- Account Reconciliation
- Strategic Workforce Planning

Profitability and Cost Management customers will not be affected by the migration and will see no change in their Data Management user interface.

Data Management enables you to perform the following tasks:

- integrate metadata and data from a Cloud EPM source system or data from a file to a Cloud EPM target application.
- integrate Oracle General Ledger data with a Cloud EPM if you use Fusion Cloud Release 11 or higher.

  Data Management also supports the Financials Accounting Hub (FAN) and the Financial Accounting Hub Reporting Cloud Service (FRACAS) as part of its integration with the Oracle General Ledger.
- drill through from the Cloud EPM target application and view data in the Cloud EPM source system.
- synchronize data between Cloud EPM applications—Move data between Cloud EPM applications, for example, copying data from Financial Consolidation and Close to Essbase for reporting.
- write back budget data to the source system from any Planning, Oracle Essbase aggregate storage, or Essbase block storage application.

You can also:

- integrate file-based data from an Enterprise Resource Planning (ERP) source system 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.

- integrate Oracle General Ledger data with the Cloud EPM if you use Fusion Cloud Release 11 or higher.

  Data Management also supports the Financials Accounting Hub (FAN) and the Financial Accounting Hub Reporting Cloud Service (FRACAS) as part of its integration with the Oracle General Ledger.
- load commitments, obligations, and expenditures from an Budgetary Control to Planning and Planning Modules applications.
- load Human Resources data from Oracle Human Capital Management Cloud to use in the Oracle Workforce Planning business process of Planning Modules.

Data Management enables you to work with the following cloud services belonging to the Cloud EPM:

- Planning Modules
- Planning
- Financial Consolidation and Close
- Account Reconciliation
- Profitability and Cost Management
- Tax Reporting
- Strategic Workforce Planning

Data Loads and Write-Back

Data loads 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 a Oracle Fusion Cloud Enterprise Performance Management application. For example, you can take a trial balance report generated from their source system and map it into Data Management 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 allows a business user to easily import data from any source by way of a file format, and requires limited technical help, if any, when loading into a Cloud EPM application.

You can also define data load rules which determine how you want to extract or write back budget data from Planning to the file system.

Drilling into Data

Data Management enables you to drill into your data enabling you to answer questions such as what values make up a value. Three types of drill processes are available for drilling data: drill up and down, drill back, and drill through.

Drill up and down enables you to navigate EPM dimensions and hierarchies allowing you to see which members are aggregated. . For example, when you drill down on the Period dimension member "Q4", you might see: "Jan", "Feb" and "Mar".

Drill back enables you to navigate from the EPM application (such as Planning) to the source application from which the data was stored and extracted. For example, if you initiate the drill back from Planning and the data is stored in an application on the Oracle Financials Cloud, you are directed back to the Oracle Financials Cloud.

Drill through enables you to navigate from source balance within Data Management back to the source system from which the data was extracted. This allows you to review the detailed (transactional) data that constitutes the source value.

Drilling Through

You can drill through to the detail from the EPM target application and view data in the Enterprise Resource Planning (ERP) source system. Predefined by administrators, drill-through reports are available to users from specified individual member cells and data cells. A cell can be associated with multiple drill-through reports. Cells that contain drill-through reports can be indicated on the grid by a cell style.

Using Data Management with Multiple Cloud EPM Deployments

Data Management is available as an integration option for all offerings of the Oracle Fusion Cloud Enterprise Performance Management, which includes:

- Planning Modules
- Planning
- Financial Consolidation and Close
- Account Reconciliation
- Profitability and Cost Management
- Tax Reporting
- Strategic Workforce Planning

When transforming and loading data between Oracle Fusion Cloud EPM deployments (service instances), you may use Data Management to process a source data file that is not in the required format for native loading in your application, or when Data Management features are desired beyond the native data loading functionality.

In the following sections, notable differences are explained when customers are moving to the cloud version from the on-premise version of their products using Data Management.

Customers Using Account Reconciliation

The process to implement an integration to Account Reconciliation, is to first test the import and validation steps in Data Management, and when satisfied with the results, launch the actual integration from within the Account Reconciliation.

The actual loading of the data is executed in the Account Reconciliation. For more information, see Importing Data Using Data Management.

Location security in not available in the Account Reconciliation user interface. Location security is available only in Data Management user interface.

Lock/Unlock POV from the Application page in Data Integration is only available for administrators. In the Data Management user interface, you can lock an individual location from the POV page as non-administrator.

When you are an on-premise Accounts Reconciliation Manager customer moving to Account Reconciliation, note the following in Data Management:

- Using Account Reconciliation as a source for other than Oracle Fusion Cloud Enterprise Performance Management applications is not currently supported with Account Reconciliation.
- Only numeric data may be loaded to the Account Reconciliation.
- Drill-through is supported from Account Reconciliation to the drill-through landing page in Data Management. Account Reconciliation can also drill through to the data source in the on-premise Financial Data Quality Management, Enterprise Edition if the data has been first imported to Data Management using the hybrid integration feature. To drill through to the landing page, the Account Reconciliation profile segments must be mapped to the LOOKUP dimension in the Target Dimension Class on the Target Application page.
- Integrating data from Oracle NetSuite is supported in Account Reconciliation.
- Integrating data from the Oracle Financials Cloud is supported in Account Reconciliation.
- When mapping a "Source Type" dimension in the Data Load Mapping option for Account Reconciliation balances, use the **Target Value** as either the **source system** or **sub-system** (subledger). These options are a categorization that define the sources of the data. For example, if you select **source system**, this option does not necessarily indicate that the source data is from the same source system but does indicate that the data is not from a subledger, such as Accounts Receivable (AR), Accounts Payable (AP), and so on.
- Any Lookup dimension you add for mapping purposes should be of classification of "LOOKUP." Do not add any dimension of classification "Generic."
- When mapping to a Reconciliation Account ID within Account Reconciliation, there are considerations for blank target segments. If there are blank segments in between two populated segments in the target reconciliation, Account Reconciliation treats each blank/null segment values in the middle of a Reconciliation Account ID as three blank spaces. Account Reconciliation also trims off the trailing NULL segments after the last populated segment.

  For example, a Grouped Reconciliation with the following Reconciliation ID: "001-null-null-1925 XXX" (the "null" in Account Reconciliation would be non-existent (void of characters) when viewing the Reconciliation/Profile.) The design of Account Reconciliation replaces the "null" at the database tier with three spaces for each blank/null segment in between the populated segments. The Target Mapped Profile in Data Management needs the following: "ACCOUNT ID 001- - -1925 XXX" to align with Account Reconciliation.
- Account Reconciliation customers, who need to load bank file transaction (which use a BAI or Bank Administration Institute file format or a SWIFT MT940 file format) to the Transaction Matching module in Account Reconciliation, can use Data Management as the integration mechanism. Data Management supports a pre-built adapter for loading:
  - BAI Format Bank File Transactions
  - BAI Format Bank File Balances
  - SWIFT MT940 Format Bank File Transactions
  - SWIFT MT940 Format Bank File Balances

  For more information, see Integrating BAI, SWIFT MT940 or CAMT.053 Format Bank File Transactions and Balances.

> **Note:**
>
> In addition, any other file format that Data Management supports, can also be used to import, map, and load to the Transaction Matching module.

- As an integration mechanism, Data Management enables Account Reconciliation customers to load Reconciliation Compliance Transactions into Reconciliations. You can pull transactions directly from the Oracle ERP Cloud to the Cloud EPM including:
  - Balance Explanations
  - Source System Adjustments
  - Subsystem Adjustments
  - Variance Explanations

  For more information, see Loading Reconciliation Compliance Transactions.
- In Transaction Matching, you can export adjustments or transactions as dual sided journal entries that can then be imported into your ERP system. Data Management is used as the mechanism to load the exported journal entries. For more information, see: Loading Exported Journal Entries.
- Account Reconciliation customers can use up to 64 fields per transaction to load data using Data Management to Transaction Matching.
- For additional features available to Account Reconciliation users, see the contents of this guide.

For information on loading general ledger and subledger balances in Account Reconciliation from a file using Data Management, see: Overview: Load GL and Subledger Balances from a File using Data Management in Account Reconciliation.

Customers Using Financial Consolidation and Close

For those Oracle Hyperion Financial Management customers moving to Financial Consolidation and Close, note the key differences between the two products:

- Financial Consolidation and Close shows a positive amount as a debit and a negative amount as a credit.
- A "plan type" is not an Financial Consolidation and Close concept.
- Financial Consolidation and Close users can load Oracle General Ledger data into their own applications. Only budgets data can be written back to the Oracle General Ledger.
- Data synchronization can push data from either Planning or Financial Consolidation and Close to an Financial Consolidation and Close target application.
- Financial Consolidation and Close can be used as a source system in the import format. In this way, you can use Financial Consolidation and Close as a source system, and then use a different cloud service (such as Planning Modules, Account Reconciliation, Planning, Profitability and Cost Management) as a target, and move data from Financial Consolidation and Close to these other cloud services.

  Additionally, you can pull data from Financial Consolidation and Close and push the data to a file for use in another application.
- For a consolidation dimension, you can load different override amounts and rates for different source members by location. This enables you to report on details used to perform the various stages of the consolidation process.
- In addition to the system predefined dimensions, you can create up to two additional Custom dimensions based on your application needs. Custom dimensions are associated with the Account dimension and provide additional detail for accounts. If Extended Dimensionality is enabled for the application, you can create up to four Custom dimensions. If the application is enabled with the Multi-GAAP reporting option, you can create three Custom dimensions.

- Data Management supports an Financial Consolidation and Close "Period" as a column in a data file. If you have data for multiple periods in a single file, then you can include the year and period on each row of the data. In Import Formats, you select the source period rows of Year and Period so the system knows that these columns are in the file, and then map them to the appropriate dimension in the target system. See Loading Multiple Periods for Cloud EPM or File-Based Source Systems.
- Data Management supports an explicit load method for loading journals to Financial Consolidation and Close. Journals are loaded by defining a data rule with the type "Journals." Both Excel and text based journal loads are supported. See Loading Journals to Financial Consolidation and Close.
- Drill through functionality is not supported for exchange rates data.
- The import modes available to Financial Consolidation and Close are "append" and "replace."
- When you import data from Financial Consolidation and Close and use an Explicit mapping set, do not use attribute columns ATTR2 and ATTR3 for any dimension mappings. Data Management uses these columns to determine the correct period key for the row.
- The export modes available to Financial Consolidation and Close target application are "merge" (If data already existed in the application, the system simply adds values from the load file to the existing data. No existing data is deleted. If data does not exist, the new data will be created), "replace" (The system first deletes all values based on the scenario, year, period, entity, and data source before it submits the load.), and "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.)
- To load data to actual currency rather than entity currency when the currency is fixed, set the currency in the Functional Currency field in the Location option. SeeDefining Locations. You can also add a Currency row in the import format and map it. See Defining the Import Format.

Data Loads

Data Management supports a variety of ways for importing data from a range of financial data sources, and then transforming and validating the data.

Data and exchange rates can be loaded to users who 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 Financial Consolidation and Close application. For example, you can take consolidation features, which include out-of-the box translations, consolidation, eliminations and adjustments from their source system, and map it into Data Management by way of the import format feature. You can instruct the system where the dimensions and data values reside in the file, as well as which rows to skip during the data import. This feature allows a business user to easily import data from any source by way of a file format, and requires limited technical help, if any, when loading into an Financial Consolidation and Close application.

Other Considerations

1. Data may be loaded to Financial Consolidation and Close by way of Data Management when the movement member is set to one of the following:
   a. Level 0 descendants of FCCS_Mvmts_Subtotal
      or
   b. FCCS_OpeningBalanceAdjustment
      or

   c. Any level 0 members of customer specific hierarchies that are siblings of FCCS_Movements. The hierarchies are siblings of FCCS_Movements (not the level zero members).

2. Data loaded to Financial Consolidation and Close can be only at the base level.
3. Drill through from an Financial Consolidation and Close web form or Smart View on Financial Consolidation and Close is supported.
4. Data loaded from Data Management to Financial Consolidation and Close is summarized based on the dimensionality in Data Management, and this summarized data is loaded to Financial Consolidation and Close. Any computations or consolidation logic can only be performed within Financial Consolidation and Close.
5. Import formats support the addition of both "file" and Planning source types.
6. Data Management indicates if the data loaded to Financial Consolidation and Close is "PTD" or "YTD." If data is specified as YTD, Financial Consolidation and Close performs any necessary computations as if that data needs to be translated to PTD.

Customers Using Tax Reporting

For those Oracle Hyperion Tax Provision customers moving to Tax Reporting, note the key differences:

- Balance data or exchange rates may be loaded to the Tax Reporting application using a file. (Data and exchange rates cannot be loaded by way of the same file.) In addition, balance data from the Oracle Financials Cloud may also be directly integrated to the Tax Reporting application. At this time, exchange rate loading from the Oracle ERP Cloud is not supported.
- Data is loaded to Tax Reporting at the summary account level. Line item detail is not supported in the Tax Reporting.
- Journals are not supported in Tax Reporting at this time. In Data Management, only "data" load types are supported for Tax Reporting applications.
- Drill through *from* an Tax Reporting web form or Oracle Smart View for Office (dynamically linked to Tax Reporting) *to* Data Management is supported.
- Drill through *to* an Tax Reporting web form *from* Data Management is only available when Tax Reporting includes a URL that can be called from Data Management.
- Drill through functionality is not supported for exchange rates data.
- Data loaded from Data Management to Tax Reporting is summarized based on the dimensionality in Data Management, and this summarized data is loaded to Tax Reporting. Any computations or consolidation logic is only performed within Tax Reporting.
- The Tax Reporting supports "YTD" data only, and consequently no data is modified when it has been loaded.
- When data load rules are executed, there are two export modes for loading data to the target Tax Reporting application:
  - Merge—By default, all data load is processed in the Merge mode. If data already existed in the application, the system overwrites the existing data with the new data from the load file. If data does not exist, the new data will be created.
  - Replace—The system first clears any existing data in the application for those referenced in the data load file. Then the system performs the data load in Merge mode.

> **Note:**
>
> In Replace mode, before the first record for a specific Scenario/Year/Period/Entity/Mapped Data Source is encountered, the entire combination of data for that Scenario, Year, Period, Entity, and Mapped Data Source is cleared, whether entered manually or previously loaded. Note that when you have a year of data in the Planning application, but are only loading a single month, this option clears the entire year before performing the load.

- If you need to consolidate all entities as part of the data load process, in Data Management, use the Check Entity Group option (see Creating Check Entity Groups.)
- The "ownership of data" feature in Tax Reporting is not supported in this release.
- Oracle Hyperion Financial Data Quality Management, Enterprise Edition can be used as a primary gateway to integrate on-premise and Tax Reporting based applications. This feature enables customers to adapt cloud deployments into their existing EPM portfolio.
- The `rundatarule` command of the EPM Automate utility, which executes a Data Management data load rule based on the start period and end period, can be executed for an Tax Reporting application.
- Data Management can be used to move data between service instances. This means you can move data between Tax Reporting applications, or Tax Reporting data to and from other Oracle Fusion Cloud Enterprise Performance Management services.
- To load data to actual currency rather than entity currency when the currency is fixed, set the currency in the Functional Currency field in the Location option. SeeDefining Locations. You can also add a Currency row in the import format and map it. See Defining the Import Format.
- After completing a data load cycle in Tax Reporting, data can be written out to a text file created in a custom application for use in an external application, or to an FDMEE (onpremise) location. When the custom application is defined, you can export the file and download it using EPM Automate.
- For additional features available to Tax Reporting users, see the contents of this guide.

Customers Using Strategic Workforce Planning

You can load Human Resources data from the Oracle Fusion Human Capital Management to use in the Strategic Workforce Planning business process of Oracle Fusion Cloud Enterprise Performance Management.

Strategic Workforce Planning customers who need to translate long-term corporate strategy into execution plans, can align and pull strategic data from Human Capital Management. Data Management is the integration mechanism. It provides an out of the box solution that enables customers to apply predefined mappings from Human Capital Management data model to target dimensions in Strategic Workforce Planning. Customers can also customize and extend these integrations, for example, by applying other mappings as needed to meet their business requirements.

For more information about using Human Capital Management with Data Management, see Integrating with the Oracle HCM Cloud.

Navigating Data Management

From the Home page, click (**Navigator** icon) and then from the **Integration** category, select **Data Management**.

Toolbars

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

Help

When a selected Data Management option has context-sensitive help enabled for it, click .

To view all other help topic specific to Data Management, see Administering Data Management for Oracle Enterprise Performance Management Cloud.

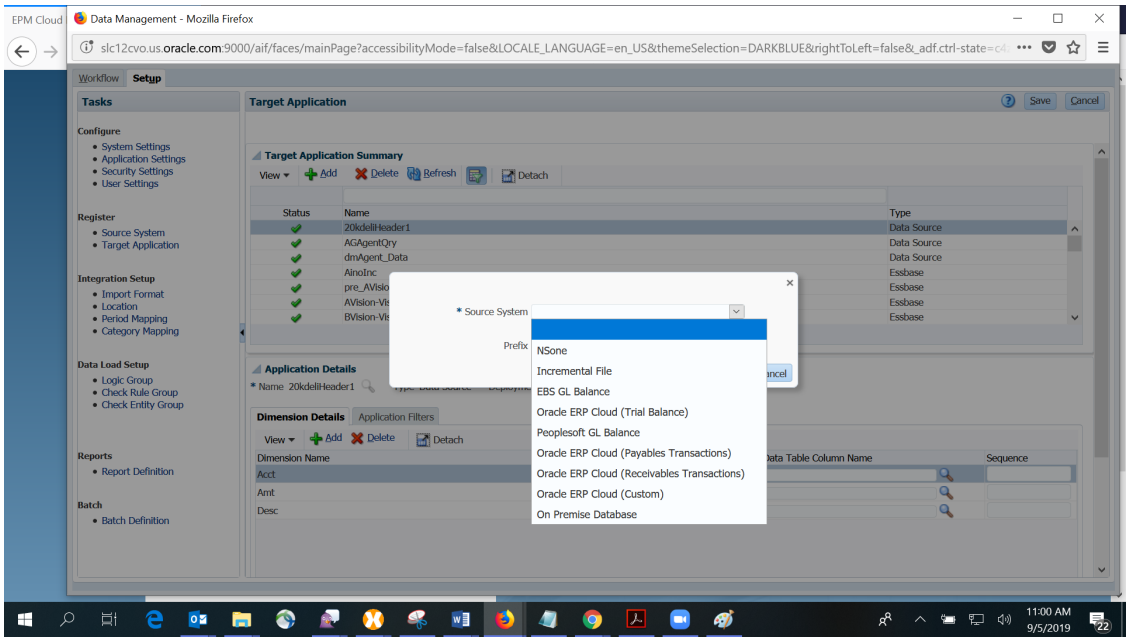
For all other help, see the Oracle Cloud Help Center, which is the hub for accessing the latest Oracle Enterprise Performance Management Cloud books, Help topics, and videos.

The URL of the Cloud Help Center:

Oracle Cloud Help Center.

Task Pane Options

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



Workflow Tasks

From the Workflow tab, you can integrate data using the following options:

- Data Load
  - Data Load Workbench
  - Data Load Rule
  - Data Load Mapping
- Other
  - Batch Execution
  - Report Execution
  - System Maintenance Tasks
- 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
- Integration Setup
  - Import Format
  - Location
  - Period Mapping
  - Category Mapping
- Data Load Setup
  - Logic Group
  - Check Rule Group
  - Check Entity Group

Working with Data in Grids

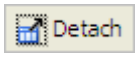
Most screens display data in one or more grids. To manipulate grid data, perform one or more actions:

- 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**.

Data Management User Interface Elements

The following elements are common on Data Management pages.

Table 2-2 Elements Common on Data Management 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 Data Management setup screens.

Table 2-2 (Cont.) Elements Common on Data Management Pages

Button	Description
	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 click **Enter**. For example, on the Process Details page, to view only processes for a specific location, enter the name of the location in the **Location** text box. The Query by Example button displays on the following Data Management setup screens: Target Application, 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 click **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.

Advanced Search Options

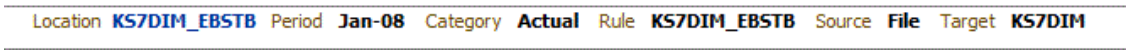
The Search button is common to many Data Management pages. When you select the Search button, if the Advanced Search button is available, you can enter additional search conditions. The fields that are displayed in the advanced search options differ depending on what artifact you are selecting. The following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

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 Data Management 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 Data Management, 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 Data Management administrator controls the data category active for all users. This feature prevents users from inadvertently loading data to incorrect categories.

> **Note:**
>
> By default, when you display the Data Load Rule screen, you see all data load rules only for the *current* POV Category. To show all data load rules for all categories regardless of the POV Category, from **Data Rule Summary**, select **Show** and then **All 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**.

Administration Tasks

Set system, application, and user profiles. Use also to register source systems and target applications.

Related Topics

- Predefining a List of Profiles
- Setting up Source Systems
- Registering Target Applications

Predefining a List of Profiles

Data Management 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)

Setting System-Level Profiles

Use system settings to update or clear system level profiles that apply to entire system.

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).
   - Other (Use to set profiles associated with a 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.
4. Click **Save**.

Table 2-3 System Setting Profile Options

Profile Type	Profile Option	Profile Description
All	Includes all profile types	
File	Create Location Folder	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.

Table 2-3 (Cont.) System Setting Profile Options

Profile Type	Profile Option	Profile Description
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.
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 setting 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.

Table 2-3 (Cont.) System Setting Profile Options

Profile Type	Profile Option	Profile Description
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.

Table 2-3 (Cont.) System Setting Profile Options

Profile Type	Profile Option	Profile Description
File	LCM Mode	Select the LCM Mode to use when exporting Lifecycle Management snapshots. Available options: • **Individual Artifact – Setup Only**—In this mode, you select the individual artifacts to migrate such as locations and mappings. When you import the snapshot in the target system merges data with the existing data in the target system. This mode does not include Workbench data. This is default mode used by the LCM process. Snapshots of individual artifacts are exported as XML files contained in a ZIP file. Snapshot ZIP files are available from the Snapshots tab in Migration. • **Single Snapshot – Setup Only**—In this mode, when you import the snapshot in the target system, all the existing setup data is deleted and the data from the snapshot is imported. For a list of setup artifacts, see Snapshot Export Setup Artifacts. Setup artifacts are exported to CSV files in table format contained in a ZIP file. Snapshot ZIP files are available from the Snapshots tab in Migration. Snapshots run in Single Snapshot – Setup Only mode are executed faster than snapshots run in Individual Artifact – Setup Only mode and may prevent database timeout issues. • **Single Snapshot – Setup and Data**—In this mode, the data in the target system is completely deleted and data from the snapshot is imported. The import process can take longer depending on the volume of the Workbench data and may affect the performance of the LCM backup depending on the size of the data in the staging tables. For a list of setup and data artifacts, see Snapshot Export Setup Artifacts and Snapshot Export Data Artifacts.

Table 2-3 (Cont.) System Setting Profile Options

Profile Type	Profile Option	Profile Description
		Before using this mode, create a baseline individual artifact snaphot. The system exports setup and all data (including Workbench) incrementally to CSV files in table format contained in a ZIP file. Snapshot ZIP files are available from the Snapshots tab in Migration.
POV	Default POV Period	Specifies the default POV Period. These preferences take precedence when no equivalent settings are in Application Settings or User Settings.
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	Default POV Location	Specify the default POV location.
POV	Global POV Mode	When this is set to **Yes**, other POVs (Application Level and User Level POVs) are ignored.
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	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, Data Management waits for the job to complete before returning control.

Table 2-3 (Cont.) System Setting Profile Options

Profile Type	Profile Option	Profile Description
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 in the Export Mode drop-down located on the Execute Rule screen. When you select to override all data, the following message is displayed "Warning: Override All Data option will clear data for the entire application. This is not limited to the current Point of View. Do really want to perform this action."
Other	Enable Map Audit	Set to **Yes** to create audit records for the Map Monitor reports (Map Monitor for Location, and Map Monitor for User). The default value for this setting is **No**.
Other	Access to Open Source Document	When drilling down to the Data Management landing page, this setting determines access to the Open Source Document link (which opens the entire file that was used to load data). • Administrator—Access to Open Source Document link is restricted to the administrator user. • All Users—Access to the Open Source Document link is available to all users. All Users is the default setting.
Other	Map Export Delimiter	Sets the column delimiter value when exporting member mappings. Available delimiters are: • ! (exclamation mark) • , (comma) • ; (semi-colon) • | (pipe)
Other	Map Export Excel File Format	Select the Excel file format to use when exporting member mappings: • Excel 97-2003 Workbook (*.xls) • Excel Macro-Enabled Workbook (*.xlsm)

Table 2-3 (Cont.) System Setting Profile Options

Profile Type	Profile Option	Profile Description
Other	Map LCM Format	Sets the export option for data load mappings to Migration (Lifecycle Management). Available options: • Individual Data Load Mapping—maps are exported individually for each location and imported individually for each location. If you have a large number of maps for each location, use this method since it allows loading of maps in smaller sets by location. This method is also useful to migrate maps for certain locations selectively. With this method, existing maps are deleted and replaced by new maps in the snapshot. • Combine Data Load Mapping for All Locations—maps are exported in a single artifact for all locations. With this method, maps from the snapshot are merged to the existing maps in the target system. This is the default setting.

Setting Application-Level Profiles

Use application settings to update or clear application-level profiles that apply to target applications.

To set an application level profile:

1. On the **Setup** tab, under **Configure**, select **Application Settings**.
2. In **Application Settings**, from **Target Application**, select the Oracle Fusion Cloud Enterprise Performance Management application.
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 2-4 Application Level Profile Options

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.
Global POV Mode	Specify the Global POV mode. When this is set to **Yes**, then other POVs are ignored.
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. This setting is not available in the Financial Consolidation and Close.
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. This setting is not available in the Financial Consolidation and Close.

Table 2-4 (Cont.) Application Level Profile Options

Option	Description
Display Data Export Option "Override All Data"	Specify **Yes** to display the **Override All Data** option in the Export Mode drop-down located on the Execute Rule screen. When you select to override all data, the following message is displayed "Warning: Override All Data option will clear data for the entire application. This is not limited to the current Point of View. Do really want to perform this action."
Enable Map Audit	Set to **Yes** to create audit records for the Map Monitor reports (Map Monitor for Location, and Map Monitor for User). The default value for this setting is **No**.
Access to Open Source Document	When drilling down to the Data Management landing page, this setting determines access to the Open Source Document link (which opens the entire file that was used to load data). • Administrator—Access to Open Source Document link is restricted to the administrator user. • All Users—Access to the Open Source Document link is available to all users. All Users is the default setting.
Map Export Delimiter	Sets the column delimiter value when exporting member mappings. Available delimiters are: • ! (exclamation mark) • , (comma) • ; (semi-colon) • | (pipe)
Map Export Excel File Format	Select the Excel file format to use when exporting member mappings: • Excel 97-2003 Workbook (*.xls) • Excel Macro-Enabled Workbook (*.xlsm)

Table 2-5 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 the EPM application. You can use a separate root folder for each EPM application.
	Based on this parameter, the system 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 Folder** 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 a Universal Naming Convention (UNC) path, share permissions on the folder must allow access to the DCOM user for read/write operations. Use a Universal Naming Convention (UNC) path for the application root folder when Oracle Hyperion Financial Management and Data Management 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 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.

Table 2-5 (Cont.) Application Level Profile Options

Option	Description
Default Check Report	Specify the type of Report to use as the default report at the application level. The following are pre-seeded 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 non-zero digit, and the least important digit is the right-most known digit.
Display Data Export Option "Override All Data"	Display the "Override All Data" option on the Export Mode drop-down on the Execute Rule screen. When you select to override all data, the following message is displayed "Warning: Override All Data option will clear data for the entire application. This is not limited to the current Point of View. Do really want to perform this action."
Enable Map Audit	Set to **Yes** to create audit records for the Map Monitor reports (Map Monitor for Location, and Map Monitor for User). The default value for this setting is **No**.

Table 2-5 (Cont.) Application Level Profile Options

Option	Description
Access to Open Source Document	When drilling down to the Data Management landing page, this setting determines access to the Open Source Document link (which opens the entire file that was used to load data). • Administrator—Access to Open Source Document link is restricted to the administrator user. • All Users—Access to the Open Source Document link is available to all users. All Users is the default setting.
Map Export Delimiter	Sets the column delimiter value when exporting member mappings. Available delimiters are: • ! (exclamation mark) • , (comma) • ; (semi-colon) • | (pipe)
Map Export Excel File Format	Select the Excel file format to use when exporting member mappings: • Excel 97-2003 Workbook (*.xls) • Excel Macro-Enabled Workbook (*.xlsm)

Locking and Unlocking All (POV) Locations

The lock all locations feature prevents data from being loaded to a selected POV by locking all locations related to the current period and category for an entire target application. When a location has been locked, you cannot import, validate, export, or re-run the validation.

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

The Lock All Locations feature is referenced in the:

- Data Load Workbench
- Data Load Rule
- Batch Execution

An "Unlock All Location" option is also available so that you can unlock all locked location. You can provide an option on the Select Point of View screen that enables users to unlock a POV by location.

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 **Period**, select the period to lock.
5. In **Category**, select the category to lock.

6. Click **Allow Unlock by Location** to provide the **Unlock POV** option on the Select Point of View screen.

   If **Allow Unlock by Location** is disabled, then the **Unlock POV** and **Lock POV** fields are not displayed on the Select Point of View screen.

7. 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. In **Period**, select the period to unlock.
5. In **Category**, select the category to unlock.
6. Click **OK**.

   All locations for the selected target application are unlocked.

Setting User Level Profiles

Use user settings 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 2-6 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.
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. This setting is not available in the Financial Consolidation and Close.
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.

Table 2-6 (Cont.) User Level Profile Settings

Option	Description
Map Export Delimiter	Sets the column delimiter value when exporting member mappings. Available delimiters are: • ! (exclamation mark) • , (comma) • ; (semi-colon) • | (pipe)
Map Export Excel File Format	Select the Excel file format to use when exporting member mappings: • Excel 97-2003 Workbook (*.xls) • Excel Macro-Enabled Workbook (*.xlsm)

Setting Security Options

Set up role-level, report, batch, and location security options.

In Data Management, service administrators and power users can enable security for almost any user interface and report feature. Data Management supports four 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 group 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 a 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.

In Data Management, administrators can control user access to locations using location security.

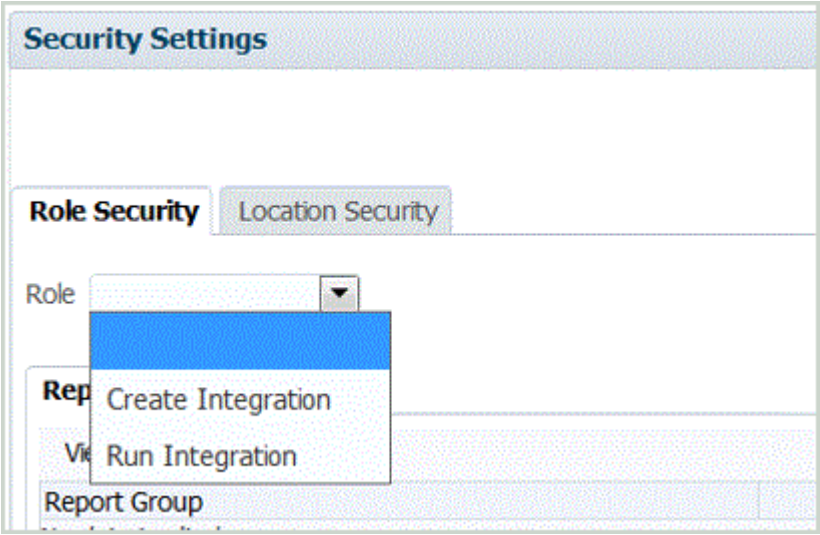
Role Level Security

Data Management security enables service administrators and power users to customize user access to user interface functions using the concept of roles. Roles are permissions that grant user access to functions. In Data Management, 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 Application Management. 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.

The role category determines the display of functions associated with the selected role. A list of roles is described below.



4. Select either the **Report** tab or **Batch** tab.
5. In **Select**, select the function to assign to the role.

   For information on assigning role security to report groups, see Defining Report Security.

   For information on assigning role security to batch groups, see Defining Batch Security.
6. Click **Save**.

Table 2-7 Role and Descriptions

Role	Description
Create Integration	Creates Data Management metadata and data load rules.
Run Integration	Runs Data Management data rules and fills out runtime parameters. Can view transaction logs.

Defining Report Security

Report security enables you to assign reports to a selected type group, which in turn, is assigned to a role. The role has access to all report in the groups at execution time.

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

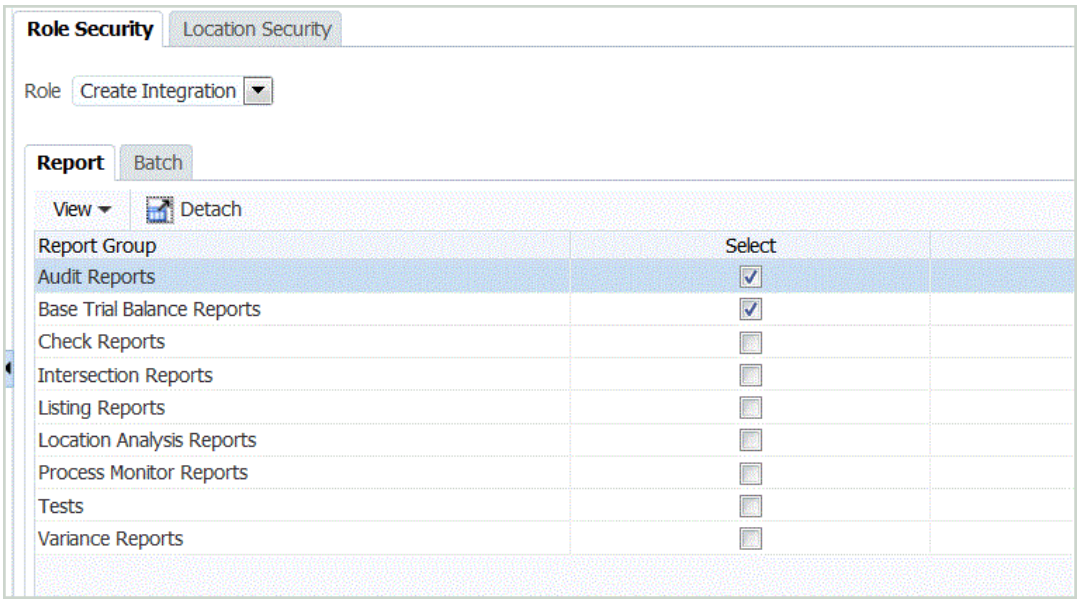
To add report level security:

1. On the **Setup** tab, under **Configure**, select **Security Settings**.
2. In **Role**, select the role to which to assign the report security.

   Available roles:

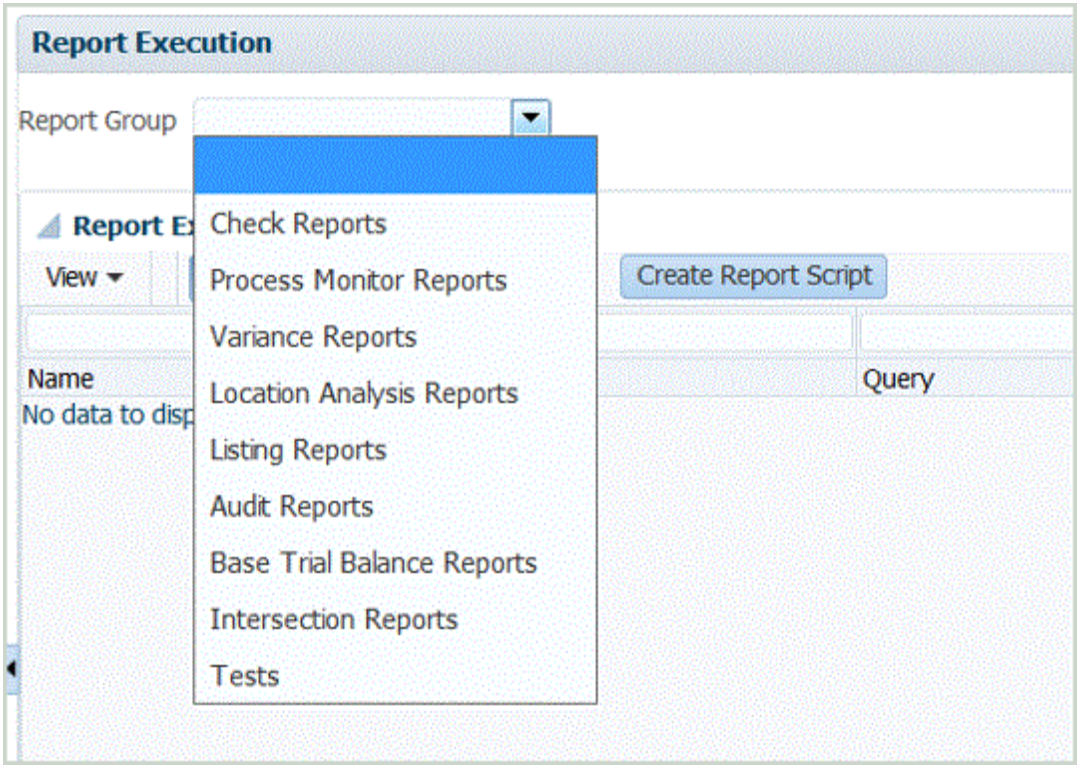
   - Create Integration—Creates Data Management metadata and data load rules
   - Run Integration—Runs Data Management and fills out runtime parameters. Can view transaction logs.

3. Select the **Report** tab.
4. In **Report Group**, in the **Select** field, select the report group to which to assign report security.



5. Click **Save**.

When a user selects the **Reports Execution**, the list of available reports in the **Report Groups** drop down is based on reports selected in role security.



Defining Batch Security

Batch security enables you to assign batch to a selected type group, which in turn, is assigned to a role. The role has access to all batches in the groups at execution time.

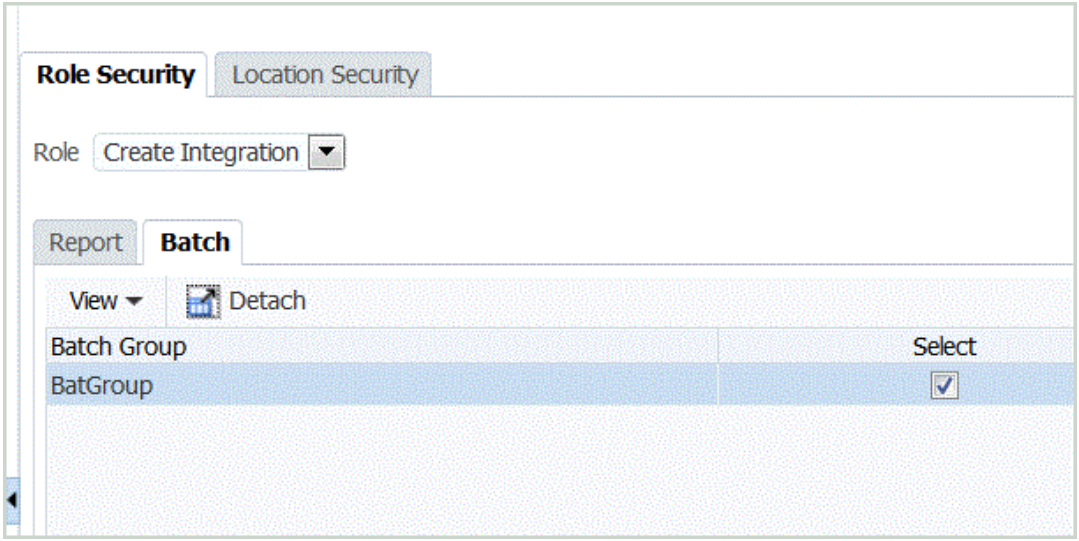
To define batch security, you assign batches of a selected type to a group (see Adding a Batch Group). Next you assign the batch group to a role. The role has access to all batches in the groups at execution time.

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.

   Available roles:

   - Create Integration—Creates Data Management metadata and data load rules
   - Run Integration—Runs Data Management and fills out runtime parameters. Can view transaction logs.
3. Select the **Batch** tab.



4. In **Batch Group**, from **Select**, select the batch group to which to assign batch security.
5. Click **Save**.

   When a user selects the **Batch Execution**, the list of available reports in the **Batch Groups** is based on batches selected in role security.

Defining Location Security

User access to locations is determined by location security. You define the user groups to create for each location.

Location security (user access to locations) for Data Management 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** option 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 Application Management.

   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, Data Management determines the groups assigned to the user.

   Based on the name of the group, Data Management 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.

   > **Note:**
   >
   > Underscore is not supported in the prefix or suffix for group names.
6. In the **Suffix** field, select the name of the function or rule that the user is provisioned to access.

   > **Note:**
   >
   > Underscore is not supported in the prefix or suffix for group names.

For example, specify:

- Run Integration role
- Create Integration role

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
   - Run Integration

   By default, only Service Administrators and Power Users can access Data Management to work on the data integration process.

   To enable users with the User or Viewer identity domain role to participate in the integration process, Service Administrators and power users can grant the following Data Management roles to them.

   - Create Integration—Uses Data Management to create mappings to integrate data between source and target systems. Users can define data rules with various run time options.
   - Run Integration From Data Management—Executes data rules with runtime parameters and views execution logs.

   For information on available roles, see Role Level Security.

8. Click **Save**.
9. To create user 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

> **Note:**
>
> Starting with the September (23.09) update, the user interface pages for Source Systems will no longer be available in Data Management, but will be available in Data Integration. Data Integration is available now from the Data Exchange card from the home screen in the Oracle Fusion Cloud Enterprise Performance Management Business Process. Users will be able access the Source Systems features in the current Cloud EPM update from the **Data Integration** user interface by selecting the **Actions** drop down, then **Applications**, and then selecting the **Configure Connections** icon
> (
>
>). For more information, see Configuring Source Connections in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

Data Management supports only file-based source systems. Before you begin using Data Management, you must register the source system.

1. Register a source system.

   See Registering File-Based Source Systems.

2. Edit source system settings as necessary. See Editing Registered Source System Details.

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

> **Note:**
>
> For information on viewing Data Management processes or jobs, see Viewing Process Details.

Registering File-Based Source Systems

Use this procedure to register a file-based source system to use in Data Management.

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.

> **Note:**
>
> You must manually create a source system and initialize it, before artifacts (such as the import format, or location) that use the source system are imported. You must manually create a source system and initialize it, before artifacts (such as the import format, or location) that use the source system are imported using Migration import.

To add a file-based 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 **File** as the source system type.
   d. In **Drill Through URL**, enter the URL hyperlink for the drill through link by specifying the protocol identifier and resource name.

      Drill through is the navigation from a value in one data source to corresponding data in another file-based source system. Use drill through when you are working on data in EPM applications and want to understand the source of a data value.

      The protocol identifier indicates the name of the protocol used to fetch the resource. The Hypertext Transfer Protocol (HTTP) serves up the hypertext documents. HTTP is just one of many various protocols used to access different types of resources. Another protocol is file.

      The resource name is the complete address to the resource. The format of the resource name depends entirely on the protocol used, but for many protocols, including HTTP, the resource name contains one or more of the following components:

      - Host Name—Specify the name of the machine on which the resource lives.
      - File Name—The path name to the file on the machine.
      - Port Name—The port number to which to connect (typically optional).

      For example, specify `http://machinename.us.server.com:portnumber`

      For more information about defining a drill through, see Using 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 source system, you can select the source system in the table, and the details are displayed in the lower pane.

Registering Oracle ERP Cloud Source Systems

When integrating applications, such as Oracle General Ledger or Budgetary Control created in the Oracle ERP Cloud with an Oracle Fusion Cloud Enterprise Performance Management application, you first create and register the source system specifying the application type **Oracle ERP Cloud**.

To add an Oracle ERP Cloud application as 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.

      Enter the name you want to use for the application, such as "General Ledger" or "Fusion Budgetary Control".

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

   c. In **Source System Type**, select **Oracle ERP Cloud**.

      If you want to register an Oracle General Ledger application as a source system, leave the **Fusion Budgetary Control** field unchecked.

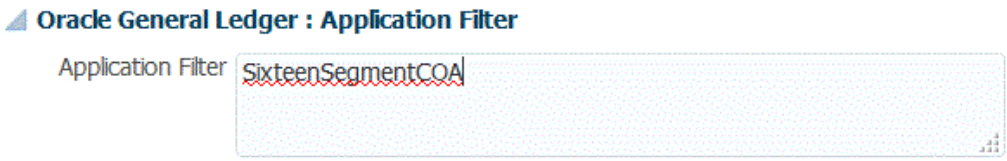
      If you want to register an Budgetary Control application as a source system, check the **Fusion Budgetary Control** field.

   d. In **Application Filter**, specify any filter(s) conditions to limit the number of applications returned when you initialize the source system.

      You can specify a single filter condition or multiple filter conditions. If you use multiple filter conditions, separate each filter by a comma (,).

      When you specify an application name as a filter, you can use the full Oracle General Ledger or Budgetary Control application name, wild card, or a wild card for a single character as shown below.

      - GeneralLedgerVision (Full Name)
      - VF* (Wild Card)
      - VF??COA (Wild Card for single char_)

      When you run the initialize process, the system imports all the applications that match the filter condition. If no filter is provided, all applications are imported.

   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. Click **Configure Source Connection**.

   The source connection configuration is used to store the Oracle ERP Cloud user name and password. It also stores the WSDL connection for the same.

5. In **User Name**, enter the Oracle ERP Cloud user name.

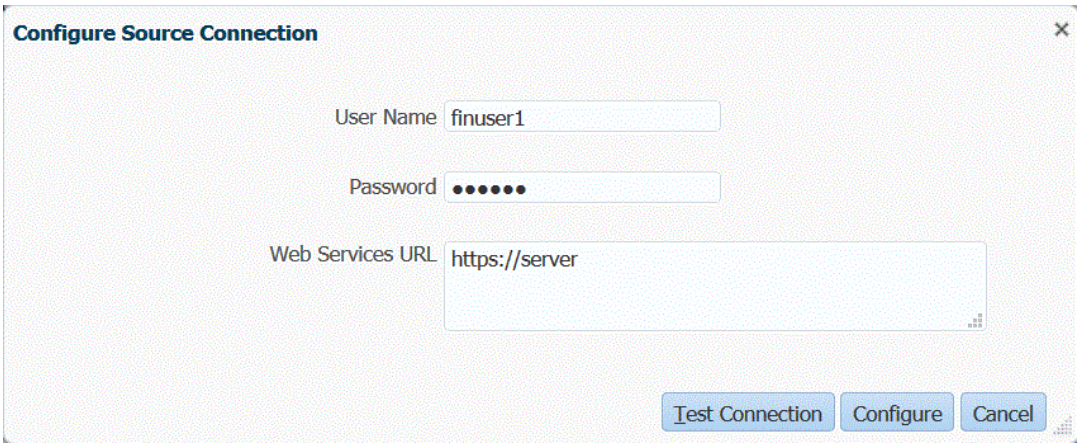
   Enter the name of the Oracle ERP Cloud user who launches the process requests to send information between the Cloud EPM and the General Ledger. This user must be assigned a General Ledger job role such as "Financial Analyst," "General Accountant," or "General Accounting Manager."

> **Note:**
>
> Web services requires that you use your native user name and password and not your single sign-on user name and password.

6. In **Password**, enter the Oracle ERP Cloud password.

   You must update this password anytime you change your Oracle ERP Cloud password.

7. In **Web Services URL**, enter the server information for the Fusion web service. For example, enter `https://server`.



   For customers using release 19.01 and earlier of the Oracle ERP Cloud, use the old WSDL to make the connection and then specify the URL in the following format:

   If you are use a release URL format version earlier than R12, then replace the "fs" with **fin** in the URL from the one that is used to log on into the Web Services URL.

   If you are use a release URL format version later than R12, replace the "fs" with "**fa**" in the URL from the one that is used to log or simply copy and paste the server from the one that is used to log on into **Web Services URL**.

8. Click **Configure**.

   The confirmation "Source system [*source system name*] has been configured successfully" is displayed.

9. On the **Source System** screen, click **Initialize**.

   Initializing the source system fetches all metadata needed in Data Management, 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.

   The initialize process may take a while, and you can watch the progress in the job console.

10. Click **Save**.

    After you add a source system, 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 Data Management.

> **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, 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.
4. Click **Save**.

Adding File-Based Data Load Definitions

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

Data Management creates a file-based data load system automatically. If you 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.

      For more information about a file-based drill through, see Using 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.

Registering Target Applications

> **Note:**
>
> Starting with the September (23.09) update, the user interface pages for Target Application will no longer be available in Data Management, but will be available in Data Integration. Data Integration is available now from the Data Exchange card from the home screen in the Oracle Fusion Cloud Enterprise Performance Management Business Process. Users will be able access the Target Applications features in the current Cloud EPM update from the **Data Integration** user interface by selecting the **Actions** drop down, and then **Applications**.
>
> For more information, see Registering Applications in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

Target applications enable Data Management to be used as a primary gateway to integrate data between different source systems and target applications. In this way, you can deploy local Cloud EPM applications, business process instance to business process instance deployments (cloud to cloud applications), custom applications, and generic data source entities into your existing EPM portfolio. The process to integrate source applications with target applications provides data visibility, integrity, and verification systems.

The following application types describe the types of target application that can be used:

- local—This application type refers to a local EPM application (on-premise deployment) in the current service.

  You might use the integration to import data from existing on-premise ERP applications or synchronize data between on-premise EPM applications.

  For example, Oracle Hyperion Financial Management customers can add Planning data, or a Planningcustomer can add more Planning applications. In addition, this integration enables you to write back from a cloud to an on-premise application or other external reporting applications.
- Cloud—This application type refers to a service instance that uses a remote service to integrate data. A business process instance is a self-contained unit often containing the

web server and the database application. In this case, connection information must be selected between the two business process instances.

This feature enables EPM customers to adapt cloud deployments into their existing EPM portfolio including

- Planning Modules
- Planning
- Financial Consolidation and Close
- Profitability and Cost Management
- Tax Reporting

Also see Using Data Management with Multiple Cloud EPM Deployments.

- Data Source—Refers to generic source and target entities that use the specific data model of the source or target applications.

  For example, NSPB Sync SuiteApp Save Search Results objects and Oracle Human Capital Management Cloud extracts are considered data source applications.

- Dimension— Refers to the class of dimension or dimension type of a target application when loading metadata. When you add a dimension, Data Management creates six-dimension applications automatically: Account, Entity, Custom, Scenario, Version, and Smartlist.

  For more information on adding a dimension class or type as a target application, see Registering a Target Application for the Class of Dimension or Dimension Type.

To register a target application:

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. In **Target Application**, in the summary grid, click **Add**, and then select the type of deployment.

   Available options are **Cloud** (for a Cloud deployment), **Local** (for an on-premise deployment) or **data source** (for Oracle NetSuite or Oracle HCM Cloud deployments.)

   For a Cloud deployment, go to step 3.

   For a Local deployment, go to step 4.
3. To register a Cloud deployment, select **Cloud** and then complete the following steps on the EPM Cloud Credentials screen:

   a. In **URL**, specify the service URL that you use to log on to your service.

   b. In **User name**, specify the user name for the Cloud Service application.

   c. In **Password**, specify the password for the Cloud Service application.

   d. In **Domain**, specify the domain name associated with the Cloud Service Application.

      An identity domain controls the accounts of users who need access to service instances. It also controls the features that authorized users can access. A service instance belongs to an identity domain.

> **Note:**
>
> Administrators can update the domain name that is presented to the user, but Data Management requires the original domain name that was provided when the customer signed up for the service. Alias domain names cannot be used when setting up Cloud EPM connections from Data Management.

e. From **Type**, specify the type of application, and click **OK**.

   Valid application types:

   - Planning
   - Essbase
   - Consolidation
   - Tax Reporting

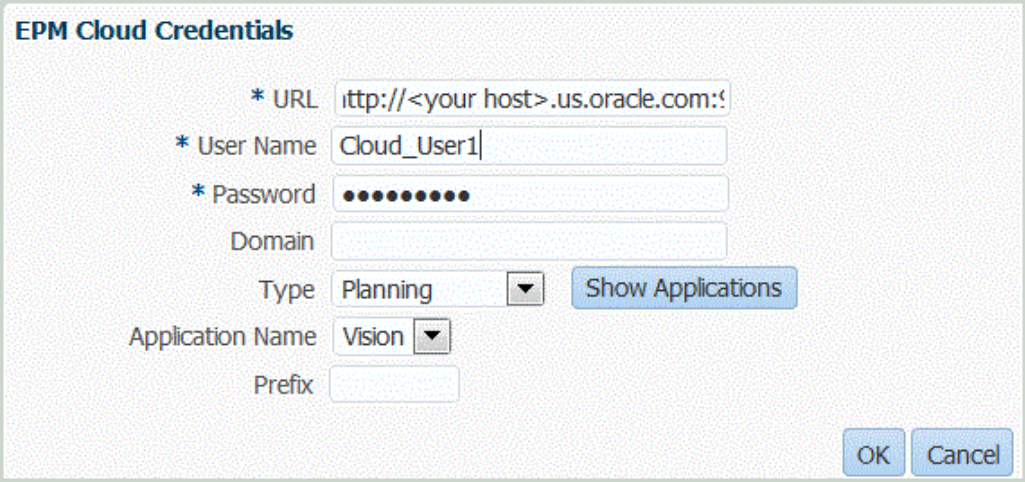
   You can also click **Show Applications** and select the application.

f. In **Application Name**, enter the application name.

g. To register a target application with the same name as an existing target application, in **Prefix**, specify a prefix to make the name unique.

   The prefix name is joined to the existing target application name. For example, if you want to name a demo target application the same name as the existing "Vision" application, you might assign the **Demo** prefix to designate the target application with a unique name. In this case, the Data Management joins the names to form the name **DemoVision**.

h. Click **OK**.



4. Click **OK**.
5. In **Application Details**, enter the application name.
6. Click **OK**.
7. Click **Refresh Members**.

   To refresh metadata and members from theCloud EPM, you must click **Refresh Members**.

8. Click **Save**.

9. Define the dimension details.

   Optional: If not all dimensions are displayed, click **Refresh Metadata**.

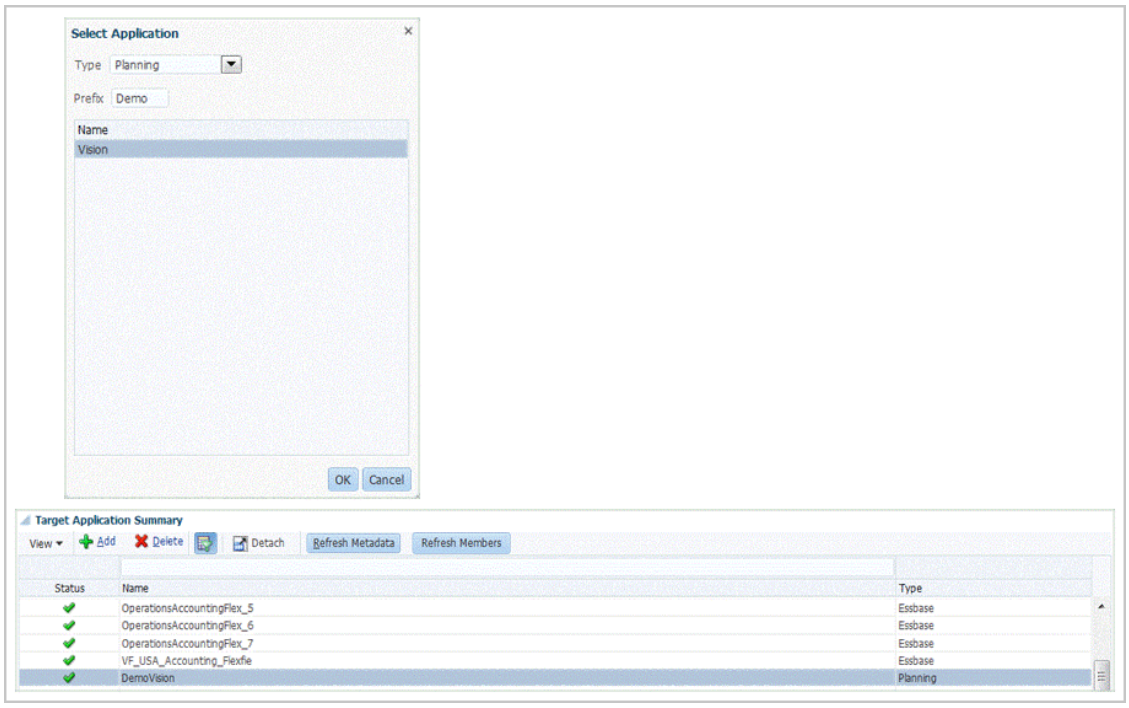
10. Select the application options.

> **Note:**
>
> For Financial Consolidation and Close application options, see Defining Application Options for Financial Consolidation and Close.

Reusing Target Application Names Multiple Times

Data Management supports the registration of target applications with the same name. You might use this feature when you have multiple service environments and the application name is the same in each environment, or the application names are identical in development and production environments. This feature enables you to add a prefix to the application name when registering the application so that it can be registered successfully in Data Management and can be identified correctly in the list of target applications.

In the following example, the user has selected the target application name "Vision" and prefixed it with the name "Demo." The result is a new target application with the name "DemoVision."



A target application with a prefix is not backward compatible and cannot be migrated to a 17.10 or earlier release. Only a target application without a prefix name can be migrated to an earlier release.

For information on adding a prefix, see Registering Target Applications.

Creating a Data Export File

The data export to file feature enables you to export data from an Oracle Fusion Cloud Enterprise Performance Management application to a data file. You can use the data file to load data into an ERP application or an external system.

When creating a data export to file application, note the following:

- When dimensions are created, the order of the column in the data file is used to assign the column order. The first column in file is assigned ACCOUNT data column.
- It is recommended that you export only a year at a time. If date ranges cross a year boundary, data may be duplicated.
- Data Rule—The POV category is not validated.
- Data Load Mapping—Target values are not validated for data export to file applications.
- Data Load Execution—When the option to export the data file is enabled, Data Management creates an output data file. The name of the data file is `<Target App Name>_<Process ID>.dat`, and it is written to the `<APPL ROOT FOLDER>/outbox` directory. You can access the data file from the Process Details page from the `OUTPUT file` column.

  When the data load rule is executed, Data Management exports the data.
- Check Rules can be created from a data export file. Check rules cannot be based on target values.
- Write-back is not applicable from data export files.
- In this release, only numeric data types are supported.
- The custom target application option is still available for exporting production data to external systems. Data Management supports both the custom target and data export to file application options. Eventually, the data export to file option will supersede the custom target application option due to its enhanced functions and capabilities.

  The data export to file option is largely backward compatible with the file format of the custom target application option, but small differences exist, which may cause regression issues.

  For this reason, you are urged to migrate your existing custom target applications to Data Export to File applications. To do this, select the **System Maintenance** process called the **Upgrade Custom Application** option, which can be run for one custom application or all. See Upgrade Custom Applications for more information.

  The Upgrade Custom Application process converts existing custom applications to the file formats used by the data export to file option. It retains all the existing setup. When the custom target applications have been converted, you can run same data rule as before. Before using the conversion program, reconcile any differences in the file formats. For example, the header row in the data export to file option contains the name of the dimension and not UD1, UD2 etc.

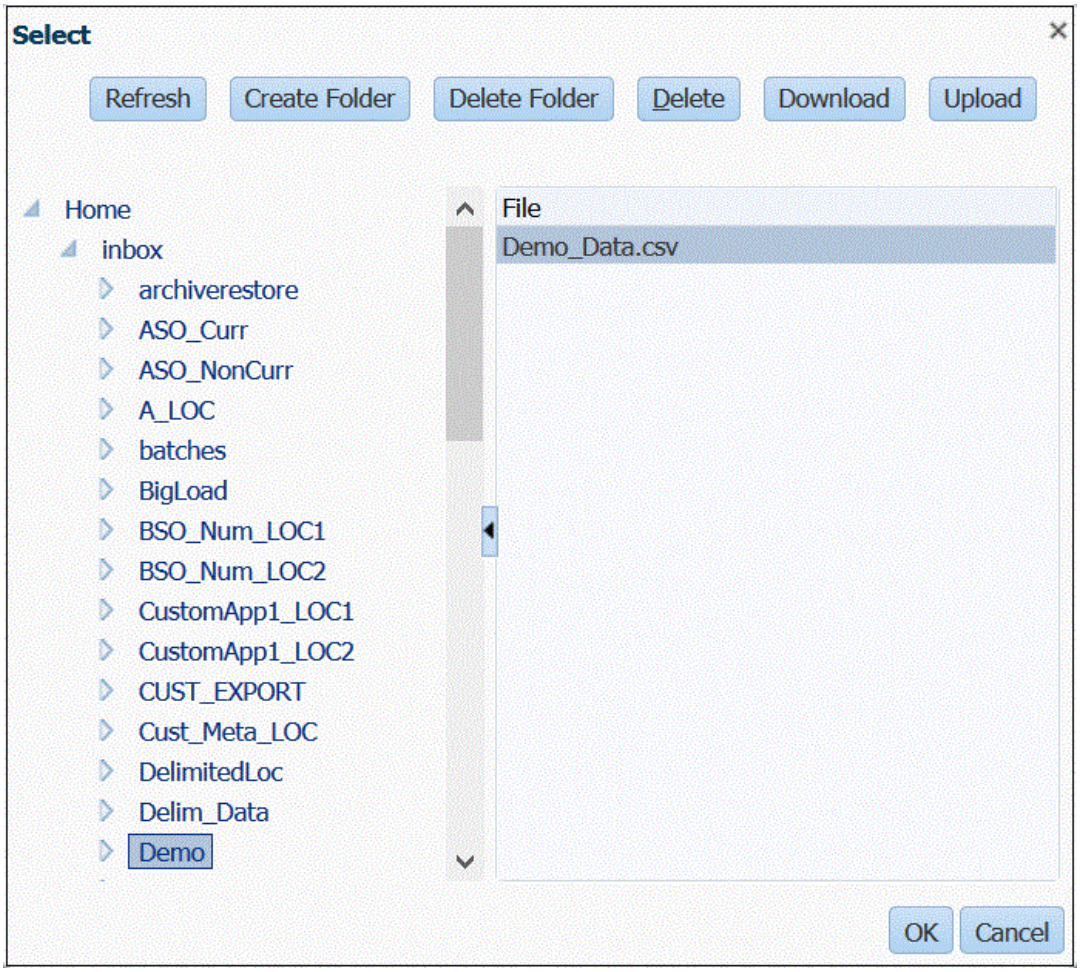
To define a data export to file target application:

1. Create a .CSV file with the list of columns in the order that you want exported.

> **Note:**
>
> Do not include the Amount column in the data file. If its included, you can delete it after the application is created.

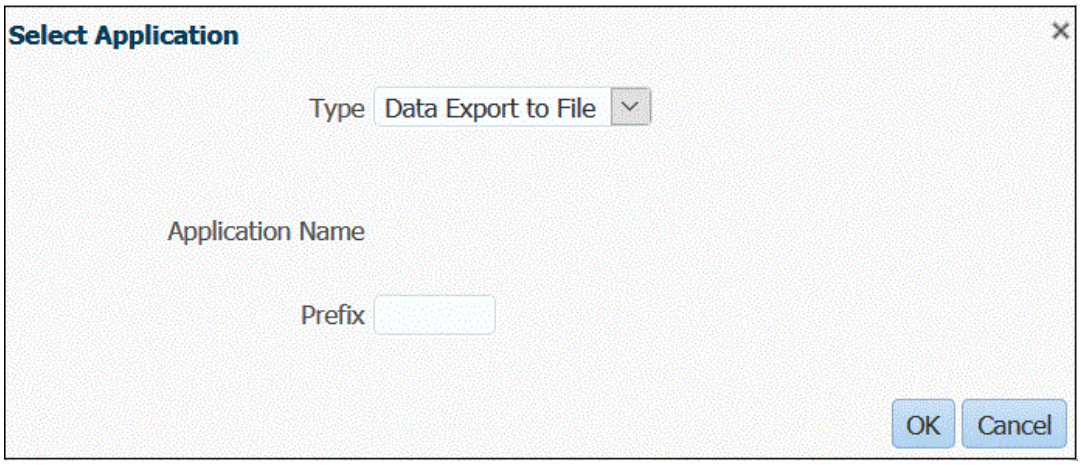
The name of the file is the name of the application so name the file appropriately.

2. On the **Setup** tab, under **Register**, select **Target Application**.
3. In the **Target Application** summary grid, click **Add**.
4. Select **Local** target application.
5. From **Select Application**, select **Data Export to File**.
6. From the **Select** screen, select the name of the source file.



7. To register a target application with the same name as an existing target application, in **Prefix**, specify a prefix to make the name unique.

   The prefix name is joined to the existing target application name. For example, if you want to name a demo target application the same name as the existing "Vision" application, you might assign the **Demo** prefix to designate the target application with a unique name. In this case, Data Management joins the names to form the name **DemoVision**.



8. Click **OK**.

   The system registers the application.

9. In **Application Details**, select the **Dimension Details** tab.

10. Edit the **Dimension Name** and **Data Column Name** as needed.

11. 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 Data Management first processes the mapping for Account dimension, followed by Product, and then by Entity.

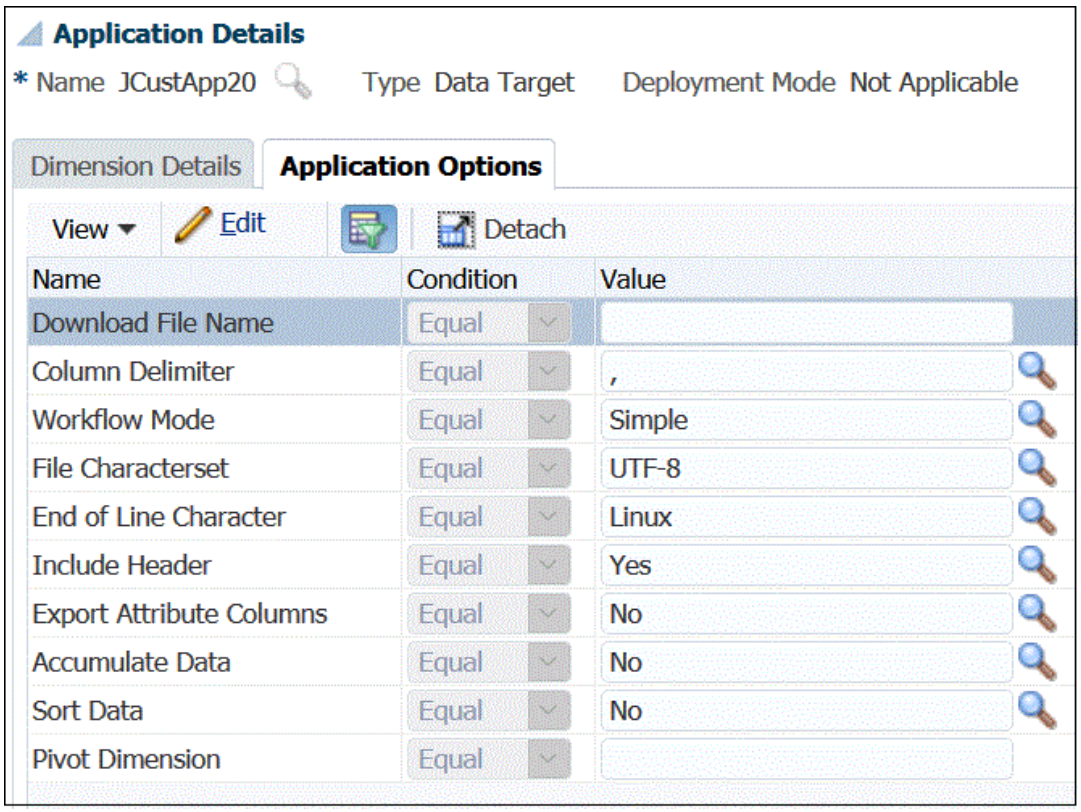
12. In **Column Order**, specify the order of each column in the data export file.

    By default, Data Management assigns the "Account" dimension as the first column in the order.

13. Click **Save**.

14. Click the **Application Options** tab, and select any applicable properties and values for the data export file.

    For more information about data export to file properties, see Data Export to File Properties.



15. Click **Save**.
16. From **Setup**, then **Integration Setup**, and then **Import Format**, create an import format based on the source type that you want to load to the target application.

    The import format defines the layout of source data.

    For more information, see Defining Import Formats for File-Based Mappings.
17. From **Setup**, then **Integration Setup**, and then **Location**, define the location to specify where to load data.

    For more information, see Defining Locations.
18. From **Setup**, **Integration Setup**, and then **Period Mapping**, define any periods.

    You define period mappings to map your source system data to Period dimension members in the target application. You can define period mappings at the Global, Application, and Source System levels.

    For more information, see Defining Period Mappings.

    For information on loading multiple periods for file-based data, see Loading Multiple Periods for Cloud EPM or File-Based Source Systems.
19. From **Setup**, then **Integration Setup**, and then **Category Mapping**, define any categories to map source system data

    For more information, see Defining Category Mappings.
20. From **Workflow**, then **Data Load**, and then **Data Load Mapping**, define data load mapping to map source dimension members to their corresponding target application dimension members.

    You define the set of mappings for each combination of location, period, and category to which you want to load data.

For more information, see Creating Member Mappings.

21. From **Workflow**, then **Data Load**, and then **Data Load Rule**, define a data load rule for a specific location and category. The data rule determines the data imported from the source system.

    For more information, see Defining Data Load Rule Details for a File-Based Source System.

    You check the box labeled "import from source" so that you can look at the data and the mapped results in the workbench prior to loading the data from the source system. After everything is confirmed, additional data imports can be loaded to the workbench and exported to the Cloud EPM application in the same step.

22. Execute the data load rule to define the options for running the data load rule.

    You can execute the data load rule for one or more periods. You then verify that the data was imported and transformed correctly, and then export the data to the target application.

    See the following data load rule topics:

    - Executing data load rules—Running Data Load Rules.
    - Schedule data load rules—Scheduling Data Load Rules.

Data Export to File Properties

Use the following options when defining the data export to file application:

Filter	Description
Download File Name	Enter the name of the output file. You can use EPM Automate to download the output file. The EPM Automate Utility enables Service Administrators to remotely perform Oracle Fusion Cloud Enterprise Performance Management tasks. For more information, see *Working with EPM Automate*.
Column Delimited	Select the character to use for delimiting columns in the output file. Available column delimiters are: • , • | • ! • ; • : The default delimiter is a comma (,).

Filter	Description
Workflow Mode	Select the data workflow method. Available options: • Full—Data is processed in the TDATASEG_T table and then copied to the TDATASEG table. All four Workbench processes are supported (Import, Validate, Export, and Check) and data can be viewed in the Workbench. Drill-down is supported. • Full No Archive—Data is processed in the TDATASEG_T table and then copied to TDATASEG table. All four Workbench processes are supported (Import, Validate, Export, and Check). Data can be viewed in the Workbench but only after the import step has been completed. Data is deleted from TDATASEG at the end of the workflow process. Drill-down is not supported • Simple— Data is processed in the TDATASEG_T table and then exported directly from the TDATASEG_T. table. All data loads include both the import and export steps. Data is not validated and any unmapped data result in load failure. Maps are not archived in TDATAMAPSEG. Data cannot be viewed in the Workbench. Drill-down is not supported. The Simple Workflow Mode is the default mode.
File Character Set	Specify 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. UTF-8 is the default file character set.

Filter	Description
End of Line Character	Select the operating system of the server associated with the End Of Line (EOL) character. Valid options are • Windows • Linux indicates end of line. Some text editors like Notepad will not display files using Linux EOL correctly. An EOL character indicates the end of line. Some text editors like Notepad do no display files using the Linux EOL correctly. For Cloud EPM, Data Management uses the Linux EOL character as the defaults. When customers views exported files in Windows, the EOL shows on a single line.
Include Header	Determines whether to include/exclude the header record in the output file. Select **Yes** to include the dimension name in the header record. The default is **Yes.** Select **No** to exclude the header record.
Export Attribute Columns	Include attribute columns if you have some static values to include in the export or file. You can also use attribute columns if you don't have a requirement to map the source values. This will minimize the need to define data load mapping. Select **Yes** to include attribute columns. Select **No** to exclude attribute columns.
Accumulate Data	Summarizes Account data before export and groups the results by one or more column. Select **Yes** to group the results by one or more columns. Select **No** to not group the results by one or more columns. The default value is **Yes**.
Sort Data	Determine if data is sorted based on the column order or not. Select **Yes** to include columns. Select **No** to exclude columns.
Pivot Dimension	Pivoting changes the orientation of the data in the export file enabling you to aggregate the results and rotate rows into columns. When you pivot between rows and columns, the system moves the selected dimension to the outermost row or column on the opposite axis. To use this feature, specify one dimension name from the export file.

Creating a Custom Target Application

Create a custom target application that enables you to extract data from the Oracle Fusion Cloud Enterprise Performance Management, and then push the data into a flat file instead of loading it to a Cloud EPM application.

You can define the custom target application with required dimensionality. Instead of exporting the data to a target application, Data Management generates a data file that can be loaded to an external system using a custom process.

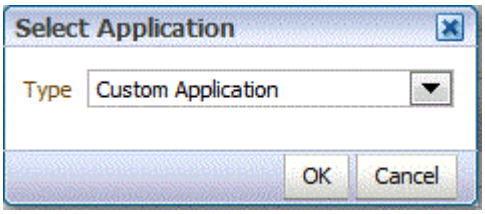
When creating a custom target application, note the following:

- 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 application 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.
- Data Rule—The POV category is not validated.
- Data Load Mapping—Target values are not validated for custom applications.
- Data Load Execution—Data Management creates an output data file. The name of the data file is `<Target App Name>_<Process ID>.dat`, and it is written to the `<APPL ROOT FOLDER>/outbox` directory. You can access the data file from the Process Details page from the `OUTPUT file` column.

  When the data load rule is executed, Data Management exports the data.
- To extract data from a Cloud EPM application with Data Management, the Period dimension must be set to "dense." The only exception is the Financial Consolidation and Close, where the account dimension is set to "dense" instead of the Period dimension.
- Check Rules can be created from a custom target application. 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. In **Target Application**, in the **Target Application** summary grid, click **Add**.
3. Select **Local** target application.
4. From **Select Application**, select **Custom Application**, and then click **OK**.



5. In **Application Details**, enter the application name.
6. Select the **Dimension Details** tab.
7. Specify the **Dimension Name**.

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

9. 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.

10. 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 Data Management first processes the mapping for Account dimension, followed by Product, and then by Entity.

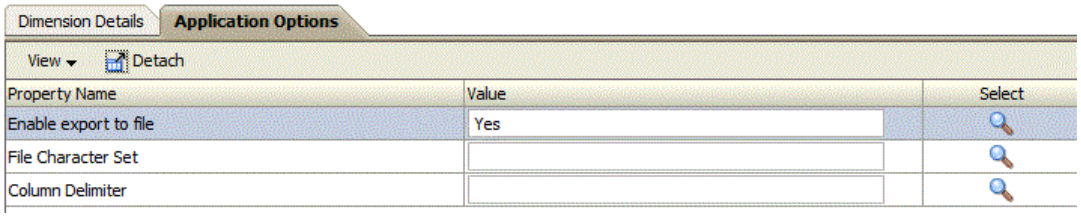
11. In **Prefix Dimension for Duplicates**, enable or check (set to **Yes**) to prefix member names by the dimension name.

    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 are across dimensions.

    If the application supports duplicate members and Prefix Dimension for Duplicates is disabled or unchecked (set to **no**), then the user must specify the fully qualified member names. Refer to the Essbase documentation for the fully qualified member name format.

    > **Note:**
    >
    > Planning does not support duplicate members.

12. Click **Application Options**.



13. In **Enable export to file**, select **Yes** to have Data Management 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.

14. 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.

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

    Available column delimiters are:

    - ,
    - |
    - !
    - ;
    - :

16. In **File Name to Download**, enter the file name to copy.

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

17. Click **Save**.

Adding Lookup Dimensions

Lookup dimensions can be created and assigned with data columns for target applications, and are used for mapping and reference.

Lookup dimensions can only be used in Data Management 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.

   > **Note:**
   >
   > The data table column name value must be a user-defined dimension greater than the selected target dimension. For example, if the application has four custom dimensions, select **UD5**.

7. Click **OK**.

   The lookup dimension is added to the dimension detail list with the target dimension class name of "LOOKUP." To use the lookup dimension as a source dimension, make sure you map it in the import format.

Defining Application Dimension Details

Dimension details differ for each application type. For selected application types, you can 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. Select the **Dimension Details** tab.
3. 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 Oracle Essbase applications, you must specify the appropriate dimension class for Account, Scenario, and Period. For Oracle Hyperion Public Sector Planning and Budgeting applications, you must specify the dimension class for Employee, Position, Job Code, Budget Item, and Element.

   For information on Financial Consolidation and Close application dimensions, see Financial Consolidation and Close Supported Dimensions.
4. **Optional**: Click **Refresh Metadata** to synchronize the application metadata from the target application.
5. 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.
6. 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 Data Management first processes the mapping for Account dimension, followed by Product, and then by Entity.
7. **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.

   When you select a dimension in which to a create a drill-region, you can design 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.

   Select the Create Drill Region option if you want to include the dimension in the Drill Region data slice definition. When the dimension is selected during the data load process, the system builds the data slice by including the unique list of values for each of the dimension.

> **Note:**
>
> The Drill Region simply defines the cells for which the drill icon is enabled in the Data Forms and SmartView. It is recommended to use a minimum set of dimensions to define the drill region. If a large number of dimensions are included in the drill region, then the size of the drill region becomes large and consumes system resources every time a form is rendered. For Planning applications, use dimensions with small number of members like Scenario, Year, Period, Version to define the drill region. For an Financial Consolidation and Close application, use only the Data Source for defining the drill region.

If you want to define a more granular drill region with multiple dimensions, then use the Calculation Manager Drill Region page to edit the region definition. You can use member functions like iDescendants to define the region instead of individual members. You can access the drill region by selecting **Navigate** and then **Rules**. Then click **Database Properties** and expand the application and select the cube. Right click and select **Drill Through Definition**. Edit only the **Region** definition and do not modify the XML content. If you edit the drill region manually, set the **Drill Region** option to **No** in **Application Options**.

8. Click **Save**.

   The target application is ready for use with Data Management.

> **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. (Click to toggle the filter row.) Then, enter the text to filter.

Defining Application Options for Planning

Define application and dimension details for Planning applications.

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

To define application options for 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 Oracle 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.
5. Click **Save**.

Table 2-8 Planning Application Options and Descriptions

Option	Description
Load Method	Select the method for loading data: • Numeric—Loads numeric data only. Planning data security is not enforced with this method. • all data types with security— Loads Numeric, Text, Smartlist, Date data types. If the Planning administrator loads data, Planning data security *is not* enforced. If a Planning non-administrator user loads data, then Planning data security is enforced.
Batch Size	Specify the batch size used to write data to file. The default size is 10,000.
Drill Region	Select `Yes`, to create a drill region. A drillable region is created to use the drill through feature. **Note:** Data Management does not support drilling through to human resource data. When loading data from Data Management, the drill region is loaded to Planning data. Data Management creates drill region by scenarios. For any cube (Planning plan types or Planning databases), the name of the drill region is FDMEE_<name of the scenario member>. When creating the drill region, Data Management checks if a dimension is enabled for the drill. Members of enabled dimensions selected in data loads, are included in the drill region filter. If no dimensions are enabled, the following dimensions are enabled by default: Scenario, Version, Year, and Period. You can enable additional dimensions, and the subsequent data load considers members of newly enabled dimensions. If you disable any dimensions which were previously included in a drill region used for drill creation, members of such dimensions are not deleted during the subsequent data loads. If needed, you can remove obsolete members manually. For more information about drill through, see Using Drilling Through.

Table 2-8 (Cont.) Planning Application Options and Descriptions

Option	Description
Enable Drill from Summary	Select **Yes** to drill down from summary members in a Planning data form or report and view the detail source data that make up the number. After enabling this option and loading the data with the Create Drill Region option set to **Yes**, the Drill icon is enabled at the summary level. Drill is limited to 1000 descendant members for a dimension. **Note:** If you Enable Summary Drill, do not include the dimension you want to drill from the Parent Members in the drill region definition. If you absolutely need to include this dimension, then disable the auto drill region creation and then maintain the drill region manually using Calculation Manager user interface. Use Essbase member function like Descendants to enumerate the members you want to include in the drill region. Summary drill is available for local service instances only. It is not available between cross service instances or hybrid deployments.
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.
Date Format	Use the date format based on the locale settings for your locale. For example, in the United States, enter the date using the format MM/DD/YY format.

Table 2-8 (Cont.) Planning Application Options and Descriptions

Option	Description
Data Dimension for Auto-Increment Line Item	Select the data dimension that matches the data dimension you specified in Planning. Used for loading incremental data using a LINEITEM flag. See Loading Incremental Data using the LINEITEM Flag to an Cloud EPM Application.
Driver Dimension for Auto-Increment Line Item	Select the driver dimension that matches the driver dimension you specified in Planning. Used for loading incremental data using a LINEITEM flag. See Loading Incremental Data using the LINEITEM Flag to an Cloud EPM Application.
Member name may contain comma	If the member name contains a comma, and you are loading data to one of the following services, set this option to **Yes**, and then load the data: • Planning Modules • Planning • Financial Consolidation and Close • Tax Reporting
Workflow Mode	Select the data workflow method. Available options: • Full—Data is processed in the TDATASEG_T table and then copied to the TDATASEG table. All four Workbench processes are supported (Import. Validate, Export, and Check) and data can be viewed in the Workbench. Drill-down is supported. The Full Workflow Mode is the default mode. • Full No Archive—Data is processed in the TDATASEG_T table and then copied to TDATASEG table. All four Workbench processes are supported (Import, Validate, Export, and Check). Data can be viewed in the Workbench but only after the import step has been completed. Data is deleted from TDATASEG at the end of the workflow process. Drill-down is not supported • Simple— Data is processed in the TDATASEG_T table and then exported directly from the TDATASEG_T. table. All data loads include both the import and export steps. Data is not validated and any unmapped data result in load failure. Maps are not archived in TDATAMAPSEG. Data cannot be viewed in the Workbench. Drill-down is not supported.

Table 2-8 (Cont.) Planning Application Options and Descriptions

Option	Description
Enable Data Security for Admin Users	Enables data validation when an administrative user loads data. In this case, all data validations in the data entry form are enforced while loading data. Due to the enhanced validations, the performance of data load will be slower. When the 'Enable Data Security for Admin Users' is set to **No** (default value), then data loads by the administrator are performed using the Outline Load Utility (OLU). In this case, performance is faster but you are unable to get a detailed error report for any rows that are ignored for any reason. **Note:** When running any of the Workforce Incremental rules (for example, OWP_INCREMENTAL PROCESS DATA WITH SYNCHRONIZE DEFAULTS), ensure that the target option **Enable Data Security for Admin Users** is set to **No**. This option can only be set by an administrator. When this option is set to **Yes**, data is validated for administrator and non-administator data loads in the same manner. Validations include: security checks, intersection validations, read-only cells, dynamic calc cells, etc. In addition, a detailed error list for any rows that are rejected or ignored is available and no additional Planning permissions are needed. However, performance may be slower even for administrators.

Table 2-8 (Cont.) Planning Application Options and Descriptions

Option	Description
Display Validation Failure Reasons	Enables you to report rejected data cells and the rejection reason when you load data in a data validation report. Select **Yes** to report rejected data cells and the rejected reason. The limit for the number of rejections reported is 100. The data validation report is available for download from the Process Details page by clicking the Output link. In addition a copy of the error file is stored in the `Outbox` folder. Select **No** to not report rejected data cells and the rejection reason.
Drill View from Smart View	Specify the custom view of columns from the Workbench when displaying customized attribute dimension member names in Oracle Smart View for Office drill-through reports. Custom views are created and defined in the Workbench option in Data Integration. When the custom view has been defined and then specified in the Drill View from Smart View field, in Smart View you can click the drill-through cell and select Open as New Sheet, and the drill-through report opens based on the view defined in the Workbench. If no views are defined on the Application Options page, the default view is used, meaning that attribute dimensions do not display customized member names in Smart View. For more information, see Defining a Custom View in the Workbench
Default Import Mode	Sets the default import mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Append • Replace
Default Export Mode	Sets the default export mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Accumulate (Add Data) • Replace • Merge Data (Store Data) • Subtract

Defining Application Options for Essbase

Define application and dimension details for Oracle Essbase applications.

To define application options for Essbase:

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.
5. Click **Save**.

Table 2-9 Essbase Application Options and Descriptions

Option	Description
Load Method	Select the method for loading data: • Numeric—Loads numeric data only. Planning data security is not enforced with this method. • all data types with security— Loads Numeric, Text, Smartlist, Date data types. If the Planning administrator loads data, Planning data security *is not* enforced. If a Planning non-administrator user loads data, then Planning data security is enforced. Data is loaded in chunks of 500K cells.
Batch Size	Specify the batch size used to write data to file. The default size is 10,000.

Table 2-9 (Cont.) Essbase Application Options and Descriptions

Option	Description
Drill Region	Select **Yes** to create a drill region. A drillable region is created to use the drill through feature. **Note:** Data Management does not support drilling through to human resource data. When loading data from Data Management, the drill region is loaded to Planning data. Data Management creates drill region by scenarios. For any cube (Planning plan types or Planning databases, the name of the drill region is FDMEE_<name of the scenario member>. When creating the drill region, Data Management checks if a dimension is enabled for the drill. Members of enabled dimensions selected in data loads, are included in the drill region filter. If no dimensions are enabled, the following dimensions are enabled by default: Scenario, Version, Year, and Period. You can enable additional dimensions, and the subsequent data load considers members of newly enabled dimensions. If you disable any dimensions which were previously included in a drill region used for drill creation, members of such dimensions are not deleted during the subsequent data loads. If needed, you can remove obsolete members manually. For more information about defining drill regions, see the "Drill Through URL" option in Registering File-Based Source Systems, and "Drill URL" option in Adding Import Formats.

Table 2-9 (Cont.) Essbase Application Options and Descriptions

Option	Description
Enable Drill from Summary	Select **Yes** to drill down from summary members in a Planning data form or report and view the detail source data that make up the number. After enabling this option and loading the data with the Create Drill Region option set to **Yes**, the Drill icon is enabled at the summary level. Drill is limited to 1000 descendant members for a dimension. **Note:** Summary level drill downs are not available for the Scenario, Year, and Period dimensions. For these dimensions, you must perform a drill through on the leaf members. Summary drill is available for local service instances only. It is not available between cross service instances or hybrid deployments.
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.

Table 2-9 (Cont.) Essbase Application Options and Descriptions

Option	Description
Workflow Mode	Select the data workflow method. Available options: • Full—Data is processed in the TDATASEG_T table and then copied to the TDATASEG table. All four Workbench processes are supported (Import, Validate, Export, and Check) and data can be viewed in the Workbench. Drill-down is supported. The Full Workflow mode is the default mode. • Full No Archive—Data is processed in the TDATASEG_T table and then copied to TDATASEG table. All four Workbench processes are supported (Import. Validate, Export, and Check). Data can be viewed in the Workbench but only after the import step has been completed. Data is deleted from TDATASEG at the end of the workflow process. Drill-down is not supported • Simple— Data is processed in the TDATASEG_T table and then exported directly from the TDATASEG_T. table. All data loads include both the import and export steps. Data is not validated and any unmapped data result in load failure. Maps are not archived in TDATAMAPSEG. Data cannot be viewed in the Workbench. Drill-down is not supported.

Table 2-9 (Cont.) Essbase Application Options and Descriptions

Option	Description
Enable Data Security for Admin Users	Enables data validation when an administrative user loads data. In this case, all data validations in the data entry form are enforced while loading data. Due to the enhanced validations, the performance of data load will be slower. When the 'Enable Data Security for Admin Users' is set to **No** (default value), then data loads by the administrator are performed using the Outline Load Utility (OLU). In this case, performance is faster but you are unable to get a detailed error report for any rows that are ignored for any reason. **Note:** When running any of the Workforce Incremental rules (for example, OWP_INCREMENTAL PROCESS DATA WITH SYNCHRONIZE DEFAULTS), ensure that then target option **Enable Data Security for Admin Users** is set to **No**. This option can only be set by an administrator. When this option is set to **Yes**, data is validated for administrator and non-administator data loads in the same manner. Validations include: security checks, intersection validations, read-only cells, dynamic calc cells, etc. In addition, a detailed error list for any rows that are rejected or ignored is available and no additional Planning permissions are needed. However, performance may be slower even for administrators.

Table 2-9 (Cont.) Essbase Application Options and Descriptions

Option	Description
Display Validation Failure Reasons	Enables you to report rejected data cells and the rejection reason when you load data in a data validation report. Select **Yes** to report rejected data cells and the rejected reason. The limit for the number of rejections reported is 100. The data validation report is available for download from the Process Details page by clicking the Output link. In addition a copy of the error file is stored in the `Outbox` folder. Select **No** to not report rejected data cells and the rejection reason.
Drill View from Smart View	Specify the custom view of columns from the Workbench when displaying customized attribute dimension member names in Oracle Smart View for Office drill-through reports. **Note:** When drilling into Smart View, Data Integration uses the last used view on the Drill landing page. If no last used view is found, Data Integration uses the default view selection in this setting Custom views are created and defined in the Workbench option in Data Integration. When the custom view has been defined and then specified in the Drill View from Smart View field, in Smart View you can click the drill-through cell and select Open as New Sheet, and the drill-through report opens based on the view defined in the Workbench. If no views are defined on the Application Options page, the default view is used, meaning that attribute dimensions do not display customized member names in Smart View. For more information, see Defining a Custom View in the Workbench

Table 2-9 (Cont.) Essbase Application Options and Descriptions

Option	Description
Default Import Mode	Sets the default import mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Append • Replace
Default Export Mode	Sets the default export mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Accumulate (Add Data) • Replace • Merge Data (Store Data) • Subtract

Defining Application Options for Financial Consolidation and Close

Define application and dimension details for Financial Consolidation and Close applications.

To define Financial Consolidation and Close application options:

1. On the **Setup** tab, under **Register**, select **Target Application**.
2. In the **Target Application** summary grid, select an Financial Consolidation and Close target application.
3. After defining the application details in **Application Detail**, select the **Application Options** tab.
4. Complete the application options as needed.
5. Click **Save**.

Table 2-10 Financial Consolidation and Close Application Options and Descriptions

Option	Description
Load Type	Defaults to "Data" for loading numeric data only.
Journal Status	The journal status indicates the current state of the journal. The status of a journal changes when you create, submit, approve, reject, or post the journal. Available options: • Working—Journal is created. It has been saved, but it may be incomplete. For example, more line items may need to be added. • Posted—Journal adjustments are posted to the database.

Table 2-10 (Cont.) Financial Consolidation and Close Application Options and Descriptions

Option	Description
Journal Type	Select the type of journal to load. Available options: • Auto-Reversing—Loads an auto-reversing journal that contains adjustments that need to be reversed in the next period. That is, the journal posts in the next period by reversing the debit and credit. • Regular—Load journals using the Replace mode, which clears all data for a journal label before loading the new journal data.
Journal Post As	Select the method for posting journal entries: Available options: • Journal-to-date—A Journal-to-Date journal entry carries forward from period to period, from the first instance of the journal entry, including a carry-forward across any intervening year-ends. The only difference between a Journal-to-Date entry and a Year-to-Date entry is that in the first period of each year, the data from Journal-to-Date entries in the last period of the prior year are reversed. For Year-to-Date entries, there are no reversals in the first period of any year. • Periodic—When you select the View member FCCS_Periodic, when the journal entries are posted, the data entered to the line detail is summarized and posted to the Consol cube based on the line detail POV. The data from one posted journal entry does not overwrite the data written from other posted journal entries. • Year-to-date—When you select the View member FCCS_YTD_Input, you can enter a year-to-date amount in the line detail debit / credit fields. A Year-to-Date journal entry must contain year-to-date entries on all detail lines. When Year-to-Date journal entries are posted, the appropriate periodic impact on the POV across the entries is calculated and then accumulated with any accumulation from posted Periodic journal entries In the first period of any year, the year-to-date View data is the same as Periodic data. In the first period of any year, the year-to-date View data is the same as Periodic data. In subsequent periods, the periodic calculated data posted to the Periodic View member for each unique POV equals the current period year-to-date entries accumulated across all Year-to-Date journal entries, minus the prior period year-to-date entries accumulated across all Year-to-Date journal entries.

Table 2-10 (Cont.) Financial Consolidation and Close Application Options and Descriptions

Option	Description
Create 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 Data Management. 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 Zero Loading	Select **Yes** to load 0 values during a multiple period load.

Table 2-10 (Cont.) Financial Consolidation and Close Application Options and Descriptions

Option	Description
Enable Data Security for Admin Users	Enables data validation when an administrative user loads data. In this case, all data validations in the data entry form are enforced while loading data. Due to the enhanced validations, the performance of data load will be slower. When the 'Enable Data Security for Admin Users' is set to **No** (default value), then data loads by the administrator are performed using the Outline Load Utility (OLU). In this case, performance is fast but you are unable to get a detailed error report for any rows that are ignored for any reason. **Note:** When running any of the Workforce Incremental rules (for example, OWP_INCREMENTAL PROCESS DATA WITH SYNCHRONIZE DEFAULTS), ensure that then target option **Enable Data Security for Admin Users** is set to **No**. This option can only be set by an administrator. When this option is set to **Yes**, data is validated for administrator and non-administator data loads in the same manner. Validations include: security checks, intersection validations, read-only cells, dynamic calc cells, etc. In addition a detailed error list for any rows that are rejected or ignored is available and no additional Planning permissions are needed. However, performance may be slower even for administrators.

Table 2-10 (Cont.) Financial Consolidation and Close Application Options and Descriptions

Option	Description
Enable Drill from Summary	Select **Yes** to drill down from summary members in a Planning data form or report and view the detail source data that make up the number. After enabling this option and loading the data with the Create Drill Region option set to **Yes**, the Drill icon is enabled at the summary level. Drill is limited to 1000 descendant members for a dimension. **Note:** Summary level drill downs are not available for the Scenario, Year, and Period dimensions. For these dimensions, you must perform a drill through on the leaf members. Summary drill is available for local service instances only. It is not available between cross service instances or hybrid deployments.
Movement	Specify the movement dimension that indicates the automated cash flow reporting dimension used through hierarchies and system calculations. By default, the system provides members in the Movement dimension to maintain various types of cash flow data, and FX to CTA calculations. If no movement, then specify as **FCCS_No Movement**. Otherwise, select the desired movement member. Example of Movement Dimension Members: • FCCS_No Movement • FCCS_Movements • FCCS_OpeningBalance • FCCS_ClosingBalance
Multi-GAAP	Specify the multi-GAAP dimension used to report your financial statements in both local GAAP and in IFRS or another GAAP. This dimension tracks the local GAAP data input as well as any GAAP adjustments.
Data Source	Specify the data source dimension. The default value is "FCCS_Managed Source."

Table 2-10 (Cont.) Financial Consolidation and Close 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.
Member name may contain comma	If the member name contains a comma, and you are loading data to one of the following services, set this option to **Yes**, and then load the data: • Planning Modules • Planning • Financial Consolidation and Close • Tax Reporting
Workflow	Select the data workflow method. Available options: • Full—Data is processed in the TDATASEG_T table and then copied to the TDATASEG table. All four Workbench processes are supported (Import, Validate, Export, and Check) and data can be viewed in the Workbench. Drill-down is supported. The Full Workflow mode is the default mode. • Full No Archive—Data is processed in the TDATASEG_T table and then copied to TDATASEG table. All four Workbench processes are supported (Import. Validate, Export, and Check). Data can be viewed in the Workbench but only after the import step has been completed. Data is deleted from TDATASEG at the end of the workflow process. Drill-down is not supported • Simple— Data is processed in the TDATASEG_T table and then exported directly from the TDATASEG_T. table. All data loads include both the import and export steps. Data is not validated and any unmapped data result in load failure. Maps are not archived in TDATAMAPSEG. Data cannot be viewed in the Workbench. Drill-down is not supported.

Table 2-10 (Cont.) Financial Consolidation and Close Application Options and Descriptions

Option	Description
Drill View from Smart View	Specify the custom view of columns from the Workbench when displaying customized attribute dimension member names in Oracle Smart View for Office drill-through reports. **Note:** When drilling into Smart View, Data Integration uses the last used view on the Drill landing page. If no last used view is found, Data Integration uses the default view selection in this setting Custom views are created and defined in the Workbench option in Data Integration. When the custom view has been defined and then specified in the Drill View from Smart View field, in Smart View you can click the drill-through cell and select Open as New Sheet, and the drill-through report opens based on the view defined in the Workbench. If no views are defined on the Application Options page, the default view is used, meaning that attribute dimensions do not display customized member names in Smart View. For more information, see Defining a Custom View in the Workbench
Default Import Mode	Sets the default import mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Append • Replace
Default Export Mode	Sets the default export mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Accumulate (Add Data) • Replace • Merge Data (Store Data) • Subtract

Financial Consolidation and Close Supported Dimensions

Financial Consolidation and Close uses a pre-defined dimensional model. You can add custom dimensions to meet your consolidation and reporting requirements. Below are the Financial Consolidation and Close dimensions and their data requirements.

> **Note:**
>
> In addition to the system predefined dimensions, you can create up to four additional Custom dimensions based on your application needs. Custom dimensions are associated with the Account dimension and provide additional detail for accounts. If the application is enabled with the Multi-GAAP reporting option, you can create three Custom dimensions.

Dimension	Member
Year	All members in the Year dimension The Year member is prefixed with " FY." For example, the Year member 2016 shows as "FY16."
Period	Only base members
View	The View dimension controls the representation of data across time periods. Valid views are "YTD" or "PTD." For periodic data, the member "FCCS_Periodic" is used, and for YTD, "FCCS_YTD_Input" is used.
Currency	Shows the members available under the reporting currency parent using the parent member "Input Currency."
Consolidation	The Consolidation dimension enables the users to report on the details used to perform the various stages of the consolidation process. Members are associated with "FCCS_Entity Input."
Scenario	Scenario contains the following members: • Actual • Budget (optional) • Forecast
Entity	All base members
Intercompany	"FCCS_No Intercompany" or ICP_<ENTITY>. If there is no intercompany value, "FCCS_No Intercompany" is used. Otherwise for an intercompany member, the ICP_<ENTITY> format is used.
Account	All base members

Dimension	Member
Movement	No Movement All base members under FCCS_Mvmts_Subtotal including: • FCCS_No Movement • FCCS_No Movement • FCCS_Movements • FCCS_OpeningBalance • FCCS_ClosingBalance
Data Source	FCCS_Managed Data
Multi GAAP	All base members including: • IFRS (system) • Local GAAP (system) • IFRS Adjustments (system) The default is " FCCS_Local GAAP. "
Custom1	All base members that are a valid intersection for the account. This dimension is based on the domain of the custom dimension. If no member, use "No_<Dimension Name>."
Custom2	All base members that are a valid intersection for the account. This dimension is based on the domain of the custom dimension. If no member, use "No_<Dimension Name>."
Custom3	All base members that are a valid intersection for the account. This dimension is based on the domain of the custom dimension. If no member, use" No_<Dimension Name>".
Custom4	All base members that are a valid intersection for the account. This dimension is based on the domain of the custom dimension. If no member, use "No_<Dimension Name>".

Loading Financial Consolidation and Close Exchange Rates

When you define a data rule for a Financial Consolidation and Close target application, you can specify how you want Data Management to extract exchange rates.

For Financial Consolidation and Close, the dimensionality of the exchange rates are:

- Period
- Average Rate
- Ending Rate
- Scenario
- Year
- View
- Entity

- From Currency
- To Currency
- Rates Essbase cube name

For example a sample Financial Consolidation and Close application file may have the following values:

```
Period,FCCS_Average Rate,FCCS_Ending Rate,Point-of-View, Data Load Cube Name
Jan,0.2927,1.9549,"Actual,FY14,FCCS_Periodic,FCCS_Global
Assumptions,From_CNY,USD",Rates
Jan,2.4584,0.7007,"Actual,FY14,FCCS_Periodic,FCCS_Global
Assumptions,From_COP,USD",Rates
Jan,1.6824,0.6465,"Actual,FY14,FCCS_Periodic,FCCS_Global
Assumptions,From_DKK,USD",Rates
Jan,2.9578,2.7619,"Actual,FY14,FCCS_Periodic,FCCS_Global
Assumptions,From_GBP,USD",Rates
Jan,1.2788,2.2206,"Actual,FY14,FCCS_Periodic,FCCS_Global
Assumptions,From_CAD,USD",Rates
```

Based on the first row, exchange rates are applied as follows:

- Jan (Period)
- 0.2927 (value for FCCS_Average Rate)
- 1.9549 (value for FCCS_Ending Rate)
- Actual (Scenario)
- FY14 (Year)
- FCCS_Periodic (View)
- FCCS_Global Assumptions (Entity)
- From_CNY (From currency)
- USD (To Currency)
- Rates (Cube name)

For Import Formats, the default exchange rate types applies to two members: "FCCS_Average Rate" for the average rate, and "FCCS_Ending Rate" for the ending rate.

In this case, you create an import format with the rate cube as the target, and then map the source data file to this cube.

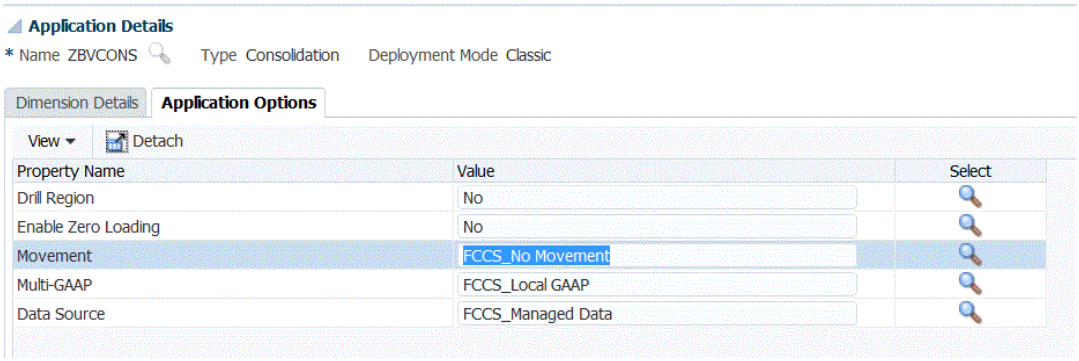
In the import format, the following dimensions are available for mapping:

- Average Rate (Value)
- Ending Rate (Value)
- View
- Entity
- From Currency

Other dimensions are mapped from the selected POV or set in the target application option. It is recommended that you map the target member for "View" to" FCCS_Periodic", and "Entity" to "FCCS_Global Assumptions."

To load exchange rates to Oracle Hyperion Financial Management:

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. Specify the members for the following dimensions:
   - Movement
   - Multi GAAP
   - Data Source



5. From **Movement**, select the member value for the movement dimension.

   Available options:
   - FCCS_Movements
   - FCCS_CashChange
6. In **Multi GAAP**, select the member value for the multi-GAAP.
7. In **Data Source**, select the member value for the data source.
8. Click **Save**.

Defining Application Options for Tax Reporting

Define application and dimension details for Tax Reporting applications.

To define Tax Reporting application options:

1. On the **Setup** tab, under **Register**, select **Target Application**.
2. In the **Target Application** summary grid, select an Tax Reporting target application.
3. After defining the application details in **Application Detail**, select the **Application Options** tab.
4. Complete the application options as needed.
5. Click **Save**.

Table 2-11 Tax Reporting Application Options and Descriptions

Option	Description
Load Type	Defaults to "Data" for loading numeric data only.

Table 2-11 (Cont.) Tax Reporting Application Options and Descriptions

Option	Description
Create Drill Region	Select **Yes** to create a drill region. A drill region enables you to navigate from data in the Tax Reporting application to its corresponding source data. Data Management loads enabled drill regions to the Tax Reporting target application after data is loaded and consolidated. A cell is considered drillable in the target application when it is associated with the drill regions defined in the application. Data Management creates drill region by scenarios. For any cube, the name of the drill region is FDMEE_<name of the scenario member>. Data Management also checks if a dimension is enabled for the drill. Members of enabled dimensions selected in data loads, are included in the drill region filter. If no dimensions are enabled, the following dimensions are enabled by default: Scenario, Version, Year, and Period. You can enable additional dimensions, and the subsequent data load considers members of newly enabled dimensions. If you disable any dimensions which were previously included in a drill region used for drill creation, members of such dimensions are not deleted during the subsequent data loads. If needed, you can remove obsolete members manually. To disable the drill region, select **No**.

Table 2-11 (Cont.) Tax Reporting Application Options and Descriptions

Option	Description
Enable Drill from Summary	Select **Yes** to drill down from summary members in a Planning data form or report and view the detail source data that make up the number. After enabling this option and loading the data with the Create Drill Region option set to **Yes**, the Drill icon is enabled at the summary level. Drill is limited to 1000 descendant members for a dimension. **Note:** Summary level drill downs are not available for the Scenario, Year, and Period dimensions. For these dimensions, you must perform a drill through on the leaf members. Summary drill is available for local service instances only. It is not available between cross service instances or hybrid deployments.
Movement	Specify the movement dimension member that indicates the automated cash flow reporting dimension used through hierarchies and system calculations. The dimension member can be any valid base member. By default, the system provides members in the Movement dimension to maintain various types of cash flow data, and FX to CTA calculations. If no movement, then specify the member as "FCCS_No Movement." Otherwise, select the desired movement member. • TRCS_BookClosing • TRCS_TBClosing • FCCS_No Movement • FCCS_ClosingBalance • TRCS_TARFMovements • TRCS_ETRTotal • TRCS_ClosingBVT

Table 2-11 (Cont.) Tax Reporting Application Options and Descriptions

Option	Description
Multi-GAAP	Specify the multi-GAAP dimension used to report your financial statements in both local GAAP and in IFRS or another GAAP. This dimension tracks the local GAAP data input as well as any GAAP adjustments.
Datasource	Specify the data source dimension. The default value is "FCCS_Managed Source."
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.

Table 2-11 (Cont.) Tax Reporting Application Options and Descriptions

Option	Description
Enable Data Security for Admin Users	Enables data validation when an administrative user loads data. In this case, all data validations in the data entry form are enforced while loading data. Due to the enhanced validations, the performance of data load is slower. **Note:** When running any of the Workforce Incremental rules (for example, OWP_INCREMENTAL PROCESS DATA WITH SYNCHRONIZE DEFAULTS), ensure that then target option **Enable Data Security for Admin Users** is set to **No**. This option can only be set by an administrator. When this option is set to **Yes**, data is validated for administrator and non-administator data loads in the same manner. Validations include: security checks, intersection validations, read-only cells, dynamic calc cells, etc. In addition, a detailed error list for any rows that are rejected or ignored is available and no additional Planning permissions are needed. However, performance may be slower even for administrators. When this options is set to **No** (default value), then data loads by the administrator are performed using the Outline Load Utility (OLU). In this case, performance is faster but you are unable to get a detailed error report for any rows that are ignored for any reason.
Jurisdiction	Specify the jurisdiction dimension. Any valid base member. The default member is "TRCS_No Jurisdiction."

Table 2-11 (Cont.) Tax Reporting Application Options and Descriptions

Option	Description
Member name may contain comma	If the member name contains a comma, and you are loading data to one of the following services, set this option to **Yes**, and then load the data: • Planning Modules • Planning • Financial Consolidation and Close • Tax Reporting
Workflow Mode	Select the data workflow method. Available options: • Full—Data is processed in the TDATASEG_T table and then copied to the TDATASEG table. All four Workbench processes are supported (Import, Validate, Export, and Check) and data can be viewed in the Workbench. Drill-down is supported. The Full Workflow mode is the default mode. • Full No Archive—Data is processed in the TDATASEG_T table and then copied to TDATASEG table. All four Workbench processes are supported (Import, Validate, Export, and Check). Data can be viewed in the Workbench but only after the import step has been completed. Data is deleted from TDATASEG at the end of the workflow process. Drill-down is not supported • Simple— Data is processed in the TDATASEG_T table and then exported directly from the TDATASEG_T. table. All data loads include both the import and export steps. Data is not validated and any unmapped data result in load failure. Maps are not archived in TDATAMAPSEG. Data cannot be viewed in the Workbench. Drill-down is not supported.

Table 2-11 (Cont.) Tax Reporting Application Options and Descriptions

Option	Description
Drill View from Smart View	Specify the custom view of columns from the Workbench when displaying customized attribute dimension member names in Oracle Smart View for Office drill-through reports. **Note:** When drilling into Smart View, Data Integration uses the last used view on the Drill landing page. If no last used view is found, Data Integration uses the default view selection in this setting Custom views are created and defined in the Workbench option in Data Integration. When the custom view has been defined and then specified in the Drill View from Smart View field, in Smart View you can click the drill-through cell and select Open as New Sheet, and the drill-through report opens based on the view defined in the Workbench. If no views are defined on the Application Options page, the default view is used, meaning that attribute dimensions do not display customized member names in Smart View. For more information, see Defining a Custom View in the Workbench
Default Import Mode	Sets the default import mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Append • Replace
Default Export Mode	Sets the default export mode when you execute a data load rule in Data Management or run an integration in Data Integration. Available options: • Accumulate (Add Data) • Replace • Merge Data (Store Data) • Subtract

Tax Reporting Supported Dimensions

Tax Reporting uses a pre-defined dimensional model. Below are the Tax Reporting dimensions and their data requirements.

Table 2-12 Tax Reporting Supported Dimensions

Dimension	Member	Description
Year	All members in the Year dimension	Year members include the FY prefix. For example, the year member "2016" is defined as FY16.
Period	Only base members	Standard period members and user defined.
View	FCCS_Periodic	The View dimension is not exposed in the Data Management user interface. (The system defaults to the view dimension to the member named" FCCS_Periodic.")
Currency	All enabled Currency members created under the parent member "Input Currency" and "Entity Currency."	Standard ISO currency members. This dimension is only available when the target Tax Reporting application has been set up as multi-currency.
Consolidation	"FCCS_Entity Input"	The Consolidation dimension allows you to report on the details used to perform the various stages of the consolidation process. The default member should be mapped to "FCCS_Entity Input." You can also load different override amounts and rates for different source members by location using the **Consolidation Value** option in Locations. See Defining Locations.
Scenario	All base members.	Standard user defined scenario members.
Entity	All base members	
Intercompany	"FCCS_No Intercompany" or ICP_<ENTITY>.	If no intercompany, then use the member "FCCS_No Intercompany." Otherwise, use a user defined ICP member, which is typically ICP_<ENTITY>.
Account	All base members	Any user defined based member.

Table 2-12 (Cont.) Tax Reporting Supported Dimensions

Dimension	Member	Description
Movement	FCCS_No Movement, or any base member.	If no movement, then specify member as "FCCS_No Movement. " Otherwise, select the desired movement member. Example of movement dimension members: • TRCS_BookClosing • TRCS_TBClosing • FCCS_No Movement • FCCS_ClosingBalance • TRCS_TARFMovements • TRCS_ETRTotal • TRCS_ClosingBVT
Data Source	All base members for "FCCS_Data Input"	The default is " FCCS_Managed Data."
Multi GAAP	"FCCS_Local GAAP" or any user defined base member.	The default is "FCCS_Local GAAP." You can also use base a member provided by Tax Reporting.
Jurisdiction	Any valid base member. The default member is "TRCS_No Jurisdiction."	The default member is "TRCS_No Jurisdiction," but you can select any valid base member.

Loading Tax Reporting Exchange Rates

Tax Reporting exchange rates include two default members associated with rate types. The default member for average rates is "FCCS_Average Rate." The default member for ending rate is "FCCS_Ending Rate."

The import format enables you to map the following dimensions for mapping:

- Average Rate (Value)
- Ending Rate (Value)
- View
- Entity
- From Currency
- To Currency

Additionally, map the target member for "View" to "FCCS_Periodic" and "Entity" to "FCCS_Global Assumptions."

> **Note:**
>
> Drill through functionality is not supported for exchange rates data.

Defining Application Options for Profitability and Cost Management

Profitability and Cost Management uses an Essbase cube for data storage. Dimensions and members are also created in Essbase and imported into Profitability and Cost Management.

For information on Essbase application options, see Defining Application Options for Essbase.

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 also removed.

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**.

Executing Business Rules When Loading Data

Runs business rules that perform calculations, aggregations or copies data to another Plan Type if the rules are registered in the target application.

You can execute a business rule that runs a calculation script or a business rule that runs a Groovy script. For more information on designing and creating business rules, see Designing Business Rules in the *Designing with Calculation Manager*.

Watch this tutorial video to learn more about calculating incrementally loaded data using Groovy rules:

Calculating Incrementally Loaded Data in Data Management using Groovy Rules.

Note the following:

- Business rules are registered in the Target Application option.
- Business rules are available only for Planning applications.
- Business rules with run time prompts are not supported when executed from Data Management

  .

- Business rules are executed only when you select the data load method as "all data type". They are not executed for numeric data only.

  Using the all data type load method, you can load data files that support the following data types to Planning:

  – numbers

  – text

  – Smartlists

  – Date

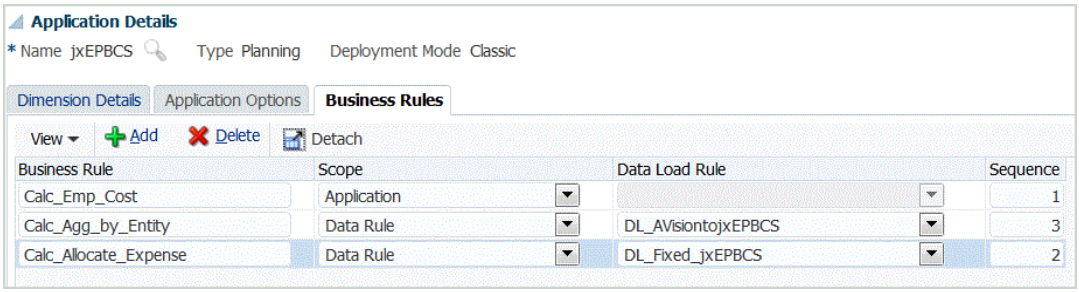
  For more information, see All Data Types Data Loads.

- Business rules can be assigned an Application scope or to a specific data load rule.

Adding Business Rules

Add business rules in Data Management to a Planning target application.

1. On the **Setup** tab, under **Register**, select **Target Application**.
2. Select a Planning target application.
3. Click the **Business Rules** tab.



4. In **Rule name**, specify the name of the business rule that has been defined for the script.
5. From **Script Scope**, select which type of business rule script is processed and executed first. The scope can be at the application or data rule level.

   Available scopes:

   - Application
   - Data Rule

   Consider the following when selecting the script scope:

   - If the scope of one or more rules is **Application**, then they are all run in sequential order.
   - If the scope is **Data Rule**, only rules for the running data rule run in sequential order.
   - The **Application** scope rules does not run if a **Data Rule** scope exists for the data load rule. However, if you run another rule against the same target application, then the **Application** scope rule runs.

   If the script scope is a data rule, select the specific data load rule from the **Data Load Rule** drop-down.

6. From **Data Load Rule**, select the specific data load rule in which you want to run the script.

   The Data Load Rule is disabled when the script scope is "Application."

7. In **Sequence**, specify the numeric order in which to execute a script if multiple scripts are to be executed and if scripts are at one script scope level (such as only data rules, or only applications).
8. Click **Save**.

Loading Data Using an Incremental File Adapter

The Incremental File Adapter feature enables you to compare a source data file with a prior version of the source data file and identify new or changed records and then load only that data set. You can sort the initial source data file before making the comparison or provide a pre-sorted file for better performance.

To use this feature, you register an initial source data file as an incremental file adapter. The initial source data file is used as the template. Actual data loads are run from the file designated in the data rule where a file comparison is run between the initial source data file and a subsequent file. You can load once, twice or many times thereafter. The last run file becomes the basis against which the subsequent load is evaluated. The adapter loads only the differences, which leads to a faster load during the file import. The remaining data import processes stay the same as in a standard data load for a file.

Considerations:

- The source data file must be a delimited data file.
- Data files used must contain a one-line header, which describes the delimited columns.
- Both numeric and non-numeric data can be loaded.
- Any deleted records between the two files is ignored. In this case, you must handle the deleted records manually.
- If the file is missing (or you change the last ID to a non-existent run), the load completes with an error.
- Sort options determine the level of performance using this feature. Sorting increases the processing time. Pre-sorting the file makes the process faster.
- Only single period data loads are supported for an incremental load. Multi-period loads are not supported.
- Drill down is not supported for incremental loads since incremental files are loaded in Replace mode and only the last version of the file comparison is present in the staging table.

  As a workaround, you can load the same data file to another location using the full data load method. In this case, you should import data only and not export it to the target application.
- Copies of the source data file are archived for future comparison. Only the last 5 versions are retained. Files are retained for a maximum of 60 days. If no incremental load is performed for more than 60 days, then set the Last Process ID to 0 and perform the load.

Watch this tutorial video to learn more about loading and calculating incremental workforce data:

Loading and Calculating Incremental Workforce Data using Data Management.

Watch this tutorial video to learn more about calculating incrementally loaded data using Groovy rules:

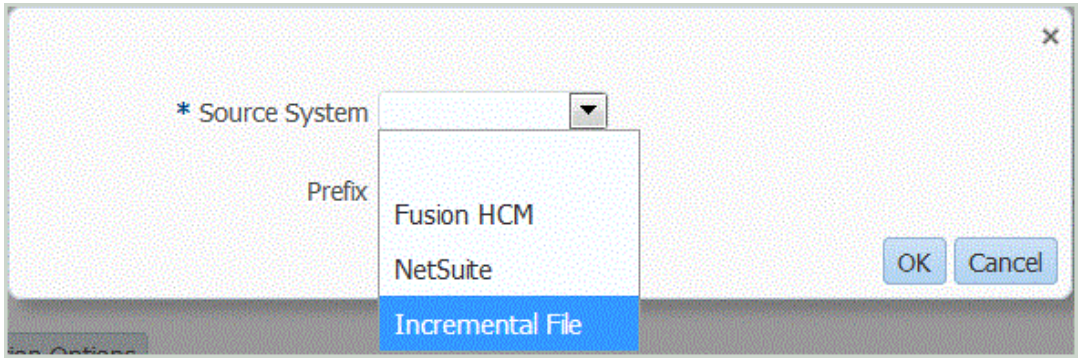
Calculating Incrementally Loaded Data in Data Management using Groovy Rules.

Setting up the Incremental File Adapter

To set up an incremental data file load:

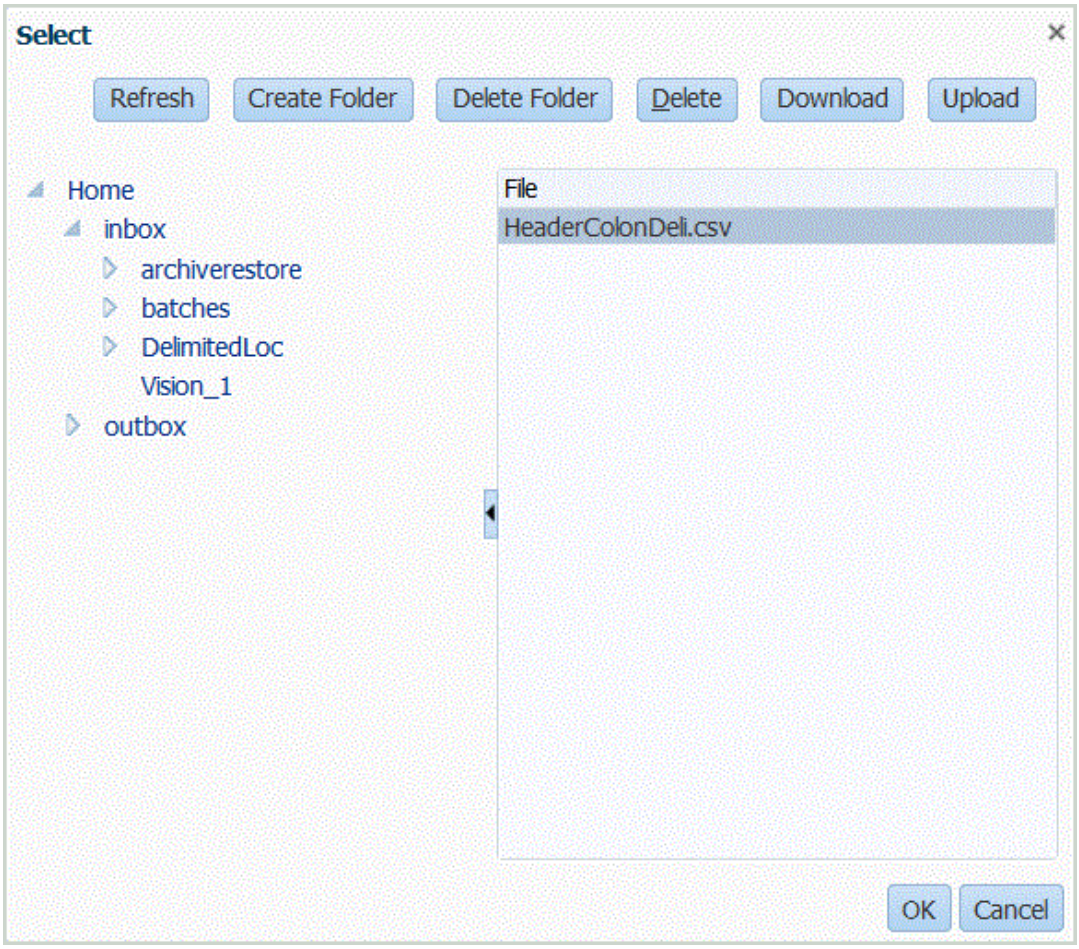
1. From the **Home** page, click the Navigator icon and then from the **Integration** category, select **Data Management**.
2. Select the **Setup** tab, and then under **Register**, select **Target Application**.
3. In **Target Application**, in the summary grid, click **Add**, and then select **Data Source**.
4. From **Source System**, select **Incremental File**.
5. In **Prefix**, specify a prefix to make the source system name unique.

   Use a prefix when the source system name you want to add is based on an existing source system name. The prefix is joined to the existing name. For example, if you want to name an incremental file source system the same name as the existing one, you might assign your initials as the prefix.



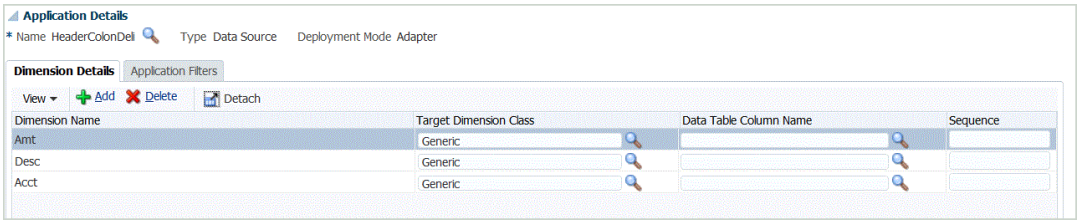
6. From the **Select** screen, select the data file.

   The file must be a delimited file using one of the supported delimiters, and must contain a header record in the first row.



7. Click **OK**.
8. Click **Save**.

   The system creates the dimension details automatically.



9. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
10. In the **Import Format** summary task bar, select **Add**.
11. In **Name**, enter a user-defined identifier for the import format.
12. In **Source**, select **File** for the source.
13. From **File Type** drop-down, select delimited file type.

    For example, you might select **Delimited - Numeric Data** as the format of the file.
14. From the **File Delimiter** drop-down, select a type of delimiter.

    Available delimiters:

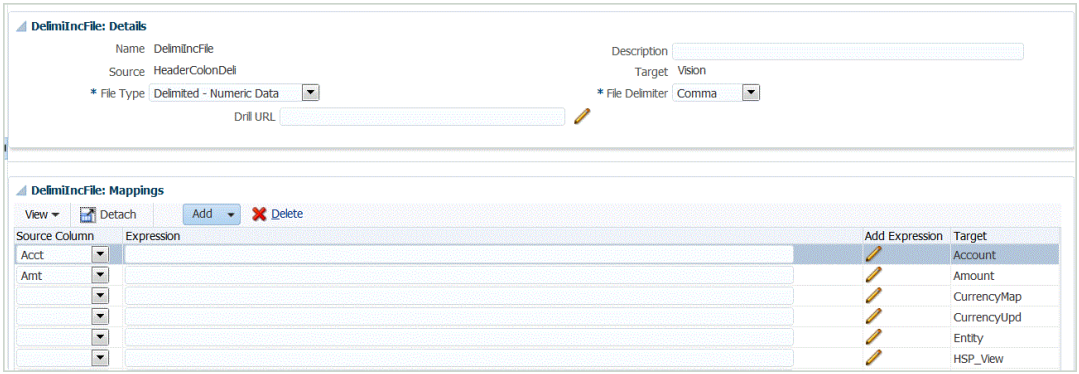
    - comma (,)

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

15. In **Target**, select the name of the target application.
16. Click **Save**.

    For more information, see Working with Import Formats.
17. Optional: On the **Mappings** tab, map dimensions between the source system and target application, and click **Save**.

> **Note:**
>
> Only single period loads are supported.



See Working with Import Formats.

18. On the **Setup** tab, under **Integration Setup**, select **Location**, define the location used to associate the import format.

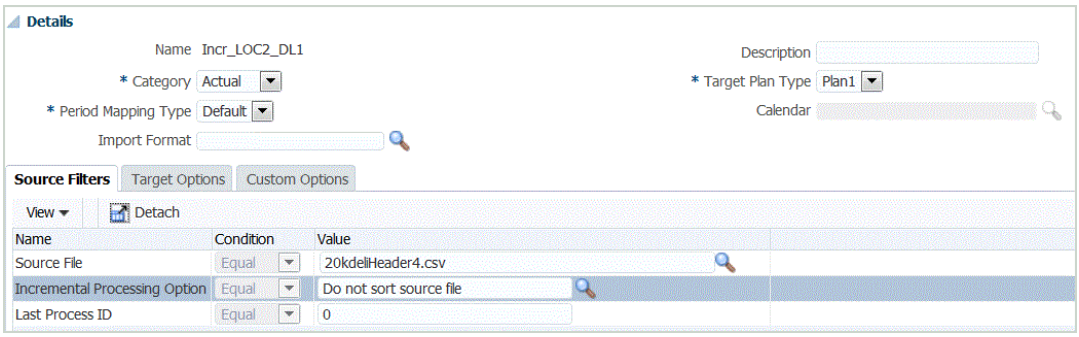
    See Defining Locations.
19. **Optional**: On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**, define member mappings to map the members from the source to target.

    See Creating Member Mappings.
20. **Optional**: On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.
21. From the POV bar, select the POV of the location for the data load rule.
22. In the **Data Load** summary area, click **Add**.
23. In **Details**, in **Name**, enter the data load rule name.
24. In **Category**, select the category to map source system data to target Scenario dimension members.
25. In **Period Mapping Type**, select either **Default** or **Explicit**.

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.

The Explicit method for loading data is used when the granularity of the source periods and target application periods are not the same.

26. **Optional**: In **Import Format** select the import format to use with the file so override the import format. If the import format is unspecified, then the import format from the location is used.
27. If the target system is a Planning application, from the **Target Plan Type** drop-down, select the plan type of the target application.
28. Select the **Source Filters** tab.



29. In **Source File**, select the data file name that contains the data you are loading. It may be the same one from which you created the data source application, or another file that has data as well as the appropriate header.

    Select the file that contains your data, as before. It may have the same name as the original file, or it may have a new name. The differences in the file (i.e. the incremental load file) is created automatically between the two files loaded. So if file A.txt has 100 rows and file B.txt has 300 rows where the first 100 are identical, your first load should select file A.txt when the ID is 0. The second load will be against file B.txt and the ID automatically points to the load ID that was assigned to A.
30. In **Incremental Processing Options**, select the method for sorting data in the source file.

    Available options:

    - Do not sort source file—Source file is compared as provided. This option assumes that the source file is generated in the same order each time. In this case, the system performs a file comparison, and then extracts the new and changed records. This option makes the incremental file load perform faster.
    - Sort source file—Source file is sorted before performing the file comparison for changes. In this option the source file is first sorted. The sorted file is then compared to the prior sorted version of this file. Sorting a large file consumes a lot system resources and performs slower.

> **Note:**
>
> If you have rule that uses the Do Not Sort option and then switch to a Sort option, then the first load will have invalid results since the files are in different order. Subsequent runs load data correctly.

31. The **Last Process ID** shows the last run ID for the original source data file.

When the load is first run for the original data file, the **Last Process ID** shows the value of **0**.

When the load is run again, the **Last Process ID** shows the run number of the last load.

If the newly created file comparison version and the original data file shows no differences, or the file is not found, the value of the **Last Process ID** is assigned to the last load ID that ran successfully.

To reload all data, set the **Last Process ID** back to **0**, and select a new source file to reset the baseline.

32. View the data before exporting it.

    See Using the Data Load Workbench.

    .

Loading Data to a Free Form Application

The Free Form application type is a business process that recreates a native Oracle Essbase application within the Planning environment to support required analysis. Free Form allows any dimensions to be associated with the cube. The Planning-specific Currency, Entity, Scenario, and Version dimensions, along with their member hierarchies are not required with Free Form business processes. You use Free Form to do your own modeling and build your own cubes while preserving the ability to leverage platform functionality. Service Administrators build a Free Form application using an Essbase outline (OTL) file, or by manually defining the dimensionality.. For more information, see Creating a Free Form Business Process in the *Getting Started Guide for Administrators*.

Free Form applications are meant for customers who want to create an Essbase application for anything or to migrate an on-premise application to the Oracle Fusion Cloud Enterprise Performance Management because the Free Form application in Planning does not have any dimension requirements.

You can load these Free Form applications in Data Management and Data Integration, but there are a number of considerations:

1. The Free Form application requires a minimum of three dimensions: Account, Period, and Scenario. The application definition in Data Management and Data Integration must have three dimensions with the dimension type of Account, Period, and Scenario.
2. You must set up a period mapping so that the system knows where to load the data. For example, you could set up period mapping with a period of Jan-20 which is the period member created in a Free Form application. When you set up a period mapping in Data Management and Data Integration, you enter a period created in the Free Form application and a year entry so that it passes the user interface validations for the period mapping. This is he case where the you don't have to define a year dimension in your Free Form application, only a period.
3. You must specify a Scenario dimension, but in Planning, it can be anything. The only requirement is that the dimension is classified as scenario on our side. You then need to set up category mapping so that the process succeeds.

- Assign a dimension classification of Account for one of the dimensions.
- If you want to use the drill through functionality, then a "Scenario" dimension is required. Assign a dimension classification of Scenario for one of the dimensions. Note when a dimension is classified as Scenario, the Category mapping is used to assign a target value, so data can be loaded to only one value. Select a dimension that meets this requirement and define a Category mapping.

- If you want to use Check feature, then an "Entity" dimension is required. Assign a dimension classification of Entity for one of the dimensions.

Applications of type ASO are not auto registered when they are created. Use the Data Management Target Application page and select Application type of Essbase to manually register the application.

3
Integrating Data

Related Topics

- Integrating Data Using a File
- Integrating Metadata
- Integrating Oracle ERP Cloud Oracle General Ledger Applications
- Integrating Budgetary Control
- Integrating Oracle NetSuite
- Integrating with the Oracle HCM Cloud
- Loading Data from the Oracle ERP Cloud
- Integrating Account Reconciliation Data
- Integrating EPM Planning Projects and Oracle Fusion Cloud Project Management (Project Management)

Integrating Data Using a File

Any file, whether it is a fixed width file or a delimited file, can be easily imported into an Oracle Fusion Cloud Enterprise Performance Management application. For example, you can take a trial balance report generated from their source system and map it into Data Management 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 by way of a file format, and requires limited technical help, if any, when loading into an Cloud EPM application.

You can also define data load rules which determine how you want to extract or write back budget data from the Cloud EPM to the file system.

Integrating File-Based Data Process Description

At a high level, this is how you import a file, whether it is a fixed width file or a delimited file, to an Oracle Fusion Cloud Enterprise Performance Management application:

1. Register the file-based source system from which you want to import data.

   See Configuring a Source Connection.

2. Register the target application (for example, a Planning application) to which you want to load the data from one or more file-based source systems.

   For more information, see Registering Target Applications.

3. Create an import format based on the source type that you want to load to the target application.

   The import format defines the layout of source data.

   For more information, see Defining Import Formats for File-Based Mappings.

   For more information, see Concatenating Source Dimensions for a File-Based Source.

4. Define the location to specify where to load data.

   For more information, see Defining Locations.

5. Define any periods.

   You define period mappings to map your source system data to Period dimension members in the target application. You can define period mappings at the Global, Application, and Source System levels.

   For more information, see Defining Period Mappings.

   For information on loading multiple periods for file-based data, see Loading Multiple Periods for Cloud EPM or File-Based Source Systems.

6. Define any categories to map source system data to target Scenario dimension members.

   For more information, see Defining Category Mappings.

7. Define data load mapping to map source dimension members to their corresponding target application dimension members.

   You define the set of mappings for each combination of location, period, and category to which you want to load data.

   For more information, see Creating Member Mappings.

8. Define a data load rule for a specific location and category. The data rule determines the data imported from the source system.

   For more information, see Defining Data Load Rule Details for a File-Based Source System.

   You check the box labeled "import from source" so that you can look at the data and the mapped results in the workbench prior to loading the data from the source system. After everything is confirmed, additional data imports can be loaded to the workbench and exported to the Cloud EPM application in the same step.

9. Execute the data load rule to define the options for running the data load rule.

   You can execute the data load rule for one or more periods. You then verify that the data was imported and transformed correctly, and then export the data to the target application.

   See the following data load rule topics:

   - Executing data load rules—Running Data Load Rules.
   - Schedule data load rules—Scheduling Data Load Rules.

Registering File-Based Source Systems

Use this procedure to register a file-based source system to use in Data Management.

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.

> **Note:**
>
> You must manually create a source system and initialize it, before artifacts (such as the import format, or location) that use the source system are imported. You must manually create a source system and initialize it, before artifacts (such as the import format, or location) that use the source system are imported using Migration import.

To add a file-based 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 **File** as the source system type.
   d. In **Drill Through URL**, enter the URL hyperlink for the drill through link by specifying the protocol identifier and resource name.

      Drill through is the navigation from a value in one data source to corresponding data in another file-based source system. Use drill through when you are working on data in EPM applications and want to understand the source of a data value.

      The protocol identifier indicates the name of the protocol used to fetch the resource. The Hypertext Transfer Protocol (HTTP) serves up the hypertext documents. HTTP is just one of many various protocols used to access different types of resources. Another protocol is file.

      The resource name is the complete address to the resource. The format of the resource name depends entirely on the protocol used, but for many protocols, including HTTP, the resource name contains one or more of the following components:

      - Host Name—Specify the name of the machine on which the resource lives.
      - File Name—The path name to the file on the machine.
      - Port Name—The port number to which to connect (typically optional).

      For example, specify `http://machinename.us.server.com:portnumber`

      For more information about defining a drill through, see Using 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 source system, you can select the source system in the table, and the details are displayed in the lower pane.

Registering Target Applications

> **Note:**
>
> Starting with the September (23.09) update, the user interface pages for Target Application will no longer be available in Data Management, but will be available in Data Integration. Data Integration is available now from the Data Exchange card from the home screen in the Oracle Fusion Cloud Enterprise Performance Management Business Process. Users will be able access the Target Applications features in the current Cloud EPM update from the **Data Integration** user interface by selecting the **Actions** drop down, and then **Applications**.
>
> For more information, see Registering Applications in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

Target applications enable Data Management to be used as a primary gateway to integrate data between different source systems and target applications. In this way, you can deploy local Cloud EPM applications, business process instance to business process instance deployments (cloud to cloud applications), custom applications, and generic data source entities into your existing EPM portfolio. The process to integrate source applications with target applications provides data visibility, integrity, and verification systems.

The following application types describe the types of target application that can be used:

- local—This application type refers to a local EPM application (on-premise deployment) in the current service.

  You might use the integration to import data from existing on-premise ERP applications or synchronize data between on-premise EPM applications.

  For example, Oracle Hyperion Financial Management customers can add Planning data, or a Planningcustomer can add more Planning applications. In addition, this integration enables you to write back from a cloud to an on-premise application or other external reporting applications.
- Cloud—This application type refers to a service instance that uses a remote service to integrate data. A business process instance is a self-contained unit often containing the web server and the database application. In this case, connection information must be selected between the two business process instances.

  This feature enables EPM customers to adapt cloud deployments into their existing EPM portfolio including

  – Planning Modules
  – Planning
  – Financial Consolidation and Close
  – Profitability and Cost Management
  – Tax Reporting

  Also see Using Data Management with Multiple Cloud EPM Deployments.
- Data Source—Refers to generic source and target entities that use the specific data model of the source or target applications.

For example, NSPB Sync SuiteApp Save Search Results objects and Oracle Human Capital Management Cloud extracts are considered data source applications.

- Dimension— Refers to the class of dimension or dimension type of a target application when loading metadata. When you add a dimension, Data Management creates six-dimension applications automatically: Account, Entity, Custom, Scenario, Version, and Smartlist.

  For more information on adding a dimension class or type as a target application, see Registering a Target Application for the Class of Dimension or Dimension Type.

To register a target application:

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. In **Target Application**, in the summary grid, click **Add**, and then select the type of deployment.

   Available options are **Cloud** (for a Cloud deployment), **Local** (for an on-premise deployment) or **data source** (for Oracle NetSuite or Oracle HCM Cloud deployments.)

   For a Cloud deployment, go to step 3.

   For a Local deployment, go to step 4.
3. To register a Cloud deployment, select **Cloud** and then complete the following steps on the EPM Cloud Credentials screen:

   a. In **URL**, specify the service URL that you use to log on to your service.

   b. In **User name**, specify the user name for the Cloud Service application.

   c. In **Password**, specify the password for the Cloud Service application.

   d. In **Domain**, specify the domain name associated with the Cloud Service Application.

   An identity domain controls the accounts of users who need access to service instances. It also controls the features that authorized users can access. A service instance belongs to an identity domain.

   > **Note:**
   >
   > Administrators can update the domain name that is presented to the user, but Data Management requires the original domain name that was provided when the customer signed up for the service. Alias domain names cannot be used when setting up Cloud EPM connections from Data Management.

   e. From **Type**, specify the type of application, and click **OK**.

   Valid application types:

   - Planning
   - Essbase
   - Consolidation
   - Tax Reporting

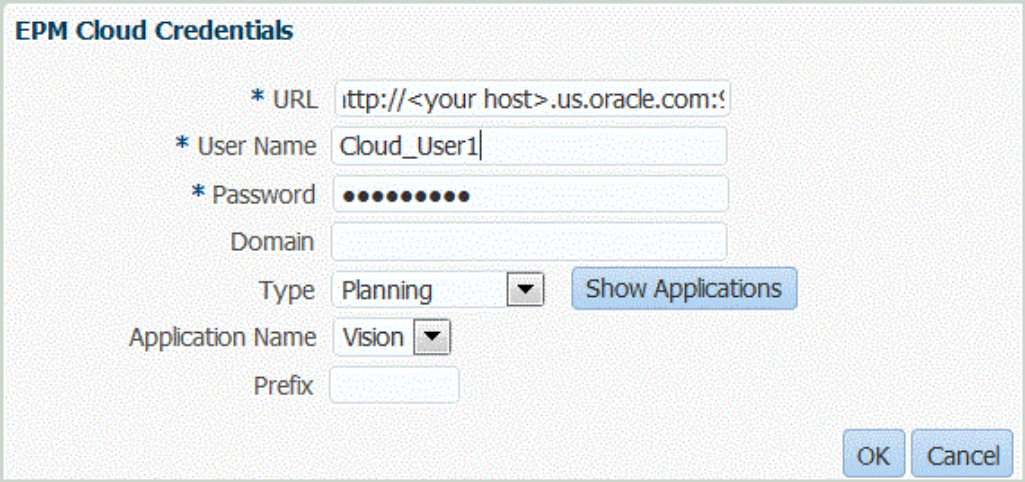
   You can also click **Show Applications** and select the application.

   f. In **Application Name**, enter the application name.

   g. To register a target application with the same name as an existing target application, in **Prefix**, specify a prefix to make the name unique.

The prefix name is joined to the existing target application name. For example, if you want to name a demo target application the same name as the existing "Vision" application, you might assign the **Demo** prefix to designate the target application with a unique name. In this case, the Data Management joins the names to form the name **DemoVision**.

h. Click **OK**.



4. Click **OK**.
5. In **Application Details**, enter the application name.
6. Click **OK**.
7. Click **Refresh Members**.

   To refresh metadata and members from theCloud EPM, you must click **Refresh Members**.
8. Click **Save**.
9. Define the dimension details.

   Optional: If not all dimensions are displayed, click **Refresh Metadata**.
10. Select the application options.

> **Note:**
>
> For Financial Consolidation and Close application options, see Defining Application Options for Financial Consolidation and Close.

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, which determines which fields (columns) are extracted from the source system and how data is stored in the staging table.

For detailed information about working with import formats, see Working with Import Formats. For information about working with all data types data loads in import formats, see All Data Types Data Load Process Description.

You can add a mapping row to the import format definition based on the following options:

- Skip
- Currency
- Attribute
- Description
- Dimension Row

Table 3-1 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 available for both fixed and delimited file types.

Table 3-1 (Cont.) Import format definition options

Import Definition Option	Description
Attribute	The TDATASEG table includes 40 attribute columns to which you can import values 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. Each attribute column can accept up to 300 characters.

Note:

If you integrate an Financial Consolidation and Closeor source with an explicit period mapping type, the system stores Tax Reporting the mapping year (SRCYEAR) and mapping period (SRCPERIOD) in the ATTR2 column and year in ATTR3 columns. For this reason when importing data from Financial Consolidation and Close, attribute columns ATTR2 and ATTR3 should not be used for any other dimension mappings.

Similarly when you map a Movement source attribute to any target dimension, the system automatically creates another map for mapping the

Table 3-1 (Cont.) Import format definition options

Import Definition Option	Description
	Movement to the ATTR1 column.
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.
Currency	Data Management 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	Data Management 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 numeric data files with a fixed length:

> **Note:**
>
> For information about defining import formats for fixed length all data type data files, see Setting the Import Format Data Types.

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 of row to add from the **Add** drop-down.

Available options:

- Skip Row
- Currency Row
- Attribute Row
- Description Row
- Dimension Row

4. In **Start**, specify where on the file the column starts.
5. In **Length**, enter the length of the column.
6. In **Expression**, 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.
7. Click **Save**.

To define an import format for delimited numeric data files:

> **Note:**
>
> For information about defining import formats for delimited all data type data files, see Setting the Import Format Data Types.

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.
6. Click **Save**.

Concatenating Source Dimensions for a File-Based Source

Concatenate 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:

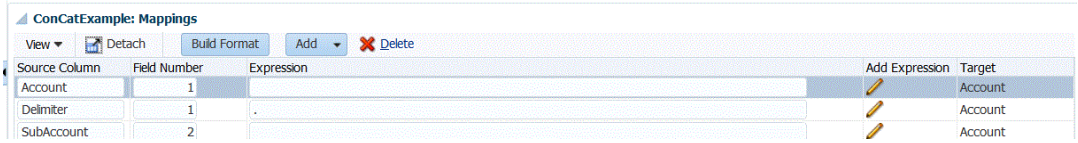
1. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
2. In the **Import Format** summary task bar, select the import format of the file.

   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**.



Loading Multiple Periods for Cloud EPM or File-Based Source Systems

For an Oracle Fusion Cloud Enterprise Performance Management or file-based source system, Data Management supports a "Period" as a column in a data file. If you have data for multiple periods in a single file, then you can include the year and period on each row of the data. In Import Formats, you select the source period rows of Year and Period, so that they are

identified as columns in the file, and then map them to the appropriate dimension in the target system. Then you run the data load rule and select a range of dates to load. The range of dates can be based on a default or explicit period mapping type.

For example, in the following sample file, there is multiple period data, "Jan" and "Feb" in a single data file.

```
E1,100,2016,Jan,USD,100
E2,100,2016,Jan,USD,200
E3,100,2016,Feb,USD,300
E4,100,2016,Feb,USD,400
```

In another example, if you select a Jan-March period range, and the file includes: Jan, Feb, Mar, and Apr, then Data Management only loads Jan, Feb, and Mar.

```
E1,100,2016,Jan,USD,100
E2,100,2016,Jan,USD,200
E3,100,2016,Feb,USD,300
E4,100,2016,Feb,USD,400
E4,100,2016,Mar,USD,400
E4,100,2016,Mar,USD,400
E4,100,2016,Apr,USD,400
E4,100,2016,Apr,USD,400
```

Data Management loads the periods specified on the Execute Rule screen, and ignores rows in the file that don't match what you selected to load.

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 then run the rule for a single period. To load multiple periods, create a file for each period, and then 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 Data Management setup, such as "Actual." See Defining Category Mappings.
3. **Optional**: In **Description**, specify a description of the data load rule.
4. **Optional**: If the target system is a Planning application, from the **Target Plan Type** drop-down, select the plan type of the target system.

   Data Management currently supports data loads that have up to six plan types. Planning can support three custom plan types and up to four Planning Modules applications (Workforce, Capex, Project, Financials). You can enable any combination of these applications. When you create an Planning Modules application and you create more than two custom plan types, then you cannot support a data load to all four applications.

   If the target system is Financial Consolidation and Close, from the **Target Cube** drop-down, select the data load cube type.

Available options:

- Consol
- Rates

5. **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 periods 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 by the explicit mapping.
6. **Optional**: Enter a description.
7. If necessary, select the **Source Options** and add or change any dimensional data.
8. Click **Save**.

Running Data Load Rules

Run the data load rule to load updates and push the data into the target application. 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.

When a data load rule is run, Data Management loads the data, and creates a drill region (optional), which enables users to drill through to the source data.

> **Note:**
>
> In Financial Consolidation and Close for YTD data loads, data is stored in Periodic view. In this case, the user must select this option so that a "pre-processing" is done to convert the YTD data from the file to periodic data for loading purpose.

When you run a data load rule, you have several options:

> **Note:**
>
> When a data load rule is run for multiple periods, the export step occurs only once for all periods.

- **Import from Source**—Data Management imports the data from the source system, performs the necessary transformations, and exports the data to the Data Management 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.

  > **Note:**
  >
  > Oracle E-Business Suite and source imports require a full refresh of data load rules. The refresh only needs to be done once per chart of accounts.

- **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.

Using Drilling Through

Data Management provides a framework that enables you to drill through from your Oracle Fusion Cloud Enterprise Performance Management application to the application. Use drill through when you want to understand the source of a data value, or you need a granular level of detail for a value without leaving the workspace.

When you load data to a Cloud EPM target application using Data Management, you can specify an optional drill region flag. When set to "Yes," a drill region definition is passed to the target application, in addition to the actual data, to indicate that a cell is "drillable."

When drilling through from the Cloud EPM application, a landing page is displayed in a separate workspace tab that shows all rows that comprise the amount from the selected cell in the Cloud EPM application. From this landing page, you can open the source document or continue to drill-through to the defined source system landing page.

Drill through based on a URL requires that you are connected to the server on which the data resides. Drill through works only for data loaded through Data Management. In addition, because drill through is available in the target application, data load mappings must have at least one explicit mapping for the drill through to work.

> **Note:**
>
> Drill through functionality is not supported for exchange rates data loaded to:
>
> - Financial Consolidation and Close
> - Tax Reporting
> - Planning Modules
> - Planning

Creating the Drill Region

A drill region is a named region of data intersections in an Oracle Fusion Cloud Enterprise Performance Management application that can be viewed with the drill-through functionality. The data in the drill region is loaded to the Cloud EPM application with Data Management. In the workspace, you can view the drill region in the data forms of the application.

The drill region stores the uniform resource locator (URL) to get back to Data Management, and a region name. When you enable drill regions, Data Management populates them in the Data Management target application after data is loaded and consolidated. A cell is considered drillable in the target application when it is contained in the drill regions. For Oracle Enterprise Performance Management System applications, the drill region includes the Entity, Account, Scenario, Year, and Period dimensions.

Data Management creates drill region by scenarios. For any cube (Planning plan types or Planning databases), the name of the drill region is FDMEE_<name of the scenario member>. When creating the drill region, Data Management checks if a dimension is enabled for the drill.

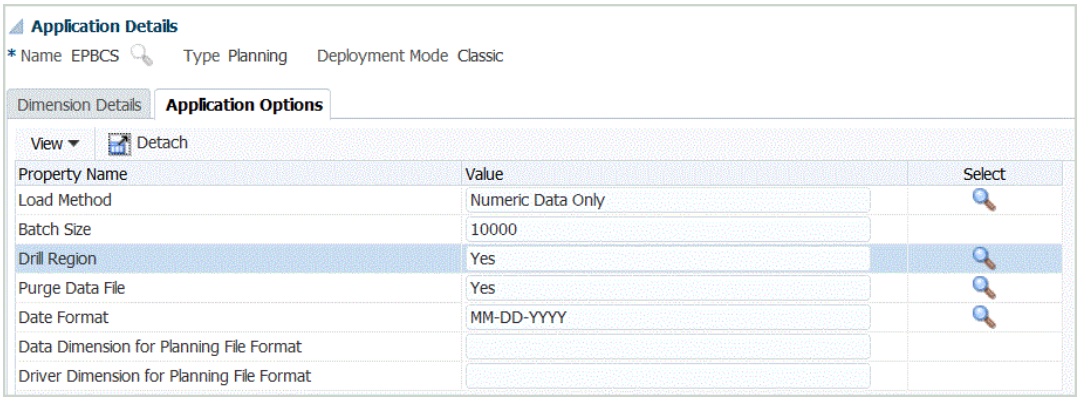
Drill regions to the source system work only when there is an identical intersection of the data loaded by Data Management. For example, if you loaded $5000 to Entity2;Account2 intersection, you cannot drill-through from Entity2;ParentAccount2 since no data was loaded for that intersection.

Members of enabled dimensions selected in data loads, are included in the drill region filter. If no dimensions are enabled, the following dimensions are enabled by default: Scenario, Version, Year, and Period. You can enable additional dimensions, and the subsequent data load considers members of newly enabled dimensions. If you disable any dimensions which were previously included in a drill region used for drill creation, members of such dimensions are not deleted during the subsequent data loads. If needed, you can remove obsolete members manually.

To add a drill region for the Data Management target application:

1. On the **Setup** tab, under **Register**, select **Target Application**.
2. In the **Target Application** summary grid, select the target application.
3. Select the **Application Options** tab.
4. In **Drill Region**, enter: **Yes**.

> **Note:**
>
> Administrators can set the drill region setting at the application level in the Target Application option. Additionally, they can change the setting for a specific target application in data load rules.



5. Click **Save**.

Drill Through Components

The Data Management landing page is called by a drill through URL. Two components define the drill-through URL:

- Server component—defined for each source system
- Detail Component – defined manually for file-based integrations

Adding the Server Component for the Drill Through URL

Use these steps to define the server component drill through URL in Data Management. The server component is added to the source system definition.

> **Note:**

To add a drill through URL:

1. On the **Setup** tab, under **Register**, select **Source System**.
2. Select the file to which to add the drill through.
3. In **Drill Through URL**, click .
4. In **Drill Through URL** edit window, specify the URL that identifies the URL to use for drilling through.

   The URL to use needs to include the request-response method, protocol, and the resource name.

   The protocol identifier indicates the name of the protocol used to fetch the resource. The Hypertext Transfer Protocol (HTTP) typically serves up the hypertext documents. HTTP is

just one of many various protocols used to access different types of resources. Other protocols include a file.

Available request-response between a client and server methods are:

- GET—Form data is encoded into the URL. For example, specify: `GET@http://www.server.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.server.com/`.

The resource name is the complete address to the resource. The format of the resource name depends entirely on the protocol used, but for many protocols, including HTTP, the resource name contains one or more of the following components:

- Host Name—Specify the name of the machine on which the resource lives.
- File Name—The path name to the file on the machine.
- Port Name—The port number to which to connect (typically optional).

When specifying the resource information, use this format: http://<SERVER>:<PORT>

For example, specify `GET@http://machinename.us.server.com:portnumber`

This URL identifies the server component of the drill through URL. In the import format, you include the detail component.

5. Click **OK** and then click **Save**.

Adding the Detail Component for the Drill Through URL

The detail component defines the parameters values of the drill through URL. Values not hard coded in the drill through URL can be referenced from the TDATASEG table using references to the table column names, or to the column names specified in the import format. Drill through attributes that are different for each row of data, like the CCID (code combination ID for Oracle E-Business Suite applications) must be included in the input file and mapped to an attribute column in the import format. When formatting the drill URL, these parameters can be referenced from the TDATASEG table using the $<TDATASEG_COLUMN>$ notation, or from the import format using the $$<IMPORT_FORMAT_COL>$$ notation.

To add the detail component of the drill through URL:

1. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
2. From the **Import Format Summary** section, select the import format.
3. In the **Import Format Detail** section, in the **Drill URL**, click .
4. Click **Add**, and specify the import format name, source, target, file type, and file delimiter.
5. In the **Drill URL** edit window, specify the parameters of the drill through URL.

   Parameters may include any specific source system required information, and the attributes used to populate the actual drill region.

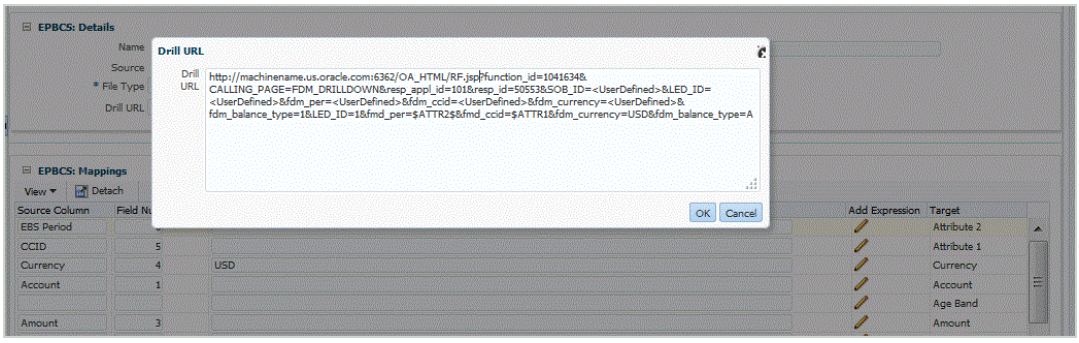
The attribute refers to the source columns (dimensions) in the TDATASEG table. You can provide the location of the attribute in the input file by specifying the starting location and length.

In the following example, the drill through URL enables a user to drill through to an E-Business Suite source system.

In addition to the attributes selected for the drill through, the function ID, calling page, and Resp_Appl_ID and Resp_id are specified.

The function ID is E-Business Suite system specific. It is generated at the time the E-Business Suite system is installed and configured. The calling page parameter indicates the origin of the HTTP call. This is hard coded in the URL as **FDM_DRILLDOWN**. The Resp_Appl_ID and Resp_id parameters are the application ID and responsibility ID from E-Business Suite. These can be set to -1 if unknown. The E-Business Suite source system prompts the user for the user name, password and responsibility if not provided on initial authentication.
Attributes may include:

- SOB_ID—Internal Set of Books ID
- LED_ID—Internal Ledger ID
- fdm_per—the E-Business Suite period name. This value must be the same as the period name in the E-Business Suite system.
- fdm_ccid—the Code Combination ID (CCID) for the requested account.
- fdm_currency—the E-Business Suite ledger currency
- fdm_balance_type —"A" for Actual, "B" for Budget



6. In the Mappings grid of the import format, map the columns in the source column to the dimensions in the target application to which to drill through.
7. Click **OK** and then click **Save**.

Viewing the Drill Through Results

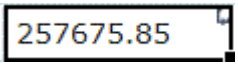
When you set up a drill through for data that was loaded by Data Management, you can select the data form in the Oracle Fusion Cloud Enterprise Performance Management application and then display the general ledger accounts and the hyperlinked balances that were used to populate the cells in the onpremise application.

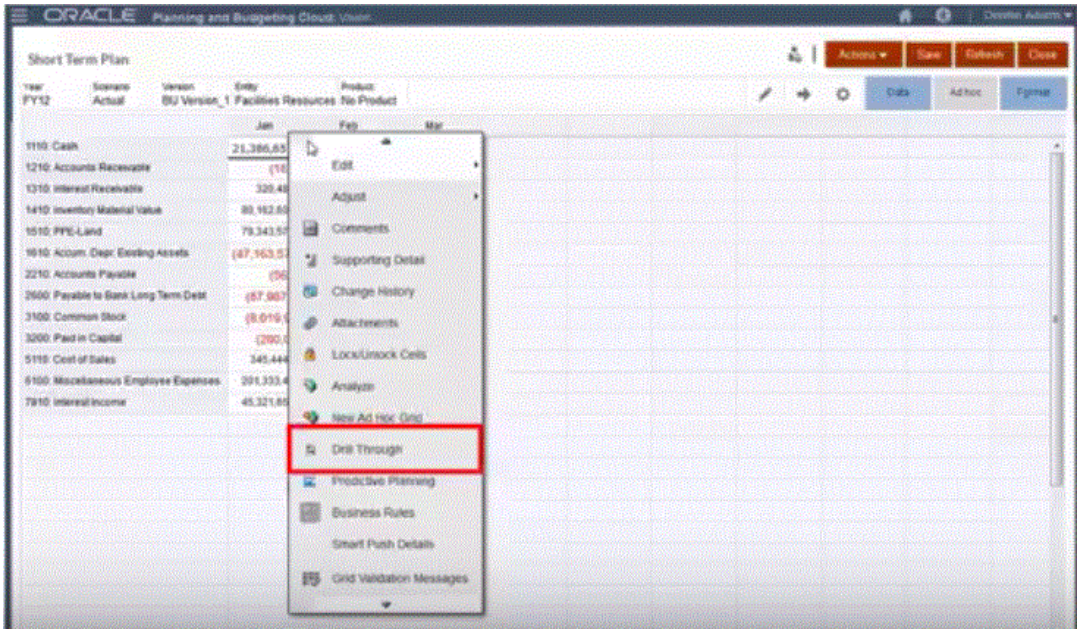
From a linked data value, you can drill through to the source system from the landing page and then view the associated journal entries and sub-ledger entries for the selected account.

To view the drill through results in the onpremise application

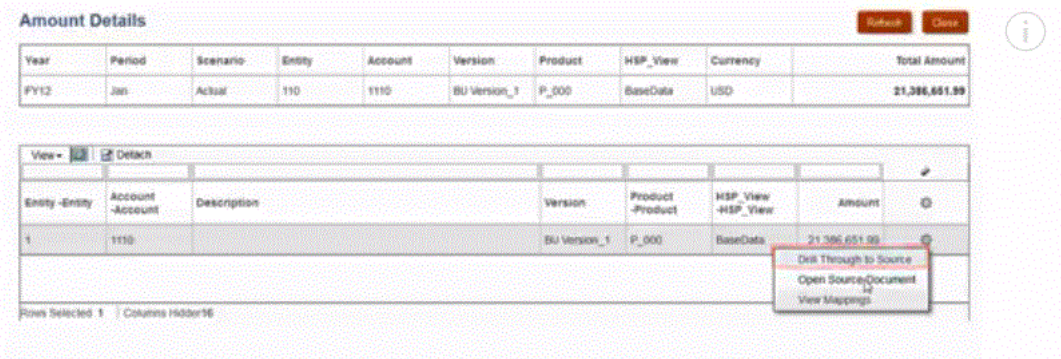
1. In the Cloud EPM application, open the data form of the loaded source data.
2. From a cell that contains drill-down data, click **Actions**, and then select **Drill Through**.

A drill through icon in the right top corner of a cell indicates that it has drill-through data:



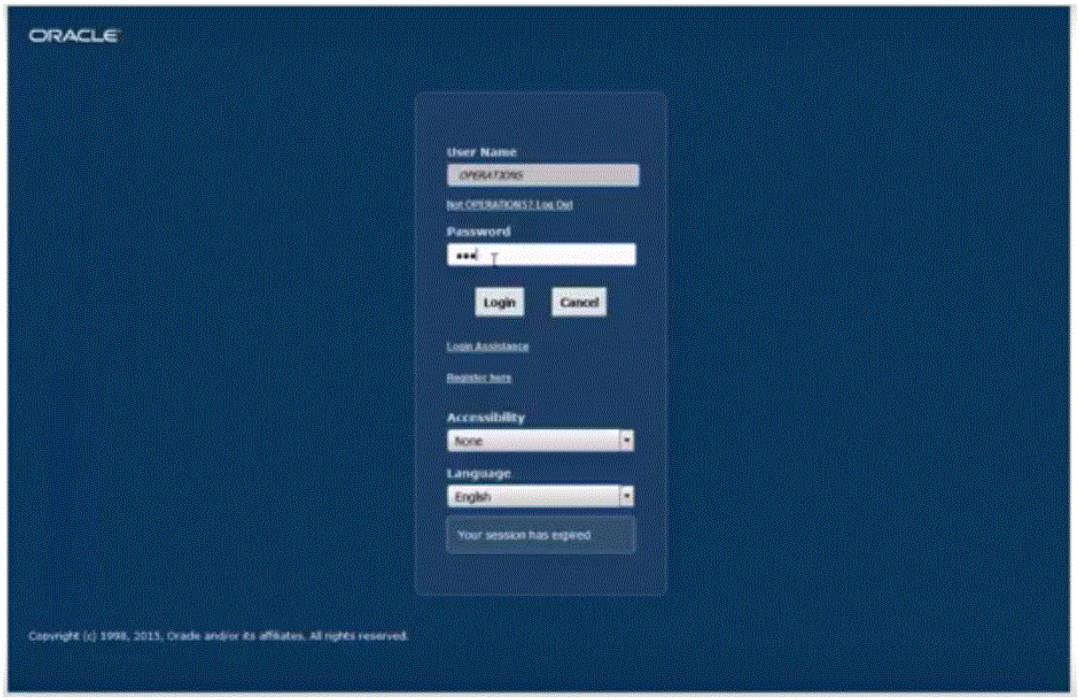


3. Click **Drill Through to Source**.
4. From the landing page, click the drill through icon.



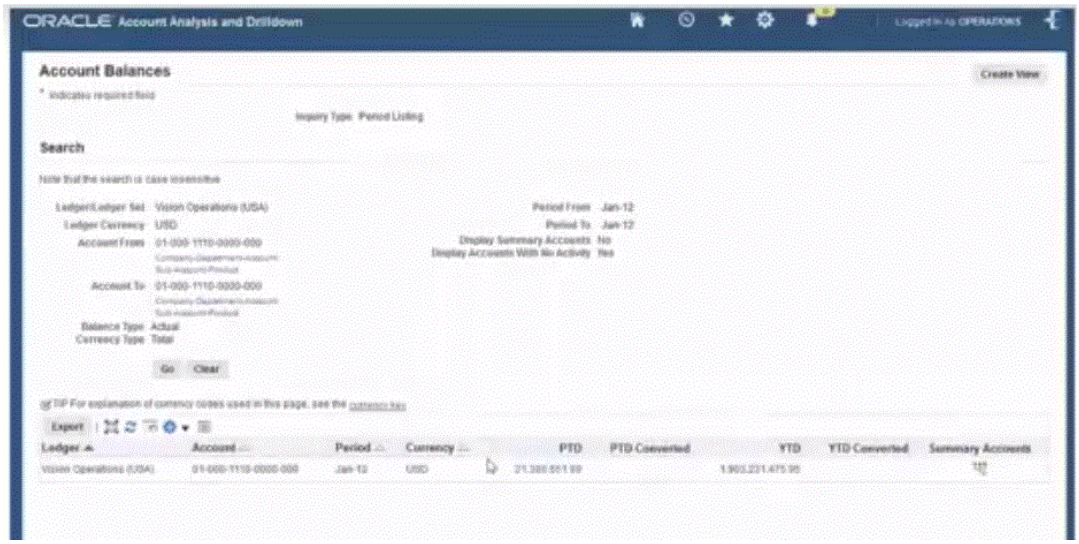
5. Click **Drill Through to Source**.
6. Log into the onpremise application by providing any required credentials.

   In the following example, an Oracle E-Business Suite logon screen is shown.

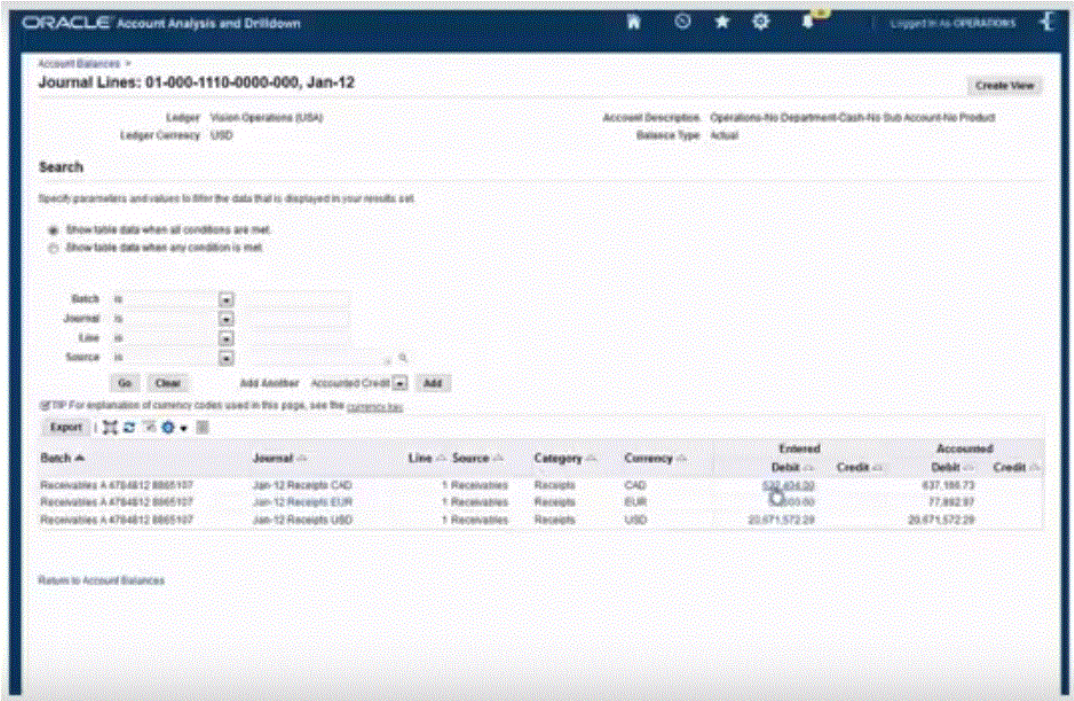


7. Drill down to the level of detail that you want to view.

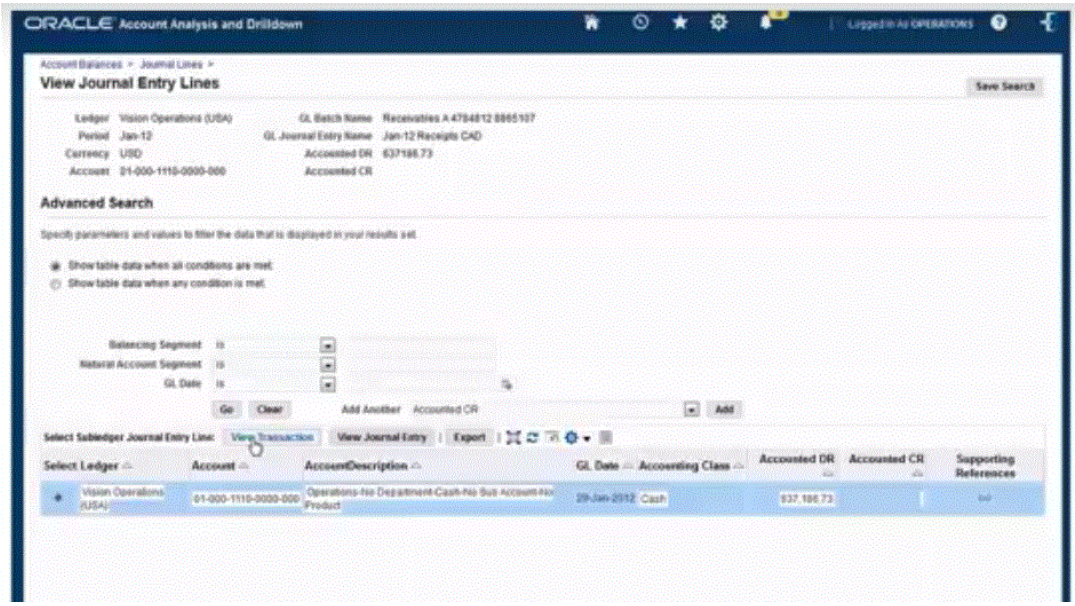
   In the following example, you can drill through to the ledger details that support the balance:



In the next example, you can drill through to the sub-ledger that supports the balance:



In the next example, you can view additional information associated with the balance:



Integrating Metadata

Data Management supports the loading of metadata from a flat file in the order provided in the file. This feature allows customers to build a metadata load file in any format, from any source, and load the metadata to an Oracle Fusion Cloud Enterprise Performance Management environment. Using this approach, users can set property defaults during the load or mapping process.

For example, Oracle Workforce Planning customers can load employees, jobs, organizations and other work structure and compensation related items from Oracle Human Capital Management Cloud to the Planning.

Regular (such as Account and Entity), custom (such as Product), and Smart List dimensions are only supported, and for the following services only:

- Planning Modules
- Planning
- Financial Consolidation and Close
- Tax Reporting

> **Note:**
>
> Loading metadata is only available for applications that are application type: Planning. If the application type is Oracle Essbase, then use the Planning Outline Load Utility to load metadata.

> **Note:**
>
> Profitability and Cost Management does not support the loading of metadata by way of a file using Data Management.

Loading Metadata Process Description

At a high level, this is how you load metadata from a file to a Planning application:

1. Generate a metadata load file for each dimension to be loaded.

   A metadata load is only available to applications built on the Planning platform only.

   For information on how to construct a metadata load file, see Metadata Load File Considerations.

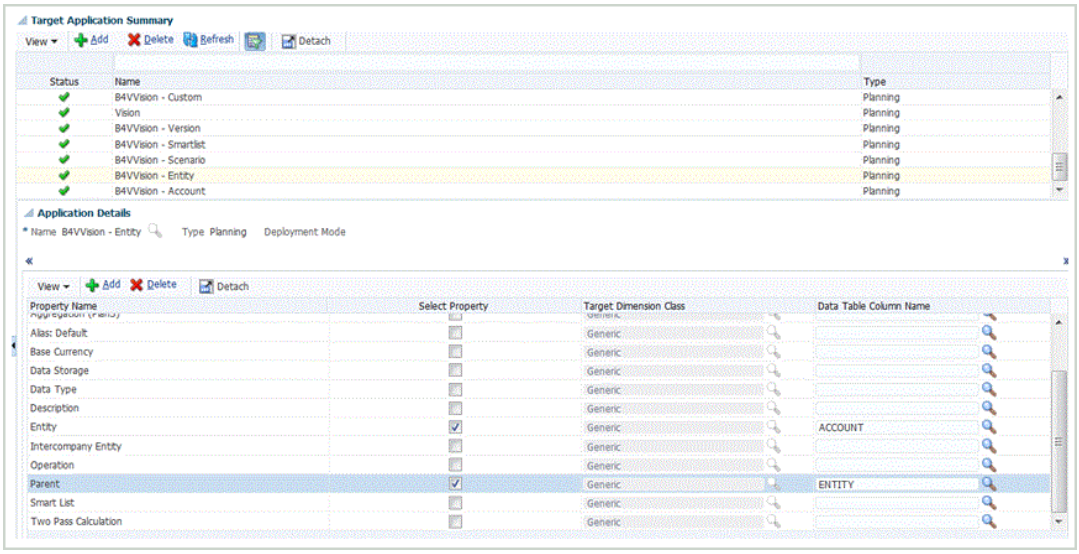
2. In Target Application, register a target application for the class of dimension or dimension type.

   Data Management creates six-dimensions applications automatically: Account, Entity, Custom, Scenario, Version, and Smartlist.

   For more information on adding a dimension class or type as a target application, see Registering a Target Application for the Class of Dimension or Dimension Type.

   For more information on target applications, see Registering Target Applications.

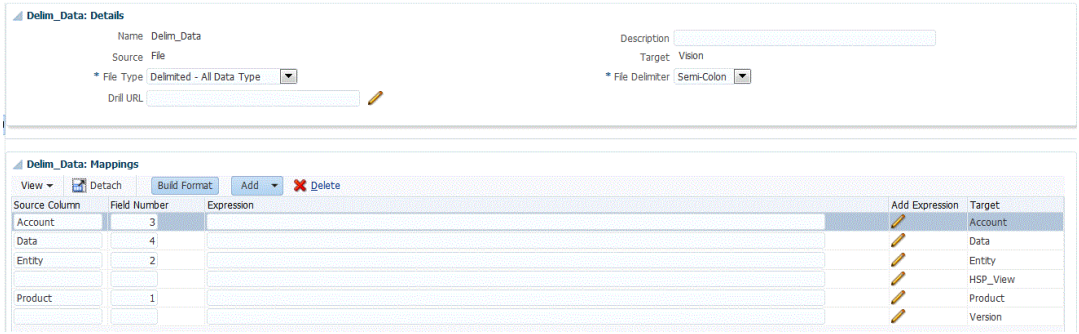
3. In Dimension Details, the system creates a record for each dimension property. Only the member name and parent are required fields.



To enable additional properties, add a row to the dimension metadata application. The name of the row is the property or attribute name used in the Planning application.

4. **Optional**: To add a custom dimension (one designated as Generic in the Planning application), in the target application, select the property name and enable the **Select Property** field, and then map it to a **Data Table Column Name** value. Next create a separate import format for each generic dimension. Then, in the dimension's data rule, specify the dimension name (for example, Product, Movement) in the Dimension name of the data rule's target options.

5. In Import Format, map the data from the metadata load file to the properties of the dimensions in the EPM application. This allows users to import dimension members from any file format. (The file must be "delimited - all data type" file type.)



For more information, see Defining Import Formats for File-Based Mappings.

6. Define the location to specify where to load data.

   For more information, see Defining Locations.

7. In data load mapping, map, transform, or assign values to properties of a dimension to the corresponding properties of the target application dimension member.

   Properties are added as "dimensions" of a dimension application. For example, the Two Pass Calculation property of Entity is added as a dimension and the flat file adds the "yes" or "no" property on the load.

> **Note:**
>
> Checked dimensions in the dimension "application" are the ones loaded. If you do not map them, the load will fail. There is no default if a mapping is missing. To avoid loading a "field" such as alias, uncheck the check box in the target application. To supply a single value for all loaded rows, specify the value in the Expression field and map *to* for that dimension.

For more information, see Creating Member Mappings.

8. Define a data load rule to load the metadata.

   The data rule determines the data imported from the source system.

   For more information, see Defining Data Load Rule Details for a File-Based Source System.

   You check the box labeled "import from source" so that you can look at the data and the mapped results in the workbench prior to loading the data from the source system. After everything is confirmed, additional data imports can be loaded to the workbench and exported to the Oracle Fusion Cloud Enterprise Performance Management application in the same step.

9. Execute the data load rule to define the options for running the data load rule.

   You can execute the data load rule for one or more periods. You then verify that the data was imported and transformed correctly, and then export the data to the target application.

   See the following data load rule topics:

   - Executing data load rules—Running Data Load Rules.
   - Schedule data load rules—Scheduling Data Load Rules.

10. You can also create a batch for a metadata application and include rules from any of the metadata applications in the same batch. In this way, you can load all dimensions from a single batch and execute it in one step.

    For more information, see Working with Metadata Batch Definitions.

Metadata Load File Considerations

Consider these points when working with load files:

- For each dimension in the application, you create a load file with fields corresponding to the dimension properties. Each load file can contain members for only one dimension. You can define multiple members for each dimension.
- Required fields are different for each dimension being loaded. For detailed information on the properties available for each Planning member, see the *Dimension Properties* topic in the *Administering Planning* guide.
- The member name and parent name must be included as fields in the load file. If a member property value is not specified, the new member will inherit the property values from its parent.
- When adding new members, unspecified values are inherited from the parent member's property value as appropriate. If the member exists and no value is specified, it is left as is.
- When you load a member that already exists in the Planning application (for example, to change a property) and a parent is not specified in the load file, the member is left under

the existing parent. If a new parent is specified, the member is moved under the new parent.

- Only one dimension can be loaded per load file.
- The records are loaded one by one. If a record fails to load, its associated exception is written to the exception file and the load process resumes with the next record.
- Metadata is loaded in the order provided in the file.
- Member names with parenthesis are treated as functions.
- When you load metadata using a data load rule to a Planning application, the export mode parameter must be set to " Store Data".

Registering a Target Application for the Class of Dimension or Dimension Type

In the Target Application option, you add a new target application for the class of dimension or dimension type. This application is used as the target application for loading metadata. When you add a dimension, Data Management creates six-dimensions applications automatically: Account, Entity, Custom, Scenario, Version, and Smartlist.

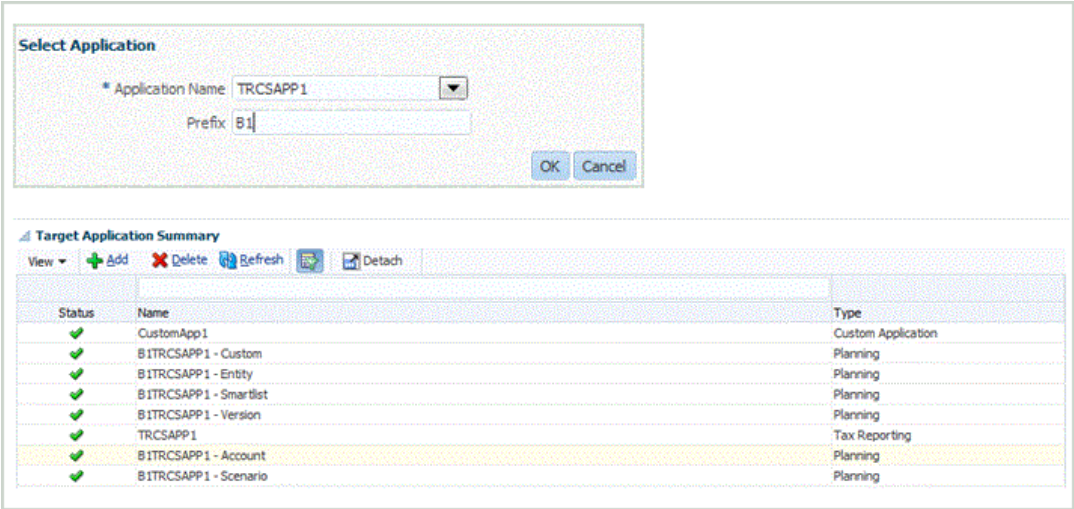
To add a dimension as a target application:

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. In **Target Application**, in the summary grid, click **Add**, and then select **Dimension**.
3. From **Select Application**, and then from the **Application Type** drop-down, select the target application type.
4. To specify a prefix name to use with each target application, in **Prefix**, specify a unique name.
5. Click **OK**.

   Data Management creates the dimension application name using this format: "Application Name -" + Dimension Type.

   You can add dimensions multiple times. Data Management checks if a dimension application exists. If a dimension exists, it is skipped, and if not, it is created. This enables you to delete applications as needed and recreate it.

> **Note:**
>
> The **Refresh Metadata** and **Refresh Members** options are not available when adding dimensions.



Working with Metadata Batch Definitions

You can create a batch for a metadata application and include rules from any of the metadata applications in the same batch. In this way, you can load all dimensions from a single batch and execute it in one step.

When working with metadata batch definitions, you can also create a batch that includes data load rules from different target applications. This is helpful when creating a batch from which to load data and metadata. (Metadata in this case, is loaded from a flat file. See Integrating Metadata for more information.)

You can also create a batch of batches or "master" batch with one batch for metadata and another batch for data. With this method, you do not need to select a target application name, but note that you cannot migrate a master batch without one.

> **Note:**
>
> Only an administrator can create batch definitions.

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 the **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 root target application.

   Suppose "Vision" is the base application, and "Vision - Account" and "Vision - Entity" are the metadata applications. When you select "Vision - Account" as the target application in

the batch, then you will see all the rules associated with both the "Vision - Account" and "Vision - Entity" applications.

6. From **Type**, select the type of batch definition.

   Available options for metadata batch definitions are:

   - Data—identifies a batch that loads metadata and data.
   - Batch—identifies a batch of batches with one batch for metadata and another batch for data

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.

   > **Note:**
   >
   > Files are not grouped by location in parallel mode.

8. **Optional:** In the **Description** field, enter a description of the batch definition.
9. Click **Save**.
10. **Optional**: In **Batch Group**, select the batch group to associate with the batch.

    For more information, see Adding a Batch Group.

11. Click **Save**.
12. In the **Batch Jobs** section, click **Add**.
    If you selected **Data** from the **Type** field, blank **Rule Name** and **Job Sequence** fields are displayed.

    If you selected **Batch** from the **Type** field, blank **Batch Name** and **Job Sequence** fields are displayed.

13. If you are loading data in the batch, specify the data load rule name of the metadata application in the **Rule Name** to which to add to the batch definition.

    If you are creating a batch of batches with one batch for metadata and another batch for data, select the batch names of the batches in the **Batch Name** to which to add to the batch definition.

14. In **Job Sequence**, specify the order in which to execute the data load rule batch.
15. Click **Save**.

    For information on definition batch parameters, see Working with Batch Definitions.

    For information on executing batches, see Executing Batches.

Integrating Oracle ERP Cloud Oracle General Ledger Applications

You can integrate Oracle General Ledger data from the Oracle ERP Cloud with your Oracle Fusion Cloud Enterprise Performance Management application if you use the Oracle ERP Cloud Release 11 or higher. This integration enables you to simply pick the desired source ledger from the Oracle ERP Cloud, set up a few simple mappings and then push a button to

pull the data into the Cloud EPM applications. This integration can be run manually or scheduled for a specific time.

> **Note:**
>
> The Average Daily Balances (ADB) ledger is not supported in the current integration.

> **Note:**
>
> Data Management also supports the Financials Accounting Hub (FAH) and the Financial Accounting Hub Reporting Cloud Service (FAHRCS) as part of its integration with the Oracle General Ledger.

The integration sets up the drill definition automatically.

Data Management facilitates not only data loads but write-backs to the Oracle ERP Cloud.

Watch this tutorial video to learn more about integrating the Oracle General Ledger with the Cloud EPM.

Tutorial Video

Integration Process Description

At a high level, this is how you integrate Oracle General Ledger data from the Oracle ERP Cloud with your EPM application:

1. Set up the Oracle General Ledger source system and connection information, and then initialize the source system.

   The initialize process brings over the Oracle General Ledger data into the Oracle Fusion Cloud Enterprise Performance Management system as Oracle Essbase cubes. Each Essbase target application represents a chart of accounts definition from the source Oracle General Ledger.

   See Configuring a Source Connection.

2. Create the Cloud EPM target application that requires the Oracle General Ledger data from the Oracle General Ledger source system.

3. Create the target application that requires data from one or more source systems.

   If you are loading data from an Oracle General Ledger application to an Cloud EPM application, add the Cloud EPM as the target application type (for example, add Planning as the target application type.)

4. Set up the integration mapping between Oracle General Ledger and the EPM application dimensions in Data Management by building an import format.

   See Working with Import Formats in this section.

5. Define the location used to associate the import format with the Oracle General Ledger segments.

   See Defining Locations in this section.

6. Create category mapping for scenario dimension members in the EPM application to which Oracle General Ledger balances are loaded.

   See Defining Category Mappings in this section.

7. Define data load mapping to convert the chart of accounts values from the Oracle General Ledger to dimension members during the transfer.

   See Data Load Mapping in this section.

8. Define a data rule with the necessary filters and execute the rule.

   A default filter is provided that includes all dimensions of the Essbase cube. The cube may have duplicate members so fully qualified member names are required. The Essbase cubes work off the Oracle General Ledger segments, and there is a one to many relationships of Chart of Accounts to ledgers in the Oracle General Ledger.

   Data Management creates filters when a rule is created. You can modify the filters as needed but cannot delete them. (If the filters are deleted, Data Management recreates the default values). For information about these filters, see Adding Filters for Data Load Rules.

   The process extracts and loads the data from Oracle ERP Cloud to Data Management.

   See Adding Data Load Rules.

9. **Optional**: Write back the data to the Oracle ERP Cloud.

   To write back data to Oracle ERP Cloud from an Planning or Planning Modules source system, set up a data rule. In this case, the filters are applied against the Planning or Planning Modules application.

   Optionally, you can write back budget data from a Planning to a flat file using a custom target application. This output file may be used to load data to any other application.

Configuring a Source Connection

To begin integrating the Oracle General Ledger with the Oracle Fusion Cloud Enterprise Performance Management, you first create and register the source system with the type "Oracle ERP Cloud".

After the source system and connection information are specified, you initialize the source system to copy the Oracle General Ledger Chart of Account information to Cloud EPM as one of many Oracle Essbase target applications. The download is an integration with the Essbase database of the Planning application. You can see the actual cubes in Oracle Smart View for Office.

After the source system and connection information are specified, you initialize the source system to copy the Oracle General Ledger Chart of Account information to Cloud EPM as one of many Essbase target applications. The download is an integration with the Essbase database of the Planning application. You can see the actual cubes in Smart View.

To begin integrating the Oracle General Ledger with the Cloud EPM, you first create and register the source system with the type "Oracle ERP Cloud".

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.

Enter the Oracle General Ledger name to use for the file, such as "General Ledger" or "Oracle General Ledger Financials". If you are also using this source for write-back, make sure the source system name does not include any spaces.

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

c. In **Source System Type**, select **Oracle ERP Cloud**.

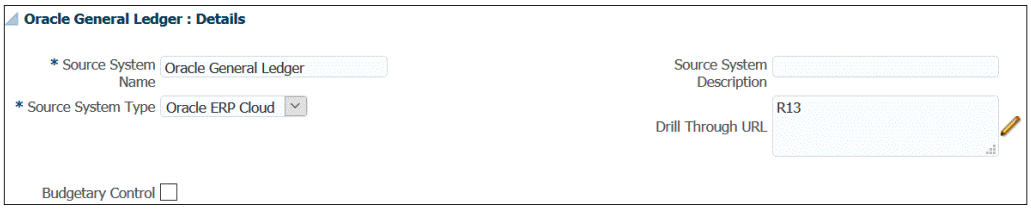
d. In **Drill Through URL**, specify one of the following Oracle ERP Cloud release URL formats:

- **R13**—system uses the Oracle ERP Cloud Release 13 URL format.
- **R12**—system uses the Oracle ERP Cloud Release 12 and earlier URL format.
- (Null)—system uses the Oracle ERP Cloud Release 12 and earlier URL format.

If you need to overwrite the server in addition to specify the release URL format, specify one of the following Oracle ERP Cloud release URL formats:

- **R13@https://server**—system uses the Oracle ERP Cloud Release 13 URL format and your server.
- **R12@https://server**—system uses the Oracle ERP Cloud Release 12 and earlier URL format and your server.

e. Leave the **Fusion Budgetary Control** field unchecked.



f. In **Application Filter**, specify any filter(s) condition to limit the number of Essbase applications returned when you initialize the source system.

You can specify a single filter condition or multiple filters conditions. If you use multiple filter condition, separate each filter condition by a comma (,).

When you specify an application name as a filter condition, you can specify the full Oracle ERP Cloud application name, wild card, or a wild card for a single character as shown below.

- Vision (Full Name)
- VF* (Wild Card)
- VF??COA (Wild Card for single char_

When you run the initialize process, the system imports all the applications that match the filter condition. If no filters are provided, all applications are imported.

4. Click **Configure Source Connection**.

The Configure Source Connection screen is used to configure the connection to the Oracle ERP Cloud.

The source connection configuration is used to store the Oracle ERP Cloud user name and password. It also stores the WSDL connection for the Oracle ERP Cloud user name and password.

5. In **User Name**, enter the Oracle ERP Cloud user name.

   Enter the name of the Oracle ERP Cloud user who launches the process requests to send information between Cloud EPM and the Oracle ERP Cloud. This user must have an assigned Oracle General Ledger job role such as "Financial Analyst," "General Accountant," or "General Accounting Manager."

   > **Note:**
   >
   > Web services require that you use your native user name and password and not your single sign-on user name and password.

6. In **Password**, enter the Oracle ERP Cloud password.

   You must update this password anytime you change your Oracle ERP Cloud password.

7. In **Web Services URL**, enter the server information for the Fusion web service. For example, enter https://server.

   If you are use a release URL format version earlier than R12, then replace the "fs" with **fin** in the URL from the one that is used to log on into the Web Services URL.

   If you are use a release URL format version later than R12, replace the "fs" with **fa** in the URL from the one that is used to log or simply copy and paste the server from the one that is used to log on into **Web Services URL**.

8. Click **Test Connection**.

9. Click **Configure**.

   The confirmation "Source system [*source system name*] configuration has been updated successfully" is displayed.

10. On the **Source System** screen, click **Initialize**.

    Initializing the source system fetches all metadata needed in Data Management, 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.

    The initialize process may take a while, and you can watch the progress in the job console.

    > **Note:**
    >
    > When re-initializing an Oracle General Ledger source, application period mappings are reset/removed from the system. If specific period mappings are required, then use the source period mapping tab to specify the period mappings.

11. Click **Save**.

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

    The initialize process may take a while, so the user can watch the progress in the job console.

Working with Import Formats

The import format enables you to set up the integration mapping between the Oracle General Ledger (Chart of Accounts) segments and Oracle Fusion Cloud Enterprise Performance Management dimensions.

When you select the source and target, Data Management populates the source and target columns automatically.

> **Note:**
>
> Oracle General Ledger creates one Essbase cube per Chart of Account/Calendar combination. In this case, you can use the same import format to import data from Ledgers sharing this Chart of Accounts. Ledgers can be specified as a filter in the data load rule.

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.

To add an import format for an Oracle General Ledger based source 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**, select the Oracle General Ledger Chart of Accounts from the drop down.
6. In **Target**, select the Cloud EPM target application.
7. **Optional**: In **Expression**, add any import expressions.
   Data Management provides a set of powerful import expressions that enable it to read and parse virtually any trial balance file into the Data Management database. You enter advanced expressions in the Expression column of the field. Import expressions operate on the value read from the import file.

   For more information, see Adding Import Expressions.
8. Click **Save**.

Defining Locations

A location is the level at which a data load is executed in Data Management. Each location is assigned an import format. Data load mapping and data load rules are defined per location. You define locations to specify where to load the data. 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. However; if you are using multiple import formats, you must define multiple locations.

> **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 **Name**, enter the location name.
4. From **Import Format**, enter the import format.

   The import format describes the source system structure, and it is executed during the source system import step. A corresponding import format must exist before it can be used with a location.

   Additionally:

   - Source name is populated automatically based on the import format.
   - Target name is populated automatically based on the import format.

   You can also click and select an import format.

   For more information about import formats, see Defining Import Formats for File-Based Mappings.
5. In **Functional Currency**, specify the currency of the location.

   > **Note:**
   >
   > You must specify the budget currency of the control budget to which the budget is written back.
6. In **Parent Location**, enter the parent assigned to the location.

   Parent mappings 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.

   > **Note:**
   >
   > If a location has a parent, the mappings are carried over to the child. However; changes to mapping can only be performed on the parent location.
7. **Optional**: In **Logic Account Group**, specify the logic account group to assign to the location.

A logic group contains 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.

8. **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. Data Management check reports retrieve values directly from the target system, Data Management source data, or Data Management converted data.

   The list of values for a check entity group is automatically filtered based on the target application under which it was created.

9. **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.

10. Click **Save**.

11. **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 Data Management screens, such as Data Load.

> **Tip:**
>
> To filter by the location name, ensure that the filter row is displayed above the column headers. (Click to toggle the filter row.) Then, enter the text to filter.
>
> You can filter locations by target application using the drop down at the top of the screen.

Defining Category Mappings

You define category mappings for categorizing and mapping source system data to a target EPM Scenario dimension member. For example, you may have a Scenario dimension member called Actuals for storing actual balances from a Oracle General Ledger application. In an Planning application, the same source system data is stored using the Scenario dimension member "Current". In Data Management, you can create one category mapping to give both one name to represent their respective scenarios.

You create category mapping for the scenario dimension member in Planning from which budget is written back.

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 a name that corresponds to the Planning application Scenario dimension member from which you want to load data.

5. In **Target Category**, enter the name of the Planning Scenario dimension members from which you want to load data.

6. Click **Save**.

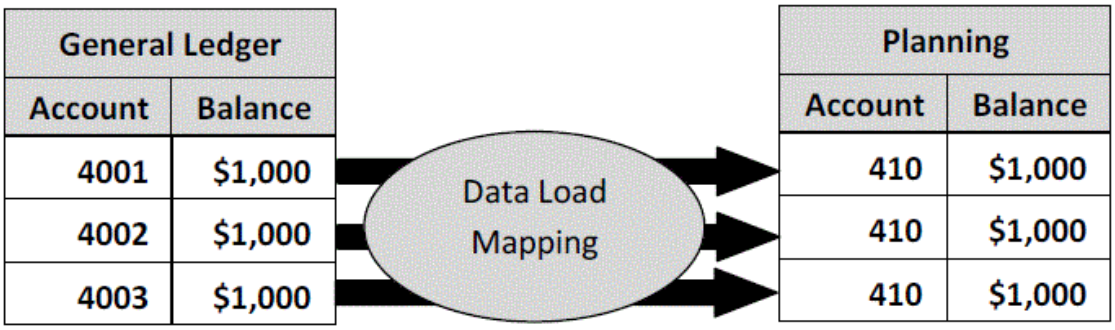
Data Load Mapping

Data load mappings convert the chart of accounts values from the Oracle General Ledger to Oracle Fusion Cloud Enterprise Performance Management dimension members during the transfer. This allows Data Management to categorize Oracle General Ledger balances.

In the following example, based on the chart of accounts segment, the Oracle General Ledger breaks down administrative expenses as a range of accounts from 4001-4003.

In Planning, budgeting for administrative expenses is done for dimension value 410, Administrative Expenses.

The data load mapping maps Oracle General Ledger accounts in the range 4001-4003 actual amounts to 410 administrative expenses in Planning.

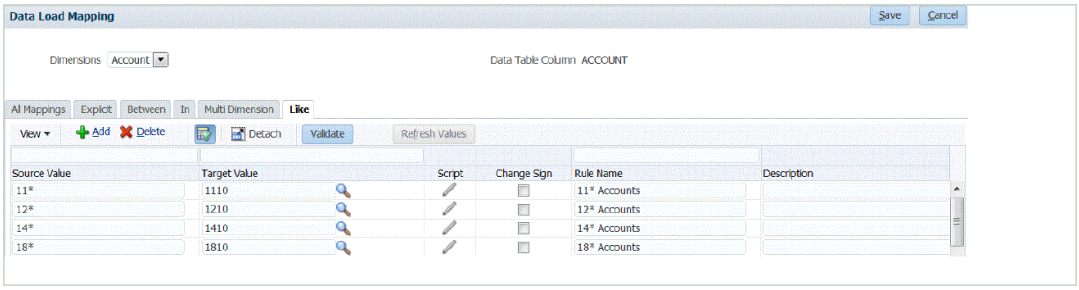


Differences in Planning dimension values and Oracle General Ledger Chart of Accounts values may occur. Additionally, segments of the Chart of Accounts may not be used when budgeting.

For example, the data load mapping can be used to use zero values (such as "0000" for sub-account) for the chart of accounts segments that are not used for budgeting.

To define data load mappings:

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



2. From the **Dimensions** drop-down, select the dimension that you want to map.

The "*" represents all values. Data load mappings should be based upon your Cloud EPM requirements.

When there is no update to the Oracle General Ledger value prior to the load, it is still necessary to create the data load mapping for the dimensions to instruct Data Management to create the target values.

At a minimum, map values for the "Account" and "Entity" dimensions since those are transferred from Oracle General Ledger.

If you are transferring additional chart segments you must provide a mapping for each destination dimension.

3. In **Source Value**, specify the source dimension member to map to the target dimension member.

   To map all General Ledger accounts to Cloud EPM "as is" without any modification, in **Source Value**, enter: *****, and from **Target Value**, enter: *****.

4. Select the **Like** tab.

5. In **Source Value**, enter: ***** to indicate that all values should use the mapping.
   These are the values from the Oracle General Ledger Chart of Accounts. Enter the values directly.

6. In **Target Value**, enter the value for the accounting scenario to use to load the budget information.
   Enter the values that should be used in Cloud EPM to store the Oracle General Ledger actual balances that are transferred.

   > **Note:**
   >
   > If you are working with Account Reconciliation "source types," you can specify either **source system** or **sub-system** (subledger) as a target value.

7. In **Rule Name**, enter the name of the data load rule used to transfer budget amounts to the Oracle General Ledger.

   > **Note:**
   >
   > Rules are evaluated in rule name order, alphabetically. Explicit rules have no rule name. The hierarchy of evaluation is from Explicit to (In/Between/Multi) to Like.

8. In **Description**, enter a description of the mapping.
   For example, enter a description such as "Map to the General Ledger".

9. **Optional:** In **Apply to Rule** to apply the mapping only to the specific data rule in the location.
   See Creating Member Mappings.

Adding Data Load Rules

After you define member mappings for the location, define data load rules for ledgers or business units in your source system to extract the data from the Oracle General Ledger and move it to the Oracle Fusion Cloud Enterprise Performance Management.

Data load rules are defined for locations that you have already set up. Data load rules are specific to locations. You can create multiple data load rules for a target application so that you can import data from multiple sources into a target application.

The data load rule is created once but used each time there is a transfer.

To create a data load rule for synchronization:

1. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
2. From the **POV Bar**, select the location to use for the data load rule.
   Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.
3. Click **Add**
4. In **Name**, enter the name of the data load rule.
5. In **Category**, leave the default category value.
   The categories listed are those that you created in the Data Management setup. See Defining Category Mappings.
6. 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 Data Management to determine the source General Ledger periods mapped to each Data Management period included in a Data Rule execution.
   - Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source General Ledger periods mapped to each Data Management period included in a data load rule execution. Explicit period mappings enable support of additional Oracle General Ledger data sources where periods are not defined by start and end dates.
   - Click **Save**.

Processing Oracle General Ledger Adjustment Periods

You can include adjustment periods from an Oracle General Ledger source system in the Oracle ERP Cloud when loading balances to an Oracle Fusion Cloud Enterprise Performance Management application.

You can include adjustment periods from an Oracle General Ledger source system in the Oracle ERP Cloud when loading balances to an Cloud EPM application.

Adjustment periods are additional periods that are related to regular periods from the source. An "adjustment period" refers to any accounting period set up to adjust balances prior to the closing period of the year. These periods are adjusted to "per12" and consequently are referred to as "per13". Typically, dates within the adjustment period overlap regular accounting periods. A customer might use a "Year Open Period" that refers to the first period in the accounting calendar to adjust last year’s balance carried forward amount. Additionally, the customer can set up the last period of the accounting calendar as the "Year Close Period" to adjust transactions made in the current accounting calendar.

In Data Management, adjustments are processed in Period Mappings where you indicate how the adjustment period maps to the period in the target application. The method for how adjustments gets processed is specified in the data load rule. This feature enables you to map Oracle General Ledger source periods in Data Management simply by pointing to the calendar and periods from the Oracle General Ledger application to the period in the EPM application.

When setting up the data load rule, you can either load to regular and adjustment periods when an adjustment period mapping exist or load an adjustment period only when an adjustment period mapping exists.

For example, when you 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.

To include adjustment periods from an Oracle General Ledger source system:

1. On the **Setup** tab, under **Integration Setup**, select **Period Mapping**.
2. Select the **Source Mapping** tab.
3. From **Source System**, select the Oracle General Ledger source system.
4. From **Target Application**, select the Cloud EPM application to which the adjustment applies.
5. From **Mapping Type**, select **Adjustment**.
6. Click **Add**.
7. In **Source Period Key**, specify the last day of the month to be mapped from the Oracle General Ledger source system.

   Use the date format based on the locale settings for your locale. For example, in the United States, enter the date using the **MM/DD/YY** format.

   You can also click and browse to and select the source period key.

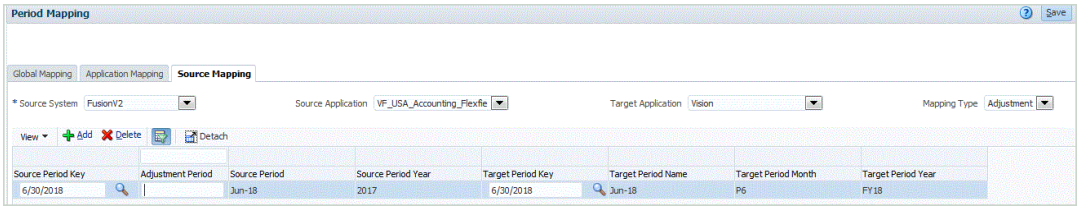
   When you select the **Source Period Key**, Data Management populates the **Source Period** and **Source Period Year** fields automatically.
8. In **Adjustment period**, specify the name of the adjustment period from the Oracle General Ledger source.

   For example, if the adjustment period from the Oracle General Ledger is Adj-Dec-16, then enter: **Adj-Dec-16** in this field.
9. In **Target Period Key**, specify the last day of the month to be mapped from the target system.

   Use the date format based on the locale settings for your locale. For example, in the United States, enter the date using the **MM/DD/YY** format.

   You can also click and browse to and select the target period key.

   When you select the **Target Period Key**, Data Management populates the **Target Period Name**, **Target Period Month**, and **Target Period Year** fields automatically.



10. Click **Save**.
11. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
12. From the **POV Bar**, select the location to use for the data load rule.

Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.

13. Click **Add**.
14. In **Name**, enter the name of the data load rule.
15. In **Category**, specify the default category value.

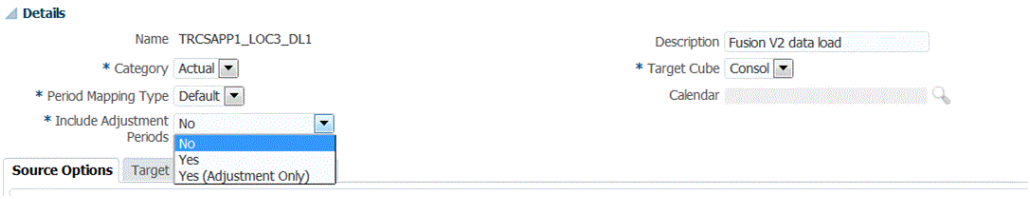
    The categories listed are those that you created in the Data Management setup.

    See Defining Category Mappings.
16. 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 Data Management to determine the source General Ledger periods mapped to each Data Management period included in a Data Rule execution.
    - Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source General Ledger periods mapped to each Data Management period included in a data load rule execution. Explicit period mappings enable support of additional Oracle General Ledger data sources where periods are not defined by start and end dates.
17. From **Include Adjustment Period**, select one of the following options for processing adjustment periods:

    - No—Adjustment periods are not processed. The system processes only regular period mappings (as setup for "default" and "explicit" mappings). **No** is the default option for processing adjustments.
    - Yes—If **Yes** is selected, then the regular period and adjustment period are included. If the adjustment period does not exist, then only the regular period is processed.
    - Yes (Adjustment Only)—If **Yes (Adjustment Only)** is selected, the system processes the adjustment period only. However, if the adjustment period does not exist, the system pulls the regular period instead.



18. Click **Save**.

> **Note:**

Adding Filters for Data Load Rules

Use filter to limit the results from an Oracle General Ledger source.

For data rules used to import data from the Oracle General Ledger, use filters to limit the results.

Data Management automatically creates filters when a rule is created. You can modify the filters as needed but cannot delete them. (If filters are deleted, Data Management recreates the default value.)

Data load rule filters:

Oracle General Ledger Dimension	Filter
Scenario	Actual
Balance Amount	Ending Balance
Amount Type	YTD
Currency Type	Total
All Other Dimensions	'@ILvl0Descendants("All '|| TARGET_DIMENSION_NAME||' Values")'

Note:

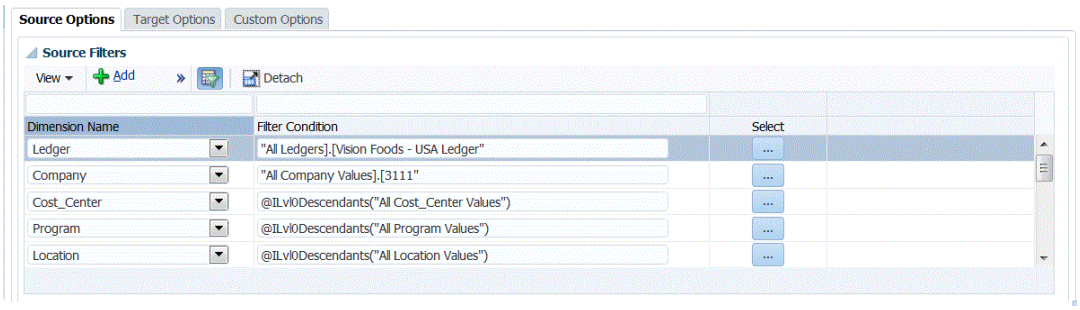
Drill Through is only supported if you load leaf level data for Oracle General Ledger Chart of Account segments. If you load summary level data, then drill through does not work.

Note:

If you want to bring in encumbrance from Oracle General Ledger and combine it with Actual in Oracle Fusion Cloud Enterprise Performance Management, modify the default dimension filter in the data load rule to include not only Actual but also Encumbrance.

To assign a filter to the data load rule:

1. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
2. Select the data load rule to which to add a filter.
3. Select the **Source Options** tab.



4. In the **Source Filters** area, click .
5. Select the **Dimension Name**.
6. In **Filter Condition** specify the filter condition:
   - Enter a member name or filter condition in the Filter Condition text box.

- 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.

> **Note:**
>
> Assign filters for dimension. 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 Oracle Essbase syntax in the Filter Condition field.

Drilling Through to the Oracle ERP Cloud

Drill though enables you to display and view the account balance summary page in the Oracle ERP Cloud.

When integrating with the Oracle General Ledger, Data Management determines the drill URL definition based on the connection information automatically such as system and fixed information. You do not need to set up when drilling through to the Oracle General Ledger.

Writing Back to the Oracle ERP Cloud

If you want to report budget-to-actual from the Oracle General Ledger, you need to write back your budget to Oracle General Ledger. If you want to validate spending online, you need to write back your budget to Budgetary Control.

Use this procedure to write back original and revised budget prepared using thePlanning feature to Oracle General Ledger.

This procedure is not for writing back budget revisions prepared using the Budget Revisions feature in ,Oracle Fusion Cloud Enterprise Performance Management which automatically updates budget in both General Ledger and EPM type control budget in Budgetary Control through other procedure.

The write back to Oracle General Ledger is also automatically performed for you when you write back budget to Budgetary Control for EPM type control budget, but obviously only for the portion of your enterprise-wide budget that you writes back to Budgetary Control.

For more information, see Using Financials for the Public Sector.

For Planning users, watch this tutorial video to learn about writing back Cloud EPM budgets to the Oracle General Ledger:

Tutorial Video

For Planning Modules users, see the Tutorial Video.

Writing Back Budgets to the Oracle ERP Cloud

If you want to report budget-to-actual from the General Ledger, you need to write back your budget to Oracle General Ledger. If you want to validate spending online, you need to write back your budget to Budgetary Control.

Use this procedure to write back original and revised budget prepared using Planning in the Oracle Fusion Cloud Enterprise Performance Management to Oracle General Ledger.

This procedure is not for writing back budget revisions prepared using the Budget Revisions feature in the Cloud EPM, which automatically updates budget in both General Ledger and EPM type control budget in Budgetary Control through another procedure.

The write back to Oracle General Ledger is also automatically performed for you when you write back budget to Budgetary Control. for EPM type control budget, but obviously only for the portion of your enterprise-wide budget that you writes back to Budgetary Control.

For more information, see Using Financials for the Public Sector

To write back to the Oracle General Ledger:

1. Create an import format to map dimensions to the Oracle General Ledger:
   a. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
   b. Click **Add**.
   c. In **Name**, enter the name of the import format.
   d. In **Source**, select the name of the Cloud EPM application from the drop-down.
   e. In **Description**, enter a description that can be used to identify the import format.

f. In **Drill URL** leave blank.

g. In **Target** drop-down, select the Oracle General Ledger application.

h. In **Target** drop-down, select the EPM application.

i. Click **Save** to save the import format and see the lower portion populated.

j. Scroll down to the lower region of the Import Format screen to map Cloud EPM dimensions to the general ledger dimensions.

k. Map a source for the target dimension "Ledger."
You can map a dimension like "Entity" to the ledger and define any necessary data load mapping to convert to the Oracle General Ledger name. If you are writing back to a single ledger, enter the name of the ledger in the expression column.

l. Click **Target Options**, select **Budget Name**.

m. In **Expression**, leave blank.

If the target is the budget name, enter the value of the accounting scenario that you plan to use.

2. Create a location.
The location is used to execute the transfer of budget amounts to the Oracle General Ledger. The import format is assigned to the location. If you are using multiple import formats, you also need to define multiple locations.

a. On the **Setup tab**, under **Integration Setup**, select **Location**.

b. Click **Add**.

c. In **Name**, enter a name for the location.

The location name is displayed when you initiate the transfer from the Cloud EPM to the Oracle General Ledger.

The location name is displayed when you initiate the transfer from the EPM application to the Oracle General Ledger.

d. In **Import Format**, select the name of the import format you to use during the transfer.

> **Note:**
>
> The Source and Target field names are populated automatically based on the import format.

e. In **Parent Location**, enter the parent assigned to the location.
Parent mappings 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.

f. In **Source**, the source is populated automatically.

g. In **Functional Currency**, specify the currency of the location.

h. **Optional**: In **Logic Account Group**, specify the logic account group to assign to the location.

i. **Optional**: In **Check Entity Group**, specify the check entity group to assign to the location.

j. **Optional**: In **Check Rule Group**, specify the check rule group to assign to the location.

k. Save the location.

See Defining Locations.

3. Create **period mappings**.

The period mapping is used to convert periods to Oracle General Ledger accounting calendar periods for the transfer.

> **Note:**
>
> When specifying the period, the starting and ending periods should be within a single fiscal year. Providing date ranges that cross fiscal year results in duplicate data.

a. On the **Setup tab**, under **Integration Setup**, select **Period Mapping**.

b. Click **Add** and add a separate row for each period that is to receive budget amounts.

Use the period names from the accounting calendar used by the ledger in the general ledger.

c. Define a **Period Key**.

Once you select a value, information about the period key, prior period key, period name, and the target period month are populated automatically.

- **Target Period Month**—The values in this field need to match the accounting calendar for the ledger in the Oracle General Ledger, which receives the transferred amounts.
- **Target Period Year**—Use values that corresponds to the accounting period (as defined in the Target Period Month column).

See Defining Period Mappings.

4. Define the **data load rule**.

A data load rule is used to submit the process to transfer balances from the Cloud EPM application to the Oracle General Ledger. The data load rule is created once but used each time there is a transfer.

a. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.

b. From the **POV Bar**, select the location to use for the data load rule.

Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.

c. Click **Add**.

d. In **Name**, enter the name of the data load rule.

e. In **Category**, leave the default category value.

f. In **Description**, enter a description to identify the data load rule when you launch the request to transfer general ledger balances.

g. In **Target Plan Type**, select a plan type.

h. 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 Data Management to determine the Source General Ledger Periods mapped to each Data Management period included in a Data Rule execution.
- Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source GL Periods mapped to each Data Management 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.

i. Click **Save**.

5. Add **Source Option filters** to the data load rule for write-back.

   a. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.

   b. From the **POV Bar**, select the location to use for the data load rule.

      Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.

   c. Select the data load rule to which to add a filter.

   d. Select the **Source Options** tab.

   e. In the **Source Filters** area, click .

   f. Select the **Dimension Name**.

   g. In **Filter Condition** specify the filter condition:

      - Enter a member name or filter condition in the Filter Condition text box.
      - Click to display the Member Select screen and use a member selector to specify functions for filtering. Then, click **OK**.

      To use the member selector:

      i. In the list of available dimensions and members on the left, select a member and click .

      ii. To deselect a member from the list of members, click .

      iii. 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 .

iv. Click **OK** twice to continue defining the source filter details.

The selected member is displayed in Oracle Essbase syntax in the Filter Condition field.

6. Execute the data load rule to write back.
   a. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
   b. From the **POV Bar**, verify the location and period to use for the data load rule.
   c. Select **Execute** to submit a request to transfer budget amounts to the Oracle General Ledger.
   d. In **Import from Source**, select to import the budget information from Planning.
   e. In **Recalculate**, leave blank.
   f. In **Export to Target**, select to export the information to the Oracle General Ledger.
   g. In **Start Period**, select the earliest general ledger period to transfer.

      The list of values includes all the general ledger periods that you have defined in the period mapping. This is typically the first period of the year for the initial budget load, and then the current period or a future period during the year if there are updates to the budget that are to be transferred to the Oracle General Ledger.
   h. In **End Period**, select the latest General Ledger period to transfer.

      The list of values includes all the general ledger periods you have defined in the period mapping.
   i. In **Import Mode**, select **Replace** to overwrite existing budget information in Oracle General Ledger for the period range you selected (from the start period and end period options).

      Select **Append** to add information to existing Oracle General Ledger budget amounts without overwriting existing amounts.
   j. Click **Run**.

Writing Back Actuals to the Oracle ERP Cloud - Oracle General Ledger

When actual information is complete in your Oracle Fusion Cloud Enterprise Performance Management application, you can define the Cloud EPM application as a source and then write back data to an Oracle ERP Cloud - Oracle General Ledger target application.

After specifying any necessary filters, you can then extract actual values from Cloud EPM and write them to Oracle General Ledger. In the Export workflow step, the data is written to a flat file, which in turn is copied to a file repository. When data is written back, journal entries are created in the General Ledger.

On the Oracle ERP Cloud side when configuring the ERP system, make sure the Oracle Fusion ERP Essbase cube has been created using the "Create General Ledger Balances Cube." In addition, scenarios must be already be set up in the Oracle Fusion ERP Essbase cube using the "Create Scenario Dimension Members" job.

To write back to the Oracle General Ledger:

1. An Oracle ERP Cloud/Cloud EPM integration requires that the you have the privileges or user role and data access to work with all ERP ledgers to be integrated.
2. Create an import format to map dimensions to the Oracle General Ledger:
   a. On the **Setup** tab, under **Integration Setup**, select **Import Format**.

b. Click **Add**.

c. In **Name**, enter the name of the import format.

d. In **Source**, select the name of the Cloud EPM application from the drop-down.

e. In **Description**, enter a description that can be used to identify the import format.

f. In **Drill URL** leave blank.

g. In **Target** drop-down, select the Oracle General Ledger application.

h. In **Target** drop-down, select the EPM application.

i. Scroll down to the lower region of the Import Format screen to map Cloud EPM dimensions to the general ledger dimensions.

j. Map a source for the target dimension "Ledger."
You can map a dimension like "Entity" to the ledger and define any necessary data load mapping to convert to the Oracle General Ledger name. If you are writing back to a single ledger, enter the name of the ledger in the expression column.

k. **Optional**: If you want to populate any additional reference data and/or attribute data for each journal, use the Attribute columns to map the columns.

   Attribute columns, Attribute1 to Attrbute10, are reserved for REFERENCE1 TO REFERENCE10. In this case, you need to also add the REFERENCE column as a dimension and map it to the ATTR column in the target application. For example if you want to populate REFERENCE3, then insert dimension details and give it an appropriate name, assign the type of Attribute and then assign data column ATTR3. (ATTR11 to ATTR30 are reserved for ATTRIBUTE1 TO ATTRIBUTE20. Attribute1 is stored in ATTR11, Attribute2 is stored in ATTR12 and so on.)

l. In **Expression**, leave blank.

m. Click **Save** to save the import format and see the lower portion populated.

3. Create a location.
The location stores the data load rules and mappings for the integration. The import format is assigned to the location. If you are using multiple import formats, you also need to define multiple locations.

   a. On the **Setup tab**, under **Integration Setup**, select **Location**.

   b. Click **Add**.

   c. In **Name**, enter a name for the location.

      The location name is displayed when you initiate the transfer from the Cloud EPM to the Oracle General Ledger.

      The location name is displayed when you initiate the transfer from the EPM application to the Oracle General Ledger.

   d. In **Import Format**, select the name of the import format you to use during the transfer.

      > **Note:**
      >
      > The Source and Target field names are populated automatically based on the import format.

   e. In **Parent Location**, enter the parent assigned to the location.
   Parent mappings 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.

f. In **Source**, the source is populated automatically.

g. In **Functional Currency**, specify the currency of the location.

h. **Optional**: In **Logic Account Group**, specify the logic account group to assign to the location.

i. **Optional**: In **Check Entity Group**, specify the check entity group to assign to the location.

j. **Optional**: In **Check Rule Group**, specify the check rule group to assign to the location.

k. Save the location.

See Defining Locations.

4. On the **Setup tab**, under **Integration Setup**, select **Period Mapping**.

5. Create any period mappings if needed.

The period mapping is used to convert periods to Oracle General Ledger accounting calendar periods for the transfer.

> **Note:**
>
> When specifying the period, the starting and ending periods should be within a single fiscal year. Providing date ranges that cross fiscal year results in duplicate data.

a. Click **Add** and add a separate row for each period that is to receive actual amounts.

Use the period names from the accounting calendar used by the ledger in the general ledger.

b. Define a **Period Key**.

Once you select a value, information about the period key, prior period key, period name, and the target period month are populated automatically.

- **Target Period Month**—The values in this field need to match the accounting calendar for the ledger in the Oracle General Ledger, which receives the transferred amounts.
- **Target Period Year**—Use values that corresponds to the accounting period (as defined in the Target Period Month column).

See Defining Period Mappings.

6. On the **Workflow** tab, under **Integration Setup**, select **Data Load Rule**.

A data load rule is used to submit the process to transfer balances from the Cloud EPM application to the Oracle General Ledger. The data load rule is created once but used each time there is a transfer.

7. From the **POV Bar**, select the location to use for the data load rule.

Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.

8. In **Name**, specify a name for the data load rule.
9. From **Category**, select **Actual**.
10. From **Import Format**, select the import format associated with the write-back.
11. Click the **Source Option**.
    a. In **File Name**, select the data file name that contains the data you are loading. It may be the same one from which you created the data source application, or another file that has data as well as the appropriate header.

       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 you execute the rule for a range of periods, the process constructs the file name for each period and uploads it to the appropriate POV.
    b. From **Directory**, specify the directory to which the file has been assigned.

       To navigate to a file located in a Data Management directory, click **Select**, and then choose a file on the **Select** screen. You can also select **Upload** on the **Select** page, and navigate to a file on the **Select a file to upload** page.

       If you do not specify a file name, thenData Management prompts you for the file name when you execute the rule.
    c. To load data into multiple periods, in the **File Name Suffix Type** drop-down, select **Period Name** or **Period Key**.

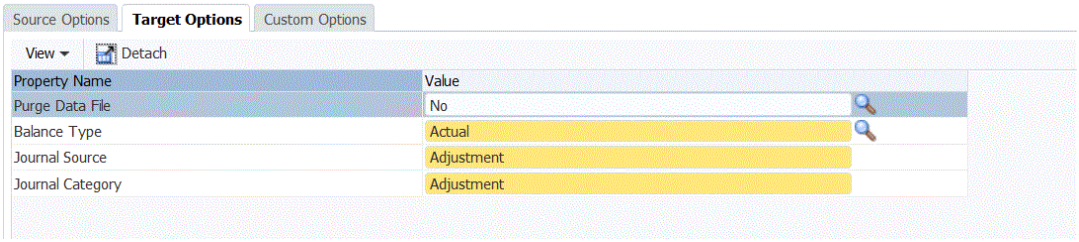
       A suffix is appended to the file name, andData Management adds the file extension after adding the suffix. If you leave the file name blank, then Data Management looks for a file with Suffix. When the file name suffix type is provided, then the file name is optional in this case, and it is not required 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. 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.

       For example, specify:

       i. 1_Jan-2019.txt
       ii. 1_Feb-2019.txt
       iii. 1_Mar-2019.txt
    d. 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).
    e. Click **Save**.
12. Click the **Target Options** tab.

    When working with data load rules, use target application options to specify options specific to a location/data load rule (instead of the entire target application).



13. From **Balance Type**, select **Actual**.
14. In **Journal Source**, enter a description of the journal source that matches the journal source defined in the Oracle ERP Cloud.
15. In **Journal Category**, enter a description of the journal category that the matches the journal category in the Oracle ERP Cloud.
16. Click **Save**.
17. Execute the data load rule to write back.
    a. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
    b. From the **POV Bar**, verify the location and period to use for the data load rule.
    c. Select **Execute** to submit a request to write back actual amounts to the Oracle General Ledger.
    d. In **Import from Source**, select to import the actual value information from the Cloud EPM application.
    e. In **Recalculate**, leave blank.
    f. In **Export to Target**, select to export the information to the Oracle General Ledger.
    g. In **Start Period**, select the earliest general ledger period to transfer.

       The list of values includes all the general ledger periods that you have defined in the period mapping. This is typically the first period of the year for the initial actual load, and then the current period or a future period during the year if there are updates to the actual values that are to be written back to the Oracle General Ledger.
    h. In **End Period**, select the latest General Ledger period to transfer.

       The list of values includes all the general ledger periods you have defined in the period mapping.
    i. In **Import Mode**, select **Replace** to overwrite existing actual information in Oracle General Ledger for the period range you selected (from the start period and end period options).

       Select **Append** to add information to existing Oracle General Ledger actual value amounts without overwriting existing amounts.
    j. Click **Run**.

Integrating Budgetary Control

Budgetary Control is a module in the Oracle ERP Cloud that provides a flexible open interface to allow budgets to be imported and provides a basic spreadsheet for budget data entry.

You can import commitments, obligations, other anticipated expenditures, and expenditures fromBudgetary Control into your Planning and Planning Budget Revisions modules for use with budget revision, future budget preparation and reporting purposes.

In addition, you can develop comprehensive budgets in Planning and Planning Budget Revisions modules and then using the write-back feature in Data Management, transfer budgets to Budgetary Control and enable budgetary control validation.

> **Note:**
>
> In this release, Budgetary Control only integrates with Planning and Planning Budget Revisions modules.

For information on loading commitments, obligations, and other anticipated expenditures from Budgetary Control to Oracle Fusion Cloud Enterprise Performance Management, see Loading Budgetary Control Budget Consumption Balances to the Cloud EPM Process Description.

For information on writing back budgets from Cloud EPM to Budgetary Control, see Writing Back Cloud EPM Budget Balances to the Budgetary Control Process Description.

Loading Budgetary Control Budget Consumption Balances to the Cloud EPM Process Description

Describes how to load commitments, obligations, and other anticipated expenditures from Budgetary Control to use in your Planning and Planning Budget Revisions applications.

You can load commitments, obligations, expenditures and other anticipated expenditures from Budgetary Control to use in your Planning and Planning Budget Revisions applications.

At a high level, these are the steps to load commitments, obligations, and other anticipated expenditures from Budgetary Control to the Oracle Fusion Cloud Enterprise Performance Management:

1. Register, configure, and initialize a source connection for Budgetary Control.

   The initialize process brings over Budgetary Control balance Essbase cubes into Data Management as Budgetary Control target applications. A control budget dimension member within each Budgetary Control target application represents a control budget in Budgetary Control from and to which the Cloud EPM loads data and writes back.

   See Configuring a Connection to a Budgetary Control Source.

   > **Note:**
   >
   > Drill through is not supported in this release for the Budgetary Control integration with the Cloud EPM.

2. Create the Cloud EPM target application to represent the Planning and Budgetary Control application to be integrated.

   As a rule, when loading and writing back data between the Planning application and the Budgetary Control application, you can use the system-generated target application that represents the Planning application in the Cloud EPM and the target applications generated from source system initialization that represents the Budgetary Control balances Essbase cube, instead of creating your own. Do not change, add, or delete any dimension details for these system-generated target applications on the Target Application screen.

   See Registering Target Applications.

3. Create an import format to map the dimensions from the Budgetary Control application to those of the Planning application to which commitment, obligation and expenditure amounts are loaded.

   See Working with Import Formats in this section.

4. Create a location to associate the import format with the Budgetary Control.

   See Defining Locations in this section.

5. Create category mapping for scenario dimension members in the Planning application to which Budgetary Control balances are loaded.

   See Defining Category Mappings in this section.

6. Create data load mappings to map the dimension members between the Budgetary Control application and the Planning application.

   See Data Load Mapping in this section.

7. Create a data load rule (integration definition) to execute the data load and transfer commitment, obligation and expenditure amounts to the Cloud EPM application from the Budgetary Control application.

   See Adding Data Load Rules.

Configuring a Connection to a Budgetary Control Source

Procedure describes how to configure an Budgetary Control source.

Budgetary Control Balance cubes and their underlying control budgets are eligible for integration with the Oracle Fusion Cloud Enterprise Performance Management when the control budget in Budgetary Control:

- has a "Planning" Source Budget Type.
- does not have Project Portfolio Management keys as a budget segment
- is associated with a Budgetary Control Balances cube

To begin integrating the Budgetary Control with the Cloud EPM, create and register the source system with the source system type "Oracle ERP Cloud."

After the source system and connection information are specified, initialize the source system to copy the Budgetary Control information to Cloud EPM as one of many Oracle Essbase target applications.

To add a Budgetary Control 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.

      > **Note:**
      >
      > Make sure the source system name does not include any spaces. For example, use **FinCloudBC** rather than **Fin Cloud BC**.

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

c. In **Source System Type**, select **Oracle ERP Cloud**.

d. Select **Fusion Budgetary Control**.

When Budgetary Control is enabled, only Budgetary Control applications, as indicated by an "XCC _" prefix, are imported.

e. In **Application Filter**, specify any filter(s) condition to limit the number of Budgetary Control applications returned when you initialize the source system.

You can specify a single filter condition or multiple filters conditions. If you use multiple filter condition, separate each filter condition by a comma (,).

When you specify an application name as a filter condition, you can specify the full Budgetary Control application name, wild card, or a wild card for a single character as shown below.

- XCC_VF_City_Budget (Full Name)
- XCC_VF* (Wild Card)
- XCC_VF??COA (Wild Card for single char_)

You can get the name of the Budgetary Control Balances Essbase cubes for the control budgets to which to integrate using the Manage Control Budgets task in Fusion Budgetary Control.

When you run the initialize process, the system imports all the applications that match the filter condition. If no filters are provided, all applications are imported.

4. Click **Configure Source Connection**.

The source connection configuration is used to store the Budgetary Control user name and password. It also stores the WSDL connection for the same.

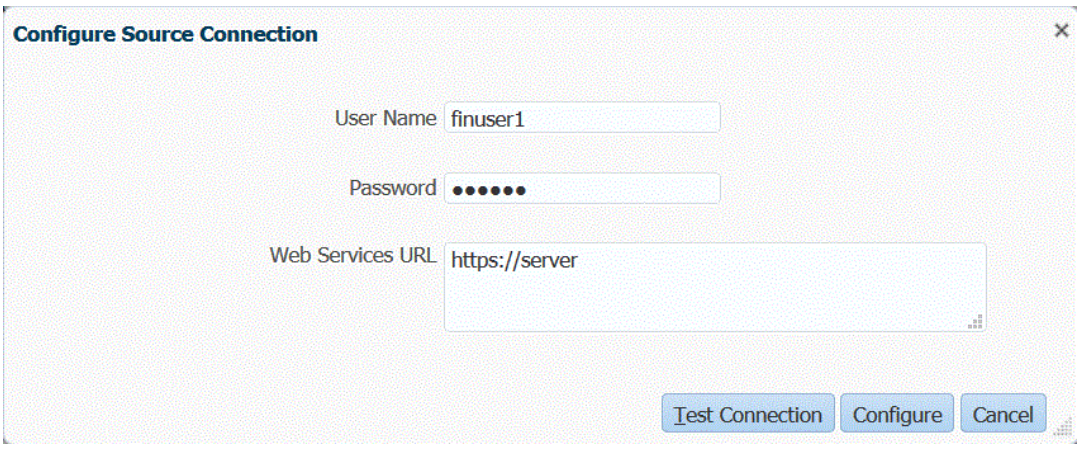
5. In **User Name**, enter the Budgetary Control user name.

Enter the name of the user who is assigned as a Budget Manager and has data access to the Budgetary Control budgets with which you want to integrate.

6. In **Password**, enter the password of the user.

You must update this password anytime you change your Oracle ERP Cloud password.

7. In **Web Services URL**, enter the server information for the Fusion web service. For example, enter `https://server`.



For customers using release 19.01 and earlier of the Oracle ERP Cloud, use the old WSDL to make the connection and then specify the URL in the following format:

If you are use a release URL format version earlier than R12, then replace the "fs" with **fin** in the URL from the one that is used to log on into the Web Services URL.

If you are use a release URL format version later than R12, replace the "fs" with "**fa**" in the URL from the one that is used to log or simply copy and paste the server from the one that is used to log on into **Web Services URL**.

For example, you might specify: `https://efsdcdgha02.fin.efops.yourcorp.com/publicFinancialCommonErpIntegration/ErpIntegrationService?WSDL`

\

8. Click **Test Connection**.
9. Click **Configure**.

   The confirmation "Source system [*source system name*] has been configured successfully" is displayed.
10. On the **Source System** screen, click **Initialize**.

    Initializing the source system fetches all metadata needed in Data Management, such as budgets, budget 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.

    The initialize process may take a while, and you can watch the progress in the job console.
11. Click **Save**.

Working with Import Formats

The import format enables you to set up the integration mapping between the Budgetary Control (Budget Chart of Accounts) segments and Oracle Fusion Cloud Enterprise Performance Management dimensions.

When you select the source and target, Data Management populates the source and target columns automatically.

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.

To add an import format for a Budgetary Control based 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 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**, select the Data Management source application from the drop down.
6. In **Target**, select the Budgetary Control application.
7. Go to the **Import Format Mapping** section.

   The target dimensions are populated automatically.
8. From **Source Column**, From Source Column, specify the source dimensions in the source Budgetary Control application that correspond to the dimensions in the target Planning application.

   > **Note:**
   >
   > For Planning dimensions that cannot be mapped from a Budgetary Control dimension, such as the "Version" and "Plan Element" dimension in a Planning application, leave them unmapped. You can specify a single member for those unmapped Planning dimensions later in Data Load Mappings.
9. **Optional**: In **Expression** add any import expressions.

   Data Management provides a set of powerful import expressions that enable it to read and parse virtually any file into the Data Management database. You enter advanced expressions in the Expression column of the field. Import expressions operate on the value that is read from the import file.

   For more information, see Adding Import Expressions.
10. Click **Save**.

Defining Locations

A location is the level at which a data load is executed in Data Management. Each location is assigned an import format. Data load mapping and data load rules are defined per location. You define locations to specify where to load the data. 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. However; if you are using multiple import formats, you must define multiple locations.

> **Note:**
>
> You can create duplicate locations with the same source system and application combination.

To create a location:

1. On the **Setup** tab, under **Integration Setup**, select **Location**.
2. In **Location**, click **Add**.
3. From **Location Details**, in **Name**, enter the location name.
4. From **Import Format**, enter the import format.

   The import format describes the source system structure, and it is executed during the source system import step. A corresponding import format must exist before it can be used with a location.

   Additionally:

   - Source name is populated automatically based on the import format.
   - Target name is populated automatically based on the import format.

   You can also click and select an import format.
5. In **Functional Currency**, specify the currency of the location.
6. In **Parent Location**, enter the parent assigned to the location.

   Parent mappings 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.

   > **Note:**
   >
   > If a location has a parent, the mappings are carried over to the child. However; changes to mapping can only be performed on the parent location.

7. **Optional**: In **Logic Account Group**, specify the logic account group to assign to the location.

   A logic group contains 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.
8. **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. Data Management check reports retrieve values directly from the target system, Data Management source data, or Data Management converted data.

The list of values for a check entity group is automatically filtered based on the Target Application under which it was created.

9. **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.

10. Click **Save**.

11. **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 Data Management screens, such as Data Load.

> **Tip:**
>
> To filter by the location name, ensure that the filter row is displayed above the column headers. (Click to toggle the filter row.) Then, enter the text to filter.
>
> You can filter Locations by target application using the drop down at the top of the screen.

Defining Category Mappings

You create category mapping for scenario dimension members in the Planning and Planning Budget Revisions application to which Budgetary Controlbalances are loaded.

If you load Budgetary Control budget consumption balances for inquiry in Budget Revisions, load them to the pre-defined OEP_Consumed scenario member.

To define category mappings:

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 a name that corresponds to the Planning and Planning Budget Revisions applications Scenario dimension member to which you want to load budget consumption amounts.

   For example, if you want to load the sum of commitments, obligations, other anticipated expenditures, and expenditures from Budgetary Control to one Scenario dimension member in the Planning application, you need one Category mapping entry.

   If you are using Budget Revisions feature, the system-generated Scenario dimension member for this usage is OEP_Consumed.

If you are not using Budget Revisions and still want to load the Budgetary Control balances, instead of the encumbrance balances from General Ledger balances, to the Planning application, you can create a custom Scenario dimension member.

Either way, create a category mapping entry and enter this Scenario dimension member name as the Target Category. Its corresponding Category can be named the same for convenience or anything you like, such as Budgetary Control Consumption or just Consumed.

5. Click **Save**.

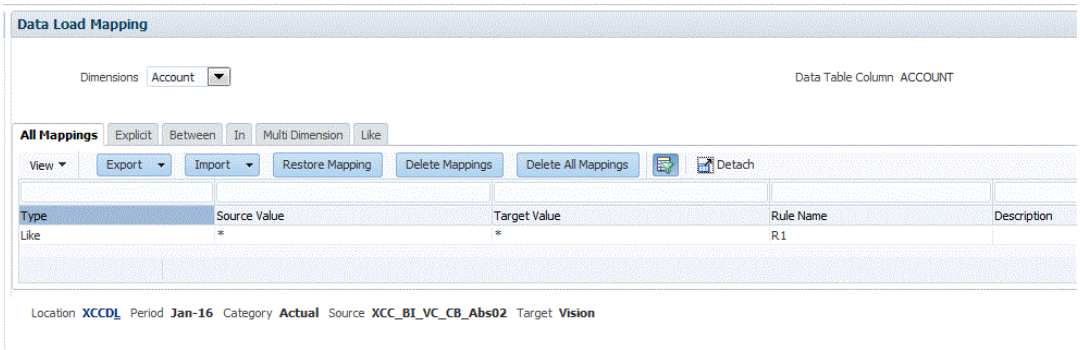
Data Load Mapping

When loading Budgetary Control budgets to Oracle Fusion Cloud Enterprise Performance Management, you map the Budgetary Control source members to the Cloud EPM target members.

Besides mapping the members for Planning dimensions mapped in the Import Format, also map the members for the unmapped Planning dimensions by specifying the Planning dimension member to which data is loaded, such as the "OEP_Working" version and the "OEP_Load" plan element..

To define data load mappings:

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



2. From the **POV Bar**, select the location, period, and category corresponding to the Cloud EPM to which to load data for the data load mapping and the data load rule.

   Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.

3. From the **Dimensions** drop-down, select the source dimension to map.

   You must provide mapping for each target Planning dimension.

   For dimensions that are not mapped in the Import Format, you must map to a specific target member, such as "OEP_Working" in the unmapped "Version" dimension and "OEP_Load" in the unmapped "Plan Element" dimension in the Planning application.

   For dimensions that are mapped in Import Format, even if there is no update to the Cloud EPM dimensions value prior to the load, it is still necessary to create an "as is" mapping.

4. Select the **Like** tab.

5. In **Source Value**, specify the source dimension member to map to the target dimension member.

   To map all Budgetary Control accounts to Cloud EPM "as is" without any modification, in **Source Value**, enter *****, and from **Target Value**, enter *****.

6. In **Target Value**, select the member name to which the source members are mapped.

   You can also click the search to display the Member Selector and select a member name from the member list.

7. In **Rule Name**, enter the name of the data load rule used to transfer budget amounts to Budgetary Control.

   > **Note:**
   >
   > Rules are evaluated in rule name order, alphabetically. Explicit rules have no rule name. The hierarchy of evaluation is from **Explicit** to (In/Between/Multi) to **Like**.

8. In **Description**, enter a description of the mapping.

   For example, enter a description such as "Map to the ledger".

9. **Optional:** In **Apply to Rule**, check to apply the mapping only to the specific data rule in the location.

   See Creating Member Mappings.

10. Click **Save**.

Adding Data Load Rules

After you define member mappings for the location, define and execute data load rules to push budget consumption from the Budgetary Control to the Oracle Fusion Cloud Enterprise Performance Management application.

Data load rules are defined for locations that you have already set up. Data load rules are specific to locations. You can create multiple data load rules for a target application so that you can import data from multiple sources into a target application.

The data load rule is created once, but used each time there is a transfer.

To create a data load rule:

1. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
2. From the **POV Bar**, select the location, period, and category corresponding to the Cloud EPM scenarios to which to load data for the data load rule.

   Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.

3. Click **Add**.
4. In **Name**, enter the name of the data load rule.
5. In **Description**, enter a description to identify the data load rule when you launch the transfer.
6. In **Category**, select the category that corresponds to the Scenario dimension member in the Planning application to which the Budgetary Control consumption amounts are loaded, the one you created in the **Defining Category Mapping** step above.
7. 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 Data Management to determine the Source General Ledger Periods mapped to each Data Management period included in a Data Rule execution.

  Select **Default** period mapping type for loading consumption amounts to the Planning application.

- Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source GL Periods mapped to each Data Management Period included in a Data Rule execution. Explicit period mappings enable support of additional General Ledger data sources where periods are not defined by start and end dates.

8. Click **Save**.
9. In **Target Plan Type**, select the plan type of the target to which you want to load budget.
10. Select **Source Options** to specify and dimensions and filters.

    See Adding Filters for Data Load Rules.

11. **Optional**: Select **Target Options** to specify any target options.

    See Defining Application Options for Essbase.

12. **Optional**: Select **Custom Options** to specify any free form integration information.

    See Creating Custom Options.

13. Execute the data load rule.

    See the following data load rule topics:

    - Edit data load rules—See Editing Data Load Rules.
    - Run data load rules—See Running Data Load Rules.
    - Delete data load rules—See Deleting Data Load Rules.
    - Schedule data load rules—See Scheduling Data Load Rules.
    - View data load rules before executing them—See Using the Data Load Workbench.
    - Check the data rule process details—See Viewing Process Details.

14. From **Workflow**, under **Monitor**, select **Process Details**
15. Verify the **status** of the data load.

    A green check mark indicates that the transfer was successful.

16. To verify the results of the transfer, on the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

Adding Filters for Data Load Rules

Data Management automatically creates Budgetary Control filters when a rule is created. You can modify the filters as needed but cannot delete them. (If the filters are deleted, Data Management recreates the default value.)

For data rules used to import data from the Budgetary Control, use filters to limit the results.

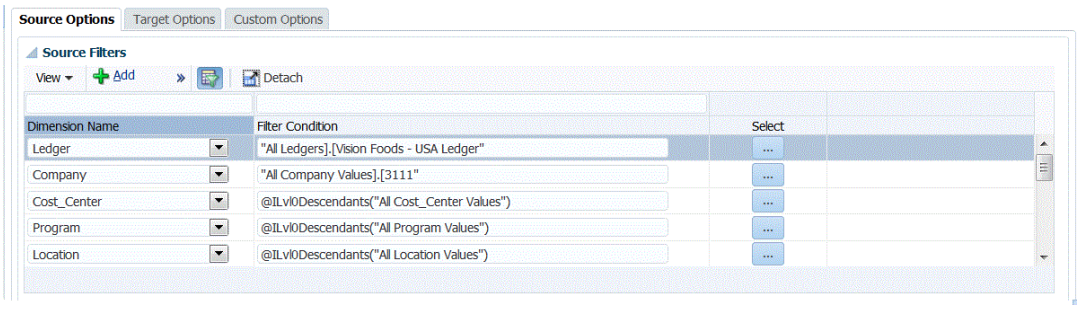
Data Management automatically creates filters when a rule is created. You can modify the filters as needed but cannot delete them. (If the filters are deleted, Data Management recreates the default value.)

When working with Budgetary Control data load filters, note the following:

- Control Budget— Add this dimension and select the control budget from which consumption balances are to be loaded.
- Amount Type budgetary control dimension—Select "PTD" assuming the line items to be loaded from Budgetary Control are typically income statement type of accounts.
- Balance Amounts budgetary control dimension—Depending on your business requirements for the type of consumption amounts you want to bring into the Planning application, select any balance amount(s), such as Commitment, Obligation, Other Anticipated Expenditures, and Expenditures.
- For the other budgetary control dimensions, select members from the appropriate level to which you want to load data in the Planning application.

To assign a filter to the data load rule:

1. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
2. Select the data load rule to which to add a filter.
3. Select the **Source Options** tab.



4. In the **Source Filters** area, click .
5. Select the **Dimension Name**.
6. In **Filter Condition** specify the filter condition:
   - Enter a member name or filter condition in the Filter Condition text box.
   - 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.

> **Note:**
>
> Assign filters for dimensions. If you do not specify an appropriate level of members, even summary members are retrieved and results in an overstatement.

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 Oracle Essbase syntax in the Filter Condition field.

Writing Back Cloud EPM Budget Balances to the Budgetary Control Process Description

If you want to report budget-to-actual from the General Ledger, you need to write back your budget to Oracle General Ledger. If you want to validate spending online, you need to write back your budget to Budgetary Control.

Use this procedure to write back original and revised budget prepared using thePlanning feature to Oracle General Ledger.

This procedure is not for writing back budget revisions prepared using the Budget Revisions feature in the Oracle Fusion Cloud Enterprise Performance Management which automatically updates budget in both General Ledger and EPM type control budget in Budgetary Control through other procedure. For more information, see Setting Up Budget Revisions and Integration with Budgetary Control.

This procedure synchronizes the budget written back to an EPM type control budget in Budgetary Control with the budget in Oracle General Ledger, making it possible to skip the Writing Back Budgets to the Oracle ERP Cloud in *Administering Data Management for Oracle Enterprise Performance Management Cloud* procedure for the portion of your enterprise-wide budget that you write back to Budgetary Control.

For more information, see Using Financials for the Public Sector.

For Planning users, watch this tutorial video to learn about writing back Cloud EPM budgets to the Oracle General Ledger:

Tutorial Video

For Planning Modules users, see the Tutorial Video.

At a high level, here are the steps for writing back Cloud EPM budgets to the Budgetary Control::

1. Register, configure, and initialize a source connection to the Budgetary Control.

   See Configuring a Connection to a Budgetary Control Source.

   > **Note:**
   >
   > If you have already registered a source system to connect to the Budgetary Control application in Loading Budgetary Control to the Oracle Fusion Cloud EPM Process Description topic (see Loading Budgetary Control Budget Consumption Balances to the Cloud EPM Process Description), you must reuse the same source system.

   > **Note:**
   >
   > Drill through is not supported in this release.

2. Select the Budgetary Control target application to which to write back budgets from the Cloud EPM source system.

   A Budgetary Control application is downloaded with the target application type Oracle Essbase.

   As a rule, when writing back to a Budgetary Control application, do not change, add, or delete any dimension details on the Target Application screen.

   See also: Registering Target Applications.

3. Map the dimensions between the Planning application and the Budgetary Control target application by building an import format.

   See also: Working with Import Formats.

4. Create a location to associate the import format for a Cloud EPM application with a Budgetary Control application.

   See also: Defining Locations.

5. Create category mapping for scenario dimension members in the Planning application and from which the budget is written back to the Budgetary Control.

   See also: Defining Category Mappings.

6. Create data load mappings to map dimensions between the Planning application and Budgetary Control.

   See also: Data Load Mapping.

7. Create a data load rule (integration definition) to to map dimension members between the Planning application and Budgetary Control.

   See also: Adding Data Load Rules.

8. View the Cloud EPM budgets loaded to Budgetary Control.

   See also: Viewing the Cloud EPM Budgets Loaded to Budgetary Control.

9. Optionally, you can write out budget data from the Planning to a flat file using a custom target application. This output file may be used to load data to any other application.

   See also: Creating a Custom Target Application.

Working with Import Formats

The import format enables you to set up the integration mapping between the Oracle Fusion Cloud Enterprise Performance Management dimensions and Budgetary Control dimensions. Note that Budgetary Control does not have a "Scenario" dimension.

When you select the source and target, Data Management populates the source and target columns automatically.
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.

To add an import format for a Planning based 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 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**, select the Cloud EPM source application from the drop down.
6. In **Target**, select the Budgetary Control application.
7. Select the **Import Format Mapping** section.

   The target dimensions are automatically populated.
8. From **Source Column**, specify dimensions in the source Planning that correspond to the dimensions in the target Budgetary Controlapplication.

   The Source Column drop-down displays all Cloud EPM source system segments available for the Planning application.

   > **Note:**
   >
   > Arbitrarily map the "Control Budget" Budgetary Control dimension to the "Account" Planning dimension. Without a mapping to the Control Budget, the import process fails.

9. **Optional**: In **Expression** add any import expressions.

   Data Management provides a set of powerful import expressions that enable it to read and parse virtually any file into the Data Management database. You enter advanced expressions in the Expression column of the field. Import expressions operate on the value that is read from the import file.

For more information, see Adding Import Expressions.

10. Click **Save**.

Defining Locations

A location is the level at which a data load is executed in Data Management. Each location is assigned an import format. Data load mapping and data load rules are defined per location. You define locations to specify where to load the data. 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. However; if you are using multiple import formats, you must define multiple locations.

> **Note:**
>
> You can create duplicate locations with the same source system and application combination.

To create a location:

1. On the **Setup** tab, under **Integration Setup**, select **Location**.
2. In **Location**, click **Add**.
3. From **Location Details**, in **Name**, enter the location name.
4. From **Import Format**, enter the import format.

   The import format describes the source system structure, and it is executed during the source system import step. A corresponding import format must exist before it can be used with a location.

   Additionally:

   - Source name is populated automatically based on the import format.
   - Target name is populated automatically based on the import format.

   You can also click and select an import format.
5. In **Functional Currency**, specify the currency of the location.

   > **Note:**
   >
   > You must specify the budget currency of the control budget to which budget is written back.
6. In **Parent Location**, enter the parent assigned to the location.

   Parent mappings 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.

> **Note:**
>
> If a location has a parent, the mappings are carried over to the child. However; changes to mapping can only be performed on the parent location.

7. **Optional**: In **Logic Account Group**, specify the logic account group to assign to the location.

   A logic group contains 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.

8. **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. Data Management check reports retrieve values directly from the target system, Data Management source data, or Data Management converted data.

   The list of values for a check entity group is automatically filtered based on the Target Application under which it was created.

9. **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.

10. Click **Save**.

11. **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 Data Management screens, such as Data Load.

> **Tip:**
>
> To filter by the location name, ensure that the filter row is displayed above the column headers. (Click to toggle the filter row.) Then, enter the text to filter.
>
> You can filter Locations by target application using the drop down at the top of the screen.

Defining Category Mappings

You create category mapping for the scenario dimension member in Planning from which budget is written back.

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 a name that corresponds to the Planning application Scenario dimension member from which you want to write back the budget.

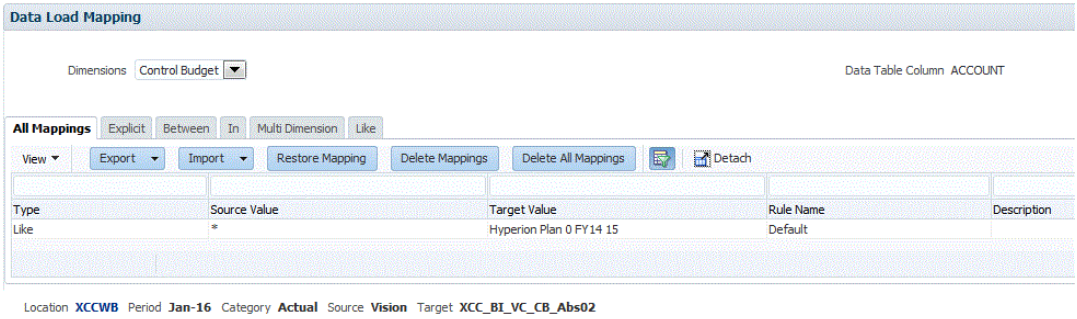
   For example, if you want to write back budget from the "Plan" Scenario dimension member in the Planning application, you may name the Category "Plan" by the same name as the Scenario dimension member. If the Scenario dimension member from which you want to write back the budget already exists as a Target Category in the existing system-generated category mappings, you do not need to create your own mapping.
5. In **Target Category**, enter the name of the Planning Scenario dimension members from which you want to write back the budget.
6. Click **Save**.

Data Load Mapping

When writing back budgets to Budgetary Control, you assign member mappings to a Control Budget. For example, mapping source budget member is just one of the dimensions that need to be mapped. Data load mappings convert data from the Oracle Fusion Cloud Enterprise Performance Management dimension members to the Budgetary Control during the transfer.

To define data load mappings:

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



2. From the **POV** bar, select the location, period, and category corresponding to the Cloud EPM Scenario from which the budget is written back.
3. Select the **Like** tab.
4. In **Source Value**, specify the source dimension member to map to the target dimension member.

   To map all Budgetary Control accounts to Cloud EPM "as is" without any modification, in **Source Value**, enter *****, and from **Target Value**, enter *****.
5. In **Target Value**, select the control budget name in Budgetary Control to which the budget is loaded.

   You can also click the search to display the Member Selector and select the control budget name from the member list.
6. In **Rule Name**, enter the name of the data load rule used to transfer budget amounts to Budgetary Control.

> **Note:**
>
> Rules are evaluated in rule name order, alphabetically. Explicit rules have no rule name. The hierarchy of evaluation is from Explicit to (In/Between/Multi) to Like.

7. In **Description**, enter a description of the mapping.

   For example, enter a description such as "Map to the ledger".

8. **Optional:** In **Apply to Rule**, select to apply the mapping only to the specific data rule in the location.

   See Creating Member Mappings.

9. Click **Save**.

10. From the **Dimensions** drop-down, select the rest of the budget segments (budget dimension such as Fund, Department, Account and so on).

11. Use the **Like** mapping to map all Budgetary Control budget segment values from the corresponding Oracle Fusion Cloud EPM dimension members "as is" without any modification, by entering * in Source Value and Target Value and specifying a Rule Name.

Adding Data Load Rules

After you define member mappings for the location, define data load rules for budgets units in your source system to extract the data from the Oracle Fusion Cloud Enterprise Performance Management application and push it to Budgetary Control.

Data load rules are defined for locations that you have already set up and are specific to locations. You can create multiple data load rules. For example, you can create one rule for writing back original budget and another rule for the revised budget, instead of keep revising the same rule for a different occasion.

The data load rule is created once, but used each time there is a transfer.

To create a data load rule:

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

2. From the **POV** bar, select the location, period, and category corresponding to the Cloud EPM Scenario from which the budget is written back.

3. Click **Add**.

4. In **Name**, enter the name of the data load rule.

5. In **Description**, enter a description to identify the data load rule when you launch the transfer.

6. In **Category**, leave the default category value.

   The categories listed are those that you created in the Data Management setup. See Defining Category Mappings.

7. 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 Data Management to determine the Source General Ledger Periods mapped to each Data Management period included in a Data Rule execution.

Typically, choose the default period mapping type for writing back to Budgetary Control.

- Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source General Ledger Periods mapped to each Data Management Period included in a Data Rule execution. Explicit period mappings enable support of additional General Ledger data sources where periods are not defined by start and end dates.

8. In **Source Plan Type**, select the plan type of the Cloud EPM application source from which to write back.
9. In **Source Options**, specify and dimensions and filters.

   See Adding Filters for Data Load Rules.
10. In **Source Parameters**, specify any additional parameters associated with the write-back.

    See Defining Source Parameters for Planning and Essbase.
11. In **Target Options**, select a **Source Budget Type** to match that of the control budget to which budget is written back.

    Select EPM Financials module versus Hyperion Planning based on the source budget type classification of the control budget.
12. Execute the data load rule.

    See the following data load rule topics:

    - Edit data load rules—See Editing Data Load Rules.
    - Run data load rules—See Running Data Load Rules.
    - Delete data load rules—See Deleting Data Load Rules.
    - Schedule data load rules—See Scheduling Data Load Rules.

    > **Note:**
    >
    > When selecting the Execute Rule submission parameters, always choose **Replace** as the **Import Mode** for writing back to the Budgetary Control.

    - View data load rules before executing them—See Using the Data Load Workbench.
    - Check the data rule process details—See Viewing Process Details.
13. On the **Workflow tab**, under **Monitor**, select **Process Details**.
14. Verify the **status** of the data load.

    A green check mark indicates that the transfer was successful.
15. To verify the results of the transfer, on the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

Adding Filters for Data Load Rules

For data rules used to write back budget from a Planning application to the Budgetary Control, use filters to limit the results.

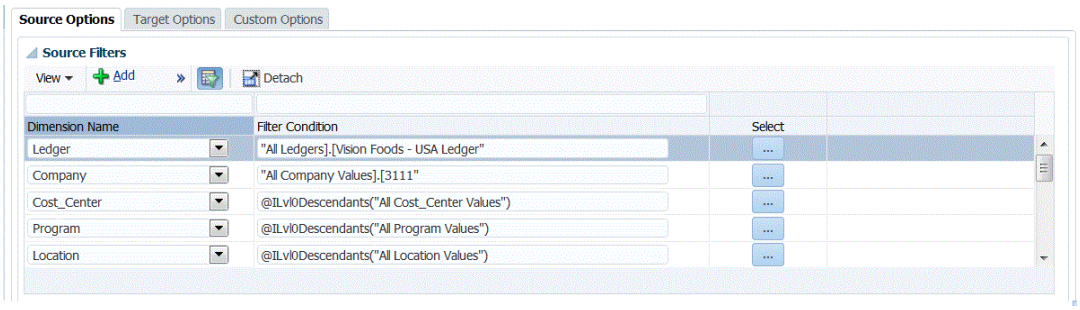
Data Management automatically creates filters when a rule is created. You can modify the filters as needed but cannot delete them. (If the filters are deleted, Data Management recreates the default value.)

When working with filters to write back budget from Planning to Budgetary Control, note the following:

- For Planning dimensions mapped to Budgetary Control dimensions that correspond to control budget segments such as "Account," specify members that correspond to budget segment values that are either at or below the control budget level as defined in Budgetary Control for the particular control budget to be written back. For ease of use, it is recommended that you select members from the level 0 descendants from these Planning dimensions and let Budgetary Control roll up to the appropriate budget level segment values during the write back process. Do not specify members from multiple levels.
- For the Planning dimensions that are not mapped to the Budgetary Control dimensions, such as "Version" and "Scenario," specify a single member, such as the "Final" version and "Plan" scenarios.

To assign a filter to the data load rule:

1. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
2. Select the data load rule to which to add a filter.
3. Select the **Source Options** tab.



4. In the **Source Filters** area, click .
5. Select the **Dimension Name**.
6. In **Filter Condition** specify the filter condition:
   - Enter a member name or filter condition in the Filter Condition text box.
   - 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.

> **Note:**
>
> Assign filters for dimensions. If you do not specify an appropriate level of members, even summary members are retrieved, and this results in an overstatement.

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.

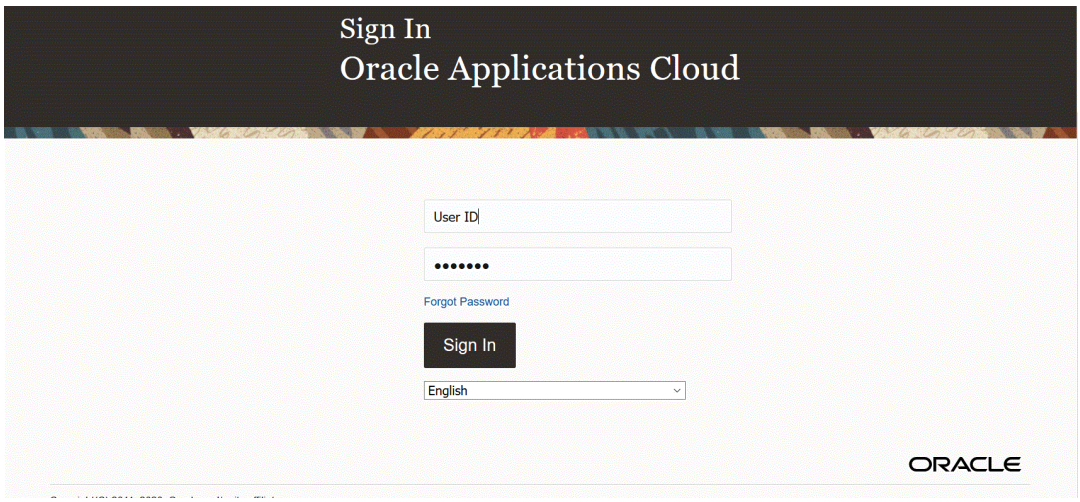
The selected member is displayed in Oracle Essbase syntax in the Filter Condition field.

Viewing the Cloud EPM Budgets Loaded to Budgetary Control

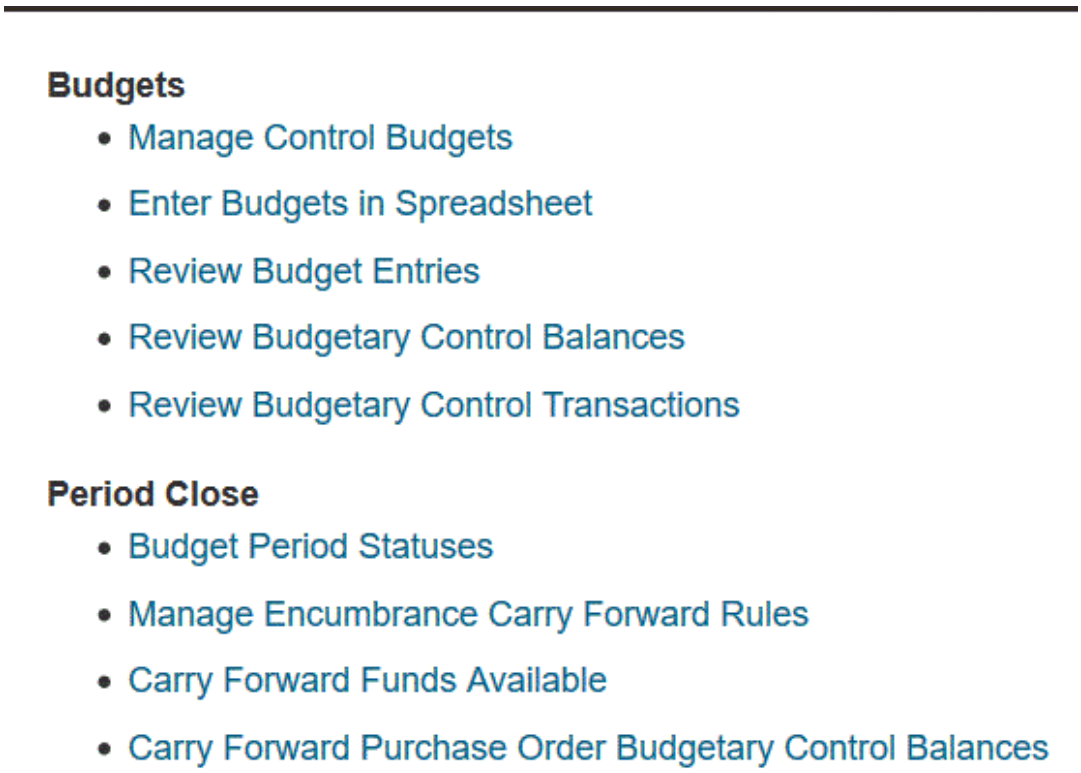
When you have successfully written back budgets from Oracle Fusion Cloud Enterprise Performance Management to the Budgetary Control, you can view the budget detail that was transferred.

To view the budget information transferred to Budgetary Control:

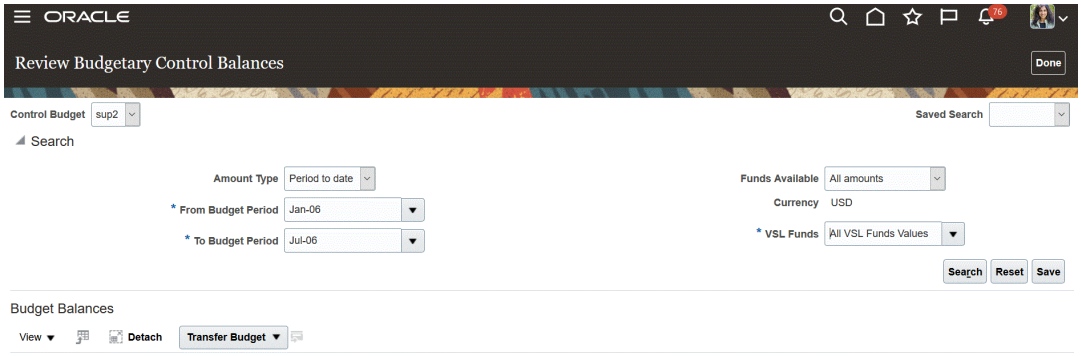
1. Sign into the **Oracle Applications Cloud**.



2. Enter your **User ID** and **Password**.
3. From the Oracle ERP Cloud Navigation menu, under **Budgetary Control**, select **Budgetary Control**.
4. From **Budgetary Control Workspace**, click the **Tasks** icon.
5. From the Tasks page, select **Review Budgetary Control Balances**.



6. On the **Review Budgetary Control Balances** page, select the **Control Budget**, and any search parameters for the budget that you want to review.

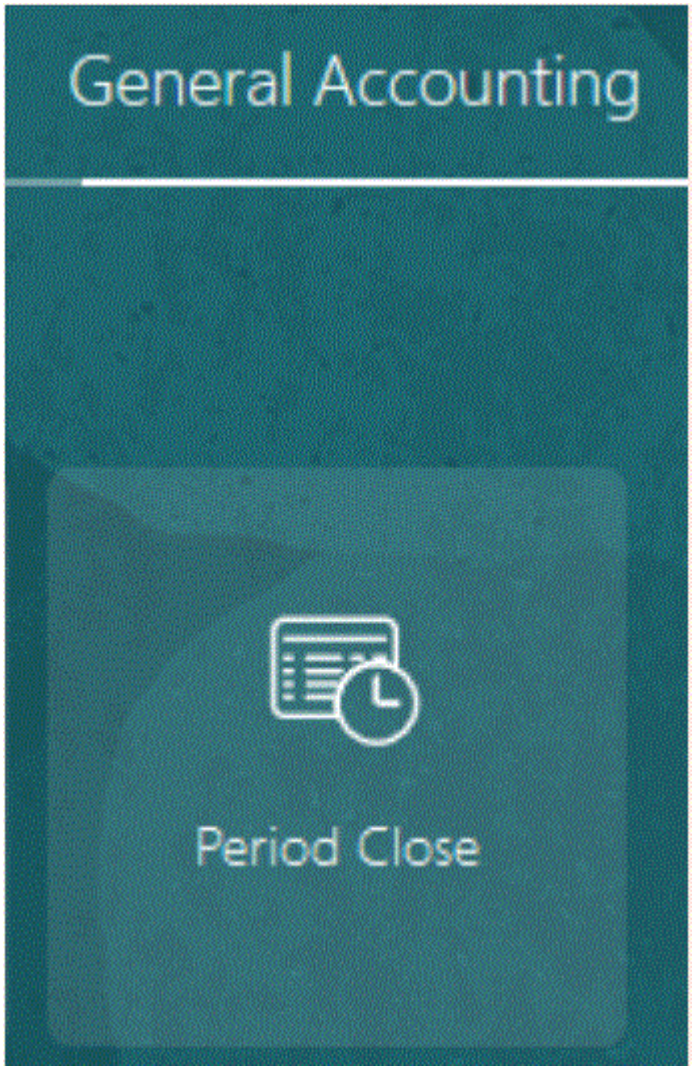


7. Click **Search**.

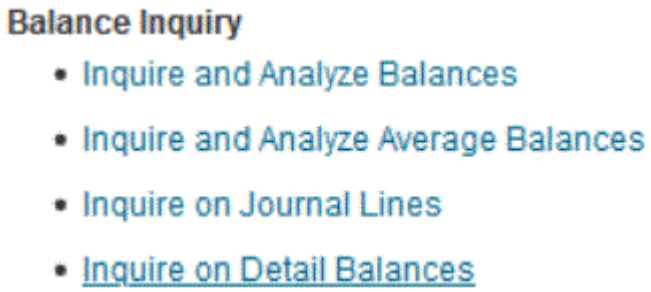
   The results of the search are shown on a results page.

8. **Optional**: If you write back to a control budget with a source budget type classified as an "EPM Financials module,", then the system synchronizes the loaded budget to Oracle General Ledger for you, without having to perform the steps in the **Writing Back Budgets to the Oracle ERP Cloud** topic. You can verify the updated budget in Oracle General Ledger by completing the following:

9. From the Oracle ERP Cloud, from **General Accounting**, select **Period Close**.

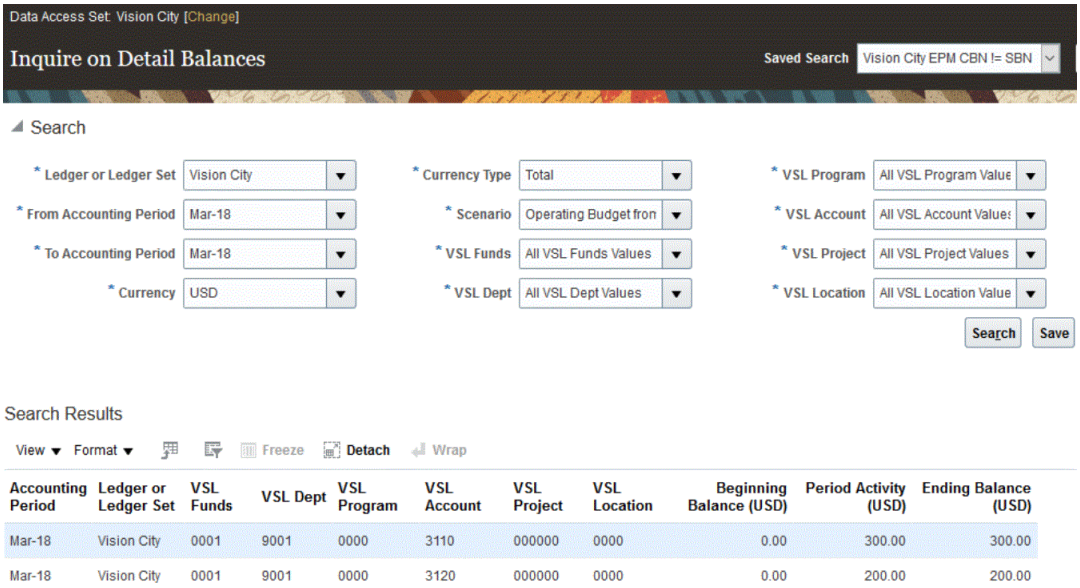


10. From **Period Close Workspace**, select **Tasks**.
11. From the **Tasks** drop-down, select **Inquire on Detail Balances**.



12. On the Inquire on Detail Balances page, select a data access set context if not already done and specify the search parameters for the budget that you want to review.

    Currently the Scenario for the budget auto-synchronized by the EPM Financials module type control budget goes by the same name as that of its source budget name.



Accounting Period	Ledger or Ledger Set	VSL Funds	VSL Dept	VSL Program	VSL Account	VSL Project	VSL Location	Beginning Balance (USD)	Period Activity (USD)	Ending Balance (USD)
Mar-18	Vision City	0001	9001	0000	3110	000000	0000	0.00	300.00	300.00
Mar-18	Vision City	0001	9001	0000	3120	000000	0000	0.00	200.00	200.00

Integrating Oracle NetSuite

Data Management is available as the integration mechanism for Oracle Fusion Cloud Enterprise Performance Management customers looking to load data from the NSPB Sync SuiteApp. Data Management customers have direct access to the unified suite of cloud-based ERP, CRM, and commerce applications from Oracle NetSuite.

The integration uses the NSPB Sync SuiteApp Saved Search framework to query data from the NSPB Sync SuiteApp system.

Watch this tutorial video to learn more about integrating Data Management and Oracle NetSuite.

Tutorial Video

Supported NSPB Sync SuiteApp Saved Searches

The following saved searches are included in the NSPB Sync SuiteApp Saved Searches:

> **Note:**
>
> After specifying an Oracle NetSuite source system and connection information in Data Management, you must initialize the source system to create a Target Application definition for each NSPB Sync SuiteApp Saved Search. Metadata saved searches includes "Metadata" in the saved search name, and Data saved searches includes "Data" in the saved search name.

Saved Search Name	ID	Type
PBCS All Posting Transactions Last Period		Summary
PBCS All Posting Transactions Last Period		Detail
PBCS All Posting Transactions Last Period—Trial Balance		Trial Balance
PBCS - Transaction Summary	customsearch_nspbcs_all_transactions_sum	Transaction
PBCS - Transaction Detail	customsearch_nspbcs_all_transactions_det	Transaction
PBCS - Trial Balance	customsearch_nspbcs_trial_balance	Transaction
PBCS sync (Data) Income Statement Transactions [.csv]	customsearch_pbcs_sync_is_csv	Transaction
PBCS sync (Data) Balance Sheet Transactions [.csv]	customsearch_pbcs_sync_bs_csv	Transaction
PBCS sync (Data) Beg Balance [.csv]	customsearch_pbcs_sync_begbal_csv	Transaction
PBCS sync (Data) Income Statement Transactions	customsearch_nspbcs_sync_is	Transaction
PBCS sync (Data) Balance Sheet Transactions	customsearch_nspbcs_sync_bs	Transaction
PBCS sync (Data) Beg Balance	customsearch_nspbcs_sync_begbal	Transaction
PBCS sync (Data) Consolidated Exchange Rates	customsearch_nspbcs_sync_fx	Consolidated Exchange Rates
PBCS sync (Metadata) Income Statement Accounts	customsearch_nspbcs_sync_acct_inc_stmt	Account
PBCS sync (Metadata) Balance Sheet Accounts	customsearch_nspbcs_sync_acct_bs	Account
PBCS sync (Metadata) Class	customsearch_nspbcs_sync_class	Class
PBCS sync (Metadata) Customer	customsearch_nspbcs_sync_cust	Customer

Saved Search Name	ID	Type
PBCS sync (Metadata) Department	customsearch_nspbcs_sync_dept	Department
PBCS sync (Metadata) Item	customsearch_nspbcs_sync_item	Item
PBCS sync (Metadata) Location	customsearch_nspbcs_sync_loc	Location
PBCS sync (Metadata) Project	customsearch_nspbcs_sync_prj	Project
PBCS sync (Metadata) Customer Project	customsearch_nspbcs_sync_cprj	Project
PBCS sync (Metadata) Subsidiary	customsearch_nspbcs_sync_sub	Subsidiary
PBCS sync (Metadata) Vendor	customsearch_nspbcs_sync_vend	Vendor

Process Description for Integrating Oracle NetSuite

When Oracle NetSuite is used as a data source in the Oracle Fusion Cloud Enterprise Performance Management, Data Management uses the NSPB Sync SuiteApp Saved Search framework to query data from Oracle NetSuite.

A NSPB Sync SuiteApp Saved Search is a reusable search definition based on criteria and filters. For example, an NSPB Sync SuiteApp Saved Search might include all posting transactions to the General Ledger since the last period. Any kind of record in the NSPB Sync SuiteApp Saved Search can be included in or considered as the basis of a NSPB Sync SuiteApp Saved Search. A search can either be pre-packaged or user-defined. All balances are generated using transaction details that have been summarized.

When you create a new NSPB Sync SuiteApp Saved Search in Oracle NetSuite, you must include the prefix **customsearch_nspbcs** in the saved search id.

> **Note:**
>
> Data generated from the NSPB Sync SuiteApp Saved Search is used for importing data only, and not for write-back.

At a high level, these are the steps for loading data from an Oracle NetSuite data source:

1. An administrator installs NSPB Sync SuiteApp Saved Searches, which is a shared bundle. Before you can install the bundle, it must be shared with your account.
2. Perform the following tasks. (See the topics in the *Oracle NetSuite Planning and Budgeting Cloud Service Sync* guide for information on performing these tasks. Access to the guide requires a NetSuite login.)
   - You are required to have an Oracle NetSuite login to access NSPB Sync SuiteApp. For information on setting up the login, see the *Oracle NetSuite Planning and Budgeting Cloud Service Sync* guide.
   - Enable the required features in your Oracle NetSuite account. See "Required Features for Installing the NSPB Sync SuiteApp."
   - Install the SuiteApp. See "Installing the NSPB Sync SuiteApp."
   - Set the file encryption password. See "Setting Up a Password for File Encryption."

- Create user records for Cloud EPM users. These user records must have a Cloud EPM Integration role. See "Creating a Cloud EPM User Record."
- Set up token-based authentication for Cloud EPM users. See "Setting Up Token-Based Authentication."
- Set up single sign-on (SSO). NSPB Sync SuiteApp Saved Searches supports single sign-on (SSO) through any SSO service that offers SAML 2.0. With an SSO account, users can navigate between NetSuite and Planning without entering their credentials each time. This enables users to navigate to the Create user records for Cloud EPM users. See "Setting Up Menu Navigation to Planning."

3. In Data Management, register the source system with integration user credentials.

   This step includes specifying the connection details and the drill URL.

   See Configuring a Source Connection to Oracle NetSuite.

4. Run the initialize process to import the definition of all saved search owned by the user.

   When you initialize the source system, Data Management imports all saved search definitions owned by the user. If you don't want to import all saved search definitions, you can go to target application and select individual saved search definitions one by one. If you have initialized the source system the first time, add incremental saved search definitions also in the target application.

   For more information, see Creating an Oracle NetSuite Data Source.

5. Define the import format to map columns from the saved search to dimensions in the Cloud EPM application.

   For more information, see Adding Import Formats for Oracle NetSuite Data Sources.

6. Once the initialization process is complete, you can pick a NSPB Sync SuiteApp Saved Search when adding a target application. When you select Oracle NetSuite as a data source, then you are presented with a list of the saved searches from the selected Oracle NetSuite source.

   You can also provide source filter criteria on the application filters tab. These source filters are the same as Oracle NetSuite "Criteria", which filter the data from the NSPB Sync SuiteApp Saved Searches.

7. Define source mapping entries in the calendar mapping section to map the Oracle NetSuite periods to the Cloud EPM periods.

   Define any period mapping. Available options are explicit or default period mappings:

   For more information on periods mappings available for an Oracle NetSuite integration, see Managing Periods in Oracle NetSuite.

8. In the Import Format, specify the NSPB Sync SuiteApp data source as the source application and your Planning application as the target application.

   For more information, see Adding Import Formats for Oracle NetSuite Data Sources.

9. Define a location to indicate where to load the data.

   Each location includes an import format, data load rules, and data load mappings.

   For more information, see Defining Locations.

10. Create data load mappings.

    For more information, see Data Load Mapping.

11. Create a data load rule, apply any source filers, and execute the data load rule.

This pulls the data from the Oracle NetSuite instance into Data Management, maps the data and then shows the results in the workbench. If the mapping succeeds without errors, the data is loaded to the target application.

For more information, see Adding Data Load Rules for an Oracle NetSuite Data Source.

For more information about applying filter criteria, see Applying Oracle NetSuite Application Filters.

For more information about executing a rule, see Running Data Load Rules.

Configuring a Source Connection to Oracle NetSuite

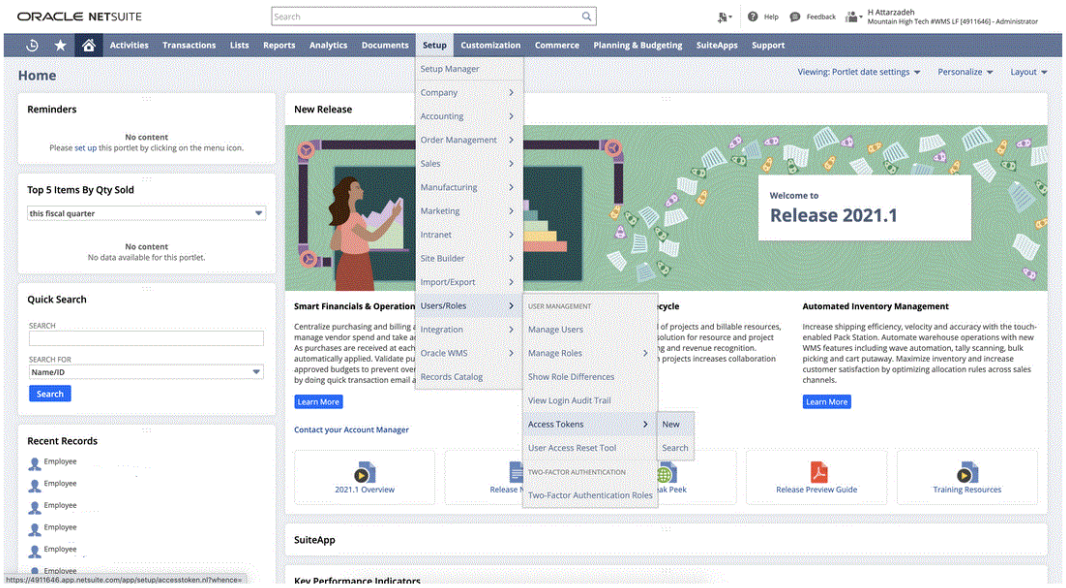
To begin integrating from NSPB Sync SuiteApp Saved Searches with the Oracle Fusion Cloud Enterprise Performance Management, you first create and register the source system with the type "Netsuite".

After the source system and connection information are specified, initialize the source system to create a Target Application record for each NSPB Sync SuiteApp Saved Search.

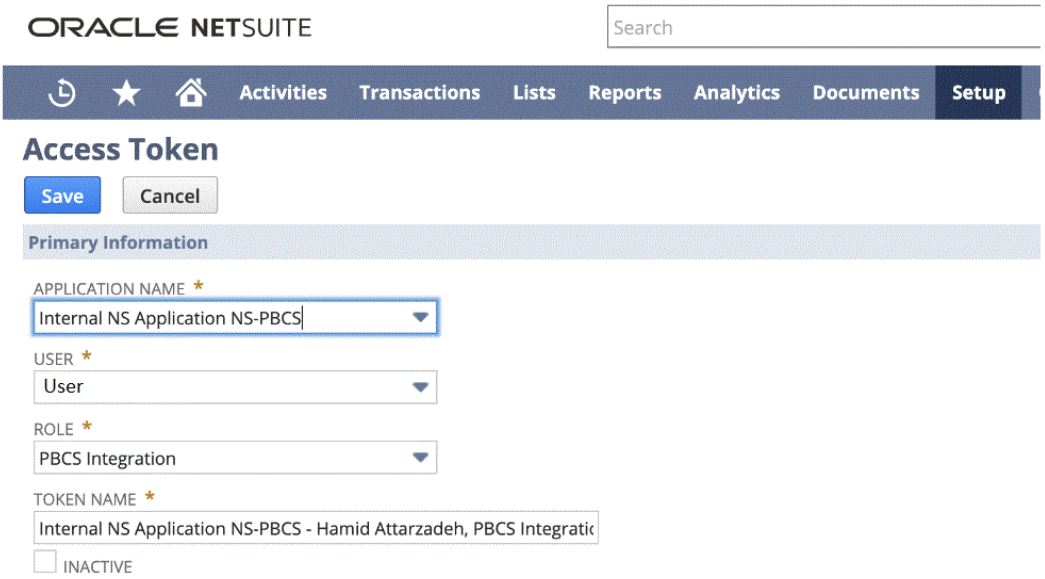
> **Note:**
>
> The NSPB Sync SuiteApp Saved Search policy for accessing integrations has changed. It now requires token based authorization instead of basic authentication in order to set up the connection to NSPB Sync SuiteApp Saved Searches from the Cloud EPM. Basic authorization credentials will be made read only in Release 21.06.

To add an Oracle NetSuite source system:

1. Launch **Oracle NetSuite**.
2. From the **Oracle NetSuite** home page, select **Setup**, then **User/Roles**, then **Access Token**and then **New** (create a new token).

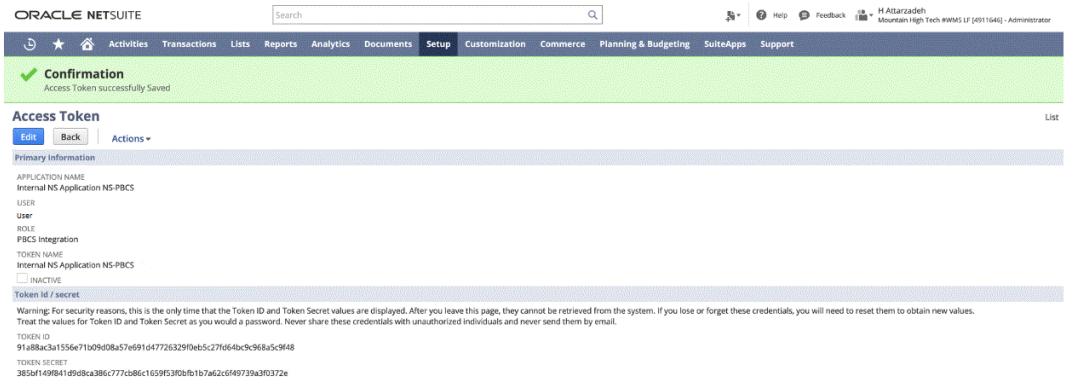


3. From the **Access Token** page, select **Internal NS Application NS-PBCS** as the application name.

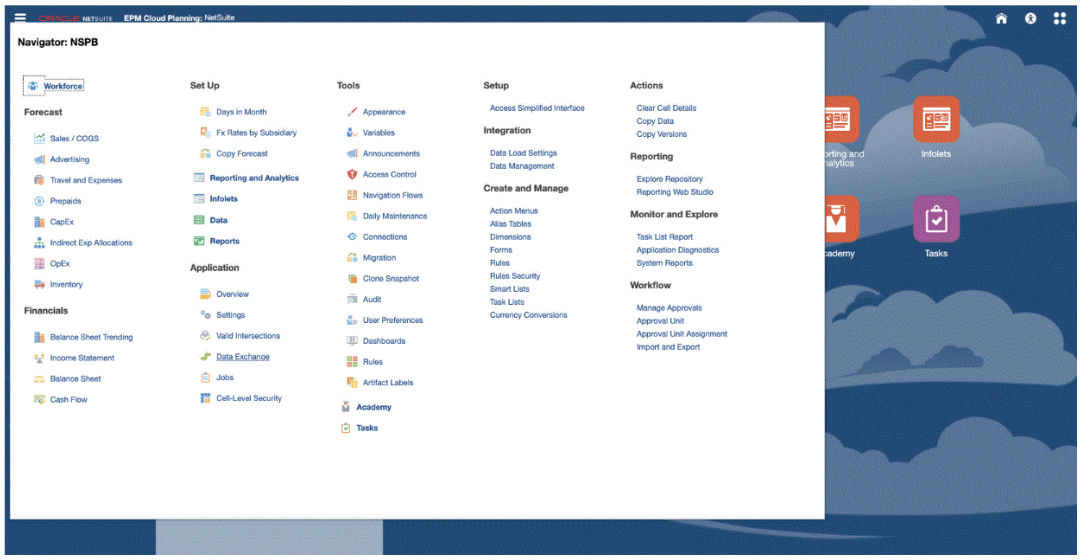


4. Click **Save** and copy the Token ID and Token Secret from this page.

> **Note:**
>
> This is the only time you can view these values. If you navigate away from this page, you cannot get access to these values.



5. From the **NSPB Sync SuiteApp** home page, under **Integration**, select **Data Management**.



6. On the **Setup** tab, under **Register**, select **Source System**.
7. In **Source System**, click **Add**.
8. Enter the source system details:
   a. In **Source System Name**, enter the source system name.

      Enter the name to use for the NSPB Sync SuiteApp Saved Search application, such as "NetSuite ERP."

   b. In **Source System Description**, enter a description of the source system.
   c. In **Source System Type**, select **NetSuite**.
   d. In **Drill Through URL**, enter the URL hyperlink for the drill through link to the NSPB Sync SuiteApp Saved Search system

      Use the following format for the drill URL:

      ```
      https://<NetSuite Domain>/app/common/search/searchresults.nl
      ```

      To get Oracle NetSuite domain, launch the following:

      ```
      https://rest.netsuite.com/rest/datacenterurls?account=<ACCOUNT>
      ```

      For example, if you have account "TSTDRV1700457," type the following:

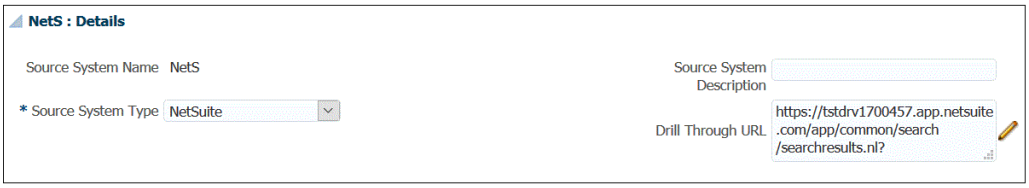
      ```
      https://rest.netsuite.com/rest/datacenterurls?account=TSTDRV1700457
      ```

      What is returned is one of the following:

      ```
      {"webservicesDomain": "https://tstdrv1700457.suitetalk.api.netsuite.com",
      "restDomain":"https://tstdrv1700457.restlets.api.netsuite.com",
      "systemDomain":"https://tstdrv1700457.app.netsuite.com"}
      ```

      Using the example above for the systemDomain url, the drill URL would be:

      ```
      https://tstdrv1700457.app.netsuite.com/app/common/search/searchresults.nl?
      ```



9. Click **Configure Source Connection**.

   The Configure Source Connection screen is used to specify the Oracle NetSuite connection information.

   Data Management supports a token-based authentication method to connect to Oracle NetSuite. Before using the token-based authentication method, be sure you have your token details (for the token-based authentication). This information must be defined in the Oracle NetSuite before configuring the connection in Data Management.

   The token-based authentication method is described in step 10.

   Basic (user) authorization credentials is available but will be made read only in Release 21.06. The user-based authentication configuration is described in step 11.

10. To connect to the NSPB Sync SuiteApp Saved Search system using token-based authentication, complete these steps:

    This authentication mechanism enables client applications to use a token to access the NSPB Sync SuiteApp Saved Search system through APIs, eliminating the need for RESTlets or web services integrations to store user credentials.

    a. Specify the following:

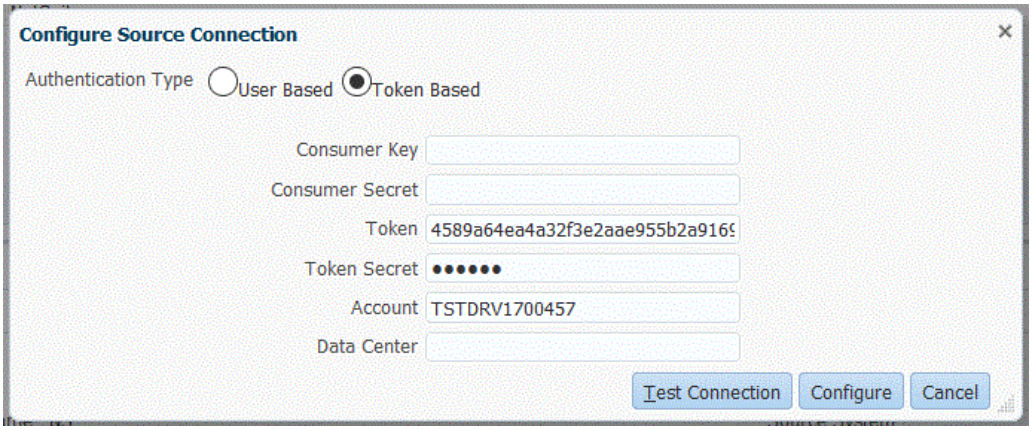
       - **Consumer Key**—specify the type of consumer key. The consumer key type determines if the connection uses a default customer key or a custom customer key. The customer key is a globally unique identifier, which identifies the consumer. It is generated in the NSPB Sync SuiteApp system.
       - **Consumer Secret**—specify the password used to establish ownership of the consumer key used by a custom Consumer Key Type implementation.
       - **Token**—Specify the token value used to gain access to protected resources on behalf of the user, generated in the NSPB Sync SuiteApp Saved Search system.
       - **Token Secret**—Specify the password used to establish ownership of the token.
       - **Account**—Specify your account ID to the NSPB Sync SuiteApp Saved Searches web services.

         The account ID identifies the account type, for example, whether the account is a production account, a sandbox account, or a Release Preview account. The account-specific domain is not dependent on the data center where an account is hosted. The domain does not change, even if the account is moved to a different data center.
       - **Data Center**—(field is now deprecated and is ignored).

    b. Click **Test Connection**.

    c. Click **Configure**.

       The confirmation "Source system [*Source system name*] has been configured successfully" is displayed.



11. To connect to Oracle NetSuite using a user-based authentication, complete these steps:
    a. Specify your credentials for the fields below:
        - **User** (name)
        - **Password**
        - **Account**—Specify your account ID to the Oracle NetSuite web services.

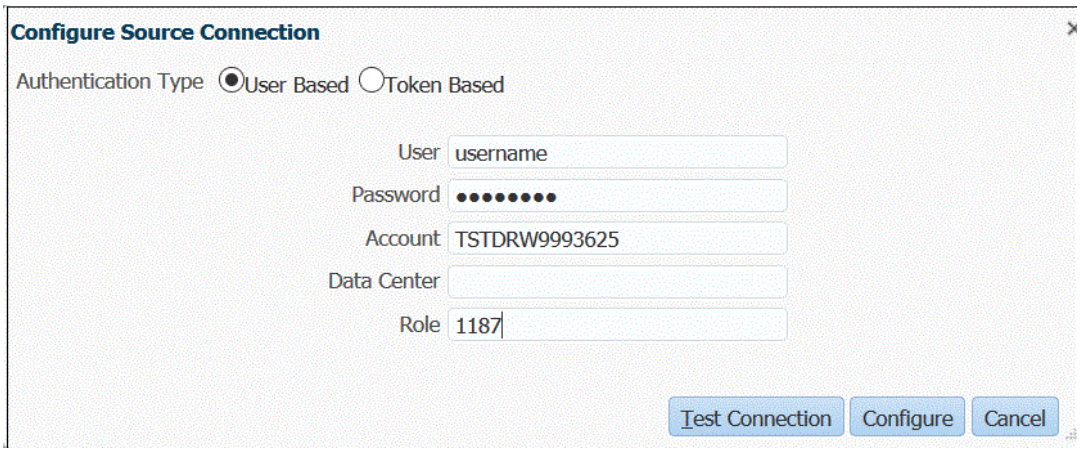
          The account ID identifies the account type, for example, whether the account is a production account, a sandbox account, or a Release Preview account. The account-specific domain is not dependent on the data center where an account is hosted. The domain does not change, even if the account is moved to a different data center.

          Data Center—(field is now deprecated and is ignored).
        - **(Optional) Role ID**—Specify the role ID assigned to the user from Oracle NetSuite.

          You might specify a role id when you have multiple roles assigned for an account in Oracle NetSuite.

          Data Management uses the role ID for user-password authorization.

          To get the role ID from Oracle NetSuite, from Oracle NetSuite, select **Setup**, then **Users/Roles**, and then **Manage Roles**. If it's not visible by default, but you can edit view and add the **InternalID** column to see it; or just open the role detail and see that id in the browser URL.
    b. Click **Test Connection**.
    c. Click **Configure**.



12. On the **Source System** screen, click **Initialize**.

    The initialize process is used to extract the NSPB Sync SuiteApp Saved Searches metadata information.

    The initialize process may take a long time to complete. You can watch the progress on the job console.

13. Click **Save**.

Creating an Oracle NetSuite Data Source

Target applications enable Data Management to store the structure of the source and target applications that can be integrated. In this way, you can map the source and target applications and specify import criteria.

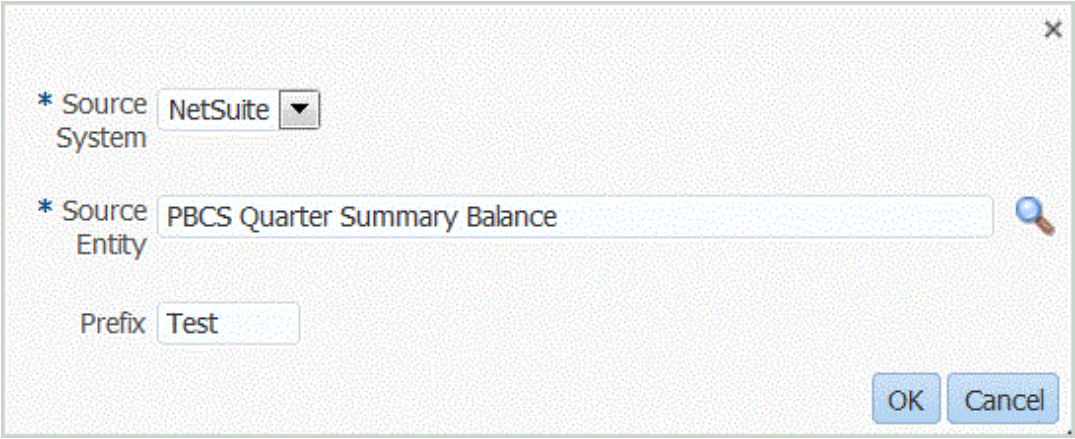
Oracle NetSuite Saved Searches results are registered with an application type of "data source." During the initialization, the system creates the data source automatically based on the available Saved Searches results under the user name registered in the Oracle NetSuite source system. In the target application option, you can create additional Saved Searches in Oracle NetSuite, and then register the custom saved searches on the Target Application screen.

> **Note:**
>
> You can click **Refresh** on the Target Application screen to refresh any saved searches that have been created in Oracle NetSuite after you have initialized the source system in Data Management.

> **Note:**
>
> When you create an Oracle NetSuite data source, dimension details are populated automatically and mapped directly to the target dimension class "Generic." As a rule when loading data from an Oracle NetSuite data source, do not change, add, or delete any dimension details on the Target Application screen.

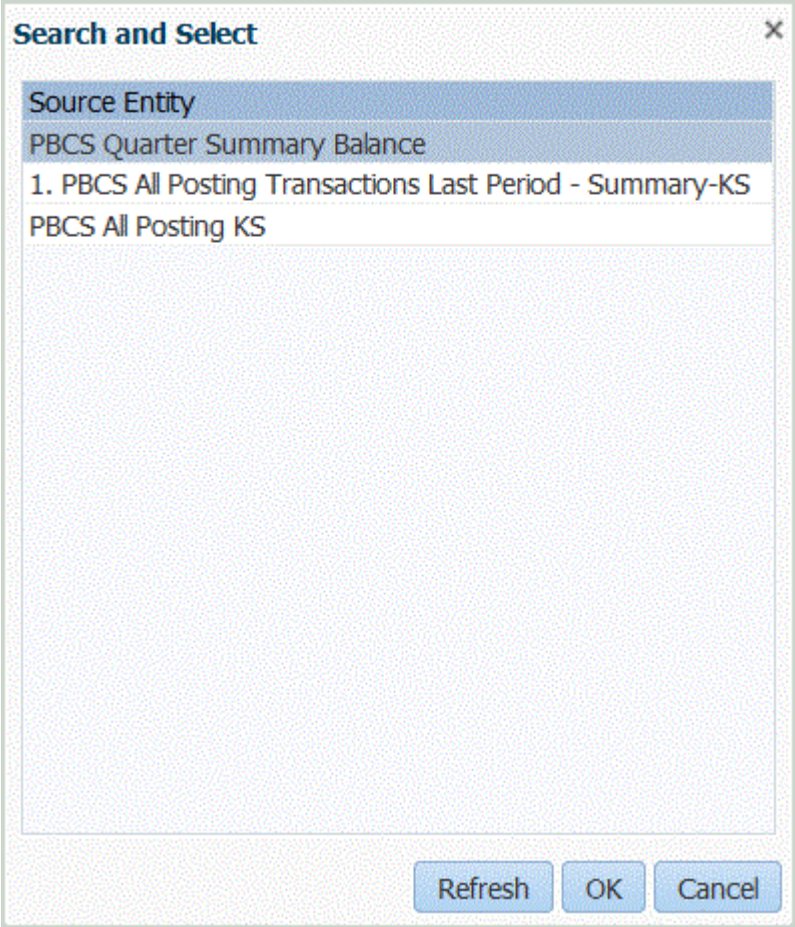
To include an individual Oracle NetSuite Saved Search:

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. In **Target Application**, in the summary grid, click **Add**, and then select **Data Source**.
3. In **Source System**, enter **NetSuite**.



4. In **Source Entity**, enter the name of the Saved Search.

   You can also launch the Search and Select screen by clicking and selecting a source entity.



5. To register a target application with the same name as an existing target application, in **Prefix**, specify a prefix to make the name unique.

   The prefix is joined to the name of the existing target application. For example, if you have a test target application and want to use the same name as the existing "PBCS Quarter Summary Balance" application, you can assign the **Test** prefix to designate the target

application with a unique name. In this case, the Data Management joins the names to form the name **TestPBCS Quarter Summary Balance**.

6. Click **OK**.
7. Click **Save**.

Applying Oracle NetSuite Application Filters

Search criteria defined in the NSPB Sync SuiteApp Saved Searches are registered automatically, as application filters. You can edit the filters if needed. For example, you can assign default values or hide the filters from end users by setting the property level.

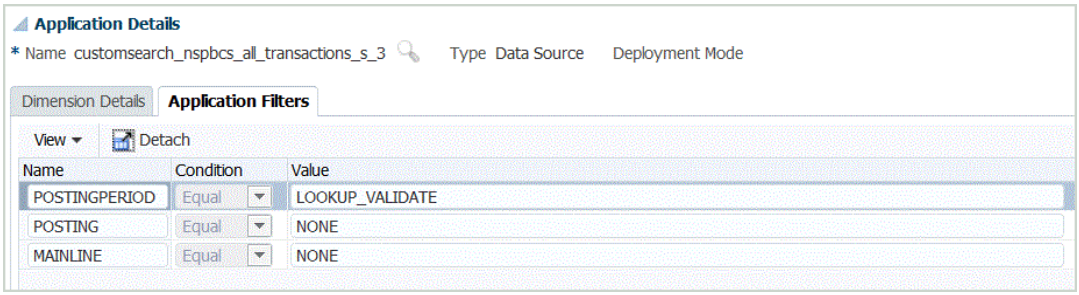
You can apply filter conditions to the Oracle NetSuite Saved Search results so that only those records that meet selected conditions are returned to Data Management. You can specify a single filter condition or multiple filters conditions, and additionally specify the exact values that you want returned.

To apply an Oracle NetSuite filter condition:

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. Select the NSPB Sync SuiteApp Saved Search results data source to which to apply any filters.
3. From **Application Details**, select the **Application Filters** tab.
4. Select the name of the field to which to apply the filter condition.
5. From the **Condition** drop-down, select the applicable condition.
6. In **Value**, specify the filter definition.

   To see available filter values for a given record, click

   For example, to apply a filter to the "POSTINGPERIOD," add the value as **This Period**.



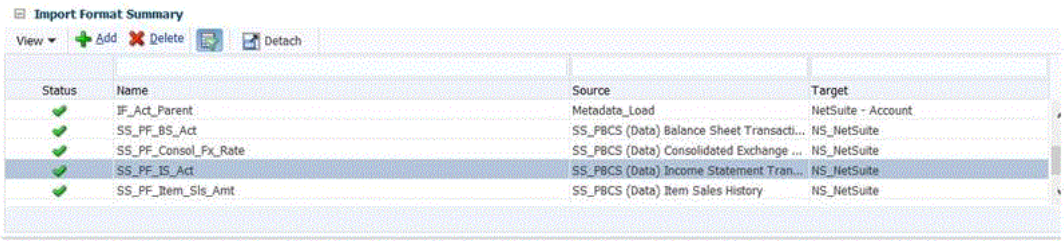
Adding Additional Filters to the Drill URL in the Import Format

When performing a drill through from Oracle Fusion Cloud Enterprise Performance Management to Data Management, and then to the NSPB Sync SuiteApp Saved Search, sometimes too many records are returned. As a guideline, when you add the amounts in all the records in the drill through, they should total to the number in the data cell you were on when you initiated the drill through in Cloud EPM. To resolve this issue, add additional filters to the drill through URL in the Import Format.

To add additional filters:

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

2. In the **Import Format** summary task bar, select the import format associated with the drill through to which to add an additional filter.



3. In the **Import Format Mapping** section, map the source dimension associated with the additional filter to an Attribute (User defined attribute - used as needed for mapping or drill through) column.

   To do this, click **Add**, select **Attribute** and then map the **Source Column** to the **Attribute**.

   For example you could map a Subsidiary ID source column to the Attribute 4 row.

4. In **Drill Through URL**, click and enter the search type criteria used for the drill-through for addition filter.

   For example, if you want to add a Subsidiary ID as an additional filter, enter **&Transaction_SUBSIDIARY=$ATTR4$** to the list of parameters.

   In this case, you would specify the entire drill through URL definition as:

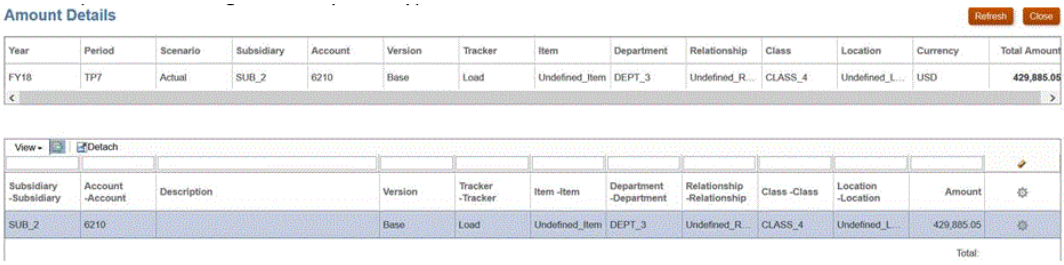
   ```
   Searchtype=Transaction&searchid=customsearch_nspbcs_trial_balance&Transaction_
   ACCOUNT=$ATTR1$&Transaction_POSTINGPERIOD=$ATTR2$&Transaction_SUBSIDIARY=$ATTR
   4$&Transaction_POSTING=T&
   ```

   For more information, see Defining Drill Through Parameters to Oracle NetSuite.

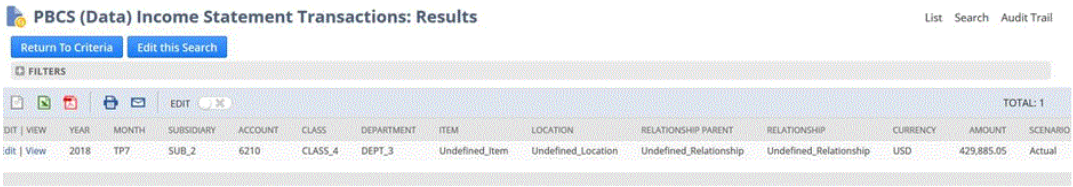
> **Note:**
>
> When specifying the Drill Through URL detail components here, you must also set up the server component for the drill through in the source system. See also Configuring a Source Connection to Oracle NetSuite.

5. Click **Save**.

   When the drill through is first selected from Cloud EPM to Data Management, no extra records are included:



   The second drill to Oracle NetSuite also does not include any additional records.



Managing Periods in Oracle NetSuite

When loading periods from Oracle NetSuite, you have two options:

- Default Period Mappings—Use this option to load a single period from the POV from the data load rule. In this case, you do not map the period column in the import format or define a source period mapping in period mappings. You can set a source filter in the data rule such as the Current Period or Last period. For example, if you want to load the Feb 2018 period, you set it as the last period. When you run the data rule, periods are not checked and all the data you extract from Oracle NetSuite is imported into the selected POV.
- Explicit Period Mappings—Explicit period mappings enable the loading of General Ledger data when Oracle NetSuite and Planning periods match. Use this option to load multiple periods, or when you do not want users to select the period from the POV.

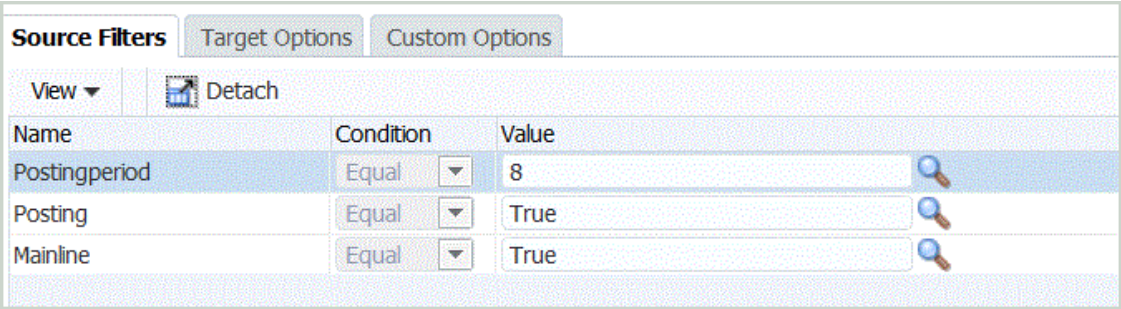
  To use explicit period mappings, you map the period column in the import format and define source period mappings. The General Ledger period column must match exactly the Oracle NetSuite period. Next in the data rule, you select the calendar from the period mapping. When you run the data rule, you specify the start – end periods that you want to load. You can set a filter condition in the data rule to extract specific period data, for example, the Fiscal Year Current to Fiscal Quarter Current period. Data Management matches the period column from the search result with the period in the period mapping and loads the data to the appropriate period.

Filtering Oracle NetSuite Periods

If you need to load data by a specific period, for example, by a specific month, use an Oracle NetSuite posting period filter that contains a period ID. The period ID is created in the posting period filter and returned by the NSPB Sync SuiteApp Saved Search used for filtering data.

Oracle NetSuite provides several date filters: a named time period, like last fiscal year, a custom date range defined by a specific start date and end date, and a relative date range defined by a beginning number of days, weeks, months, quarters, or years ago or from now, to an ending number of same. See the NetSuite "Search Guide" for more information on setting up filters.

In Data Management when you run the data load rule, you select the period value that you want to load from the Postingperiod option on the Source Filters tab as shown below.



Adding Import Formats for Oracle NetSuite Data Sources

A NSPB Sync SuiteApp Saved Search is stored as a data source, and import formats enables you to set up the integration mapping between the data source and the dimensions of your target application in Oracle Fusion Cloud Enterprise Performance Management.

The files generated by the data source application can be in any of the supported format like single column numeric, and multi-column data.

When you select an Oracle NetSuite data source, Data Management populates the source and target columns automatically.

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.

You map NSPB Sync SuiteApp Saved Searches Saved Search data source columns or fields in the import file to dimensions in the Cloud EPM application.

To add an import format to an Oracle NetSuite 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 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**, select the NSPB Sync SuiteApp Saved Searches from the drop down.
6. In **Target**, select the Cloud EPM target application.
7. In **File Type**, select the format of the file to import:

   Available file formats:

   - Delimited - Numeric Data

     See Defining Import Formats for File-Based Mappings.
   - Multi Column - Numeric Data
     See Loading Multi-Column Numeric Data.
   - Delimited Data - All Data Type

     See Setting the Import Format Data Types.
   - Multi Column - All Data Type

     See Loading Multi-Column Numeric Data
8. In **Drill Through URL**, enter the search type criteria used for the drill-through.

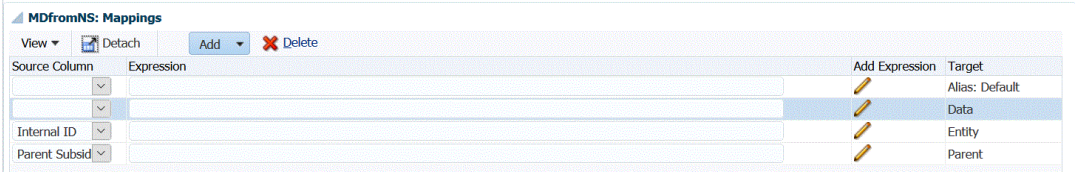
   For example, you could specify:

```
Searchtype=Transaction&searchid=customsearch_nspbcs_trial_balance&Transaction_
ACCOUNT=$ATTR1$&Transaction_POSTINGPERIOD=$ATTR2$&Transaction_DEPARTMENT=$ATTR
5$&Transaction_CLASS=$ATTR4$&Transaction_INTERNALID=$ATTR3$&Transaction_POSTIN
G=T&
```

For more information, see Defining Drill Through Parameters to Oracle NetSuite.

When specifying the Drill Through URL detail components here, you must also set up the server component for the drill through in the source system. See also Configuring a Source Connection to Oracle NetSuite.

9. In the **Mapping** section, map the source columns to the dimensions.



10. **Optional**: In **Expression**, add any import expressions.

    Data Management provides a set of powerful import expressions that enable it to read and parse virtually any file into the Data Management database. You enter advanced expressions in the Expression column of the field. Import expressions operate on the value that is read from the import file.

    For more information, see Adding Import Expressions.

    For information on adding an import format for a data driver, see Adding an Import Expression for a Data Driver.

11. Click **Save**.

Adding Data Load Rules for an Oracle NetSuite Data Source

After you define member mappings for the location, define and execute data load rules to push the results of the NSPB Sync SuiteApp Saved Search to your Oracle Fusion Cloud Enterprise Performance Management application.

You can specify filter values so that only those records that meet selected condition are returned to Data Management.

> **Note:**
>
> You can add additional (non-dimensional/non-Cloud EPM) columns in the result set of the saved search such as a memo, transaction date, document #, or transaction details. To do this, , set up the non-dimensional columns in the NSPB Sync SuiteApp Saved Search and then map the columns to Lookup or Attribute columns in the Import Format option in Data Management.
>
> For more information about lookup dimensions, see Adding Lookup Dimensions.

Data load rules are defined for locations that you have already set up. You can create multiple data load rules for a target application so that you can import data from multiple sources into the target application.

The data load rule is created once, but used each time there is a transfer.

To create a data load rule:

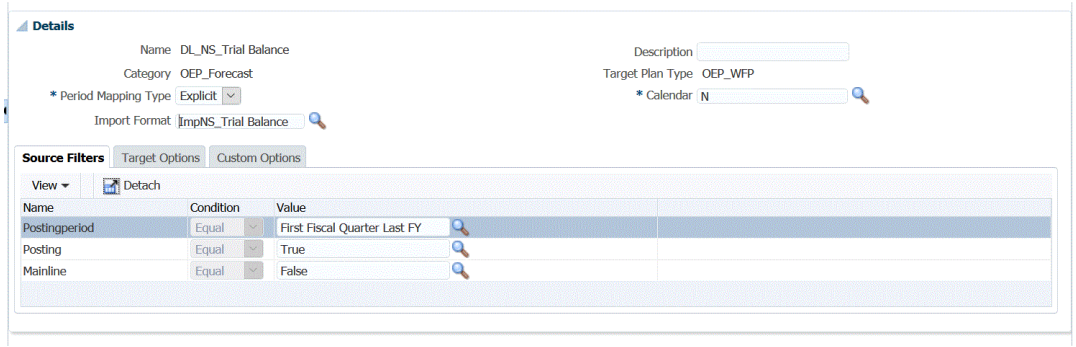
1. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
2. From the **POV Bar**, select the location to use for the data load rule.

   Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.
3. Click **Add**.
4. In **Name**, enter the name of the data load rule.
5. In **Description**, enter a description to identify the data load rule when you launch the transfer.
6. In **Category**, leave the default category value.

   The categories listed are those that you created in the Data Management setup. See Defining Category Mappings.
7. 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 Data Management to determine the Source General Ledger Periods mapped to each Data Management period included in a Data Rule execution.
   - Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source GL Periods mapped to each Data Management 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.
8. In **Import Format**, specify the import format based on the file format of Saved Search application (for example, single column numeric, and multi-column data) that you want to load to the target application.
9. In **Calendar**, select the source system calendar.
10. In **Target Plan Type**, select the plan type of the target system to which you want to load budget.



11. **Optional**: Select the **Source Filters** tab to apply filter conditions to the source Oracle NetSuite Saved Search application.

    See Applying Oracle NetSuite Application Filters.

    See Defining Application Options for Essbase.
12. **Optional**: Select **Target Options** to specify any target options.
13. **Optional**: Select **Custom Options** to specify any free form integration information.

See Creating Custom Options.

14. Click **Save**.
15. Execute the data load rule.

    See the following data load rule topics:

    - Edit data load rules—See Editing Data Load Rules.
    - Run data load rules—See Running Data Load Rules.
    - Delete data load rules—See Deleting Data Load Rules.
    - Schedule data load rules—See Scheduling Data Load Rules.
    - View data load rules before executing them—See Using the Data Load Workbench.
    - Check the data rule process details—See Viewing Process Details.
16. From **Workflow**, under **Monitor**, select **Process Details**.
17. Verify the **status** of the data load.

    A green check mark indicates that the transfer was successful.
18. To verify the results of the transfer, on the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

Drilling Through to Oracle NetSuite

Data Management enables you to drill through to Oracle NetSuite using an externally available URL that you specify within Data Management.

When drilling back to the Oracle NetSuite, the drill URL is constructed by passing the stored values from Data Management as parameters in the drill URL.

The drill through URL to Oracle NetSuite must be configured manually.

Defining Drill Through Parameters to Oracle NetSuite

The parameters required to drill back to Oracle NetSuite are described below.

The server URL for drilling to Oracle NetSuite takes the drill URL address format of: `https://<NetSuite Domain>/app/common/search/searchresults.nl?`.

On the detail side (where you specify the search type components), the drill URL to Oracle NetSuite requires the following parameters:

- "search type"
- "search ID"
- Optionally, you can specify additional parameters to filter the drill based on the Account and Period.

Search Type

The drill through parameter list includes the search type of "Transaction." It is specified in the drill through URL as:

```
Searchtype=Transaction&searchid=customsearch_nspbcs_trial_balance&Transaction_ACC
OUNT=$ATTR1$&Transaction_POSTINGPERIOD=$ATTR2$&Transaction_DEPARTMENT=$ATTR5$&Tra
nsaction_CLASS=$ATTR4$&Transaction_INTERNALID=$ATTR3$&Transaction_POSTING=T&
```

The Transaction search types include:

- Transaction_POSTINGPERIOD
- Transaction_DEPARTMENT
- Transaction_SUBSIDIARY
- Transaction_CLASS
- Transaction_LOCATION
- Transaction_INTERNALID
- Transaction_POSTING=T

Search ID

The drill through list also includes "Search ID." Specify the parameter by using Search StringID.

You can find the value from the Search Definition in Oracle NetSuite.

```
https://<NetSuite Domain>/app/common/search/searchresults.nl?
searchtype=Transaction&searchid=customsearch_nspbcs_all_transactions_det.
```

Additional Parameters

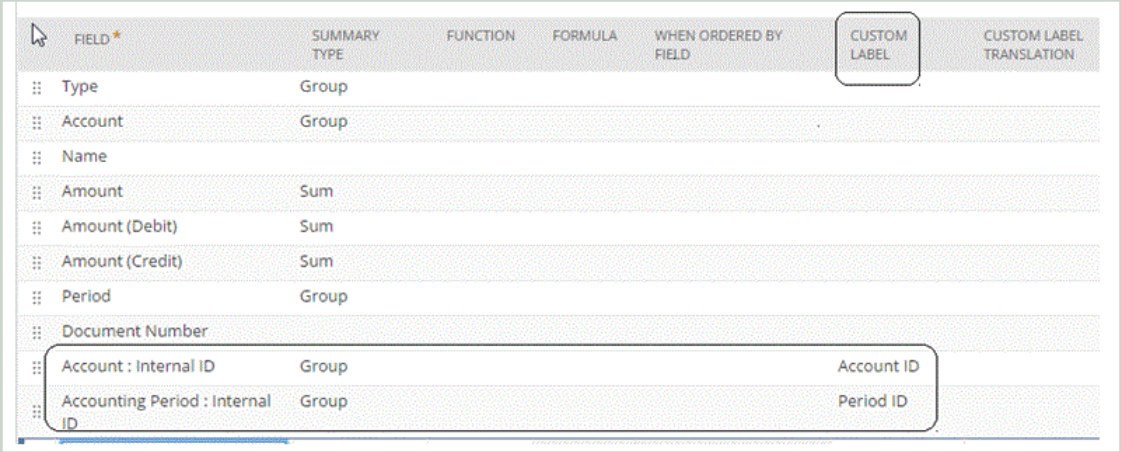
You can specify additional parameters to filter the drill based on account and period. Below are some commonly used parameters:

Table 3-2 Additional Filter Parameters

Label	Parameter	Value	Example
Account	Transaction_ACCOUNT	Account internal ID	`&Transaction_ACCOUNT=54`
Main Line	Transaction_MAINLINE	T or F	`&Transaction_MAINLINE=T`
Period	Transaction_POSTINGPERIOD	Period ID or key of the predefined period	`&Transaction_POSTINGPERIOD=21 or &Transaction_POSTINGPERIOD=LP`
Posting	Transaction_POSTING	T or F	`&Transaction_POSTING=T`
Subsidiary	Transaction_SUBSIDIARY	Subsidiary internal ID	`&Transaction_SUBSIDIARY=1`

Saved Search Requirements in the Drill Through

To use the context sensitive drill through, the Saved Searches must include an Internal ID for the account and period fields in the search Output. You can add these fields if they are missing in the Results section of your Saved Search in Oracle NetSuite as shown below:



FIELD *	SUMMARY TYPE	FUNCTION	FORMULA	WHEN ORDERED BY FIELD	CUSTOM LABEL	CUSTOM LABEL TRANSLATION
Type	Group					
Account	Group					
Name						
Amount	Sum					
Amount (Debit)	Sum					
Amount (Credit)	Sum					
Period	Group					
Document Number						
Account : Internal ID	Group				Account ID	
Accounting Period : Internal ID	Group				Period ID	

For more information about Internal IDs, see the NetSuite Help Center.

Adding the Drill Through URL

Use these steps to add the drill through URL in Data Management. There is a server component and a detailed component when defining the drill URL. The server component is added to the source system definition, and the detailed component is added to the import format definition.

To add a drill through URL:

1. On the **Setup** tab, under **Register**, select **Source System**.
2. Select the Oracle NetSuite data source system to which to add the drill through.
3. In **Drill Through URL**, click .
4. On the **Drill Through URL** edit window, enter the URL hyperlink for the drill through link.

   For example, specify: `https://system.netsuite.com/app/common/search/searchresults.nl`.
5. Click **OK** and then click **Save**.
6. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
7. From the **Import Format Summary** section, select the import format.
8. Map the Internal ID for Account, Period, and Transaction Type to the Attribute columns.

NetSuite-Drill-Demo: Mappings

View | Detach | Add | Delete

Source Column	Expression	Add Expression	Target
Account			Account
Amount			Amount
Account ID			Attribute1
Period ID			Attribute2
Type			Attribute3
Description			Description 1
			Entity
			HSP_View

In this example, the drill URL format for the Saved Search is:

```
searchtype=Transaction&searchid=<NAME OF SAVED
SEARCH>&Transaction_TYPE&detailname=$<ATTR COLUMN FOR TRANSACTION
TYPE>$&Transaction_ACCOUNT=$<ATTR COLUMN FOR ACCOUNT
```

```
ID>$&Transaction_POSTINGPERIOD=$=$<ATTR COLUMN FOR PERIOD
ID>$&Transaction_POSTING=T&Transaction_MAINLINE=F&
```

9. In the **Import Format Detail** section, in the **Drill URL**, click .
10. In the **Drill URL** edit window, specify the attributes of the drill through.

    Based on the example in step 8, you specify the drill URL as:
    `searchtype=Transaction&searchid=customsearch_nspbcs_all_transactions_sum&Transaction_TYPE&detailname=$ATTR3$&Transaction_ACCOUNT=$ATTR1$&Transaction_POSTINGPERIOD=$ATTR2$&Transaction_POSTING=T&Transaction_MAINLINE=F&`

    For more information on search types, see Saved Search Requirements in the Drill Through.
11. Click **OK** and then click **Save**.

Integrating with the Oracle HCM Cloud

You can load Human Resources data from the Oracle Human Capital Management Cloud to use in the Workforce business process of Planning Modules or Strategic Workforce Planning.

You use Data Integration to drive the integration of data between Oracle HCM Cloud and the Oracle Workforce Planning or Strategic Workforce Planning. Data Integration provides an out of the box solution that enables Workforce Planning customers to apply predefined mappings from the Oracle HCM Cloud data model to target dimensions. You can also customize and extend these integrations, for example, by applying other mapping as needed to meet their business requirements.

Watch this video to learn how to integrate data between Oracle HCM Cloud and Workforce Planning using Data Integration. Integrating selected data from your Oracle HCM Cloud application allows you to prepare workforce plans using data directly from your Oracle HCM Cloud as the basis for your plan.

Tutorial Video

Process Description for Integrating Data from Oracle HCM Cloud

Data Integration provides an out of the box solution that enables customers to apply predefined mappings from the Oracle Human Capital Management Cloud data model to target dimensions in Oracle Workforce Planning or Strategic Workforce Planning.

Data Integration with Oracle HCM Cloud provides templates that the user must load to the Oracle HCM Cloud instance so that data can be extracted.

Oracle HCM Cloud extracts are used to extract high volumes of data from Oracle HCM Cloud. Each of the predefined Oracle HCM Cloud extracts are defined as "Data Sources" in Data Integration.

When Data Integration performs the data extraction portion of the integration, it designates each predefined Oracle HCM Cloud extract as a data source entity. In turn, these data sources are mapped directly to the Workforce Planning or Strategic Workforce Planning data model in Planning Modules.

There is one template named "EPBCS Initialize.xml" that is not an extract template, but which is used by the test connection process and initialize process on the Data Integration side. If you do not upload the full set of templates provided by Data Integration, you must still upload

"EPBCS Initialize.xml " so that Data Integration can successfully initialize the content from the Oracle HCM Cloud system, and so that it can perform the test connection step.

The following is a description of metadata templates that are provided as part of this integration:

- Entity data including organization code, name and available organization structure
- Employee data including person number, full name and available demographic information
- Job data including job code, name and available job structure
- Position data including position code, name and available position structure
- Component data including grade code and name
- Union Code data including bargaining unit code and name

The following is a description of the data that is provide via the extract templates:

- FTE
- Salary Basis
- Salary Rate for defined basis
- Union Code

Customers can also pull the position start date which Data Integration converts to the start month for loading into the Workforce Planning application. They can also customize and extend these integrations, for example, by applying other mapping as needed to meet their business requirements.

> **Note:**
>
> Drill through and write-back are not supported in Oracle HCM Cloud.

Since there are multiple data rules involved to integrate various data from the Oracle HCM Cloud, batches are defined to import the series of data rules.

At a high level, the steps for loading data from an Oracle HCM Cloud extract data source are:

1. Make sure that you have been assigned a Human Capital Management Integration Specialist job role.

   A Human Capital Management Integration Specialist job role is required to manage Human Capital Management extracts. The Human Capital Management Integration Specialist (Job Role) is the individual responsible for planning, coordinating, and supervising all activities related to the integration of human capital management information systems.

   For more information, see Human Capital Management Integration Specialist (Job Role).

2. In Data Integration, then from **Application** option, select the application corresponding to the Workforce Planning application, and then on the **Dimension Detail** tab, assign classifications for the seeded dimensions in Planning Modules.

   Classifications for the seeded dimensions include "Employee," "Job", "Property," and "Union" dimensions.

3. In the Source System option, select Oracle HCM Cloud as a source system.

4. Configure the source connection.

   For more information, see Configuring a Source Connection to an Oracle HCM Cloud Data Source Application.

5. Download the Oracle HCM Cloud extracts by clicking **Download Extract**.

   An **EPBCS HCM Extract.zip** file containing the following Oracle HCM Cloud extract definitions is created. These files are a subset of the data that can be extracted and loaded into the Planning Modules application.

   - EPBCS Assignment_<Release>.xdoz

     > **Note:**
     >
     > You must import EPBCS Assignment_<Release>.xdoz into the /Custom folder of BI Publisher and not Oracle HCM Cloud.

     > **Note:**
     >
     > If you require non-English characters, download the EPBCS HCM Extract.zip file and then unzip the zip. Next go to BI Publisher Document Repository and import the EPBCS Assignment.xdoz file.

   - EPBCS Entity Metadata_<Release>.xml
   - EPBCS Employee Metadata_<Release>.xml
   - EPBCS Position Metadata_<Release>.xml
   - EPBCS Location Metadata_<Release>.xml
   - EPBCS Job Metadata_<Release>.xml
   - EPBCS Initialize.xml

     > **Note:**
     >
     > In all cases, the EPBCS Initialize.xml must always be imported in Oracle HCM Cloud.
     >
     > .

     > **Note:**
     >
     > All extracts must be imported without the Legislative Group. That is, the Legislative Group must be blank.

- EPBCS Component Salary Metadata.xml
- EPBCS Assignment Data.xml
- EPBCS Account Merit Metadata.xml

Data Integration ships the template that is needed for the extract as content that is uploaded to the Oracle HCM Cloud application. This content is provided by Data Integration because it is not seeded with the Oracle HCM Cloud.

6. Save the zip to a temporary folder.
7. In Oracle HCM Cloud, import the Oracle HCM Cloud extract definitions contained in the **EPBCS HCM Extract.zip**.

   For more information, see Importing Oracle HCM Cloud Extract Definitions to Oracle HCM Cloud.
8. In Data Integration in the Source System option, initialize the source system.

   When initialize is executed, Data Management performs the following:

   - registers the Oracle HCM Cloud extract used for the integration as a data source application,
   - creates the import format to map Oracle HCM Cloud columns to Planning Modules dimensions,
   - creates a location,
   - creates mappings to import data to the correct Workforce Planning accounts,
   - creates a data rule for the load,
   - creates a batch definition to define the batch jobs and parameters, and the type of rules included in the batch.
9. You are prompted to specify a prefix for the predefined content of the Oracle HCM Cloud integration.

   Specify a prefix name if you plan to have multiple Oracle HCM Cloud integrations, or you plan to use multiple import formats, locations, or data load rule for the integration with Oracle HCM Cloud. The prefix name is used as a unique identifier for each integration.

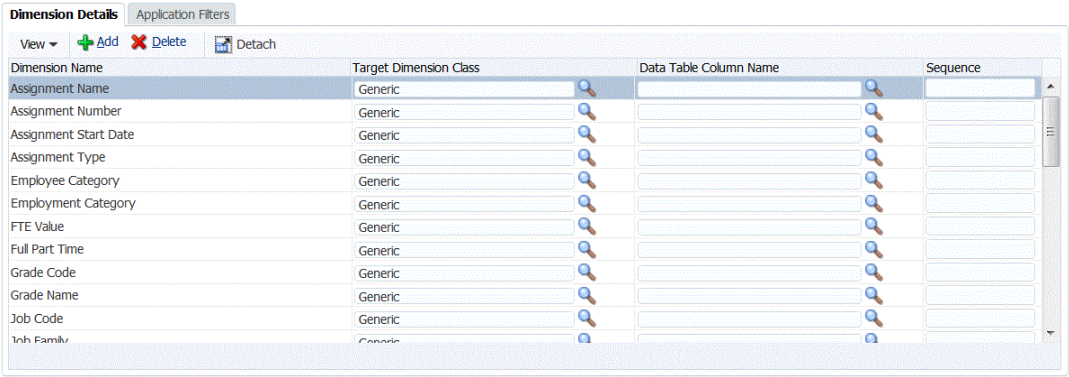
   If your integration with Oracle HCM Cloud is a single occurrence using only one import format, location and data load rule, you can leave the prefix name blank.
10. In Target Application, each Oracle HCM Cloud extract imported is registered automatically as a target data source application.

    You can register an individual Oracle HCM Cloud extract as a data source entity by selecting a source entity (or individual Oracle HCM Cloud extract) from which to create the application definition. For more information, see Creating an Oracle HCM Cloud Data Source Application.

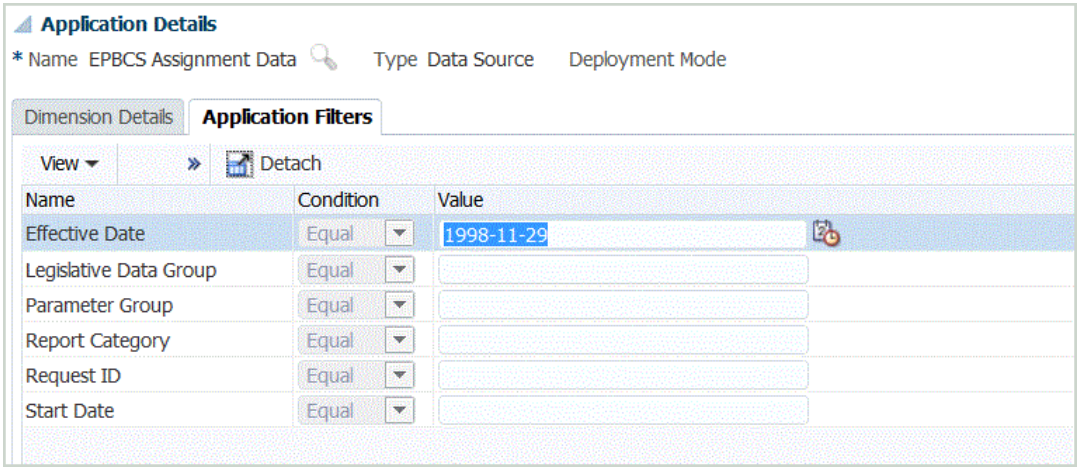
    For information on using an updated version of an extract, see Updating Existing Oracle HCM Cloud Extracts.
11. If necessary, modify any dimension details.

    All columns from the Oracle HCM Cloud extract are mapped to the EPM target dimensions class with the type "Generic."

> **Note:**
>
> As a rule, when loading data from an Oracle HCM Cloud data source, do not change, add, or delete any dimension details on the Target Application screen.

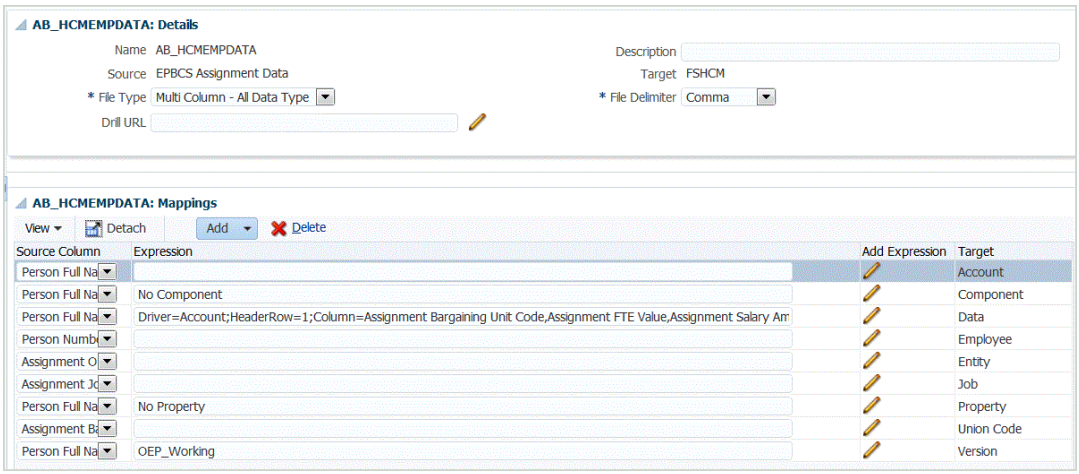


12. Any application filters associated with the data source are predefined during the initialization.

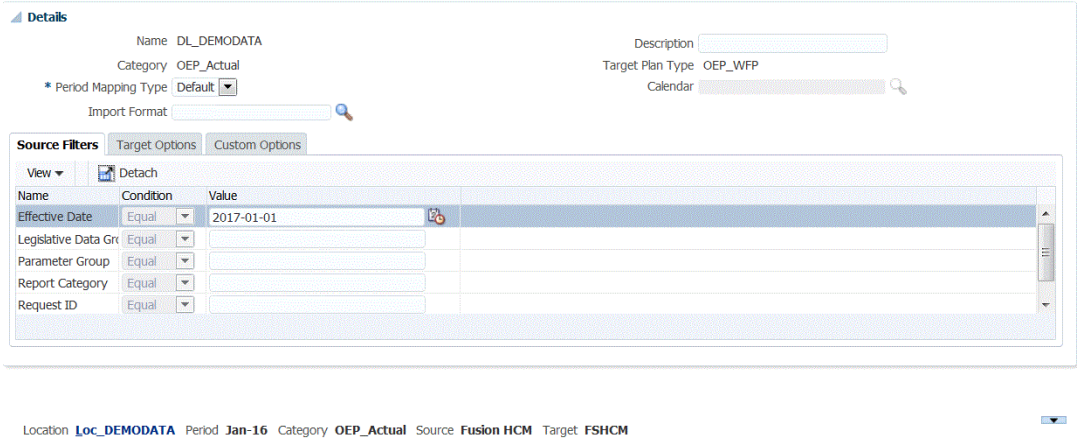


13. The Import Format for each Oracle HCM Cloud extract is predefined during the initialization step.

    For information on adding or modifying import formats, see Adding Import Formats.

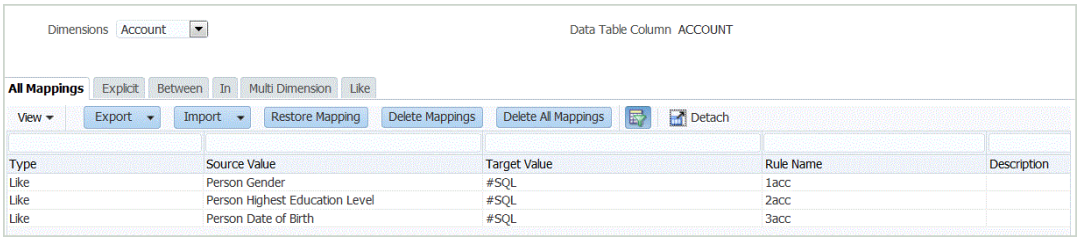


14. The Location, including the import format, data load rules, and the data load mappings, are predefined during the initialization steps.



For information on modifying a location, see Defining Locations.

15. Data load mappings are predefined during the initialization step.

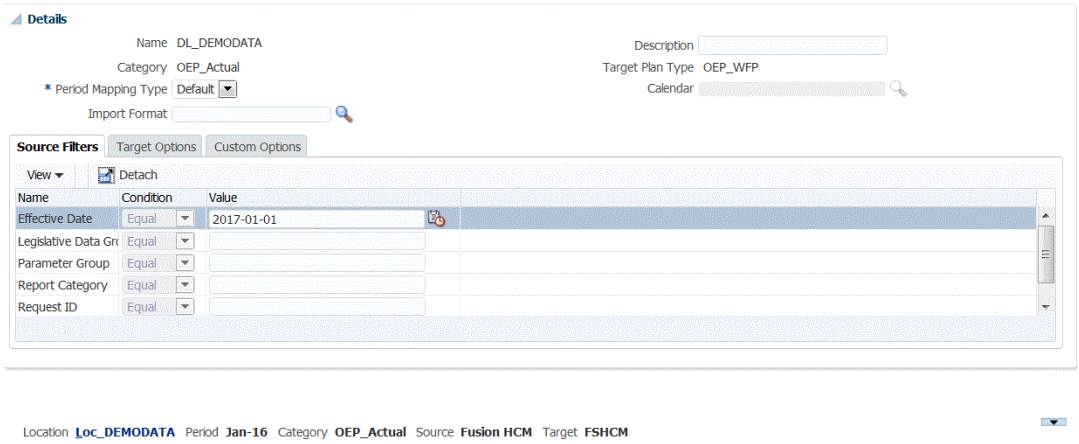


Additionally, Oracle HCM Cloud extracts support the transformation of actual data imported from Oracle HCM Cloud in the Data dimension column.

For example, in the Oracle HCM Cloud, the employee type might be "F" (for full time employee type), or "T" (for temporary employee) while in Planning Modules, the same designations are shown as "FULLTIME," or "TEMP."

For information on modifying data load mappings, see Creating Member Mappings.

16. Data load rules are predefined during the initialization for the target application.

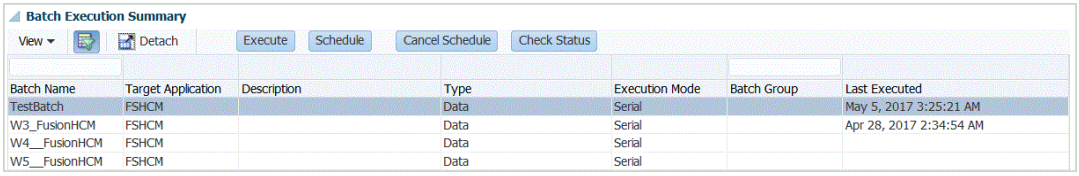


For information on modifying a data load rule, see Defining Data Load Rules to Extract Data.

Any source filters associated with the data source are created automatically during the integration. You can select any specific criteria on the Source Filters tab to filter the results that are loaded.

17. The batch definition is predefined during the initialization step.

    Data Management populates the batch definition detail, parameters, and jobs for the data load rules.



Batch Name	Target Application	Description	Type	Execution Mode	Batch Group	Last Executed
TestBatch	FSHCM		Data	Serial		May 5, 2017 3:25:21 AM
W3_FusionHCM	FSHCM		Data	Serial		Apr 28, 2017 2:34:54 AM
W4__FusionHCM	FSHCM		Data	Serial		
W5__FusionHCM	FSHCM		Data	Serial		

    If you need to modify a batch definition, see Working with Batch Definitions.

Updating Existing Oracle HCM Cloud Extracts

When an Oracle Human Capital Management Cloud extract is updated to provide new functionality or definitions, a new file is created and made available in the EPBCS HCM Extract.zip. This feature enables you to take the latest updates when new extract definitions become available and shipped.

You can retain all existing mappings and definitions for a selected or all target applications based on an extract definition in Data Management when the extract is updated, select the Refresh Metadata feature on the Target application page.

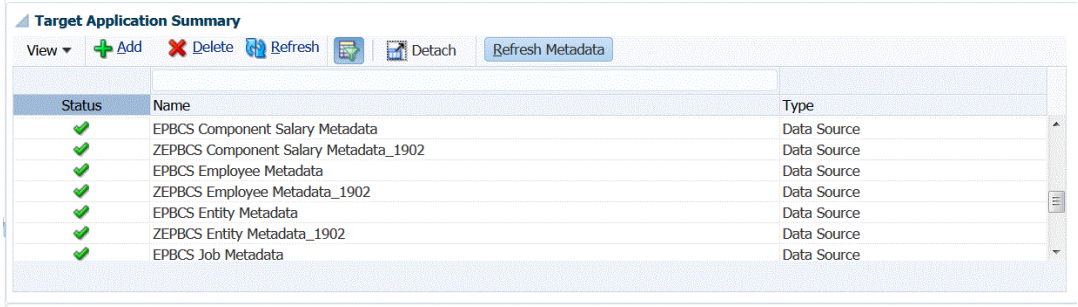
Any new files show the release version in the file name. For example, if extracts are updated in Release 19.02, the extract file and name are as follows:

- File name—EPBCS Assignment Data_1902.xml
- Extract name—EPBCS Assignment Data_1902
- XML Tag Name—EPBCS Assignment Data (no release version added)

To select an updated version of an Oracle HCM Cloud extract:

> **Note:**
>
> These steps assume that you have configured the source system, defined the source connection, and downloaded the EPBCS HCM Extract.zip. For information about any of these processes, see Process Description for Integrating Data from Oracle HCM Cloud.

1. From **Setup**, and then **Register**, click **Target Application.**
2. To select an updated version of an Oracle HCM Cloud extract and retain all existing mappings and definitions for the target application, select the target application for the extract and click **Refresh Metadata**.
3. When prompted with the message, "Do you want to update only Selected Extract or All HCM Extracts?", click **All** to update all extracts, or click **Selected** to update just the individual extract.



Configuring a Source Connection to an Oracle HCM Cloud Data Source Application

To begin integrating Oracle Human Capital Management Cloud with the Planning Modules, you first create and register the source system with the type "Oracle HCM Cloud".

After the source system and connection information are specified, you initialize the source system. This process creates a Target Application record for each Oracle HCM Cloud extract.

To add an Oracle HCM Cloud 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 Oracle HCM Cloud source system name.

      Enter the name to use for the Oracle HCM Cloud application, such as **Oracle HCM Cloud**.

   b. In **Source System Description**, enter a description of the source system.
   c. In **Source System Type**, select **Oracle HCM Cloud**.
4. Click **Configure Source Connection**.

   The Configure Source Connection screen is used to specify the Oracle HCM Cloud connection information, such as the user name and password.
5. In **User Name**, enter your Oracle ERP Cloud user name.
6. In **Password**, enter your Oracle ERP Cloud password.
7. In **Fusion Web Services URL**, enter the URL for the Fusion web service.

   For example, you might enter: `https://server/hcmProcFlowCoreController/FlowActionsService?WSDL`.

   Replace " fs" with "hcm" in the URL from the one that is used to log on.
8. Before completing the remaining steps, exit the **Configure Source Connection** screen and complete the following:
   a. On the Source System screen, click **Download Extract** and save the HCM extracts in the **EPBCS HCM Extract.zip** to a temporary folder.
   b. Import the Oracle HCM Cloud extracts to the Oracle HCM Cloud. For more information, see Importing the Oracle HCM Cloud Extract Definition.
9. Select the name of the source system to which you are configuring a source connection, and click **Test Connection**.

10. Click **Configure**.

    The confirmation "Source system [*Source system name*] has been configured successfully" is displayed.

11. On the **Source System** screen, click **Initialize**.

    The initialize process is used to configure the integration for importing data from the Oracle HCM Cloud.

    One data source application is defined for each Oracle HCM Cloud data extract. The Oracle HCM Cloud extract definitions are exported and shipped out of the box as XML files.

    The initialize process may take a while, and you can watch the progress in the job console.

12. When prompted, specify a prefix for the predefined content of the Oracle HCM Cloud integration.

    You are prompted to specify a prefix for the predefined content of the Oracle HCM Cloud integration.

    Specify a prefix name if you plan to have multiple Oracle HCM Cloud integrations, or you plan to use multiple import formats, locations, or data load rule for the integration with Oracle HCM Cloud. The prefix name is used as a unique identifier for each integration.

    If your integration with Oracle HCM Cloud is a single occurrence using only one import format, location and data load rule, leave the prefix name blank.

Importing Oracle HCM Cloud Extract Definitions to Oracle HCM Cloud

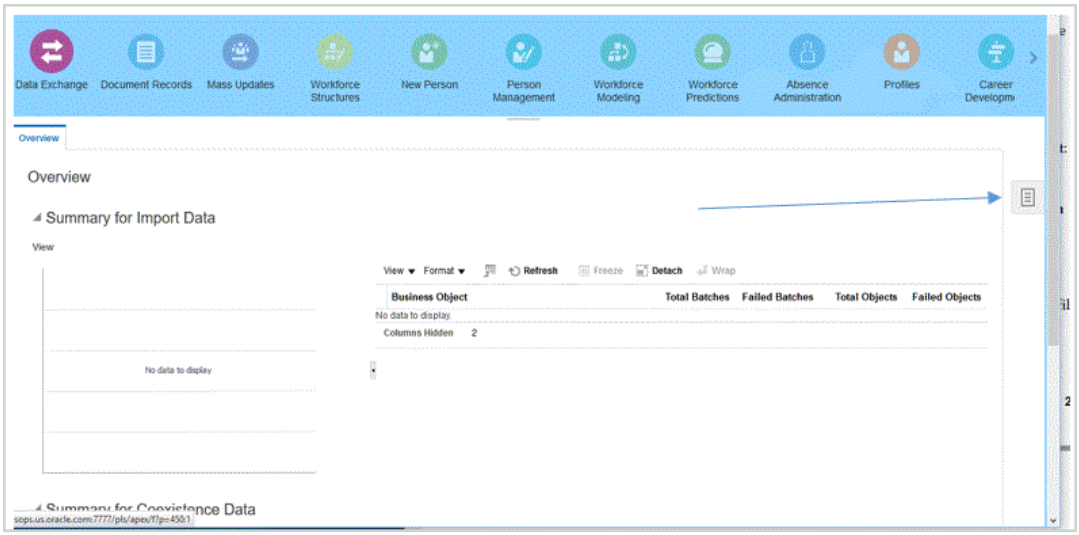
To begin seeding extract definitions in the Oracle Human Capital Management Cloud application, you import Oracle HCM Cloud extract definition XML files and BI Publisher e-Text template XDOZ files where the extract output is saved in a comma separated value (CSV) file. The CSV file format is defined as a BI Publisher report, and this report template is specified as part of the extract definition in the Oracle HCM Cloud application.

Importing the Oracle HCM Cloud Extract Definition

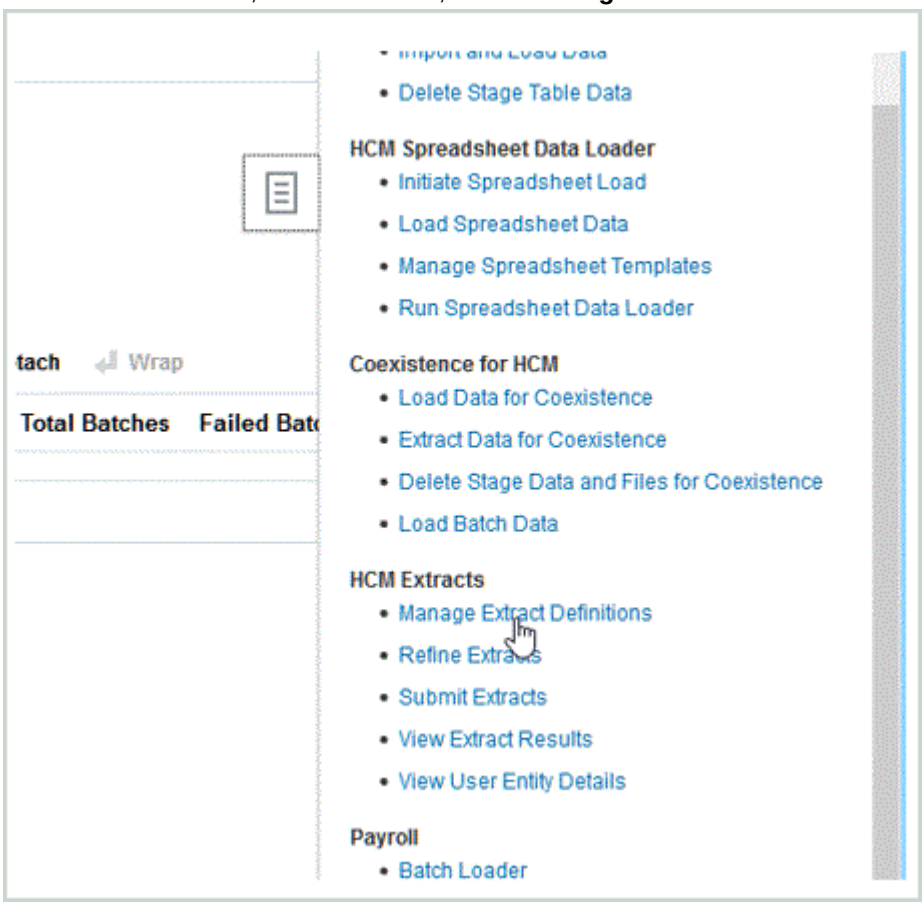
To import the Oracle Human Capital Management Cloud extract definitions that were exported from Data Management:

1. Log on to the Oracle HCM Cloud application.
2. From the **Fusion Navigation** menu, and then from **My Workforce**, select **Data Exchange**.
3. Launch the **Task** menu by clicking the

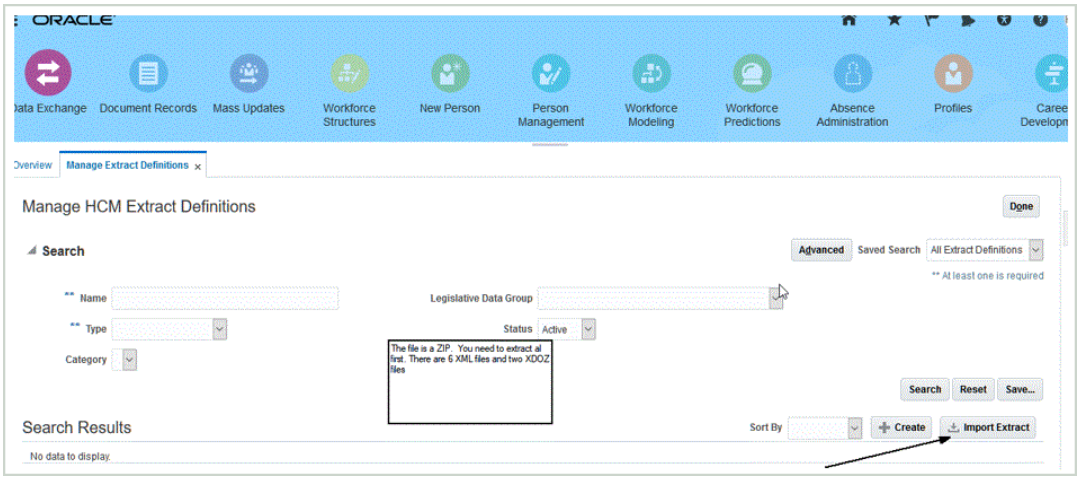
   icon (located on the right side of the screen).



4. From the **Task** menu, **HCM Extracts**, select **Manage Extract Definitions**.



5. Extract the ZIP file to a temporary folder.



6. Click **Import Extract** to import the pre-defined Oracle HCM Cloud extract definition XML files.

   When importing the extract definitions, the extract name must be same as the first name of the file name. For example, when importing "PBCS Assignment Data_1902.xml," the extract name must be specified as "EPBCS Assignment Data_1902."

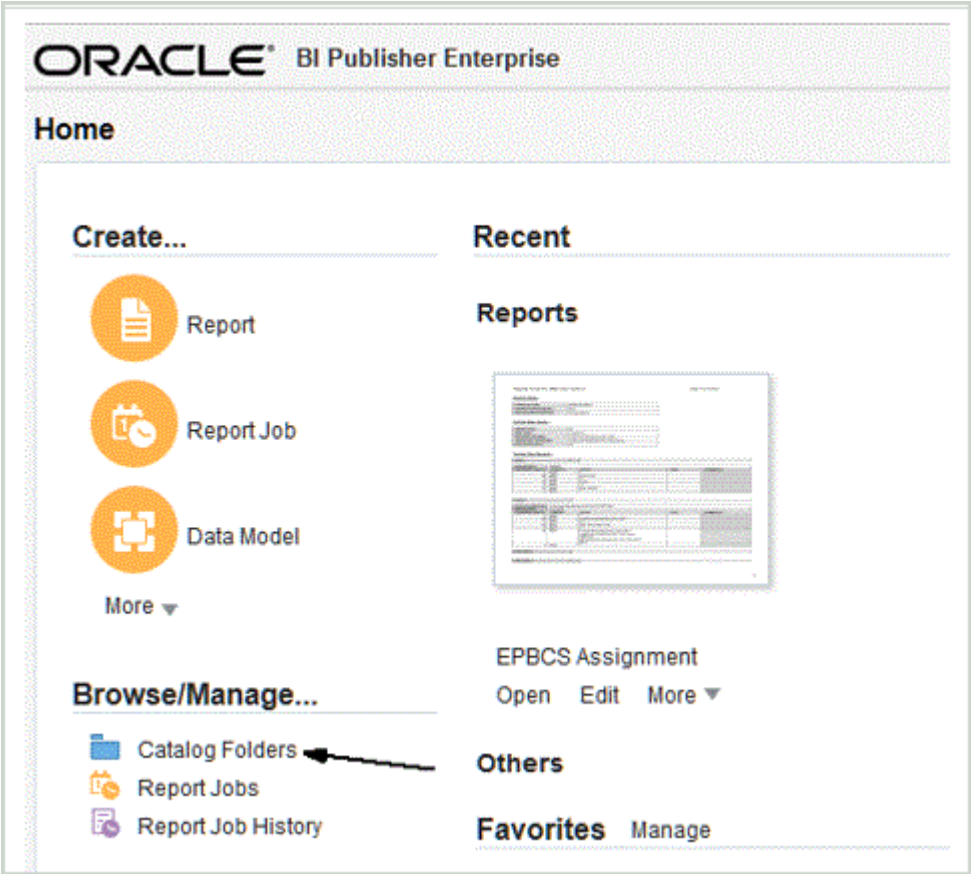
7. Import all the pre-defined Oracle HCM Cloud extract definitions:
   - EPBCS Account Merit Metadata—EPBCS Account Merit Metadata_<Release>.xml
   - EPBCS Assignment Data—EPBCS Assignment Data_<Release>.xml
   - EPBCS Component Salary Metadata—EPBCS Component Salary Metadata_<Release>.xml
   - EPBCS Employee Metadata—EPBCS Employee Metadata_<Release>.xml
   - EPBCS Entity Metadata—EPBCS Entity Metadata_<Release>.xml
   - EPBCS Job Metadata—EPBCS Job Metadata_<Release>.xml
   - EPBCS Location Metadata—EPBCS Location Metadata_<Release>.xml
   - EPBCS Position Metadata—EPBCS Position Metadata_<Release>.xml

You can import only the extract definitions that you plan to load from Oracle HCM Cloud, or all extracts even if you are not using them. All XML files that are loaded need to be "compiled" after all files are loaded. See Submitting the Oracle HCM Cloud Extract Definition.

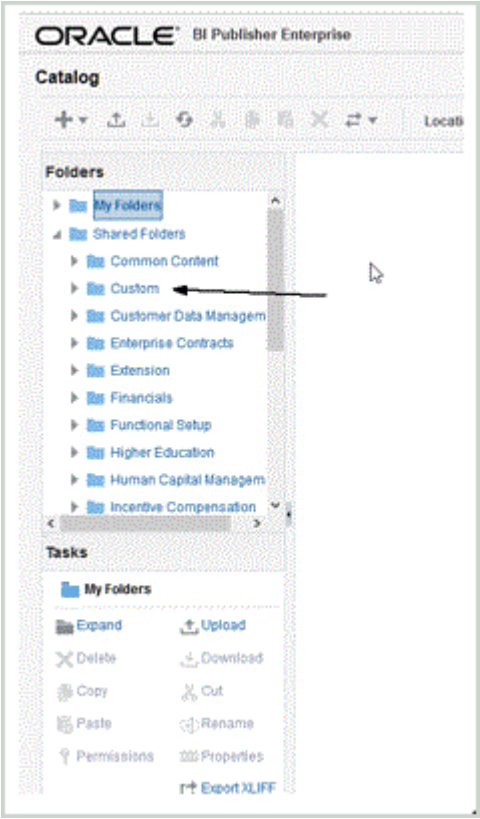
Importing the BI Publisher eText Templates

To import the BI Publisher eText templates:

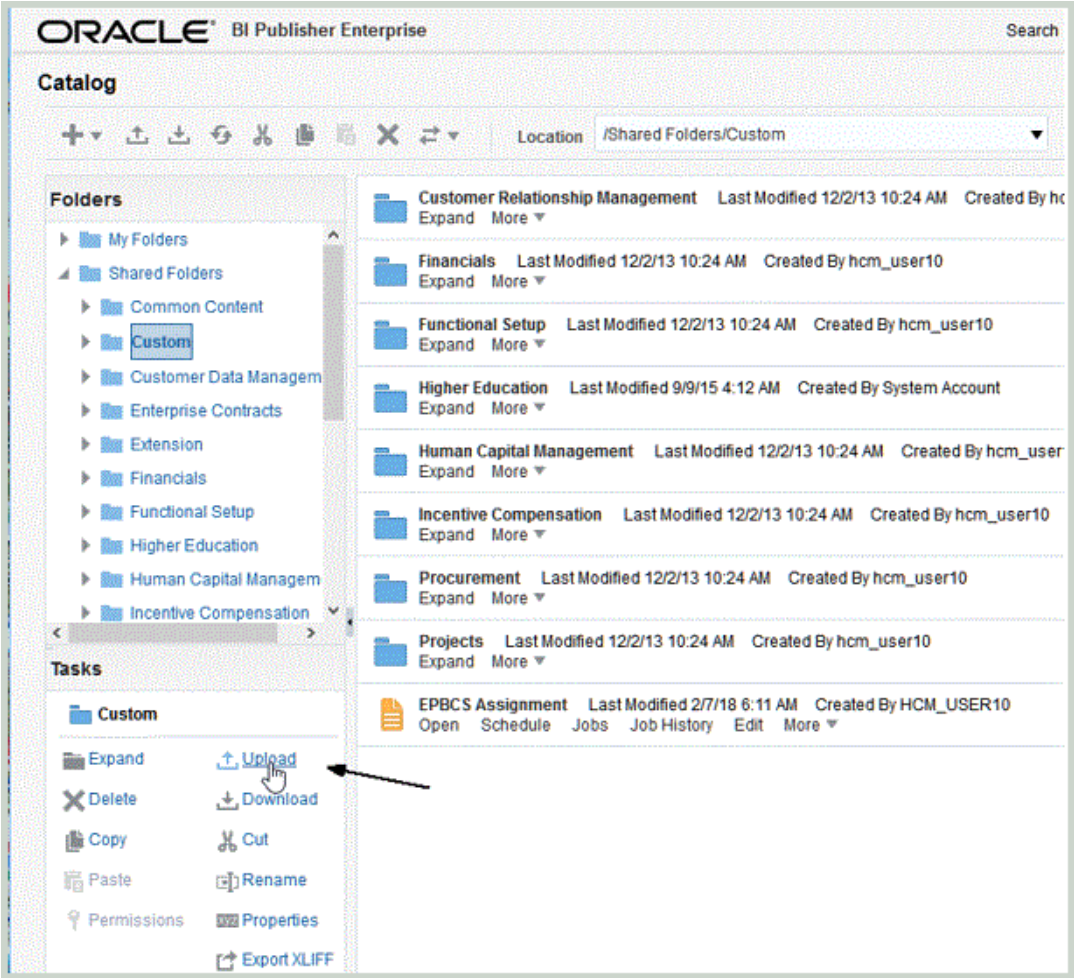
1. Log on to the **BI Publisher Enterprise** by specifying the following address in a browser: `https://{servername}/xmlpserver/servlet/catalog`.
2. Click **Catalog Folders**.



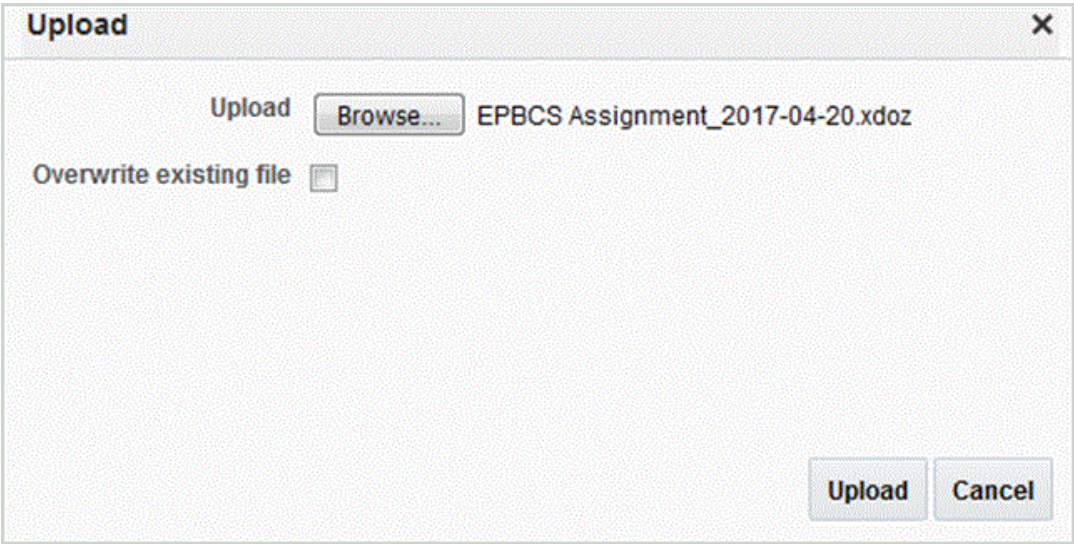
3. From the **Catalog** screen, then under **Shared Folders**, select **Custom**.



4. Expand the **Custom** folder.



5. Click **Upload** and import the predefined template files.



Submitting the Oracle HCM Cloud Extract Definition

An extract definition automatically creates an extract process (payroll flow) with the same name as the extract. The extract process enables you to define an execution sequence of

multiple tasks, including pre and post tasks using the extract process. You can use the Refine HCM Extracts task to view and modify the extract process submission parameters, if required.

You can run the flow pattern directly using the Submit an HCM Process option.

To submit an extract:

1. Click the newly created HCM Extract Definition.
2. Under **Validate**, click **Compile All Formulas** to compile all attributes.
3. Click **Refresh** and verify that a green check mark is under the **Status** column.

4. Click **Submit** to validate, save, and close the definition.
5. From the **Tasks** menu, and then under **HCM Extracts**, click **Submit Extracts**.
6. Narrow down the list of available definition to the one imported by entering a few characters of the definition name in the text box.
7. Select the definition and click **Next**.
8. Enter a value for the **Payroll Flow** and the **effective date** for the extraction.
   For the Payroll Flow, you might specify something like **Assignment_Extract_Run_1**.
9. Click **Submit** to run the extraction.
10. Click **Done**.

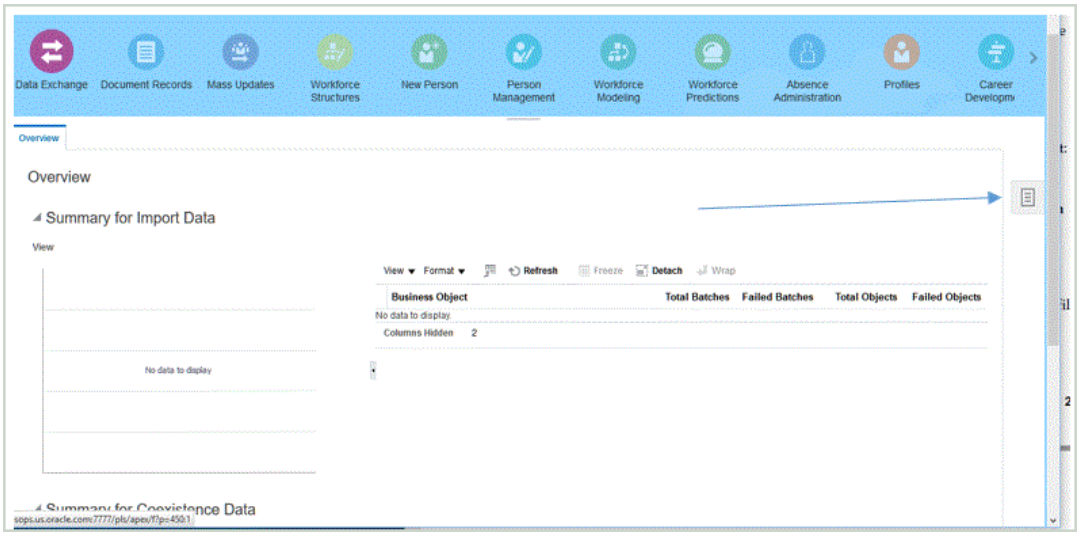
Downloading the Oracle HCM Cloud Extract Definition

> **Note:**
>
> This process enables you to download metadata using Data Management.

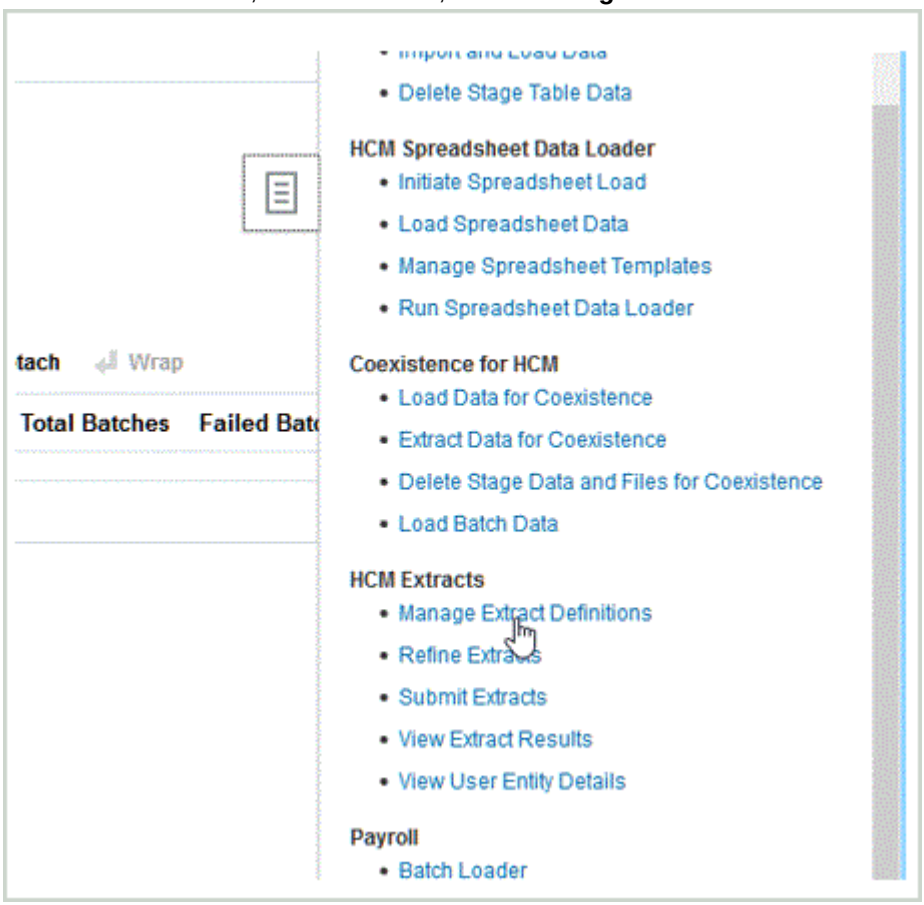
To download the Oracle Human Capital Management Cloud extract definition:

1. Log on to the Oracle HCM Cloud application.
2. From the **Fusion Navigation** menu, and then from **My Workforce**, select **Data Exchange**.
3. Launch the **Task** menu by clicking

   icon (located on the right side of the screen).



4. From the **Task** menu, **HCM Extracts**, select **Manage Extract Definitions**.



5. **Click the eyeglass icon for the extract definition to view the extract run details and status.**

   The eyeglasses are on the far right for Assignment Data.

6. Click the **Extract Run** that was submitted.

   Verify that the Status column shows a green check mark and the word "Succeeded."

7. From the **Fusion Navigator** menu, and then from **Payroll**, select **Checklist**.

8. Select the extract definition that was submitted for the Flow Pattern.

The process flow name displays after clicking **Search**.

Payroll Process Flow Name	Flow Pattern	Status	Percentage Complete	Submitted By	Submitted On
EPBCS_Assignment_Metadata_Run_20170424	EPBCS Assign...	✓	100	HCM_USER10	4/24/17
Columns Hidden 7					

9. Click the process flow name link to see the task details.

Task	Owner	Due Date	Status	Complete(%)	Last Updated By	Go to Task	Task Type
Hcm Extract	HCM_USER10		✓	100	HCM_USER10		
Extracts	HCM_USER10		✓	100	HCM_USER10		
EPBCS Assignment Metadata	HCM_USER10		✓	100	HCM_USER10		

10. Click on the **Go to Task** arrow pointing to the right icon for the process.

Process or Report	Payroll Checklist	Status	Percentage Complete	View Results
Hcm Extract	Hcm Extract	✓	100	
Extracts	Extracts	✓	100	
EPBCS Assignment Metadata	EPBCS Assignment Meta...	✓	100	
Process 975005			100	

11. From the **Actions** menu, select **View Results** for the extract output.

Type	File Name or URL	Title	Description	Attached By	Attached Date
File	AccountMerit.txt	ESS_BI_66536_OP	AccountMerit.txt	FUSION_APPS...	4/24/17 1:41 PM
File	ComponentSalaryGrade.txt	ESS_BI_66531_OP	ComponentSalaryGrade.txt	FUSION_APPS...	4/24/17 1:41 PM
File	Currency.txt	ESS_BI_66535_OP	Currency.txt	FUSION_APPS...	4/24/17 1:41 PM
File	Employee.txt	ESS_BI_66530_OP	Employee.txt	FUSION_APPS...	4/24/17 1:41 PM
File	Entity.txt	ESS_BI_66534_OP	Entity.txt	FUSION_APPS...	4/24/17 1:41 PM
File	Gender.txt	ESS_BI_66542_OP	Gender.txt	FUSION_APPS...	4/24/17 1:41 PM
File	HighestEducationDegree.txt	ESS_BI_66547_OP	HighestEducationDegre...	FUSION_APPS...	4/24/17 1:41 PM
File	Job.txt	ESS_BI_66533_OP	Job.txt	FUSION_APPS...	4/24/17 1:40 PM
File	Location.txt	ESS_BI_66549_OP	Location.txt	FUSION_APPS...	4/24/17 1:40 PM
File	Position.txt	ESS_BI_66529_OP	Position.txt	FUSION_APPS...	4/24/17 1:40 PM

12. Download each of the metadata files and load them into the Oracle Workforce Planning application.

    For metadata with hierarchy structures, submit the extract, download and load them into the Workforce Planning application.

Creating an Oracle HCM Cloud Data Source Application

In Data Management, use the Target application option to register an individual Oracle Human Capital Management Cloud extract as a data source target application.

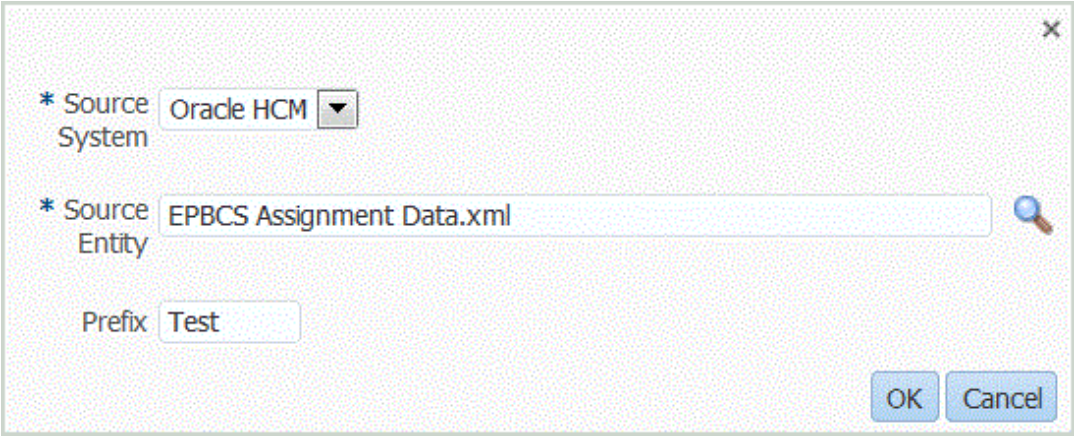
To create an individual Oracle HCM Cloud extract as a data source application:

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. Click **Add**, and then select **Data Source**.
3. In **Source System**, select the name of the Oracle HCM Cloud source system.

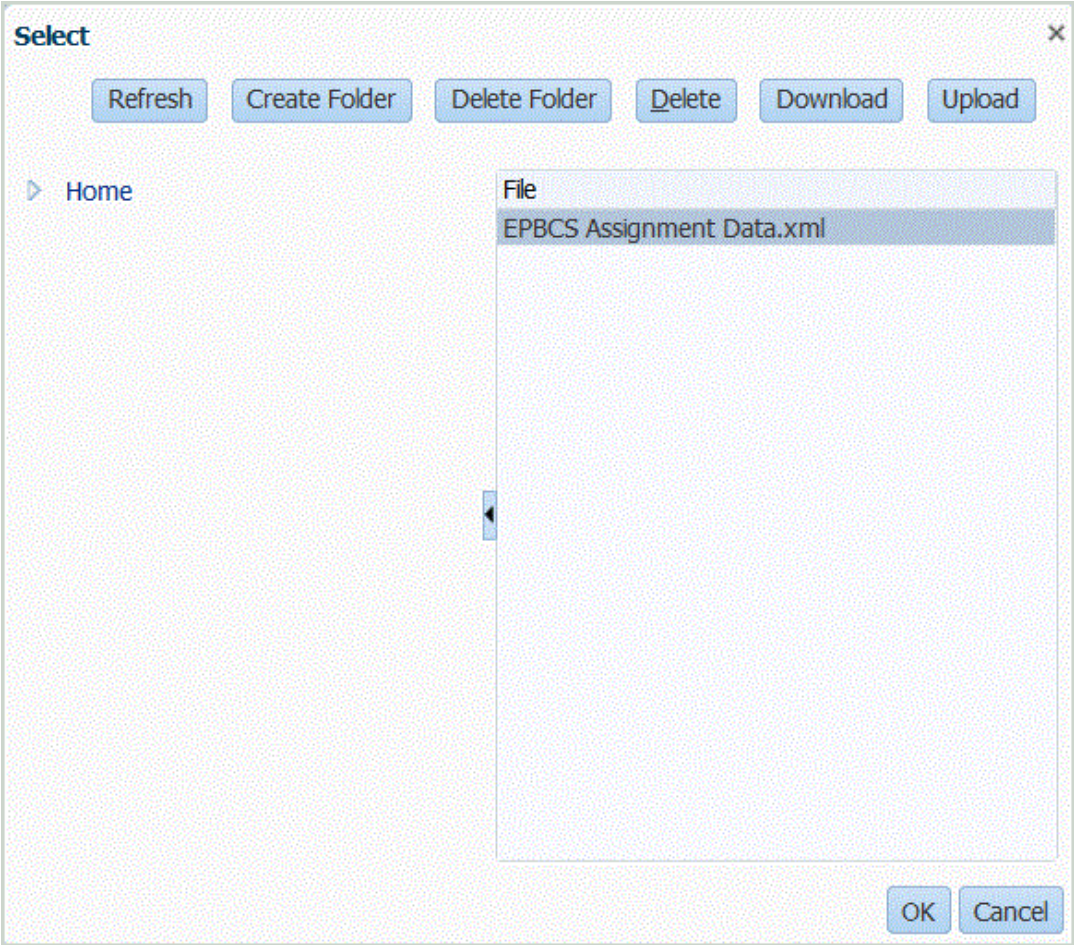
   For example, you might specify **Oracle HCM Cloud**.
4. In **Source Entity**, specify the file name (in XML format) of the source entity to register as a data source.

The file is the Oracle HCM Cloud extract application name/definition that has already been uploaded to the *inbox* in Data Management.

The Oracle HCM Cloud extract application name and definition are defined in Oracle HCM Cloud, and are included in the XML file that is downloaded from the Oracle HCM Cloud.



You can also launch the Search and Select screen by clicking and selecting a source entity.



5. Click **OK**.

6. **Optional**: You can apply filter conditions to the Oracle HCM Cloud data source so that only those records that meet selected conditions are returned to Data Management. You can specify a single filter condition or multiple filters conditions, and additionally specify the exact values that you want returned.

   To apply a filter condition:

   a. From **Application Details**, select the **Application Filters** tab.
   b. Select the name of the field to which to apply the filter condition.
   c. From the **Condition** drop-down, select the applicable condition.
      - EQ (equals)
      - Like
      - In
   d. In **Value**, specify the filter definition.
7. Click **Save**.

> **Note:**
>
> When you create an Oracle HCM Cloud data source, dimension details are populated automatically and mapped directly to the target dimension class "Generic." As a rule, when loading data from an Oracle HCM Cloud data source, do not change, add, or delete any dimension details on the Target Application screen.

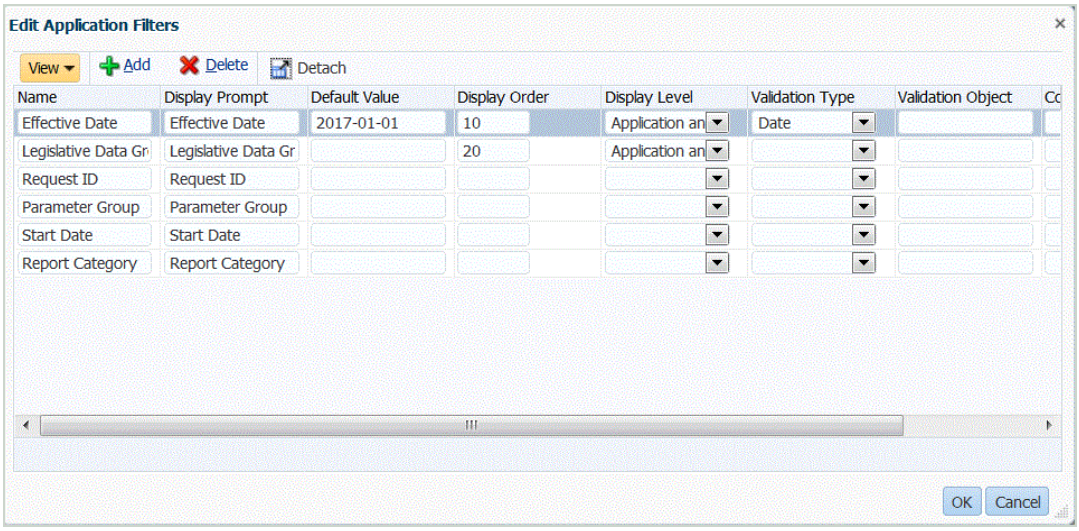
Editing Application Filters for the Oracle HCM Cloud Data Source Application

System administrators can add and edit the application filters that are associated with the Oracle Human Capital Management Cloud if they customize the Oracle HCM Cloud extract definition.

By default, these application filters are defined explicitly for the Oracle HCM Cloud data source. It is recommended that you do not modify or change the filter definitions if you use the predefined integration with Oracle HCM Cloud.

To edit Oracle HCM Cloud application filters:

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. Select the Oracle HCM Cloud data source to which to apply any filters.
3. From **Application Details**, select the **Application Filters** tab.
4. Select the name of the field to which to apply the filter condition.
5. Click **Edit**.
6. From **Edit Application Filters** screen, select the name of the value to which to change the filter condition.



7. Modify the filters based on the following criteria:
   - Name—Specify the name of the filter. This is the internal name to be used in the API.
   - Display Prompt—Specify the name of the display prompt in the user interface.
   - Default Value—Specify the default value of the filter.
   - Display Order—Specify the display order of the filter on the Application Filters tab. If this field is blank, the custom filter cannot be displayed, and the default value is used as the filter value.
   - Display Level—Select where the filter is displayed. Available options are:
     - Application only
     - Application and Rule
     - Rule only
   - Validation Type—Provide drop down of values listed using lookup type.
   - Validation Object—Provide list of lookup types.
   - Condition List—Provide a condition list based on one or all following conditions:
     - EQ (Equal)
     - IN
     - Like

     The condition values can be `Equal`, `Like`, or `In`. The condition values are stored as a drop-down list in CONDITION_LIST field. If the value is `EQ,IN,`, then show only `Equal` and `In` in the Condition drop down. If the value is `EQ LIKE`, then show only Equal, Like in the drop down. Any combination of `EQ,IN,LIKE` are stored in the field. If only one value is provided in the Condition List, then the condition cannot be changed. The default value is `EQ`. When specifying multiple conditions, prefix the condition with a comma. For example, to use the `IN` and `LIKE` conditions, enter: `,IN,LIKE`.
8. Click **OK**.

Adding Data Load Rules for an Oracle HCM Cloud Data Source Application

Data load rules are predefined during the initialization for the target application. However, if you have added new Oracle Human Capital Management Cloud extracts in the target application,

or modified the import format, location, or data load mappings, you can define and execute new data load rules to load the results of the Oracle HCM Cloud extracts to your Oracle Workforce Planning application.

You can specify filter values so that only those records that meet selected condition are returned.

Data load rules are defined for locations that have been already set up. You can create multiple data load rules for a target application so that you can import data from multiple sources into a target application.

The data load rule is created once, but used each time there is a transfer.

To create a data load rule:

1. On the **Workflow tab**, under **Data Load**, select **Data Load Rule**.
2. From the **POV Bar**, select the location to use for the data load rule.

   Data load rules are processed within the context of a point of view. The default point of view is selected automatically. The information for the point of view is shown in the POV bar at the bottom of the screen.
3. Click **Add**.
4. In **Name**, enter the name of the data load rule.
5. In **Description**, enter a description to identify the data load rule when you launch the transfer.
6. In **Category**, leave the default category value.

   The categories listed are those that you created in the Data Management setup. See Defining Category Mappings.
7. 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 Data Management to determine the Source General Ledger Periods mapped to each Data Management period included in a Data Rule execution.
   - Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source General Ledger Periods mapped to each Data Management Period included in a Data Rule execution. Explicit period mappings enable support of additional General Ledger data sources where periods are not defined by start and end dates.
8. In **Import Format**, specify the import format based on the file format of the Saved Search application (for example, single column numeric, and multi-column data) that you want to load to the target application.
9. In **Calendar**, select the source system calendar.
10. In **Target Plan Type**, select the plan type of the target system to which you want to load budget.
11. **Optional**: Select the **Source Filters** tab to apply filter conditions to the source Oracle HCM Cloud data source application.

    For example, you can filter legislative data groups to a specific group. For more information, see Creating an Oracle HCM Cloud Data Source Application.
12. **Optional**: Select **Target Options** to specify any target options.
13. **Optional**: Select **Custom Options** to specify any free form integration information.

See Creating Custom Options.

14. Click **Save**.
15. Execute the data load rule.

    See the following data load rule topics:

    - Edit data load rules—See Editing Data Load Rules.
    - Run data load rules—See Running Data Load Rules.
    - Delete data load rules—See Deleting Data Load Rules.
    - Schedule data load rules—See Scheduling Data Load Rules

      .
    - View data load rules before executing them—See Using the Data Load Workbench.
    - Check the data rule process details—See Viewing Process Details.
16. From **Workflow**, under **Monitor**, select **Process Details**.
17. Verify the **status** of the data load.

    A green check mark indicates that the transfer was successful.
18. To verify the results of the transfer, on the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

Integrating Oracle HCM Cloud Metadata

You can integrate Oracle Human Capital Management Cloud metadata to use in the Oracle Workforce Planning business process of Planning Modules or Strategic Workforce Planning.

As the integration mechanism, Data Management can align and move the following metadata from the Oracle HCM Cloud to your target applications and business processes in the Planning Modules:

- Account Merit
- Component Salary Metadata
- Employee Metadata
- Entity Metadata
- Job Metadata
- Location Metadata
- Position Hierarchy

During the initialization of the Oracle HCM Cloud source system, Data Management creates an application for each metadata source. You can map each application to your metadata application and then execute the load. Note that the system does not create mappings automatically.

> **Note:**
>
> For detailed information on the Oracle HCM Cloud fields belonging to each predefined extract definition, see Oracle HCM CloudExtract Definition Field Reference.

Loading Oracle HCM Cloud Metadata

To load Oracle Human Capital Management Cloud metadata:

1. On the **Setup** tab, under **Register**, select **Source System**.
2. In **Source System**, click **Add**.
3. In **Source System Name**, enter the name of the Oracle HCM Cloud source system.
4. In **Source System Type**, select **Oracle HCM Cloud**.

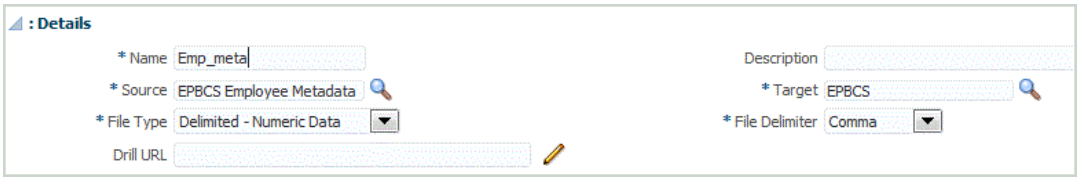
5. In **Source System Description**, enter a description of the Oracle HCM Cloud source system.
6. Click **Configure Source Connection**.

   For more information, see Configuring a Source Connection to an Oracle HCM Cloud Data Source Application.
7. Click **Initialize**.
8. On **Configure HCM Integration**, and then **Prefix**, specify a prefix for the predefined content of the Oracle HCM Cloud integration.

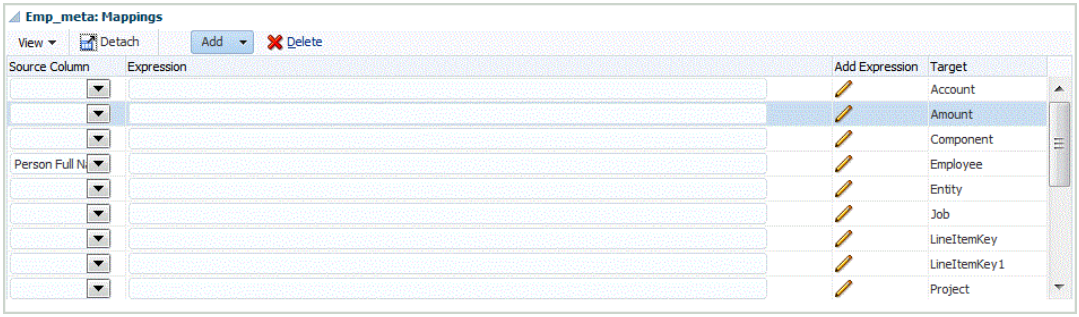
   When you initialize the Oracle HCM Cloud source, the system creates an application for each of the metadata sources. These applications can then be mapped to the target application and the metadata is loaded.
9. Click **Save**.
10. On the **Setup** tab, under **Register**, select **Target Application**.
11. **Optional**: Add or change any dimension details.

    See Defining Application Dimension Details.
12. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
13. In the **Import Format** summary task bar, select **Add**.
14. 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.
15. In **Description**, enter a description of the import format.
16. In **Source**, select Oracle HCM Cloud metadata application for the source system.
17. In **Target**, select the target system.
18. In **File Type**, select **Delimited - All Data Type**.
19. From the **File Delimiter** field, select **Comma**.



20. In **Drill URL**, enter the URL used for the drill-through.
21. In the **Mapping** section, map the source columns to the dimensions in the target application.



For information on adding or modifying import formats, see Adding Import Formats.

For information on adding import expressions, see Adding Import Expressions.

22. Click **Save**.
23. On the **Setup** tab, under **Integration Setup**, select **Location**.
24. Define a location to indicate where to load the data.

    Each location includes an import format, data load rules, and data load mappings.

    For more information, see Defining Locations.
25. Click **Save**.
26. On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.
27. Create any data load mappings.

    For more information, see Data Load Mapping.
28. On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.
29. Create a data load rule.

    For more information about creating a data load rule, see Defining Data Load Rules to Extract Data.
30. Apply any source filters.

    Any source filters associated with the data source are created automatically during the integration. You can select any specific criteria on the Source Filters tab to filter the results that are loaded.

    Depending on the Oracle HCM Cloud metadata category, the following source filters apply:

    - Effective Date—Select the date on which you want the trees to be effective.
    - Legislative Data Group—Legislative data groups are a means of partitioning payroll and related data. At least one legislative data group is required for each country where the enterprise operates. Each legislative data group is associated with one or more payroll statutory units.

- Tree Code— Tree code for hierarchy in Oracle HCM Cloud (for objects with hierarchy, for example: Org, Position)
- Tree Version—Tree Version for hierarchy in Oracle HCM Cloud
- Changes Only—Controls the extract mode. Valid options are **N** or **Y**.
  The following table describes the different extract modes, their lookup values and descriptions:

Mode	Lookup Value	Description
N	All attributes	Includes all data in the extract. A full extract is run which produces the full data output at that point of time. The archived data is utilized as a baseline.
Y	Changed attributes	Compares this extract run with the previous extract runs and by comparing against the baseline (to identify the incremental data), displays the data that has changed only.

31. Execute the data load rule.

    This step pushes the data from the metadata application into Data Management, maps the data and then shows the results in the workbench. If mapping succeeds without errors, the data is loaded to the target application.

    For more information about executing a rule, see Running Data Load Rules.

Loading Data from the Oracle ERP Cloud

You can pull a subset of data from the Oracle ERP cloud using Data Management as the integration mechanism without connecting directly to Fusion sources. Using this feature, you can import from data sources such as Oracle Financials or Supply Chain.

To do this, you use an data source adapter-based framework that queries data from BI report as a data source. BI Reports extracts EPR Cloud data directly from the Fusion database tables.. Any kind of record of record in the Oracle ERP cloud can be included in or considered as the basis of the query. When the system brings over the downloaded file into Data Integration, the data and metadata can be subsequently mapped and loaded to the Oracle Fusion Cloud Enterprise Performance Management.

You can use either be pre-packaged queries or customize BI reports to define your own report parameters for extracting the data from the Oracle ERP Cloud.

Process Description for Integrating Oracle ERP Cloud Using Prepackaged Queries

Data Management ships with prepackaged queries that leverage seeded data extracts provided by Oracle ERP Cloud as data sources.

For more information about Oracle Business Intelligence Publisher, see Oracle Business Intelligence Publisher 12.2.1.3.0

These are the steps for loading data from the Oracle ERP Cloud using the prepackaged queries shipped with Data Management:

1. An Oracle ERP Cloud integration requires that you have the privileges or user role and data access to all ERP. For more information, see Security Role Requirements for Oracle ERP Cloud Integrations .
2. Register the source system for the source system type **Oracle ERP Cloud** and specify your user credentials.

   This step includes specifying the connection details and testing the connection.

   For more information, see Configuring a Source Connection for an Oracle ERP Cloud Source System
3. Register a target application as an Oracle ERP Cloud data source application type and save it.

   The source columns are populated automatically from the uploaded file extract.

   See Creating an Oracle ERP Cloud Data Source.
4. Provide any input values in the rule or integration options in Application Filters.

   > **Note:**
   >
   > Define any necessary filters to limit the amount of data returned by the BI Publisher extract. Filters ensure the best load performance.
5. Set up the integration mapping between the Oracle ERP Cloud data source and the target application by building an import format.

   See Working with Import Formats.
6. Define the location used to associate the import format.

   See Defining Locations.
7. Define data mapping to map the members from the source to target.

   See Creating Member Mappings.
8. Define the data load rule and specify and source and target options.

   See Defining Data Load Rule Details.
9. Execute the integration.

   See Running Data Load Rules.

Configuring a Source Connection for an Oracle ERP Cloud Source System

To begin integrating an Oracle ERP Cloud source system with the Oracle Fusion Cloud Enterprise Performance Management, you first create and register the source system with the type "Oracle Financial Cloud".

To add a source system:

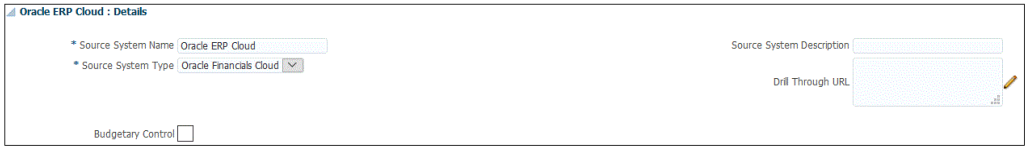
1. On the **Setup** tab, under **Register**, select **Source System**.
2. In **Source System**, click **Add**.
3. Enter the source system details:
   a. In **Source System Name**, enter the source system name.

Enter the Oracle General Ledger name to use for the file, such as "ERP Cloud."

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

c. In **Source System Type**, select **Oracle ERP Cloud**.

d. Leave the **Fusion Budgetary Control** field unchecked.



4. Click **Configure Source Connection**.

   The Configure Source Connection screen is used to configure the connection to the Oracle ERP Cloud.

   The source connection configuration is used to store the Oracle ERP cloud user name and password. It also stores the WSDL connection for the Oracle ERP Cloud user name and password.

5. In **User Name**, enter the Oracle ERP Cloud user name.

   Enter the name of the Oracle ERP Cloud user who launches the process requests to send information between Cloud EPM and the Oracle ERP Cloud. This user must have an assigned Oracle General Ledger job role such as "Financial Analyst," "General Accountant," or "General Accounting Manager."

   > **Note:**
   >
   > Web services require that you use your native user name and password and not your single sign-on user name and password.

6. In **Password**, enter the Oracle ERP Cloud password.

   You must update this password anytime you change your Oracle ERP Cloud password.

7. In **Fusion Web Services URL**, enter the server information for the Fusion web service. For example, enter `https://server`.

   For customers using release 19.01 and earlier of the Oracle ERP Cloud, use the old WSDL to make the connection and then specify the URL in the following format:

   `https://server/publicFinancialCommonErpIntegration/ErpIntegrationService?WSDL`

   For customers that implement after 19.01, simply copy and paste the server to the URL.

   `https://server//fscmService/ErpIntegrationService?WSDL`

8. Click **Test Connection**.

9. Click **Configure**.

   The confirmation "Source system [*source system name*] configuration has been updated successfully" is displayed.

10. Click **Save**.

Creating an Oracle ERP Cloud Data Source

Target applications enable Data Management to store the structure of the Oracle ERP Cloud data source and the target applications that can be integrated with it. In this way, you can map the source and target applications and specify import criteria.

This section describes registering an Oracle ERP Cloud data source from the prepackaged queries shipped with Data Management.

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. In **Target Application**, in the summary grid, click **Add**, and then select **Data Source**.
3. From the **Select Source** screen, select an Oracle ERP Cloud data source.

   Available Oracle ERP Cloud data sources shipped with Data Management include:

   - Oracle ERP Cloud (Payables Transactions)
   - Oracle ERP Cloud (Receivable Transactions)
   - Oracle ERP Cloud (Trial Balance - Average)
   - Oracle ERP Cloud (Trial Balance)

   The **Application Name** is populated automatically with the name of the prepackaged query that you selected.
4. In **Prefix**, specify a prefix to make the application name unique.

   The prefix is concatenated with the file name to form a unique application name. For example, if you want to name an application with the same name as an existing one, you can assign your initials as the prefix.
5. Click **OK**.
6. Click **Save**.

Applying Application Filters to an Oracle ERP Cloud Data Source

All the application filters are predefined when you select any of the prepackaged queries to the Oracle ERP cloud sources. However, you can provide input values in the rule or integration options.

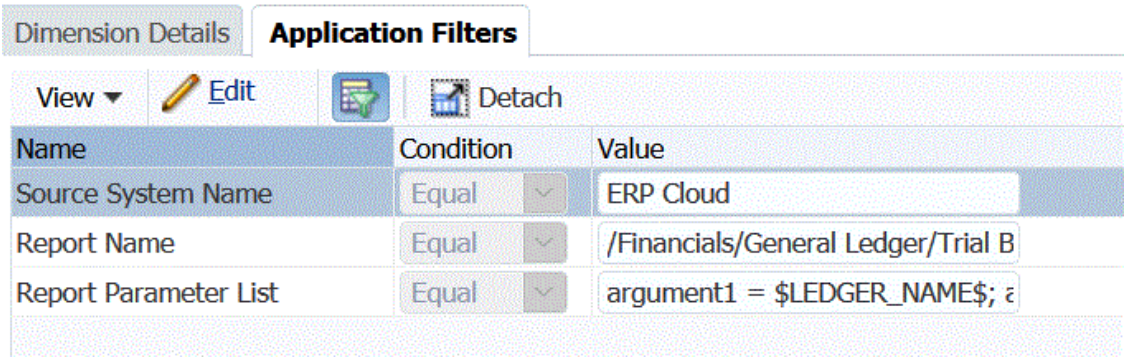
You can select dynamic filters to define as report parameters from the Oracle ERP cloud data source when the actual parameter value needs to be defined at the data load rule or application level.

An example of a dynamic filter is "Currency Type" where you can select either: Entered, Statistical, or Total.

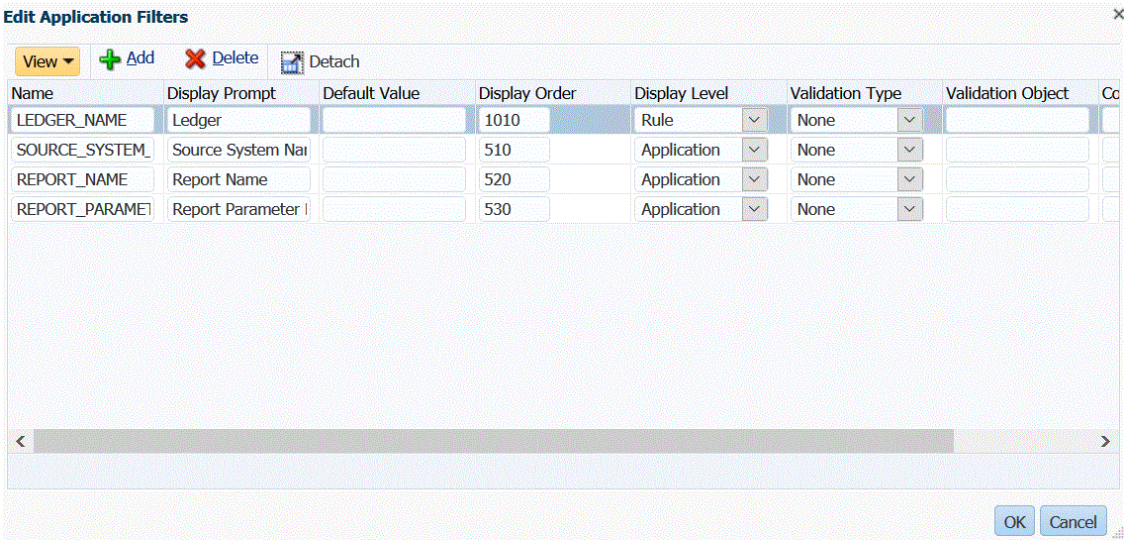
You can specify a single filter condition or multiple filters conditions, and additionally specify the exact values that you want returned.

In some cases, you can change a static parameter value in the Report parameter list by replacing it with a parameter value enclosed within $$ notations. This type of filter applies to the Ledger ID and Period parameters.

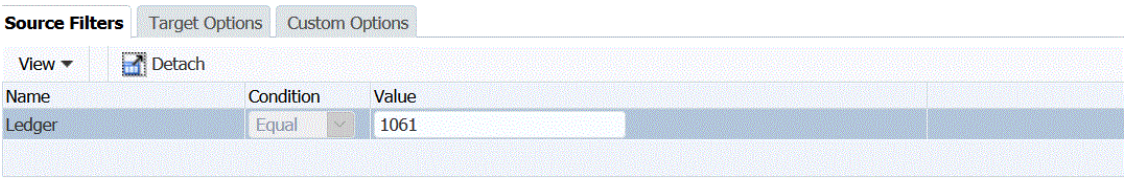
For example, in the image below, the static parameter value `argument1 = $LEDGER_NAME$` has been added to the Report Parameter List as a parameter:



On the Edit Application Filter screen, a display name has been entered for the parameter. This is the name as it is shown in the rule or integration options.



In data load rules, this is how the parameter shows on the Source Options screen:



Two predefined parameters, $START_PERIODKEY$ and $END_PERIODKEY$, can be used to select specific periods using a data format from the POV. For information on using these two parameters, see Selecting Period Report Parameters from the Oracle ERP Cloud.

To add a filter for the Oracle ERP cloud data source.

1. In Data Management, select the **Setup** tab, and then under **Register**, select **Target Application**.
2. Select the Oracle ERP Cloud data source and click the **Application Filters** tab.
3. In the **Source System Name**, specify the name of the Oracle ERP Cloud source system.

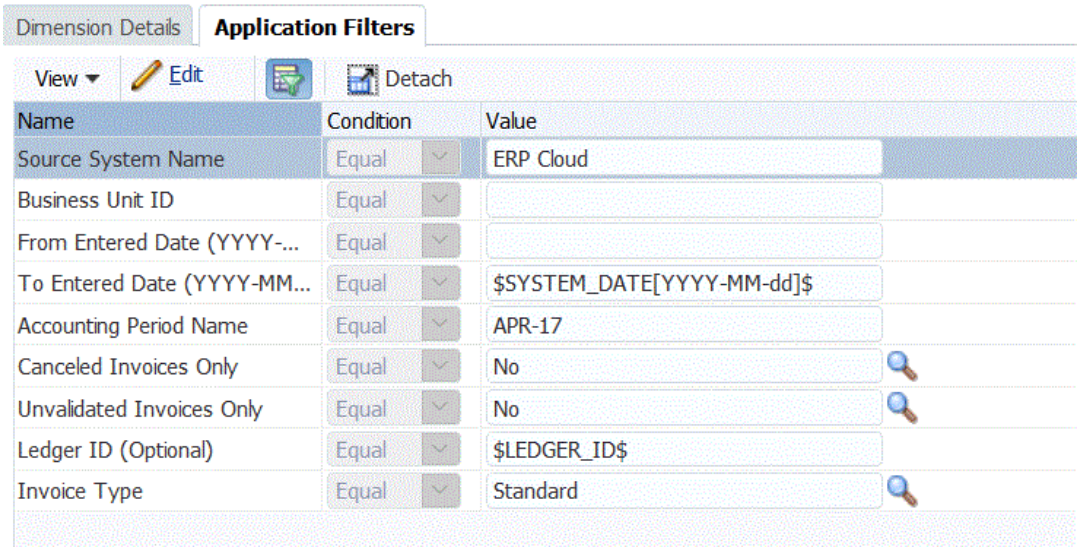
   For example, type **ERP Cloud**.
4. Select any parameters from the list of available report parameter to pass to the Source Option tab when the data load rule is run.

For example, to set the Canceled Invoices Only option to "No," select **No** in the parameter field for **Canceled Invoice Only**.

5. **Optional**: Select any Ledger ID or any Periods report parameters to pass.

   You can replace a static parameter value in the parameter list for the Ledger ID or Period by replacing the value enclosed within the $$ notation with your own selected parameter.

   In the following example, you can change the "ACCOUNTING PERIOD NAME" by selecting the actual period using the $START_PERIODKEY[MMM-YY]$ format. In this example, the accounting period has been changed to APR-17.



   For more information, see Selecting Period Report Parameters from the Oracle ERP Cloud.

6. To edit any display options for any dynamic report parameter, on the Application Filters tab, click **Edit**.
7. On the **Edit Application Filters** screen, click **Add**.
8. From the **Name** field, select the name of the parameter.
9. In **Display Prompt**, enter the name of the display prompt for the filter on the **Source Options** tab in Data Management or **Edit Integration** page in Data Integration.
10. In **Display Order**, specify the display order of the filter on the **Source Options** or **Edit Integration** page.

    If this field is blank, the custom filter cannot be displayed, and the default value is used as the filter value.

    For example, enter **99** to show the filter in the 99th position sequence or position in a list of filters. Display orders are listed from lowest to highest.

11. In **Display Level**, select display level of the parameter (application and/or rule) to indicate the level at which the filter is displayed.
12. In **Validation Type**, select **None**.
13. Click **OK**.
14. Click **Save**.

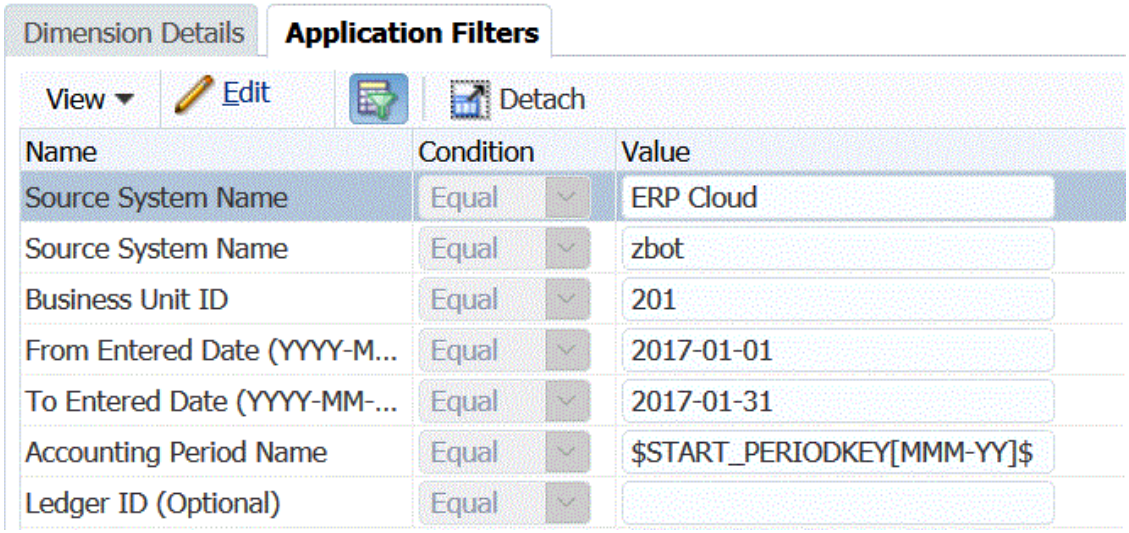
Selecting Period Report Parameters from the Oracle ERP Cloud

When importing data from the Oracle ERP Cloud, you can select the period from which to pull the data by specifying a date (using a date specific format) in the $START_PERIODKEY$ and $END_PERIODKEY$ notations.

Valid values for date format include:

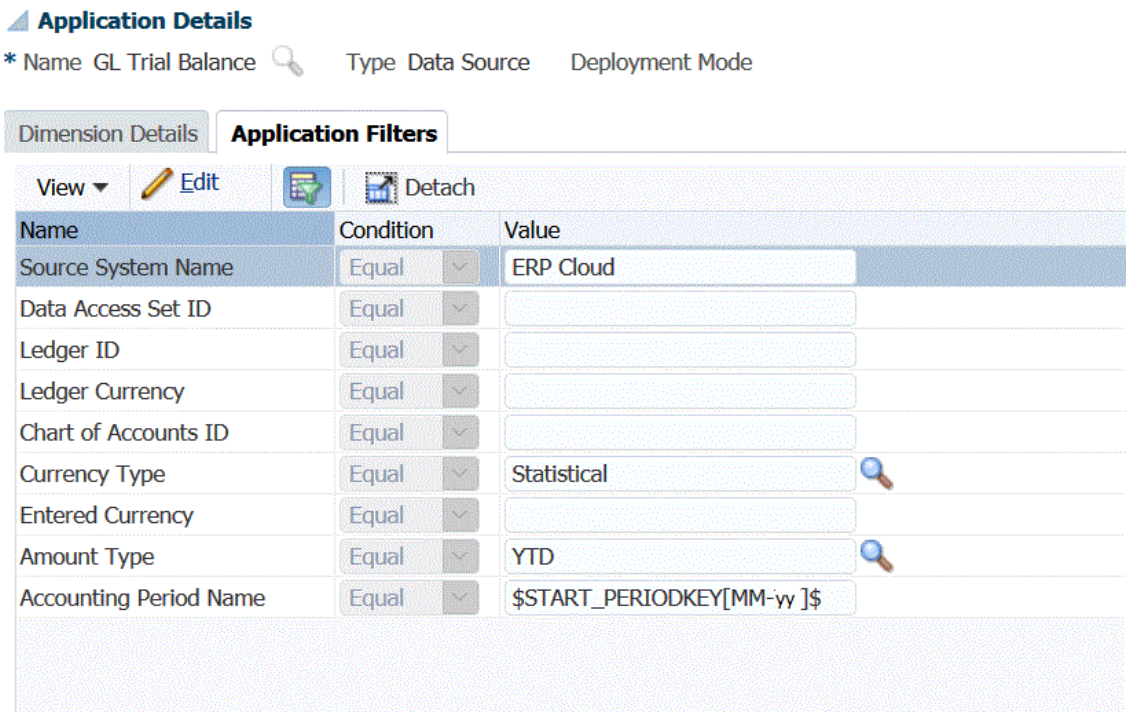
- dd: Day of the Month, which uses the day of year instead of the day of the month
- MM or MMM: Month
- yy or yyyy: Year

In the following example, the From Entered Date and To Entered Data are specified in the format: (yyyy-MM-dd). To import data from January 1, 2017 to January 31, 2017, you enter **2017-01-01** as the report parameter in the From Entered Date field and **2017-01-31** as the report parameter in the To Entered Data field.



If you want to specify a single-period load, select the $START_PERIODKEY$ notation to indicate the period key from which the data load rule is run. The data is imported for the period specified in the $START_PERIODKEY$ notation. Source period mappings are not needed for single-period loads.

In the following example, you can change the "ACCOUNTING PERIOD NAME" by selecting the actual period using the $START_PERIODKEY[MM-yy]$ format.



When you a run multi-period load, data is imported for the range and must be specified in the START_PERIODKEY and END_PERIODKEY parameter list. In order for the system to load the data into the right periods, source period mappings must exactly match the Year and Period columns in the data extract.

Multi-period imports are available if the report accepts a period as a range. If the report accepts only the period name (START_PERIODKEY parameter), no multi-period imports are available.

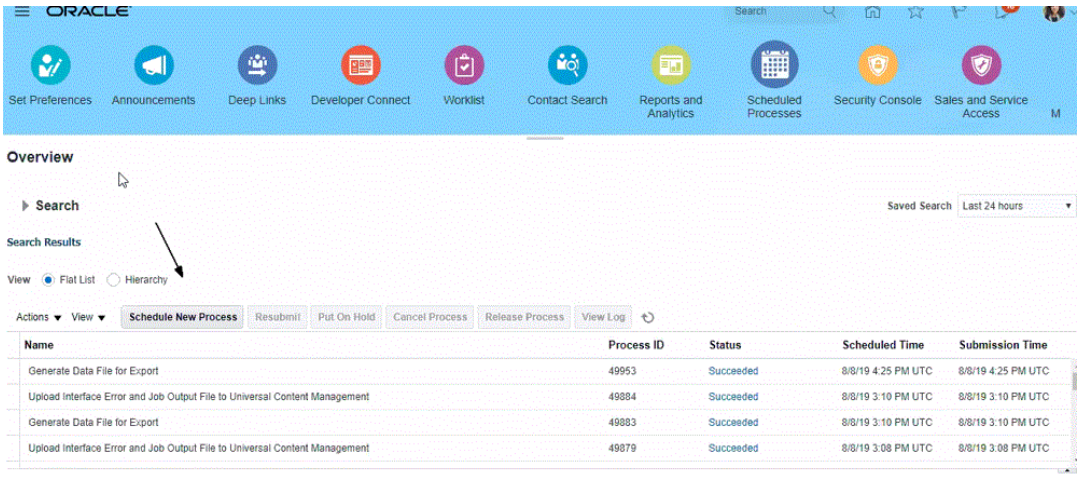
Process Description for Integrating Oracle ERP Cloud Data Using a Custom Query

You can fetch data from the Oracle ERP using a custom query and load it into Oracle Fusion Cloud Enterprise Performance Management. The custom query is run against any report from Oracle Business Intelligence Publisher that creates a CSV formatted data file and then load the data to the Cloud EPM. In this case, Data Management executes the report to extract the data and loads it to Cloud EPM.

These are the steps for loading data from the Oracle ERP Cloud into Cloud EPM using Oracle Business Intelligence Publisher data extracts using a custom query.

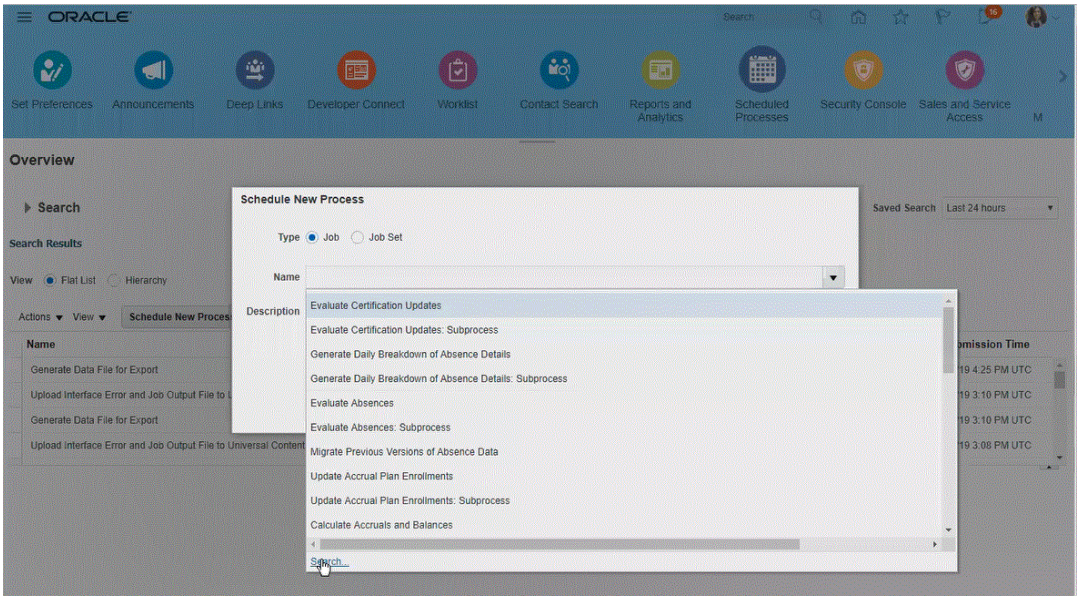
Data Management integration.

1. An Oracle ERP Cloud integration requires that you have privileges or user role and data access to all ERP ledgers to be integrated. For more information, see .
2. Navigate to the Oracle ERP Cloud and execute an BI Publisher report by clicking **Schedule New Process**.

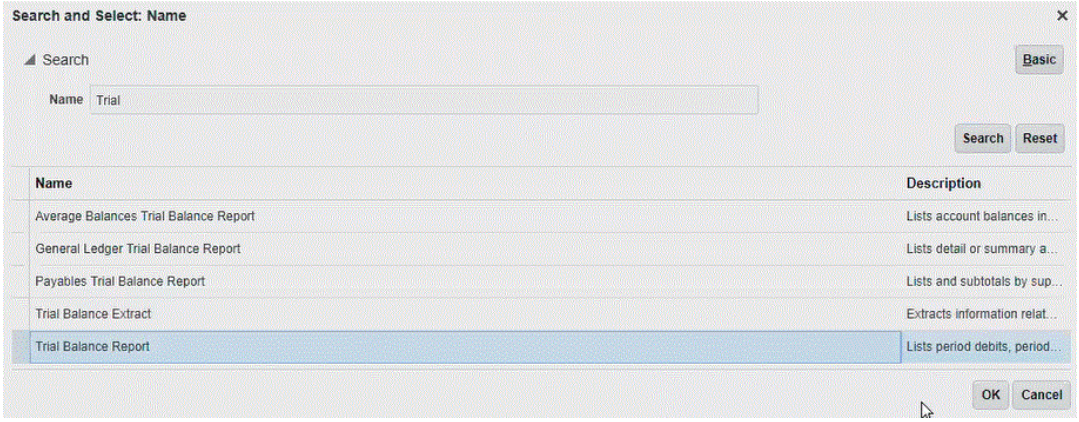


3. From the **Search and Select** page, in **Name**, select a report or extract, and click **OK**.

   You can select any BI Publisher report just as long as it produces an output file in a CSV format file. Not all reports in Fusion produce a CSV format file.



   For example, enter **Trial** to search for a Trial Balance Report.

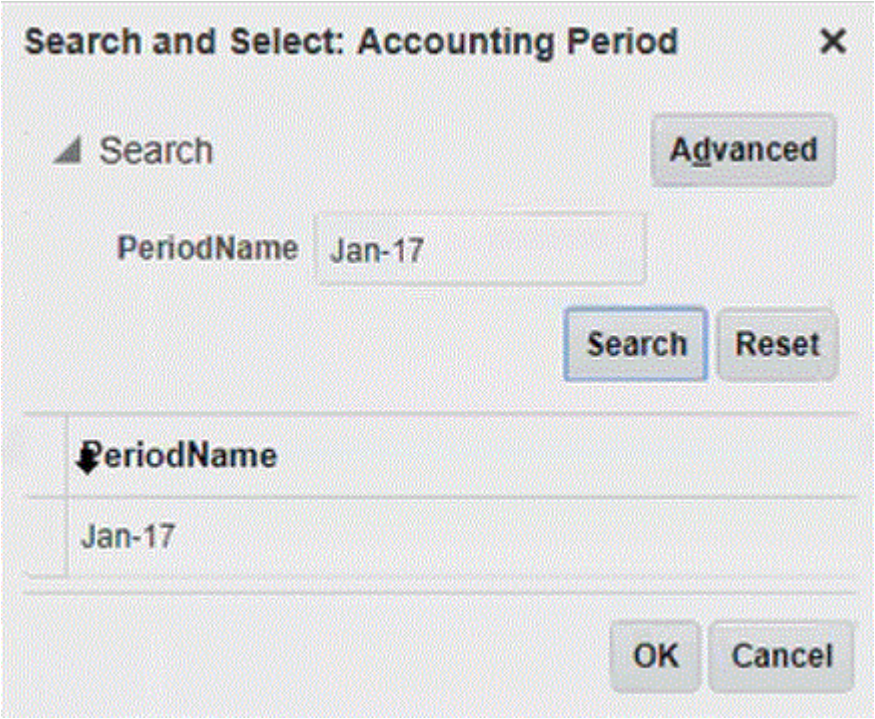


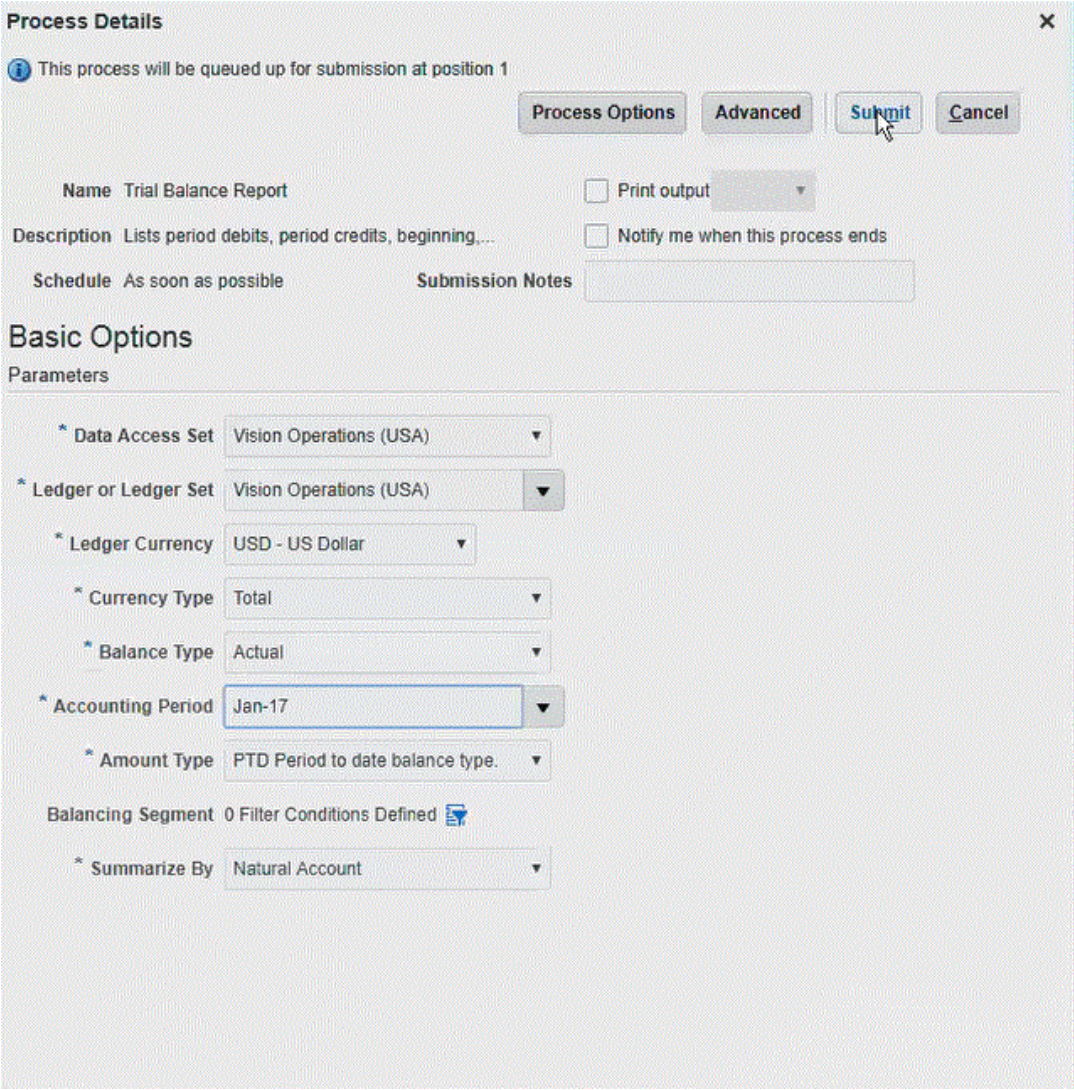
4. From **Process Details**, select the parameters for the extract or report, and click **Submit**.

In the following example, "Ledger" is Vision Operations and "Amount type" is YTD or PTD.

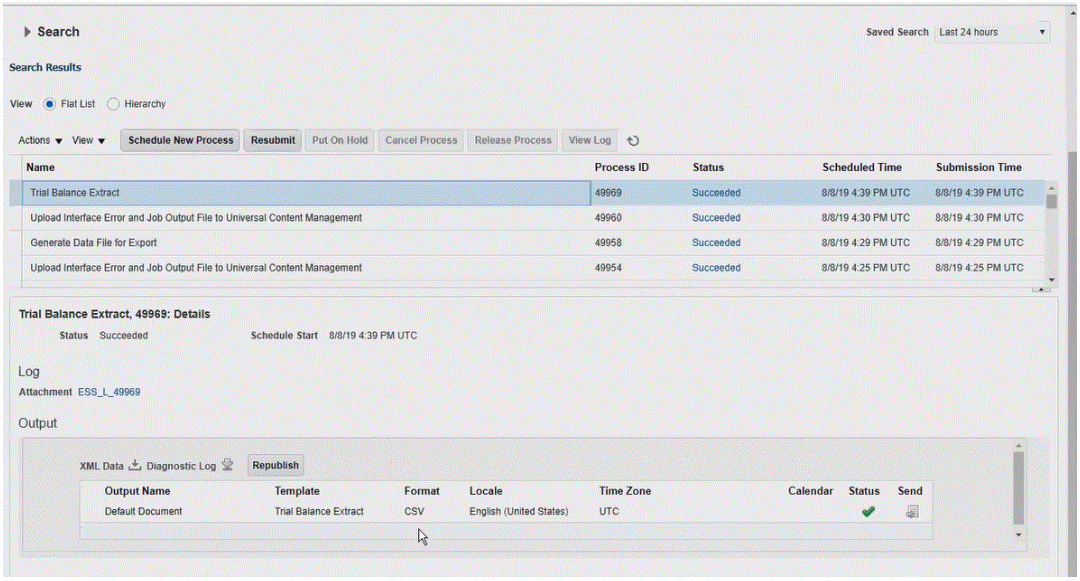
Be sure to specify the Accounting Period. The Accounting Period is the parameter that will be set up in Data Management so that the report can be reused.

> **Note:**
>
> The integration to Oracle ERP Cloud will fail unless the selected extract on the Oracle ERP Cloud side has one or more bind parameters passed from the Cloud EPM. The bind parameter is a placeholder for actual values in the SQL statement. Bind parameters must be enclosed in tilde (~~) characters. For example, to use "Period" as a bind parameter specify: ~PERIOD~. The name must exactly match the name specified in the SQL query.
>
> To do this, create a bind parameter directly in the report, which is not referenced in the Data Model query. In Data Management, specify a random string such as "ABC" in the "Report Parameter List" that will be passed to the bind parameter you created in the report definition.

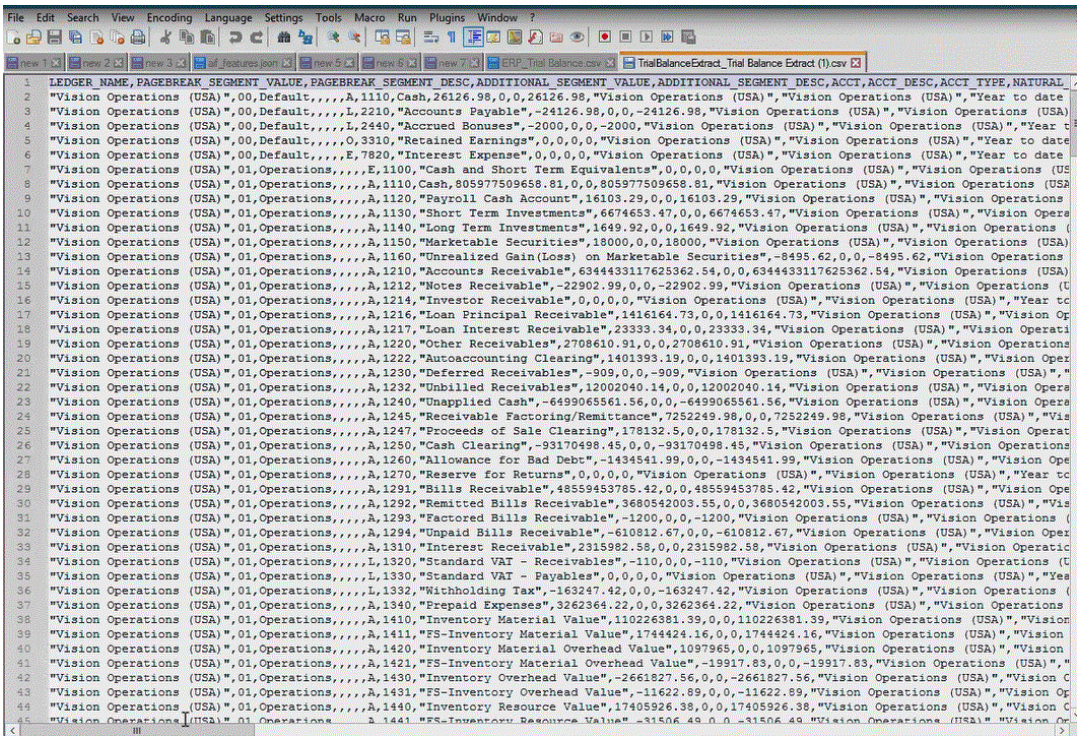




When the report has been generated, the Output section shows the results of the submission.



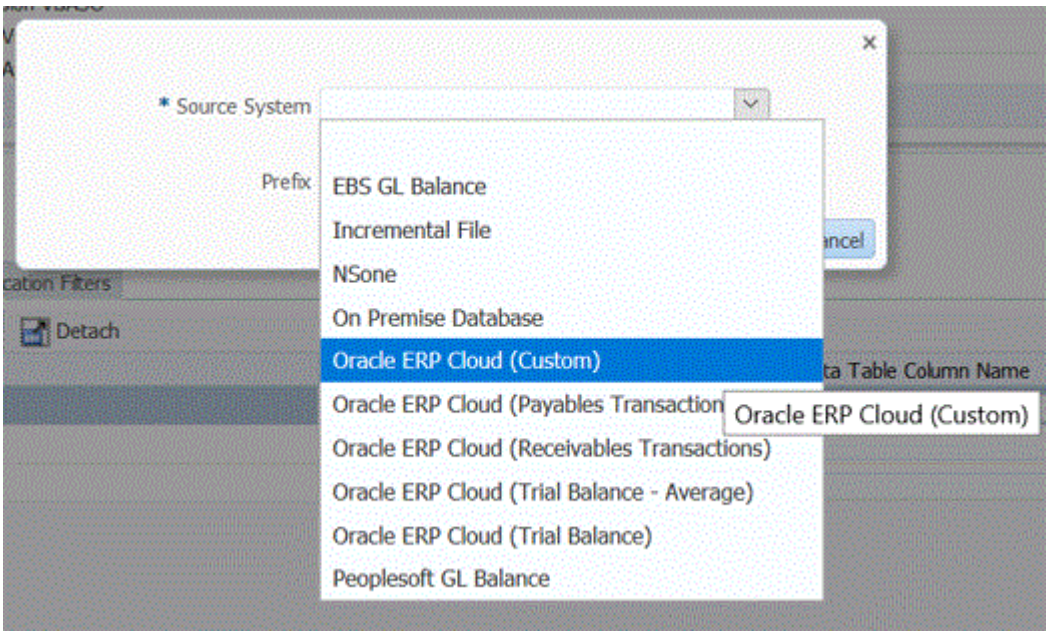
5. Click **Republish**, and then from the **report output** page, click **csv**.
6. Select the CSV output file, right click it, and then select **Open**.



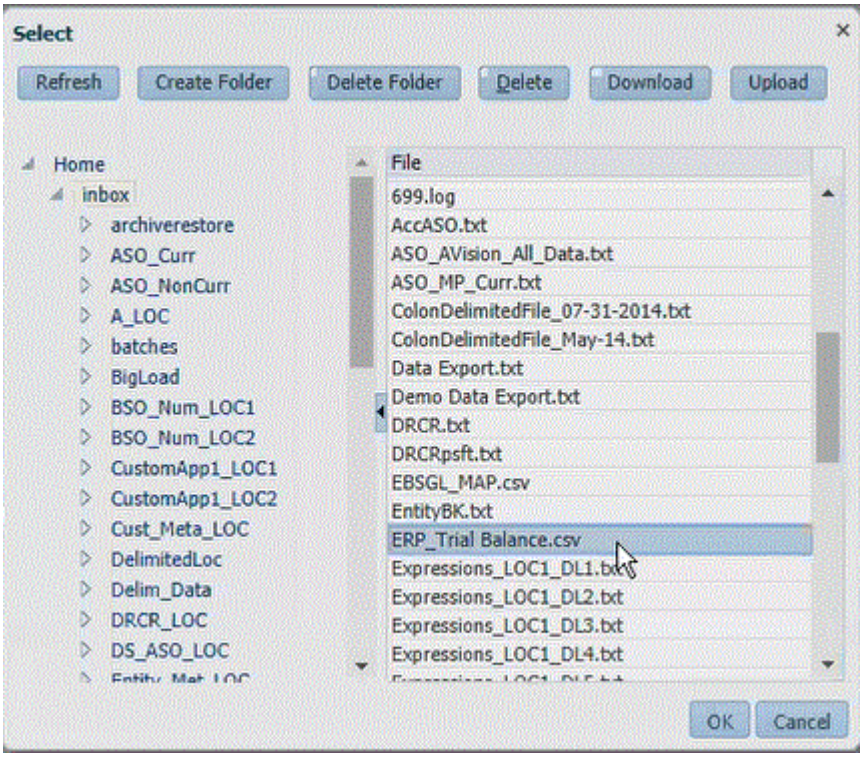
7. Save the report locally in your file system.

   Rename the downloaded output file as `Appname.csv` where `Appnam` is the intended application name for the "Data Source" application in Data Management, which represents the BI Publisher extract.

8. Navigate to Data Management, select the **Setup** tab, and then under **Register**, select **Target Application**.
9. In **Target Application**, in the summary grid, click **Add**, and then select **Data Source**.
10. From the **Select Source** screen, select **Oracle ERP Cloud (Custom)**.



11. From the **Select** screen, navigate to the folder where you saved the CSV file, select it and click **OK**.



The report is saved as the target application and the Application Name is populated automatically.

12. In **Prefix**, specify a prefix to make the application name unique.

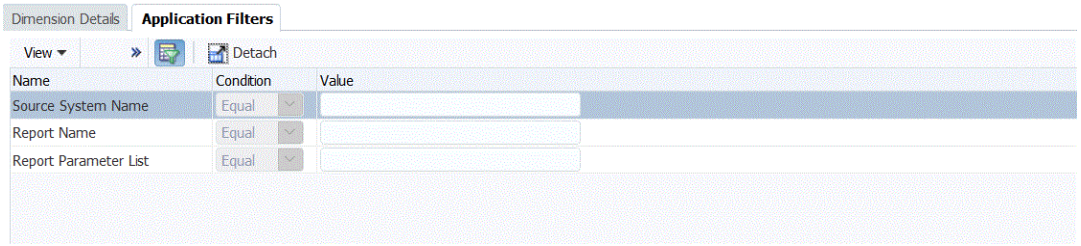
    The prefix is concatenated with the file name to form a unique application name. For example, if you want to name an application with the same name as an existing one, you can assign your initials as the prefix.

13. Click **OK**.

14. Click **Save**.

    Data Management registers the application and returns all the columns in Dimension Details.

15. Click **Application Filters**.



16. In **Source System Name**, specify the name of the Oracle Financial source system.

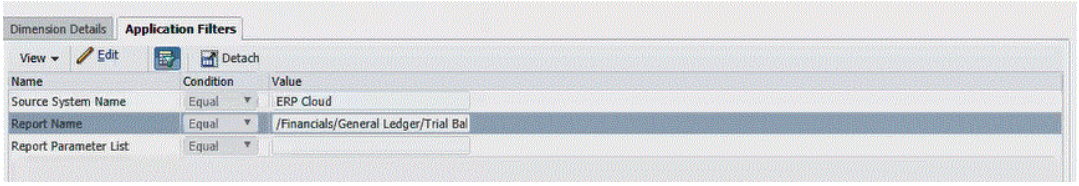
    For example, if the name of your source system is "ERP Cloud," specify **ERP Cloud.**

    You can use an Oracle ERP Cloud or GL source system name or define a new one.

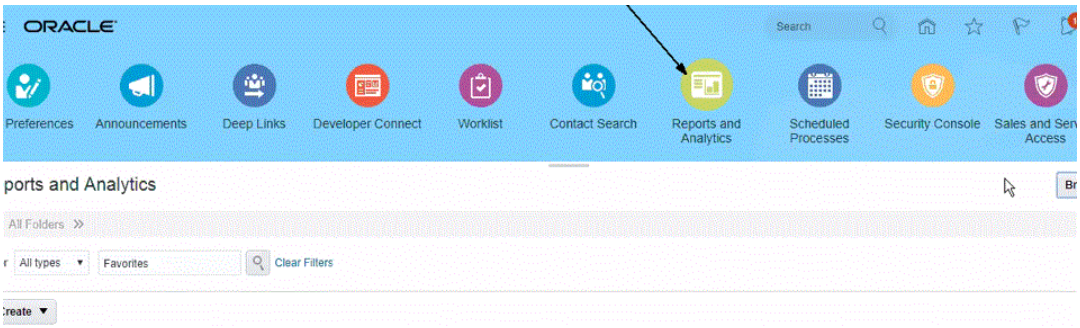
    For more information, see Configuring a Source Connection for an Oracle ERP Cloud Source System.

17. In **Report Name**, specify the path and name of the report in the Oracle ERP Cloud.

    Steps 17 - 23 show you how to get the report name from Oracle ERP Cloud. If you already have the report path and name, enter the information in the **Report name** field (in Data Management) and skip to step 24.

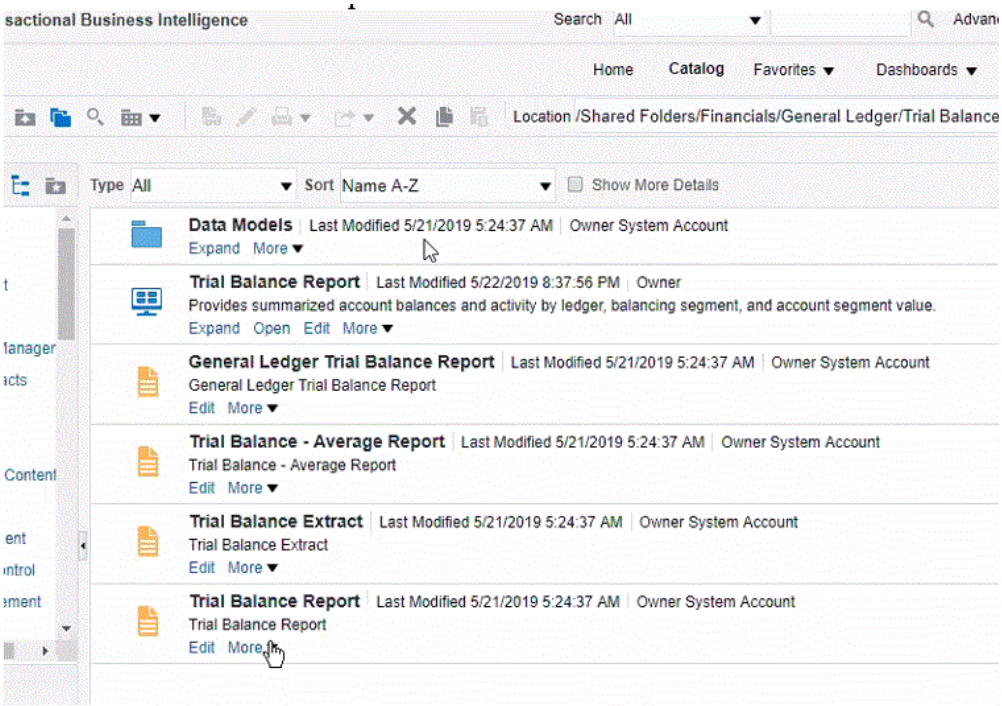


18. Navigate to **Oracle ERP Cloud**, find the report, and select **Reports and Analytics** to retrieve the parameter information.

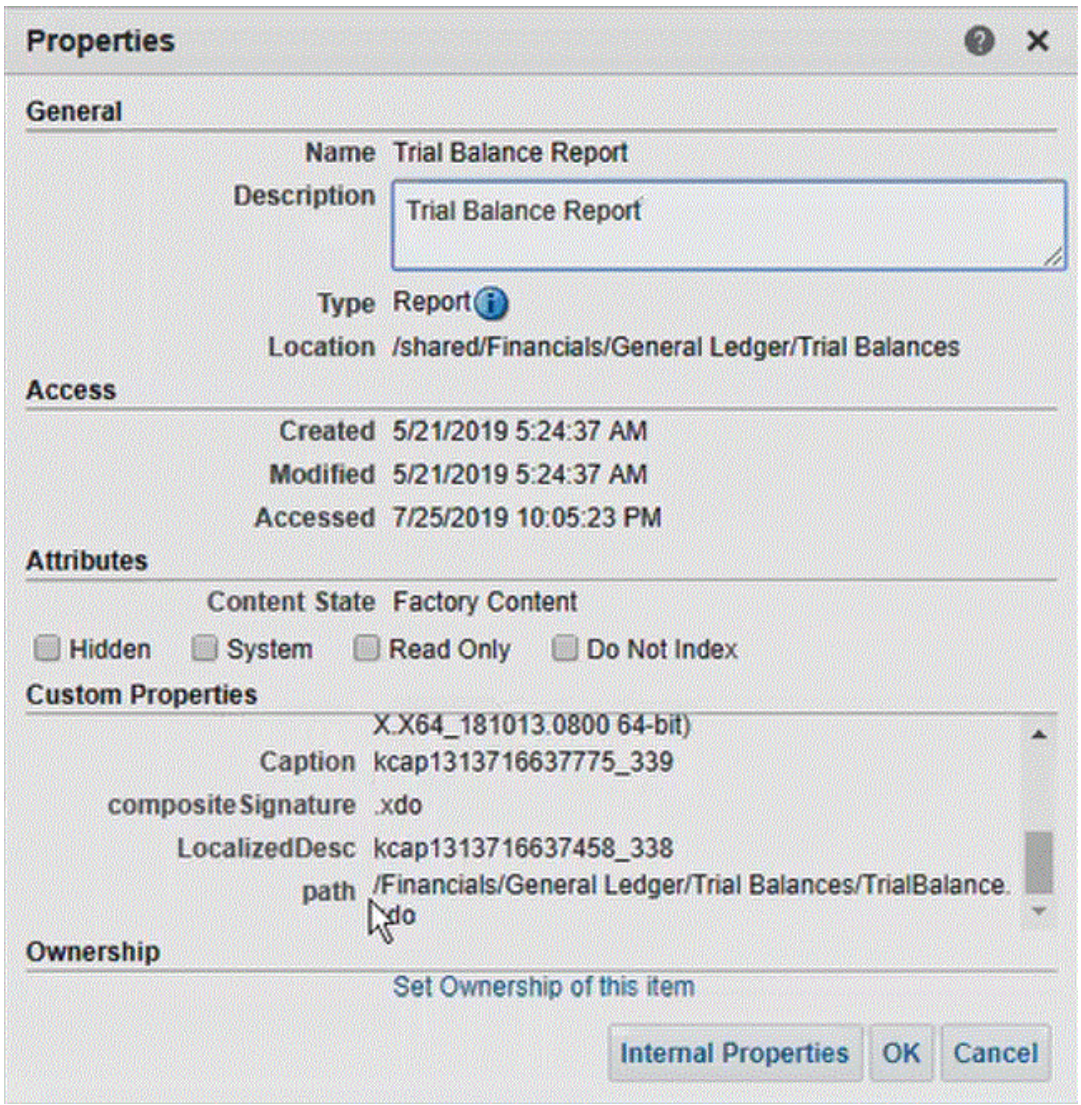


19. Click **Browse Catalog**.

20. Locate and select the extract or report.



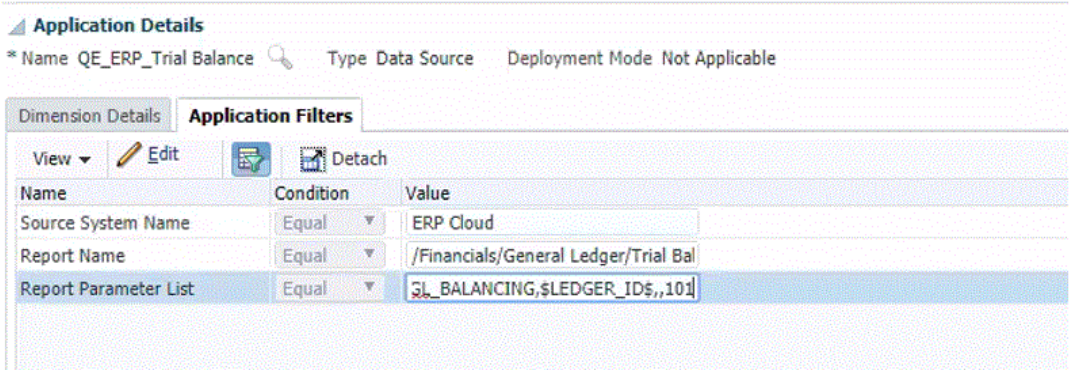
21. Click **More** and then **Properties**.



22. In the **Custom Properties** section, scroll down to the **path** field.
23. Copy the **path** (and name) and paste it to the **Report Name** field when registering the target application in Data Management.
24. Return to Data Management and in the **Report Parameter list**, specify the report parameters of the custom query.

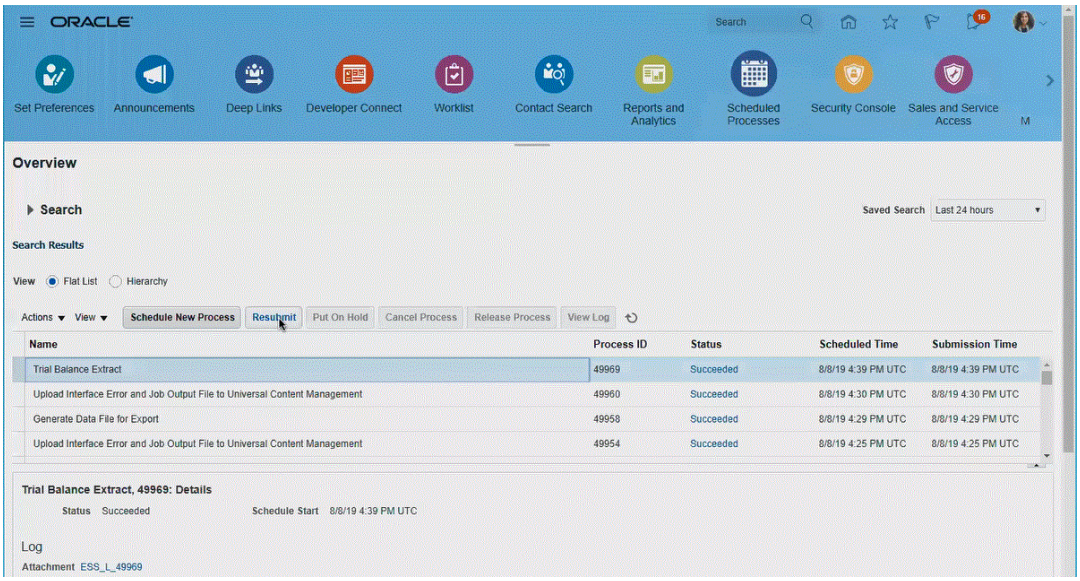
    Make sure you specify a random string such as "ABC" in the "Report Parameter List" that will be passed to the bind parameter you created in the report definition. If you create a report with a query that doesn't have bind parameters passed from the Cloud EPM, the process will fail on the Oracle ERP Cloud side.

    Steps 24 - 25 explain how to get the report parameters from the BI Publisher extract and then populate the Report Parameter List field with them in Data Management.

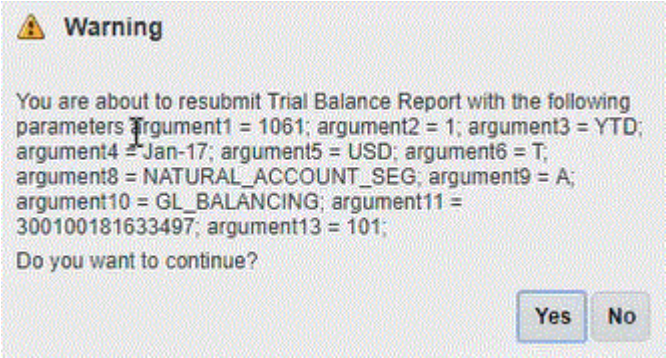


25. Navigate to **Oracle ERP Cloud**, and from the **Overview** page, select the report and click **Resubmit**.

    This step enables you to view and capture the report parameters defined in the BI Publisher extract or report.



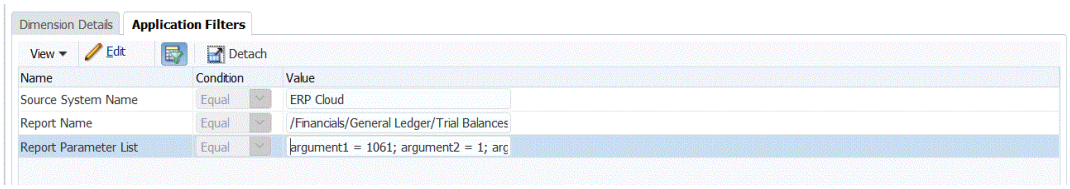
A list of report parameters is generated.



26. Copy the report parameters shown in the **Warnings** window.

27. Navigate to Data Management and paste the report parameter list from the **Warnings** window into the **Report Parameter List** of your custom query.

    The image below shows the report parameter pasted into the **Report Parameter List**



28. Set up the integration mapping between the Oracle ERP Cloud data source and the target application by building an import format.

    See Working with Import Formats.

29. Define the location used to associate the import format.

    See Defining Locations.

30. Define data mapping to map the members from the source to target.

    See Creating Member Mappings.

31. Define the data load rule and specify and source and target options.

    See Defining Data Load Rule Details.

32. Execute the data load rule in Data Management or run the integration in Data Integration.

    See Running Data Load Rules

Security Role Requirements for Oracle ERP Cloud Integrations

Oracle General Ledger Security role requirements for Oracle ERP Cloud integrations with the Oracle Fusion Cloud Enterprise Performance Management include:

- Integration User Privileges
- Integration User Predefined Roles
- Integration User Custom Roles
- Allowlist

For more information about Oracle ERP Cloud security role requirements, see Oracle ERP Cloud Securing ERP.

Integration User Privileges

The required "Integration User" privileges in the Oracle ERP Cloud used for the Oracle General Ledger and Oracle Fusion Cloud Enterprise Performance Management integration are:

Privilege	Description
GL_RUN_TRIAL_BALANCE_REPORT_PRIV	Import data from the Oracle General Ledger to the Cloud EPM.
GL_ENTER_BUDGET_AMOUNTS_FOR_FINANCIAL_REPORTING_PRIV	Write-back data from Cloud EPM to the Oracle General Ledger.
FUN_FSCM_REST_SERVICE_ACCESS_INTEGRATION_PRIV	Execute REST API used to perform the integration

Integration User Predefined Roles

When importing data, you can assign one of the following pre-defined roles to the integration user:

- General Accountant
- Journal Management
- Period Close Management

When importing and writing back data, you can assign the "General Accountant" pre-defined roles to the integration user.

Integration User Custom Roles

You can use a Custom Role to the integration use and then assign the following privileges: When importing data, you can assign one of the following custom roles to the integration user

Privilege	Description
GL_RUN_TRIAL_BALANCE_REPORT_PRIV	Import data from the Oracle General Ledger to the Oracle Fusion Cloud Enterprise Performance Management.
FUN_FSCM_REST_SERVICE_ACCESS_INTEGRATION_PRIV	Execute REST API used to perform the integration

When importing data, you can assign one of the following custom roles to the integration user

Privilege	Description
GL_RUN_TRIAL_BALANCE_REPORT_PRIV	Import data from the Oracle General Ledger to the Cloud EPM.
GL_ENTER_BUDGET_AMOUNTS_FOR_FINANCIAL_REPORTING_PRIV	Write-back data from Cloud EPM to the Oracle General Ledger.
FUN_FSCM_REST_SERVICE_ACCESS_INTEGRATION_PRIV	Execute REST API used to perform the integration

Allowlist

If you have enabled IP Allowlist in the Oracle ERP Cloud, then add the Oracle EPM Cloud IP addresses to the list.

Refer to **IP Allowlist for Web Service Calls Initiated by Oracle Cloud Applications (Doc ID 1903739.1)** for details.

Integrating Account Reconciliation Data

This section describes how to integrate data from the Account Reconciliation.

Integrating BAI, SWIFT MT940 or CAMT.053 Format Bank File Transactions and Balances

As an integration mechanism, Data Management provides an adapter-based framework that enables Account Reconciliation customers to:

- add a Bank file as a source system (identified with an application type "Data Source").
- associate either a BAI format bank file (which uses a Bank Administration Institute file format) or a SWIFT MT940 format bank file (which uses a SWIFT MT940 file format) or CAMT.053 (which is a "Bank to Customer" file in XML format), and then stage *transactions* to be loaded to an Account Reconciliation target application.

  Specific Data Management functions, such adding locations and member mappings, are handled using the standard Data Management workflow process. The loading of the data is also executed in Data Management.
- associate either a BAI format bank file (which uses a Bank Administration Institute file format), SWIFT MT940 format bank file, or a CAMT.053 file with the Bank File source system, and then stage *balances* to be loaded to an Account Reconciliation target application. Balances are end of day bank balances either posted once a month or on a daily basis.

  Specific Data Management functions, such adding locations and member mappings, are handled using the standard Data Management workflow process. The loading of the data is also executed in Data Management.
- add a target application for each Transaction Matching data source as needed, and then map the dimensions from a file-based source system (including a BAI file, SWIFT MT940 file or CAMT.053 file) to the Transaction Matching target application in the import format. In this way a customer can easily import data from any source system by way of a file format and push it to a Transaction Matching target application. Specific Data Management functions, such adding locations and member mappings, are handled using the standard Data Management workflow process.

  When creating a target application for Transaction Matching, in the Import Format, select **Amount** field from the target application instead of **Data** to load data correctly.

Integrating BAI Format Bank File, SWIFT MT940 or CAMT.053 Format Bank File Transactions

When loading bank file data, you create a data source associated with the bank file source system. Data Management converts the BAI, SWIFT MT940 or CAMT.053 file formats to a CSV format.

The source application for BAI Format Bank File Transactions has the following pre-defined constant columns and headers:

- Account
- Amount
- Transaction Type
- Currency
- Transaction Date
- Bank Reference
- Customer Reference
- Bank Text

The source application for a Swift MT940 Format Bank File Transactions file has the following pre-defined constant columns and headers:

- Transaction Reference Number
- Account

- Statement Number
- Statement Date
- Transaction Date
- Amount
- Transaction Type
- Customer Ref
- Bank Ref
- Bank Text
- Additional Info1
- Additional Info2
- Additional Info3

The source application for CAMT.053 bank statement file has the following pre-defined constant columns and headers:

- StatementIdentification
- CreateDate
- StatementFromDateTime
- StatementToDateTime
- Account
- Amount
- Currency
- CdtDbtInd
- BookingDate
- ValueDate
- EntryRef
- AccountServicerReference
- Domain Code
- Family Code
- Sub Family Code
- Proprietary
- ReversalIndicator
- BankTransactionIdentification
- EndToEndIdentification
- ChequeNumber
- InstructionIdentification
- PaymentInformationIdentification
- MandateIdentification
- ClearingSystemReference
- SourceCurrency

- TargetCurrency
- UnitCurrency
- ExchangeRate
- ContractIdentification
- QuotationDate
- ReturnReasonCode
- ReturnReasonProprietary
- Originato
- OrgnlBkTxCdDomain
- OrgnlBkTxCdFamily

The source application for a BAI Format Bank File Balance file has the following pre-defined constant columns and headers:

- Closing Balance
- Currency (the account currency is extracted first. If it is unavailable, the group currency is extracted. In most cases, the account currency and the group currency are identical.)
- Transaction Type
- Currency
- Statement Date
- Account

The source application for a Swift MT940 Format Bank File Transactions has the following pre-defined constant columns and headers:

- Closing Balance
- Currency
- Transaction Type
- Currency
- Statement Date
- Account

The source application for a CAMT.053 bank statement file has the following pre-defined constant columns and headers:

- Account
- Closing Balance
- Currency
- As Of Date
- CdtDbtInd

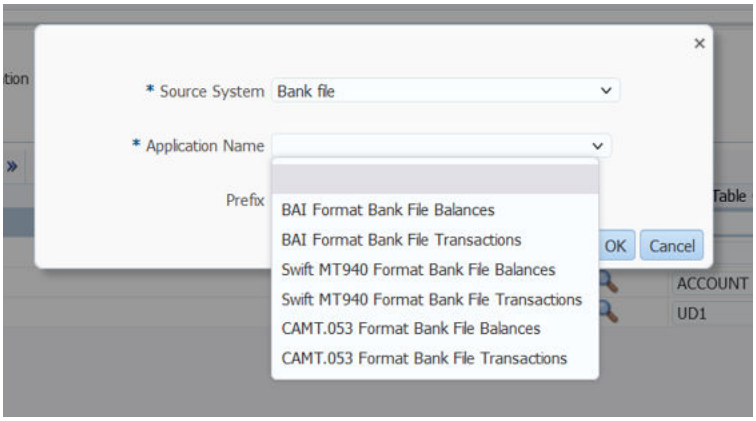
To add a BAI Format Bank File, SWIFT MT940, or CAMT.03 Format Bank File Transactions source system:

1. From the **Home** age, click (**Navigator** icon) and then from the **Integration** category, select **Data Management**.
2. Select the **Setup** tab, and then under **Register**, select **Target Application**.

3. In **Target Application**, in the summary grid, click **Add**, and then select **Data Source**.
4. From **Source System**, select **Bank file**.
5. From **Application Name**, select an application name from the list of values.

   Available types of application include:

   - BAI Format Bank File Transactions
   - SWIFT MT940 Format Bank File Transactions
   - CAMT.053 Format Bank File Transactions



   For a BAI Format Bank File Transactions file, the available application names are a combination of match types and a data source name on that match type in Transaction Matching. For example, in Transaction Matching, the match type INTERCO has two data sources AP and AR. This results in two target application names in the available list; INTERCO:AP and INTERCO:AR.

   > **Note:**
   >
   > The Data Management connection to the BAI source file fails under the following circumstances:
   >
   > - The match type is changed in Transaction Matching.
   > - The data source ID changes.
   > - The data source attribute ID changes, or is added and removed.
   >
   > In this case, you need to recreate the application (including the entire target application, import format, location, mapping and data load rule in Data Management.

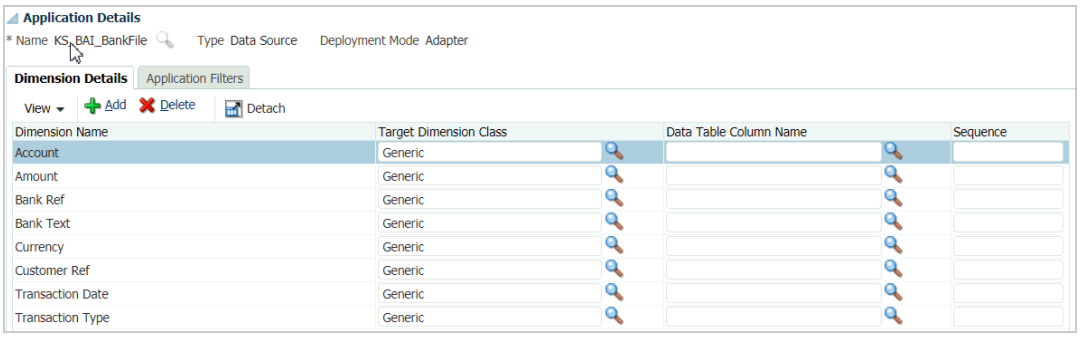
   For a SWIFT MT940 file, select **SWIFT MT940 Format Bank File Transactions**.

   For a CAMT.053 file, select **CAMT.053 Format Bank File Transactions**.
6. In **Prefix**, specify a prefix to make the source system name unique.

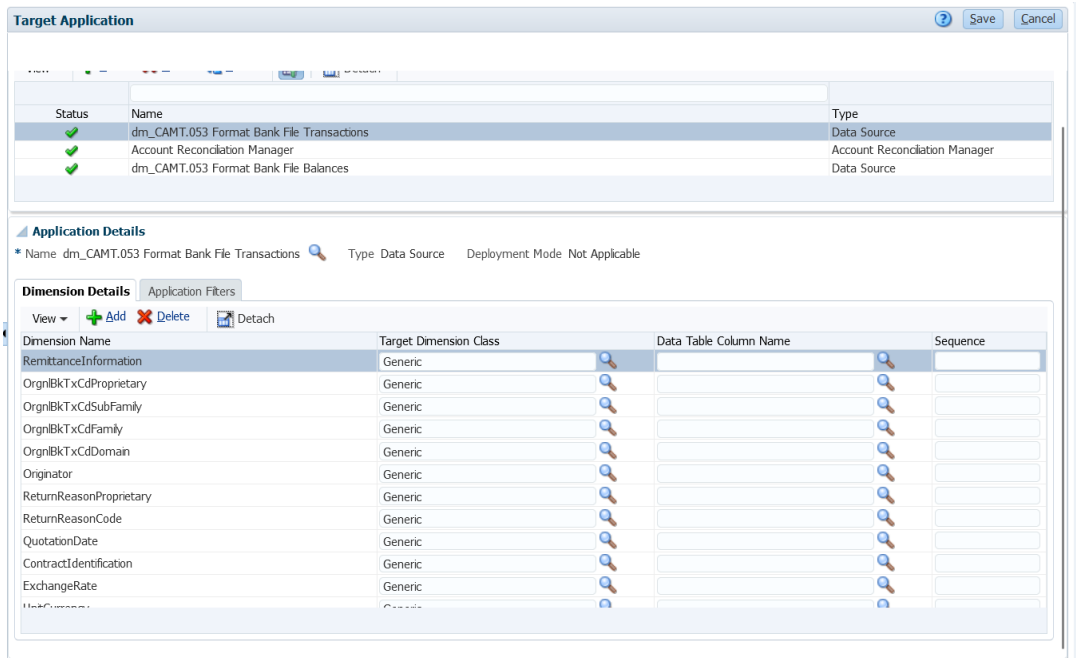
   Use a prefix when the source system name you want to add is based on an existing source system name. The prefix is joined to the existing name. For example, if you want to name a Bank file application the same name as the existing one, you might assign your initials as the prefix.
7. Click **OK**.

8. To add or modify dimensions in the Bank file source system, select the **Dimension Details** tab.

   The dimension details for a Bank file application are shown below:



   An example of dimension details for a CAMT.053 Bank File Transactions application is shown below:



9. 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.

10. Set up the integration mapping between Bank file source system and the Account Reconciliation target application by building an import format.

    See Working with Import Formats.

11. Define the location used to associate the import format.

    See Defining Locations.

12. Create category mapping to map currency buckets.

    See Defining Category Mappings.

> **Note:**
>
> Category mappings are not relevant for Transaction Matching, but they are required in Data Management.

13. Define data mapping to map the members from the source to target.

> **Note:**
>
> All transaction matching files require the Reconciliation Id dimension to be mapped to the corresponding Transaction Matching Profile.

See Creating Member Mappings.

14. In Data Load Workbench, test and validate the data by executing the data load rule to ensure that the data load rule is running properly, and your data looks correct. Data Management transforms the data and stages it for Account Reconciliation to use.

    See Using the Data Load Workbench.

    When you execute a data load rule, the Point of View requires Location, Period, and Category to be selected; however, Transaction Matching does not use the Period and Category when processing the transactions. Only the correct Location is required to be selected.

Integrating BAI Format Bank File, SWIFT MT940, or CAMT.053 Balances

When loading Bank file data, you create a data source associated with a Bank file source system. Data Management converts the BAI, SWIFT MT940, or CAMT.053 file formats to a CSV format.

The source application for a BAI Format Bank File Balance has the following pre-defined constant columns and headers:

- Closing Balance
- Currency
- Transaction Type
- Currency
- Statement Date
- Account

The source application for a Swift MT940 Format Bank File Balances has the following pre-defined constant columns and headers:

- Closing Balance
- Currency
- Transaction Type
- Currency
- Statement Date
- Account

The source application for a CAMT.053 bank statement file has the following pre-defined constant columns and headers:

- Account
- Closing Balance
- Currency
- As Of Date

> **Note:**
>
> BAI codes 100-399 are for bank credits (positive numbers) and 400-699 are for bank debits (negative numbers).
>
> For Bank specific BAI codes which are greater than 699, Data Management will treat them as bank credits (positive numbers) by default. If you need any specific code in this range to be treated as bank debit (negative number), then you can use SQL Mapping (see Creating Mapping Scripts) to update the Amount as a negative number as in the following example.
>
> ```
> AMOUNTX=
> CASE
>  WHEN UD7 = '868' THEN AMOUNT*-1
>  ELSE AMOUNT
> END
> ```

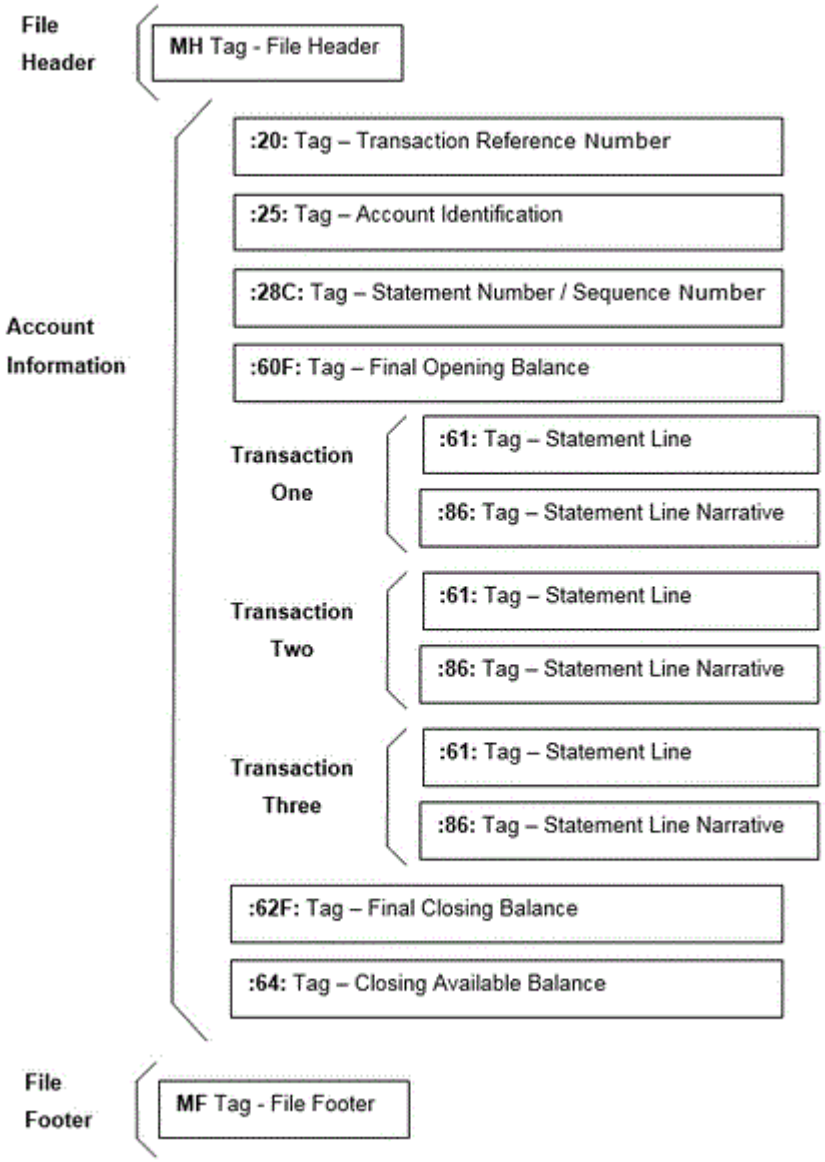
To add a BAI Format Bank File, SWIFT MT940, or CAMT.053 Format Bank File Balances source system:

1. Save the BAI Format Bank File, SWIFT MT940, or CAMT.053 Format Bank File Balances files as CSV format file.
2. Upload the files using the file browser when registering the target application.

   The following shows a BAI Format Bank File Balances file:

```
01,JSLTEST,JSLTEST,150828,1353,004,80,,2/
02,JSLTEST,JSLTEST,1,150827,1435,USD,2/
03,9000000009124,USD,010,00000006850000,,/
88,015,00000008430000,,/
88,100,00000004190000,,/
88,400,00000002610000,,/
16,354,004000000,,KB0075 IMG8650153019,,Int Inc
16,654,000100000,,KB0075 IMG8650153019,,Int exp
16,116,100000,,KB0075 IMG8650153019,1800000040,Check(s) In,/
88,rcode056,invoice number, text info,/
16,116,90000,,KB0075 IMG8650153019,1800000041,Check(s) In,/
16,698,0010000,,KB0075 IMG8650153019,,Bank Fee
16,475,1000000,,KB0075 IMG8650153019,100007,Check(s) Paid
16,475,1100000,,KB0075 IMG8650153019,100008,Check(s) Paid
16,469,4000000,,20150840796815,/
49,0000000000010000,000007/
98,0000000000010000,00001,000009/
99,0000000000010000,00001,000011/
```

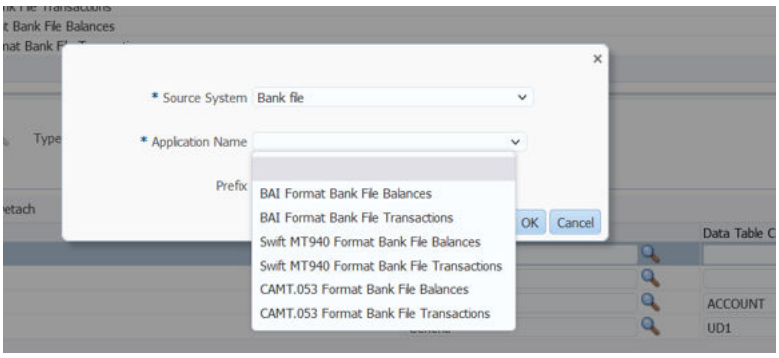
The following shows a SWIFT MT940 Format Bank File Balances file:



3. From the **Home** age, click (**Navigator** icon) and then from the **Integration** category, select **Data Management**.
4. Select the **Setup** tab, and then under **Register**, select **Target Application**.
5. In **Target Application**, in the summary grid, click **Add**, and then select **Data Source**.
6. From **Source System** page, select **Bank file**.
7. From **Application Name**, select an application name from the list of values.

   Available types of applications include:

   - BAI Format Bank File Balances
   - SWIFT MT940 Format Bank File Balances
   - CAMT.053



For a BAI Format Bank File Balances file, the available application names are a combination of match types and a data source name on that match type in Transaction Matching. For example, in Transaction Matching, the match type INTERCO has two data sources AP and AR. This results in two target application names in the available list; INTERCO:AP and INTERCO:AR.

> **Note:**
>
> The Data Management connection to the BAI source file fails under the following circumstances:
>
> - The match type is changed in Transaction Matching.
> - The data source ID changes.
> - The data source attribute ID changes, or is added and removed.
>
> In this case, you need to recreate the application (including the entire target application, import format, location, mapping and data load rule in Data Management.

For a SWIFT MT940 file, select **SWIFT MT940 Format Bank File Balances**.

For a CAMT.053 file, select **CAMT.053 Format Bank File Balances**.

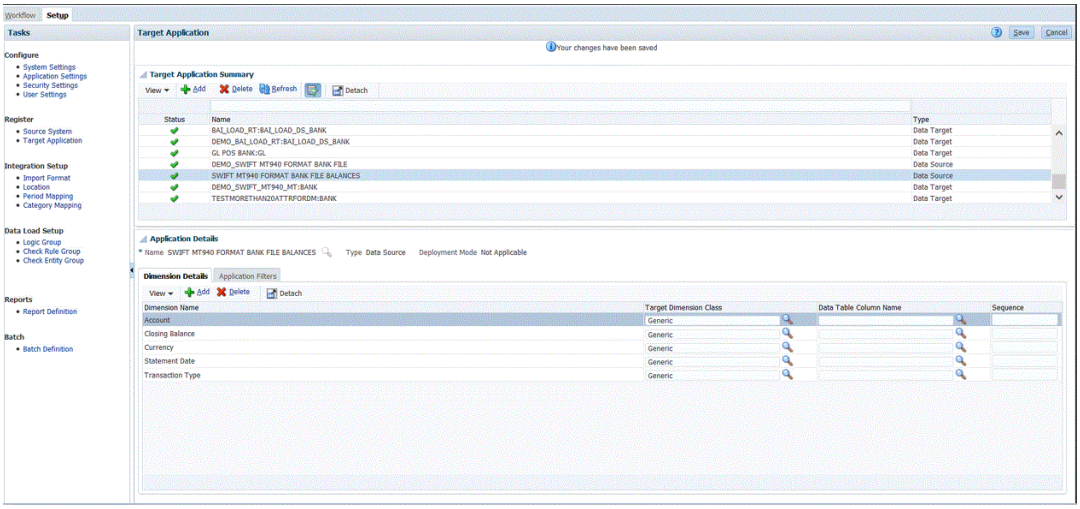
8. In **Prefix**, specify a prefix to make the source system name unique.

   Use a prefix when the source system name you want to add is based on an existing source system name. The prefix is joined to the existing name. For example, if you want to name a Bank file application the same name as the existing one, you might assign your initials as the prefix.

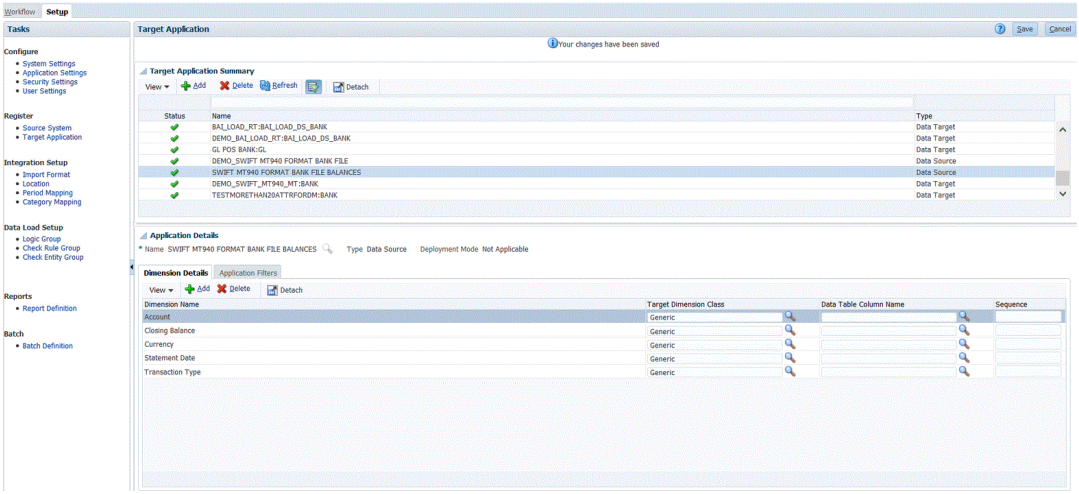
9. Click **OK**.

10. To add or modify dimensions in the BAI Format Bank File Balances file source system, select the **Dimension Details** tab.

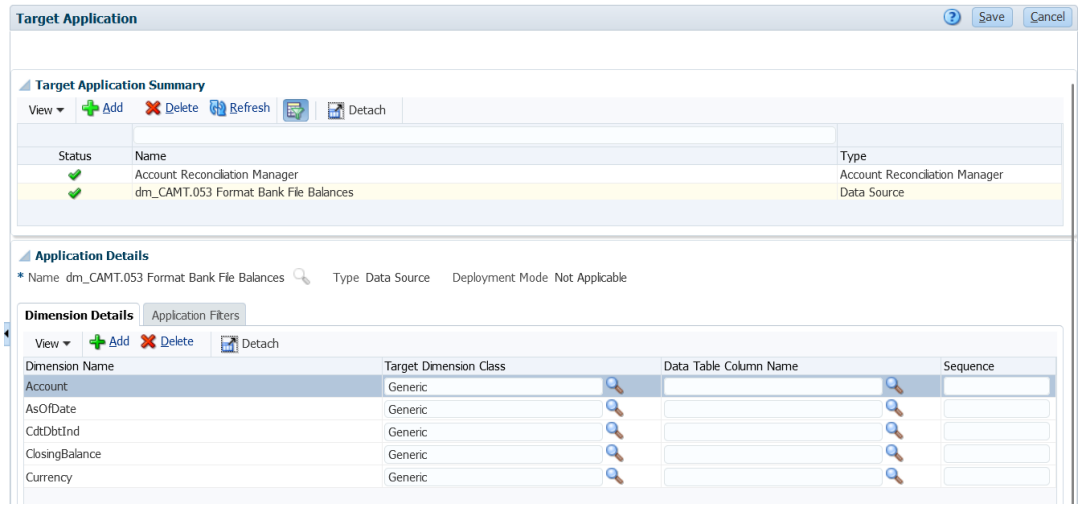
    The dimension details for a BAI Format Bank File Balances file application are shown below:



The dimension details for a SWIFT MT940 Format Bank File Balances application are shown below:



The dimension details for a CAMT.053 Format Bank File Balances application are shown below:



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

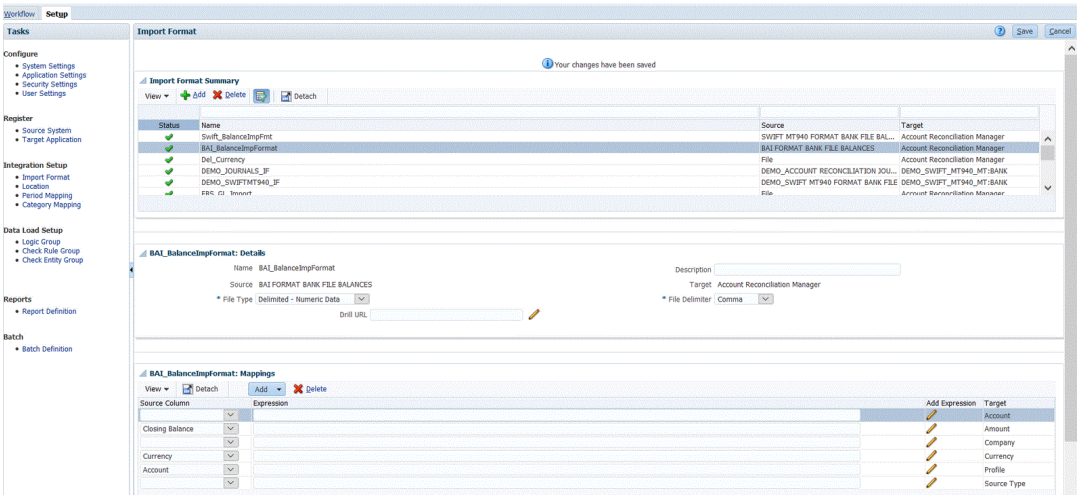
    The dimension class is a property that is defined by the dimension type.

12. Select the **Setup** tab, and then under **Integration Setup**, select **Import Format**.

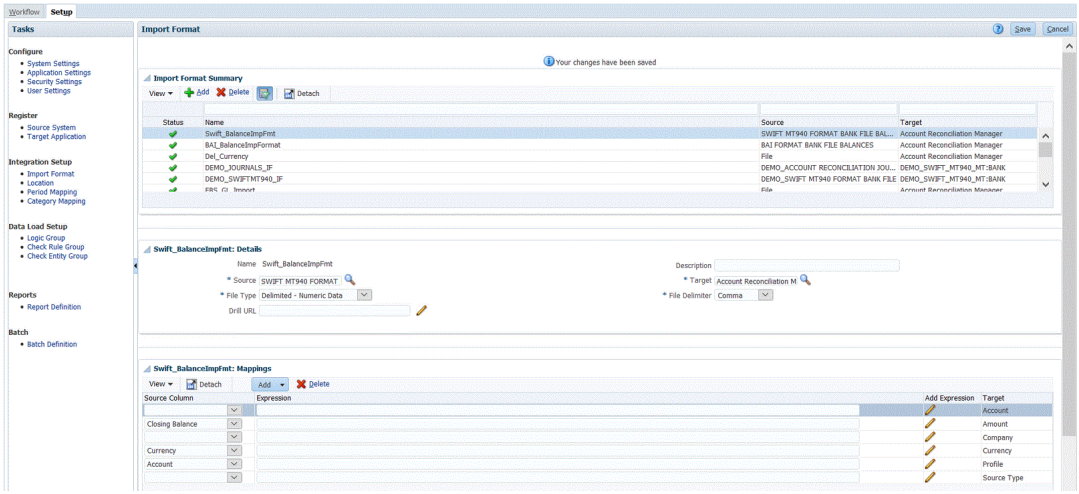
13. Set up the integration mapping between BAI Format Bank File Balances source system and the Account Reconciliation target application by building an import format.

    See Working with Import Formats.

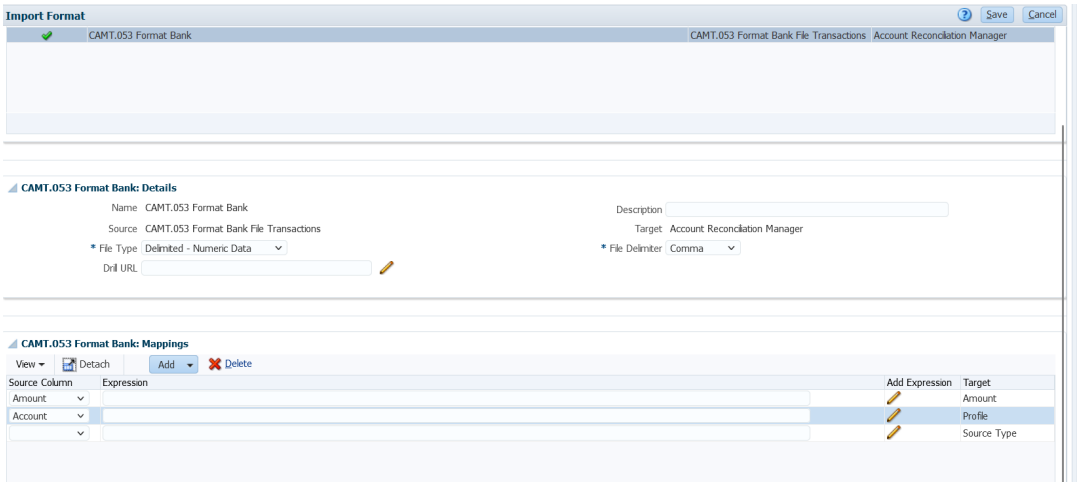
    An example of the dimension detail for a BAI Format Bank File Balances application is shown below:



An example of the import format for a SWIFT MT940 Format Bank File Balances application is shown below:

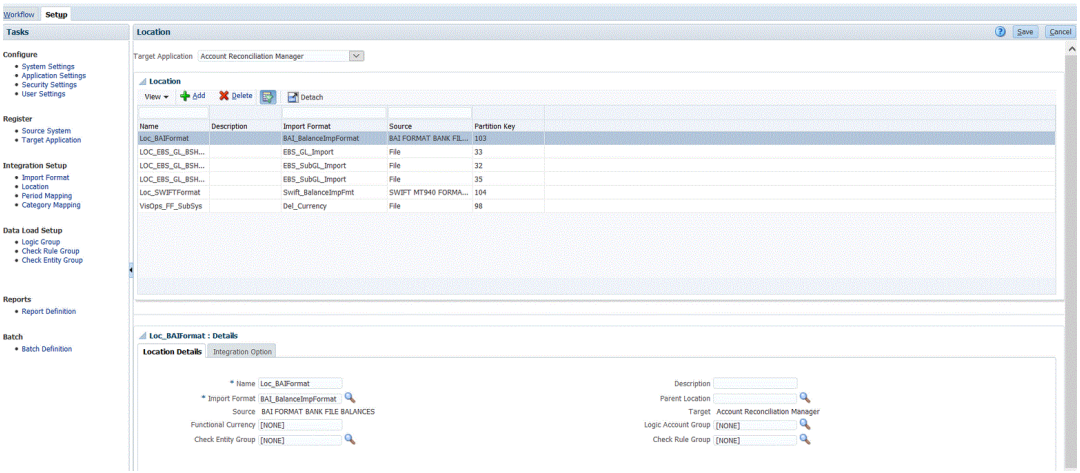


An example of the import format for a CAMT.053 Format Bank File Balances application is shown below:

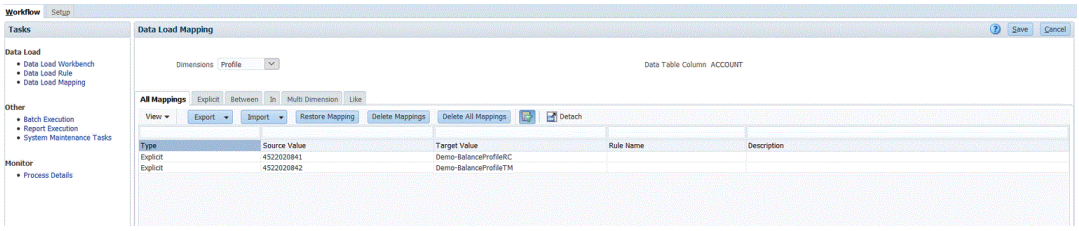


14. Select the **Setup** tab, and then under **Integration Setup**, select **Location**.
15. Define the location used to associate the import format.

    See Defining Locations.

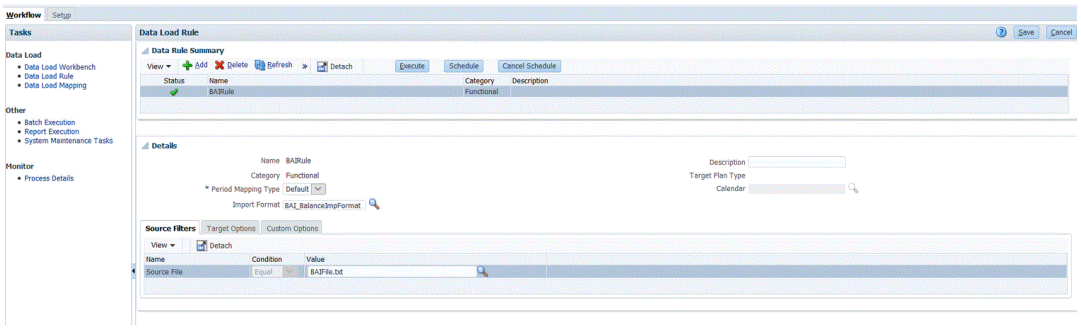


16. Select the **Workflow** tab, and then under **Data Load**, select **Data Load Mapping**.
17. Map the account numbers in the file to the appropriate Reconciliation names.



> **Note:**
>
> All transaction matching files require the Reconciliation Id dimension to be mapped to the corresponding Transaction Matching Profile.

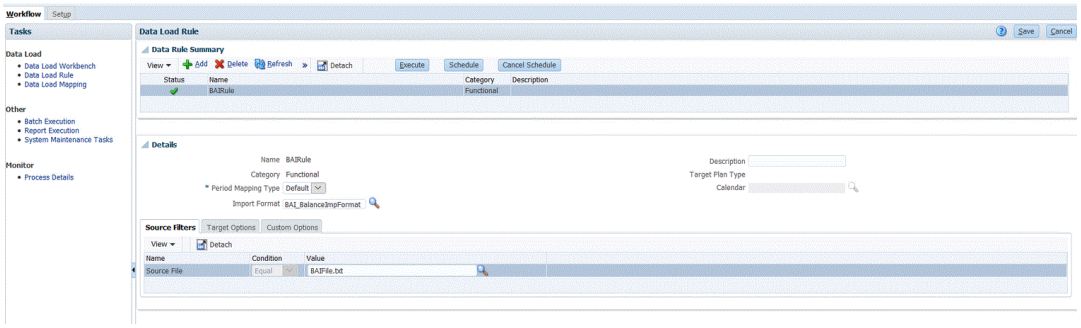
18. Map the source type dimension **Source type *** to the hard coded "source system" or "source sub-ledger" Target value.



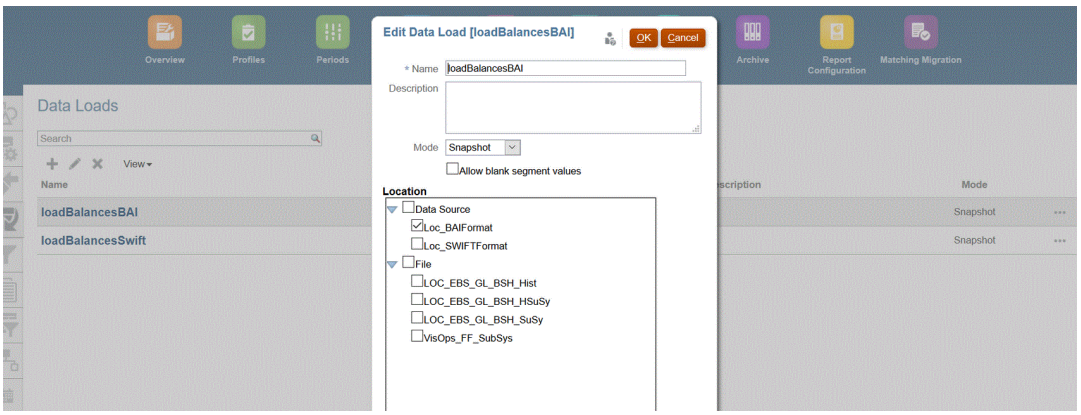
See Creating Member Mappings.

19. Select the **Workflow** tab, and then under **Data Load**, select **Data Load Rule**.
20. Create a data load rule for the location and specify the period and category.

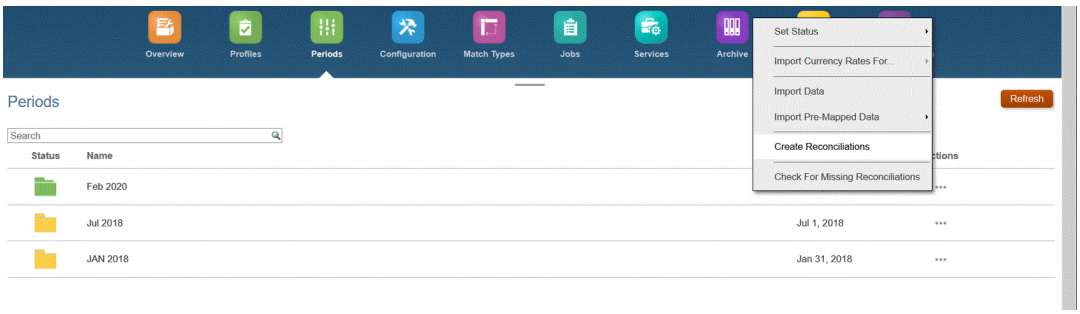
    the data rule "BAIRule" is created and the BAI Format Bank Balances file format **is imported** to the location "Loc_BAIFormat." The period is specified as "feb-20" and category is specified as "Functional."



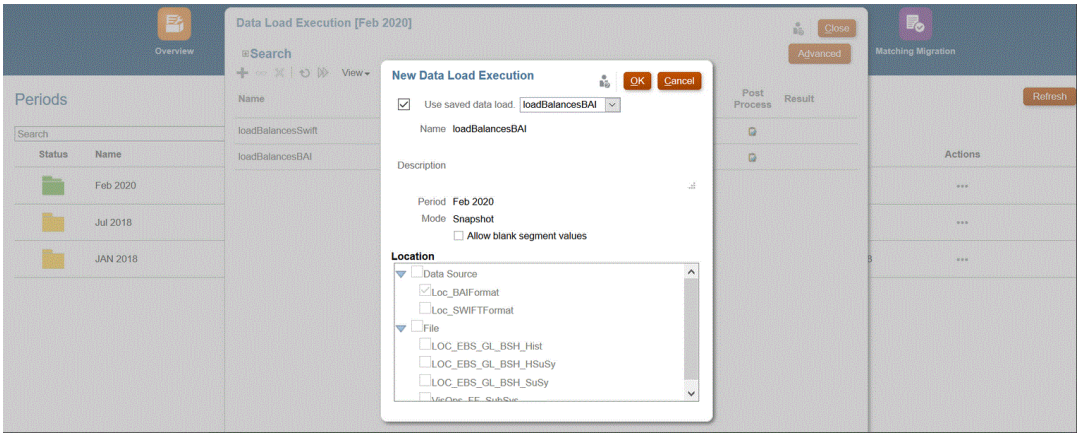
21. Go to Account Reconciliation home page.
22. Click **Application**, then **Configuration**, and then **Data Load**.
23. Create two rules for both import format executions as shown below.



24. Execute the data load rule by selecting **Application** and then **Period**.
25. Click to go to the action menu and then click **Import Data**.

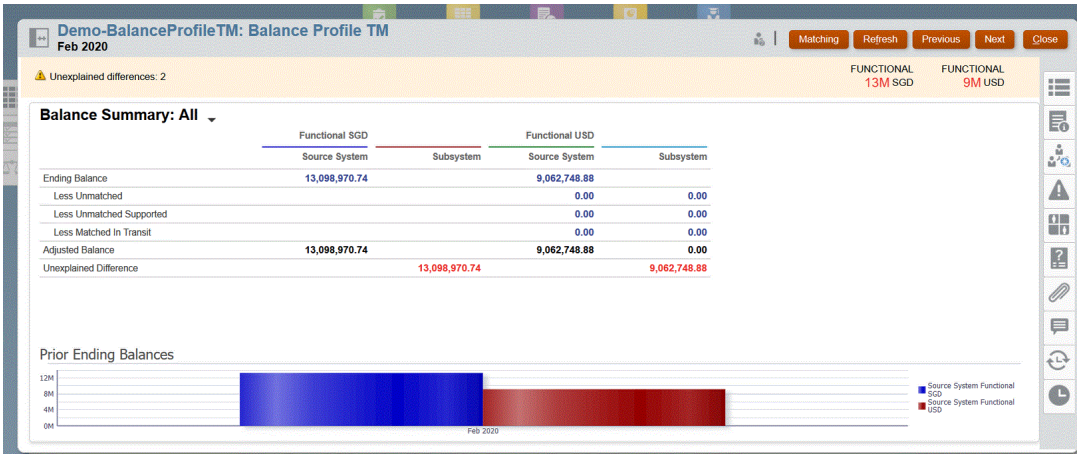


26. Click **+**, then from **New Data Load Execution**, select **Use saved data load**, and select the data load created in the previous step.



27. Click **OK** to execute the data load rule.

Balances are loaded to the reconciliation defined in the Data Load Mapping for the Profile dimension as shown below. Bank balances are typically loaded to the Subsystem, but can also be loaded to the Source System if needed.



Adding a Transaction Matching Target Application

Any file, including a Bank file, can easily be exported to a Transaction Matching target application. In this case, you create a local application, which uses a Transaction Matching data source as the application type, and then you select the application name.

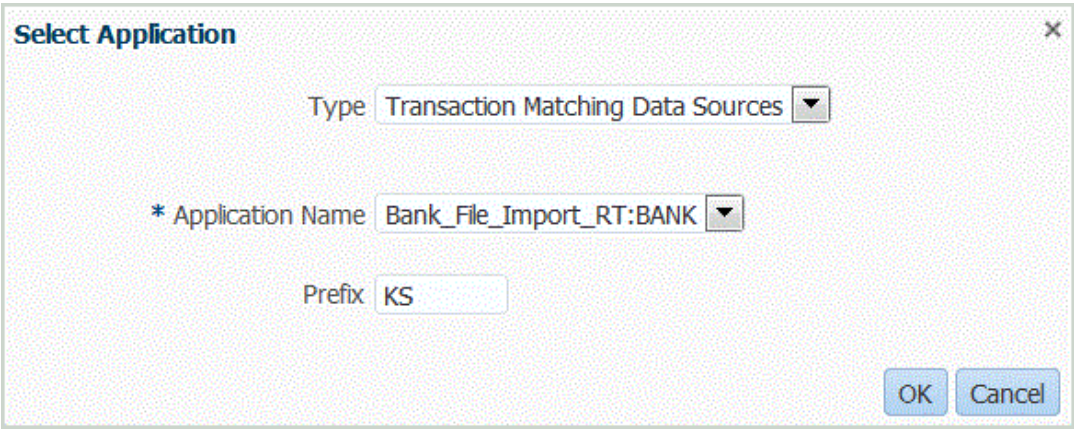
To add a Transaction Matching target application:

1. From the **Home** page, click (**Navigator** icon) and then from the **Integration** category, select **Data Management**.
2. Select the **Setup** tab, and then under **Register**, select **Target Application**.
3. In **Target Application**, in the summary grid, click **Add**, and then from **Type**, select **Local**.
4. From **Select Application**, and then from the **Type** drop-down, select **Transaction Matching Data Sources**.
5. In **Application Name**, enter the target application name for the Transaction Matching data source.
6. In **Prefix**, optionally specify a prefix to make the application name unique.

   The prefix supports up to a maximum of 10 chars max. The combination of the reconciliation type and transaction matching data source name is auto generated.

   For example, if the bank file import is for a Transaction Matching data source named "BOA" and the reconciliation type text id is "BAI_LOAD_RT," you might add the prefix "TM_" followed by "BAI_LOAD_RT" and then "BANK." In this case, the application name would be "TM_ BAI_LOAD_RT:BANK."

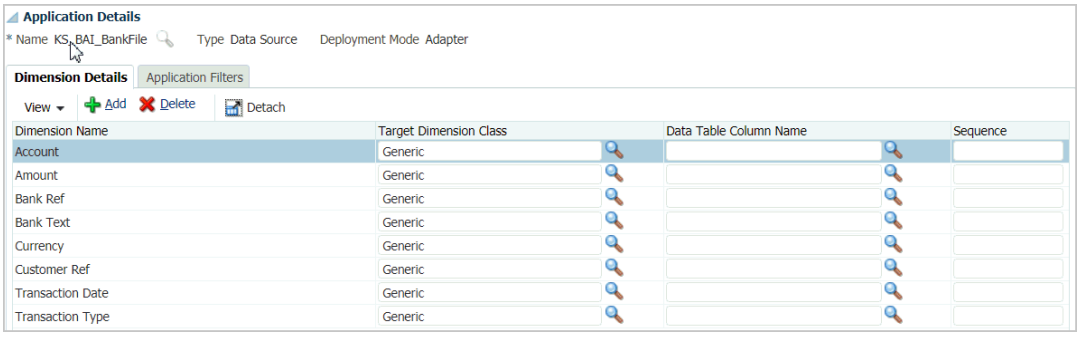
   In another example, if this a MT940 bank file import is for a transaction data source named "SWIFT_MT940_MT" and the reconciliation type text id is "BANK", then the target application name would start with a prefix (such as DEMO_), followed by "SWIFT_MT940_MT", and then "BANK". In this case, the name is "DEMO_SWIFT_MT940_MT:BANK. "
7. Click **OK**.



8. Select the **Dimension Detail** tab.

   When you a Transaction Matching target application, the dimension details of the application are populated automatically on the Dimension Detail tab.
9. Select the **Target Dimension Class** or click to select the target dimension class for each dimension that is not defined in the application.

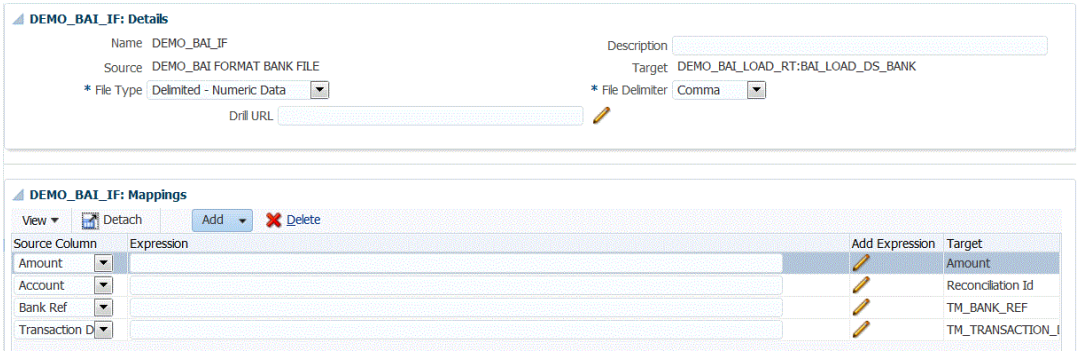
   The dimension class is a property that is defined by the dimension type.



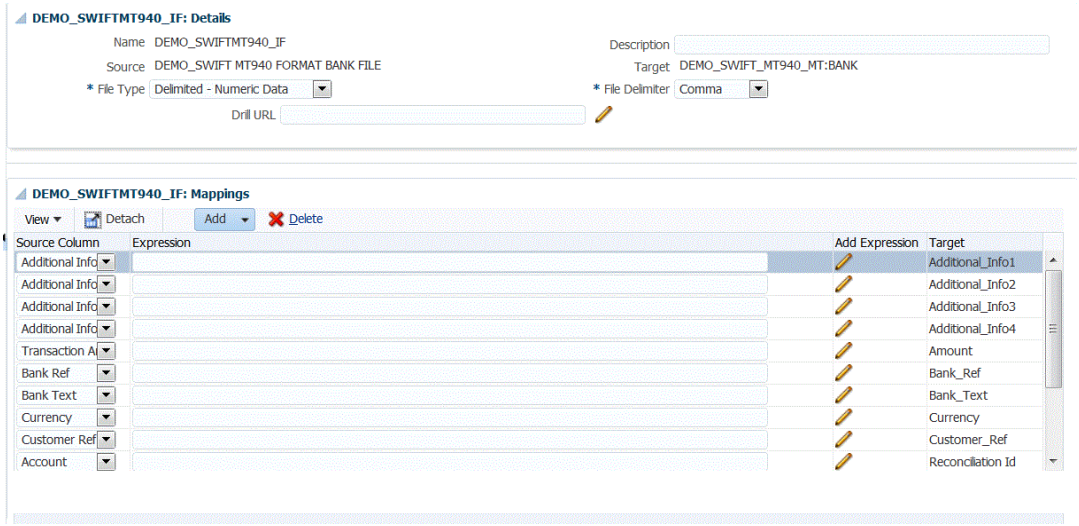
10. Set up the source and target mapping between the source system and the Transaction Matching target application by building an import format.

    See Working with Import Formats.

    The following shows the import format for a Bank file.



    The following shows the import format for a MT940 file.



11. Define the location used to associate the import format.

    See Defining Locations.

12. Create category mappings to map currency buckets.

    For information on Account Reconciliation currency buckets, see Defining Currency in the *Setting Up and Configuring Account Reconciliation*.

13. Define the data load mapping to map the members from the source to target.

The SWIFT MT940 import format requires that you map the Reconciliation Id dimension to the corresponding Transaction Matching reconciliations. You can map other dimensions as needed.

See Creating Member Mappings.

14. In the Data Load Workbench, test and validate the data by executing the data load rule to ensure that the data load rule is running properly, and your data looks correct. Data Management transforms the data and stages it for Account Reconciliation to use.

    See Using the Data Load Workbench.

Aggregating Transaction Matching Data

Data Management enables users to aggregate transactions for Transaction Matching. For example, using this aggregation option, you can load transactions at a detail credit card swipe level and roll them up to a summary total per location per day total for matching.

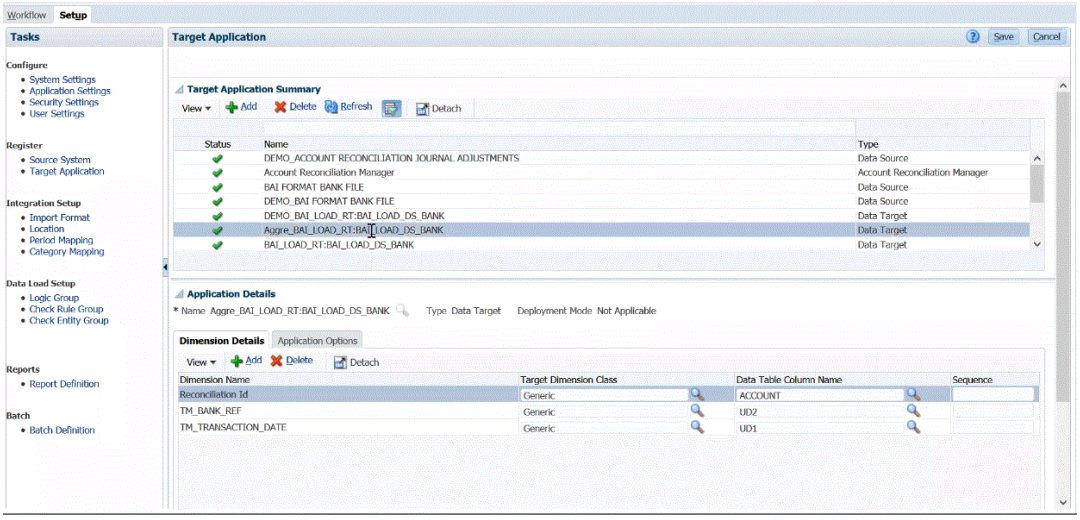
To set the Aggregation option:

1. From the **Home** page, click (**Navigator** icon) and then from the **Integration** category, select **Data Management**.
2. Select the **Setup** tab, and then under **Register**, select **Target Application**.
3. Add a new Transaction Matching target application or select an exiting one.

   For information on adding a Transaction Matching target application, see Adding a Transaction Matching Target Application.
4. Select the **Dimension Detail** tab.

   When you select a Transaction Matching target application, the dimension details of the application are populated automatically on the Dimension Detail tab.

   Include only those dimensions that you want to aggregate when mappings dimensions. For example, if you want to roll up only the merchant number, bank reference, credit card type, or transaction date, include only these corresponding dimensions in your mappings.



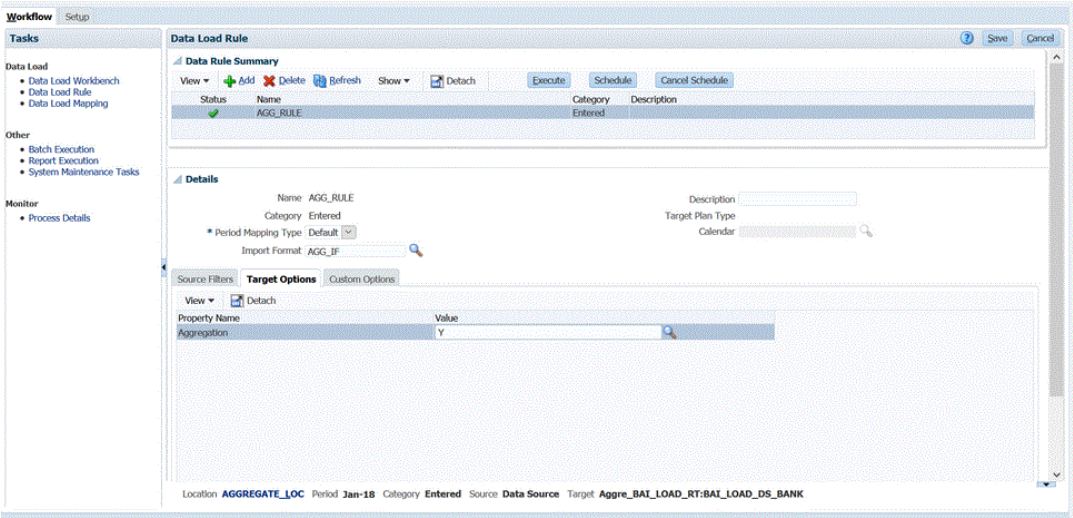
5. Select the **Target Dimension Class** or click to select the target dimension class for each dimension that is not defined in the application.

   The dimension class is a property that is defined by the dimension type.

6. Click **Save**.
7. Select the **Application Options** tab.
8. From **Aggregation**, click , and select **Y** to aggregate imported transactions.

   To leave imported transaction unaggregated, select **N**.

   The default aggregation setting is **N**.



   You can also enable the aggregation option by selecting **Data Load Rule**, then **Target Options**, then **Aggregation** and then **Y** (for yes).

   The Aggregate option chosen on the Data Load Rule overrides the option chosen in the Application Options.
9. Click **Save**.
10. Set up the source and target mapping between the source system and the Transaction Matching target application by building an import format.

    See Working with Import Formats.
11. Define the location used to associate the import format.

    See Defining Locations.
12. Create category mappings to map currency buckets.

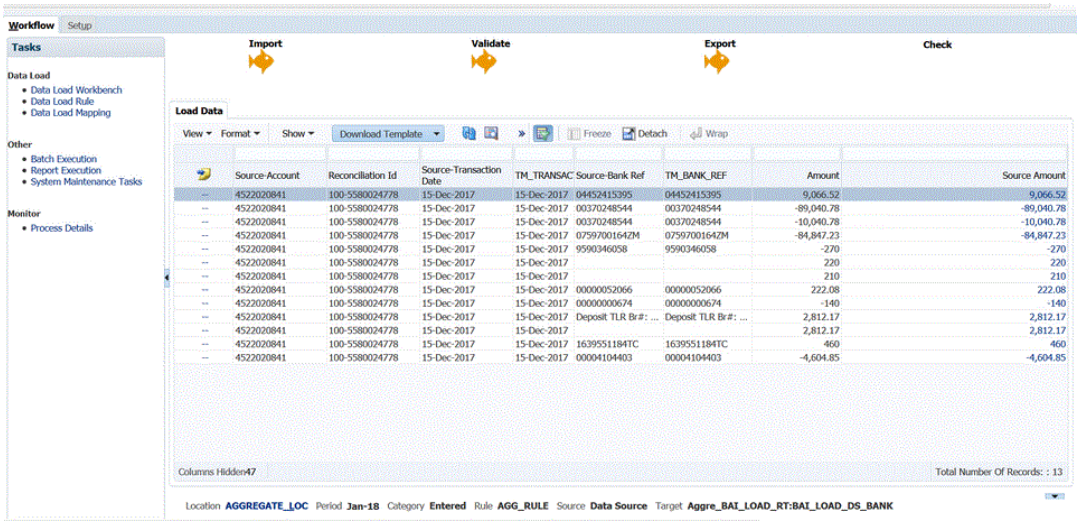
    For information on Account Reconciliation currency buckets, see Defining Currency in the *Setting Up and Configuring Account Reconciliation*.
13. Define the data load mapping to map the members from the source to target.

    The SWIFT MT940 import format requires that you map the Reconciliation Id dimension to the corresponding Transaction Matching reconciliations. You can map other dimensions as needed.

    See Creating Member Mappings.
14. In the Data Load Workbench, test and validate the data by executing the data load rule to ensure that the data load rule is running properly, and your data looks correct. Data Management transforms the data and stages it for Account Reconciliation to use.

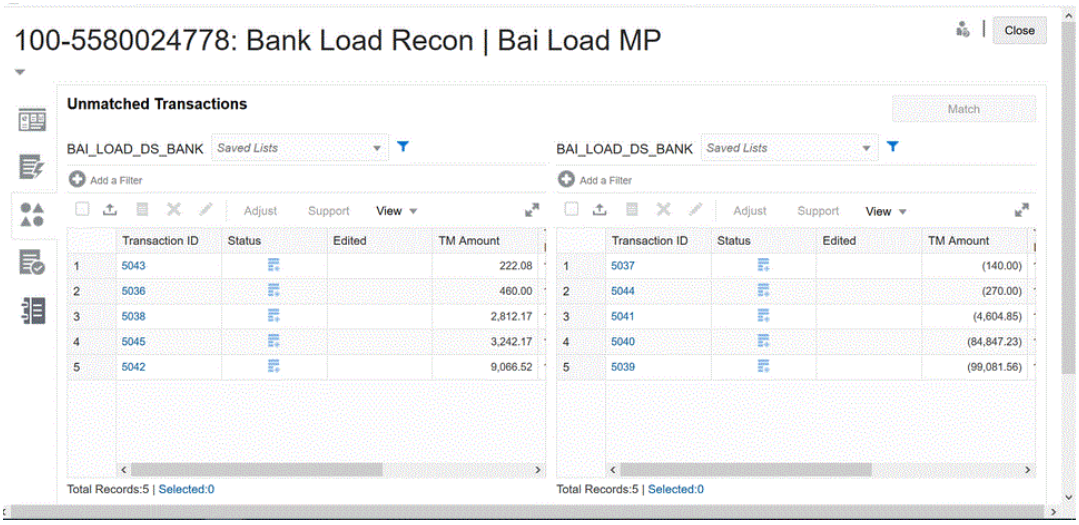
    The following example shows how the data imported from source a Bank BAI file will be aggregated in Account Reconciliation. Here you can see that the second and third row, and

sixth, seventh and eleventh rows are similar to each and will be aggregated. In this example, thirteen row are in the imported data.

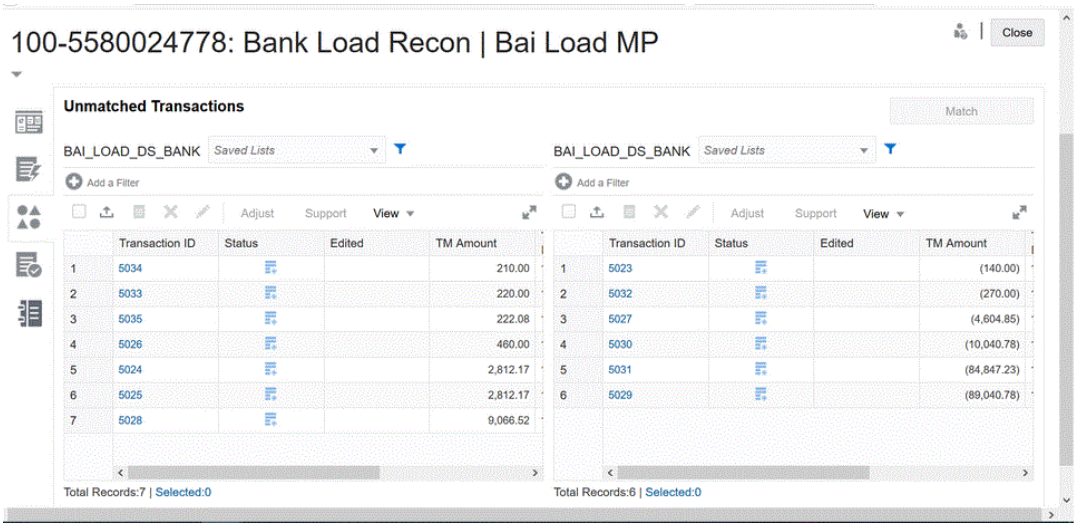


15. To view the Transaction Matching with the aggregated imported data, from the **Accounts Reconciliation** home page, click **Matching**.
16. Click the **Account Id** to which the source accounts were mapped.
17. Click the **Unmatched Transactions** icon ( )

    In the example from step 15, ten transactions are loaded here when aggregation is enabled:



If the aggregation option is disabled, a total of thirteen transactions are loaded:



Loading Reconciliation Compliance Transactions

As an integration mechanism, Data Management enables Account Reconciliation customers to load Reconciliation Compliance Transactions into reconciliations. You can pull transactions directly from the Oracle ERP Cloud to the Oracle Fusion Cloud Enterprise Performance Management including:

- Balance Explanations
- Source System Adjustments
- Subsystem Adjustments
- Variance Explanations

Loading Reconcilation Compliance Transactions Process Description

At a high level, this is how you load Reconciliation Compliance Transactions to Account Reconciliation using Data Management.

> **Note:**
>
> As a best practice recommendation while loading transactions throughData Management, do not replicate your General Ledger or Subledgers in Account Reconciliation. Loading activity from your ERP is not a best practice for period end reconciliations. If you need to load more than a 100 transactions; then as an implementer, you need to ask more questions to better understand the customer's requirements. For a reviewer, a large number of transactions for period-end reconciliation would be difficult to review. Use cases with higher volumes of transactions are candidates for Transaction Matching and not Reconciliation Compliance.

To set up the load for Reconciliation Compliance Transactions in Data Management.

1. Create a local target application for Reconciliation Compliance Transactions.

   See Adding a Reconciliation Compliance Transactions Application.

2. Map Reconciliation Compliance Transactions attributes to dimensions.

   See Mapping Reconciliation Compliance Transactions Attributes to Dimensions.

3. Create the import format for the Reconciliation Compliance Transactions.

   See Creating an Import Format for Reconciliation Compliance Transactions.

4. Create the location to associate with the import format.

   See Defining the Location.

5. Define the period for the Reconciliation Compliance Transactions.

   See Defining a Period for Reconciliation Compliance Transactions.

6. As a requirement in Data Management, create a data load mapping to pair intersections of data from the source to the target during the data load.

   Data load mappings are not used with Reconciliation Compliance Transactions.

   See Creating a Data Load Mapping for Reconciliation Compliance Transactions.

7. Run the data load rule.

   See Running the Data Load Rule for Reconciliation Compliance Transactions.

8. In Account Reconciliation, prepare the reconciliation.

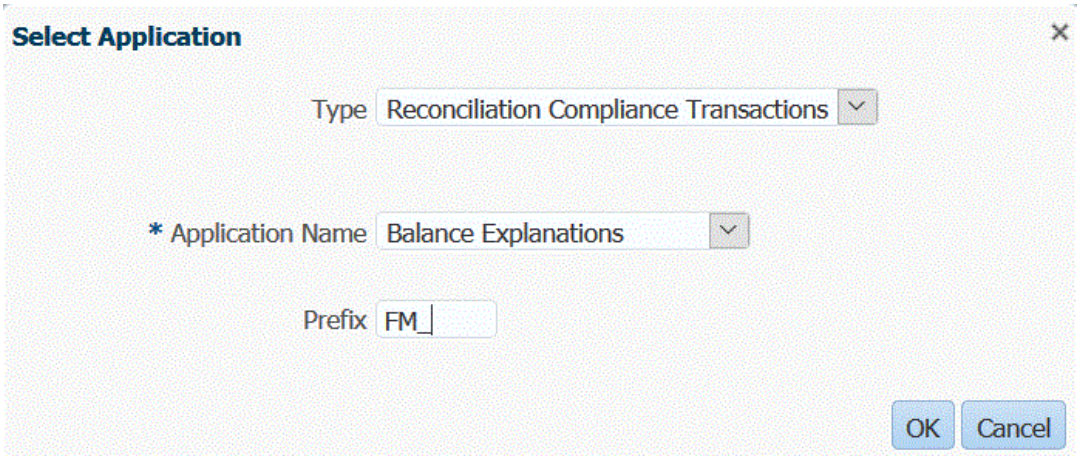
   For more information, see Importing Data Using Data Management.

Adding a Reconciliation Compliance Transactions Application

Here you create a local application, which uses a Reconciliation Compliance Transactions data source as the application type, and then you select the application name.

To add a Reconciliation Compliance Transactions target application:

1. From the **Home** page, click (**Navigator** icon) and then from the **Integration** category, select **Data Management**.
2. Select the **Setup** tab, and then under **Register**, select **Target Application**.
3. In **Target Application**, in the summary grid, click **Add**, and then select **Local**.
4. From **Select Application** page, and then from the **Type** drop-down, select **Reconciliaton Compliance Transactions**.



5. From **Application Name**, select the transaction type.

Application Name is a drop-down list with the following transaction types:

- Balance Explanations
- Source System Adjustments
- Subsystem Adjustments
- Variance Explanations

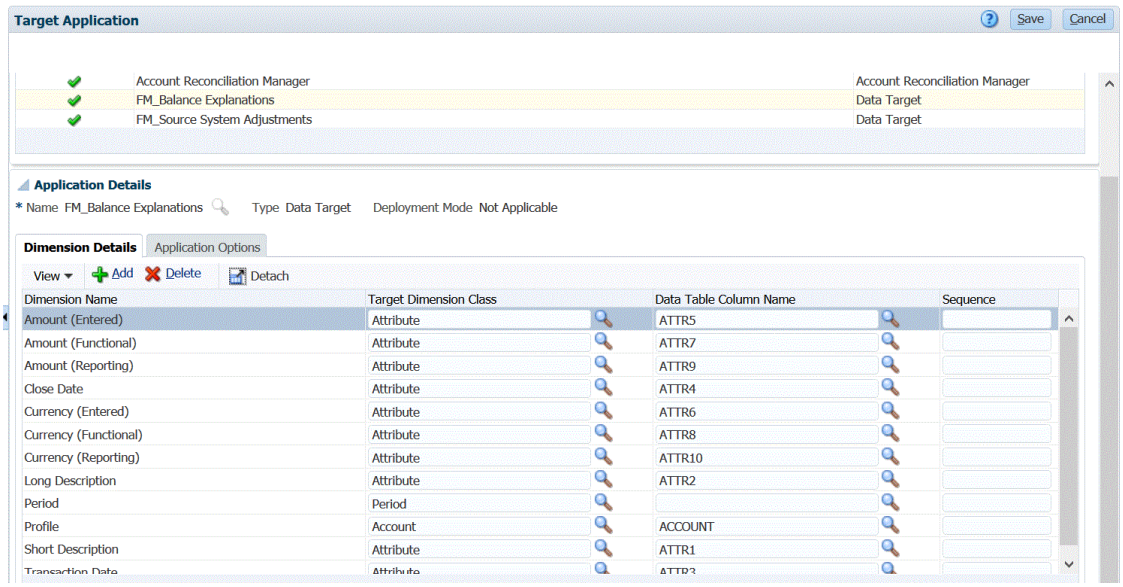
6. In **Prefix**, optionally specify a prefix to make the application name unique.

   The prefix is concatenated with the application name to form a unique application name. For example, if you want to name an application with the same name as an existing one, you can assign your initials as the prefix.

7. Click **OK**.

Mapping Reconciliation Compliance Transactions Attributes to Dimensions

When you map a Reconciliation Compliance Transactions target application, the dimension details of the application are populated automatically in Dimension Details.



Dimension names must match exactly with attribute names in Account Reconciliation. If the dimension is for a standard attribute, its name should be exactly as specified here and should not be changed.

By default "Profile" is mapped to the "Account" (Reconciliation Account ID) target dimension class and "Period" is mapped to the "Period" target dimension class.

The following dimensions are assigned to the Attribute target dimension class and are mapped to the ATTR1 to ATTR4 columns respectively. If mappings rules are needed for these dimensions, change them to Lookup dimension types and map them to UD (user-defined) columns. Attribute dimensions can have no mapping rules.

Table 3-3 Default List of Dimensions

Dimension Name	Target Dimension Class	DB Table Column
Short Description	Attribute	ATTR1
Long Description	Attribute	ATTR2

Table 3-3 (Cont.) Default List of Dimensions

Dimension Name	Target Dimension Class	DB Table Column
Transaction Date	Attribute	ATTR3
Close Date	Attribute	ATTR4

For more information about Lookup dimensions, see Adding Lookup Dimensions.

The following are standard dimensions and the names should not be changed. Dimensions for unused currency buckets can be deleted.

Table 3-4 Standard Dimension Details

Dimension Name	Target Dimension Class	DB Table Column
Amount (Entered)	Attribute	ATTR5
Currency (Entered)	Attribute	ATTR6
Amount (Functional)	Attribute	ATTR7
Currency (Functional)	Attribute	ATTR8
Amount (Reporting)	Attribute	ATTR9
Currency (Reporting)	Attribute	ATTR10

Other standard dimensions are shown below. These can either be Lookup or attribute dimensions. Because Reconciliation Compliance Transactions allow the same custom attributes to be assigned to the transaction itself and its action plan, the system differentiates between custom attributes for the transaction and custom attributes for the action plan. In this case, the system prefixes **Action Plan** at the beginning of dimension names for action plan attributes.

Table 3-5 Other Standard Dimensions

Dimension Name	Target Dimension Class	DB Table Column
Child Account ID—The child account ID for child transactions of a summary reconciliation.	LOOKUP or Attribute	Select any UD columns or ATTR columns.
<sub-segment name>—Sub-segments for transactions of a group reconciliation. The dimension name should match the sub-segment name in Account Reconciliation, for example, Store, Entity.	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Amortization	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Amortization Method	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Amortization Half Month Convention	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Amortization Periods	LOOKUP or Attribute	Select any UD columns or ATTR columns.

Table 3-5 (Cont.) Other Standard Dimensions

Dimension Name	Target Dimension Class	DB Table Column
Amortization Start Period	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Amortization End Date	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Amortization Original Amount<index>	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Action Plan	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Action Plan Closed	LOOKUP or Attribute	Select any UD columns or ATTR columns.
Action Plan Close Date	LOOKUP or Attribute	Select any UD columns or ATTR columns.

To define dimension details for a reconciliation compliance transactions:

1. On the **Setup** tab, under **Register**, select **Target Application**.
2. In the **Target Application** summary grid, select the Reconciliation Compliance Transactions target application.
3. Select the **Dimension Details** tab.
4. Select the **Target Dimension Class** or click , select the **Target Dimension Class** for each dimension that you need to change, and then specify the target dimension class from the drop-down.
5. Click **Save**.

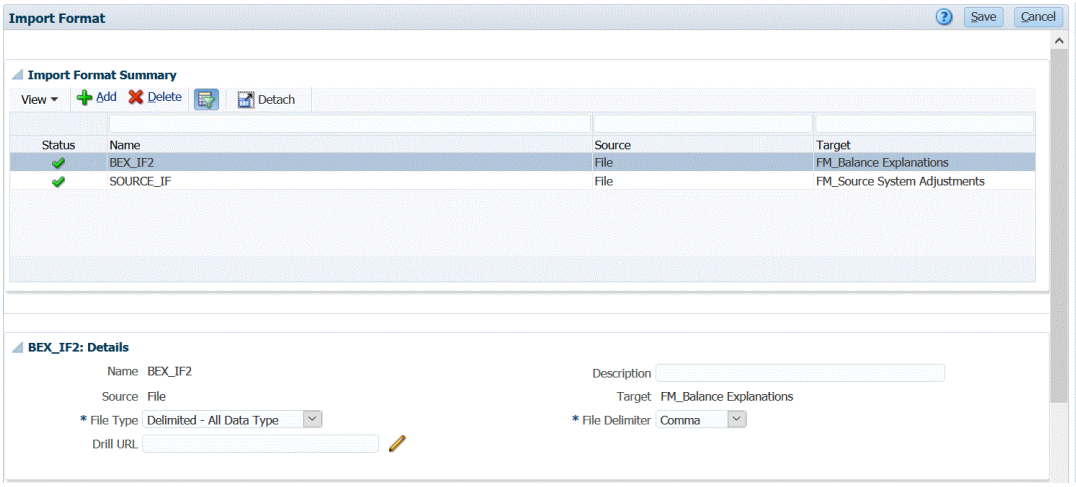
Creating an Import Format for Reconciliation Compliance Transactions

Set up the integration mapping between source and the Reconciliation Compliance Transactions target application by building an import format. The import format describes the source structure, and it is executed during the source import step.

To create an import format for the Reconciliation Compliance Transactions application:

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 page, 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**, select the source system.

   If the source system is a file-based, specify the file name. For more information, see Defining Import Formats for File-Based Mappings.

6. If the source system is file-based, from **File Type**, select **Delimited Data - All Data Type**.

   See Setting the Import Format Data Types.

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
   - tilde (~)

8. In **Target**, select the **Transactions** target system.

9. In the **Mapping** section, map any dimensions.

10. Click **Save**.

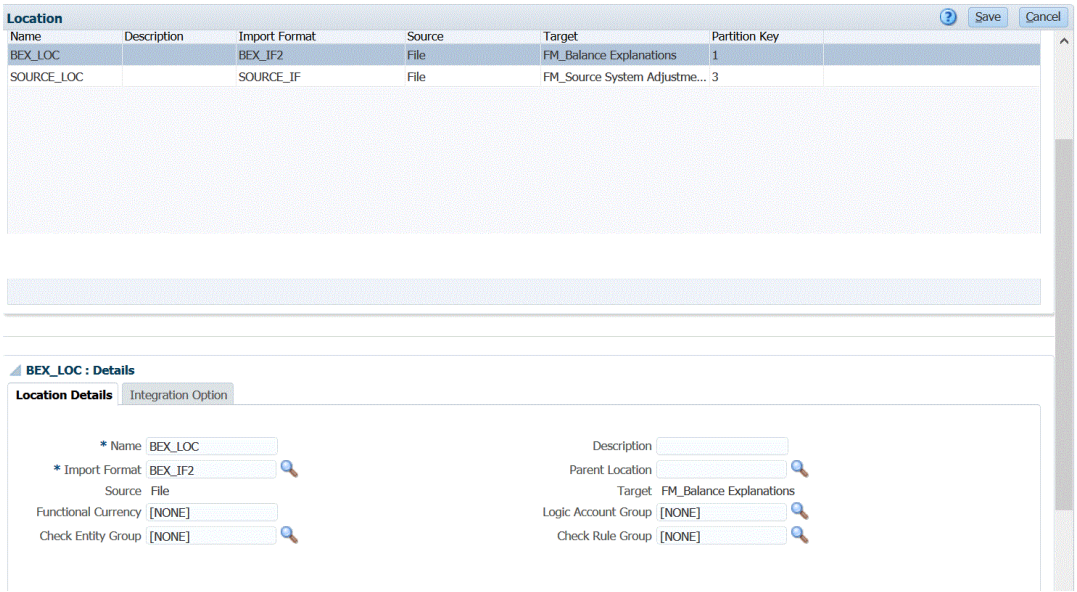
    To define import formats for file-based mappings, see Defining Import Formats for File-Based Mappings.

Defining the Location

Define the location used to associate the import format associated with the Reconciliation Compliance Transactions target application.

To define the location:

1. On the **Setup** tab, under **Integration Setup**, select **Location**.
2. On the **Location** page, click **Add**.
3. From the **Details** pane, and then **Name**, enter the name of the location.
4. From **Import Format**, select the import format to associate with the location. When you select the import format, the source and target values are populated automatically.



5. Click **Save**.

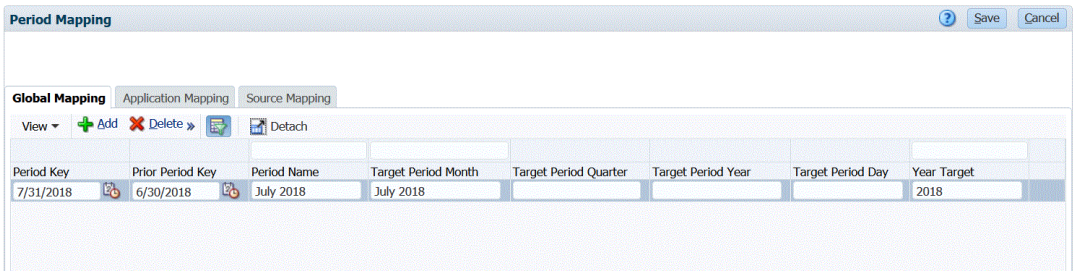
Defining a Period for Reconciliation Compliance Transactions

Account Reconciliation transactions must be loaded to one period. To do this, use global mappings to map various periods to one period.

To define a global mapping period for Reconciliation Compliance Transactions:

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**.

   The Reconciliation Compliance Transactions load uses the Period Key and Prior Period Key defined in Data Management.



5. Select the **Prior Period Key**.
6. Complete the following:

a. Period Name; for example, July 2018
b. Target Period Month; for example, August
c. Target Period Year
d. Target Period Day
e. Year Target

7. Click **Save**.

Creating a Data Load Mapping for Reconciliation Compliance Transactions

As a requirement in Data Management, create a data load mapping to pair intersections of data from the source to the target during the data load.

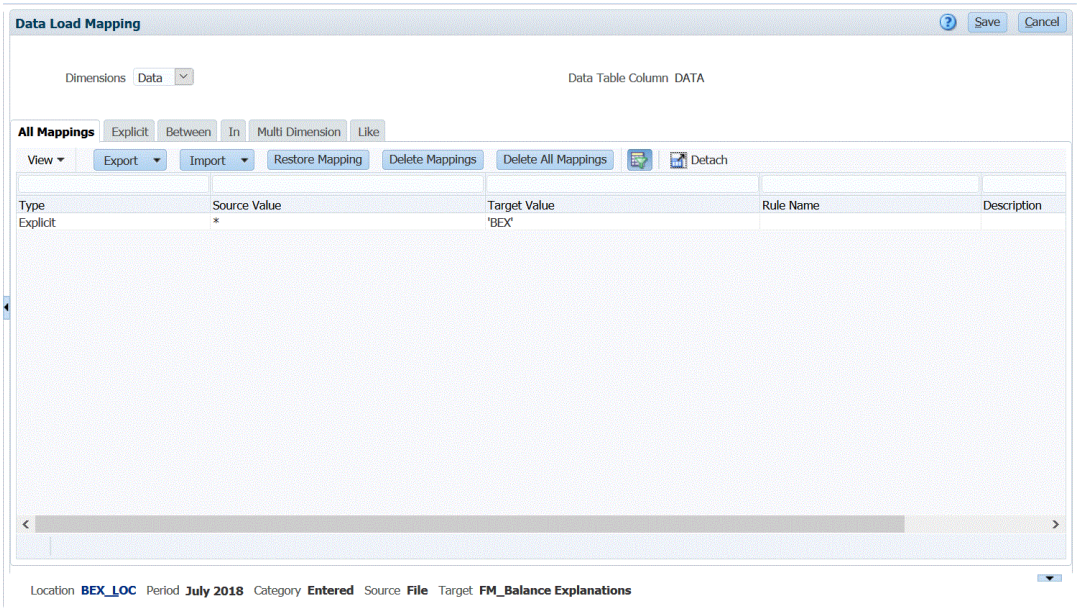
A data load mapping is not used with Reconciliation Compliance. However, a data load mapping is required for the "Data" dimension so that the system can create target values.

To create a data load mapping:

1. On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.
2. On the **Data Load Mapping** page, select the **Location**.
3. From the **Dimension** drop-down, select **Data**.
4. Select the **Explicit** tab.
5. Click **Add**.
6. In **Source Value**, enter ***** (asterisk).

   An asterisk (*) represents the source value.
7. In **Target Value**, enter a reference to the type of transaction type.

   For example, you might enter **BEX** to identify the mapping as "Balance Explanation."



8. Click **Save**.

Running the Data Load Rule for Reconciliation Compliance Transactions

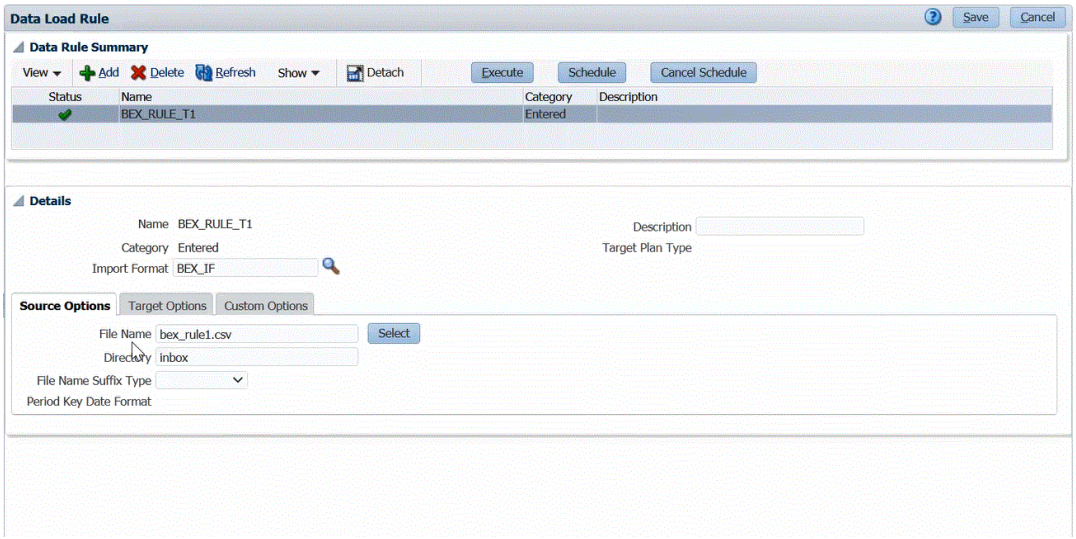
When you execute a data load rule in Data Management that has a Reconciliation Compliance Transactions target application, Data Management imports data from the source and stages it. Then Data Management exports the data to Account Reconciliation by generating a .CSV file with the same format as the Account Reconciliation pre-mapped transactions import file and submits a job to Account Reconciliation for import. Transactions previously loaded from Data Management are overwritten.

To load data to a Reconciliation Compliance Transactions target application:

1. On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.
2. On the **Data Load Rule** page, and then **Location**, select the location assoicated with the import format that you want to load.
3. Click **Add**.
4. In **Name**, enter the name of the data load rule.
5. In **Import Format**, select the import format associated with the Reconciliation Compliance Transaction target application.
6. If the source system is file based, on the **Source Options** tab, in **File Name**, select the data file name that contains the data you are loading.

   When the file name is provided, then data must be entered for a single period on the Rules Execution window.

   To navigate to a file located in a directory, click **Select**, and then choose a file on the **Select** page. You can also select **Upload** on the Select page, and navigate to a file on the **Select a file to upload** page.
7. Click **Save**.



8. Click **Execute**.
9. On the **Execute Rule** page, complete the following options:
   a. Select **Import from Source**.

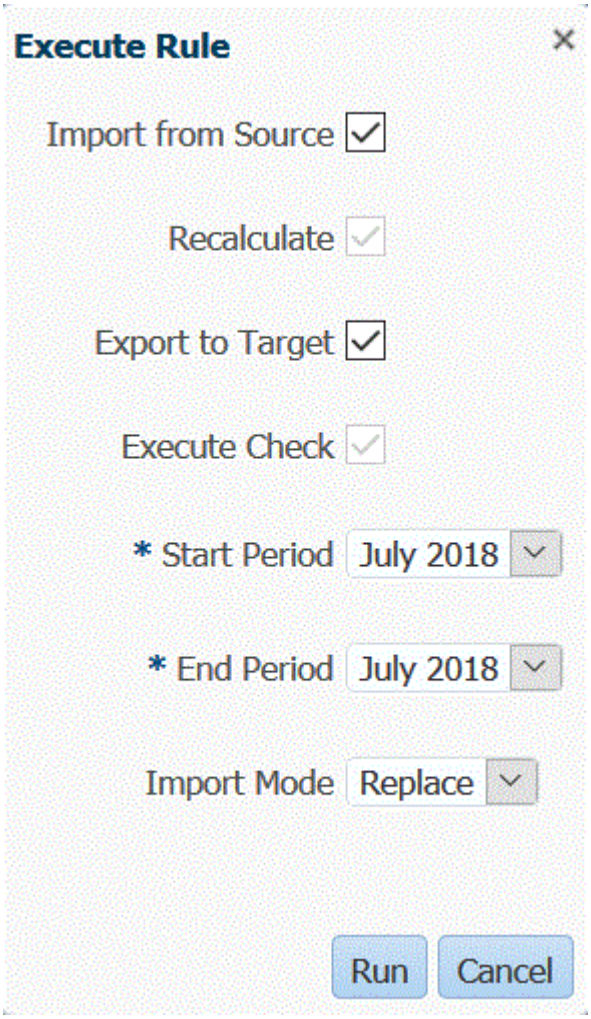
      Data Management imports the data from the source system, performs the necessary transformations, and exports the data to the Data Management staging table.

b. Select **Export to Target**.

   Select this option after you have reviewed the data in the staging table and you want to export it to the target application.

c. From **Start Period** and **End Period**, select the period defined for Reconciliation Compliance Transactions.

d. Click **Run**.



10. In Account Reconciliation, prepare the reconciliation.

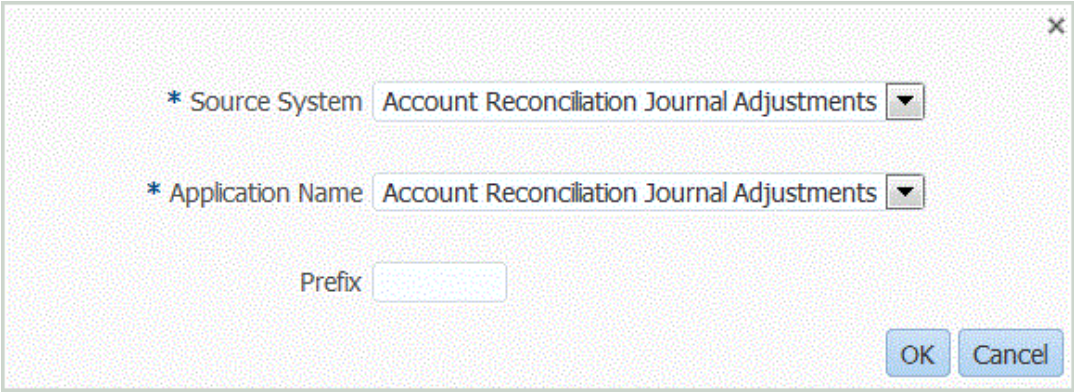
Loading Exported Journal Entries

In Transaction Matching, you can export adjustments or transactions as dual sided journal entries that can then be imported into your ERP system. Using Data Management, you can create a data source associated with an Accounts Reconciliation journal adjustments source system, and then load the entries to a custom target application. When the entries are exported in the Data Load Rule, all adjustments and transaction that have an open status and match any applied filter criteria are exported.

To load exported journals entries:

1. On the **Setup** tab, under **Integration Setup**, select **Period Mapping**.
2. Select the **Application Mapping** tab.

3. In **Target Application**, select **Account Reconciliation Manager**.
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. Select the **Setup** tab, and then under **Register**, select **Target Application**.
8. In **Target Application**, in the summary grid, click **Add**, and then select **Data Source**.
9. From **Source System**, select **Account Reconciliations Journal Adjustments**.
10. In **Application Name**, select the data source application name for the Accounts Reconciliation Journal Adjustment application.



11. In **Prefix**, optionally specify a prefix to make the application name unique.

    The prefix supports up to a maximum of ten characters.
12. Click **OK**.
13. Select the **Dimension Detail** tab.

    When you add an Account Reconciliation Journal Adjustment data source, the dimensions in application are populated automatically on the Dimension Detail tab. These dimensions correspond to the Transaction Matching journal entry column names in Account Reconciliation as shown below.

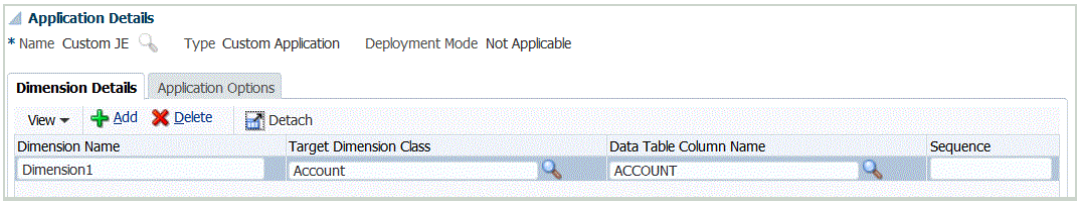
14. Map all dimension names in the **Dimension Names** column with the value **Generic** in the **Target Dimension Class** column and click **Save**.
15. Create the target application by clicking **Add** and then **Local**.
16. On the **Select Application** screen, from **Type**, select **Custom Application**.
17. Click **OK**.
18. In the **Application Details** section, in the **Name** field, specify the name of the custom application.
19. Select the **Dimension Details** tab.
20. Click **Add**.
21. In **Dimension Name**, enter the name of the Account dimension, and then specify **Account** in the **Target Dimension Class**. and **Data Table Column Name** fields.

    When you specify **Account** in the **Target Dimension Class**. the value **Account** prefills automatically in the **Data Table Column Name** field.

    This step enables you to create dimensions not defined in the target application. You must create an "Account" dimension name and associate it with an "Account" target dimension class, which is a property defined by the dimension type. You also associate it with an "Account" data table column name, which identifies the table column name of the column in the staging table. These definitions are required by Data Management but not the Account Reconciliation.

    You do not need to create an "Amount" dimension because it defaults on the Import Mapping screen.

    You can create other dimension names, such as UD1 through UD20 or "Entity" as needed.



22. Click **Save**.
23. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
24. In **Details** and then in **Name**, specify the name of the import format.
25. In **Source** and **Target**, select the source and target for the journal adjustments.
26. In the **Mapping** section, map the Accounts Reconciliation Journal Adjustment source columns and the custom target application columns.

    For more information, see Working with Import Formats.
27. On the **Setup** tab, under **Integration Setup**, select **Location**.
28. Define the location associated with the import format.

    For more information, see Defining Locations.
29. On the **Workflow** tab, under **Data Load**, select **Data Load Mapping**.
30. Define the data load mapping to map the members from the source to target.

    Do not add mappings for the Data dimension.

    For more information, see: Creating Member Mappings.
31. On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.

32. Specify the location.

    A location is the level at which a data load is executed in Data Management. Any import format associated with the location is populated automatically in the Import Format field. If multiple import formats have been associated with the location, you can browse for them.

33. Select the **Source Filters** tab, and complete any parameters based on the transaction matching type.

    Available parameters:

    - Type—Specify the type of reconciliation.

      Available types:

      – **Transactions**

      – **Adjustments**

    - Match Type—Specify the match type ID such as "Clearing."

      Match Types determine how the transaction matching process works for the accounts using that match type. They determine the structure of the data to be matched, as well as the rules used for matching. Additionally, match types are used to export adjustments back to an ERP system as journal entries in a text file.

    - Data Source—Specify the data source when the transaction matching transaction type is "Transactions."

      Leave this field blank when the transaction matching transaction type is "Adjustments."

      Names for the data sources that appear in Data Management are actually sourced from the Transaction Matching data sources. The convention used in the drop-down is *Match Type Name: Data Source Name.*

      For example, application choices might include:

      – InterCo3:AR

      – InterCo3:AP1 3

      – Bank BAI:BAI_Bank_File

      – Bank BAI:GL

      – INTERCO2:AR

      – INTERCO2:AP

      – INTERCO:AR 8

      – INTERCO:AP 9

      – CLEARING:CLEARING

    - Filter—If you choose **Type** as the Transaction, specify the filter name for transactions.

      The filters is defined in data source configuration in Account Reconciliation as shown below:

    If you choose Type as **Adjustment**, specify the filter value in JSON format.

    You can select specific transaction types and/or the accounting date while exporting the journal for Adjustments

    For example, you can select all transaction types except transaction types of tax until month end.

    To specify the filter for Adjustments, use the **Filter** field to select the following:

- (Adjustment) Type—Specify the adjustment type available for the match type selected in the previous step. You can specify one or more values. If you don't select a value, the default used is **All**.
- Adjustment Date—Specify the operand and date values (using the Date Picker to select the dates). The operands available for filtering are: EQUALS, BEFORE, BETWEEN, and AFTER.

  The date format must be YYYY-MM-DD. If you use EQUALS, BEFORE, and AFTER operands, use the JSON format: `accountingDate` and then specify the accounting date. If you select a BETWEEN operand, use the JSON format:

  – `fromAccountingDate` for the "from" Accounting Date
  – `toAccountingDate` for the "to" Accounting Date

  Here are some sample JSON formats:

```
{"adjustmentTypes" : ["Invoice Dispute","Coding Error"],"operator" :
"BETWEEN", "fromAccountingDate" : "2022-02-01", "toAccountingDate" :
"2022-02-10"}
```

```
{"adjustmentTypes" : ["Invoice Dispute","Coding Error"],"operator" :
"EQUALS", "accountingDate" : "2022-02-01"}
```

```
{"operator" : "AFTER", "accountingDate" : "2022-02-01"}
```

```
{"adjustmentTypes" : ["Invoice Dispute","Coding Error"]}
```

34. In Data Load Workbench, test and validate the data by executing the data load rule to ensure that the data load rule is running properly, and your data looks correct. Data Management transforms the data and stages it for Account Reconciliation to use.

    See Using the Data Load Workbench.

    For information on running the data load rule using EPMAUTOMATE, see the rundatarule topic in the *Working with EPM Automate*.

Integrating EPM Planning Projects and Oracle Fusion Cloud Project Management (Project Management)

You can integrate the EPM Planning Projects module (Projects) and Oracle Fusion Cloud Project Management (Project Management) to perform organizational planning and budgeting and to execute projects. Develop your strategic corporate plan and budget using EPM Planning Projects and execute and collect costs for approved projects using Project Management. Actual costs are then included in budget analysis, forecasting, and re-planning using EPM Planning Projects.

With this two-way integration, you typically use EPM Planning Projects to develop new projects, create project budgets, and do overall project planning. Then, use Project Management to capture actuals. Bring in the actuals to EPM Planning Projects for budget variance analysis.

With this integration, the same Indirect and Capital projects are visible in both EPM Planning Projects and Project Management depending on the cadence of the synchronization. The capabilities include:

- Transfer projects and budgets created in EPM Planning Projects to Project Management. The strategic budget is created in Project Management as a baseline budget at the resource class level.
- Use the budget approval validation to validate the detailed budgets created by project managers vs. the strategic budgets created in EPM Planning Projects (Optional).
- Transfer actual cost amounts from Project Management to EPM Planning Projects at the resource class level.
- Transfer re-planned budgets from EPM Planning Projects to Project Management at the resource class level.

You use Data Management and Data Integration to drive the integration of data between EPM Planning Projects and Project Management. Data Management and Data Integration provide an out of box solution that enables EPM Planning Projects customers to apply predefined mappings from the Project Management data model to target dimensions. You can also customize and extend these integrations, for example, by applying other mappings as needed to meet your business requirements.

For more information see Integrating EPM Planning Projects and Project Management.

4

Integration Tasks

Related Topics

- Working with Import Formats
- Defining Locations
- Defining Period Mappings
- Defining Category Mappings
- Loading Data
- Data Load, Synchronization and Write Back
- Logic Accounts
- Check Rules

Working with Import Formats

Import formats defines the layout of source including:

- which fields (columns) are extracted from the source system and how the data is stored in the Data Management staging table.
- the data format and mapping information for columns in the Planning source system and target applications for a source adapter-based integration.
- mapping between the source system segments or chartfields and the dimensions (used in the metadata load and data load process).
- mapping between the EPM dimensions and the source system segments or chartfields (used in the write-back process).
- mapping information for source adapter-based integrations
- mapping information between source and target EPM dimensions for data synchronization.

The following screen shot shows a portion of the Vision_account.txt. In the import format, you define the location of these columns and map them to dimensions in the target application.

```
1100;01;Cash In Bank;122.75;145.31;;12.30;55.67
1100-1011-000-00;01;Dallas National Bank;140,320;78.42; ;09.08;07.06
1100-1012;01;Midland Bank & Trust;115000.00;654.12;45.39;05.04;0.00
1190;01;Petty Cash;130.00;41.27;999.11;01.00;12.98
1190-101;01;Sales;204.00;77.33;46.31;15.94;23.46
1515;01;Prepaid Deposits;107.00;88.00;0.00;9.32;"2.45"
1515-101;01;CPI Market Security;501.00;93.44;57.38;34.76;-145e-3
1516-201;01;CPK Market Security;787.00;0.00;11.35;01.4;-4.56
1520-101-11;01;PIY Market Security;45.00;19.87;47.39;-12.65;-04.56
1522-121-11;01;MyPIY Market Security;25.10;39.47;57.76;-22.85;-02.53
2520-1101;01;betwCPI Market Security;187.00;12.00;7.30;02.54;-123e-2
2215-104;01;bet2 CPI Market Security;57.00;18.02;44.00;0.0000000012;33.62
```

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, 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.

Defining the Import Format

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

Viewing Import Format Information

Table 4-1 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 – 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 click **[Enter]**. All text is case sensitive.

Adding Import Formats

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.

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**, select **File** for the source system.
6. From **File Type**, select the format of the file.
   - Fixed - Numeric Data

     See Defining Import Formats for File-Based Mappings.
   - Delimited - Numeric Data

     See Defining Import Formats for File-Based Mappings.
   - Multi Column - Numeric Data
     See Loading Multi-Column Numeric Data.
   - Delimited Data - All Data Type

     See Setting the Import Format Data Types.
   - Fixed Data - All Data Type

     See Setting the Import Format Data Types.
   - Multi Column - All Data Type
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
   - tilde (~)
8. In **Target**, select the target system.
9. In **Drill URL**, enter the URL used for the drill-through.

   To display the **Drill URL** editor, click .
10. In the **Mapping** section, map any dimensions.
11. Click **Save**.

    To define import formats for file-based mappings, see Defining Import Formats for File-Based Mappings.

Import Formats and Data Load Rules

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

Table 4-2 Data Load Rule

Source System	Target System
ERP (Enterprise Resource Planning)	EPM (Enterprise Performance Management)

Table 4-3 Write-Back Rule

Target System	Source System
EPM	ERP

Table 4-4 Data Synchronization

Source System	Target System
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.

Adding Import Expressions

Data Management provides a set of powerful import expressions that enable it to read and parse virtually any trial balance file into the Data Management database. You enter advanced expressions in the Expression column of the field. Import expressions operate on the value read from the import file.

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 Data Management:

- Nonstandard Numeric Sign Conventions
- Converting from European to U.S. Notation
- Padding Fields with Leading Fills
- Padding Fields with Trailing Fills
- Multiplying by Whole-Number and Decimal Factors
- Disabling Zero Suppression

Nonstandard Numeric Sign Conventions

The Sign expression is used to manage nonstandard numeric sign conventions. Data Management 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, Data Management 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 4-5 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 Data Management 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 a (.,) to a (,.) 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. This type of expression enables you to scale file data by any numeric factor. Using this expression, you can double or halve data. The `Factor=Value` is expressed as `Factor=Value`, where the value is the user-defined whole or decimal number by which to multiply your data. The import expression is entered in the Expression field for the ‘Amount’ source column.

Disabling Zero Suppression

The `NZP` expression is used to disable zero suppression during the data-load process. By default, Data Management 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`.

Processing Order

For all fields except the Amount field, Data Management processes stacked expressions by Fill or FillL order:

For the Amount field, Data Management processes stacked expressions in the following order:

1. DRCRSplit

2. Fill=EuroToUS
3. Sign
4. Scale
5. 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, which determines which fields (columns) are extracted from the source system and how data is stored in the staging table.

For detailed information about working with import formats, see Working with Import Formats. For information about working with all data types data loads in import formats, see All Data Types Data Load Process Description.

You can add a mapping row to the import format definition based on the following options:

- Skip
- Currency
- Attribute
- Description
- Dimension Row

Table 4-6 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 available for both fixed and delimited file types.

Table 4-6 (Cont.) Import format definition options

Import Definition Option	Description
Attribute	The TDATASEG table includes 40 attribute columns to which you can import values 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. Each attribute column can accept up to 300 characters.

Note:

If you integrate an Financial Consolidation and Closeor source with an explicit period mapping type, the system stores Tax Reporting the mapping year (SRCYEAR) and mapping period (SRCPERIOD) in the ATTR2 column and year in ATTR3 columns. For this reason when importing data from Financial Consolidation and Close, attribute columns ATTR2 and ATTR3 should not be used for any other dimension mappings.

Similarly when you map a Movement source attribute to any target dimension, the system automatically creates another map for mapping the

Table 4-6 (Cont.) Import format definition options

Import Definition Option	Description
	Movement to the ATTR1 column.
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.
Currency	Data Management 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	Data Management 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 numeric data files with a fixed length:

> **Note:**
>
> For information about defining import formats for fixed length all data type data files, see Setting the Import Format Data Types.

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 of row to add from the **Add** drop-down.

Available options:

- Skip Row
- Currency Row
- Attribute Row
- Description Row
- Dimension Row

4. In **Start**, specify where on the file the column starts.
5. In **Length**, enter the length of the column.
6. In **Expression**, 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.
7. Click **Save**.

To define an import format for delimited numeric data files:

> **Note:**
>
> For information about defining import formats for delimited all data type data files, see Setting the Import Format Data Types.

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.
6. Click **Save**.

Concatenating Source Dimensions for a File-Based Source

Concatenate 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:

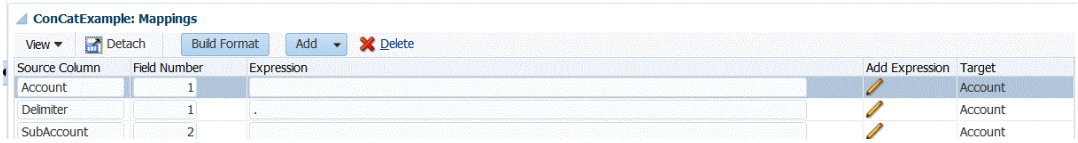
1. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
2. In the **Import Format** summary task bar, select the import format of the file.

   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.

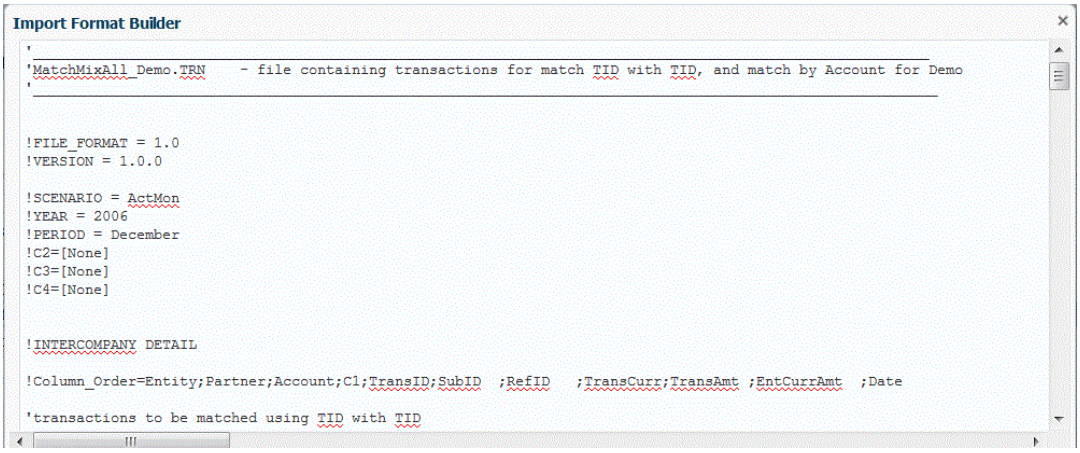
To assign an import format using the Import Format Builder:

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**.

   In addition to selecting a file to load, you can:

   - Create a new folder under the *inbox* directory.
   - Delete a file.
   - Download a file
   - Upload a file

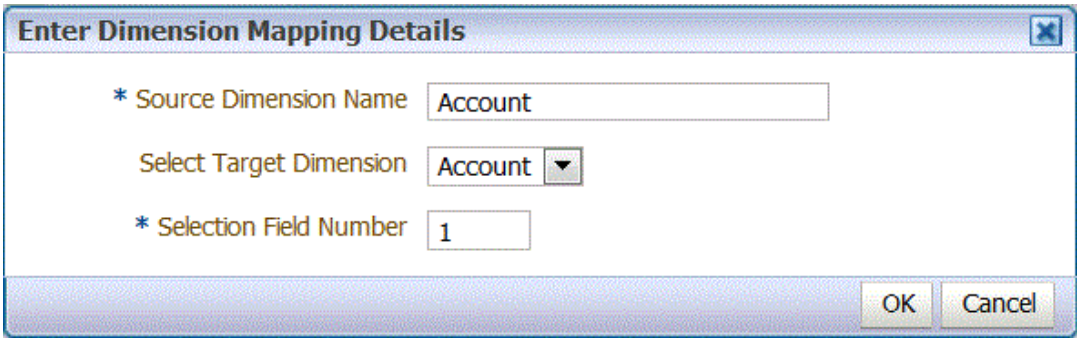
   The file contents are shown on the Import Format Builder screen.



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.

All Data Types Data Loads

Using the all data type load method, you can load data files that support the following data types to Planning:

- numbers
- text
- Smartlists
- Date

Additionally, you can load data files that include multiple balance columns for a selected calendar period.

> **Note:**
>
> The All Data Type with Security loads only to the currency specified in the import.

> **Note:**
>
> The All Data Type load method is not supported for Profitability and Cost Management.

All Data Types Data Load Process Description

At a high level, when working with the all data types load method, note the following:

1. In the Target Application feature, on the Application Options tab, select the either the **All data types with auto-increment of line item** or the **all data types with security** load method.
2. In the **Import Format** option, select the **file type** for the All Data Type load method.
3. For multi-column types only in the Data Load Rule, assign any driver dimension member(s) for multiple column data types. The driver dimension is the member into which data is loaded. The driver dimension is only applicable to a multiple column type, not delimited or fixed. If no header record or member expressions are assigned, you can select the members from the Member Selector screen in the import format or the data load rule.
4. In the **Data Load Workbench**, verify the values of the data type in the Data Column.

   The Data Load Workbench displays the Data Column instead of the Amount Column.

   a. Use the **Import from Source** feature to import the data from the source system, perform the necessary transformation, such as import, map, and validate the data.
   b. Validate the source data.
   c. Export the data to the Planning application.

   For more information about how data is loaded in Planning, see the Outline Load Utility in *Administering Planning*.

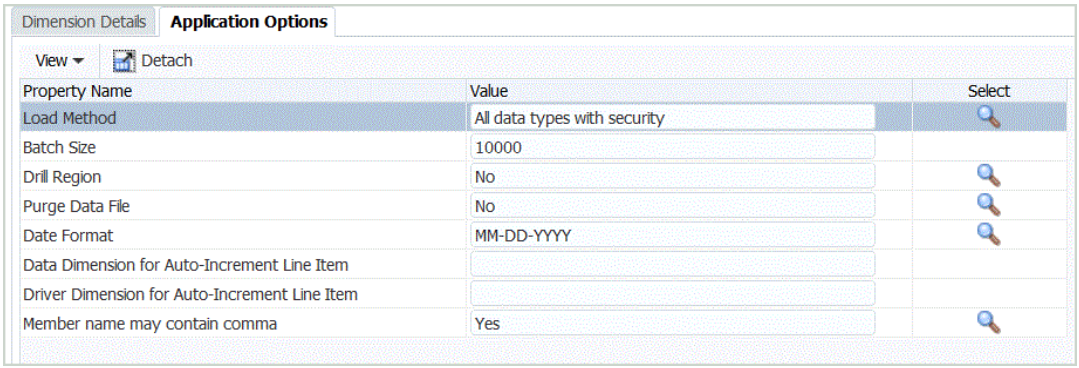
Setting the All Data Types Load Method

You can select the method to use when loading metadata and data for Account, Period, Year, Scenario, Version, Currency, Entity, user-defined dimensions, attributes, UDAs, exchange rates, Smart Lists, and planning unit hierarchies.

> **Note:**
>
> To load numeric data, use the **Numeric Data Only** load method.

1. Select the **Setup** tab, and then under **Register**, select **Target Application**.
2. In **Target Application**, in the **Target Application** summary grid, click **Add**, and then select either **Local** or **Cloud**.

   Available options are **Cloud** (for a Cloud deployment) or **Local** (for an on-premise deployment).
3. In **Target Application** under **Application Options**, from the **Load Method** drop-down, select **all data types with security**.



Available load method descriptions:

- All data types with auto-increment of line item.
  This method requires that you define the data and driver dimensions, and unique identifiers for the Oracle Fusion Cloud Enterprise Performance Management application. You define data load and driver dimension in the Data Dimension for Auto-Increment Line Item field and Driver Dimension for Auto-Increment Line Item field on the Target Options tab in the Data Load Rule.
- Numeric—Loads numeric data only. Planning data security is not enforced in this method.
- all data types with security— Loads Numeric, Text, Smartlist, Date data types. If the Planning administrator loads data, Planning data security *is not* enforced. If a Planning non-administrator user loads data, then Planning data security is enforced.

  The data is loaded in chunks of 500K cells.

4. From the **Date Format** drop-down, specify the format of the date data:
   - DD-MM-YYYY
   - MM-DD-YYYY
   - YYYY-MM-DD
5. Click **Save**.

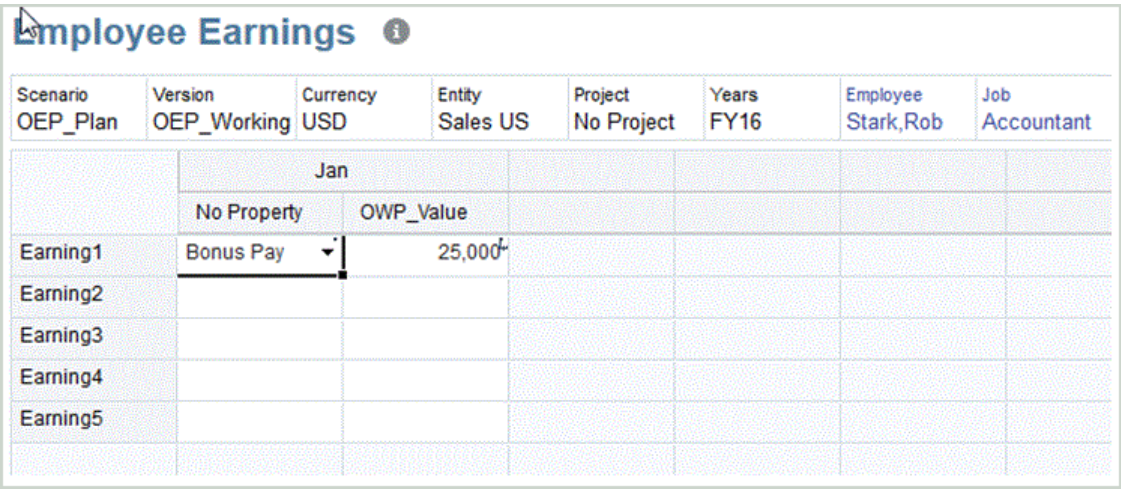
Loading Incremental Data using the LINEITEM Flag to an Cloud EPM Application

You can include line item detail using a LINEITEM flag in the data load file to perform incremental data loads for a child of the data load dimension based on unique driver dimension identifiers to a Oracle Fusion Cloud Enterprise Performance Management application. This load method specifies that data should be overwritten if a row with the specified unique identifiers already exists on the form. If the row does not exist, data is entered as long as enough child members exist under the data load dimension parent member.

For example, you can load employee earnings detail from the following sample source data file to a target Cloud EPM application.

```
Emp,Job,Pay Type,Amount
"Stark,Rob",Accountant,Bonus_Pay,20000
"Molinari,Sara",Sales Manager,Bonus_Pay,22000
"Matthew,Peter",Sales Associate,Bonus_Pay,5000
```

The target Planning application is shown below:



When using the LINEITEM syntax, the data file may contain records having identical dimensions except driver member values.

In the following data file, records have the same dimensions but differ on the value of the acct_date column (a driver member). This requires you to identify driver member(s) which make the data record unique (that is, the. acct_date column for the example.

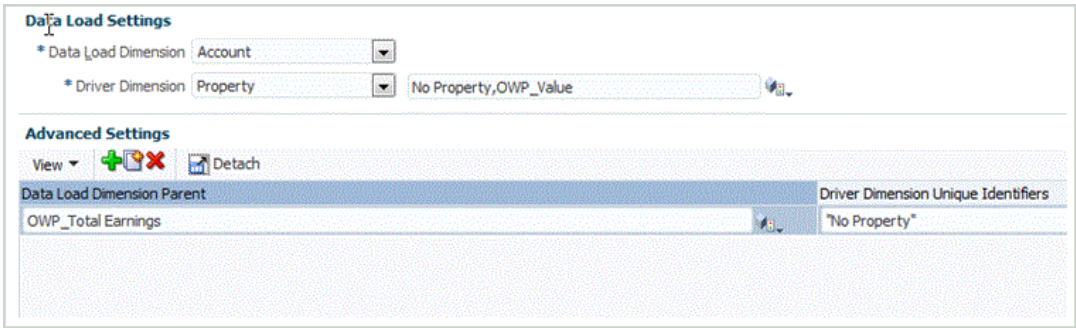
```
Entity,Employee,Version,asl_EmployeeType,acct_date,acct_text,SSTax Rate1
<LINEITEM("ParentMember")>,No Employee,Baseline,Regular,1-1-2001,Text1,0.4
<LINEITEM("ParentMember")>,No Employee,Baseline,Regular,1-1-2002,Text2,0.4
<LINEITEM("ParentMember")>,No Employee,Baseline,Regular,1-1-2003,Text3,0.5
```

To support the above use case, create a LOOKUP dimension and map driver member column to it in the Import Format option. The name of the dimension must start with `LineItemKey`. For example, create a LOOKUP dimension named `LineItemKey` and assign any Data Column Name (such as UD8). In the Import Format option, map `LineItemKey` dimension to 5th column (acct_date) in the data file and use the LIKE (* to *) data mapping. You may also use other types of data mappings to populate the look up dimension. If needed, create more LOOKUP dimensions to uniquely identify data records. The rest of the setup is same.

To use this feature, you need to perform steps both in Planning and Data Management.

1. Launch Planning.
2. From the **Data Load Settings** screen, select the **Data Load Dimension** and **Driver Dimension**.

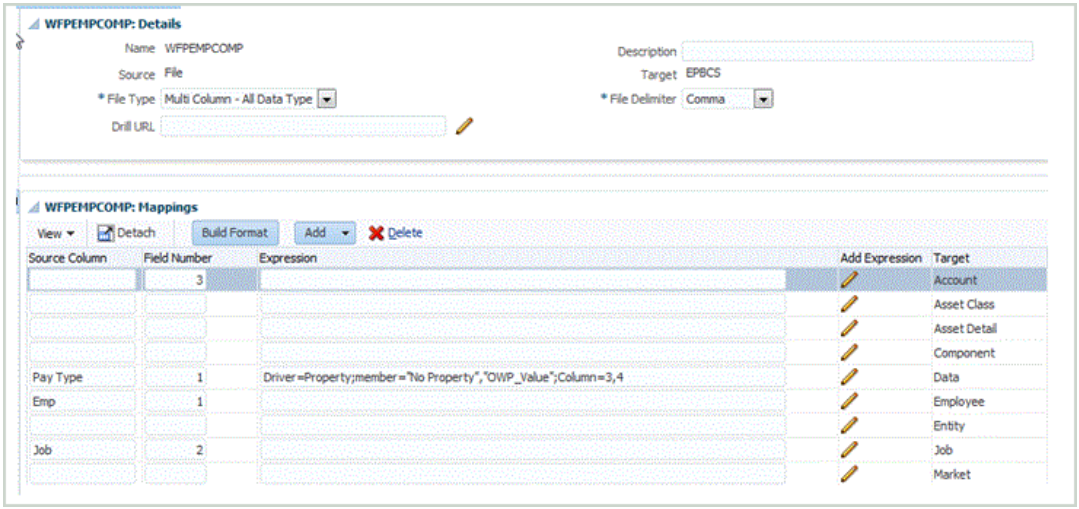
   In Planning, **Earning1** and **Earning2**, are members of the **Account** dimensions. The various Earnings Types are loaded to the **No Property** member of the **Property** dimension, and the **Earning** value is loaded to the **OWP_Value** of the **Property** dimension.



For more information about the Data Load Settings screen, see: *Oracle Hyperion Planning Administrator's Guide*.

3. Launch Data Management, then select **Setup**, and then select **Import Format**.
4. From the **Import Format Mapping** grid, select the data source column.
5. In **Expression**, add an import expression for the data driver.

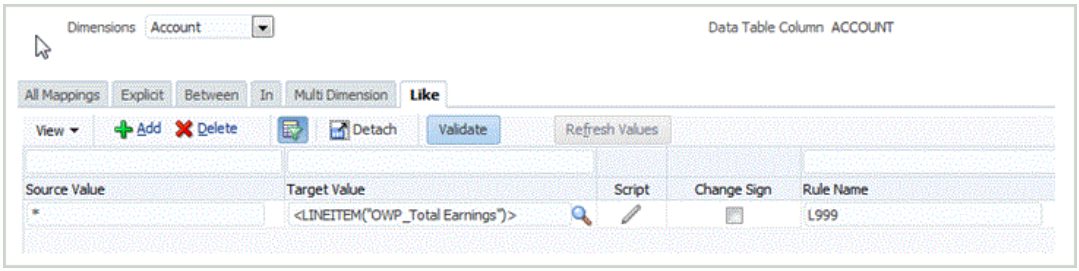
   For example, add the import format expression: **Driver=Property;member="No Property","OWP_value";Column=3,4**.



For more information about adding drivers Data Management, see Adding an Import Expression for a Data Driver and Assigning Driver Dimension Members.

6. From **Workflow**, select **Data Load Mapping**.

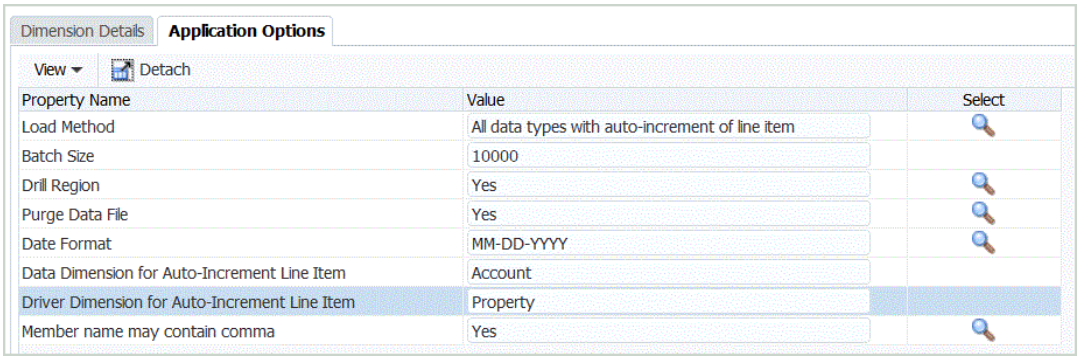
   In Data Load Mapping, you identify how source dimensionality translates to the target dimensionality. As shown below for a "Like" mapping, the **Earning** source value (represented by the asterisk) is loaded to **OWP_Total Earnings** of the **Account** dimension.



7. From **Workflow**, select **Data Load Rule**.
8. Select the **Target Options** tab.
9. From the **Load Method** drop-down, select **All data types with auto-increment of line item**.
10. In **Data Dimension for Auto-Increment Line Item**, select the data dimension that matches the data dimension you specified in Planning.

    In this example, the data dimension is **Account**.
11. In **Driver Dimension for Auto-Increment Line Item**, select the driver dimension that matches the driver dimension you specified in Planning.

    In this example, the driver dimension is **Property**.



Setting the Import Format Data Types

When loading data, specify the type of data for the import format:

- Delimited–Numeric data
- Fixed–Numeric data
- Multi-Column–Numeric Data
- Delimited–All Data Type
- Fixed–All Data Type
- Multi Column–All Data Type

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 **Source**, select the source system.
5. In **Target**, select the target system.
6. In **Description**, enter a description of the import format.
7. In **Import Format**, in **File Type**, select the type of non-numeric data file.

   Options include:

   - Fixed - Numeric Data

     See Defining Import Formats for File-Based Mappings.
   - Delimited - Numeric Data

     See Defining Import Formats for File-Based Mappings.
   - Multi Column - Numeric Data
     See Loading Multi-Column Numeric Data.
   - Delimited - All Data Type

     See Setting the Import Format Data Types.
   - Fixed - All Data Type

     See Setting the Import Format Data Types.
   - Multi Column - All Data Type

8. If the file type is delimited, in the **File Delimiter** field, select the type of delimiter:
   - comma (,)
   - exclamation (!)
   - semi-colon (;)
   - colon (:)
   - pipe (|)
   - tab
   - tilde (~)
9. In **Drill URL**, enter the URL used for the drill-through.
10. In the **Mapping** section, map any dimensions.
11. Add the import format expressions.
12. Click **Save**.

Setting the Import Format for Multi-Column Data Types

You can load data from multiple columns using a combination of column expressions and driver expressions as shown below:

- A Column expression is used to specify the columns to import. You can import a contiguous set of columns or a non-contiguous set of columns.

  You specify contiguous columns by using starting and ending columns. For example, `5,10` indicate columns `5` through `10`.

  You specify non-contiguous columns by using `column1 | column2 | column3`. For example, `5|7|10` indicates import columns `5`, `7` and `10`.
- A driver expression can be used to specify the dimension and target value for each column. The driver dimension is the member into which data is loaded. You can have one driver dimension per load, but multiple members can be defined for the driver dimension. The driver dimension is only applicable to the multi-column type.

  The member assignment in the data rule is similar to the multi-period assignment. You can assign the driver member in the header record, import format (member expression), or data rule. If you don't specify a header record or member expression in the import format, you can select the member(s) in the data load rule.

  For more information, see Adding an Import Expression for a Data Driver and Assigning Driver Dimension Members.
- For the multi-column type, you can use a header, multi-row header, or no header specified in the import format. These are the different formats:

> **Note:**
>
> In the import format you must have a column definition for the driver dimension defined in the data field. If your driver is "Account," then your import format must include a source column and field or start and end period for the account dimension. This must be a valid field in the file, or a valid start and end position in the file. This is not referenced by the process, but it must be valid for the process to execute.

- For a file with a header record, use the format `Driver=<Dimension Name>; Header=<Row Number>; Column=<Column Numbers>`.

  For example, when the import format definition `Driver=Account;HeaderRow=1;Column=2,4` is applied to the following sample data file:

  ```
  Entity,ACCT1,ACCT2,ACCT3
  Entity01,100,200,300
  ```

  This tells the system that row 1 is the header, and data starts in row 2. In column 2, the entity is the first value, and then the next three columns are the values for ACCT1, ACCT2 and ACCT3.

- For a file with multiple row headers (driver members don't line up with the data column), you can use a modified header expression. For example, when you export data from Essbase as in the following data file, the data column header is a new row and does not line up data.

```
"Period","Consolidation","Data Source","Currency","Intercompany","Entity","Movement","Multi-GAAP","Product","Scenario","Years","View","Account"
"FCCS_Sales","FCCS_Cost of Sales"
"Jan","FCCS_Entity Input","FCCS_Data Input","Entity Currency","FCCS_No Intercompany","01","FCCS_No Movement","FCCS_Local
GAAP","P_110","Actual","FY15","FCCS_Periodic",3108763.22,2405325.62
"Jan","FCCS_Entity Input","FCCS_Data Input","Parent Currency","FCCS_No Intercompany","01","FCCS_No Movement","FCCS_Local
GAAP","P_110","Actual","FY15","FCCS_Periodic",3108763.22,2405325.62
```

  With a multi row header, you identify header row that contains the driver information to the system. When the header row is specified as Header=2,1, this means that the header starts at row 2, and the driver members start at column 1.

  In another example, say your second header is A,B,C,D and columns are 10 to 13 for these values. If you set column expression to 10|12,13, then the B member and its values (at column 11) are skipped.

- To load multiple columns without a header record in the data file, use the import format definition `Driver = <Dimension Name>; Member = <List of Members>; Column=<Column Numbers>`. Use this method when to skip a source column in the source record.

  For example, when the import format definition `Driver=Account;member=ACCT1, ACCT2, ACCT3;Column=2,4;` is applied to the following data file:

  ```
  Entity01,100,200,300
  ```

  you tell the system to include entity as the first value, and then for the next three columns to use driver dimension members values from ACCOUNT; ACCT1, ACCT2 and ACCT3.

- For data source application types, you assign the driver dimension, but the system assigns row 1 as the header. You can load multiple columns by selecting the columns from the Add Import Format Mapping Expression screen.

Adding an Import Expression for a Data Driver

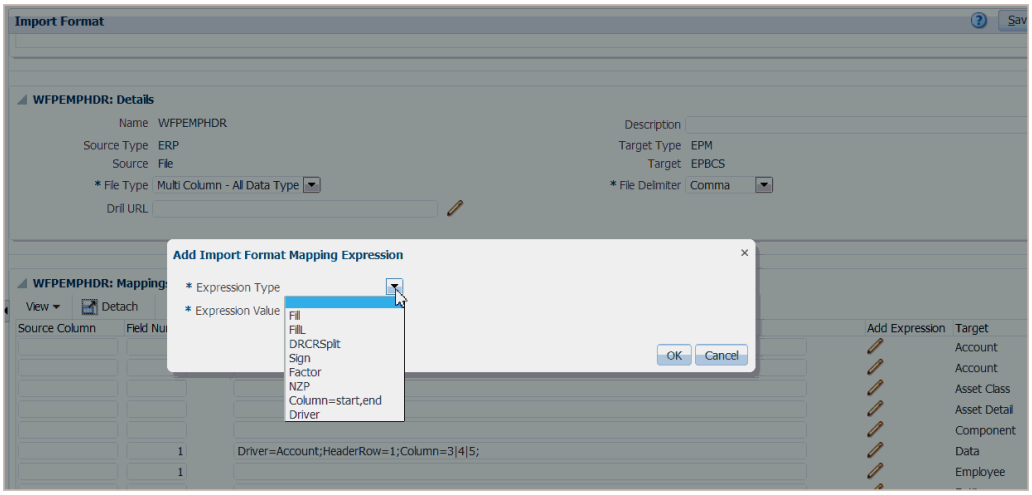
To add an import expression for non-numeric data:

1. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
2. In **Import Format**, from the **Import Format Mapping** grid, select the data source column.
3. In **Expression**, specify the import expression.

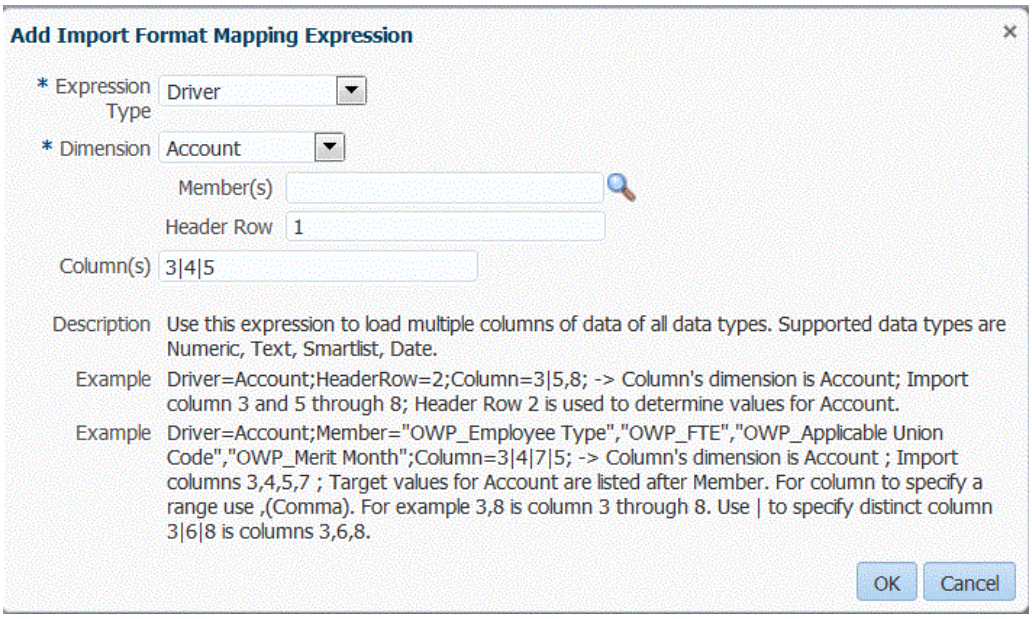
4. **Optional:** You can also specify the expression type and value in the **Add Expression** field.

   a. Click .

   b. From the **Expression Type** drop-down, select **Driver**.

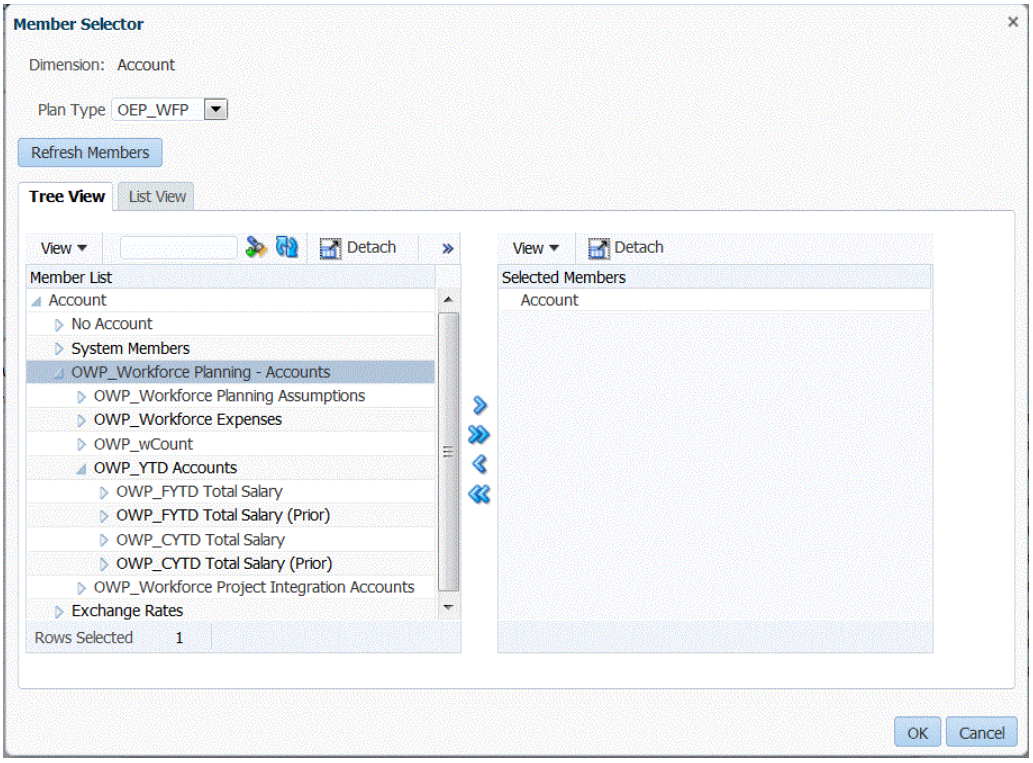


   c. In **Add Import Format Mapping Expression** when entering a driver, enter the values for the expression and click **OK**.



   In **Dimension**, select the dimension to which the expression applies.

In **Member(s)**, select the dimension members. You can also browse and select members on the Member Selector screen.

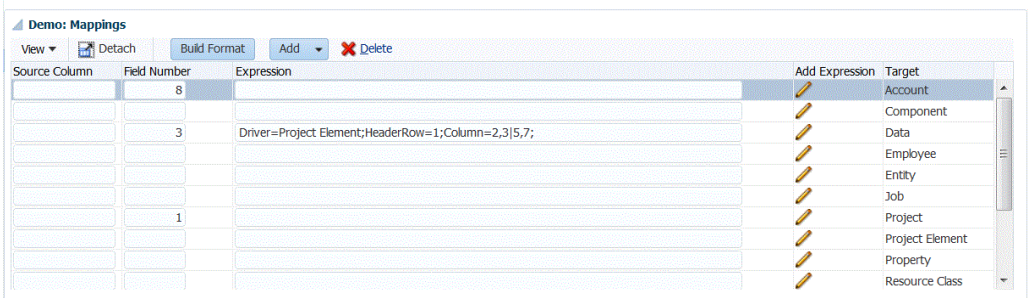


In **Header row**, select the header row of the file for the expression.

In **Column(s)**, specify the data columns in the expression. To use a range of DATA columns, specify columns using a comma (,). To use non-contiguous DATA columns, specify columns using the pipe (|) delimiter.

d. Click **OK**.

In the following example, the "Project Element" is the driver member of the first header row, and includes contiguous rows "2,3", and non-contiguous rows "5,7".



Assigning Driver Dimension Members

A driver dimension member can be assigned in the data rule (as well as the header record or import format (member expression)). This tab is only displayed in the data load rule when the members are not specified in the import format, or if the header row is not specified in the import format.

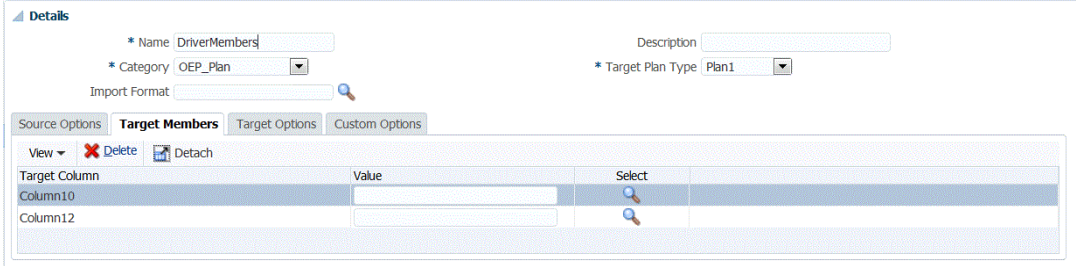
1. On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.
2. In the **Data Load** summary area, click **Add** to add a new date load rule, or change the location name from the POV bar, and select the data load rule.

For information on adding a data load rule, see Defining Data Load Rule Details for a File-Based Source System.

3. Select the **Target Member** tab.

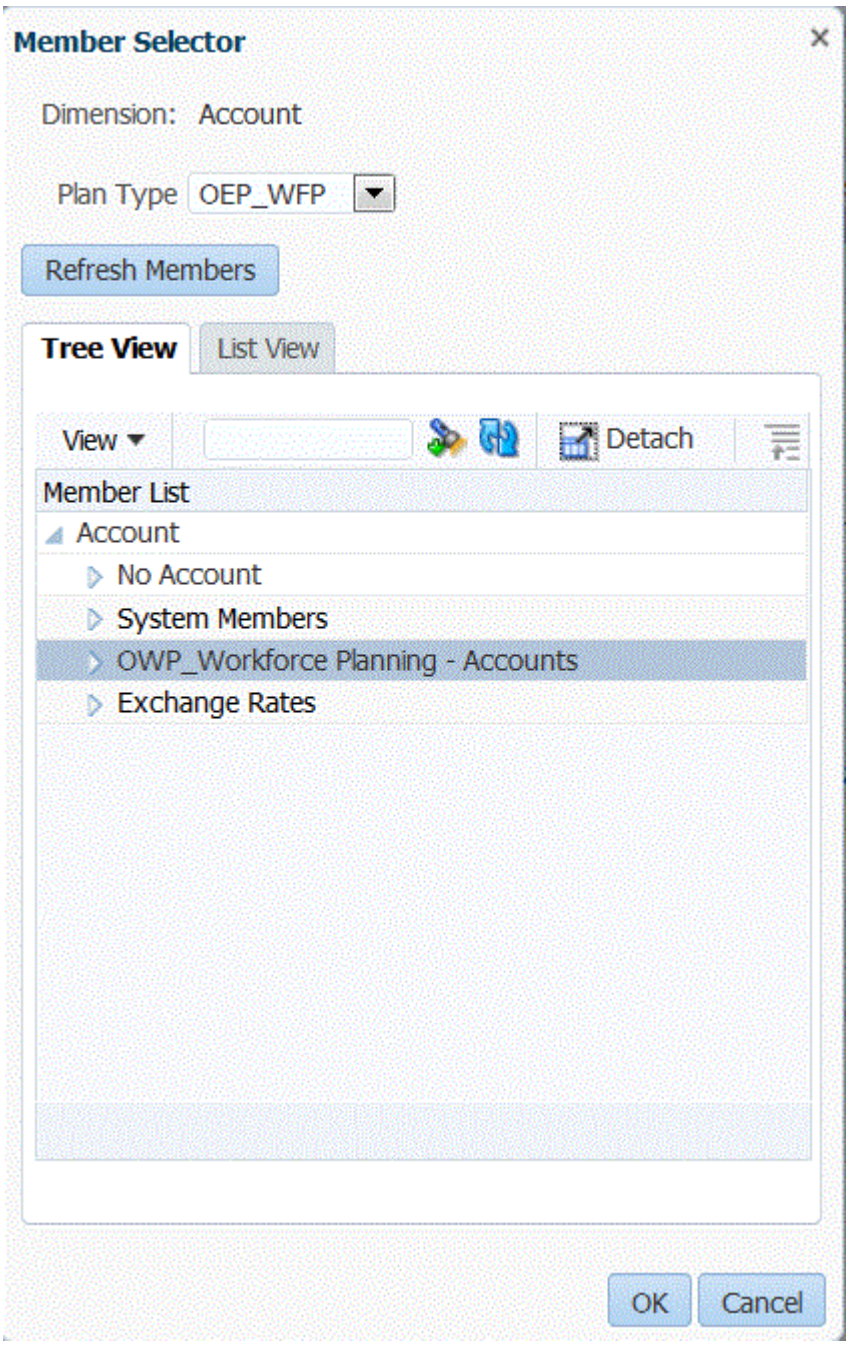
   You see this tab only when the driver dimension members are not defined in the import format.

   The columns to which you can select driver dimension members are available for edit.



4. In the **Value** field, enter the name of the driver dimension member to use in the header record or member expression.

5. **Optional**: To search on driver dimension members, click the **Search** button and navigate to the driver dimension on the **Member Selection** screen.



6. Click **Save**.

Loading Multi-Column Numeric Data

Data Management enables you to load data for multiple dimension members of a selected dimension in a single row of data. The definition of the members to load can be included in a header record in the load file, or in the import format definition.

The data file can be a:

- text data file with multi-columns of numeric data with no headers to contiguous periods by executing a data load rule with start and end periods.

- text data file with multiple columns of numeric data to a period or any other dimension as a column header by specifying the:
  - column header in the data file
  - column header member list in the import format
  - column header member in the data rule
- Excel data file with multiple columns of numeric data to a period as a column header. The Excel file may or may not contain a header.

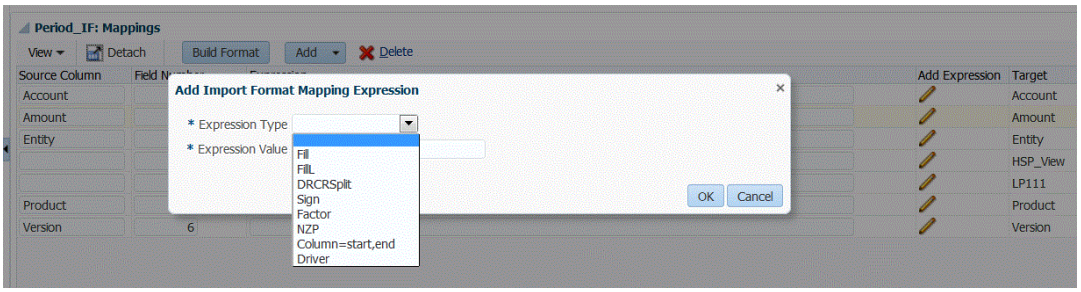
To load multi-column numeric data:

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**, select **File** for the source.
6. From **File Type** drop-down, select **Multi Column - Numeric Data** as the format of the file.
7. From the **File Delimiter** drop-down, select a type of delimiter.

   Available delimiter symbols:
   - comma (,)
   - exclamation (!)
   - semicolon (;)
   - colon (:)
   - pipe (|)
   - tab
   - tilde (~)
8. In **Target**, select **EPM** and select any EPM application as a target.
9. **Optional**: In **Drill URL**, enter the URL used for the drill-through.
10. In the **Mapping** section, select the **Amount** dimensions and click .
11. From the **Expression Type** drop-down, select **Column=start,end**.

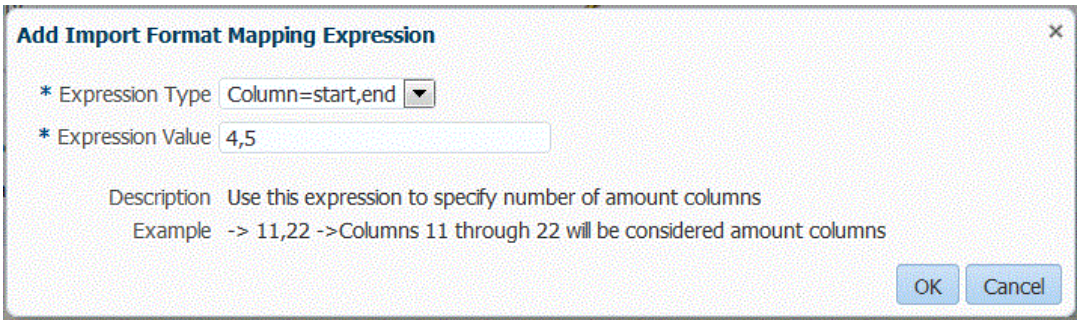


12. In **Expression value**, specify the columns to import.

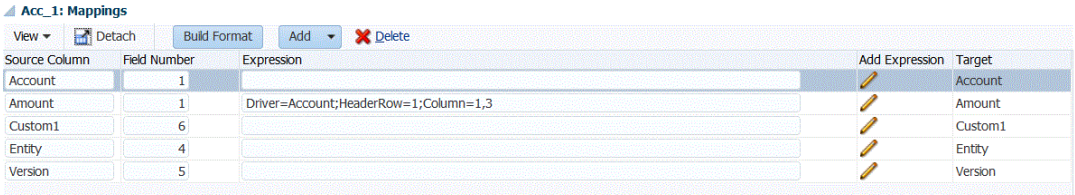
You can import a contiguous set of columns or a non-contiguous set of columns. To use a range of Amount (data) columns, specify columns using a comma (,). To use non-contiguous amount columns, specify columns using the pipe (|) delimiter.

You specify contiguous columns by using starting and ending columns. For example, `5,10` indicates columns `5` through `10`.

You specify non-contiguous columns by using `column1 | column2 | column3`. For example, `5|7|10` indicates import columns `5`, `7`, and `10`.



13. **Optional:** Specify any drivers and header rows of the file for the expression.
14. Click **OK**.



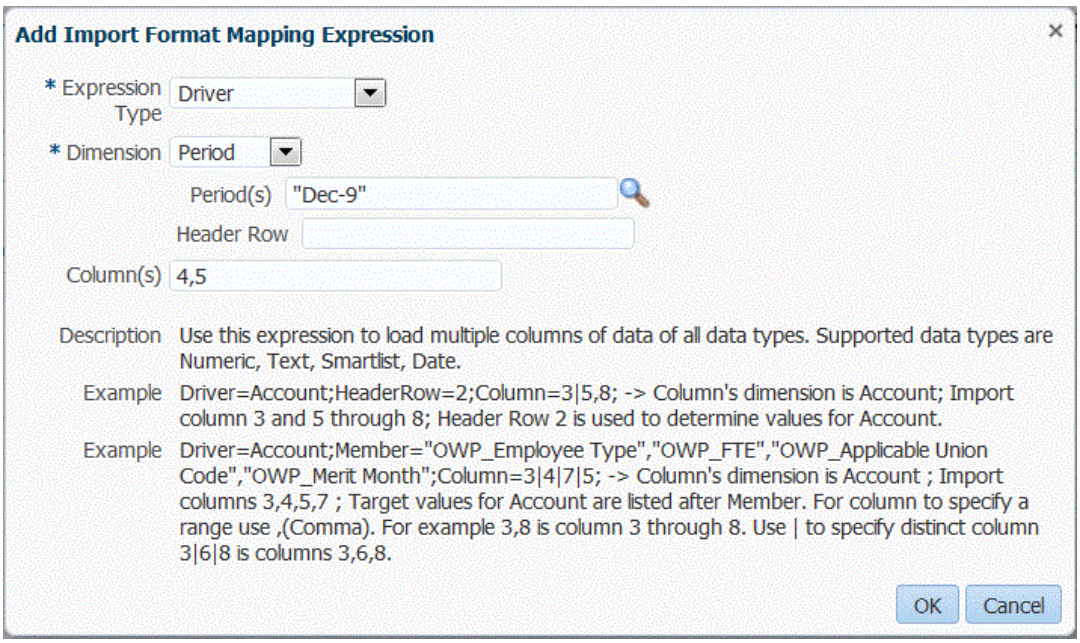
15. Click **Save**.

To load a text data file with multiple columns of numeric data to a period:

1. Complete steps 1-12 in the To load multi-column numeric data.
2. From the **Expression Type** drop-down, select **Driver**.
3. On the **Add Import Format Mapping Expression**, in **Dimension**, leave the default driver dimension **Period**.
4. In **Period(s)**, select the **period driver dimension member** to load and click **OK**.

   Specify the period using quotes. For example, you might enter: **"Dec-9"**.

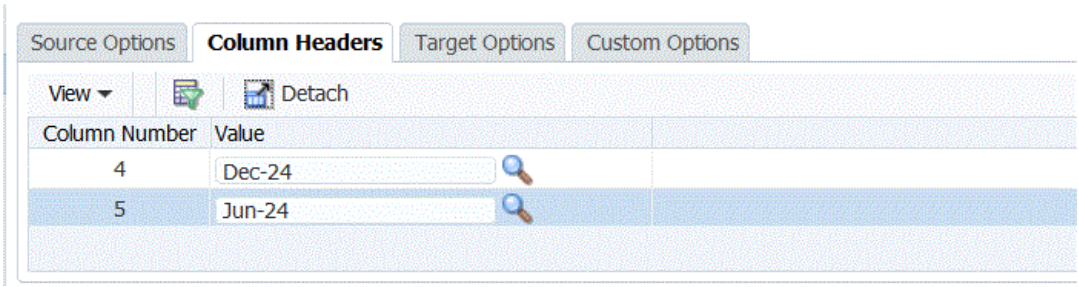
   If you do not specify a period driver member dimension on the Add Import Format Mapping Expression, you can specify period members in the data load rule. See steps 5-11.



5. On the **Workflow** tab, under **Data Load**, select **Data Load Rule**.
6. On the **Data Load Rule** screen, select the POV to use for the data load rule.
7. Add or select the data load rule to use for the multi-column numeric data load.
8. In **Import Format**, select the import format set up for the multi-column numeric load.
9. **Optional**: From the **Source Options** tab, specify any source options.
10. Select the **Column Headers** tab, and specify the start date and end date of the numeric columns.

    You are prompted to add the start and end dates on the Column Headers tab when:

    - a text data file has no header in the header record of the data file, in the import format, or data rule.
    - you are using an Excel file in all cases. If header information is specified in the Excel file, only periods that fall within the start and end period range are processed.



11. Save and execute the data load rule.

Using Workflow Modes

By default, the data load process in Data Management is designed with a well-defined process flow that provides a full audit of the data load process and the ability to drill down and view data in Workbench. However, a full data flow may contribute to lengthy processing times due to archiving of data for audit purposes. Workflow mode options provide scalable solutions when

processing large volumes of data, or when an audit is not required, and performance is a key requirement.

The three workflow mode options are:

- Full
- Full (no archive)
- Simple

The Full option is the default flow for loading data. Data is loaded in the standard way between the staging tables, data can be viewed in Workbench, and drill down is supported.

The Full (no archive) option loads data in the same manner as the full mode, but data is deleted from the staging tables at the end of the data load process. Data can be viewed in the Workbench only after the import step. No drill down is available with the full (no archive) mode. This method is useful when you want to review and validate the data during load process but auditing or drill down is not a requirement. This method does not provide performance improvement but limits space usage since data is not persisted for future reference.

The Simple option limits data movement between the staging tables. No drill down is available, and the data cannot be viewed in the Workbench. This method provides performance improvement and is useful when you do not require auditing or drill down.

> **Note:**
>
> You can use import expression mapping or traditional dimension mapping for any of the Workflow modes.

> **Note:**
>
> If you use the Simple Workflow mode to load data (see Using Workflow Modes and you run a check rule with target intersections, then include a check entity group (see Creating Check Entity Groups). Otherwise the check rule fails. In addition, other than the Full workflow mode, no check reports are not available after the export step has completed.

Selecting the Workflow Mode

The Workflow Mode option is only available at the target application option level. The option to select the mode is not available at the data rule level. If you want to use full and simple workflow modes for the same application but for different data sets, then register the same application multiple times and then select the different workflow modes.

To select the Workflow mode:

1. On the **Setup** tab, under **Register**, select **Target Application**.
2. In the **Target Application** summary grid, select the target application.
3. After defining the application details in **Application Detail**, select the **Application Options** tab.
4. From **Workflow**, select the mode option and click **Save**.

Defining Locations

A location is the level at which a data load is executed in Data Management. You define locations to specify where to load the data. 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 Data Management 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 **Name**, enter the location name.
4. From **Import Format**, enter the import format.

   The import format describes the source file structure, and it is executed during the source file import step. Data Management supports file-based imports for those users who do not have direct connections to their source data but do have source data residing in a text file. A corresponding import format must exist before it can be used with a location.

   Additionally:

   - The source system is automatically populated based on the import format.
   - The Source field displays the source application based on the import format.

   You can also click and select an import format.

   For more information about import formats, see Defining Import Formats for File-Based Mappings.
5. In **Target Application**, specify the target application associated with this location.

   You can also click to search for a target application.
6. In **Functional Currency**, specify the currency of the location.

> **Note:**
>
> For Financial Consolidation and Close and Tax Reporting customers: To load data to actual currency rather than entity currency when the currency is fixed, set the currency in the Functional Currency field in the Location option. You can also add a Currency row in the import format and map it. See Defining the Import Format.
>
> Financial Consolidation and Close can also specify Parent Input, Contribution Input, and Translated Currency Input in this field to create and post journals to different currencies other than the entity currency.

7. In **Parent Location**, enter the parent assigned to the location.

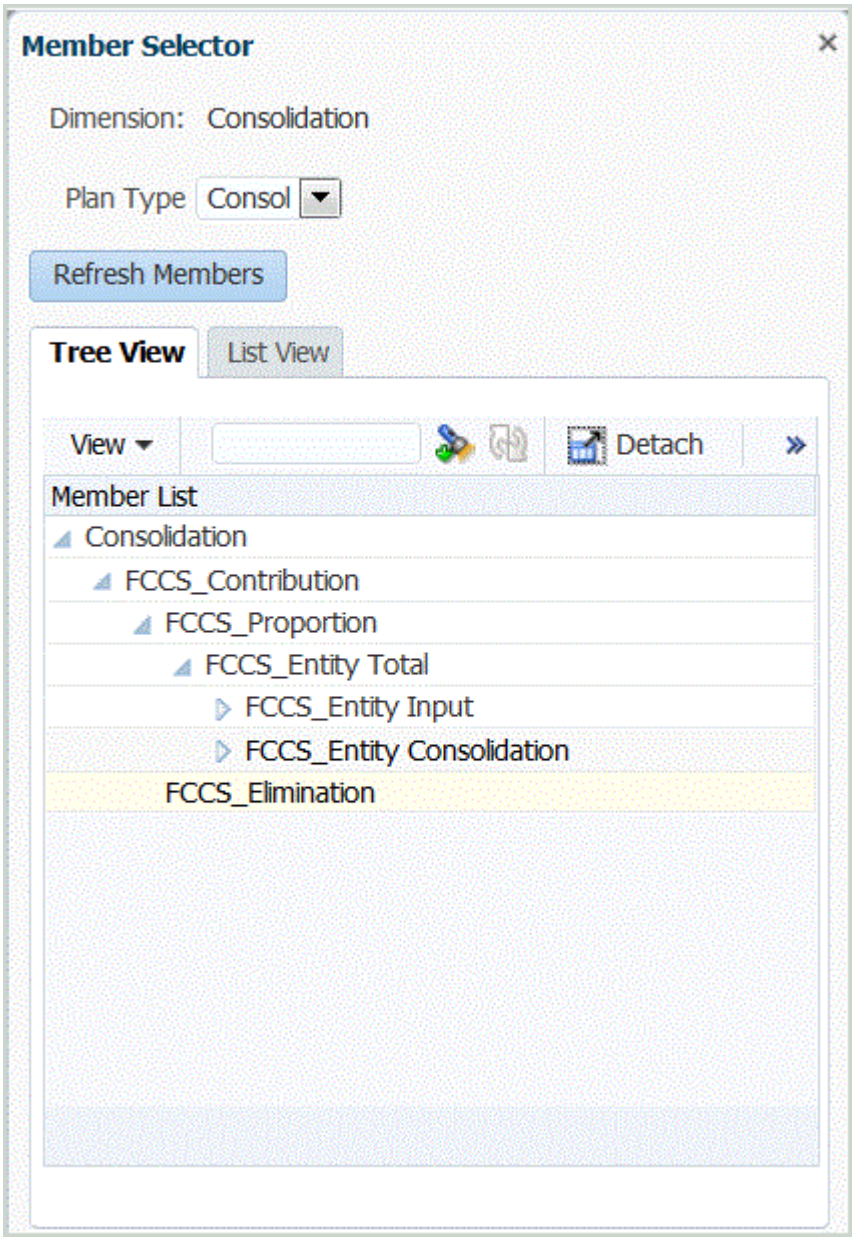
   Parent mappings are used to share mappings with other locations. Enter mappings at the parent location, and the related locations can use the same mappings. Multiple locations can share a parent. This feature is useful when multiple locations use one chart of accounts. Changes to a child or parent mapping table apply to all child and parent locations.

8. **Optional for an Financial Consolidation and Close consolidation dimension**: In **Consolidation Value**, you can load the consolidation dimension associated with the FCCS_Entity Input entity, or if you are using a multi-currency application, you can load different override rates or amounts to different source members.
   The Consolidation dimension allows you to report on details used to perform the various stages of the consolidation process including:

   - FCCS_Entity Input—Amount represents the input for base entities. By way of journals, it is also available to be added for parent entities.
   - FCCS_Amount Override—Used for amount override loads.
   - FCCS_Rate Override - Used for exchange rates loads.

   By default, the consolidation dimension value is associated with the FCCS_Entity Input entity.

   A selected data load can load to one consolidation dimension value at a time.



> **Note:**
>
> For Tax Reporting applications, a rates cube does not have a consolidation dimension. For this reason, leave this field blank so that you can load exchange rates for Tax Reporting applications.

9. **Optional**: In **Logic Account Group**, specify the logic account group to assign to the location.

   A logic group contains 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.

10. **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. Data Management check reports retrieve values directly from the target system, Data Management source data, or Data Management converted data.

The list of values for a check entity group is automatically filtered based on the Target Application under which it was created.

11. **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.

12. Click **Save**.

13. **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 Data Management screens, such as Data Load.

> **Tip:**
>
> To filter by the location name, ensure that the filter row is displayed above the column headers. (Click 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

> **Note:**
>
> Starting with the September (23.09) update, the user interface pages for Period Mapping will no longer be available in Data Management, but will be available in Data Integration. Data Integration is available now from the Data Exchange card from the home screen in the Oracle Fusion Cloud Enterprise Performance Management Business Process. Users will be able access the Period Mapping features in the current Cloud EPM update from the **Data Integration** user interface by selecting the **Actions** drop down, and then **Period Mapping**. For more information, see Managing Period Mapping in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

You can use various kinds of calendars (for example, monthly, weekly, or daily) based on your business and statutory requirements. In your Cloud EPM application, you can also use different calendars, based on your application requirements (for example, different levels of periods). Because Data Management extracts the ERP source system data to the target EPM application, it establishes the mapping relationship by defining a period mapping between the source system periods and the target Cloud EPM application periods.

Before you can define data rules, define the period mappings. Period mapping 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.

> **Note:**
>
> Source mappings are also used to set up Oracle General Ledger adjustment periods. For more information, see Processing Oracle General Ledger Adjustment Periods.

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 4-7 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 4-8 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
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 4-9 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

Table 4-9 (Cont.) 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
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 derived from a weekly calendar. This mapping is performed on the Application Mapping tab.

Table 4-10 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.

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

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 Data Management 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 Data Management periods cannot be created on this tab.

> **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**.
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 System**, 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. **Optional**: Enter a description for the mapping.
9. Click **Save**.
1. Select **Source Mapping**.
2. In **Source System**, select the source system.
3. Click **Add**.
4. In **Mapping Type**, select **Budget**.
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 General Ledger 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

> **Note:**
>
> Starting with the September (23.09) update, the user interface pages for Category Mapping will no longer be available in Data Management, but will be available in Data Integration. Data Integration is available now from the Data Exchange card from the home screen in the Oracle Fusion Cloud Enterprise Performance Management Business Process. Users will be able access the Category Mapping features in the current Cloud EPM update from the **Data Integration** user interface by selecting the **Actions** drop down, and then **Category Mapping**. For more information, see: Managing Category Mappings in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

You define category mappings for categorizing and mapping source system data to a target Scenario dimension member. For example, in a Planning application, the same source system data is stored using the Scenario dimension member "Current". In Data Management, you can create category mapping for the scenario dimension member. Ensure that the target category value specified does exist in Planning under the Scenario Dimension.

Global Mappings

You can define one global mapping to map various Scenario dimensions to the individual mapping.

The global category mapping lets you define mappings that cross multiple applications. For example, you may have a case where a source category of an actual maps to a target of an actual in most cases. But you may have a case where you have a target application where the actual maps to current. In this case, it provides the ability to override the global mapping on an application basis.

> **Note:**
>
> Avoid using special characters in names or spaces if you plan to use batch scripts. Some characters may cause issues when run from a command line.

To define a global category mapping:

1. On the **Setup** tab, and then 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.

   For example, the target category is the Scenario dimension in the Planning application.
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 a mapping, select the mapping, and then make changes as necessary. Then, click **Save**.
   - To delete a mapping, click **Delete**.

Loading Data

Data Management is a solution that allows business analysts to develop standardized financial data management processes and validate data from any source system—all while reducing costs and complexity. Data Management puts the finance user in total control of the integration process to define source data, create mapping rules to translate data into the required target format, and to execute and manage the periodic data loading process.

Creating Member Mappings

You use member mappings to identify how source dimensionality translates to target dimensionality based on source values. Member mappings are referenced during the data load, enabling Data Management 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 a single target value.
- **In**—Enables a list of non-sequential source values to be mapped to one target value.
- **Multi-Dimension**—Enables you to define member mapping based on multiple source column values.
- **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.

Table 4-11 How Segment Members Map to EPM Members

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 values. See Using Special Characters in the Source Value Expression for Like Mappings and Using Special Characters in the Target Value Expression.

> **Note:**
>
> Target values for multi-dimensional mapping must be an explicit member name. Wildcard or special characters are not supported

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.

   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.
   - **Between**—The range of source values is replaced with a single target value. For example, a range from "001" to "010" is replaced as one value: "999". See Creating Mappings Using the Between Method.
   - **In**—In mappings enable a list of non-sequential 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, if the source value combination is Entity-001,002 Department-ABC, XYZ Account-1222, 1333, then 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.

   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 hundred, insert new rules between existing ones. For example, if rules are numbered 10, 20, and 30, add a rule that starts with 25 so that you do not need to rename other rules.

   > **Note:**
   >
   > Avoid using special characters in names or spaces if you plan to use batch scripts. Some characters may cause issues when run from a command line.

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.
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.
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 mappings 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 In Method

In mappings enable a list of non-sequential 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.
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 mappings 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 Between Method

Between mappings enable you to enter a range of source values, separated with a comma. The range of source values is replaced with a single 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.

   Separate source values with a comma, for example, specify `100,199`. Between mappings do not support special characters, such as an asterisk.
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.
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 mappings 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 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. Multi-dimension mappings derive the target values based on the combination of source values. In addition, Lookup dimensions can be added to Target Application registration. These dimensions contain source dimensions that 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.

> **Note:**
>
> When using multi-dimensional mapping, the source needs to be less than or equal to 75 characters.

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. In **Target Value**, specify the target dimension member.

You can also click to select a target value.

The target values for multi-dimensional mapping must be an explicit member name. Wildcard or special characters are not supported

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.
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 mappings 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.

Special characters include:

- 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. 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 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.

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.
6. Select the **Target Value** or click to select a member.
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 mappings 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 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.
- **<1>, <2>, <3>, <4>, <5>**

  Processes rows that have concatenated values and extracts the corresponding value. 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).

  The system only reads the expression where the source member is ‘ ‘ as <BLANK>. In this case, single quotes surround a single space character. If the source has NULL, which is shown like`,,` or as a space surrounded by `" "`, then the system does not interpret the NULL as a <BLANK>. Only the ‘<space char> expression is interpreted.

> **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.

Table 4-12 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, Data Management 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 Data Management replaces any source value with the target value of 1000.
*	Data Load	*	*	`1000` returns `1000` `WXYZ` returns `WXYZ`	In this example, Data Management 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.

Table 4-12 (Cont.) Examples of Expressions Using Special Characters

Special Character(s) Used	Mapping Type	Source Value	Target Value	Result	Notes
*	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`	
<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.

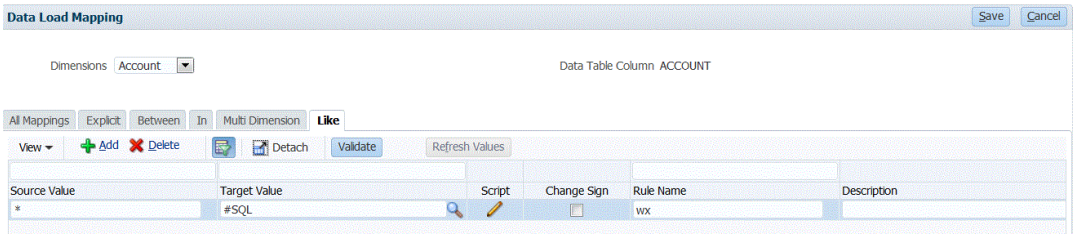
Conditional Mapping using a Mapping Script

With conditional mapping, source members are mapped to script expressions rather than to hard-coded target members. Conditional mappings are valid only for rule-based mapping (Between, In, and Like). You can activate conditional mapping by placing `#SQL` in the Target value column for a SQL script. The row that uses a script has a target value of #SQL. Then the next row has the <!SCRIPT> delimiter and the actual script, followed by <!SCRIPT>. Conditional mapping, in conjunction with dimension processing order, enables a mapping based on the results of dimension mappings. That is, dimension mappings that have already been processed. See Using Mapping Scripts.

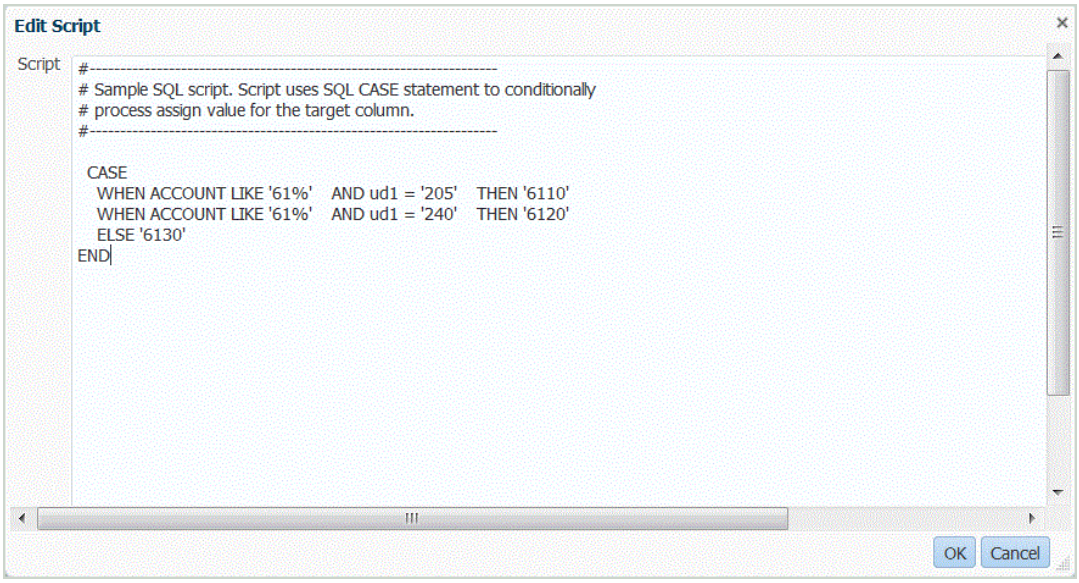
> **Note:**
>
> In Data Management, Jython script is not supported for conditional mapping (`#SCRIPT` cannot be used in the Target value column.)

To apply conditional 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. Select either the **Between**, **In**, or **Like** tab.
5. Enter source values in the **Source Value** range.
6. In **Target Value**, enter **#SQL**.
   The pencil icon is enabled.



7. Click the pencil icon.
8. On the **Edit Script** screen, specify your SQL script.
   This sample script uses the SQL Cast statement to conditionally process assigned values for the target column.



   Data Management does not perform an error check or validate the script. You need to test the script on your data files in a test environment and verify the results.
9. In **Rule Name**, specify the data load rule to use with the mapping script.
10. Click **Save**.

Using Mapping Scripts

This section explains how to use mapping scripts in Data Management.

Creating Mapping Scripts

For Like mappings, you can create mapping scripts to designate conditional mapping. This type of mapping enables you to specify source members mapped to script expressions rather than to hard-coded target members. Target values are assigned in the script value. You activate the mapping script by placing `#SQL` in the Target value field for a SQL script. (The row that uses a script has target value of #SQL). Then the next row has the <!SCRIPT> delimiter and the actual script, followed by <!SCRIPT>. Mapping scripts, used in conjunction with dimension processing order, enables a mapping that is based on the results of dimension mappings. That is, dimension mappings that have already been processed. See Using 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** tab.

   Mapping scripts are unavailable for "Explicit" and "Multi-dimension" mapping types.
4. Select the **Source Value**.
5. In **Target Value**, enter **#SQL** to designate a SQL script.

   For SQL based mappings, Data Management specifies the special value #SQL to the "Target Value." For this reason, this field cannot be used to specify a value of "IGNORE." To flag a row, use either VALID_FLAG = "Y" (row if valid), VALID_FLAG = "N" (row if invalid), or VALID_FLAG = "I" (row is ignored based on the user defined criteria).

   For example, if you want to map null entries so that they are ignored, specify the data table column for the dimension and then specify VALID_FLAG = "I." In the following example UD3 identifies the data table column for the product dimension.

   Edit Script

   Script

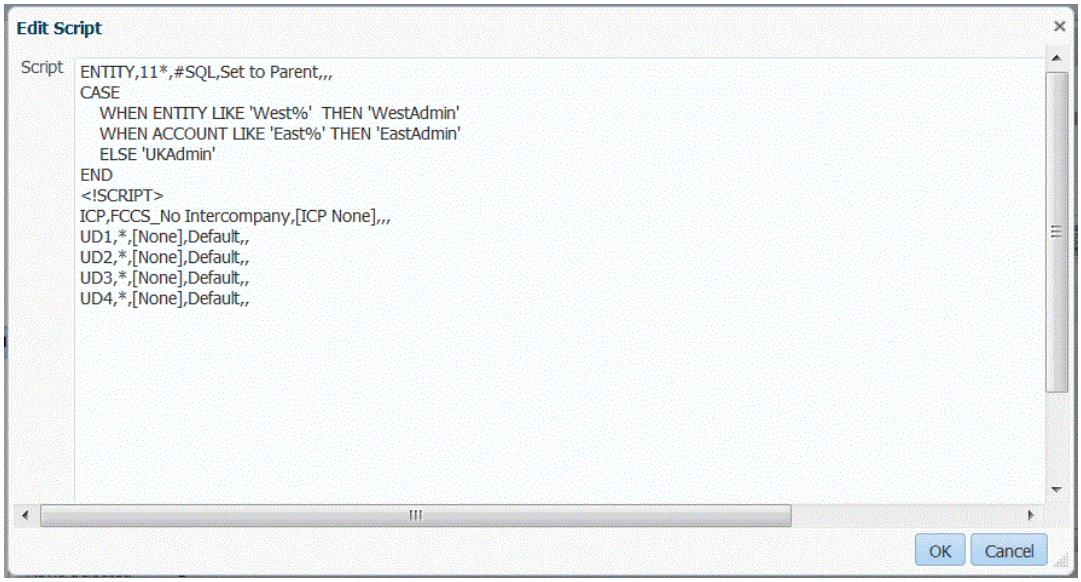
   ```
   CASE
     WHEN UD3 is NULL then 'IGNORE'
      ELSE 'PR_'UD3
   END

   ,VALID_FLAG =
    CASE
      WHEN UD3 is NULL THEN 'I'
      ELSE 'Y'
    END
   ```

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**.

   The example below shows how you might specify an SQL script as a target value.



Using Special Characters in the Target Value Expression

You can use 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
```

Format Mask Mapping for Target Values

Data Management 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 4-13 #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 Data Management 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 4-14 #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 can 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 can 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 a Prefix or Suffix

You can 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 then 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 the segment in the target based on the source.

> **Note:**
>
> If any other string operation is desired, 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.
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 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 for the target value, 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 you 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.

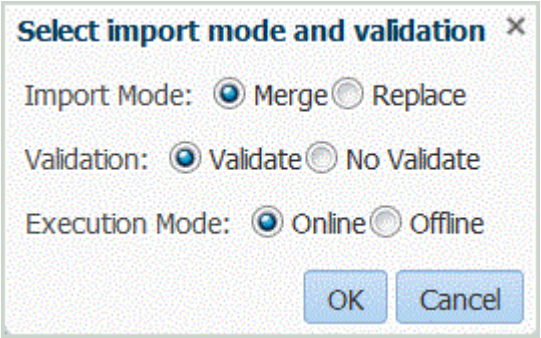
You can also import mappings from Excel or download an Excel template.

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
   - Download Excel Template

   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. For a Planning application,

     For a Planning application, Replace first clears data for the Year, Period, Scenario, Version, and Entity dimensions that you are loading, and then replaces it with values in the existing file.
6. From **Validate**, select to validate the member mappings.

   Validate ensures that all data in the imported General Ledger has a corresponding mapping.
7. In **Execution Mode**, select the mode for executing the import:
   - Online—Processes the import immediately.

- Offline—Runs the import in the background.

8. Click **OK**.

In the member mapping import files, Data Management 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.

Table 4-15 Mapping Source Types

Column	Mapping
100, Cash, 100, 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 then export it to the file. You can then modify the file by applying 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 mapping 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 Oracle Hyperion Financial Management dimensions directly from the target application to which you are connecting.

You must upload the Excel template to the Data Management server, and then pick the excel file as the file to load in the data load rule, or when prompted by the system if the file name is

left blank. The system determines if the file being processed is an Excel file, and then reads the required formatting to load the file.

When working with a mapping template in Excel:

- Do not have any blank lines in the map template.
- You can insert lines in the template, but you must keep new lines in the designated area.
- Each template supports a single dimension.

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 **Location** in **cell B1**, **Location ID** in cell **B2**, and select the dimension from the **Dimension** drop-down in cell **B3**.
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 range evaluates all values from 10000 to 19999 inclusive of both start and end values.)

        In this case, Data Management 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 are all accounts 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.

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.

> **Note:**
>
> If you are adding an Explicit mapping, the rule name must equal the source value.

	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.

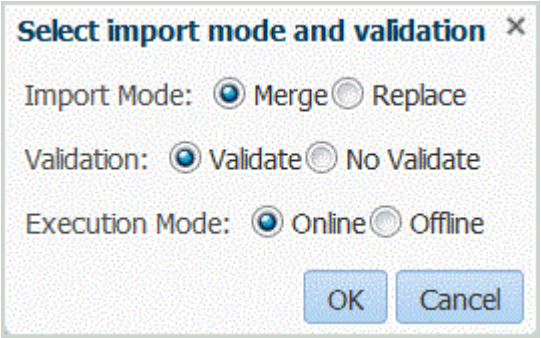
To import an Excel mapping:

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**.

> **Note:**
>
> If you are importing an Excel 2010 or 2016 file that has already been exported, open the file before importing it. This step launches macros in the Excel file that are required for the import process.

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 General Ledger 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: "System Generated Mappings."

    If you use Explicit mapping, the data rule name must equal the source value.

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 XLS file as desired.

   When you export to Excel, you cannot re-import in that format.

When the file has been exported, Data Management 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

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 allow you to create an integration definition that can be reused for each period. They use a point of view specified by a user for a period and category. Data load rules are defined for locations that you have set up and are specific to locations.

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 consist of four tabs: Source Options, Target Members (for file-based data load rules in which a driver is specified), Target Options, and Custom Options)

  See Working with Target Options (by location) and Registering Target Applications.

  See Creating Custom Options.

> **Note:**
>
> Before you create data load rules, ensure that your source system data does not include special characters in the target application.
>
> Also avoid using special characters in names or spaces if you plan to use batch scripts. Some of the characters may cause issues when run from a command line.

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 Data Management setup. See Defining Category Mappings.
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 Data Management to determine the Source General Ledger Periods mapped to each Data Management period included in a Data Rule execution.
   - Explicit—The Data Rule uses the Explicit period mappings defined in Data Management to determine the source General Ledger Periods mapped to each Data Management Period included in a Data Rule execution. Explicit period mappings enable support of additional General Ledger data sources where periods are not defined by start and end dates.
6. **Optional**: Enter a description.

7. Select the source options.
8. From **Target Plan Type**, select the plan type of the target system.
   Data Management currently supports data load that have up to six plan types. Planning can support three custom plan types and up to four Planning Modules applications (Workforce, Capex, Project, Financials). You can enable any combination of these applications. When you create an Planning Modules application and if you create more than two custom plan types, then you cannot support a data load to all four applications.
9. For Planning and Oracle Essbase, select the **Source Parameters** tab, and specify any parameters.

   See Defining Source Parameters for Planning and Essbase.

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. **Optional**: If you are working with a multi-column data load, select the **Column Headers** tab, and specify the start date and end date of the numeric columns.

   See Loading Multi-Column Numeric Data.
5. **Optional**: To work with target options, select the **Target Options** tab, and select any options.

   See the following:

   a. For Planning application options, see Defining Application Options for Planning.
   b. For Financial Consolidation and Close, application options, see Defining Application Options for Financial Consolidation and Close.
6. **Optional**: You can specify free form text or a value by selecting **Custom Options** and specifying the text you want to associate with the data load rule.

   See Creating Custom Options.
7. 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 then run the rule for a single period. To load multiple periods, create a file for each period, and then 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 Data Management setup, such as "Actual." See Defining Category Mappings.
3. **Optional**: In **Description**, specify a description of the data load rule.
4. **Optional**: If the target system is a Planning application, from the **Target Plan Type** drop-down, select the plan type of the target system.

Data Management currently supports data loads that have up to six plan types. Planning can support three custom plan types and up to four Planning Modules applications (Workforce, Capex, Project, Financials). You can enable any combination of these applications. When you create an Planning Modules application and you create more than two custom plan types, then you cannot support a data load to all four applications.

If the target system is Financial Consolidation and Close, from the **Target Cube** drop-down, select the data load cube type.

Available options:

- Consol
- Rates

5. **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 periods 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 by the explicit mapping.
6. **Optional**: Enter a description.
7. If necessary, select the **Source Options** and add or change any dimensional data.
8. Click **Save**.

Defining Source Parameters for Planning and Essbase

In data synchronization, when Planning and Oracle Essbase are the source systems, you can specify additional source parameters.

> **Note:**
>
> Financial Consolidation and Close note that Account dimension cannot be concatenated with other dimensions as part of the import.

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 a Planning and Essbase source, and then click **Add**.
3. Select the **Source Parameters** tab.
4. (Planning only): In **Data Extract Option**, select the type of member data to extract.

   Members can be extracted depending on how they have been flagged for calculation. For a member flagged as "stored," calculated data values are stored with the member in the

database after calculation. For a member tagged as "dynamic calc," the member's data values are calculated upon retrieval.

> **Note:**
>
> The former name of Data Extract option was "Extract Dynamic Calculated Data. "

Available options:

- All Data—Extracts stored values and dynamically calculated values for both the Dense and Spare dimension.

  The All Data option is always shown, but only work in the following cases:

  – ASO Reporting applications

  – Planning and Planning modules with Hybrid enabled

- Stored and Dynamic Calculated Data—Extracts stored dynamic calculated values for the Dense dimension only and not Spare dimensions.
- Stored Data Only—Extracts stored data only. Dynamically calculated values are excluded in this type of extract.

> **Note:**
>
> If you set the **Extract Dynamic Calculated Data** option on the Data Load Rule screen to "Yes," and a leaf level member's (Level 0) Data Storage is set to "Dynamic," then the data is not picked up by the extraction process. To pick up the data, set the member's Data Storage to something besides "Dynamic," to include the value in the selection from the source application.

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 sixteen.

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, sixteen positions for numeric data are supported, including decimal positions. If both the Data Precision and the Data Number of Decimal options are specified, the Data Precision option is ignored.

7. Click **Save**.

Managing Data Load Rules

You can perform the following tasks:

- Edit data load rules—See Editing Data Load Rules.
- Run data load rules—See Running Data Load Rules.
- Delete data load rules—See Deleting Data Load Rules.
- View data load rules before executing them—See Using the Data Load Workbench.
- Schedule data load rules—Scheduling Data Load Rules
- Check the data rule process details—See Viewing Process Details.

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

Run the data load rule to load updates and push the data into the target application. 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.

When a data load rule is run, Data Management loads the data, and creates a drill region (optional), which enables users to drill through to the source data.

> **Note:**
>
> In Financial Consolidation and Close for YTD data loads, data is stored in Periodic view. In this case, the user must select this option so that a "pre-processing" is done to convert the YTD data from the file to periodic data for loading purpose.

When you run a data load rule, you have several options:

> **Note:**
>
> When a data load rule is run for multiple periods, the export step occurs only once for all periods.

- **Import from Source**—Data Management imports the data from the source system, performs the necessary transformations, and exports the data to the Data Management 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.

  > **Note:**
  >
  > Oracle E-Business Suite and source imports require a full refresh of data load rules. The refresh only needs to be done once per chart of accounts.

- **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.

Scheduling Data Load Rules

The execution and scheduling of Data Management and Data Integration jobs can only be performed now using the EPM Platform Job Scheduler console in the 24.09 update and later.

The old scheduling functionality in Data Management has been deprecated.

You must use the "Migrate Schedules to Platform Jobs Scheduler" utility to migrate any existing scheduled jobs (formerly run in Data Management) to the EPM Platform Job Scheduler console.

For more information about scheduling Data Management and Data Integration jobs, see Scheduling Jobs in *Administering Data Integration for Oracle Enterprise Performance Management Cloud.*

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Management, see Migrating Schedules to EPM Platform Job Scheduler.

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Integration, see Migrating Schedules to EPM Platform Job Scheduler in *Administering Data Integration for Oracle Enterprise Performance Management Cloud.*

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.

Deleting Data Load Rules

You can delete data load rules created in Data Management. You cannot delete data load rules when 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 Planning application options specific to a location. For example, using the Target Options feature, you can specify different data protection values for each location.

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.
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 Data Management scripts.

Additionally, if you use Oracle Data Relationship Management to export dimensions and hierarchies from ERP systems to Data Relationship Management, or import data load mapping from Data Relationship Management to Data Management, you can specify Data Relationship Management import and export profiles.

Data Relationship Management integration is enabled on the Target Application screen. See Registering Target Applications for more information.

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 Data Management.

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

The Data Load Workbench consists of four sections:

- Workflow Grid
- POV Bar—See Using the POV Bar.
- Status
- Data Grid

Workflow Grid

When you select a Workflow step, the following occurs:

Data Management 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.

Processing Data

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, Data Management 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.
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

Data Management 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:

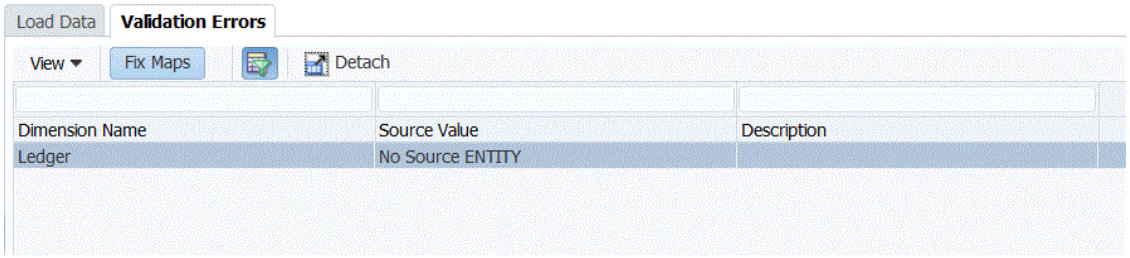
1. On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.
2. Select **Validate**.

Validation with No Mapping Errors

When validation is successful, the orange Validate fish is displayed in the header of the Data Management 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 (consequently, 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 rows with that source value. For example, if the top region displays a value of Entity dimension with Source Value 01, then the bottom region should show all rows where ENTITY = ‘01.’
3. Click **Validate** to refresh the validation form.

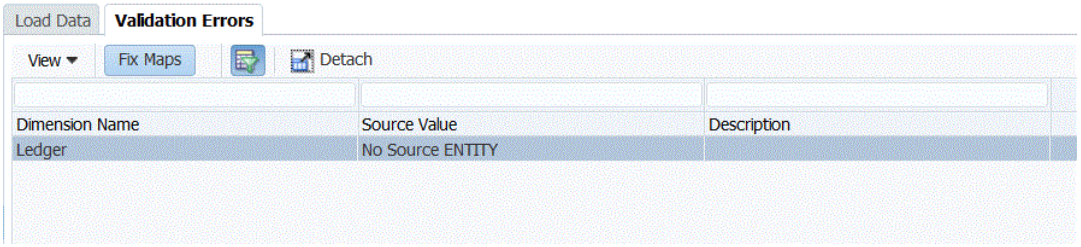
   Source data that passes the validation process can be loaded to the target system.

Fixing the Mapping Errors

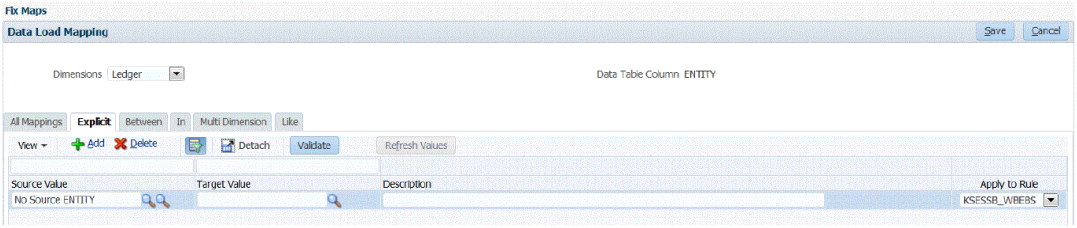
In the Data Load Workbench, you can view mapping errors and fix them instantly when mapping errors have occurred.

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**.

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, you can store, add, subtract and override data.

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, Data Management 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.
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).

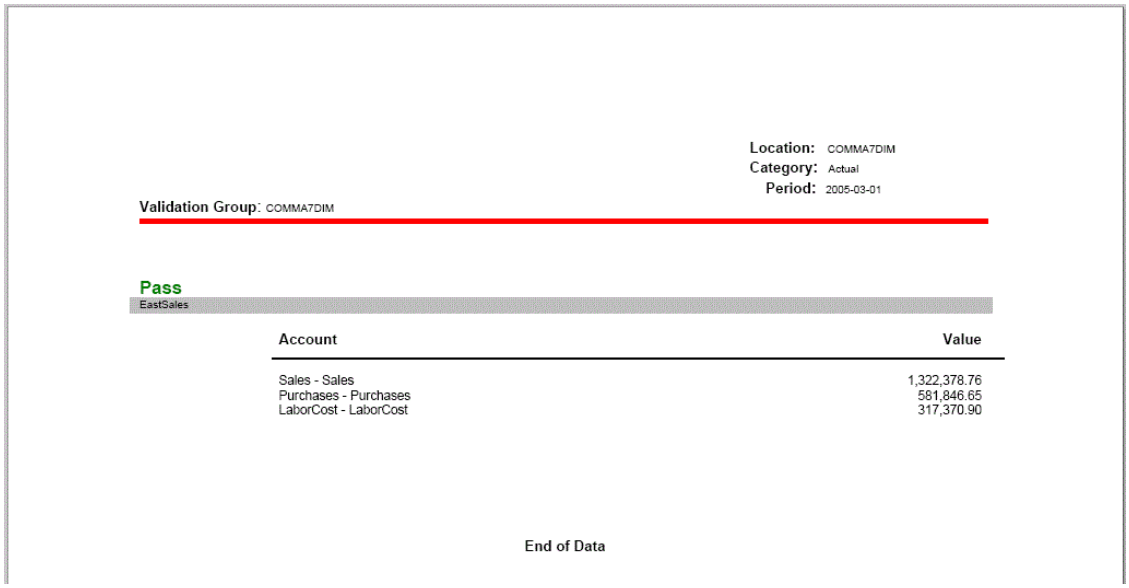
     Click to navigate to the Process Detail page to monitor the ODI job progress.
5. Click **OK**.

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 Data Management 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
- Formatting Data
- Showing Data
- Opening Loaded Data in Microsoft Excel
- Querying by Example
- Freezing Data
- Detaching Data
- Wrapping Text

Viewing Data

The View data provides multiple ways to view data including:

Table—Selects the source or target data to display in the grid:

- 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:

- Show All
- Entity
- Account
- Version
- Product
- Department
- STAT
- Amount
- Source Amount

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 click **Enter**. To clear a filter, remove the text to filter by in the text box, then click **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 map to ignore a source value when exporting to target. This type of map is defined in the member mapping by assigning a special target member with the value 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.

To drill through to the source mapping:

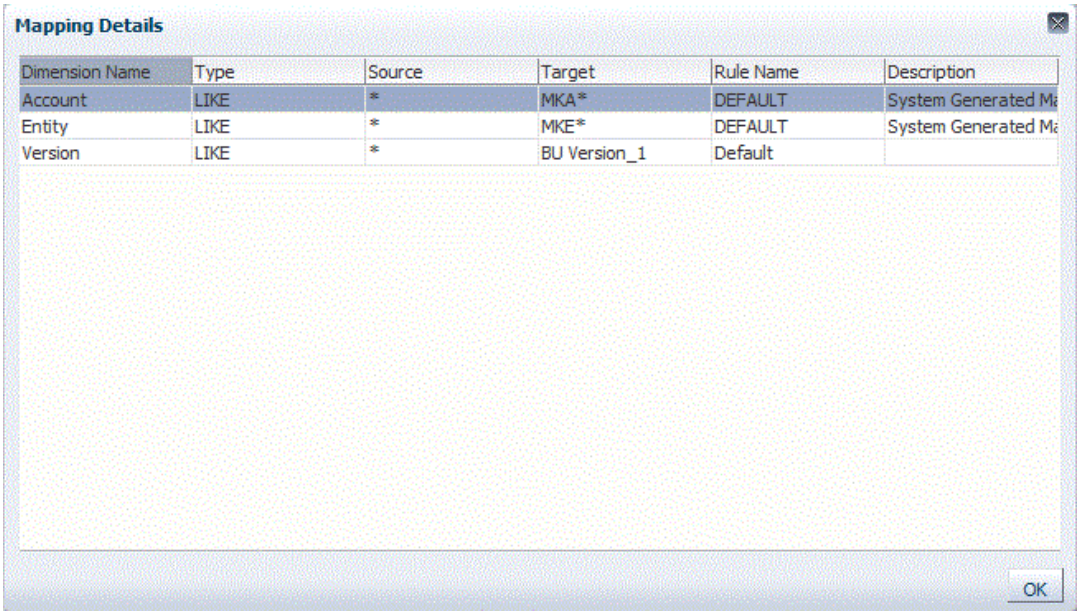
1. Select the type of data to display in the data grid.

   See Showing Data.
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.
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 the 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.

> **Note:**
>
> Exported data from Excel is exported either in a CSV (*.csv) or Excel (*.xls) file format depending on the "Workbench Export to File Format" setting in System Settings. The default file format for exports is CSV. For more information, see Setting System-Level Profiles.

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 click **Enter**. To clear a filter, remove the text to filter by in the text box, then click **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 click **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 columns 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 to the data grid:

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 .

Viewing Process Details

You use the Process Details page to view a submitted rule status and logs and download a validation report when cells are rejected during a data load..

> **Note:**
>
> Process Detail logs are purged every seven days. If you want to download log, use EPMAutomate to download the log to a local folder. The command is `downloadFile`. For example: `epmautomate downloadfile "[FILE_PATH]/FILE_NAME"`. For more information, see *Working with EPM Automate*

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:
   - **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 Oracle Hyperion EPM 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.
- **Output Link**—Download a validation error report that shows data cells rejected during a data load and the reasons for the rejection. A validation error report is only available when the Display Validation Failure Reasons option is set to **Yes**.

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. (Click to toggle the filter row.) Then, enter the text to filter.

   You can filter by:
   - 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 Data Management User Interface Elements.

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 more periods, categories, and locations.

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 use an Excel Trail Balance template, the template can contain one or more periods. When loading multiple periods, 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."

Table 4-16 Data Management dimension tags and the corresponding tags

Data Management 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 Data Management, 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, which shows all hidden rows for the selected range in the sheet. You can re-hide the rows after changes have been made.

	A	B	C	D
1	Trial Balance Template			
2				
3				
4				
5	Account	Center	Description	Current Month
8				
9				
10				
11				

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 periods. 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.

> **Note:**
>
> You only need to include a period key (for example, V1:2016/1/31) with the tag if the periods are non-contiguous. If the periods are contiguous, then the period keys are ignored, and the start/end periods selected when running the rule are used to define the periods.

> **Note:**
>
> The Excel template expects an empty row between the tags and the first row of data.

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					

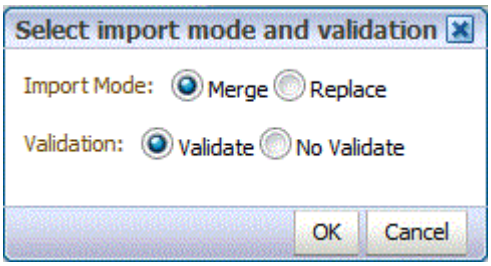
Importing Excel Mapping

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 shows the description: "System Generated Mappings."

Loading Multiple Periods for Cloud EPM or File-Based Source Systems

For an Oracle Fusion Cloud Enterprise Performance Management or file-based source system, Data Management supports a "Period" as a column in a data file. If you have data for multiple periods in a single file, then you can include the year and period on each row of the data. In Import Formats, you select the source period rows of Year and Period, so that they are identified as columns in the file, and then map them to the appropriate dimension in the target system. Then you run the data load rule and select a range of dates to load. The range of dates can be based on a default or explicit period mapping type.

For example, in the following sample file, there is multiple period data, "Jan" and "Feb" in a single data file.

```
E1,100,2016,Jan,USD,100
E2,100,2016,Jan,USD,200
E3,100,2016,Feb,USD,300
E4,100,2016,Feb,USD,400
```

In another example, if you select a Jan-March period range, and the file includes: Jan, Feb, Mar, and Apr, then Data Management only loads Jan, Feb, and Mar.

```
E1,100,2016,Jan,USD,100
E2,100,2016,Jan,USD,200
E3,100,2016,Feb,USD,300
E4,100,2016,Feb,USD,400
E4,100,2016,Mar,USD,400
E4,100,2016,Mar,USD,400
E4,100,2016,Apr,USD,400
E4,100,2016,Apr,USD,400
```

Data Management loads the periods specified on the Execute Rule screen, and ignores rows in the file that don't match what you selected to load.

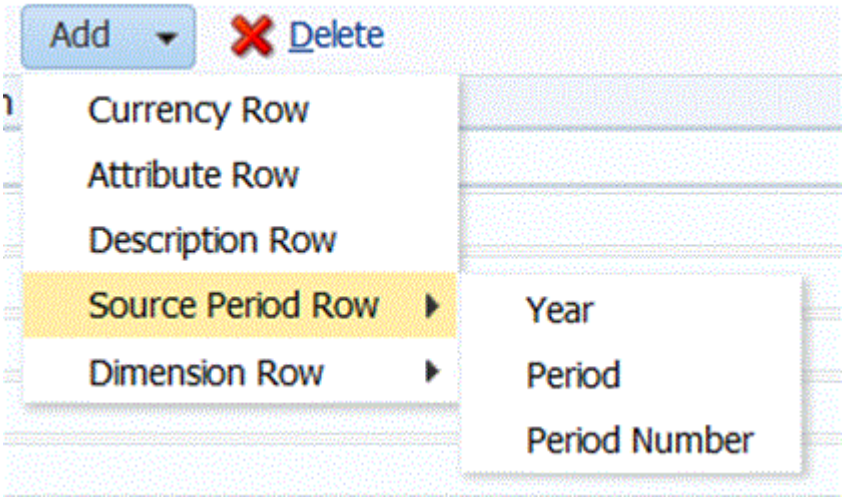
Loading Periods as a Column from the Data File

"Period" dimensions are supported as columns in a data file. If you have data for multiple periods in a single file, then you can include the year and period on each row of the data file that gets loaded to the target application.

You load a period as a column from a data file by defining the load definition through the import format, and the data load rule.

To include a period as a column from the data file:

1. On the **Setup** tab, under **Integration Setup**, select **Import Format**.
2. In the **Import Format** summary task bar, select the Financial Consolidation and Close consolidation application or file.
   Typically, this is a single file with multiple periods, such as Year and Period.
3. From the **Import Format Detail Mapping** grid, select the source column and click **Add**.



4. Select the period rows to include:
   a. To map to a "Year" row, click **Source Period Row**, and then select **Year** to map to the **Year** dimension in the target application.
   b. In **Source Column**, select the dimension to map to the **Year** row.
   c. In **Field Number**, enter the **field number** from the file to import (defaults to the field number from the file when text is selected.)

d. In **Expression**, specify the expression to apply to the **Year** row.

e. To map to a period row, click **Add**, select **Source Period Row**, and then select **Period**.

f. In **Field Number**, enter the **field number** from the file to import (defaults to the field number from the file when text is selected.)

g. In **Expression**, specify the expression to apply to the **Period** row.

h. To map to a period number row, click **Add**, select **Source Period Row**, and then select **Period Number**.

i. In **Field Number**, enter the **field number** from the file to import (defaults to the field number from the file when text is selected.)

j. In **Expression**, specify the expression to apply to the **Period Number** row.

5. Click **Save**.

6. Specify the parameters of the data load rule, and then execute it.

   See Defining Data Load Rules to Extract Data.

Loading Journals to Financial Consolidation and Close

In Data Management, journals enable you 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.

Data Management supports an explicit load method when loading journals to Financial Consolidation and Close application. Journals are loaded by defining a data rule with the type "Journals." Both Excel and text-based journal loads are supported.

Loading Financial Consolidation and Close Journals Process Description

At a high level, journals can be loaded as a regular data file, or as an Excel template.

If you load journals as a data file, you define an import format to import the journal file. The import format contains additional mappings for the journal label and description columns. The rest of the source data is imported in the same manner as standard data. Then you define a data load rule and set the load type to "journal" to import the data. Text journals can be imported like any other from the data load rule or the workbench. They can also be imported using a batch process similar to standard data load processes.

If you use the Excel template to load a journal, then you use an existing location, create a new data load rule for that location and specify load type of Journal for the data load rule. You then use the workbench to import the Excel journal template file. When you open the Excel template, you fill it out, upload it, and then post it.

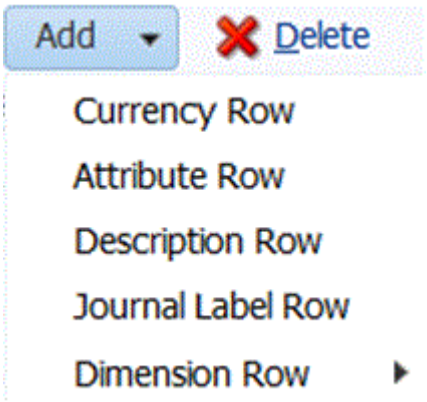
Working with Journal Loads and Import Formats

When defining the import format for a journal load, you can include the journal label row and journal description row.

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

2. In the **Import Format** summary task bar, select an Financial Consolidation and Close consolidation application.

3. From the **Import Format Detail Mapping** grid, select the source column and click the **Add** drop-down.



4. Select the **Journal Label Row**, and enter the journal ID from the journal template used as the journal label when loading to the Financial Consolidation and Close in the **Expression** field.

   You cannot include the following characters in the journal label:

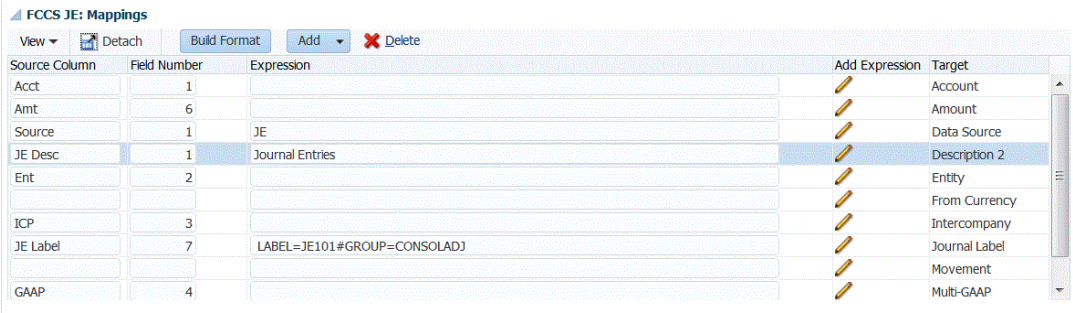
   - period (.)
   - plus sign (+)
   - minus sign (-)
   - asterisk (*)
   - forward slash (/)
   - number sign (#)
   - comma (,)
   - semicolon (;)
   - at symbol (@)
   - double quotation mark (")
   - curly brackets ({ })

   Additionally, you can specify the label; label and group; or no label or group in the **Expression** field.

   - To specify a label and group, add values in the format `LABEL=<Label>#GROUP=<Group>` in the **Expression** field. For example, you might enter `LABEL=JE101#GROUP=CONSOLADJ`.
   - You cannot specify only a group (that is, without a label.)
   - If the journal ID field is null, Data Management creates the journal label as JL<loaded> automatically.

     This is the process id. The journal name includes the process id, and you can tie it back to Data Management if needed.
   - For a multiple journal load, you can specify different journal labels in the file import.
5. Click **Add** and insert the **Description Row** twice.
6. In the **Description 2** row, enter the journal description in the **Expression** field.

   The journal description must be entered in the Description 2 row, so you must add the description row 2 times, and then you can delete the Description 1 row if not needed.



7. **Optional**: Add other import format mappings as needed.
8. Click **Save**.

   After saving the import format, make sure that you associate it with a location. For more information about creating or working with locations, see Defining Locations.

Working with Journal Loads and the Data Load Rule

Data load rules are defined for the journal load to load journal entries from the Excel-based or text-based journal file source and push them into the Financial Consolidation and Close target application.
Journals are loaded by defining a load type of "Journal" in the **Load Type** field on the Target Option tab in Data Load Rules.

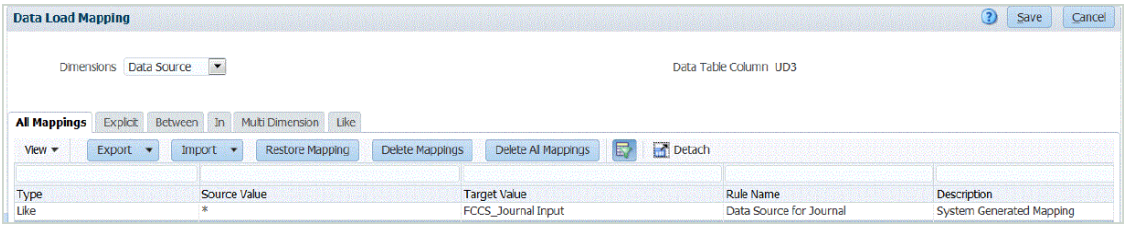
Optionally, you can specify the status of the journals in the **Journal Status** field on the Target Option tab. There are four options available to set the status of the journal in Financial Consolidation and Close:

- Working
- Submitted
- Approved
- Rejected

For information about creating a data load rule, see Defining Data Load Rules to Extract Data.

After you create and save the data load rule for the journal load, Data Management automatically creates a data load mapping for the dimension "Data Source" with the following mapping values.

- Type: Like
  The string in the source value is matched and replaced with the target value.
- Source Value: *
- Target: FCCS_Journal Input
- Rule Name: System Generated Map



Loading Journals from the Data Load Workbench

When loading journals, use the Data Load Workbench as a framework to import, view and verify, and export journals.

Journals can be loaded using:

- Excel-based journals. See Loading Journals from a Template.
- Text-based journals. See Loading Text-Based Journals.

Loading Journals from a Template

Data Management enables you to load Financial Consolidation and Close journal entries using a journal template. These templates are Excel spreadsheets that are formatted for journal entry, and include the required values for the Financial Consolidation and Close journal.

Processing Journals Templates

The process for processing journals is:

1. Download the template and reformat the template as needed.

   See Downloading a Journal Template.
2. Enter required journals in the template.
   Defining Journal Templates.
3. Upload the finished template to the desired folder in Data Management.
   See Loading Journals.
4. In the Data Load Workbench, click the load journal button and then select the journal template file from Data Management.
   See Loading Journals.
5. Validate the journal file by clicking **Check**. If the file validates, then it is eligible for posting.
   Checking Journals.
6. Click **Post** to post the journal file to the Financial Consolidation and Close.
   See Posting Journals.

Downloading a Journal Template

If you use a journal template to load journal entries, then from the Data Load Workbench you can select a journal template that has been uploaded to the server. A template is associated with an existing POV. Once you have completed the required values for the template, you reload it (post it to the server), create a new data load rule for that POV, and specify a load type of "Journal" in the data load rule.

To download a Journal template:

1. On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.
2. From the POV, select the POV associated with the journal template to download.
3. In **Download Template**, select **Journal**.

   Data Management prompts you to open or save the default template.

   The default template is copied, and all the necessary custom dimensions are added as columns before the Amount column. By default, two custom dimensions are included in the template.

4. On the **Open** screen, open or save the template, and then click **OK**.

Defining Journal Templates

A journal template is a Microsoft® Excel spreadsheet that has been formatted so that you can enter journal entries. The spreadsheet is tagged with a header consisting of metadata that instructs Data Management how to interpret the data contained in the template. Metadata consists of a series of tags that tell Data Management 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`.

Metadata tags are required in a specific tabular format. The metadata row order is important, but the column order is not. The first five rows (metadata header) of data must contain the metadata tags for the table of data. The sample journal template shown contains the metadata header (rows 1–5) and two lines of imported data (rows 6 and 7).

	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

To define the completed template in Excel, you must create a range name that includes all the metadata and the data value cells. The range name must begin with the prefix "ups." For example, you can create a range name to define a standard template and name it [upsStandardJV (A1 to D7)].

Metadata Structure

The metadata header (Row 1-5) instructs Data Management 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 Data Management.

Row 1 (Journal ID and Location Tag)

The tag in row 1 of the range is used to set the Journal ID and the Data Management 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.

Row 2 (Data Management Category Tag)

The tag in row 2 of the range sets the Data Management category into which the journal loads. The category must be a valid Data Management category. The Data Management Category tag must be placed in the Amount column.

Row 3 (Data Management Period Tag)

The tag in row 3 of the range sets the period that the data should be loaded into. The period must be a valid Data Management period. This tag must be placed in the Amount column.

Row 4 (Load Method Tag)

The tag in row 4 of the range sets the journal load method within Data Management. 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 Data Management 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 Data Management 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.

Table 4-17 Journal Load Methods and Corresponding Tags

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 of the range defines the dimension that the amounts are loaded into. The table below defines the possible dimension tags.

Table 4-18 Financial Consolidation and Close Dimensions and Corresponding Tags

Data Management Dimension	Valid Tags
Account (Required)	A, Account, SrcAcctKey
Entity (Required)	C, Center, SrcEntityKey
Description (Optional)	D, Description, SrcAcctDesc
Movement (Required)	3, Movement
Multi GAAP (Optional)	4, Multi GAAP
Intercompany Party (Optional)	I, IC, ICCoParty
Custom 1 (Optional)	1, UD1, UserDefined1
Custom 2 (Optional()	2, UD12, UserDefined2
Amount (Required)	V, Amount, SrcAmount

Creating Range Names Within Journal Templates

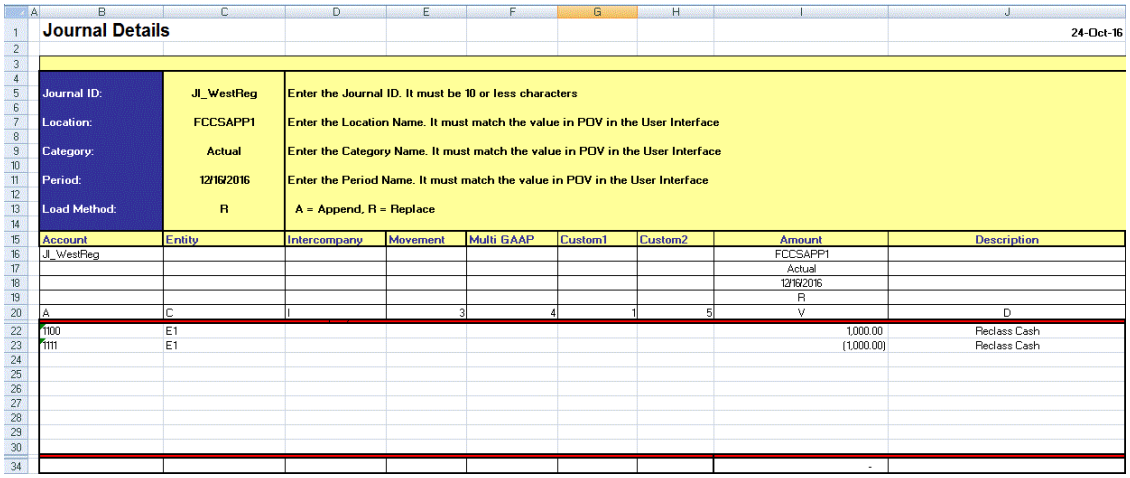
A range of columns comes predefined in the template, and you can simply fill out the top section in rows 5-13 and add any necessary columns. Data Management evaluates the named range to determine the POV, load method, and data to load.

To create your own journal template, you create a range name that includes all metadata and data cells, and that begin with the prefix *ups*. For example, for a standard template, create the range name `[upsStandardJV (B16 to J33]`.

The following illustration depicts a journal template. Note that in this template, the metadata are not in rows 1–5, but in rows 16–20. The template has an `upsJournal` starting from row 16.

Therefore, rows 16–20 are the first five rows in the `upsJournal`. Rows 4–14 is a simple interface to assist users with creating the metadata header. Metadata information is entered here 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		Journal Details								24-Oct-16
5		Journal ID:	Jl_WestReg	Enter the Journal ID. It must be 10 or less characters						
7		Location:	FCCSAPP1	Enter the Location Name. It must match the value in POV in the User Interface						
9		Category:	Actual	Enter the Category Name. It must match the value in POV in the User Interface						
11		Period:	12/16/2016	Enter the Period Name. It must match the value in POV in the User Interface						
13		Load Method:	R	A = Append, R = Replace						
15		Account	Entity	Intercompany	Movement	Multi GAAP	Custom1	Custom2	Amount	Description
16		Jl_WestReg							FCCSAPP1	
17									Actual	
18									12/16/2016	
19									R	
20		A	C	I	3	4	1	5	V	D
22		1100	E1						1,000.00	Reclass Cash
23		1111	E1						(1,000.00)	Reclass Cash
34									-	

The journal template must contain the following dimensions:

- **Account—**It is the journal account (required).
- **Entity—**It is the journal entity (required).
- **Intercompany—** (Optional unless being used by Financial Consolidation and Close.)
- **Movement—**Data changes from period to period (required)
- **Multi GAAP—**Data changes from period to period (optional)
- **Custom1, Custom2 Dimensions—**Optional unless used by the target application
- **Amount—**(required)
- **Description—**(optional)

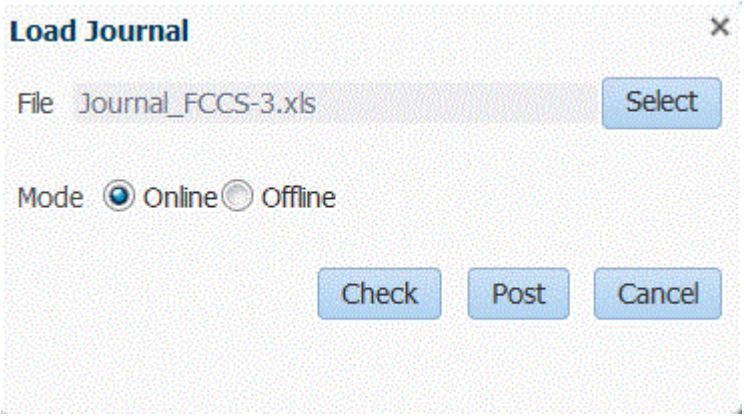
Loading Journals

To load a journal:

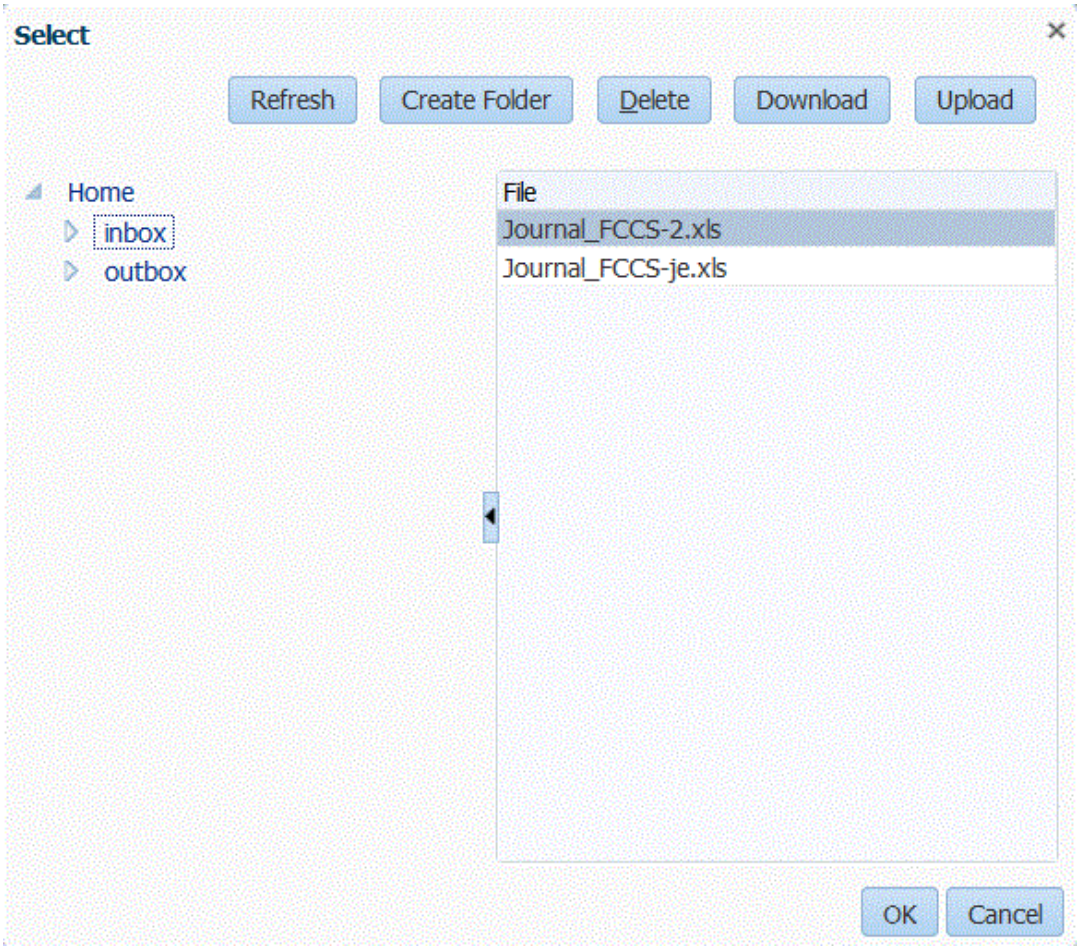
1. On the **Workflow** tab, under **Data Load**, select **Data Load Workbench**.

   When you load a journal, Data Management uses the current POV to determine location, category, and period. To use another POV, select another POV on the Data Load Workbench.

2. Click **Load Journal**.



3. On the **Load Journal** screen, to browse for a journal file, click **Select**.



a. Select a journal template to load from the server to which you uploaded one and click **OK**.

   When a journal has been successfully loaded, the **Check** button is enabled.

> **Note:**
>
> When loading journals to an Financial Consolidation and Close target from Data Management, consider that Data Management (Cloud) determines the account types and converts the credits/debits. All positive numbers are loaded as debits and all negative numbers are loaded as credits. If you need to designate other credit or debit signs for your account type, use the change sign feature in Data Load Mappings or another customized method to handle credits/debits changes for your journal loads.
>
> When loading journals to an Financial Consolidation and Close target from the Oracle Hyperion Financial Data Quality Management, Enterprise Edition (onpremise), consider that Data Management does not determine the account types or select the credits/debits. All positive numbers are loaded as credits and all negative numbers are loaded as debits. If you need to designate other credit or debit signs for your account type, use the change sign feature in Data Load Mappings or another customized method to handle credits/debits changes for your journal loads.

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**.

4. Click **Check** to validate and load the journal.

   See Checking Journals.

Checking Journals

Before journals can be posted, they must be checked. 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.

> **Note:**
>
> If the journal import file is not XLS or XLSX, then the check feature is not available.

To check a journal:

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.

   When a journal is checked, Data Management 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. Data Management does not check metadata segments that include an invalid range.

   When Data Management validates the journal, you get the following message: "The journal file checked successfully."

Posting Journals

After a journal has been validated (checked) 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**.

   When Data Management posts the journal, you get the following message: "The journal file loaded successfully."

Loading Text-Based Journals

You can load a text-based journal using the Import Format option. In this case, you map the source columns for the journal label and description. Text journals can be imported from the data load rule or workbench. Text-based journals can also be imported using batch process similar to standard data load process.

For more information on the import format option, see Working with Journal Loads and Import Formats.

Service Instance Integrations

Data Management can be used as a primary gateway to move data from one service instance to another. A service instance is a self-contained unit often containing the web server and the database application (Planning application).

To use this feature, you open the parent service instance, and then use the target application option to register a child service instance. In this case, you use the "Cloud" option as the target application type. Once the child service instance is registered, it can be used as a source or target application.

This feature enables you to integrate multiple instances of Oracle Fusion Cloud EPM deployments into your existing portfolio. You might use the integration to import data from an existing Cloud EPM deployment application, or synchronize data from another Cloud EPM application. For example, you can add multiple Planning applications. In addition, this integration includes writing back from one Cloud EPM application to another.

Watch this tutorial video to learn more about hybrid deployments.

Tutorial Video

Setting up Business Process Instance Deployments

The child business process instance (Planning application) is registered with the target application type and the deployment mode of "Cloud." All other setup definitions, such as the import format, location, and data rule are defined in the exact same way as any other EPM application.

To register target application as a business process instance:

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

2. In **Target Application**, in the **Target Application** summary grid, click **Add**.
3. To register a business process instance (Oracle Fusion Cloud EPM deployment), select **Cloud** and then complete the following steps on the EPM Cloud Credentials screen:
   a. In **URL**, specify the URL of the business process that you use to log in.
   b. In **User name**, specify the user name for the business process application.
   c. In **Password**, specify the password for the business process application.
   d. In **Domain**, specify the domain name associated with the business process application.

      An identity domain controls the accounts of users who need access to business process instances. It also controls the features that authorized users can access. A service instance belongs to an identity domain.

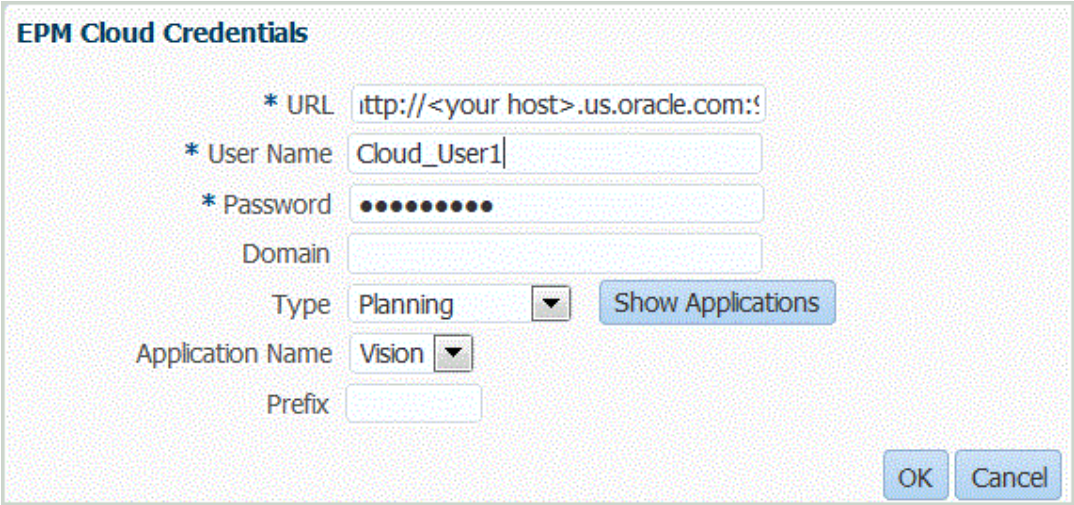
      > **Note:**
      >
      > Administrators can update the domain name that is presented to the user, but Data Management requires the original domain name that was provided when the customer signed up for the business process (but not the domain "display" name. Alias domain names cannot be used when setting up Oracle Fusion Cloud Enterprise Performance Management connections from Data Management and from Financial Data Quality Management, Enterprise Edition.
4. From **Type**, specify the type of application, and click **OK**.

   Valid application types:

   - Planning
   - Essbase
   - Consolidation
   - Tax Reporting

   You can also click **Show Applications**, and select the application.
5. In **Application Name**, enter the application name.
6. To register a target application with the same name as an existing target application, in **Prefix**, specify a prefix to make the name unique.

   The prefix name is joined to the existing target application name. For example, if you want to name a demo target application the same name as the existing "Vision" application, you might assign the **Demo** prefix to designate the target application with a unique name. In this case, the Data Management joins the names to form the name **DemoVision**.
7. Click **OK**.



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, navigate to the Import Format option and map any new dimensions to their source columns.

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 mapping.

10. In **Target Application**, click **Save**.

11. Define the dimension details.

12. Select the application options.

Loading Data Between Service Instances

The basic data flow for loading data from one service instance to another is:

1. Register the child business instance as a target application in Data Management.

   For information on registering an application, see Setting up Business Process Instance Deployments.

2. Define the import format to map the source of the business process instance.

   For more information, see Working with Import Formats.

3. Define the location, data load mapping, and the data load rule in the exact same manner using the normal procedures.

   See Defining Locations.

   See Defining Period Mappings.

   See Creating Member Mappings.

   See Defining Locations and Defining Data Load Rules to Extract Data.

Data Load, Synchronization and Write Back

Related Topics

- Overview
- Synchronizing and Writing Back Data

Overview

Oracle Fusion Cloud Enterprise Performance Management supports a variety of ways for importing data from a range of financial data sources, and then transforming and validating the data:

- Data Loading—Several types of sources are available for data loads:
  - file-based applications
  - Oracle General Ledger applications from the Oracle Financials Cloud
  - Budgetary Control applications from the Oracle ERP Cloud
  - Oracle NetSuite Save Search Results data sources
  - Oracle Human Capital Management Cloud extracts from the Oracle HCM Cloud
- Synchronization—move data between Cloud EPM and ASO Essbase cubes created by Planning applications. That is, select an EPM application as an integration source.
- Write back—In the Planning, you can write back budget data to a file-based source system or Oracle General Ledger application in the Oracle ERP Cloud.

Watch this tutorial video to learn about extracting data from Oracle Planning and Budgeting Cloud using Data Management.

Tutorial Video

Synchronizing and Writing Back Data

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.

- Oracle Fusion Cloud Enterprise Performance Management applications to Cloud EPM applications (data synchronization)—Moves data between Cloud EPM applications, for example, copying data from Planning to Oracle Essbase ASO cubes created by Planning.
- Cloud EPM applications to Oracle ERP Cloud applications (write-back)—Moves data from Cloud EPM applications to Oracle ERP Cloud applications (file-based).

Data Synchronization

Data synchronization enables you to synchronize and map data between Oracle Fusion Cloud Enterprise Performance Management source to target applications irrespective of the dimensionality of the application simply by selecting the source and target Cloud 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, use data synchromization to move data from:

- Planning input cubes to reporting cubes,
- Actuals from Financial Consolidation and Close to Planning reporting cube for variance reporting.

Tasks enabled by the data synchronization:

- Create and modify synchronizations.
- Select source and target applications.
- Define mappings between sources and targets.
- Push data from Planning to Oracle Essbase ASO cubes created by Planning.
- Copy consolidated data from Essbase ASO cubes to Planning for future planning.
- Execute synchronizations.
- View logs of synchronization activities.

At a high level, the steps to synchronize data in Data Management include:

> **Note:**
>
> Make sure the EPM applications to be synchronized are registered as target applications.

1. **Import Format**—Select the source and target Oracle Enterprise Performance Management 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.

   > **Note:**
   >
   > To make certain that Data Management loads periodic instead of year-to-date (YTD data), you might have to hard code the "Periodic" Value dimension in the import format.

2. **Location**—Create a new location and associate it with the import format.
3. **Data Load Rule**—Define the source filter parameters.
4. **Data Load Mapping**—Define the source to target application mappings.
5. **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.
6. **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 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 Data Management setup, such as "Actual." See Defining Category Mappings.
3. **Optional**: Enter a description.
4. In **Plan Type**, select the plan type.

   Data Management supports data loads for up to six plan types (including custom and Planning applications.)

   Data Management currently supports up to six plan types when loading data. Planning can support three custom plan types and up to four Planning Modules applications (Workforce, Capex, Project, Financials). You can enable any combination of these applications. When you create an Planning Modules application and if you create more than two custom plan types, then you cannot support a data load to all four applications.
5. In **Period Mapping Type**, select **Default** or **Explicit**.
6. **Optional**: Add or change any source filter options.

   See Defining Source Filters.
7. **Optional**: Add or change any target options.

   See Registering Target Applications.
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 Planning to Oracle Essbase.

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.

Defining Source Filters

Source filters enable you select a dimension, and then enter 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 **Source Filters**, 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 Oracle 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, and E6. For information on Essbase syntax, see the *Oracle Essbase Database Administrator's Guide*.

     > **Note:**
     >
     > When an Essbase source dimension shares members across alternate hierarchies, a Source Filter should be used to eliminate duplicates. For example, if the Account dimension shares members across parallel hierarchies headed by parent members Alt_Hier_1 and Alt_Hier_2, use the following Source Filter function on Account to eliminate duplicates: @Lvl0Descendants("Alt_Hier_2")

   - 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.

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 is extracted from the Oracle Enterprise Performance Management 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.

> **Note:**
>
> When a data load rule is run for multiple periods, the export step occurs only once for all periods.

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.

Mapping and Export

During the mapping and export, Data Management:

- Imports data from Planning and writes it to the Data Management staging table.
- Applies the necessary transformation in the staging table.
- Exports data from the Data Management staging table to a file-based application.

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.

Write-Back

Financial budgeting information often must be compared with and controlled with actuals and stored in the general ledger system. In Data Management, 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.

Writing Back from Planning Applications in Data Management

Data Management supports write-back by enabling you to move data from Planning applications to a file-based application. In this case, you need to define a custom application with dimensions that match the General Ledger chart of accounts.

Writing Back from the Planning to the Oracle General Ledger

You can write back data loaded to a general ledger file from the Planning to the Oracle ERP Cloud using Data Management. See Writing Back to the Oracle ERP Cloud.

Available Source to Target Write-Backs

You define data load rules to write back for Planning source systems.

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). When creating the application, ensure that the Export to File option is "Yes".

Other Considerations:

- Data load to write back is supported only for Planning applications, and Planning applications created from Oracle Essbase ASO cubes.
- Only monetary and statistical amounts can be written back.
- Allocation from a source amount to multiple target amounts is not provided.
- 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.

Defining Data Load Rules for Write-Back Scenarios to External Sources

You create a data load rules to write back to extract budget data from Planning application to an ERP source system that uses a file-based source application.

The process at a high level:

1. Data Management imports data from Planning and writes it to a Data Management staging table.
2. Data Management applies the necessary transformation in the staging table.
3. Data is exported from the Data Management 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. In **Name**, enter the data load rule name used to write back data.
3. In **Category**, select a category.

   The categories listed are those that you created in the Data Management setup, such as "Actual." See Defining Category Mappings.
4. Optional: In **Description**, specify a description of the data load rule used to write back data.
5. Optional: From the **Target Plan Type** drop, select the plan type of the target system.

   Data Management supports data loads for up to six plan types (including custom and Planning applications.)

   Data Management currently supports data load that have up to six plan types. Planning can support three custom plan types and up to four Planning Modules applications (Workforce, Capex, Project, Financials). You can enable any combination of these applications. When you create an Planning Modules application and if you create more than two custom plan types, then you cannot support data load to all four applications.
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 periods selected for the rule determine the specific periods in the file when loading a multiple period text file.
7. **Optional**: Enter a description.
8. **Optional**: Add or change any source filter options.

   See Defining Source Filters.
9. **Optional**: Add or change any target options.

   See Defining Application Options for Planning.
10. Define the source and target options.

Defining the Source Filter Option

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 box. The selection syntax is based on the source system.

     For example, if Oracle Essbase is the source system, 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, and E6. For information on Essbase syntax, see the *Oracle Essbase Database Administrator's Guide*.

     > **Note:**
     >
     > For any dimensions not included in the source filter, Data Management includes level zero members. However, it is possible to have an alternate hierarchy in **For Planning applications** where a member that is a parent in the base hierarchy, is also a level 0 member in a shared hierarchy.

   - 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.

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**.
3. To load data from the source Planning, 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", Data Management imports the data from the Planning target application, performs the necessary transformations, and exports the data to the Data Management staging table.
4. Select **Export to Target**.
5. Click **Run**.

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.

When exporting data for Planning, the following options are available:

- Store Data—Inserts the value from the source or file into the target application, replacing any value that currently exists.
- Replace Data—Clears data for the Year, Period, Scenario, Version, and Entity dimensions that you are loading, and then loads the data from the source or file. Note 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.
- 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.

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.

Logic Accounts

Related Topics

- Overview of Logic Accounts
- Creating a Logic Group
- Creating Accounts in a Simple Logic Group
- Creating Complex Logic Accounts

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 application. (The logic group list of values is filtered in the location user interface based on the target application in which it 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.

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.

Table 4-19 Between Type field and example of the corresponding Criteria Value Field values.

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.

Table 4-20 Like Type and Examples

Type Field	Criteria Value Field
Like	1??0
Like	10*

In (Criteria Type)—Used to include one source account or a list of non-sequential source accounts.

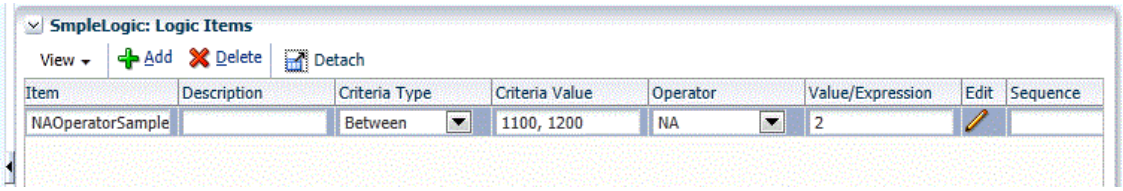
Table 4-21 In Type and Examples

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 Data Management 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.

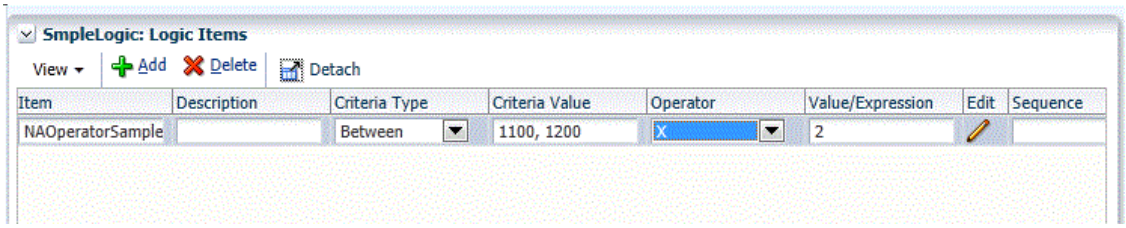


Math Operator

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



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 Data Management Lookup 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 Data Management 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 Data Management Lookup function to add a source account (810) and a source account from a specified center, Data Management category, and Data Management 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 enables 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 4-22 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 Data Management 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 Data Management Lookup function to add a source account (810) to the value of the logic account if the current Data Management period is "Dec 2013".

```
if StrPerKey == "12/31/2013":

    RESULT = CURVAL + |810|

else:

    RESULT="Skip"
```

This function uses the Data Management Lookup function to add another source account from a different Entity, Data Management category, and Data Management 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 dependent 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 the 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 Data Management 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 4-23 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 Data Management 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

Table 4-24 Imported Values Sample

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

Table 4-25 Sample Imported Account Names

Account	Entity	ICP	UD1	Amount
Cash	Texas	ICP	UD1	50,401.07
Cash	Texas	ICP	UD1	10,996.00

Data Management groups and summarizes the rows that include identical member combinations and thus creates the following result:

Final Result

Table 4-26 Imported Account Names and Numbers

Account	Entity	ICP	UD1	Amount
Cash	Texas	ICP	UD1	61,397.07

Complex Logic Example 2: CashTx

Table 4-27 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 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

Table 4-28 Sample Imported Account Numbers

Account	Entity	ICP	UD1	Amount	Include or Exclude
1150	Tx	070	01	50,401.07	Include
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

Table 4-29 Logic Members Imported Account Names

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

Data Management groups and summarizes the rows that include identical member combinations and thus creates the following result.

Final Result

Table 4-30 Final Result of Imported Account Names and Numbers

Account	Entity	ICP	UD1	Amount
Cash	Texas	07	UD1-01	50,401.07
Cash	Texas	04	UD1-02	20,046.41

Check Rules

Use check rules to enforce data integrity.

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. Data Management check reports retrieve values from the target system, Data Management source data, or Data Management converted data.

Data Management 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.

> **Note:**
>
> If the Entity dimension has shared hierarchies, then members must be specified in parent.child format in the check entity group or data load mappings for check rules to work with Financial Consolidation and Close and Tax Reporting.

> **Note:**
>
> If you use the Simple Workflow mode to load data (see Using Workflow Modes and you run a check rule with target intersections, then include a check entity group (see Creating Check Entity Groups). Otherwise the check rule fails. In addition, other than the Full workflow mode, no check reports are not available after the export step has completed.

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 Check Rules

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.
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.
   - **Description** (optional)—See Description.
   - **Rule Name**—See Rule Name.
   - **Rule Text**—See Rule Text.
   - **Category**—See Category.
   - **Sequence**—See Sequence.
   - **Rule Logic** (optional)
6. Click **Save**.

Example 4-1 Display Value

The Display Value field, which controls how Data Management formats the data rows of check reports, is used to select target accounts or report format codes. For fields that contain report format codes, no value lookup is attempted.

Example 4-2 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.

Example 4-3 Select Format Code

This option enables you to enter format codes into the Target Account column.

Format codes determine the display of check reports.

Table 4-31 Format Codes and Corresponding Actions Performed on 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.

Table 4-31 (Cont.) Format Codes and Corresponding Actions Performed on Check Reports

Format Code	Action Performed on Check Reports
`#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.

Example 4-4 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
```

Example 4-5 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
```

Example 4-6 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].
```

Example 4-7 Category

In the Category column, select the Data Management category to restrict a check rule to one Data Management category. The rule is displayed in the check report only when the Data Management category that is selected in the Category field associated with the rule is the Data Management 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**.

Example 4-8 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, Data Management flags the rule as passing or failing.

Check Rule Condition Expressions

Check rule expressions are used primarily to validate target-system account balances when performing 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:

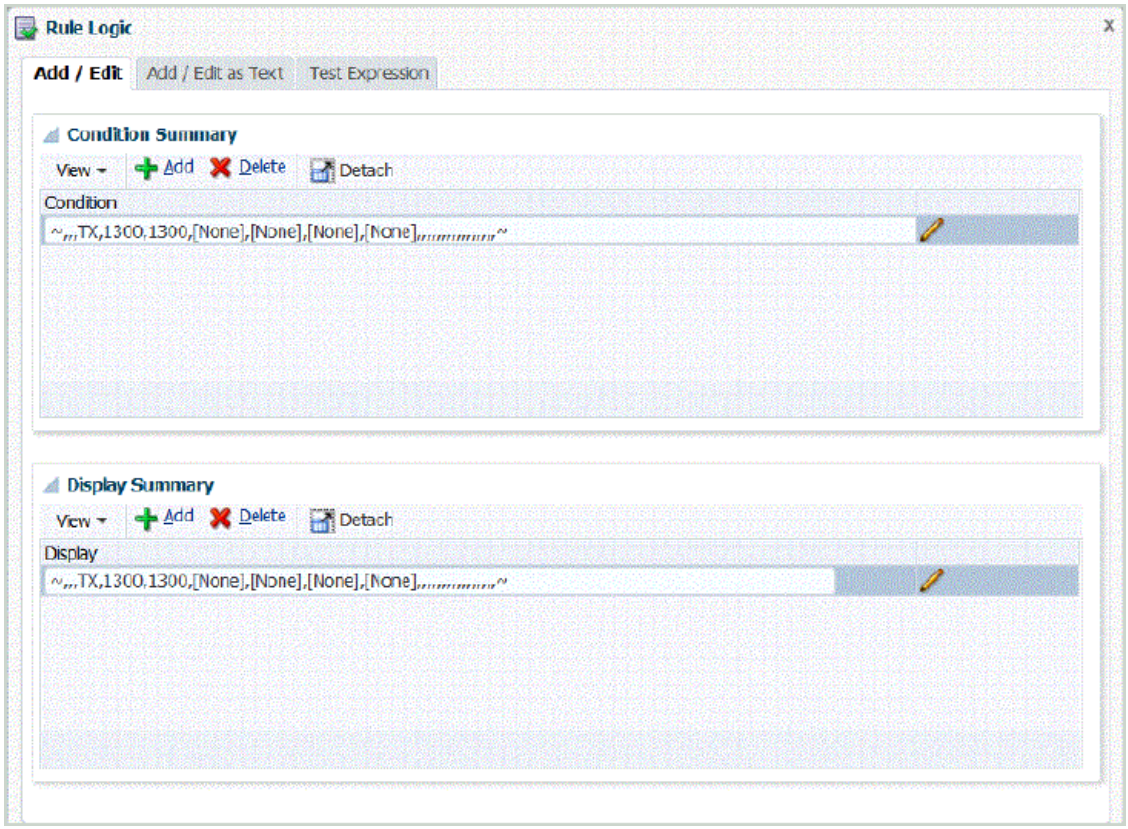
```
|,,,YTD,<Entity Currency>,,Cash,[ICP None],[None],[None],[None],
[None],,,,,,,,,,,,,,,,|>0
```

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. You 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.
   - **Description**—(optional) See Description.
   - **Rule Name**—See Rule Name.
   - **Rule Text**—See Rule Text.
   - **Category**—See Category.
   - **Sequence**—See Sequence.
5. Click .

The **Rule Logic** screen includes three tabs:

- Rule Logic Add/Edit
- Rule Logic Add/Edit as Text
- Rule Logic Test Expression

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:

- **Condition Summary—**Provides the logic for the check rule by enabling the specification of conditional expression that evaluates to "true" or "false."

  If the Condition Summary does not contain a condition, it does not show **OK** or **Error**, but it does show an intersection that you can specify.

  The Condition Summary and Display Summary options are optional, but if omitted, they display only 0.00.
- **Display Summary—**Enables the specification of a multiple-dimensional lookup to be used as the display value.

  The display value is ignored and if the row has no rule logic at all and just a display value, the row is ignored and the report is terminated. The only value displayed in the Value column on the report is whatever expression is contained in the Display Summary. The display summary is optional.
- **Add—**Adds a row in the summary.
- **Delete—**Removes a row in the summary.

To add a rule logic statement:

1. On **Rule Logic Editor**, select the **Rule Logic Add/Edit** tab.
2. From the **Condition** or **Display** 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.

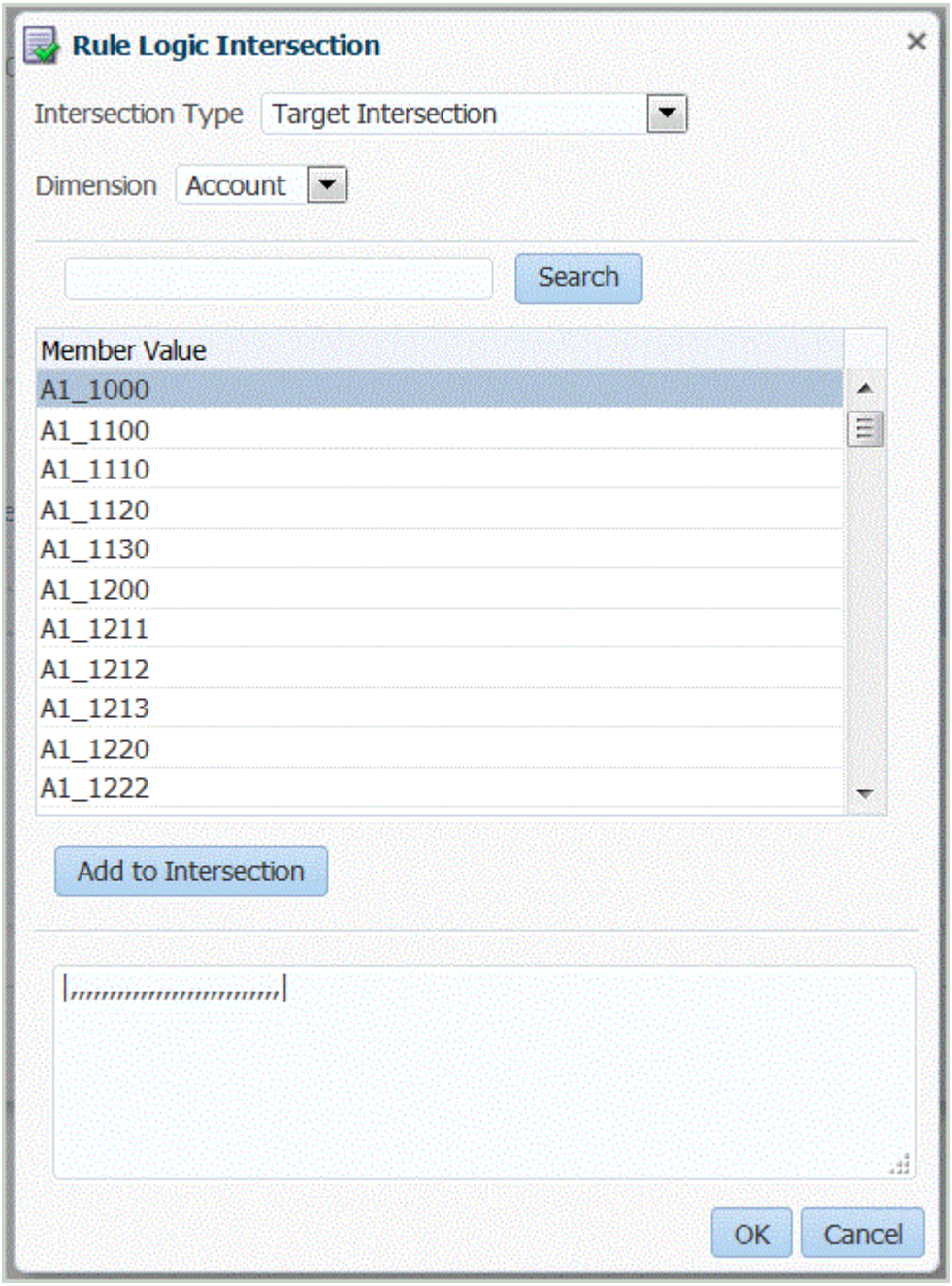
   See Multidimensional Lookup.
6. From **Dimension**, select the dimension from which to retrieve values.
7. From **Member Value**, select a value from the dimension.
8. Click **Add to Intersection**.

The member value is added to the Display area.

9. Click **OK**.

Rule Logic Intersection

Use the **Rule Logic** Intersection screen, from which you can select dimensions directly from the target system, to ensure that required dimensions are entered and ordered correctly.



Display the Rule Logic Intersection screen by clicking from the Condition Summary or Display summary grid on the Rule Logic Add/Edit screen.

The Rule Logic Intersection screen enables you to select the type of retrieval format for the target dimensions.

Data Management uses the intersection type when multidimensional lookups are selected for a rules logic statement. The multidimensional lookup retrieves account values from the target system, Data Management source data, target data or Data Management source converted data. See Multidimensional Lookup.

Multidimensional Lookup

The multidimensional lookup retrieves account values from the target system, Data Management source data, or Data Management converted data. You can use multidimensional lookups in the rule condition and in the display of the rule logic.

Rule Data Sources

Data Management can retrieve data from three sources:

- Target-system data
- Data Management source data
- Data Management converted data

Target System Data

The following format, which begins and ends the rule with the pipe character (|), enables Data Management 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.

Note the following:

- The Year dimension defaults to the year set in the POV.
- The Currency dimension defaults to 0.
- The View dimension defaults to YTD.
- The Value dimension defaults to <Entity Currency>.

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 Data Management check entity group that is assigned to the location. The example rule passes the check when the target account is less than $10 and greater 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 Data Management POV, the previous target period, and each entity of the Data Management check entity group that is assigned to the location.

Example 1

The following shows how to use +n and -n to specify a relative offset in the check rule when the current year dimension is "2015":

```
-1 result is 2015 - 1 = 2014 (Year - n)


+1 result is 2015 + 1 = 2016 (Year + n)
```

Example 2

The following shows how to use +n and -n to specify a relative offset in the check rule when the current period dimension is "January":

```
-1 result is January - 1 = January


+1 result is January + 1 = February


+12 result is January + 12 = December
```

Data Management 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 Data Management.

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~
```

Data Management 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 Data Management. 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 (+, -, *, /)—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 "*" 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)
- abs ()

If/Then/Else

Check rules accept `If/Then/Else` statements that enables you to create more complex conditional tests on the Add/Edit as Text tab. 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.

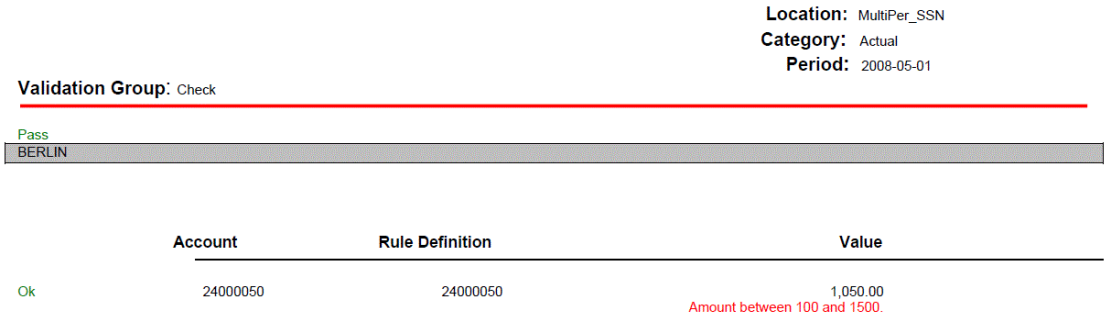
The script is written using Jython code:

```
 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. If you write only a single message, two other 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** tab to add the rule to test manually as free-form text. This feature enables you to instruct the system on how to display the actual value from the check rule logic. It always provides you with a way to cut and paste text rather than entering text line by line. If you do not specify a display summary, then the report shows a "0" value.

When the Display area is active, all interactions take 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 Condition 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**.

Testing Check Rule Expressions

You can test a rule in the Test Expression tab of the Rule Logic tab and validate conditions for a combination of dimensions. When a test check rule is submitted, you can display errors that were found in the rule being tested.

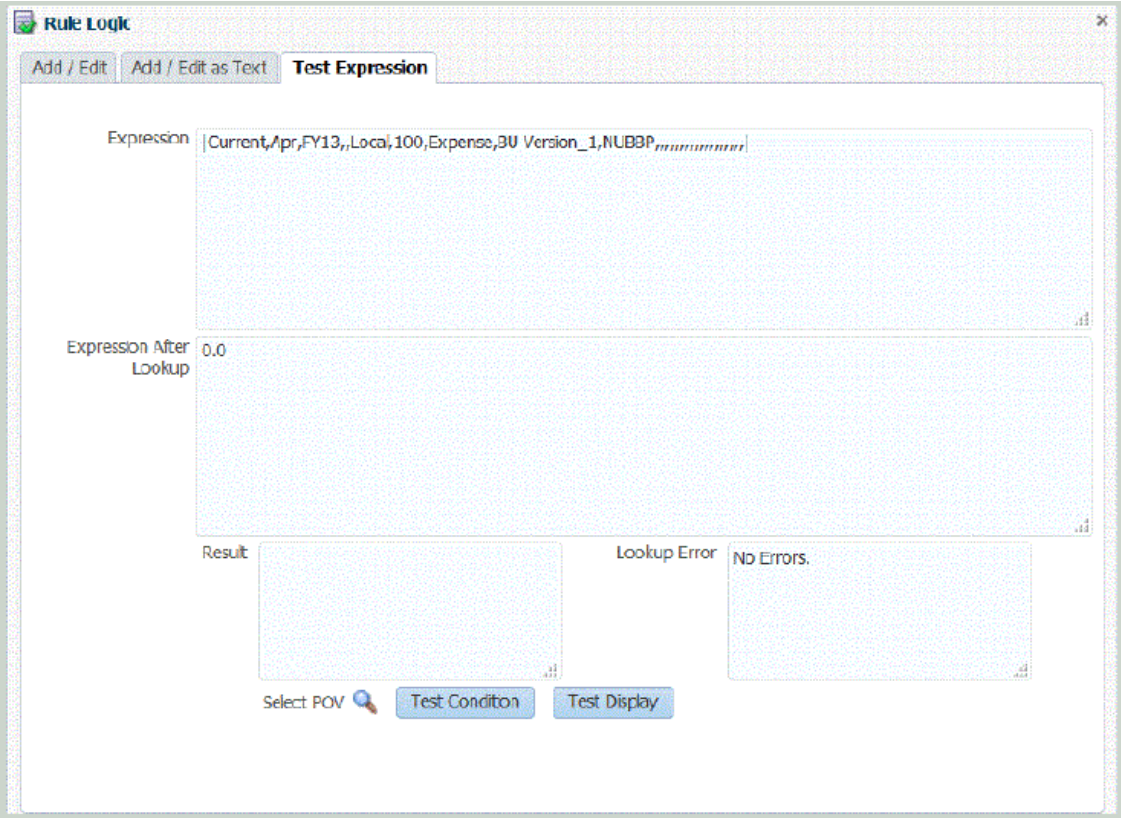
The Text Expression screen contains the following elements:

- **Expression**—Area that displays the rule being tested
- **Expression After Lookup** (Scratch Pad)—Area that displays the results of the expression being tested. (You can use the area for temporary storage of text and expressions by selecting text and right-clicking.)

  Any expression in this field is removed when you click Test Condition or Test Display.
- **Result**—Area that displays the results of the test condition (True or False)
- **Lookup Errors**—Area that displays errors that were found in the expression being tested
- **Select POV**—Enables you to select the Check Rule POV.

  On the Select Point of View screen, you can select another POV, or select a specific entity on the Member Selector screen.

  > **Note:**
  >
  > The POV can only be set after data was exported to the application for a specific POV. Then you can enter the POV and run the rule being tested. The POV entered remains set for the current session. You can navigate to the workbench and return without having to reset the POV.
- **Test Condition and Test Display**—Buttons that are used to run, respectively, the expression in the Condition or Display area on the Rule tab



To test a rule logic statement:

1. On the **Rule Logic Editor**, select the **Test Expression** tab.
2. Click **Select POV** to select the POV for the rule.

   Optionally, you can click the **Entity** look up and select a member from the **Member Selector** screen.
3. Click **Test Condition** or **Test Display** to test the condition or display specified on the other tabs.

   If you need to edit an expression, move to the other Rule tabs (Add Edit and Add / Edit as Text) and change the expression.
4. Click **OK**.

Running Check Reports for a BSO Essbase Cube

Before running a Check Report for an 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). This requirement applies to Profitability and Cost Management, Financial Consolidation and Close, and Tax Reporting.

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 4-32 Entity Detail Options and Descriptions

Option	Description
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 before displaying it in the check report. Data Management also runs a consolidation after loading the target system (assuming a check entity group is assigned to the location). The consolidated entities are specified in the check entity group that is assigned to the active location. Planning—Runs the default calculation specified in the Calc Script Name. Oracle Essbase—Runs the default calculation specified in the Calc Script Name depending on the "Check Entity Calculation Method" property of the target application. (Note that a calculation script can be run before or after a check rule is run.)
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.

5
Batch Processing

Using the Data Management 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 data 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.
- When working with metadata batch definitions, you can create a batch that includes data load rules from different target applications. This is helpful when creating a batch from which to load data and metadata. (Metadata in this case, is loaded from a flat file.)

  You can also create a batch of batches or "master" batch with one batch for metadata and another batch for data. With this method, you do not need to select a target application name, but note that you cannot migrate a master batch without one.

  For more information, see Working with Metadata Batch Definitions.

Batch processing options are available on the Data Management task pane, or by executing batch scripts.

If you process batches from the Data Management 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. Use the Batch Execution option to execute batches. See Executing Batches.

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:

- data
- batch
- open batch

> **Note:**
>
> Only an administrator can create batch definitions.

You can create a batch definition that includes data load rules from a different target applications. This enables you to use a batch that loads both metadata and data, or to create a batch of batches with one batch for metadata and another batch for data.

If you want to work with data load rules that have been associated with a metadata application, Data Management supports the loading of metadata from a flat file. For more information, see

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."
- Batch Definition jobs—Enables you to add and delete jobs in 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:

   - data
   - batch
   - open batch
   - open batch multi-Period file-based data sources that include starting and ending periods.

   If you are including multiple target applications, make sure the "type" of rule is consistent by type. For example, a batch of type "batch" cannot include a data rule. It can include only batches. A batch of type "data" cannot include batches.

   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.

> **Note:**
>
> Files are not grouped by location in parallel mode.

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. Data Management 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 `Home\inbox\batches openbatch` where the files to be imported are copied. If this field is blank or null, all files under `Home\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 Data Management assigns the data rule name, it checks whether a data rule with the name "Location_Category" exists. If this name does not exist, Data Management 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.

    For more information, see Adding a Batch Group.

15. **Optional**: In **Number of Parallel Jobs**, specify the maximum number of parallel processes submitted by a batch at any time.

    This option is used in conjunction with the **Wait for Completion** and **Timeout** fields.

    If Wait for Completion and a time-out period options are set, but the number of parallel jobs is not, then Data Management waits for all batch jobs to complete and then returns control.

    When the number of parallel jobs count is set, and the Wait for Completion/time-out modes are enabled, the system submits the specified number of jobs for processing at one time. If the wait time is reached before all the jobs are complete, the system exits the batch processing procedure.

    The Wait for Completion setting is not for each subset, but for the whole batch. For example, let's suppose you have 20 jobs where the number of parallel jobs is set to 4 and the time-out period is 10 M. If only 15 jobs are completed in 10 M, the system still exits.

    If No Wait is specified, the system submits all jobs and returns control submitted immediately without waiting for any running processes to finish.

16. 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 Data Management 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, in the United States, enter the date using the format MM/DD/YY format.

   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.

   Options are:

   - Append—Existing rows for the POV remain the same, but new rows are appended to the POV. For example, a first-time load has 100 rows and second load has 50 rows. In this case, Data Management appends the 50 rows. 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, Data Management first removes the 100 rows, and loads the 70 rows to TDATASSEG. After this load, the row total for the POV is 70. For a Planning application, Replace Data clears data for the Year, Period, Scenario, Version, and Entity dimensions that you are loading, and then loads the data from the source or file. Note 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.

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. 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 are:

   - Store Data—Inserts the value from the source or file into the target application, replacing any value that currently exists.
   - Replace Data—Clears data for the Year, Period, Scenario, Version, and Entity dimensions that you are loading, and then loads the data from the source or file. Note 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.
   - 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.

   This field is only available for a data load batch.

   For Financial Consolidation and Close, the modes of exporting data are:

   - Replace—First deletes all values based on the scenario, year, period, entity, and data source before it submits the load.
   - Merge—If data already existed in the application, the system simply adds values from the load file to the existing data. No existing data is deleted. If data does not exist, the new data is created.
   - 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.
10. For Oracle Essbase or Planning, from the **Plan Type** drop-down, select the plan type of the application.
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**.

   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.

3. In **Job Sequence**, specify the order in which to sequence the batch.
4. Click **Save**.

Adding a Batch Group

Batch groups enable you to determine security eligibility when executing batches.

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**.

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. It is a batch definition type that enables you to automate and schedule the workflow process (such as four fish steps in the Data Load Workbench: import, validate, export, and check), particularly when you must process the loading of a large number of external 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**, add a new batch definition with the type of **Open Batch**.
2. Create an `openbatch` folder in the application `inbox\batches` subdirectory where the files to be imported are copied.

   After a batch is processed, a directory is created and all files within the `OpenBatch` directory are moved into it. The new directory is assigned a unique batch ID.
3. Select the **File Name Separator** character.

   This character is used to separate the five segments of an open batch file name.
4. Select the **Auto Create Data Rule** option.
5. Stage the open batch files by copying files to the `inbox\batches\openbatch` folder using the name format for batch files.

6. In Batch Execution, process the batch.

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 Data Management assigns the data rule name, it checks whether a data rule with the "Location_Category" name exists. If the name does not exist, Data Management creates the data rule.

    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).

      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 import load method, depending on the source system, available values are:

- A—Append
- R—Replace Data
- F—Full Refresh
- I—Incremental
- S—Replace by Security

For Planning Modules and Planning, the export modes are:

- A—ADD_DATA
- R—REPLACE_DATA
- M—STORE_DATA
- S—SUBTRACT_DATA

For Financial Consolidation and Close and Tax Reporting, the export modes are:

- A—Accumulate
- R—REPLACE
- M—MERGE

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 Data Management create the data load rule automatically, create the open batch file name using the following format: "FileID_Location_Category_Period_LoadMethod".

  In this case, Data Management looks for the data rule with the name "Location_Category". If it does not exist, Data Management creates the data rule automatically with the name "Location_Category".

14. On the **Workflow** tab, under **Other**, select **Batch Execution**.
15. 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 Oracle 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, Data Management 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 a 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 are 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 an 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 the **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 to 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 Data Management assigns the data rule name, it checks whether a data rule with the "Location_Category" name exists. If the name does not exist, Data Management 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).

      If you must load to noncontiguous periods in the open batch, create the data rule in which the source period mappings 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 Data Management create the data load rule automatically, create the open batch file name using the format: "FileID_Location_Category_Period_LoadMethod".

In this case, Data Management looks for the data rule with the name "Location_Category". If it does not exist, Data Management creates the data rule automatically with the name "Location_Category".

An auto-create data rule is only applicable for contiguous period loads. To load to noncontiguous periods, create the data rule in which the source period mappings are defined.

14. On the **Workflow** tab, under **Other**, select **Batch Execution**.
15. 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 and all files within the `openbatch` directory are moved to it. The new directory is assigned a unique batch ID.

> **Note:**
>
> The Open batch feature is unavailable for the Account Reconciliation Manager.

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.

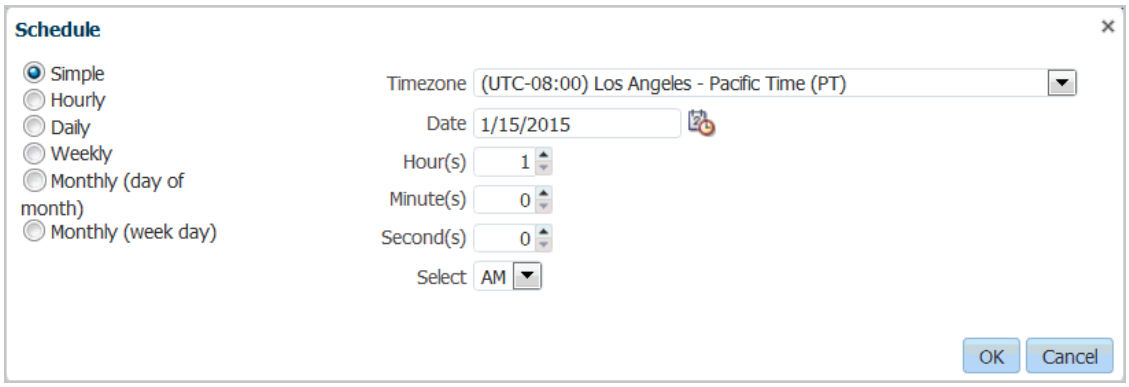
Batch Execution shows all batches to which you have access based on the batch group assigned.

> **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**.

Scheduling Jobs



The execution and scheduling of Data Management and Data Integration jobs can only be performed now using the EPM Platform Job Scheduler console in the 24.09 update and later.

The old scheduling functionality in Data Management has been deprecated.

You must use the "Migrate Schedules to Platform Jobs Scheduler" utility to migrate any existing scheduled jobs (formerly run in Data Management) to the EPM Platform Job Scheduler console.

For more information about scheduling Data Management and Data Integration jobs, see Scheduling Jobs in *Administering Data Integration for Oracle Enterprise Performance Management Cloud.*

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Management, see Migrating Schedules to EPM Platform Job Scheduler.

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Integration, see Migrating Schedules to EPM Platform Job Scheduler in *Administering Data Integration for Oracle Enterprise Performance Management Cloud.*

For more information about scheduling Data Management and Data Integration jobs from Data Integration, see Scheduling Jobs in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Management, see Migrating Schedules to EPM Platform Job Scheduler.

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Integration, see Migrating Schedules to EPM Platform Job Scheduler in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

Canceling a Scheduled Job

The execution and scheduling of Data Management and Data Integration jobs can only be performed now using the EPM Platform Job Scheduler console in the 24.09 update and later.

The old scheduling functionality in Data Management has been deprecated.

You must use the "Migrate Schedules to Platform Jobs Scheduler" utility to migrate any existing scheduled jobs (formerly run in Data Management) to the EPM Platform Job Scheduler console.

For more information about scheduling Data Management and Data Integration jobs, see Scheduling Jobs in *Administering Data Integration.*

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Management, see Migrating Schedules to EPM Platform Job Scheduler in *Administering Data Integration* ..

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Integration, see Migrating Schedules to EPM Platform Job Scheduler in *Administering Data Management*

For more information about scheduling Data Management and Data Integration jobs from Data Integration, see Scheduling Jobs in *Administering Data Integration* .

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Management, see Migrating Schedules to EPM Platform Job Scheduler .

For more information about accessing the "Migrate Schedules to Platform Jobs Scheduler" from Data Integration, see Migrating Schedules to EPM Platform Job Scheduler in *Administering Data Integration* .

6

Data Management Reports

Data Management provides prebuilt reports that capture business-critical operations and revenue-generating activities within your organization. These reports provide key information on how data is integrated from the Enterprise Resource Planning (ERP) source system into the Oracle Fusion Cloud Enterprise Performance Management target application.

The Data Management reporting framework enables you to adjust report group assignments, add or remove reports from report groups and control report security.

Data Management Reports

The standard Data Management report groups are described below. For information on the subcategories of each report, see Data Management Detail Reports.

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 6-1 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 • Map Monitor for Location • Map Monitor for User • Intersection Drill Down **Note:** The Map Monitor reports do not capture historical data earlier than release 11.1.2.4.100. Map Monitor reports are enabled only if the Enable Map Audit is set to "Yes" in System Settings.
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)

Table 6-1 (Cont.) Report Groups and Descriptions

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. Check Reports are not available in the Financial Consolidation and Close.
Listing Reports	Listing reports summarize metadata and settings (such as the import format, or check rule) by the current location. Listing reports summarize data 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 processes. 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 Status Period Range (Cat, Start Period, End Period)

Table 6-1 (Cont.) Report Groups and Descriptions

Report Group	Description
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 Report Definitions

Report definitions are the attributes that determine the content and structure of a report. Using the Report Definition option, you can:

- review the details of a report definition
- add or remove reports from a report group
- associate a report with a report group.

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.
6. Click **Save**.

Associating a Report with a Report Group

To add a report definition and associate a report with the report group 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.
6. 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."

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. Click **OK**.

Data Management Detail Reports

The following reports are available in Data Management.

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 Data Management locations, subtotaled by Data Management location, based on an account selection that enables use of wildcards.

Runs for

All Data Management 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 Data Management locations; subtotaled by Data Management location.

Runs for

All Data Management locations

Parameters

Target account, Period, Category

Query

Account Chase Freeform

Template

Account Chase Free Form.rtf

Map Monitor for Location

Displays a list of mapping changes, additions, and deletions made for a location based on a date range. Shows the user name, and the time and date of the change.

> **Note:**
>
> The Map Monitor reports do not capture historical data earlier than release 11.1.2.4.100.
>
> Map Monitor reports are enabled only if the Enable Map Audit is set to "Yes" in System Settings.

Map Monitor reports includes data load mappings from:

- Data load mapping option
- Text file imports
- Migration imports
- Oracle Data Relationship Management

Runs for

All Data Management locations

Parameters

Location, Start Date, End Date

Query

Dimension Map Query

Template

Dimension Map for POV.rtf

Map Monitor for User

Displays a list of mapping changes, additions, and deletions made by a user based on a date range. Report shows the user name, and the time and date of the change.

> **Note:**
>
> The Map Monitor reports do not capture historical data earlier than release 11.1.2.4.100.
>
> Map Monitor reports are enabled only if the Enable Map Audit is set to "Yes" in System Settings.

Map Monitor reports includes data load mappings from:

- Data load mapping option
- Text file imports
- Migration imports
- Oracle Data Relationship Management

Runs for

All Data Management locations

Parameters

User name, Start Date, End Date

Query

Dimension Map for POV

Template

Dimension Map for POV.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 Data Management location

Parameters

Period, Category

Query

Intersection Drill Down Query

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 Data Management 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 Data Management 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 Data Management 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 Data Management 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 Data Management 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 Data Management 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 Data Management. 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.

TB Current Location, with Targets (Cat, Per)

Shows imported source accounts (departments) and their corresponding accounts (entities).

Runs for

Current Data Management 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 Data Management 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 Data Management 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 Data Management 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 Data Management 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 Data Management 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 Data Management 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 data 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 Data Management 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 Data Management location

Parameters

Any Data Management 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 Data Management location

Parameters

Current Data Management 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 Data Management location

Parameters

Any Data Management 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 processes. 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 Data Management locations

Parameters

Category, Period

Query

Process Monitor

Template

Process Monitor.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 Data Management 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 Data Management categories and locations

Parameters

Period

source

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 Data Management 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 Data Management location

Parameters

Category 1, Period 1, Category 2, Period 2

Query

Trial Balance Variance

Template

TB Variance.rtf

7
System Maintenance Tasks

You can run system processes to maintain and clean up all runtime artifacts, such as the Process tables, Staging tables or `inbox`/`outbox` folders. Often the tables and folders contain vast amounts of data, which you may no longer need. With the System Maintenance Tasks feature, you can purge standard tables and folder by scheduling system processes and executing them in the EPM Platform Job Scheduler.

> **Note:**
>
> All applications *not* assigned to a folder are purged when a single application is selected for a purge. The default application folder is generic, and the purge script focuses on the folder in which the selected application resides. In this case if you want to prevent an application from being purged, save it to an independent folder.

To facilitate the use of the Purge Scripts, Data Management provides the following:

- A set of custom scripts is shipped to the `bin/system` directory.

  The scripts include:

  - Partition Data Load Staging Tables
  - Delete Integration (DeleteIntegration.py)
  - Maintain Application FolderExport Setup Table Data (TableExport.py)
  - List Table Rowcount
  - Maintain Application Folder (MaintainApplication Folder.py)
  - Maintain Data Table by Location (MaintainFDMEEDatatables.py)
  - Maintain Data Table by Application (MaintainFDMEEDatatables.py)
  - Maintain Process Table (MaintainProcessTables.py)
  - Maintain Setup Table (MaintainSetupData.py)
  - Migrating Schedules to EPM Platform Job Scheduler
  - Purge All Imported Data (PurgeAllData.py)
  - Upgrade Custom Applications (UpgradeCustomApp.py)
  - Reallocate Tablespace
  - Reset Environment
- Scripts are registered as system scripts in script registration.
- Script are registered as part of installation with QUERYID = 0 and APPLICATIONID = 0.
- The script group "System" is created and system scripts are assigned to it.
- Script execution displays system scripts when the user has access irrespective of the target application in the POV.

- The ODI process executes the scripts from the `bin/system` directory instead of the `data/scripts/custom` directory.

Partition Data Load Staging Tables

Use the Partition Data Load Staging Tables script to select the table partitioning option when loading large volumes of data.

Table partitioning feature addresses inconsistent data load times, and enables table partitioning to isolate each data load process in a table partition.

> **Note:**
>
> Run the **Partition Data Load Staging Tables** process only when no other data load processes are running.

> **Note:**
>
> Enabling table partitioning is not available for data loads in a local environment.

To execute the Partition Data Load Staging Tables script:

To execute the List Table Rowcount script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Partition Data Load Staging Tables** and then click **Execute**.
2. From the **Execute Script** page, in **Value**, select the partition data load staging tables mode.

   Available options:

   - **Enable** — Classifies a table in the cloud version of the Oracle Autonomous Database as "STAGING" and enables partitioning.
   - **Revert** — Turns off table partitioning.
3. Click **OK**.

Partitioning Tables

A table partitioning option is available when loading large volumes of data. This feature is first used if a sudden performance degradation of your integrations has occurred. Table partitioning provides enhanced support for large data loads to the TDATASEG_T and TDATASEG tables by letting you decompose them into smaller, independent and more manageable pieces. Each data load works on a separate petition on which supports parallel processing. Additionally, a partition can be truncated instead of deleted from the from the TDATASEG_T table, which enhances performance.

In general, table partitioning is a technique used by database administrators to help manage performance of customer datasets. For the Oracle Fusion Cloud Enterprise Performance Management, customers don’t have direct access to the database, but this feature has been enabled within Cloud EPM to allow users to directly perform this operation, but not as a direct user command against the database. Using this feature improves overall data load

performance when a large number of mapping rules are used to transform the data prior to loading to the downstream business processes.

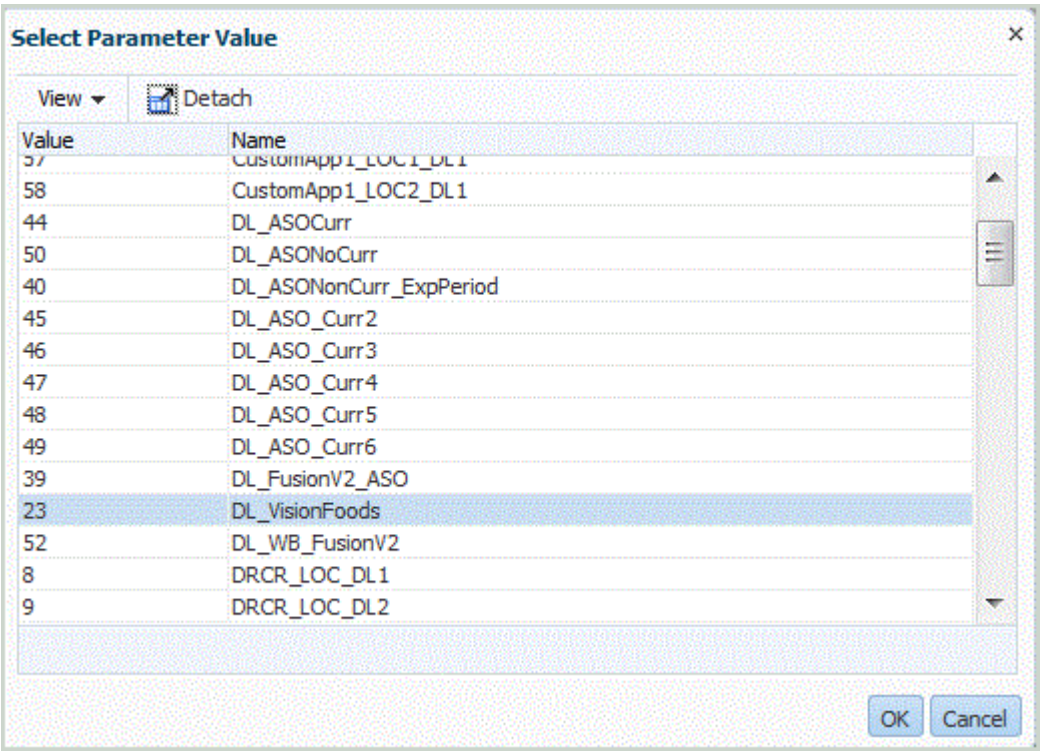
> **Note:**
>
> Run the **Partition Data Load Staging Tables** process only when no data load processes are running.

Deleting Integration

You can delete an integration including the name, import format, location, mappings and any data rules created in Data Integration. This option enables you to delete an entire integration without having to delete individual components.

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Delete Integration** and then click **Execute**.
2. From the **Execute Script** page, and then in **Value**, enter the name of the integration to delete and click **OK**.
3. **Optional**: Click to search for the integration.

   On the **Search Parameter Value**, select the integration from the list and click **OK**.



   Click **OK**.

   When the job is executed, the system shows the message: "Custom script execution initiated with Process ID: XXX". To view the details of the job, see Viewing Process Details.

List Table Rowcount

Use the List Table Rowcount option to show the number of rows in a data table.

This option lists table row counts from the following tables:

- TDATASEG
- TDATASEG_T
- TDATAMAP
- TDATAMAPSEG
- TLOGPROCESS
- TPOVPARTITION

To execute the List Table Rowcount script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **List Table Rowcount** and then click **Execute**.
2. From the **Execute Script** page, click **OK**.

Export Setup Table Data

Use the Export Setup Table Data option to export the data from the following tables for debugging purposes:

- AIF_BALANCE_RULES
- AIF_BAL_RULE_PARAMS
- AIF_LCM_ARTIFACTS_V
- AIF_SOURCE_SYSTEMS
- AIF_TARGET_APPLICATIONS
- AIF_TARGET_APPL_DIMENSIONS
- AIF_TARGET_APPL_PROPERTIES
- TPOVPARTITION
- TBHVIMPGROUP
- TBHVIMPITEMFILE
- TPOVPERIOD
- TPOVPERIODADAPTOR
- TPOVPERIODSOURCE
- TPOVCATEGORY
- TPOVCATEGORYADAPTOR

To execute the Export Setup Table Data script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Export Setup Table Data** and then click **Execute**.
2. From the **Execute Script** page, click **OK**.

Maintain Application Folder

The Maintain Application Folder process purges files from the `inbox`, `outbox`, and `data` folder directories. Data Management accepts a separate Days to Keep parameter for each of the folders. If the value is not specified for a specific folder, Data Management skips the folder.

By default, the system purges all files after 60 days. Logs are purged after 7 days.

In addition, Data Management checks the `inbox` and `outbox` subdirectories under the respective folders and deletes any files. In the `data` subdirectory, Data Management skips the `scripts` directory because it holds customer scripts.

To execute the Maintain Application Folder script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Maintain Application Folder**.
2. Click **Execute**.
3. On the **Execute Script** page, and then from **Target Application** specify the name of the target application to which to purge files.
4. In **Days to keep Inbox directory**, specify the number of days to keep files in the Inbox directory.
5. In **Days to keep Outbox directory**, specify the number of days to keep files in the Outbox directory
6. In **Days to keep Data directory**, specify the number of days to keep files in the Data directory.
7. Click **OK**.

Maintain Data Table by Location

Use Maintain Data Table by Location to delete data for a specific location by period or category.

> **Note:**
>
> To delete all locations for an application, use the Maintain Data Tables by Application option. This option enables you to delete data across all locations associated with a selected target application. See Maintain Data Table by Application for more information.

This script takes the following parameters:

- Location
- Start Period
- End Period
- Category

To execute the Maintain Data Table by Location script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Maintain Data Table by Location** and then click **Execute**.
2. From **Execute Script** page, from **Location**, select the location from which to delete data.

   To delete data from all locations, leave the **Location** field blank.
3. From **Start Period**, select the starting period from which to delete data.
4. From **End Period**, select the ending period from which to delete data.
5. From **Category**, select the category data to delete.

   To delete all category data, leave blank.
6. Click **OK**.

Maintain Data Table by Application

The Data Management data tables store archives of exported data for audit and drill down purposes. These tables can grow over a period of time but you can purge these tables as needed. The maintenance process deletes the following tables:

- TDATAMAPSEG
- TDATASEG
- TPROCESSLOG

The parameters are:

- Target Application
- Category
- Start Period
- End Period

To execute the Maintain Data Table by Application script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Maintain Data Table by Application** and then click **Execute**.
2. From the **Execute Script** page, and then from **Target Application**, specify the name of the target application to which to purge data.
3. From **Start Period**, select the starting period from which to delete data.
4. From **End Period**, select the ending period from which to delete data.
5. From **Category**, select the category data to delete.

   To delete all category data, leave blank.
6. Click **OK.**

Maintain Process Tables

This process maintains the following execution tables:

- AIF_PROCESSES
- AIF_PROCESS_DETAILS
- AIF_PROCESS_LOGS

- AIF_PROCESS_PARAMETERS
- AIF_PROCESS_PERIODS
- AIF_PROCESS_STEPS
- AIF_BAL_RULE_LOADS
- AIF_BAL_RULE_LOAD_PARAMS
- AIF_BATCH_JOBS
- AIF_BATCH_LOAD_AUDIT
- AIF_TEMP

To execute the Maintain Process Tables script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Maintain Process Tables** and then click **Execute**.
2. From the **Execute Script** page, then from **Days to keep records**, specify the number of days to keep records, and then click **OK**.

Maintain Setup Data

Use Maintain Setup Data to view and delete an orphan row or invalid data that cannot be accessed or deleted from the user interface. This data might include an orphan row from an import format, location, or data load rule. It can also include a duplicate row, or a Cloud user id or password defined for a local target application

Maintain Setup Data uses a Mode parameter, which enables you to either preview or delete invalid data. Preview mode enables you to print the data to be deleted. Delete mode enables you to delete the data.

To execute the Maintain Setup Data script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Maintain Setup Data**.
2. Click **Execute**.
3. From the **Execute Script** page, and then from **Mode**, select either **Delete** or **Preview**.
4. Click **OK**.

   If you selected **Preview**, the invalid data is shown on the Execute Script screen.

   If you selected **Delete**, the message: **Custom script executed initiated with Process ID: XXX** is displayed (where XXX is the process id number generated for job). You can access the log for the deleted records from the Process Details page.
5. Click **OK**.

Upgrade Custom Applications

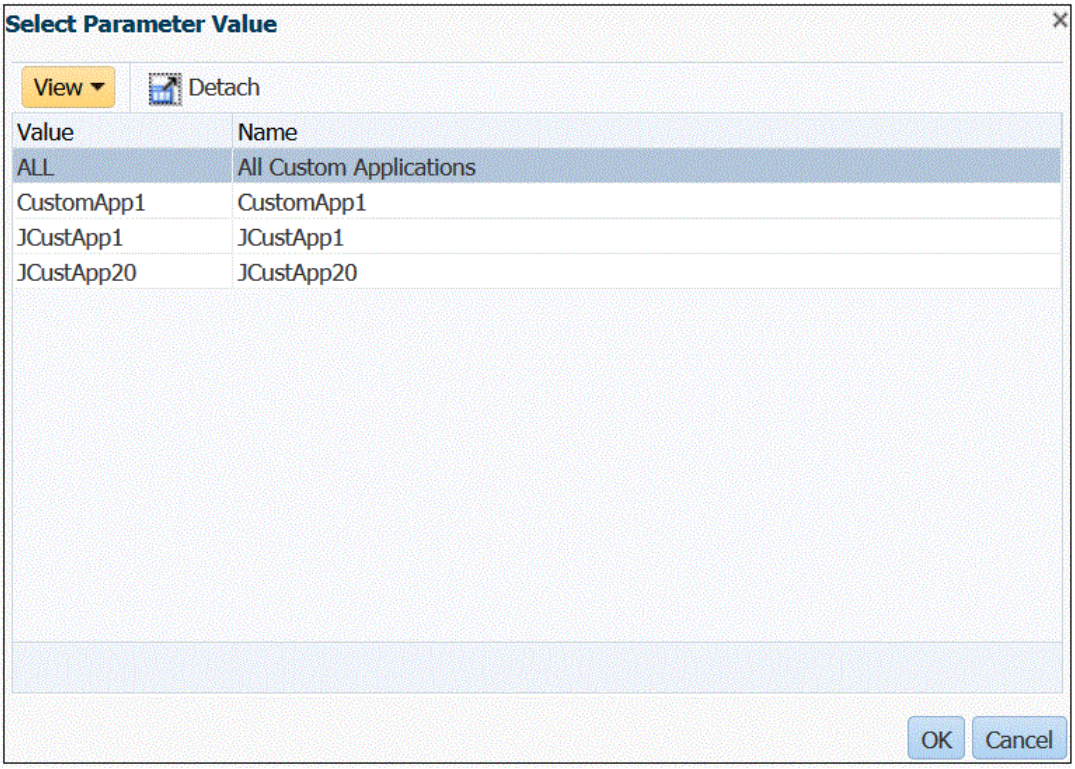
Use the Upgrade Custom Applications option to migrate your existing custom target application to data export to file applications. The migration converts existing file format from the custom target application to the file formats used in the data export to file option and retains all the existing setup. When the custom target application has been converted, you can run same data rule as before. You can run the migration for one custom application or all.

Before using this option, reconcile the differences in the file formats. For example, the header row in the Data Export to File contains the name of the dimension and not UD1, UD2 etc.

For more information about the Data Export to File option, see Creating a Data Export File.

To execute the Upgrade Custom Applications script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Upgrade Custom Applications**.
2. Click **Execute**.
3. From the **Execute Script** page, and then in **Value**, specify the name of the custom target application to migrate from the LOV.
   To migrate all custom applications, in **Value**, enter **All Custom Applications**.
4. **Optional**: To browse custom target applications, click , and from the **Search Parameter Value** screen, select the custom target application and click **OK**.



5. Click **OK**.

Purge All Imported Data

Use Purge All Imported Data to clear all imported data from your data tables. This option enables you to clear data from the system so that you can start over when loading data.

When executed, the Purge All Imported Data deletes the following:

- Mapping audit used for loading
- Audit information about the data load
- Process load status
- Process parameters

> **Note:**
>
> There is **no backup** to recover any purged data. It is recommended that you use extreme caution before executing this process.

After the purge, note the following:

- You cannot view any data in Workbench for any POV
- You cannot drill down from the Oracle Fusion Cloud Enterprise Performance Management to Data Management.

  > **Note:**
  >
  > Drill regions are not deleted as part of the purge process. If you need to delete a drill region, then delete it manually.

- You cannot restore maps for the given POV.

> **Note:**
>
> All setup data for example application registration, import format, and mapping are retained and not impacted by the purge process.

To execute the Purge All Imported Data script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Purge All Imported Data** and then click **Execute**.
2. From **Execute Script** page, and then in **Confirm Delete All Imported Data**, select **Y** (yes) to launch a confirmation message before executing a purge.

   Otherwise, enter **N** (No).
3. In **Reason**, specify the reason for executing the purge.

   The reason is shown on the Process Details log.
4. Click **OK**.

   The message: **Custom script executed initiated with Process ID: XXX** is displayed (where XXX is the process id number generated for job). You can access the log from the Process Details page.

Reallocate Tablespace

Use the Reallocate Tablespace maintenance script to free unused and space in your tables. Reallocating tablespace enables you not to exceed the space quota defined for a specific table and free up space available for the storage of data.

> **Note:**
>
> Do not load data when executing this script.

To execute the Reallocate Tablespace script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Reallocate Tablespace** script and then click **Execute**.
2. On the **Execute Script** page, click **OK**.

Reset Environment

The Reset Environment script enables you to clear all Data Management setup and data resetting the entire business process environment. You can then reconfigure the integration process as needed. This process accepts a **Yes** or **No** confirmation parameter and allows you to specify a reason for the reset.

> **Note:**
>
> When the Reset Environment process is executed, data cannot be recovered.

To execute a Reset Environment script:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Reset Environment** script and then click **Execute**.
2. On the **Execute Script** page, from the **Confirm Delete** drop-down, select **Y** to confirm the deletion.
3. From **Reason for Delete**, enter a reason for the deletion.
4. Click **OK**.

Migrating Schedules to EPM Platform Job Scheduler

To support the migration of all existing scheduled jobs in Data Management to the EPM Platform Job Scheduler console, use the "Migrate Schedules to Platform Jobs Scheduler" option.

> **Note:**
>
> Customers must migrate any existing job schedules from Data Management to the EPM Platform Job Scheduler console prior to Q4 2024. At that time the scheduling functionality accessed from the user interface in Data Management will be deprecated.

Migrating Schedules to the EPM Platform Job Scheduler Important Considerations

The following are important actions and considerations when migrating scheduling jobs:

1. Before performing the Migrate Schedules to Platform Jobs Scheduler task, make a backup or Data Management Snapshot using the exportDataManagement EPMAutomate command or Executing a Snapshot Export Job in System Maintenance tasks.

The regular Lifecyle (LCM) snapshot backup does not include schedules. If you delete old schedules, there is no way to recover the old schedules without a Data Management snapshot.

2. Schedules are always migrated in Merge mode. Once a schedule is migrated, it is not updated again. However, you can delete the schedule and migrate it again. You can run the migration process repeatedly.
3. When you migrate the schedule, you have the option to delete the existing schedules from Data Management.

   If you choose not to delete existing schedules, then both the new and the old schedule execute at the same time and can cause data corruption issues.
4. Schedules are created in the EPM Platform Job Scheduler under the user running the migrate process. The schedules can be created only by an Application Administrator so always run the migrate process using a user with Planning Administrator or Consolidation Administrator roles.
5. After schedules are migrated, a job is executed under the user who migrated the schedule. Jobs are always run as an Administrator. If the original schedule was created by a Power User or by a user with a Run Integration role, jobs are run in an elevated role. If there are requirements to enforce security or other validations applicable to non-admin users, then those validations are not enforced. Oracle will consider adding support for running scheduled jobs as non-admin user if there is demand in a future release.
6. Schedules with execution times defined as Last Day or Last Day - 1 are not supported in the EPM Platform Job Scheduler. If you have requirement to run the jobs on the last day of the month, then schedule a separate job for each month.

Migrating Schedules Best Practices

The following are best practices when migrating scheduling jobs:

1. Execute the migrate schedule job in Preview mode. Review the process log to understand how the schedules will be migrated.
2. When satisfied with the details of a migrated schedule job run in Preview, take a Data Management snapshot of the Setup Data only.

   For more information, see Executing a Snapshot Export Job.
3. Execute the Migrate Schedule process and set the **Delete Old Schedules** to **No**.
4. Review the newly created schedules.
5. If there are issues with the newly created schedules, delete the invalid schedules from the EPM Platform Job Scheduler console.

   When any unrecoverable errors occur, restore the Data Management snapshot and execute the migration again.
6. Fix the appropriate source schedules and rerun the process.
7. If everything looks OK, run the Migrate Schedule by setting the **Delete Old Schedule** option to **Yes**.

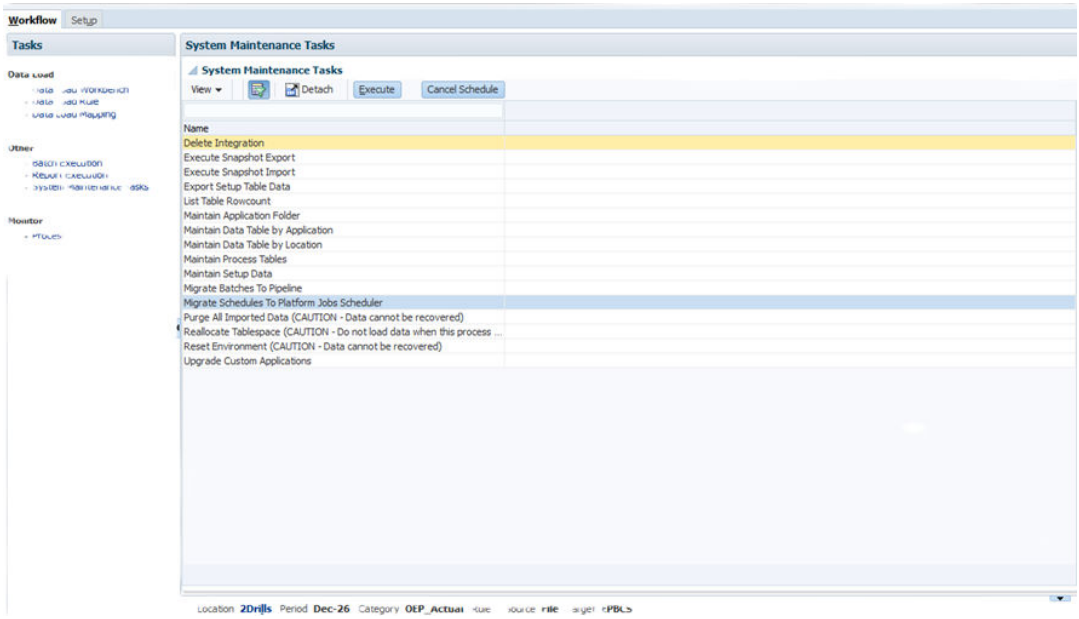
   Run the **Delete Old Schedule** option before the first scheduled job is supposed to execute.

Migrating Schedules to the EPM Platform Job Scheduler Process Description

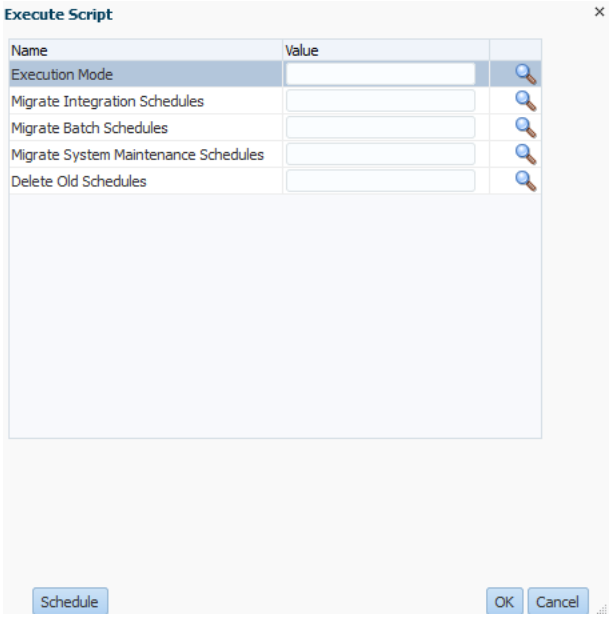
The following are the steps to migrate scheduling jobs to the EPM Platform Job Scheduler. Before beginning the migration, familiarize yourself with the content at: Migrating Schedules Best Practices and Migrating Schedules to the EPM Platform Job Scheduler Important Considerations.

To migrate a job schedule:

1. In **Data Management**, from the **Workflow** tab, then under **System Maintenance Tasks**, select **Migrate Schedules to Platform Jobs Scheduler**.



2. Click **Execute**.

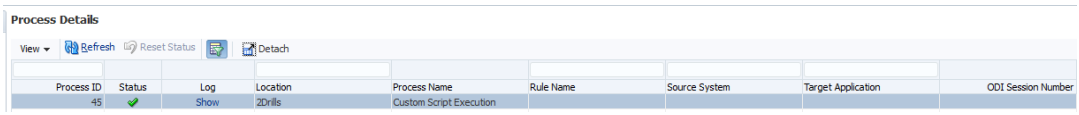


3. Select the following parameters:

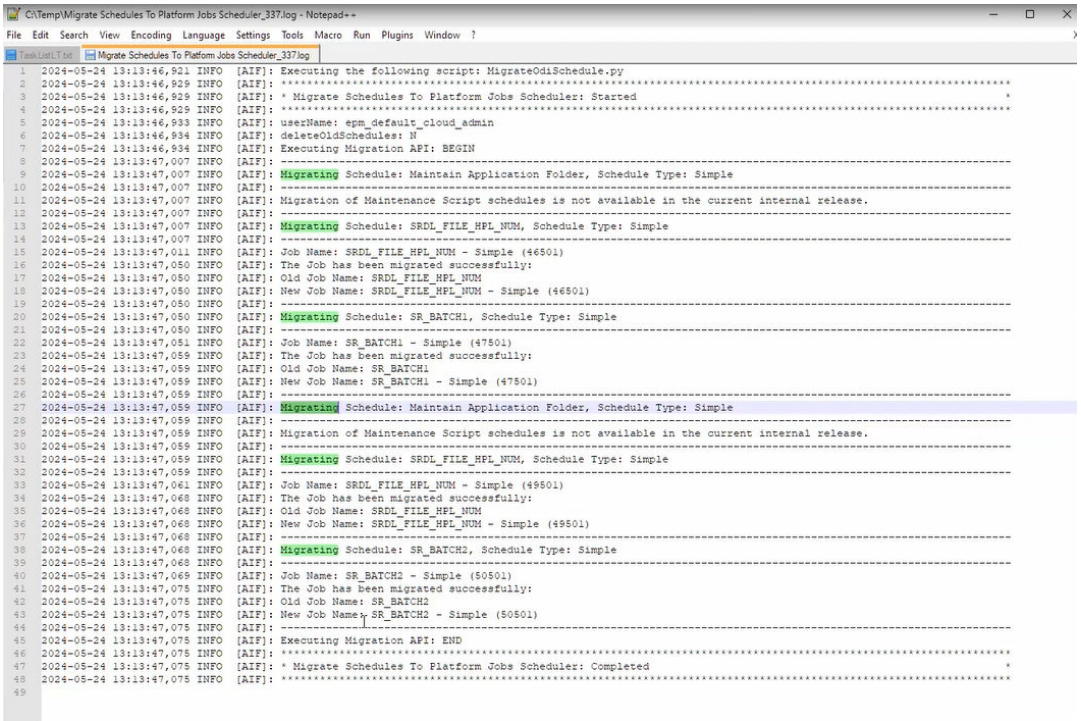
Table 7-1 Migrate Job Schedule Parameters

Parameter	Value	Description
Execution Mode	Options: • Preview • Migrate The default value is Preview.	In Preview mode the system provides details of all schedules that to be migrated, but will not perform the actual migration. In Migrate mode the system performs the actual migration.
Migrate Integration Schedules	Options: • Yes • No Default value is **Yes**.	Select **Yes** to migrate existing integration schedules.
Migrate Batch Schedules	Options: • Yes • No Default value is **Yes**.	Select **Yes** to migrate existing batch schedules.
Migrate System Maintenance Schedules	Options: • Yes • No Default value is **Yes**.	Select **Yes** to migrate existing System Maintenance Tasks schedules.
Delete Old Schedules	Options: • Yes • No Default value is **No**.	Select **Yes** to delete existing schedules from Data Management. If the schedules are not deleted, then both the old and new schedules are executed.

4. Click **OK**.
5. To view a report of the migrated jobs, from the **Workflow** tab, under **Monitor**, select **Process Details**.
6. Click **Show** next to the migrated job schedule.



The following image shows a migrated job schedule report link in Process Details.



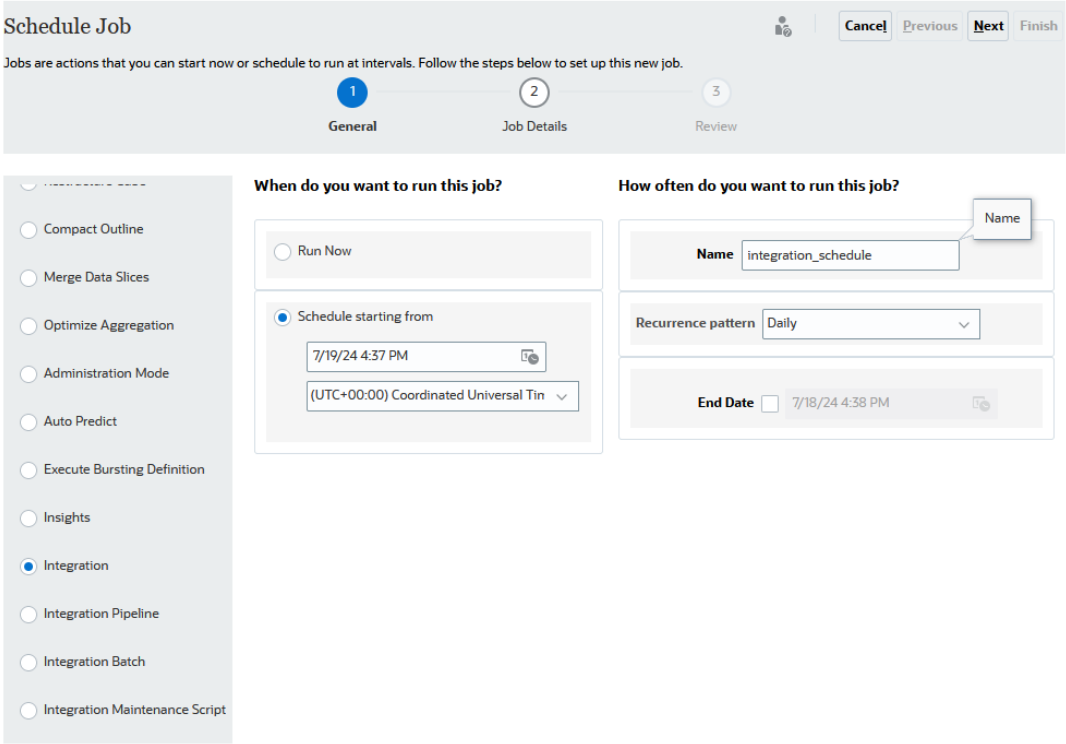
> **Note:**
>
> To change the level of detail for the migrated job schedule report in Process Details, change the **Log Level** settings in **User Settings**. Setting the log level to **5** shows the most detail on the report. For more information, see Setting User Level Profiles.

Scheduling a Data Rule, Integration, or Batch Definition to Run in the Job Scheduler

You can schedule the execution times of a data load rule or batch in Data Management or an integration in Data Integration.

To schedule a data load rule, integration, or batch:

1. Click **Application**, then **Jobs**, and then **Schedule Jobs**.
2. From the **Schedule Jobs** page, then **What type of job is this?**, select **Integration**.

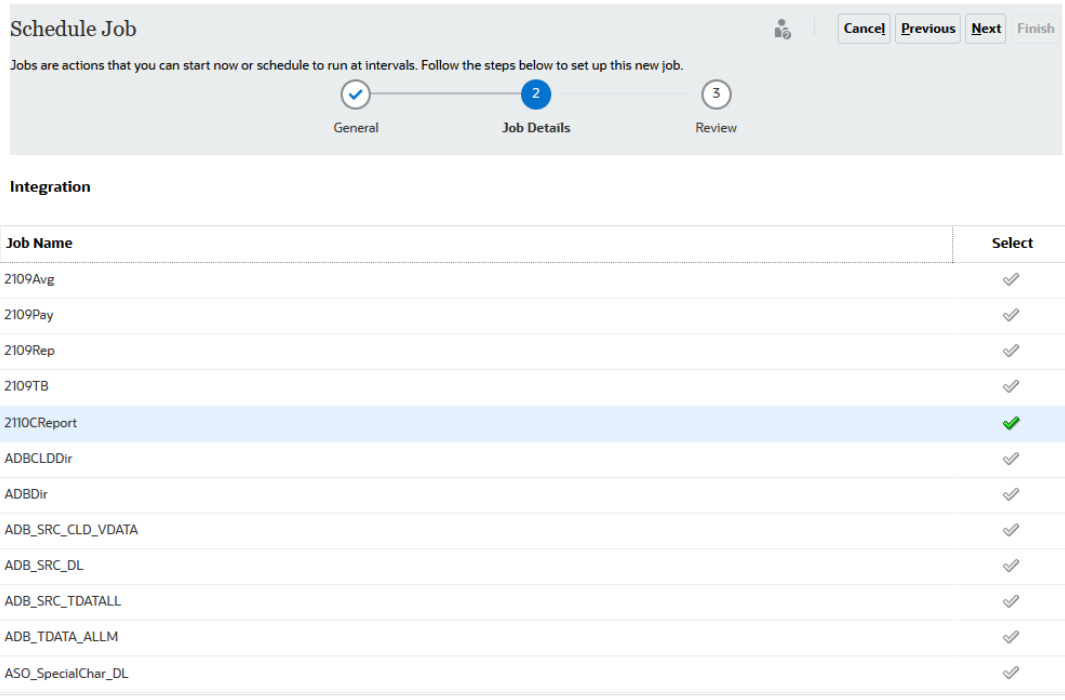


3. To schedule a data rule or integration to run now, see Scheduling Hourly Jobs.

   To schedule a data rule or integration to run later, see Scheduling a Data Rule or Integration Definition to Run Later in the Job Scheduler.

4. Click **Next**.

5. From **Job Name**, select the data rule or integration to schedule and click ✔.



6. Click **Next**.

7. From **Import Mode**, select the method for importing data.

   Options include:

   - **Append**—Keep existing rows for the POV but append new rows to the POV. For example, a first-time load has 100 rows and second load has 50 rows. In this case, 50 rows are appended. After this load, the row total for the POV is 150.
   - **Replace**—Clears all data for the POV in the target, and then loads from the source or file. For example, a first-time load has 100 rows, and a second load has 70 rows. In this case, 100 rows are removed, and 70 rows are loaded to TDATASSEG. After this load, the row total is 70.

     For a Planning application, Replace clears data for Year, Period, Scenario, Version, and Entity that you are loading, and then loads the data from source or file. Note that when you have a year of data in the Planning application, but are only loading a single month, this option clears the entire year before performing the load.

     > **Note:**
     >
     > When running an integration in Replace mode to an ASO cube, if the scenario member is a shared member, then only a Numeric data load is performed. Be sure to specify the member name with fully qualified name including complete hierarchy. The All Data Type load methods does not work when the scenario member is a shared member.

     > **Note:**
     >
     > Replace Mode is not supported for the load method "All data types with auto-increment of line item."

   - **Merge**—(Account Reconciliation only). Merge changed balances with existing data for the same location.

     Merge mode eliminates the need to load an entire data file when only a few balances have changed since the last time data was loaded into Account Reconciliation. If mappings change between two loads, customers must reload the full data set.

     For example, a customer might have 100 rows of existing balances for one number account IDs, each which has an amount of $100.00. If the customer runs the integration in merge mode and the source has one row for one account ID with an amount of $80, then after running integration, there are one hundred rows of balances, 99 each of which have a balance of $100.00, and 1 which has a balance of $80.00.
   - **No Import**—Skip the import of data entirely.
   - **Map and Validate**—Skip importing the data but reprocess the data with updated mappings.

8. From **Export Mode**, select the method for exporting data to the target application.

   Options include:

   - **Merge**—Overwrite existing date with the new data from the load file. (By default, all data load is processed in the Merge mode.) If data does not exist, create new data.
   - **Replace**—Clears all data for the POV in the target, and then loads from the source or file. For example, a first-time load has 100 rows, and a second load has 70 rows. In

this case, 100 rows are removed, and 70 rows are loaded to the staging table. After this load, the row total is 70.

For a Planning application, Replace clears data for Year, Period, Scenario, Version, and Entity that you are loading, and then loads the data from source or file. Note that when you have a year of data in the Planning application, but are only loading a single month, this option clears the entire year before performing the load.

- **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.
- **Subtract**—Subtract 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.
- **Dry Run**—(Financial Consolidation and Close and Tax Reporting only) Scan a data load file for invalid records without loading data it to the target application. The system validates the data load file and lists any invalid records into a log, which lists 100 errors or less. For each error, the log indicates each record in error with its corresponding error message. Log details are available in Process Details.

> **Note:**
>
> Dry Run ignores the Enable Data Security for Admin Users target option and always uses the REST API for the administrator user.

- **No Export**—Skip the export of data entirely.
- **Check**—After exporting data to the target system, display the Check report for the current POV. If check report data does not exist for the current POV, a blank page is displayed.

9. From **Start Period**, select the first period for which data is to be loaded.You can filter periods by simply typing the character(s) to filter by. For example, type J to filter by months beginning J such as June or July. You can also click the drop down and specify additional filter criteria in the edit box shown below More results available, please filter further. This period name must be defined in period mapping.

   This period name must be defined in period mapping.

   > **Note:**
   >
   > Use a Start Period and End Period that belong to a single Fiscal Year. If a period range crosses fiscal years, you run into the following issues:
   >
   > - When loading data in replace mode, the system clear data for both years
   > - When exporting data, you will get duplicate data
   >
   > The above is applicable for all modes of data load including standard and quick mode.

10. From **End Period**, select the last period for which data is to be loaded. This period name must be defined in period mapping.
11. Click **OK**.

Scheduling a Data Rule or Integration Definition to Run Later in the Job Scheduler

Table 7-2 Scheduling Jobs Options

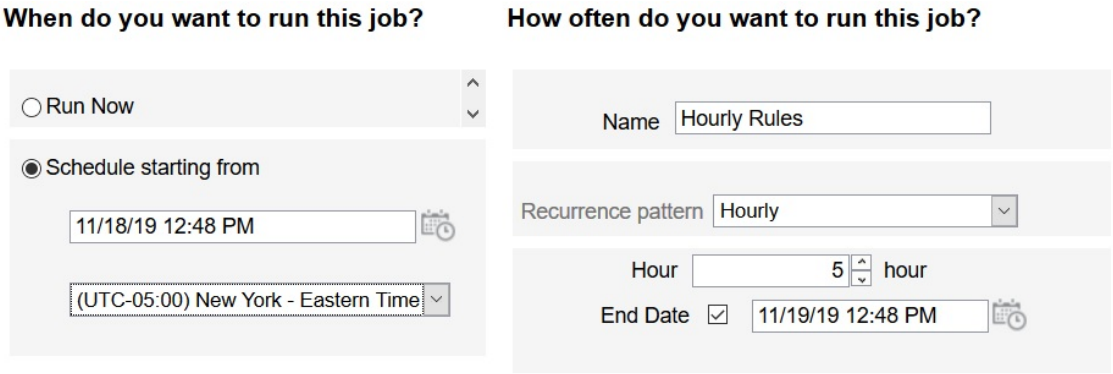
Option	Description
Schedule starting from	Select the starting date and time, including the time zone.
Name	Specify a name for the scheduled job; for example, **MyDailyCubeRefresh**. The name you specify is displayed along with the job name (which you'll choose on the next screen); for example, **MyDailyCubeRefresh : Refresh Database**.

Table 7-2 (Cont.) Scheduling Jobs Options

Option	Description
Recurrence Pattern	Specify the frequency with which to run the job: • **Hourly**: Hourly jobs run according to a timetable which is based on the values you set in the **Schedule starting from** and **Hour** fields. The schedule for **Hourly** jobs restarts each day during the midnight hour and the recurring job starts at the first hour, second hour, third hour (and so on up to 12 hours) after the midnight hour, depending on the value you select in the **Hour** field. So for example, if you specify a value of **5** in the **Hour** field, the possible times the job could start are during the 12:00 AM hour, the 5:00 AM hour, the 10:00 AM hour, the 3:00 PM hour, and the 8:00 PM hour each day. If the scheduled start time for a job is 12:48 PM and you set the **Hourly** recurrence for **5 Hours**, the job will start at 3:48 PM, which is the first scheduled time available after 12:48 PM in which to start a 5-hour recurring job. Then the job will run again at 8:48 PM, 12:48 AM, 5:48 AM, and 10:48 AM. For the default recurrence of **1 Hour**, the job will start running at the start time you specify and continue to run each hour until the ending date and time; for example, if the scheduled start time for a job is 12:48, the job will run at 12:48, 1:48, 2:48, 3:48 and so on. • **By Minute**: Set the **Frequency** for 15 or 30 minutes. The job will start running in 15 or 30 minutes and continue to run at the selected frequency until the ending date and time; for example, if you set the job to run every 15 minutes and the starting time is 3:15, the job will start to run at 3:30, then 3:45, and so on. Jobs cannot be scheduled to run in increments smaller than 15 minutes. • **Run Once**: The job will run once at the starting date and time. • **Yearly**: The job will run at the starting date and time and continue to run each year thereafter until the end date. • **Monthly**: The job will run at the starting date and time and continue to run each month thereafter until the end date. • **Weekly**: The job will run at the starting date and time and continue to run each week until the end date. • **Daily**: The job will run at the starting date and time and continue to run each day until the end date.
End Date	If the job is recurring, select an ending date and time.

Scheduling Hourly Jobs

Hourly jobs run according to a timetable which is based on the values you set in the **Schedule starting from** and **Hour** fields. The schedule for **Hourly** jobs restarts each day during the midnight hour and the recurring job starts at the first hour, second hour, third hour (and so on up to 12 hours) after the midnight hour, depending on the value you select in the **Hour** field.



For example, if you specify a value of **5** in the **Hour** field, the hours during which the job will run each day are 12 AM, 5 AM, 10 AM, 3 PM, and 8 PM. The start time indicates the hour and minute when the system should start honoring the schedule, and the end time indicates when the system should stop. So if the start time is 12:48 PM on 11/18, then that means 12:48 AM, 5:48 AM, and 10:48 AM have already occurred on the current day (11/18) and the next available timeslot is 3:48 PM, which is when the scheduled job will run for the first time. After that it will run at 8:48 PM on 11/18. However on 11/19 it starts over again and will run at 12:48 AM, 5:48 AM, 10:48 AM, and so on until the system reaches the specified end time (in this case, 12:48 PM on 11/19).

> **Note:**
>
> When a job spans two days, the job runs during the midnight hour the next day and re-sets the recurrence pattern.

Table 7-3 Timetable for Hourly Jobs

Hourly Recurrence	Timetable
1 (default)	AM: 12:00, 1:00, 2:00, 3:00, 4:00, 5:00, 6:00, 7:00, 8:00, 9:00, 10:00, 11:00 PM: 12:00, 1:00, 2:00, 3:00, 4:00, 5:00, 6:00, 7:00, 8:00, 9:00, 10:00, 11:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 1 hour, the job will run for the first time at 12:48 PM, and then again at 1:48 PM, 2:48 PM, 3:48 PM, and so on.
2	AM: 12:00, 2:00, 4:00, 6:00, 8:00, 10:00 PM: 12:00, 2:00, 4:00, 6:00, 8:00, 10:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 2 hours, the job will run for the first time at 12:48 PM, and then again at 2:48 PM, 4:48 PM, 6:48 PM, and so on.
3	AM: 12:00, 3:00, 6:00, 9:00 PM: 12:00, 3:00, 6:00, 9:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 3 hours, the job will run for the first time at 12:48 PM, and then again at 3:48 PM, 6:48 PM, 9:48 PM, 12:48 AM, 3:48 AM, and so on.

Table 7-3 (Cont.) Timetable for Hourly Jobs

Hourly Recurrence	Timetable
4	AM: 12:00, 4:00, 8:00 PM: 12:00, 4:00, 8:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 4 hours, the job will run for the first time at 12:48 PM, and then again at 4:48 PM, 8:48 PM, 12:48 AM, 4:48 AM, and so on.
5	AM: 12:00, 5:00, 10:00 PM: 3:00, 8:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 5 hours, the job will run for the first time at 3:48 PM, and then again at 8:48 PM, 12:48 AM, 5:48 AM, 10:48 AM, and so on.
6	AM: 12:00, 6:00 PM: 12:00, 6:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 6 hours, the job will run for the first time at 12:48 PM, and then again at 6:48 PM, 12:48 AM, 6:48 AM, and so on.
7	AM: 12:00, 7:00 PM: 2:00, 9:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 7 hours, the job will run for the first time at 2:48 PM, and then again at 9:48 PM, 12:48 AM, 7:48 AM, and so on.
8	AM: 12:00, 8:00 PM: 4:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 8 hours, the job will run for the first time at 4:48 PM, and then again at 12:48 AM, 8:48 AM, and so on.
9	AM: 12:00, 9:00 PM: 6:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 9 hours, the job will run for the first time at 6:48 PM, and then again at 12:48 AM, 9:48 AM, 6:48 PM, and so on.
10	AM: 12:00, 10:00 PM: 8:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 10 hours, the job will run for the first time at 8:48 PM, and then again at 12:48 AM, 10:48 AM, 8:48 PM, and so on.
11	AM: 12:00, 11:00 PM: 10:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 11 hours, the job will run for the first time at 10:48 PM, and then again at 12:48 AM, 11:48 AM, 10:48 PM, and so on.
12	AM: 12:00 PM: 12:00 For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 12 hours, the job will run for the first time at 12:48 PM, and then again at 12:48 AM, and so on.

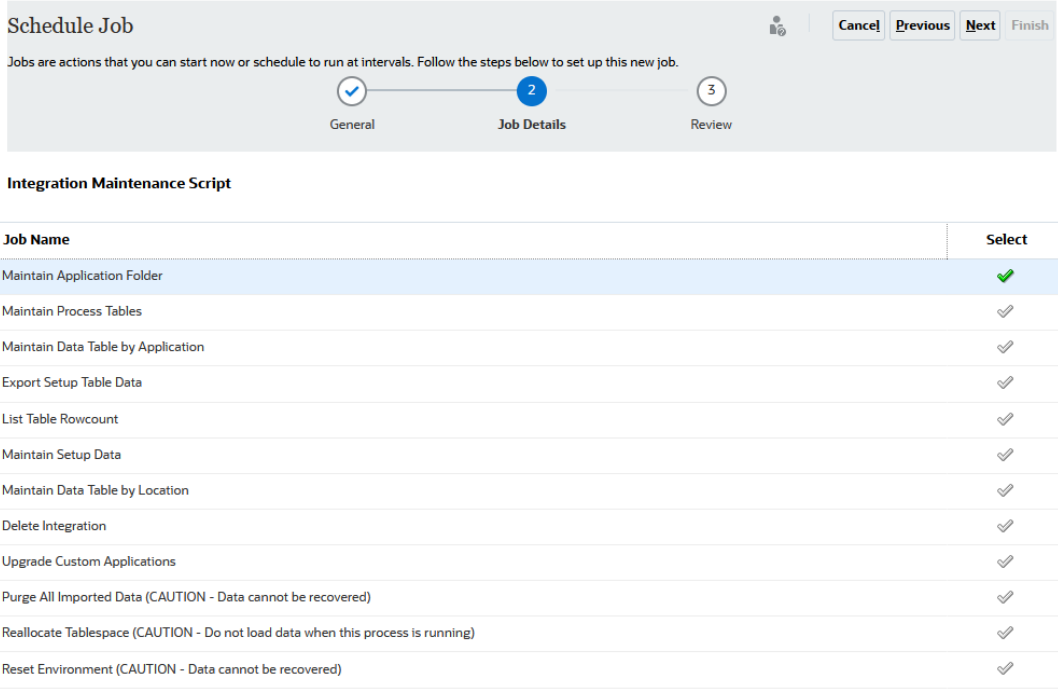
Scheduling Maintenance Scripts in the Job Scheduler

You can schedule the execution times of Data Management maintenance scripts in the Job Scheduler.

To schedule an Integration Maintenance script:

1. Click **Application**, then **Jobs**, and then **Schedule Jobs**.
2. From the **Schedule Jobs** page, then **What type of job is this?**, select **Integration Maintenance Script**.
3. To schedule an integration maintenance script to run now, see Scheduling Hourly Jobs.

   To schedule an integration maintenance script to run later, see Scheduling a Data Rule or Integration Definition to Run Later in the Job Scheduler.
4. Click **Next**.
5. From **Job Name**, select the integration maintenance script to schedule and click ✔.



6. Complete the parameters for the integration maintenance scripts, and then click **OK**.

   For more information about the following integration maintenance scripts, see below:

   - Delete Integration (DeleteIntegration.py)
   - Export Setup Table Data (TableExport.py)
   - List Table Rowcount
   - Maintain Application Folder (MaintainApplication Folder.py)
   - Maintain Data Table by Location (MaintainFDMEEDatatables.py)
   - Maintain Data Table by Application (MaintainFDMEEDatatables.py)
   - Maintain Process Table (MaintainProcessTables.py)
   - Maintain Setup Table (MaintainSetupData.py)

- Migrating Schedules to EPM Platform Job Scheduler
- Purge All Imported Data (PurgeAllData.py)
- Upgrade Custom Applications (UpgradeCustomApp.py)
- Reallocate Tablespace
- Reset Environment

Lifecycle (LCM) Snapshots

Data Management enables you to create an identical copy of an environment, including individual artifacts, setup data, and Data Management (Workbench) staging table data. Ths snapshot then can be used to migrate artifacts, setup and data to another environment. Additionally, Service Administrators can create full backup snapshots of the environment or incremental backup snapshots of artifacts at any time.

See the following topics about the Snapshot process:

- Importing Snapshots
- Exporting Data to a Snapshot
- Using Lifecycle (LCM) Snapshot Modes

Importing Snapshots

A snapshot data import enables you to restore setup and historical artifacts from one environment to another. Data Management clears the existing data in the target environment and then imports the data from the backup files without merging any operations.

> **Note:**
>
> You can import a snapshot to the same or older release. You cannot import a snapshot that is newer than the source version.

Import Snapshot Flow

The following steps describe the import snapshot flow:

1. All data in the target environment is deleted.
2. When the snapshot export job is set to an "All" or an "Incremental All" snapshot type, the import snapshot process:
   a. Purges the */data/snapshots/setup* folder.
   b. Unzips all contents of the the data folder from the ZIP file to the data folder on the local network.
   c. Imports all data artifacts.
   d. Imports Process related tables.
   e. Resets sequences.
3. If the snapshot data export job is set to an "Incremental" snapshot type, the import snapshot process:
   a. **Does not** purge the */data/snapshots/data* folder.

b. Unzips all contents of the data folder from the ZIP into a *data* folder on the local network.

c. Imports all data artifacts extracted in the current process.

d. Imports Process related tables.

e. Resets sequences.

Executing a Snapshot Import Job

During the snapshot data *import* process, the system first truncates all the setup and data artifacts and then imports them. Additionally, database sequences are reset based on the imported data so that no conflicts occur after the data is restored.

To execute a snapshot import:

1. Upload the snapshot export ZIP to the *inbox* in Data Management.

   To upload the snapshot export ZIP to the *inbox* in Data Management, use the EPM Automate uploadFile command.

   You can also use the File Browser in Data Integration to upload a file to the Data Management inbox.

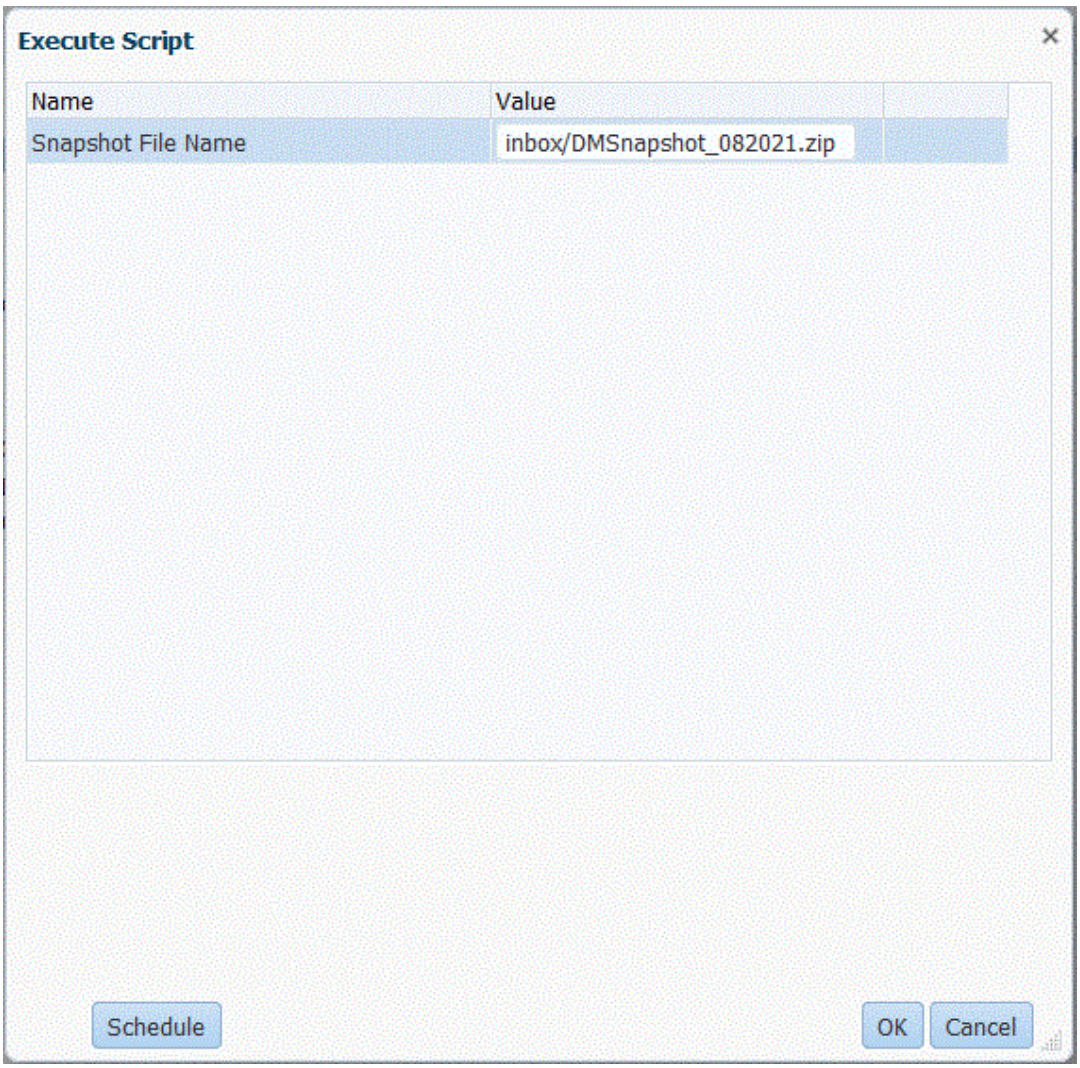
2. On the **Workflow** tab, under **System Maintenance Tasks**, select **Execute Snapshot Import**.

3. In **Snapshot File Name**, enter the path and file name of the ZIP to be executed.

   For example, you might type: **inbox/DMSnapshot_082021.zip**.

4. Click **Execute**.

   Only one Execute Snapshot Import job can be executed at a time.



5. Click **OK**.

   The message: **Custom script executed initiated with Process ID: 0**.

   You can access the job log from the Process Details page.

> **Note:**
>
> The Process ID for the snapshot import is always " 0" only when the file is exported in ALL, INCREMENTAL or ALL_INCREMENTAL modes because each of these three exports contain data artifacts and process details are part of data tables.
>
> The Process ID is not "0" when only setup data is exported. This is because setup data doesn't contain data tables (Process details). In this case, the next available sequence in the Process ID is used.

6. **Optional**: Click **Schedule** to schedule the job.

   For information on scheduling jobs, see Scheduling Jobs.

Exporting Data to a Snapshot

Using the snapshot export data option, customers can backup their setup and historical (staging) data securely. Then using the Execute Snapshot Import option, data can be imported from one environment to another. The snapshot export includes all setup and data artifacts loaded to the Oracle Fusion Cloud Enterprise Performance Management business process. Snapshot export data is exported to a ZIP output file.

Snapshot Export Setup Artifacts

The following setup artifacts are included in the snapshot export:

- Application
- Source System
- Period Mapping
- Category Mapping
- Logic Group
- Check group
- Integration
  - Location
  - Import Format (Dimension Maps)
  - Data Rule
  - Data Load Mapping (Member Maps)
- Batch Definition
- System Setting
- Application Setting
- User Setting
- Security Setting

Snapshot Export Data Artifacts

The following data artifacts are included in the snapshot export:

- Historical (staging) data
- POV Lock data
- Process Detail data

Export Flow for the All Snapshot Type

The following steps describes the export process flow for the "All" snapshot type:

1. Purges the */data/snapshots/setup* folder.
2. Exports all setup artifacts to a separate setup folder.

   A separate CSV is created for each artifact.
3. Purges the */data/snapshots/data* folder.

4. Exports historical artifacts by POV.

   Each POV is exported to a separate file.

5. Deletes orphan POVs.

   Orphan POVs result from deleted period mappings, category mappings, locations, or data load rules.

6. Stores snapshot metadata information in a `SnapshotParams.json` file in the data folder.

   The `SnapshotParams.json` file includes the last exported process id.

7. Archives the setup and data folders into a ZIP file in the `outbox/<filename>.zip` folder.

> **Note:**
>
> If the snapshot type is **Setup**, then only the setup folder is exported and included in the ZIP file.

Export Flow for Incremental Snapshot Types

In Incremental mode, Data Management exports only artifacts that were imported since the last snapshot. Any deleted artifacts are also removed the from the snapshot. Full setup data is always exported.

When the snapshot type is set to *Incremental All*, Data Management includes only new or changed historical artifacts based on the POV since the last snapshot was exported. It also includes setup artifacts (all *old* and *new* POVs) in the output file.

When the snapshot type is set to *Incremental,* Data Management includes only new or changed historical artifacts based on the POV since the last snapshot was exported. It also includes only setup artifacts and *new* POVs in the output file.

The following steps describes the export process flow for the Incremental and Incremental All snapshot types:

1. Purges the */data/snapshots/setup* folder.
2. Exports all setup artifacts to a separate setup folder.

   A separate CSV is created for each table.

3. **Does not purge** the */data/snapshots/data* folder.

   The system retains the */data/snapshots/data* folder "as is" because this is an incremental load.

4. Deletes orphan POVs.

   Orphan POVs result from deleted period mappings, category mappings, locations, or data load rules.

5. Stores snapshot metadata information in a `SnapshotParams.json` file in the data folder.

   The `SnapshotParams.json` file includes the last exported process id.

6. Exports data and metadata of the workflow process status for a location, category, and period.
7. Deletes the files under an */output* folder for any POVs that have been deleted after the last export.

8. Archives the setup and data folders into a ZIP file in the `outbox/<filename>.zip` folder.

> **Note:**
>
> When the snapshot type is set to INCREMENTAL ALL, all files are included in the */output folder* inside the ZIP.
>
> When the snapshot type is set to INCREMENTAL, only the incremental files exported in the current process are included in the under */output folder* inside the ZIP.

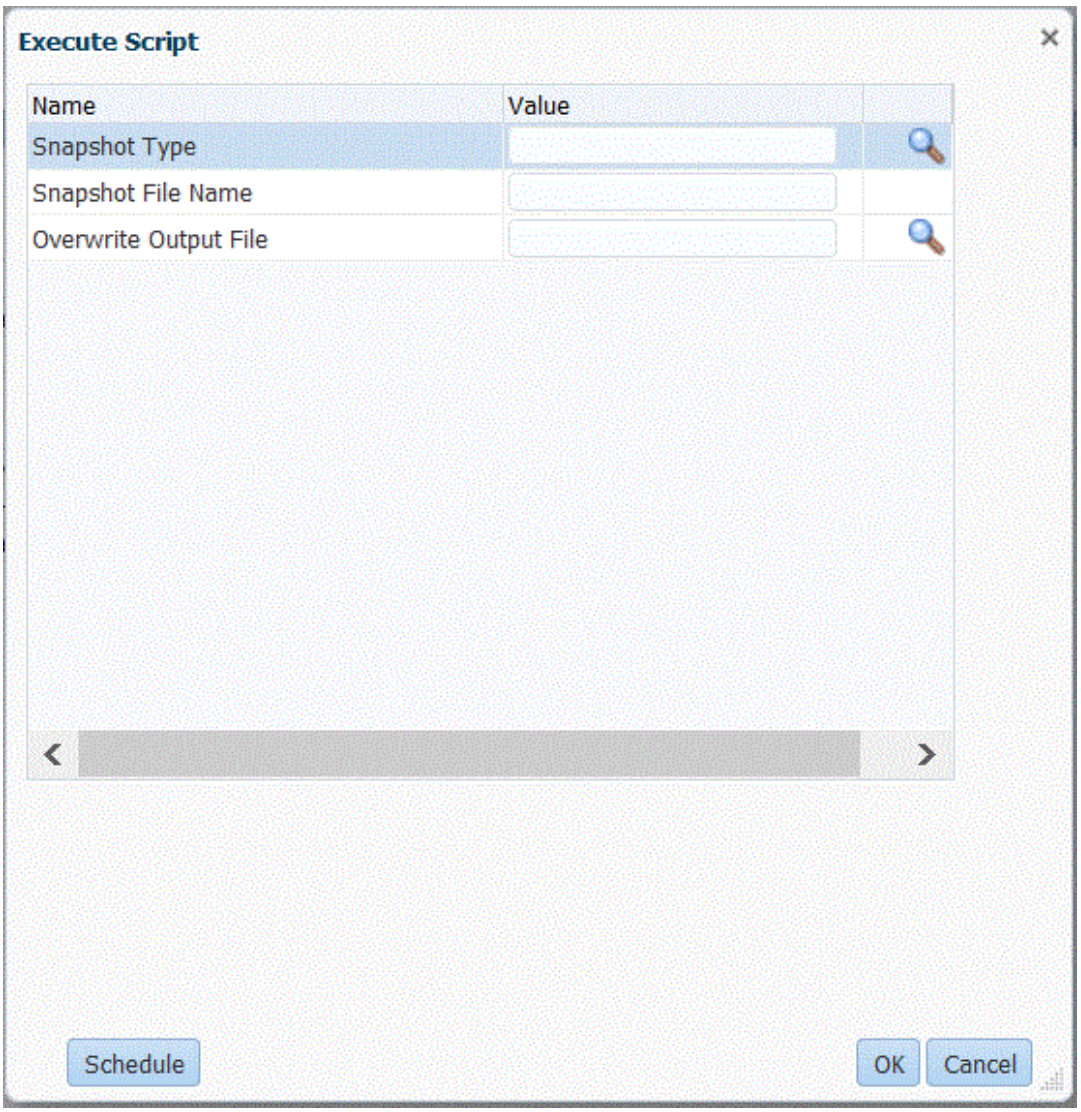
Executing a Snapshot Export Job

The data export process exports all artifacts from setup and data folders including the ID columns to a ZIP file. Artifacts are exported by POV and retain the ID of the setup artifact when data is exported and then imported to the target environment.

The snapshot export options supports: All, All Incremental, Incremental, and Setup export types.

To execute a snapshot export:

1. On the **Workflow** tab, under **System Maintenance Tasks**, select **Execute Snapshot Export**.
2. Click **Execute**.



3. In **Snapshot Type**, select the type of snapshot to export.

   Available snapshot types:

   - All—Includes all setup and historical artifacts.
   - All Incremental—Include only new or changed historical artifacts based on the POV since the last snapshot was exported and include setup artificats and all POVs (old and new) in the output file.
   - Incremental— Include only new or changed historical data based on the POV since the last snapshot was exported and include only setup artifacts and new POVs in the output file.
   - Setup—Includes only setup artifacts.

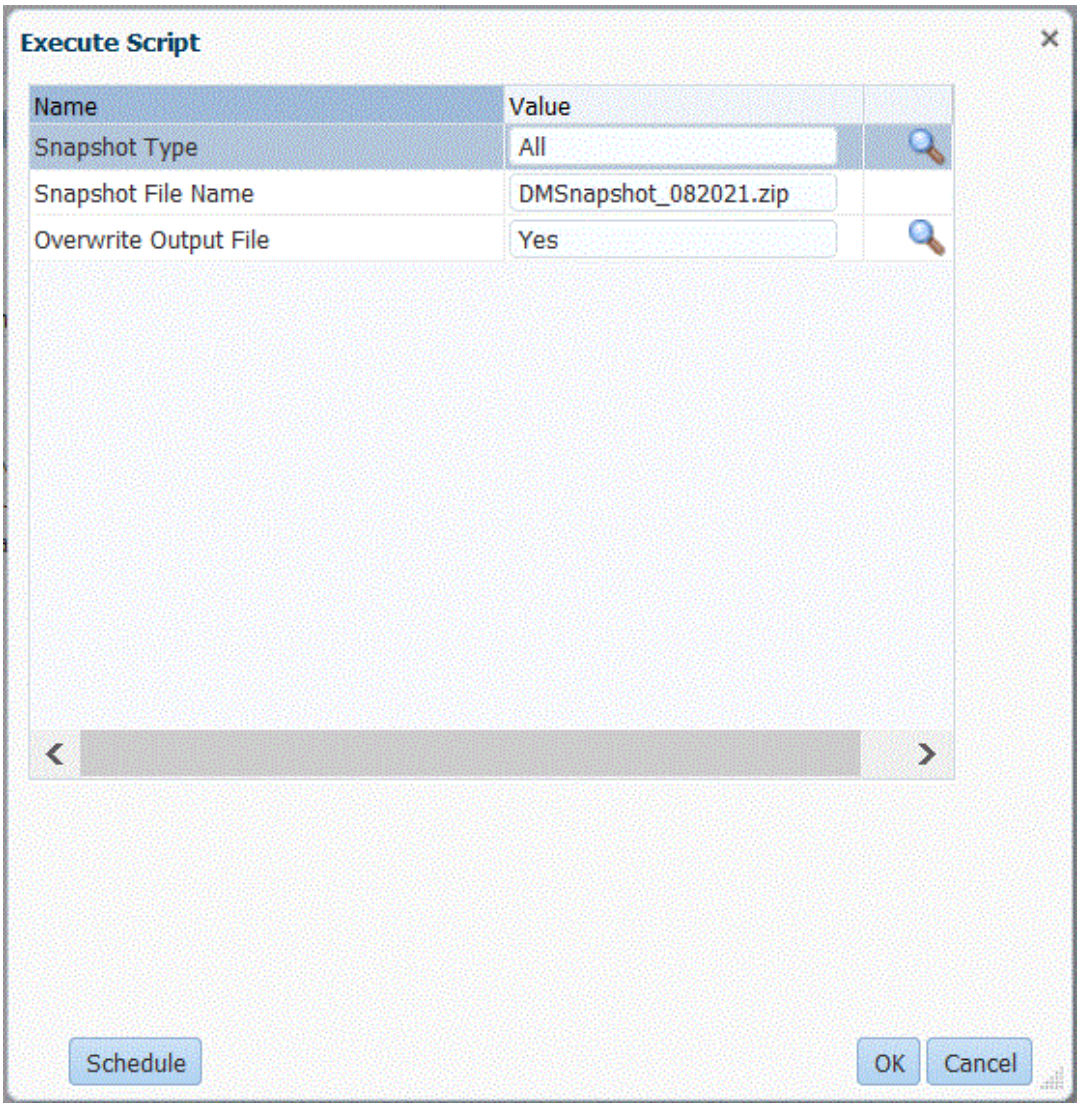
4. In **Snapshot File Name**, specify the file name of the ZIP with the ZIP extension to be written to the *outbox* for the snapshot export.

   For example, you might type: **DMSnapshot_082021.zip**.

   If a file doesn't end with a ZIP extension, Data Management forces a ZIP extension by appending a **.zip** suffix at the end of the file name.

5. In **Overwrite Output File**, specify **Yes** to overwrite a ZIP that has the same name as the one you are creating. Otherwise, specify **No**.

> **Tip:**
>
> If you specify an existing output file and specify **No** to overwrite the existing output file (ZIP), the job fails and the system shows the message: "Rule Execution did not complete successfully."



6. Click **OK**.

   One Execute Snapshot Exports job can be executed at a time.

   The message: **Custom script executed initiated with Process ID: XXX** is displayed (where *XXX* is the process id number generated for the job).

   You can access the job log from the Process Details page in Data Management.

   You can view the snapshot export ZIP after the snapshot export has completed by downloading the output ZIP in Process Details.

You can also download the snapshot ZIP using the EPM Automate downloadFile command.

7. **Optional**: Click **Schedule** to schedule the job.

   For information on scheduling jobs, see Scheduling Jobs.

Using Lifecycle (LCM) Snapshot Modes

Lifecycle (LCM) snapshot modes enable you to export and import an individual artifact ((includes only setup data), or a single snapshot of setup data or setup data and all (Workbench) data. The LCM mode option you choose should depend on what point-in-time view of your system is needed, how the snapshot is used for development, testing, or other purposes, and system resources. You can switch the LCM modes at any time.

> **Note:**
>
> You can import a snapshot to the same or older release. You cannot import a snapshot that is newer than the source version.

Table 7-4 LCM Snapshot Modes

LCM Mode	Description
Individual Artifact – Setup Only	In this mode, you select the individual artifacts to migrate such as locations and mappings. When you import the snapshot in the target system, the data is merged with the existing data in the target system. This mode does not include Workbench data. Individual Artifact – Setup Only mode is the default mode used by the LCM process. Snapshots of individual artifacts are exported as XML files contained in a ZIP file. Snapshot ZIP files are available from the Snapshots tab in Migration.
Single Snapshot – Setup Only	In this mode, when you import the snapshot in the target system, all the existing setup data is deleted and the data from the snapshot is imported. For a list of setup artifacts, see Snapshot Export Setup Artifacts. Setup artifacts are exported to CSV files in a table format contained in a ZIP file. Snapshot ZIP files are available from the Snapshots tab in Migration. Snapshots run in Single Snapshot – Setup Only mode are executed faster than snapshots run in the Individual Artifact – Setup Only mode and may prevent database timeout issues.

Table 7-4 (Cont.) LCM Snapshot Modes

LCM Mode	Description
Single Snapshot – Setup and Data	In this mode, the data in the target system is completely deleted and data from the snapshot is imported. The import process time can take longer depending on the volume of the Workbench data and may affect the performance of the LCM backup depending on the size of the data in the staging tables. For a list of setup and data artifacts, see Snapshot Export Setup Artifacts and Snapshot Export Data Artifacts. Before using this mode, create a baseline snapshot. The system exports setup and all data (including Workbench) incrementally to CSV files in a table format contained in a ZIP file. Snapshot ZIP files are available from the Snapshots tab in Migration.

To select a LCM mode:

1. Launch Data Management.
2. On the **Setup** tab, under **Configure**, select **System Settings**.
3. On the **System Settings** page, in **Profile Type**, select the specific profile **File**.
4. From the **LCM Mode** drop-down, select one of the following modes:
   - Individual Artifact – Setup Only
   - Single Snapshot – Setup Only
   - Single Snapshot and Data - Setup and Data
5. Click **OK**.

A

TDATASEG Table Reference

The TDATASEG table is used to store the data loaded by the user and any transformations between the source dimension members and results of the mapping process.

> **Note:**
>
> When loading text, the column in TDATASEG it is loaded to DATA, and the mapped result is loaded to DATAX.

Table A-1 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 Data Management to EPM period mapping details.
DATAVIEW	VARCHAR2(20 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(25 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(80 CHAR) DEFAULT	ID for the Journal. User provided value
AMOUNT	NUMBER(38,12) DEFAULT 0 NOT NULL ENABLE	Amount loaded from source
AMOUNTX	NUMBER(38, 12) DEFAULT 0 NOT NULL ENABLE	Amount after any transformation rules. This value is loaded to the target application.
DESC1	VARCHAR2(300 CHAR) DEFAULT	Description can be imported from file
DESC2	VARCHAR2(300 CHAR) DEFAULT	Description can be imported from file
ACCOUNT	VARCHAR2(300 CHAR) NOT NULL ENABLE	Account member from source

Table A-1 (Cont.) TDATASEG Table Reference

Column Name	Definition	Description
ACCOUNTX	VARCHAR2(2000 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(300 CHAR) DEFAULT	Entity member from source
ENTITYX	VARCHAR2(300 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
ICP	VARCHAR2(300 CHAR) DEFAULT	ICP from source
ICPX	VARCHAR2(300 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(280 CHAR) DEFAULT	UD1 from source
UD1X	VARCHAR2(280 CHAR) DEFAULT	UD1 after mapping rules processed. This value is exported.
UD1R	VARCHAR2(10, 0 CHAR) DEFAULT	Key to mapping used for this dimension. Refers to DATAKEY in TDATAMAPSEG
UD1F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	Map type: • 1=Exception • 3=Between • 4=Range
UD2	VARCHAR2(300 CHAR) DEFAULT	UD2 from source
UD2X	VARCHAR2(300 CHAR) DEFAULT	UD2X from source
UD2R	VARCHAR2(10, 0 CHAR) DEFAULT	UD2R from source
UD2F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD2F from source
UD3	VARCHAR2(300 CHAR) DEFAULT	UD3 from source
UD3X	VARCHAR2(300 CHAR) DEFAULT	UD3X from source
UD3R	VARCHAR2(10, 0 CHAR) DEFAULT	UD3R from source
UD3F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD3F from source
UD4	VARCHAR2(300 CHAR) DEFAULT	UD4 from source
UD4X	VARCHAR2(300 CHAR) DEFAULT	UD4X from source
UD4R	VARCHAR2(10, 0 CHAR) DEFAULT	UD4R from source

Table A-1 (Cont.) TDATASEG Table Reference

Column Name	Definition	Description
UD4F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD4F from source
UD5	VARCHAR2(300 CHAR) DEFAULT	UD5 from source
UD5X	VARCHAR2(300 CHAR) DEFAULT	UD5X from source
UD5R	VARCHAR2(10, 0 CHAR) DEFAULT	UD5R from source
UD5F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD5F from source
UD6	VARCHAR2(300 CHAR) DEFAULT	UD6 from source
UD6X	VARCHAR2(300 CHAR) DEFAULT	UD6X from source
UD6R	VARCHAR2(10, 0 CHAR) DEFAULT	UD6R from source
UD6F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD6F from source
UD7	VARCHAR2(300 CHAR) DEFAULT	UD7 from source
UD7X	VARCHAR2(300 CHAR) DEFAULT	UD7X from source
UD7R	VARCHAR2(10, 0 CHAR) DEFAULT	UD7R from source
UD7F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD7F from source
UD8	VARCHAR2(300 CHAR) DEFAULT	UD8 from source
UD8X	VARCHAR2(300 CHAR) DEFAULT	UD8X from source
UD8R	VARCHAR2(10, 0 CHAR) DEFAULT	UD8R from source
UD8F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD8F from source
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
UD9	VARCHAR2(300 CHAR) DEFAULT	UD9 from source
UD9X	VARCHAR2(300 CHAR) DEFAULT	UD9X from source
UD9R	VARCHAR2(10, 0 CHAR) DEFAULT	UD9R from source
UD9F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD9F from source
UD10	VARCHAR2(300 CHAR) DEFAULT	UD10 from source
UD10X	VARCHAR2(300 CHAR) DEFAULT	UD10X from source
UD10R	VARCHAR2(10, 0 CHAR) DEFAULT	UD10R from source
UD10F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD10F from source
UD11	VARCHAR2(300 CHAR) DEFAULT	UD11 from source
UD11X	VARCHAR2(300 CHAR) DEFAULT	UD11X from source
UD11R	VARCHAR2(10, 0 CHAR) DEFAULT	UD11R from source
UD11F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD11F from source
UD12	VARCHAR2(300 CHAR) DEFAULT	UD12 from source
UD12X	VARCHAR2(300 CHAR) DEFAULT	UD12X from source
UD12R	VARCHAR2(10, 0 CHAR) DEFAULT	UD12R from source

Table A-1 (Cont.) TDATASEG Table Reference

Column Name	Definition	Description
UD12F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD12F from source
UD13	VARCHAR2(300 CHAR) DEFAULT	UD13 from source
UD13X	VARCHAR2(300 CHAR) DEFAULT	UD13X from source
UD13R	VARCHAR2(10, 0 CHAR) DEFAULT	UD13R from source
UD13F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD13F from source
UD14	VARCHAR2(300 CHAR) DEFAULT	UD14 from source
UD14X	VARCHAR2(300 CHAR) DEFAULT	UD14X from source
UD14R	VARCHAR2(10, 0 CHAR) DEFAULT	UD14R from source
UD14F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD14F from source
UD15	VARCHAR2(80 CHAR) DEFAULT	UD15 from source
UD15X	VARCHAR2(300 CHAR) DEFAULT	UD15X from source
UD15R	VARCHAR2(10, 0 CHAR) DEFAULT	UD15R from source
UD15F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD15F from source
UD16	VARCHAR2(300 CHAR) DEFAULT	UD16 from source
UD16X	VARCHAR2(300 CHAR) DEFAULT	UD16X from source
UD16R	VARCHAR2(10, 0 CHAR) DEFAULT	UD16R from source
UD16F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD16F from source
UD17	VARCHAR2(300 CHAR) DEFAULT	UD17 from source
UD17X	VARCHAR2(300 CHAR) DEFAULT	UD1X from source
UD17R	VARCHAR2(10, 0 CHAR) DEFAULT	UD17R from source
UD17F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD17F from source
UD18	VARCHAR2(300 CHAR) DEFAULT	UD18 from source
UD18X	VARCHAR2(300 CHAR) DEFAULT	UD18X from source
UD18R	VARCHAR2(10, 0 CHAR) DEFAULT	UD18R from source
UD18F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD18F from source
UD19	VARCHAR2(300 CHAR) DEFAULT	UD19 from source
UD19X	VARCHAR2(300 CHAR) DEFAULT	UD19X from source
UD19R	VARCHAR2(10, 0 CHAR) DEFAULT	UD19R from source
UD19F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD19F from source
UD20	VARCHAR2(300 CHAR) DEFAULT	UD20 from source
UD20X	VARCHAR2(300 CHAR) DEFAULT	UD20X from source
UD20R	VARCHAR2(10, 0 CHAR) DEFAULT	UD20R from source
UD20F	VARCHAR2(6, 0 CHAR) DEFAULT 0 NOT NULL ENABLE	UD20F from source
ATTR1	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through

Table A-1 (Cont.) TDATASEG Table Reference

Column Name	Definition	Description
ATTR2	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through **Note:** When importing data from Financial Consolidation and Close, attribute columns ATTR2 and ATTR3 should not be used for any other dimension mappings.
ATTR3	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through **Note:** When importing data from Financial Consolidation and Close, attribute columns ATTR2 and ATTR3 should not be used for any other dimension mappings.
ATTR4	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR5	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR6	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR7	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR8	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR9	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through

Table A-1 (Cont.) TDATASEG Table Reference

Column Name	Definition	Description
ATTR10	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR11	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR12	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR13	VARCHAR2(300 CHAR) DEFAULT	Restricted. Used to store the "Logic Item" if a logic group is assigned to a location.
ATTR14	VARCHAR2(300 CHAR) DEFAULT	User defined attribute - used as needed for mapping or drill-through
ATTR15	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR16	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR17	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR18	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR19	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR20	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR21	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR22	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR23	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR24	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR25	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR26	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR27	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR28	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR29	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR30	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR31	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR32	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR33	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR34	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through

Table A-1 (Cont.) TDATASEG Table Reference

Column Name	Definition	Description
ATTR35	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR36	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR37	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR38	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR39	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
ATTR40	VARCHAR2(300 CHAR)	User defined attribute - used as needed for mapping or drill-through
DATA	VARCHAR2(2000 CHAR)	
DATAX	VARCHAR2(2000 CHAR)	
DATAR	NUMBER(10,0) DEFAULT 0 NOT NULL ENABLE	
DATAF	NUMBER(6,0) DEFAULT 0 NOT NULL ENABLE	
CODE_COMBINATION_ID	VARCHAR2(500 CHAR)	Used for integration with Oracle 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 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

B

Oracle HCM CloudExtract Definition Field Reference

The following tables list the Oracle Human Capital Management Cloud fields belonging to each predefined extract definition. These fields are a subset of the data that can be extracted and loaded into a Oracle Workforce Planning or Strategic Workforce Planning application from each extract definition.

- Account Merit Extract Definition Fields
- Assignment Extract Definition Fields
- Component Extract Definition Fields
- Employee Extract Definition Fields
- Entity Extract Definition Fields
- Job Extract Definition Fields
- Location Extract Definition Fields
- Position Extract Definition Fields

Account Merit Extract Definition Fields

The following table shows the Account Merit Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Account: Merit Extract Definition Fields
Extract Performance Rating Short Description
Extract Performance Rating Description

Assignment Extract Definition Fields

The following table shows the Assignment Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Assignment Extract Definitions Fields
Assignment Bargaining Unit Code
Assignment Bargaining Unit Code Name
Assignment FTE Value
Assignment Full Part Time
Assignment Type
Assignment Salary Amount
Assignment Salary Basis Code
Assignment Salary Currency Code

Assignment Extract Definitions Fields
Assignment Organization Code
Assignment Organization Name
Extract Assignment Organization Classification
Person Number
Person Start Date
Person Date of Birth
Person Gender
Person Highest Education Level
Assignment Job Code
Job Family Name
Assignment Grade Code
Assignment Position Code
Assignment Number
Assignment Position Type
Assignment Job Function Code
Person Full Name
Assignment Grade Name
Assignment Job Name
Assignment Location Code
Assignment Location Name
Assignment Employee Category
Assignment Employment Category
Assignment Name
Assignment Position Name
Extract Assignment Effective Start Date
Person Gender Meaning
Person Highest Education Level Meaning
Assignment Grade Type
Assignment Business Unit Name
Assignment Legal Employer Name
Assignment Legislation Code
Assignment Legislation Name
Assignment General Ledger Code Combination Segment1
Assignment General Ledger Code Combination Segment2
Assignment General Ledger Code Combination Segment2
Assignment General Ledger Code Combination Segment3
Assignment General Ledger Code Combination Segment4
Assignment General Ledger Code Combination Segment5
Assignment General Ledger Code Combination Segment6
Organization GL Cost Center - Company
Organization GL Cost Center - Cost Center
Extract Performance Rating Short Description
Extract Performance Rating Description
Benefit Amount
Benefit Type
Plan - Name

Assignment Extract Definitions Fields
Plan Type - Name
Annual Rate Value
Unit of Measure
Option Name

Component Extract Definition Fields

The following table shows the Component Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Component Extract Definition Fields
Extract Grade Code
Grade Name
Extract Grade Type

Employee Extract Definition Fields

The following table shows the Employee Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Employee Extract Definition Fields
Extract Employee Person Number
Person Full Name
Person Date of Birth
Person Enterprise Hire Date
Person Gender
Person Gender Meaning
Person Highest Education Level
Person Highest Education Level Meaning
Assignment Employee Category
Assignment Employee Category Meaning
Assignment Bargaining Unit Code
Assignment Bargaining Unit Code Name
Person First Name
Person Last Name
Assignment Employment Category
Assignment Employment Category Meaning
Location Code

Entity Extract Definition Fields

The following table shows the Entity Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Entity Extract Definition Fields
Extract Organization Tree Code
Extract Organization Tree Version Name
Extract Organization Tree Distance
Extract Organization Tree Depth
Extract Organization Tree Is Leaf
Extract Organization Tree Code
Extract Organization Tree Name

Job Extract Definition Fields

The following table shows the Job Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Job Extract Definition Fields
Extract Job Code
Job Name
Job Family Name
Extract Job Function Code
Extract Job Function Code Meaning

Location Extract Definition Fields

The following table shows the Job Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Location Extract Definition Fields
Extract Location Code
Extract Location Name
Extract Location Country
Extract Location Town or City
Extract Location Region1
Extract Location Region2
Extract Location Region3

Position Extract Definition Fields

The following table shows the Position Extract Definition fields that can be extracted and loaded to the Oracle Workforce Planning or Strategic Workforce Planning application from the extract definition.

Position Extract Definition Fields
Extract Position Tree Code
Extract Position Tree Version Name

Position Extract Definition Fields
Extract Position Tree Depth
Extract Position Tree Distance
Extract Position Tree Is leaf
Extract Position Code
Position Name