Oracle® Fusion Cloud EPM

Setting Up and Configuring Account Reconciliation

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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*.

Part I

Setting Up Reconciliation Compliance

Related Topics

- Learning About Setup and Configuration in Reconciliation Compliance
- Learning About Setup Best Practices
- Configuring Reconciliation Compliance
- Configuring Periods
  Configure periods before creating profiles and reconciliations.
- Working with Global Rules
- Defining Formats
- Working with Profiles
- Working with Group Reconciliations

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Learning About Setup and Configuration in Reconciliation Compliance

Related Topics

- Configuration
- Configuring Periods
- Setting Up Formats
- Performing Variance Analysis
- Creating Profiles
- Configuring Data Loads
- Period-Specific Tasks
- Training Users, Performing Acceptance Testing, and Migrating to Production

Configuration

The first task in setting up Account Reconciliation is to configure different settings available from **Home**, then **Application**, and then **Configuration**.

Configuration has the following easy access to various features and settings:

- **Alert Types**
- **Attributes**
- **System Attributes**
- **Currencies**
- **Enterprise Journals Mapping**
- **Data Loads**
- **Filters**
- **Formats**
- **Views**
- **Organizations**
- **Periods**
- **Settings** (System Settings)

Alert Types

Alerts allow communication between a user having an issue while working towards closing a reconciliation, and other users that may be able to help resolve the issue. Alert types are created by administrators to define a procedure to follow when certain issues arise. See Creating Alert Types

Attributes

Custom attributes are user-defined fields defined centrally by administrators and can be used in reconciliations, profiles and formats:

In Profiles: Administrators and power users can assign attributes to profiles to capture information that is not supported by the standard attributes. In Formats: Administrators can assign attributes to formats to appear on reconciliations in two places.

This tab appears first on the list since you will access this often while managing Account Reconciliation. See Creating Attributes for details on how to create them.

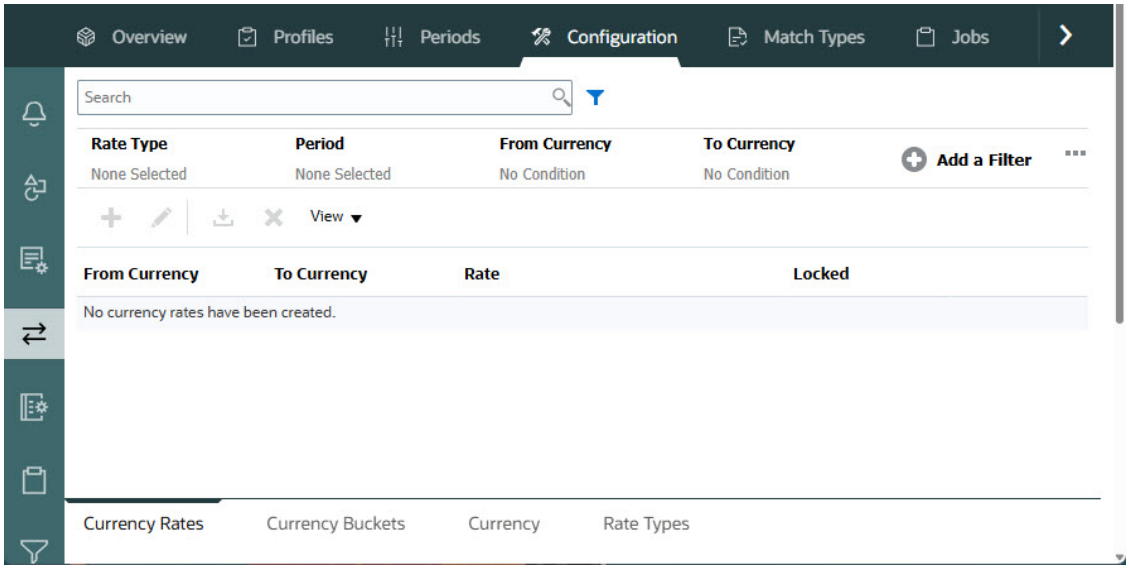
Defining System Attributes

Under System Attributes, you define these attributes of profiles and reconciliations:

- **Profile Segments** are the components of the Account ID used to uniquely identify profiles and reconciliations. For example, if you typically reconcile accounts at the Company-Account level, then you should define two segments: one for Company, and one for Account. Profile Segment values are labels. They don't control the mapping of balances to reconciliations which occur through mapping rules added in the data load definitions or by pre-mapping balances before import.
- **Process** distinguishes between reconciliations for different purposes, such as a pre-defined *Balance Sheet* process. You can remove this option if you prefer other terminology.
- **Risk Ratings**are tags assigned to reconciliations to help with reporting and analysis such as High, Medium, or Low..
- **Frequencies** determine how often reconciliations are prepared. "Monthly" and "Quarterly" are typical frequencies. In System Settings, you define the frequencies. You also need to assign frequencies to profiles and periods. Reconciliations are only created when the frequency assigned to the profile matches the frequency assigned to the period.
- **Account Type** are tags assigned to reconciliations to help with reporting and analysis such as Assets, Liabilities, or Equity.
- **Aging Profiles** Aging Profiles are used in reports to classify transactions into *aging buckets*that you define. For example, you might define an Aging Profile consisting of the following buckets: 0-15 days, 16-30, 30-60, 61-90, and greater than 90 days. You can review reports that display the count or value of transactions within each aging bucket.
- **Global Integration Tokens** are used when parameterized reports should be accessible from the Reconciliation. For example, if you are using BI Publisher to generate Fixed Asset Rollforward schedules, then you can use Global Integration Tokens to pass parameters such as Account ID or Period into the report so it displays the correct data.

Defining Currencies

The Currency section enables configuration of Currency Buckets, Rate Types, and Currencies.



Currency Rates See Defining Currency Rates

Currency Buckets should be defined for each bucket that must be certified in reconciliations, and for any additional buckets that make it easy to prepare the reconciliations. For example, it's very common to require reconciliation at the Functional currency bucket. If this is the case for your company, then the Functional currency bucket should be enabled. If it helps preparers perform the reconciliation by entering values in the Entered, or Posted currency value, then this bucket should be enabled as well. The Reporting currency bucket is typically enabled only when a certification requirement exists for this bucket. Note that all the bucket labels are configurable, to enable renaming to match your company convention. However, you should only use uppercase if you rename a currency bucket label.

Currency enables you to control which currency codes are active in the system.

Define **Rate Types** when you require translation of transactions entered into the reconciliation. For example, if preparers are adding transactions in the Entered currency bucket, then the system can translate these values to the Functional currency bucket using imported Rates

Data Loads

You can use the **Data Loads** dialog to define data load definitions in order to load data using **Data Management** and save those same data load parameters. See Define a Data Load Definition.

Filters

See Creating Filtered Views

Formats

See Learning About Formats

Lists

See Working with Views
See Appendix A: Reconciliation List Select Column Definitions to view the list column definitions for the following dataset types that are referenced across the lists in the application: Profile, Reconciliation, Balance, Transaction.

Organizations

Calendars are used to set the dates and frequencies for each period. Each calendar allows different organizations to work off of different dates and frequencies for the same period.

Holiday Rules are only defined if the reconciliation schedules are affected by company or statutory holidays.

Organizational Units provide a mechanism to assign a hierarchical organizational unit structure to profiles and reconciliations. They provide value in filtering, reporting, and are the means by which holiday rules are applied to profiles.

Periods

Next you configure the number of periods associated with the reconciliations. Periods determine the as-of date of the reconciliation and every period has a start date, end date, and close date. Periods also have associated frequencies. When profiles are added to periods, only those with a frequency matching a frequency associated with the period are added to the period as a reconciliation.

If circumstances require changes to reconciliations, or if administrators must import updated balances, administrators can reopen periods.

You can start with just one or two periods, and then add periods as needed. For each period, you'll define start and end dates, as well as the dates that books are closed for each period and the frequencies associated with each period.

See Configuring Periods

Settings (System Settings)

The **Settings (System Settings)** tab contains other configuration settings that an Administrator may need to use during set up of Reconciliation Compliance. For example, allowing users to delete comments, setting the maximum number of rows in a list, allowing bulk updates, and setting data load timeout. See Defining System Settings

Watch Overview: Get Started Configuring the System in Reconciliation Compliance Video

Click this link to watch a video:

Configuring Periods

Next you configure the number of periods associated with the reconciliations. Periods determine the as-of date of the reconciliation and every period has a start date, end date, and close date. Periods also have associated frequencies. When profiles are added to periods, only those with a frequency matching a frequency associated with the period are added to the period as a reconciliation.

If circumstances require changes to reconciliations, or if administrators must import updated balances, administrators can reopen periods.

You can start with just one or two periods, and then add periods as needed. For each period, you'll define start and end dates, as well as the dates that books are closed for each period and the frequencies associated with each period.

Setting Up Formats

Reconciliation formats determine what reconciliations will look like, and the type of information that preparers and reviewers can enter. Formats for reconciliations are selected or designed by the Service Administrator using the Manage Formats feature. A library of standard formats are available to use as a starting point but formats are completely customizable. Start with an initial set, and you can revise and adapt that set as needed. All formats are based on one of three methods: Balance Comparison, Account Analysis, or Variance Analysis..

Formats include the following information:

- Properties, such as the method
- Instructions, and any associated reference files
- History of changes to the format
- Attributes, such as Journal Number Entry, Supplier, Policy Number
- Questions to be answered by the selected user when working with a reconciliation
- Selected rules to apply to the reconciliation

Performing Variance Analysis

Reconciliation Compliance supports the variance analysis process which is a key control in the overall account monitoring process to ensure balance fluctuations are monitored and explained if certain thresholds are exceeded. Variance Analysis automates the process by automatically comparing balances across periods, for example, period over period, period over quarter, etc. The same powerful rules engine utilized by Reconciliation Compliance allows you to streamline the reconciliation process can be used for the Variance Analysis process to either automatically process accounts that do not require any user explanation or require the variance to be explained.

The suggested best practice from best in class performing customers is to complete the Variance Analysis across all desired accounts prior to period-end close and certainly prior to reconciliation sign-off, so that the accounts can be as accurate as possible when the ledger closes for that period.

Variance analysis uses the same Profile/Format concept as an Account Analysis or Balance Comparison reconciliation methods to create variance analysis records to accomplish the period-to-period comparison. This means that companies who perform both reconciliations and variance analysis may need two sets of profiles (one for reconciliations and one for variance analysis). This enables users to perform the variance analysis at a different level of detail then the reconciliation (more summarized or more detailed) if required.

Setting Up a Variance Analysis

In order to set up variance analysis, you set up and configure Reconciliation Compliance in the same way as for Account Balance or Balance Comparison reconciliation methods including using the Format and Profile concepts. However, you must create a separate set of profiles for Variance Analysis.

See the following topics:

- Learning About Setup and Configuration in Reconciliation Compliance
- Learning About Formats

- Defining Profiles for Variance Analysis

Creating Profiles

Profiles are one of the most important objects within Account Reconciliation since profiles are the pre-cursors to reconciliations. Profiles is the term used for the collection or group of accounts that are reconciled. Each profile represents a distinct reconciliation and may contain many different low level accounts rolling into it.

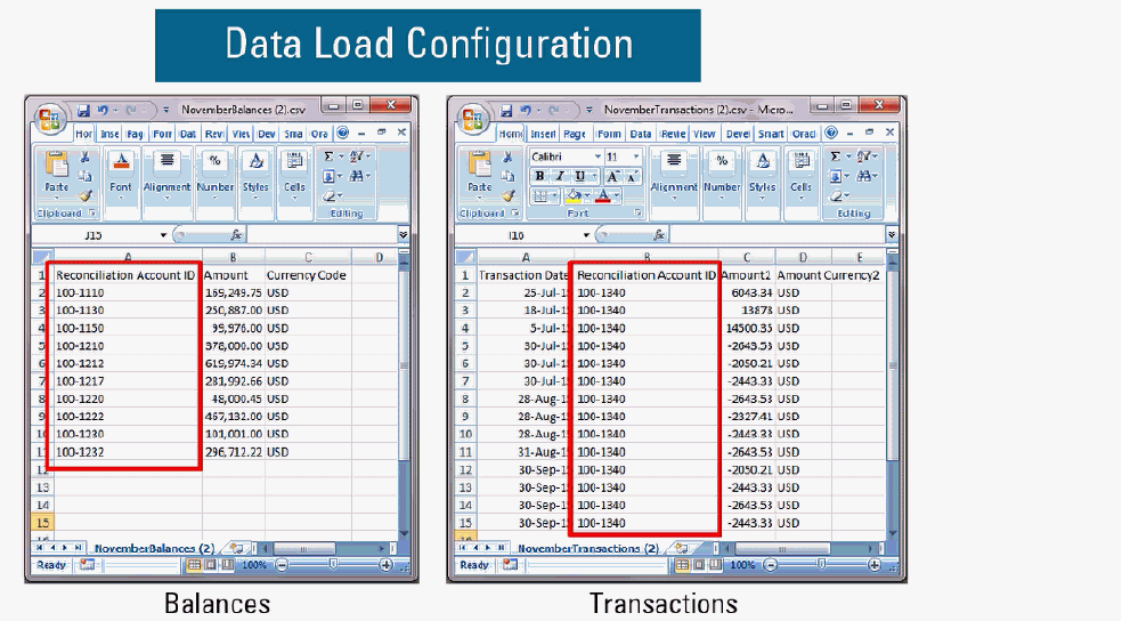
Profiles can be created manually or imported from a spreadsheet. Profiles contain the preparer and reviewer assignments, account descriptions, instructions, format assignments, risk ratings. One profile will exist for each reconciliation performed. Each month, reconciliations are created from profiles by Administrators. The process of creating reconciliations from profiles causes a snapshot of the profiles to be taken and stored along with the reconciliations. Over time, profile configurations may change. However, the profile information stored with the reconciliations is never impacted by these changes.

As time goes on, profile configurations will change as the business changes. These changes have no impact on existing reconciliations, which must remain intact and representative of the configuration that existed on the date it was created.

Configuring Data Loads

Next, a data load configuration must be created. You can use a Pre-mapped Data Load (including both balances and transactions) or perform data loading setup in **Data Management**.

The pre-mapped import requires the file to conform to a specified structure, and each row must have an Account ID assigned to it, so that you know which reconciliation to assign the data to.



For information about pre-mapped data, see Importing Pre-Mapped Data

For information about using **Data Management** with Oracle Account Reconciliation Cloud, see Importing Data Using Data Management

Period-Specific Tasks

The remaining activities that need to be performed are period-specific:

- Importing currency rates, if they aren't being imported through the data load process
- Creating reconciliations for a period
- Opening the period
- Running data loads

Training Users, Performing Acceptance Testing, and Migrating to Production

Your users will need to be trained to manage the reconciliation process, and to work with reconciliations as preparers, reviewers and other roles that need to interact with reconciliations in order to perform their job functions. There are tutorials available to train your users.

After the users have been trained, acceptance testing must be done to validate that the configurations are correct.

Key items to validate include:

- Ensuring balance mappings and aggregations for each reconciliation contain the correct account balances
- Checking that all preparer and reviewer assignments are correct
- Ensuring each reconciliation contains the correct format

When testing is complete, migrate your configuration from your test environment to your production environment.

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Learning About Setup Best Practices

Implementing account reconciliation compliance solutions like Account Reconciliation is more art than science. There is no one right way to do it. This section contains best practice suggestions for two challenging implementation topics: implementation methodologies and format design.

Implementation Methodologies

Implementation methodologies are options for how you roll out Account Reconciliation across your organization. Oracle recommends managing your scope tightly to achieve measurable success as quickly as possible. For most companies, this means that every account that requires reconciliation is in fact reconciled. You can achieve this goal quickly, and with minimal disruption to your business, by using a "tracking only" implementation.

Tracking Only Implementation

With tracking only implementations, you don’t have to change how people do their reconciliations. You simply track that they are being performed. The key impact is on Format design. In these implementations, you’ll have only one or two formats for your initial rollout. These simple formats are meant for users to attach completed reconciliations, typically performed in Excel. Oracle provides a sample "Tracking" format with our standard formats. Implementing a tracking only approach gives you complete visibility into the status of the reconciliation process, and centralized access to the reconciliations themselves.

Format Design

After users are comfortable with this process, you can work towards secondary goals, such as ensuring that every reconciliation performed qualifies as a valid reconciliation. You achieve this through effective format design. Reconciliation formats are best designed at the Account Type level. Subledger-supported accounts like Accounts Payable, Accounts Receivable, and Fixed Assets are the easiest accounts to migrate from tracking-only formats to custom formats. It’s best to time the migration of these types of accounts to coincide with the automation of subledger balance loads. This way, users will immediately recognize the benefit of auto reconciliation when the source and subsystem balances match.

Accounts not supported by subledgers and that require reconciliation using an *account analysis* method, such as prepaids, accruals, provisions, and reserves, are more challenging. A best practice for these types of accounts is to design formats that ensure a high quality reconciliation by guiding the user through the analysis they need to perform. With Format design, you can customize exactly what information must be included when reconciling items or balance explanations are entered.

You can also add rules that validate data or require attachments. For example, for intangible assets, rather than asking for a general description of the items comprising the balance, you can ask questions to assess the quality of the items, to ensure that they belong in the account balance. By rolling out custom Formats at the Account Type level, you can target highest risk accounts first, minimizing disruption where needs are not as great.

Watch Best Practices Video

Click this link to watch a video:

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Configuring Reconciliation Compliance

Related Topics

- Defining Attributes
- Defining System Attributes
- Defining Currency
- Defining Calendars
- Defining Holiday Rules
- Defining Organizational Units
- Defining System Settings

Defining Attributes

Account Reconciliation enables you to define custom attributes, group attributes, and calculated attributes.

Related Topics

- About Account Reconciliation Attributes
  Attributes are defined centrally by Service Administrators and can be used in multiple places in Account Reconciliation.
- Defining Custom Attributes
  A custom attribute is a user-defined attribute that contains a single field.
- Defining Calculated Attributes
- Defining Balance Attributes
  Balance attributes enable you to associate and load additional information with balances. This additional information can be used to enhance the effectiveness of rules, provide insights when users view the data, and provide more information for machine learning algorithms.
- Defining Group Attributes
  Group attributes provide a mechanism to easily manage a set of dependent attributes that are related to a single entity.
- About Group Attributes in Reconciliation Compliance
  A group attribute is a user-defined attribute that consists of one or more member attributes.
- Creating Group Attributes
  In Reconciliation Compliance, Service Administrators can create group attributes. In Transaction Matching, users with the Match Type - Manage granular role can create group attributes.
- Specifying Group Attribute Properties
  Group attribute properties include the name and type.
- Defining Member Attributes
  For each member attribute in a group attribute, you must specify a name and type.

- Specifying Values for Group Member Attributes
  Multiple values can be specified for each member attribute in a group attribute.
- Exporting Group Attribute Member Values
  Exporting a group attribute enables the member attribute values to be reused in a different environment.
- Importing Group Attributes
  Importing a group attribute enables you to use the group attribute contained in the import `.csv` file in your environment.
- Editing Group Attributes
  Service Administrators can modify member attributes and member attribute values.
- Deleting Group Attributes
  Service Administrators can delete a group attribute, member attributes, or member attribute values subject to certain conditions.

About Account Reconciliation Attributes

Attributes are defined centrally by Service Administrators and can be used in multiple places in Account Reconciliation.

Attributes are user-defined fields and can be:

- custom attributes (see About Custom Attributes)
- group attributes (see About Group Attributes in Reconciliation Compliance and About Group Attributes in Transaction Matching)
- calculated attributes (see About Calculated Attributes)
- balance attributes (see About Balance Attributes)
- predicted attributes (see About Predicted Attributes)

Additionally, Account Reconciliation also provides some system-defined attributes, which are not editable.

Attributes can be used in:

- Profiles

  Administrators and power users can assign attributes to profiles to capture information that is not supported by the standard attributes.
- Formats

  Administrators can assign attributes to formats to appear on reconciliations in two places.
  - In the reconciliation summary section, to capture reconciliation-level information from the preparer or reviewer (Format Attributes)
  - In transactions associated with the reconciliation, including adjustments and balance explanations; values for these attributes are provided by the preparer and are intended to ensure that the reconciliation contains sufficient information to justify the balance (Transaction Attributes).

> **Note**
>
> You cannot delete an attribute that is used as the **Target** in a predicted attribute.

Defining Custom Attributes

A custom attribute is a user-defined attribute that contains a single field.

Related Topics

- About Custom Attributes
  Custom attributes are user-defined attributes that consist of a single field.
- Creating Attributes
  Create custom attributes from the **Attributes** tab under **Application** , then **Configuration**.
- Importing List Attributes
  For attributes of type List, you can import the list values from a TXT file.

About Custom Attributes

Custom attributes are user-defined attributes that consist of a single field.

Types of Attributes

Account Reconciliation supports the following types of attributes:

- Date
- Date and Time
- Integer
  When you select this type, select a value in **Total**. The available options are None, Average, Count, and Sum.
- List
  Enter a list of valid responses to the question. To import a list of attributes, see Importing List Attributes.
- Multi-Line Text
  The maximum length is 4,000 characters.

  Select **Multi-Line Text**, then enter the **Number of Lines**, from 3 to 50 lines. This determines how many lines of text are visible, without scrolling, on the Actions dialog boxes. Select **Include Attachments** if you want the custom attribute to include an attachments section on the Reconciliation Actions dialog box.
- Number
  If you select Number, select number formatting options in the Format tab:
  - For Decimal Places, enter a value for the number of decimal places to display.
  - Select Display as Percentage to display a percent sign.
  - Select the Thousands Separator option if you want numbers to display a thousands separator (for example, 1,000.00)
  - From the Currency Symbol list, select a currency symbol, for example, Dollars ($).
  - From the Negative Number list, select how to display negative numbers, for example, (123).
  - From the Scale list, select a scale value for numbers, for example, 1000.

> **Note**
>
> The Format tab is not displayed when creating member attributes in Transaction Matching. The default precision used for Number attributes is 2 decimal places.

For all numeric attributes, you can enter a value in the **Total** field. The group view displays on the Reconciliations List. The values for the grouping method can be:

  - None
  - Average
  - Count
  - Maximum
  - Minimum
  - Sum

- Text
- True or False
- User
- Yes or No
- Calculation
  See About Calculated Attributes

> **Note**
>
> You cannot create a custom attribute or calculated attribute with the same name as a system attribute.

Creating Attributes

Create custom attributes from the **Attributes** tab under **Application** , then **Configuration**.

There are various tabs that display based on your entries to guide you through the attribute creation process.

- Properties - contains the core properties of the attribute
- Format - this tab only displays for Number type attributes
- List - only appears for List type attributes
- Calculation - contents of this tab depend on the Calculation type chosen.

Some of the tabs only display if you create a certain type of attribute. For example, if you select **Calculation** in the **Properties** tab, you will see the Calculation definition tab and you are guided through the required entries based on what you enter.

To create attributes:

1. From Home, click **Application**, and then **Configuration**, and then select the **Attributes** tab.
2. In the **Standard** tab, click **New (+)**. The **New Standard Attribute** dialog displays.

3. In **Name**, enter an attribute name.

   Note that you can create an attribute using the same name that you used earlier and deleted for some reason. Any objects that were previously linked to the deleted object will be associated with the new object.

4. In **Type,** select an option for the type of attribute.

   See About Custom Attributes.

5. For certain type of attributes, an additional tab or additional fields are displayed.

   See About Custom Attributes for details about the additional information that must be provided.

6. Click **OK**.

> **Note**
>
> The maximum number of custom attributes and group attributes that can be defined in an application is 950.

Importing List Attributes

For attributes of type List, you can import the list values from a TXT file.

To import attributes of type List:

1. Create an import file of type List in a TXT file format, with each value on a separate line.

   For example:

   ```
   Blue
   Yellow
   Red
   Green
   ```

   The import option is always "Replace All".

2. From the Home page, select **Application**, then **Configuration**, and then the **Attributes**.
3. In the **Standard** tab, select an attribute of type List, click **Actions**, and then **Edit**.
4. In the **List Values** tab, click **Import**.
5. In the **Import List Values** dialog, browse to and select a text file.
6. Click **Import**.

   The following values are displayed: Total List Values, Completed, Errored, List Values Created, and List Values Updated.

   If the **Status** shows **Completed Successfully**, click **OK**.

   If the **Status** shows **Completed with Errors**, the errors are listed. To export the error list, click **Export to Excel** .

Defining Calculated Attributes

Related Topics

- About Calculated Attributes
  Calculated attributes can be used to implement complex if-then-else logic, thereby improving performance.
- Examples: Using Calculated Attributes
  Service Administrators can use custom attributes to implement solutions that adhere to their reconciliation policy.
- Creating Calculated Attributes
  Calculated attributes are created using the **Attributes** tab under **Configuration**.

About Calculated Attributes

Calculated attributes can be used to implement complex if-then-else logic, thereby improving performance.

Calculated attributes are read-only. Administrators can add calculated attributes to the attributes sections in the Actions dialog boxes, and workflow users can view them in the actions dialog boxes and in transactions. Administrators can restrict access to certain roles by setting access to Do Not Display. For example, for calculated attribute XYZ, an administrator could add Viewer: Do Not Display access to it, so that XYZ would not be displayed to viewers.

Any user role can add calculated attributes as columns in views and lists. They can also be added as filterable attributes in the Filter Panel.

The following table lists the calculation types that each attribute type can use when the Calculation option is chosen:

Table 4-1 Calculation Types that Each Attribute Type Can Use When the Calculation Option is Chosen

Attribute Type	Assign Value to List	Conditional	Scripted	Assign List to Value
Date			X	
Date/Time			X	
Integer	X	X	X	
List		X		X
Multi-Line Text	X	X	X	
Number	X	X	X	
Text	X	X	X	
True/False		X		
User				
Yes/No		X		

Examples of Scripted Functions

For numeric functions, a Null value is treated as zero. For example, the result of adding Null to 100 is 100 and the result of multiplying Null with 100 is zero. However, when all the values in a numeric function are Null, the result is Null.

- **Add Month**: Returns a date offset a specified number of months from the starting date. The date will always fall in the specified month offset. If the starting date has a day value beyond what is in the offset month, the last day of the offset month will be used. For

example, EDate (31-Jan-2017, 1) returns (28-Feb-2017). For Months, enter the number of months before or after the start date. A positive value for months yields a future date. A negative value yields a past date.

```
EDate(<Start Date>, <Months>, <Length>)
```
Example:

```
EDate(DATE(2017, 2, 15) 3)
```

- **Average Prior Function:** Averages a numeric amount over the prior X periods.

```
AVERAGE_PRIOR(<Value>, <Number of Periods>, <To Currency*>, <Rate Type*>,
<Rate Period*>)
```
Example:

```
AVERAGE_PRIOR( {Source System Balance (Reporting)}, '2', 'EUR', 'REC')
```

> **Note**
>
> Parameters with an asterisk, *, are required if the value is a balance-type attribute like Source System. If the value is a normal value (like a numeric attribute), then the * parameters should be omitted.

> **Note**
>
> Rate Type must be a valid rate type on the system, or the value 'REC', which means use the rate type assigned to the reconciliation. The Rate Period parameter must be either 'CURRENT' or 'PRIOR', which means when converting the currency, use the current period or prior period rate types.

- **Date**: Returns a date value based on specified integer values for the year, month and day. For example, this function creates a value of type Date, so `DATE(2018, 5, 31)` would convert to May 31st 2018. This can then be used in the Date Difference function, to pull the difference in days between a date, such as an end date, and this specific date.

  ```
  DATE(<Year>, <Month>, <Day>)
  ```
  You can also use `PERIOD START`, `PERIOD END`, or `PERIOD CLOSE` dates when creating a calculated data attribute. For example, if you wanted to compare the Closed Date on an Adjustment transaction to the `PERIOD END` date.

- **Date Difference:** Returns the difference in days, hours minutes, or seconds between two dates. For Date1 and Date 2, the values 'TODAY' and 'NOW' can be used, which denote the current date (with no time component) and date-time, respectively.

  Valid types are DAYS, HOURS, MINUTES, SECONDS.

  ```
  DATE_DIFF(<Date1>, <Date2>, <Type>)
  ```
  Example:

  ```
  DATE_DIFF('TODAY', {Preparer End Date}, 'DAYS') or DATE_DIFF({Preparer End
  Date}, 'NOW', 'HOURS')
  ```

- **Day**: Returns the day value of a date as an integer number

  ```
  DAY(<DATE>)
  ```

- **Extract Text:** Returns the substring within the value, from the positions specified. Extract Text/Text Location uses the value of 1 for the first character.

  ```
  SUBSTRING(<Value>, <Location>, <Length>)
  ```

Example:

```
SUBSTRING( {Name} , 5, 10)
```

If <location> is zero, it is treated as 1. If <location> is positive, then Account Reconciliation counts from the beginning of <value> to find the first character. If <location> is negative, then Account Reconciliation counts backwards from the end of <value>.

- **If Then Else:** Allows the user to insert a conditional calculation into the scripted calculation. IF_THEN_ELSE calculations can also be nested to support "ELSE IF" type calculations.

  ```
  IF_THEN_ELSE(<Condition>, <Value1>, <Value2>)
  ```

  Example:

  ```
  IF_THEN_ELSE( {Risk Rating} = 'Low', 'Good',
  IF_THEN_ELSE( {Risk Rating} = 'Medium', 'Better',
  IF_THEN_ELSE({Risk Rating} = 'High', 'Best','Bad')))
  ```

- **Instring:** Returns the index of the substring within the value.

  ```
  INSTRING(<Value1>, <Value to Search>)
  ```

  Example:

  ```
  INSTRING({Name}, 'a')
  ```

- **Length:** Takes a text value as a parameter and returns an integer which is the number of characters in the text.

  `LENGTH('Value')` returns 5, and `LENGTH({Name})`would return the number of characters in the name of the object. If the value is empty or null, the calculation returns 0.

  Use the calculation with `SUBSTRING` to extract the last 4 characters of a text value.

  Example:

  ```
  SUBSTRING( {MyString}, LENGTH ({MyString}) - 4)
  ```

- **Lowercase:** Returns the value in lower case.

  ```
  LOWERCASE(<Value>)
  ```

  Example:

  ```
  LOWERCASE( {Description} )
  ```

- **Maximum**: Returns the maximum value from a list of attributes. There can be any number of parameters.

  ```
  MAX(<Value1>, <Value2>,<ValueN>)
  ```

  Example:

  ```
  MAX( TRANSLATE( {Source System Balance (Entered)}, 'USD', 'Accounting'),
  TRANSLATE( {Source System Balance (Functional)}, 'USD', 'Accounting'),
  TRANSLATE( {Source System Balance (Reporting)}, 'USD', 'Accounting') )
  ```

- **Maximum Prior:** Returns the maximum value over the prior X periods.

  ```
  MAX_PRIOR (<Value>, <Number of Periods>, <To Currency*>, <Rate Type*>, <Rate
  Period*>)
  ```

  Example:

  ```
  MAX_PRIOR( {Source System Balance (Functional)}, '6', 'CAD', 'REC', 'CURRENT')
  ```

> **Note**
>
> Parameters with an asterisk, *, are required if the value is a balance-type attribute like Source System. If the value is a normal value (like a numeric attribute), then the * parameters should be omitted.

> **Note**
>
> Rate Type must be a valid rate type on the system, or the value 'REC', which means use the rate type assigned to the reconciliation. The Rate Period parameter must be either 'CURRENT' or 'PRIOR', which means when converting the currency, use the current period or prior period rate types.

- **Minimum:** Returns the minimum value from a list of attributes. There can be any number of parameters.

  `MIN(<Value1>, <Value2>,<ValueN>)`
  Example:

  ```
  MIN( TRANSLATE( {Source System Balance (Entered)}, 'CAD', 'REC'),
  TRANSLATE( {Source System Balance (Functional)}, 'CAD', 'REC'),
  TRANSLATE( {Source System Balance (Reporting)}, 'CAD', 'REC') )
  ```

- **Minimum Prior:** Returns the minimum value over the prior X periods.

  `MIN_PRIOR (<Value>, <Number of Periods>, <To Currency*>, <Rate Type*>, <Rate Period*>)`
  Example:

  ```
  MIN_PRIOR( {Source System Balance (Functional)}, '6', 'EUR', 'Simplified')
  ```

> **Note**
>
> Parameters with an asterisk, *, are required if the value is a balance-type attribute like Source System. If the value is a normal value (like a numeric attribute), then the * parameters should be omitted.

> **Note**
>
> Rate Type must be a valid rate type on the system, or the value 'REC', which means use the rate type assigned to the reconciliation. The Rate Period parameter must be either 'CURRENT' or 'PRIOR', which means when converting the currency, use the current period or prior period rate types.

- **Month**: Returns the month value of a date as an integer number (1-12)

  `MONTH (<DATE>)`

- **Power:** Raises one number to the exponential power of another.
  `POWER(x,y) where x=BASE NUMBER,and y=EXPONENT` and x and y can be attributes or calculations, so long as they are numeric.

  `Example: POWER(3,4)=81`

> **Note**
>
> Fractional values will reduce the number to its root. For example, `POWER(27, 1/3) = 3` the cube root.

> **Note**
>
> Negative values will perform an inverse of the exponential calculation. For example `POWER(2, -2) = 1 / (2^2) = 1 / 4 = .25`.

- **Prior:** Returns the value of the specified prior period.

  `PRIOR(<Value>, <Number of Periods Prior>, <To Currency*>, <Rate Type*>, <Rate Period*>)`

  To return prior balance numbers, you must specify the Currency, Rate Type, and Rate Period using the following format:

  `PRIOR( {Source System Balance (Entered)}, '1', 'EUR', 'rec', 'prior')`
  If you are not returning balance numbers, you need to only specify the number of prior periods using the following format:

  `PRIOR ( {Reviewer 1(Actual)},1 )`

  - If the `Number of Periods Prior` is omitted, it is assumed to be the value 1.
  - Parameters with an asterisk, *, are required if the value is a balance-type attribute like Source System. For other values (like a numeric attribute), the * parameters must be omitted.
  - `Rate Type` must be a valid rate type on the system, or the value 'REC', which means use the rate type assigned to the reconciliation.
  - `Rate Period` must be either 'CURRENT' or 'PRIOR', which means when converting the currency, use the current period or prior period rate types.
- **Round:** Returns the value rounded to the decimal places specified.

  `ROUND(<Value>, <Decimal Places>)`

  `Example: ROUND( ({Scripted Translate} /7), 4)`
- **Sum Prior:** Returns the sum of a value over the prior X periods.

  `SUM_PRIOR(<Value>, <Number of Periods>, <To Currency*>, <Rate Type*>, <Rate Period*>)`

  `Example: SUM_PRIOR( {Source System Balance (Reporting)}, '3', 'EUR', 'REC')`

> **Note**
>
> Parameters with an asterisk, *, are required if the value is a balance-type attribute like Source System. If the value is a normal value (like a numeric attribute), then the * parameters should be omitted.

> **Note**
>
> Rate Type must be a valid rate type on the system, or the value 'REC', which means use the rate type assigned to the reconciliation. The Rate Period parameter must be either 'CURRENT' or 'PRIOR', which means when converting the currency, use the current period or prior period rate types.

- **Text Location:** Returns the index of the substring within the value, starting at 1 as the first position.

  ```
  INSTRING(<Value>, <Value To Search>)
  ```

  ```
  Example: INSTRING( UPPERCASE( {Name} ), 'TAX' )
  ```

- **Translate:** Translates a currency attribute to a numeric attribute using a specified rate type.

  ```
  TRANSLATE(<Value>, <To Currency>, <Rate Type>)
  ```

  ```
  Example: TRANSLATE( {Source System Balance (Entered)}, 'EUR', 'Accounting')
  ```

> **Note**
>
> Rate Type must be a valid rate type on the system, or the value 'REC', which means use the rate type assigned to the reconciliation.

- **Uppercase:** Returns the value in upper case.

  ```
  UPPERCASE(<Value>)
  ```

  ```
  Example: UPPERCASE( {Name} )
  ```

- **Year**: Returns the year value of a date as an integer number.

  ```
  YEAR (<DATE>)
  ```

Examples: Using Calculated Attributes

Service Administrators can use custom attributes to implement solutions that adhere to their reconciliation policy.

This topic discusses a few common examples of creating calculated attributes and using them in rules.

Example: Transaction Drop Off

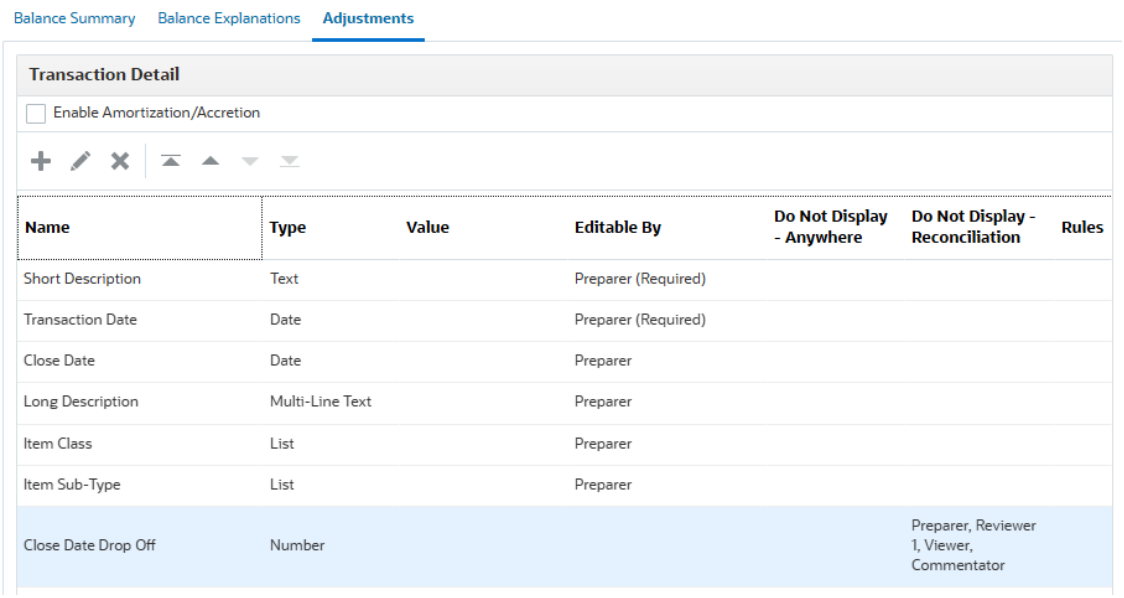
The Preparer needs Balance Explanations or Adjustments to drop off reconciliations if the Close Date has passed. This example creates a calculated attribute and applies it in a rule which will stop the transaction from carrying forward if the attribute calculation goes above zero.

If a Close Date has been entered on the transaction, the attribute *Close Date Drop Off* can be created by using the Date Difference and Add Month calculation functions. This attribute will put the Close Date back a month and will calculate the date difference between your new attribute and the current period end date in days. This attribute is then applied to a *Copy Transactions from Prior Reconciliation* rule to ensure that Adjustments will not be carried forward into the period that the Close Date is in.

The calculated attribute *Close Date Drop Off* has the following settings:

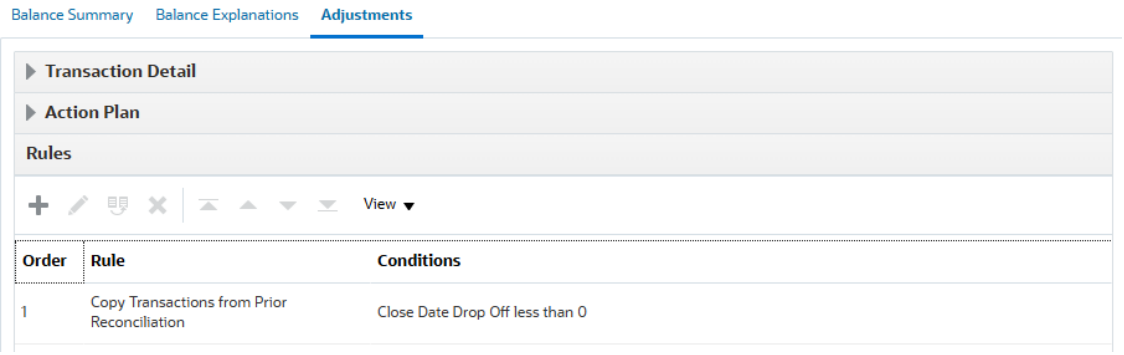
- **Type**: Number
- **Total**: Sum
- **Calculation Type**: Scripted
- Select **Display to User**
- **Calculation Definition**: `DATE_DIFF(EDATE({Close Date}, -1), {Period End Date}, 'DAYS')`

This attribute can then be applied to the **Transaction Detail** in the format with no view access to any roles.



Name	Type	Value	Editable By	Do Not Display - Anywhere	Do Not Display - Reconciliation	Rules
Short Description	Text		Preparer (Required)			
Transaction Date	Date		Preparer (Required)			
Close Date	Date		Preparer			
Long Description	Multi-Line Text		Preparer			
Item Class	List		Preparer			
Item Sub-Type	List		Preparer			
Close Date Drop Off	Number				Preparer, Reviewer 1, Viewer, Commentator	

A *Copy Transactions from Prior Reconciliation* rule can then be created which will drop off the transaction if the attribute day difference calculation is greater than 0.



Order	Rule	Conditions
1	Copy Transactions from Prior Reconciliation	Close Date Drop Off less than 0

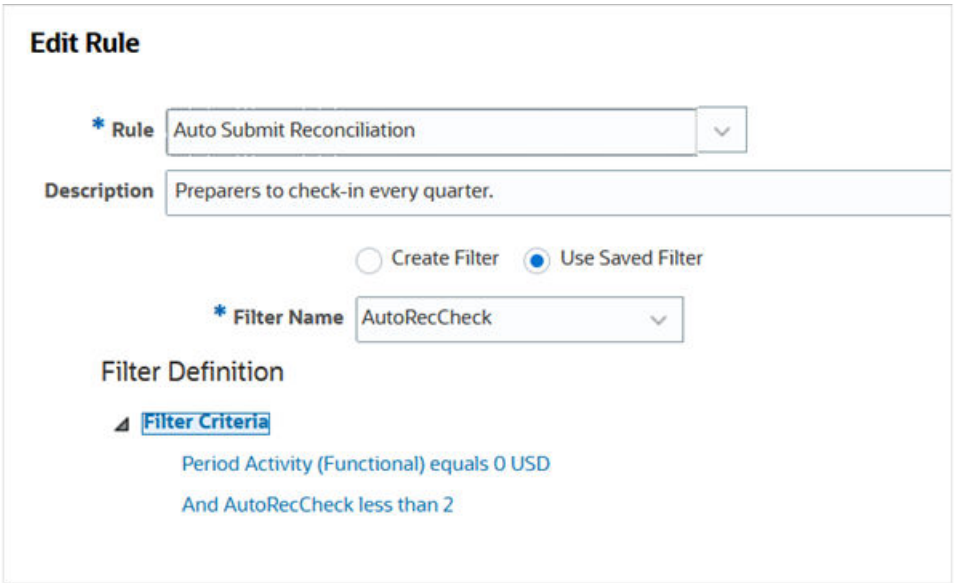
Example: Stop Auto Reconciliation

The Service Administrator wants to stop auto reconciliation from occurring if a reconciliation has been auto reconciled two months in a row. This can be implemented by creating a custom attribute and applying it to the required rule.

Create a calculated attribute named AutoRecCheck with the following settings:

- **Type**: Text
- **Calculation Type**: Scripted
- Select **Display to User**
- **Calculation Definition**: `SUM_PRIOR(IF_THEN_ELSE({Auto Reconciled} = 'Yes', 1, IF_THEN_ELSE({Auto Submitted} = 'Yes', 1, 0)),2)`

Then, apply this calculated attribute to a rule with criteria that meets your requirement. In this example, the calculated attribute is used in the filter criteria of a rule, as shown in the following screenshot.



Example: Calculate Period Variance and Require an Explanation

The Service Administrator wants Preparers to enter an explanation when the variance between periods fluctuates over a specified percentage.

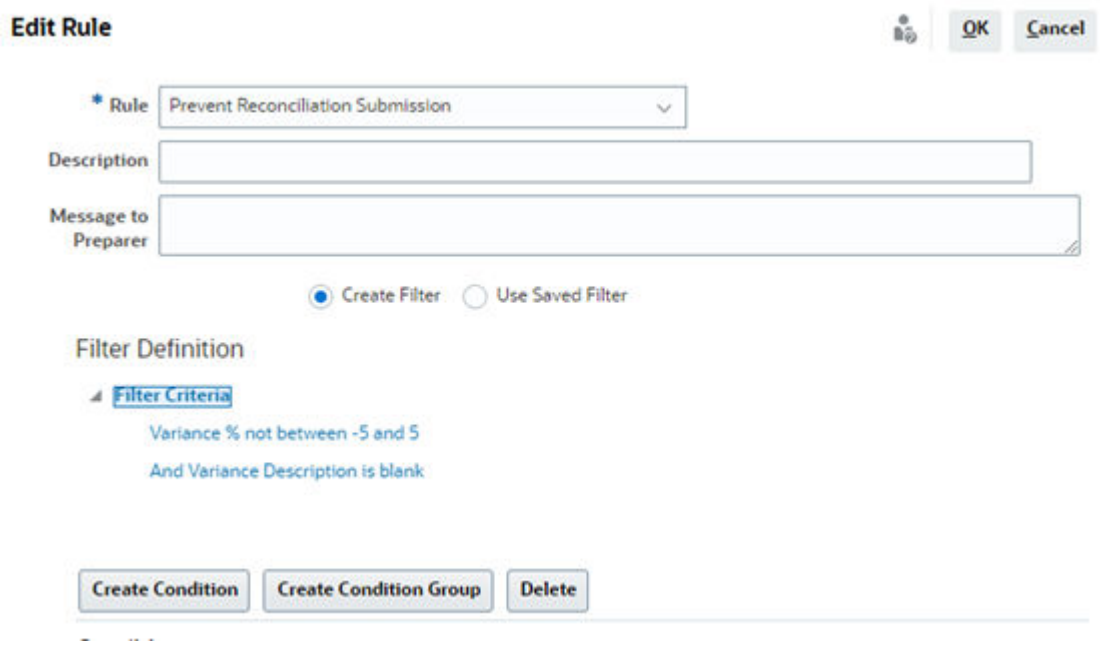
This example creates a custom attribute of type Number and a calculated attribute that computes the variance between two periods. Although this example uses Variance Analysis, the values can also be interchanged for Account Analysis methods.

Create a calculated attribute Variance % with the following settings:

- **Type**: Number
- **Total**: None
- **Calculation Type**: Scripted
- Select **Display to User**
- **Calculation Definition**: `(TRANSLATE({Source System Balance (Functional)}, 'USD', 'Accounting') - TRANSLATE({Variance Period Balance (Functional)}, 'USD', 'Accounting'))/TRANSLATE({Source System Balance (Functional)}, 'USD', 'Accounting')`

Next, create a custom attribute named Variance Description with **Type** set to Text.

Create a rule using both the calculated attribute and the text attribute. In the Filter Definition, set the filter criteria as shown in the following screenshot.

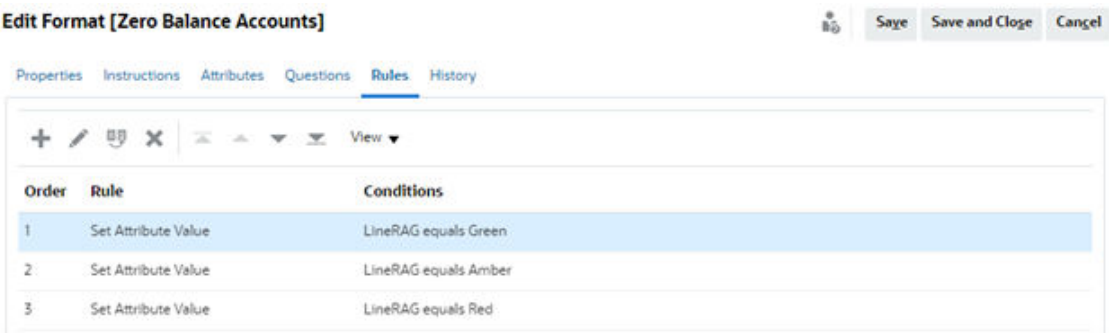


Example: Track a RAG Score

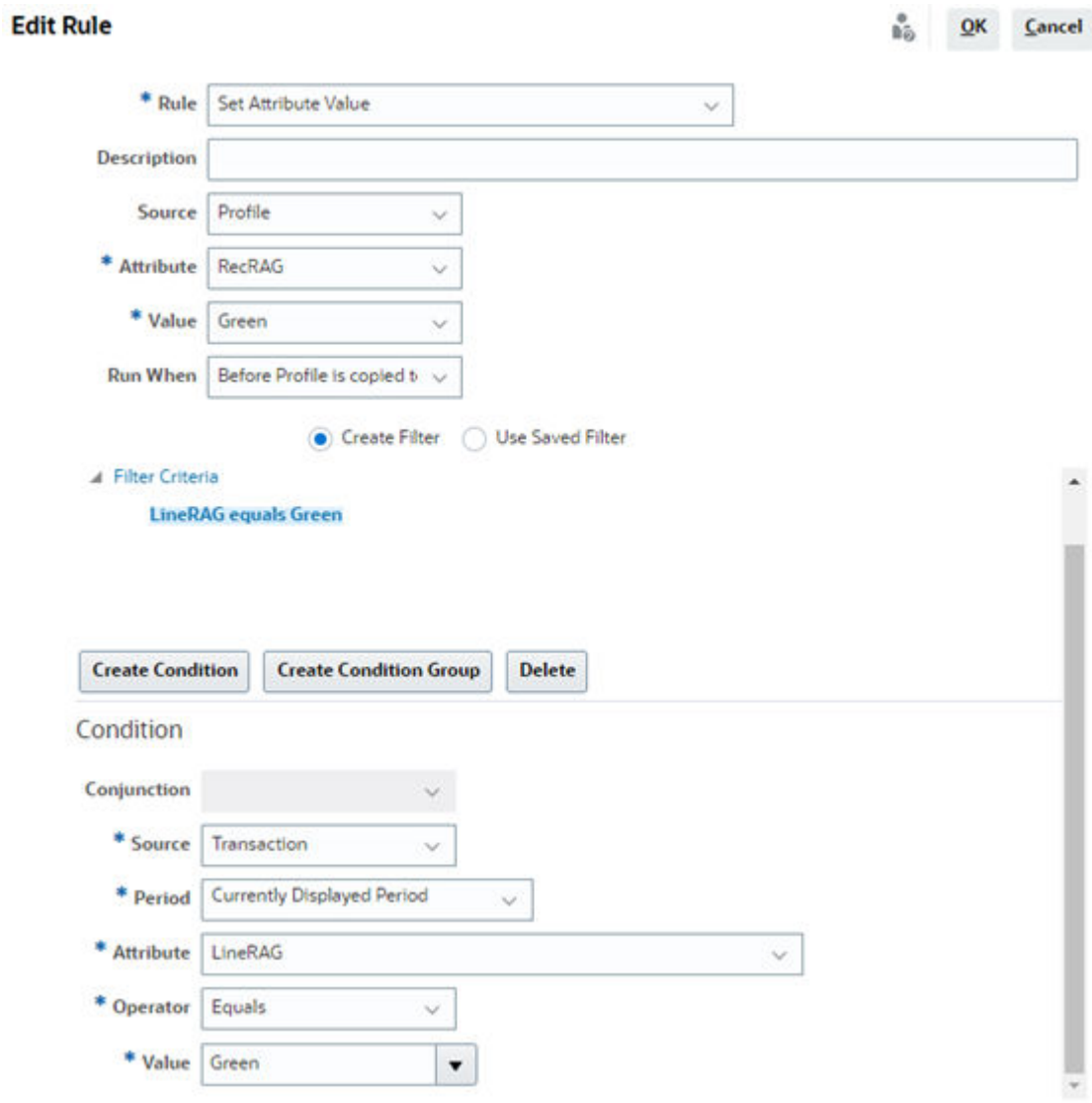
This example creates a rule to change the reconciliation RAG (Red, Amber, Green) score based on the transaction RAG score.

Create two custom attributes, LineRAG and RecRAG, of type Text. The LineRAG must be placed in the Format transactions and the RecRAG must be placed on the Format attributes tab.

Rules are then built in the following order to set the RecRAG based on the transaction LineRAG. The order of the colors in the rules is important. Red needs to be the last rule so that if any transaction in your set of items has a red color, the RecRAG will be red. For instance, if you have three transactions and all LineRAGs are green, the RecRAG will be green. But if you have two green LineRAGs and one red LineRAG, the third rule will be run last and will apply a RecRAG of red since one of those transactions had a red LineRAG.



A rule to set the RecRAG to Green, Amber, or Red is created using the example below. Three rules must be created for Green, Amber, and Red.



Rules must be run periodically during the day to ensure that the RecRAG is updated with the latest information on the reconciliation. This can be done manually or by using the EPM Automate `importReconciliationAttributes` command with Rules = SET_ATTR_VAL.

See importReconciliationAttributes in *Working with EPM Automate*.

Example: Auto Submit and Approve a Reconciliation if there is No Source and Subsystem Activity

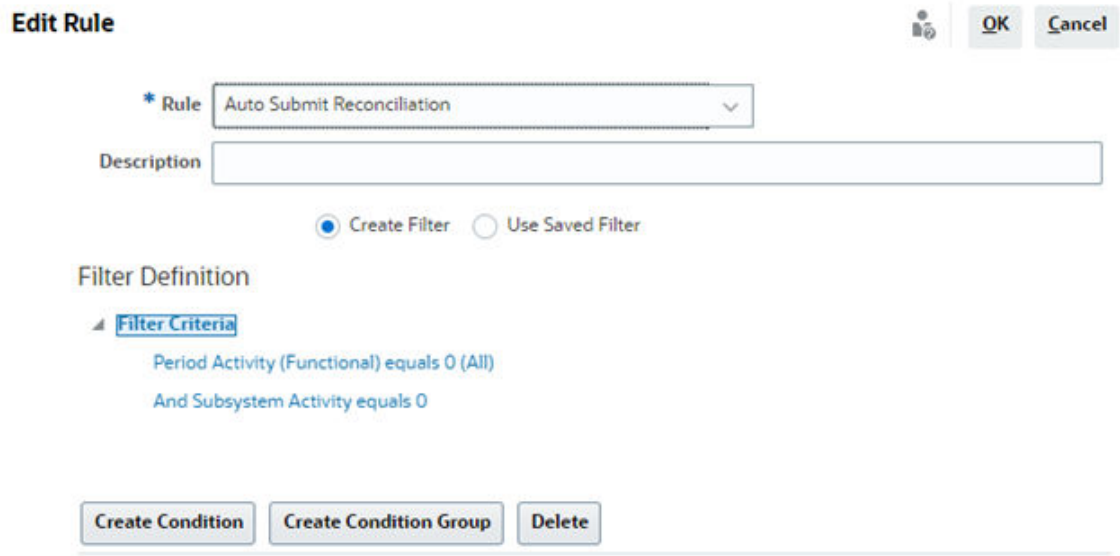
The Service Administrator wants to set up a rule that auto submits reconciliations if there is no source system activity or subsystem activity.

To implement this, create a calculated attribute to calculate the change in subsystem balance between periods. The calculated attribute named Subsystem Activity has the following settings:

- **Type**: Number
- **Total**: Sum
- **Calculation Type**: Scripted
- Select **Display to User**

- **Calculation Definition**: `TRANSLATE({Subsystem Balance (Functional)}, 'USD', 'REC') - PRIOR( {Subsystem Balance (Functional)}, 1, 'USD', 'REC', 'PRIOR')`

Then, apply this calculated attribute to a rule that has a criteria that meets your requirement. The following screenshot applies the calculated attribute to filter criteria of a rule.



Example: Calculate the Current Month in the Quarter

The Service Administrator wants reconciliations to show the current month of the quarter, such as M1, M2, and M3.

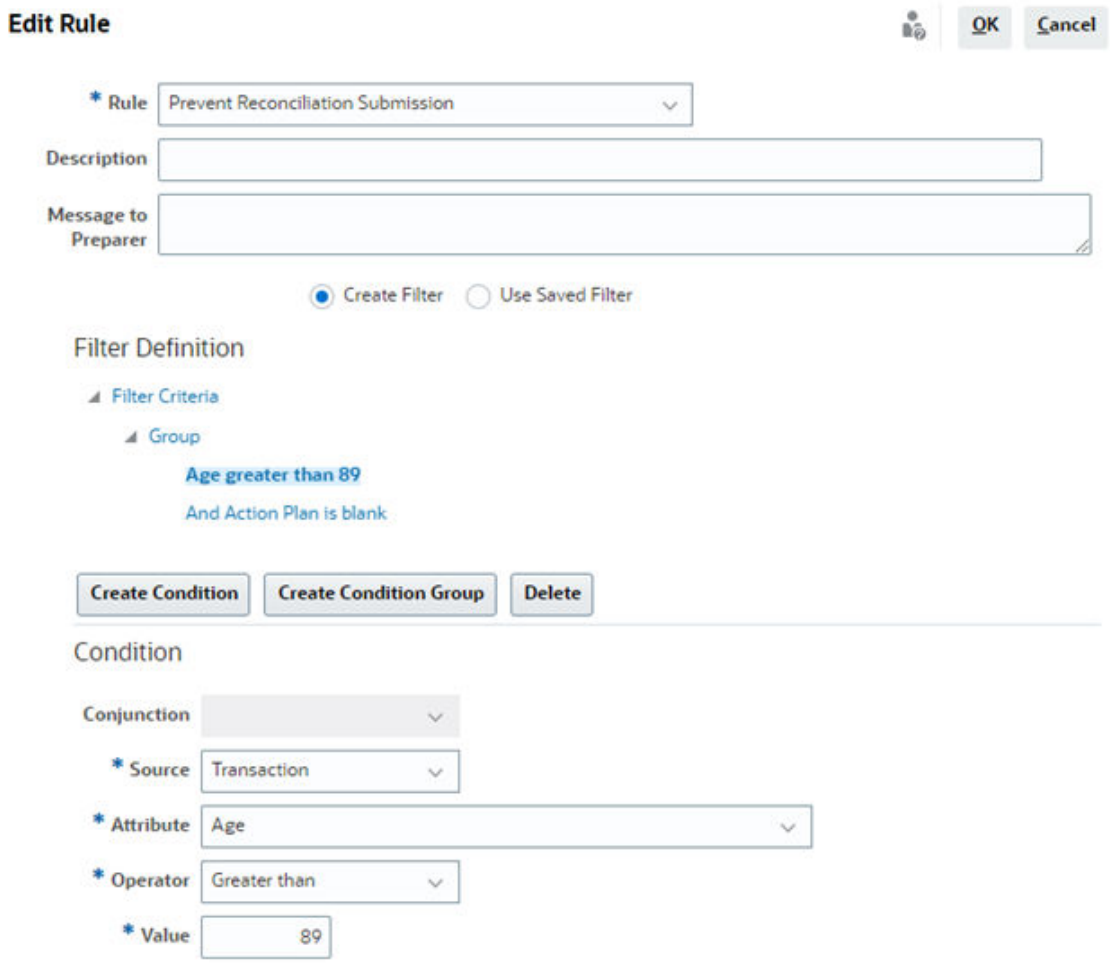
Create a calculated attribute named Period Number with the following settings:

- **Type**: Text
- **Calculation Type**: Scripted
- Select **Display to User**
- **Calculation Definition**:

```
IF_THEN_ELSE(MONTH ({Period End Date})=1, 'M1',
(IF_THEN_ELSE(MONTH ({Period End Date})=2, 'M2',
(IF_THEN_ELSE(MONTH ({Period End Date})=3, 'M3',
(IF_THEN_ELSE(MONTH ({Period End Date})=4, 'M1',
(IF_THEN_ELSE(MONTH ({Period End Date})=5, 'M2',
(IF_THEN_ELSE(MONTH ({Period End Date})=6, 'M3',
(IF_THEN_ELSE(MONTH ({Period End Date})=7, 'M1',
(IF_THEN_ELSE(MONTH ({Period End Date})=8, 'M2',
(IF_THEN_ELSE(MONTH ({Period End Date})=9, 'M3',
(IF_THEN_ELSE(MONTH ({Period End Date})=10, 'M1',
(IF_THEN_ELSE(MONTH ({Period End Date})=11, 'M2',
(IF_THEN_ELSE(MONTH ({Period End Date})=12, 'M3',
'recon not found'))))))))))))))))))))))))
```

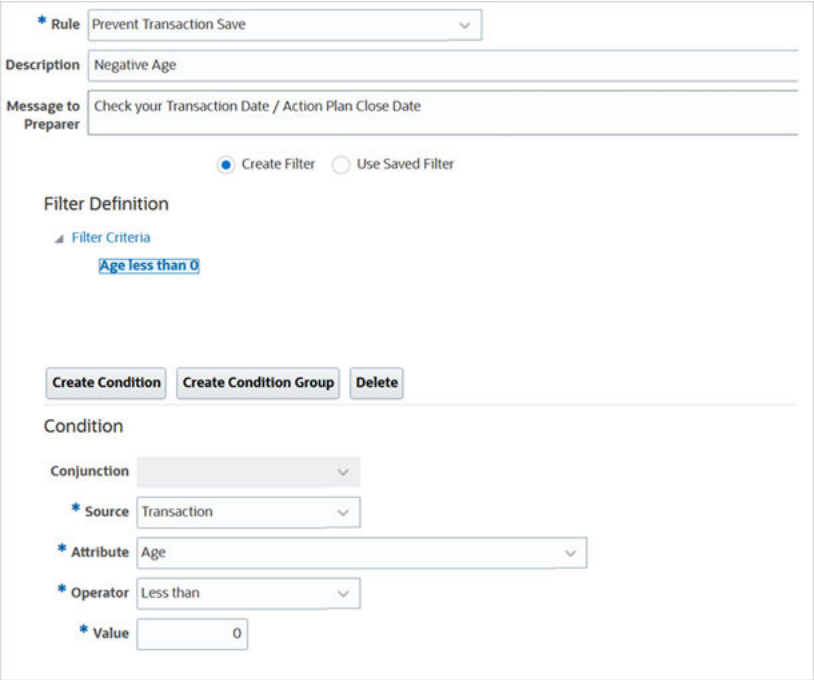
Example: Require an Action Plan if the Transaction has Aged More Than 90 Days

The Service Administrator wants Preparers to create an action plan if a transaction has aged more than 90 days. In the rule, create filter criteria as shown in the following screenshot.



Example: Preventing the Entering of Transaction Dates from a Future Period

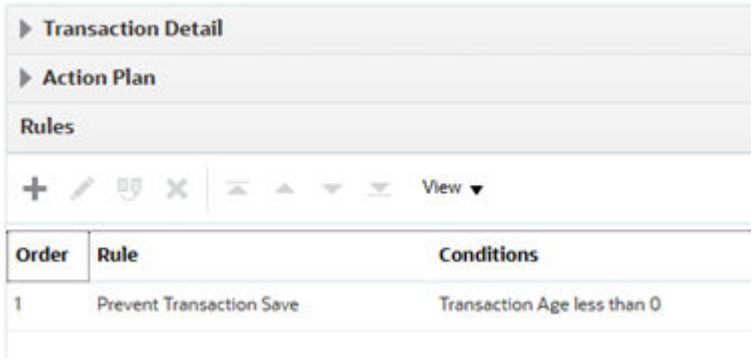
Service Administrators want Preparers to only enter transaction dates, such as Balance Explanations, in the current period. Create a rule in the format that looks at the Age of the transaction.



The above example will not work if action plans are being used because an action plan date calculates the age differently. When action plans are being used, create a custom attribute named Transaction Age with the following settings:

- **Type**: Number
- **Total**: Sum
- **Calculation Type**: Scripted
- Select **Display to User**
- **Calculation Definition**: `DATE_DIFF({Transaction Date}, {Period End Date}, 'DAYS')`

Then, apply this calculated attribute to a rule after adding it to the Transaction Detail.



Creating Calculated Attributes

Calculated attributes are created using the **Attributes** tab under **Configuration**.

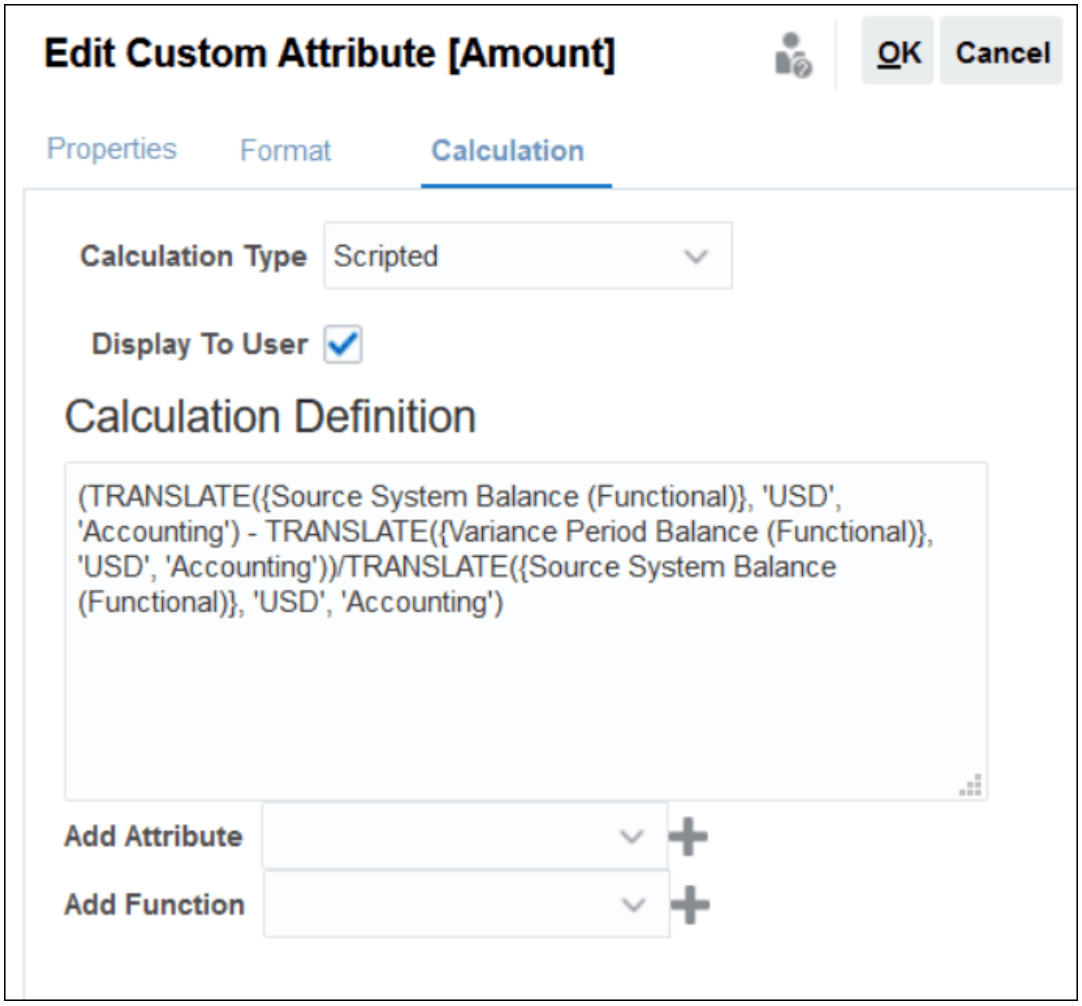
To create a calculated attribute:

1. From Home, click **Application**, then **Configuration**, and then select the **Attributes** tab.
2. Click the **Calculated** tab.
3. Click **New (+)**. The **New Calculated Attribute** dialog displays.
4. In **Name**, enter an attribute name.

   Note that you can create a calculated attribute using the same name that you used earlier and deleted for some reason. Any objects that were previously linked to the deleted object will be associated with the new object.
5. In **Type,** select a type for the calculated attribute.

   See About Custom Attributes.
6. Click the **Calculation** tab.
7. In **Calculation Type**, select the type of calculation. The list of values displayed is determined by the attribute type.
   - **Assign Value to List**—Assign a value to a List type attribute
   - **Assign List To Value**—Assign a List Value to the value of a different attribute. Only available for attributes of type List
   - **Conditional**—A conditional calculation (If – Then – Else)
   - **Scripted**—A free-form scripted calculation. Scripted is available for attributes of type Date, Text, Number, or Integer

   See About Calculated Attributes for the calculation types that each attribute type can use.
8. If you selected **Scripted** in **Calculation Type**, use **Add Attribute** and **Add Function** to enter a free-form calculation equation that will be used to compute the value of the calculated attribute.



- **Add Attribute**—Select an attribute and click **Add** to insert the attribute into the Calculation Definition box at the location of the cursor. If the cursor is in the middle of a word or attribute, the word/attribute will be replaced in the definition. Any attribute that is added will have brackets {} around the name, according to the scripting format.
- **Add Function**—Select a function and click **Add** to add the function to the Calculation Definition. The Function is added with placeholders for each parameter.

For example:

Insert the TRANSLATE function in the calculation definition:

```
TRANSLATE(<Value>, <To Currency>) - TRANSLATE(<Value>, <To Currency>)<Rate Type*>
```

Then replace the placeholders with attributes:

```
TRANSLATE({Source System Balance (Entered)}, 'USD') - TRANSLATE({Subsystem Balance (Entered)}, 'USD')
```

9. Select **Display to User** to enable users to include this calculated attribute as a column in lists and views and filter data using this attribute.
10. Click **OK**.

Defining Balance Attributes

Balance attributes enable you to associate and load additional information with balances. This additional information can be used to enhance the effectiveness of rules, provide insights when users view the data, and provide more information for machine learning algorithms.

Related Topics

- About Balance Attributes
  A balance attribute is a user-defined attribute that contains additional information about the balances that are loaded into your application.
- Creating Balance Attributes
  Service Administrators can define up to a maximum of 20 balances attributes in an application.

About Balance Attributes

A balance attribute is a user-defined attribute that contains additional information about the balances that are loaded into your application.

The balance attributes are available directly with the data and are also aggregated into any reconciliations associated with the data. Service Administrators can specify which balance attributes they want to load along with their balances and how to handle aggregating each one. Balance attributes can be displayed in the Reconciliation List, Transactions tab, Reconciliation Balances tab, and Detail Balances tab. Use **Select Columns** from **Actions** to specify which balance attributes must be displayed. Balance attributes can also be used when defining filters, format rule conditions, profile rule conditions, custom reports, and custom dashboards.

Note that you cannot use existing custom attributes or calculated attributes to load additional information about balances.

Balance attribute data is aggregated and stored at multiple levels:

- Detail Balance (if specified): Transactional level data will be aggregated by Segments, Sub-segments, Currency Buckets, Currencies and Balance Types
- Reconciliation Balance: Transactional level data or Detail Balances (if specified) will be aggregated by Segments, Currency Buckets, Currencies and Balance Types
- Reconciliations: Reconciliation Balance data will be aggregated by Account ID.

You can view the balance attributes along with the sub-segment balances that have been loaded. You can use filter to display only the balances that you require and then export these rows to a Microsoft Excel file.

Balance attributes are associated with the data, not the reconciliation. Therefore, if a reconciliation is deleted, the data still exists in the balance attribute, and will be displayed in the Balance and Detail Balance dashboards. If the reconciliation is recreated, the balance attributes are included in it.

In the source file that you use to load balances, the balance attribute values must appear in the same row as the corresponding balance.

> **Note**
>
> You cannot create a balance attribute with the same name as a system attribute.

About Using Balance Attributes

1. Create one or more balance attribute. See Creating Balance Attributes.
2. Classify the balance attributes as Attribute or LOOKUP.
   a. From Home, select **Data Exchange**.
   b. From **Actions**, select **Applications**, and click **Reconciliation Compliance Balances**.
   c. In the **Dimensions** tab, under **Dimension Classification**, select **Attribute** or **LOOKUP** for the balance attribute.
3. Map the required balance attributes with your data integration.
   See Mapping Balance Attributes to an Integration in *Administering Account Reconciliation*.
4. Load balances using Data Integration or Data Exchange.
   See Executing a Data Load and Viewing Results in *Administering Account Reconciliation*.
5. Use the loaded balance attributes, as required:
   - View the balance attributes in the Reconciliation List, Transactions tab, Reconciliation Balances tab, and Detail Balances tab.
   - Include balance attributes in filters, format rules, profile rules, custom reports, and custom dashboards
     Balance attributes cannot be used with a Set Attribute Value rule.

Best Practices for Using Balance Attributes

- Ensure that balance attributes are included in your balance load
- When loading debit or credit activity (or any currency-based amount), load it at the Functional or Reporting buckets for multi currency applications
- Most balance attributes are loaded from source systems. However, for the Balance Comparison method, you'll need to include the attributes in your subsystem integrations.
- Consider aggregation when designing attributes

Creating Balance Attributes

Service Administrators can define up to a maximum of 20 balances attributes in an application.

To create a balance attribute:

1. From **Home**, select **Application**, then **Configuration**
2. Click the **Attributes** tab.
3. Click the **Balance** tab.
4. Click **Add**. The **New Balance Attribute** dialog displays.
5. In **Name**, enter a unique name for the balance attribute.
6. In **Type**, select the type of attribute (Group is not selectable). See About Custom Attributes.

   Depending on the type selected, some additional information may need to be provided.
7. Select **Reopen** if you want the reconciliation to be reopened with the Preparer when the value of this balance attribute changes.

The created balance attributes will appear automatically in the **Dimensions** tab of the **Reconciliation Compliance Balances** target application. The Dimension that you associate

with a balance attribute must be a LOOKUP dimension classification with a UD data table or Attribute dimension with an ATTR data table.

> **Note**
>
> When loading balances using Data Integration, balance attributes of type Multi-line Text will not enforce limits on the number of lines.

> **Note**
>
> The maximum number of balance attributes that can be defined in an application is 20.

Defining Group Attributes

Group attributes provide a mechanism to easily manage a set of dependent attributes that are related to a single entity.

Related Topics

- About Group Attributes in Reconciliation Compliance
  A group attribute is a user-defined attribute that consists of one or more member attributes.
- Creating Group Attributes
  In Reconciliation Compliance, Service Administrators can create group attributes. In Transaction Matching, users with the Match Type - Manage granular role can create group attributes.
- Exporting Group Attribute Member Values
  Exporting a group attribute enables the member attribute values to be reused in a different environment.
- Importing Group Attributes
  Importing a group attribute enables you to use the group attribute contained in the import `.csv` file in your environment.
- Editing Group Attributes
  Service Administrators can modify member attributes and member attribute values.
- Deleting Group Attributes
  Service Administrators can delete a group attribute, member attributes, or member attribute values subject to certain conditions.

About Group Attributes in Reconciliation Compliance

A group attribute is a user-defined attribute that consists of one or more member attributes.

Group attributes can store multiple values for a set of member attributes. One member attribute in the group attribute must be assigned as the key member attribute.

An example of a group attribute is Parent Account, with member attributes as Parent Account, Parent Description, and Department. Details for multiple parent accounts are stored in this group attribute. Data for each member attribute is referred to as a value. The data stored in the group attribute can be as shown in the following table.

Table 4-2 Group Attribute Example - Parent Account

Parent Account	Parent Description	Department
P10000	Cash Gross Trade	1100
P12000	Receivables Fixed	1200
P14000	Assets Accounts	1400
P20000	Payable	2000
P30000	Equity	1000

> **Note**
>
> Group attributes defined in Reconciliation Compliance are different from those defined in Transaction Matching. You cannot use Reconciliation Compliance group attributes in Transaction Matching and vice versa.

> **Note**
>
> You cannot create a group attribute or a member attribute with the same name as a system attribute.

Benefits of Using Group Attributes

- Define once and use in multiple objects
- Prevents discrepancies in the value of an attribute that is used in multiple objects
  - When there is a change in any member value, you need to only update the value in the group attribute. This change can then be seen across all objects within the application that reference the key value of the group attribute.
  - When you select a group attribute's key member in a reconciliation or transaction, you automatically get the values of all member attributes.
- Reduces effort involved in setting multiple related attributes across your application Typically, a subset of group attribute members is included in a format, reconciliation, or transaction. So, a reconciliation may use Store ID, Store Manager, and Store Email, and a transaction may use Store ID, Store Location, and Phone Number. When group attributes are used, there is no need to set all these attributes individually. Instead, you select the Store ID (key attribute) and the values of the other attribute members are populated.

Where Can Reconciliation Compliance Group Attributes Be Used?

When using a Reconciliation Compliance group attribute in an object, you can use some or all member attributes. For example, in **Select Columns** of the reconciliation list, you can include only the Store Name and Store Location member attributes.

Group attributes defined for Reconciliation Compliance can be used in the following:

- Formats
- Reconciliations card
  - Search
  - Select Columns

  - Filters
- Matching card
  - Search
  - Select Columns
  - Filters
- Views
  - List views - Select Columns
  - Pivot views – as an attribute in the Layout tab
  - Chart views – as an attribute in the Layout tab
- Dashboards - for the Reconciliations, Transactions, Alerts, Detail Balances, and Profiles object types

Creating Group Attributes

In Reconciliation Compliance, Service Administrators can create group attributes. In Transaction Matching, users with the Match Type - Manage granular role can create group attributes.

To create group attributes in Reconciliation Compliance:

1. From **Home**, select **Application**, then **Configuration**, and then **Attributes**.
2. Click the **Group** tab.
3. Click **Add** to display the **New Group Attribute** dialog.
4. Specify the group attribute properties. See Specifying Group Attribute Properties.
5. Define the group attribute members. See Defining Member Attributes.
6. Specify values for the group attribute members. See Specifying Values for Group Member Attributes.
7. Click **OK** to save the group attribute.

To create group attributes in Transaction Matching:

1. From **Home**, select **Application**, and then **Match Types**.
2. Select the **Group Attributes** tab. This tab displays all group attributes defined in Transaction Matching.
3. Click **Add** to display the New Custom Attribute dialog.
4. Specify the group attribute properties. See Specifying Group Attribute Properties.
5. Define the group attribute members. See Defining Member Attributes.
6. Specify values for the group attribute members. See Specifying Values for Group Member Attributes.
7. Click **OK** to save the group attribute.

> **Note**
>
> The maximum number of custom attributes and group attributes that can be defined in an application is 950.

Specifying Group Attribute Properties

Group attribute properties include the name and type.

To specify group attribute properties:

1. Click the **Properties** tab in the New Custom Attribute dialog.
2. In **Name**, enter a name for the group attribute. The name should be unique across all custom attributes in the application.
3. In **Type**, select Group.

   Note: The Calculation option is disabled when creating group attributes.

Defining Member Attributes

For each member attribute in a group attribute, you must specify a name and type.

To define the member attributes of a group attribute:

1. Click the **Members** tab in the New Custom Attribute dialog.
2. Create one or more member attributes using the following steps:
   a. Click **Add**. The New Attribute Member dialog displays.
   b. In **Name**, enter a unique name for the member attribute.

      The name must be unique across all custom attributes and system attributes in the application.
   c. In **Type**, select the type of member attribute. See About Custom Attributes.

      If you select List, you must specify a list of values for this member attribute. You cannot select Group as the type for a member attribute.

      > **Note**
      >
      > In Reconciliation Compliance, you cannot add attachments for multi-line text attributes.

   d. If this is a calculation attribute, select **Calculation**. See About Calculated Attributes and Creating Calculated Attributes.

      You can use only the member attributes of this group attribute when specifying the calculation definition.

      > **Note**
      >
      > This option is disabled for member attributes created in Transaction Matching.
3. Select **Key** for the member attribute that must be used as the key for this group attribute. A group attribute must have one key attribute.

Specifying Values for Group Member Attributes

Multiple values can be specified for each member attribute in a group attribute.

You can either enter the values for member attributes or import them from a .CSV file. See Importing Group Attributes.

To specify values for the member attributes in a group attribute:

1. Click the **Values** tab in the New Custom Attribute dialog.

   The grid displays one column for each member attribute defined in the Members tab.
2. Create one or more sets of values for the defined member attributes.
   a. Click **Add** to display a new row.
   b. Enter values for each member attribute.

> **Note**
>
> The values of the key attribute must be unique across the group attribute.

Exporting Group Attribute Member Values

Exporting a group attribute enables the member attribute values to be reused in a different environment.

To export a group attribute:

1. Open the Edit Custom Attribute dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then, click the name of the group attribute that must be exported.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute that must be exported.
2. Click the **Values** tab and select **Export**.

The member attribute values are exported to a file named `Members.csv`, with the member attribute names as columns. If a file with this name already exists, an integer suffix is used and the file name is `Members(n).csv`.

Importing Group Attributes

Importing a group attribute enables you to use the group attribute contained in the import `.csv` file in your environment.

If the import file contains an invalid value (that is, a value that is not present in the group attribute), that attribute is left blank and it can be updated subsequently.

To import a group attribute:

1. Open the **New Group Attribute** dialog, or **Edit Group Attribute** dialog. Refer to the first step in Creating Group Attributes or Editing Group Attributes.
2. Click the **Values** tab, and then click **Import**.

The Import Member Values tab displays.

3. Click **Choose File** to select the `.csv` file that contains the member values.
4. In **Import Type**, select an option that indicates the action to be taken when there are existing values for one or more members.

   Select one of the following options:

   - **Replace:** All values from the import file will be added to or will replace the existing attribute values. Existing attribute values that are not in the import file will not be changed. However, all attribute data for a particular key value will be replaced with the contents from the file or they will be cleared.
     Use this import type when you are only moving the latest changes from a source system. For example, adding new store data from an acquisition.
   - **Replace All:** All values from the import file will completely replace the existing attribute values. Existing attribute values that are not in the import file will be deleted.
     Use this import type when you are mirroring values from a source system with a full update. For example, weekly updates to synchronize with store data from your ERP system.
   - **Update:** Compares using the key attribute and updates member attribute values with those in the file that you are importing. There is no effect on values for key attributes that are not specified in the import file.
     All values from the import file are added to or will replace the existing attribute values. Existing attribute values that are not in the import file will not be changed. Only attribute data for a particular key value will be replaced with the contents from the file. Attribute data for attributes that are not in the file are not changed. Any key values in the import file that are not in the attribute will cause an error.

     Use this import type when you want to update a few attributes across all attribute values. For example, updating the store managers after a reorganization, without affecting the rest of the store data.
5. In **Date Format**, select the required date format.
6. In **File Delimiter**, select the character that is used as a file delimiter in the import `.csv` file.
7. Click **Import**.

Editing Group Attributes

Service Administrators can modify member attributes and member attribute values.

To edit a group attribute:

1. Open the Edit Custom Attribute dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then, click the name of the group attribute that must be updated.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute that must be updated.
2. (Optional) In **Name**, modify the name of the group attribute.
3. To edit a member attribute, click the **Members** tab.

   Select the member attribute to be edited and click the Edit icon. You can edit the member attribute name and the list of values provided for a list attribute. To add a new member attribute, click the Add icon.

You cannot change the key attribute or modify the type of a member attribute.

> **Note**
>
> If the value of a member attribute is updated after a match is created, this change has no impact on existing matches.

4. To edit a member attribute's value, click the **Values** tab.

   Click the required cell and modify the value. After you save the changes, all reconciliations or transactions that use this member attribute will be updated to use the new value.

   You can add new values by clicking the Add icon. Note that you cannot modify the values of the key attribute.

Deleting Group Attributes

Service Administrators can delete a group attribute, member attributes, or member attribute values subject to certain conditions.

> **Note**
>
> In Reconciliation Compliance, group attributes and member attributes can only be deleted if they are not being used in any format, profile, or reconciliation within a period that is not locked.

When a group attribute or member attribute is deleted, any reconciliations or transactions that use them will continue to retain the deleted information.

To delete a group attribute:

1. Access the list of existing group attributes.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab.
2. Click the **Group** tab.
3. For the group attribute to be deleted, click the Actions menu, and select **Delete**.
4. In the Delete Confirmation dialog, click **Yes**.

To delete a member attribute:

1. Open the **Edit Group Attribute** dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then click the name of the group attribute whose member attribute must be deleted.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute whose member attribute must be deleted.
2. Click the **Members** tab.
3. Select the member attribute to be deleted and click the Delete icon.

4. In the Delete Confirmation dialog, click **Yes**.

To delete a member attribute value:

1. Open the Edit Custom Attribute dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then, click the name of the group attribute whose member attribute values must be deleted.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute whose member attribute values must be deleted.
2. Click the **Values** tab.
3. To delete an entire row, select the row and then click the Delete icon.
4. To delete a particular value, click that cell and press the **Delete** key.
   The value of this member attribute becomes null. All reconciliations that use the deleted value will also display a null for this member attribute value.

Using Reconciliation Assignment Assistance

Use Reconciliation Assignment Assistance to create and train predicted attributes using Machine Learning algorithms. The predicted attribute can then be used to predict the value of specified attributes.

> **Note**
>
> This feature is only available on Oracle Enterprise Performance Management Enterprise Cloud Service environments.

Prerequisites for using Reconciliation Assignment Assistance

- The **Enable Predictive AI** configuration setting must be enabled. See Configuring Artificial Intelligence Settings.
- You must be a Service Administrator or a user with the Profiles and Reconciliations - Manage granular role.

To use Reconciliation Assignment Assistance to predict attribute values:

1. Define a predicted attribute. See Defining Predicted Attributes.
2. Train the predicted attribute on your historical data.
   Training uses Machine Learning algorithms to create a prediction model that can then be used to predict the value of specified attributes. You must train the predicted attribute at least once before it can be used to predict the attribute values.

   See Training Predicted Attributes.
3. Run predictions for your predicted attribute.
   See Predicting Attribute Values Using Predicted Attributes.

Benefits of Using Reconciliation Assignment Assistance

- Automates the process of setting values for attributes
- Streamlines and speeds up the period-end close process by automatically assigning values to profile attributes

- Enhance consistency and accuracy by minimizing human errors and leveraging historical data-driven insights

About Predicted Attributes

A predicted attribute is an attribute that can predict the value of a specified attribute by using Machine Learning algorithms that are trained on your historical data.

For each predicted attribute, a separate attribute is automatically created to store its Confidence score. Predicted attributes and their corresponding confidence percentages can be included as columns in the Reconciliation list and Profile list. Predicted attributes can also used in formats, but they are read-only. The values of predicted attributes can be copied into standard attributes or custom attributes.

The accuracy of predicted attributes can be determined using the following parameters:

- Expected Accuracy
  After a predicted attribute is created and trained, it is assigned an Expected Accuracy. This accuracy is for the prediction model and it indicates the overall accuracy of the model, with the specified parameters. This value is displayed in the **Edit Predicted Attribute** dialog and can be added as a column in the **Predicted** tab under **Attributes** tab.
- Confidence
  For each attribute value that is predicted using the predicted attribute, a confidence percentage is generated. This value indicates the accuracy of the individual prediction. A value of 100 represents the highest confidence and zero represents the lowest. Both the predicted attribute value and its confidence can be used wherever attributes appear.

For example, you create a predicted attribute named `PredictRiskRating`. After this attribute is saved, Account Reconciliation automatically creates a corresponding attribute `PredictRiskRating (Confidence)` to store the confidence percentage for this predicted attribute values. After the predicted attribute is successfully trained, the **Edit Predicted Attribute** dialog shows a value for **Expected Accuracy**. This value represents the overall accuracy of the prediction model. Next, you use the `PredictRiskRating` predicted attribute to predict attribute values for the November 2025 period. The trained predicted attribute predicts attribute values for all reconciliations in the November 2025 period. Assume that 30 attribute values are predicted. For each of these values, a percentage is assigned for `PredictRiskRating (Confidence)`. So, `PredictRiskRating (Confidence)` could be 95 for the one reconciliation and 89 for the second. These values represent the confidence level of the prediction for those reconciliations. Both the predicted attribute and its corresponding confidence attribute can be displayed in the Reconciliation list and Profile list. Use **Select Columns** to select the attributes that you want to display.

Target and Parameters Allowed for Predicted Attributes

The following table lists the types of attributes that can be used as Target and Parameter attributes for predicted attributes.

Table 4-3 Predicted Attributes

	Target of Predicted Attribute	Parameters of Predicted Attribute
Standard Attributes (Text, Number, Integer, Yes/No, True/False, List, User)	Yes	Yes

Table 4-3 (Cont.) Predicted Attributes

	Target of Predicted Attribute	Parameters of Predicted Attribute
System Attributes (Text, Number, Integer, Yes/No, True/False, List, User)	Yes	Yes
System Attributes (Multi-Line Text, Date, Date/Time)	No	No
Standard Attributes (Multi-Line Text, Date, Date/Time)	No	No
Predicted Attribute	No	No
Predicted Attribute Confidence	No	No
Balance Attribute	No	Yes
Group Attribute	No	No
Group Attribute Members	No	Yes
Calculated Attribute	No	Yes
Transactional User Attributes, Action Plan Attributes	No	No
Account Segments Attribute	No	Yes

Defining Predicted Attributes

Create a predicted attribute by defining its properties and the parameters that will be used to train it.

Prerequisites for Defining Predicted Attributes

- The **Enable Predictive AI** configuration setting must be selected. See Configuring Artificial Intelligence Settings.
- You must be a Service Administrator or a user with the Profiles and Reconciliations - Manage granular role

To define a predicted attribute:

1. From **Home**, click **Application** and then **Configuration**.
2. Click **Attributes**, and then the **Predicted** tab.
3. Click the New icon to display the **New Predicted Attribute** dialog.
4. In the **Properties** tab, specify the properties of the predicted attribute. See Specifying the Properties of Predicted Attributes.
5. In the Parameters tab, specify the parameters on which the predicted attribute must be trained. See Defining the Parameters Used to Train Predicted Attributes.
6. Click **Ok** to save the predicted attribute definition.
7. (Optional) Click **Train Now** to train the predicted attribute.
   You can train the predicted attribute separately, after its definition is saved. See Training Predicted Attributes.

Depending on where the predicted attribute is being created or edited, **Training Status** can contain the following values:

- Untrained - predicted attribute has never been trained

- Needs Training - Parameters or data on which the predicted attribute was previously trained on has changed
- Trained - predicted attribute is trained and ready to be used for prediction

Specifying the Properties of Predicted Attributes

Properties of the predicted attribute include its name, the target attribute, and training frequency.

To specify the properties of a predicted attribute:

1. Navigate to the **Properties** tab of the **Create Predicted Attribute** or **Edit Predicted Attribute** dialog. See Defining Predicted Attributes.
2. In **Name**, enter a name for the predicted attribute.
   The name must be unique within the user-defined attributes.
3. In **Target**, select the attribute for which you want to predict attribute values. The historical data of the selected target attribute is used to train the predicted attribute.
   The read-only field **Type** displays the data type of the Target attribute, which is the data type of the selected target attribute. It cannot be modified after the predicted attribute definition is saved.

   For details about the attributes that can be selected in **Target**, see About Predicted Attributes.
4. (Optional) If the selected target attribute is of data type Number, the **Format** tab is displayed. Use this tab to specify the **Decimal Places**, **Currency Symbol**, **Negative Number**, and **Scale** for the predicted attribute. You can also specify whether the value must include a thousands separator and be displayed as a percentage.
5. In **Repeat Training On Period**, specify the training frequency. You can train on demand or define a training schedule. With scheduling, the training is run automatically during system maintenance.
   Select one of the following options:
   - **No Training** – the predicted attribute is trained only when you click Train Now in the Create Predicted Attribute or Edit Predicted Attribute dialog.
   - **Start Date** - Select the number of days to offset from your period start date.
   - **End Date** - Select the number of days to offset from your period end date.
   - **Closed Date** - Select the number of days to offset from your period close date.

Note that unless the predicted attribute is trained at least once, the **Training Status** shows Untrained and the **Expected Accuracy** is empty.

Defining the Parameters Used to Train Predicted Attributes

Parameters are the training features used to train the predicted attribute.

Specify a minimum of one and a maximum of 10 parameters. The predicted attribute is trained based on the values of the specified parameters.

To specify the parameters for a predicted attribute:

1. Navigate to the **Parameters** tab of the **Create Predicted Attribute** or **Edit Predicted Attribute** dialog.
   By default, the account segments are added as parameters. Additional parameters can be included based on the Target selected for the predicted attribute. Delete the parameters that are not required.

2. Click **Add** to create a new parameter. A new row is added to the table.
3. In **Name**, select the attribute that must be used as a parameter. The **Type** is populated based on the attribute selected.
4. Click **Ok** to save the predicted attribute definition.

> **Note**
>
> If the list of parameters is modified after the predicted attribute is trained, you must retrain the model so that it reflects the changes made.

Training Predicted Attributes

Training a predicted attribute creates a prediction model that can be used to predict the value of this predicted attribute for different periods. The training is based on the target and parameters specified in the predicted attribute definition.

To ensure accuracy of predictions, retrain the predicted attribute to reflect data changes over time. Typically, this could be once a month, after all the reconciliations for the month are complete. Training can be scheduled or performed manually (when the predicted attribute is created or on-demand). Scheduled training is performed during system maintenance.

When training a predicted attribute, you must specify a period. The system uses up to the last one year's historical data during the training. After training, an **Expected Accuracy** is generated indicating the overall accuracy of predictions made by this predicted attribute, and with the specified parameters.

To train a predicted attribute on-demand:

1. On the **Predicted** tab, select the required predicted attribute.
2. Click the **Train Now** icon. Or, from the Actions menu of the predicted attribute, select **Train Now**.
   The **Train Predicted Attribute** dialog appears.
3. Under **Period**, select a period for the training job. It is recommended that the period should have a full set of reconciliation data.
   Locked periods are not displayed in the **Period** list.
4. Click **Apply**.
   The **Train Attribute** dialog appears and a Train Predicted Attribute job is started. The **Stage** shows the status of the training job. After the training completes, the **Training Time** is displayed.
5. Click **Close** to close the dialog. The training job runs in the background and can be accessed from the Jobs card.

To schedule training for a predicted attribute:

1. On the **Predicted** tab, click the required predicted attribute to open the **Edit Predicted Attribute** dialog.
2. In **Repeat Training On Period**, specify the frequency at which the predicted attribute must be trained. Select one of the following and enter a number:
   a. Start Date
   b. End Date
   c. Closed Date

> **Note**
>
> The system prevents training on targets that have a high percentage of unique values.

Predicting Attribute Values Using Predicted Attributes

A trained predicted attribute is used to predict the values of the specified attribute for a period.

The predicted attribute must be trained at least once before it can be used for prediction. Predictions are typically done multiple times, when new profiles are created, reconciliations are created or deleted, or new account combinations are created. The predicted values are stored in a separate attribute and can be compared with existing data or copied in to existing standard or custom attributes.

Each predicted value is assigned a confidence percentage, which is stored in a separate attribute. For example, if your predicted attribute is called `PredictRiskRating`, the attribute that stores the confidence score is called `PredictRiskRating (Confidence)`. You can use Average when aggregating the confidence attribute.

To predict attribute values:

1. On the **Predicted** tab, select the required predicted attribute.
2. Click the **Predict** icon. Or, from the **Actions** menu of the predicted attribute, select **Predict**.
   This option is only enabled if the predicted attribute has been trained at least once.
3. In the **Predict Predicted Attribute** dialog, under **Period**, select the period for which the attribute values must be predicted. Attribute values are predicted for all profiles in the selected period.
   Locked periods are not listed under **Period**.
4. Click **Apply**.
   The **Predict Attribute** dialog appears. A Predict Attribute job is created and it runs in the background.

After the prediction completes, the following details are displayed in the **Predict Attribute** dialog:

- Stage - the status of the job. Shows Completed if the job completed successfully. If there are errors, and the job was not completed successfully, the error message is shown above the status.
- Prediction Time – the time taken for the predictions
- Predictions Made - the number of values that were predicted for the selected period

> **Note**
>
> You cannot predict attributes values for reconciliations whose profiles have been deleted.

Duplicating Predicted Attributes

Use duplication to create a predicted attribute with the same definition as an existing predicted attribute.

Duplicating only copies the attribute definitions, not the training details. So, you must train the new duplicated attribute.

To duplicate a predicted attribute:

1. From **Home**, click **Application** and then **Configuration**.
2. Click **Attributes**, and then the **Predicted** tab.
3. Select the predicted attribute that you want to duplicate.
4. Click the **Duplicate** icon. Or, from the **Actions** menu of the predicted attribute, click **Duplicate**.
   A new predicted attribute is created. The name is the same as the source predicted attribute but prefixed with "Copy Of".

Example: Using Reconciliation Assignment Assistance to Predict Attribute Values

This example creates a predicted attribute, trains it, and then uses it to predict attribute values for the October 2025 period.

Prerequisites

- You must be a Service Administrator or a user with the Profiles and Reconciliations - Manage granular role.
- Ensure that the **Enable Predictive AI** configuration setting is selected.

Step 1: Create Predicted Attribute PredictRiskRating

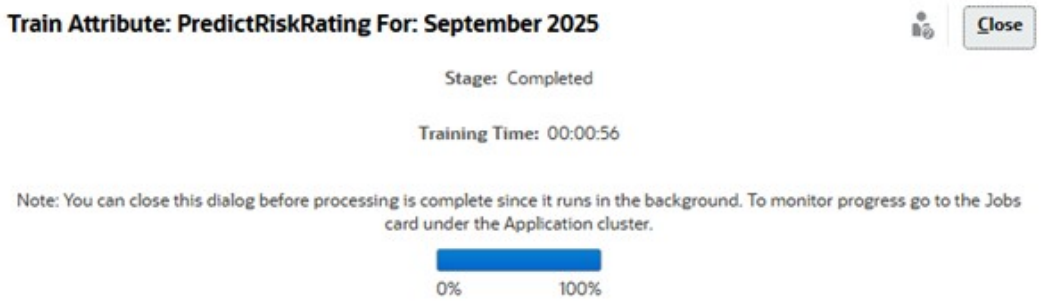
Create a predicted attribute named Risk Rating that is based on the Risk Rating attribute. The parameters used to train this predicted attribute are Account, Account Type, and Source System Balance (Functional).

1. From **Home**, click **Application** and then **Configuration**.
2. Click **Attributes**, and then the **Predicted** tab.
3. Click the New icon to display the **New Predicted Attribute** dialog.
4. In the **Properties** tab:
   a. Name: Enter PredictRiskRating.
   b. Target: Select Risk Rating.
   c. Repeat on Training: Select No Training.
5. In the Parameters tab:
   You may see some parameters already listed. In this example, the Account and Company parameters have already been added. Delete the parameters that are not required.
   - Select the Company row and click the Delete icon.
   - Click Add to add a new row. Under **Name**, select Account Type.
   - Click Add to add a new row. Under **Name**, select Source System Balance (Functional).
6. Click **Ok** to save the predicted attribute.

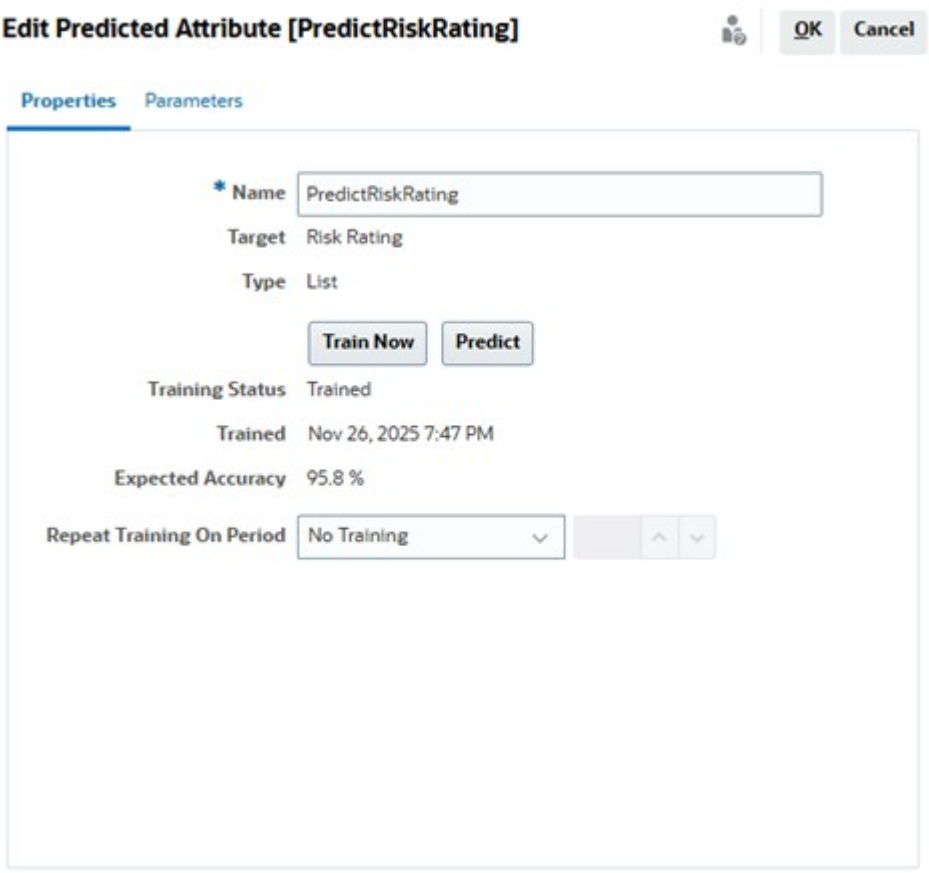
An attribute named PredictRiskRating (Confidence) is automatically created. For each PredictRiskRating attribute value, PredictRiskRating (Confidence) represents the percentage of confidence in the predicted value.

Step 2: Train Predicted Attribute PredictRiskRating

1. From **Home**, click **Application** and then **Configuration**.
2. Click **Attributes**, and then the **Predicted** tab.
3. Select the PredictRiskRating row and click the Train Now icon.
   The **Train Predicted Attribute** dialog appears.
4. In **Period**, select September 2025.
   Note that we want to predict attribute values for the October 2025 period. So, selecting September 2025 trains the prediction model using historical data of the last one year.
5. Click **Apply**.
   The Train Attribute: PredictRiskRating dialog appears. The following screenshot shows this dialog after the training completes:



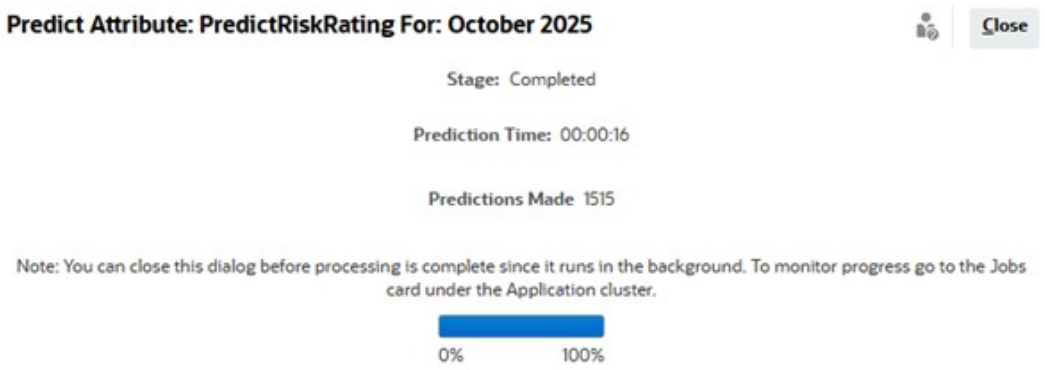
   Notice that the **Training Time** shows that the prediction model was trained in 50 seconds.
6. Click **Close**.
7. Select the PredictRiskRating row and click the Edit icon. The **Edit Predicted Attribute** dialog displays, as shown below.



The **Training Status** shows as Trained, with the most recent training time. The Expected Accuracy for the prediction model is 95.8%.

Step 3: Predict Attribute Values for the October 2025 Period

1. From **Home**, click **Application** and then **Configuration**.
2. Click **Attributes**, and then the **Predicted** tab.
3. Select the PredictRiskRating row and click the Predict icon.
   The **Predict Predicted Attribute** dialog appears.
4. In **Period**, select October 2025 and click **Apply**.
   The **Predict Attribute: PredictRiskRating For: October 2025** displays, as shown below:

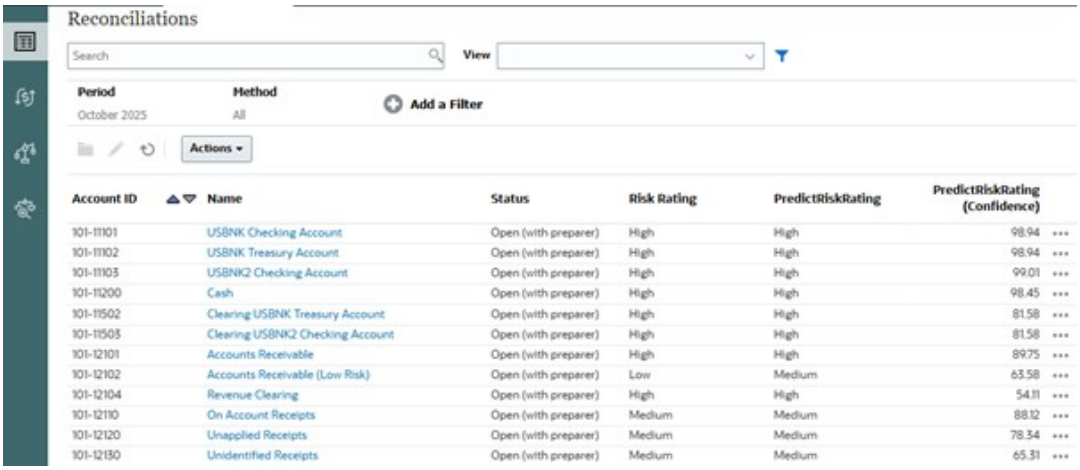


The **Prediction Time** shows that the time taken by this prediction job is 16 seconds. The **Predictions Made** represents the number of attribute values predicted for the October 2025 period.

5. Click **Close**.

Step 4: View the Predicted Attribute Values in the Reconciliation List

1. From **Home**, select **Reconciliations**.
2. In the **Period** filter, select October 2025 to display the reconciliation for this period.
3. Click Actions, and then **Select Columns**.
4. In the **Select Columns** dialog, select PredictRiskRating and PredictRiskRating (Confidence) and move these to the **Selected** section, and click **Ok**.
5. The reconciliations for the selected period are displayed, along with the values of the predicted attribute and its confidence score.



Predicted Attributes Error Messages

This topic describes the error that may occur when using predicted attributes with Reconciliation Assignment Assistance.

Table 4-4 Error Messages for Predicted Attributes

Error Message	Cause	Resolution
Data is insufficient for training the attribute.	The historical data for the selected training period and the selected training parameters is not sufficient to train the predicted attribute. There must be at least 1000 distinct combinations of training data with the selected training parameters and in the previous one year from the specified period.	Add more reconciliation data in the previous months or add more training parameters that are relevant to the target. The **Train Attribute** dialog provides additional information about the accounts for which data is insufficient. Details include **Required unique data points**, **Selected Account IDs**, **Training Periods**, and **Unique data points found in range**.
An error occurred during training the attribute. Please check the configuration and try again.	Unknown errors during training that users cannot fix. The error may be because of the Machine Learning or a configuration issue.	Submit the feedback with snapshots to analyse this problem.
An error occurred during prediction of the attribute. Please check the configuration and try again.	Unknown errors during that users cannot fix. There could be an issue at Machine Learning end or a configuration issue.	Submit the feedback with snapshots to analyse this issue.
The feature is not enabled. Please contact your Service Administrator to enable Predictive AI first to use this feature.	When scheduled training is run or training and prediction are run through the REST API, and the feature is disabled.	Select the **Enable Predictive AI** configuration setting.
System is unable to process the request. Please retry after some time.	The resource is not available to run the training job or there are insufficient resources to run the specific training or prediction.	Try to perform the task after some time.

Defining System Attributes

Related Topics

- About System Attributes
  System attributes include profile segments, processes, risk rating, frequencies, account types, aging profiles, and global integration tokens.
- Defining Profile Segments
- Defining Process System Attribute
  Process distinguishes between reconciliations for different purposes.
- Defining Risk Ratings System Attribute
  Risk Ratings are associated with profiles and reconciliations, and enable classification of profiles and reconciliations according to risk level.
- Defining Frequencies
  Frequencies determine how often reconciliations are prepared. **Monthly** and **Quarterly** are typical frequencies.

- Defining Account Type System Attribute
  Account Types are associated with profiles and reconciliations.
- Defining Aging Profiles
  Aging Profiles are used in reports to classify transactions into "aging buckets" that you define.
- Defining Global Integration Tokens

About System Attributes

System attributes include profile segments, processes, risk rating, frequencies, account types, aging profiles, and global integration tokens.

Under **System Attributes** you define values for:

- **Profile Segments** are the components of the Account ID used to uniquely identify profiles and reconciliations. For example, if you typically reconcile accounts at the Company-Account level, then you should define two segments: one for **Company**, and one for **Account**. See Defining Profile Segments.
- **Process** distinguishes between reconciliations for different purposes. Common processes include the balance sheet reconciliation processes, the consolidation system reconciliation process, and the local GAAP reconciliation process. You can remove this option if you prefer other terminology. See Defining Process System Attribute.
- **Risk Rating** are associated with profiles and reconciliations and enable classification of profiles and reconciliations according to risk level. Risk ratings can be used to select accounts for reporting or to facilitate assignment of preparers, frequencies, or other attributes. See Defining Risk Ratings System Attribute.
- **Frequencies** determine how often reconciliations are prepared. **Monthly** and **Quarterly** are typical frequencies. See Defining Frequencies.
- **Account Type** are associated with profiles and reconciliations, account types enable classification of profiles, reconciliations, and adjustments according to a hierarchical structure that defines:
  - The nature of the account (for example, asset, liability, or equity)
  - Subclassifications (for example, current assets and noncurrent assets)
  - Specific account types (for example, cash)

    To achieve the maximum benefit, configure account types to match the structure that is used for financial reporting.

  See Defining Account Type System Attribute.
- **Aging Profiles** are used in reports to classify transactions into "aging buckets" that you define. For example, you might define an Aging Profile consisting of the following buckets: 0-15 days, 16-30, 31-60, 61-90, and greater than 90 days. See Defining Aging Profiles.
- **Global Integration Tokens** are used when parameterized reports should be accessible from the reconciliation. For example, if you are using a program to generate Fixed Asset Roll Forward Schedules, then you can use Global Integration Tokens to pass parameters such as Account ID or Period into the report so it displays the correct data. See Defining Global Integration Tokens.

Defining Profile Segments

Related Topics

- About Profile Segments
  Profile Segments are the components of the Account ID used to uniquely identify profiles and reconciliations.
- Creating Profile Segments
  You can create multiple types of profile segments.
- Importing Profile Segments
  Create an import file of type List in a TXT file format, with each value on a separate line.

About Profile Segments

Profile Segments are the components of the Account ID used to uniquely identify profiles and reconciliations.

For example, if you typically reconcile accounts at the Company-Account level, then you should define two segments: one for **Company**, and one for **Account**.

When defining profiles, the profile account ID is stored in segments to facilitate filtering and reporting on the values. The number of profile segments is configurable and unlimited. For example, the account ID `100-1200-ABC` contains three profile segments. Profile Segment values are labels. They don't control the mapping of balances to reconciliations that occur through mapping rules added in the data load definitions or by pre-mapping balances before import.

Profile segments are also displayed in the **Attributes** under **Configuration**. However, profile segments can only be edited from the **Profile Segments** tab. To access this tab, from the Home page, select **Application**, then **Configuration**, and then **System Settings**.

Types of Profile Segments

You can specify different profile segment types:

Integer
Values ranging from 0-9. Use number segments for segments that require only numeric values.

List
Values entered into the profile segment are predefined; restrict them to an authorized set of values.

Text
Numbers, letters, and most special characters. Use hyphens (-) to delimit profile segments so they cannot be used as a segment value. Use Text segments when segment values are not restricted to a defined list and may contain a wide range of values.

> **Note**
>
> Account Reconciliation treats NULL segment values in the middle of an ACCOUNT ID as three blank spaces and trims trailing NULL segments. The ACCOUNT ID in Data Management for a data load must map to the exact ACCOUNT ID in Account Reconciliation so you may see three blank spaces. For example, a profile with the following values for five profile segments: 001, NULL, NULL, NULL, and 1925 XXX (NULL is completely void of characters) will have ACCOUNT ID "001 - - - - 1925 XXX" in Account Reconciliation.

Guidelines for Designing Profile Segments

Carefully design your profile segments since once you create them, they can only be edited to adjust the sub-segment settings under the following conditions:

- No balances have been loaded while one or more sub-segments have been enabled.

  > **Note**
  >
  > If this has been done, the only way to remove all the balances is to delete the period OR load an empty file through each data management location for each Period & Category that previously loaded balances.

- No formats have the Group Reconciliation check box enabled.
- No reconciliations exist that had the Group Reconciliation option enabled when they were created.

> **Note**
>
> Oracle recommends as a best practice to limit to 10 profile segments or less, however up to 20 profile segments are supported. The total of all the segment labels (and dividers) can be up to a maximum of 1000 characters, although this may be less for non-English characters.

Defining Sub-Segments for Group Reconciliations

For information about setting up profile sub-segments for group reconciliations, see Administrator Set Up Tasks for Group Reconciliations.

Creating Profile Segments

You can create multiple types of profile segments.

To create profile segments:

1. From Home, select **Application**, and then **Configuration**.
2. Click **System Attributes**, and then click the **Profile Segments** tab.
3. Click **New** (**+**) to create a **New Profile Segment**.
4. Enter the **Name** for the new profile segment.
5. Select the **Type** for the new profile segment.

For List, enter the list values. The master and detail sections are displayed. The Administrator adds values for the list segment.

Importing Profile Segments

Create an import file of type List in a TXT file format, with each value on a separate line.

To import profile segments of type List:

1. From Home, select **Application**, then **Configuration**, and then **Profile Segments**.
2. Click **System Attributes** , and then **Profile Segments**.
3. Select **Profile Segments**, and then select a profile segment of type List.
4. In the detail section, select **Actions**, and then **Import**.
5. Click **Browse**, navigate to the import file and then click **Open**.

   When the import is completed, the Import List Values displays the status, total List values, and List values Completed, Created, and Updated.
6. Click **OK** to accept the import, or **Reset** to reject the imports and go back to **Import List Values**.

Defining Process System Attribute

Process distinguishes between reconciliations for different purposes.

Common processes include the balance sheet reconciliation processes, the consolidation system reconciliation process, and the local GAAP reconciliation process. You can remove this option if you prefer other terminology.

To edit the Process system attribute:

1. From Home, click **Application**, then click **Configuration**, and then select the **System Attributes** tab.
2. Select **Process**.
3. To add an attribute, click **New (+)**, and enter a name (for example, Balance Sheet)
4. Click **Save**.

Defining Risk Ratings System Attribute

Risk Ratings are associated with profiles and reconciliations, and enable classification of profiles and reconciliations according to risk level.

Risk ratings can be used to select accounts for reporting or to facilitate assignment of preparers, frequencies, or other attributes.

To edit the Process system attribute:

1. From Home, click **Application**, then click **Configuration**, and then select the **System Attributes** tab.
2. To add a rating, click **New (+)**, and enter the name (for example, Medium).
3. To edit a rating, highlight the value and type a new name.
4. Click **Save**.

Defining Frequencies

Frequencies determine how often reconciliations are prepared. **Monthly** and **Quarterly** are typical frequencies.

Related Topics

- Creating Frequencies
  You need to create and then assign frequencies to Profiles and Periods.
- Deleting Frequencies
  Frequencies that are not currently used by items can be deleted.

Creating Frequencies

You need to create and then assign frequencies to Profiles and Periods.

Reconciliations are only created when the frequency assigned to the Profile matches the frequency assigned to the Period.

You can specify the frequencies at which amortization or accretion can be performed for reconciliations. The **Locked** column indicates if the frequency can be edited. Frequencies that have been assigned to one or more periods are locked. You cannot update the name or order for locked frequencies, but you can enable or disable amortization/accretion. Disabling amortization/accretion for an existing frequency only impacts new transactions and has no impact on existing transactions.

To create frequencies:

1. From Home, click **Configuration**, and then select the **System Attributes** tab.
2. Select **Frequencies**.
3. Select **New**.
4. Enter the name of the frequency. For example: Monthly, Quarterly.

   The names of frequencies do not matter, can be changed anytime, and do not affect reconciliation processing.
5. Select **Enable Amortization/Accretion** if you want amortization or accretion to be performed at this frequency.

   By default, this option is enabled for new frequencies.

Deleting Frequencies

Frequencies that are not currently used by items can be deleted.

To delete Frequencies:

1. From Home, click **Configuration**, and then select the **System Attributes** tab.
2. Select **Frequencies.**
3. Select a frequency, **Actions**, and then **Delete (X)**.

   If the frequency is in use by other items, a message is displayed: "One or more of the items selected for modification are in use by other items and cannot be modified at this time. Select an item to see the list of items which are using it."

Defining Account Type System Attribute

Account Types are associated with profiles and reconciliations.

Account types enable classification of profiles, reconciliations, and adjustments according to a hierarchical structure that defines: – The nature of the account (for example, asset, liability, or equity) – Subclassifications (for example, current assets and noncurrent assets) – Specific account types (for example, cash) To achieve the maximum benefit, configure account types to match the structure that is used for financial reporting.

To edit the Process system attribute:

1. From Home, click **Application**, then click **Configuration**, and then select the **System Attributes** tab.
2. Select **Account Type**.
3. To add a new account type, click **New (+)**, and enter the name (for example, Assets).
4. To edit an account type, highlight the account type, then type a new value in the field.
5. Click **Save**.

Defining Aging Profiles

Aging Profiles are used in reports to classify transactions into "aging buckets" that you define.

Related Topics

- Creating Aging Profiles
  You can define additional aging profiles to support aging policies.

Creating Aging Profiles

You can define additional aging profiles to support aging policies.

For example, you might define an Aging Profile consisting of the following buckets: 0-15 days, 16-30, 31-60, 61-90, and greater than 90 days.

You can review reports that display the count or value of transactions within each aging bucket.

To create Aging Profiles:

1. From Home, click **Application**, then click **Configuration**, and then select the **System Attributes** tab.
2. Select **Aging Profiles**.
3. Click **New (+)**, and then **New**.
4. Enter an **Aging Profile Name**.
5. For each aging bucket in the aging profile:
   a. Click **Add (+)**.
   b. Enter these fields:
      - **Label:** Enter a label for each range of days, for example, 0–30 days, 31–60 days, 61–90 days.
      - **Start Day:** Enter the first day of the range, for example, 0.
      - **End Day:** Enter the last day of the range, for example, 30.

Defining Global Integration Tokens

Related Topics

- About Global Integration Tokens
  Global Integration Tokens are designed as a general mechanism to substitute parameters in URL links (usually from the instructions) with information from the current reconciliation (such as the Rec ID).
- Creating a Global Integration Token

About Global Integration Tokens

Global Integration Tokens are designed as a general mechanism to substitute parameters in URL links (usually from the instructions) with information from the current reconciliation (such as the Rec ID).

These tokens:

- Must be unique
- Cannot be modified
- Should not be deleted. When you try to delete, a warning message is displayed: "Deleting a Global Integration Token will invalidate the URLs that are referencing it. Are you sure you want to continue?"

When creating the URL, the parameters are inserted into the URL. When the URL is clicked, the parameters are replaced with the values from another program.

In Account Reconciliation parameters are configured from:

- Static parameters
- Attributes of type Text and List assigned to Profiles or Reconciliations and Formats
- Native Profile or Reconciliation attributes of type Text and List assigned to Profiles or Reconciliations and Formats

You can access URLs from the following locations in the Instructions section:

- **Profile** dialog box, after an administrator adds a reference URL to a profile in the Instructions section.
- **Format** dialog box, after an administrator adds a reference URL to a format in the Instructions section.
- **Actions** dialog box.

Creating a Global Integration Token

To create a token:

1. From Home, click **Configuration**, and then select the **System Attributes** tab.
2. Click **Global Integration Tokens** then select **Add (+)**.
3. To define the new integration token, enter:
   - **Name**: Enter a unique token name
   - **Type**: Reconciliation Attribute or Static Attribute

- **Value**:
  - If **Reconciliation Attribute** is selected as the Type, select the Reconciliation and Balance Attributes.
  - If **Static Attribute** is selected as the Type, enter the value that is passed when the URL is rendered.

Defining Currency

In this section you configure:

- Defining Currency Rates
- Currency Buckets
- Currencies
- Rate Types

Defining Currency Rates

Currency rates may be set up initially by importing from an existing CSV file, or created manually.

For importing, see Importing Currency Rates.

For creating currency rates manually, see Creating Currency Rates.

> **Note**
>
> You cannot delete a currency that is in use.

Importing Currency Rates

To import currency rates:

1. From Home, click **Application**, then **Configuration**.
2. Select **Currencies** tab, and then select **Currency Rates**.
3. Select a **Period** and **Rates Types**.
4. Select **New (+)**, and then **Import** icon.
   - Enter the file name, or click **Browse** to navigate to a currency rate folder.

     > **Note**
     >
     > Here is an example of an import file:
     > `FromCurrency,ToCurrency,Rate`
     >
     > `USD,CAD,1.3`

   - For **Import Type**, click **Replace** or **Replace All**.
5. Select a file delimiter for the import file (for example, comma or tab). Or, choose **Other** to specify any single character as the delimiter.

6. Click **Import**.

Creating Currency Rates Manually

To create currency rates manually:

1. From Home, click **Application**, then click **Configuration**, and then select the **Currencies** tab.
2. Click the **Currency Rates** tab.
3. Select the **Period**.
4. Select the **Rate Types**.
5. Click **New (+)**.
6. On the New Currency Rate dialog box, enter the following Information:
   - Select the **From Currency**
   - Select the **To Currency**
   - Enter the new currency **Rate**

> **Note**
>
> If you make a change to a rate after creating it, the system does not automatically recalculate currencies.

Defining Currency Buckets

The currency buckets setup options determine how many currency buckets are set up for your company. You can have up to three currency buckets, for example: Entered, Functional, and Reporting.

Currency Buckets should be defined for each bucket that must be certified in reconciliations, and for any additional buckets that make it easy to prepare the reconciliations.

For example, it's very common to require reconciliation at the **FUNCTIONAL** currency bucket. If this is the case for your company, then the Functional currency bucket should be enabled.

If it helps Preparers perform the reconciliation by entering values in the **ENTERED**, or Posted currency value, then this bucket should be enabled as well.

The **REPORTING** currency bucket is typically enabled only when a certification requirement exists for this bucket. Note that all the bucket labels are configurable to enable renaming to match your company convention.

> **Note**
>
> If you need to disable a currency bucket, be sure that any List Views (including saved List Views) referring to that bucket are updated to reference the enabled currency bucket(s) instead. This may involve removing and replacing the currency attribute to sync it to the newly enabled bucket.

To define Currency Buckets:

1. From Home, click **Application**, then click **Configuration**, and then select the **Currencies** tab.
2. Select **Currency Buckets**.
3. Select a label for the multiple currency bucket for Balances and Transactions data. For example:
   - **ENTERED**—Report balances and transactions in the currencies in which they occurred.
   - **FUNCTIONAL**—Report balances and transactions in the currency associated with the entity that owns the account.
   - **REPORTING**—Report balances and transactions in the currency used for system-wide reporting.
4. Select whether to **Enable** the currency bucket to display in the application.
5. Select a **Default Currency**, for example, US Dollar (USD).
6. Review **Decimal Places**
7. Select **Balance Attributes with All Currencies** to include attributes that contain all amounts for that bucket with the corresponding currency code.

   These attributes cannot be sorted or used in dashboards since there may be more than one amount and currency in each attribute and will require additional formatting if they are exported to Microsoft Excel. This option is selected by default for all currency buckets.
8. Select **Balance Attributes with Default Currency** to include attributes that contain a single amount for that bucket in the reconciliation's default currency only. If there is more than one currency for a bucket, this attribute uses the provided currency rates to calculate a single amount. Since these attributes are a single amount, they can be sorted and used in dashboards, and will not require additional formatting if they are exported to Microsoft Excel.

If both **Balance Attributes with All Currencies** and **Balance Attributes with Default Currency** are selected, all the balance attribute options are available for filtering and calculations. If neither option is selected, or the currency bucket is disabled, no balance attributes will be available for selection for the bucket.

> **Note**
>
> Organizations who are single currency (for example, USD only) would typically only select **Balance Attributes with Default Currency** for the active bucket. Organizations who have multiple currencies and/or multiple buckets would typically select **Balance Attributes with Default Currency** for all active buckets and select **Balance Attributes with Default Currency** for the highest enabled bucket (for example, Reporting bucket only).
>
> All possible balance attributes are always created in Account Reconciliation. So, these options to select either or both of **Balance Attributes with All Currencies** and **Balance Attributes with Default Currency** only affect what attributes are displayed to the users. It does not cause any harm to select and deselect the options to determine a preferred configuration. If an option is unchecked, but some of the attributes are already in use, they will continue to function as before. However, users will no longer be able to select them for new lists, filters, or calculations.

Controlling Currencies

The **Currencies** tab enables you to control which currency codes are active in the system. Standard currencies are installed with your product.

To hide unused currencies on available currency lists, hide them in the Currency System Settings.

To disable standard currencies:

1. From Home, click **Application**, then click **Configuration**, and then select the **Currencies** tab.
2. Select the **Currency** tab.
3. Select a currency, and then clear the **Enabled** field. See Creating Custom Currencies.

Creating Custom Currencies

To create custom currencies:

1. From Home, click **Application**, then click **Configuration**.
2. Select the **Currencies** tab.
3. Select the **Currency** tab.
4. Select **New (+)**.
5. Enter the following information:
   - Enter the **Currency Code**
   - Enter the **Currency Symbol**
   - Select the number of **Decimal Places** you want to display
   - Enter a **Description** for the selected currency
   - **Enabled**

     If the currency is enabled, then it is displayed in the currency list.

> **Note**
>
> Source and sub-system balances are automatically rounded to the applicable currency "Decimal Places" during the balance loading process. It is not recommended to change the "Decimal Places" and later reload balances for a period that has already had the balances loaded using a different "Decimal Places" setting. This may cause reconciliations that are already completed to re-open due to balance changes.

Defining Rate Types

Rate types are associated with foreign exchange rates for use with profiles or reconciliations.

You need to define **Rate Types** when you require translation of transactions entered into the reconciliation. Configure only rate types used for period end balance translation in the source systems being reconciled.

For example, if Preparers are adding transactions in the Entered currency bucket, then the system can translate these values to the Functional currency bucket using imported rates. Each Rate is associated with a Rate Type.

When foreign exchange rates are imported from source systems, they are associated with a rate type. Assign profiles and reconciliations that require foreign exchange translation a rate type that matches the rate type used for balance translation in the source system. When Account Reconciliation calculates foreign currency transaction values in a reconciliation, it uses the rates associated with the rate type assigned to the reconciliation.

Creating Rate Types

When foreign exchange rates are imported from source systems, they are associated with a rate type.

Assign profiles and reconciliations that require foreign exchange translation a rate type that matches the rate type used for balance translation in the source system. When Account Reconciliation calculates foreign currency transaction values in a reconciliation, it uses the rates associated with the rate type assigned to the reconciliation.

To create Rate Types:

1. From **Home**, select **Application**, and then **Configuration**.
2. Select **Currencies**, and then **Rate Types**.
3. Select **Add (+)**.
4. Enter the following information
   - **Rate Type**—Enter a unique name for the Rate Type.
   - **Source System**—Enter the name of the source system. For example, if importing currency rates from Oracle GL as the source system, enter Oracle GL.
   - **Source System Rate Type**—Enter the source system rate type. For example, if importing currency rates from Data Management, select the rate type such as Oracle GL Corporate.
   - **Data Management**—If the data is from Data Management, this column displays a check mark.

Defining Calendars

Calendars are used to set the dates and frequencies for each period. Each calendar allows different organizations to work off of different dates and frequencies for the same period.

Related Topics

- About Calendars
  Administrators define Calendars, which are associated with Periods and Organizational Units.
- Adding Calendars
- Deleting Calendars

About Calendars

Administrators define Calendars, which are associated with Periods and Organizational Units.

One Period may have many Calendars, to reflect different date configurations for the period. An Organizational Unit is assigned a single Calendar that determines the dates used for that Organizational Unit. Calendars must exist first; in System Settings, an Administrator assigns a calendar to a Period or to an Organizational Unit.

Both Calendars and Holiday Rules can be applied separately to Organizations. Ultimately, the Calendar and Holiday Rules associated with a Profile (via its Organizational Unit) interact with the Calendar associated with a Period to determine the users workflow start and end dates in the deployed Reconciliation. For example, a company may reconcile their North America and European operations with different financial dates.

Let's look at this example to explain how calendars and periods interact and how holiday rules work with different organizations:

- Calendar and Periods
  - For the North America calendar, May has a start date of May 1, end date of May 31 and a close date of June 4 with a frequency of Monthly, Quarterly and Yearly
  - For the European calendar, May has a start date of May 1, end date of May 31 and a close date of June 10 with a frequency of Monthly
  - For the North America calendar, December has a start date of December 1, end date of December 31 and a close date of January 5 with a frequency of Monthly
  - For the European calendar, December has a start date of December 1, end date of December 31 and a close date of January 10 with a frequency of Monthly, Quarterly and Yearly
- Holiday Rules
  - The US Holiday Rule has July 4th as a Holiday
  - The UK Holiday Rule has May 27th (Spring Bank) as a Holiday
  - The French Holiday Rule has May 1 (Labor Day) as a Holiday
- Organizations
  - An Organization in the US would use the North American Calendar and the US Holiday Rule
  - An Organization in England would use the European Calendar and the UK Holiday Rule
  - An Organization in France would use the European Calendar and the French Holiday Rule

Adding Calendars

To add a calendar:

1. From Home, click **Application**, then click **Configuration**.
2. Click the **Organizations** tab.
3. Click **Calendars**.
4. Click **New (+)**.
5. Populate these fields:
   - **Calendar ID**
     Required as an identifier and must be unique.
   - **Name**

Required.

Deleting Calendars

> **Note**
>
> The **Base** calendar cannot be deleted.

To delete calendars:

1. From Home, click **Application**, then click **Configuration**.
2. Click the **Organizations** tab.
3. Click **Calendars**.
4. Select a calendar, and then **Delete**.

Defining Holiday Rules

Holiday Rules are only defined if the reconciliation schedules are affected by company or statutory holidays or if you are working with date tolerance in **Transaction Matching** and want to use a business calendar instead of a base calendar for matching purposes.

To create holiday rules:

1. From Home, click **Application**, then click **Configuration**, and then select the **Organizations** tab.
2. Select the **Holiday Rules** tab.
3. Click **New (+)**.
4. Enter:
   - **Holiday Rule ID**

     Identifies the record, is mandatory, and must be unique.
   - **Name**

     Mandatory, can be up to 50 characters, and need not be unique.
   - **Year**

     The Year attribute behaves as a filter. Users need not select a value, but if they do, then the table should display the dates associated with the year.

Importing Holiday Dates

You can import dates into an existing holiday rule.

To import holiday dates:

1. From Home, click **Application**, then click **Configuration**, and then select the **Organizations** tab.
2. Select the **Holiday Rules** tab.
3. Create or select a holiday rule.

4. On the bottom section of Holiday Rules, select **New (+)**, and then **Import**.
   - Enter the file name, or click **Browse** to navigate to the CSV import file.

     Example:

     ```
     "Date","Name"
     "Jan 1, 2014","New Years Day"
     "May 26, 2014","Memorial Day"
     ```

   - For **Import Type**, click one:
     - **Replace**—Replaces the holiday dates with the holiday dates in the file that you are importing. It does not affect other units that are not specified in the import file.
     - **Replace All**—Imports a new set of holiday dates that replaces the existing holiday dates. Use this option to replace a unit in one system with an updated definition from another system. Holiday dates that are not specified in the import file are deleted.
5. **Date Format**

   Select a Date Format from the drop down list of allowed date formats. Date formats are not translated. By default, the date format is set to the locale date format of the exported file location.

   For example:

   - MM/dd/yyyy
   - dd/MM/yyyy
   - dd-MMM-yy
   - MMM d, yyyy
6. Click **Import**.

Defining Organizational Units

Organizational Units provide a mechanism to assign a hierarchical organizational unit structure to profiles and reconciliations. They provide value in filtering, reporting, transaction matching, and are the means by which holiday rules are applied to profiles.

Related Topics

- Creating Organizational Units
  The procedure to add an organization describes how to add a unique organization and associate with certain metadata (such as calendars, viewers, and so on).
- Importing Organizational Units
  You import organizational units by creating a CSV import file.
- Selecting an Organizational Unit
  Administrators define Organizational units in system settings. The organizational list is displayed in functional dialogs.

Creating Organizational Units

The procedure to add an organization describes how to add a unique organization and associate with certain metadata (such as calendars, viewers, and so on).

> **Note**
>
> You can create an organizational unit using the same name that you used earlier and deleted. Any objects that were previously linked to the deleted object will be associated with the new object.

To add an organizational unit:

1. From Home, click **Application**, then click **Configuration**, and then select the **Organizations** tab.
2. Select the **Organizational Units** tab.
3. Expand the hierarchy to the location to which you want to add a child or sibling.
4. Click **Add Child** or **Add Sibling**, as required. The Properties tab is opened.
5. On the **Properties** tab, enter the following information:
   - **Name**

     Mandatory, cannot exceed 50 characters, and the name does not need to be unique. Administrators can change the name anytime.
   - **Organizational Unit ID**

     A unique ID used to identify the transaction for Migration purposes. Organizational Unit ID is mandatory and cannot be changed after an organizational unit is set.
   - **Calendar**

     Enables administrators to associate an organizational unit with a Period calendar. Selection of a Calendar is optional; if it is not selected, the organizational unit will use the Base calendar for each period.

     Administrators can change the calendar associated with an organizational unit. However, that change will be conditional. For example, if the calendar is changed such that the current period is no longer a monthly period, then existing monthly reconciliations will remain in the period, even though that frequency no longer matches the frequency of the calendar associated with the organizational unit. Reconciliations are unaffected by changes to the period start date, end date, and close date as a result of a change in the ARM calendar assigned to the organizational unit.
   - **Parent Organization**

     Enables Administrators to change the hierarchy.
   - **Description**

     Optional.
   - **Holiday Rule**

     Optional. Determines which list of holidays applies to the organizational unit.

     > **Note**
     >
     > Setting up a holiday rule is required if you want to use a Business Calendar instead of a base calendar when working with date tolerance ranges for matching transactions in Transaction Matching.
   - **Work Days**

Determines which days of the week are workdays.

> **Note**
>
> Setting up days of the work week for your organization is required if you want to use a Business Calendar instead of a base calendar when working with date tolerance ranges for matching transactions in Transaction Matching.

6. The **Access** tab allows administrators to assign viewer and commentator access in a centralized location, rather than having to assign it to each task or reconciliation.
   To select a user:
   a. Select **Actions**, and then **Add (+)**.
   b. In **Select Viewers**, enter the First Name and Last Name, or click **Search Users** icon, select either **Users** or **Teams** and then enter the name, or click **Search**.
   c. In **Search Results**, select Users or Teams, and add them to the **Available** column.
   d. Click **OK**.

Importing Organizational Units

You import organizational units by creating a CSV import file.

Import File Format

The list of available headers are:
`OrganizationalUnitID,Name,ParentOrganization,Description,HolidayRule,Calendar,Workdays,Viewer1,Viewer2,Viewer3,Commentator1,Commentator2`
where:

Workdays are specified by entering numbers 1 through 7 starting with Monday as number 1. Numbers are separated with a dash.

Here is an example of an import file and assumes you have set up holidays in a list called **US Holidays** and a calendar called **US Calendar**.

A	B	C	D	E	F	G
OrganizationalUnitID	Name	ParentOrganization	Description	HolidayRule	Calendar	Workdays
"US"	"United States"	""	"US Description"	"US Holidays"	"US Calendar"	"1-2-3-4-5"

To Import Organizational Units

To import organizational units:

1. From Home, click **Application**, then click **Configuration**, and then select the **Organizations** tab.
2. Select the **Organizational Units** tab.
3. Click **Import**.
   - Enter the file name, or click **Browse** to navigate to the CSV import file.
   - For **Import Type**, click one:
     – **Replace**—Replaces the Organizational Unit detail with the Organizational Unit that is in the file that you are importing. It does not affect other units that are not specified in the import file.

  - **Replace All**—Imports a set of Organizational Units to replace the existing Units. Use this option to replace a unit in one system with an updated definition from another system. Organizational Units that are not specified in the import file are deleted.
- Select a file delimiter for the import file (for example, comma or tab). Or, choose **Other** to specify any single character as the delimiter.

4. Click **Import**.

Selecting an Organizational Unit

Administrators define Organizational units in system settings. The organizational list is displayed in functional dialogs.

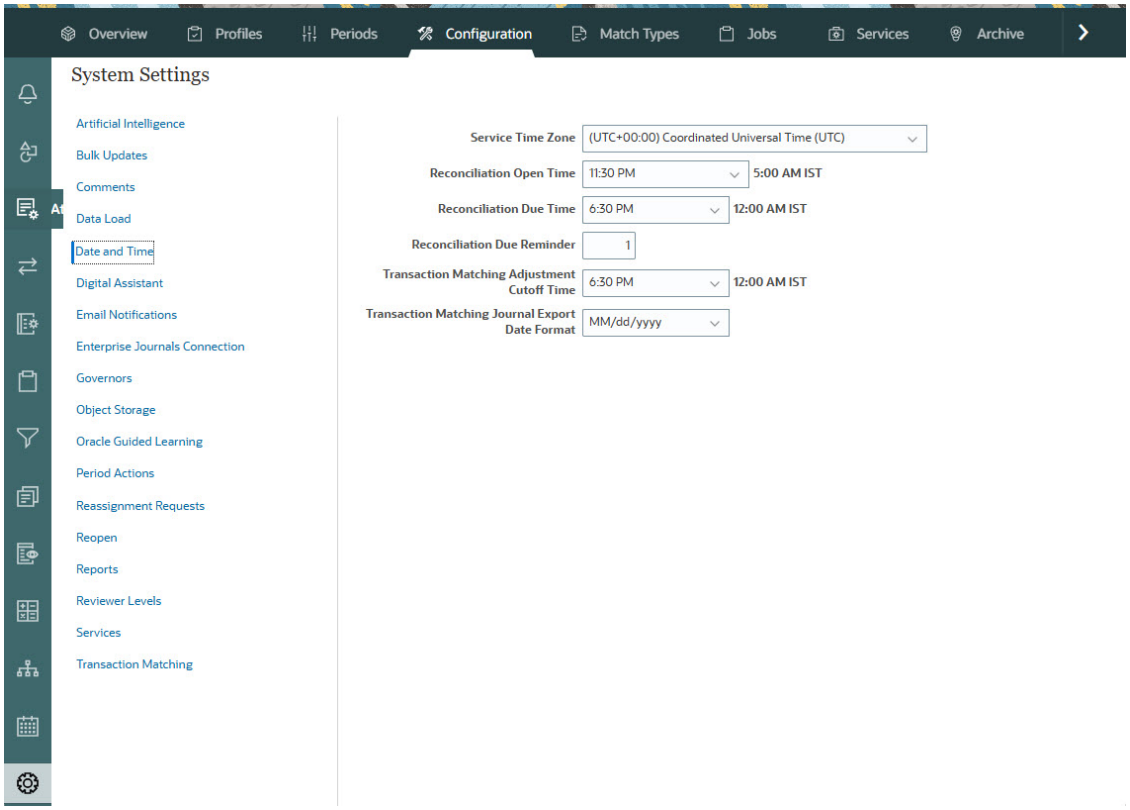
To select an organization:

1. From Home, click **Application**, then click **Configuration**, and then select the **Organizations** tab.
2. Select the **Organizational Units** tab.
3. Select an organization. An arrow indicates a child organization exists. Expand the parent to select a child organization.
4. Click **OK**.

Defining System Settings

System Settings contain additional technical settings that impact the system's behavior

This includes allowing comment deletion or bulk updates by users, setting the length of time allowed for data load timeouts, the Digital Assistant settings, timing of due date email reminders, whether email notifications are active, the number of rows that should display in list views, the maximum size for file attachments, allowing users to reassign reconciliations directly, allowing reopen of reconciliations, the number of reviewer levels the system should allow, and the open reconciliation service start time and skipping the next run of the system maintenance process.



Configuring Artificial Intelligence Settings

Use the Artificial Intelligence configuration setting to enable Predictive AI features in your application.

To configure Artificial Intelligence settings:

1. From **Home**, click **Application**, then **Configuration**, and then **Settings**.
2. On **System Settings**, select **Artificial Intelligence**.
3. Select **Enable Predictive AI**.

This enables the use of the following features:

- Transaction Matching Assistance
- Reconciliation Assignment Assistance

Allowing Editing and Deleting of Comments

A Service Administrator can decide to allow deletions of comments in Reconciliation Compliance by using the **Allow Comment Editing and Deleting** configuration settings option.

By default, this option is **OFF**.

For auditing purposes, once a comment is created, it cannot be edited or deleted without this option turned on. Users with the same workflow role on a reconciliation can delete each other's comments. For example, a Preparer on a reconciliation can delete comments created by other Preparers. But, the Preparer cannot edit or delete comments added by a Reviewer.

Commentators can edit or delete comments added by them. Users with the Administrator role can delete any comment.

To allow users to edit or delete comments:

1. From Home, click **Application**, then click **Configuration**, and then select the **Settings** tab.
2. On **System Settings**, select **Allow Comment Editing and Deleting**,
3. Select **Turn On** to enable deletions.

Allowing Bulk Updates by Users

A Service Administrator can use a configuration setting in Reconciliation Compliance to allow users to perform Submit, Approve, Reject, Claim or Release on multiple reconciliations at one time.

To allow bulk updates:

1. From Home, click **Application**, then click **Configuration**, and then select the **Settings** tab.
2. On **System Settings**, select **Bulk Updates**,
3. Decide whether you want to allow users to perform some or all of these actions on multiple reconciliations at one time:
   - **Submit**
   - **Approve**
   - **Reject**
   - **Claim**
   - **Release**
4. Click **Save**

Data Load Timeout

To enable data load timeout:

1. From Home, click **Application**, then click **Configuration**, and then select the **System Settings** tab.
2. Select **Data Load**.
3. In **Number of hours to wait for Data Management data load rule to finish**, enter the number of hours.

Configuring Date and Time Settings

Use the **Date and Time** configuration settings to set a global time zone for the service, due dates, cutoff time for Transaction Matching adjustments, and other date/time settings.

Due Date Reminder Notifications are emailed to preparers and reviewers in these conditions:

1. Responsibility for reconciliations changes to the preparer or reviewer.
2. A due date is missed.
3. A due date is approaching for reconciliations. (You must configure the number of days in advance of the due date. See the next procedure.)

> **Note**
>
> When choosing a time-zone that follows daylight savings, the system will include an additional one hour beyond the time set during daylight savings. If you prefer not to add this additional hour, the Service Administrator can set the Reconciliation Due Time and/or Transaction Matching Adjustment Cutoff Time one hour earlier during daylight savings.

Notifications pertaining to the conditions 1 and 2 require no additional configuration and are sent based on information contained within the reconciliations.

To define date and time settings:

1. From **Home**, click **Application**, then **Configuration** and then **Settings**.
2. On **System Settings**, select **Date and Time**.
3. In **Service Time Zone**, select the time zone for your service. This global setting determines the time zone used for settings such as reconciliation open time, reconciliation due time, and Transaction Matching adjustment cutoff time. For example, if you set **Service Time Zone** to (UTC-8:00) Los Angeles – Pacific Time (PT) and set **Reconciliation Due Time** to 8:00 PM, reconciliations will be due by 8:00 PM Pacific Time of the day on which a reconciliation is due.

   Note: The Automated Maintenance Window is not be impacted by the **Service Time Zone**. It uses its own time zone setting in the **Tools** > **Daily Maintenance**.
4. In **Reconciliation Open Time**, select the time of the day that the service performs the daily task of opening reconciliations.

   The selected time is in the time zone set by **Service Time Zone**. If you set the open time to Midnight, the reconciliation opens at 12 AM of the set day. If the user's time zone is different from the service time zone, the corresponding time in the user's time zone is displayed to the right of this field.
5. Select the end of the day for late reconciliations in **Reconciliation Due Time**. The selected time is in the time zone set in **Service Time Zone**. For example, if you set the service time zone to Pacific Time and Reconciliation Due Time to 6:00 PM, a reconciliation whose due date is 16 June will be due at 6:00 PM Pacific Time on 16 June. If you set the due time to Midnight, the due date is 11:59:59 PM of that day.

   If the user's time zone is different from the service time zone, the corresponding time in the user's time zone is displayed to the right of this field.
6. In **Reconciliation Due Reminder**, enter the number of days before a due date to send reminder notifications.

   If the user's time zone is different from the service time zone, the corresponding time in the user's time zone is displayed to the right of this field.
7. In **Transaction Matching Adjustment Cutoff Time**, select the time of the day before which Transaction Matching adjustments must be created so that their Adjustment Accounting Date is set to the current date. Adjustments created after the cutoff time will be created with an Adjustment Accounting Date set to the next day. This applies to both manually and automatically created adjustments.

   This setting works in conjunction with **Service Time Zone**.

   For example, if **Service Time Zone** is set to Eastern Time and **Transaction Matching Adjustment Cutoff Time** is set to 8:00 PM, any adjustments created before 8 PM, Eastern Time, on a day will have the Adjustment Accounting Date set to the current date.

Adjustments created after 8:00 PM, Eastern Time, on a day will have the Adjustment Accounting Date set to the next day.

8. In **Transaction Matching Journal Export Date Format**, select the format used for date columns when you create an Export Journals job to export adjustments or transactions as journal entries.

   If no selection is made for this setting, the default format used is MM/dd/yyyy.

Settings for EPM Digital Assistant

There are settings required as part of configuration of the **EPM Digital Assistant** for use in **Account Reconciliation**.

These settings are available in **Account Reconciliation** by clicking **Application** and then **Configuration** and then **Digital Assistant Settings**.

1. From **Home**, select **Application**, then **Configuration** and then **System Settings**.
2. On **System Settings**, select **Digital Assistant Settings**.
3. In **Service URI** (Uniform Resource Identifier), enter the **Digital Assistant URL** which is the Oracle Digital Assistant Service URL that you see when you log on to the service. The URI should be entered without either `http://` or `https://` preceding it.
4. In **Channel ID**, enter the channel ID you noted down when you created the Oracle Web channel.
5. The **Account Reconciliation Assistant** is now ready to use and you will see an icon on **Home**.

For details on the configuration of the **EPM Digital Assistant** for use in **Account Reconciliation**, see Using the Assistant for Account Reconciliation in *Getting Started with the Digital Assistant for Enterprise Performance Management*.

Enabling Email Notifications

Use the **Email Notifications** configuration settings to turn email notifications on/off and to define settings for email notification preferences.

> **Note**
>
> By default, **Turn On** is selected.

To enable email notifications:

1. From **Home**, select **Application**, and then **Configuration**.
2. On the **System Settings** tab, select **Email Notifications**.
3. For **Email Notifications**, select **Turn On** or **Turn Off**.

This setting acts as a master on/off switch for all notifications, for all users. When **Turn On** is selected, batch notifications are generated.

4. If the **From Address** can be edited, enter an email ID. Otherwise, the default of **no.reply@oraclecloud.com** displays and cannot be edited.
5. The Service Administrator can select **User Specified** to enable users to customize their personal email notification settings. To prevent user customization of email notification settings, the Service Administrator can unselect **User Specified**. In this case, users will inherit the default settings defined by the Service Administrator.
6. Use **Email Start Time** and **Email End Time** to specify the time period in a day when scheduled emails will be sent. This setting will take effect in each user's individual time zone.
7. Set the notification settings for the various types of notifications in **Notify Me**. This includes late notifications, status change notifications, and due date reminder notifications. See Email Notification Settings Reference for details about the notification settings.

When using Export artifacts to clone an application:

- When cloning to a blank target environment, **Email Notifications** is set to **On** (default setting).
- When cloning to an existing target environment:
  - If **Application Properties** is selected in the source environment, the target environment will have the same setting as the source for **Email Notifications**.
  - If **Application Properties** is not selected in the source environment, the target environment will retain it's existing (prior to cloning) setting for **Email Notifications**.

Email Notification Settings Reference

Service Administrators can define default settings for all email notifications and for all users. The types of notifications include the following: late notifications, status change notifications, and due date reminder notifications. If the Service Administrator has allowed users to customize email notification settings, then users can define their own notification settings.

Table 4-5 Late Notification Settings

Notification	Valid Values
You are the reconciliation preparer and preparation is late	• Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the reconciliation reviewer and review is late	• Every two hours • Every three hours • Every four hours • Every six hours • Once a day

Table 4-6 Status Change Notification Settings

Notification	Valid Values
You are the backup preparer and the primary preparer is unavailable	• Never • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the backup reviewer and the primary reviewer is unavailable	• Never • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the reconciliation preparer and status changes to open with preparer	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the reconciliation reviewer and status changes to open with reviewer	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the alert approver and alert status changes to open with approver	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the alert assignee and alert status changes to open with assignee	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the alert owner and alert status changes to open with owner	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day

Table 4-6 (Cont.) Status Change Notification Settings

Notification	Valid Values
You are the alert owner and alert status changes to open with assignee	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the alert owner and alert status changes to open with approver	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the alert owner and alert status changes to completed	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are an alert viewer and alert status changes to open with owner	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are an alert viewer and alert status changes to open with assignee	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are an alert viewer and alert status changes to open with approver	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day

Table 4-6 (Cont.) Status Change Notification Settings

Notification	Valid Values
You are an alert viewer and alert status changes to completed	• Never • Immediately • Every two hours • Every three hours • Every four hours • Every six hours • Once a day

Table 4-7 Due Date Reminder Settings

Notification	Valid Values
You are the reconciliation preparer and preparer due date is within 1 days	• Never • Every two hours • Every three hours • Every four hours • Every six hours • Once a day
You are the reconciliation reviewer and reviewer due date is within 1 days	• Never • Every two hours • Every three hours • Every four hours • Every six hours • Once a day

> **Note**
>
> When you select an option other than Immediately, any alerts associated with Pending or Locked periods will not be emailed.

Configuring Enterprise Journals Connections

To link Account Reconciliation use with Enterprise Journals:

1. From **Home**, select **Application**, then **Configuration**, then **System Settings**, and then select **Enterprise Journals Connection**.
2. Enter the URL to Financial Consolidation and Close Enterprise Journals.
3. Enter the user name and password for Financial Consolidation and Close Enterprise Journals. Note that this user must have the privilege to design journals.
4. Click **Validate** and **Save**.

Click **Reset** to revert to the last saved connection information. If this is the first time you are entering connection details, and there is no saved connection information, **Reset** clears the entered details.

Setting Governor Limits in Account Reconciliation

Account Reconciliation provides both predefined and customizable governor limits.

Related Topics

- About Predefined Governor Limits
  Account Reconciliation sets predefined governor limits for certain system settings.
- Setting Customizable Governor Limits
  Default governor limits are set for various system settings. The Service Administrator can modify these default values based on the business requirement.

About Predefined Governor Limits

Account Reconciliation sets predefined governor limits for certain system settings.

Predefined governor limits can be increased by using the process described in Requesting an Increase in Account Reconciliation Governor Limits in *Operations Guide*.

About Predefined Governor Limits in Reconciliation Compliance

The pre-mapped transactions load process has a governor that limits the maximum transactions per file to 500,000.

About Predefined Governor Limits in Transaction Matching

The system sets governor limits for certain Transaction Matching settings.

Table 4-8 Predefined Governor Limits for Transaction Matching

Governor	Maximum Allowed
Number of match types in an application	300
Number of data sources in a match type	20
Number of data sources in an application	750
Number of attributes in a data source	200
Number of match processes in a match type	20
Number of rules in a match process	500

Setting Customizable Governor Limits

Default governor limits are set for various system settings. The Service Administrator can modify these default values based on the business requirement.

Governor limits that can be updated include the following:

- Maximum number of rows to display in the Reconciliations, Transactions, Profiles, Matching lists, Reconciliation Actions dialog, and the maximum number audit records that can be exported
- Maximum individual file size for uploading files

To set Account Reconciliation governors:

1. From **Home**, click **Application**, then **Configuration** and then **Settings**.
2. On **System Settings**, click **Governors**.

3. In **Maximum Number of Items displayed in a List**, use the drop-down to set a value for the maximum number of rows to display in the Reconciliations, Transactions, Profiles, Matching lists, Reconciliation Actions dialog, and the maximum number audit records that can be exported. The default value is 10000 and the maximum value is 500000.
4. In **Select maximum file upload size**, select a value for the maximum individual file size that users are allowed to upload. The default is 5 MB.
   The maximum individual file size is 20 MB. There is no maximum number of files you can store. However, you cannot upload files with the following file extensions: exe, com, cmd, bin, bat, msi, vbs, sh, class, jsp, js, ear, war, py, rpm, so, properties, and config. Account Reconciliation blocks a file containing zip slip from being uploaded.

   > **Note**
   >
   > You can increase to 100 MB if you use **Object Storage** for attachments instead of the default direct database storage which has a maximum individual file size of 20 MB. See Using Oracle Cloud Object Storage to Store Attachments

5. In the **Dashboards** section, set **Execute Queries in Parallel** to **Turn On** to enable parallel execution for custom dashboard queries. The default is **Turn Off**.
6. In the **Reports** section, set the following:
   - In **Generate reports as separate process**, select **Turn On** or **Turn Off**.
   - In **Number of reports that can be run in parallel**, use the drop-down to select the number of reports that can be run in parallel.

   > **Note**
   >
   > Do not update the default governor limits in the Reports section unless recommended by Oracle Support.

Using Oracle Cloud Object Storage to Store Attachments

Related Topics

- About Using Oracle Cloud Object Storage to Store Attachments
  Customers who have a large Account Reconciliation database mainly due to the number of uploaded attachments should use **Oracle Cloud Infrastructure (OCI) Object Storage** to store the attachments.
- Understanding What is Stored on OCI Object Storage
  Account Reconciliation automatically handles moving files to and from OCI Object Storage so users can upload and view attachments seamlessly.
- Steps to Use OCI Object Storage with Account Reconciliation

About Using Oracle Cloud Object Storage to Store Attachments

Customers who have a large Account Reconciliation database mainly due to the number of uploaded attachments should use **Oracle Cloud Infrastructure (OCI) Object Storage** to store the attachments.

Using a separate storage option will allow a large reduction in the size of the LCM snapshot so the backup, download and restore steps will be more streamlined (for example, when restoring a snapshot from test to production, or when downloading a snapshot for offline storage).

Another advantage is that using OCI Object Storage allows you to increase the maximum attachment size from 20 MB to 100 MB. It is a highly recommended best practice to use OCI Object Storage.

OCI Object Storage requires its own subscription and configuration so this feature is optional. If you choose to set it up, attachments are stored in OCI Object Storage going forward and existing attachments will be moved to OCI Object Storage once configured.

When you create an application using a snapshot or by cloning, and the source application uses OCI Object Storage to store attachments, the password required to access the OCI Object Storage bucket is not exported in the new application for security reasons. The recommended best practice is to separately clone your source OCI Object Storage bucket, and configure the new bucket on the new application. See Setting Up OCI Object Storage in Account Reconciliation.

> **Note**
>
> Once you start using OCI Object Storage, you cannot go back to using the Account Reconciliation database for these attachments.

For information about setting up backup and disaster recovery for your Object Storage bucket, see Backup and Disaster Recovery in *Getting Started Guide for Administrators*.

Understanding What is Stored on OCI Object Storage

Account Reconciliation automatically handles moving files to and from OCI Object Storage so users can upload and view attachments seamlessly.

Some examples of what Account Reconciliation stores in OCI Object Storage are:

- Reconciliation Compliance: attachments for reconciliations, transactions, and alerts
- Transaction Matching: attachments for adjustments, supports, and alerts

A unique ID is generated for each attachment that is created in Account Reconciliation. This ID is used as the file name when the attachment is stored in OCI Object Storage. The name actual name of the attachment file is stored as a property of the object storage file. For example, assume that you add an attachment with the file name `fx_translations.xlsx` to a reconciliation. A unique ID, say `fpbh-2765`, is generated for this attachment. This attachment is stored in OCI Object Storage with the name `fpbh-2765` and the actual name of the attachment file, `fx_translations.xlsx`, is stored as a property of `fpbh-2765` in OCI Object Storage. To determine the actual name of an attachment file, use **View Details** for the file in OCI Object Storage.

> **Note**
>
> Account Reconciliation does not delete any files from OCI Object Storage. Instead, OCI Object Storage attachments are purged based on the Retention Policy set in OCI Object Storage. See Using Retention Rules to Preserve Data.

Steps to Use OCI Object Storage with Account Reconciliation

The following are the high-level steps for using OCI Object Storage with Account Reconciliation.

1. Subscribe to OCI Object Storage. See Oracle Cloud Infrastructure - Cloud Storage.

   To review the user assistance for OCI Object Storage, see Overview of Object Storage.

2. Create the environment required to store attachments in OCI Object Storage. This includes setting up the bucket (logical storage location in OCI Object Storage) in which attachments will be stored.

   See Setting Up OCI Object Storage.

3. Configure Account Reconciliation to store attachments in OCI Object Storage.

   See Setting Up OCI Object Storage in Account Reconciliation.

4. Configure backup and disaster recovery for object storage.

   See Backup and Disaster Recovery in *Getting Started Guide for Administrators* .

> ⚠ **Caution**
>
> If an Object Storage bucket is accidentally deleted, it cannot be recovered. Therefore, it is vital that you configure backup and disaster recovery for buckets that store your data.

See Deleting an Object Storage Bucket.

Setting Up OCI Object Storage

A separate subscription to **OCI Object Storage** is required in order to use this feature.

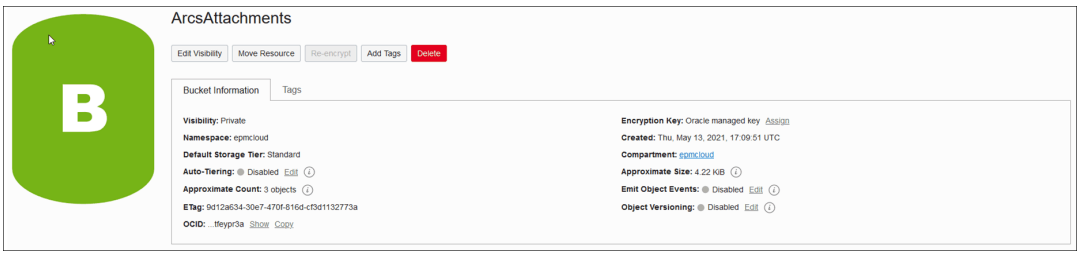
Note that a Bucket is a logical container in **OCI Object Storage** for storing objects. In the context of **Account Reconciliation**, your attachments are considered objects.

The high level steps in **OCI Object Storage** are listed here:

1. Create a Bucket in **OCI Object Storage** to store your **Account Reconciliation** attachments. For instructions, see Creating a Bucket .

> ⓘ **Note**
>
> You can create a bucket in an existing compartment or create a new compartment for Account Reconciliation attachments.

Here's an example of a set up Bucket.



To enable you to test access to the bucket and to switch seamlessly from a test environment to a production environment, it is recommended that you create two folders within the bucket – one folder for the test environment and another folder for the production

environment. For example, if you create a bucket named `account_rec_data` to store your attachments, create folders `test` and `prod` within this bucket. During the implementation phase, use the `test` folder by specifying the bucket URL as `<bucket_url>/test`. When moving to the production environment, switch the bucket configuration to `<bucket_url>/prod`. The folder `test` can subsequently be deleted without any impact in the production environment.

2. Ensure that Auto-Tiering is disabled for the bucket. See Managing Auto-Tiering for an Object Storage Bucket.
3. You need to keep the **Lifecycle Policy Rules** as is in **OCI Object Storage**. Do not change this.
4. Optional: **Retention Rules** in **OCI Object Storage** follow your company's audit requirements (for example five to seven years).
5. In **Oracle Cloud Infrastructure** (OCI), you need to create a user for **Account Reconciliation** and grant that user at least READ and WRITE access but do not grant DELETE access. The user can be an **Identity and Access Management** (IAM) user or a Federated user.
   We recommend a separate user be created for accessing Object Storage for Account Reconciliation. This user has to be granted privileges to access to the attachment storage bucket and to manage objects in the bucket.
6. You need to create a group to assign policies.

   Access to Object Storage is managed by **Identity and Access Management (IAM)** policies. Common object storage policies can be found in Common Policies

   To create **IAM** policies, refer to this guide Getting Started with Policies

   Here is an example of the policy that is required.

   - `Allow group ArcsAttachmentWriters to read buckets in compartment ABC`
   - `Allow group ArcsAttachmentWriters to manage objects in compartment ABC where all {target.bucket.name='ArcsAttachments', any {request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT', request.permission='OBJECT_READ'}}`
7. An auth token has to be created for the user. For details, see Managing User Credentials

   > **Note**
   >
   > The auth token will not be displayed after it has been created so make a note of the token since it ill be used later in the configuration process.

8. Once you have created the Bucket and created a user, you need to set up **OCI Object Storage** in **Account Reconciliation** so that the connection is made using the **Bucket URL** and the **Username** and **Password**. See Setting Up OCI Object Storage in Account Reconciliation.

Examples: Configuring Policies

When creating a policy, ensure that you select the compartment or tenancy where your bucket is stored. For example, if your bucket is created in the compartment ABC, then your policy must also be placed in the compartment ABC.

Bucket in the Root tenancy and user is created in Federated Identity Provider

If you bucket is in Root tenancy, you are using a group, and the user is created in Federated Identity Provider, the policy format must be as follows:

```
Allow group 'OracleIdentityCloudService'/'GROUP_NAME' to read buckets in
tenancy
Allow group 'OracleIdentityCloudService'/'GROUP_NAME' to manage objects in
tenancy where all {target.bucket.name='BUCKET_NAME', any
{request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT',
request.permission='OBJECT_READ'}}
```

For example, when the group name is arcs_attachments and bucket name is arcs_bucket:

```
Allow group 'OracleIdentityCloudService'/'arcs_attachments' to read buckets
in tenancy
Allow group 'OracleIdentityCloudService'/'arcs_attachments' to manage objects
in tenancy where all {target.bucket.name='arcs_bucket', any
{request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT',
request.permission='OBJECT_READ'}}
```

Bucket in the Root tenancy, regular (non-federated Identity Provide) group, and user

If your bucket is in Root tenancy and you are using a regular (non-federated Identity Provider) group and user, the policy format must be as follows:

```
Allow group GROUP_NAME to read buckets in tenancy
Allow group GROUP_NAME to manage objects in tenancy where all
{target.bucket.name='BUCKET_NAME', any {request.permission='OBJECT_CREATE',
request.permission='OBJECT_INSPECT', request.permission='OBJECT_READ'}}
```

For example, when the group name is arcs_attachments and bucket name is arcs_bucket:

```
Allow group arcs_attachments to read buckets in tenancy
Allow group arcs_attachments to manage objects in tenancy where all
{target.bucket.name='arcs_bucket', any {request.permission='OBJECT_CREATE',
request.permission='OBJECT_INSPECT', request.permission='OBJECT_READ'}}
```

Bucket is in the Compartment Level and the group and user are created in a Federated Identity Provider

If your bucket is in the compartment level and you are using a group and user that are created in the Federated Identity Provider, the policy format must be as follows:

```
Allow group 'OracleIdentityCloudService'/'GROUP_NAME' to read buckets in
compartment COMPARTMENT_NAME
Allow group 'OracleIdentityCloudService'/'GROUP_NAME' to manage objects in
compartment COMPARTMENT_NAME where all {target.bucket.name='BUCKET_NAME', any
{request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT',
request.permission='OBJECT_READ'}}
```

For example, when the group name is arcs_attachments and compartment name is arcs_compartment:

```
Allow group 'OracleIdentityCloudService'/arcs_attachments' to read buckets in
compartment ABC
Allow group 'OracleIdentityCloudService'/arcs_attachments' to manage objects
in compartment arcs_compartment where all {target.bucket.name='arcs_bucket',
any {request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT',
request.permission='OBJECT_READ'}}
```

Bucket in the Compartment level and regular (non-federated Identity Provider) group and user

If your bucket is in compartment level and you are using regular (non-federated Identity Provider) group and user, the policy format must be as follows:

```
Allow group GROUP_NAME to read buckets in compartment COMPARTMENT_NAME
Allow group GROUP_NAME to manage objects in compartment COMPARTMENT_NAME
where all {target.bucket.name='BUCKET_NAME', any
{request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT',
request.permission='OBJECT_READ'}}
```

For example, when the group name is arcs_attachments and compartment name is arcs_compartment:

```
Allow group arcs_attachments to read buckets in compartment arcs_compartment
Allow group arcs_attachments to manage objects in compartment
arcs_compartment where all {target.bucket.name='arcs_bucket', any
{request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT',
request.permission='OBJECT_READ'}}
```

Setting Up OCI Object Storage in Account Reconciliation

To set up **OCI Object Storage** in **Account Reconciliation**:

1. From **Home**, click **Application**, then click **Configuration**, and then select the **Settings** tab.
2. On **System Settings**, select **Object Storage**.
3. Enter the **Bucket URL** from your set up of **OCI Object Storage**. The **Bucket URL** is the URL of the Oracle Object Storage Cloud bucket.
   The URL format is:

   `https://swiftobjectstorage.region_identifier.oraclecloud.com/v1/namespace/bucket_name` where:

   - `region_identifier` is the hosting Oracle Cloud Infrastructure (OCI)
   - `region.namespace` is the top-level container for all buckets and objects. Each Oracle Cloud Infrastructure tenant is assigned a unique system-generated and immutable Object Storage namespace name at account creation time. Your tenancy's namespace name, for example, `axaxnpcrorw5`, is effective across all regions
   - `bucket_name` is the name of a logical container where you store your data and files. Buckets are organized and maintained under compartments.

An example URL is: `https://swiftobjectstorage.us-ashburn-1.oraclecloud.com/v1/epmcloud/arcsAttachments`

If you created folders within your bucket, the URL format is `https://swiftobjectstorage.us-ashburn-1.oraclecloud.com/v1/epmcloud/`*`bucket_name`*`/`*`folder_name`*, where `folder_name` is the name of the folder containing the data.

> **Note**
>
> If the URL of the bucket is changed, the old attachments become unavailable. You must copy or move the attachments from the old bucket to the new bucket.

4. Enter the **User Name** and **Password** you created for **Account Reconciliation** in **Oracle Cloud Infrastructure**.

> **Note**
>
> If the user was created in the Federated Identity Provider, then the user name has to be prefixed with the Federated Identity Provider name. For example: `oracleidentitycloudservice/username`. For password, you must use the auth token as the password, not the login password.

5. Click **Validate and Save**. The system validates to make sure the connection is working properly and creates and reads a test file.
6. Statistics display depending on whether you are an existing **Account Reconciliation** customer or a new customer first setting up **OCI Object Storage** and **Account Reconciliation**:

- Total Reconciliation and Transaction attachments
- Number of migrated attachments - how many attachments are migrated.
- Size of migrated attachments (MB) - the size of attachments that are migrated.
- Number of pending attachments - how many attachments are still pending for migration.
- Size of pending attachments (MB) - the size of the attachments pending for migration.
- Number of all the attachments - how many total attachments are in the system (includes migrated attachments plus pending migration attachments plus newly added attachments).
- Size of all the attachments (MB) - size of all attachments in the system
- If you are an existing **Account Reconciliation** customer, you will see statistics relating to migration of the attachments from the **Account Reconciliation** database to **OCI Object Storage**. You will see statistics increment as attachments are moved. **Account Reconciliation** takes the attachments from the database and moves files to **OCI Object Storage** in the Bucket you have set up. This is performed based on the **Bucket URL**, along with the user name and password you created for **Account Reconciliation** in **Oracle Cloud Infrastructure**. The attachments are moved from the database into **OCI Object Storage** and then removed from the database.

  After the first time migration, uploads and downloads of attachments are stored and retrieved from **OCI Object Storage**.
- If you a customer new to **Account Reconciliation**, many of the statistics shown will display as zero since you are not moving existing attachments to **OCI Object Storage**.

Troubleshooting Configuration Problems

When setting up **OCI Object Storage**, if you see the following error, there may be problem with the bucket URL or credentials:

```
Error: Unable to connect to the Object Storage service using the specified URL
and credentials.
```

Use any REST client such as cURL or Postman to test the bucket URL and credentials.

The format of the cURL command is as follows: `curl <bucket URL> -u "<username>:<password>"`

Following is an example of a cURL command to test your URL and credentials:

```
curl https://swiftobjectstorage.us-ashburn-1.oraclecloud.com/v1/epmcloud/
arcsAttachments -u "username:password"
```

Allow Workflow Users to Perform and Approve Reassignment Requests

An Administrator can turn on a feature allowing workflow users to directly perform and approve reassignment of reconciliations rather than submitting requests to an Administrator or Power User for approval.

The Administrator allows workflow users this ability through **Reassignment Requests** under **System Settings** under **Configuration.**

Once users can perform reassignments, workflow users will see a **Profiles** card under **Applications** where they can request Profiles to be assigned to them. Users can then approve reassignment requests from their Worklist.

To allow workflow users to perform reassignments:

1. From **Home**, click **Application**, then **Configuration**.
2. On the **System Settings** tab, select **Reassignment Requests**.
3. Select **Turn On** in **Allow workflow users to reassign reconciliation profiles**.

> **Note**
>
> The default setting is **Turn Off**.

4. Select the **Users** checkbox under **Allow reassignment request approval by**.

> **Note**
>
> The default setting is allowing the reassignment to be done by the **Administrator** and **Power User**.

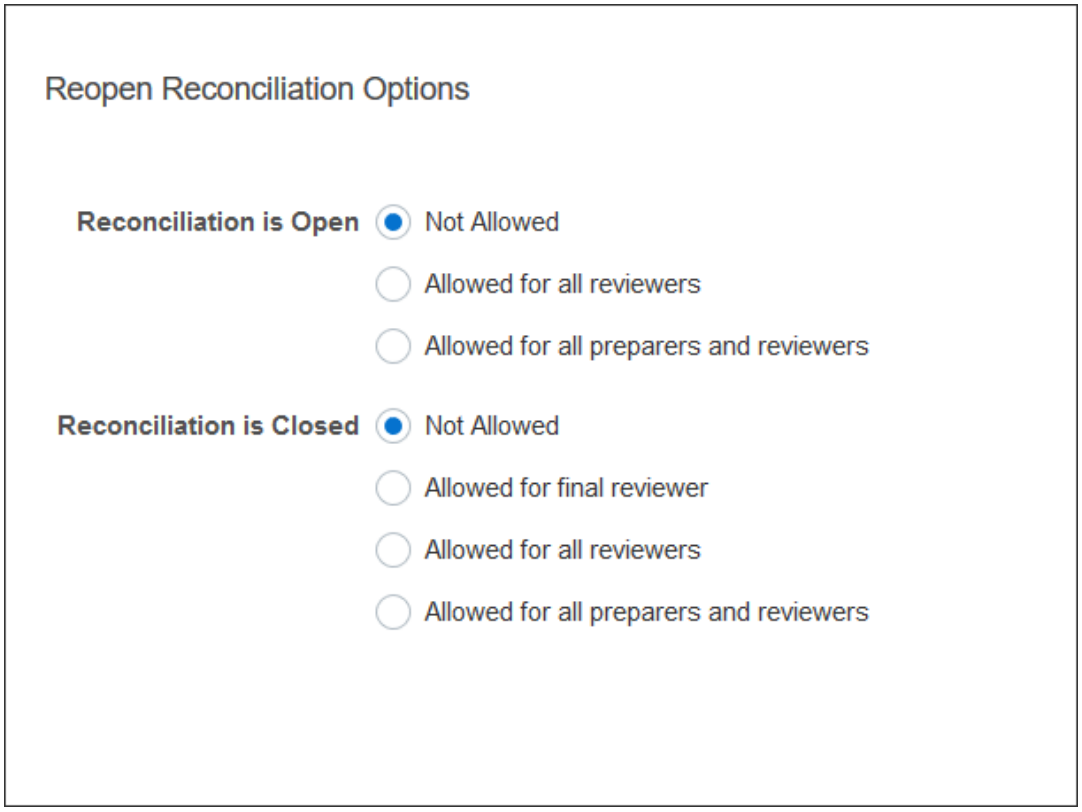
For information on how users perform reassignment requests, see Requesting Reassignments in *Reconciling Accounts With Oracle Account Reconciliation Cloud*.

Reopening Reconciliations

There may be times within your organization when users in the course of the business cycle need to reopen or decertify a reconciliation. An administrator can permit this by taking action in the **System Settings**.

To allow reopening of reconciliations:

1. From Home, click **Application**, then **Configuration**
2. On the **System Settings** tab, select **Reopen**



3. Set the conditions for allowing reopening of open reconciliations:
   - **Not Allowed** - this is the default option and Preparers and Reviewers cannot change the workflow of an open reconciliation once they have submitted or approved.
   - **Allowed for all reviewers**- allows Reviewers who have approved a reconciliation to return the workflow to themselves. Preparers cannot do this.
   - **Allowed for all preparers and reviewers** - allows a Preparer who has submitted a reconciliation or a Reviewers who has approved a reconciliation to return the workflow to themselves.
4. Set the conditions for allowing reopening of closed reconciliations:
   - **Not Allowed** - this is the default option and Preparers and Reviewers will not be able to reopen a closed reconciliation.
   - **Allowed for final reviewer**- allows only the final Reviewer to reopen and return the workflow to themselves. If there is only one Reviewer, that user is by default the final Reviewer.
   - **Allowed for all reviewers**- allows any Reviewer associated with the reconciliation to reopen and return the workflow to themselves
   - **Allowed for all preparers and reviewers** - allows either Preparers or Reviewers of the reconciliation to reopen and return the workflow to themselves.

Configuring Oracle Guided Learning

Oracle Guided Learning (OGL) can be integrated with Account Reconciliation.

To configure OGL:

1. From **Home**, select **Application**, and then **Configuration**.
2. On the **System Settings** tab, select **Oracle Guided Learning**.
3. In **Application ID**, enter the application ID associated with your Oracle Guided Learning account.
   The application ID can contain a maximum of 100 characters and cannot contain spaces.
4. In **Server URL**, enter the URL of your Oracle Guided Learning application.
   The maximum length of the URL is 300 characters and should be a valid URL that begins with http or https.

   Depending on your data region tenancy, the URL is:

   - NA: `https://guidedlearning.oracle.com`
   - EMEA: `https://guidedlearning-emea.oracle.com`
   - APAC: `https://guidedlearning-apac.oracle.com`

When you set or update Oracle Guided Learning settings, you must log off and then log in to your application for the settings to take effect.

For information about integrating Oracle Fusion Cloud EPM with OGL, see Integrating Cloud EPM with Oracle Guided Learning in *Getting Started Guide for Administrators*. For information about creating an OGL application, see Getting Started with Oracle Guided Learning.

Specifying Period Actions

Service Administrators use Period Actions settings to configure permissions that define permissible actions in closed periods and locked periods.

To configure period actions:

1. From the Home page, select **Application**, and then **Configuration**.
2. Select **Settings** to open the System Settings.
3. Select **Period Actions**.
4. In the **Closed Periods** section, configure the settings that determine which actions are allowed in closed periods.
   Select **Turn On** or **Turn Off** for the following actions:
   - **Allow Reconciliation Creation**
   - **Allow Reconciliation Deletion**
   - **Allow Balance Loading**
5. In the **Locked Periods** section, select **Turn On** for **Allow Action Plan Updates**, if you want action plan updates to be allowed in locked periods.

Settings for Reports

Administrators can configure settings that control the generation and formatting of reports.

Handling Rows that Span Multiple Lines

After the 23.05 monthly update, when generating reports in Microsoft Excel format, a row that spans multiple lines may result in empty rows displayed after the row that contains data. This may cause a problem if you have scripts that perform calculations on a row value. Account Reconciliation provides a setting to control the display of these extra rows.

To resolve this issue, you must modify the template file of the report by performing the following:

- Remove any empty lines from the table row
- Change the row height of the row to 0

Alternatively, Account Reconciliation provides a setting to control the display of these extra rows. This setting applies to all the reports.

Specifying Settings for Reports

1. From **Home**, click **Application**, then click **Configuration**, and then select the **System Settings** tab.
2. Select **Reports**.
3. Unselect **Enable Row Split** to ensure that multiple rows are not displayed for each row of data in Microsoft Excel.
4. In **Excel Export Format**, select the Excel format to be used when export Account Reconciliation data. Options are:
   - **Excel 97 – 2003 (.xls)**: Creates files in the .xls format.
   - **Excel (.xlsx)**: Creates files in the .xlsx format. This is the default setting.

Setting Reviewer Levels

Reviewer Levels determines the number of levels that a reconciliation might be reviewed.

To change the reviewer level:

1. From Home, click **Application**, then **Configuration**.
2. On the **System Settings** tab, select **Reviewer Levels**.
3. In **Reviewer Levels**, select a value from 1 to 10.

Managing System Maintenance

The **Services** configuration settings under System Settings allows you to manage system maintenance settings.

Skipping the Next System Maintenance Process Run

System Maintenance Process refers to actions that are performed routinely within Account Reconciliation such as the user synch process and is not the same as actions taken at the Cloud level called **Daily Maintenance**.

The system maintenance process is initialized to run daily and cannot be turned off. You can, however, decide to skip the next system maintenance process run. The System Maintenance process is run automatically after Daily Maintenance (AMW), typically between 30-60 minutes after AMW starts.

1. From **Home**, click **Application**, then **Configuration**.
2. On the **System Settings** tab, select **Services**.
3. Next to **System Maintenance Process**, select **Skip Next Run** to skip the next system maintenance process run.

> **Note**
>
> **Daily Maintenance** refers to actions such as operational maintenance and backup snapshots in the Cloud on test or production environments and is available by clicking **Tools**, then **Daily Maintenance**. For further details on Daily Maintenance, see Setting Daily Maintenance in *Getting Started Guide for Administrators*.

Synchronizing the Attribute Cache

> **Note**
>
> Refresh the attribute cache only if Oracle Support recommends that you perform this action.

For quick and efficient display of data, Account Reconciliation maintains a cache that contains attribute values and other runtime data. Inconsistencies may appear in the attribute values displayed in the Reconciliation list and the ones in the Reconciliation Actions if the cached data goes out of sync with the actual data. Next to **System Maintenance Process**, select **Refresh Attribute Cache Next Run** to refresh the cache and bring it in sync with the actual reconciliation data. The refresh is performed during the next automatic maintenance window run.

Refreshing Attribute Values for Adjustments

Inconsistencies may occur between the actual adjustment data and that stored in the `TM_ADJ_ATTRIBUTE_VAL_COL` table. Next to **System Maintenance Process**, select **Refresh Transaction Matching Attributes Table Next Run** to refresh attribute values in the `TM_ADJ_ATTRIBUTE_VAL_COL` table. The refresh is performed during the next automatic maintenance window run.

Enabling Administration Mode for Applications

While performing certain administrative tasks, Service Administrators may want to prevent other users from accessing the application. Setting **Enable Use of the Application for** to **Administrators** restricts access to the application to Service Administrators only. To enable all users to access the application, set **Enable Use of the Application for** to **All Users**.

Settings for Transaction Matching

Administrators can configure settings that improve performance and make transaction matching easy to use.

Settings that can be configured include search mode, enabling or disabling inline edits for unmatched transactions, and batch size for purging transactions.

To configure transaction matching settings:

1. From Home, click **Application**, then **Configuration**.
2. On the **System Settings** tab, select **Transaction Matching**.
3. Set **Search Mode** to tune the performance of transaction search. Select one of the following options:
   - **Normal:** Uses default database query optimization.

- **Parallel Mode:** Uses parallel mode database query optimization. Select this mode when your typical search is across all accounts within a Match Type. This is the default setting.
- **Full Scan Mode:** Uses full scan database query optimization. Select this mode when your typical search requires selection of a single account.

4. To enable inline editing of the values of editable attributes in the Unmatched Transaction dialog, select **Enable Inline Edit**.
   This acts as a master on/off switch for all editable attributes and for all unmatched transactions. For new applications, the default setting for **Enable Inline Edit** is ON. For existing applications, if this setting was never configured, the default remains OFF.
5. In **Batch Size** under the **Purge Transactions** section, specify the batch size that must be used when purging transactions.
   The default is 500000. The minimum value is 1000 and the maximum value is 500000.
6. In **Batch Size** under the **Archive Transactions** section, enter the number of matched transactions that must be stored in a single .csv file within the archive.

   The default value is 5000000. The minimum value is 10000 and the maximum value is 50000000.
7. Under **Import Transactions**, select **Ignore Invalid Accounts** to ignore transactions with invalid, unmapped, or inaccessible accounts during a data load. The data load succeeds and the import log file contains warnings for the transactions that were not loaded.

   When this setting is unchecked, the import fails when the load file contains transactions with invalid account IDs or unmapped accounts.
8. In the **Automatch** section:
   - **Thread pool size**: Specify the number of accounts that can be run in parallel by systems across all Automatch processes. The minimum value is 1 and the maximum value is 32. The default value is 10 for non-OCI environments and 24 for OCI environments. The default setting is appropriate for most scenarios. Change the default value only if Oracle Support recommends that you do so. If this value is updated, the change will take effect when the service is restarted.
   - **Optimization**: Select one of the following options:
     - Normal: Uses default database query optimization.
     - Full Scan Mode: Uses full scan database query optimization.

     Change the default setting only if Oracle Support recommends that you do so.
9. In the **Balance Summary** section:
   - **Thread pool size** (OCI environments only): Specify the number of tasks that can run in parallel for balance summary recalculations. The minimum value is 16 and the maximum value is 32. The default value of 16 is appropriate for most scenarios. Change the default setting only if Oracle Support recommends that you do so. If this value is updated, the change will take effect when the service is restarted.
   - **Queue Optimization**: Optimizes the submission of balance summary recalculation tasks. This option is enabled by default. If this value is updated, the change will take effect when the service is restarted.

5

Configuring Periods

Configure periods before creating profiles and reconciliations.

Related Topics

- Overview of Configuring Periods
- Creating Periods
- Changing a Period's Status
- Viewing Period History
- Editing Periods
- Deleting Periods

Overview of Configuring Periods

Periods are associated with reconciliations and determine the as-of date of the reconciliation.

Every period has a start date, end date, and close date. Periods also have associated frequencies. When profiles are added to periods, only those with a frequency matching a frequency associated with the period are added to the period as a reconciliation.

If circumstances require changes to reconciliations, or if administrators must import updated balances, administrators can reopen periods.

A period can be associated with multiple calendars – one base calendar and one or more custom calendars. When multiple calendars are configured for a period, the start and end dates of the periods within a particular calendar cannot overlap. However, the start and end dates can overlap across calendars.

Methods of Defining Periods

Use one of the following methods to define periods:

- Manually configure periods (see Creating Periods)
- Bulk import periods using a file (see Importing Multiple Periods from a File). This method is useful when defining large numbers of periods, including daily periods.

Working with Large Lists of Periods or Daily Periods

You may have a need to create and manage large lists of periods or daily periods in Account Reconciliation. Here's how Account Reconciliation makes it easy to work with multiple periods:

- Create large lists of periods (for example, for 5 or 10 years), and use period filter capability to filter by date, status, or frequency
- Support daily reconciliations by allowing easy creation of daily periods
- Allow bulk uploading of periods instead of requiring manual configuration

Creating Periods

You can either create periods manually or you can create multiple periods using an import file.

See Importing Multiple Periods from a File

A calendar gets assigned to Periods and to Organizational Units. Each period has a base calendar by default; however, administrators can add calendars to support different start date, open date, close date, and frequency configurations.

To create a Period:

1. From Home, click **Application**, then **Configuration**, and then the **Periods** tab.
2. Click **New** (**+**) to open the **New Period** dialog box.
3. On the **Properties** tab, enter:
   - **Period Name**
   - **Prior Period**

     Specify the period that should be used as the prior period.

     > **Note**
     >
     > After a period is opened, you can't change the prior period.
     >
     > You can't save periods if the prior period contains a period referenced as a prior period for a different period. A period should exist only once as a prior period.

   - **Calendars**

     A calendar includes start date, end date, close date, and frequencies. Calendars are assigned to Organizational Units in the Organizational Unit dialog box.

     Each period has a base calendar row added to the table by default, and this row has a locked icon appearing in the locked column.

     The locked icon indicates that the row cannot be deleted.

     The period can't be saved unless the Administrator selects the Calendar start, end, and close dates. The Administrator must select at least one frequency.
4. Click **Save and Close**.

Importing Multiple Periods from a File

To create periods covering a large span of time or to create daily periods, you can import multiple periods from a flat file rather than go through a manual configuration.

Period Import File Format

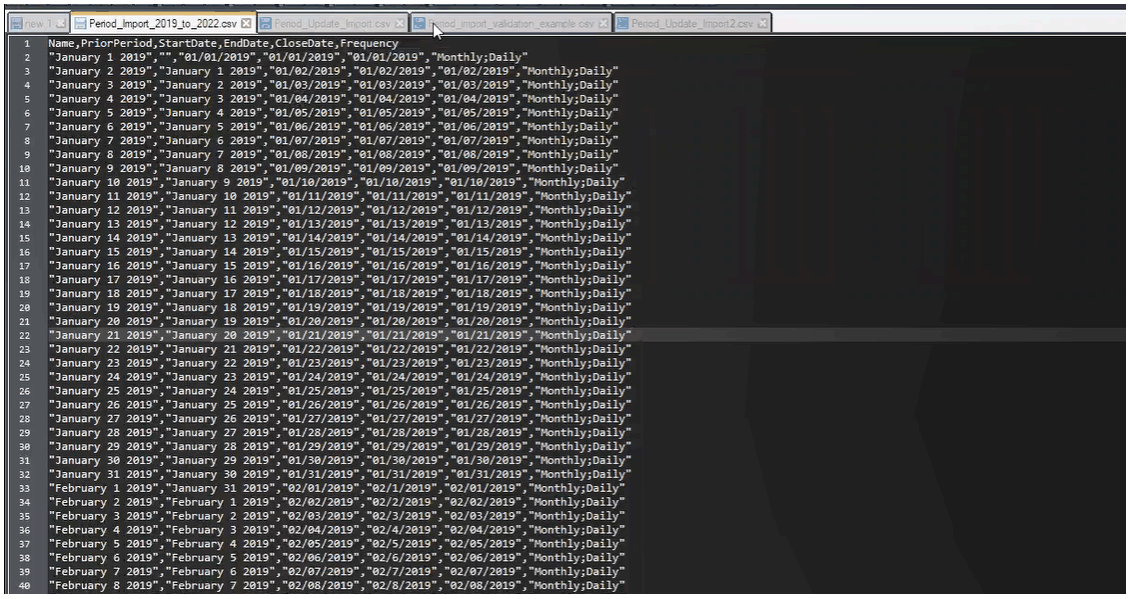
The import file format is as follows:

- Name - name of the period. Required for both Replace and Update import mode.
- Prior Period - (Optional) name of the prior period.

- Start Date - - Start Date of default base calendar (Required for Replace import mode)
- End Date - End Date of default base calendar (Required for Replace import mode)
- Frequency - Frequency of default base calendar. You can have multiple frequencies separated by a semi-colon (for example, Monthly; Yearly (Required in Replace import mode)
- Calendar Name 1 - Name of the calendar if additional calendars are being added. (Optional)
- Start Date 1 - Start Date for Calendar 1 (Optional)
- End Date 1 - End Date for Calendar 1 (Optional)
- Frequency 1 - Frequency for Calendar 1. You can have multiple frequencies separated by a semi-colon (for example, Daily, Monthly (Optional)

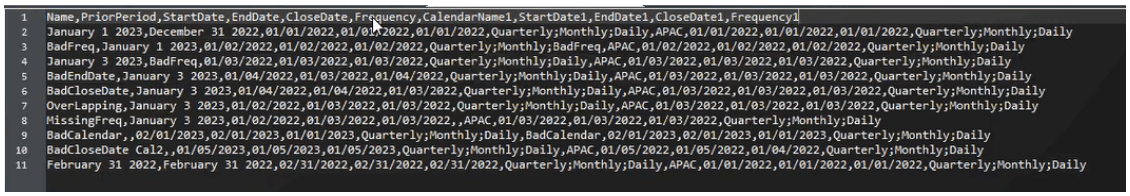
> **Note**
>
> To get started with creation of an import file, you can perform an export of a period or two so that you get a sample file with correct headers. Then make your additions to that file and import it.

Here is an example of an import file for daily periods:



```
Name,PriorPeriod,StartDate,EndDate,CloseDate,Frequency
"January 1 2019","","01/01/2019","01/01/2019","01/01/2019","Monthly;Daily"
"January 2 2019","January 1 2019","01/02/2019","01/02/2019","01/02/2019","Monthly;Daily"
"January 3 2019","January 2 2019","01/03/2019","01/03/2019","01/03/2019","Monthly;Daily"
"January 4 2019","January 3 2019","01/04/2019","01/04/2019","01/04/2019","Monthly;Daily"
"January 5 2019","January 4 2019","01/05/2019","01/05/2019","01/05/2019","Monthly;Daily"
"January 6 2019","January 5 2019","01/06/2019","01/06/2019","01/06/2019","Monthly;Daily"
"January 7 2019","January 6 2019","01/07/2019","01/07/2019","01/07/2019","Monthly;Daily"
"January 8 2019","January 7 2019","01/08/2019","01/08/2019","01/08/2019","Monthly;Daily"
"January 9 2019","January 8 2019","01/09/2019","01/09/2019","01/09/2019","Monthly;Daily"
"January 10 2019","January 9 2019","01/10/2019","01/10/2019","01/10/2019","Monthly;Daily"
"January 11 2019","January 10 2019","01/11/2019","01/11/2019","01/11/2019","Monthly;Daily"
"January 12 2019","January 11 2019","01/12/2019","01/12/2019","01/12/2019","Monthly;Daily"
"January 13 2019","January 12 2019","01/13/2019","01/13/2019","01/13/2019","Monthly;Daily"
"January 14 2019","January 13 2019","01/14/2019","01/14/2019","01/14/2019","Monthly;Daily"
"January 15 2019","January 14 2019","01/15/2019","01/15/2019","01/15/2019","Monthly;Daily"
"January 16 2019","January 15 2019","01/16/2019","01/16/2019","01/16/2019","Monthly;Daily"
"January 17 2019","January 16 2019","01/17/2019","01/17/2019","01/17/2019","Monthly;Daily"
"January 18 2019","January 17 2019","01/18/2019","01/18/2019","01/18/2019","Monthly;Daily"
"January 19 2019","January 18 2019","01/19/2019","01/19/2019","01/19/2019","Monthly;Daily"
"January 20 2019","January 19 2019","01/20/2019","01/20/2019","01/20/2019","Monthly;Daily"
"January 21 2019","January 20 2019","01/21/2019","01/21/2019","01/21/2019","Monthly;Daily"
"January 22 2019","January 21 2019","01/22/2019","01/22/2019","01/22/2019","Monthly;Daily"
"January 23 2019","January 22 2019","01/23/2019","01/23/2019","01/23/2019","Monthly;Daily"
"January 24 2019","January 23 2019","01/24/2019","01/24/2019","01/24/2019","Monthly;Daily"
"January 25 2019","January 24 2019","01/25/2019","01/25/2019","01/25/2019","Monthly;Daily"
"January 26 2019","January 25 2019","01/26/2019","01/26/2019","01/26/2019","Monthly;Daily"
"January 27 2019","January 26 2019","01/27/2019","01/27/2019","01/27/2019","Monthly;Daily"
"January 28 2019","January 27 2019","01/28/2019","01/28/2019","01/28/2019","Monthly;Daily"
"January 29 2019","January 28 2019","01/29/2019","01/29/2019","01/29/2019","Monthly;Daily"
"January 30 2019","January 29 2019","01/30/2019","01/30/2019","01/30/2019","Monthly;Daily"
"January 31 2019","January 30 2019","01/31/2019","01/31/2019","01/31/2019","Monthly;Daily"
"February 1 2019","January 31 2019","02/01/2019","02/1/2019","02/01/2019","Monthly;Daily"
"February 2 2019","February 1 2019","02/02/2019","02/2/2019","02/02/2019","Monthly;Daily"
"February 3 2019","February 2 2019","02/03/2019","02/3/2019","02/03/2019","Monthly;Daily"
"February 4 2019","February 3 2019","02/04/2019","02/4/2019","02/04/2019","Monthly;Daily"
"February 5 2019","February 4 2019","02/05/2019","02/5/2019","02/05/2019","Monthly;Daily"
"February 6 2019","February 5 2019","02/06/2019","02/6/2019","02/06/2019","Monthly;Daily"
"February 7 2019","February 6 2019","02/07/2019","02/7/2019","02/07/2019","Monthly;Daily"
"February 8 2019","February 7 2019","02/08/2019","02/8/2019","02/08/2019","Monthly;Daily"
```

Here is another example of a periods import file for a different calendar.



```
Name,PriorPeriod,StartDate,EndDate,CloseDate,Frequency,CalendarName1,StartDate1,EndDate1,CloseDate1,Frequency1
January 1 2023,December 31 2022,01/01/2022,01/01/2022,01/01/2022,Quarterly;Monthly;Daily,APAC,01/01/2022,01/01/2022,01/01/2022,Quarterly;Monthly;Daily
BadFreq,January 1 2023,01/02/2022,01/02/2022,01/02/2022,Quarterly;Monthly;BadFreq,APAC,01/02/2022,01/02/2022,01/02/2022,Quarterly;Monthly;Daily
January 3 2023,BadFreq,01/03/2022,01/03/2022,01/03/2022,Quarterly;Monthly;Daily,APAC,01/03/2022,01/03/2022,01/03/2022,Quarterly;Monthly;Daily
BadEndDate,January 3 2023,01/04/2022,01/03/2022,01/04/2022,Quarterly;Monthly;Daily,APAC,01/03/2022,01/03/2022,01/03/2022,Quarterly;Monthly;Daily
BadCloseDate,January 3 2023,01/04/2022,01/04/2022,01/03/2022,Quarterly;Monthly;Daily,APAC,01/03/2022,01/03/2022,01/03/2022,Quarterly;Monthly;Daily
OverLapping,January 3 2023,01/02/2022,01/03/2022,01/03/2022,Quarterly;Monthly;Daily,APAC,01/03/2022,01/03/2022,01/03/2022,Quarterly;Monthly;Daily
MissingFreq,January 3 2023,01/02/2022,01/03/2022,01/03/2022,,APAC,01/03/2022,01/03/2022,01/03/2022,Quarterly;Monthly;Daily
BadCalendar,,02/01/2023,02/01/2023,01/01/2023,Quarterly;Monthly;Daily,BadCalendar,02/01/2023,02/01/2023,01/01/2023,Quarterly;Monthly;Daily
BadCloseDate Cal2,,01/05/2023,01/05/2023,01/05/2023,Quarterly;Monthly;Daily,APAC,01/05/2022,01/05/2022,01/04/2022,Quarterly;Monthly;Daily
February 31 2022,February 31 2022,02/31/2022,02/31/2022,02/31/2022,Quarterly;Monthly;Daily,APAC,01/01/2022,01/01/2022,01/01/2022,Quarterly;Monthly;Daily
```

Importing Periods from a File

To import periods from a file:

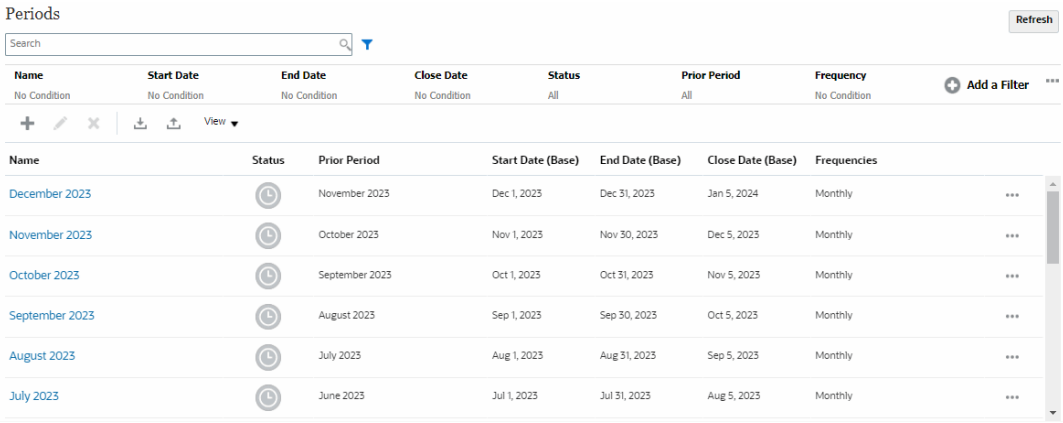
1. From **Home**, then **Application**, then **Periods**.
   The Periods dialog displays.
2. Click **Import**

   to display the Import Periods dialog.
3. From **File**, browse to and select your import file.
4. Select one of the following options for **Import Type**:
   - **Replace** - create new periods or update any existing periods. The following required columns must be specified: **Name, Start Date, End Date**, and **Frequency**.
   - **Update** - input just the columns that need to be updated. Only the **Name** is required for existing periods. If you use update and include new periods, the required columns need to be specified (**Name, Start Date, End Date** and **Frequency**.

   > **Note**
   >
   > Any existing period that matches **Period Name** will be modified.

5. Select your **Date Format** from the drop down list.
6. Select a file delimiter for the import file (for example, comma or tab). Or, choose **Other** to specify any single character as the delimiter.
7. Click **Import**.
   You will be notified if there are errors.
8. Click **OK** and the system displays a progress dialog while the periods and the prior periods structure is generated. Do not close your browser while the periods are generating.
   This is an example of the list of periods after the periods have been generated.



Performing an Update of Multiple Periods Using Export

You can also use the **Export** feature to export all periods or selected periods. A .CSV file is created that can be opened or saved in Excel. This allows you to update the periods and then re-import them.

To export all or selected periods:

1. From **Home**, select **Application**, then **Configuration**, and then **Periods**.
2. Click **Export**

   and the **Export** dialog displays.

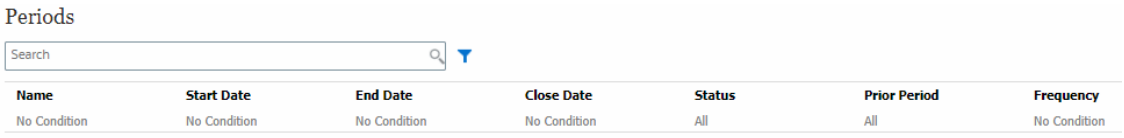
3. Select either **All Periods** or **Selected Periods** and choose the periods you want to export.
4. Click **Export**.

You will be prompted to either Open or Save the .csv file.

Filtering the Periods List

Use filters on the Periods dialog to help you narrow down your period list so that you can view only the periods you want to work with.

This is especially useful when you are working with large numbers of periods over several years or are working with daily periods.



Available filters include:

- Name
- Start Date (defaults to base calendar)
- End Date (defaults to base calendar)
- Close Date (default to base calendar)
- Status
- Last Updated On

- Last Updated By
- Created On
- Created By
- Prior Period
- Frequency
- Name

Changing a Period's Status

You can change the status of one or more periods at the same time.

A period's status changes throughout the reconciliation process:

- Periods are initially set with a status of Pending and prohibit work from proceeding on reconciliations.
- Administrators must change the status to *Open*, which allows work to begin on reconciliations after the reconciliation start date is reached.
- After the period is finished, administrators change the period to *Closed*, which prohibits new reconciliations from being added to the period. However, work can continue on reconciliations and users can import updated balances. The Closed' status simply helps users know which is the current period, however, it does not prevent them from taking actions.
- After work has concluded, periods may be *Locked*, which prohibits changes to the reconciliations. Users can't add reconciliations to the period, changes can't be made to reconciliations, and balances can't be imported.

To change the status of one or more periods:

1. From **Home**, select **Application**, then **Periods**.
2. Select one or more periods.
3. Use the **Set Status** drop down list, and then select **Open**, **Closed**, or **Locked**.

Watch Changing a Period's Status Video

Click this link to watch a video:

Opening Periods

You can open one or more periods from the Periods List.

Reconciliations in a period are *Pending* until the period status becomes *Open*. When an administrator changes the status to Open, auto-reconciliations that have met their start date are run.

If balances are not loaded for a reconciliation, or if the reconciliation contains transactions, auto-reconciliation is skipped for that reconciliation, the reconciliation status changes to Open with Preparer, and a notification is sent to the preparer.

If auto-reconciliation fails for a reconciliation (for example, the account balance is not zero for an account authorized for zero balance auto-reconciliation), the reconciliation status changes to Open with Preparer, and a notification is sent to the preparer.

For manual reconciliations that have met the start date, status becomes Open with Preparers and notifications are sent to preparers.

To open one or more periods:

1. From **Home**, select **Application**, then **Configuration**, and then **Periods**.
2. Select one or more periods.

> **Note**
>
> You can use the filter bar to narrow the list of periods if you are working with large lists of periods. See Filtering the Periods List

3. Use the **Set Status** drop down list, and then select **Open**.

Locking Periods

Locking a period prevents changes to reconciliations for the period.

You can lock one or more periods at the same time. Locking a period does not cancel any actions that are currently running for the period. Notifications continue to run when a period is closed but not if it is locked and it also prevents Transaction Matching transactions from being loaded that have an Accounting Date that is less than or equal to the locked period's End Date.

> **Note**
>
> You can use the filter bar to narrow the list of periods if you are working with large lists of periods.

To lock one or more periods:

1. From **Home**, select **Application**, and then **Periods**.
2. Select one or more periods.
3. Use the **Set Status** drop down list, and then select **Locked**.

For additional information, see What is Locked Through Date in Transaction Matching?, Additional Considerations When Using Locked Through Date, and Why does Transaction Matching Reopen Reconciliations?.

Checking for Missing Reconciliations

It is important that you check for missing reconciliations to ensure completeness. This action double checks to ensure that reconciliations exist for all profiles that should have them in a given period.

There are various reasons you could have missing reconciliations:

- New profile - for example, a profile was created after the reconciliations were created for a given period

- Missing required information - for example, a profile is missing workflow or currency information
- Deleted - for example, the profile was deleted from the period
- Inactive - for example, the profile was flagged as inactive.

For example, if you reconcile Equity on a quarterly basis, this account will not show up as a missing reconciliation during the January and February periods, but it will show up for the March period (assuming March is your quarter end).

> **Note**
>
> Inactive profiles are not considered when you check for missing reconciliations.

Missing reconciliations can occur if you forget to create reconciliations for profiles. This can happen if you add profiles later in the period after reconciliations have been created, or if reconciliations were created and subsequently deleted.

To check for missing reconciliations:

1. From **Home**, select **Application**, then **Periods**, and then select a period.
2. Under **Actions**, select **Check for Missing Reconciliations**.
3. To view the missing reconciliations in Excel, click the **Export to Excel** icon.
4. Select a directory for the Excel file, and then click **Save**, and then **Close**.

To watch a video on Checking for Missing Reconciliations, click this link: 

Viewing Period History

Period history provides a summary of the actions that were performed for this period.

To view period history:

1. From Home, select **Application**, then **Configuration**, and then **Periods**.
2. Select the period you want to edit.
3. Click **Edit** (pencil) or from **Actions**, select **Edit**.
4. Select **History** on the **Edit Period** dialog.
5. Double-click a period to open the Edit Profile.
6. On the Edit Profile, select the **History** tab. The History tab displays all actions performed on the selected period, including the dates, and old and new values.

Editing Periods

You can edit a period if a calendar row is selected if the period is pending or open.

To edit a Period:

1. From Home, select **Application**, then **Configuration**, and then **Periods**.
2. Select a period, and then click **Edit** (Pencil) or click **Edit** from the **Actions** menu.

> **Note**
>
> You can use the filter bar to narrow down the list if you have a large number of periods. See Filtering the Periods List

You can edit the Calendar, Start Date, Open Date, Close Date, and Frequency check boxes. However, you can't edit the Calendar value for the base calendar.

3. Make edits.

Deleting Periods

You can delete a period if there are no reconciliations created in that period. Open, Closed, and Locked periods can be deleted as long as they do not have reconciliations created in them yet.

A validation error message is displayed if you attempt to delete a calendar that is assigned to an organizational unit.

To delete one or more periods:

1. From Home, select **Application**, then **Configuration**, and then **Periods**.
2. Select one or more periods, and then click **Delete** (**X**) or click **Delete** from the **Actions** menu.
3. Click **Yes** to delete the selected periods.

> **Note**
>
> When you delete a period, the associated format instances are not immediately deleted. The format instances are cleaned up as part of the system maintenance process.

6

Working with Global Rules

Related Topics

- About Rules in Account Reconciliation
  Account Reconciliation supports global rules, format rules, and profiles rules.
- Configuring Global Rules

About Rules in Account Reconciliation

Account Reconciliation supports global rules, format rules, and profiles rules.

Related Topics

- About Types of Rules
  Based on your business screnario, create the type of rule that matches your requirement.
- Where Can Rules be Defined?
  Rules can be defined at multiple levels in Account Reconciliation.
- Order of Precedence for Auto Reconciliation and Rules
  This topic explains the order of precedence when auto reconciliation and rules are run.
- Best Practices for Configuring Rules
  Oracle recommends that you follow these guidelines while configuring rules.

About Types of Rules

Based on your business screnario, create the type of rule that matches your requirement.

The following table describes the types of rules supported by Account Reconciliation. These types are applicable to global rules, format rules, and profile rules.

Table 6-1 Types of Rules

Type of Rule	Description	Rerun Rule	Examples
Auto Approve Reconciliation	Automatically completes specified approvals only if specified conditions have been met. When conditions are satisfied, the specified reviewer levels are marked complete, and workflow progresses to the next level, or the workflow is closed if no additional review levels exist.	Yes	Examples of conditions that could apply to this rule: • The balance is outside a specified range. • The balance fluctuates more than a specified amount or percentage from some prior period. • The prior reconciliation has transactions or other conditions meeting specified criteria. • Attributes have specified values (including calculated attributes).
Auto Submit Reconciliation	Automatically submits a reconciliation if specified conditions are met. Runs when Reconciliation status changes to Open with Preparer. When conditions are satisfied, the preparer level is marked as complete and, the workflow progresses to the review level or the workflow is closed if no additional review levels exist. This rule is also run if a reconciliation is Open with Preparer and has transactions that are either carried forward from a prior period (copy forward manually or copy transactions from prior period rules) or loaded through Data Integration.	Yes	Examples of conditions that could apply to this rule: • The balance is outside a specified range. • The balance fluctuates more than a specified amount or percentage from some prior period. • The prior reconciliation has transactions or other conditions meeting specified criteria. • Attributes have specified values (including calculated attributes).

Table 6-1 (Cont.) Types of Rules

Type of Rule	Description	Rerun Rule	Examples
Prevent Reconciliation Approval	Prevents approval of a reconciliation based on attribute values, or other characteristics.	No	
Prevent Reconciliation Submission	Prevents submission of a reconciliation based on attribute values, or other characteristics.	No	
Require Reconciliation Attachment	Prevents submission of a reconciliation if an attachment has not been added to the main attachments section of the reconciliation; conditions may be established based on attribute values, or other characteristics that specify when the attachment is required.	No	
Prevent Reconciliation Rejection	Prevents rejection by a reviewer under certain conditions. This rules runs when a Reviewer click **Reject**.	No	
Send Email on Update	Sends emails when a reconciliation is saved based on certain conditions being met. **Note:** This rule is designed to be run when a user takes an action on a reconciliation such as setting attributes, not for actions on the reconciliation that happen outside the **Actions** dialog such as resetting dates.	No	

Table 6-1 (Cont.) Types of Rules

Type of Rule	Description	Rerun Rule	Examples
Set Attribute Value	Sets an attribute's value based on the filter condition specified in the rule definition. This rule enables rules to be configured for standard attributes. Attribute values can be set using one of the following methods: • assign a specified value • copy the value of the custom attribute, predicted attribute, balance attribute, or calculated attribute The Set Attribute Value rule can be used to set the values of multiple attributes using a single rule.	Yes	For example, set the Preparer Duration based on the period frequency. The rule configuration supports when to set the value: "Before profile is copied to the period".
Create Alert	Creates an alert and assigns it, as specified by the rule definition.	No	

See Order of Precedence for Auto Reconciliation and Rules.

Where Can Rules be Defined?

Rules can be defined at multiple levels in Account Reconciliation.

Levels at which rules can be defined include the following:

- Application level
  These are called global rules. They are applicable to all profiles and reconciliations or a set of profiles and reconciliations in the application. For example, if you want a rule that applies to a set of formats, say all Account Analysis formats, then define it as a global rule with the required filter conditions.

  See Configuring Global Rules.
- Format level
  Rules defined in a format are inherited by all profiles that are based on this format. They are called format rules.

  See Working With Format Rules.
- Profile level
  Rules defined in a profile are applicable to that profile and are called profile rules.

See Working With Profile Rules.

Order of Execution of Rules in Account Reconciliation

When rules are defined at multiple levels in your application, the order of execution is as follows:

1. Global rules
   When multiple global rules are defined in the application, they are run in the order shown in **Order** in the **Global Rules** tab in System Settings.
2. Profile rules
3. Format rules

Order of Precedence for Auto Reconciliation and Rules

This topic explains the order of precedence when auto reconciliation and rules are run.

At a high level, here is the processing order:

1. Auto reconciliation method - See *Auto Reconciliation Methods* in Creating Profiles
2. Reconciliations closed by the three auto reconciliation methods (No activity, Balance within range, Balance within range and no activity), copy transactions/comments from prior reconciliation
3. Rule execution
   a. Copy transactions rules
   b. Set attribute rules, if applicable
   c. Auto submit/approve rules

Order of Precedence Rules

Successfully executing a rule in Oracle Account Reconciliation may prevent a later rule from being invoked. For example, if a customer assigns an auto-reconciliation rule to a reconciliation, and the auto-reconciliation succeeds, then any rule tied to the Submit function (such as require reconciliation attachment) would never be invoked.

Table 6-2 Format and Profile Rules

Rule	Runs When	Precedence Notes
Auto Approve Reconciliation	Reconciliation status changes to Open with Reviewer. During post-processing of data loads, to handle cases where the rule is based on balance conditions that may be satisfied as a result of the data load process. An Auto Approve rule depends on there being an Auto Submit rule. During the post-data load processing, an Auto Approve rule is run if any of the following conditions is true: • Reconciliation was Open with Reviewer, Pending, or Closed prior to the data load and it was reopened due to new or modified data and an Auto Submit rule forwarded the reconciliation to the With Approver status • Reconciliation is Open with Preparer prior to the data load, but no transactions have been entered or imported for the reconciliation, and an Auto Submit rule forwarded the reconciliation to the With Approver status **Note:** The system checks if no transactions have been entered or imported only for reconciliations that were Open with Preparer prior to the data load. If a reconciliation was Open with Reviewer, Pending, or Closed prior to the data load, Auto Approve rules may be evaluated during post-data load processing without checking whether transactions already exist. This rule can be rerun using **Actions** under the **Run Rules** menu.	If multiple Auto Approve rules are configured, then the success of any rule causes the reconciliation to be automatically approved.
Auto Submit Reconciliation	Reconciliation status changes from Pending to Open with Preparer. During the post-data load processing, an Auto Submit rule is run for if any of the following conditions is true: • Reconciliation was Open with Reviewer, Pending, or Closed prior to the data load and was reopened due to new or modified data • Reconciliation was Open with Preparer prior to the data load and no transactions have been entered or imported for the reconciliation **Note:** The system checks if no transactions have been entered or imported only for reconciliations that were Open with Preparer prior to the data load. If a reconciliation was Open with Reviewer, Pending, or Closed prior to the data load, Auto Approve rules may be evaluated during post-data load processing without checking whether transactions already exist. This rule can be rerun using **Actions** under the **Run Rules** menu.	The Copy Transactions Rule is processed before the Auto Submit Reconciliation Rule is evaluated.
Prevent Reconciliation Approval	Approver clicks **Approve**	Rules triggered when the Approver clicks **Approve**. Can be evaluated in any order. If any rule succeeds, then the Approve function is prevented.

Table 6-2 (Cont.) Format and Profile Rules

Rule	Runs When	Precedence Notes
Prevent Reconciliation Submission	Preparer clicks **Submit**.	Rule triggered when the preparer clicks **Submit**. Can be evaluated in any order (the order is irrelevant). If any rule succeeds, then the Submit function is prevented.
Prevent Reconciliation Rejection	Reviewer clicks **Reject**.	Rule prevents rejections unless user fills in certain fields. This gives the preparer more information on how to correct.
Require Reconciliation Attachment	Preparer clicks **Submit**	Rule triggered when the preparer clicks **Submit**. Can be evaluated in any order. If any rule succeeds, then the Submit function is prevented.
Send Email On Update	Users updates attributes on a reconciliation and pre-existing conditions are met.	Rule triggered when the user updates attribute values in the Reconciliation dialog when certain conditions associated with this rule have been satisfied.
Set Attribute Value	According to **Run When** attribute configuration. For Set Attribute Value rules, select one or more of the following: • **Profile** section: The available options are **Post Data Load** and **Pre Reconciliation Creation**. • **Reconciliation** section: The available option is **Post Data Load** This rule can be rerun using **Actions** under the **Run Rules** menu. Rules that reference periods in their filter conditions are not run when reconciliations are being created (from profiles or periods). You need to run such rules using the **Run Rules** option under **Actions** after the reconciliation is created.	

Table 6-3 Format Transaction Rules

Rule	Runs When	Precedence Notes
Copy Transactions Copies transactions from the previous reconciliation performed by the user and that correspond to the same profile . This copy function behaves the same as the **Copy Transactions from Prior Reconciliation** window. The transactions, transaction attachments, and transaction comments from the previous reconciliation that are copied are selected based on the conditions established. **Note:** The copy transactions from the prior reconciliation is not permitted for a summary reconciliation.	This rule is run when: • the status of a reconciliation changes from Pending to Open with Preparer. • balances are loaded into a reconciliation whose status is Pending. This rule can be rerun using **Actions** under the **Run Rules** menu.	The Copy Transactions Rule is processed before the Auto Submit Reconciliation Rule is evaluated.
Prevent Amount Edit	When Preparer accesses the **Transaction Detail** dialog box.	When the conditions associated with the rule are met, the Preparer cannot edit the transaction amount through the application (the amount attribute is disabled, and any override features for calculated amounts are also disabled). In addition, import validations prevent editing the Amount through import.
Prevent Transaction Delete	Preparer clicks transaction **Delete**.	Rule triggered when the preparer clicks **Delete**. Can be evaluated in any order. If any rule succeeds, then the Delete function is prevented.
Prevent Transaction Save	Preparer clicks transaction **Save**	Rules triggered when the preparer clicks the transaction **Save**. Can be evaluated in any order (the order is irrelevant). If any rule succeeds, then the Submit function is prevented.
Require Transaction Attachment	Preparer clicks transaction **Save**	Rules triggered when the preparer clicks the transaction **Save**. Can be evaluated in any order. If any rule succeeds, then the Submit function is prevented.

Best Practices for Configuring Rules

Oracle recommends that you follow these guidelines while configuring rules.

Where Should I Configure My Rule?

For any rule that applies to all profiles and reconciliations, or a set of profiles and reconciliations, you can create a global rule. This eliminates the need to define the same rule in multiple formats.

Apart from global rules, as a rule of thumb, it is preferable to configure rules in the format. Configure rules in a profile only for corner cases. See Working With Format Rules or Working With Profile Rules.

Configuring rules in a format has the following advantages:

- They can be reused in multiple profiles

  Rules created in a format continue to be part of the format's definition. If you need the same rule in multiple profiles, you create the rule in the format and then have the profiles inherit this rule from the format.
- They are not deleted when the associated profile is deleted

  Service Administrators may delete profiles as part of regular maintenance. This would result in the deletion of the rules associated with the profile.

How Can I Test My Rule?

You must define a filter when creating a rule. The filter determines the conditions that trigger the rule to be applied. There are two ways to define filters:

- Create a new filter
- Use a saved filter

It is recommended that you use a saved filter. The advantages of saved filters are:

- If multiple rules use the same condition, then the saved filters can be used across rules.
- The saved filter can be applied in the Reconciliations card to test your rule.

  In the Reconciliations card, select your filter by clicking the ellipsis () at the top-right of the page. The reconciliations that match the selected filter are displayed. Then, ensure that all columns that contain information related to the filter condition are displayed in the Reconciliations list. Verify your rule by comparing the data displayed with your filter condition.

See Working with Filters in *Administering Account Reconciliation* for additional information about using filters.

What Guidelines Can I Follow While Configuring Rules?

Configure your rule wisely.

- Rules work in accordance with the order of precedence defined in Account Reconciliation. Therefore, if you configure rules with conditions that are very similar to the Auto Reconciliation Methods, the order of precedence will apply if both are configured.

  See Order of Precedence for Auto Reconciliation and Rules.

- Keep your conditions as generic as possible. For example, do not configure rules that contain specific Account IDs, User IDs, or Periods.

Configuring Global Rules

Related Topics

- About Global Rules
  Rules that are defined at the application level are called global rules. Global rules eliminate the need to define the same rule in multiple profiles and formats.
- Listing Global Rules
  Global rules are part of the Account Reconciliation configuration settings.
- Defining Global Rules
  Defining a global rule includes specifying the rule properties and filter conditions.
- Manually Running Set Attribute Value Rules
  In addition to running as per the specified filter conditions, Set Attribute Value rules can be run manually on profiles and reconciliations.
- Example: Using Global Rules to Set Multiple Attribute Values
  This example creates a global rule, of type Set Attribute Value, that sets the values of three profile attributes.
- Example: Using Global Rules to Automatically Submit Reconciliations with No Activity
  This example creates a global rule that auto submits reconciliations that have no activity.

About Global Rules

Rules that are defined at the application level are called global rules. Global rules eliminate the need to define the same rule in multiple profiles and formats.

Depending on the filter condition configured, the global rule can be applied to all formats and profiles in the application or a specified subset. The **Run When** property of a global rule shows the events with which the rule is associated. For example, if **Run When** displays Submission, it indicates that the global rule runs when the reconciliation is submitted. For Set Attribute Value rules, Service Administrators can to control when the rule is run by setting **Run When**. For all other rule types, this property is read-only.

By default, global rules are disabled. Once a global rule is enabled, it takes effect immediately. The rule then impacts profiles and reconciliations when the condition specified in **Run When** occurs. This behavior is also applicable when a global rule definition is edited and saved.

Listing Global Rules

Global rules are part of the Account Reconciliation configuration settings.

To list global rules in the application:

1. From the Home page, select **Application**, and then **Configuration**.
2. Select the **Global Rules** tab.
   The **Global Rules** page is displayed and it shows the existing global rules.

The **Order** column shows the order in which the global rules are run. The **Enabled** column indicates if the global rule is enabled. Service Administrators can use this to enable or disable global rules. See About Global Rules.

Actions Performed Using the Global Rules Tab

- **New** - create a new global rule
- **Edit** – modifies the definition of the selected global rule
- **Delete** – deletes the selected global rule
  Global rules that are referenced in a reconciliation workflow cannot be deleted.
- **Duplicate** – creates a new global rule by duplicating the selected rule
  The new rule uses the same name as the original rule with the prefix "Copy of".
- **Move to Top**, **Move Up**, **Move Down**, and **Move to Bottom** – moves the selected global rule within the list of displayed rules
  Moving rules changes the order in which the global rules are displayed and run.
- **View** - specify the columns to display and the order in which they are displayed in the **Global Rules** page
  Use the **Columns** option to select the columns and the **Reorder Columns** option to change the order of the columns.
- Filter the displayed data
  In addition to the default filters, use **Add** to create new filters.

Defining Global Rules

Defining a global rule includes specifying the rule properties and filter conditions.

Prerequisites

The Service Administrator predefined role is required to create and manage global rules.

Steps to Define Global Rules

1. From the Home page, select **Application**, and then **Configuration**.
2. Select the **Global Rules** tab.
3. Click **New** to open the **New Rule** dialog.
4. In the **Properties** tab, specify the properties of the global rule.
   See Defining the Global Rule Properties.
5. Click the **Filter** tab and define the filter conditions for the global rule. This rule is applicable to all profiles and reconciliations that satisfy the filter condition.
   See Specifying the Filter Conditions for Global Rules.
6. For Set Attribute Value rules only: The **Attributes** tab is displayed if **Rule** is set to **Set Attribute Value** in the **Properties** tab. Use this tab to define rules that set the values of one or more attributes.
   See Assigning Attribute Values Using Global Rules.
7. Click **OK** to save the global rule definition.

Defining the Global Rule Properties

Properties of a global rule includes the name, rule type, and whether the rule is enabled.

To specify the properties of a global rule:

1. Create a new global rule as described in Defining Global Rules.
2. Select the **Properties** tab.

3. In **Name**, enter the name of the global rule.
   The name must be unique with the application.
4. In **Rule**, select the type of rule. See About Types of Rules.
5. Select **Enabled** if the rule must be enabled as soon as it is created.
   Once a global rule is enabled, it impacts profiles and reconciliations when the condition specified in **Run When** occurs.
6. For Set Attribute Value rules only, select when this rule must run for profiles and formats.
   - Under **Profile**, select when this rule should be run for profiles.
     - **Post Data Load** - runs the global rule on the profiles every time data is loaded into their corresponding reconciliations
     - **Before Copied to Period** - runs the global rule before reconciliations are created for a period.
   - Under **Reconciliation**, select **Post Data Load** to run the global rule every time data is loaded into reconciliations.
7. For Create Alert type rules only, specify the details of the alert to be created when the rule condition is satisfied.
   - In **Alert Name**, enter a name for the alert.
   - In **Owner**, select the alert owner.
   - In **Type**, select the type of alert.
   - In **Assignee**, select the user to whom the alert must be assigned.
   - In **Restriction**, select None, Prevent Close, or Prevent Workflow.
   - (Optional) In **Notification Assignee**, select the external user who must be notified when the alert is created.
   - (Optional) In **Approver**, select the approver for this alert.
   - In **Alert Description**, provide a description for the alert.
8. For rule types related to approving or rejecting reconciliations, certain additional properties such as **Message to Preparer** or **Reviewer Level** are displayed.

Specifying the Filter Conditions for Global Rules

The filter condition specifies the conditions that must be satisfied for the global rule to run. An existing saved filer can be used or a new filter created.

To specify the filter condition for a global rule:

1. Define the global rule properties as described in Defining the Global Rule Properties.
2. In the **Filter** tab, select the method of specifying the filter condition:
   - **Create filter** - creates a new filter for the global rule
     Use the **Filter Definition** section to define the condition.
   - **Use Saved Filter** - uses an existing saved filter for the global rule
     Select the required saved filter in **Filter Name**.
   - **No Filter**
     No further filter is applied on profiles or reconciliations when this rule is run. Note that filtering may already have been performed before the rule is applied. For example, reconciliations within a period.

Global rules that were run as part of a reconciliation workflow are included in the **Workflow** tab. Click the rule name to view the rule details, including its filter condition. However, if the global rule's filter condition is updated after the rule was run for a reconciliation, when you click the rule name in the **Workflow** tab, the filter condition in the **Edit Rule** dialog shows the updated condition and not the condition that was used when the global rule was run for the reconciliation.

Assigning Attribute Values Using Global Rules

Use the **Attributes** tab in the **New Rule** or **Edit Rule** dialog to specify how attribute values must be assigned using a Set Attribute Value rule.

The attribute value can either be set to a specified value or copied from another attribute. The following table shows the allowed data types when copying attribute values.

Table 6-4 Allowed Data Types for Global Rules

Target Attribute Data Type	Allowed Source Attribute Data Types	Additional Information
Date	Date Date/Time	Copying Date/Time to Date will lose the Time component
Date/Time	Date Date/Time	Copying Date to Date/Time will set the Time to 00:00:00
Integer	Integer Number Text	Text to integer will only work for integer strings Only custom text attributes included in picklist
List	List Text	Source List may be of any List type. Only the list value labels need to match.
Multi-line text	Integer List Multi-line Text Text	
Number	Integer Number	
Text	List Text Integer	
True/False	True/False Yes/No	
User	User Text	The Text must be the user log in name
Yes/No	True/False Yes/No	

To set the attribute value using the Set Attribute Value global rule:

1. In the **Attributes** tab, click New to create a new attribute.
   A new row is added and you use this row to specify how the attribute value must be set.

2. In **Attribute**, select the attribute value that must be set. The values displayed in the list depend on the object with which the attribute is associated and it's current state.
3. In **Method**, specify how the attribute value must be set.
   - **Copy** - sets the attribute value by copying it from a custom attribute, calculated attribute, balance attribute, or predicted attribute
   - **Value** - sets the attribute value to the specified value
4. In **Operation**, select one of the following:
   - **Replace** - replaces the attribute value with that from **Value**. All values are copied, including null values.
   - **Fill** - copies the specified attribute value if the target attribute value is currently null. For example, for any profiles that do not have a format set, you can copy the format from the attribute specified in **Value**.
   - **Update** - copies the value of the attribute specified in **Value** into this attribute, if this attribute value is not null
5. In **Value**:
   - When **Method** is set to **Value**, enter the value that must be assigned to the attribute.
   - When **Method** is set to **Copy**, click the Search icon to select the attribute whose value must be assigned to this new attribute. The attributes displayed in the list depend on the selection made in the **Attribute** property.
6. (For Copy method that copies from a predicted attribute only) In **Confidence**, enter the confidence percentage for copying the value.
   For example, if you set this value to 95, it means that the attribute's value is set to that of the specified predicted attribute, if the corresponding confidence percentage is equal to or greater than 95. The default value is blank. A zero or blank percentage means that all the values will be copied.

Manually Running Set Attribute Value Rules

In addition to running as per the specified filter conditions, Set Attribute Value rules can be run manually on profiles and reconciliations.

To run a Set Attribute Value rule:

1. From the Home page, select **Application**, and then **Profiles**.
   Or, from the Home page, select **Reconciliations**.
2. From **Actions**, select **Run Rules**.
3. In **Source Period**, select the period for which the Set Attribute Value rules must be run.

When you run rules for one or more reconciliations using **Run Rules** under **Actions**, the following are not updated:

- Contents of the **Workflow** tab (including Preparer, Frequency, Duration, and so on)
- Currency bucket attributes (both currency attributes and enabling/disabling the bucket)
- Auto reconciliation method

Example: Using Global Rules to Set Multiple Attribute Values

This example creates a global rule, of type Set Attribute Value, that sets the values of three profile attributes.

For profiles that meet the specified filter conditions, the global rule runs before reconciliations are created for a period and sets the values of the following profile attributes:

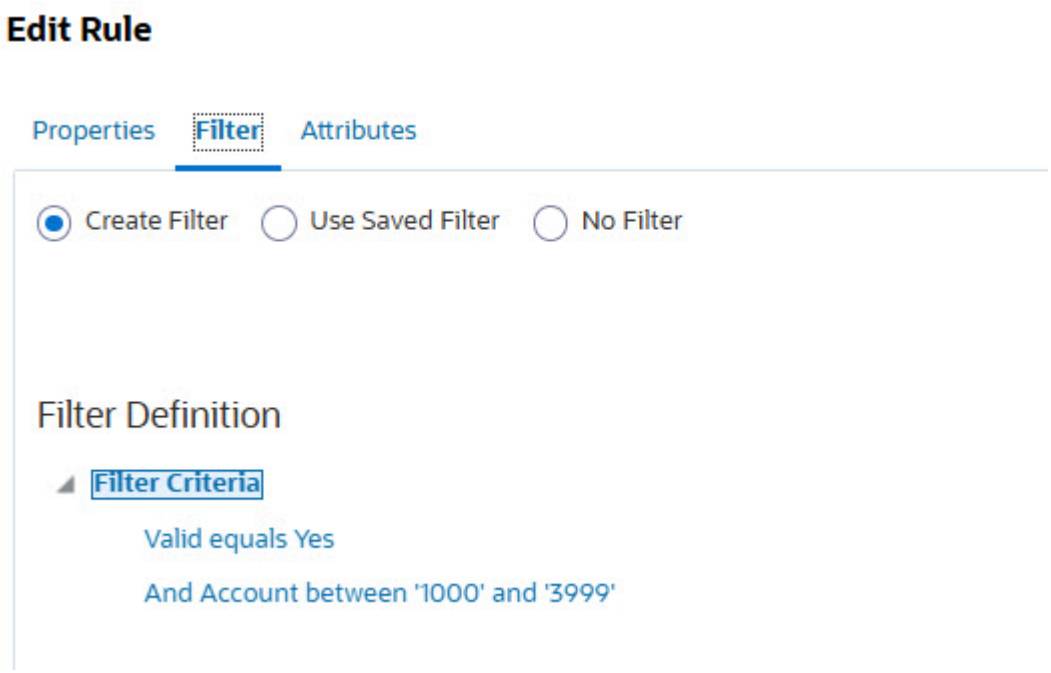
- Risk Rating - replace its value with that in the predicted attribute `Risk Rating - Predicted`, if the prediction confidence is equal to or greater than 95.
- Process - update its value with that in the system attribute `Balance Sheet`, if the current value in Process is not null.
- Account Type - copy value of the balance attribute `Account Type - Loaded`, if the value in Account Type is null.

Prerequisites

- You are assigned the Service Administrator role
- The following attributes exist:
  - Predicted attribute named `Risk Rating - Predicted`
    The confidence attribute associated with the predicted attribute is automatically created.
  - System attribute named `Balance Sheet`
  - Balance attribute named `Account Type - Loaded`

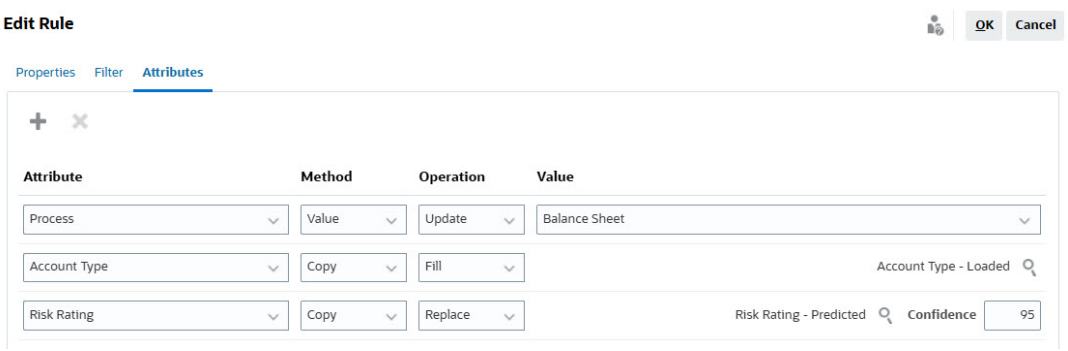
Steps to Create the Global Rule

1. From the Home page, select **Application**, and then **Configuration**.
2. Select the **Global Rules** tab.
3. Select New to display the **New Rule** dialog.
4. In the **Properties** tab:
   - In Name, enter gr_set_profile_attr_values.
   - In **Rule**, select Set Attribute Value.
   - Under **Profile**, select **Before Copied to Period**.
   - Select **Enabled**.
5. In the **Filter** tab, click **Create Condition** to define the conditions under which the global rule runs. This rule runs for all valid profiles with Account between 1000 and 3999.



- In **Condition**, set the following values:
  - **Source** - Profile
  - **Attribute** - Valid
  - **Operator** - Equals
  - **Value** - Yes
- Click **Create Condition**, and then set the following under **Condition**:
  - **Conjunction** - And
  - **Source** - Profile
  - **Attribute** - Account
  - **Operator** - Between
  - **Value** - 1000
  - **And** - 3999

6. In the **Attributes** tab, click **New** to create the attribute whose values must be set. In this example, values of three profile attributes are set. The following image shows the attribute settings.



7. Select **OK** to save the global rule definition.

Example: Using Global Rules to Automatically Submit Reconciliations with No Activity

This example creates a global rule that auto submits reconciliations that have no activity.

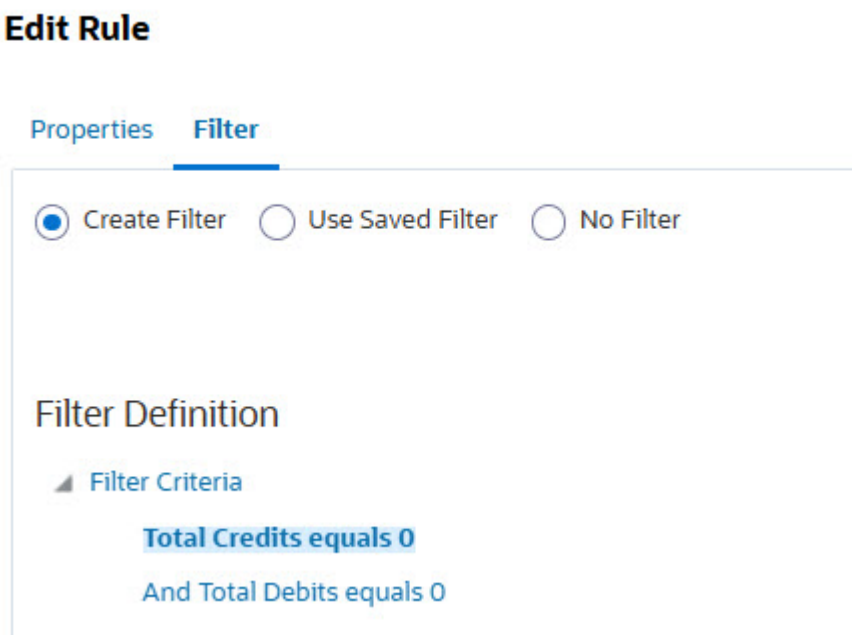
In this example, no activity means that the balance attributes `Total Credits` and `Total Debits` are zero. This rule runs when data is loaded into reconciliations and when the reconciliation status changes from Pending to Open.

Prerequisites

- You are assigned the Service Administrator role
- The balance attributes `Total Credits` and `Total Debits` exist. These attributes are of data type Number.

Steps to Create the Global Rule

1. From the Home page, select **Application**, and then **Configuration**.
2. Select the **Global Rules** tab.
3. Select New to display the **New Rule** dialog.
4. In the **Properties** tab:
   - In Name, enter gr_auto_submit_no_activity.
   - In **Rule**, select Auto Submit Reconciliation.
   - Select **Enabled**.
5. In the **Filter** tab, click **Create Condition** to define the conditions under which the global rule runs. This rule runs for all reconciliation balances where Total Debits and Total Credits is zero.



- In **Condition**, set the following values:
  - **Source** - Balance
  - **Attribute** - Total Credits
  - **Operator** - Equals
  - **Value** - 0
- Click **Create Condition**, and then set the following under **Condition**:
  - **Conjunction** - And
  - **Source** - Balance
  - **Attribute** - Total Debits
  - **Operator** - Equals
  - **Value** - 0

6. Select **OK** to save the global rule definition.

7

Defining Formats

Related Topics

- Learning About Formats
- Using Standard Formats
- Creating Formats
- Deleting Formats
- Defining Formats

Learning About Formats

Reconciliation formats determine what reconciliations will look like, and the type of information that preparers and reviewers can enter. Formats for reconciliations are selected or designed by the Service Administrator.

Formats are completely customizable. A library of standard formats is available, or Service Administrators can build custom formats from scratch.

Formats for Group Reconciliations

For information about defining formats for group reconciliations, see Administrator Set Up Tasks for Group Reconciliations.

About Designing Formats

The design of a format impacts the reconciliations that are based on the format.

Format design impacts reconciliations by defining the following areas:

- The information presented in the Balance Summary section
- The types of transactions that exist within the reconciliation, as well as the attributes associated with these transactions and the rules governing who can edit the values of these attributes
- The business rules impacting the reconciliation, including auto reconciliation routines and certain preventive controls that are designed to ensure reconciliations are complete and conform with policies

Formats are designed to evolve. You can start with one set of formats, and then modify formats over time as your business changes, or as you become aware of new or different risks. Every month when you create your reconciliations from your account profiles, a snapshot of the existing formats is taken. The snapshot copies retain the historical format with the reconciliation. As you make changes to your Format designs, the historical reconciliations continue to appear just the same as they did on the date they were created.

About Reconciliation Compliance Formats

All Reconciliation Compliance formats are based on one of three methods: **Account Analysis**, **Balance Comparison**, or **Variance Analysis**.

Reconciliation Compliance Formats

- The **Account Analysis** method is used for accounts that have no comparative balance. Preparers justify the account balance by entering the list of items that should be comprising the ending balance, such as prepaids, accruals, reserves, and intangibles, into the reconciliation. This list of transactions is called the **Explained Balance**.If there is an **Unexplained Difference**, the preparer uses the **Explained Balance** and **Adjustments** tabs to record any adjustments to get the unexplained difference down to zero.
- The **Balance Comparison** method justifies the balance to be reconciled by comparing this balance to a balance from another source such as a subledger, a bank statement, a report, or any other external system. When a preparer reconciles an account using this format, the **Source System Balance**, the **Subsystem Balance** and the **Difference** between the two are displayed. If there is a difference, the preparer must record an adjustment on the **System Adjustments** or **Subsystem Adjustments** tabs. The system calculates the **Adjustments to Source System** and **Adjusted Source System Balance**, and subtracts one from the other to calculate the Unexplained Difference.
- **Variance Analysis** method ensures balance fluctuations are monitored and explained if certain thresholds are exceeded. Variance Analysis compares balances across periods such as month over month or quarter over quarter. When a preparer reconciles an account using this format, they provide an explanation for the variance amount and send for review. At a higher level, a power user or administrator can look at summary reconciliations that roll up this information.

> **Note**
>
> For variance analysis, the **Unexplained Difference** is calculated by taking the **Current Period Balance** and subtracting the **Variance Period Balance** and the **Variance Explanations**.

Method	Format Name
Account Analysis	• Accruals • Current Assets • Current Liabilities • Equity • Intangibles • Investments • Non-Current Assets • Non-Current Liabilities • Prepaid Expenses • Zero Balance Accounts

Method	Format Name
Balance Comparison * only available by using the Sample Application	• Accounts Payable • Accounts Receivable • Assets - Other* • Bank Reconciliation • Buildings & Land • Depreciation • Fixed Assets • Inventory • TM Intercompany* • Tracking Only • Tracking with Reconciling Items
Variance Analysis * only available by using the Sample Application	• Variance Analysis Monthly • Variance Analysis Quarterly*

About Transaction Matching Formats

All Transaction Matching formats are based on one of three methods: **Account Analysis With Transaction Matching**, **Balance Comparison With Transaction Matching**, or **Transaction Matching Only**.

Transaction Matching Formats

- The **Account Analysis With Transaction Matching** method is used to match transactions within a single data source, for example, for debit and credit matching.
- The **Balance Comparison With Transaction Matching** method to match transactions between source system and sub systems.
- The **Transaction Matching Only** method is used when you are only using Transaction Matching and not using period end reconciliations.

See Creating Formats and Using Standard Formats for more information on formats.

About Using Formats to Prevent File Uploads

Service Administrators can use a format-level setting to control whether files can be uploaded to reconciliations that are associated with the format.

When creating or editing a format, select **Prevent File Upload** to prevent file uploads to reconciliations associated with the format.

Even when the associated format prevents file uploads, users can upload files to reconciliations in the following scenarios:

- Reconciliations in the current period contain file attachments, comments with file attachments, and transactions with file attachments, which are set up to be carried forward to the next period. The **Prevent File Upload** option is then selected in the format associated with those reconciliations.

  In this case, selecting **Prevent File Upload** will not prevent attachments in the existing reconciliations from being carried forward when reconciliations are created in the next period.

- Consider a summary reconciliation that is set up based on a format that has **Prevent File Upload** selected. Some of the summary reconciliation's child accounts belong to a different format using the same method, but without the **Prevent File Upload** option selected. In that case, file attachments can be added to transactions in the child accounts that use the format with **Prevent File Upload** unselected. Then, when Generate is run in the summary reconciliation, the transactions with the file attachments will be pulled up into the summary reconciliation.

Restrictions on Changing or Deleting Formats

Certain restrictions apply when you update or delete formats.

- Formats cannot be changed on existing reconciliations. First, delete the reconciliation, then change the format on the profile, and then copy the changed profile into the period. The system calculates the **Adjustments to Source System** and **Adjusted Source System Balance**, and subtracts one from the other to calculate the Unexplained Difference. If there is an **Unexplained Difference**, the preparer uses the **Explained Balance** and **Adjustments** tabs to record any adjustments to get the unexplained difference down to zero.
- You cannot delete formats that are assigned to profiles. Remove the format from the profiles, and then delete it. You can delete formats that are assigned to reconciliations. Reconciliations point to a snapshot of the format; not to the format itself.
- You cannot delete the Short Description on the Format since it is a required field and there are navigation links in the reconciliation that are dependent on it. You can rename it if needed, but it cannot be deleted.

Using Standard Formats

Sample formats are provided to save time in configuring. You can edit or remove any of the standard formats.

Formats for Reconciliation Compliance

The standard formats have been created at the Account type level and include common accounts types, for example: Accounts Payables, Account Receivables, and Accruals.

In addition to the formats by Account type, there are also two tracking only format variations. These formats can be used for reconciliations where the work is still being performed in Microsoft Excel based reconciliations and the results are uploaded for tracking:

- The "Tracking Only" format allows only uploading the spreadsheet.
- The "Tracking with Reconciling Items" format supports uploading a spreadsheet and documenting any reconciling items. This approach can be useful if you want to report on the magnitude of reconciling items across all reconciliations.

The **method** column indicates whether the format uses a Balance Comparison, Account Analysis or a Variance Analysis method:

- The "Balance Comparison" method is appropriate for accounts where the balance is validated by comparing it to another balance.
- The "Account Analysis" method requires preparers to explain or justify the balance.
- The "Variance Analysis" method requires preparers to explain or justify the variance between balances across periods.

The "Prior Period Balance" and the "Net Activity" are not displayed across our Standard formats. If your policies or preferences require the display of this information, change this configuration by clearing the "Hide" checkbox.

The design for reconciliation transactions including Source System Adjustments, Subsystem Adjustments, and Explained Balance Transactions has been simplified. Review these configurations and change them as needed to match your policies and preferences.

Formats for Transaction Matching

Formats are associated with a Match Type in Transaction Matching and the Match Type has to have been created before you define formats and then profiles.

There are three format methods that you can use for Transaction Matching:

- The "Balance Comparison with Transaction Matching" method is appropriate for accounts where the balance is validated by comparing it to another balance.
- The "Account Analysis with Transaction Matching" method requires preparers to explain or justify the balance.
- The "Transaction Matching Only" method is used when you are not using period end reconciliations but need to match transactions.

Watch Using Standard Formats Video

Click this link to watch the video:

Creating Formats

Formats are created for both Reconciliation Compliance and Transaction Matching.

Related Topics

- Creating a New Format for Reconciliation Compliance
- Creating a New Format for Transaction Matching
- Specifying Format Properties
  Properties that must be defined for a format include the name, method, configuration for transactions, and so on.
- Specifying Format Instructions
  Administrators provide instructions on how to use the format. These instructions can include text-based instructions, URLs, attached files, or links to files in document repositories. These instructions are merged with profile instructions and presented on the reconciliation.
- Adding Format Attributes
  Format attributes affect the overall reconciliation and enable capture of additional information, such as Time to Prepare, or Time to Review. Format attributes appear in the Reconciliation dialog, on the Summary tab, under Additional Attributes.
- Specifying Format Questions
  Administrators can configure certification questions that the preparer must respond to before they can submit the reconciliation for review.

- Working With Format Rules
  Format rules affect reconciliation workflow, the requirement for reconciliation attachments, or the value of profile/reconciliation attributes. The rules are displayed on the Profile Rules tab in read-only form.
- View Format History
  The History tab logs changes to the format configuration.

Creating a New Format for Reconciliation Compliance

To create a new customized format for Reconciliation Compliance:

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. Click **New** (**+**) .
3. In the **Properties** tab, specify properties such as the name, method, Reconciliation Compliance configuration, and so on. The details that must be provided depend on the method selected. See Specifying Format Properties.
4. In the **Instructions** tab, enter instructions on how to use the format. See Specifying Format Instructions.
5. In the **Attributes** tab, create any custom attributes that will be used in this format. See Adding Format Attributes.
6. Except for formats based on the **Transaction Matching Only** method: In the **Questions** tab, specify questions that preparers must answer before they submit the reconciliation. See Specifying Format Questions.
7. Except for formats based on the **Transaction Matching Only** method: In the **Match Rules** tab, create one or more rules that are associated with the format. Rules created in the format will be inherited by all profiles that are based on this format. If required, you can create additional rules in the profile. See Working With Format Rules.
8. In the **History** tab, you can view the changes that were made to the format configuration over time. See View Format History.
9. If you are done with creating the format, click **Save and Close**. Click **Save** to save your current settings and then continue with specifying other information required to create the format.

Watch Creating Custom Formats in Reconciliation Compliance Video

Click this link to watch a video:

Creating a New Format for Transaction Matching

To create a new customized format for Transaction Matching

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. Click **New** (**+**).
3. In the **Properties** tab, specify properties such as the name, method, Reconciliation Compliance configuration, and so on. The details that must be provided depend on the method selected. See Specifying Format Properties.

4. In the **Instructions** tab, enter instructions on how to use the format. See Specifying Format Instructions.
5. In the **Attributes** tab, create any custom attributes that will be used in this format. See Adding Format Attributes.
6. Except for formats based on the **Transaction Matching Only** method: In the **Questions** tab, specify questions that preparers must answer before they submit the reconciliation. See Specifying Format Questions.
7. Except for formats based on the **Transaction Matching Only** method: In the **Match Rules** tab, create one or more rules that are associated with the format. Rules created in the format will be inherited by all the profiles that are based on this format. If required, you can create additional rules in the profile. See Working With Format Rules.
8. In the **History** tab, you can view the changes that were made to the format configuration over time. See View Format History.

Specifying Format Properties

Properties that must be defined for a format include the name, method, configuration for transactions, and so on.

To specify properties for a format:

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. In **Name**, enter a name for the format. The name must be unique within the application.
3. In **Description**, enter an optional description for the format.
4. In **Method**, select a method depending on whether you want to create a Reconciliation Compliance format or a Transaction Matching format. The available options are:
   - Reconciliation Compliance formats: **Account Analysis**, **Balance Comparison**, **Variance Analysis**. See About Reconciliation Compliance Formats.
     - **Account Analysis**—**Source System Beginning Balance** and **Net Activity** enable you to measure the change in an account from the last reconciliation performed for the account.

       The balance in the general ledger is substantiated through a listing of transactions that should comprise the ending balance. This list of transactions is called the **Explained Balance**, and it is compared to the **General Ledger Balance**. If there is a **Difference**, the preparer uses the **Explained Balance** and **Adjustments** tabs to record adjustments to get the unexplained difference down to zero. Examples of accounts include prepaids, accruals, reserves, and intangibles. The key to a high-quality account analysis is to ensure that the list of explained balance transactions includes sufficient detail to justify all items.
     - **Balance Comparison**—The balance in the general ledger can be substantiated by comparing it to a balance from another source. That source might be a subledger, a bank statement, a system report, or a spreadsheet containing a complex calculation.

       When a preparer reconciles an account using this format, the **Source System Balance**, the **Subsystem Balance**, and the **Difference** between the two are displayed. If there is a difference, the preparer must record an adjustment on the **System Adjustments** or **Subsystem Adjustments** tabs.

       The system then calculates **Adjustments to Source System** and **Adjusted Source System Balance**, and subtracts those two to calculate the **Unexplained Difference**.

In the **Label** column, assign descriptive names.

Select **Hide** to exclude rows from the reconciliation. For example, if the Subsystem Balance can never be wrong, on the Properties tab, hide Adjustments to Subsystem and Adjusted Subsystem Balance to prevent users from adding these types of transactions.

- **Variance Analysis**—For a given period, the **Balance Summary** is compared to an earlier time period's balance and the difference between the two requires an explanation. The **Unexplained Difference** is calculated

  For variance analysis, unexplained difference = current period balance - variance period balance - variance explanations

  When a preparer reconciles an account using this format, the **Current Period Balance**, the **Variance Period Balance**, and the **Difference** between the two are displayed. If there is a difference, the preparer must provide an explanation.

  For a summary reconciliation, the **Variance Period Balance** comprises the balances of the summary reconciliation in the variance period. Therefore, if the summary reconciliation does not exist in the variance period, no **Variance Period Balance** is displayed.

- Transaction Matching formats: **Account Analysis with Transaction Matching**, **Balance Comparison with Transaction Matching**, **Transaction Matching Only**. Use the **Transaction Matching Only** method if you are not using period end reconciliations.

  See About Transaction Matching Formats.

5. In **Display Account ID** as, select one of the following:
   a. **Concatenated String**
   b. **Individual Segments**
6. Select **Require 0 unexplained difference** to indicate that there must be no unexplained difference in reconciliations that use this format.

   Depending on the chosen method of reconciliation, the reconciliation calculates the **Unexplained Difference** as:

   - For Account Analysis formats: The Source System Balance, less the Explained Balance, and less the Adjustments.
   - For Balance Comparison formats: The Source System Balance, less the Subsystem Balance, less the Adjustments to Source system, and less the Adjustments to Subsystem.
   - For Variance Analysis formats: The Current Period Balance, less the Variance Period Balance and less the Adjustments.
   - For Account Analysis With Transaction Matching Formats: The Source System Balance, less the Explained Balance, and less the Adjustments.
   - For Balance Comparison With Transaction Matching Formats: The Source System Balance, less the Subsystem Balance, less the Adjustments to Source system, and less the Adjustments to Subsystem.

   Administrators can specify whether the format requires a 0 unexplained difference. If it does, the preparer can't submit the reconciliation for review until adjustments are created for the full difference between the source system balance and the explained/subsystem balance.

> **Note**
>
> The **Require 0 unexplained difference** is not available for Transaction Matching Only formats. Also, the setting is only applicable when reconciliations are manually submitted by the Preparer. It does not apply for auto-reconcile or auto submit and auto approve rules.

7. Select **Group Reconciliation** to specify that this format must be used with group reconciliations.
8. Select **Prevent File Upload** to prevent users from uploading files to reconciliations that are associated with this format. This includes uploading files as attachments or comments to reconciliations, transactions, and action plans. Note that attaching a file as a link is allowed. See About Using Formats to Prevent File Uploads.
9. For Transaction Matching formats: In **Match Type**, select the match type for which this format is used.

   The drop down list contains match types based on the format method:

   - **Account Analysis With Transaction Matching** formats will list Match Types that have only Source System sources.
   - **Balance Comparison With Transaction Matching** formats will list Match Types that have both Source System and Sub System sources.
   - **Transaction Matching Only** formats will list Match Types.

   Formats must be linked to a match type.
10. (Optional) Configure Reconciliation Compliance transactions, as described in Configuring Reconciliation Compliance Transactions.
11. Click **Save** to save the settings specified. You can continue to specify other settings for the format using the other tabs in the New Format dialog.

> **Note**
>
> For formats based on Transaction Matching methods, the System Adjustments and Subsystem Adjustments tabs are hidden by default. If your business requires you to configure these attributes, unselect **Hide** for the **Adjustments to Source System (Tab)** and **Adjustments to Subsystem (Tab)** columns in the Balance Summary tab.

Configuring Reconciliation Compliance Transactions

Design how transactions are managed in Reconciliation Compliance.

As part of configuring transactions, you can:

- add custom attributes for adjustments and explanations
- specify how attributes must behave, including which users can view or edit attributes
- define action plans and rules for transactions

This configuration is used for Reconciliation Compliance transactions (even for formats that use a Transaction Matching based method).

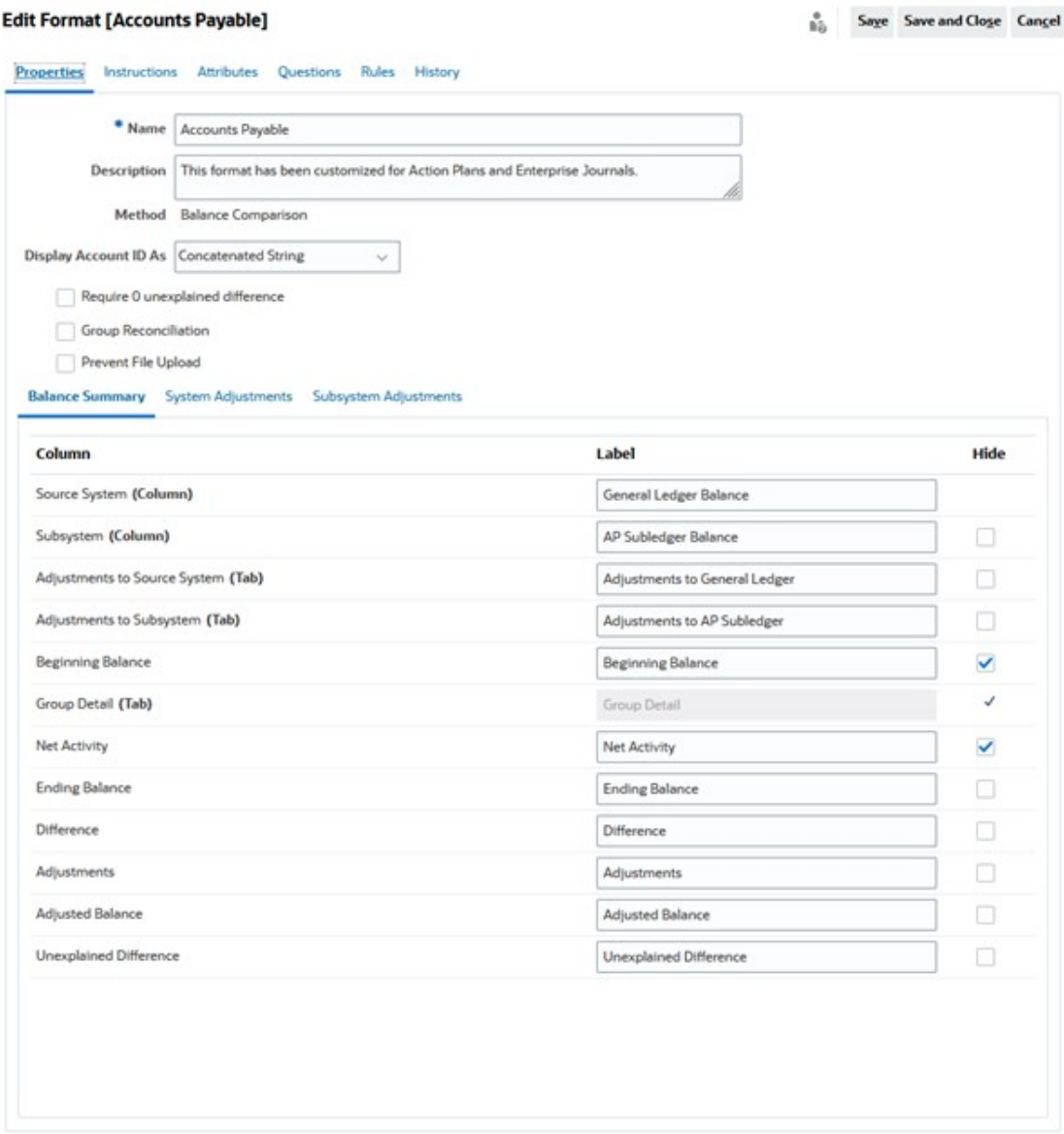
The Properties tab in the Create Format dialog and Edit Format dialog displays a set of tabs to configure transactions. The number and names of these tabs depends on the method used by the format. The Balance Summary tab is shown for all formats. Although the names of the remaining tabs depend on the format used, they contain the following sections: Transaction Detail, Action Plan, and Rules.

> **Note**
>
> Configuring transactions is not applicable for formats that use the Transaction Matching Only method.

Balance Summary

Use the **Label** column to assign descriptive names to the balance attributes. These labels are displayed in the Balance Summary section of reconciliations. Select **Hide** to exclude attributes from the reconciliation. For example, assume that your Subsystem represents the bank balance. Because you cannot make an adjustment to the bank balance, you can hide Adjustments for the Subsystem to prevent users from adding these types of transactions.

> **Note**
>
> When choosing to hide columns, the entire Subsystem side should not be hidden because that column includes calculation. Alternatively, the Account Analysis based format should be the Unexplained Difference used instead.



Transaction Detail

A Service Administrator can use the **Enable Amoritization/Accretion** option to control whether users are allowed to amortize transactions. This means that users will instead post to the GL correctly and amortize only on the Balance Explanations tab the following month. This option is not available for formats that use the Variance Analysis method.

By default, the following attributes are available: Short Description, Transaction Date, Close Date, and Long Description. If additional attributes are required, click **Add** to create attributes. These attributes are typically used for adjustments and can be posted to a target system such as Oracle ERP Cloud. For example, if you integrate Account Reconciliation with Enterprise Journals, and map the attributes, Enterprise Journals will pick up these attributes and to create a journal and post the journal to Oracle ERP Cloud.

You can also restrict access to attributes based on the specified filter conditions. Select the attribute, click **Edit,** and then use the Rules tab to provide role-based access. For example, for Close Date, you can go to the Rules tab and add a **Set Attribute Access** rule that provides **Allow Edits** access to Reviewers. You can also add a filter condition while creating the rule.

Action Plan

You enable the use of action plans by selecting **Show Action Plan**. There are a set of default actions plans and you can add your own plans.

Actions plans are typically created for adjustments. You can use them to manage the posting of Account Reconciliation reconciliation data to other systems such as Oracle ERP Cloud.

Rules

You can create rules to manage the behaviour of adjustments or explanations created on this tab. The available rules are:

- Copy Transactions from Prior Reconciliation
- Prevent Transaction Save
- Require Transaction Attachment
- Prevent Transaction Delete
- Prevent Amount Edit

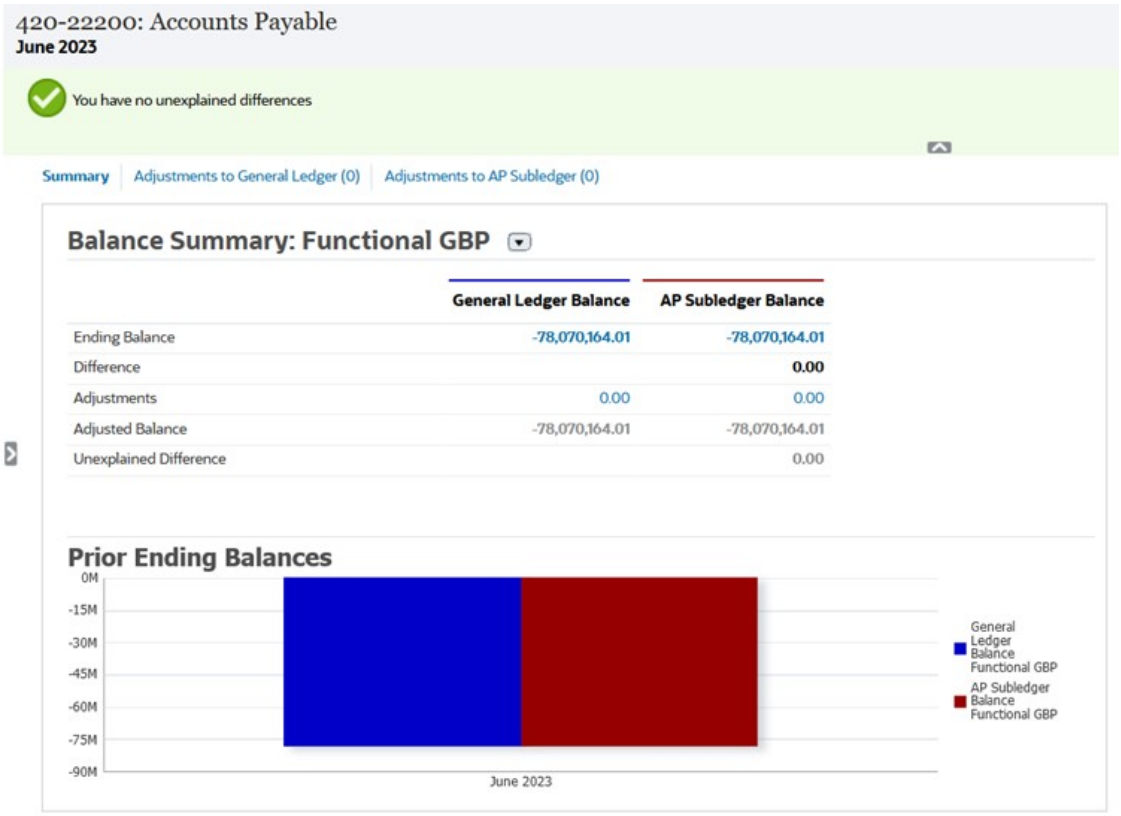
Note that you can use these tabs to define rules for Reconciliation Compliance transactions only. These rules are visible on the format. Rules that are created using the Rules tab in the Create Format dialog or Edit Format dialog are applicable to the reconciliation and are visible on the profile with a Lock sign.

For more information about rules, see Order of Precedence for Auto Reconciliation and Rules.

Configured Transactions and the Reconciliation Summary Dialog

The design specified of Reconciliation Compliance transactions is used in the Reconciliation Summary dialog of the reconciliations that use this format.

The labels specified in the Balance Summary tab are used in the Summary tab of the Reconciliation Summary dialog.



Similarly, the attributes defined in the adjustments or explanations tabs in the format are shown in the corresponding tabs in Reconciliation Summary dialog.

Specifying Format Instructions

Administrators provide instructions on how to use the format. These instructions can include text-based instructions, URLs, attached files, or links to files in document repositories. These instructions are merged with profile instructions and presented on the reconciliation.

To specify instructions:

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. In **New Format** or **Edit Format**, select the **Instructions** tab.
3. In **Instructions**, enter instruction text.

To add a reference:

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. Select a format, and select the **Instructions** tab
3. In the **References** section, click **Add** (**+**) .
4. In **Type** list, select a type:
   - **Local File**

     Click **Browse** to select and attach the file, enter a **Name**, and then click **OK.** The file size is specified in System Attributes.
   - **URL**

Name the URL, and then enter it, for example: Oracle, http://www.oracle.com, and then click **OK**.

> **Tip**
>
> To delete a reference, select it, and then click **Delete.**

Adding Format Attributes

Format attributes affect the overall reconciliation and enable capture of additional information, such as Time to Prepare, or Time to Review. Format attributes appear in the Reconciliation dialog, on the Summary tab, under Additional Attributes.

To add an attribute assignment:

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. In **New Format** or **Edit Format**, select the **Attributes** tab.
3. Select **Add**.
4. On the **Add Attribute Assignment** dialog box, enter:
   - **Attribute**:

     Select one: See Creating Attributes.

     Type:

     This non-editable field is populated by the Attribute.
   - **Value**:

     Select a value associated with the type of attribute, for example: a numeric value for Formatted Number attribute, a List for List attribute, a name of a person for User attribute, or Yes or No for the Yes/No attribute.
   - **Access**

     All roles have view access unless otherwise specified in the table below.

     To add an access, for each of the Text Box and Attachments tabs:

     a. Click **Add**.

     b. Select the role for which access is being defined.

     c. Select one of the Role access types:

        – **Text Box**:

          * **Do Not Display - Reconciliation**—Does not show this attribute in the Attributes drawer of the reconciliation. However, the attribute value is shown in the Reconciliation List, reports, views, and dashboards. This setting enables you to specify which attributes end users can see while working on a reconciliation.

          * **Do Not Display - Anywhere**—Does not show this attribute anywhere in the application. The Attributes drawer of the reconciliation does not show this attribute. In other areas of the application, the value of this attribute will be blank. Use this setting to control which roles can view the value of the attribute within the application.

* **Allow Edits**—Has the ability to add, change, and remove values for the attribute, but subject to the editability rules.
* **Required**—Requires a value for the attribute. The Required option is available for Preparers and Reviewers. Until a value is provided, Preparers are prevented from submitting, and Approvers are prevented from approving.

> **Note**
>
> Use the **Do Not Display - Anywhere** setting only when required because this could impact performance.

– The **Multi-Line Text Box** has 2 access tabs:
  * Text Box tab:
    * **Do Not Display**—Does not see this attribute on the Reconciliation List or in any of the dashboards, list views, or reports.
    * **Allow Edits**— Has the ability to add, change, and remove values for the attribute, but subject to the editability rules.
    * **Required**—Requires a value for the attribute. The Required option is available for Preparers and Reviewers. Until a value is provided, Preparers are prevented from submitting, and Approvers are prevented from approving.
  * Attachments tab:
    * **Do Not Display**—Does not see this attribute on the Reconciliation or in any of the dashboards, list views, or reports.
    * **Add & Remove—**Has the ability to add files and remove files that they themselves added, but subject to the editability rules.
    * **Required**—Requires the Preparer or Reviewer to attach at least one file. The Required option is only available for Preparers and Reviewers. Until a file is attached, Preparers are prevented from submitting, and Approvers are prevented from approving.
    * **Add & Remove All**—Can add their own files, remove their own files, and also remove files added by other roles.

d. Click **OK**.

5. The Rules tab defines rules for the attribute being assigned.

   The Format Attribute rule runs when the specified conditions are met:

Table 7-1 Format Rules

Rule	Runs When	Rule Type	Precedence Notes
Set Attribute Access Sets the value of attributes assigned to the Transaction Attributes section in the **Format** dialog box.	This rule gets evaluated (not run) whenever the attribute associated with the rule can be updated (through the user edits, or through import)	Format / Profile Attribute Rule	Rules that trigger different access levels can be configured. When this condition occurs, access is as follows: • Hide • Required • Edit • Read Only

Specifying Format Questions

Administrators can configure certification questions that the preparer must respond to before they can submit the reconciliation for review.

For example, if your policy requires that the user clear adjustments within 60 days, consider adding a certification question that asks, "Have you cleared all adjustments older than 60 days? – Yes or No". Administrators can add unlimited certification questions as needed for each Format.

To specify questions:

1. From Home, click **Application**, then **Configuration**, and then **Formats**
2. In **New Format**, select the **Questions** tab.
3. Click **New**.
4. In **New Question**, in **Question**, enter your question text.
5. In **Type**, select a question type:
   - **Date**
   - **Date/Time**
   - **Integer**
   - **List**

     Enter a list of valid responses to the question.
   - **Multi-Line Text**

     The maximum length of a question should be less than 1,000 characters.

     Select **Multi-Line Text**, then enter the **Number of Lines**, from 3 to 50 lines. Multi-Line Text determines how many lines of text are visible, without scrolling, on the Actions dialog boxes.

     For Multi-Line text type: Select **Include Attachments** if you want the custom attribute to include an attachments section on the Reconciliation Actions dialog box.
   - **Number**

     If you select Number, select number formatting options:

     – For Decimal Places, enter a value for the number of decimal places to display.

     – Select the Thousands Separator option if you want numbers to display a thousands separator (for example, 1,000.00)

  - From the Currency Symbol list, select a currency symbol, for example, Dollars ($).
  - From the Negative Number list, select how to display negative numbers, for example, (123).
  - From the Scale list, select a scale value for numbers, for example, 1000.
- **True/False**
- **Text**
- **User**
- **Yes/No**

6. Assign a **Role**. The purpose of assigning a role is to determine which role can answer your question:
   - Administrator
   - Commentator
   - Power User
   - Preparer
   - Reviewer (with separate roles for each Reviewer level currently in use in the application)
   - Viewer

> **Note**
>
> When re-ordering questions, you can only re-order within a role.

7. If the **Required** check box is selected for Preparers or Reviewers, users can close a reconciliation without answering their questions, but they cannot Submit or Approve.

> **Note**
>
> The Required check box is enabled for Questions assigned to Preparer and Reviewer questions.

8. Click **OK**.
9. **Optional:** To change the order of questions, select a question, then select **Actions,** and then **Move to Top**, **Move Up**, **Move Down**, or **Move to Bottom.**

> **Tip**
>
> To edit a question, select it, and then click **Edit**. To remove a question, select it, and then click **Delete**.

Working With Format Rules

Format rules affect reconciliation workflow, the requirement for reconciliation attachments, or the value of profile/reconciliation attributes. The rules are displayed on the Profile Rules tab in read-only form.

Rules evaluate transaction conditions only if the accompanying reconciliations already exist.

See Order of Precedence for Auto Reconciliation and Rules.

To work with format rules:

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. Double-click a format.
3. On Edit Format, select the **Rules** tab. You can view the following information:
   - **Locked**
   - **Order**—The order of precedence. See Order of Precedence for Auto Reconciliation and Rules
   - **Rule**—Name of the Rule.
   - **Conditions**—The choice of what conditions must exist before running the rule.
4. To create, edit, duplicate, delete, or reorder a rule, on the Rules tab, click the appropriate button and, if necessary, update the following:
   - In the Properties tab:
     - **Rule—**Select a rule.
     - **Description**—Optional. Explain why you configured the rule and how the rule should be used.
     - **Message** (on some rules):
       - **Message to Preparer**—Define an optional message to the preparer on the prevent reconciliation submission rule and require reconciliation attachment rules.
       - **Message to Reviewer**—Define an optional message to the preparer on the prevent reconciliation approval rule.
     - **Reviewer Level**—Select **All Levels** to apply the rule to all reviewer levels or select specific reviewer levels individually. At least one reviewer level must be selected.
   - In the Filter tab:
     - Select **Create Filter** and populate the conditions section or select **Use Saved Filter**, and then select a filter. The filter you select and configure for the rule determines the conditions that trigger the rule to apply.
     - **Condition**—
       - If you select **Use Saved Filter**, the Conditions section displays a read-only version of the conditions associated with the saved filter.
       - If you select **Create Filter**, the Condition section is enabled.

         Conjunction, Source, Attribute, Operator, and Value behave as they do for the existing advanced filter feature. When creating filters, you can use these attributes:

    - Any Reconciliation or Transaction attribute, including calculated attributes, that are classified as Reconciliation and Transaction attributes
    - Period Frequency
- (For Set Attribute Rules only): In the **Attributes** tab, click **New** to create a rule. See Assigning Attribute Values Using Global Rules.

When a condition includes columns that are based on currencies, and you select **All**, then all the listed currencies are included in the condition. If you configure additional currencies at a later date, these new currencies are automatically added to the condition.

In Reconciliation Compliance, when a reconciliation is claimed and manually submitted by a Preparer, the Auto Approve Reconciliation rule is automatically run. If you want the Auto Approve Reconciliation rule to be run only when a reconciliation is automatically submitted, create an additional filter in the Auto Approve Reconciliation rule with the condition Auto Submit = Yes.

> **Note**
>
> When you make changes to a rule definition, the additional information is added to the audit log. You can view the changes both in the History tab as well as the Audit Report.

To watch a video about using formats with rules, click this link: 

View Format History

The History tab logs changes to the format configuration.

To view format history:

1. Select **Settings**, and then **Formats**.
2. Double-click a format.
3. Select the **History** tab.

Deleting Formats

You cannot delete formats that are assigned to Profiles. Remove the format from the profiles, and then delete it. You can delete formats that are assigned to reconciliations. Reconciliations point to a snapshot of the format, not to the format itself.

To delete formats:

1. From Home, click **Application**, then **Configuration**, and then **Formats**.
2. Select a format, and then click **Delete**.
3. Click **Yes** to the question, "Are you sure you want to delete the format (NAME)."

8

Working with Profiles

Related Topics

- About Profiles in Account Reconciliation
- Creating Profiles
- Creating Profiles for Variance Analysis
- Adding Accounts
- Using Excel CSV Files for Profiles
- Importing Profiles
- Exporting Profiles
- Updating the Format Associated with a Profile
- Deleting Profiles or Reconciliations
- Using the Profile Actions Panel
- Copying Profiles to Period
- Duplicating Profiles

About Profiles in Account Reconciliation

Profiles are one of the most important objects within Account Reconciliationand are created for both Reconciliation Compliance and Transaction Matching.

Profiles are the pre-cursors to reconciliations. They contain functions like the current preparer and reviewer assignments, account descriptions, instructions, format assignments, risk ratings. One profile will exist for each reconciliation performed. Each month, reconciliations are created from profiles by Administrators. The process of creating reconciliations from profiles causes a snapshot of the profiles to be taken and stored along with the reconciliations. Over time, profile configurations may change. However, the profile information stored with the reconciliations is never impacted by these changes.

For Reconciliation Compliance, one set of profiles may be created and used for both **Account Analysis** or **Balance Comparison** methods. To perform a **Variance Analysis**, you need to create a separate set of profiles however, Variance Analysis profiles can be used in the same periods as profiles using the other methods.

For Transaction Matching, one set of profiles may be created and used for both **Account Analysis with Transaction Matching** or **Balance Comparison with Transaction Matching** methods. To use the **Transaction Matching Only** method, you need to create a separate profile.

Administrators and authorized power users can update profiles and reconciliations to change user assignments and attributes used for reporting. Attributes that affect the type of reconciliation being performed (including formats and currency bucket configuration) cannot be changed on reconciliations. If changes must occur, the reconciliation must be deleted, and the changes must be applied to the profile directly. Then, the profile can be copied again to the period. A new reconciliation is created, which is a snapshot of the new profile configuration.

Service Administrators, Power Users, and Users have access to the **Profiles** card by default. Service Administrators can edit all profiles, while Power Users can only edit profiles that match their security scope. See Power User Security in Account Reconciliation in *Administering Account Reconciliation* for details. Users can view the profiles for which they've been assigned a workflow role. However, if the **Allow workflow users to reassign reconciliation profiles** is set to **Turn On**, Users can view all profiles and create reassignment requests for these profiles. Viewers can only see the **Profiles** card if they have the Profiles - View granular role assigned to them. Viewers have read-only access to profiles for which they are assigned as Viewers through an Organizational Unit or are assigned directly through the profile.

Profiles can be created manually or imported from a spreadsheet.

Watch Creating Profiles Video

Click this link to watch a video:

About Auto Reconciliation Methods

Account Analysis and Account Analysis with Transaction Matching

This section describes the conditions required for Account Analysis and Account Analysis with Transaction Matching auto reconciliation methods and what is done when the conditions are met.

Table 8-1 Required Conditions for Auto Reconciliation of Account Analysis and Account Analysis with Transaction Matching

Auto Reconciliation Method	Required Conditions	If Auto Reconciliation Succeeds
Balance is zero	• The Source System Balance is zero. • If an account analysis format is assigned to the profile, then the profile can be enabled for the "Account has a 0 Balance" auto-reconciliation method. • If the balance associated with the reconciliation for a given period is 0, then the reconciliation is prepared and reviewed automatically for that period. • If the balance is not 0, then the reconciliation must be manually prepared and reviewed.	The reconciliation status is set to Closed.

Table 8-1 (Cont.) Required Conditions for Auto Reconciliation of Account Analysis and Account Analysis with Transaction Matching

Auto Reconciliation Method	Required Conditions	If Auto Reconciliation Succeeds
Balance is zero and no activity	• The Source System Balance is zero. • Source System Balance is the same as the Prior Reconciliation Source System Balance. **Note** This last condition also means that a previous reconciliation source system balance must exist. • If a previous reconciliation does not exist, then the prior reconciliation Source System balance is presumed to be zero: – If the current period's Source System Balance is also zero, then the reconciliation will be auto-reconciled. – If the current period's Source System balance is not zero, then the reconciliation will not auto reconcile.	The reconciliation status is set to Closed.

Table 8-1 (Cont.) Required Conditions for Auto Reconciliation of Account Analysis and Account Analysis with Transaction Matching

Auto Reconciliation Method	Required Conditions	If Auto Reconciliation Succeeds
No activity	• If a previous reconciliation exists, the following conditions must be met: – The prior reconciliation status must be Complete. – The prior reconciliation Source System balance must be the same as the current reconciliation Source System balance. – The prior reconciliation format must be the same as the current reconciliation format Specifically: * The Format ID used to create both the current and prior format instances must be the same. * The current format instance must not contain mandatory attributes that do not exist in the prior format instance. • If a previous reconciliation does not exist, then the prior reconciliation Source System balance is presumed to be zero: – If the current period's Source System Balance is also zero, then the reconciliation will be auto-reconciled. – If the current period's Source System balance is not zero, then the reconciliation will not auto reconcile.	• The reconciliation status is set to Closed • Explained Balance and Source System Adjustment transactions are copied from the prior reconciliation to the current reconciliation: – File Attachments and Comments associated with the transaction are copied – Age is recalculated by subtracting the Open Date from the new period end date (the period the transaction is being copied into) – The Aging Violation for that transaction is set if the age is greater than the Authorized age – The Aging Violation flag for the Reconciliation is set if one or more transactions of each type have an aging violation • Comments and Attachments that exist at the Reconciliation level are copied

Table 8-1 (Cont.) Required Conditions for Auto Reconciliation of Account Analysis and Account Analysis with Transaction Matching

Auto Reconciliation Method	Required Conditions	If Auto Reconciliation Succeeds
Balance is within range	• A prior reconciliation must exist and the status of this reconciliation must be Complete. • The prior reconciliation format must be the same as the current reconciliation format. Specifically, the format ID used to create both the current and prior format instances must be the same, and the current format instance must not contain mandatory attributes that do not exist in the prior format instance. • The Source System Balance is more than or equal to the **Balance Range (Low).** • The Source System Balance is less than or equal to the **Balance Range (High).**	• Explained Balance and Source System Adjustment transactions are copied from the prior reconciliation to the current reconciliation: – File Attachments and Comments associated with the transaction are copied – Age is recalculated by subtracting the Open Date from the new period end date (the period the transaction is being copied into) – The Aging Violation for that transaction is set if the age is greater than the Authorized age – The Aging Violation flag for the Reconciliation is set if one or more transactions of each type have an aging violation • The reconciliation status is set to Closed • Comments and Attachments that exist at the Reconciliation level are copied

Table 8-1 (Cont.) Required Conditions for Auto Reconciliation of Account Analysis and Account Analysis with Transaction Matching

Auto Reconciliation Method	Required Conditions	If Auto Reconciliation Succeeds
Balance is within range and no activity	• A prior reconciliation must exist and the status of this reconciliation must be Complete. • The prior reconciliation format must be the same as the current reconciliation format. Specifically, the format ID used to create both the current and prior format instances must be the same, and the current format instance must not contain mandatory attributes that do not exist in the prior format instance. • Source System Balance is greater than or equal to the **Balance Range (Low).** • The Source System Balance is less than or equal to **Balance Range (High).** • Source System Balance – Prior Reconciliation Source System Balance = 0; The range can be a negative number. **Note:** This last condition also means that a prior reconciliation source system balance must exist.	• The reconciliation status is set to Closed • Explained Balance and Source System Adjustment transactions are copied from the prior reconciliation to the current reconciliation: – File Attachments and Comments associated with the transaction are copied – Age is recalculated by subtracting the Open Date from the new period end date (the period the transaction is being copied into) – The Aging Violation for that transaction is set if the age is greater than the Authorized age – The Aging Violation flag for the Reconciliation is set if one or more transactions of each type have an aging violation • Comments and Attachments that exist at the Reconciliation level are copied

Balance Comparison or Balance Comparison with Transaction Matching

This section describes the conditions required for Balance Comparison or Balance Comparison with Transaction Matching auto reconciliation methods and what is done when the conditions are met.

Table 8-2 Required Conditions for Auto Reconciliation of Balance Comparison or Balance Comparison with Transaction Matching

Auto Reconciliation Method	Required Conditions	If Auto Reconciliation Succeeds
Balance is zero	• If a balance comparison format is assigned to the profile, then the profile can be enabled for the "Account has a 0 Balance" auto-reconciliation method. • If the source system balance associated with the reconciliation for a given period is 0, then the reconciliation is prepared and reviewed automatically for that period. The subsystem balance is not considered. • If the balance is not 0, then the reconciliation must be manually prepared and reviewed. **Note:** For Balance Comparison "Balance is zero" the Sub-system balance is not considered. If you would like it considered, you can use a custom rule to evaluate both source and subsystem balances. Alternatively, you can also consider using the "Balance match" condition since that will compare source and subsystem balances to ensure they are equal, or within your desired threshold.	The reconciliation status is set to Closed
Balance is zero and no activity	For Balance Comparison format with No Activity, you can use a custom rule to obtain the correct results. For example, add a custom rule for Auto Submit Reconciliation with filter criteria: Difference (Reporting) equals 0 USD and Period Activity (Reporting) equals 0 USD.	
No activity	For Balance Comparison format with No Activity, you can use a custom rule to obtain the correct results. For example, add a custom rule for Auto Submit Reconciliation with filter criteria.	

Table 8-2 (Cont.) Required Conditions for Auto Reconciliation of Balance Comparison or Balance Comparison with Transaction Matching

Auto Reconciliation Method	Required Conditions	If Auto Reconciliation Succeeds
Balance match (% Tolerance)	If a balance comparison format is assigned to the profile, then the profile can be enabled for the Balance Comparison where the Balances Match (% Tolerance) auto-reconciliation method. If this method is enabled, then a threshold value can be applied. The threshold percentage is multiplied against the source system balance to calculate a threshold value. • If the difference between the source system balance and the subsystem balance is less than the threshold value in a period, then the reconciliation is prepared and reviewed automatically for that period. • If the difference is greater than the threshold value, then the reconciliation must be manually prepared and reviewed. Enter the **Match Balance Threshold (Percent)** as a whole number between 1 and 100.	The reconciliation status is set to Closed
Balances match (# tolerance):	The difference between the Source System Balance and the Subsystem Balance is less than or equal to a tolerance value; the tolerance value is specified on the profile. Enter the **Match Balance Threshold (Number)** tolerance amount.	The reconciliation status is set to Closed

Reason Codes for Auto-Reconciliation Failures

The following table lists the reasons why certain accounts did not auto-reconcile:

Table 8-3 Reasons Why Certain Accounts Did Not Auto-Reconcile

Reason Code	Description	Applies to
Activity not zero	The activity of the reconciliation is not zero for the enabled currency buckets	Applies to reconciliations configured with the following auto reconciliation methods: • No activity • Balance is zero and no activity
Balance not zero	The balance of the reconciliation is not zero for the enabled currency buckets	Applies to reconciliations configured with the following auto reconciliation methods: • Balance is zero • Balance is zero and no activity
Balance not within range	The balance of the account is not within the authorized range for the enabled currency buckets	Applies to reconciliations configured with the following auto reconciliation methods • Balance is within range • Balance is within range and no activity
Match tolerance exceeded	The difference between the source and subsystem balances exceeds the tolerance level authorized for the enabled currency buckets	Applies to reconciliations configured with the following auto reconciliation methods: • Balance match (% tolerance) • Balance match (# tolerance)
No prior reconciliation	There is no prior reconciliation in existence	Applies to reconciliations configured with the following auto reconciliation methods: • Balance is zero and no activity • Balance is within range and no activity
Prior reconciliation is not closed	A prior reconciliation exists for the account, but the status of the prior reconciliation is not closed	Applies to reconciliations configured with the following auto reconciliation methods: • Balance is zero and no activity • Balance is within range and no activity
Source system balance does not exist	No source system balances exist for the account/period	Applies to all auto reconciliation methods
Source system balance does not exist for all enabled currency buckets	Source system balances are missing for some of the reconciliation's enabled currency buckets	Applies to all auto reconciliation methods
Subsystem balance does not exist	No subsystem balances exist for the account/period	Applies to reconciliations configured with the following auto reconciliation methods: • Balance match (% tolerance) • Balance match (# tolerance)

Table 8-3 (Cont.) Reasons Why Certain Accounts Did Not Auto-Reconcile

Reason Code	Description	Applies to
Subsystem balance does not exist for all enabled currency buckets	Subsystem balances are missing for some of the reconciliation's enabled currency buckets	Applies to reconciliations configured with the following auto reconciliation methods: • Balance match (% tolerance) • Balance match (# tolerance)
Transactions exist in the reconciliation	Transactions have been added to the reconciliation	Applies to all auto reconciliation methods
Enter Balances Manually is checked	If the reconciliation has the option to either "Enter Source System Balances Manually" or "Enter Subsystem Balances Manually", then it is not eligible for auto reconciliation.	Applies to all auto reconciliation methods

Creating Profiles

To create profiles for **Account Analysis** or **Balance Comparison** methods:

1. From Home, select **Application**, and then **Profiles**.
2. Click **New** (**+**) to display the **New Profile** dialog.
3. In the **Properties** tab, specify the profile properties, as described in Specifying Profile Properties.
4. (Optional) In the **Instructions** tab, provide instructions on how to use the profile, as described in Creating Profile Instructions.
5. In the **Workflow** tab, provide preparer and reviewer assignments, as described in Assigning Profile Workflows.
6. In the **Currencies** tab, set up currencies for the profile, as described in Specifying Profile Currencies.
7. (Optional) In the **Access** tab, specify the users who are authorized as commentators or viewers of reconciliations related to the profile, as described in Specifying Profile Access.
8. (Optional) In the **Attributes** tab, assign attributes to the profile, as described in Specifying Profile Attributes.
9. (Optional) In the **Rules** tab, define rules for the profile, as described in Working With Profile Rules.

   For both format rules and profile rules, group attributes and balance attributes can also be included in rule conditions.
10. In the **History** tab, view the history of changes made to the profile, as described in Viewing Profile History.
11. Click **Save and Close** to create the profile and then close the **New Profile** dialog.

Specifying Profile Properties

To specify the properties of a profile:

1. Create a new profile.

2. In the **New Profile** dialog, click the **Properties** tab.
3. In **Account ID**, enter a unique ID for the profile. The combination of segment values must be unique across profiles. The number of segments available is defined in system settings.
4. In **Profile Name**, enter a name for the new profile. The name is a second way to identify the profile. Names do not need to be unique.

   As a best practice, Oracle suggests using the name associated with the natural account segment and some other descriptor that identifies ownership of or responsibility for the profile.
5. In **Description**, add an optional description for the profile.
6. **Active** is selected by default for profiles created manually or imported. Unselect this option if you do not want this profile copied to a period.

   The Active flag will be automatically switched from inactive to active if an updated balance is loaded to an inactive profile. If the balance does not change, then the profile will remain inactive.
7. Select **Summary Profile** to create a summary profile.

   The **Auto-Reconciliation** section is removed, and you can't edit balances.
8. For summary profiles, **Included Accounts** enables administrators and power users to assign profiles to summary profiles. Non-summary profiles can be selected for addition to a summary profile.
9. In **Organizational Unit**, select the organizational unit that must be associated with this profile.

   Represents a hierarchical entity-type structure that you can use to model your organization. Define a separate organizational unit for each entity for which separate reporting is required, or for entities that require different configurations for any of the following: holidays, work days, or viewer or commentator assignments. Organizational Units are defined in system settings.
10. In **Format**, select the format that must be associated with this profile.

    Method displays the method associated with the format assigned to the profile. Formats, created by Service Administrators, determine the method of reconciliation and the information that the Preparer must provide.
11. Use **Process** to associate the profile with a specific reconciliation process. For example, the balance sheet reconciliation process or the local GAAP reconciliation process. Processes are defined in system settings.
12. In **Risk Rating**, select the risk rating to be associated with the profile.

    Risk ratings are defined in system settings, for example, **High**, **Low**, or **Medium**.
13. In **Account Type**, select the type of account to associate with the profile.

    Risk Rating and Account Type are attributes that facilitate reporting – the values are defined by administrators and can be used on dashboards and list views to filter reconciliations.

    To edit a selected value, click the Clear icon to clear the current setting and then use Search to find and select the account type that must be set.
14. **Normal Balance**—Identifies whether the profile is expected to contain a debit balance, a credit balance, or a debit or a credit balance. If the balance is different from the normal balance, then a warning is set on the reconciliation.
15. In **Auto Reconciliation Method**, select a method that describes the conditions that must be true for reconciliations configured with the auto-reconciliation method to qualify for auto-

reconciliation. See About Auto Reconciliation Methods for details about the conditions required for each auto reconciliation method.

If any conditions are false, then auto-reconciliation fails, and the reconciliation status is set to Open so that the Preparer can manually prepare the reconciliation. For more information about auto-reconciliation failures, see Reason Codes for Auto-Reconciliation Failures.

16. In the **Maximum Age Limits** section, enter the number of days for the maximum age of reconciliation transactions:
    - **Reconciliation Adjustments** (applies to Account Analysis and Balance Comparison methods)
    - **Balance Explanations** (applies to Account Analysis method)

> **Note**
>
> **Aging Violation:** If a value is provided and the reconciliation contains transactions where the age of the items (calculated as Period End Date minus Transaction Open Date) is greater than the value provided, then the transactions are flagged as aging violations, and an aging violation warning is set on the reconciliation.

17. **Manually Enter Balances** determine whether the source system or subsystem balances can be entered manually by the preparer on the reconciliation. Select these options only if balances are not being imported for the profile. Select one or both:
    - **Enter Source System Balances Manually** (applies to Account Analysis and Balance Comparison methods)
    - **Enter Subsystem Balances Manually** (applies to Balance Comparison method)

Creating Profile Instructions

The **Instructions** tab inherits instructions configured on the format assigned to the profile, eliminating the need to provide instructions for each profile.

Some profiles, however, do require extra instruction. Add the instructions as paragraphs of text, attached files, URLs, or links to files in document repositories.

To specify profile instructions:

1. From Home, click **Application**, and then **Profiles**.
2. In **New Format** or **Edit Format**, select the **Instructions** tab.
3. In **Instructions**, enter the instructions as paragraphs of text, attached files, URLs, or links to files in document repositories.
4. **Optional:** Under **References**, click **Add** (**+**) .
5. On the **Add Reference** dialog box, select the **Type** of reference:
    - **Local File**

      Click **Browse** to select and attach the file, enter a **Name**, and then click **OK.** The file size is specified in System Attributes.
    - **URL**

      Enter a Name for the URL, and then enter the URL, for example: Oracle, http://www.oracle.com, and then click **OK**.

> **Tip**
>
> To delete a reference, select it, and then click **Delete.**

Assigning Profile Workflows

The **Workflow** tab contains the preparer and reviewer assignments.

Only users authorized for preparer and reviewer roles can be assigned these functions on a profile. The system prevents the same user from being assigned preparer and reviewer roles on the same profile, or the same user being assigned multiple reviewer roles.

Sometimes you may need to have levels of preparation or review for a reconciliation. An example is if members of an approval team might all need to approve a reconciliation but the order in which they approve does not matter. Now you can assign the profile workflow to all members of a team by using the **Require Action By** field **All Preparers** or **All Reviewers**.

See Specifying Profile Access for information about assigning commentators or viewers for this profile.

Enter this information for the preparer:

- **User Name**—The user names available for selection as preparer are only those users authorized with the preparer role.
- **Backup User**—If you assigned a user for the primary preparer, you can assign a backup user authorized as a preparer:

> **Note**
>
> In Reconciliation Compliance, a backup preparer can prepare the reconciliation only when the primary's status is unavailable. In Transaction Matching, the backup preparer can act like the primary preparer and has access to the Transaction Matching tasks as if they are the primary preparer.

To assign a profile workflow:

1. From Home, select **Application**, and then **Profiles**.
2. Click **New** (**+**) to create a **New Profile**, and then click the **Workflow** tab.
3. Under **Preparer**, select the users who are to be assigned as the Preparer, and the Backup User.
    a. Click **Search** to select the user for the role. The **First Name** and **Last Name** are populated.
    b. Click **Details** to set the user's **Status** to Available, then click **Close**.
    c. **Optional:** Click **Advanced** to enter a User ID, Email address or Description for the user.
    d. Click **OK** to save the assigned Preparer or Backup User.
4. If you assigned a team as **Preparer**, you will see a **Require Action By** field and the default is **Any Preparer**. You can change that to **All Preparers** if you need all the members of a team to be involved in preparation.

5. Select a **Frequency**, if a profile contains a frequency that matches a frequency associated with a period, then the reconciliation is created in the period when Create Reconciliation job is run. Frequency examples: Annually, Quarterly, Quarterly-US, Quarterly-Europe, and Monthly.
   Frequency assigned to the Reviewer role can be the same, or less frequent, than the Frequency assigned to a Preparer. For example, you can assign Monthly to Preparer and Quarterly to Reviewer, but you cannot assign Quarterly to Preparer and Monthly to Reviewer.
6. Select a **Start Day Offset** to determine the start date of the reconciliation. This negative or positive number determines the number of days before (if negative) or after (if positive) the period close date the reconciliation is authorized to begin.
7. Select **Schedule From** to determine what day the Start Day Offset relates to.(for example, the Close date or End Date)
8. Select the **Duration**. This is added to the start date to calculate the preparer due date.
9. Under **Reviewers**, click **New** (**+**) to assign reviewers. The **Level** is added when you create each Reviewer. Up to 10 levels of review are supported.
   a. Under **User Name**, start with the reviewer with the highest frequency., and click the **Select a Reviewer** icon to assign the reviewer. The user names available for selection as reviewers are only those users authorized with the reviewer role.
   b. Under **Backup User**, to assign a backup reviewer, or team, click **Select a Reviewer**. If you selected a user for the primary reviewer, you can select a backup reviewer. In the **Backup User** column, click **Select a Backup User** and select a backup user.
10. If you assigned a team as **Reviewers**, you will see a **Require Action By** field and the default is **Any Reviewer**. You can change that to **All Reviewers** if you need all the members of a team to review and sign off.
11. Under **Frequency**, select the frequency of the reconciliation review. Reconciliations can be prepared monthly and reviewed quarterly.
12. Under **Duration**, set the reviewer due date. The due date is calculated as preparer start date, plus the preparer duration, plus the reviewer duration. There is no start day offset for reviewers, because the reviewer start date is determined by when the preparer releases the reconciliation for review. As soon as this occurs, the reviewer may begin review.
13. Click **Save**.

After a profile is created, if users assigned as Preparers or Reviewers are either removed from the service or have the required roles removed, then the profile is marked as invalid after the System Maintenance (non-blocking) job is run.

> **Note**
>
> The Service Administrator can assign a team that contains the same user in the Preparer team and Reviewer team. However, during the process of approving a reconciliation, that user can perform either the preparation or approval, not both.

Specifying Profile Currencies

If your company uses one currency configuration, then the currency tab is hidden. Summary reconciliations are always prepared in a single currency. Changes are required to the Currency

tab to enable configuration for a single currency bucket. For summary reconciliations, select the Rate Type, and them select the single currency bucket. The functional currency bucket is the default.

Determines the number of currency buckets enabled for the reconciliation and the behavior of foreign exchange translation. Enter this information:

To set up profile currency:

1. From Home, select **Application**, and then **Profiles**.
2. Click **New** (**+**) to create a **New Profile**.
3. Click the **Currency** tab.
4. Select **Historical Rate** for profiles that contain accounts not subject to revaluation in the source system:
   - If **Historical Rate** is selected, the preparer must specify the value in all currency buckets enabled on the reconciliation when entering transactions into the reconciliation (for example, balance explanations or adjustments).
   - If **Historical Rate** is cleared, the preparer must enter a value into the lowest -level currency bucket (for example, the entered currency bucket), and the system calculates the equivalent value in the other currency buckets using exchange rates maintained.
5. Select **Rate Type**. You don't need to select a rate type if only one currency bucket is selected for your profile.

   The rate type selection applies only if the historical rate is cleared. When Foreign Currency Rates (FX rates) are loaded, they are associated with a rate type. The rate type setting on the profile determines which series of FX rates are used to perform currency conversion calculations for transactions of reconciliations pertaining to the profile.
6. For each bucket **Label** (for example, Entered, Functional, or Reporting), enable it and select the default currency.

   The currency bucket table determines which currency buckets are enabled for the profile. Currency buckets are configured in system settings, and only those buckets enabled at a system level can be enabled for individual profiles. If a currency bucket is enabled, then you can assign a default currency to the profile, by accepting the system-level default for that bucket or by assigning a profile-specific default value.

   Setting a default currency is important and impacts the following:
   - When one or more of the currency buckets has **Balance Attributes with Default Currency** selected, the system will automatically convert all other currency amounts into this default amount in the **Default Currency** column, which can then be used in list views, pivot views, and custom dashboards.
   - When the Preparer is entering a transaction on a reconciliation, the default currency is pre-selected.
   - If you load balances in a currency that is not the default currency for that bucket, the reconciliation shows blank values for this bucket. To view the balances in the reconciliation, you can change the default currency to the currency in which balances were loaded.

> **Note**
>
> When using **Balance Attributes with Default Currency**, Period Activity (Default Currency) is calculated by subtracting the Prior Period Balance with prior period exchange rates from the Source System Balance with current period exchange rates.

Specifying Profile Access

The **Access** tab determines which users are authorized as commentators or viewers of reconciliations related to the profile.

Commentators can view the reconciliations and add comments to the reconciliation or to transactions of the reconciliation. Viewers have read-only access.

To select a user or team as Commentators or Viewers:

1. From Home, select **Application**, and then **Profiles**.
2. Click **New** (**+**) to create a **New Profile**.
3. Select the **Access** tab.
4. Click **Add** (**+**) .
5. In **Select Viewers** or **Select Commentators**, click **Search Users** .
6. Select **Users** or **Teams**, and then enter the name or click **Search**.
7. Under **Search Results**, select the Commentator or Viewer Users or Teams, and add them to the **Available** column.

After a profile is created, if users who are Commentators or Viewers are either removed from the service or had the required roles removed, then the profile is marked as invalid after the System Maintenance (non-blocking) job is run.

Specifying Profile Attributes

The **Attributes** tab enables administrators to assign attributes to profiles and provide values for the attributes. Attributes are displayed in **Reconciliation**, on the Summary tab, under Attributes.

The **Locked** column shows that the attribute is inherited from the Format.

For details on how to create attributes, see Creating Attributes.

To add a profile attribute:

1. From Home, select **Application**, and then **Profiles**.
2. Click **New** (**+**) to create a **New Profile**.
3. Click the **Attributes** tab.
4. Click **Add** (**+**) to display the **Add Attribute Assignment**.
5. Under **Attribute**, select an attribute from the list of defined attributes. Depending on the attribute selection, the dialog box options are displayed.

> **Note**
>
> When adding attributes to a **Variance Analysis** profile, note the following on the **Set Attribute** dialog:
>
> - **Enter Source System Balances** should be used to specify **Enter Current Period Balances**
> - **Enter Subsystem Balances** should be used to specify **Enter Variable Period Balances**.

6. Under **Type**, this non-editable field is populated by depending on the attribute selection.
7. Under **Value**, select a value associated with the type of attribute, for example: a numeric value for Formatted Number attribute, a List for List attribute, multiple lines of displayed text without scrolling for Multi-Line Text, a name of a person for a User attribute, or Yes or No for the Yes/No attribute.
8. Under **Access**, select the Role and Access for the selected attribute. All roles have view access unless otherwise specified below.
   To add access for each of the Text Box and Attachments tabs:
   a. Click **Add**.
   b. Select a role.
   c. Select one of the Role access types:
      - **Text Box**:
        - **Do Not Display**—Does not see this attribute on the Reconciliation List or in any of the dashboards, list views, or reports.
        - **Allow Edits**—Has the ability to add, change, and remove values for the attribute, but subject to the editability rules.
        - **Required**—Requires a value for the attribute. The Required option is available for Preparers and Reviewers. Until a value is provided, Preparers are prevented from submitting, and Approvers are prevented from approving.
      - The **Multi-Line Text Box** has two access tabs:
        - Text Box tab:
          * **Do Not Display**—Does not see this attribute on the Reconciliation List or in any of the dashboards, list views, or reports.
          * **Allow Edits**— Has the ability to add, change, and remove values for the attribute, but subject to the editability rules.
          * **Required**—Requires a value for the attribute. The Required option is available for Preparers and Reviewers. Until a value is provided, Preparers are prevented from submitting, and Approvers are prevented from approving.
        - Attachments tab:
          * **Do Not Display**—Does not see this attribute on the Reconciliation or in any of the dashboards, list views, or reports.
          * **Add & Remove—**Has the ability to add files and remove files that they themselves added, but subject to the editability rules.
          * **Required**—Requires the Preparer or Reviewer to attach at least one file. The Required option is only available for Preparers and Reviewers. Until a

file is attached, Preparers are prevented from submitting, and Approvers are prevented from approving.

* **Add & Remove All**—Can add their own files, remove their own files, and also remove files added by other roles.

The **Allows Edits** option is disabled for predicted attributes.

9. Select **Copy Reconciliation Changes to Profile** if you want to push updates made to the attribute within a reconciliation to the profile. This ensures that the profile is updated to align with the reconciliation so that, when the reconciliation is created in the next period, it will use the same value. This update occurs irrespective of how the attribute is updated - manually, bulk update, or by rule execution.
10. Click **OK**.

Working With Profile Rules

Profile rules affect the behavior of reconciliations. These rules enable users to assign rules directly to Profiles/Reconciliations. These rules apply to the reconciliations for which the rules were configured.

Rules only evaluate transaction conditions if the accompanying reconciliations already exist.

Rules assigned to the profile's format appears in read-only format.

- **Auto Approve Reconciliation**—Automatically completes specified approvals only if specified conditions have been met.
  Examples of conditions that could apply to this rule include:
  - If the balance is outside a specified range
  - If the balance fluctuates more than a specified amount or percentage from some prior period
  - If the prior reconciliation has transactions or other conditions meeting specified criteria
  - If attributes have specified values (including calculated attributes)

  When conditions have been satisfied, the rule causes the specified reviewer levels to be marked as complete, thus progressing workflow to the next review level, or to Closed if no additional review levels exist.

  This rule runs when the reconciliation status changes to Open with Reviewer.

  This rule can be rerun.
- **Auto Submit Reconciliation**—Automatically submits a reconciliation if specified conditions are met.

  Examples of conditions that could apply to this rule:
  - The balance is outside a specified range.
  - The balance fluctuates more than a specified amount or percentage from some prior period.
  - The prior reconciliation has transactions or other conditions meeting specified criteria.
  - Attributes have specified values (including calculated attributes)

  When conditions are satisfied, the preparer level is marked complete, and the workflow progresses to the review level or the workflow is closed if no additional review levels exist.

> **Note**
>
> This rule is not the same as the existing auto-reconciliation functions, which always advance the workflow status to Closed. The Auto Submit rule is an optional way for users to automate preparation while still invoking a manual review.

This rule runs when the reconciliation status changes from Pending to Open with Preparer.

This rule is also run if a reconciliation is Open with Preparer and has transactions that are either carried forward from a prior period (copy forward manually or copy transactions from prior period rules) or loaded through Data Integration. Reconciliations that have one or more transactions added by the user for that period will continue to be ineligible for Auto Submit Reconciliation rule, unless the rule is run manually.

This rule can be rerun.

- **Prevent Reconciliation Approval**—This rule prevents approval of a reconciliation based on attribute values, or other characteristics. This rule runs when the Approver clicks **Approve**.
- **Prevent Reconciliation Submission**—This rule prevents submission of a reconciliation based on attribute values, or other characteristics. This rule runs when the Preparer clicks **Submit**.
- **Require Reconciliation Attachment—**This rule prevents submission of a reconciliation if an attachment was not added to the main attachments section of the reconciliation; conditions may be established based on attribute values, or other characteristics that specify when the attachment is required. This rule runs when the Preparer clicks **Submit**.
- **Prevent Reconciliation Rejection**—This rule prevents rejection by a reviewer under certain conditions. This rules runs when a Reviewer click **Reject**.
- **Send Email on Update**—This rule sends emails when a reconciliation is saved based on certain conditions being met.

> **Note**
>
> This rule is designed to be run when a user takes an action on a reconciliation such as setting attributes, not for actions on the reconciliation that happen outside the **Actions** dialog such as resetting dates.

Columns:

Locked
Displays Locked if the Rule was inherited from the Format.

Order
The successful execution of a rule may prevent a later rule from being invoked. For example, if a customer assigns an auto reconciliation rule to a reconciliation, and the auto reconciliation succeeds, then a rule tied to the Submit function would never be invoked. See Order of Precedence for Auto Reconciliation and Rules.

Set Attribute Value
Sets an attribute value to a specified value, before a profile is copied to the period, established on the rule definition. This rule enables rules to be configured for standard attributes. This rule can be rerun.

Example: Set the Preparer Duration based on the period frequency. The rule configuration supports when to set the value: "Before profile is copied to the period".

To work with profile rules:

1. From Home, click **Application**, and then click **Profiles**.
2. On **Profiles**, double-click a profile.
3. Select the **Rules** tab. You can view the following information:
   - Order—The order of precedence. See Order of Precedence for Auto Reconciliation and Rules.
   - Rule—Name of Rule
   - Conditions—The choice of what conditions must exist before running the rule

   Rules that were defined for the format on which this profile is based.
4. To create, edit, duplicate, delete, or reorder a rule, on the Rules tab, click the appropriate button and, if necessary, update:

   In the Properties tab:

   - **Rule**—Select a rule.
   - **Description**—Optional. Explain why you configured the rule and how the rule should be used.
   - **Message**(on sum rules):
     - **Message to Preparer**—Define an optional message to preparer on the prevent reconciliation submission rule and require reconciliation attachment rules.
     - **Message to Reviewer**—Define an optional message to reviewer on the prevent reconciliation approval rule.
   - **Reviewer Level**—Select **All Levels** to apply the rule to all reviewer levels or select specific reviewer levels individually. You must select at least one reviewer level.

   In the Filter tab:

   - Select **Create Filter** and populate the conditions section or select **Use Saved Filter**, and then select a filter. The filter selected and configured for the rule determines the conditions that trigger the rule to apply.
   - Conditions—
     - If **Use Saved Filter** is selected, the Conditions section displays a read-only version of the conditions associated with the saved filter.
     - If **Create Filter** is selected, the Condition section is enabled.

       Conjunction, Source, Attribute, Operator, and Value behave as they do for the existing advanced filter feature. When creating filters, you can use these attributes:

       * Any Reconciliation or Transaction attribute, including calculated attributes that are classified as Reconciliation and Transaction attributes
       * Period Frequency

   (For Set Attribute Rules only): In the **Attributes** tab, click **New** to create a rule. See Assigning Attribute Values Using Global Rules.

Example: Defining Profile Rules

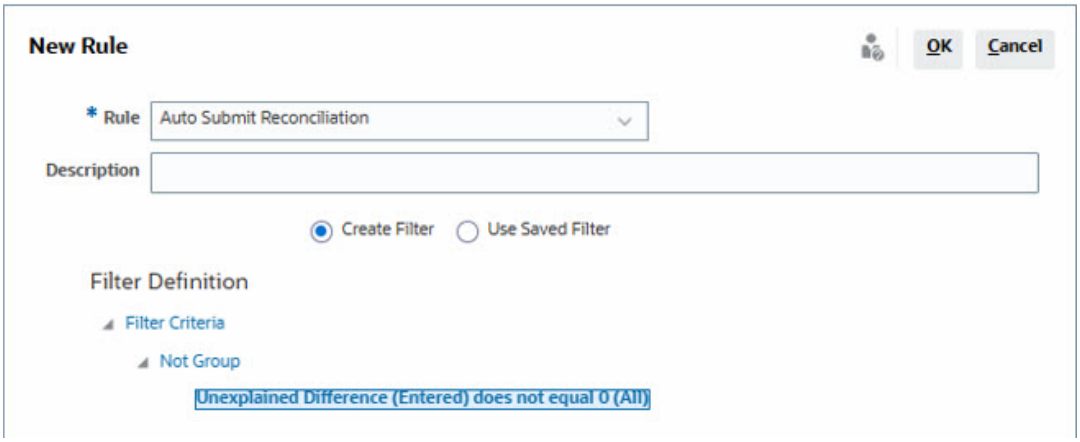
You want to create a profile rule that automatically submits a reconciliation if the unexplained difference for all currencies is zero.

Note that when filtering against an attribute with a source type of Balance, and with multiple currencies, a filter condition returns True if *any* of the currencies match the filter condition. For example, a filter with **Attribute** set to **Unexplained Difference (Entered)** and **Currency** set to **All**, will return True if the reconciliation has unexplained difference of 0 USD, 0 GBP, and 100 EUR. This is because the unexplained difference is zero for at least one currency.

To define a filter that returns True only when All currencies are zero, the filter must find when there are *no* cases where *any* currency is *not* zero. You can achieve this by using the Not operator on a condition group, with a child condition that is Unexplained difference is not zero for All currencies. If any currency is not zero, the child condition will evaluate to True, but the parent group condition with the Not operator will change that value to false. Likewise, if all currencies are zero, then the child condition will evaluate to false, but the parent group condition will evaluate to true.

To define a profile rule that will automatically submit a reconciliation only if the unexplained difference for all currencies is zero:

1. In the **Rules** tab of the profile, click Add to create a new rule.
2. Under **Rule**, select **Auto Submit Reconciliation**.
3. In the **Filter Definition** section, click **Create Condition Group**.
4. In **Conjunction**, select **Not**.
5. Click **Create Condition**.
6. In **Source**, select **Balance**.
7. In **Attribute**, select **Unexplained Difference (Entered)**.
8. In **Operator**, select **Does Not Equal**.
9. In **Value**, enter 0.
10. In **Currency**, select **All**.



Viewing Profile History

To view profile history:

1. From Home, select **Application**, and then **Profiles**.
2. Double-click the **Account ID** to open the Edit Profile, and then click the **History** tab.
3. Review the details on the **History** tab, which logs changes to the Profile, including changes in workflow assignments, changes in format configuration, risk rating, and profile attributes.

Creating Profiles for Variance Analysis

To create profiles for variance analysis:

1. From Home, select **Application**, and then **Profiles**.
2. Click**New** (**+**) to create a **New Profile**.
3. On the **Properties** tab, enter:
   - **Account ID**—The combination of segment values must be unique across profiles. The number of segments available is defined in system settings.
   - **Name**—A second way to identify the profile. Names do not need to be unique. As a best practice, Oracle suggests using the name associated with the natural account segment and some other descriptor that identifies ownership of or responsibility for the profile.
   - **Description**
   - **Active**—Selected by default for profiles manually entered or imported. Clear this check box if you do not want this profile copied to a period.
   - **Summary Profile**—If selected, then the Profile is a Summary Profile.
   - **Organizational Unit** — Represents a hierarchical entity-type structure that you can use to model your organization. Define a separate organizational unit for each entity for which separate reporting is required, or for entities that require different configurations for any of the following: holidays, work days, or viewer or commentator assignments. Organizational Units are defined in system settings.
   - **Format**—Associates the profile with a format created by an administrator, determining the method of reconciliation and the information that the preparer must provide.
   - **Method**—The method associated with the format assigned to the profile.
   - **Process**—Associates the profile with a specific reconciliation process, for example, the balance sheet reconciliation process or the local GAAP reconciliation process. Processes are defined in system settings.
   - **Risk Rating**—Associates the profile with a risk rating. Risk ratings are defined in system settings, for example, **High**, **Low**, or **Medium**.
   - **Account Type**—Associates the profile with an account type. Risk Rating and Account Type are attributes that facilitate reporting – the values are defined by administrators and can be used on dashboards and list views to filter reconciliations.
   - **Normal Balance**—Identifies whether the profile is expected to contain a debit balance, a credit balance, or a debit or a credit balance. If the balance is different from the normal balance, then a warning is set on the reconciliation.

- **Manually Enter Balances**—Determine whether the preparer enters the current period balances and/or the variance period balances. Check these boxes only if balances are not being imported for the profile. Select one or both:
  - **Enter current period balances**
  - **Enter variance period balances**

Adding Accounts

You can use the Add Accounts dialog to assign accounts to a summary profile.

To assign accounts to summary profiles:

1. From Home, click **Application**, and then click **Profiles**.
2. Either create a new profile and then select **Summary Profile**, or select a summary profile, and then **Edit**.
3. Select and add the accounts to **Selected Accounts**.
4. Save as one of the following:
   - **Save as Filter**—Evaluates the filter at the time the summary profile is copied to the period and at that point the list of accounts is saved and stored.
   - **Save as List**—You select accounts by going to **Available Accounts**, select the accounts for the summary profile, and then add them to under the **Selected Accounts**.
5. When finished, click **Save and Close**.

Using Excel CSV Files for Profiles

Administrators and Power Users can configure profiles in Excel and then import them.

To import a profile:

1. From Home, click **Application**, and then click **Profiles**.
2. Export a profile list to create an import template that creates a spreadsheet with the column headings.
3. Copy and paste the profile information into it.
4. Import the file. See Importing Profiles.

Importing Profiles

Use this procedure to import profiles into **Account Reconciliation**. You can only import a maximum of 300,000 profiles at one time in a file.

If you need to import more than 300,000 profiles, you need to break the profiles into multiple file imports to keep under the maximum.

To import profiles:

1. From Home, click **Applications**, and then **Profiles**.
2. On **Profiles**, select **Actions**, and then **Import**.
3. In the **Import Profiles** dialog, enter:

a. In **File**, enter or click **Browse** to locate the file you want to import.

b. In **File Type** , select one:

- **Profiles**
- **Summary Reconciliation Children**

> **Note**
>
> You can use the **Export Profiles** option to first export Summary Reconciliation Children before using the import. You can also use **Export Profiles** option first if you want to make revisions to profile attributes. First export the file, then make your revisions, and use **Import** to re-import the revised profiles. See Exporting Profiles.

c. In **Import Type**, select one:

- **Replace**—Replaces the definition of a profile with the definition in the import file. This option replaces the profile detail with the detail that is in the file that you are importing.
- **Update**—Updates partial information for profiles. Account Segment values are required. For example, in the import file, you changed profile instructions or reassigned reviewers. You also made the same change to a large number of profiles, for example, adding a new attribute to 100 of 400 profiles. This option is not a full replacement of the profile details; only details for the attributes specified in the file are updated. For example, if the import file has only a column for a profiles instructions, then the preparer, reviewers, and other attributes are not affected.

> **Note**
>
> If you import profiles containing an organizational unit, you must specify the Organizational Unit ID in the import file.

d. In **Date Format**, select a date format from the drop down list of allowed date formats. Date formats are not translated. By default, the date format is set to the locale date format of the exported file location.

For example:

- MM/dd/yyyy
- dd/MM/yyyy
- dd-MMM-yy
- MMM d, yyyy

e. Select a file delimiter for the import file (for example, comma or tab). Or, choose **Other** to specify any single character as the delimiter.

f. Click **Import**. An import summary status is displayed:

- If the import is successful, **Import Success** displays the number of profiles imported.
- If the import generates errors, the profiles with errors are not imported, and **Import Errors** identifies errors.

4. Click **OK** to return to the Profile List, or click **Reset** to load another file. With either selection, profiles that were imported successfully are saved and the errored profiles are discarded.

> **Note**
>
> When importing profiles, the default currency cannot be changed for currency buckets that are not enabled.

Exporting Profiles

Exporting Profiles to a File

To export profiles:

1. From **Home**, click **Applications**, and then **Profiles**.
2. On**Profiles**, select **Actions**, and then **Export**.
   Optional: Filter the Profile List to include only the profiles that you want to export.
3. In **Export Profiles**, select:
   - **Rows**

     Select one:

     – **All profiles** to export all profiles that meet the current filter criteria

     – **Selected profiles** to export the selected profiles

     > **Note**
     >
     > You can adjust the maximum number of rows to display by using the Maximum Number of Items displayed in a List setting. See Setting Governor Limits in Account Reconciliation for detailed instructions.

   - **Format**

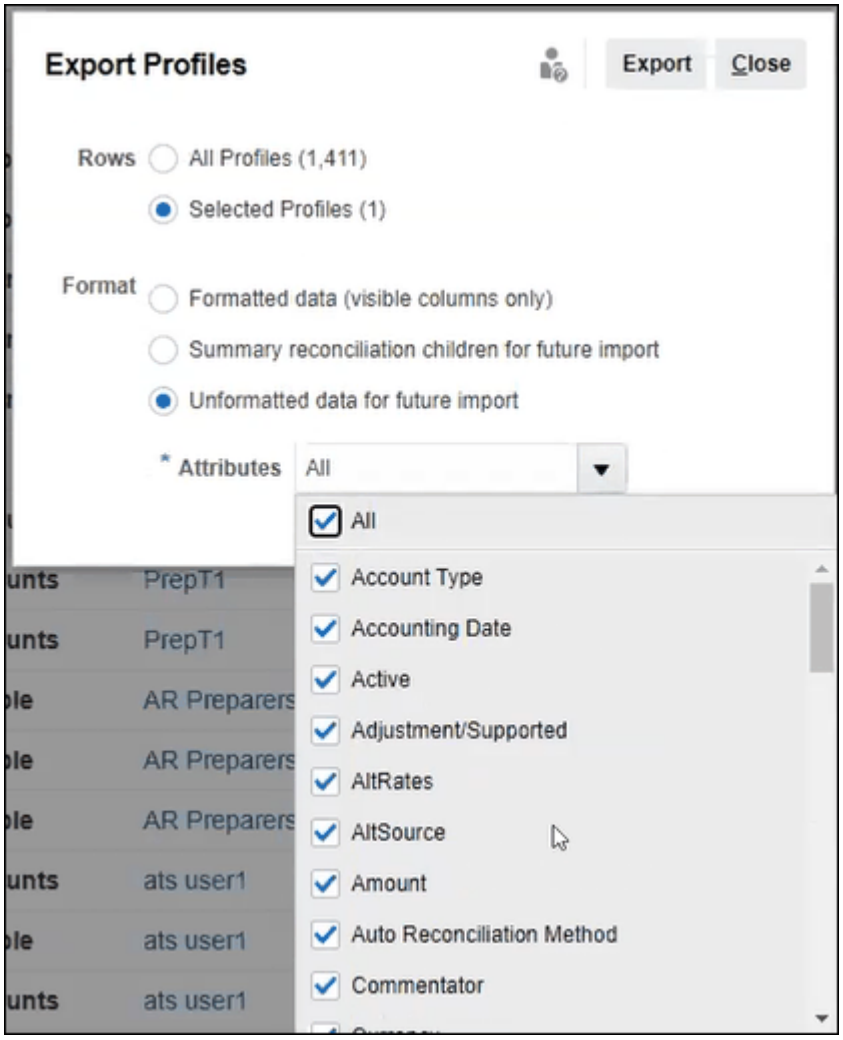
     Select one:

     – **Formatted data (visible columns only)** to export to an Excel-compatible format

     – **Summary reconciliation children for future import** to export summary information for future import

     – **Unformatted data for future import** to export to CSV format for future import.

     Note than an Administrator or Power User is able to select the attributes you want to include in the file or leave the default of **All**.



4. Click **Export**.
5. Click **Open** or **Save** to save the file to your hard drive.
6. In **Export Profiles**, click **Close**.

Using Export Profiles for Future Import of Revised Profile Attributes

Note that the **Export Profiles** dialog can be used to export profile attributes in order to make changes within the exported file and then re-import the revised profiles into **Account Reconciliation**. The process is:

- Export the profile attributes using **Export** on the **Profiles** dialog. See Exporting Profiles
- Make your changes in the downloaded csv file.
- Import the revised profiles using **Import** on the **Profiles** dialog. See Importing Profiles

Updating the Format Associated with a Profile

Service Administrators can update the format associated with a profile, if the profile is based on a Reconciliation Compliance method.

Changing a Reconciliation Compliance Profile to a Reconciliation Compliance with Transaction Matching Profile

Profiles associated with a Reconciliation Compliance method can be updated to use the corresponding Reconciliation Compliance with Transaction Matching method. Therefore, profiles based on formats that use Account Analysis can be updated to use a format that uses the Account Analysis with Transaction Matching method. Similarly, profiles based on formats that use the Balance Comparison method can be updated to use a profile that uses the Balance Comparison with Transaction Matching method.

To update the format for a profile that is based on a Reconciliation Compliance method:

1. From Home, select **Application**, and then **Profiles**.
2. Click the name of the profile whose format must be updated.
3. In the **Properties** tab, click the Select Format icon (next to the **Format** column).
4. In the **Select Format** dialog, select the required format and click **OK**.

Changing a Profile Based on a Reconciliation Compliance with Transaction Matching Method to a Reconciliation Compliance Profile

Profiles associated with formats that use the Balance Comparison with Transaction Matching or Account Analysis with Transaction Matching methods cannot be updated to associate them with a format that uses an Account Analysis or Balance Comparison method. However, if your business requires this, you create a new profile and then associate it with a format that uses the required method.

For example, the profile 101-11000 is associated with a format that is based on the Account Analysis with Transaction Matching method. You have been using this profile for a number of years. However, your organization now needs this profile to be based on the Account Analysis method. So, you stop using the profile 101-11000, create a new profile 101-11000_RC and associate the new profile with a format based on the Account Analysis method.

Use the following steps:

1. (Optional) Create a new format with the required properties and set its **Method** to Account Analysis or Balance Comparison. See Creating Formats.
2. Create a new profile with similar properties as your existing profile and use a suffix for the profile segments (for example, "_RC").
   Associate this profile with the format created in the previous step. You can also use an existing format that is based on the Account Analysis or Balance Comparison method.

   See Creating Profiles.
3. If there are mappings in Data Integration associated with your existing profile, ensure that you update these mappings in Data Integration to load balances into the new profile that was created in the previous step.

Deleting Profiles or Reconciliations

You can delete one or more profiles or reconciliations in **Account Reconciliation**. For multiple deletes, a batch job runs in the background so that you can continue to perform tasks while the processing goes on. Once the job has run, you can use the **Jobs** card to see if there are any errors.

Related Topics

- Deleting Profiles
  Service Administrators can delete one or more profiles from the Reconciliation List.
- Deleting Reconciliations
  Service Administrators can delete one or more reconciliations from the Reconciliation List. Users with the Profiles and Reconciliations - Manage granular role can delete reconciliations in their security scope.

Deleting Profiles

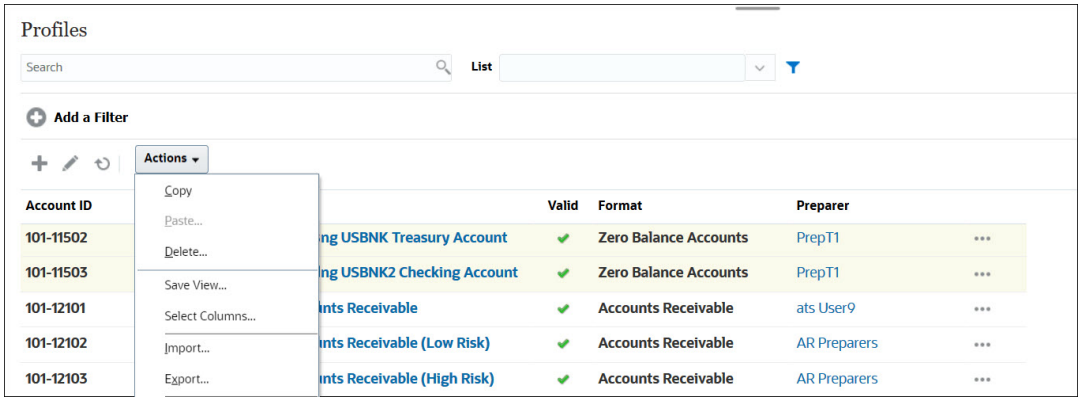
Service Administrators can delete one or more profiles from the Reconciliation List.

> **Note**
>
> When deleting profiles that are associated with a Transaction Matching Format, all matched and unmatched Transaction Matching transactions associated with the profiles will be deleted as well. It is strongly recommended you take an environment backup prior to deleting the profiles.

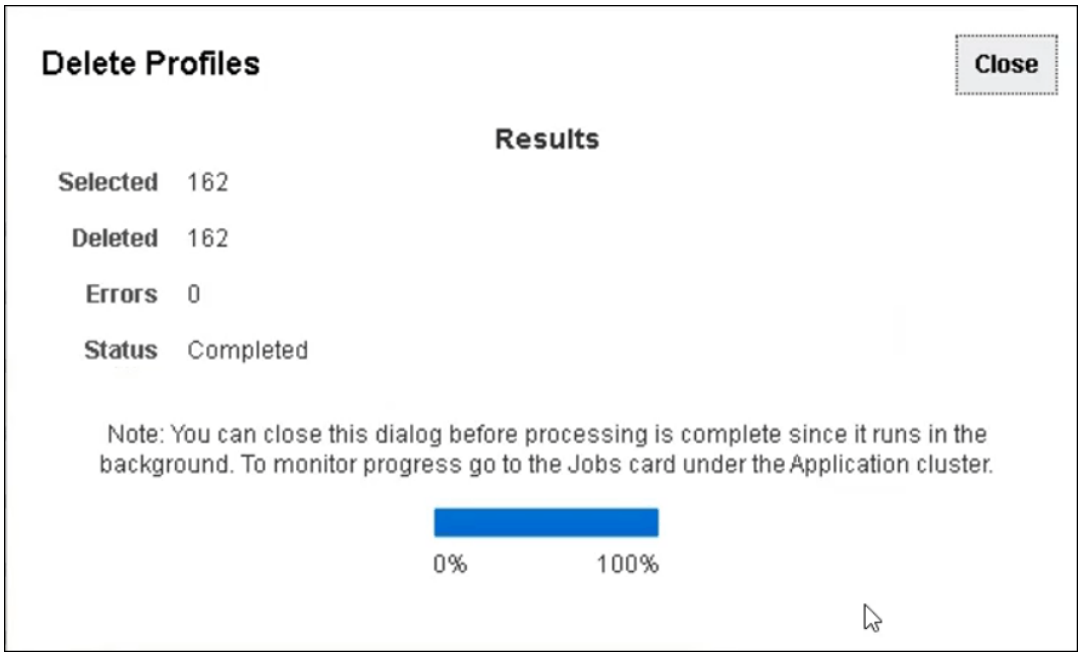
To delete profiles:

1. From **Applications**, select **Profiles** to see a list of profiles.
2. To easily access the reconciliation you want, use the **Search** field. You can search across any of the attributes in the grid below, except for the Source and Subsystem balances, dates, and any icon-based columns. For example, you could search on the word "Accounts" to see all records that have Accounts in the name such as Accounts Payable or Accounts Receivable.

   You can also use the specific filtering capability to access particular lists of reconciliations by clicking the **Filter** icon next to the Search field and then set the filters you want.
3. Highlight the profiles you want to delete, and then from **Actions**, select **Delete**.



4. A warning message displays, and then click **OK** in response to the message *Are you sure you want to delete the selected objects?*
5. If you are deleting multiple profiles, a batch job will start to run and you can see the status of the processing that is running in the background.

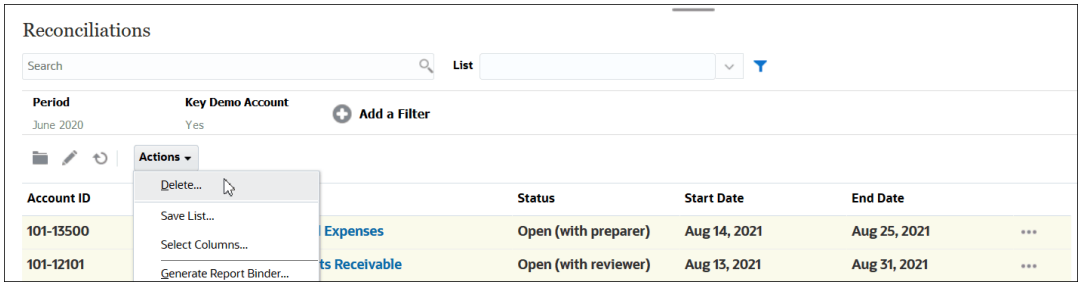


Deleting Reconciliations

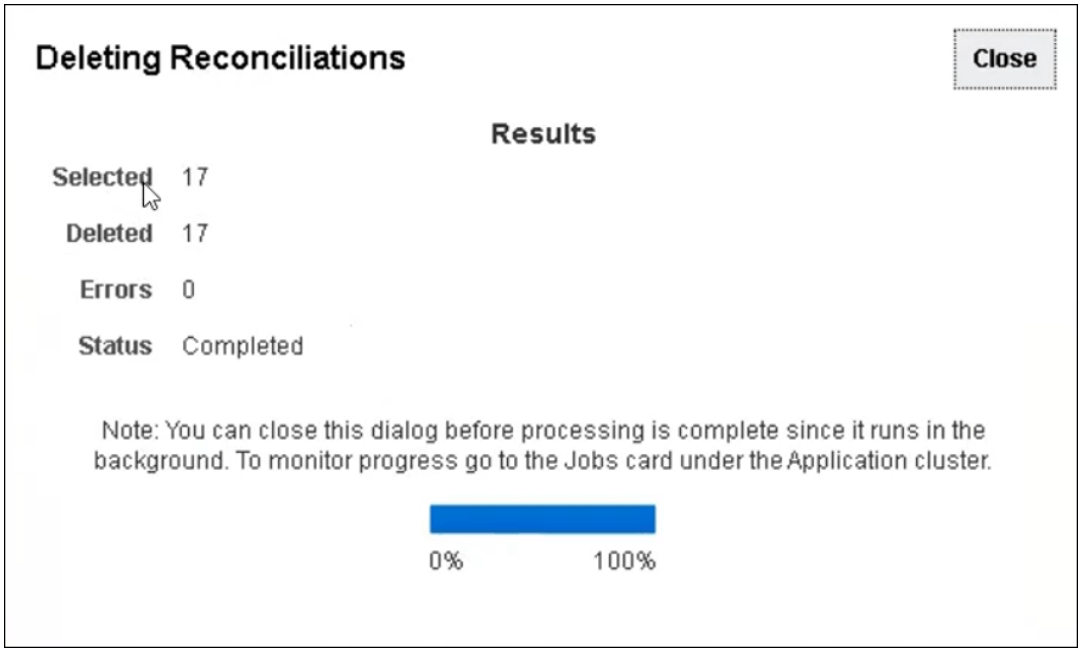
Service Administrators can delete one or more reconciliations from the Reconciliation List. Users with the Profiles and Reconciliations - Manage granular role can delete reconciliations in their security scope.

To delete reconciliations:

1. From **Home**, select **Reconciliations** to see the reconciliations list.
2. Highlight the reconciliations you want to delete, and then from **Actions**, select **Delete**.



3. A warning message displays, and then click **OK** in response to the message *Are you sure you want to delete the selected objects?*
4. If you are deleting multiple reconciliations, a batch job will start to run and you can see the status of the processing that is running in the background.



Using the Profile Actions Panel

Use the Actions panel to perform batch updates of profile attributes and workflow. You can update all profiles or a filtered subset of profiles.

For example, 500 profiles have John assigned as the preparer. Departmental responsibilities have changed, so you need to assign Mary as the preparer for those accounts. Filter the profile list to include only profiles for which John is the preparer, and then use the Actions panel to set Mary as the Preparer.

Copying Profiles to Period

To copy profiles to periods:

1. From **Home**, select **Application**, then **Profiles**.
2. On the Actions panel, click **Create Reconciliations**.

3. In the **Create Reconciliations** dialog, click **Period**, select the desired period, and click **Apply**.

   The drop-down within **Period** allows you to easily select a period by filtering on options such as All, Daily, Monthly, and Quarterly periods.

4. Select the desired profiles to copy to the period, and then click **Apply**.

How Is the Start Date of a Reconciliation Calculated?

Multiple criteria are used to calculate the start date for a reconciliation. Account Reconciliation first determines the Calendar used by the organizational unit that is associated with the reconciliation. If holidays rules and work days are associated with an organizational unit, then the business calendar of this organizational unit is considered when the organizational unit is associated with a reconciliation. Next, using this Calendar, the **Schedule From** date is retrieved. When the **Schedule From** date is a non-working day or holiday, the **Schedule From** date is moved forward or backward (depending on the whether the specified number of days is positive or negative).

For example, assume that the period is August 2024 and the reconciliation start date is Day 3 in this period. The **Schedule From** date for this period is 31-Aug-2024. 01-Sep-2024 is a Sunday and 02-Sep-2024 is a holiday. So, **Schedule From** is moved to 03-Sep-2024. The specified start date is Day 3 of the period. Therefore, three working days are added to 03-Sep-2024 and the reconciliation start date 06-Sep-2024.

Duplicating Profiles

You can duplicate profiles by copying and pasting them.

To copy profiles:

1. From Home, click **Applications**, and then click **Profiles**.
2. Select a profile.
3. Select **Actions**, and then **Copy**.
4. In **Copy Profile**, click **Save and Close** or **Cancel**.

To paste profiles:

1. From Home, click **Applications**, and then click **Profiles**.
2. Select a profile, then select **Actions**, and then **Paste**.

9

Working with Group Reconciliations

Related Topics

- About Working with Group Reconciliations
  Most companies find it useful to track general ledger and subledger balances at a lower level than the level at which the reconciliation is performed. Using sub-segments in group reconciliations in Reconciliation Compliance gives preparers an improved capacity to reconcile at one level but understand the detail at a lower level.
- Administrator Set Up Tasks for Group Reconciliations
  There are several one time set up tasks that must be performed by an Administrator in order to work with Group Reconciliations.

About Working with Group Reconciliations

Most companies find it useful to track general ledger and subledger balances at a lower level than the level at which the reconciliation is performed. Using sub-segments in group reconciliations in Reconciliation Compliance gives preparers an improved capacity to reconcile at one level but understand the detail at a lower level.

This also helps them analyze data more thoroughly and identify areas that need attention.

Examples include:

For Account Analysis, preparers can perform a single group reconciliation for many General Ledger (GL) balances but also access which Balance Explained transactions do not add up to which detail balances.

For Balance Comparison, preparers can perform a single group reconciliation for many General Ledger (GL) balances and Subledger balances, and easily see which detail balances do not match.

Balance Inquiry - Gives preparers, reviewers, or auditors of reconciliations a way to determine which group reconciliation a particular detail balance is a part of.

Balance Verification - Gives administrators the ability to check that all balances intended to be loaded have loaded and are valid in the system.

A common example of using sub-segments in group reconciliations might be a three segment configuration for Entity, Account, and Cost Center. You can create Group reconciliations across any combinations of those segments if you designate them as potential sub-segments. For example, Group Reconciliation #1 could be at the Entity - Account level, grouping across all Cost Centers which makes the Cost Center a sub-segment. You could also create Group Reconciliation #2 would be at the Account level, grouping across all entities and cost centers, which makes Entity & Cost Center sub-segments. Essentially, for any segment that you may group across, you would designate it as a sub-segment so when you’re configuring the reconciliation you have the flexibility to group as needed.

Understanding Data Loading for Group Reconciliations

Data loading to the sub-segment level must be done within **Data Integration**. You are not able to manually edit balances, nor load pre-mapped data to the sub-segment level using **Account**

Reconciliation. Pre-mapped balances import will always be done at the profile segments level.

Administrator Set Up Tasks for Group Reconciliations

There are several one time set up tasks that must be performed by an Administrator in order to work with Group Reconciliations.

1. Defining Sub-Segments
2. Configure the Format for the new group reconciliation settings and then apply the format to the profiles that will be group reconciliations.
3. Apply the Group Reconciliation Format to Profiles
4. Map sub-segments to target dimensions in **Data Integration**. See Data Integration - Target Application Dimension Mapping.
5. Create an Integration in Data Integration
   - Map Dimensions in Data Integration
   - Map Members in Data Integration

After the setup, see Ongoing Task - Create and Run a Data Load in Account Reconciliation.

Differences for Preparers

Now that an Administrator has set up and configured the profile sub-segments in both **Account Reconciliation** and **Data Integration**, and created and applied a format for group reconciliations and then applied the format to profiles, let's look at how this appears to preparers. See Preparer Tasks for Group Reconciliations.

Defining Sub-Segments

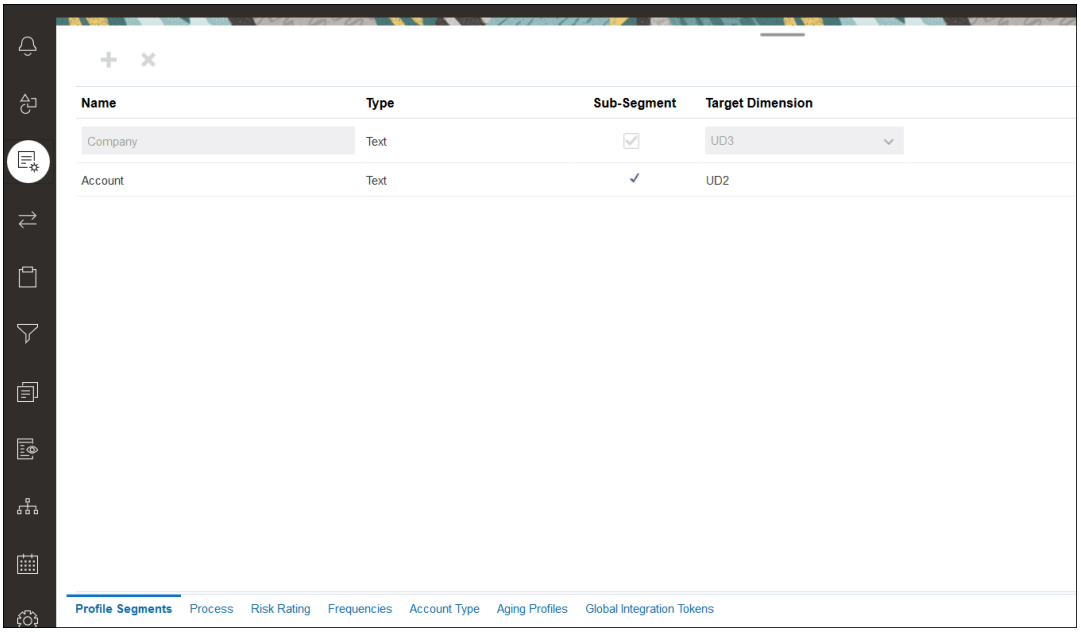
When a profile segment is marked as a sub-segment in **Account Reconciliation**, it also has to get mapped to a target dimension in Data Integration.

Sub-segments are locked down once data is loaded to one or more periods after sub-segments are activated.

> **Note**
>
> A sub-segment ID cannot contain a hyphen (-) and the segment Type must be Text.

To define sub-segments in **Account Reconciliation**:

1. From **Home**, select **Application**, then **Configuration**, and then **System Attributes**.
2. Under **Profile Segments**, select **Sub-Segment**, and then select a **Target Dimension** from the drop down list. These are dimensions defined in Data Integration.



> **Note**
>
> Drill to balance details for group reconciliations will work if the sub segments are changed from Lookup to Generic in Data Exchange.

> **Note**
>
> 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 Group 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 Integration needs the following: "ACCOUNT ID 001- - -1925 XXX" to align with Account Reconciliation.

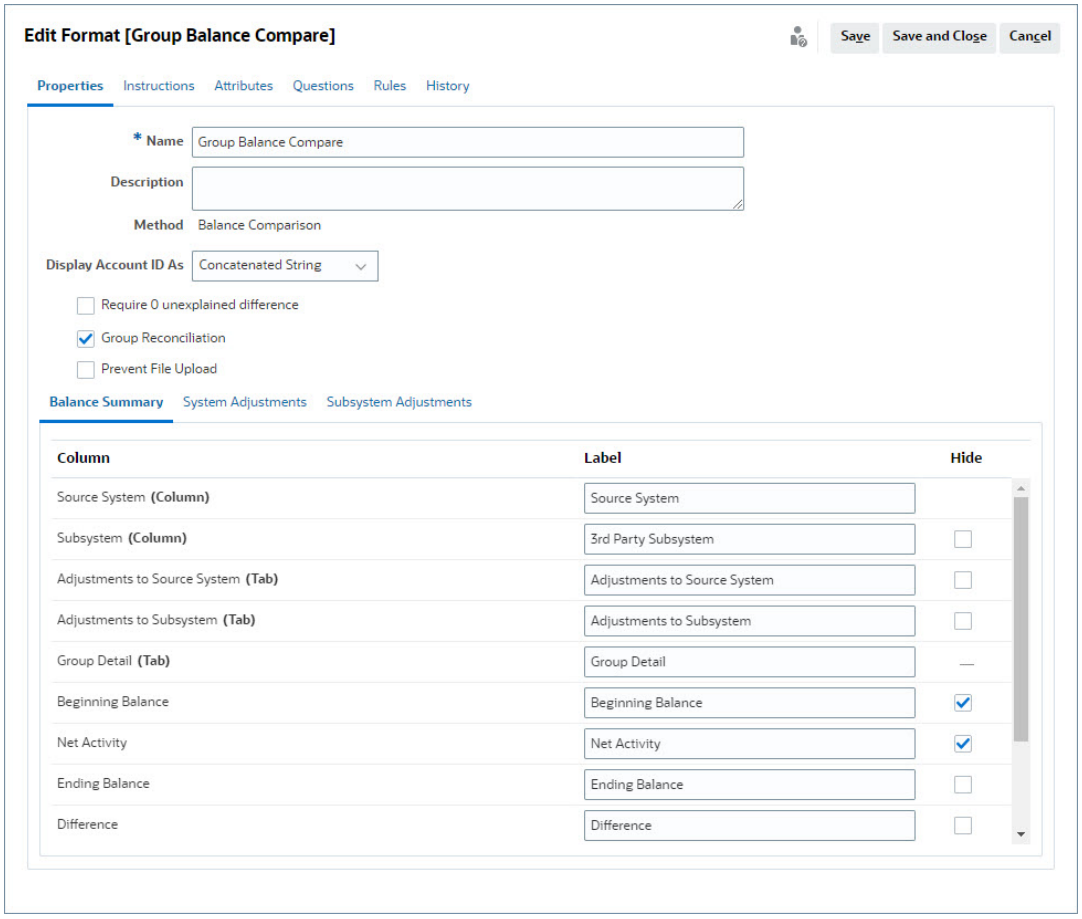
A sub-segment cannot be updated if any of the following conditions is true:

- A format or format instance is using the sub-segment
- A transaction is using the sub-segment
- Any source or subsystem balance has been loaded, regardless of whether or not the sub-segment has been mapped in Data Exchange

Configure the Format

The next step is to set up a format for the group reconciliation. To create a format for a group reconciliation:

1. From **Home**, select **Application**, then **Configuration**, and then **Format**.
2. Create a new format for the group reconciliation by clicking the plus sign **(+).** and then filling out the required fields. Here is an example of a format created for a group reconciliation. Note the following:
   - Select the **Group Reconciliation** checkbox. Checking this will display the **Group Detail** link in the **Reconciliation Actions** dialog.
   - All other settings will behave the same as an individual reconciliation.
   - Group reconciliations do not apply to Transaction Matching or Variance Analysis methods.



Apply the Group Reconciliation Format to Profiles

Once you have configured the format for the new group reconciliation, you can apply this format to profiles that will be group reconciliations. This follows the usual process for applying a format to profiles. See Working with Profiles

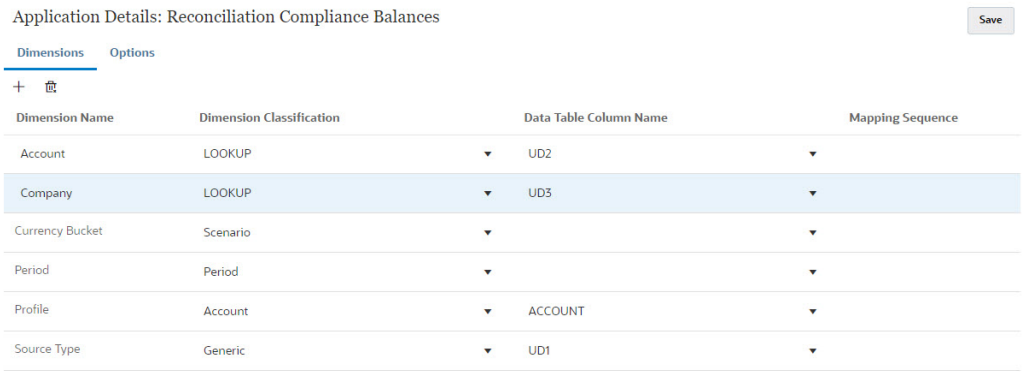
Data Integration - Target Application Dimension Mapping

In Data Integration, you must add each sub-segment that you added in **Account Reconciliation** as a dimension in the **Target Application** in Data Integration using the exact same sub-segment name and the same dimension name.

The profile loads as one concatenated value that aligns with the profile as configured in **Account Reconciliation**. Each additional sub-segment is mapped to it's own "UD" field as **Lookup**. This ensures that the UD mapping aligns with the "UD" selection made on the Profile Segments screen in **Account Reconciliation**.

To add sub-segments as dimensions in Data Integration:

1. From **Home**, select **Application**, and then **Data Exchange**. The Data Integration page appears.
2. Click **Actions** and then select **Applications**. The Applications dialog appears.
3. Select **Reconciliation Compliance Balances**, and click the Actions (ellipsis), and then select **Application Details**.
4. On the Dimensions tab, click **Add** to add each sub-segment you added in **Account Reconciliation** to Data Integration so that it is mapped correctly. Add the following for each sub-segment:
   a. **Dimension Name** - must match the profile segment name in **Account Reconciliation** exactly.
   b. **Dimension Classification** - must be **LOOKUP**.
   c. **Data Table Column Name** - must match the Target Dimension Name specified in **Account Reconciliation**.



> **Note**
>
> **Source Type** is a reserved dimension and its settings must not be modified.

Create an Integration in Data Integration

An integration specifies how data is extracted from the source system and loaded into the target system.

1. From the **Home** page, select **Application**, and then **Data Exchange**. On the Data Integration page, click the Add icon to create an integration.

   See Defining a Data Integration in *Administering Data Integration*.

2. Map sub-segments. See Map Dimensions in Data Integration.

3. Map data from the source to the target during data load. See Map Members in Data Integration.

Map Dimensions in Data Integration

Ensure that each sub-segment is mapped in the **Import Format** as part of the Map Dimensions step so that it's available to be loaded into **Account Reconciliation**.

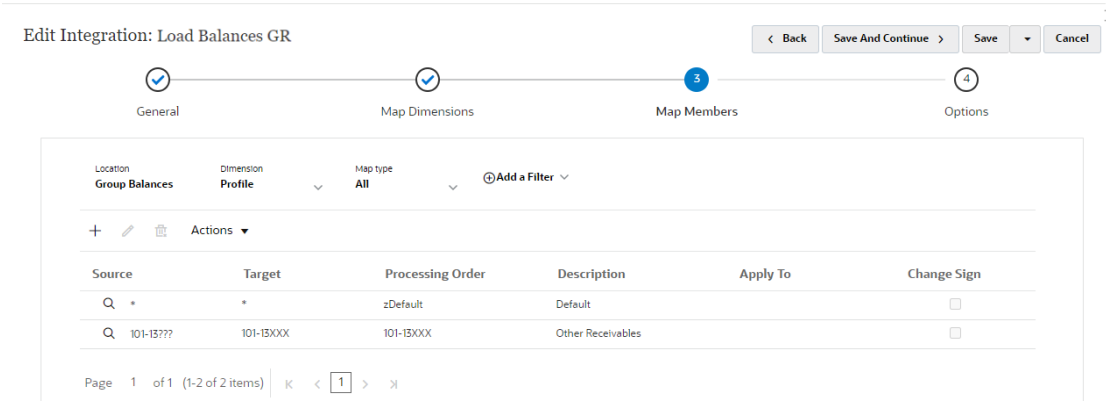
For information on importing formats in **Data Integration**, see Creating the Dimension Maps in *Administering Data Integration*.

Map Members in Data Integration

To configure a data load mapping in Data Integration, you need to use the Map Members step when creating a data integration.

See Mapping Members in *Administering Data Integration*.

The following image shows the Map Members configuration for a group reconciliation in Data Integration. The target value 101-13XXX represents the target profile. The source value of 101-13??? indicates that source profiles from 101-13000 through 101-13999 are all mapped to the target profile 101-13XXX. See Using Special Characters in Multi-Dimensional Mapping in *Administering Data Integration*.



> **Note**
>
> When specifying target values for the **Source Type** dimension, the only allowed values are "source system" and "sub-system". If the "source system" and "sub-system" values are not selectable in the Edit Member Mapping page, refresh your members in your Reconciliation Compliance Balances application.

Once you have configured the integration in **Data Integration**, the set up tasks for group reconciliations are complete. An ongoing task is creating and running a data load in **Account Reconciliation**.

Ongoing Task - Create and Run a Data Load in Account Reconciliation

To create a new data load:

1. From **Home**, select **Application**, then **Configuration**, and then **Data Loads**.
2. In the **Data Loads** page, click **Add** icon.
3. In the **New Data Load** dialog, select **Allow blank segment values**. This must be selected so that balances can be loaded that do not have sub-segment values.
4. In **Location**, expand the type of source from which you would like to Import Balances (for example, **File**), and select the appropriate Location or Locations.

To import balances in **Account Reconciliation**:

1. From **Home**, select **Application**, then **Periods**.
2. From the list, select the period for which you want to import data and from **Actions**, select **Import Data**.

Part II
Setting Up Transaction Matching

Related Topics

- Learning About Transaction Matching
  The Transaction Matching module enables companies to save additional time spent on performing complex reconciliations, while improving quality and reducing risk.
- Setting Up Transaction Matching Overview
  You must set up Reconciliation Compliance before setting up Transaction Matching. This is required because Transaction Matching uses the periods set up in Reconciliation Compliance and also uses formats and profiles to create reconciliations.
- Exporting Adjustments or Transactions as Journal Entries
  In Transaction Matching, you can export adjustments or transactions from data sources as dual sided journal entries that can then be imported into your Oracle ERP system. The exported journal entries are provided in a .csv file.

10

Learning About Transaction Matching

The Transaction Matching module enables companies to save additional time spent on performing complex reconciliations, while improving quality and reducing risk.

Related Topics

- Overview of Transaction Matching
- Transaction Matching Workflow
- Transaction Matching Terminology
- Reconciliation Methods for Transaction Matching
- Transaction Status

Overview of Transaction Matching

This topic provides a basic understanding of transaction matching, its benefits, and business cases.

Related Topics

- About Transaction Matching
  Transaction Matching enables organizations to automate the preparation of high volume, labor-intensive, and complex reconciliations. These reconciliations can then be seamlessly integrated with the tracking features within Reconciliation Compliance.
- Benefits of Transaction Matching
- How to Determine if Transaction Matching is Appropriate for your Scenario?
- Business Case for Transaction Matching
- About the Sample Application for Transaction Matching

About Transaction Matching

Transaction Matching enables organizations to automate the preparation of high volume, labor-intensive, and complex reconciliations. These reconciliations can then be seamlessly integrated with the tracking features within Reconciliation Compliance.

As part of the Reconciliation Compliance process, in addition to comparing balances, organizations would like to match the transactions that form the balance. Transaction Matching is a perfect complement to the Reconciliation Compliance feature set. It provides the functionality required to simplify the preparation of complex reconciliations and then integrates the period-end results into the Reconciliation Compliance period-end process.

The goal of Transaction Matching is to load transactions from one or more data sources, match the transactions using predefined rules, identify exceptions, and explain the exceptions. Typically, the frequency of preparing reconciliations in Reconciliation Compliance is lesser than or equal to the frequency at which transactions are loaded. For example, if balances are compared and reconciliations prepared every month, then transactions can be loaded daily, weekly, or monthly.

You can also use Transaction Matching for non-balance sheet reconciliations across disparate sources, also referred to as operational reconciliations. Examples include system to system reconciliations, stock or share settlements, expense reimbursements, and so on.

> **Note**
>
> Transaction Matching functionality is provided with Oracle Enterprise Performance Management Enterprise Cloud Service (EPM Enterprise Cloud Service) only.

Tour of Account Reconciliation Video

Click this link to watch a video:

Benefits of Transaction Matching

The benefits of using Transaction Matching include the following:

- Saves the additional time and labor spent on manual preparation of complex reconciliations
- Reduces risks and improves the quality of the reconciliation process
- Removes inefficiencies in the process of preparing reconciliations
- Reduces human errors and speeds up the reconciliation process

How to Determine if Transaction Matching is Appropriate for your Scenario?

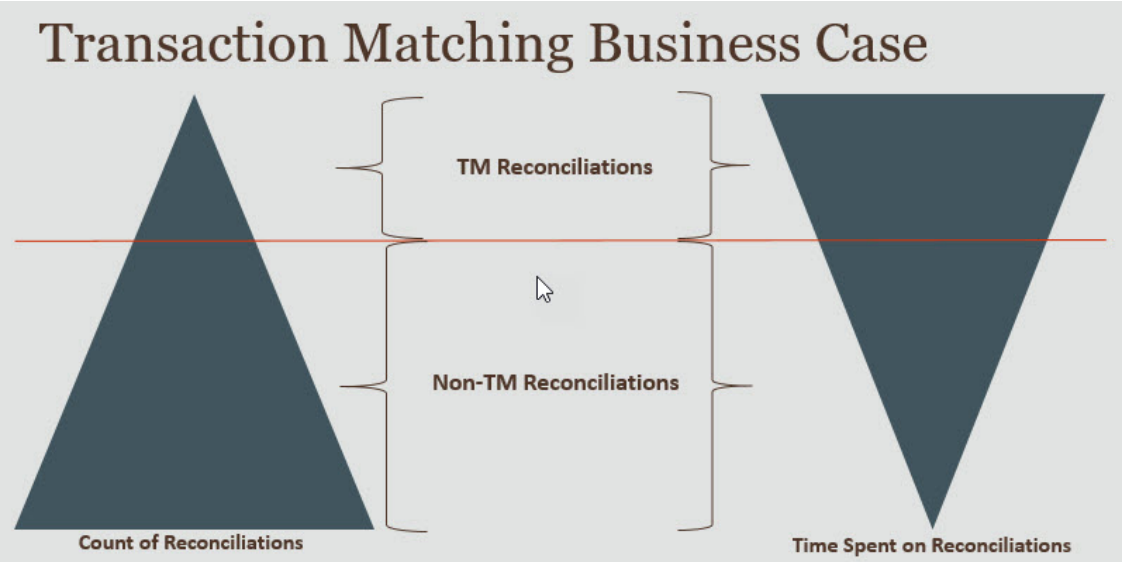
Answer the following questions to decide if Transaction Matching is appropriate for your reconciliation:

- How many FTEs (full-time equivalents) are spent on this reconciliation?
- How many transactions per month/day flow through this reconciliation?
- Is detail data available from both sources?

  Sometimes data from one source has details, whereas data from the other source is summarized. At other times, the data itself may not be completely reliable. For example, when you try to base matching logic on unreliable, manual, journal names or descriptions.

Business Case for Transaction Matching

When you consider your total number of reconciliations, you will notice that a small number of reconciliations cause the most work. This is reason Transaction Matching features are a perfect complement to Reconciliation Compliance. They provide the tools to make those complex reconciliations simpler and then integrate the period-end results into the Reconciliation Compliance period-end process.



Scenarios for Which Transaction Matching is Beneficial

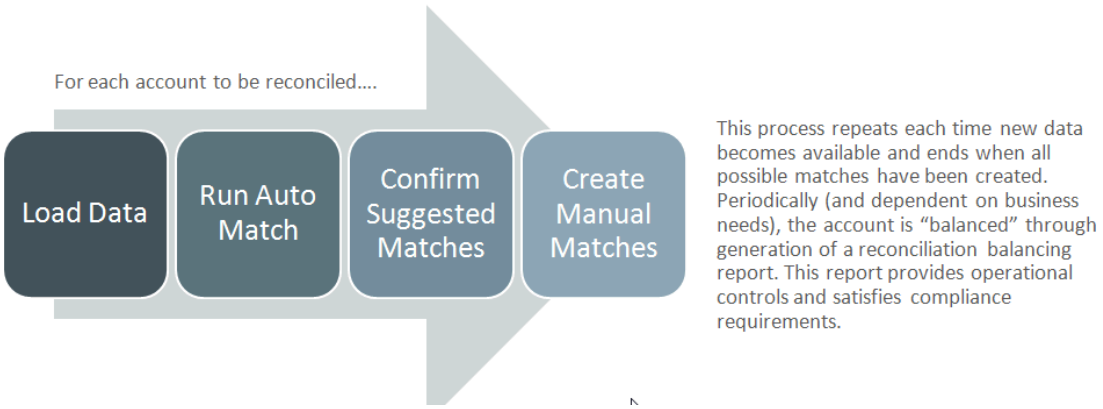
- Balance sheet-related reconciliations
  - Suspense and Clearing Accounts
  - Intercompany
  - Cash
  - Credit card receivables
  - Detailed Subledger reconciliation
- Operational, off-balance sheet, reconciliations
  - System to System reconciliations (which typically involve two third-parties whose accounts must be in sync with each other)
  - Stock or share settlements
  - Expense reimbursements

About the Sample Application for Transaction Matching

To help a Service Administrator learn more about Account Reconciliation, you can create a sample application when you first start your service. See Creating an Application.

Transaction Matching Workflow

The workflow for using Transaction Matching includes multiple steps that must be performed for each account reconciled. These steps must be repeated each time new data becomes available.



Transactions can be imported from any source. The import process can be run on demand or scheduled to run automatically.

The Auto Match process matches transactions according to predefined rules and users need to focus only on the exceptions. Auto Match creates Confirmed Matches, where no further action is required, and Suggested Matches, where the user can either confirm or discard the match. Period-end reconciliation is performed at a frequency that depends on your business requirement.

Transaction Matching Terminology

Before using Transaction Matching, understand the key concepts and terminology.

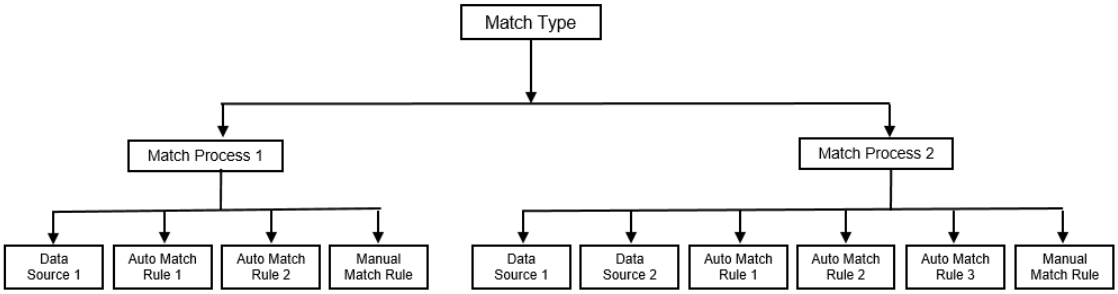
Related Topics

- Match Types
  A match type determines how the Transaction Matching process will work for the accounts that use this match type. It also determines the structure of the data to be matched and the rules used for matching.
- Transactions in Transaction Matching
  Transactions are loaded from one or more source systems and then matched with those in the subsystem.
- Data Sources
  A data source is a system from which transactions are loaded into Transaction Matching. This can include Enterprise Resource Planning (ERP) systems, on-premise or Cloud databases, or files.
- Match Rules
  Match rules determine how matches are made.

Match Types

A match type determines how the Transaction Matching process will work for the accounts that use this match type. It also determines the structure of the data to be matched and the rules used for matching.

Match types are created by Service Administrators. For each match type, you define data sources and match processes. Within a match process, you specify the data sources that are included in the match process and one or more match rules that are used to match transactions. You can use the same match type for multiple reconciliations, as long as the reconciliations share the same data source and matching rule configuration.



Companies can have many different match types. For example, Intercompany Accounts, Bank Accounts, Accounts Receivable, Accounts Payable, and various Clearing Accounts. Because the data structure and the matching rules for these different accounts are likely to be different, companies would typically create a match type for each account type. Additionally, you can use match types to export adjustments back to an Enterprise Resource Planning (ERP) system, as journal entries in a text file.

For example, you can create a match type for clearing accounts with a single data source, a match type for intercompany matching and reconciliation with two data sources, and a match type for Cash accounts with three data sources - GL, POS and Bank.

Transactions in Transaction Matching

Transactions are loaded from one or more source systems and then matched with those in the subsystem.

Timing and Frequency

Transaction Matching supports a variety of workflow needs.

You can:

- Match and balance daily
- Match daily and balance monthly
- Match and balance monthly

Data Sources

A data source is a system from which transactions are loaded into Transaction Matching. This can include Enterprise Resource Planning (ERP) systems, on-premise or Cloud databases, or files.

Depending on the scenario, you may want to define one or more data sources within your match type. For each data source, define the required attributes (columns) and any calculated attributes that are used for data enrichment. Examples of data sources include General Ledger, Subledger, Bank, and so on.

Match Rules

Match rules determine how matches are made.

Rules can be configured for tolerance ranges on dates and amounts, and adjustments can be made when variances exist.

Match Rule Types

The following matching rule types are supported:

- 1 to 1
- 1 to Many
- Many to 1
- Many to Many
- Adjustment

Match Status for Match Rules

Each match rule can have a match status. The possible match statuses for match rules, other than Adjustment, are as follows

- Suggested
- Confirmed
- Suggested (No Ambiguous)

  To add a rule with suggested matches that does not allow ambiguous results (multiple transactions that satisfy the rule conditions).
- Confirmed (No Ambiguous)

  To add a rule with confirmed matches that does not allow ambiguous results (multiple transactions that satisfy the rule conditions).
- Suggested Ambiguous*
- Confirmed Ambiguous*

For rules of type Adjustment, the only match status supported is Suggested or Confirmed.

*For 1 to 1 Auto match rules, the match status Suggested Ambiguous and Confirmed Ambiguous can be used when there are a large number of ambiguous matches. These options ensure that all potential matches are found when auto match is run. However, they may impact matching performance.

> **Note**
>
> As a best practice, you can improve the efficiency of your process by ensuring that source data has enough reference attributes for reconciliation purposes, thereby avoiding ambiguity in data.

Match Rule Conditions

A match rule condition determines which attributes must be matched together, and whether they must match exactly, or a tolerance is allowed.

Match rule conditions make it easier to define matching rules in multiple source match processes by defining the default relationship between attributes in the source system and subsystem.

Tolerance Limits

A tolerance limit specifies the permitted difference when matching two values in Transaction Matching. It can be expressed as a numerical value or a percentage.

For example, you specify a tolerance limit of -10 to +10 for Amount in the match rule. Then, the Amounts from the source system and subsystem are considered an exact match if their difference is equal to or less than 10. Consider a source system amount of 26000 and subsystem amount of 25990. These values are considered an exact match because the difference between them is 10, which is less than the specified tolerance of 10.

For more information, see "Evaluating Tolerances" in Understanding the Transaction Matching Engine.

Reconciliation Methods for Transaction Matching

Transaction Matching formats are based on one of the following reconciliation methods: Balance comparison with transaction matching, Account analysis with transaction matching, or Transaction matching only.

- Balance comparison with transaction matching

  This method is used to compare balances and match transactions between two distinct sources, such as source systems and subsystems. For example, you can have a point of sale system and a merchant transaction system, or you match the transactions between accounts payable and journal entries within the general ledger.

- Account analysis with transaction matching

  This method is used to match transactions within a single data source. For example, debit and credit matching. The most common use case is if you are netting off transactions within a single data source to determine the net balance for an account, such as a clearing account.

- Transaction matching only

  This method is used primarily to match transactions between two systems, without a period-end reconciliation.

Transaction Status

All transactions are unmatched when they are loaded into Transaction Matching. Subsequently, after matching is performed, the transactions are assigned a status.

The status of a transaction can be one of the following:

- Unmatched

  An unmatched transaction is one that does not yet have a match.

- Supported

  A supported transaction is an unmatched transaction that has a legitimate reason for having no match.

  The Preparer provides a justification, through support details, mentioning the valid reason for the transaction having no match. Support details are retained in Account Reconciliation even after the transaction is matched.

  Once a supported transaction is matched, its status changes to Confirmed Match.

See Handling Supported Transactions in *Reconciling Accounts with Account Reconciliation*.

- Confirmed Match

  The status of a transaction is set to Confirmed Match when Auto Match determines that it either has an exact match or a match within the specified tolerance limit.

  With manual matching:

  – When a suggested match is confirmed, the status of the transactions within the suggested match are changed to Confirmed Match.

  – When unmatched transactions are matched, the status of these transactions change to Confirmed Match.

- Suggested Match

  A suggested match is one that Auto Match identifies as a possible match. Only the Auto Match process can set this status.

  If the Preparer confirms a suggested match, the transaction's status changes to Confirmed Match. If the Preparer discards the suggested match, that transaction's status becomes Unmatched.

  See Confirming Suggested Matches in *Reconciling Accounts with Account Reconciliation*.

- Confirmed Adjust

  The status of a transaction is set to Confirmed Adjust when Auto Match rules clear off transactions as single sided adjustments.

  With manual matching:

  – When a transaction with status Suggested Adjust is confirmed, its status is changed to Confirmed Adjust.

  – When transactions from only one side are chosen and adjusted, the status of these transactions is changed to Confirmed Adjust.

  See Setting Up One Sided Adjustments to Run During Auto-Match in *Setting Up and Configuring Account Reconciliation*.

- Suggested Adjust

  When Auto Match rules identify possible transactions to be cleared off as single sided adjustments, a status of Suggested Adjust is assigned to those transactions. Only the Auto Match process can set this status.

  The Preparer can either confirm or discard a suggested adjust. If the suggestion is confirmed, the transaction's status changes to Confirmed Adjust. If the suggestion is discarded, the transaction's status changes to Unmatched.

  See Setting Up One Sided Adjustments to Run During Auto-Match in *Setting Up and Configuring Account Reconciliation*.

Set Up Tasks for Transaction Matching

A Service Administrator must perform certain tasks to set up Transaction Matching.

The tasks include the following:

1. Create match types. See Creating Match Types.
   a. Define data sources. See Defining Data Sources.

b. Define the matching process. See Defining the Match Process by Creating Rules.

2. Create formats.

   See Creating Formats.

3. Define profiles.

   See Creating Profiles.

Understanding the Transaction Matching Engine

This topic helps you understand how the Transaction Matching engine evaluates transactions.

The examples in this topic assume the following transactions in Source System data source and Sub System data source.

Source System

Invoice	Date	Amount
1	September 15, 2016	$100
1	September 16, 2016	$200
1	September 17, 2016	$200

Sub System

Invoice	Date	Amount
1	September 18, 2016	$100
1	September 14, 2016	$200
1	September 17, 2016	$200

Match Rules

1. Source System "Invoice" exactly matches Sub System invoice
2. Source System matches within a -1 to +3 tolerance of Sub System Date
3. Source System "Amount" exactly matches Sub System amount

The Source System and Sub System "Amount" attribute is the Balancing Attribute.

Order of Evaluation / First One Matching Wins

Transactions are evaluated for matching in the order in which the transactions exist in the database, and the first transaction evaluated for the match that satisfies the conditions will be selected for the match.

Order of Evaluation / Lowest Transaction ID Matches First

When transactions are loaded, they are assigned a Transaction ID sequentially. Therefore, the matching transaction with the lowest Transaction ID means it was loaded first and will be first to match.

In a 1 to 1 match, if two transactions exist that qualify as a match with a third transaction, but only one can be matched, the transaction with the lowest Transaction ID will be the one selected as the match.

For subset rules, matching will sort the transactions based on both amount and transaction ID during match creation. If two transactions have the same amount, the one with the lowest transaction ID will be used in the match.

Note that if you ran the same rule with No Ambiguous selected, all transactions will remain unmatched (as expected).

Evaluating Tolerances

There are three ways to set tolerance levels to allow matching of transactions that have variances. You can set:

- a tolerance variance value that is applied to the transactions. For example, auto match with up to a variance of -1 and +3.
- a tolerance threshold level expressed as a percentage. For example, auto match with up to 0.5% of the value of the amount.
- a tolerance threshold level expressed as a percentage along with a variance amount. For example, auto match with up to 1.0% of the value of the amount up to a maximum amount of 100.00.

> **Note**
>
> The percentage value can not be more than 100 for both high and low tolerance and can be used for **Number** or **Integer** data source attributes.

Evaluating Tolerances Set as Values

When evaluating tolerances that are a set tolerance value, the calculation is impacted by how the high/low tolerance values are applied to transactions. For example, in the sample transactions where we apply a tolerance to the Date values, we have an authorized tolerance of -1 and +3. If you apply these values to the first record in the Source System table, then the first record in the Sub System table satisfies the match rule because September 18 is less than or equal to +3 days from September 15. However, if we apply the tolerances to the Sub System transaction (rather than the Source System), the match fails since September 15 is not less than or equal to -1 days from September 18.

> **Note**
>
> While the above example uses Date tolerances, the same logic applies to tolerances on Date, Time and Integer data types.

To ensure consistent results, we opted to use the following approach when evaluating tolerances:

Evaluating 1 to 1 Rules Types

With 1 to 1 rule types, we treat the Source transactions as the "base or anchoring transactions". This example shows the way in which the evaluation takes place. In this example, we are assuming a Date tolerance **Start** set to zero (0) and **End** was set at +3.

1. Starting with the first Source transaction, the tolerance limits are added to the transaction's Date value to derive the acceptable range of Date values from Sub System.
2. Then, the first transaction from Sub System is selected that satisfies the match. In our example, the Source date value for the first transaction is September 15.
3. Adding the 0 to +3 tolerance to the Sub System transaction, the first transaction from Source System with a Date value greater than or equal to September 15 and less than or equal to September 18 is selected as a match. This match is identified in green below:

Source System

Invoice	Date	Amount
1	September 15, 2020	$100
1	September 16, 2020	$200
1	September 17, 2020	$200

Sub System

Invoice	Date	Amount
1	September 18, 2020	$100
1	September 14, 2020	$200
1	September 17, 2020	$200

4. Continuing to the second Source transaction (with a Date value of September 16), the first transaction from Sub System with a Date greater than or equal to September 16 and less than or equal to September 19 is found. This match of September 17 is within the range and identified in red below:

Source System

Invoice	Date	Amount
1	September 15, 2020	$100
1	September 16, 2020	$200
1	September 17, 2020	$200

Sub System

Invoice	Date	Amount
1	September 18, 2020	$100
1	September 14, 2020	$200
1	September 17, 2020	$200

5. Continuing with the third Source System transaction (with a Date value of September 17), assume we need to find the first transaction from Source System with a Date greater than or equal to September 16 and less than or equal to September 20. Since no transaction from Source System satisfies this condition, no match is created.

> **Note**
>
> In the case of single source match processes, Positive transactions match to Negative transactions.

Evaluating 1 to Many Rule Types

With 1 to Many rule types, Source System transactions are the base transactions.

> **Note**
>
> For 1 to Many rule types, you must define one rule condition which can be Match Exactly or with tolerance in addition to the Balancing Attribute.

The following example describes how 1 to Many rules are evaluated. A date tolerance Start set to zero (0) and End set at +2 is assumed. Starting with the first source system transaction, the tolerance limits are added to the transaction's Date value to derive the acceptable range of Date values from subsystem. Then, the first transaction or transactions from subsystem that satisfy the match condition are selected.

1. Consider the first source system transaction with date January 15.
    a. Adding the 0 to +2 tolerance, the date range for the subsystem transactions is January 15 to January 17.

b. The first transaction, or set of transactions, from subsystem that satisfy all the following conditions are selected as a match:

   i. Date value later than or same as January 15 and earlier than or same as January 17

   ii. Sum of Amounts in the subsytem is equal to Amount in the source system

c. A match, with the Match ID of 20001, is created as shown below.

Table 10-1 Source System Transactions

Invoice	Date	Amount	Match Id
1001	**January 15, 2025**	**100**	**20001**
1001	January 16, 2024	200	
1001	January 17, 2025	200	

Table 10-2 Subsystem Transactions

Invoice	Date	Amount	Match Id
1001	**January 15, 2025**	**50**	**20001**
1001	**January 16, 2024**	**50**	**20001**
1001	January 14, 2025	200	
1001	January 17, 2025	100	
1001	January 18, 2025	100	
1001	January 18, 2025	100	

2. Consider the second source system transaction with date January 16.

   a. Adding the 0 to +2 tolerance, the date range for the subsystem transactions is January 16 to January 18.

   b. The transaction, or set of transactions, from the subsystem that satisfy all the following conditions is considered a match:

      i. Date value later than or same as January 16 and earlier than or same as January 18

      ii. Sum of Amounts in the subsystem should be equal to the source system Amount, which is 200.

      iii. The highlighted transactions match the date criteria, but the amount does not match. Therefore, a match is not created for these transactions.

Table 10-3 Source System Transactions

Invoice	Date	Amount	Match Id
1001	January 15, 2025	100	20001
1001	**January 16, 2025**	**200**	
1001	January 17, 2025	200	

Table 10-4 Subsystem Transactions

Invoice	Date	Amount	Match Id
1001	January 15, 2025	50	20001

Table 10-4 (Cont.) Subsystem Transactions

Invoice	Date	Amount	Match Id
1001	January 16, 2025	50	20001
1001	January 14, 2025	200	
1001	**January 17, 2025**	**100**	
1001	**January 18, 2025**	**100**	
1001	**January 18, 2025**	**100**	

Evaluating Many to 1 Rule Types

With Many to 1 rule types, Sub System transactions are the base transactions.

> **Note**
>
> For Many to 1 rule types, you must define one rule condition which can be Match Exactly or with tolerance in addition to the Balancing attribute condition.

Evaluating Many to Many Rule Types

With Many to Many rule types, there is no base transaction. Rather, the conditions are evaluated using a set of rules.

The following process is used to evaluate a match for Many to Many rule types with Date tolerance specified.

1. Find the minimum date value and maximum date value from the source system.
2. From the subsystem, use the following formula to compute the minimum date value and the maximum date value that can be allowed when determining a match:
   - Minimum subsystem date must be equal to or greater than maximum source system date + start value of the date tolerance range
   - Maximum subsystem date must be equal to or less than minimum source system date + end value of the date tolerance range
3. Consider all subsystem transactions that are within the computed minimum subsystem date and maximum subsystem date when determining a match

Note that the minimum subsystem date must be equal to or less than the maximum subsystem date.

Example: Many to Many Rule Type with Date Tolerance

In this example, the date tolerance allowed for a match is -2 to +3.

Consider the following source system transactions for store ID 3738.

Table 10-5 Source System Transactions

Store ID	Amount	Date
3738	$715	07-Feb-23
3738	$595	07-Feb-23
3738	$960	04-Feb-23
3738	-$138	04-Feb-23

In the source system transactions, the minimum date value is 04-Feb-23 and the maximum date value is 07-Feb-23.

Consider the following subsystem transactions for store ID 3738.

Table 10-6 Subsystem Transactions

Store ID	Amount	Date
3738	$387	05-Feb-23
3738	$211	05-Feb-23
3738	$378	07-Feb-23
3738	$342	05-Feb-23
3738	$714	06-Feb-23
3738	$100	07-Feb-23

Using the formula in Step 2, determine the date range for subsystem transactions that must be considered for matching.

- Minimum subsystem date must be equal to or greater than 05-Feb-23 (07-Feb-23 - 2 days)
- Maximum subsystem date must be equal to or less than 07-Feb-23 (04-Feb-23 + 3 days).

Therefore, all subsystem transactions that are between 05-Feb-23 and 07-Feb-23 are considered while creating a match. In this example, all subsystem transactions fall within this range.

The sum of the Amounts in the source system is 2132. In the subsystem, the sum of Amounts of the transactions that are within the computed date range is 2132. Therefore, the source system and subsystem transactions are considered a match.

To understand an example when a match is not created, consider the same source system transactions shown above. In the subsystem transactions, the only change is that the last transaction (with Amount = 100) is dated 08-Feb-23. The maximum subsystem date that can be considered when creating a match is 07-Feb-23, so the transaction dated 08-Feb-23 is not included. The sum of Amounts in the source system is 2132, but the sum of Amounts in the subsystem is 2032. Therefore, these sets of source and subsystem transactions are not a match.

> **Note**
>
> For Many to Many rules, you must define at least one Match Exactly condition.

Evaluating Match Rule Conditions for a Balancing Attribute

The method for evaluating match rule conditions for a Balancing Attribute is slightly different than for other attributes. Consider a Many to Many rule type using the sample data. Here's how the system evaluates this:

1. The system will first select all transactions with matching Invoice numbers (rule #1).
2. The Date attributes will then be evaluated to see if they satisfy the rule condition (rule #2).
3. Lastly, it will evaluate whether the Source System Amount matches exactly to the Sub System Amount (rule #3).
   Since it's a Many to Many match with multiple transactions in Source System and Sub System, the Amount values must first be summed by Data Source, and then the sum totals compared.

In our example, the sum of Source System Amount is $500 and the sum of Sub System Amount is also $500, so the match conditions are satisfied:

Source System

Invoice	Date	Amount
1	September 15, 2016	$100
1	September 16, 2016	$200
1	September 17, 2016	$200
	Total:	**$500**

Sub System

Invoice	Date	Amount
1	September 18, 2016	$100
1	September 14, 2016	$200
1	September 17, 2016	$200
	Total	**$500**

> **Note**
>
> The same process applies to 1 to Many matches and Many to 1 matches. Any time multiple transactions of the same data source exist for a match, the values of Balancing Attributes must first be summed before the comparison occurs.

Evaluating Tolerances Set as a Percentage and Variance Limit

The percentage tolerance option is available for **Number** and **Integer** type data source attributes (including balancing attribute) and can be set for:

- Auto match rules
- Manual match rule
- Default attribute mapping

Let's look at how matching works with tolerance low/high values as a percentage. For example, let's assume:

- Matching rule has 1% low and 1% high tolerance
- The tolerance on Up To Amount is set as .5

Source System Amount	Sub System Amount	Calculated Tolerance	Variance (Source - Sub System Amt)	Match Calculation	Result
99.6	100	1% of 99.6 = .99	99.6 - 100 = .4	.4 < .99 and < .5	YES Match found

Source System Amount	Sub System Amount	Calculated Tolerance	Variance (Source - Sub System Amt)	Match Calculation	Result
99.1	100	1% of 99.1 = .99	99.1 - 100 = .9	.9 < .99 but > .5	NO Match found since tolerance variance Up To limit was exceeded
100	99.6	1% of 100 = 1	100 - 99.6 = .4	.4 < 1 and < .5	YES Match Found
100	99.1	1% of 100 = 1	100 - 99.1 = .9	.9 < 1 and > .5	NO Match found since tolerance variance Up To limit was exceeded
50, 49.6	50, 50	1% of 99.6 = .99	99.6 - 100 = .4	.4 < .99 and < .5	YES Match Found

Evaluating Date Tolerances for 1 to 1 and 1 to Many Rules

The date tolerance is the number of days to consider for matching of transactions between two data sources. **Transaction Matching** considers date tolerance in the most common way of matching transactions, treating the Source (in the GL for example), as available "before" the Bank deposits or Sub System transactions. The engine anchors on the Source and calculates the range of date values to consider for matching forward from there based on the tolerance values entered in the rule.

The Date tolerance option is available for **Date** type data source attributes and can be set for:

- Auto match rules
- Manual match rule
- Default attribute mapping

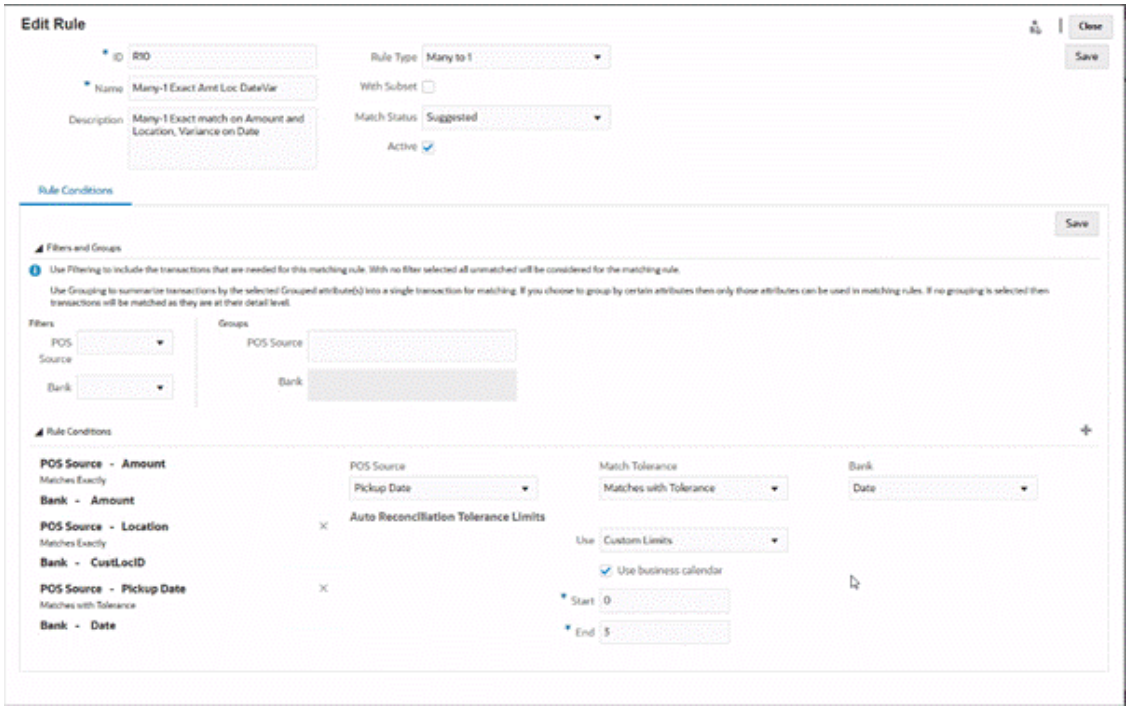
Date tolerance is very flexible and you can use it to specify matching using a:

- **Range** of days
  Use the date tolerance in rules to establish a range of days to consider for the matching. In rule creation, these fields are labelled **Start** and **End** to indicate the range. The engine provides a lot of flexibility for working with the date tolerance range. Let's say you want to consider transactions for matching between today and one day later. That would be Start and End date of 0 to 1. Another example is to start matching transactions two days from the Source transactions and ending 4 days out. You can also consider one day back (start as -1) to 1 day forward by entering a Start as -1 and End value of +1.
- **Specific Date**
  Additional precision for the date tolerance is offered by being able to match transactions from one source to transactions in the Sub System on another specific day instead of a range of days. This is accomplished by using the date tolerance values in the Start and End fields as the same value. For example, let's say that you only want to match your Source transactions with the Bank transactions 2 days out. You can enter 2 in the Start field and 2 in the End field to only consider exactly that day for matching.
- **Business Calendar** instead of a regular calendar in order to eliminate holidays and weekends for consideration in matching.

By default, **Account Reconciliation** uses a regular calendar to specify the dates in a date range. You also have the option of using a business calendar when calculating date range in order to easily eliminate counting days that are work holidays for a company or weekends in calculation of the range. The **Use Business Calendar** check box is available as an option when creating Date Type attribute rule conditions with tolerance and also for match process default attribute mapping. The business calendar option is not available for manual matching.

> **Note**
>
> To use a business calendar, you must specify the work days for your organizational unit as well as a holiday rule containing the list of holidays. The organizational units are assigned to profiles and the associated business calendar is then used during creation of reconciliations. See Defining Organizational Units in the *Setting Up and Configuring Account Reconciliation* guide.

Here is an example of a rule that has date tolerance specified as well as showing the business calendar checkbox.



For more details on creating rules with date tolerance when defining a match process, see Defining the Match Process by Creating Rules

Evaluating Match Rules for Partial Text Match

For text attributes and list attributes, partial text matching enables users to match structured text in an attribute with part of the unstructured text in another attribute. The structured text can appear anywhere within the unstructured text. You can match part of a source system attribute with a subsystem attribute or vice versa.

Under **Rule Conditions**, select **Matches with Contains Operator** under **Match Tolerance** to match partial text.

When matching attributes in a source system and subsystem, you select the source system attribute, sub system attribute, and specify whether the source system attribute must contain the subsystem attribute, or vice versa.

For example, GL is the source system and POS is the subsystem. The Reference attribute (structured text) in the POS must be matched with part of the Line Description attribute (unstructured text) in the GL. To set up this matching:

1. In the **Match Process** tab, click the **Match Rules** tab.
2. Navigate to the **New Rule** or **Edit Rule** dialog.
3. For a manual match rule:
    a. In the **Manual Match** section, click **Configure**.
    b. In the **Rule Conditions** tab, select the source system attribute and subsystem attribute
    c. In **Match Tolerance**, select **Matches with Contains Operator**.
    d. Select **GL Line Description Contains POS Reference**.
4. For an auto match rule:
    a. In the **Auto Match Rules** section, click Add to create a match rule.
    b. Enter the details for the rule, such as ID, name, rule type, and so on. Select the source and subsystem attributes. See Defining Auto Match Rules.
    c. Under **Match Tolerance**, select **Matches with Contains Operator**.
    d. Select **GL Line Description Contains POS Reference**.
    Note that this selection is not available for Many to Many with Subset rules. For more information see, Using a Subset During Creation of Many to Many Rules.

When using a single source, you select the attributes that must be used for the matching. For example, in the POS source, the Reference Number in a debit transaction contains structured text (such as "76284") and Reference Number in a credit transaction contains unstructured text (such as "Rev 76284"). The Reference Number in a debit transaction must match with part of the Reference Number in a credit transaction. You select the attribute that must be used for matching in **Attribute** and select **Matches with Contains Operator** in **Match Tolerance**.

In cases where we are matching two different attributes within the source system, for example, matching Reference (structured text) in a debit transaction with Description (unstructured text) in a credit transaction, you can do one of the following:

- Create a calculated attribute in Transaction Matching
  The value of the calculated attribute is set as follows: If the Amount >= 0, the calculated attribute is set to Reference. If Amount < 0, the calculated attribute is set to the Description.

  The matching is based on the value of the calculated attribute.
- Use SQL mappings in Data Integration
  In this case, instead of a calculated attribute, you create a text attribute without calculation and then use SQL mappings to obtain the result described above.
- Use two different data sources, one for debit and one for credit
  This will behave like two separate data sources and you can then match the required source system and subsystem attributes.

Using a Subset Rule During Creation of 1 to Many and Many to 1 Rules

There may be times when you are working with 1 to Many or Many to 1 rule types and you need to match an amount with a subset of all transactions in order to match correctly. If this is your requirement, then you can use the **With Subset** check box for 1 to Many or Many to 1 rules.

Example: 1 to Many with Subset Rule

Consider the following source system and subsystem transactions. The defined rule condition is that the Amount, Date and GL Value must match exactly.

Table 10-7 Source System Transactions

Amount	Date	GL Value
111	10-13-2023	Shop-1
233	10-13-2023	Shop-1

Table 10-8 Subsystem Transactions

Amount	Date	GL Value
100	10-13-2023	Shop-1
10	10-13-2023	Shop-1
1	10-13-2023	Shop-1
200	10-13-2023	Shop-1
30	10-13-2023	Shop-1
3	10-13-2023	Shop-1

When using the subset matching functionality, the amount 111 from the source system should match with group amount (100 + 10 + 1) from the Subsystem transactions. Similarly, the amount 233 should match with group amount (200 + 30 + 3).

Without using the subset matching functionality, the rule condition, to match exactly with amount, Date and GL string, will be returning the sum of amount of all the six transactions from Subsystem because Date and GL String (10-13-2023, Shop-1) from Subsystem is equal to Date, GL String from Source System. So, the result would be the amount 111 from Source System and a sum (100+10+1+200+30+3) = 344 from the Subsystem and would not be a proper match. Similarly amount 233 from Source System is not a match with amount 344 from Subsystem.

Using a Subset During Creation of Many to Many Rules

The Subset rule for Many to Many match types enables you to match one or more transactions in a data source with all subset of transactions in another data source. The specified tolerance limit is applied to both the data sources.

Null values are included when creating a match with the Match Exactly rule condition.

Example 1: Many to Many with Subset Rule

Consider a match type that contains two data sources, with POS as the source system and Bank as the subsystem. The table below shows a limited set of transactions that are required for the purpose of this example.

Table 10-9 Source System Transactions

Transaction Id	Store Id	Transaction Date	Amount
10001	7959	15-JUL-2021	983
20001	7959	14-JUL-2021	637
30001	7959	11-JUL-2021	288
40001	7959	10-JUL-2021	500
50001	7959	09-JUL-2021	818

Table 10-10 SubSystem Transactions

Transaction Id	Store Id	Transaction Date	Amount
19999	7959	14-JUL-2021	-475
29999	7959	16-JUL-2021	2095
39999	7959	15-JUL-2021	-725

Notice that, although their dates are not an exact match, the transactions with Transaction Id 10001 and 20001 in the source system add up to an amount of 1620. The transactions with Transaction Id 19999 and 29999 in the subsystem add up to the same amount, 1620.

Consider the rule condition to match exactly with Amount and Store Id, anchor the Date, and then apply the specified tolerance limit on the Date. Assume that the specified tolerance is + or - 1 day. In our example, consider the first source system transaction dated 15-JUL-2021. If you use the Many to Many rule (without subset), the source system transactions that match the rule condition are Transaction Ids 10001 and 20001, whose amount adds up to 1620. In the subsystem, all transactions match the rule condition and their amounts add up to 895. This does not result in an exact match. However, when you use the Many to Many with Subset rule, all possible subsets of the subsystem transactions are created based on the specified match rules. This results in the subset with Transaction Ids 19999 and 29999 in the subsystem matching with Transaction Ids 10001 and 20001 in the source system.

Example: Many to Many with Subset Rule, using Business Calendar

Consider a match type that contains two data sources, with POS as the source system and Bank as the subsystem. The table below shows a limited set of transactions that are required for the purpose of this example.

Table 10-11 Source System Transactions

Transaction Id	Store Id	Transaction Date	Amount
60001	7959	09-AUG-2024	818
40001	7959	10-AUG-2024	500
50001	7959	10-AUG-2024	501
30001	7959	11-AUG-2024	288
10001	7959	15-AUG-2024	983
20001	7959	19-AUG-2024	637

Table 10-12 Subsystem Transactions

Transaction Id	Store Id	Transaction Date	Amount
19999	7959	15-AUG-2024	-475
29999	7959	19-AUG-2024	2095
39999	7959	19-AUG-2024	-725

Assume that the business calendar is being used and 16-Aug-2024 is a holiday. 17-Aug-2024 and 18-Aug-2024 is the weekend. You want to create a match rule with the following conditions:

- Store Id matches exactly
- Amount matches exactly
- Transaction Date matches with a tolerance of +1 day.

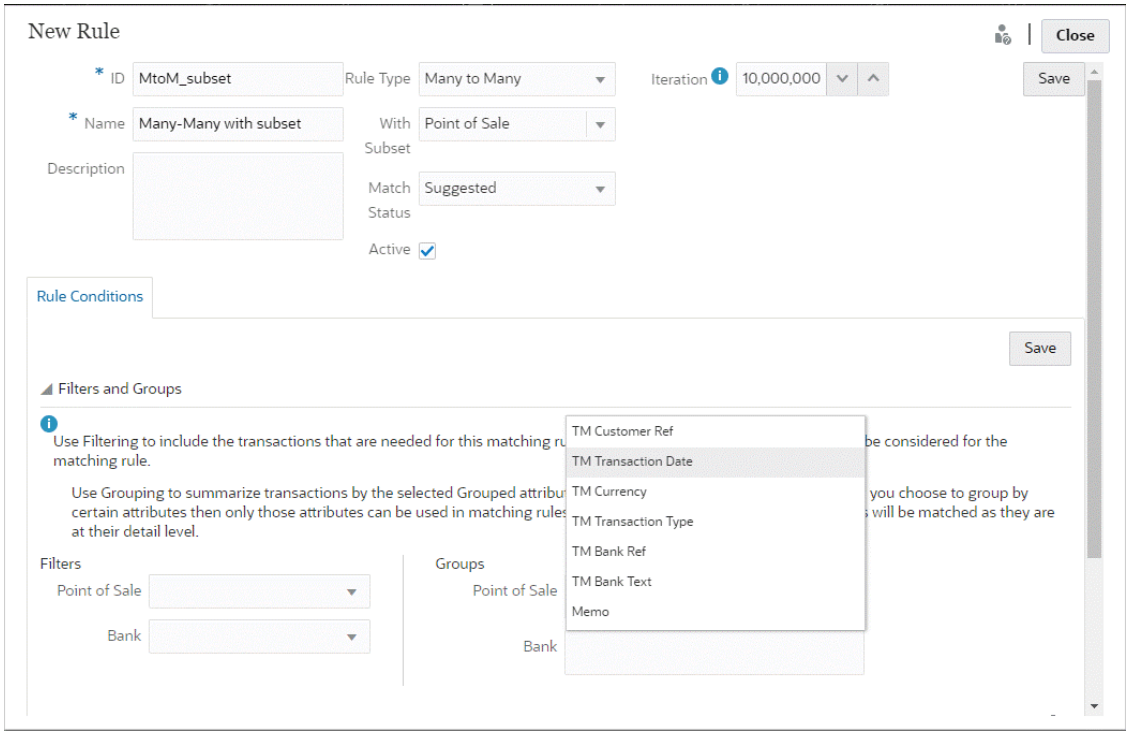
Consider the source system transaction 10001, with date 15-Aug-2024. Because a business calendar is used, and a date tolerance of +1 day is acceptable, subsystem transactions with Transaction Date 19-Aug-2024 will satisfy the date tolerance rule. The following transactions add up to an Amount of 1620 and, therefore, are considered a match as per the rules defined above:

- Source system transactions 100001 and 20001
- Subsystem transactions 19999 and 29999

Defining a the Many to Many with Subset Rule

To create a Many to Many with Subset rule, you must:

- Select a data source in **With Subset**
  Note: If you don't select a data source in **With Subset**, the behavior is the same a Many to Many rule type (without subset).
- Include at least one attribute in **Groups**



You can apply the subset rule to the source system or subsystem. In the New Rule dialog, use **With Subset** to select the data source on which the subset rule must be applied. The other data source is used as the anchor for applying the specified tolerance limit. For example, your match type has two data sources, Bank and POS. If you select Bank under **With Subset**, the subset rule is applied to Bank and a subset of transactions in Bank is matched with a one or more transactions in POS. The POS is used as an anchor and the specified tolerance limit is applied on both POS and Bank.

In the **Groups** section of the **Rule Conditions** tab, ensure that you define at least one group for the anchored data or at least one exact match rule condition. To define a group, in the **Groups** section, select one or more attributes from the anchored data source. Notice that grouping is disabled for the data source that you selected in With Subset.

You can create a Many to Many subset rule when a group attribute is defined, even if there is no exact match condition defined on the non-balancing attribute.

11

Setting Up Transaction Matching Overview

You must set up Reconciliation Compliance before setting up Transaction Matching. This is required because Transaction Matching uses the periods set up in Reconciliation Compliance and also uses formats and profiles to create reconciliations.

For More Information About Transaction Matching

- Click this link to watch the Configuring Transaction Matching video:

- You can learn more about the Transaction Matching Engine:Understanding the Transaction Matching Engine
- You can learn more about using multiple data source and multiple match processes:Using Multiple Data Sources and Multiple Match Processes

Steps to Set Up Transaction Matching

Set up steps must be performed before Transaction Matching can be used with reconciliations.

The key steps in setting up Transaction Matching are as follows:

1. Define group attributes that will be used when creating your match types. See Creating Group Attributes.
2. Create a match type, as described in Creating Match Types.
   Match Types determine how transaction matching occurs. For each Match Type, you define the sources of data and the rules used for the matching process. You can use the same Match Type for multiple reconciliations, as long as the reconciliations share the same data source and matching rule configuration.
3. Create a format by choosing one of the format methods available for Transaction Matching and associate it with a Match Type.

   The format methods for Transaction Matching are:

   - Balance Comparison with Transaction Matching - similar to the Balance Comparison format used in Reconciliation Compliance
   - Account Analysis with Transaction Matching - similar to the Account Analysis format used in Reconciliation Compliance
   - Transaction Matching Only - select this format if you want to use Transaction Matching as before and are not using period-end reconciliations. You also need to configure at least one period.

   See Defining Formats.
4. Define a profile that will be used to create the reconciliations based on the format you defined. See Working with Profiles.

Once profiles have been created, an Administrator can create reconciliations for Transaction Matching and then import data so that users can begin to perform the transaction matching

function. See Creating Reconciliations in Transaction Matching and Understanding Data Loads.

> **Note**
>
> If you need to know more about setting up periods or how the "Locked Through Date" affects activities in Transaction Matching, see Configuring Periods and Locking Periods.

> **Note**
>
> If you are intending to use Oracle Account Reconciliation Cloud for Transaction Matching only and want to create a Balancing Report, you will need to set up at least one period as a prerequisite to setting up Transaction Matching.

Defining Group Attributes

Group attributes provide a mechanism to easily manage a set of dependent attributes that are related to a single entity.

Related Topics

- About Group Attributes in Transaction Matching
  A group attribute is a user-defined attribute that consists of one or more member attributes.
- Creating Group Attributes
  In Reconciliation Compliance, Service Administrators can create group attributes. In Transaction Matching, users with the Match Type - Manage granular role can create group attributes.
- Exporting Group Attribute Member Values
  Exporting a group attribute enables the member attribute values to be reused in a different environment.
- Importing Group Attributes
  Importing a group attribute enables you to use the group attribute contained in the import `.csv` file in your environment.
- Editing Group Attributes
  Service Administrators can modify member attributes and member attribute values.
- Deleting Group Attributes
  Service Administrators can delete a group attribute, member attributes, or member attribute values subject to certain conditions.

About Group Attributes in Transaction Matching

A group attribute is a user-defined attribute that consists of one or more member attributes.

Group attributes can store multiple values for a set of member attributes. One member attribute in the group attribute must be assigned as the key member attribute.

An example of a group attribute is Store, with member attributes as Store ID, Store Name, Store Location, Phone Number, Store Manager, and Store Email. Details for multiple stores can be stored in this group attribute. Data for each member attribute is referred to as a value.

Data stored in the group attribute can be as follows:

Table 11-1 Example: Store Group Attribute

Store ID	Store Name	Store Location	Phone Number	Store Manager	Store Email
100	Store 1	Store1_Location	123-7645	Jane D	jane.d@company.com
200	Store 2	Store2_Location	765-3467	Amar K	amar.k@company.com
300	Store 3	Store3_Location	980-4821	Anita T	anita.t@company.com
400	Store 4	Store4_Location	564-3563	Jack S	jack.s@company.com

> **Note**
>
> Group attributes defined in Reconciliation Compliance are different from those defined in Transaction Matching. You cannot use Reconciliation Compliance group attributes in Transaction Matching and vice versa.

> **Note**
>
> In Transaction Matching, users with the Match Types - View granular role cannot view the Group Attributes tab that displays the list of group attributes.

> **Note**
>
> You cannot create a group attribute or a member attribute with the same name as a system attribute.

Benefits of Using Group Attributes

- Define once and use in multiple objects
- Prevents discrepancies in the value of an attribute that is used in multiple objects
  - When there is a change in any member value, you need to only update the value in the group attribute. This change can then be seen across all objects within the application that reference the key value of the group attribute.
  - When you select a group attribute's key member in a reconciliation or transaction, you automatically get the values of all member attributes.
- Reduces effort involved in setting multiple related attributes across your application Typically, a subset of group attribute members is included in a format, reconciliation, or transaction. So, a reconciliation may use Store ID, Store Manager, and Store Email, and a transaction may use Store ID, Store Location, and Phone Number. When group attributes are used, there is no need to set all these attributes individually. Instead, you select the Store ID (key attribute) and the values of the other attribute members are populated.

Where Can Transaction Matching Group Attributes Be Used?

A group attribute defined for Transaction Matching can be used in the following:

- Match types
  - Data source attributes
  - Adjustment attributes
  - Support attributes
- Dashboards - for the Matching object type

Creating Group Attributes

In Reconciliation Compliance, Service Administrators can create group attributes. In Transaction Matching, users with the Match Type - Manage granular role can create group attributes.

To create group attributes in Reconciliation Compliance:

1. From **Home**, select **Application**, then **Configuration**, and then **Attributes**.
2. Click the **Group** tab.
3. Click **Add** to display the **New Group Attribute** dialog.
4. Specify the group attribute properties. See Specifying Group Attribute Properties.
5. Define the group attribute members. See Defining Member Attributes.
6. Specify values for the group attribute members. See Specifying Values for Group Member Attributes.
7. Click **OK** to save the group attribute.

To create group attributes in Transaction Matching:

1. From **Home**, select **Application**, and then **Match Types**.
2. Select the **Group Attributes** tab. This tab displays all group attributes defined in Transaction Matching.
3. Click **Add** to display the New Custom Attribute dialog.
4. Specify the group attribute properties. See Specifying Group Attribute Properties.
5. Define the group attribute members. See Defining Member Attributes.
6. Specify values for the group attribute members. See Specifying Values for Group Member Attributes.
7. Click **OK** to save the group attribute.

> **Note**
>
> The maximum number of custom attributes and group attributes that can be defined in an application is 950.

Specifying Group Attribute Properties

Group attribute properties include the name and type.

To specify group attribute properties:

1. Click the **Properties** tab in the New Custom Attribute dialog.
2. In **Name**, enter a name for the group attribute. The name should be unique across all custom attributes in the application.
3. In **Type**, select Group.

   Note: The Calculation option is disabled when creating group attributes.

Defining Member Attributes

For each member attribute in a group attribute, you must specify a name and type.

To define the member attributes of a group attribute:

1. Click the **Members** tab in the New Custom Attribute dialog.
2. Create one or more member attributes using the following steps:
   a. Click **Add**. The New Attribute Member dialog displays.
   b. In **Name**, enter a unique name for the member attribute.

      The name must be unique across all custom attributes and system attributes in the application.
   c. In **Type**, select the type of member attribute. See About Custom Attributes.

      If you select List, you must specify a list of values for this member attribute. You cannot select Group as the type for a member attribute.

      > **Note**
      >
      > In Reconciliation Compliance, you cannot add attachments for multi-line text attributes.

   d. If this is a calculation attribute, select **Calculation**. See About Calculated Attributes and Creating Calculated Attributes.

      You can use only the member attributes of this group attribute when specifying the calculation definition.

      > **Note**
      >
      > This option is disabled for member attributes created in Transaction Matching.

3. Select **Key** for the member attribute that must be used as the key for this group attribute. A group attribute must have one key attribute.

Specifying Values for Group Member Attributes

Multiple values can be specified for each member attribute in a group attribute.

You can either enter the values for member attributes or import them from a .CSV file. See Importing Group Attributes.

To specify values for the member attributes in a group attribute:

1. Click the **Values** tab in the New Custom Attribute dialog.

   The grid displays one column for each member attribute defined in the Members tab.
2. Create one or more sets of values for the defined member attributes.
   a. Click **Add** to display a new row.
   b. Enter values for each member attribute.

> **Note**
>
> The values of the key attribute must be unique across the group attribute.

Exporting Group Attribute Member Values

Exporting a group attribute enables the member attribute values to be reused in a different environment.

To export a group attribute:

1. Open the Edit Custom Attribute dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then, click the name of the group attribute that must be exported.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute that must be exported.
2. Click the **Values** tab and select **Export**.

The member attribute values are exported to a file named `Members.csv`, with the member attribute names as columns. If a file with this name already exists, an integer suffix is used and the file name is `Members(n).csv`.

Importing Group Attributes

Importing a group attribute enables you to use the group attribute contained in the import `.csv` file in your environment.

If the import file contains an invalid value (that is, a value that is not present in the group attribute), that attribute is left blank and it can be updated subsequently.

To import a group attribute:

1. Open the **New Group Attribute** dialog, or **Edit Group Attribute** dialog. Refer to the first step in Creating Group Attributes or Editing Group Attributes.
2. Click the **Values** tab, and then click **Import**.

The Import Member Values tab displays.

3. Click **Choose File** to select the `.csv` file that contains the member values.
4. In **Import Type**, select an option that indicates the action to be taken when there are existing values for one or more members.

   Select one of the following options:

   - **Replace:** All values from the import file will be added to or will replace the existing attribute values. Existing attribute values that are not in the import file will not be changed. However, all attribute data for a particular key value will be replaced with the contents from the file or they will be cleared.
     Use this import type when you are only moving the latest changes from a source system. For example, adding new store data from an acquisition.
   - **Replace All:** All values from the import file will completely replace the existing attribute values. Existing attribute values that are not in the import file will be deleted.
     Use this import type when you are mirroring values from a source system with a full update. For example, weekly updates to synchronize with store data from your ERP system.
   - **Update:** Compares using the key attribute and updates member attribute values with those in the file that you are importing. There is no effect on values for key attributes that are not specified in the import file.
     All values from the import file are added to or will replace the existing attribute values. Existing attribute values that are not in the import file will not be changed. Only attribute data for a particular key value will be replaced with the contents from the file. Attribute data for attributes that are not in the file are not changed. Any key values in the import file that are not in the attribute will cause an error.

     Use this import type when you want to update a few attributes across all attribute values. For example, updating the store managers after a reorganization, without affecting the rest of the store data.
5. In **Date Format**, select the required date format.
6. In **File Delimiter**, select the character that is used as a file delimiter in the import `.csv` file.
7. Click **Import**.

Editing Group Attributes

Service Administrators can modify member attributes and member attribute values.

To edit a group attribute:

1. Open the Edit Custom Attribute dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then, click the name of the group attribute that must be updated.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute that must be updated.
2. (Optional) In **Name**, modify the name of the group attribute.
3. To edit a member attribute, click the **Members** tab.

   Select the member attribute to be edited and click the Edit icon. You can edit the member attribute name and the list of values provided for a list attribute. To add a new member attribute, click the Add icon.

You cannot change the key attribute or modify the type of a member attribute.

> **Note**
>
> If the value of a member attribute is updated after a match is created, this change has no impact on existing matches.

4. To edit a member attribute's value, click the **Values** tab.

   Click the required cell and modify the value. After you save the changes, all reconciliations or transactions that use this member attribute will be updated to use the new value.

   You can add new values by clicking the Add icon. Note that you cannot modify the values of the key attribute.

Deleting Group Attributes

Service Administrators can delete a group attribute, member attributes, or member attribute values subject to certain conditions.

> **Note**
>
> In Reconciliation Compliance, group attributes and member attributes can only be deleted if they are not being used in any format, profile, or reconciliation within a period that is not locked.

When a group attribute or member attribute is deleted, any reconciliations or transactions that use them will continue to retain the deleted information.

To delete a group attribute:

1. Access the list of existing group attributes.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab.
2. Click the **Group** tab.
3. For the group attribute to be deleted, click the Actions menu, and select **Delete**.
4. In the Delete Confirmation dialog, click **Yes**.

To delete a member attribute:

1. Open the **Edit Group Attribute** dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then click the name of the group attribute whose member attribute must be deleted.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute whose member attribute must be deleted.
2. Click the **Members** tab.
3. Select the member attribute to be deleted and click the Delete icon.

4. In the Delete Confirmation dialog, click **Yes**.

To delete a member attribute value:

1. Open the Edit Custom Attribute dialog for the group attribute that must be updated.
   - In Reconciliation Compliance: From the Home page, click **Application**, then **Configuration**, and then **Attributes**. Click the **Group** tab. Then, click the name of the group attribute whose member attribute values must be deleted.
   - In Transaction Matching, From the Home page, click **Application**, and then **Match Types**. Select the **Group Attributes** tab and then click the name of the group attribute whose member attribute values must be deleted.
2. Click the **Values** tab.
3. To delete an entire row, select the row and then click the Delete icon.
4. To delete a particular value, click that cell and press the **Delete** key.
   The value of this member attribute becomes null. All reconciliations that use the deleted value will also display a null for this member attribute value.

Creating Match Types

Match types determine how the transaction matching process will work for the accounts that use that match type.

Related Topics

- Steps to Create Match Types
  A match type determines the structure of the data coming from the data sources (columns and data types), and the rules used for matching. Service Administrators and users with the Match Types - Manage granular role can create match types.
- Defining Match Type Properties
  To define a new match type, begin on the Properties tab and enter a name, any instructions or explanation for users when using this match type, and the calendar that determines how frequently balancing can occur for the reconciliations using this type.
- Defining Data Sources
  Data sources contain the transactions that need to be matched.
- Working with Transaction Types
  Transaction types include adjustment types and support types.
- Overview of Defining a Match Process
  A match process defines the rules and conditions used to match transactions in Transaction Matching.
- Defining the Match Process
  Service Administrators can create one or more match processes for a match type. Each match process can define both auto match rules and manual match rules.

Steps to Create Match Types

A match type determines the structure of the data coming from the data sources (columns and data types), and the rules used for matching. Service Administrators and users with the Match Types - Manage granular role can create match types.

Companies may have many match types such as Intercompany Accounts, Bank Accounts, Accounts Receivable, Accounts Payable and various Clearing accounts. Since the data structure and rules for these different accounts are likely different, companies will create a

match type for each account. Match Types are assigned to reconciliations, and more than one reconciliation may use the same match type.

You can use the Match Type Data Source Configuration report to view the configuration settings for all data sources in a particular match type or for all data sources in the system. See Working with Predefined Reports in Transaction Matching in *Administering Account Reconciliation*.

> **Note**
>
> The maximum number of match types that can be created in an application is 300.

To create a match type:

1. Define match type properties. This includes the match type ID, name, and instructions for users when using this match type.
   See Defining Match Type Properties.
2. Define one or more data sources.
   See Define the data sources.
3. Define the matching process, including creating rules that must be used for matching transactions.
   See Define the matching process.
4. Define transaction types, including adjustment types and support types.
   See Define the transaction types.

> **Note**
>
> You can also export and import match types across environments. See Exporting and Importing of Match Types Across Environments

Watch a Creating Match Types Video

Click this link to watch the video:

Defining Match Type Properties

To define a new match type, begin on the Properties tab and enter a name, any instructions or explanation for users when using this match type, and the calendar that determines how frequently balancing can occur for the reconciliations using this type.

To define the match type properties:

1. From **Home**, select **Application**, and then **Match Types**.
2. From **Match Types**, click **New**. The Properties tab of the New Match Type dialog displays.
3. Enter an ID value that is unique across match types, a Name, and optionally a description. The ID must be an alphanumeric value that is less than or equal to 28 bytes. Special characters allowed are period (.), underscore (_), and hyphen (-).

> **Note**
>
> - The status can be either **Pending** or **Approved**. New match types default to **Pending** status. Once you are ready for users to use this match type, change it to **Approved**. Edits cannot be made once the type is in **Approved** status other than editing filters.
> - If you see the warning icon in the Match Type screen:
>   - You can continue to use Match Type without affecting your Day to Day operations. However this may impact your existing reports referencing the SQL view for this Match type. See About Match Type Views for Data Sources.
>   - To fix the warning, you can revert the status to Pending and then Approve the Match Type.

4. Click **Save**.

When you set the status of the Match Type to **Approved** and save the definition, the Match Type view for this match type is created. This view contains all transactions across all the data sources for this match type. Click the database icon in the View field to display the SQL query to use the view in custom reports. See Generating Custom Reports in *Administering Account Reconciliation*.

If the View field displays an exclamation mark (instead of a database icon), it indicates that there was an error when creating the view. You can retry by setting the Match Type Status to **Pending**, setting it back to **Approved**, and the saving your changes. If the problem persists, review your Match Type ID and Data Source IDs. Refer to the following:

- Step 3 in this topic
- Defining Data Sources
- About Match Type Views for Data Sources

Defining Data Sources

Data sources contain the transactions that need to be matched.

Related Topics

- About Defining Data Sources
  Multiple data sources can be added. However, most reconciliations will contain two data sources: transactions from Source system will be matched with transactions from Sub System.
- About Data Source Attributes
  When defining an attribute in a data source, you must provide certain details.
- About Calculated Attributes
  Calculated attributes are read-only.
- About Match Type Views for Data Sources
  A Match Type view is created for each approved match type. This view contains all the transactions across all data sources within the match type.
- Steps to Define a Data Source

About Defining Data Sources

Multiple data sources can be added. However, most reconciliations will contain two data sources: transactions from Source system will be matched with transactions from Sub System.

Certain types of reconciliations (such as Clearing accounts, Suspense accounts, or high volume accruals) require debit/credit matching within a single data source. The goal for both cases is to produce a reconciliation and the format depends on whether you are working with a two or more source process or a one source process.

> **Note**
>
> - The maximum number of data sources that can be created in an application is 750.
> - The maximum number of data sources within a match type is 20.

When defining a data source, you define the "attributes" in the source, which are the columns of data that will be imported. This is also where you can enrich and normalize the data to get it ready for matching by using calculated attributes. For example, you may need to extract a string of text from the center of some field of text, and then match this string of text to some other attribute. Or, you may need to convert various text values into some "normalized" value, so that it can be matched. A library of calculated attributes can be used for data enrichment and normalization, so that you can achieve the greatest number of possible matches using the automated matching engine.

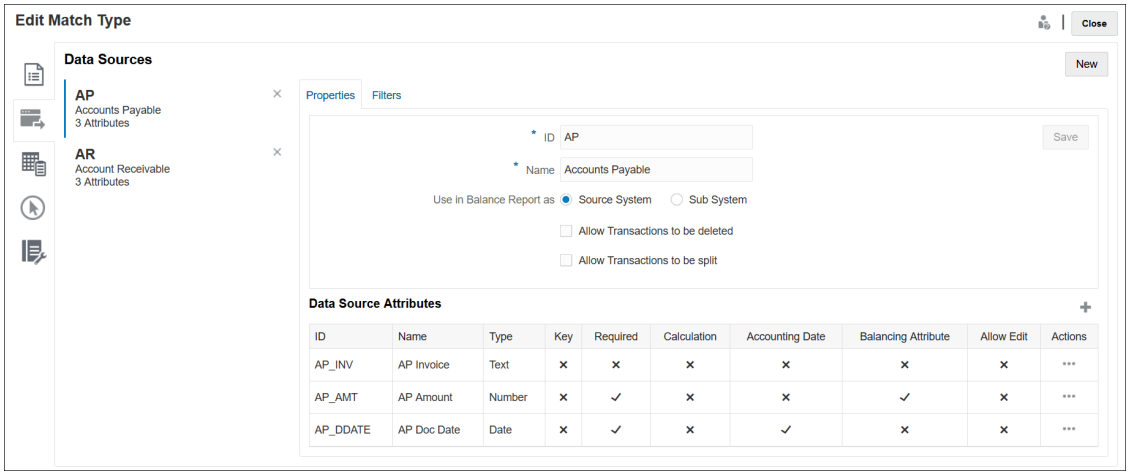
> **Note**
>
> You are required to set up two fields at minimum for each Data Source: **Amount** and **Date**. An **Amount** attribute is needed to represent the transaction amount from the source or sub-system, which is defined as the "Balancing Amount" on the data source definition. An **Amount** should always be set as type **Number**. A **Date** attribute is needed to represent the Accounting Date which determines the accounting period that a transaction is reflected in. The amount and date attributes must be populated on each transaction since they will be used to perform period-end calculations.

An administrator can also allow users to delete transactions for a given data source. This is done by enabling the **Allow transactions to be deleted** check box. Note that this feature can be enabled for a given data source whether transactions are already loaded or not. For information about deleting transactions, see Deleting Transactions

An administrator can also allow users to edit transactions by enabling that feature per data source attribute. For information on Editing Transactions, see Editing Transactions

Example: Match Type with Two Data Sources

Here is an example of a match type showing two data sources, Accounts Payable and Accounts Receivable, with data source attributes for the Accounts Payable data source. Note that the required Date attribute has been created called AP_DDATE. Also a Balancing Attribute has been created called AP AMT.



About Data Source Attributes

When defining an attribute in a data source, you must provide certain details.

> **Note**
>
> A data source can have a maximum of 200 attributes.

The following table describes the details required to create a data source attribute.

Table 11-2 Attribute Details

Field	Description
ID	ID of the data source attribute
Name	Name of the data source attribute The data source attribute ID and name cannot connect special characters such as {, }, [,], |, or reserved keywords (like transaction ID).

Table 11-2 (Cont.) Attribute Details

Field	Description
Type	• **Text**- Used for large comments, descriptions, and so on and can be up to 300 characters long. **Note:** When the value in a text string is already enclosed in double quotes at the beginning and ending of the string, use double quotes when you have comma inside that text. For example: `"GM LLC - GMNA, formerly ""NAO"" ADMIN STAFF"`. • **Date**-The format when loading transactions should be DD-MMM-YYYY or DD-MMM-YY. **Note:** You may have multiple Date attributes, but one must be designated as **Required** and serve as the **Accounting Date** which represents the accounting period that the transaction is reflected in. This date assigned to each transaction will be used to perform all period-end calculations. • **Number**: Used for amount fields up to 15 digits in total and up to 12 digits after precision. Numbers are rounded to 2 decimal places for variance calculations. Numbers with up to total 15 digits are supported without loss of precision. For example, all of these examples are valid: – `1234567890123.45` – `12345678901234.5` – `123456789012.345` – `1234.56789012345` • **Integer**: Used for non-decimal values up to 18 digits and can be positive or negative. • **List**: Used to configure a List of Values and upper and lowercase do not matter when importing. • **Yes/No**: Used for a Boolean field that can be left **Blank**, **Yes** (`1,Yes,YES,Y,y,T,t,True,TRUE,True`) or **No** (`0,No,NO,N,n,F,f,False,FALSE,False`) • **Group**: Used for group attributes. See About Group Attributes in Reconciliation Compliance.
Decimal Places	For attributes with **Type** set to **Number**, enter the number of decimal places that must be used for the attribute.
Default Value	(optional) Enter a default value for this attribute.
Key	Select if you want to activate the duplicate transaction check process. The **Key** setting is a way to uniquely identify a record in the database. You can select one or more attributes as Keys for the duplicate check. The Transaction Import will not load a file if the file contains one or more transactions that match a Key that has already been loaded. **Note:** An attribute of type Group cannot be set as Key.
Required	Select if you want this attribute to be required.

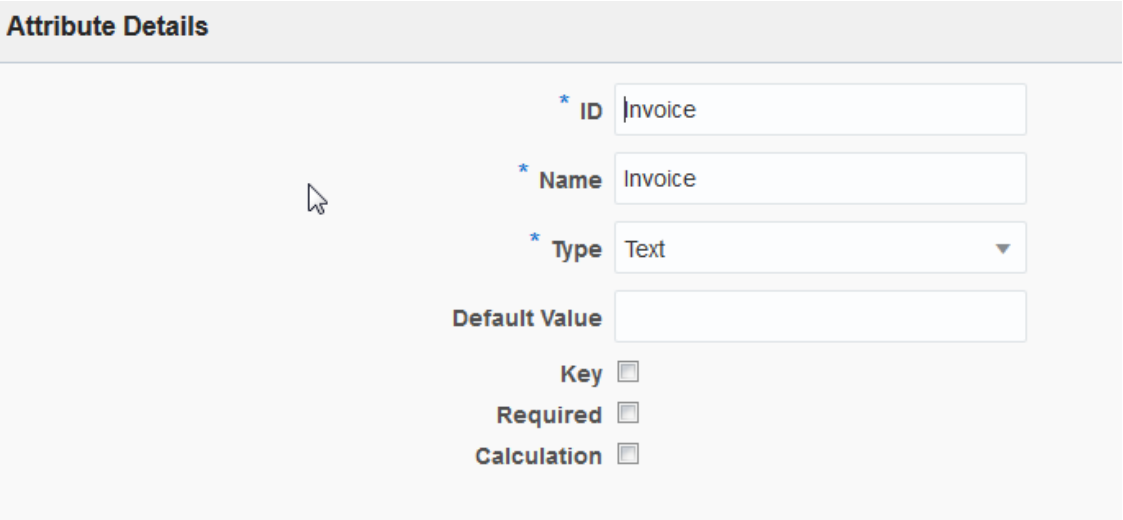
Table 11-2 (Cont.) Attribute Details

Field	Description
Accounting Date	Select if you want the attribute to be set as the Accounting Date. The Accounting Date represents the accounting period that the transaction is reflected in. This date assigned to each transaction will be used to perform all period-end calculations. Only one attribute can be set as Accounting Date.
Balancing Attribute	Select if you want the attribute to be set as a Balancing Attribute. Only one attribute can be set as the Balancing Attribute. The precision of the balancing attribute is inherited from the currency code of the default currency in the lowest currency bucket that is enabled for the Profile.
Calculation	(optional) Check this box if you want the attribute data to be calculated. If you choose this option, a Calculation definition section is displayed.
Calculation Type	Choose whether you want the calculation to be based on a script, when certain conditions are met, or assign value to a list • **Assign Value to List**—if you want to assign a value to a list • **Conditional**—if you want the calculation to be performed when certain conditions are met • **Scripted**—if you want the calculation to be based on a script. Scripted is available for attributes of type Text, Date, Number, or Integer
Calculation Definition	Enter a calculation script in this area.
Add Attribute	Add an existing attribute to a calculation script by selecting from the list.
Add Function	Choose from the library of functions to help create a script: • Date Difference • Extract Text • If Then Else • Lowercase • Maximum • Minimum • Round • Text Location • Uppercase

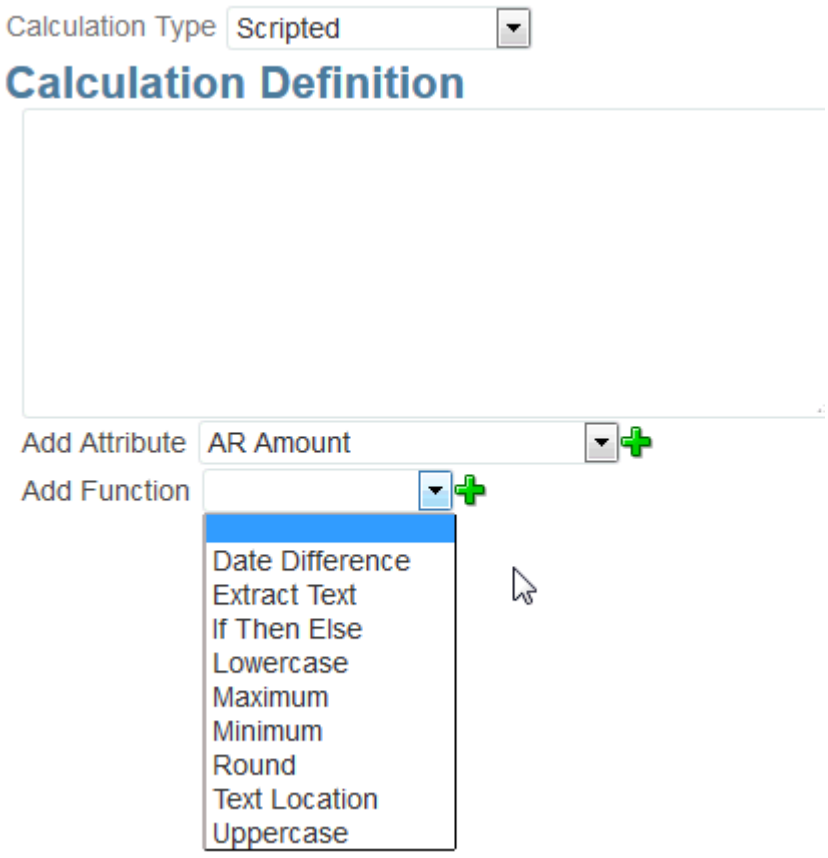
Attribute Examples

Here are some examples of common attributes:

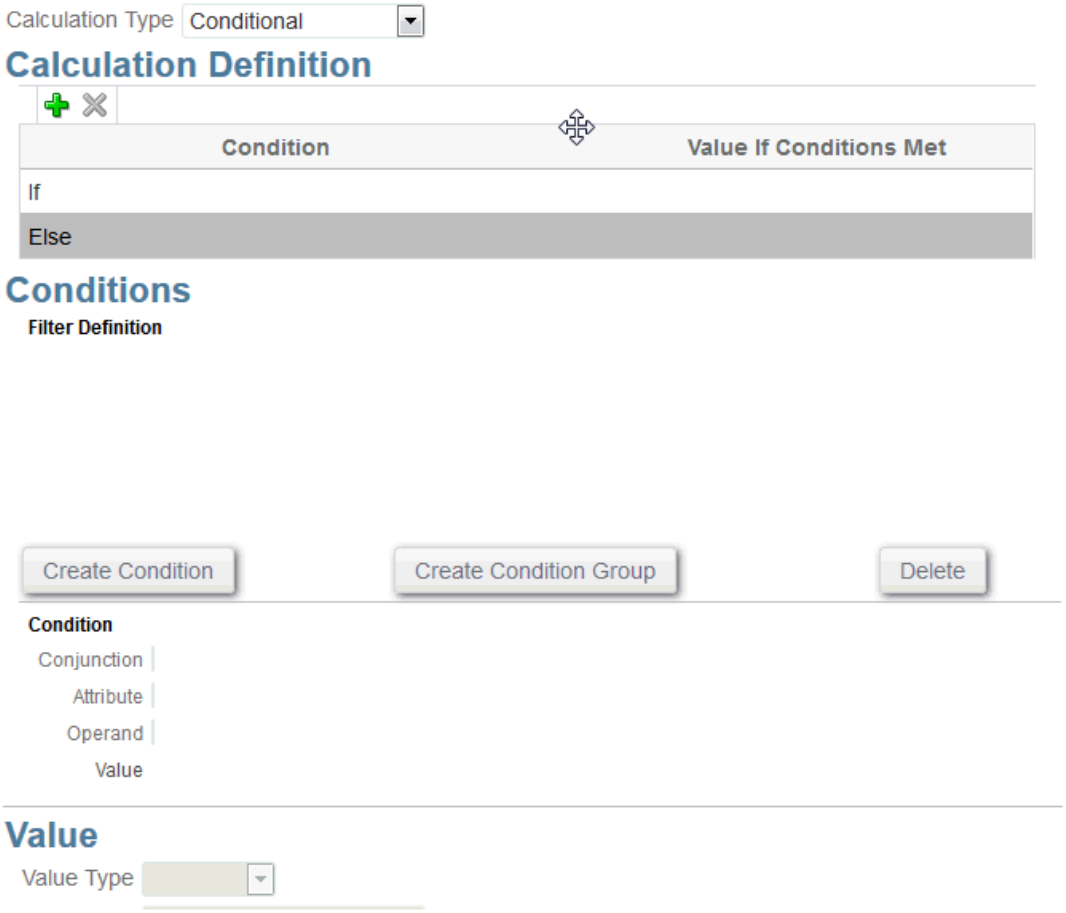
Text



Scripted Calculation Type Example



Conditional Calculation Type Example



About Calculated Attributes

Calculated attributes are read-only.

Administrators can add attributes to the attributes sections in the Actions dialog boxes, and workflow users can view them in the actions dialog boxes and in transactions. Administrators can restrict access to certain roles by setting access to Do Not Display. For example, for calculated attribute XYZ, an administrator could add Viewer: Do Not Display access to it, so that XYZ would not be displayed to viewers.

Any user role can add calculated attributes as columns in views and portlets. They can also be added as filterable attributes in the Filter Panel.

> **Note**
>
> You cannot create calculated attributes that result in a cyclic dependency. For example, the following calculated attributes are not allowed, where A and B are dependent on each other: `A= {B}*(-1)` and `B= {A} + 100`, since that causes a cyclic dependency which is not permitted and causes errors.

About Calculation Types

- **Assign Value to List**—Assign a value to a List type attribute

- **Assign List To Value**—Assign a List Value to the value of a different attribute. Only available for attributes of type List
- **Conditional**—A conditional calculation (If – Then – Else)
- **Scripted**—A free-form scripted calculation. Scripted is available for attributes of type Text, Number, or Integer

The following table lists the calculation types that each attribute type can use when the Calculation option is chosen:

Table 11-3 Calculation Types that Each Attribute Type Can Use When the Calculation Option is Chosen

Attribute Type	Assign Value to List	Conditional	Scripted	Assign List to Value
Date			X	
Integer	X	X	X	
List				
Number	X	X	X	
Text	X	X	X	
Yes/No		X		

Examples of Scripted Functions

Other scripted function examples:

- **Date Difference:** Returns the difference in days, hours minutes, or seconds between two dates. For Date1 and Date 2, the values 'TODAY' and 'NOW' can be used, which denote the current date (with no time component) and date-time, respectively.

  DATE_DIFF(<Date1>, <Date2>, <Type>)

  Example: DATE_DIFF('TODAY', {Preparer End Date}, 'DAYS') or DATE_DIFF({Preparer End Date}, 'NOW', 'HOURS')

- **Extract Text:** Returns the substring within the value, from the positions specified.

  SUBSTRING(<Value>, <Location>, <Length>)

  Example: SUBSTRING({Name} , 5, 10)

- **If Then Else**: Allows the user to insert a conditional calculation into the scripted calculation. IF_THEN_ELSE calculations can also be nested to support "ELSE IF" type calculations.

  IF_THEN_ELSE(<Condition>, <Value1>, <Value2>)

  Example:

  ```
  IF_THEN_ELSE( {Risk Rating} = 'Low', 'Good',
  IF_THEN_ELSE( {Risk Rating} = 'Medium', 'Better',
  IF_THEN_ELSE({Risk Rating} = 'High', 'Best','Bad')))
  ```

- **Length** Takes a text value as a parameter and returns an integer which is the number of characters in the text.
  LENGTH('Value') returns 5, and LENGTH({Name}) would return the number of characters in the name of the object. If the value is empty/null, the calculation will return 0.

  Use the calculation with `SUBSTRING` to extract the last 4 characters of a text value.

  Example: `SUBSTRING( {MyString}, LENGTH ({MyString}) - 4)`

- **Lowercase** Returns the value in lower case.

LOWERCASE(<Value>)

Example: LOWERCASE({Description})

- **Maximum**: Returns the maximum value from a list of attributes. There can be any number of parameters.

  MAX(<Value1>, <Value2>,<ValueN>)

  Example: MAX({Acccount1},{Account2},{Account3})

- **Minimum:** Returns the minimum value from a list of attributes. There can be any number of parameters.

  MIN(<Value1>, <Value2>,<ValueN>)

  Example: MIN({Acccount1},{Account2},{Account3})

- **Round:** Returns the value rounded to the decimal places specified.

  ROUND(<Value>, <Decimal Places>)

  Example: ROUND(({Scripted Translate} /7), 4)

- **Text Location:** Returns the index of the substring within the value, starting at 1 as the first position.

  INSTRING(<Value>, <Value To Search>)

  Example: INSTRING(UPPERCASE({Name}), 'TAX')

- **Uppercase:** Returns the value in upper case.

  UPPERCASE(<Value>)

  Example: UPPERCASE({Name})

About Match Type Views for Data Sources

A Match Type view is created for each approved match type. This view contains all the transactions across all data sources within the match type.

Match Type views simplify the creation of reports on all transactions for a particular match type. The Match Type view for a particular match type contains attributes from all the data sources within that match type. Use the SQL query of this view to obtain the column names for each data source. You can then create a report query that includes all transactions across all data sources within a particular match type. Running custom reports based on this report query enables you to filter and view data about all transactions for a match type in one place. See Generating Custom Reports in *Administering Account Reconciliation*.

A Match Type view can be joined with other tables. Report queries based on Match Type views are portable. If the match type configuration is same between two applications, the same report query will work in both applications even if the applications are not exact clones.

The Match Type view is created or updated when a match type is approved.

Structure of the Match Type View for Data Sources

The name of a Match Type view is its match type ID prefixed with "TM_". For example, the Match Type view name for a match type with ID `POtoInv` is `TM_POtoInv`. The maximum length for the view name is 30 bytes.

The maximum number of columns supported in a Match Type view is 300.

The Match Type view contains fixed system-defined attributes and data source attributes from all data sources within the match type. Column names must not exceed 30 bytes. The column

name for a data source attribute is the data source attribute ID suffixed with an underscore and a letter that represents the data type of the column. See *TM_<MATCH_TYPE_ID>* in *Tables and Views for Account Reconciliation* for details about the columns in the Match Type view.

> **Note**
>
> If the match type ID or the data source attribute ID contains a period (.), or curly brackets ('{' or '}'), this character is replaced with an underscore in the Match Type view. For example, if a match type ID is `InterCompany1.2`, the name of its Match Type view is `TM_InterCompany1_2`.

Examples: Queries for Reporting on Matched Transactions for Match Types

Example 1: Select all transactions for a specific data source

Use any of the following report queries to retrieve all transactions for the match type TM_GL_POS_BANK where the data source is 'Bank'.

```
SELECT * FROM "TM_GL POS Bank" TM_GL_POS_BANK WHERE TM_GL_POS_BANK.SOURCE =
'Bank';


SELECT * FROM "TM_GL POS Bank" TM_GL_POS_BANK WHERE TM_GL_POS_BANK.SOURCE =
'Bank' and
TM_GL_POS_BANK.RECON_ID IN
(SELECT recon.recon_id FROM tm_recon recon, tm_recon_type recon_type,
TM_DATA_SOURCE data_source
     WHERE recon.recon_type_id = recon_type.recon_type_id AND
recon.recon_type_id = data_source.recon_type_id
     AND data_source.recon_type_id = recon_type.recon_type_id AND
data_source.DATA_SOURCE_ID = 2009);
```

Example 2: Select unmatched transactions for a match type

The following report query returns all unmatched transactions for the match type TM_GL_POS_BANK across all data sources.

```
select * FROM "TM_GL POS Bank" TM_GL_POS_BANK where
TM_GL_POS_BANK.match_status_enum is null or TM_GL_POS_BANK.match_status_enum
= 6
```

Example 3: Select all matched transactions between two specified dates

The following report query returns all matched transactions for match type TM_GL_POS_BANK created between the dates. This result includes transactions from all data sources in the match type.

```
 SELECT * FROM "TM_GL POS Bank" TM_GL_POS_BANK LEFT OUTER JOIN TM_MATCH MATCH
ON
   (TM_GL_POS_BANK.RECON_ID = MATCH.RECON_ID AND MATCH.MATCH_ID =
TM_GL_POS_BANK.MATCH_ID)
   WHERE MATCH.CREATE_DATE > ~MATCH_DATE_LOW~ and MATCH.CREATE_DATE <=
~MATCH_DATE_HIGH~
```

Steps to Define a Data Source

To define data sources:

1. From **Home**, select **Application**.
2. On the **Match Types** tab, select the match type you are creating.
3. On the **Data Sources** tab, select **New**.
4. Define the data source properties. See Defining Data Source Properties.
5. (Optional) Create filters. See Creating Filters When Defining Data Sources.

See About Defining Data Sources.

Watch Creating Data Sources Video

Click this link to watch the video:

Defining Data Source Properties

Use the following steps to define the properties of a data source.

1. Enter an **ID** for the data source and a descriptive name.
   The ID must be an alphanumeric value that is less than or equal to 27 bytes. Special characters allowed are period (.), underscore (_), and hyphen (-).

   > **Note**
   >
   > You cannot use the name, **Reconciliation ID**, as an ID since it is a reserved ID.

2. Indicate whether the data source is a **Source System** or a **Sub System** data source.
3. Decide whether you want to allow deletion of transactions by users for this data source. For information about deleting transactions, see Deleting Transactions
4. Decide whether you want to allow split of transactions by users for this data source. Then, click **Save**. For information about splitting transactions, see Splitting Unmatched Transactions
5. In **Data Source Attributes**, click **+** (New Attribute) to start adding attributes to describe how the data in this column should appear. Keep in mind that this is how you can use the powerful calculated attributes feature to normalize and enrich your data before using the matching engine in Transaction Matching.

   See About Data Source Attributes for details about the information that must be provided when creating a data source attribute.

   When you select Group under **Type**, select the required group attribute from the list of available group attributes in **Group Name**. Note that the list include only group attributes defined in the Group Attributes tab in Transaction Matching. The ID and Name fields are disabled and their values are automatically updated based on your selection.

> **Note**
>
> You must create a **Date** type attribute that is required to represent the **Accounting Date**.

6. (Calculated attributes only) To create a calculated attribute, select **Calculation**.

   See About Calculated Attributes for additional information about calculated attributes.

   - Under **Calculation Type**, select one of the following options: **Assign Value to List**, **Assign List To Value**, **Conditional**, or **Scripted**.

     Note that the options listed depend on the data type selected for the attribute. See About Data Source Attributes.

   - When you select **Scripted** Calculation type, to enter a free-form calculation equation, use the Add Attribute and Add Function:

     – **Add Attribute**—Select an attribute and click **Add** to insert the attribute into the Calculation Definition box at the location of the cursor. If the cursor is in the middle of a word or attribute, the word/attribute will be replaced in the definition. Any attribute that is added will have brackets {} around the name, according to the scripting format.

     – **Add Function**—Select a function and click **Add** to add the function to the Calculation Definition. The Function is added with placeholders for each parameter.

7. Click **Save** to continue adding the next attribute.

Creating Filters When Defining Data Sources

After you define a data source and set up the data source attributes, you can set up filters to limit the records included in the list. You can create many different filters depending on how you want to view the information.

To create a filter when defining data sources:

1. Click the **Filters** tab from the **Data Sources** tab.
2. Click the **+** (plus sign) to Add a Filter and display the Filter definition dialog.
3. Enter the **Name** for the filter.
4. Enter the filter criteria:
   a. Click **Create Condition**.
   b. Enter the conditions you want to use to create the filter definition expression (Conjunction, Attribute, Operator, Value).

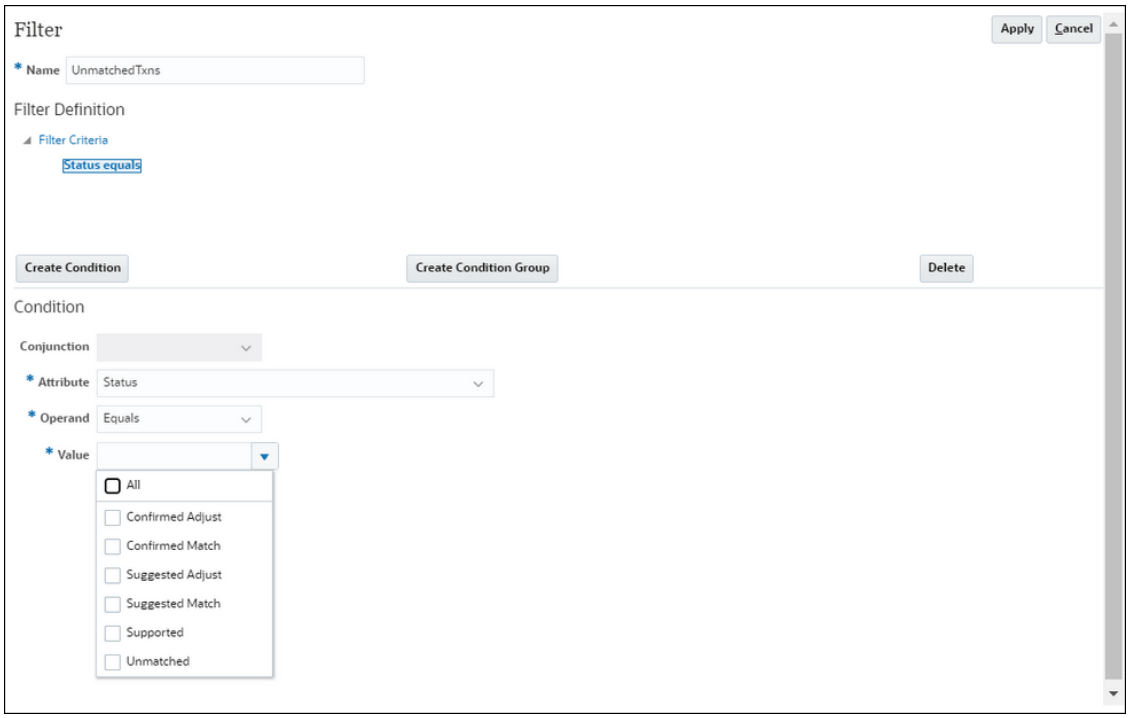
Example of a Data Source Filter Using Age

An example of how a data source filter can help you is using the **Age**, calculated as Current Date minus the Accounting Date, to identify all unmatched transactions that are over 180 days old in order to write those off. Once you create that filter, you apply that filter to the Match Rule for Adjustments so that all the old unmatched transactions are automatically cleared or matched off as Adjustments. Similar to other adjustments created, you can then extract these as journal entries to the GL

> **Note**
>
> The last used filter will be persisted (saved) for each user by match type, match process and data source.This means that you can log out and back in again, and if you open another reconciliation of the same match type, it shows the same filter.

Example of a Data Source Filter Using Status Attribute

Another example of how a data source filter can help you is using the **Status** attribute to filter. Note that the possible statuses are: Unmatched, Supported, Confirmed Adjust, Confirmed Match, Suggested Adjust or Suggested Match.



Working with Transaction Types

Transaction types include adjustment types and support types.

Related Topics

- About Transaction Types in Transaction Matching
  Use of transaction types allows you to create as many unique adjustment and support types as you need to suit your reconciliation requirements.
- Creating a New Adjustment Transaction Type
- Creating a New Support Transaction Type

About Transaction Types in Transaction Matching

Use of transaction types allows you to create as many unique adjustment and support types as you need to suit your reconciliation requirements.

A Service Administrator sets up the transaction types during set up of Transaction Matching. There are two default transaction types provided:

- Adjustment Type
- Support Type

Configuring each transaction type allows the user who is creating the adjustment to select from a list of available adjustments for this reconciliation and the system provides all the information required to post a journal from that reconciliation. A Preparer can also input ad-hoc information by adding comments and attachments. For example, you may want to configure an **Adjustment** type for a reconciliation for each expense account for that reconciliation.

> **Note**
>
> An Administrator may want to set up certain adjustment types used for auto matching and then hide those adjustment types from other users so that they are not selectable for manual matching. Hiding the adjustment type can be done during creation or editing of the adjustment type by deselecting **Allow Adjustment Type for Manual Match Rule**. By default, the check box is selected. Note that the adjustment type cannot be hidden if the adjustment type is used in one or more suggested match rules. Suggested matches created prior to hiding the adjustment type, can show the hidden adjustment type on transaction search but they cannot be confirmed.

The configurable **Support** types is very similar to the Adjustment Type process in that the Preparer can now select from a list of available support types for that reconciliation, allowing them to easily mark their unmatched transactions into support categories that make sense for that reconciliation.

Within an Adjustment Type or Support Type, the attributes are global attributes. This means that you create attributes and other users can reuse them and they appear in a drop down list.

Creating a New Adjustment Transaction Type

1. From **Application**, select **Match Types**, then select the match type you want to edit and under **Actions**, select **Edit**.
2. Select the **Transaction Types** tab and then select **Adjust**.

> **Note**
>
> The match type has to be in **Pending** status.

You can see a list of transaction types on the left.

3. (Optional) You can change the name and description associated with Default Adjust ID.
4. To create a new adjustment type, click **New Transaction Type**.
5. Enter an ID (up to 25 characters identifying this transaction type), a name (up to 50 characters), and optionally, a description (up to 250 characters).
6. Click **Save** to save the details of the adjustment type.
7. Create the required adjustment attributes in the adjustment type.
   - Add an existing global adjustment attribute, including custom attributes, by clicking **Add** and then selecting **Existing**. In the **Attribute Details** dialog, select the **Attribute** and click **Save**.
     Attributes are global attributes so they are available for use by other users in a drop down list. See Creating Global Adjustment and Support Attributes.
   - Define a new attribute by clicking **Add** and then selecting **New**.
     Enter a **Name** and select the **Type**.

   The following data types can be selected for each attribute:

   - **Text** - Used for large comments, descriptions, etc and can be up to 255 characters long

> **Note**
>
> To import string values containing a comma (,) the string value must be enclosed in double quotes. When the string is enclosed in double quotes, you must enclose all other double quotes in the string in a second set of double quotes. Examples are shown in this table.

String Value	Import Status
`"GM LLC - GMNA, formerly ""NAO"" ADMIN STAFF"`	Successful (entire string value in double quotes and second set of quotes around NAO)
`"GM LLC - GMNA, formerly "NAO" ADMIN STAFF"`	Import Error (no second set of double quotes for NAO)
`"GM LLC - GMNA, formerly NAO ADMIN STAFF"`	Successful (double quotes around string value)
`GM LLC - GMNA, formerly NAO ADMIN STAFF`	Error (no double quotes around string value)

- **Date** - Used for date values

  The format when loading transactions should be DD-MMM-YYYY or DD-MMM-YY.

- **Number** - Used for amount fields up to 18 digits (12 digits plus up to 6 decimal places)

  It can be positive or negative value. A negative number can be indicated during import by using the minus sign, for example, -1,000.00 while importing but will show on the user interface as (1000.00).

  In **Decimal Places**, enter a precision between 0 and 12 for the attribute.

- **Integer** - Used for non-decimal values up to 18 digits

  The value can be positive or negative.

- **List** - Used to configure a List of Values and upper and lowercase do not matter when importing

- **Yes/No** - Used for a Boolean field

  The value can be left **Blank**, **Yes** (`1,Yes,YES,Y,y,T,t,True,TRUE,True`) or **No** (`0,No,NO,N,n,F,f,False,FALSE,False`).

8. To hide an adjustment type from being used by users during manual matching, deselect the **Allow Adjustment Type for Manual Match Rule** check box. By default, the check box is selected. Note that the adjustment type cannot be hidden if the adjustment type is used in one or more suggested match rules.

You will see transaction types when you work on:

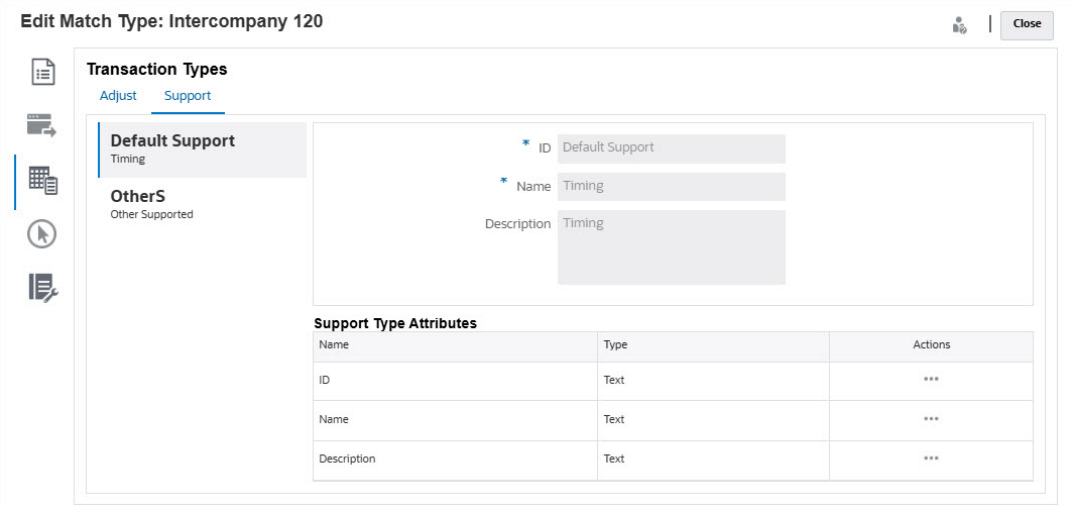
- Editing match rules
- Working with Suggested Matches
- Auto match with adjustments

Creating a New Support Transaction Type

1. From **Application**, select **Match Types**, then select the match type you want to edit and under **Actions**, select **Edit**.

> **Note**
>
> The match type has to be in **Pending** status.

2. Select the **Transaction Types** tab and then select **Support**.
   You can see a list of transaction types on the left. This is an example showing the default support type.



3. You can change the name and description associated with Default Support ID.
4. To create a new support type, click **New Transaction Type**.
5. Enter an ID (up to 25 characters identifying this transaction type), a name (up to 50 characters), and optionally, a description (up to 250 characters).
6. You can add new attributes by clicking **Add** and then selecting **New**.
   To add an existing custom attribute, including a group attribute, click **Add** and select **Existing**. In the Attribute Details dialog, select the required custom attribute.

   - **Text**- Used for large comments, descriptions, and so on

     The value can be up to 255 characters long.

     > **Note**
     >
     > When the value in a text string is enclosed in double quotes at the beginning and ending of the string, use double quotes when you have comma in between. For example: `"GM LLC - GMNA, formerly ""NAO"" ADMIN STAFF"`

   - **Date** - Used for date values

     The format when loading transactions should be `DD-MMM-YYYY` or `DD-MMM-YY`.

   - **Number** - Used for amount fields up to 18 digits (12 digits plus up to 6 decimal places)

     It can be positive or negative. A negative number can be indicated during import by using the minus sign, for example, -1,000.00 while importing but will show on the user interface as (1000.00).

     In **Decimal Places**, enter a precision between 0 and 12 for the attribute.

   - **Integer** - Used for non-decimal values up to 18 digits and can be positive or negative
   - **List** - Used to configure a List of Values and upper and lowercase do not matter when importing
   - **Yes/No** - Used for Boolean fields

     It can be left **Blank**, **Yes** (`1,Yes,YES,Y,y,T,t,True,TRUE,True`) or **No** (`0,No,NO,N,n,F,f,False,FALSE,False`).

Overview of Defining a Match Process

A match process defines the rules and conditions used to match transactions in Transaction Matching.

Related Topics

- About Match Processes
  A match process specifies the match rules for matching transactions. Each match type can have multiple match processes.
- About Defining Match Process Properties
  Properties of a match process include the ID, name, and data sources.
- About Defining Match Rules
  Match rules determine how matches are made.
- About Automated Alerts for Transaction Matching
  Service Administrators can configure alerts to be automatically generated for a particular match type.

About Match Processes

A match process specifies the match rules for matching transactions. Each match type can have multiple match processes.

Define the following to create a match process:

- Match process properties

  This includes specifying the number of data sources, the source system, the subsystem, the default attribute mapping, and the bucket attribute mapping.

  See About Defining Match Process Properties.

- Match rules

  Match rules determine how transactions from the source system must be matched with transactions from the subsystem. A match process can contain Auto Match rules and also manual match rules.

  See About Defining Match Rules.

About Defining Match Process Properties

Properties of a match process include the ID, name, and data sources.

Specify the following when defining match process properties:

- Match process ID
  The ID must always be unique within the match type.
- Match process name
  The ID and Name identify the match process in various places, so that you know which set of matching rules were used to produce a given set of matches.
- Data Sources

  The number of data sources determines how many data sources are included in the match process. Then you specify the data sources that represent the source system and subsystem.

For example, if three data sources are defined in a match process, and Match Process 1 uses two data sources and Match Process 2 uses one data source, then you select the name of the data sources to assign to Source System and Sub System. Then you select the format and the list of available formats is dependent on the number of data sources assigned to the match process.

- Adjustment Accounting Date
- Default attribute mapping
- Bucket attribute mapping

See Specifying the Properties of the Match Process.

Group Attributes in Default Attribute Mapping

When you use group attributes in the default attribute mapping, note the following:

- Key member attributes of type Integer or Text cannot be used in a mapping.
- Key member attributes can only be used in exact matches and cannot use tolerance.

About Default Attribute Mappings

Default attribute mappings can be defined for a match process.

A default attribute mapping configures the match process limits for match rules with tolerance set to **Match with Tolerance** and **Use** set to **Match Process Limits**. By default, the system creates a default attribute mapping using the balancing attributes in the source system and subsystem. The Default Tolerance Limit for this mapping is set to -0 To +0. You can edit this default attribute mapping and change the tolerance limits. Based on your business requirement, additional default attribute mappings can be created.

For example, if the balancing attribute in the source system is Amount and the balancing attribute in the subsystem is InvAmount, then a default attribute mapping is created to match Amount and InvAmount with a default tolerance of -0 to +0. You can edit this to -1 to +1, to suit your requirement. When you create a rule condition that uses Amount and InvAmount, and you set **Match Type** to **Match with Tolerance** and **Use** to **Match Process Limits**, the **From** and **To** values default to -1 and +1 respectively (the tolerance limits specified in the default attribute mapping).

About Defining Match Rules

Match rules determine how matches are made.

See Defining Match Rules and Rule Conditions in the Match Process.

Types of Match Rules

Account Reconciliation provides the following types of match rules:

- Auto Match rule

  Auto Match rules are used by the auto match process. You define the rules or conditions that must be met in order for a match to be made. A match process can contain one or more Auto Match rules. To define an Auto Match rule, specify a unique ID, name, rule type, match status, and the rule conditions.

- Manual match rule

You can create one or more rule conditions within a manual match rule. To define a manual match rule, create one or more rule conditions. If you want to perform manual matching only, you can create a match process without any auto match rules.

See Match Rules for details about the match status for match rules and supported match rule types.

You can use the Match Type Rule Configuration report to view the configuration settings for all match rules in a particular match type or for all match rules in the system. See Working with Predefined Reports in Transaction Matching in *Administering Account Reconciliation*.

Changing Batch Size and Number of Matching Iterations for Auto Match Rules

Transaction Matching allows you to change the default values for the number of iterations during the match process for Auto Match rules. See Changing Defaults for Maximum Iterations for Auto Match Rules.

Understanding Match Rule Conditions

Setting rule conditions determines which attributes must be matched together, and whether they must exactly match, or whether a tolerance is allowed.

Rule conditions makes it easier to define matching rules in multiple source match processes by defining the default relationship between attributes in Source System and Sub System.

If the source system or subsystem contains a group attribute, all its member attributes can be used when defining a rule condition.

The list of rule types is dependent on the format. For example,

- **Balance Comparison with Transaction Matching** corresponds to a two source match and can be: 1 to 1, 1 to Many, Many to 1, and Many to Many.

  1 to 1 means 1 transaction from Source System will be matched to 1 transaction from Sub System.

  1 to Many means 1 transaction from Source System will be matched to all transactions from Sub System that meet the rule conditions.

- **Account Analysis with Transaction Matching** corresponds to a one source match and can be: 1 to 1, 1 to Many, Many to 1, and Many to Many.
  1 + to 1- means 1 positive transaction will be matched to 1 negative transaction.

  1+ to Many – means 1 positive transaction will be matched with all negative transactions that meet the rule conditions.

For example, if three data sources are defined, and Match Process 1 uses two sources and Match Process 2 uses one, then you select the name of the data sources to assign to Source System and Sub System. Then you select the format and the list of available formats is dependent on the number of data sources assigned to the match process.

About Setting Tolerance Levels

Setting tolerance levels allows matching of transactions that have variances.

There are three ways to set tolerance levels. You can set:

- a tolerance variance value that is applied to the transactions. For example, auto match with a variance between -1 and +3.
- a tolerance threshold level expressed as a percentage.. For example, auto match with up to 0.5% of the value of the amount.

- a tolerance threshold level expressed as a percentage along with a variance amount. For example, auto match with up to 1.0% of the value of the amount up to a maximum amount of 100.00.

> **Note**
>
> The percentage value can not be more than 100 for both high and low tolerance. You can use a tolerance level as a percentage for **Number** and **Integer** type data source attributes only. The option to express as a percent will not display for other types such as **Date**.

When setting tolerance limits, there is a **Use percentage tolerance** check box that allows you to express the tolerance level as a percent and you can also then set a maximum variance value.

About Setting Date Tolerance in 1 to 1 and 1 to Many Rules

The date tolerance is the number of days to consider when matching transactions from two data sources.

Transaction Matching considers date tolerance in the most common way of matching transactions, treating the Source (in the GL for example), as available "before" the Bank deposits or Sub System transactions. The Transaction Matching engine anchors on the Source and calculates the range of date values to consider for matching forward from there based on the tolerance values entered in the rule.

The Date tolerance option is available for **Date** type data source attributes and can be set for:

- Auto Match rules
- Manual match rule
- Default attribute mapping

Date tolerance is very flexible and you can use it to specify matching using a:

- **Range** of days
  Use the date tolerance in rules to establish a range of days to consider for the matching. In rule creation, these fields are labelled **Start** and **End** to indicate the range. The engine provides a lot of flexibility for working with the date tolerance range. Let's say you want to consider transactions for matching between today and one day later. That would be Start and End date of 0 to 1. Another example is to start matching transactions two days from the Source transactions and ending 4 days out. You can also consider one day back (start as -1) to 1 day forward by entering a Start as -1 and End value of +1.
- **Specific Date**
  Additional precision for the date tolerance is offered by being able to match transactions from one source to transactions in the Sub System on another specific day instead of a range of days. This is accomplished by using the date tolerance values in the Start and End fields as the same value. For example, let's say that you only want to match your Source transactions with the Bank transactions 2 days out. You can enter 2 in the Start field and 2 in the End field to only consider exactly that day for matching.
- **Business Calendar** instead of a regular calendar in order to eliminate holidays and weekends for consideration in matching.
  By default, **Account Reconciliation** uses a regular calendar to specify the dates in a date range. You also have the option of using a business calendar when calculating date range in order to eliminate counting days that are work holidays for a company or weekends in calculation of the range for matching. The **Use Business Calendar** check box is available

as an option when creating Date Type attribute rule conditions with tolerance and also for match process default attribute mapping. The business calendar option is available for all rules except Many to Many and is not available for manual matching.

To use a business calendar, you must specify the work days for your organizational unit as well as a holiday rule containing the list of holidays for that organizational unit. The organizational units are assigned to profiles and the associated business calendar is then used during creation of reconciliations. See Defining Organizational Units in the *Setting Up and Configuring Account Reconciliation* guide.

> **Note**
>
> For a particular business date, the system calculates the offset business date. Business day is the unique date from the anchor data source. If business calendar is used, then for each unique date the system figures out the calculated offset date for sub system. In the case of 1 to 1 and 1 to Many (source system anchor) and Many to 1 (Sub system anchor), the anchor date is a single unique date and the system calculates the offset date applying the business calendar on that unique date. Many to Many matching may have multiple dates within the group (source system anchor) and that means there is no unique date to calculate offset date.

Best Practices for Defining Match Rules

Follow best practices to improve the matches created by Transaction Matching.

- Start defining match rules with the most precise rules first, those likely to create the highest number of quality matches, and then work down to the rules that may be less certain in their results.
  - The most precise rules are 1 to 1 rules, followed by 1 to Many or Many to 1 rules, and then Many to Many rules.
  - **Matches Exactly** rules are more precise than **Matches with Tolerance**.
  - Rule conditions with more number of reference attributes, that can uniquely identify a match, are more precise than those with only the balancing attribute.
- Do the following to improve the performance of Auto Match for subset rules:
  - Create one or more rules (except a subset rule) by using attributes that can uniquely identify a match and configure this rule to run before the subset rule
  - Include additional attributes in the rule condition of the subset rule to uniquely identify transactions that must be matched
- If you no longer need a rule, but there are existing matches that are matched using a rule, it is recommended that you deactivate the rule instead of deleting it. The rule can be deleted after the matches are purged for that rule.

About Automated Alerts for Transaction Matching

Service Administrators can configure alerts to be automatically generated for a particular match type.

Automated alerts are created on unmatched transactions only. As a best practice, filters must always be used so alerts are only created for the intended unmatched transactions.

When the conditions specified in the alert rule are met, the alert is automatically generated, assigned to the specified Assignee, and an email notification is sent to the Notification Assignee. The status of automated alerts is set to Open with Assignee. If automatic priority escalation is enabled, and the alert is not closed within the specified number of days, the priority of the alert is escalated automatically and notifications are sent to the respective users, for the specified Notification priority on the **Viewers** tab of the alert type. See Assigning Alert Type Viewers in *Administering Account Reconciliation*.

Note that if a transactions is already associated with an alert, this transaction is not included in another alert. If a transaction is missing a value for a group attribute, an alert is not created for this transaction.

In the **Match Process** tab of a match type, use the **Alert Rules** tab to configure automated alerts for Transaction Matching. This tab lists all the configured alerts for the match type. The **Status** filter enables you to select the alert rules that are displayed – All, Active, or Inactive. Use the **Actions** menu on an alert to perform the following actions: **Edit**, **Delete**, **Duplicate**, **Move to Top**, **Move Up**, **Move Down**, **Move to Bottom**, and **Move to Position**. See Setting Up Alert Rules for Automated Alerts.

After automated alerts are configured, an Auto Alert job must be created to process the defined alert rules and then generate the automated alerts. See Running Auto Alert Jobs in *Reconciling Accounts with Account Reconciliation*.

Service Administrators can configure what content from the object must be included in the alert's email notification. See Specifying Notification Email Details in *Administering Account Reconciliation*. They can also override users assigned to the alert, in case that alert should not use the currently-loaded group attributes.

Automatic Closing of Generated Alerts

Automated alerts are closed automatically when all the unmatched transactions that are part of alert are matched. For example, if an alert contains seven unmatched transactions, this alert gets automatically closed when all seven transactions are matched. The status of the matched transactions must be Confirmed Match or Confirmed Adjust.

Defining the Match Process

Service Administrators can create one or more match processes for a match type. Each match process can define both auto match rules and manual match rules.

See Overview of Defining a Match Process.

To create a match process:

1. From the Home page, select **Application**, then **Match Types**.
2. On the **Match Types** tab, select the Match Type you are working with. The **Edit Match Type** tab displays.
3. Select the **Match Process** tab, and the **Properties** tab displays.
4. Define the properties of the match type.

   See Specifying the Properties of the Match Process.
5. Create one or more match rules. This includes auto match and manual match rules.

   See Defining Rules and Rule Conditions in the Match Process.

> **Note**
>
> The maximum number of match processes within a match type is 20.

Watch Creating Match Process Video

Click this link to watch the video:

Specifying the Properties of the Match Process

Match process properties include an ID, name, and data sources.

See About Defining Match Process Properties.

To specify the properties for a new match process:

1. Navigate to the Properties tab of the match process. See Defining the Match Process.
2. Enter an **ID** for the match process and **Name**.
3. Select the **Number of Data Sources**.
4. Select the **Source System** data sources and the **Sub System** data sources.
5. In **Set Adjustment Accounting Date**, select one of the following:
   - **Match Date** (default setting)
   - **Latest Accounting Date in the Match Group**
   - **Earliest Accounting Date in the Match Group**
6. (Optional) Select **Allow Edit** to enable users to set the adjustment accounting date to a user-defined value. This is applicable when creating manual matches and adjustments.
7. Click **Save**.
8. The default attribute mapping displays the attributes from your defined data sources and shows the relationship between attributes in Source System and Subsystem data sources. See About Default Attribute Mappings.
9. Use the + (Plus sign) under **Default Attribute Mapping** to add a new attribute mapping.

   The **New Attribute Map** dialog is displayed. It contains the attributes from your defined data sources. Use this dialog to map the Source System attributes to the Sub System attributes and define match process limits.

   a. Select the attributes from the source system and the sub system that must be mapped.
   b. In the **Default Tolerance Limit** section, specify the tolerance limits for matching the source system and sub system attributes.

      See About Setting Tolerance Levels.
   c. Click **Save** to save the attribute map definition.

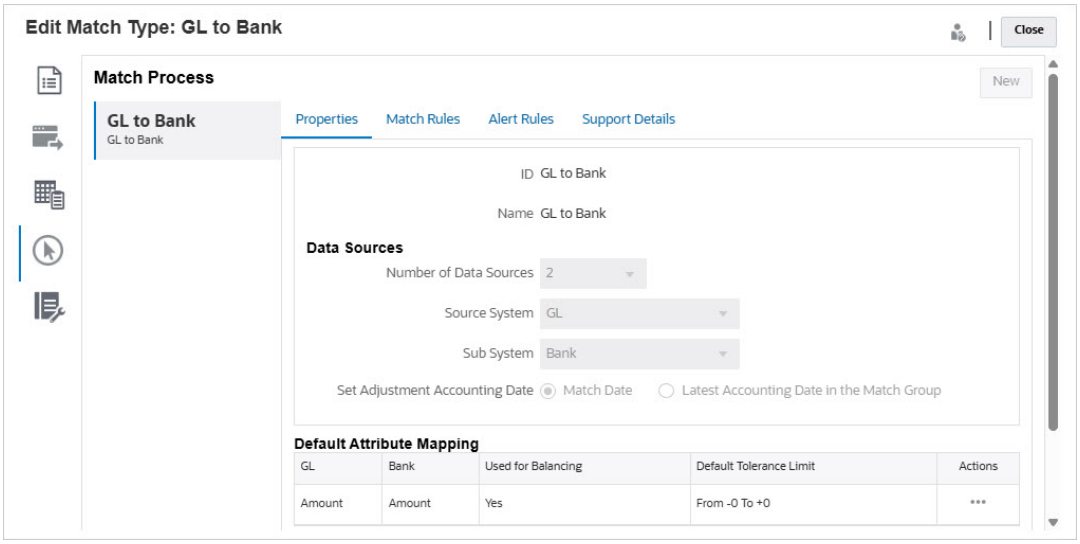
   See Default Attribute Mapping Example.
10. Use the + (Plus sign) under Bucket Attribute Mapping to configure a bucket mapping. See Configuring Buckets in *Administering Account Reconciliation*.

Default Attribute Mapping Example

This example shows how to define a default attribute mapping for the GL to Bank match process.

For more information about the default attribute mapping, see About Default Attribute Mappings.

1. Create a match process for the required match type. See Specifying the Properties of the Match Process.



2. Click the **+** (Plus sign) under **Default Attribute Mapping** to add a new attribute mapping. The **New Attribute Map** dialog automatically displays the Balancing Attribute already defined in your data source.
3. Map the source system attribute to the sub system attribute.
4. Under **Default Tolerance Limit**, define the match process limits.
   Select **Use percentage tolerance** if the match process must use percentage tolerance.

   In **From** and **To**, specify the tolerance limits. For more details on how tolerances work, see Understanding the Transaction Matching Engine.

Defining Match Rules and Rule Conditions in the Match Process

Match rules and rule conditions determine how attributes are matched.

See About Defining Match Rules.

> **Note**
>
> Each match process can have a maximum of 500 match rules. This includes Auto Match and Manual Match rules.

To create match rules and conditions:

1. Navigate to the Match Process tab of the match type in which you want to add a match rule. See Defining the Match Process.
2. Click the **Match Rules** tab.
3. (Optional) Create a manual match rule. See Defining Manual Match Rules.
4. Create the required auto match rules. See Defining Auto Match Rules.
5. Click **Close**.

Defining Manual Match Rules

Define one manual match rule that contains one or more rule conditions.

To create a manual match rule:

1. Navigate to the Match Process tab of the match type in which you want to add a match rule and then click the **Match Rules** tab. See Defining the Match Process.
2. Under **Manual Match Rule**, click **Configure**.
   The Edit Rule dialog appears. By default, there is a rule that contains the balancing attribute specified in Default Attribute Mapping. You can update the tolerance limits for this rule.
3. Click **New** to add a new rule condition.
4. Select the attributes from the source system and subsystem that must be matched for this rule condition. Group member attributes can also be used in match rule conditions.

   In **Match Tolerance**, specify how the attributes must be matched by selecting one of the following: **Matches Exactly**, **Matches with Tolerance**, or **Matches with Contains Operator**.

   If **Match Tolerance** is set to **Matches with Tolerance**:

   - In **Use**, select one of the following: Match Process Limits, Custom Limits.
   - For Auto Match rules that compare Date attributes only: Select **Business Calendar** to use the business calendar while comparing date values.
   - Select **Use percentage tolerance** if you want to match attribute values using a percentage tolerance.
   - In **From** and **To**, specify values for the lower and upper tolerance limits allowed when matching attribute values.

   If **Match Tolerance** is set to **Matches with Contains Operator**, you select the source system attribute, subsystem attribute, and specify whether the source system attribute must contain the subsystem attribute, or vice versa.

   > **Note**
   >
   > When the **Match Tolerance** is set to **Matches with Tolerance**:
   >
   > - The data type of the attributes must be Integer, Number, or Date.
   > - The key attribute of a group attribute cannot be used in a match rule.

5. (Optional) Set up default adjustment and support values for the match process. See Setting Up Default Adjustment Values.
6. Click **Save**.

Defining Auto Match Rules

Define one or more auto match rules in a match process. Auto match rules are processed in the order in which they appear.

To create auto match rules:

1. Navigate to the **Match Process** tab of the match type in which you want to add a match rule.
2. Click the **Match Rules** tab. See Defining the Match Process.
   The **Match Rules** tab contains two sections, **Manual Match Rule** and **Auto Match Rules**. In the **Status** filter, select one of the following options to filter the Auto Match rules that are displayed: All, Active, or Inactive.
3. In the **Auto Match Rules** section, click Add (+ sign). The **New Rule** dialog appears.
4. Assign a unique **ID**, and then a **Name** to the rule. A description is optional.

   > **Note**
   >
   > The **ID** field may contain up to 25 alphanumeric characters and cannot include any special characters except a period (.), dash (-), or underscore (_).The **Name** field may contain up to 50 alphanumeric characters and cannot include any special characters except a period (.), dash (-), or underscore (_).

5. Specify the **Rule Type**. This determines the number of transactions selected on each side of the match.
   The options available are: **1to1**, **1 to Many**, **Many to 1**, **Many to Many**, and **Adjustment**.
6. For **1 to Many**, **Many to 1**, and **Many to Many** rule types only: Select **With Subset** to create a subset rule.
   See Using a Subset Rule During Creation of 1 to Many and Many to 1 Rules and Using a Subset During Creation of Many to Many Rules.
7. Select the **Match Status.** This is the status assigned to the match when the specified match rule condition is met.
8. Unselect **Active** if you want the rule to be inactive. By default, auto match rules are set to **Active**.
9. Click **Save**.
10. In **Filters and Groups**, you can group transactions based on the specified attributes (including group member attributes) in the **Groups** section.
    Grouping applies to the "Many" side of the rule and is supported for the following rule types, when **Subset** is not selected: One to Many, Many to One, and Many to Many rules.
    The **Use Business Calendar** option is available only for attributes of data type Date.

    See Filtering and Grouping Transactions in Auto Match Rules.
11. Expand **Rule Conditions** and create one or more match rule conditions that must be met for this match rule to be satisfied and the transactions to be considered a match.

    For each rule condition:

    - Select the attributes from the source system and subsystem that must be matched Group member attributes can also be used in match rule conditions.

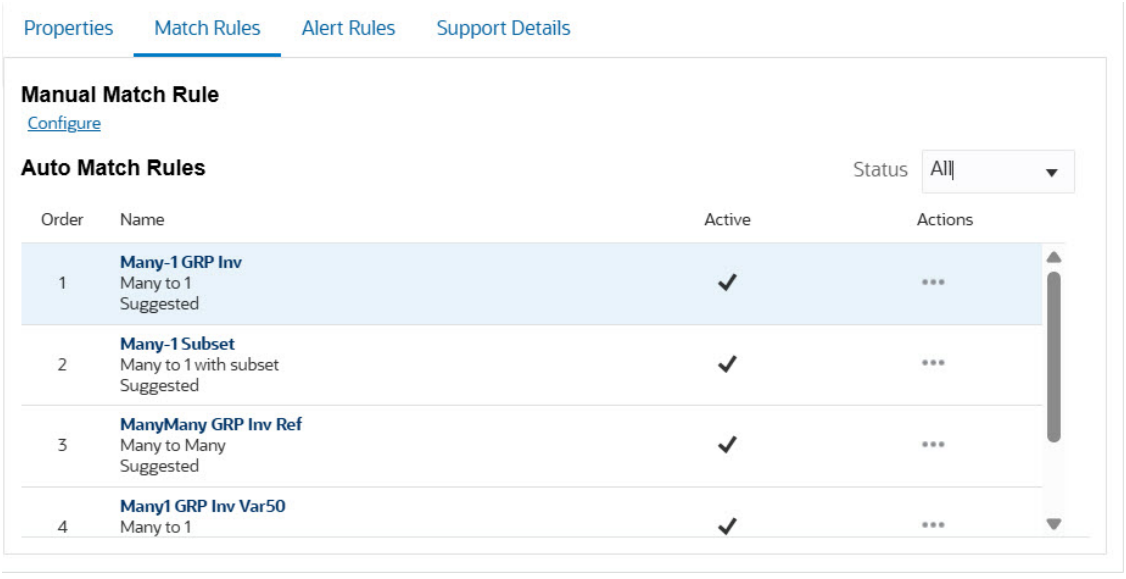
- In **Match Tolerance**, specify how the attributes must be matched by selecting one of the following: **Matches Exactly**, **Matches with Tolerance**, or **Matches with Contains Operator**.
  For a rule condition with **Match Tolerance** set to **Matches with Tolerance**:
  - In **Use**, select one of the following: Match Process Limits, Custom Limits.
  - For Auto Match rules that compare Date attributes only: Select **Business Calendar** to use the business calendar while comparing date values.
  - Select **Use percentage tolerance** if you want to match attribute values using a percentage tolerance.
  - Specify **From** and **To** values for the lower and upper tolerance limits when matching attribute values.

  If **Match Tolerance** is set to **Matches with Contains Operator**, you select the source system attribute, subsystem attribute, and specify whether the source system attribute must contain the subsystem attribute, or vice versa.

> **Note**
>
> When the **Match Tolerance** is set to **Matches with Tolerance**
> - The data type of the attributes must be Integer, Number, or Date.
> - The key attribute of a group attribute cannot be used in a match rule.

12. (Optional) Set up default adjustment and support values for the match process. See Setting Up Default Adjustment Values

This is an example of the **Match Rules** tab filled out for an auto match process. The **Active** column shows which rules will run during Auto Match. An **X** indicates that a rule will not run and is inactive. Rules can be set to inactive using the **Edit Rule** dialog.



Setting Up Default Adjustment Values

During matching, users need to add adjustments to explain differences.

When the Service Administrator defines the matching process through creation of rules, and a rule allows for tolerances, the Administrator can set up default adjustment attribute values so that users do not have to manually enter those values repetitively. This helps speed user entries during matching.

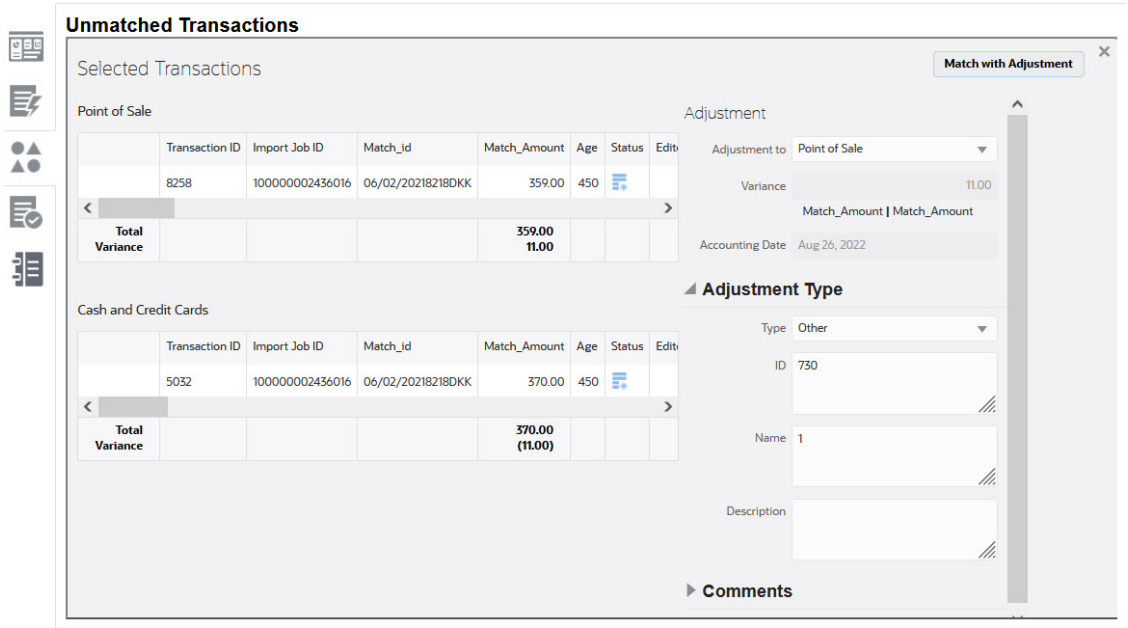
Default adjustment values can be:

- Explicit - set a specific value that must be used as the default
- Mapped - assign a data source attribute to the selected adjustment transaction type as the default

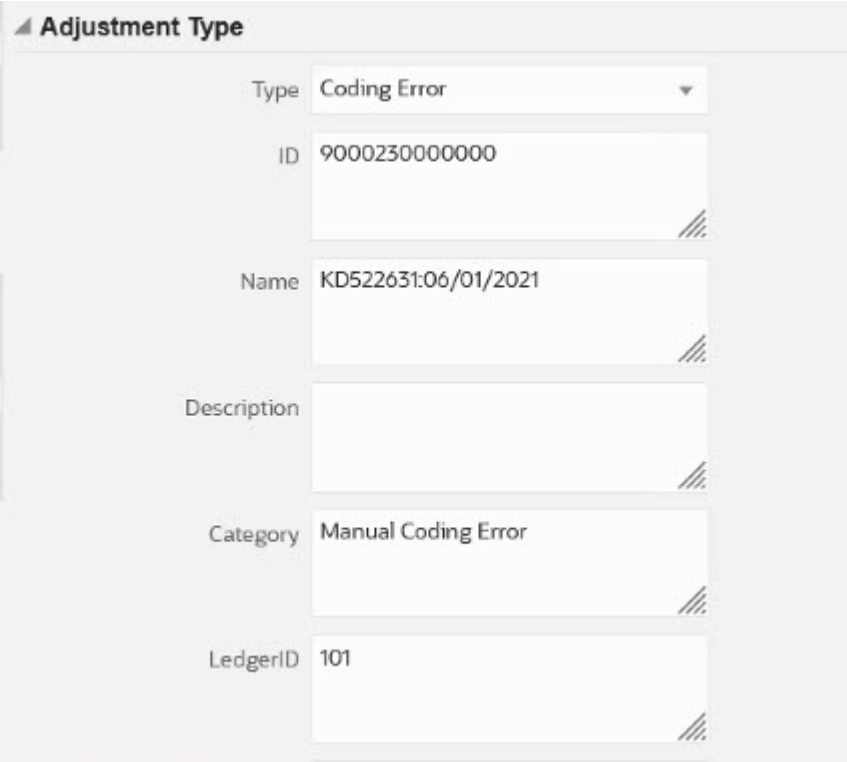
Where are the Default Adjustment Values Used?

The default adjustment values that you set up are used when creating adjustments during manual matching.

Here's an example of the Adjustment Type values that have to be entered during manual matching from the **Unmatched Transactions** tab of the Matching dialog. You can see that there are entry fields under Adjustment Type.



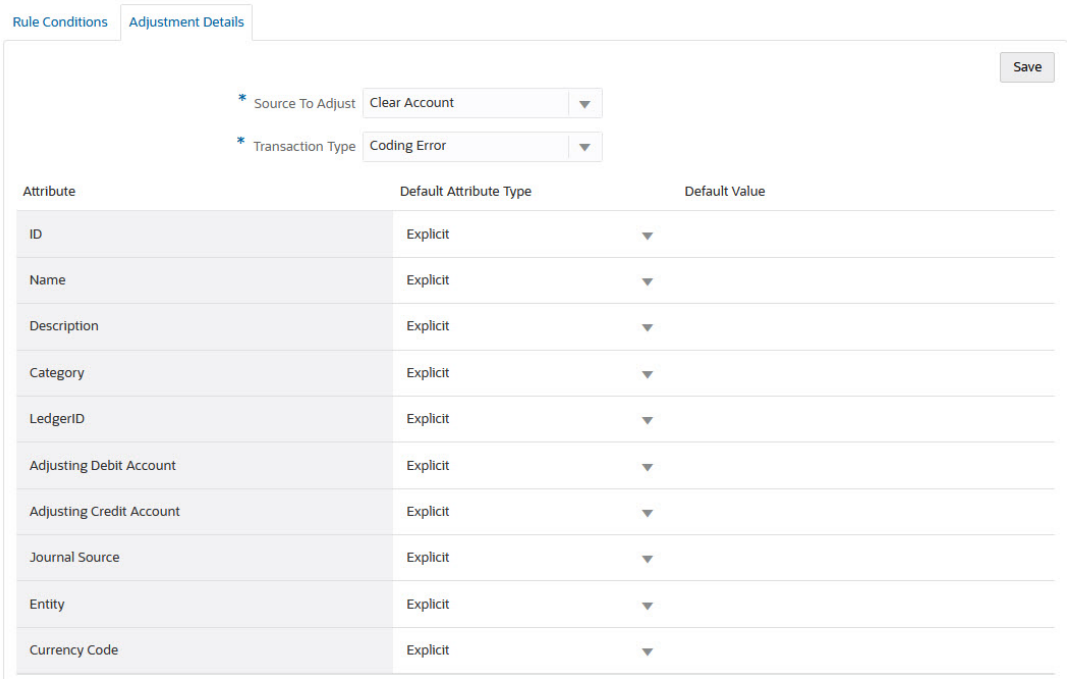
Here's how it looks to a user during manual matching if the Administrator populates the default adjustment values in advance:



Setting Up Default Adjustment Attribute Values in Auto Match

To set up default adjustment attribute values:

1. From **Home**, select **Application**, and then **Match Types**.
2. On the **Match Types** tab, select the Match Type you are working with. The **Edit Match Type** tab displays.
3. Click the **Match Processes** tab and then the match process you want to work with.
4. Click the **Match Rules** tab.
5. Select the Auto Match rule that you want to enter default values for and, on **Actions**, select **Edit** to edit the rule.
6. In the Edit Rule dialog, click the **Adjustment Details** tab. This tab is available when tolerance rules are set for the rule.
7. Select the **Transaction Type** and then enter the default values for attributes for that Transaction Type.

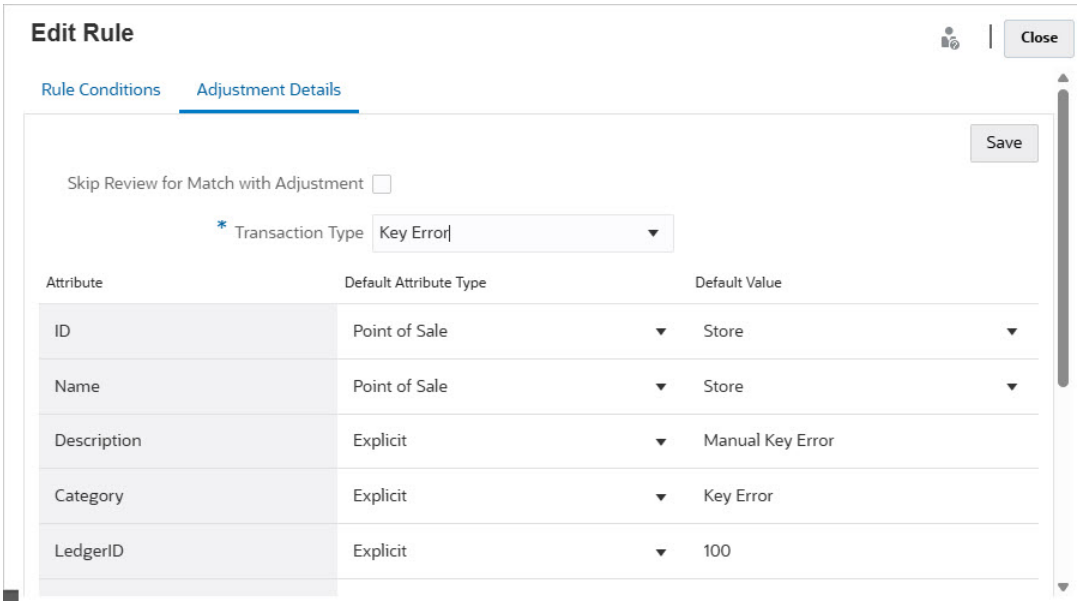


For an Adjustment attribute of type Number, the value displayed is based on the precision set when defining the attribute. Once the default values are set up, the user will see the default values when performing matching with adjustment on the Unmatched Transactions dialog.

Setting Up Default Adjustment Attribute Values in a Manual Match Rule

To set up default adjustment attribute values in a Manual Match rule:

1. From **Home**, select **Application**, and then **Match Types**.
2. On the **Match Types** tab, select the Match Type you are working with. The **Edit Match Type** tab displays.
3. Click the **Match Processes** tab and then the match process you want to work with.
4. Click the **Match Rules** tab.
5. Click **Configure** under **Manual Match Rule**.
   You can see the **Adjustment Details** tab since the rule has tolerance limits set.
6. Select the **Transaction Type** and then enter the default values for attributes for that Transaction Type.



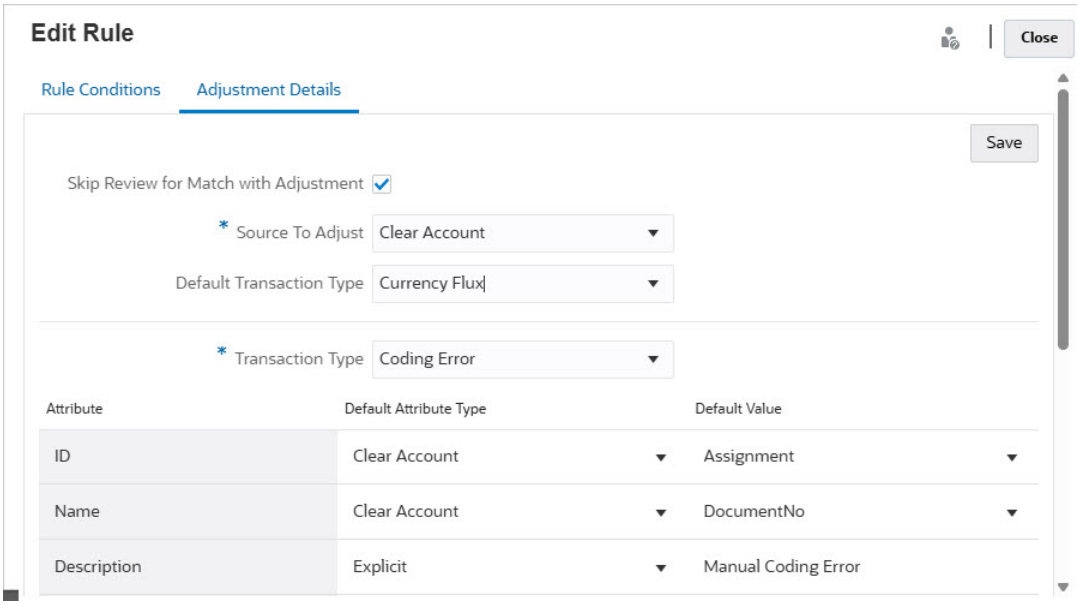
For an Adjustment attributes of type Number, the value displayed is based on the precision set when defining the attribute. Once the default values are set up, the user will see the default values when performing matching with adjustment on the Unmatched Transactions dialog.

Optional Configuration: Setting Up Adjustment Details for Manual Match Without Review

If you have high volume of manual adjustments that usually use only one adjustment type, an Administrator can speed up the adjustment process by using the optional **Skip Review for Match With Adjustments** check box on the **Edit Rule** dialog so that the manual match will then use the default Adjustment Type. This eliminates the need to prompt for review or for users to enter or adjust any data in the attributes of the adjustment since the adjustment is created immediately using the information in the default Adjustment Type.

To use this optional configuration:

1. From **Edit Match Type**, select a match process and then select the **Match Rules** tab.
2. Under **Manual Match Rule** , click **Configure**
3. On **Edit Rule**, select the **Adjustment Details** tab, and then select **Adjustment**.
4. Select the **Skip Review for Match with Adjustment** check box. Two additional fields, **Source To Adjust**, and **Default Transaction Type** display.



5. From the **Source To Adjust** drop down, select the data source from the list of available data sources for the match process.
6. From the **Default Transaction Type** drop down, select from the list of available Transaction Types for the data source selected as **Source To Adjust**. Note that only the Transaction Types which are selected for "Allow Adjustment Type for Manual Match Rule" section will be listed in the drop down.
7. Click **Save**.
8. Once these steps have been followed in the **Edit Rule** dialog, users will see two buttons on **Unmatched Transactions** tab of the **Matching** dialog:
   - **Review** - (optional) allows the user to review the match details before proceeding with **Match with Adjustment**
   - **Match with Adjustment** - allows the user to create a match without any further review The match is validated according to the manual match rule condition. During adjustment posting, it uses the **Source To Adjust** selection and **Default Transaction Type** selection for adjustment details.

> **Note**
>
> The **Review** and **Match With Adjustment** buttons do not appear on **Unmatched Transactions** if this optional configuration has not been set up.

> **Note**
>
> For both Auto Match rules and manual match rules, member attributes of type User are not displayed in the list of attributes in the Adjustment Details tab.

How Transaction Matching Evaluates Adjustment Details

For Adjustment attributes mapped from Data Source attributes:

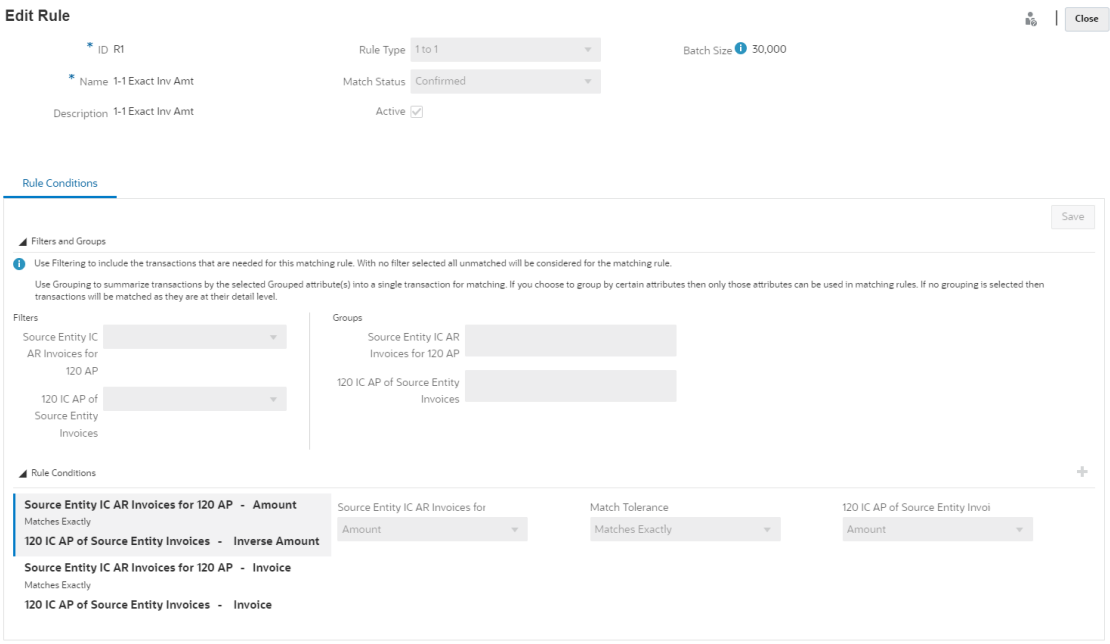
- Manual Match: the values for the Adjustment are copied over from the first transaction selected
- Auto Match: the values for the Adjustment are copied over from the transaction with the lowest Transaction ID

Examples: Match Rules

This section contains examples on defining match rules.

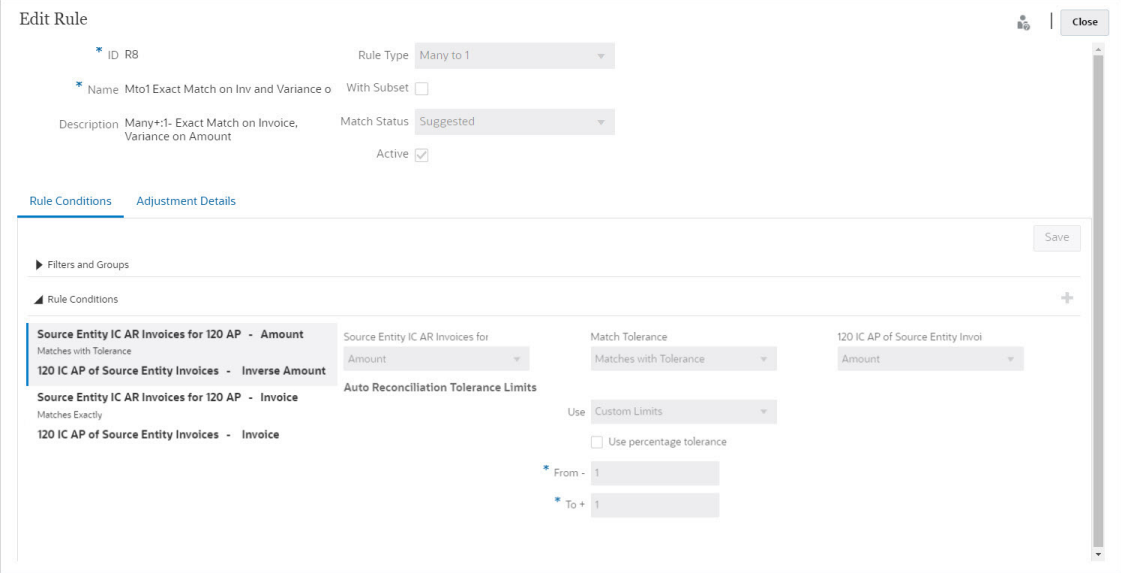
Example: Defining an Exact Match Rule

This example shows Intercompany Matching, where one transaction will be selected from the Accounts Payable and matched to one transaction from the Accounts Receivable. We require an exact match on Invoice, and an exact match on Amount. The matches produced by this rule will have a status of "Confirmed", which means no user action is required once the match has been made.



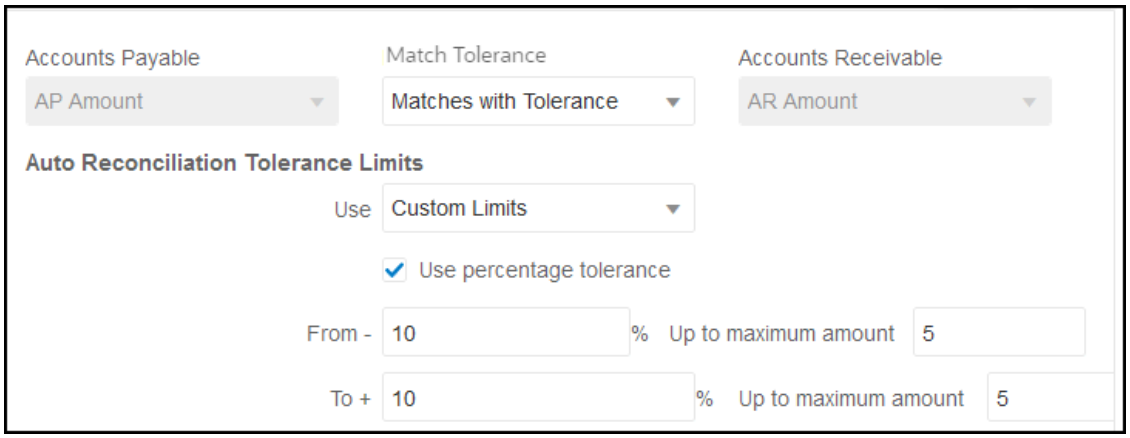
Example: Defining a Match Rule with Variance

This match rule requires an exact match on Invoice, but allows a variance of up to $1 on Amount. Matches produced by this rule will include an Adjustment for the $1 difference. We've configured this rule to create "Suggested" matches, which enables a user with the appropriate level of security privileges to review the matches and the associated Adjustments and to determine whether to confirm or discard the match.



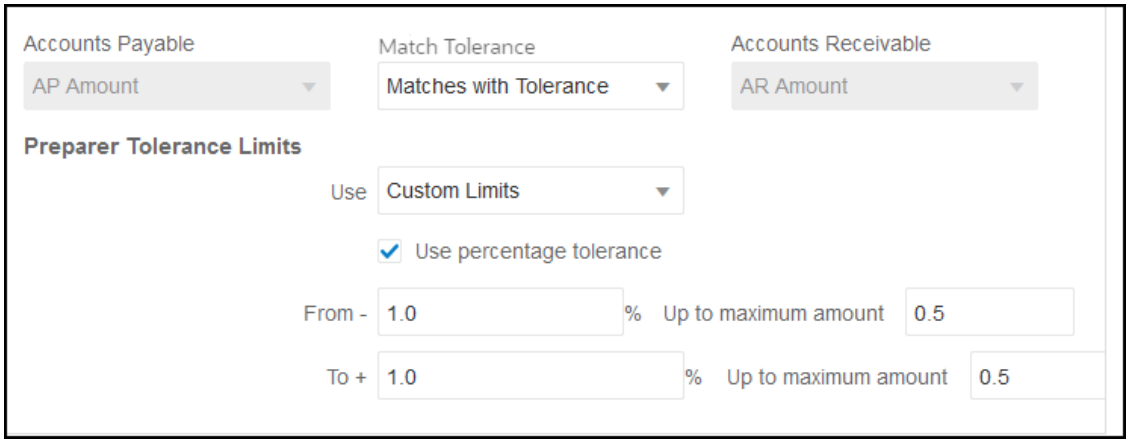
> **Note**
>
> For 1 to Many and Many to 1 rule types, you must define one rule condition which can be Match Exactly or with tolerance in addition to the Balancing attribute condition. For Many to Many rule types, you must define a Match Exactly condition.

Example: Auto Reconciliation Rule - Tolerance Limits



For Adjustment rule types, the tolerance limit is unlimited if the From and To values are blank.

Example: Manual Match Rule - Preparer Tolerance Limits



Examples: Date Tolerance in Match Rules

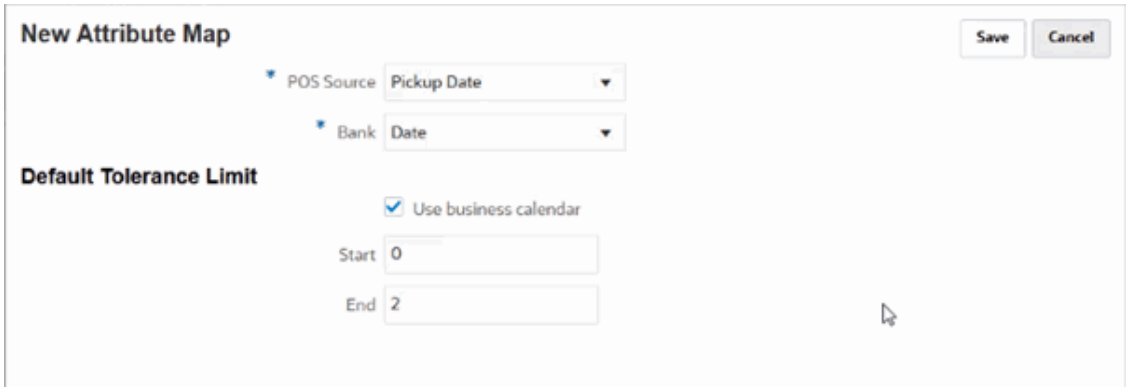
This topic describes examples that show the use of date tolerance and business calendar.

Example 1: Date Tolerance Limits and Use of Business Calendar in Attribute Mapping

This rule specifies the **Start** is 0 days from the Source System transactions and has an **End** date for the range at two days out.

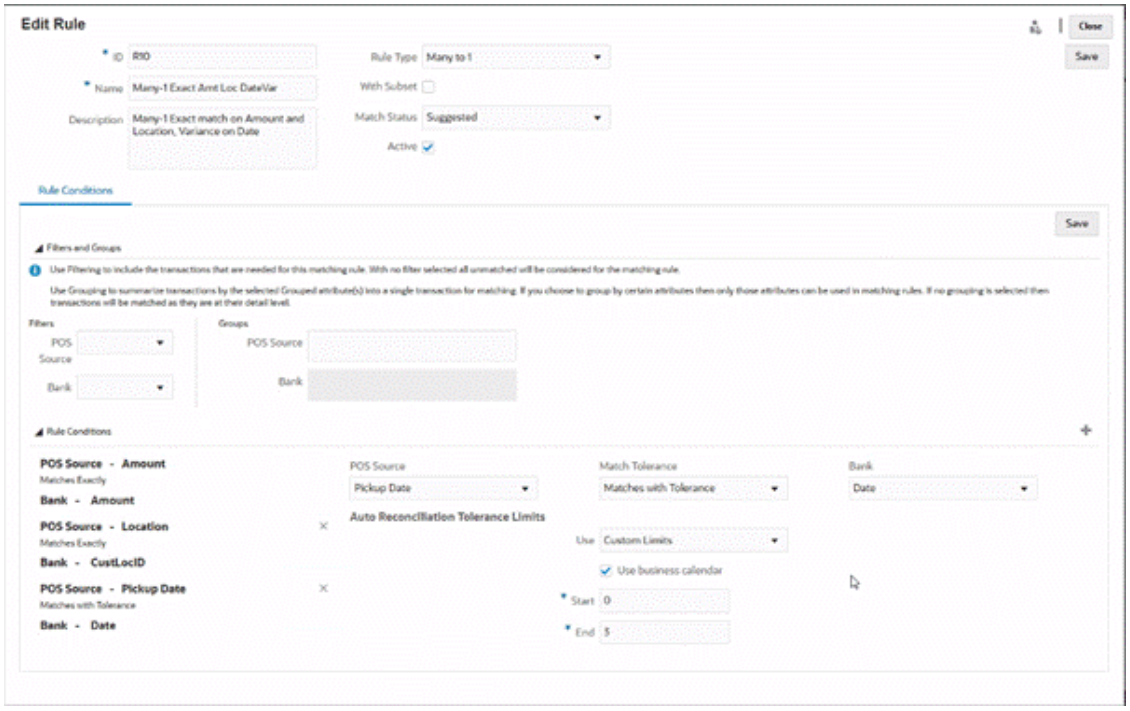
To enter date tolerance and choose to use the business calendar:

1. From **Edit Match Type**, select the **Properties** tab.
2. Click **+** (New) in **Default Attribute Mapping** and the **New Attribute Map** dialog displays.
   a. In **Default Tolerance Limit**, enter the date tolerance limits in **Start** and **End**.
   b. Select **Use Business Calendar** to use a business calendar instead of a regular calendar.



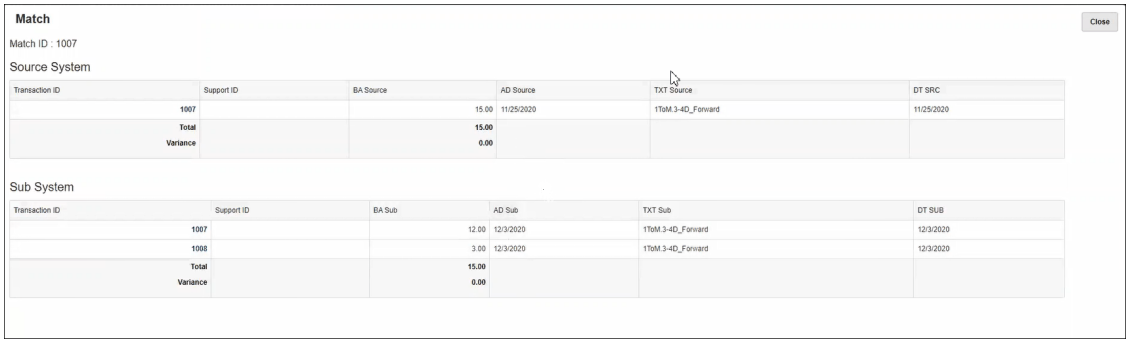
Example 2: Date Type Rule Condition with the Use Business Calendar

This rule specifies that the range for the bank deposit date can be from the pickup date until 3 days after the pickup date. Selecting **Business Calendar** takes into account holidays that are configured for the organizational unit associated with the profile.



Example 3: Business Calendar Matching Dates over Thanksgiving and Holiday Weekend

This example is for a rule that specified a **Start** of three days and **End** of four days but is over a Thanksgiving holiday and the following weekend. Using the business calendar for that organization, the system automatically does not match on dates over Thanksgiving holiday and the weekend following. While the match spans an eight day period from November 25th to December 3rd, the system has properly eliminated the non-work days of November 26 through 29th.



Duplicating Auto Match Rules

A new Auto Match rule can be created by duplicating an existing rule. You can then edit the new rule and modify it as required.

If the status of the match type is Pending, Service Administrators and users with the Match Types - Manage granular role can duplicate Auto Match rules.

To duplicate an Auto Match rule:

1. From the Home page, select **Application**, then **Match Types**.

2. On the Match Types tab, select the match type you are working with.

   The Edit Match Type tab displays.

3. Select the **Match Processes** tab.

   Details such as match process name, data sources, and default attribute mapping are displayed.

4. Click the **Match Rules** tab.

5. Select the rule that must be duplicated. Then, from **Actions**, select **Duplicate**.

6. Click **Yes** in the Confirm dialog.

   The duplicated rule is listed just below the original rule, with its order being 1 higher than the rule from which it was duplicated. The name of the duplicate rule is <*original_rule*> 1.

You can edit the duplicated rule and modify its rule type, conditions, match status, and adjustment details as required.

Reordering Auto Match Rules

You can change the order of Auto Match rules by moving them to up, down, or to a specified position.

If the status of the match type is Pending, Service Administrators and users with the Match Types - Manage granular role can reorder Auto Match rules.

To reorder an Auto Match rules

1. From the Home page, select **Application**, then **Match Types**.
2. On the Match Types tab, select the match type you are working with.

   The Edit Match Type tab displays.

3. Select the **Match Processes** tab.

   Details such as match process name, data sources, and default attribute mapping are displayed.

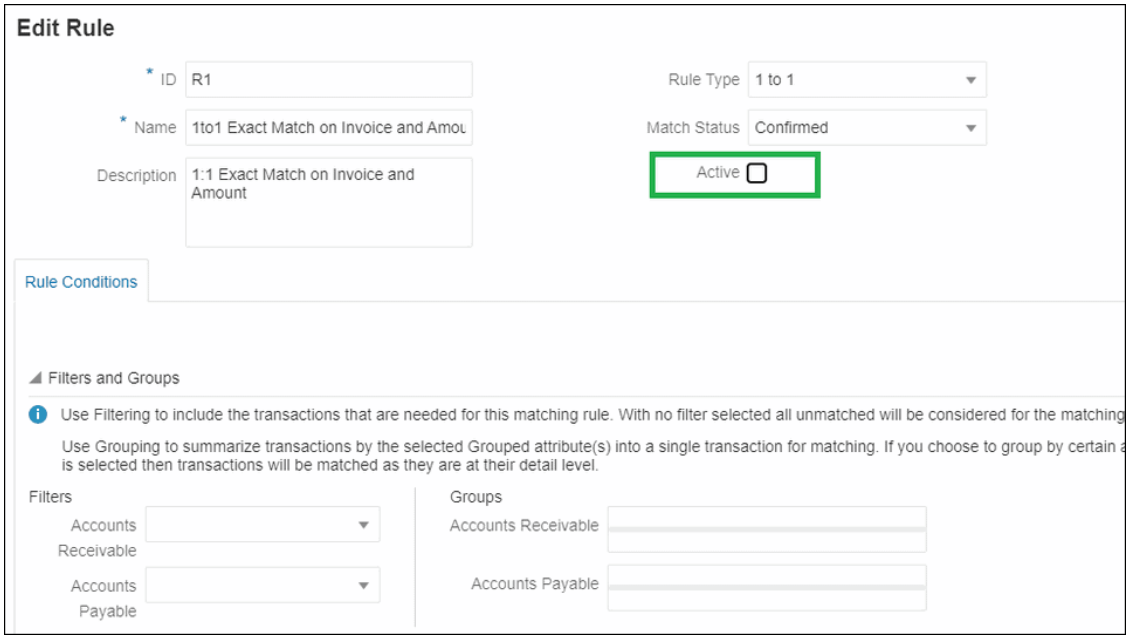
4. Click the **Match Rules** tab.
5. Select the match rule that must be reordered. From **Actions**, select one of the following options:
   - Move to Top
   - Move Up
   - Move Down
   - Move to Bottom
   - Move to Position

   These options are not displayed if Active or Inactive is selected in the **Status** filter.

Deactivating a Match Rule

If you do not want a particular rule to run during Auto Match, you can change the default "active" status for the rule to inactive by deselecting **Active** in the **Edit Rule** dialog.

Note that all new rules are automatically set to **Active**.



If you no longer need a rule, but there are existing matches that were matched using this match rule, it is recommended that you deactivate the rule instead of deleting it. After the matches are purged, the match rule can be deleted.

Setting Up Alert Rules for Automated Alerts

Service Administrators and users with the Match Type - Manage granular role can configure the generation of automatic alerts for match types.

Create one or more alert rules in a match process to configure the generation of automated alerts. When the conditions specified in the alert rules are met, the alerts are automatically generated and sent. Alert rules are executed for each profile.

To set up rules that generate automated alerts for a match type:

1. Navigate to the **Match Process** tab of the match type.
2. Click the **Alert Details** tab.
3. Click **New** (the Plus icon) to display the New Rule dialog.
4. Enter a unique **ID** for the alert rule.
5. In **Name**, enter the name of the alert rule.
6. In **Description**, enter an optional description for the alert rule.
7. Select **Active** to indicate that the alert rule is in the active state.
8. In **Alert Name**, enter the name of the alert that will be created for this alert rule. The name can contain a placeholder for member attributes within a group attribute. The placeholder must be enclosed within curly braces and will be replaced when the alert is generated. For example, Missing Deposit for {Store}.
9. In **Alert Description**, enter a description of the alert.
10. In **Alert Type**, select the alert type associated with this alert. rule.
11. In **Priority**, select one of the following priorities for the alert: High, Medium, or Low.

12. In **Notification Assignee**, select the user to who an email notification must be sent when the alert is created.

    This can be a standard user, member attribute of type User, an external user, group, or team. This field is non editable and the member attribute name or user name is displayed as specified in Alert Type. If the notification assignee was not set in the alert type associated with this alert, then it can be set in this alert rule. A default user can be selected for the alert created by this rule.

13. In **Assignee**, specify the user to whom this alert is assigned. The options are Preparer, From Alert Type, or Specify. If Specify is selected, click the **Add User** icon and select a user.

14. In **Approver**, select the approver for this alert. Options are None, From Alert Type, or Specify. If Specify is selected, click the **Add User** icon and select a user.

15. In **Duration**, specify a duration for the alert.

16. Under **Filters**, specify the filter conditions for this alert rule.

    This section displays the list of data source filters that are defined for this match type. At least one filter must be created. Select the data source attributes and specify a condition for the alert rule.

17. Click **OK**.

> **Note**
>
> - The maximum number of alert rules that be created is 500.
> - The maximum number of transactions in a single alert rule is 1000.
> - For profiles, the maximum number of automated alerts per alert rule is 500.

Setting Up Default Support Values

During matching, users need to add support to transactions to explain timing differences. When Service Administrators define the match process, they can set up default support attribute values so that users do not have to manually enter those values repetitively.

To set up default support attribute values:

1. Navigate to the **Match Process** tab of the match process. See Defining the Match Process.
2. Click the **Support Details** tab.
3. Select a **Transaction Type**.
4. Enter default values for the attributes, for the selected transaction type, using the **Default Value** column.
5. Click **Save**.

For a Support attribute of type Number, the value displayed is based on the precision set when defining the attribute. Once the default values are set up, the user will see the default values when supporting transactions on the **Unmatched Transactions** dialog.

Using Multiple Data Sources and Multiple Match Processes

Transaction Matching allows for three-way (or more) matching scenarios so that the transactions will automatically match from a balancing source A to a balancing source B.

Let's look at an example of using a multi-match process.

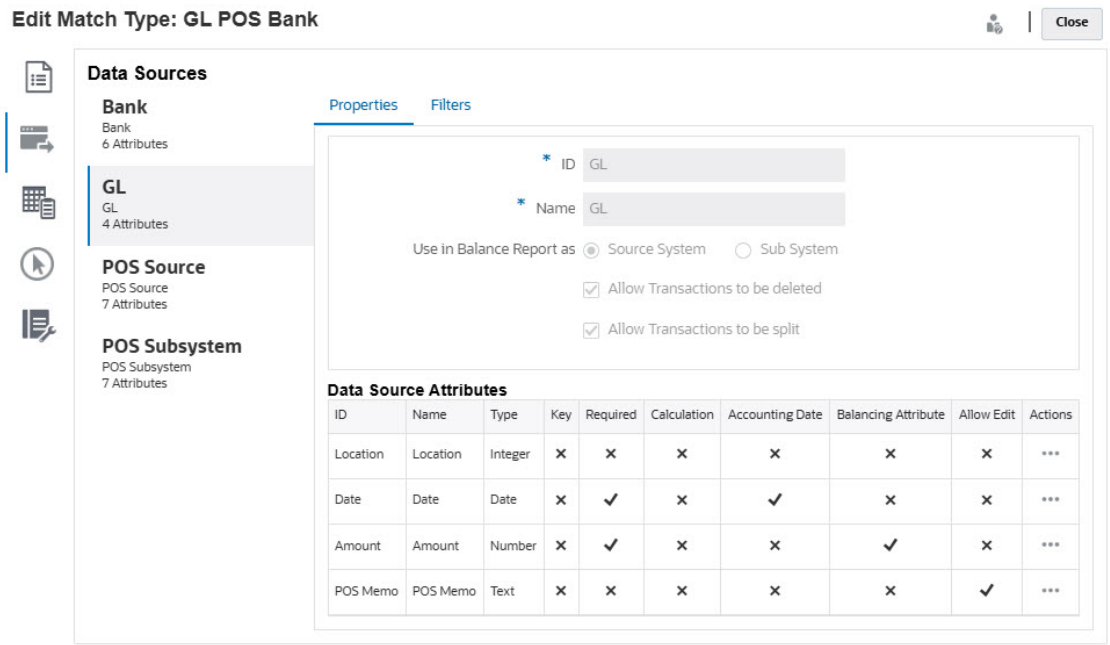
The three-way match is GL – POS and then POS – Bank. In addition to this three-way match, there are some transactions that hit the GL or Bank but are not reflected in the POS source. If you have such transactions, set up another match process to match from GL directly to Bank. For example, a Bank Fee will be on the bank statement and posted to the GL, but is not typically included with POS source activity.

Example - Setting Up the Multiple Data Sources

This example assumes that you created a match type with the following data sources:

- GL, for a General Ledger (GL)
- POS Subsystem
- POS Source
- Bank, for the bank statement

The same data is loaded twice, once for POS Source and the second time for POS Subsystem. The two Point of Sale (POS) files loaded (for POS Subsystem and the POS Source) are "net-zero" since they net themselves out to zero. The only balancing sources are GL & Bank so the POS Subsystem is the same file as POS (normal) that matches to the Bank.

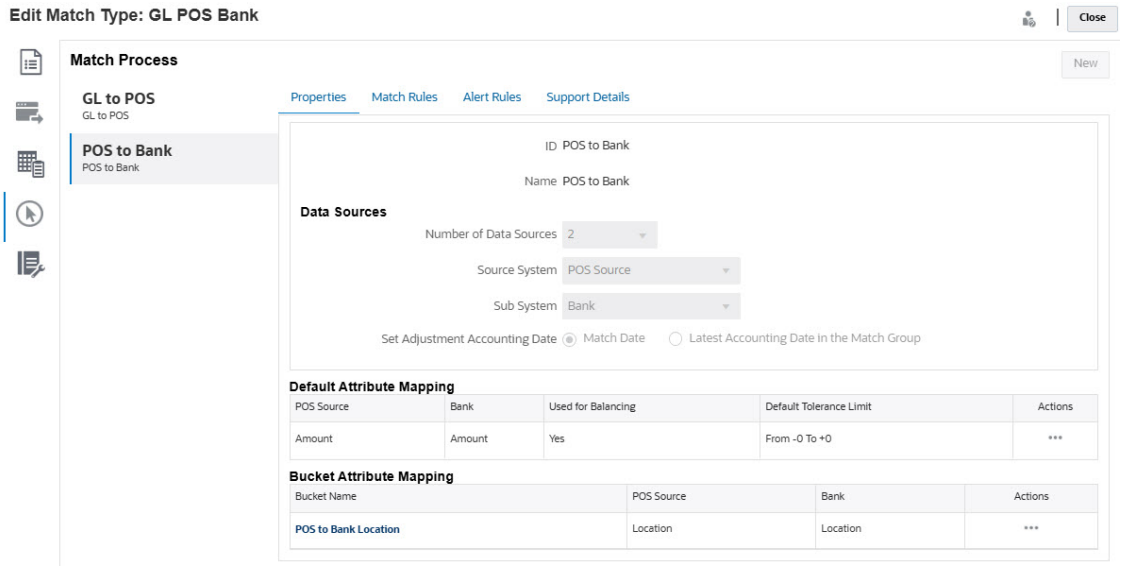


> **Note**
>
> The Balancing Attribute will be used by the system to create a default attribute mapping in a match process. You can change the Accounting Date or Balancing Attribute by using the check box as long as transactions are not already imported.

Example - Setting Up the Multi-Matching Process Scenario

Once you've defined the multiple data sources, you can set up the match processes. Let's look at this example that shows the following match processes defined:

- GL to POS, between the General Ledger **GL** and the point of sale subsystem **POS**
- POS to Bank, between the point of sale (POS) activity **POS Source** and the **Bank**



You can see that the system created a default attribute mapping based on the selection of balancing attribute of "Amount" when you created the GL data source. You can select the plus sign (+) to create a new attribute mapping for a non-balancing attribute.

Optionally, you can set up a **GL to BANK** match process, which is a two source match process between the General Ledger (GL) and the Bank source.

> **Note**
>
> Transaction Matching allows you to automatically match a transaction to a voided (or negative transaction) from that same source so that you do not have to manually match these.

Auto Match Process Order of Execution

The auto match process will follow the order of the match processes on the Match Process dialog. You can change the order of these processes by using the Move Up and Move Down indicators. Auto Match will go through each match process in the order listed and it's rules.

Once an individual transaction is matched one time, it will not be considered in another match process.

Filtering and Grouping Transactions in Auto Match Rules

Auto Match rules in Transaction Matching support grouping and filtering the transactions in the rules, which will be used by the match engine to match transactions.

A tab called **Filters and Groups** displays on the **Edit Rule** dialog for a single data source and for two data sources. Group attributes can also be included in filter conditions.

Filtering Transactions in Auto Match Rules

Auto Match will include only the transactions that is specified by the filter while executing the rule. Other transactions are excluded for the matching.

Note the following about filtering transactions:

- It is optional to define filtering for each rule.
- Filters are defined for each data source.
- Only one filter per data source can be selected for each rule.

All the different types of rules will allow filtering

Two Source Match Process - in a two source match process, one filter can be selected for source system and one for subsystem

Single Source Match Process - in a one source match process, the filter selected for subsystem can be the same as the one selected for source system.

Grouping Transactions for Auto Matching

- It is optional to define grouping for filtering for a rule.
- You can choose one ore more attributes for grouping.
- Grouping is allowed for "Many" types rules only and when subset is not used: One to Many, Many to One, or Many to Many.

One to Many

Grouping can be done only for Sub System data source:

- In a two source match process, only the Sub System data source and its attributes display.
- In a single source match process, only the data source and its attributes display.

Many to One

Grouping can be done only for Source System data source:

- In a two source match process, only the Source System data source and its attributes display.
- In a single source match process, only the data source and its attributes display.

Many to Many

Grouping can be done for both Source System and Sub System data source

- In a two source match process, both the Source System data source and its attributes and Sub System data source and its attributes display.
- In a single source match process, the data source and its attributes display.

Attributes

The following conditions apply to grouping attributes:

- You can choose one ore more attributes for grouping.
- Grouping attributes can be in any order.
- Grouping attributes can include calculated attributes.
- The balancing attribute is not allowed to be a grouping attribute.
- For Many to Many rules, all attributes defined in the rule conditions must be part of the Group By query, except for the Balancing Attribute.

Rule Conditions

If grouping is enabled for a Many type rule, only the attributes chosen for grouping are considered during rule creation. The rule conditions filter the attributes and show only the attributes selected for grouping in the drop down. It is optional to create the rule conditions using these attributes.

> **Note**
>
> When using subset rules, grouping transactions is not allowed for 1 to Many and Many to 1 rules.

How Auto Matching is Performed Using Groups

The grouped transactions behave as single transaction. Grouping can be applied only on the Many side. Once the grouping is applied on the Many side in a One to Many or Many to One rule, the rule behaves as if it is a One to One rule on the Many side as well, so that grouped transactions will be considered as single transaction.

In a Many to Many rule, grouping can be applied on both sides or only on one side. When grouping is applied on both sides, it behaves as if it is a One to One rule with grouped transactions behaving as a single transaction. However, when the grouping is applied only on one side, it behaves as if it is a One to Many or Many to One rule depending on the source the grouping is applied to.

Example

To help you understand how the matching is done, let's look at this example of Bank Transactions and GL Transactions:

In the below One to Many Rule example, GL Transactions are grouped by: Transaction (Tran) Date, Payment Type (PymtType), and Batch ID. The order of the attributes does not have any effect on matching.

Rule condition: **Amount** in GL *Matches Exactly***Amount** in Bank

Balancing attributes: **Amount** in BANK and **Amount** in GL

Table 11-4 Example of GL Transactions

Number	Tran Date	PymtType	Batch ID	Amount
1	18-Sep	Bank Draft	CS18091802	200
2	18-Sep	Bank Draft	CS18091802	200

Table 11-4 (Cont.) Example of GL Transactions

Number	Tran Date	PymtType	Batch ID	Amount
3	18-Sep	Bank Draft	CS18091802	600
4	20-Sep	Bank Draft	CS18091802	200
5	20-Sep	Bank Draft	CS18091802	200

Table 11-5 Example of Bank Transactions

Number	As-Of Date	Bank ID	Acct No	Amount
1	19-Sep	121000248	4129965265	1000
2	22-Sep	121000248	4129965265	400

This rule will create two matches.

Table 11-6 Match 1 - Example of Matching Bank Transactions

Number	As-Of Date	Bank ID	Acct No	Amount	Match Set #
1	19-Sep	121000248	4129965265	1000	1

Table 11-7 Match 1 - Example of Matching GL Transactions

Number	Tran Date	PymtType	Batch ID	Amount	Match Set #
1	18-Sep	Bank Draft	CS18091802	200	1
2	18-Sep	Bank Draft	CS18091802	200	1
3	18-Sep	Bank Draft	CS18091802	600	1

Table 11-8 Match 2- Example of Matching Bank Transactions

Number	As-Of-Date	Bank ID	Acct No	Amount	Match Set #
1	22-Sep	121000248	4129965265	400	2

Table 11-9 Match 2- Example of Matching GL Transactions

Number	Tran Date	PymtType	Batch ID	Amount	Match Set #
4	20-Sep	Bank Draft	CS18091802	200	2
5	20-Sep	Bank Draft	CS18091802	200	2

In the above rule, if we added another rule condition **As-Of Date** *Matches Exactly* **Tran Date**, no matches would get created.

Setting Up One Sided Adjustments to Run During Auto-Match

Often you will need to use a one sided adjustment to self-match something like a Bank Fee or a Transfer out of the bank account that will not have a match on the GL side. This happens

when you are loading transactions and matching against sources, many times there are transactions on one side that do not have an offsetting transaction on the other side.

There is a predefined rule type, called **Adjustment**, to handle these types of adjustments which run during Auto Match.

By running the Adjustment rule during Auto Match, it clears off these transactions with an adjustment, and then the journal posting process can be used for posting the adjustment. In this example, the GL transaction that is created from the journal is not given back to Transaction Matching in the GL feed because we've already matched/cleared the transaction(s) from the Bank side. For more information about Loading Journal Entries, see Customers Using Account Reconciliation in *Administering Data Integration*.

Predefined Adjustment Rule Processing

- The Adjustment rule will pick transactions (one or more) according to the rule from a data source. This source is called Source to Adjust of the Adjustment rule type.
- You can use filter and group capabilities with this rule type. When groups are used in the rule, then one adjustment is created per group.
- If there are no groups, then one adjustment will be created for each available transaction.

Adjustment Rule Terminology

You will see these statuses after Auto Match runs. These are the statuses and an example is shown:

- Suggested Match
- Confirmed Match
- Suggested Adjust
- Confirmed Adjust

Setting Up an Adjustment Rule Type

To set up an Adjustment rule type:

1. From **Home**, select **Application**, and then **Match Types**.
2. On the **Match Types** tab, select the Match Type you are working with. The **Edit Match Type** tab displays.
3. Select the **Match Process** tab. Select the match process you want to work with and click the **Match Rules** tab.
4. Click the plus sign (**+**) to create a new rule. The **New Rule** dialog displays.
    a. Enter an **ID**, **Name**, and **Description**.
    b. In **Rule Type**, select the **Adjustment** rule type from the drop-down. Here's an example:

> **Note**
>
> Notice that you can now use filters and groups from this one dialog. In addition, you set the rule condition here too.

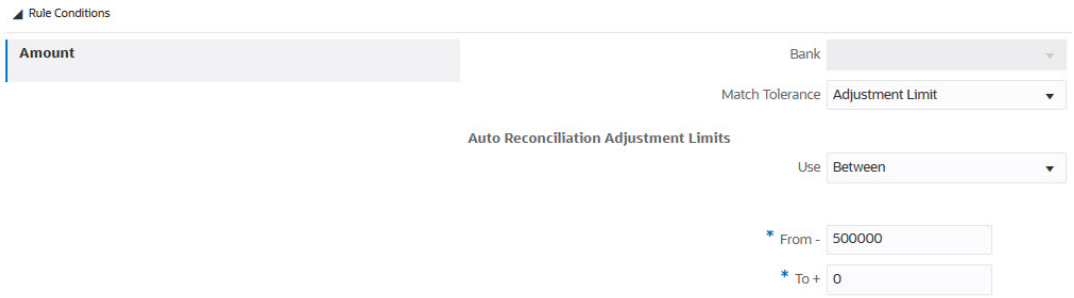
    c. In **Match Status**, you can choose **Suggested** or **Confirmed**.
    d. Click **Save** to save the rule.

e. In the **Source to Adjust** field, select the source from the drop-down and **Save** the rule.

f. Optionally, use filters and groups.

g. Click **Save**.

5. Now enter your rule condition. Note that in an **Adjustment** rule type, you only have one rule condition since unlike other rules, you are not comparing one source to another. Therefore you cannot create another rule condition.



Optionally, you can add **Adjustment Limits** if you need to restrict the auto match to a range. For example, a value between -2000 and +2000. There is no limit if the From and To values are blank.

Changing Defaults for Maximum Iterations for Auto Match Rules

When creating certain Auto Match rules in Transaction Matching, you may see an **Iteration** field shown with default values.

Setting Maximum Iterations During 1 to Many Subset, Many to 1 Subset, and Many to Many Subset Auto Match Rules

Transaction Matching allows you to adjust an iteration count on the **Edit Rule** dialog in order to balance performance versus match rate during 1 to Many Subset, Many to 1 Subset, and Many to Many Subset auto matching. When subset matching is being used, Transaction Matching tries to evaluate various combinations of the potentially matching transactions on the Many side. After the filtering and grouping conditions are applied, each transaction will be attempted to be matched with all potential combinations of the transactions on the Many side.

Performance can be tuned by adjusting the number of combinations Transaction Matching attempts while trying to find a match. In many cases, if the transaction cannot be matched and there is a large number of transactions on the Many side, then the system can attempt to find a match until combinations are exhausted. This process can potentially be time consuming.

The **Iteration** range is 10,000,000 to 100,000,000 for 1 to Many with Subset, Many to 1 with Subset, and Many to Many with Subset rules. The default value is 10,000,000.

In most cases, you will not need to change these default values. Contact Oracle Support by raising a service request, if you want to improve the performance of your subset rule.

To change the maximum iteration setting:

1. From **Home**, select **Application**, then **Match Types**.
2. On the **Match Types** tab, select the Match Type you are working with. The **Edit Match Type** tab displays.
3. Select the **Match Process** tab, and the **Properties** tab displays.

4. Select the **Match Rules** tab and select the rule you want to edit. The **Edit Rule** dialog displays.
5. On the **Edit Rule** dialog, the default **Iteration** count is shown. You can adjust upward (up to 100 million) or downward (down to 10 million) for 1 to Many with Subset, Many to 1 with Subset, and Many to Many with Subset rules. The default value is 10 million).

> **Note**
>
> Change the default value only if recommended by Oracle Support.

6. Click **Save**.

Editing Match Types

Service Administrators and users with the Match Types - Manage granular role can edit match types.

Use the Actions menu to edit a match type.

To edit the definition of a match type:

1. Click **Applications** and then **Match Types**
2. From the Actions menu adjacent to the match type to be edited select **Edit**.

   The Edit Match Type dialog is displayed.
3. Modify the information in one or more of the following cards: Properties, Data Sources, Transaction Types, Match Processes, and Journal Attribute Mapping.

When you set the status of a match type to **Approved**, the Match Type view is created after you save the changes. Click the View icon to display the SQL query that was used to create this Match Type view.

When you modify an **Approved** match type, its associated Match Type view is recreated when the match type status is set to **Approved** and the changes are saved. If the match type ID is modified after the Match Type view is created, the view is recreated using the updated match type ID. Note that any existing report queries that are based on this view must be updated manually. For information about Match Type views, see About Match Type Views for Data Sources.

Updating the ID of Match Types, Data Sources, or Data Source Attributes

When you add a new data source attribute or update a data source attribute's **ID**, this change is automatically made in the Data Integration applications that are associated with this match type. When you delete a data source attribute, a pop-up displays details of the Data Integration applications associated with this data source attribute. You must delete these attributes from the applications.

When you update the **ID** of a match type or data source, this change is not automatically made in the Data Integration applications that are associated with this match type. If you want applications to use the updated **ID**, the applications must be recreated. The application must be recreated. However, the integrations continue to work.

Although users with the Match Types – Manage role can make updates to match types, they won't be able to use Data Exchange to verify that their updates have been made. To confirm that the updates are made, contact your Service Administrator.

Deleting Match Types

Service Administrators and users with the Match Types - Manage granular role can delete match types.

To delete a match type:

1. Click **Applications** and then **Match Types**.
2. For the match type to be deleted, select **Actions** and then **Delete**.
3. In the confirmation dialog, click **Yes** to confirm the deletion.

When you delete a match type, a pop-up displays details of the Data Integration applications that use this match type. You must delete these applications using Data Exchange.

The Match Type view associated with a deleted match type is automatically deleted.

Exporting and Importing of Match Types Across Environments

System Administrators can export the Match Type configuration and then import it into an Account Reconciliation environment.

An exported Match Type configuration can be imported using one of the following options:

- Back into the same environment
- To another Account Reconciliation environment

For example, the System Administrator may configure and test a Match Type in their Account Reconciliation test environment, and then once it is ready, export from test and import into their production environment.

Note

- Always ensure you have a fresh backup of the environment before performing imports and updates of Match Types.
- When importing a Match Type with the same name as an existing Match Type, the import process will overwrite the configuration of the existing Match Type with the Match being imported.
  - If an object within the Match Type exists in the match type zip file being imported as well as in the system, the object from the match type zip file overwrites the object in the system.
  - If an object within the Match Type exists in the match type zip file being imported but not in the system, a new object is created in the system.
  - If an object within the Match Type does not exist in the match type zip file being imported but exists in the system, the object is deleted from the system to be in sync with the match type zip file being imported.

  Note: Objects within a Match Type can be data sources, data source attributes, match process, rules, or rule conditions.
- If you do not wish to update the existing Match Type you can rename the existing Match Type before importing.

Exporting Match Types

Match type definitions can be exported into a .zip file.

If the match type being exported contains one or more group attributes, the definition and values of these group attributes are exported along with the match type.

When migrating from a test environment to a production environment, it is recommended that you keep group attributes up to date.

To export match types:

1. From the Home page, click **Application**, and then **Match Types**.
2. On the **Match Types** tab, select a match type.
3. **Optional:** If you want to change the Match Type name:
   - Select the match type, and then click **Edit**.
   - On the Edit Match Type screen, click the **Properties** tab.
   - Enter the new **ID** and **Name** for the match types, and click **Save**.

> **Note**
>
> As a best practice, enter any details or changes made to the original match type in the Description.

4. Under **Actions**  , select **Export**. On the dialog box, select **Save File**, and navigate to the location you require, and then click **OK**.
   The export is created as a zip file. One zip file is created for each match type.

Importing Match Types

When importing a match type that contains one or more group attributes:

- If your application does not contain a group attribute with the same name as that in the import file, the group attributes (including values) are imported.
- If your application contains a group attribute with the same name as that in the import file, and this group attribute is not used by any other match type, the members and values are replaced with those in the import file.

> **Note**
>
> When migrating from a test environment to a production environment, it is recommended that you keep group attributes up to date.

To import match types:

1. From the Home page, click **Application**, and then **Match Types**.
2. Click **Import**.

3. In the Import Match Type dialog, click **<Select a File>**, select the file containing the match type to be imported, and then click **Open**.
4. Click **Import**.
   If a match type with the same name as the one being imported exists in the application, then a Warning dialog appears. Click **Yes** update the definition of the existing match type using the one being imported.

   A message advises that the match type has been successfully imported.
5. In the Import Match Type dialog, click **Close**.
6. On the Match Types screen, click **Refresh**.
7. When the import is complete, the Status on the Match Types screen is set to **Approved**.

If you want to use a match type as a template to create other match types, you can first create this match type, export it to a file, import the match type multiple times into your application, and then update the imported match types as required. However, because you cannot import a match type with the same name as an existing match type, you can create the match type, export it to a file, rename the match type in the application, and then import it to create other match types. For example, you create a match type named `Bank_template` that will be used to create other match types and then export this match type. In your application, rename `Bank_template` to `Bank`. Then, import `Bank_template` into your application and edit its ID, name, and other properties as required. If you need to create more match types, repeat the import process.

Importing Match Types And Data Integration Applications

When importing an existing match type, if the ID of a data source attribute in the import file is different from the ID of the data source attribute in the match type, then the data source attribute ID is updated to use the ID in the import file. However, in Data Integration, Transaction Matching target applications that are associated with this match type are not automatically updated. The existing dimensions are retained and a new dimension is created, using the name of the updated data source attribute ID. The Service Administrator must map the new dimension to the correct source.

For example, the match type `Intercompany` contains a data source attribute with ID `Bank_Ref`. The import file uses `Bank_Reference` as the data source attribute ID for the `Intercompany` match type. When you import the `Intercompany` match type using the import file, the data source attribute ID is updated to `Bank_Reference`. In Data Integration, Transaction Matching target applications that are associated with `Intercompany` will still contain the `Bank_Ref` dimension and its source mapping. A new dimension named `Bank_Reference` is created. The Service Administrator must map `Bank_Reference` to the correct source.

Defining Formats and Profiles for Transaction Matching

After creating match types, you need to perform the following tasks: define a format, associate it with a match type, and then create a profile.

- Define a format and associate with a Match Type - see Defining Formats
- Define a profile - see Working with Profiles

Once you have completed the set up for Transaction Matching, the Administrator can create reconciliations and load data. See Creating Reconciliations and Importing Data in *Administering Account Reconciliation*.

12

Exporting Adjustments or Transactions as Journal Entries

In Transaction Matching, you can export adjustments or transactions from data sources as dual sided journal entries that can then be imported into your Oracle ERP system. The exported journal entries are provided in a .csv file.

Related Topics

- Process Flow: Exporting Adjustments or Transactions as Journal Entries
- Example of a Single Adjustment and Journal Entry Created for Export
- Creating Global Adjustment and Support Attributes
- Defining the Journal Columns
- Mapping Attributes to Journal Attributes
- Applying Filters to Transactions in a Data Source
- Exporting Adjustments and Transactions Using an Export Journals Job

Process Flow: Exporting Adjustments or Transactions as Journal Entries

Users create adjustments and load transactions into Transaction Matching during normal operations. These adjustments or transactions can be exported as journal entries using an Export Journals job.

The process flow for exporting adjustments or transactions in Transaction Matching includes the following tasks:

1. Create global attributes for adjustment types and support types.
   See Creating Global Adjustment and Support Attributes.
2. Set defaults for the adjustment types.
   See Setting Up Default Adjustment Values.
3. Define the journal columns.
   See Defining the Journal Columns.
4. Map transaction or adjustment attributes to journal attributes.
   See Mapping Attributes to Journal Attributes.
5. (Optional) Use filters on transactions.
   See Applying Filters to Transactions in a Data Source.
6. Export journal entries.
   - To export journal entries using Account Reconciliation, see Exporting Adjustments as Journal Entries or Exporting Transactions as Journal Entries.
   - To export journal entries using Data Integration, see Loading Exported Journal Entries in *Administering Data Integration*.

- To export journal entries using Data Management, see Loading Exported Journal Entries in *Administering Data Management*.

Example of a Single Adjustment and Journal Entry Created for Export

Here is an example of a single adjustment's details and what the dual sided journal entry looks like that gets created from that information.

Table 12-1 Adjustment Details

Account ID	Trans. Date	Amount	CCY	Short Desc	Adj Type
100-1150	6/15/2018	10.00	USD	Cash at bank is short	Cash Over/Short

Table 12-2 Journal Posting Created From Adjustment

Company Code	GL Account	Profit Center	Date	Amount	CCY	Text
100	1150		6/15/2018	-10	USD	Cash at bank is short
100	567345	1100	6/15/2018	10	USD	Cash at bank is short

The first row in this table represents the side of the journal that hits the Reconciliation Account 1150 in the amount of 10.00 since the balance is too high currently.

The second row in this table represents the side of the journal that hits the Offset Account 567345. It's an expense account since the "missing" cash is being written off.

> **Note**
>
> This also works for a single transaction based on a data source and two rows are also created as a journal entry. For example, for a bank fee.

Creating Global Adjustment and Support Attributes

Within match types, you can use the **Adjustment and Support Attributes** tab to create attributes that can be used globally across adjustment types, support types, and match types.

Other users can reuse global adjustment and support attributes while creating their attributes. For example, you can create attributes such as Name, Description and ID and these attributes can be reused and are commonly used.

From the Home page, select **Application**, then **Match Types**, and then select the **Adjustment and Support Attributes** tab. Users can create, edit, and delete adjustment and support attributes using this tab.

Click the **Columns** icon at the top-right of the **Adjustment and Support Attributes** tab to select the columns displayed on the tab and the order in which they are displayed. The Search bar can be used to search for specific text within the Name column. You can also restrict the

data displayed on this page by filtering using one of the following: **Last Updated By**, **Created By**, **Last Update Date**, and **Creation Date**.

> **Note**
>
> The **Adjustment and Support Attributes** tab displays a maximum of 5000 rows in a page. If there are more than 5000 rows, use filters to narrow down the list and display only the users that you require.

Prerequisites

Service Administrators and users with the Match Types - Manage granular role can create, edit, and delete global adjustment and support attributes. Users with the Match Types - View role can view attribute details, customize the displayed details, search for text, and filter the displayed attributes.

Steps to Create Global Adjustment and Support Attributes

To create a new global adjustment and support attribute:

1. From **Home**, select **Applications**, and then **Match Types**.
2. Click the **Adjustment and Support Attributes** tab.
3. Click **Add**.
4. Enter the required **Name**.
5. Select one of the following options for the **Type** of attribute.
   - **Date** - Used for date values
     The format when loading transactions should be DD-MMM-YYYY or DD-MMM-YY.
   - **Integer** - Used for non-decimal values up to 18 digits and can be positive or negative
   - **List** - Used to configure a List of Values and upper and lowercase do not matter when importing.
   - **Number** - Used for amount fields up to 18 digits (12 digits plus up to 6 decimal places) It can be positive or negative. A negative number can be indicated during import by using the minus sign, for example, -1,000.00 while importing but will show on the user interface as (1000.00).

     In **Decimal Places**, enter a precision between 0 and 12 for the attribute.
   - **Text** - Used for large comments, descriptions, and so on and can be up to 255 characters long.

     > **Note**
     >
     > To import string values containing a comma (,) the string value must be enclosed in double quotes. When the string is enclosed in double quotes, you must enclose all other double quotes in the string in a second set of double quotes. Examples are shown in this table.

String Value	Import Status
`"GM LLC - GMNA, formerly ""NAO"" ADMIN STAFF"`	Successful (entire string value in double quotes and second set of quotes around NAO)
`"GM LLC - GMNA, formerly "NAO" ADMIN STAFF"`	Import Error (no second set of double quotes for NAO)
`"GM LLC - GMNA, formerly NAO ADMIN STAFF"`	Successful (double quotes around string value)
`GM LLC - GMNA, formerly NAO ADMIN STAFF`	Error (no double quotes around string value)

- **Yes/No** - Used for a Boolean field that can be left **Blank**, **Yes** (`1,Yes,YES,Y,y,T,t,True,TRUE,True`) or **No** (`0,No,NO,N,n,F,f,False,FALSE,False`)

6. Click **Save**.

Defining the Journal Columns

Service Administrators and users with the Match Types - Manage granular role can create, edit, and delete journal columns.

Users with the Match Types - View role can view attribute details, customize the displayed details, search for text, and filter the displayed attributes.

> **Note**
>
> The **Adjustment and Support Attributes** tab displays a maximum of 5000 rows in a page. If there are more than 5000 rows, use filters to narrow down the list and display only the users that you require.

Typically, the journal entry import template for an Oracle ERP system contains many columns. However, in Account Reconciliation, you need not configure all of those journal columns. It is recommended that you use Data Integration to:

- Transform the journal lines from Account Reconciliation Journal Columns into the target ERP journal import lines
- Configure additional columns in Data Integration as dimensions, which may be required for the target ERP, but may not be required in Account Reconciliation.

Here is an example of a journal entry import template of an Oracle ERP system:

Journals Import

* Required

*Status Code	*Ledger ID	*Effective Date of Transaction	*Journal Source	*Journal Category	*Currency Code	*Journal Entry Creation Date	*Actual Flag	Segment 1	Segment 2	Segment 3
NEW	1	2008-12-31	Balance Transfer	Remote Transfer	SGD	2012-04-09	A	01	000	1110
NEW	1	2008-12-31	Balance Transfer	Remote Transfer	DEM	2012-04-09	A	01	000	1110
NEW	1	2008-12-31	Balance Transfer	Remote Transfer	AUD	2012-04-09	A	01	000	1110
NEW	1	2008-12-31	Balance Transfer	Remote Transfer	JPY	2012-04-09	A	01	000	1110
NEW	1	2008-12-31	Balance Transfer	Remote Transfer	FRF	2012-04-09	A	01	000	1110
NEW	1	2008-12-31	Balance Transfer	Remote Transfer	USD	2012-04-09	A	01	000	1130

Use the **Journal Columns** tab to create, edit, and delete journal columns. From the Home page, click **Application**, then **Match Types**, and then the **Journal Attributes** tab.

You can customize the columns displayed on the tab by clicking the Columns icon (highlighted above). In the Columns popup, select or deselect the columns that must be displayed on the page. To change the order in which columns are displayed, click the lines to the right of the column name and drag the column to the required position.

Restrict the journal attributes displayed in the page using one or more of the following filters: Last Updated By, Created By, Last Update Date, and Creation Date. To filter data, click the require filter criteria and then select the required condition. For example, click Created By, and then select one or more users displayed in the drop-down list. You can also use the Search column to search for specific text in the Name column.

Steps to Create Journal Attributes

1. From **Home**, select **Applications**, and then **Match Types**.
2. Click the **Journal Columns** tab.
3. Click **Add** to create a new journal column.
4. In the Journal Column Detail panel, enter a **Name** and then click **Save**.

> **Note**
>
> You can also edit this information by clicking the **Actions** and selecting **Edit**.

5. Click **Save**.

If you add a new journal column or update an existing journal column, the changes are propagated to Data Integration source applications that are associated with this journal column. If a journal column is deleted, a pop-up is displayed with details of the Data Integration applications that use this journal column. You must delete this column from your applications in Data Integration.

Mapping Attributes to Journal Attributes

After you create the necessary journal columns, you need to map your attributes to journal attributes using the **Journal Attribute Mapping** option on **Edit Match Type**

For adjustments, you work on a per Match Type basis, and you map the journal columns to the Reconciliation Account and Offset Account.

For transactions you work on a data source basis, and map the data source attributes to journal attributes.

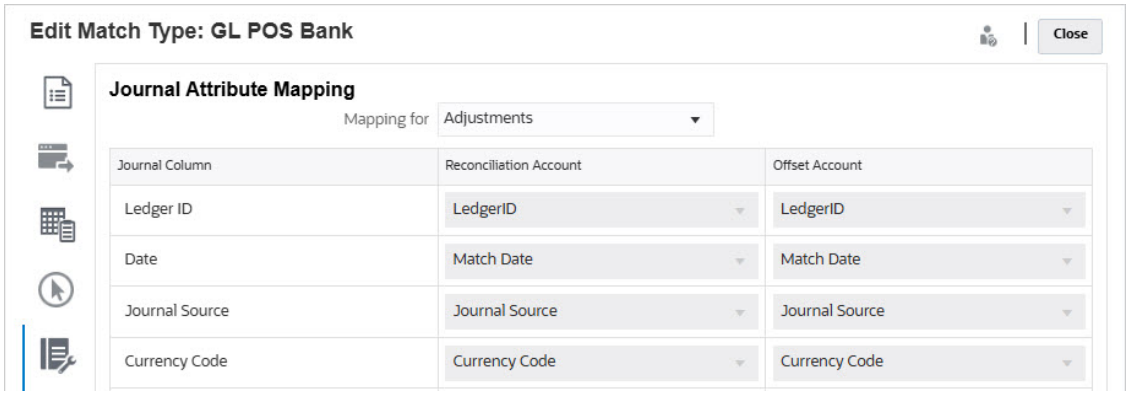
To map adjustment attributes to journal attributes:

1. From **Home**, select **Applications**, then **Match Types**.
2. From the Actions menu of the match type you want to work on, select **Edit**.
3. In the **Edit Match Type** dialog, select **Journal Attribute Mapping**.
4. Under **Mapping for**, select either **Adjustment** or one of the data sources displayed in the drop-down.
5. For each **Journal Column**, select the attributes from the drop down list for **Reconciliation Account** and **Offset Account**.
6. Once you have made all selections, click **Save**.

> **Note**
>
> You need to save the mapping for Adjustments before continuing on to save your mapping for each data source.

Example 1. Journal Attribute Mapping for Adjustments

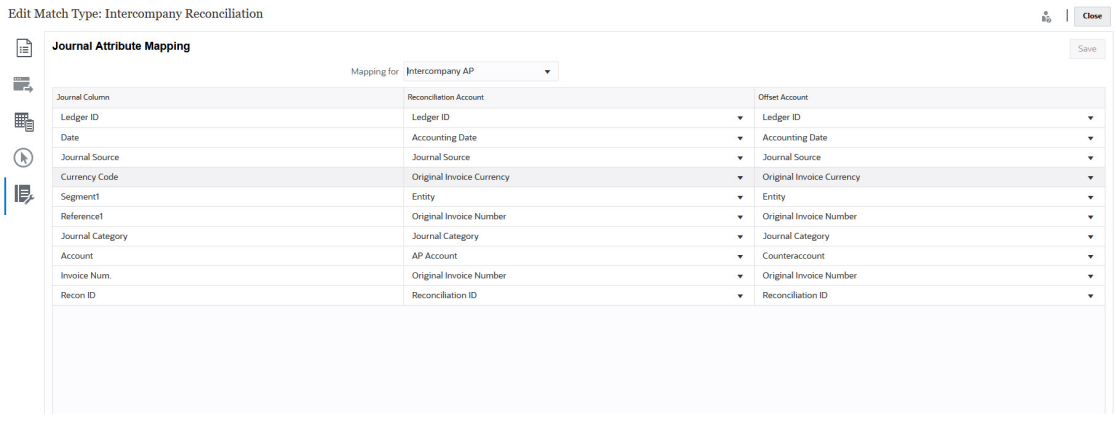
Here is an example of attribute mapping for **Adjustments**.



The mappable attributes include Match ID and Reverse Status. The Reverse Status attribute is empty for regular adjustments and is **Reverse Adjustment** for reverse adjustments. Service Administrators can differentiate between an adjustment and reverse adjustment by mapping the Reverse Status attribute to either or both of the Reconciliation and Offset Account sides. By mapping the Match ID attribute through to the journal adjustment, you can trace it back to the original adjustment's Match Id. Note that the Reverse Status attribute is applicable only for adjustments, not for transactions.

Example 2. Journal Attribute Mapping for Data Source Accounts Payable

Here is an example of attribute mapping for a data source **Intercompany AP**.



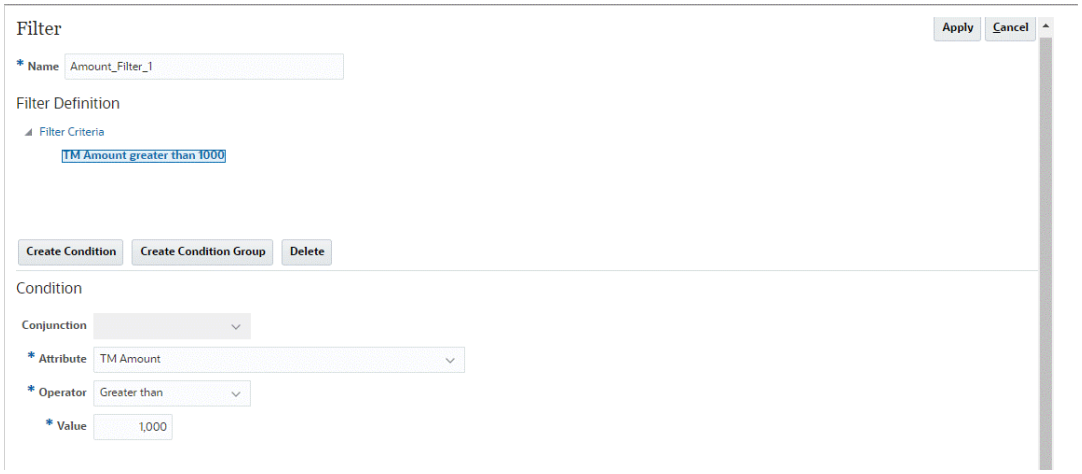
Applying Filters to Transactions in a Data Source

You can create filters for transactions within a given data source so that you can export only those transactions you wish.

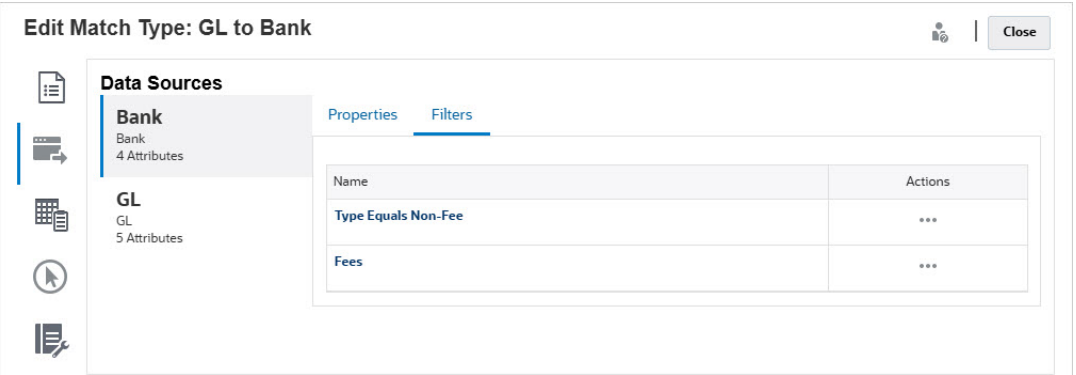
You first create the filter on the **Data Sources** tab of the **Edit Match Type** dialog. Then, during the export as journal entries, you can select that filter from the list.

To create a filter to limit the transactions for export:

1. From **Home**, select **Applications**, then **Match Types**.
2. Select the match type you want, and under **Actions**, select **Edit**.
3. Select **Data Sources** and then select the data source you want to filter.
4. Select the **Filters** tab and click **New**.
5. Enter a name for the filter in the **Name** field.
6. In **Filter Definition**, you can create the conditions that need to be met to be included and then click **Apply**.
   For example, let's create a filter for AP amount greater than 100.



7. Click **Create Condition**.
8. In **Attribute**, select **AP Amount**.
9. In **Operator**, select **Greater Than**.
10. In **Value**, select **100** and then click **Apply**.



This filter will now be available when you export transactions as journal entries.

> **Note**
>
> Once you export, transactions that are successfully exported are changed from open to closed state The export process will not include transactions that are in a closed state. This ensures that the same transaction is never accidentally exported more than one time. See Re-Exporting or Reopening Journal Entries for information on how to re-open previously closed journal entries, or re-export previously exported journal entries.

Exporting Adjustments and Transactions Using an Export Journals Job

Exporting adjustments or transactions as journal entries to a text file enables users to load these entries into Oracle ERP. Exported journal entries can be reopened and re-exported.

Related Topics

- Exporting Adjustments as Journal Entries
  The Export Journals job in Transaction Matching enables you to export adjustments as journal entries. The exported journal entries can be imported into a target system such as Oracle ERP.
- Exporting Transactions as Journal Entries
  The Export Journals job in Transaction Matching enables you to export transactions as journal entries. The exported journal entries can be imported into a target system such as Oracle ERP.
- Re-Exporting or Reopening Journal Entries
  Use the Job History page to re-export or reopen journal entries.

Exporting Adjustments as Journal Entries

The Export Journals job in Transaction Matching enables you to export adjustments as journal entries. The exported journal entries can be imported into a target system such as Oracle ERP.

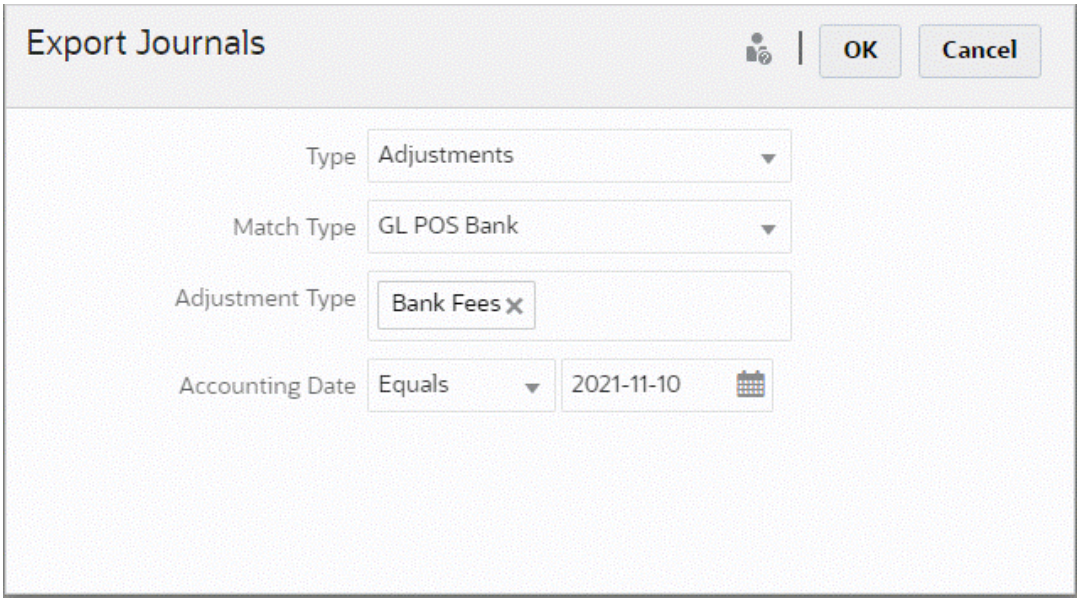
> **Note**
>
> For details about using Data Integration, see Loading Exported Journal Entries in *Administering Data Integration*.

The export process exports all the adjustments, including reverse adjustments, that are in Open status. You can select one or more of the available transaction types within a match type. You can also filter adjustments based on the transaction date. The default format used for date columns is MM/dd/yyyy. To use a different format, configure the **Transaction Matching Journal Export Date Format** setting. See Configuring Date and Time Settings.

The number of adjustments per reconciliation that you can export in one action is 1,000,000. To export more than 1,000,000, you must perform a separate export for the remaining adjustments.

To export adjustments as journal entries:

1. From **Home**, select **Applications**, and then **Jobs**.
2. Select the **Transaction Matching** tab.
3. From **Actions**, select **Export Journals**.



4. In **Type**, select **Adjustments**.
5. Select the **Match Type**.
6. (Optional) The **Adjustment Type** displays the adjustment types available for the match type selected in the previous step. Select one or more of the displayed values. If you don't select a value, the default used is All.

7. (Optional) Specify the **Accounting Date**.
   The operators available for filtering are Equals, Before, Between, and After. Select the operator required for the date comparison and then use the Date Picker to select the dates. If you don't specify anything, the default used is All (all dates).
8. Click **OK**.

The job is now visible on Job History and once successful, you can open or save the .csv file created.

It is recommended that you download and save the .csv file that contains the exported journal entries. This file is stored in a temporary directory and it may get overwritten if temporary space needs to be reclaimed. When you try to download this file at a later date, if the file is not present in the original location, an error message is displayed indicating that the file does not exist. You can re-export the journal entries and then download the file.

> **Note**
>
> Once you export, adjustments that are successfully exported are changed from open to closed state. The export process will not include Adjustments that are in a closed state. This ensures that the same Adjustment is never accidentally exported more than one time. See Re-Exporting or Reopening Journal Entries for information on how to re-open previously closed Adjustments, or re-export previously exported Adjustments.

Exporting Transactions as Journal Entries

The Export Journals job in Transaction Matching enables you to export transactions as journal entries. The exported journal entries can be imported into a target system such as Oracle ERP.

> **Note**
>
> For details using Data Integration, see Loading Exported Journal Entries in *Administering Data Integration*.

The export process exports all the adjustments and transactions that are in open status and match any applied filter criteria. Filtering is available to limit the number of transactions. The default format used for date columns is MM/dd/yyyy. To use a different format, configure the **Transaction Matching Journal Export Date Format** setting. See Configuring Date and Time Settings. Note that Date attributes do not include a default time-stamp in the journal export, instead only the applicable date itself is included.

The number of transactions that can be exported in a single export job is 1,000,000.

To export transactions as journal entries:

1. From **Home**, select **Applications**, and then **Jobs**.
2. Select the **Transaction Matching** tab.
3. From **Actions**, select **Export Journals**.
4. In **Type**, select **Transactions**.
5. In **Match Type**, select a match type.
6. In **Data Source**, select the data source.
7. If you applied filters to the transactions, select the filter.

8. Click **OK**.

The job is now visible on Job History. Once successful, you can open or save the .csv file created.

It is recommended that you download and save the .csv file that contains the exported journal entries. This file is stored in a temporary directory and it may get overwritten if temporary space needs to be reclaimed. When you try to download this file at a later date, if the file is not present in the original location, an error message is displayed indicating that the file does not exist. You can re-export the journal entries and then download the file.

Re-Exporting or Reopening Journal Entries

Use the Job History page to re-export or reopen journal entries.

Once an export has been performed, you can see two options on the **Actions** menu: **Re-Export** and **Reopen**.

Re-export is done from the **Jobs History** and you use the same **Job ID** which gets stored when an export takes place. This **Re-export** means that you get the same result as the original export.

The **Reopen** option can be used if you need to look at the adjustments or transaction journal entries again and is useful if you have a partial failure of some kind before it gets imported into your Oracle ERP system, or if you want to make a change to a filtered list of transactions. This option changes the exported entries from **Closed** to **Open**.

A

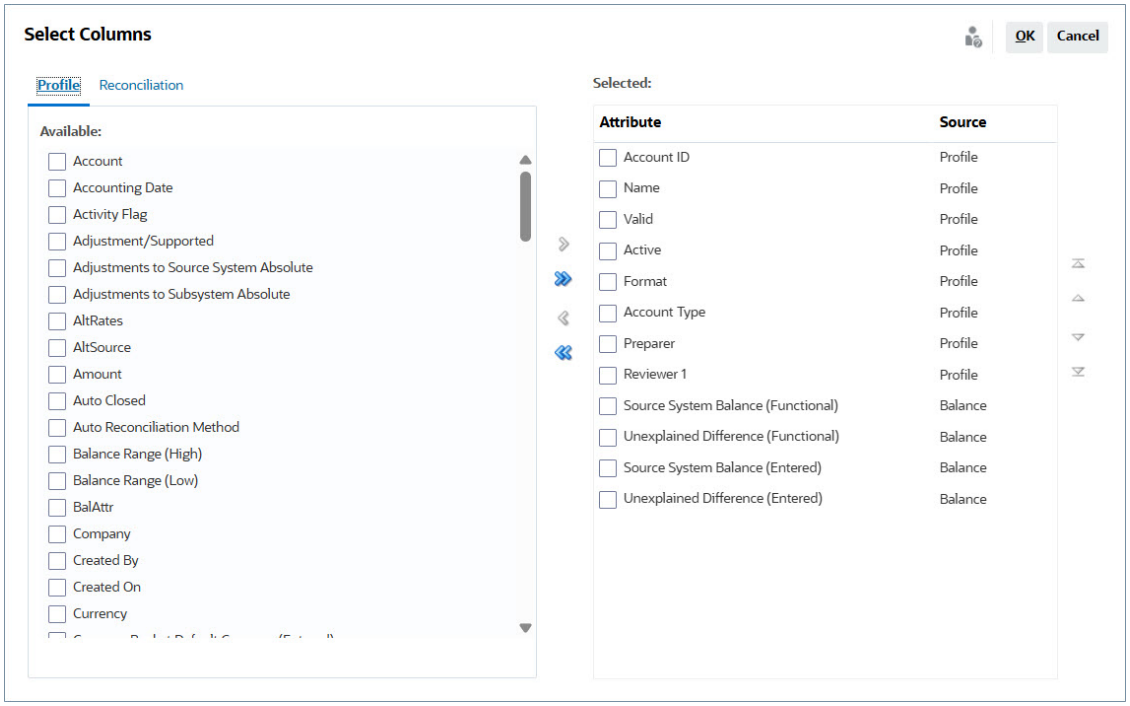
Appendix: Reconciliation List Select Column Definitions

This section provides definitions of the Reconciliation List select columns for the following dataset types that are referenced across the lists in the application:

- Profile
- Reconciliation
- Balance
- Transaction

Profile Dataset Types

This section describes definitions of the Profile dataset select columns.



The following table describes columns for Profile dataset types.

Table A-1 Profile Dataset Select Columns

Column Attributes	Definition
--Profile Segments Names 1-n	'X' number of segments can be utilized
--Custom Profile Attributes	'X' number of profile attributes can be added

Table A-1 (Cont.) Profile Dataset Select Columns

Column Attributes	Definition
Account ID	Combination of Profiles Segments that makes the profile unique
Account Type	Account type is a user-configured list of values
Active	Active / inactive setting
Auto Reconciliation Method	Auto Reconciliation Method set
Balance Range (High)	High balance value set
Balance Range (Low)	Low balance value set
Created By	Name of user who created the profile
Created On	Date-time of profile creation
Currency Bucket Default Currency (Entered, Functional, Reporting)	Default currency
Currency Bucket Enabled (Entered, Functional, Reporting)	Enabled Currency Bucket (Yes/No)
Days Until End Date	Count of days between current date and end date
Description	Description
Enabled Buckets	Count of enabled currency buckets
End Offset	Sum of start offset and durations across all roles
Enter Source System Balances	Manual Balance Entry allowed (Yes/No)
Enter Subsystem Balances	Manual Balance Entry allowed (Yes/No)
Group Profile	Group Profile Set (Yes/No)
Historical Rate	Historical Rate Set (Yes/No)
Last Updated By	Name of user the profile was last updated by
Last Updated On	Profile last updated by date-time
Match Balance Threshold (Number)	Balance Comparison Match Threshold (Number)
Match Balance Threshold (Percent)	Balance Comparison Match Threshold (%)
Match Type	Match type the format is linked to
Maximum Age Adjustments	Age violation setting - adjustment
Maximum Age Explanation	Age violation setting - explanation
Method	Method the format is linked to
Name	Name of the profile
Normal Balance	Normal balance credit/debit setting
Organizational Unit	Assigned organizational unit
Preparer	Preparer name assigned
Preparer (Actual)	Preparer name that submitted the recon
Preparer (Backup)	Preparer (backup) name
Preparer (Claimed)	The reconciliation has been claimed by a Preparer (Yes/No)

Table A-1 (Cont.) Profile Dataset Select Columns

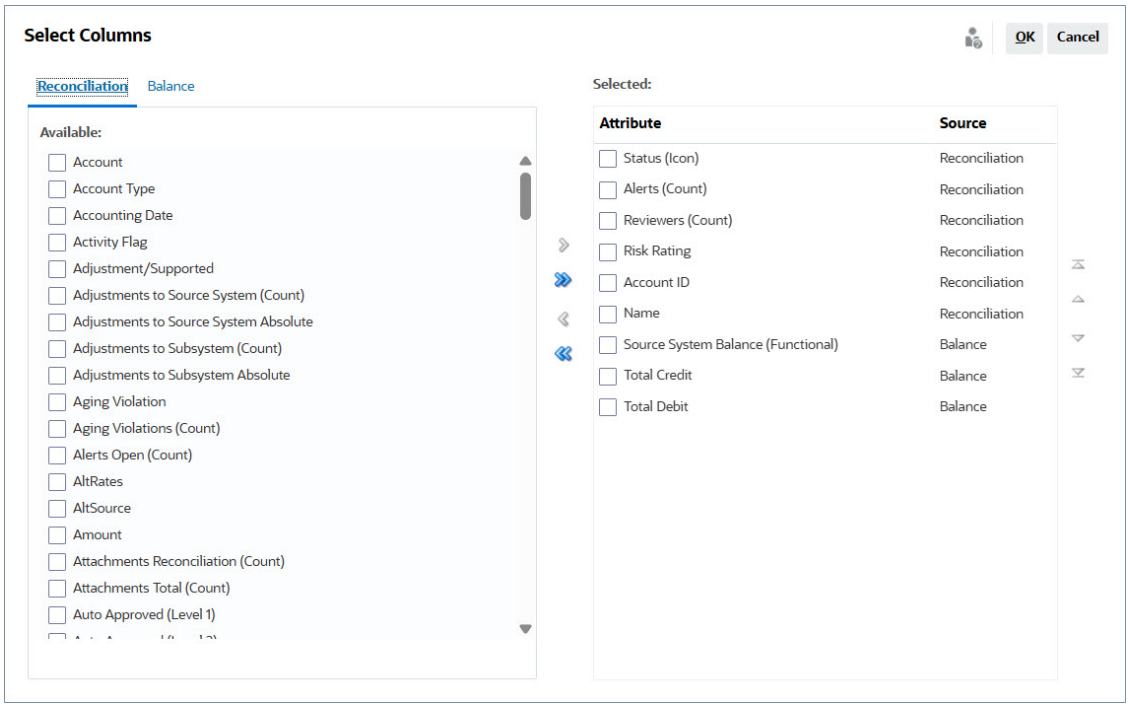
Column Attributes	Definition
Preparer (Primary)	Primary preparer from team who is currently assigned as Preparer for the Reconciliation. This can be: • The user assigned as the Preparer • The team assigned as the Preparer, if no one has claimed it • The user, on the team assigned as the Preparer, who has claimed the reconciliation • The backup Preparer if the main Preparer is out of office.
Preparer Duration	Duration set
Preparer End Date	End date set
Preparer End Date (Actual)	End date when role was completed
Preparer Frequency	Frequency set
Process	Process value set
Rate Type	Foreign exchange rate type set
References (Count)	Count of attached reference files
Require Action By (Preparer)	Team set as Any vs All
Require Action By (Reviewer 1 - Reviewer 10)	Team set as Any vs All
Reviewer 1-10	Assigned reviewer
Reviewer 1-10 (Backup)	Assigned reviewer (backup)
Reviewer 1-10 (Primary)	Primary reviewer from team
Reviewer 1-10 Duration	Duration set for each role
Reviewer 1-10 End Date	End date set for each role
Reviewer 1-10 End Date (Actual)	End date when role was completed
Reviewer 1-10 Frequency	Frequency set
Reviewer 1-10 Missing	Assigned reviewing missing (Yes/No)
Reviewer 1-10 Start Date	Start date based on offset/durations set
Reviewers (Count)	Total count of assigned reviewers
Risk Rating	Assigned risk rating
Rules (Count)	Total count of rules directly on profile
Schedule From	Schedule from close or period end date
Start Offset	Start offset set
Suggested Match Transactions Source (Count)	Total count of source suggested matches
Suggested Match Transactions Subsystem (Count)	Total count of subsystem suggested matches
Summary Profile	Profile is a summary (Yes/No)
Total Duration	Count of days set to complete the recon
Unmatched New Transactions Source System (Count)	Total count of source new transactions

Table A-1 (Cont.) Profile Dataset Select Columns

Column Attributes	Definition
Unmatched New Transactions Subsystem (Count)	Total count of new subsystem transactions
Unmatched Supported Transactions Source System (Count)	Total count of unmatched supported source transactions
Unmatched Supported Transactions Sub (Count)	Total count of unmatched supported subsystem transactions
Unmatched Transactions Source System(Count)	Total count of unmatched source transactions
Unmatched Transactions Subsystem (Count)	Total count of unmatched subsystem transactions
Valid	Profile valid to create a reconciliation (Yes/No)
Valid (Detailed)	Profile detailed reason for Invalid

Reconciliation Dataset Types

This section describes definitions of the Reconciliation dataset select columns.



The following table describes columns for Reconciliation dataset types.

Table A-2 Reconciliation Dataset Select Columns

Column Attributes	Definition
Account	Name of the profile

Table A-2 (Cont.) Reconciliation Dataset Select Columns

Column Attributes	Definition
Account ID	Combination of profiles segments that makes the profile unique
Account Type	Account type is a user-configured list of values
Adjustments to Source System (Count)	Total count of source adjustments
Adjustments to Subsystem (Count)	Total count of subsystem adjustments
Aging Violation	Aging Violation met (Yes/No)
Aging Violation (Count)	Total count of transactions with age violation
Attachments Reconciliation (Count)	Total count of attachments to reconciliation
Attachments Total (Count)	Total count of attachments to reconciliation & transactions
Auto Approved (Level 1 - Level 10)	Reconciliation was Auto Approved by Rule (Yes/No)
Auto Reconciled	Reconciliation was Auto Reconciled by Auto Reconciliation (Yes/No)
Auto Reconciliation Method	Auto reconciliation method set
Auto Submitted	Reconciliation was Auto Prepared by Rule (Yes/No)
Balance Explanations (Count)	Total count of balance explained transactions
Balance Explanations Aging Violation	Aging Violation met for Balance Explained transactions (Yes/No)
Balance Explanations Aging Violation (Count)	Total count of balance explained transactions with age violation
Balance Range (High)	High balance value set
Balance Range (Low)	Low balance value set
Comments (Count)	Total count of comments
Created By	Name of user who created the profile
Created On	Date-time of profile creation
Currency Bucket Default Currency (Entered, Functional, Reporting)	Default currency
Currency Bucket Enabled (Entered, Functional, Reporting)	Enabled Currency Bucket (Yes/No)
Current Due Date	Due date of active role
Current Reviewer Level	Reviewer level of active role
Days Overdue	Current date less overall end date (blank if not overdue)
End Date	End date set for last role on reconciliation
End Date (Actual)	End date when last role completed reconciliation
Enter Source System Balances	Manual Balance Entry allowed (Yes/No)
Enter Subsystem Balances	Manual Balance Entry allowed (Yes/No)
Ever Been Late	Has any Role Ever Been Late (Yes/No) If the Preparer was late, or any Reviewer was late, then Ever Been Late is set to Yes.

Table A-2 (Cont.) Reconciliation Dataset Select Columns

Column Attributes	Definition
Ever Been Late (Preparer)	Has Preparer Role Ever Been Late (Yes/No) For example, assume that the Preparer was on time with the original submission. However, a Reviewer rejected the reconciliation and it is now reassigned to the Preparer. If the Reviewer was late, then Ever Been Late (Preparer) is set to Yes.
Ever Been Late (Reviewer 1-10)	Has each Reviewer Role Ever Been Late (Yes/No) For example, assume that Reviewer 1 was late. However, all other Reviewers completed on time and the reconciliation was approved within the end date. Ever Been Late (Reviewer 1) is set to Yes because Reviewer 1 was late. However, Late is set to No because all other Reviewers completed before the end date.
Format	Format name set
Group Profile	Group Profile Set (Yes/No)
Historical Rate	Historical Rate Set (Yes/No)
Last Updated By	Name of user the reconciliation was last updated by
Last Updated On	Reconciliation last updated by date-time
Late	Late when the current date is greater than the Due Date of the reconciliation
Late (Preparer)	Preparer is late when either of the following is true: • The current date is greater than the Preparer's Due Date • The Reconciliation is re-opened to the Preparer after their Due Date Once the Preparer submits the reconciliation, Late is set to No. If the Reconciliation is re-opened to the Preparer after their submission End Date, this attribute is set to Yes. Once the Preparer submits the reconciliation, Late is set to No.
Late (Reviewer 1-10)	Reviewer is late when the current date is greater than the Due Date for any Reviewer. If the Reconciliation is re-opened to the Reviewer after their End Date, this attribute is set to Yes. Once the Reviewer has approved, Late with Reviewer is set to No. Example: Assume that Reviewer 1 approves a reconciliation after the end date and the reconciliation is now assigned to Reviewer 2. While Reviewer 1 was late, both Late and Late with Reviewer 1 are set to Yes. After Reviewer 1 approves the reconciliation, the Late and Late with Reviewer 1 are set to No. However, the Ever Been Late and Ever Been Late with Reviewer 1 are set to Yes and continue to be set to Yes even after Reviewer 1 approves the reconciliation.
Match Balance Threshold (Number)	Balance Comparison Match Threshold (Number)
Match Balance Threshold (Percent)	Balance Comparison Match Threshold (%)
Maximum Age Adjustments	Age Violation setting - Adjustment
Maximum Age Explanation	Age Violation setting - Explanation

Table A-2 (Cont.) Reconciliation Dataset Select Columns

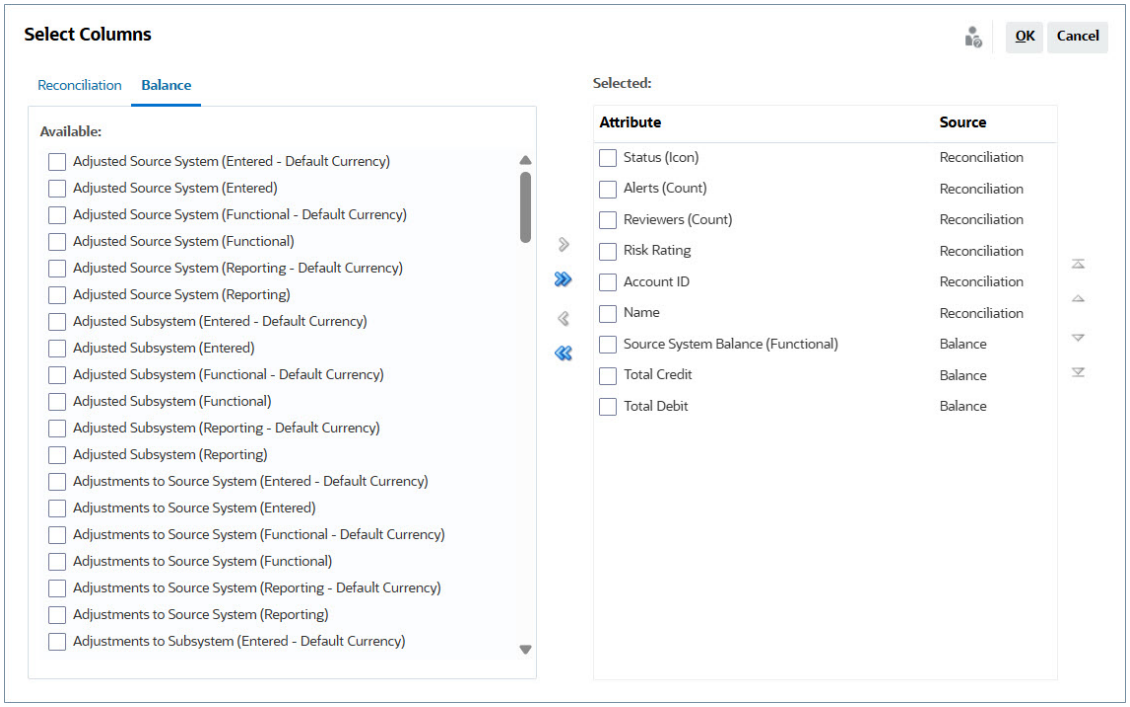
Column Attributes	Definition
Method	Method the format is linked to
My End Date	End date for the role you have on the reconciliation
My Role	Role you have on the reconciliation
Name	Name of the profile
Normal Balance	Normal Balance Credit/Debit Setting
Normal Balance Violation	Actual balance loaded conflicts with normal Balance Credit/Debit Setting (Yes/No)
On Time	Active role End Date (Actual) is less than or equal to End Date (Yes/No)
Organizational Unit	Assigned organizational unit
Period	Name of period associated with the object
Period Close Date	Close date of period selected
Period End Date	End date of period selected
Period Start Date	Start date of period selected
Preparer	Preparer name assigned
Preparer (Actual)	Preparer name that submitted the recon
Preparer (Backup)	Preparer (backup) name
Preparer (Claimed)	The reconciliation has been Claimed by a Preparer (Yes/No)
Preparer (Primary)	Primary preparer from team who is currently assigned as Preparer for the Reconciliation. This can be: • The user assigned as the Preparer • The team assigned as the Preparer, if no one has claimed it • The user, on the team assigned as the Preparer, who has claimed the reconciliation • The backup Preparer if the main Preparer is out of office.
Preparer Duration	Duration set
Preparer End Date	End date set
Preparer End Date (Actual)	End date when role was completed
Preparer Frequency	Frequency set
Process	Process value set
Rate Type	Foreign exchange rate type set
Reassignment Requested	Reassignment Request Active (Yes/No)
Rejections (Count)	Total count of rejections across all reviewers
Require Action By (Preparer)	Team set as Any vs All
Require Action By (Reviewer 1-10)	Team set as Any vs All
Responsible	Name of active user for the reconciliation
Reviewer 1-10	Assigned reviewer
Reviewer 1-10 (Actual)	Reviewer who approved the recon
Reviewer 1-10 (Backup)	Assigned reviewer (backup)

Table A-2 (Cont.) Reconciliation Dataset Select Columns

Column Attributes	Definition
Reviewer 1-10 (Primary)	Primary reviewer from team
Reviewer 1-10 Claimed	The reconciliation has been claimed by a Reviewer (Yes/No)
Reviewer 1-10 Duration	Duration set for each role
Reviewer 1-10 End Date	End date set for each role
Reviewer 1-10 End Date (Actual)	End date when role was completed
Reviewer 1-10 Frequency	Frequency set
Reviewer 1-10 Missing	Assigned Reviewing Missing (Yes/No)
Reviewer 1-10 Rejections (Count)	Total count of rejections for by role
Reviewer 1-10 Start Date	Start date based on offset/durations set
Reviewers (Count)	Total count of assigned reviewers
Risk Rating	Assigned risk rating
Rules (Count)	Total count of rules directly on profile
Source System Aging Violation	Aging violation met for source (Yes/No)
Source System Aging Violation (Count)	Total count of transactions with age violation in source
Start Date	Start date
Status	Current status
Status (Detailed)	Detail current status
Status (Icon)	Icon representation of current status
Subsystem Aging Violation	Aging violation met for subsystem (Yes/No)
Subsystem Aging Violation (Count)	Total count of transactions with age violation in subsystem
Summary Profile	Profile is a summary (Yes/No)
Total Duration	Count of days set to complete the recon
Transactions (Count)	Total count of transactions
Variance Explanations (Count)	Total count of variance explanations
Variance Period	Prior period for which current period is compared to

Balance Dataset Types

This section describes definitions of the Balance dataset select columns.



The following table describes columns for Balance dataset types.

Table A-3 Balance Dataset Select Columns

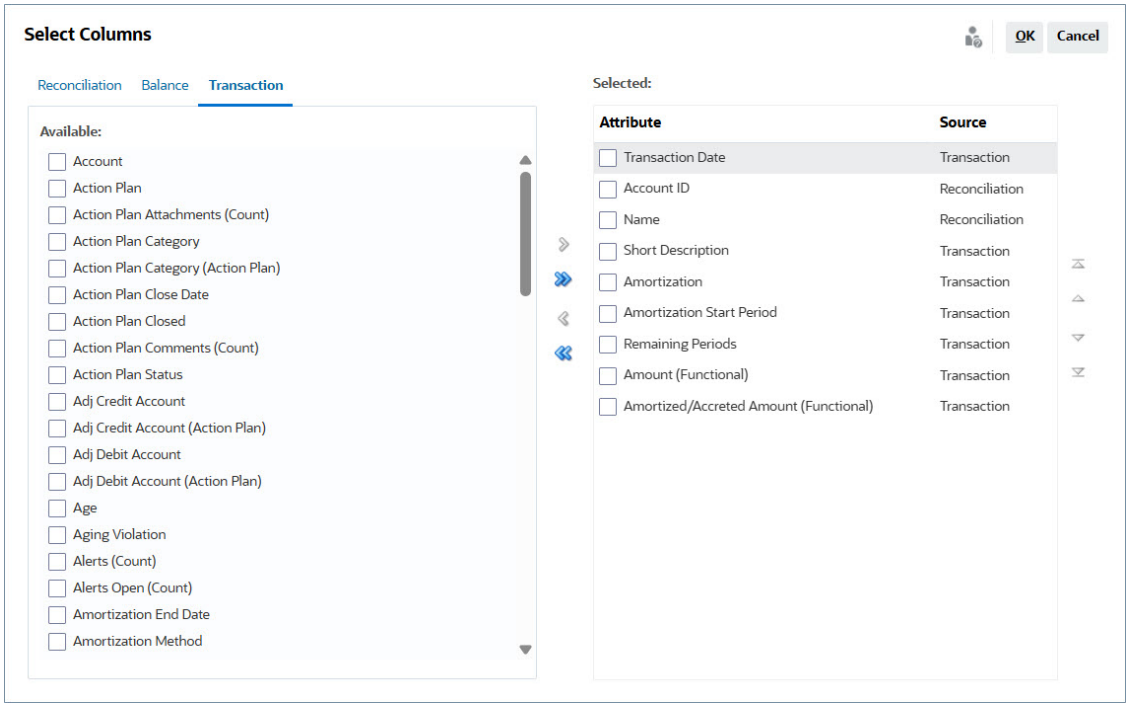
Column Attributes	Definition
Adjusted Source System (Entered, Functional, Reporting)	End Balance less Adjustments = Adjusted Balance
Adjusted Subsystem (Entered, Functional, Reporting)	End Balance less Adjustments = Adjusted Balance
Adjustments to Source System (Entered, Functional, Reporting)	Amount total of adjustments to source
Adjustments to Subsystem (Entered, Functional, Reporting)	Amount total of adjustments to subsystem
Balance Exists	Source or subsystem balance has been loaded into any bucket
Balance Exists (Source System)	Source balance has been loaded into any bucket
Balance Exists (Subsystem)	Subsystem balance has been loaded into any bucket
Balance Explanations (Entered, Functional, Reporting)	Amount total of balance explanation transactions
Difference (Entered, Functional, Reporting)	Source and subsystem end balance difference
Last Balance Load	Date-time of last balance loaded
Last Balance Loaded By	Name of user who last loaded a balance
Period Activity (Entered, Functional, Reporting)	Previous period end balance less current period end balance. Only source system balances are included in this attribute.

Table A-3 (Cont.) Balance Dataset Select Columns

Column Attributes	Definition
Prior Period Balance (Entered, Functional, Reporting)	End balance from prior period according to "Prior Period" setting on Period configuration. Only source system balances are included in this attribute.
Source System Balance (Entered, Functional, Reporting)	Source balances loaded
Source System Balance (Default Currency) - Entered, Functional, and Reporting	Source system's single numeric balance for all currencies in a currency bucket.
Source System Count of Currencies (Entered, Functional, Reporting)	Count of unique currencies loaded into the source system
Source System Less Matched In Transit (Entered, Functional, Reporting)	Matched in transit total
Source System Less Unmatched (Entered, Functional, Reporting)	Less unmatched total
Source System Less Unmatched Supported (Entered, Functional, Reporting)	Less unmatched supported total
Subsystem Balance (Entered, Functional, Reporting)	Subsystem balances loaded
Subsystem Balance (Default Currency) - Entered, Functional, and Reporting	Subsystem's single numeric balance for all currencies in a currency bucket.
Subsystem Count of Currencies (Entered, Functional, Reporting)	Count of unique currencies loaded into the subsystem
Unexplained Difference (Entered, Functional, Reporting)	Amount of unexplained difference
Variance Explanations (Entered, Functional, Reporting)	Total amount of variance explanations
Variance Period Balance (Entered, Functional, Reporting)	Variance period balance loaded

Transaction Dataset Types

This section describes definitions of the Transaction dataset select columns.



The following table describes columns for Transaction dataset types.

Table A-4 Transaction Dataset Select Columns

Column Attributes	Definition
Action Plan	Action plan value set
Action Plan Attachments (Count)	Total count action plan attachments
Action Plan Close Date	Action plan close date set
Action Plan Closed	Action plan closed (Yes/No)
Action Plan Comments (Count)	Total count action plan comments
Age	Days between transaction date and period-end date. If Action Plan is enabled, Age is days between Transaction Date and Action Plan Close Date.
Amortization	Transaction is amortizing (Yes/No)
Amortization End Date	End date of amortization schedule
Amortization Method	Amortizing method set
Amortization Start Date	Start date of amortization schedule
Amortization Start Period	Start period for amortization schedule
Amortized/ Accreted Amount (Entered, Functional, Reporting)	Amount amortized for selected period
Amount (Entered, Functional, Reporting)	Remaining amortized amount for selected period
Amount Overridden (Functional, Reporting)	Transaction foreign exchange calculation override (Yes/No)
Attachments (Count)	Total count of attachments for transaction
Carried Forward	Transaction was copied forward from previous reconciliation (Yes/No)

Table A-4 (Cont.) Transaction Dataset Select Columns

Column Attributes	Definition
Child Account	Child account associated with transaction
Close Date	Close date for transaction
Comments (Count)	Total count of comments
Flag	Reviewer flag set (Needs Attention/OK)
Half-Month Convention	Amortizing half-month convention set
Journal ID	Unique ID of the enterprise journal
Journal Name	Name of the enterprise journal
Journal Workflow Status	Workflow status of the Journal in Enterprise Journals
Journal Posting Status	Posting status of the enterprise journal (Posted or Not Posted)
Journal Posting Message	Message returned from ERP after posting
Last Updated By	Name of user that last updated one or more of the transaction attributes Short Description, Long Description, Transaction Date, Close Date.
Last Updated On	Transaction last updated by date-time for one or more of the transaction attributes Short Description, Long Description, Transaction Date, Close Date.
Long Description	Value of long description
Number of Periods	Count of periods in amortizing schedule
Original Amount (Entered, Functional, Reporting)	Amortizing transaction original amount
Rate Used	Exchange rate used for transaction translation
Remaining Periods	Amortizing transaction remaining periods on schedule
Short Description	Value of short description
Sub-Segment	Sub-Segment ID associated with the transaction
Transaction Date	Date of transaction
Type	Transaction type (Adjustment to Source/Sub, Balance Explanation, Variance)