Oracle Fusion Cloud Human Resources

Implementing Global Payroll

25B

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Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

Get Help in the Applications

Some application pages have help icons to give you access to contextual help. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons. If the page has contextual help, help icons will appear.

Get Support

You can get support at *My Oracle Support*. For accessible support, visit *Oracle Accessibility Learning and Support*.

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Increase your knowledge of Oracle Cloud by taking courses at *Oracle University*.

Join Our Community

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Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the *Oracle Accessibility Program*. Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

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We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to *oracle_fusion_applications_help_ww_grp@oracle.com*.

Thanks for helping us improve our user assistance!

1 Let's Get Started

Overview

Use the Application Implementation Consultant role (ORA_PAY_APPLICATION_IMPLEMENTATION_CONSULTANT_JOB) to access the Workforce Deployment offerings in the Setup and Maintenance and start an implementation of Cloud Payroll.

Refer to the Functional Setup Manager guide to manage the opt-in and setup of your offerings.

Workforce Deployment Offering

You use this offering to set up enterprise structures, legal entities, and organizations to create and maintain information related to people, employment, and work structures. This offering also has tasks for you to define payroll business objects required for processing and costing payroll, processing payments, and generating statutory reports.

This table outlines the primary functional areas of this offering. For the full list of functional areas and features in this offering, use the Associated Features report. Review the report when you plan the implementation of your offering. The setup steps required for payroll vary depending on your business requirements.

Functional Area	Description
Legal Structures	Manage legal entities, legal reporting units, tax reporting units, payroll statutory units, legal authorities, legal registrations and jurisdictions, and legal authorities.
Organization Structures	Manage organization structures, business units, and organization models that best suit your business process.
Workforce Structures	Manage locations, divisions, departments, jobs, positions, and grades.
Elements and Formulas	Configure elements and formulas to record earnings and deductions for processing payroll and reporting.
Payroll	Define payroll objects and payment methods required for payroll calculations and reporting, and processing and making payments.

Related Topics

- Plan Your Implementation
- About This Administering Global Payroll Costing Guide
- Payroll Cost Allocation Key Flexfield Structure

Setup Tasks for Implementing Global Payroll

Use to understand options and determine the sequence of tasks to implement global payroll.

To implement the Oracle Fusion Global Payroll application, sign-in as a user with Application Implementation Consultant or Payroll Implementor role and opt into the offerings applicable to your business requirements.

Before you begin implementing Global Payroll, you must complete:

- Initial application setup.
- Implementation of Global Human Resources and the requisite HR setup tasks for implementing and processing payroll. For more information, refer to the Implementing Global Human Resources guide.

Security Reference

The tasks that people can do and the data that they can see depend on their roles, duties, and privileges. For information about these factors, see these two guides:

- *Securing HCM*
- *Securing Reference for HCM*

Workforce Deployment Offering

Use this offering to set up enterprise structures, legal entities, and organizations to create and maintain information related to people, employment, work structures, and statutory requirements. The offering also includes tasks for defining payroll business objects required for processing and costing payroll, processing payments, and generating statutory reports.

This table lists the setup tasks required to implement the Global Payroll application. Perform all of these tasks from the Setup and Maintenance work area.Use **My Enterprise** on the Home page to navigate to Setup and Maintenance. Most of these tasks are under the Workforce Deployment offering unless otherwise specified in the first column of this table.

Setup Tasks for Implementing Global Payroll

Implementation Tasks List	Task Name	What you must do	Where to Find Information
Prerequisite Tasks for Payroll Setup			
Setup and Maintenance	Create an Implementation Project	Create an implementation project and select the enabled Workforce Deployment offering to generate the initial list of setup tasks required to implement the Global Payroll application.	• How You Use Implementation Projects to Manage Setup • Manage Setup Using Implementation Projects
• Offering: Customer Data Management • Functional Area: Application Extensions	Manage Territories	If you're unable to find a specific country in the Manage Geographies page, create the country. Use this country to set up your organization and other setup tasks.	• Create Countries

Implementation Tasks List	Task Name	What you must do	Where to Find Information
		Use the territory code and name to verify geographies, create legal addresses, and select the country extension.	
	Select Default Currency	On the Manage Territories page, select the default currency for the country. This is the currency in which balances are accumulated for this legislation.	• Manage Currencies
Define Common Applications Configuration/Define Geographies for HCM	Manage Geographies	Use the territory code to verify predefined geographies and load any additionally required local geographies. You can import Oracle-licensed data from Loqate, for those countries where the data is available.	• Geographies for HCM
Define Common Applications Configuration/Define Features by Country or Territory	Features by Country or Territory	Select the correct product for your legislation. The country extension setting ensures that certain payroll-related features, such as element templates, work correctly in your implementation.	• How Country Extensions are Selected
	Select Address Style and Address Validation	Check the address style and address validation for your country.	• Change Address Styles and Address Validation Settings
Define Common Applications Configuration/Define Enterprise Structures for HCM	Manage Legislative Data Groups	Define at least one Legislative Data Group for each country your enterprise operates in.	• Enterprise Structures • Legal Entities, Business Units, and Reference Data Sets • Legislative Data Groups
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Jurisdictions and Authorities for HCM	Manage Legal Addresses	Create legal addresses for all organizational units of the enterprise before you create legal entities.	• What's a legal address?
	Manage Legal Jurisdictions	Review the predefined jurisdictions for your country and create any jurisdictions you require for specific local taxes.	• Overview of Legal Jurisdiction and Authorities • Create Legal Jurisdictions, Addresses and Authorities
	Manage Legal Authorities	All legal entities must be registered against a jurisdiction that is governed by a legal authority. Create legal authorities as required for your country.	
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM	Manage Legal Entity	Create all legal entities that apply to the enterprise you are setting up. Designate the legal entity as a legal employer and as a payroll statutory unit (PSU) for payroll.	• Legal Entities • Legal Entities, Business Units, and Reference Data Sets
	Manage Legal Entity Registrations	Define registration details of the legal entity you create. Register them with the appropriate government or legal authorities	

Implementation Tasks List	Task Name	What you must do	Where to Find Information
		for the purpose of claiming and ensuring legal or commercial rights and responsibilities.	
	Manage Legal Entity HCM Information	Manage legal entity HCM information to include statutory components as required.	
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM/Define Legal Reporting Units for HCM	Manage Legal Reporting Unit	Define legal reporting units (LRU) also known as tax reporting units, to group employee records for tax and social reporting.	• Legal Entities • Legal Entities, Business Units, and Reference Data Sets
	Manage Legal Reporting Unit Registrations	Define registrations details of the LRU and register them with the appropriate government or legal authorities for the purpose of claiming and ensuring legal or commercial rights and responsibilities.	
	Manage Legal Reporting Unit HCM Information	Review the LRU that employs and pays workers. Define statutory requirements as required.	
Define Payroll Legislations	Configure Legislations for Human Resources	Create the legislative rules for your country. Legislative rules govern default values and how you manage employee records in your organization. Configure payroll relationship rule for your country and map a person type to a payroll relationship type.	• Legislation • Payroll Relationships
Payroll Setup Tasks			
Define Payroll Legislations	Configure Payroll Legislations	Create the payroll legislative data for your country. Set up elements, balances, and other payroll-related data for implementations.	• Legislation • Payroll Relationships
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM	Legal Entity Calculation Cards	Review and edit predefined calculation cards for payroll statutory units. The payroll process uses the calculation rules defined on the cards to calculate earnings and deductions.	• Calculation Cards • Calculation Factors • Wage Basis Rules
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM/Define Legal Reporting Units for HCM	Legal Reporting Unit Calculation Cards	Review and edit predefined calculation cards for tax reporting units. The payroll process uses the calculation rules defined on the cards to calculate earnings and deductions.	
Define Payroll/Define Payroll Business Definitions	• Payroll Lookups • Payroll Value Sets • Descriptive Flexfields for Payroll • Extensible Flexfields for Payroll	Create lookups, value sets, and descriptive and extensible flexfields that you need to support payroll.	• Define Lookups • FAQs for Define Lookups • Manage Value Sets • FAQs for Manage Value Sets • HCM Flexfields Setup

Implementation Tasks List	Task Name	What you must do	Where to Find Information
			• HCM Flexfields Maintenance
Define Payroll/Define Earning and Deduction Definitions	• Elements • Element Classifications	The application provides many predefined elements that cannot be modified at the implementation level. Define additional elements as required.	• Elements, Earnings and Deductions
	Calculation Value Definitions	Review the tables that hold the rates and values used to calculate earnings, deductions and exemption amounts. Create new calculation definitions as needed.	• Calculation Value Definitions
	Payroll Calculation Information	Review the payroll calculation information rules and definitions generated for user-defined elements. These rules and definitions are used for calculation of earnings and deduction amounts.	• Payroll Calculation Information • Payroll Calculation Information Formulas
	Values Defined by Criteria	Create the criteria rules or evaluation conditions that determine a particular value or rate.	• Values Defined by Criteria
	Rate Definitions	Review the predefined rate definitions and create new definition as needed. The rate definition can either be a derived rate or a value defined by criteria.	• Rate Definitions
	Component Group Rules	Review the rules defined for earnings and deductions that belong to the same component group and create new rules.	• Component Group Rules
Define Payroll/Define Balance Definitions	• Balance Definitions • Balance Groups • Balance Group Usages • Balance Exceptions • Balance Exception Reports	The application provides many predefined balances. Review the definitions of predefined balances and create new definitions, including assigning dimensions and feeds.	• Payroll Balances
Define Payroll/Define Payment Methods/Set Up Banks, Branches, and Accounts	• Manage Banks • Manage Bank Branches • Manage Bank Accounts	Create and edit banks, branches, and accounts.	• Bank Accounts
Define Payroll/Define Payment Methods	Organization Payment Methods	Review predefined organization payment methods and create new methods and their payment sources.	• Payment Methods • Organization Payment Methods
Define Payroll/Define Pay Frequency	Consolidation Groups	Review the consolidation groups assigned to payroll definitions and create new groups. They let you process the results from more than one payroll in a single action.	• Consolidation Groups

Implementation Tasks List	Task Name	What you must do	Where to Find Information
	Time Definitions	Review predefined time definitions and create or update static and dynamic intervals of time.	• Time Definitions
	Payroll Definitions	Create and update payroll definitions that specify the payment frequency, processing schedule, and other parameters.	• Payroll Definitions • Run Types • Pay Frequency • Periodicity
Define Payroll/Define Fast Formulas	User-Defined Tables	Review the predefined table structures and create and update new user-defined table structures.	• User Defined Tables
	Fast Formulas	Review predefined formulas and create new ones to validate or calculate data for payroll.	• Fast Formulas
Define Payroll/Define Payroll Flow Patterns	Payroll Flow Patterns	Review the predefined payroll flow patterns and create new patterns to meet specific requirements.	• Payroll Flows

Other Document References

For more detailed information about the setup tasks and other related applications and tasks, refer to these guides at docs.oracle.com/cloud/latest/globalcs_gs/docs.htm.

- Implementing Global Payroll
- Administering Global Payroll
- Administering Global Payroll Flows
- Administering Fast Formula
- Administrating Payroll Costing
- Implementing Absence Management
- Implementing Benefits
- Implementing Time and Labor
- Implementing Workforce Compensation

Responsive User Experience Setup

Profile Options for Redwood User Experience Setup for Payroll

Redwood is the new user experience in Oracle HCM applications. Many pages and flows have been recreated in the Redwood toolset Visual Builder Studio (VBS) to improve the user experience by creating cohesiveness through the application.

Some of the Redwood pages are enabled, by default. You will need to enable the respective profile options for other pages to get the Redwood user experience. In addition, you also need to enable the ORA_HCM_VBCS_PWA_ENABLED profile to enable the HCM Redwood pages. However, we recommend you evaluate your business requirements before enabling the Redwood experience.

This table lists the profile options to enable or disable the Redwood experience for the following pages in Global Payroll.

Page	Profile Option Code	Default Value
Payslips	ORA_PAY_PAYSLIPS_REDWOOD_ENABLED	No
Payroll Relationships	ORA_PAYROLL_RELATIONSHIPS_REDWOOD_ENABLED	No
Year-End Documents	ORA_PAY_YEAR_END_DOCUMENTS_REDWOOD_ENABLED	No

Deep Links

You can use deep links to provide easy navigation directly to a page in the HCM Cloud application.

You can also use deep links for mobile responsive pages on your intranet, custom and third-party applications, or in a document. This helps people run transactions in the HCM cloud and provides quick access to their HR information.

To access deep links:

1. Open the main menu.
2. Go to **Tools> Deep Links**.
3. Copy the URL for a deep link.
4. Paste the URL in the appropriate location.

When you open Deep Links, you find a list of all available deep links.

Search Logic Profile Options for Client List of Values

You can use the logic <codeph>CONTAINS</codeph> to create the client list of values. This returns results containing the characters you enter.

Optionally, for individual list of values, you could change this logic to <codeph>STARTS WITH</codeph>, to return results that start with the search characters you enter.

For example, when you search for a person with the name John Smith while using the logic `CONTAINS`, you can search by '**jo**' or '**sm**' or '**th**'. When you use the logic `STARTS WITH`, your search must start with '**j**'.

Use the logic `STARTS WITH` when your list contains thousands of values (more than 15,000 records) to improve the search performance. Or, if you don't partition your data by set ID.

Note: If you change the search logic for a client list of values, the logic changes in all pages where the list of values is used.

Related Topics

- Search Logic Profile Options for Client List of Values in Global Human Resources

Use Transaction Design Studio to Configure Field Displays

Use the Transaction Design Studio (TDS) to configure transactions and pages for responsive applications. TDS is available within the HCM Experience Design Studio.

You can control the visibility of attributes that are displayed either as **Delivered** or **Enabled**, and the availability of fields and sections of a transaction based on the user's role, person's business unit, or legal employer.

By default, the responsive pages display the often used attributes and hide the less often used attributes. Use Page Composer to personalize the responsive pages and display the attributes and tabs delivered within the feature.

Here's how you start HCM Experience Design Studio:

1. Sign in to the application as Human Capital Management Application Administrator with Access HCM Page Configurator (HRC_ACCESS_HCM_TRANSACTION_CONFIGURATOR_PRIV) privilege. This privilege provides you access to TDS in HCM Experience Design Studio.
2. Enable a sandbox to compose data for configuring business objects. On the Home page, click the **HCM Experience Design Studio** quick action under the **My Client Groups** tab.
3. Under **Settings and Actions**, click **Edit Pages**.
4. Select the site layer and click **OK**.

Related Topics

- Overview of Page Modification

Payroll Activity Center Setup

Enable Redwood Payroll Activity Center

Set Up Profile Options

Payroll Activity Center is disabled by default.

The **Redwood Payroll Activity Enabled** (**ORA_PAY_PAYROLL_ACTIVITY_REDWOOD_ ENABLED**) profile option is set to **No** by default.

Note: In addition, the **ORA_HCM_VBCS_PWA_ENABLED** profile option to enable the HCM Redwood pages, must also be enabled.

Here's how you enable Payroll Activity Center:

1. Navigate to the Setup and Maintenance area and search for the **Manage Administrator Profile Values** task.
2. On the Manage Administrator Profile Values page, search for and select the **Redwood Payroll Activity Enabled** profile option. The code for this profile option is **ORA_PAY_PAYROLL_ACTIVITY_REDWOOD_ ENABLED**.
3. In the **Profile Values** section, click **Add**.
4. Select **Site** to specify the level at which the profile value is to be set.
5. Click **Save and Close**.

Upgrade Payroll Results

To use Payroll Activity Center, you must enable the profile options and then run the Run Feature Upgrade flow.

Run the **Run Feature Upgrade** flow and select the **Payroll Activity Center Upgrade Payroll Results** feature to upgrade the payroll results. This process creates the required payroll results data, for the last 12 months' period only.

> **Note:** This is a one-time set up step for existing customers. It will upgrade your payroll results for the 12 months period before Update 24D, so that these results can be displayed in Payroll Activity Center.

Here's how you do it:

1. Navigate to the **Submit a Flow** task from **My Client Groups > Payroll**.
2. On the Flow Submission page, search for and click **Run Feature Upgrade**.
3. On the Submit a Payroll Flow page:
    a. In the **Payroll Flow** field, enter a name for the payroll flow.
    b. From the **Feature** drop-down list, select **Payroll Activity Center Upgrade Payroll Results**.
    c. Click **Submit**.

Upgrade User-Defined Legislations

If you've configured a legislation for a country or territory that's not already predefined by Oracle before Update 24D, you must upgrade the legislation to ensure that the balances are displayed correctly in Payroll Activity Center.

Here's how you do it:

1. Navigate to the **Setup and Maintenance** area.
2. Search for the **Configure Legislation for Human Resources** task.
3. On the Configure Legislation for Human Resources page, select an existing legislation from the **Installed Legislations** list.
4. On the Legislations page, click **Edit**, then **Save**, and then **Done**. These actions will trigger the necessary update for the legislation.
5. Navigate to Payroll Activity Center. The balances will now display on the **Balance Comparison** region of the **Overview** tab.

Related Topics

- Payroll Activity Center Overview

Set Up the Index for Person Results

You need to configure the profile options and run the initial data ingestion process to set up Oracle Search index for Payroll person results.

The Oracle Search index is the foundation of the Oracle Search based Global Search.

Set up the profile options listed in the "Set Oracle Search Profile Options" section of the *Set Up Oracle Search for HCM* topic.

Here's how you set up the index for person results (to see the pending records):

1. Navigate to **Tools > Scheduled Processes**.
2. Search for the **ESS job to create index definition and perform initial ingest to OSCS** scheduled process.
3. For the **Index Name to Reingest** parameter value, enter **fa-hcm-person-results**.
4. Submit the scheduled process.

   The pending records will be displayed on Payroll Activity Center after the scheduled process completes.

Provide Access and Security

This topic lists the functional privileges required to access Payroll Activity Center.

A new functional privilege, **PAY_ACCESS_PAYROLL_ACTIVITY_CENTER** is available by default for payroll administrators and managers to access Payroll Activity Center. Add this privilege to any custom payroll role and regenerate that custom role.

This privilege provides the user with access to the payroll summary information displayed in Payroll Activity Center. The list of payrolls that are displayed on this page is secured by the legislative data group and payroll definition data security profiles that are assigned to the user.

The other details on Payroll Activity Center, such as the person results, are secured using the existing security profiles that are granted to the predefined payroll roles.

Disable the Existing Payroll Work Area

This topic explains how you can disable the access of the existing Payroll work area.

To disable the access of the existing Payroll work area, you must remove the following functional privileges from payroll administrators, managers, and custom payroll roles:

- ORA_PAY_REGULATORY_AND_TAX_REPORTING_WA_MANAGEMENT_DUTY
- ORA_PAY_ACCOUNTING_DISTRIBUTION_WA_MANAGEMENT_DUTY
- ORA_PAY_ADMINISTRATION_WA_MANAGEMENT_DUTY
- ORA_PAY_CALCULATIONS_WA_MANAGEMENT_DUTY
- ORA_PAY_CHECKLISTS_WA_MANAGEMENT_DUTY
- ORA_PAY_PAYMENT_DISTRIBUTION_WA_MANAGEMENT_DUTY

Related Topics

- Payroll Activity Center Overview

Integration With Other Applications

Time and Labor

Overview of Time, Absence, and Pension Data for Payroll

You can automate the regular import of time card entries, absence entries, and pension enrollments.

Load Data Options

The application that you use to record time, absences, and pensions determines options for importing data to payroll. This table lists the applications for transferring data to payroll.

Source Application	Data Load Options
Time card	• For Oracle Fusion Time and Labor, submit the Load Time Card Batches process. • For third-party time applications, you can load time cards using HCM Data Loader.
Absences	• For Absence Management, use the **Absence Records** task to record an absence and transfer it directly to the person's absence calculation card. When you set up the plan in Absence Management, select the **Transfer absence payment information for payroll processing** check box. Find this setting in the **Payroll Integration** section of the **Entries and Balances** tab on the **Create Absence Plan** page. • For third-party absence applications, you can load absence records using HCM Data Loader.
Pensions	You can load benefits and pension calculation cards using HCM Data Loader. The availability of this process depends on the implementation for your country or territory.

Related Topics

- Example of Loading Payroll Time Cards
- Example for Loading Absence Records
- Guidelines for Loading Calculation Cards

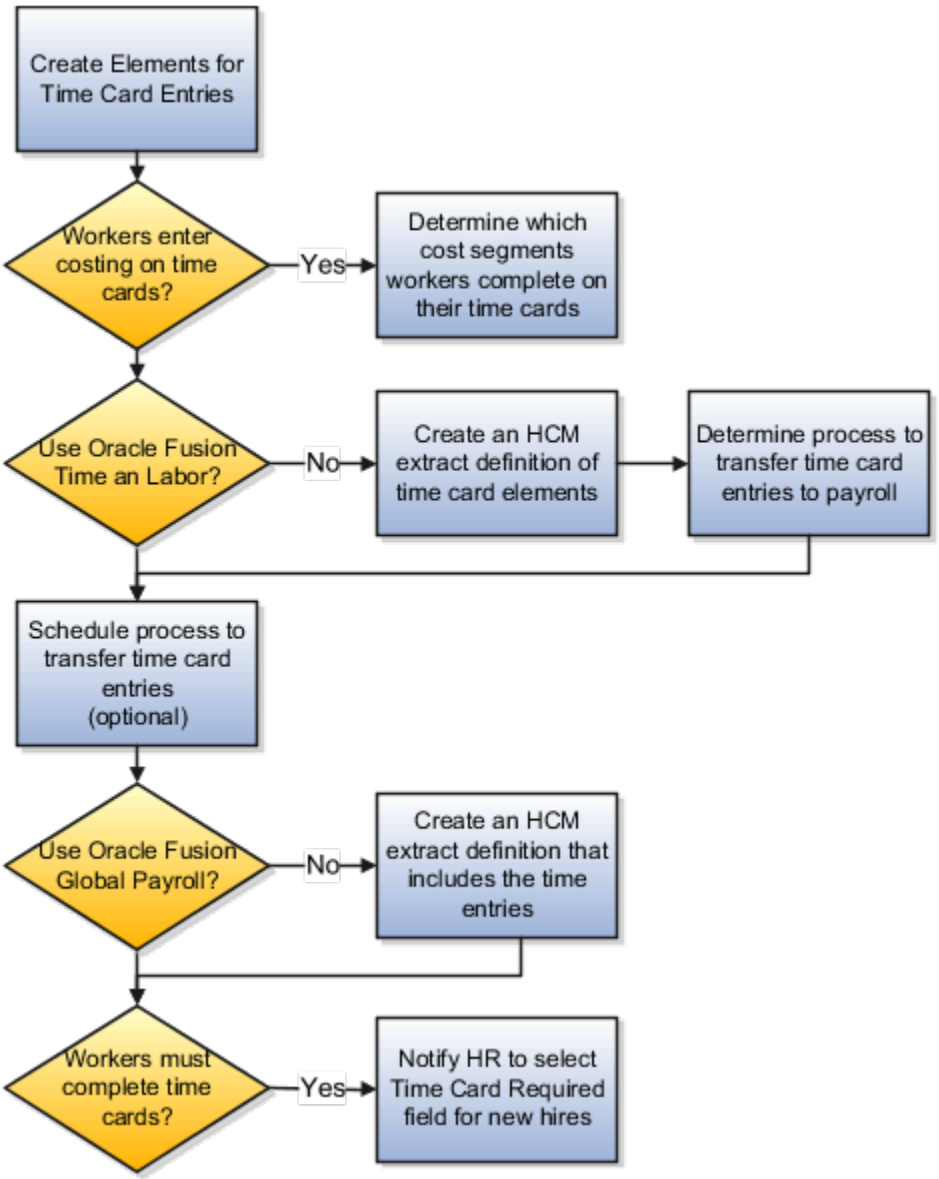
Prerequisite Payroll Setup for Importing Time Entries

Before you can import time card entries to process in a payroll run or extract for a third-party payroll provider, complete payroll setup tasks.

These tasks vary depending on your configuration, specifically whether your enterprise:

- Uses Oracle Fusion Time and Labor or a third-party time provider
- Uses Oracle Fusion Global Payroll or a third-party payroll provider
- Requires workers to submit a time card if their pay is calculated using time entries

This figure and table lists the tasks that depend on each of these configuration choices.



All configurations create elements for use with time cards. This table describes the remaining setup tasks and processes that vary based on your configuration.

Task	Applies To
Create elements for time card entries	All configurations
Create rate definitions and associate with the elements if the rate is different from the default salary rate	Elements whose rate isn't the default salary rate
Determine which value definitions would override the criteria for the rate definition	Optional for all configurations

Task	Applies To
Determine which cost segments workers complete on their time cards Record costing overrides at the element entry level by having workers specify the account to charge on their time cards. **Note:** If you enable costing overrides, ensure that you're using the segments that are enabled for element entry level costing in the Cost Allocation key flexfield.	Optional for all configurations
Create an HCM extract definition of time card elements	Third-party time provider
Determine process to transfer time card entries to payroll: • Use the Load Time Card Batches process to upload time entries to calculation cards. • Use HCM Data Loader to load element entries.	Third-party time provider
Schedule process to transfer time card entries As an example, schedule the Load Time Card Batches process: • After normal working hours to distribute the load on server • To run more frequently during time periods when most employees submit their time cards	Optional for all configurations
Create an HCM extract definition that includes time entries	Third-party payroll provider
Notify HR to select Time Card Required field at the Terms or Assignment level when a new hire's pay calculations depend on time cards.	Optional for all configurations

Related Topics

- Time Card Required Option
- Create Time Card Elements for Time Entries
- Extract Components
- Enable Overrides for Time Elements Using Values Defined by Criteria

Absence Management

Integrate Absence Management with Global Payroll

Use Oracle HCM Cloud Absence Management to set up and enroll persons in absence plans. Transfer absence information to Cloud Payroll for processing and paying absences.

Select these different quick actions under the **My Client Groups** tab to integrate Absence Management with Cloud Payroll.

Steps	Tasks
Create an absence plan, such as an Accrual, Qualification, or No Entitlement plan.	Absence Plans
Create absence types based on predefined absence patterns and associate them to the absence plans.	Absence Types
Create rate definitions to use in calculating accrual and liability balances.	Rate Definitions
Create absence elements.	Elements
Complete these payroll integration information: • Select the Transfer absence payment information for payroll processing check box. • Select the element for the plan in the Element field. The element links the absence plan to the calculation component shown on the person's calculation card. • Optionally, specify rates. These rates override rates specified elsewhere.	Absence Plans **Note:** Find these settings in the Payroll Integration section of the Entries and Balances tab on the Create Absence Plan page.
Enroll persons in the absence plan:	Absence Records

Steps	Tasks
• Add the plan and provide the entitlement date information. • For accrual plans, select the Run Accruals for Selected Plan task action.	

After the information is set up, use the **Absence Records** task to record an absence. When the absence is approved, the daily and summary breakdown information is automatically transferred to payroll.

You can then process the payroll that includes these absence entries and view the resulting absence balances on the person's Statement of Earnings. After you process and archive payments, you can view the resulting absence balances on the person's payslip.

Related Topics

- Define Payroll Elements to Process Absences
- Rates Used to Calculate Absences in Payroll
- How Many Salary Bases to Create
- Import Absence Entries to Payroll

Payroll Concepts to Understand

Date Effectivity

Date Effectivity Overview

Date effectivity preserves a history of changes made to the attributes of some objects. As a Professional user, you can retrieve and edit past and future versions of an object.

Many Human Capital Management (HCM) objects, including person names, assignments, benefits plans, grades, jobs, locations, payrolls, and positions are date-effective.

Logical and Physical Records

Date-effective objects include one or more physical records. Each record has effective start and end dates. One record is current and available to transactions. Others are past or take effect in the future. Together, these records constitute the logical record or object instance. For a date-effective logical row, which is a collection on contiguous temporal physical rows, each physical row CreatedBy (CREATED_BY) and CreationDate (CREATION_DATE) are the same.

This table shows changes to the department manager attribute in a department business object. Each row represents a single physical record.

Physical Record	Effective Start Date	Effective End Date	Department Manager
4	18 January, 2022		C. Woods

Physical Record	Effective Start Date	Effective End Date	Department Manager
3	15 October, 2021	17 January, 2022	A. Chan
2	13 June, 2020	14 October, 2021	T. Romero
1	22 March, 2019	12 June, 2020	G. Martin

Note: The physical record number doesn't appear in the record.

Effective End Dates in Physical Records

Every physical record except the last has an effective end date. The update process adds this date, which is the day before the effective start date of the next record, whenever you update the object.

Object End Dates

You can enter a final effective end date for some date-effective objects. For example, terminating an assignment adds a final effective end date to the assignment. Alternatively, the **End Date** action may be available. If you end date a date-effective object, then it isn't available to transactions after that date. But the object's history is retrievable.

Status Values in Date-Effective Objects

Some date-effective objects, such as grades and jobs, have both effective dates and status values. When the object status is **Inactive**, the object isn't available to transactions, regardless of its effective dates. Setting the status to **Inactive** makes objects unavailable to transactions. If you can't enter an effective end date for an object, then changing its status has the same effect.

Future-Dated Changes

For date-effective objects, you can enter future changes. For example, you enter the worker promotion shown in this table on 25 July, 2022 to take effect on 18 October, 2022.

Physical Record	Effective Start Date	Effective End Date	Grade
2	18 October, 2022		IC2
1	14 December, 2020	17 October, 2022	IC1

Physical record two becomes current on 18 October, 2022. From 14 December, 2020 until 17 October, 2022 physical record one is current and available to transactions. If you can access the object history, you can see physical record two before it takes effect.

When future-dated changes exist, other actions may be limited. For example, to end this worker's assignment before the promotion takes effect, you must first delete the promotion.

Date-Enabled Objects

Some objects, such as work relationships, are date-enabled rather than date-effective. They have start and end dates that define when they're available, but they have no history of changes. New attribute values overwrite existing attribute values.

Related Topics

- How You Delete Physical Records from Date-Effective Objects
- Examples of Updating Date-Effective Objects
- Examples of Correcting Date-Effective Objects
- How You Make Multiple Updates to Date-Effective Objects in One Day

How You Delete Physical Records from Date-Effective Objects

The effect of deleting a physical record from a date-effective object depends on the record's position in the object's history.

Consider the date-effective object, which has three physical records, shown in this table.

Physical Record	Effective Start Date	Effective End Date	Attribute Value
3	15 August, 2022		C
2	30 October, 2021	14 August, 2022	B
1	10 June, 2020	29 October, 2021	A

Intermediate Records

If you delete physical record two, where the attribute value is B, then the object is as shown in this table after the deletion.

Physical Record	Effective Start Date	Effective End Date	Attribute Value
2	15 August, 2022		C
1	10 June, 2020	14 August, 2022	A

If physical records exist both before and after the deleted record, then the deletion adjusts the dates of the surrounding records automatically. The effective end date of the previous record is now the day before the effective start date of this record. This change closes the gap in the object's effective dates.

First or Only Records

In most cases, you can't delete the first or only physical record.

If you can delete the first physical record, then the object exists from the effective start date of the next physical record (30 October, 2010 in this example). If only one physical record exists, then deleting that record is the same as deleting the object.

Final Records

If you delete the final physical record, then the deletion removes the effective end date automatically from the previous physical record (14 August, 2011, in this example).

Country Extensions

How Country Extensions are Selected

Use the Features by Country or Territory task under Payroll in My Client Groups, to select the correct product for your legislations. The country extension setting ensures that certain payroll-related features, such as element templates, work correctly in your implementation.

By default, each country's extension is set to Human Resources or None, which means no payroll product is selected. If you plan to use payroll or any predefined payroll interface extracts for a country or territory, you must set its country extension to the appropriate payroll setting.

The options available for selection is given here.

- Payroll
- Payroll Interface
- Human Resources or None

For some countries or territories, the options available for selection may be restricted.

Setting the country extension to Payroll ensures that all payroll features function correctly. The other product settings you select control the functions of payroll-related features when you aren't using Global Payroll.

Payroll

The implications of setting the country extension to Payroll are as given here.

- When creating elements, the element templates generate formulas and other associated items that are required for costing or payment processing in Global Payroll.
- The new-hire process includes country-specific features, such as automatic generation of calculation cards for statutory deductions and validation of address formats.
- Payroll definitions require associated organization payment methods. You must select payment methods that include a payment source.
- Defining payment sources requires source banks in Oracle Fusion Financials.

Payroll Interface

The implications of setting the country extension to Payroll Interface is as given here.

- The element templates for creating regular and supplemental earnings elements generate associated objects, such as input values, formulas, and balances. These objects are required for including employee data in the Calculate Gross Earnings process.

For all other elements, the simplified element templates create only the element and no associated objects.

- The new hire process includes country-specific validations.
- Validations on payroll objects are less restrictive to support sending employee bank information as follows:
  - No requirement for payment sources in organization payment methods
  - No dependency on source banks in Financials

Human Resources or None

The implications of setting the country extension to Human Resources or None is as given here.

- The element templates for creating standard earnings, supplemental earnings, direct payments, and taxable benefits elements with flat amount calculation rule generates the element definition and three input values, such as amount, periodicity and full time equivalent. This template for percentage calculation rule generates percentage input value and factor input value for factor calculation rule. It doesn't generate any other objects, such as fast formulas and balances.
- The element templates for creating the other elements generates only the elements and not the associated objects, such as input values, formulas, or balances.

  You can configure these elements to meet your specific business requirements, such as adding input values and formulas to a compensation element.
- Certain countries or territories have additional country-specific validation.
- Validations on payroll objects are less restrictive, as with the Payroll Interface setting.

Select Country Extensions

This example demonstrates how to configure payroll-related features for countries and territories in an enterprise.

The Vision enterprise has employees in several countries with different payroll arrangements:

- In the United States and United Kingdom, the enterprise pays employees using Oracle Fusion Global Payroll.
- In France, the enterprise extracts and sends payroll-related data to third-party payroll provider using Payroll Interface extract definitions.
- In China, the enterprise stores only HR data in Oracle Fusion Applications and doesn't require any data for payroll purposes.

The following table summarizes the key decisions to consider while deciding on the product usage for a country.

Decisions to Consider	In This Example
Do your plans include processing payrolls within Oracle Fusion for any country?	Yes, using Global Payroll in the US and UK
Do your plans include extracting or transferring payroll-related data to a third-party provider for any country?	Yes, using Payroll Interface extracts in France
Do your plans include processing only HR details?	Yes, using Global HR in China

Decisions to Consider	In This Example

How to Set the Extension

1. Select the **Features by Country or Territory** task from **My Client Groups > Show More > Payroll**.
2. In the **Selected Extension** list, select the country extension for the countries as shown in this table.
   The following table lists the country names and the product usage that you can select for this scenario.

Country	Extension
United States	Payroll
United Kingdom	Payroll
France	Payroll Interface
China	Human Resources or None

3. Click **Save**, and then click **Done**.

Related Topics

- Change Address Style and Address Validation Settings

Geographies, Address Styles, and Country Extensions

To implement payroll, you must first understand payroll feature choices and concepts. You can then plan your payroll implementation using the Functional Setup Manager. Functional Setup Manager enables rapid and efficient planning, configuration, implementation, deployment, and ongoing maintenance of the application through administration.

Payroll Feature Choices

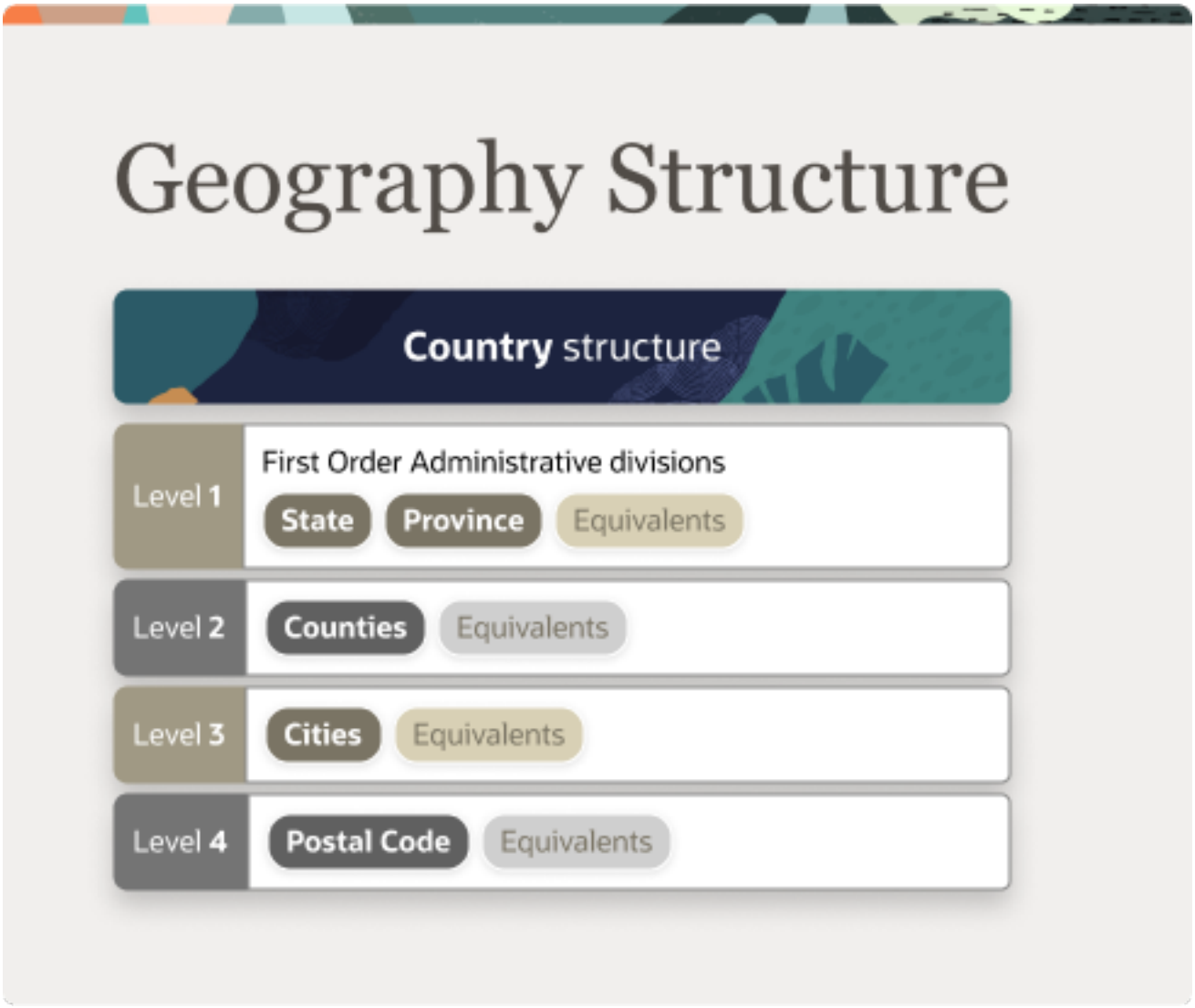
As part of feature choices for payroll processing you:

- Select the correct country extension setting for each of your countries and territories on the Features by Country or Territory page. The country extension setting ensures that certain payroll-related features, such as element templates, work correctly in your implementation.
- Select the Payroll Costing Options to cost your payroll and the appropriate subledger accounting rules.
- Select the appropriate precision for the currency of each country or territory where you're processing payroll.
- Set the currency of each country or territory where you're sending payroll data to a third-party payroll provider. However, don't select that country or territory as a feature choice. Select the Payroll Interface extension on the Features by Country or Territory page.

Geography Structures

The first step for defining a country is to create a geography structure in which geography types are part of the country structure, and then define how the geography types are hierarchically related within the country structure. For example, you can create geography types called State, City, and Postal Code. Then you can rank the State geography type as the highest level within the country, the City as the second level, and the Postal Code as the lowest level within the country structure. Geography structure can be defined using the **Manage Geographies** task, or can be imported using tasks in the **Define Geographies** activity.

Note: During import of geography data from any provider if one or more geography levels aren't available, n/a is substituted for those geography levels. For example, the list of values in the address UIs of accounts, contacts, suppliers, persons, and so on are displayed as n/a for such geography levels.



A geography structure is a hierarchical grouping of geography types for a country. The following table describes the geography structure for the United States.

Level	Geography Type
1	State
2	County
3	City
4	Postal Code

You can use the geography structure to relate geography types for a country and define geography types for a country.

Relate Geography Types for a Country

You can determine how a country's geographies are hierarchically related by creating the hierarchy of the geography types in the geography structure. When you define a country's structure, the geography type Country is implicitly at the highest level of the geography structure with level as 1. The subsequent geography types that you add after country are numbered in sequence.

You must add a geography type as a level in the country structure before you can define a geography for that geography type in a country. For example, before defining the state of California, the State geography type must be added to the United States country structure. To quickly create country structure, you can copy a structure from another country and modify the geography types for the country.

Define Geography Types for a Country

You can use any of the master reference geography types to create your geography structure. If required, you can create a geography type, before adding it to the country structure. Each geography type is added at a lower level to the current lowest level.

> **Note:** You can't delete geography types that have associated geography data. You can only delete the lowest level geography type of the country structure.

You can use a geography type that you create within the country structure for other country structures as well.

Geography Validations

After defining the geography hierarchy, you need to specify the structure for the country.

You can choose which address style format you would like to use for the country, and for each selected address style format you can map geography types to address attributes. You can also select which geography types to include in address validation or tax validation, and which geography types will display in a list of values during address entry in other user interfaces. The geography validation level for the country, such as error or warning, can also be selected. Geography validation determines the geography mapping and validation for a country's *address styles*, and the overall address validation control for a country.

The **No Styles Format** address style format is the default address style format for a country. By defining the mapping and validation for this format you will ensure that validations can be performed for any address in the country. After the **No Styles Format** is defined you can set up additional mapping for specific address styles.

For each address style format, you can define the following:

- Map to attribute
- Enable list of values
- Tax validation
- Address validation
- Address validation control

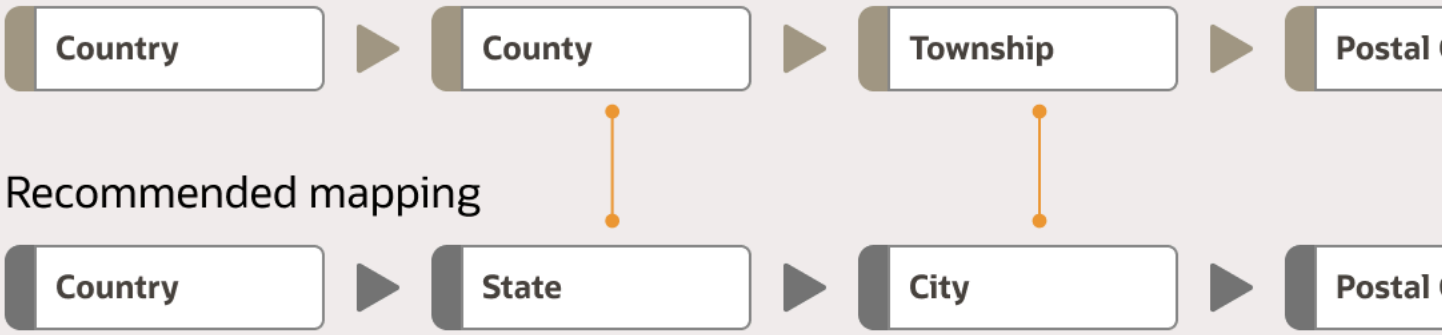
Attribute Mapping

For every address style format, you can map each geography type to an address attribute. For example, you can map the **State** geography type to the **State** address attribute for the United States, or map the **State** geography type to the **County** address attribute for the United Kingdom. The geography types that appear are based on how the country structure is defined. The list of address attributes that appear are based on address formats delivered with the application, or your customer defined address formats.

Note: You only need to map geography types that you want to use for address or tax validation purposes.

Attribute Mapping

Great Britain geography structure



GB

Organization: TechWave Solutions

Address:
1440 Westminster, Greater London, SW1A 2AA, United Kingdom

Country:
United Kingdom

Township:
Westminster

County:
Greater London

Postal Code:
SW1A 2AA

County is mapped to **State**. Oracle Geographies will be able to perform Address Validation using this mapping

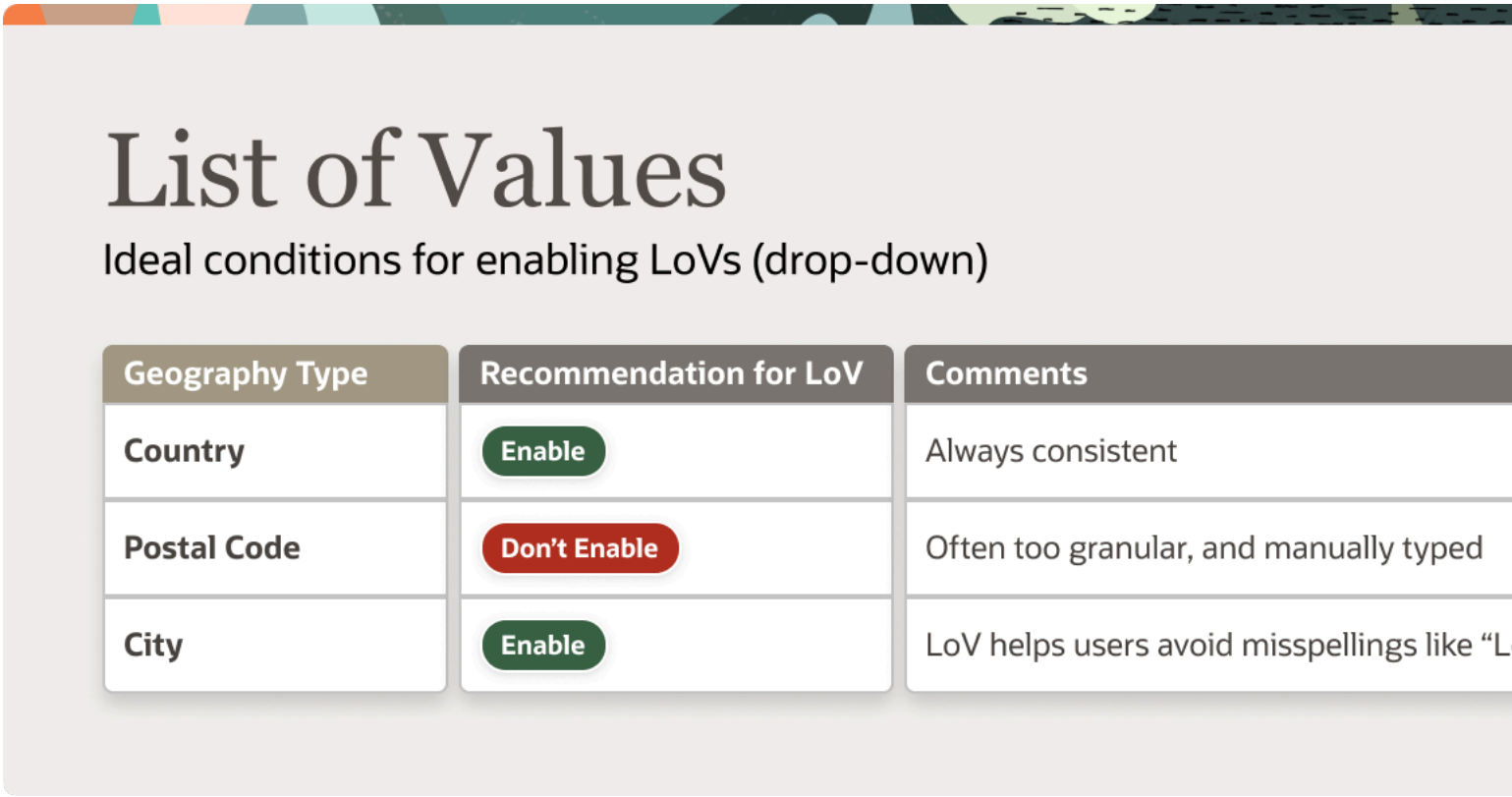
Township is mapped to **City**

Enable List of Values

Once a geography type is mapped to an attribute, then you can specify whether the geography type will appear in a list of values during address entry in user interfaces. It is very important to review carefully if you want to enable a list of values. You should only enable a list of values if you have sufficient geography data imported or created for that geography. If the setup for master geography data is incomplete, then the geography data is either not imported or created. As a result, the list of values for the address attribute doesn't list any geography data.

Once you have enabled a list of values for an address attribute, you can only select the geography data available for the geography type. This means that if a specific geography value isn't available in the geography hierarchy, you can't create an address with a different geography value.

Note: Enable List of Values applies to the UI only. It doesn't apply to import, web services, nor REST APIs. For these, all of the required geography types must have a value in the request when creating or updating an address.



Tax Validation

You can also specify whether a geography type will be included in tax validation. For example, for the United States North America address style format you specify that County, State, and City are used for tax validation. This will mean that when a transaction involves an address with the North America address style, the address must have the correct county, state, and city combination based on the geography hierarchy data, to be considered valid for tax calculation.

Address Validation

You must set up address validation for those geography elements that you plan to use in your application. Address validation checks whether geography elements of an address such as state, city, postal code, and soon are valid as per master geography data. Setting up validation also helps ensure that the addresses are correct and deliverable during

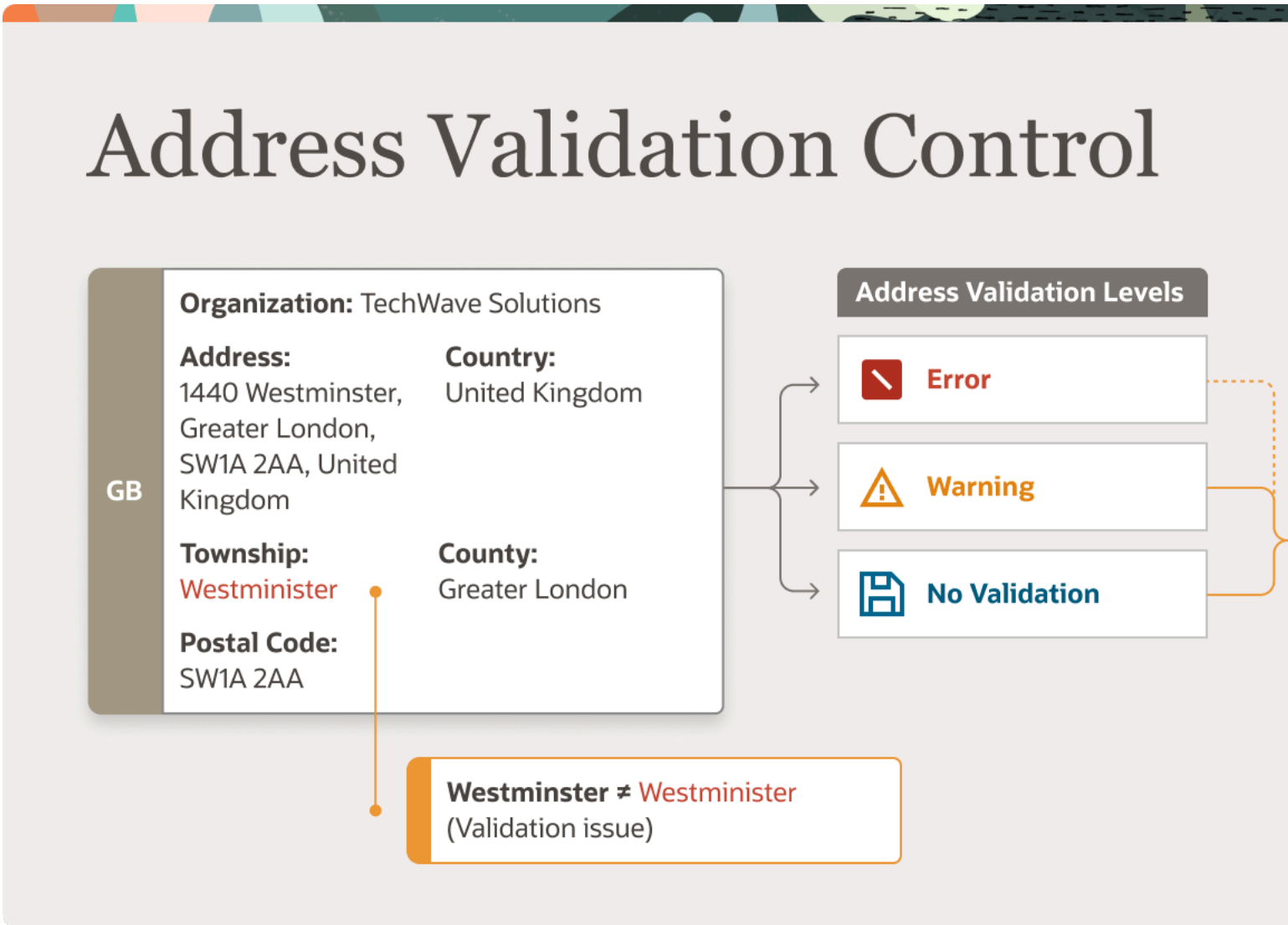
entry. You can select states or other address elements from lists to ensure accuracy during entry. For example, when you enter a postal code, the application can validate if the postal code exists. Note that address validation isn't the same as address verification. *Address Verification* updates and enhances your address. Address verification depends upon Oracle or any third-party address verification services to perform verification.

You can specify whether a geography type will be included in address validation. For example, when the user enters a United States address using the North American address style format, the address must have the correct country, state, and postal code combination based on geography hierarchy data to be considered geographically valid.

If an address element is mapped to a geography type, but not selected for geography validation usage, then during address entry suggested values are provided for the address element, but the address element isn't validated.

You need to verify that the default mapping between **Geography Type** and **Map to Attribute** is valid in the Geography Mapping and Validation region and update it if required when you define geography validation.

After setting geography validation, all features that directly and indirectly depend upon geographies are impacted. For example, multiple applications such as ERP, CX, and SCM that use geographies are impacted.



Oracle recommends that you use the following valid mapping for the countries that Loqate supports:

Country Name	Country Code	Geography Type	Map to Attribute
Andorra	AD	• Country • Parroqia • Settlement • Postal Code	• Country • State • City • Postal code
Angola	AO	• Country • Provincia • Municipio • Comuna • Localidad	• Country • Province • County • City • Additional address attribute 2
Argentina	AR	• Country • Province • Department • Municipality • Postal Code	• Country • Province • County • City • Postal code
Australia	AU	• Country • State • City • Postal Code	• Country • State • City • Postal code
Austria	AT	• Country • Bundensland • Bezirk • Gemeinde • Postal Code	• Country • State • County • City • Postal code
Belgium	BE	• Country • Gewest • Provincie • Gemeente • Postal Code	• Country • Additional address attribute 1 • Province • City • Postal code
Bolivia	BO	• Country • Departmento • Provincia • Canton	• Country • Additional address attribute 1 • Province • City
Bosnia and Herzegovina	BA	• Country	• Country

Country Name	Country Code	Geography Type	Map to Attribute
		• District • Kanton • Opcine • Nasalje • Postal Code	• Additional address attribute 1 • Province • County • City • Postal code
Brazil	BR	• Country • State • City • Postal Code	• Country • State • City • Postal code
Bulgaria	BG	• Country • Oblast • Obshhina • Settlement • Postal Code	• Country • Additional address attribute 1 • Province • City • Postal code
Canada	CA	• Country • Province • City • Postal Code	• Country • Province • City • Postal code
Cayman Islands	KY	• Country • Island • District • Postal Code	• Country • State • City • Postal code
Chile	CL	• Country • Region • Provincia • Kommune • Postal Code	• Country • State • County • City • Postal code
China **Note:** China geography structure is supported but geocoding isn't supported.	CN	• Country • Province • City • Postal Code	• Country • Province • City • Postal code
Croatia	HR	• Country	• Country

Country Name	Country Code	Geography Type	Map to Attribute
		• Zupanije • Grad • Postal Code	• Province • City • Postal code
Cuba	CU	• Country • Provincia • Municipio • City • Postal Code	• Country • Province • County • City • Postal code
Cyprus	CY	• Country • Periochi • Dimos • Postal Code	• Country • Province • City • Postal code
Czech Republic	CZ	• Country • Kraj • Okres • Obec • Postal Code	• Country • State • County • City • Postal code
Denmark	DK	• Country • Amt • Settlement • Postal Code	• Country • Province • City • Postal code
Dominican Republic	DO	• Country • Provincia • Municipio • Town • Postal Code	• Country • Province • County • City • Postal code
Ecuador	EC	• Country • Province • Canton • City • Postal Code	• Country • Province • County • City • Postal code
Estonia	EE	• Country • Maakond • Vald • Postal Code	• Country • State • City • Postal code

Country Name	Country Code	Geography Type	Map to Attribute
Finland	FI	• Country • Maakunta • Kunta • Postal Code	• Country • State • City • Postal code
France	FR	• Country • Region • Department • Commune • Postal Code	• Country • Additional address attribute 1 • State • City • Postal code
Germany	DE	• Country • Bundesland • Gemeinde • Postal Code	• Country • State • City • Postal code
Great Britain	GB	• Country • County • Township • Postal Code	• Country • State • City • Postal code
Greece	GR	• Country • Periferia • Nomi • Dimotika • Postal Code	• Country • State • County • City • Postal code
Guadalupe	GP	• Country • Commune • Postal Code	• Country • City • Postal code
Guam	GU	• Country • State • County • Municipality • Postal Code	• Country • State • County • City • Postal code
Guernsey	GG	• Country • City • Parishes • Villages	• Country • City • Additional address attribute 2

Country Name	Country Code	Geography Type	Map to Attribute
		• Postal Code	• Additional address attribute 3 • Postal Code
Hungary	HU	• Country • Megye • Jaras • Telepules • Settlement • Postal Code	• Country • Additional address attribute 1 • Province • County • City • Postal code
Iceland	IS	• Country • Jaras • Telepules • Settlement • Postal Code	• Country • Province • County • City • Postal code
India	IN	• Country • State • City • Postal Code	• Country • State • City • Postal code
Indonesia	ID	• Country • Province • City • Postal Code	• Country • Province • City • Postal code
Ireland	IE	• Country • Province • Post County • Postal_Code	• Country • State • City • Postal Code
Isles of Man	IM	• Country • Locality • Settlement • Postal Code	• Country • City • Additional address attribute 2 • Postal code
Israel	IL	• Country • District • Subdistrict • City	• Country • State • County • City

Country Name	Country Code	Geography Type	Map to Attribute
		• Postal Code	• Postal code
Italy	IT	• Country • Regione • Provincia • Comune • Postal code	• Country • Additional address attribute 1 • Province • City • Postal code
Jamaica	JM	• Country • Parish • Settlement	• Country • State • City
Japan	JP	• Country • Prefecture • City • Postal Code	• Country • State • City • Postal code
Jordan	JO	• Country • Muhafazat • Liwa • Tajma • Postal Code	• Country • State • County • City • Postal code
Kenya	KE	• Country • County • Division	• Country • State • City
Latvia	LV	• Country • Rajons • Pilseta • Postal Code	• Country • State • City • Postal code
Liechtenstein	LI	• Country • Wahlkreis • Gemeinde • District • Postal Code	• Country • Additional address attribute 1 • State • City • Postal code
Lithuania	LT	• Country • County • Municipality	• Country • State • County

Country Name	Country Code	Geography Type	Map to Attribute
		• Ward • Postal Code	• City • Postal code
Luxembourg	LU	• Country • Canton • Commune • Settlement • Postal Code	• Country • State • County • City • Postal code
Malaysia	MY	• Country • State • District • Subdistrict • Postal Code	• Country • State • County • City • Postal code
Malta	MT	• Country • Region • Local_Council • Postal Code	• Country • State • City • Postal code
Martinique	MQ	• Country • Department • Arrondisement • Commune • Postal Code	• Country • State • County • City • Postal code
Mexico	MX	• Country • State • Municipality • Locality • Postal Code	• Country • State • County • Additional address attribute 2 • Postal code
Netherlands	NL	• Country • Province • Municipality • Town • Postal Code	• Country • Province • County • City • Postal code
New Zealand	NZ	• Country • Region • Town	• Country • State • City

Country Name	Country Code	Geography Type	Map to Attribute
		• Postal Code	• Postal code
Norway	NO	• Country • Fylke • Kommune • Postal Code	• Country • Province • City • Postal code
Oman	OM	• Country • Muhafazah • District • City	• Country • State • County • City
Peru	PE	• Country • Region • Provincia • Distrito • Postal Code	• Country • Province • County • City • Postal code
Poland	PL	• Country • Wojewodztwo • Powiat • Gmina • Postal Code	• Country • Province • County • City • Postal code
Portugal	PT	• Country • Distrito • Concelho • Settlement • Postal Code	• Country • Province • County • City • Postal code
Puerto Rico	PR	• Country • Commonwealth • Municipio • Barrio • Postal Code	• Country • State • County • City • Postal code
Qatar	QA	• Country • Municipality • Zone	• Country • State • City
Reunion Island	RE	• Country • Region • Department	• Country • State • County

Country Name	Country Code	Geography Type	Map to Attribute
		• Commune • Postal Code	• City • Postal code
Romania	RO	• Country • Regiune • Judet • Settlement • Comuna • Postal Code	• Country • Additional address attribute 1 • Province • County • City • Postal code
Russia	RU	• Country • Federal_District • Federal_Subject • Oblast • Postal Code	• Country • Additional address attribute 1 • State • City • Postal code
San Marino	SM	• Country • Comune • Postal Code	• Country • State • Postal code
Singapore	SG	• Country • Region • District • Postal Code	• Country • State • City • Postal code
Slovakia	SK	• Country • Kraj • Okres • Obec • Postal Code	• Country • Province • County • City • Postal code
Slovenia	SI	• Country • Regija • Upravna Enota • Obcina • Settlement • Postal Code	• Country • Additional address attribute 1 • Province • County • City • Postal code
South Africa	ZA	• Country • Province	• Country • Province

Country Name	Country Code	Geography Type	Map to Attribute
		• District_Municipality • Local_Municipality • Postal Code	• County • City • Postal code
South Korea	KR	• Country • Jibang • Siti • Postal Code	• Country • State • City • Postal code
Spain	ES	• Country • Autonomous_Community • Province • City • Postal Code	• Country • Additional address attribute 1 • Province • City • Postal code
Sri Lanka	LK	• Country • Province • District • Divisional_Secretariat • Postal Code	• Country • Province • County • City • Postal code
Swaziland **Note:** This country maybe labeled Eswatini in Manage Territories.	SZ	• Country • District • Inkhundla • Town • Postal Code	• Country • Province • County • City • Postal code
Sweden	SE	• Country • Lan • Settlement • Postal Code	• Country • Province • City • Postal code
Switzerland	CH	• Country • Kanton • Bezirk • Gemeinde • Postal Code	• Country • State • County • City • Postal code
Taiwan	TW	• Country • County • Town	• Country • State • City

Country Name	Country Code	Geography Type	Map to Attribute
		• Postal Code	• Postal code
Thailand	TH	• Country • Region • Changwat • Amphoe • Postal Code	• Country • Additional address attribute 1 • State • City • Postal code
Tunisia	TN	• Country • Governorate • Delegation • Postal Code	• Country • State • City • Postal Code
Turkey	TR	• Country • Sehir • Ilce • Kasaba • Postal Code	• Country • Province • County • City • Postal code
United Arab Emirates	AE	• Country • Emirate • City • Area • Postal Code	• Country • State • City • Additional address attribute 2 • Postal Code
United States	US	• Country • State • County • City • Postal Code	• Country • State • County • City • Postal code
Uruguay	UY	• Country • Departamento • City • Postal Code	• Country • State • City • Postal code
Vatican City	VA	• Country • Municipal • Settlement • Postal Code	• Country • Province • City • Postal code

Country Name	Country Code	Geography Type	Map to Attribute
Vietnam	VN	• Country • Region • Tihn • Quan • Thank Pho • Postal Code	• Country • Additional address attribute 1 • Province • County • City • Postal code

Note: For either the tax or address validation, don't skip any level unless you're certain that the selected geography types can uniquely identify geographies. For example, the United States country structure is: State, County, City, and Postal Code, and you want to select just State and Postal Code for address or tax validation. However, for the combination of California and 94065, the city can be either Redwood Shores or Redwood City. In this case, you should also select at least the City geography type for address or tax validation.

Address Validation Control

You can select the address validation level for a country. Validation will check if the entered address maps to the geography hierarchy data available for the country, and the address validation control determines whether you can save an address that didn't pass validation during address entry. For example, if the validation level is **Error**, then an address can't be saved if the values don't match the geography hierarchy data.

These are the address validation levels you can choose:

- **Error** - only completely valid addresses can be saved, with all mandatory address elements entered.
- **No Validation** - all addresses can be saved including incomplete and invalid addresses.

Regardless of the result of validation, the validation process will try to map any address attribute to a geography of the country, and store any mapping it could establish based on the available data. This is called ***Geography Name Referencing*** and it's executed as part of validation. The result of this referencing is used in several business processes in the application to map an address to a specific geography or zone. Therefore, Geography Name Referencing is the process of validating and mapping address elements of existing location table records against master reference geographies. For example, CA value in the STATE column of the HZ_LOCATIONS table is mapped to the master reference geography of CA (California).

The Geography Dimension value in territories is derived from sell-to addresses of sales accounts. To use geography dimensions in territories, you must validate the geography elements in the addresses, such as state, city, and postal code. You can validate the address by enabling geography validation for each country using the Manage Geographies task. Perform the following in the Manage Geographies task:

- Enable at least one level in the geography hierarchy for geography validation.
- Enable geography validation for all geography levels that you intend to use for territory definition for each country.
- If needed, enable a list of values containing specific geography elements. This will help users search and select appropriate geography values during addresses entry and eliminate all possibilities of wrong address entry.

You can set geography validation control to Error in the Manage Geography Validation page. This ensures that users can only use valid geography elements in addresses.

Note: If you have already created addresses before setting up address validation for a country, you must enable geography validation and then execute the *Validate Geographies of Addresses Against Master Geographies* task for that country. This validates all your geography elements.

Related Topics

- How can I save an address that didn't pass geography validation?
- How do I validate geographies of addresses against master geographies and generate naming references?
- Setting Up Geography Validation

Change Address Style and Address Validation Settings

Use the Features by Country or Territory task to control address style and level of address validation for the countries or territories you configure. The values you can set depend on the combination of the country or territory and the selected country extension.

For example, for Canada, you can change the address style from its default value only when you set the country extension to Human Resources or None. You can't change the address style from its default value when you set the country extension to Payroll or Payroll Interface.

Address Styles

The address style you select determines which address attributes are available and maintained in the application. The combination of address style and address validation determines the level of validation.

Depending on the country or territory and the country extension you select, you have one or both of the following address style options. Each address style provides its own validation.

Address Style	What the Address Style Does
Postal Address	This address style provides the fundamental set of address attributes for a country or territory. In some cases, this style adds supplemental attributes. For instance this address style might include general address attributes that aren't relevant, such as State or Postal Code.
Supplemental Taxation and Reporting Address	Enforces validation to attribute changes. For example, this style may add specific validation of postal codes, such as requiring a specific number of characters in a specific sequence.

Use the Features by Country or Territory task to see what's delivered for your country. Each country has a default address style and the choice of the country extension determines whether you can change the default address style.

Address Validation Based on Country Extension

Address validation is the validation of county, city, province, and postal code combinations.

Employees must have a valid address in order for them to receive their tax card and to ensure the accuracy of their tax calculations.

Address validation is automatically enabled for some license and product extension combinations. For example, for Canada, the default is Supplemental Taxation and Reporting Address. However, the address style and address validation depends on the country extension, as shown in this table.

Extension	Style Enforced	Validation Enforced
Human Resources	No	No
Payroll Interface	Yes	No
Payroll	Yes	Yes

For Canada, if you have chosen to install Human Resources, the value for the Address Style can be modified to either format. If you have chosen to install either Payroll Interface or Payroll, the value for the Address Style can't be modified. It must be set to Supplemental Taxation and Reporting Address. Validations are implemented to enforce that requirement.

Change Address Styles

For most of the predefined countries and territories, the application enforces the address style, preventing you from making changes. However, when the address style isn't enforced, such as a customer-configured legislation, changing address styles can affect validation rules. This might lead to address data integrity and validation issues.

For example, for Canada, if you initially implement Human Resources using the Postal Address style and then later change the country extension to Payroll, you must also change the address style to Supplemental Taxation and Reporting Address. As a result, you must update your existing address data to resolve validation errors.

Note: The Supplemental Taxation and Reporting Address style, once selected, impacts both the Person and HCM Locations address styles. Ensure to test any changes you make to address style or validation for a country or territory before you implement them in a production environment. If you provide data to a third party, such as a payroll or benefit provider, statutory recipients, or financial institutions, you must test the changes. Changes to validation or address styles may result in missing data or unrecognized data.

Tip: Use the Manage Legal Addresses task to review and configure how addresses appear in the application.

Disable Address Validation

Disabling address validation disables any country-specific programmatic validation rules created for a specific country or territory. You can disable address validation on the Features by Country or Territory page.

A country or territory might have rules defined using the Manage Geographies task for validating address structure, format, or values. Disabling address validation doesn't have any impact on the validations you have set up on the Manage Geographies page.

For some countries, the application prevents you from disabling the programmatic validation. For other countries and territories, when you disable address validation, any existing validation rules for the selected address style, remains in place.

Note: For Canada, when Payroll is the selected country extension, you can't disable the address validation.

For example, suppose you have chosen Human Resources with address validation enabled. During data conversion, you want to temporarily bypass address validation rules to load a batch of worker data. You can achieve this by deselecting the Address Validation check box before loading your data. After loading the batch, if the address validation remains disabled, any new address data you enter later, could be potentially invalid. Errors may occur in subsequent processes

and reports. As a result, you must re-enable address validation and update your existing address data to resolve validation errors.

Enable Address Validation

To manually enable or disable address validation:

1. Search for and start the **Features by Country or Territory** task.
2. Select the **Address Validation** box.
3. Click Save and then Done.

> **CAUTION:** If you don't have address validation enabled, then you must take care when switching product extensions, as any address you previously defined may be missing required values, such as county and tax district. There's also the possibility of invalid address combinations, such as mismatched city and postal code combinations.

Legislation

Payroll Legislative Data

Use the Configure Legislations for Human Resources task in the Setup and Maintenance area to create and edit payroll rules for countries or territories not initially provided by Oracle.

Objects you can configure include:

- Legislative rules
- Element classifications
- Valid payment types
- Component groups
- Balance dimensions
- Legislative data groups

Legislative Rules

Legislative rules govern how to manage employee records when you rehire employees into your organization. For example, for some countries, a rehire continues to be associated with the earlier payroll relationship, thereby having access to prior data, such as year-to-date balances. For some other countries, a rehire creates a new payroll relationship record with no access to prior data. The statutory rules for your country or territory determines the selections you make, such as the starting month of the tax year.

The legislative rules you can configure include mappings between system person types and payroll relationship types. This mapping controls which person types you can include in payroll calculation processing, such as the Calculate Gross Earnings process.

> **Note:** You can't undo payroll relationship type mapping. If you select an element entries only option for a person type and then at a later date decide to use the Calculate Gross Earnings process, the process won't generate results for that person type. Consider using a standard option to provide more flexibility.

Element Classifications

Element classifications are collections of related elements. You select the primary classifications you want to include for your elements. You can provide new display names for element classifications to match the terminology that's most appropriate for your country or territory.

Valid Payment Types

Payment types are the means by which you issue payments to workers. The predefined payment types are Check, Cash, EFT (electronic funds transfer), and International Transfer. You can provide new display names for payment types to match terminology that's most appropriate for your country or territory.

Component Groups

Component groups are logical sets of payroll components, which are the rates and rules that determine calculated values for some earnings and deduction elements. You can provide new display names for the component groups you want to support to match terminology that's most appropriate for your country or territory.

The Configure Legislations for Human Resources task creates a calculation card definition and payroll components for each component group you enable. When you create elements in certain classifications and categories, the element template associates the element with a payroll component and creates calculation components that you can add to workers' calculation cards. The calculation card creates the components for the component groups you selected. The element template then associates these components with the statutory elements you create. Ensure that you associate these components with your employees through element eligibility for calculation to be processed.

Depending on the legislative rules, if you enable the Federal or Social Insurance component groups and set your country extension on the Features by Country or Territory page to Payroll or Payroll Interface for your country or territory, hiring workers automatically creates a statutory deduction calculation card for them. Ensure that you create eligibility records for your statutory deduction elements before hiring any workers.

Balance Dimensions

Balance dimensions identify the specific value of a balance at a particular point in time, based on a combination of criteria, including time, employee relationship level, jurisdiction, and tax reporting unit. You can provide new display names for the balance dimensions you want to support to match terminology that's appropriate for your country or territory.

The Configure Legislations for Human Resources task creates some predefined balances that the application uses within the statement of earnings, such as Gross Earnings and Net Pay. Additionally, the Net Payment balance is required to set up organization payment methods.

Legislative Data Groups

Use the Manage Legislative Data Groups task in the Setup and Maintenance area to define at least one legislative data group for each country or territory where your enterprise operates.

Related Topics

- Legislative Data Groups

Configure Legislations

Create the legislative content for a country or territory in the Setup and Maintenance area as part of implementing Oracle Human Resources. The Installed Legislations page shows which country extensions are predefined or already implemented or both.

This procedure outlines the steps required to configure a legislation that isn't predefined by Oracle.

When you first configure a legislation, the flow guides you through a series of setup steps for the objects necessary to set up elements, balances, and other payroll-related data for implementations. The objects you can configure include:

- Legislative Rules
- Element Classifications
- Payment Types
- Component Groups
- Balance Dimensions

Set Legislative Rules

Legislative rules govern default values and how to manage employee records in your organization. Base your selections on the statutory rules for your country or territory.

1. In the Setup and Maintenance area, go to the Configure Legislations for Human Resources task.

   > **Note:** Use the Configure Payroll Legislations task if you're implementing Global Payroll.

2. Select the country or territory from the list on the Installed Legislations page.
3. Select **Legislative Rules** from the left-pane and click **Edit**.
4. Select the month and day of the typical tax year. For example, 01 for January and 01 for the first day of the month.
5. Select the currency to use by default for this country or territory.
6. Select a payroll relationship rule. This value determines how employment records are created when employees are hired or rehired.
7. Review the mapping of the predefined system person types to payroll relationship types. Select appropriate values for your country or territory.
8. Click **Save**.

   > **Note:** You can't undo payroll relationship type mapping. If you select an 'element entries only' option for a person type and decide at a later date to use a payroll calculation process, such as Calculate Gross Earnings, the process won't generate results for that person type. If you're certain that you won't perform any type of payroll calculation, you can select an element entries only option. Selecting a standard option provides more flexibility.

Select Objects and Modify Display Names

The flow guides you through selecting primary classifications you want to include for your elements, payment types, balance dimensions, and component groups. For each of these objects, you can provide new display names to match the terminology that's most appropriate for your country or territory.

1. Select **Element Classifications** from the left pane and click **Edit**. Select the primary classifications you want to include for your elements.
2. For each primary classification you select, optionally edit the value in the Display Name column, and then click **Next**.
3. Select the payment types to include, such as Check/Cheque and EFT (electronic funds transfer).

   The payment types you select here are available when you create organization payment methods for your country or territory.

4. For each payment type you select, optionally edit the value in the Display Name column, and then click **Next**.
5. Select the component groups to include.
6. For each component group you select, optionally edit the value in the Display Name column, and then click **Next**.
7. Add any balance definitions as needed that aren't already selected. The page displays all balance dimensions available for your country or territory.
8. For each selected balance definition, optionally edit the value in the Display Name column.
9. Click **Submit**.

How Legislations are Edited

If you have configured legislative content for a country or territory not already predefined by Oracle, you can edit it using the Configure Legislations for Human Resource task.

Your ability to edit the legislative rules and objects depends on the other objects in the legislation.

Legislative Rules and Objects You Can't Edit or Delete

The following tables summarize the restrictions when you're editing legislative content for a country or territory.

Legislative Rule	Restriction
Tax Year Start Date	Can't change after running a payroll process
Currency	Can't change after initial configuration because it would impact generated balances
Payroll Relationship Type Mapping	Can change, but affects only future person records, not existing person records

Object	Restriction
Element Classification	Can't delete if you have created an element of that primary classification
Payment Type	Can't delete if you have created payment methods for that payment type
Component Group	Can't delete if you have created calculation cards for that component group
Balance Dimension	Can't delete if you have created balances with that dimension

Enterprise Structures

Enterprise Structures Overview

Oracle Fusion Applications have been designed to ensure your enterprise can be modeled to meet legal and management objectives.

The decisions about your implementation of Oracle Fusion Applications are affected by your:

- Industry
- Business unit requirements for autonomy
- Business and accounting policies
- Business functions performed by business units and optionally, centralized in shared service centers
- Locations of facilities

Every enterprise has three fundamental structures that describe its operations and provide a basis for reporting.

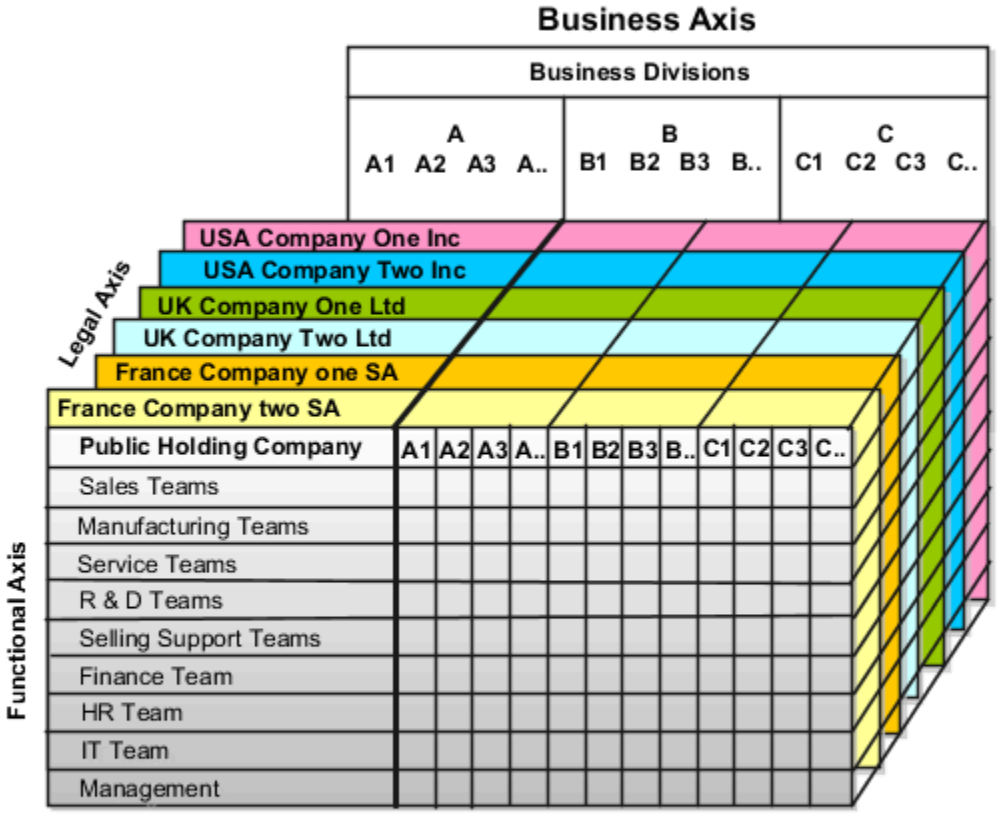
- Legal
- Managerial
- Functional

In Oracle Fusion, these structures are implemented using the chart of accounts and organization hierarchies. Many alternative hierarchies can be implemented and used for reporting. You are likely to have one primary structure that organizes your business into:

- Divisions
- Business Units
- Departments

Align these structures with your strategic objectives.

This figure illustrates a grid with Business Axis, representing the enterprise division, Legal Axis representing the companies, and the Functional Axis representing the business functions.



Legal Structure

The figure illustrates a typical group of legal entities, operating various business and functional organizations. Your ability to buy and sell, own, and employ comes from your charter in the legal system. A corporation is:

- A distinct legal entity from its owners and managers.
- Owned by its shareholders, who may be individuals or other corporations.

Many other kinds of legal entities exist, such as sole proprietorships, partnerships, and government agencies.

A legally recognized entity can own and trade assets and employ people in the jurisdiction in which the entity is registered. When granted these privileges, legal entities are also assigned responsibilities to:

- Account for themselves to the public through statutory and external reporting.

- Comply with legislation and regulations.
- Pay income and transaction taxes.
- Process value added tax (VAT) collection on behalf of the taxing authority.

Many large enterprises isolate risk and optimize taxes by incorporating subsidiaries. They create legal entities to facilitate legal compliance, segregate operations, optimize taxes, complete contractual relationships, and isolate risk. Enterprises use legal entities to establish their enterprise's identity within the laws of each country in which their enterprise operates.

The figure illustrates:

- A separate card represents a series of registered companies.
- Each company, including the public holding company, InFusion America, must be registered in the countries where they do business.
- Each company contributes to various divisions created for purposes of management reporting. These are shown as vertical columns on each card.

For example, a group might have a separate company for each business in the United States (US), but have its United Kingdom (UK) legal entity represent all businesses in that country.

The divisions are linked across the cards so that a business can appear on some or all of the cards. For example, the air quality monitoring systems business might be operated by the US, UK, and France companies. The list of business divisions is on the Business Axis.

Each company's card is also horizontally striped by functional groups, such as the sales team and the finance team. This functional list is called the Functional Axis. The overall image suggests that information might, at a minimum, be tracked by company, business, division, and function in a group environment. In Oracle Fusion Applications, the legal structure is implemented using legal entities.

Management Structure

Successfully managing multiple businesses requires that you segregate them by their strategic objectives, and measure their results. Although related to your legal structure, the business organizational hierarchies don't have to be reflected directly in the legal structure of the enterprise. The management structure can include divisions, subdivisions, lines of business, strategic business units, profit, and cost centers. In the figure, the management structure is shown on the Business Axis. In Oracle Fusion Applications, the management structure is implemented using divisions and business units as well as being reflected in the chart of accounts.

Functional Structure

Straddling the legal and business organizations is a functional organization structured around people and their competencies. For example, sales, manufacturing, and service teams are functional organizations. This functional structure is represented by the Functional Axis in the figure. You reflect the efforts and expenses of your functional organizations directly on the income statement. Organizations must manage and report revenues, cost of sales, and functional expenses such as research and development and selling, general, and administrative expenses. In Oracle Fusion Applications, the functional structure is implemented using departments and organizations, including sales, marketing, project, cost, and inventory organizations.

Legislative Data Groups

Legislative data groups are a means of partitioning payroll and related data. At least one legislative data group is required for each country where the enterprise operates.

Each legislative data group is associated with one or more payroll statutory units. Each payroll statutory unit can belong to only one legislative data group.

Payroll-related information, such as elements, is organized by legislative data group. Each legislative data group:

- Marks a legislation in which payroll is processed.
- Is associated with a legislative code, currency, and its own cost allocation key flexfield structure.
- Is a boundary that can share the same set up and still comply with the local laws.
- Can span many jurisdictions as long as they're within one country.
- Can contain many legal entities that act as payroll statutory units.

Payroll Employment Hierarchy Profile Options

You can use profile options to specify the values that you want to display for each payroll employment hierarchy level. You can specify up to three values at each level to help identify the record.

For example, you can select payroll relationship type and payroll relationship number to identify payroll relationship records that you will see in the payroll relationship switcher on the Payment Methods page.

Depending on the employment model used in your enterprise, you can use these levels to set up your payroll employment hierarchy:

- Payroll relationship
- Assignments

To define profile option settings and values, select the **Payroll Employment Hierarchy Profile Option Values**.

Profile Options for the Payroll Relationship Level

This table lists the profile option codes and available profile values at the site level for the payroll relationship level of the payroll employment hierarchy.

Profile Option Codes	Profile Values
PAY_EMP_HIERARCHY_REL_DESC_1	Payroll Relationship Number
PAY_EMP_HIERARCHY_REL_DESC_2	Payroll Statutory Unit Name
PAY_EMP_HIERARCHY_REL_DESC_3	Payroll Relationship Type

Profile Options for the Assignment Level

This table lists the profile option codes and available profile values at the site level for the assignment level of the payroll employment hierarchy.

Profile Option Codes	Profile Values
PAY_EMP_HIERARCHY_ASG_DESC_1	Assignment Name
PAY_EMP_HIERARCHY_ASG_DESC_2	Assignment Number
PAY_EMP_HIERARCHY_ASG_DESC_3	Employment Category

Profile Option Codes	Profile Values
	Grade Name Job Name Legal Employer Name Location Name Position Name

Override Site-level Values with User-level Values

You can override site-level values at the user level. For example, you might use position as the default value. Override the default value with job for the payroll administrator who manages records for a group of workers who aren't assigned to positions.

Related Topics

- Overview of Implementing Payroll Relationship

Examples of HCM Organization Models for Payroll

Use these examples to understand different models for human capital management (HCM) organizations that include a legislative data group (LDG). These examples include LDGs, which aren't an organization classification, to show how to partition payroll data by associating them with a payroll statutory unit.

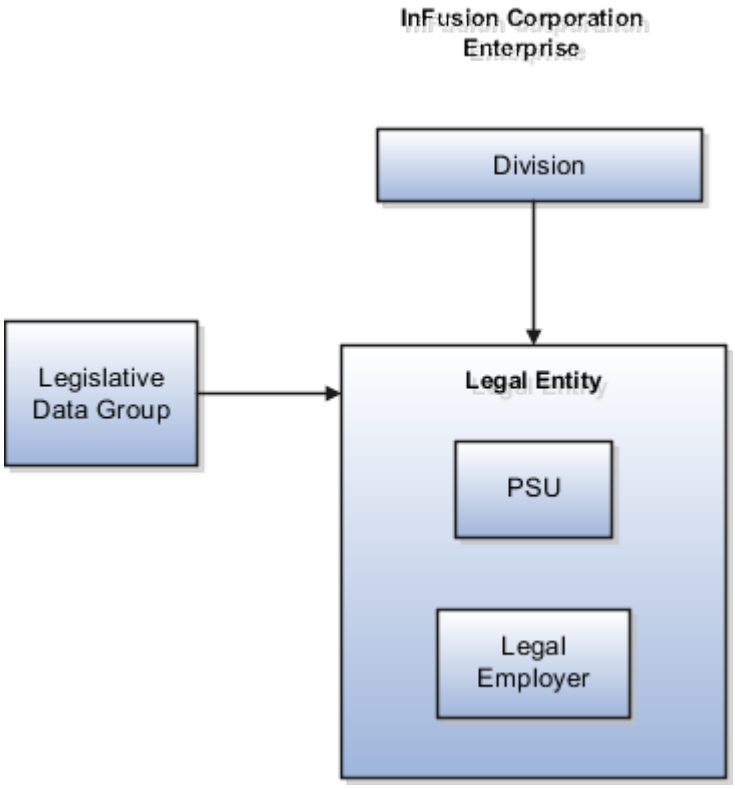
Simple Configuration

This example illustrates a simple configuration that doesn't include any tax reporting unit.

Note the following:

- The legal employer and payroll statutory units are the same, sharing the same boundaries.
- Reporting can only be done at a single level. Countries such as Saudi Arabia and the United Arab Emirates (UAE) might use this type of model, as these countries report at the legal entity level.

This figure illustrates a simple configuration where the enterprise has only one legal entity, which is both a payroll



statutory unit and a legal employer.

Multiple Legal Employers and Tax Reporting Units

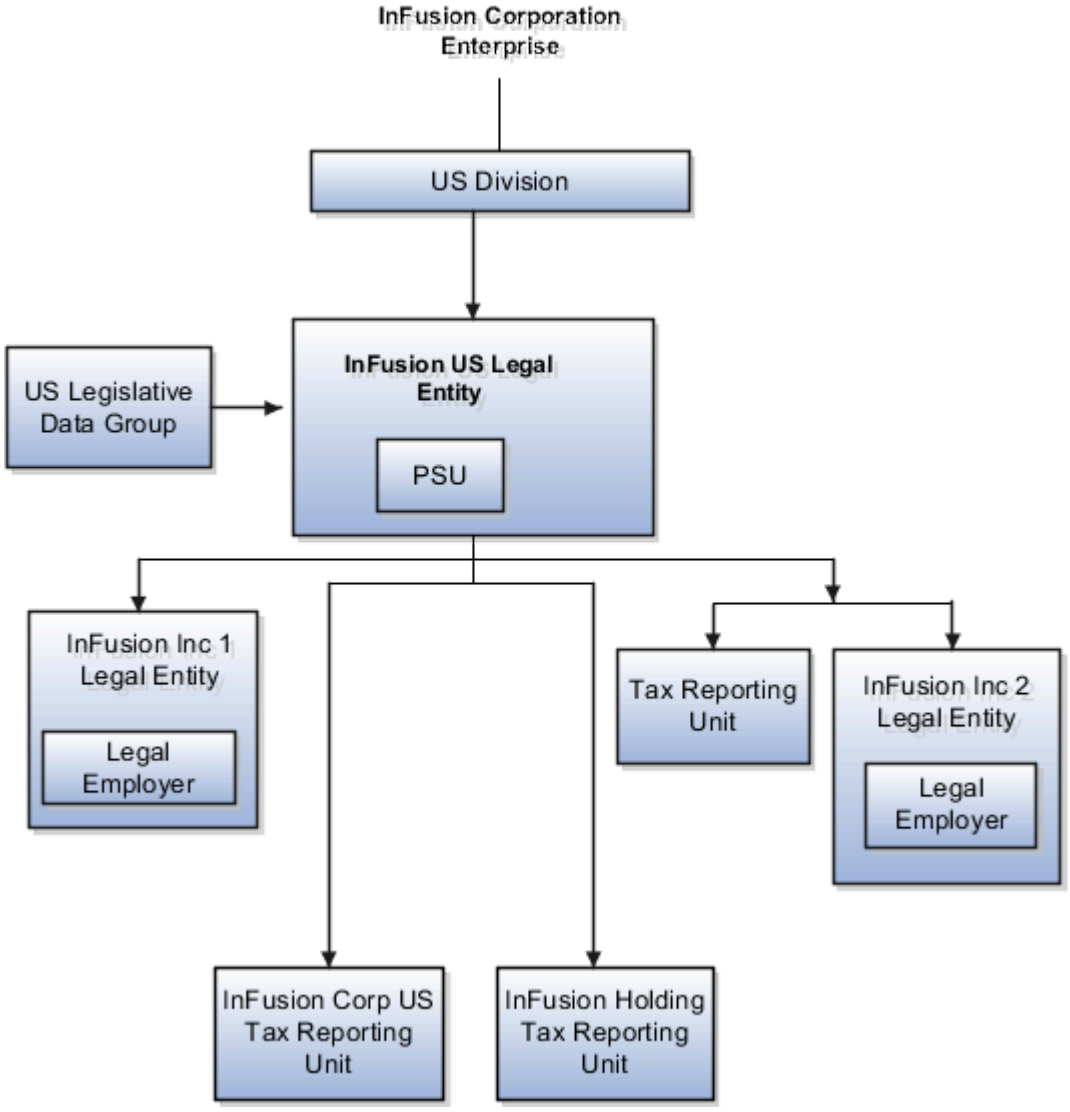
This example illustrates a more complex configuration. In this enterprise, you define one legal entity, InFusion US, as a payroll statutory unit with two separate legal entities, which are also legal employers. This model shows multiple legal employers that are associated with a single payroll statutory unit. Tax reporting units are always associated with a specific legal employer (or employers) through the payroll statutory unit.

The implication is that payroll statutory reporting boundaries vary from human resources (HR) management, and you can categorize the balances separately by one of the following:

- Payroll statutory unit
- Legal employer
- Tax reporting unit

This configuration is based on tax filing requirements, as some tax-related payments and reports are associated with a higher level than employers. An example of a country that might use this model is the US.

This figure illustrates an enterprise that has one payroll statutory unit and multiple legal employers and tax reporting units.

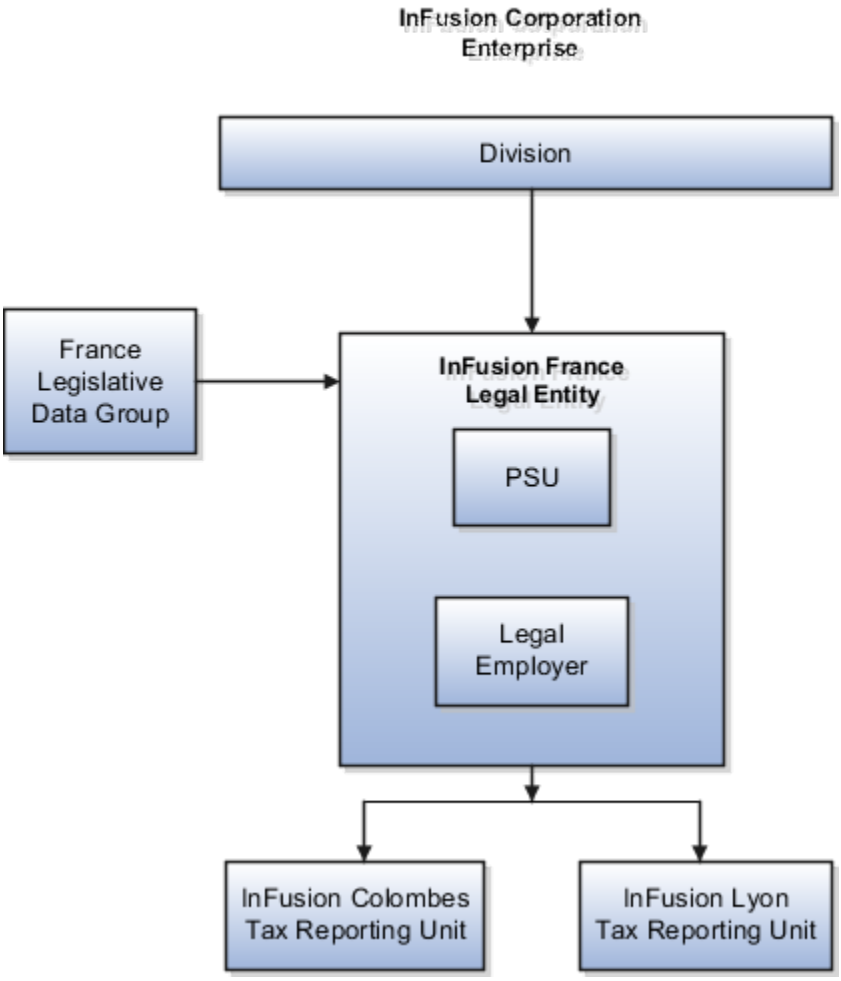


One Payroll Statutory Unit and Two Tax Reporting Units

This model makes no distinction between a legal employer and a payroll statutory unit. You define tax reporting units as subsidiaries to the legal entity.

In this enterprise, legal entity is the highest level of aggregation for payroll calculations and reporting. Statutory reporting boundaries are the same for both payroll and HR management. An example of a country that might use this model is France.

This figure illustrates an example of an organization with one legal entity. The legal entity is both a legal employer and a payroll statutory unit and has two tax reporting units.



One Payroll Statutory Unit with Several Tax Reporting Units

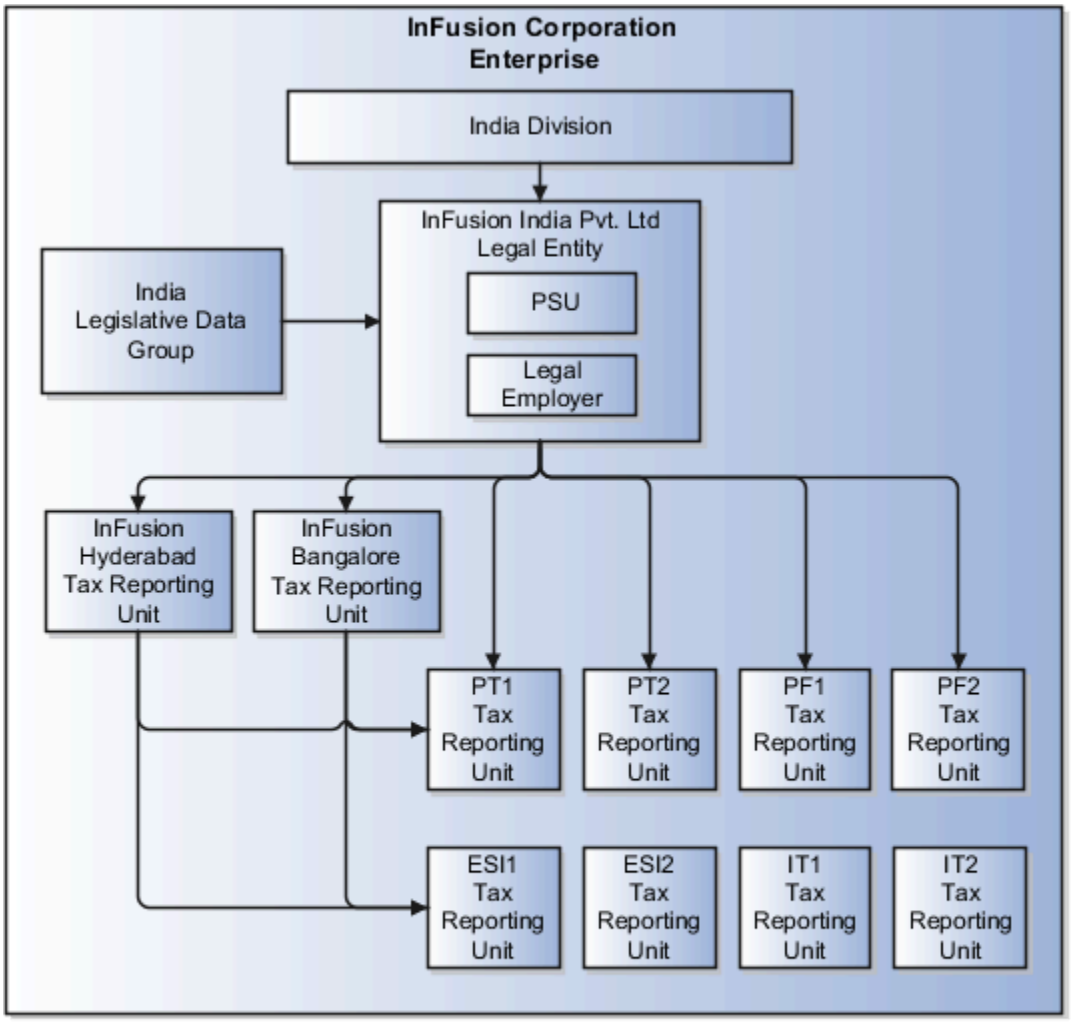
In this model, the enterprise has one legal entity. Legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently.

Using this model, you wouldn't typically:

- Report on tax reporting unit balances within a legal employer
- Categorize balances by either or both organizations, as required

An example of a country that might use this model is India.

This figure illustrates an enterprise with one legal entity that's a payroll statutory unit and a legal employer. The tax reporting units are independent from the legal employer.



Multiple Payroll Statutory Units with Several Tax Reporting Units

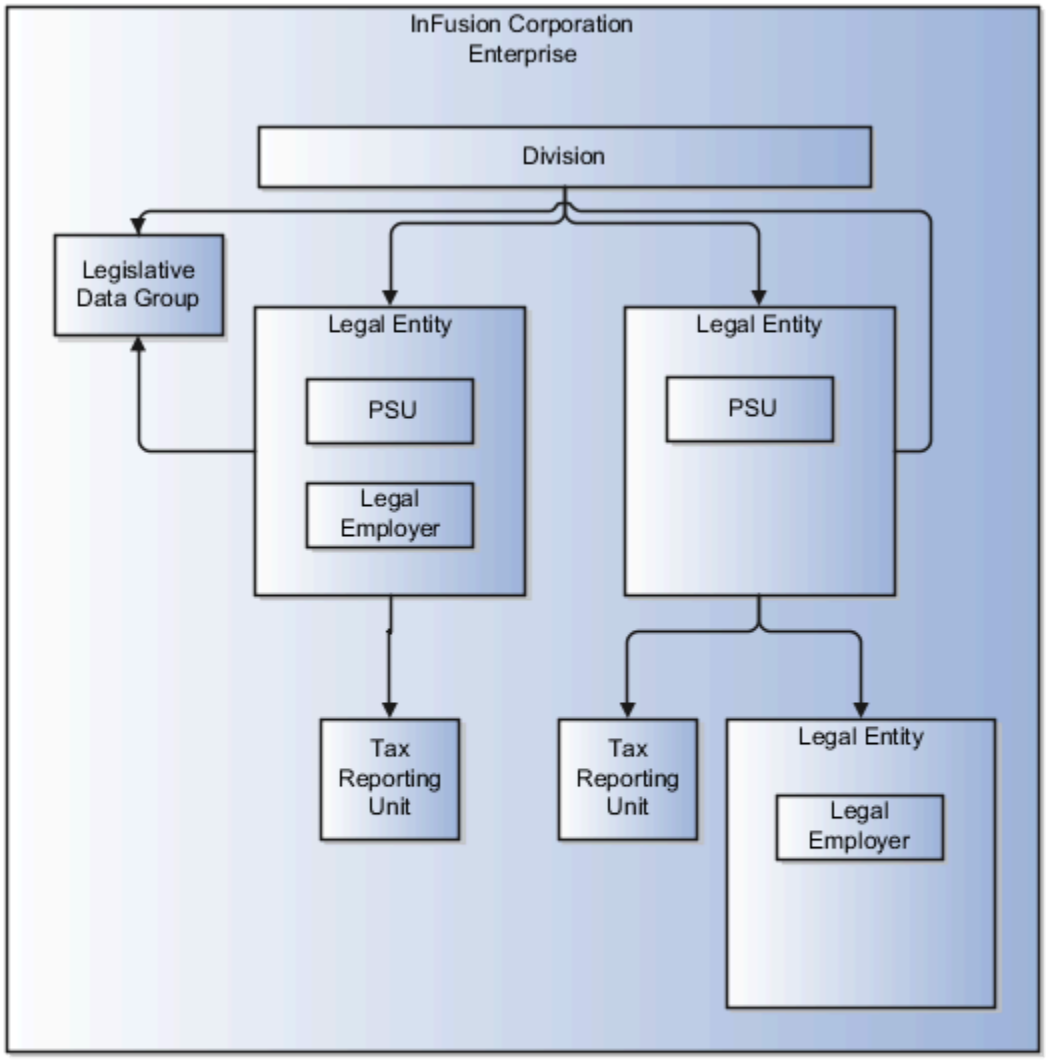
In this model, the enterprise has two legal entities. The legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently.

Using this model, you wouldn't typically:

- Report on tax reporting unit balances within a legal employer
- Categorize balances by either or both organizations, as required

An example of a country that might use this model is the United Kingdom (UK).

This figure illustrates an enterprise with two legal entities, and legal employers and tax reporting units are independent



from each other.

What's a legal employer?

A legal employer is a legal entity that employs workers. You define a legal entity as a legal employer in the Oracle Fusion Legal Entity Configurator.

The legal employer is captured at the work relationship level, and all assignments within that relationship are automatically with that legal employer. Legal employer information for worker assignments is also used for reporting purposes.

What's a payroll statutory unit?

Payroll statutory units are legal entities that are responsible for paying workers, including the payment of payroll tax and social insurance.

A payroll statutory unit can pay and report on payroll tax and social insurance on behalf of one or many legal entities, depending on the structure of your enterprise. For example, if you're a multinational, multiple company enterprise, then you register a payroll statutory unit in each country where you employ and pay people. You can optionally register a consolidated payroll statutory unit to pay and report on workers across multiple legal employers within the same country. You associate a legislative data group with a payroll statutory unit to provide the correct payroll information for workers.

What's a tax reporting unit?

Use a tax reporting unit to group workers for the purpose of tax and social insurance reporting. A tax reporting unit is the Oracle Fusion Human Capital Management (HCM) version of the legal reporting unit in Oracle Fusion Applications.

To create a tax reporting unit, you use the Oracle Fusion Legal Entity Configurator to define a legal entity as a payroll statutory unit. When you identify a legal entity as a payroll statutory unit, the application transfers the legal reporting units that are associated with that legal entity to Oracle Fusion HCM as tax reporting units. You can then access the tax reporting unit using the Manage Legal Reporting Unit HCM Information task.

If you identify a legal entity as a legal employer, and not as a payroll statutory unit, you must enter a parent payroll statutory unit. The resulting legal reporting units are transferred to Oracle Fusion HCM as tax reporting units, but as children of the parent payroll statutory unit that you entered, and not the legal entity that you identified as a legal employer.

Legal Entities

Legal Entities Overview

A legal entity is a recognized party with rights and responsibilities given by legislation.

Legal entities have the following rights and responsibilities to:

- Own property
- Trade
- Repay debt
- Account for themselves to regulators, taxation authorities, and owners according to rules specified in the relevant legislation

Their rights and responsibilities may be enforced through the judicial system. Define a legal entity for each registered company or other entity recognized in law for which you want to record assets, liabilities, expenses and income, pay transaction taxes, or perform intercompany trading.

A legal entity has responsibility for elements of your enterprise for the following reasons:

- Facilitating local compliance
- Minimizing the enterprise's tax liability
- Preparing for acquisitions or disposals of parts of the enterprise

- Isolating one area of the business from risks in another area. For example, your enterprise develops property and also leases properties. You could operate the property development business as a separate legal entity to limit risk to your leasing business.

The Role of Your Legal Entities

In configuring your enterprise structure in Oracle Fusion Cloud Applications, the contracting party on any transaction is always the legal entity. Individual legal entities:

- Own the assets of the enterprise
- Record sales and pay taxes on those sales
- Make purchases and incur expenses
- Perform other transactions

Legal entities must comply with the regulations of jurisdictions, in which they register. Europe now allows for companies to register in one member country and do business in all member countries, and the US allows for companies to register in one state and do business in all states. To support local reporting requirements, legal reporting units are created and registered.

You are required to publish specific and periodic disclosures of your legal entities' operations based on different jurisdictions' requirements. Certain annual or more frequent accounting reports are referred to as statutory or external reporting. These reports must be filed with specified national and regulatory authorities. For example, in the United States (US), your publicly owned entities (corporations) are required to file quarterly and annual reports, as well as other periodic reports, with the Securities and Exchange Commission (SEC), which enforces statutory reporting requirements for public corporations.

Individual entities privately held or held by public companies don't have to file separately. In other countries, your individual entities do have to file in their own name, as well as at the public group level. Disclosure requirements are diverse. For example, your local entities may have to file locally to comply with local regulations in a local currency, as well as being included in your enterprise's reporting requirements in different currency.

A legal entity can represent all or part of your enterprise's management framework. For example, if you operate in a large country such as the United Kingdom or Germany, you might incorporate each division in the country as a separate legal entity. In a smaller country, for example Austria, you might use a single legal entity to host all of your business operations across divisions.

Plan Legal Reporting Units

Each of your legal entities has at least one legal reporting unit. Some legal reporting units can also be referred to as establishments. You can define either domestic or foreign establishments.

Define legal reporting units by physical location, such as sales offices. For example, set up legal reporting units to represent your company and its offices for tax reporting.

Planning Legal Reporting Units

Plan and define your legal reporting units at both the local and national levels if you operate within the administrative boundaries of a jurisdiction that's more granular than country. For example, your legal entity establishes operations in a country that requires reporting of employment and sales taxes locally as well as nationally. Therefore, you need more than one legally registered location to meet this legal entity's reporting requirements in each area. Additionally, legal entities in Europe operate across national boundaries, and require you to set up legal reporting units for the purposes of local registration in each country. There can be multiple registrations associated with a legal reporting unit. However, only one identifying registration can be defined by the legal authority used for the legal entity or legal reporting unit and associated with the legal reporting unit.

Legal Entities for Global Payroll

A legal entity is an entity unequivocally identified and given rights and responsibilities under commercial law, through registration with the territory's appropriate authority.

A legal entity can legally:

- Own property
- Trade
- Repay debt
- Account for themselves to company regulators, taxation authorities, and owners according to rules specified in the relevant legislation (as performed through balance sheets, income statements, specified reports, and so on)

The judicial system may enforce its rights and responsibilities.

For your enterprise, a legal entity may help you with:

- Facilitating local compliance
- Minimizing your tax liability
- Preparing for acquisitions or disposals of parts of the enterprise
- Isolating one area of the business from risks in another area

  For example, your enterprise develops property and also leases properties. You could operate the property development business as a separate legal entity to limit risk to your leasing business.

There are no predefined legal entities. You must create all legal entities that apply to the enterprise you're setting up. Use the Legal Entity HCM Information task from your implementation project.

There are several things you need to consider when you define your legal entities.

- What roles will they play
- What types of legal entities do you need
- What registrations will they require
- Does your organization support any retirees
- How to configure them for your HR reports

Roles of Legal Entities

In configuring your enterprise structure, the contracting party on any transaction is always the legal entity. Individual legal entities:

- Own the assets of the enterprise
- Record sales and pay taxes on those sales
- Make purchases and incur expenses
- Perform other transactions

Legal entities must comply with the regulations of their registering jurisdictions.

To support local reporting requirements, you create and register legal reporting units (LRUs) within a legal entity.

You're required to publish specific and periodic disclosures of your legal entities' operations based on the different jurisdictions' requirements. Certain annual or more frequent accounting reports are referred to as statutory or external reporting. You must file these reports with the specified national and regulatory authorities.

For example, your publicly owned entities (corporations) are required to file quarterly and annual reports, as well as other periodic reports, with the Securities and Exchange Commission (SEC), which enforces statutory reporting requirements for public corporations. Individual entities privately held or held by public companies don't have to file separately.

Disclosure requirements are diverse. For example, your local entities may have to file locally to comply with local regulations in US dollars, as well as being included in your enterprise's reporting requirements in different currency.

A legal entity can represent all or part of your enterprise's management framework.

Types of Legal Entities

There are two types of legal entities.

This kind	Does this
Legal employer	A legal entity that employs workers.
Payroll statutory unit (PSU)	A legal entity responsible for paying workers, including the payment of payroll tax and social insurance. A PSU can pay and report on payroll tax and social insurance on behalf of one or many legal entities. That choice depends on the structure of your enterprise.

When defining a legal entity, consider how you're going to use it.

- If you're using the legal entity in an HCM context, designate it as a legal employer. All workers must be assigned to a legal employer.
- If you're using it in a payroll context, designate it as a PSU for payroll processing and tax reporting.
  Limit your organization to one PSU for employees and one for retirees. This helps you:
  - Control how the payroll process calculates limit taxes.
  - Control overtime calculations between multiple TRUs.
  - Track deferred compensation contribution limits.
    For further info, see Contribution Limits for Deferred Compensation Plans in the Help Center.
  - Issue pension payments to retirees.
- You can define a legal entity that's both a legal employer and a PSU.
- To group multiple legal employers together for tax reporting purposes, assign them to the same parent PSU. If your legal employers represent different companies, assign them to separate PSUs.

There are no predefined legal entities. You must create all legal entities that apply to your enterprise.

Registrations

When you create a legal entity, it automatically establishes a registration with the identifying jurisdiction. For each employer, create a registration for tax jurisdiction and specify its unique identifying number. If the legal entity has an LRU that interacts with other legal authorities, create additional registrations as appropriate.

Note: Capture the unique identifying number, registered name, and other details using the Legal Reporting Unit Registrations task.

If you don't define the registration, some payroll processes may not function properly.

Configuration for Retirees

If your organization includes retirees:

1. Define separate PSUs for employees and retirees. Do not assign both employees and retirees to the same PSUs or to the same legal employers.
2. Designate these PSUs with the 2-Tier - Multiple Assignment employment model.
3. When you set up a tax reporting unit (TRU) for a retiree, specify the distribution code that it. Set up a separate TRU for each distribution code you require.

Additional Reporting Info

When defining a legal entity, use the Legal Entity HCM Information task from your implementation project. Provide additional info required for HR reporting.

If the legal entity is also a PSU, specify:

- Fiscal year start
- Any additional info to support electronic year-end filings
  These settings apply to all LRUs attached to the PSU.

Related Topics

- Define Legal Entities for Global Payroll

How Legal Employers Work with Payroll Statutory Units and Tax Reporting Units

You can designate legal entities as legal employers and payroll statutory units, which makes them available for use in Oracle Fusion Human Capital Management (HCM).

You can have only one legal entity that's also a payroll statutory unit and legal employer, or multiple legal entities, payroll statutory units and legal employers. Payroll statutory units and tax reporting units share a parent child relationship with the payroll statutory unit being a parent of a tax reporting unit

Legal Employers and Payroll Statutory Units

You can designate payroll statutory units to group legal employers to do statutory calculations at a higher level. For example, you can use payroll statutory units for court orders, or to calculate the United Kingdom (UK) statutory sick pay. A legal employer can exist independently of an enterprise or be a part of a payroll statutory unit. There can be many legal employers belonging to a payroll statutory unit, but a legal employer can belong only to one payroll statutory unit.

Legal Employers and Tax Reporting Units

Tax reporting units are indirectly associated with a legal employer through the payroll statutory unit. One or more tax reporting units can be used by a single legal employer, and a tax reporting unit can be used by one or more legal employers.

For example, if a single tax reporting unit is linked to a payroll statutory unit and two legal employers are associated with this payroll statutory unit, then both legal employers are associated with the tax reporting unit. Use the Manage Legal Reporting Unit HCM Information task to designate an existing legal reporting unit as a tax reporting unit. You need to

select a parent payroll statutory unit when you create a legal reporting unit belonging to a legal employer (that isn't a payroll statutory unit as well). Next, you need to designate the legal reporting unit as a tax reporting unit and select the legal employer.

Related Topics

- Overview
- What's a legal employer?
- What's a payroll statutory unit?
- What's a tax reporting unit?
- Examples of HCM Organization Models

Define Legal Entities for Global Payroll

To add a legal entity to your organization, you first define it using the Legal Entities task in your implementation project. You define separate legal entities for employees and retirees.

Defining legal entities includes doing the following.

Want you want to do	How you do it
Before you begin	Make sure you have: 1. Defined the legal address for your enterprise using the Legal Addresses task. 2. Set up your legislative data group (LDG) using the Legislative Data Groups task. Or, it's automatically created when you define your first legal entity.
Create your legal entities	Use the Legal Entities task. • If you're using the legal entity in an HCM context, designate it as a legal employer. HCM implementations require legal employers. • If you're using it in a payroll context, designate it as a payroll statutory unit (PSU) for payroll processing and tax reporting. Limit your organization to one PSU for employees and one for retirees. This helps you: o Control how the payroll process calculates limit taxes. o Control overtime calculations between multiple TRUs. o Track deferred compensation contribution limits. For further info, see Contribution Limits for Deferred Compensation Plans in the Help Center. o Issue pension payments to retirees. • You can define a legal entity that's both a legal employer and a PSU. • To group multiple legal employers together for tax reporting purposes, assign them to the same parent PSU. If your legal employers represent different companies, assign them to separate PSUs. There are no predefined legal entities. You must create all legal entities that apply to your enterprise.
Confirm the LDG	Confirm the correct LDG is associated with your PSUs.

Want you want to do	How you do it
Configure your legal entities for HR reporting and payroll processing	After creating the legal entities, use the Legal Entity HCM Information task to configure them for the following. • Equal Employment Opportunity (EEO) reporting • New Hire reporting • Veterans' Employment & Training Service (VETS) reporting • Payroll processing • Third-party tax filing
Configure your legal entities and PSUs for retirees	If you have retirees in your organization, you must create separate legal entities and PSUs for them. Don't assign both employees and retirees to the same PSUs or to the same legal employers.
Define organization calculation cards for your legal entities	Use the Legal Entity Calculation Cards task from your implementation project.

For further info on these steps, see the following sections.

For info about Capital Management for the United States white papers, see the United States Information Center (2063588.2) on My Oracle Support.

Before You Begin

Be sure you have already defined any associated legal addresses through the Legal Addresses task.

Consider defining your US LDG before identifying your legal entities as PSUs. If you don't, the Legal Entities task automatically creates the LDG for you and associates it with the PSU.

If you have already defined a US LDG, you can manually associate it with the PSU.

How You Create Legal Entities

To create a legal entity:

1. Start the Legal Entities task, and click **Create**.
2. On the Create Legal Entity page, provide the name, identifier, and country.
3. If you don't designate this legal entity as a PSU, assign an existing PSU to it. Choose one from the **Payroll Statutory Unit** field.
4. Provide any other required info.
5. Click **Save** and **Close**.

How to Identify the LDG

To view the LDG associated with a PSU:

1. Start the Legal Entity HCM Information task from your implementation project.
2. Search for the PSU or legal entity.
3. Select **PSU**. This displays general info for the PSU, including the LDG.
4. If the LDG hasn't automatically been associated, select one from the menu.

How to Configure Your Legal Entities

Your legal entities require some configuration before you can perform HR reporting and payroll processing.

Note: Electronic year-end and quarterly filings processes aren't available in HCM. You must perform these filings through the US Third-Party Tax Filing interfaces.

To enter this info:

1. Start the Legal Entity HCM Information task.
2. Search for and choose the legal entity you want to modify.
3. If the legal entity is a legal employer:
    a. Select **Legal Employer**.
    b. In the left pane, click **Legal Employer Details** and enter the necessary values in the **Work Day Information** and **Legal Employer Information** sections.

       For retiree legal entities, select the 2 Tier - Multiple Assignment employment model.
    c. Click **Federal**, and define the EEO, New Hire, and VETS reporting rules.
    d. Enter the company identifier.
    e. Indicate if the company employs more than 100 employees in a pay period.
    f. Indicate if the employer is a government contractor.
    g. In **New Hire Reporting Rules**, associate a default tax reporting unit (TRU) to a legal employer. Select one in the **TRU for the New Hire Report** field.

       HR reports use the employer federal employer identification number (EIN), registered name, contact details, and registration details of the TRU associated with the legal employer.
    h. In **VETS Reporting Rules**, enter the reporting name, parent company, company number, and type of reporting organization.
    i. In **EEO and VETS Reporting Information**, choose the employment categories you want to include in the reports.
    j. Select the **Single** or **Multiple** establishment employer type.
    k. Identify whether your legal entity is affiliated with an enterprise of 100 or more employees.
    l. In **United States Reporting Entity Data**, identify each legal employer as either a parent or child.
    m. In **EEO and VETS Assignment Category**, choose the assignment categories to include or exclude from the EEO-1 report.
4. If the legal entity is also a PSU:
    a. Select **PSU**. This tab lists the associated PSU, including the LDG.
    b. Enter the fiscal year start date.
    c. Select **Federal**, and enter any additional info to support electronic year-end filings for the US.
5. Click **Submit**.

   The details you specify apply to all legal reporting units (LRUs) associated with the PSU.

Note: The TRU you select in the New Hire Reporting Rules requires additional EEO and VETS reporting info. Use the Legal Reporting Unit HCM Information task to set these values for the TRU in the EEO and VETS Reporting Rules region. For further info, see the Legal Entities for the US topic in the Help Center.

Define Organization Calculation Cards

To define a calculation card for a legal entity:

1. Start the Legal Entity Calculation Cards task from your implementation project.

2. On the Payroll Statutory Unit page, click **Create**.
3. Provide an effective date, and select **Calculation Rules for Tax Reporting and Payroll Statutory Unit**.
4. Click **Continue**.
5. Define the federal income tax (FIT) calculation rules for the card.
    a. Select the appropriate row under Calculation Components.
    b. Enter the appropriate data in **Calculation Component Details**, including the applicable employer self-adjustment method.
    c. Repeat to add calculation rules for Social Security, Medicare, and federal unemployment tax (FUTA).
    d. Click **Save**.
6. Create regional calculation rules for the card.
    a. Select **Regional** in **Calculation Card Overview**.
    b. Under the Actions menu, select **Create**.
    c. Select the appropriate state, and click **OK**.
    d. Select **State Unemployment** in **Calculation Components**.
    e. In **Calculation Component Details** of the State Income Tax: Details section, click **Add Row**.
    f. Select **State Unemployment Organization Information**, and click **OK**.
    g. Select the self-adjustment method.

       For further info, see Self-Adjustment Methods for Tax Withholding in the Help Center.
    h. To define state unemployment (SUI) employer experience rates for your PSU, select **Enterable Calculation Values on Calculation Cards** and click **Create**.
    i. Repeat these steps to enter the self-adjustment method for state disability.
    j. Define any appropriate courtesy tax withholding rules.

The settings you make on subordinate LRU calculation cards override values on this card.

Related Topics

- Legal Entities for Global Payroll

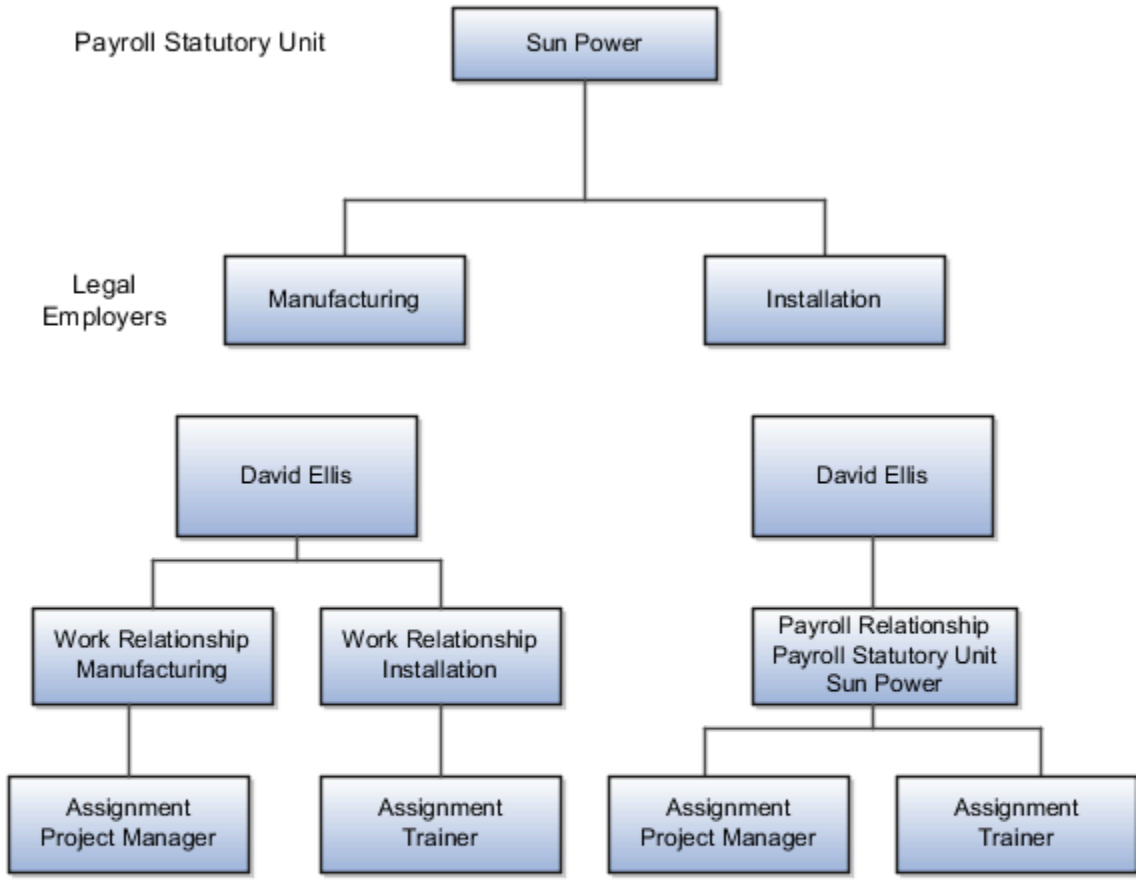
Employment Model

Overview of Payroll Employment Model

In the payroll employment model, each person has a payroll relationship to a payroll statutory unit (PSU), and one or more payroll assignments and other employment structures.

Comparing the HR and Payroll Employment Models

This diagram shows the human resource (HR) employment model and the payroll employment model contrast where two legal employers, Manufacturing and Installation belong to one PSU, Sun Power. As you can see, David Ellis has two assignments where the HR model creates two work relationships and the payroll employment model creates one payroll relationship.



Related Topics

- Payroll Employment Hierarchy Profile Options
- Employment Level Options for Payroll Elements
- How do I diagnose payroll employment model setup issues?

How do I diagnose payroll employment model setup issues?

After creating enterprise structures, run the Payroll Employment Model Setup Validation test. This test checks whether legal employers are associated with a legislative data group.

Select Run Diagnostic Tests from the Setting and Actions menu in the global header. You must have access to the Diagnostic Dashboard to run this test.

Payroll Relationships

Overview of Implementing Payroll Relationship

A payroll relationship is the highest level of the payroll employment model. It groups a person's assignment records for payroll statutory calculation and reporting purposes.

The assignments grouped within a payroll relationship always belongs to the same PSU and person type such as employee.

A payroll relationship enables you to enter information for a person in Oracle HCM Cloud that impacts their pay such as salary, compensation, time cards, and absences.

For employees with multiple assignments, payroll relationships support tax and social insurance calculations that you perform on earnings from all assignments grouped within the relationship. The results of payroll processes such as **Calculate Payroll** are accordingly held against the payroll relationship of a person.

Payroll relationship rules and mappings control the creation of payroll relationships and define how they're processed by Cloud Payroll for a localization. These rules and mappings are automatically available for country extensions which are predefined by Oracle. If you're configuring a legislation that isn't predefined by Oracle, use the **Configure Legislation for Human Resources** task to define the payroll relationship and mapping rules.

Related Topics

- Configure Legislations
- Overview of Administering Payroll Relationships

Payroll Relationship Switcher

Payroll relationship switcher gives you the ability to switch between payroll relationships when you have multiple payroll relationships defined for the employee.

For example, an employee that's a contingent worker and a pending worker with element entries only, the employee has personal payment methods: one in context of the contingent worker payroll relationship and one in context of the pending worker payroll relationship. When this occurs, a drop-down list is available to switch views from one payroll relationship to another.

You can define the values in the payroll relationship switcher using profile options to choose to display the Payroll Relationship Type, Payroll Relationship Number and Payroll Statutory Unit. If these profiles aren't defined, Payroll Relationship Type is shown by default. Use Manage Administrator Profile Options in Setup and Maintenance to define profiles associated with the payroll relationship switcher. If defining all profile options, define them all at the same level, such as Site level.

Related Topics

- Overview of Implementing Payroll Relationship
- Overview of Administering Payroll Relationships

Payroll Relationship Rules

Define a payroll relationship rule for each HCM Cloud legislation. The rule controls when and how payroll relationships are created for a person. Oracle HCM Cloud delivers predefined payroll relationship rules for all country extensions.

If you're configuring a legislation that isn't predefined by Oracle, define mapping rules for all person types including candidates that the legislation uses. The **Configure Legislation for Human Resources** task would create mapping rules for person types such as employee. You can use this task to create any person type mapping rules that aren't predefined by Oracle.

This table describes the application behavior based on the available payroll relationship rules for a legislation.

Create Employment Records Based on Rules	Application Behavior
Last Record	When you create an assignment, the application searches for an active payroll relationship of the same person type and for the same PSU. • If an active payroll relationship exists, the application groups the assignment under the existing payroll relationship. • If an active payroll relationship doesn't exist, the application creates a new payroll relationship for the assignment. The Last Record rule is used in localizations such as the UK.
Lifetime Record	When you create an assignment, the application searches for a payroll relationship of the same person type and for the same PSU. • If a payroll relationship exists, the application groups the assignment under the existing payroll relationship. If the payroll relationship is terminated, the application removes the end date. • If a payroll relationship doesn't exist, the application creates a new payroll relationship for the assignment.
New Record	When you create an assignment, the application creates a new payroll relationship. Each payroll relationship is associated with one work assignment.

Note: These rules apply to all new assignments, including the assignment that the application creates when a person is rehired.

Related Topics

- Configure Legislations
- Overview of Administering Payroll Relationships

Payroll Relationship Type Mappings

Define payroll relationship type mappings for each HCM Cloud legislation. The mappings control when the application creates payroll relationships for a specific type of person such as employee or candidate. The mappings also define if the person type is processed by Cloud Payroll.

Oracle HCM Cloud delivers predefined payroll relationship type mappings for all the supported country extensions.
If you're configuring a legislation that isn't predefined by Oracle, define mapping rules for all person types including candidates that the legislation uses. The **Configure Legislation for Human Resources** task would create mapping rules for person types such as employee. You can use this task to create any person type mapping rules that aren't predefined by Oracle.

This table summarizes the behavior of the application when a person type is mapped to these payroll relationship types.

Note: Few legislations have extended this list of payroll relationship types to meet their country specific requirements.

Payroll Relationship Type	Application Behavior
Standard	Creates a payroll relationship and includes the person in payroll processes.
Element Entries Only	Creates a payroll relationship, but doesn't include the person in payroll processes.
Pending Worker Standard	Creates a payroll relationship and includes the person in payroll processes
Pending Worker Element Entries Only	Creates a payroll relationship, but doesn't include the person in payroll processes.
Candidate Standard	Creates a payroll relationship and includes the person in payroll processes.
Candidate Element Entries Only	Creates a payroll relationship, but doesn't include the person in payroll processes.

Note: If a person type isn't mapped to a payroll relationship type, the application doesn't create payroll relationships. In this scenario, you wouldn't be able to capture payroll information for the person type such as salary, element entries, and personal payment methods.

Payroll Relationship Type Mappings Example for US Legislation

Payroll relationship types are mapped to one or more person types for each legislation.

Here's an example of the mapping rules predefined for the US legislation.

Person Type	Payroll Relationship Type	Process in Payroll
Employee	Standard	Yes
Retiree	Standard	Yes
Non-Worker	Non-Worker	No
Contingent Worker	Contingent Worker	No
Contingent Worker Candidate	Candidate Element Entries Only	No
Employee Candidate	Candidate Standard	No

Here, Employee and Retiree person types are both mapped to the Standard payroll relationship type. If a US worker has both employee and retiree assignments within the same PSU, the application will group these assignments under the same payroll relationship.

> **Note:** Use the **Configure Legislation for Human Resources** task in **My Client Groups** to view the predefined rules for your legislation.

Related Topics

- Configure Legislations
- Overview of Administering Payroll Relationships

Why can't I see candidate records on the Payroll pages?

Check the **Display Candidate Records on Payroll Pages** profile option setting, which controls the display of the candidate employment records on the Payroll application pages.

The **Display Candidate Records on Payroll Pages** profile option controls whether the candidate records are displayed on the Payroll pages. The default value of this profile option is **No**, which hides the candidate records. This setting lets you view and select only those records that are managed within the Payroll product, such as employee. You can't select candidate records on Payroll responsive pages such as Personal Payment Methods, Payroll Relationship, and Calculation Entries.

To display the candidate records on the Payroll pages, set this profile option to **Yes**.

Why do I define payroll relationship rules for an international HR legislation?

Payroll relationships capture all types of payroll information for a person in Oracle HCM Cloud, such as salary, compensation, personal payment methods, and time cards.

When do I change the payroll relationship rules for an international legislation?

Configure payroll relationship mapping rules for all person types when you implement an international legislation.

The Configure Legislation for Human Resources task would create mapping rules for person types such as employee. You can use this task to create any person type mapping rules that aren't predefined by Oracle.

If employment records already exist, the best approach is to not change the payroll relationship rules. This approach ensures that new and existing employment records have the same rules. However, if you want to update the payroll relationship rules after employment records exist, your updates will affect only the newly created employment records for the person type.

Related Topics

- Configure Legislations

Why doesn't the payroll region display for Candidate person type while you're configuring international legislation?

Verify if you have created payroll relationship mapping rules for all person types including Candidate in the international legislation.

Payroll relationship rules ensure that the application has created payroll relationship records for the person type. You can view the payroll region for workers who have a payroll relationship record.

HCM Data Roles

Role Provisioning and Deprovisioning

You must provision roles to users. Otherwise, they have no access to data or functions and can't perform application tasks. This topic explains how role mappings control role provisioning and deprovisioning.

Use the **Manage Role Provisioning Rules** or **Manage HCM Role Provisioning Rules** task to create role mappings.

Role Provisioning Methods

You can provision roles to users:

- Automatically
- Manually
    - Users such as line managers can provision roles manually to other users.
    - Users can request roles for themselves.

For both automatic and manual role provisioning, you create a role mapping to specify when a user becomes eligible for a role.

Role Types

You can provision data roles, abstract roles, and job roles to users. However, for Oracle Fusion Cloud HCM users, you typically include job roles in HCM data roles and provision those data roles.

Automatic Role Provisioning

Users acquire a role automatically when at least one of their assignments satisfies the conditions in the relevant role mapping. Provisioning occurs when you create or update worker assignments. For example, when you promote a worker to a management position, the worker acquires the line manager role automatically if an appropriate role mapping exists. All changes to assignments cause review and update of a worker's automatically provisioned roles.

Role Deprovisioning

Users lose automatically provisioned roles when they no longer satisfy the role-mapping conditions. For example, a line manager loses an automatically provisioned line manager role when he or she stops being a line manager. You can also manually deprovision automatically provisioned roles at any time.

Users lose manually provisioned roles automatically only when all of their work relationships are terminated. Otherwise, users keep manually provisioned roles until you deprovision them manually.

Roles at Termination

When you terminate a work relationship, the user automatically loses all automatically provisioned roles for which he or she no longer qualifies. The user loses manually provisioned roles only if he or she has no other work relationships. Otherwise, the user keeps manually provisioned roles until you remove them manually.

The user who's terminating a work relationship specifies when the user loses roles. Deprovisioning can occur:

- On the termination date

- On the day after the termination date

If you enter a future termination date, then role deprovisioning doesn't occur until that date or the day after. The Role Requests in the Last 30 Days section on the Manage User Account page is updated only when the deprovisioning request is created. Entries remain in that section until they're processed.

Role mappings can provision roles to users automatically at termination. For example, a terminated worker could acquire the custom role Retiree at termination based on assignment status and person type values.

Reversal of Termination

Reversing a termination removes any roles that the user acquired automatically at termination. It also provisions roles to the user as follows:

- Any manually provisioned roles that were lost automatically at termination are reinstated.
- As the autoprovisioning process runs automatically when a termination is reversed, roles are provisioned automatically as specified by current role-provisioning rules.

You must reinstate manually any roles that you removed manually, if appropriate.

Date-Effective Changes to Assignments

Automatic role provisioning and deprovisioning are based on current data. For a future-dated transaction, such as a future promotion, role provisioning occurs on the day the changes take effect. The **Send Pending LDAP Requests** process identifies future-dated transactions and manages role provisioning and deprovisioning at the appropriate time. These role-provisioning changes take effect on the system date. Therefore, a delay of up to 24 hours may occur before users in other time zones acquire their roles.

Create HCM Data Roles for Global Payroll Implementation Users

If you've licensed the Oracle Fusion Global Payroll Cloud Service, then you create the PayrollAdmin_ViewAll and PayrollMgr_ViewAll data roles. You create these roles using the Assign Security Profiles to Role task.

Create the PayrollAdmin_ViewAll Data Role

If you're already on the Manage Data Roles and Security Profiles page, then follow this procedure from step 2. Otherwise, sign in as the TechAdmin user and follow these steps:

1. In the Setup and Maintenance work area, go to the following:
    - Functional Area: Users and Security
    - Task: Assign Security Profiles to Role

    You can also go to this page by selecting **Navigator** > **My Client Groups** > **Workforce Structures** > **Data Roles and Security Profiles**.
2. In the Search Results section of the Manage Data Roles and Security Profiles page, click **Create**.
3. Complete the fields on the Create Data Role: Select Role page as shown in the following table.

Field	Value
Data Role Name	PayrollAdmin_ViewAll
Job Role	Payroll Administrator

Field	Value

4. Click **Next**.
5. In the sections of the Create Data Role: Security Criteria page, select the following predefined security profiles for each drop-down list.

Section	Security Profile
Organization	View All Organizations
Position	View All Positions
Legislative Data Group	View All Legislative Data Groups
Person	View All People
Document Type	View All Document Types
Payroll	View All Payrolls
Payroll Flow	View All Flows

6. Click **Review**.
7. On the Create Data Role: Review page, click **Submit**.
8. On the Manage Data Roles and Security Profiles page, search for the PayrollAdmin_ViewAll data role to confirm that it exists.

Create the PayrollMgr_ViewAll Data Role

Follow these steps:

1. In the Search Results section of the Manage Data Roles and Security Profiles page, click **Create**.
2. Complete the fields on the Create Data Role: Select Role page as shown in the following table.

Field	Value
Data Role Name	PayrollMgr_ViewAll
Job Role	Payroll Manager

3. Click **Next**.

4. In the sections of the Create Data Role: Security Criteria page, select the predefined security profiles shown in this table.

Section	Security Profile
Organization	View All Organizations
Position	View All Positions
Legislative Data Group	View All Legislative Data Groups
Person	View All People
Document Type	View All Document Types
Payroll	View All Payrolls
Payroll Flow	View All Flows

5. Click **Review**.
6. On the Create Data Role: Review page, click **Submit**.
7. On the Manage Data Roles and Security Profiles page, search for the PayrollMgr_ViewAll data role to confirm that it exists.

Related Topics

- Overview of HCM Data Roles for Implementation Users

Secure Elements through HCM Data Roles

Secure and limit access to elements based on your business requirements.

Perform these two actions to secure and limit access to all elements:

- Use the Element Security Profiles quick action to create an element security profile. Include or exclude elements to this profile as per your requirements.
- Add the new security profile to an HCM Data Role to secure and limit access to the elements.

For example, you can now restrict a Benefits user to access only the voluntary and pretax deductions, but not the regular and supplemental earnings. You can now define an element security profile to include only voluntary and pretax deduction elements and attach it to the Benefits Administrator data role.

When you navigate to the Element Entries page, the elements you can manage is restricted to those in your element security profile. You can enter, view, and edit certain earnings and deductions elements that are meant for your respective usage.

Features Secured by Element Security Profiles

The Element Security Profile restriction applies to these payroll features:

- Manage Element Entries (both Manage and View-only)
- Manage Calculation Entries – Standard Entries only
- Manage Elements
- Balance Adjustment
- Use REST Service – Element Entries
- Use REST Service – Element Entries Read-Only
- Payroll Element Definition List of Values REST
- Payroll Input Values List of Values REST
- HSDL – Element Entry
- HDSL – Element Entry with Costing
- QuickPay

It also applies to the following Benefits feature:

- View Payroll Info under the Enrollment section of the Benefits Summary page.

Element Security Profiles

Use the Element Security Profile task to create element security profiles. However, you can make use of any these available updates.

- By default, all the existing data roles are automatically updated with the **View All Elements** element security profile.
- When upgrading to Update 24A, the **Regenerate Data Security Profiles and Grants** job set will be run; you should verify it ran successfully. You should see that the **View All** default value appears on your data roles after upgrading.
- When you create or edit a Data Role on the HCM Data Roles and Security Profiles page, use the **Element Security Profile** option under the Element section on the Create Data Role: Security Criteria page, to chose a element security profile for the role.
- If you have any automated test cases that try to edit a role or create a new data role based on impacted job roles, you must populate the element security profile value.

  From this section, you can either select an existing element security profile or create one for the data role.
- You can also use these options to view, create, or edit element security profiles for data roles.
  - The **Element** sub-train stop on the Assign Security Profiles to Role page.
  - Support for the new profile under **Preview HCM Data Security** page.
  - A new parameter for the element security profile in the **Regenerate Data Security Profiles and Grants**scheduled process.

Include or Exclude Elements in a Security Profile

You can include or exclude elements to an element security profile as per your security and business requirements.

When you create an element security profile, you select a Legislative Data Group (LDG).

Once you select an LDG on the Element Security Profile page, the element classifications applicable to the LDG gets populated in the Classifications region.

Select the required primary classifications, all elements within the selected primary classifications are automatically included in the element security profile. However, if required, you can exclude some elements from the selected classifications, or include some elements from a classification you haven't selected.

Note: You can include multiple LDGs within a security profile. Each LDG must have at least one classification or element included. Consider the following when you create element security profiles and include or exclude elements:

- LDG security and element security profile are independent of each other. When you implement both LDG and element security profile, ensure that the LDG included in the element security profile is also included in the LDG security profile.
- Predefined statutory deduction elements exist for a legislation. If you have multiple LDGs within a single legislation, if you include the statutory deduction elements for one of the LDGs, they will be available for all LDGs within the same legislation.
- When the security profile is based on primary classifications, you can only create elements with those primary classifications. Under Element Summary, Run Types, Balance Feeds, Status Processing Rules and Autoindirect rules shows only the elements in your Element Security Profile. Similarly, when creating new records, the element list of value is restricted.

QuickPay Processing

Element entries displayed on the QuickPay page are restricted based on the user element security profile. However, all elements are processed when the user submits the QuickPay.

Access Requirements

You can use this feature only for the job roles given in this table.

Job Role Name	Job Role Code
Application Implementation Consultant	ORA_ASM_APPLICATION_IMPLEMENTATION_CONSULTANT_JOB
Benefits Administrator	ORA_BEN_BENEFITS_ADMINISTRATOR_JOB
Benefits Manager	ORA_BEN_BENEFITS_MANAGER_JOB
Benefits Specialist	ORA_BEN_BENEFITS_SPECIALIST_JOB
Compensation Administrator	ORA_CMP_COMPENSATION_ADMINISTRATOR_JOB
Human Capital Management Application Administrator	ORA_HRC_HUMAN_CAPITAL_MANAGEMENT_APPLICATION_ADMINISTRATOR_JOB
Human Capital Management Integration Specialist	ORA_HRC_HUMAN_CAPITAL_MANAGEMENT_INTEGRATION_SPECIALIST_JOB
Human Resource Analyst	ORA_PER_HUMAN_RESOURCE_ANALYST_JOB
Human Resource Manager	ORA_PER_HUMAN_RESOURCE_MANAGER_JOB

Job Role Name	Job Role Code
Human Resource Specialist	ORA_PER_HUMAN_RESOURCE_SPECIALIST_JOB
Payroll Administrator	ORA_PAY_PAYROLL_ADMINISTRATOR_JOB
Payroll Manager	ORA_PAY_PAYROLL_MANAGER_JOB

How to Restrict Access to Elements Using Element Security Profile and HCM Data Role

This topic shows how you can restrict and limit user access to certain elements based on your organisational needs.

Create a new Element Security Profile, include or exclude elements as per your specific requirements, and add this profile to a specific data role.

1. Create an Element Security Profile

Complete these steps to create an element security profile.

1. Navigate to **My Client Groups** > **Show More** > **Payroll** and select the **Element Security Profile** quick action.
2. Click the **Add** icon to create an Element Security Profile.
3. Enter a **Name** for the profile and select the **Enabled** checkbox.
4. Select a **Legislative Data Group**.

   Once you select an LDG, the element classifications applicable to the LDG gets populated in the Classifications region.
5. Select the classifications you want to include in the security profile. All elements within the selected classifications are automatically included.

2. Include or Exclude Individual Elements

Once you select an LDG on the Element Security Profile page and select the required primary classifications, all elements within the selected primary classifications are automatically included in the element security profile.

However, if required, you can exclude some elements from the selected classifications, or include some elements from a classification you haven't selected.

Complete these steps to include or exclude individual elements.

1. Click the **Add** icon in the Elements section on the Element Security Profile page.
2. Search for the elements you want to include or exclude and select the

   Inclusion Status as required.

   When you select an element and its primary classification, the Inclusion Status for the individual elements is automatically displayed as follows:
   - If the primary classification of the selected element is included in the profile, the inclusion status is set to **Exclude**.
   - If the primary classification is excluded from the profile, the inclusion status is set to **Include**.

3. Click **Save and Close**. The Element Security Profile is saved.

   You can include multiple LDGs within a security profile. Each LDG must have at least one classification or element included.

3. Add an Element Security Profile to a Data Role

After you create an Element Security Profile, add the profile to a Data Role. By default, for all existing data roles, the Element Security Profile is populated with View All Elements. You can edit a Data Role and either add an existing element security profile, or create a new element security profile.

1. Add an Existing Element Security Profile

   Complete these steps to add an existing Element Security Profile and restrict elements for a specific data role.
   a. Navigate to **My Client Groups** > **Show More** > **Workforce Structures Payroll** and select the **Data Roles and Security Profiles** quick action.
   b. Search and select the **Data Role** and click **Edit**.
   c. Select an existing profile in the **Element Security Profile** field.
2. Edit a Data Role and Create an Element Security Profile

   You can also create a new Element Security Profile and add it to the Data Role you're editing.
   a. Navigate to **My Client Groups** > **Show More** > **Workforce Structures Payroll** and select the **Data Roles and Security Profiles** quick action.
   b. Search and select the **Data Role** and click **Edit**.
   c. Select **Create New** in the Element Security Profile field.
   d. Enter the name of the profile in the **Name** field.
   e. Select the **LDG** and **Primary Classifications**, include or exclude elements as required.
   f. Click **Save and Close**.
3. Use the Element Tab and Create an Element Security Profile

   Complete these steps to create an Element Security Profile using the Element tab.
   a. Navigate to **My Client Groups** > **Show More** > **Workforce Structures Payroll** and select the **Data Roles and Security Profiles** quick action.
   b. Search and select the **Data Role** and click **Edit**.
   c. Click **Next** and select all the security profiles.
   d. Click **Next**. Click the **Element** tab.
   e. Select **Create New** in the Element Security Profile field.
   f. Enter the name of the profile in the **Name** field.
   g. Select the **LDG** and **Primary Classifications**, include or exclude elements as required.
   h. Click **Save and Close**.

How do I provision HCM data roles to users?

On the Create Role Mapping page, create a role mapping for the role.

Select the **Autoprovision** option to provision the role automatically to any user whose assignment matches the mapping attributes.

Select the **Requestable** option if any user whose assignment matches the mapping attributes can provision the role manually to other users.

Select the **Self-Requestable** option if any user whose assignment matches the mapping attributes can request the role.

Application Tools

Business Definitions

An integral part of the payroll setup is defining payroll business definitions.

Use the Define Payroll Business Definitions task in the Define Payroll tasks list to create lookups, value sets, and descriptive flexfields that you need to support payroll.

Lookups

Lookups are lists of values in the application that provide validations or provide a list of values for a user input field in the user interface. You define a list of values as a lookup type consisting of a set of lookup codes, each code's translated meaning, and optionally a tag. The tags control which countries can have access to the lookup codes being defined. End users see the list of translated meanings as the available values for an object.

Let's look at an example of a lookup type for marital status (MAR_STATUS) that has lookup codes for users to specify the marital status as given below in this table.

Lookup Code	Meaning	Tag
M	Married	Not applicable
S	Single	Not applicable
R	Registered Partner	+NL
DP	Domestic Partner	-FR, AU

As you manage lookups, consider these.

- Using lookups in applications
- Configurable levels
- Accessing lookups
- Enabling lookups
- The three kinds of lookups: standard, common, and set enabled

Descriptive Flexfields

Use descriptive flexfields to add customer-defined attributes to business object entities, and define validation for them.

All the business object entities that you can use in the application are enabled for descriptive flexfields. However, configuring descriptive flexfields is an optional task.

Configuring descriptive flexfields involves managing the available flexfields registered with your Oracle Applications Cloud database and configuring their flexfield-level properties, defining and managing descriptive flexfield contexts, and configuring global and context-sensitive segments.

Extensible Flexfields

Extensible flexfields are like descriptive flexfields, with some additional features.

Unlike descriptive flexfields, the columns corresponding to extensible flexfield segments are part of specific tables, separate from the base application table. Unlike descriptive flexfield contexts, the set of attributes in an extensible flexfield context remains constant and doesn't differ by context value.

An extensible flexfield describes an application entity, with the run time ability to expand the database that implementation consultants can use to define the data structure that appears in the application.

Extensible flexfields support one-to-many relationships between the entity and the modified attribute rows.

To get a list of predefined extensible flexfields, open the Setup and Maintenance area, and use the Extensible Flexfields for Payroll task.

Here are a few aspects that are important in understanding extensible flexfields:

- Usages
- Categories
- Pages
- Security
- Protected Extensible Flexfield Data

Value Sets

A value set is a group of valid values that you assign to a flexfield segment to control the values that are stored for business object attributes.

An end user enters a value for an attribute of a business object while using the application. The flexfield validates the value against the set of valid values that you configured as a value set and assigned to the segment.

For example, you can define a required format, such as a five digit number, or a list of valid values, such as green, red, and blue.

Related Topics

- Validation Type Options for Value Sets
- How Flexfields and Value Sets Work Together
- Considerations for Managing Descriptive Flexfields
- Overview of Extensible Flexfields
- Overview of Lookups

Profile Options

Use profile options to manage user preferences and control the general function of applications. For example, you can control user preferences involving language, date, time, currency, and other similar general settings.

You can create a profile option and also determine the level at which that profile option takes effect. You can also define the profile values for the profile option. The profile values appear on the Manage Administrator Profile Values page when you select the profile option.

Creating a Profile Option

1. In the Setup and Maintenance work area, go to the **Manage Profile Options** task.
2. On the page, click **Actions** > **New**.
3. On the Create Profile Option page, fill all the fields with relevant details with specific attention to the following:
    - Use the SQL Validation field to provide an SQL statement that displays the permissible profile values to be used. Using an SQL statement, you can select the values from another table and display them as a list of values.

      For example, to display the values **Yes** and **No** from a lookup table, you can use the following SQL statement:

      ```
      select MEANING, LOOKUP_CODE from FND_LOOKUPS where LOOKUP_TYPE='YES_NO'
      ```

      As a result, on the **Manage Administrator Profile Values** page, the profile values Yes and No are available for selection for that profile option.
    - You can specify a date range to keep the profile option active during that period. Beyond the specified duration, the profile option automatically becomes inactive. If you no longer require the profile option, you must manually delete it from the **Manage Profile Options** page.
4. Click **Save and Close**.
5. On the Manage Profile Options page, search for the newly created profile option and from the results, select it.
6. In the Profile Option Levels section, do the following:
    a. In **Enabled**, select the levels at which you want to enable the profile option.

       > **Note:** You can enable a profile option at multiple levels, but a higher-level profile value overrides a lower-level value. Therefore, enable them only at the required levels.

    b. In **Updatable**, select the profile level at which you want implementors to have update privileges. Leave the check box deselected if you don't want the implementors to modify the profile values (they appear in read-only mode).
7. Click **Save and Close**.

To edit a profile option that you created, search for it and edit the necessary details.

Note:

- While creating and editing profile options and profile categories, you can translate the details to the preferred languages without changing the language session of the application. To specify the translations in all the enabled language rows, use the Translation Editor option. Once the updates are made, users can view the translated text for the specific details.
- If you want to access the profile option using REST API, you must add it to the Authenticated User Profile Option Values (`ORA_FND_AUTH_REST_ACCESS`) profile category.

Related Topics

- Hierarchy in Profile Levels
- Set Profile Option Values
- How can I enter or edit translated text?
- Profile Categories

Security Profiles

HCM Security Profiles

Security profiles identify instances of Human Capital Management (HCM) objects. For example, a person security profile identifies one or more Person objects, and a payroll security profile identifies one or more Payroll objects.

This topic describes how to create and use security profiles and identifies the HCM objects that need them. To manage security profiles, you must have the **IT Security Manager** job role.

Use of HCM Security Profiles

You include security profiles in HCM data roles to identify the data that users with those roles can access. You can also assign security profiles directly to abstract roles, such as employee. However, you're unlikely to assign them directly to job roles, because users with same job role usually access different sets of data. You're recommended not to assign security profiles directly to job roles.

HCM Object Types

You can create security profiles for the following HCM object types:

- Country
- Document Type
- Job Requisition
- Legislative Data Group (LDG)
- Organization
- Payroll
- Payroll Flow
- Person
    - Managed Person

    - Public Person
- Position
- Talent Pool
- Transaction

Two uses exist for the person security profile because many users access two distinct sets of people.

- The Managed Person security profile identifies people you can perform actions against.
- The Public Person security profile identifies people you can search for in the worker directory.

  This type of security profile also secures some lists of values. For example, the Change Manager and Hire pages include a person list of values that the public person security profile secures. The person who's selecting the manager for a worker may not have view access to that manager through a managed person security profile.

Predefined security profiles provide view-all access to secured objects. For example, the View All Positions security profile provides access to all positions in the enterprise.

Security Criteria in HCM Security Profiles

In a security profile, you specify the criteria that identify data instances of the relevant type. For example, in an organization security profile, you can identify organizations by organization hierarchy, classification, or name. All criteria in a security profile apply. For example, if you identify organizations by both organization hierarchy and classification, then only organizations that satisfy both criteria belong to the data instance set.

Access to Future-Dated Objects

By default, users can't access future-dated organization, position, or person objects.

Enable access to future-dated objects as follows:

- For organizations, select the **Include future organizations** option in the organization security profile
- For positions, select the **Include future positions** option in the position security profile
- For person records, select the **Include future people** option in the person security profile

> **Tip:** The predefined View All Workers security profile doesn't provide access to future-dated person records. The predefined View All People security profile, which provides access to all person records, including those of contacts, does provide access to future-dated records.

Security Profile Creation

You can create security profiles either individually or while creating an HCM data role. For standard requirements, it's more efficient to create the security profiles individually and include them in appropriate HCM data roles.

To create security profiles individually, use the relevant security profile task. For example, to create a position security profile, use the **Manage Position Security Profile** task in the Setup and Maintenance or Workforce Structures work area.

Reuse of Security Profiles

Regardless of how you create them, all security profiles are reusable.

You can include security profiles in other security profiles. For example, you can include an organization security profile in a position security profile to secure positions by department or business unit. One security profile inherits the data instance set defined by another.

Related Topics

- Predefined HCM Security Profiles
- Best Practices for HCM Data Roles and Security Profiles

Payroll Security Profiles

You can use different methods to provide access to payrolls for members of the Payroll department. Use the Manage Payroll Security Profiles task to organize your payroll definitions into appropriate payroll security profiles.

Then, use the Assign Security Profiles to Role task to select the security profiles included in an HCM data role that you provision to a user.

Payroll Period Type

It's common to use the payroll security profile to organize payroll definitions by payroll period type. You simply create one security profile for each payroll type, such as monthly payrolls, another for semimonthly payrolls, and so on.

Regional Assignments

You can use payroll security profiles to group payrolls by the regions of the employees' work location. For example, you can create one for Canadian facilities and another for European facilities.

Individual Contributors

If your payroll managers can access only the payroll definitions that they manage, use create payroll security profiles to include only those payrolls.

Payroll and Payroll Flow Security Profiles

Use the Security Profile pages to restrict user access and review, create, and update security profiles for payroll and payroll flows.

IT Security Managers can navigate to the following pages from the **Quick Actions** pane under **My Client Groups > Show More> Payroll** on the **Home** page. If you have enabled the corresponding profiles, you can also access these Redwood pages from the Setup and Maintenance area.

- Payroll Security Profiles
- Payroll Flows Security Profiles

If you have functional access to these pages, you can directly access these pages in edit mode.

> **Note:** Predefined security profile values are delivered as read-only and you can't edit these rows.

The enhanced pages allow you to do the following:

- View enabled security profiles by default.
- Expose audit details for each row, such as when the security profile was created and updated.
- View focused search results with less-frequently used columns hidden by default.

- Use the **Columns** icon to hide or show columns and modify the column order. You can also enable new columns that allow you to view, sort, and search security profiles based on who created or updated that security object. You can view the date it was created on or last updated, by enabling these hidden columns.

- Sort the results in ascending or descending order.
- Export search results.
- Edit a role with a single click of the role name.
- Define security criteria using a simplified page.

Payroll Security Profile

Use payroll security profiles to limit a user's access to relevant payrolls. By default, only security profiles that are enabled are displayed in the search results. You can access disabled security profiles by removing the filter chip selection. If the delivered View All Payroll security profile doesn't support your business requirements, create a new payroll-specific security profile to meet your requirements.

Payroll Flow Security Profile

Payroll flow security profiles are used to limit a user's access to relevant payroll flows. By default, only security profiles that are enabled are displayed in the search results. You can access disabled security profiles by removing the filter chip selection.

When you add a new record, choose the relevant payroll flow. By default, the applicable legislative data group that the payroll flow is associated with appears, unless it's a global flow. Choose the checkmark to save the row, or 'x' to cancel and delete your selection.

Payroll Data Capture for Multiple Concurrent Assignments

You can restrict access to assignments based on a user's Person Security Profile, if your organization allows workers to have multiple concurrent assignments.

Enable the assignment-level security profile to ensure that users have access to only those assignments that match the criteria defined in their person security profile.

You can apply this behavior to a limited set of quick actions, such as Payroll Relationship, Element Entries, Calculation Entries, and Costing for a Person. For all other payroll features, the behavior stays the same. If at least one of the employee's assignment satisfies the criteria in the person security profile, then the application displays all assignments on the search results page.

This table describes how the enhanced data capture applies to these Quick Action tasks:

Task	Manage Page	View-Only Page	REST	Responsive Person Search	What's Displayed?
Payroll Relationship	Yes	Yes	Yes	Assignment in Security Profile	Payroll relationship for the selected assignment. Assignments within the payroll relationship and in the security profile.

Task	Manage Page	View-Only Page	REST	Responsive Person Search	What's Displayed?
Element Entries	Yes	Yes	NA	Assignment in Security Profile	Element entries for the payroll relationship for the selected assignment. All element entries for assignments within the payroll relationship and in the security profile.
Calculation Entries	Yes	Yes	NA	Assignment in Security Profile	Calculation entries for the payroll relationship for the selected assignment. All calculation entries for assignments within the payroll relationship and in the security profile.
Costing for a Person	Yes	Yes	NA	Assignment in Security Profile	Costing information for the payroll relationship for the selected assignment.
Personal Payment Method	Yes	Yes	Yes	Assignment in Security Profile	Payroll relationships for the assignments in the user's assignment security profile.

Here are some considerations that you factor in when enabling the assignment-level security profile:

- Any other page, process, or report apart from those in the table operate at the payroll relationship level. You'll have access to all assignments if at least one of the assignments satisfies the criteria set in the Person Security Profile.
- If you've access to one assignment each in the manage and view-only pages for the same employee, you can manage both assignments. The manage access takes precedence over view-only.
- Calculation entries, such as Absence and Time region don't support assignment level security.
- Quick Pay Person Search returns all assignments. Let's consider the case when you select an assignment that you're not allowed to view. Then the application displays those element entries for the assignments that you're allowed to view, which could be a different assignment than the one selected. If you aren't allowed to view any assignment, then the element entry section is blank. If you submit the Quick Pay, then the application processes all element entries.
- Quick Pay Person Search returns all assignments. Let's consider the case when you select an assignment that you're not allowed to view. Then the application displays those element entries for the assignments that you're allowed to view, which could be a different assignment than the one selected. If you aren't allowed to view any assignment, then the element entry section is blank. If you submit the Quick Pay, then the application processes all element entries.

For more information about concurrent assignments, see the Secure Access for Workers with Multiple Assignments section of the Oracle Human Resources Cloud What's New.

Secure Access to Payroll Relationships of Employees with Multiple Assignments

Use assignment-level security to restrict user access to payroll relationships of employees having multiple assignments.

having multiple assignments

access to payroll relationships

you can only view the payroll relationship for the assignment you have access.

Load Objects with HCM Data Loader

Use HCM Data Loader for bulk-loading and maintaining payroll data. You can navigate to the HCM Data Loader pages directly from the Payroll Checklist page. On the Checklist page, select the Initiate Data Loader task to open the HCM Data Loader object status page.

You can use HCM Data Loader to load these payroll objects.

- Balance Definitions
- Element Entries
- Object Groups
- Organization Payment Method
- Payroll Consolidation Groups
- Payroll Costing
- Payroll Definitions and Time Periods
- Payroll Element Run Usage
- Payroll Elements
- Payroll Relationship
- Personal Payment Method
- Time Definitions
- User-Defined Tables
- Wage Basis Rules

For more info on how to load these business objects, refer to the Integrating with HCM guide.

Payroll Transformation Formula for HCM Data Loader

Your existing data or the data that you upload might not be in the format recognized by HCM Data Loader. In such cases, use the Payroll Transformation formula for HCM Data Loader to transform your data into a format that's supported by HCM Data Loader.

Payroll Transformation Formula for HCM Spreadsheet Data Loader

You can use HCM Spreadsheet Data Loader to load all payroll objects that HCM Data Loader supports. As the first step, you create a spreadsheet template for the required object from the Data Exchange work area and further download

the template in CSV format. The Payroll Transformation Formula for HCM Spreadsheet Data Loader transforms the raw delimited file to a format that suits the template.

Related Topics

- Example of Loading Organization Payment Methods
- Example of Loading Payroll Balance Attribute Definitions
- Overview of Loading Payroll Costing
- Overview of Loading Payroll Details
- Overview of Loading User-Defined Tables

Load Payroll Data Using Transformation Formula

Overview of Payroll Transformation Formula For HCM Data Loader

Often times, your existing data or the payroll data that you upload might not be in the format recognized by HCM Data Loader.

In such cases, you can use a payroll transformation formula to transform your data into a format that's supported by HCM Data Loader.

Let's consider these examples.

- An inbound file contains data that needs to be loaded using different payroll business objects in HCM Data Loader. Here, the content of the file needs to be split across more than one HCM Data Loader file.
- You might create a transformation formula to convert an attribute value in the file to another value that you derive using value sets.
- You want to change a person number into an assignment number. In this case, you'll use a more complex formula to convert the attributes.

You use the **Load Data From File** flow to transform your data into the HCM Data Loader file format using your transformation formula.

As this table shows, the two flow patterns are secured using these privileges:

Flow Pattern	Privileges
Submit Payroll Flow	PAY_SUBMIT_PAYROLL_FLOW_PRIV
Load HCM Data	HRC_LOAD_HCM_DATA_PRIV

This example specifies the file name in the formula as `PersonalPaymentMethod`, the file discriminator as `PersonalPaymentMethod`, and the business operation as MERGE.

```
/*HDL Related Outputs*/
 FileName = 'PersonalPaymentMethod'
 BusinessOperation = 'MERGE'
 FileDiscriminator = 'PersonalPaymentMethod'
```

To view details about the file name, file discriminator, and a list of supported business operations, use the **View Business Objects** task in the Data Exchange work area.

1. On the View Business Objects page, search for and select your business object. In this example, the business object is Personal Payment Method.
2. On the Component Details page, you can find the name of the file, and the file discriminator and a list of supported actions for the object.

Related Topics

- How You Transform Data Using Payroll Transformation Formula for HCM Data Loader
- How To Create A Program for Automation
- Submit the Load Data From File Flow

How You Transform Data

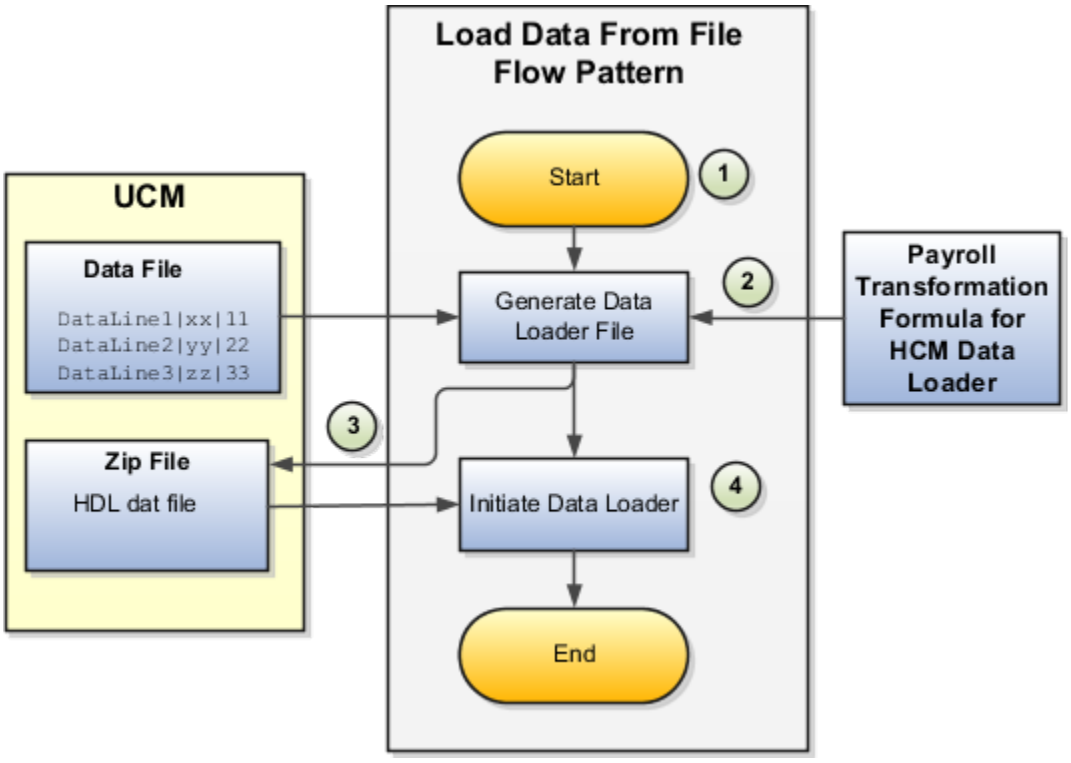
Use the **Load Data From File** flow to transform data in the source file into a format that's supported by HCM Data Loader.

You can submit this flow independently or include it in a flow that you create for automating data loads on a periodic basis. When you submit the flow, either manually or using a web service, you must specify a transformation formula to transform the data, as needed.

The flow contains these two tasks that help you to transform data into a HCM Data Loader format:

- Generate Data Loader File
- Initiate Data Loader Task

As this figure shows, the first step is to submit the **Load Data From File** flow. This flow takes data from the flat file and generates an equivalent file format for the data present in the input file.



Perform these steps to transform data using Payroll Transformation Formula for HCM Data Loader:

1. On the Home page, click the **Submit a Flow** quick action under the **My Clients Groups** tab. On the Flow Submission page, search for, select, and submit the **Load Data From File** flow pattern.
2. The flow invokes the Payroll Transformation Formula for the Content ID. Typically, you create your transformation formula for HCM Data Loader on the Manage Fast Formulas page. The type of the formula should be HCM Data Loader.
3. The Generate Data Loader File task reads the data file line by line, producing an equivalent HCM Data Loader format for each line. Finally, it creates a compressed file of all the transformed data files and uploads to the Oracle WebCenter Content server. Also, the task records the Content ID.
4. The **Initiate Data Loader** task takes the Content ID for the file generated by the **Generate Data Loader File** task. And it invokes HCM Data Loader. HCM Data Loader validates the data and creates valid records in the HCM cloud.

   The table shows the tasks and the privileges that they're secured with:

Task	Privilege
Submit Payroll Flow	PAY_SUBMIT_PAYROLL_FLOW_PRIV
Load HCM Data	HRC_LOAD_HCM_DATA_PRIV

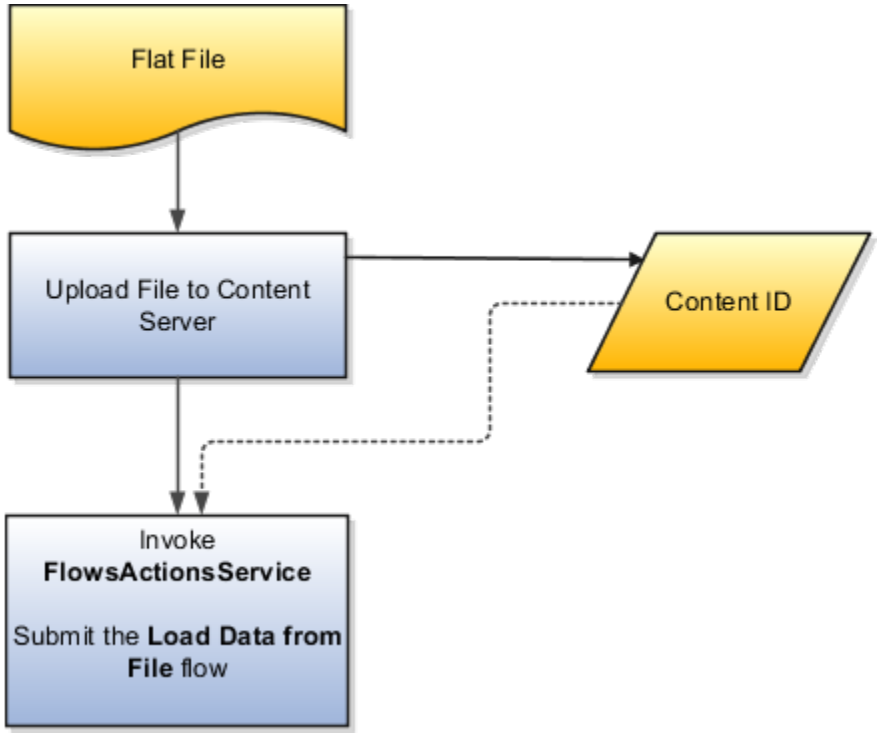
Related Topics

- How To Create A Program for Automation
- Submit the Load Data From File Flow
- Transformation Formula Input Variables

How To Create A Program for Automation

You can submit the **Load Data from File** flow by using a web service.

As this figure shows, your program uploads the source file to content server, and retrieves the content ID for the Flow Actions Service web service. Then, the program calls the Flow Actions web service by supplying certain parameters.



When calling the web service, your program supplies these parameters.

- Name of the flow pattern, which is **Load Data from File**
- Content ID of the uploaded file
- Unique name to identify the flow instance being submitted
- Process configuration group ID for special processing (optional)
- Transformation formula ID (mandatory)

For more information about the Flow Actions Service web service, refer to the SOAP Web Services for Oracle HCM Cloud guide. For examples of its usage for automating file uploads, refer to the attachment for HCM Data Loader User Guide (1664133.1) on My Oracle Support at https://support.oracle.com.

Related Topics

- Submit the Load Data From File Flow
- Transformation Formula Input Variables
- Payroll Transformation Formula Operations
- Sample Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for Multiple Business Objects

Submit the Load Data From File Flow

On the Home page, click the **Submit a Flow** quick action under the My Clients Groups tab. On the Flow Submission page, submit the **Load Data from File** flow pattern to transform data in your source file into the HDL format.

Assumptions

This procedure has these assumptions.

- You have the Human Capital Management Integration Specialist role.
- You have the source file ready to upload to Oracle WebCenter Content.
- If you have already uploaded the source file, you have the content ID handy.

Note: To upload files to the content server, browse to the source file on your file system, check it in to the content server, and retrieve its Content ID. For more information, see Oracle Fusion Middleware Using Oracle WebCenter Content guide.

Before You Begin

Before you submit the flow, ensure that you meet these prerequisites.

Characteristics	What You Should Do
Data transformation	If the data in the source file requires transformation, create and compile a transformation formula using the HCM Data Loader formula type. On the Home page, click the **Fast Formulas** quick action under the **My Clients Group** tab. You can now specify the processing parameters for your process configuration group.
File encryption	Before loading encrypted files, ensure that the encryption keys exist for the secure file transfer. This process involves creating a service request, generating PGP key pairs, and sharing the encryption keys. Specify the **Payroll Batch Loader Encryption Type** parameter value for the process configuration group you select when running the flow or the web service. Valid values are `PGPSIGNED`, `PGPUNSIGNED`, and `NONE`. On the Home page, click the **Process Payroll Configuration** quick action under the My Clients group tab. Now, you can specify the processing parameters for your process configuration group.
Other processing parameters	Use the **Payroll Process Configuration** task to add parameters for the process configuration group. Examples of processing parameters include Batch Error Mode, Logging Area, Logging Category, and Threads.

1. On the Home page, click the **Submit a Payroll Flow** quick action under the **My Clients Groups** tab.
2. In the **Legislative Data Group** option, select a legislative data group.
3. Search for and select the **Load Data from File** flow pattern.
4. Click **Next**.
5. Enter the parameters, as shown in this table.

Field	Value
Payroll Flow	Descriptive name for this specific flow process.

Field	Value
Content Id	Enter the Content Id. The source file must already exist on the content server.
Transformation Formula	Select the required transformation formula. The type of the formula should be **HCM Data Loader**.
Process Configuration Group	Select your process configuration group.

6. On the Enter Parameters page, click **Next**.
7. On the Enter Flow Interaction page, click **Next**.
8. On the Schedule page, click **Next**.
9. On the Review page, click **Submit**.
10. In the confirmation dialog box, click **OK and View Checklist**.
11. On the Payroll Flow page, Task Details tab you should see a green check mark in the **Generate Data Loader File** and **Initiate Data Loader** rows, Task Type column. If not, on the toolbar, click the **Refresh** icon intermittently until you do.
12. Close the Payroll Flow page.
13. On the Overview page, search for and click your payroll flow.
14. View the process results.
15. Check for any errors or warnings.

Related Topics

- Transformation Formula Input Variables
- Payroll Transformation Formula Operations
- Return Values for Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for Multiple Business Objects

Transformation Formula Input Variables

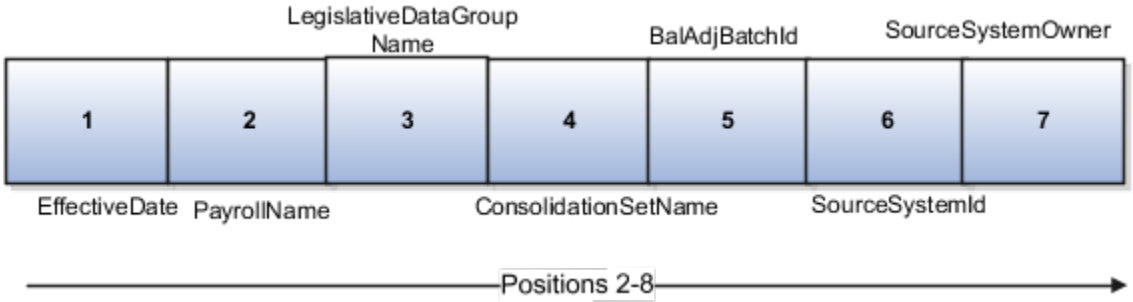
Variables, such as `FileName`, `FileDiscriminator` and `LINEREPEATNO`, are available for all formulas of HCM Data Loader Transformation formula type. Additional variables may be available depending on the selected business object.

Positions

Using the transformation formula, you can assign attributes to the required position. Positions can range from 1 to N. Depending upon the business object, the positions can be either optional or mandatory.

Example:

This figure shows the different attributes for positions 2 through 8 for Balance Adjustments.



In this example, you assign attributes to positions 2 through 8.

- **POSITION2**: **EffectiveDate**
- **POSITION3**: **PayrollName**
- **POSITION4**: **LegislativeDataGroupName**
- **POSITION5**: **ConsolidationSetName**
- **POSITION6**: **BalAdjBatchId**
- **POSITION7**: **SourceSystemId**
- **POSITION8**: **SourceSystemOwner**

FileName, FileDiscriminator, and BusinessOperation

FileName, **FileDiscriminator**, and **BusinessOperation** variables are required for all transformations.

Here are the details of these variables.

- **FileName** is the name of the file for the business object.
- **FileDiscriminator** is the file discriminator for the business object.
- **BusinessOperation** refers to the operation, such as Merge or Delete that are performed by the HCM Data Loader process on the transformed file.

Here's an example of values that you can supply for the input variables: **FileName**, **FileDiscriminator**, and **BusinessOperation**.

```
FileName = 'BalanceAdjustmentHeader'
BusinessOperation = 'MERGE'
FileDiscriminator = POSITION1
```

LINEREPEAT And LINEREPEATNO

LINEREPEAT allows a single line of input to be processed multiple times. And **LINEREPEATNO** indicates the number of repetitions.

For example, for time entry, there might be a regular time entry wage followed by a premium time entry wage.

Example: The Element Entry file contains these details.

```
Update|ElementEntryValue|Vision Corporation US LDG|WLM_Salary|2019/04/15|4712/12/31|E955160008191355-2|
Amount|1002|2|E
Update|ElementEntryValue|Vision Corporation US LDG|WLM_Salary|2019/04/15|4712/12/31|E955160008191355-2|
Amount|1003|3|E
```

The input line can be processed twice. The output file contains the element entry and element entry value as shown in this sample code snippet.

```
ELSE IF OPERATION='MAP' THEN
(
 LegislativeDataGroupName=POSITION3
 ElementName=POSITION4
 EffectiveStartDate=POSITION5
 EffectiveEndDate=POSITION6
 AssignmentNumber=POSITION7
 InputValueName=POSITION8
 ScreenEntryValue=POSITION9
 MultipleEntryCount=POSITION10
 EntryType=POSITION11
IF LINEREPEATNO=1 THEN
 (
 BusinessOperation='MERGE'
 BusinessObject='Element Entry'
 FileName = 'ElementEntry'
 FileDiscriminator ='ElementEntry'
 LINEREPEAT = 'Y'
 RETURN BusinessOperation,FileDiscriminator,FileName
 )
ELSE
(
 BusinessOperation='MERGE'
 BusinessObject='Element Entry Value'
 FileName = 'ElementEntry'
 FileDiscriminator = 'ElementEntry'
 LINEREPEAT = 'N'
 RETURN BusinessOperation,FileDiscriminator,FileName
 )
```

Note:

- The length of a line in the incoming raw file can't be more than 1000 characters
- The length of an attribute between two delimiters can't be more than 255 characters

Related Topics

- Payroll Transformation Formula Operations
- Return Values for Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for Multiple Business Objects

Payroll Transformation Formula Operations

The transformation formula is invoked several times to derive different components that are required for processing the incoming data.

This table explains the various operations that you can do with the formula.

Operation Type	Return Value	Example
FILETYPE	OUTPUTVALUE	DELIMITED
DELIMITER	OUTPUTVALUE	|

Operation Type	Return Value	Example
READ	OUTPUTVALUE	NONE
MAP	Business Object Attributes	NA
NUMBEROFBUSINESSOBJECTS	OUTPUTVALUE	2
METADATALINEINFORMATION	METADATAn	METADATA1

Note: Remember that only 'Delimited' file type is supported.

Delimiter

The default delimiter that separates values is a pipe character. If your file uses a different delimiter, you must set the delimiter you want your formula.

This example specifies a comma character as the delimiter.

```
/* Calculations */
IF OPERATION='FILETYPE' THEN
 OUTPUTVALUE='DELIMITED'
ELSE IF OPERATION='DELIMITER' THEN
 OUTPUTVALUE=','
```

Note: Ensure that the delimiter you enter in the formula is a single non-ASCII character and not part of any of the values to upload.

MAP

The MAP operation defines the return values related to a particular object. The return values must have the same names as the attributes specified in the application for that object.

For example, these RETURN values can be used to generate an Element Entry dat file.

```
RETURN
 BusinessOperation,FileDiscriminator,FileName,AssignmentId,AssignmentNumber,CreatorType,DateEarned,EffectiveEndDate,
```

Here, the `BusinessOperation` is set to MERGE and the `BusinessObject` is set to Element Entry.

METADATALINEINFORMATION

The application generates the file either with all defined attributes or with only specified attributes, depending on whether you specify a value for `METADATALINEINFORMATION` or not.

1. If you don't specify a value for `METADATALINEINFORMATION`, then the application generates `METADATLINE` in the transformed file with all defined attributes for the business object.
2. If you specify a value, then the transformed file will contain only the attributes that you specified.

For the `METADATALINEINFORMATION` operation, you specify an array per business object being processed in the formula. The number of arrays should match the number specified in the `NUMBEROFBUSINESSOBJECTS` operation. The name

of the array should be `METADATA` with the number as suffix . For example, `RETURN METADATA1, METADATA2` when the `NUMBEROFBUSINESSOBJECTS` is 2.

Note: The first two entries in the array are reserved to specify the `FileName` and `FileDiscriminator` of the business object.

Additionally, for `METADATALINEINFORMATION`, you can specify attributes with special characters for that business objects.

Notice that in this example `BalAdjBatchId(SourceSystemId)` has parenthesis.

If the file contains either Flexfield or SourceSystem references, then the application can't resolve the default mapping of output parameter names and attributes.

Let's consider this syntax: `jobEffSegment1(PER_JOBS_EIT_EFF=context)`. To allow this construct to be generated in the HCM Data Loader file, you define the `METADATA` line in the transformation formula. For each business object that appears in the output, you must define the `METADATA` content in an array.

Example:

```
METADATA2[1] = 'Job' /*FileName*/
METADATA2[2] = 'JobExtraInfo' /*FileDiscriminator*/
METADATA2[3] = 'EffectiveStartDate'
METADATA2[4] = 'EffectiveEndDate'
METADATA2[5] = 'JobCode'
METADATA2[6] = 'SetCode'
METADATA2[7] = 'FLEX:PER_JOBS_EIT_EFF'
METADATA2[8] = 'EFF_CATEGORY_CODE'
METADATA2[9] = 'InformationType'
METADATA2[10] = 'JeiInformationCategory'
METADATA2[11] = 'LegislationCode'
METADATA2[12]= 'SequenceNumber'
METADATA2[13]= 'jobEffSegment1(PER_JOBS_EIT_EFF=job-eff-context)'
```

Here's how the generated HCM Data Loader file looks like.

```
METADATA|JobExtraInfo|EffectiveStartDate|EffectiveEndDate|JobCode|SetCode|FLEX:PER_JOBS_EIT_EFF|
EFF_CATEGORY_CODE|InformationType|JeiInformationCategory|LegislationCode|SequenceNumber|
jobEffSegment1(PER_JOBS_EIT_EFF=job-eff-context)
```

NUMBEROFBUSINESSOBJECTS

This operation indicates the number of business objects being processed in the formula.

Related Topics

- Return Values for Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for Multiple Business Objects

Return Values for Payroll Transformation Formula for HCM Data Loader

The return values for HCM Data loader formulas vary based on the business object and task action.

They are the same as the attribute names and must include `BusinessOperation`, `FileName`, and `FileDiscriminator`.

Here's an example of return values.

```
/*Return Values*/
RETURN BusinessOperation,FileName,FileDiscriminator,Attribute1,Attribute2,...,Attributen
/*Attributes for a particular Business Object can be found from the View Business Objects UI under the HCM
 Data Loader task in the Data Exchange Work Area */
```

For the `NUMBEROFBUSINESSOBJECTS` and `METADATALINEINFORMATION` operations, the `RETURN` statement is as follows.

```
/*Return Values for NUMBEROFBUSINESSOBJECTS and METADATALINEINFORMATION Operation*/
IF OPERATION='FILETYPE' THEN
 OUTPUTVALUE='DELIMITED'
ELSE IF OPERATION='DELIMITER' THEN
 OUTPUTVALUE='|'
ELSE IF OPERATION='READ' THEN
 OUTPUTVALUE='NONE'
ELSE IF OPERATION = 'NUMBEROFBUSINESSOBJECTS' THEN(
 OUTPUTVALUE = '2'
 RETURN OUTPUTVALUE
 )
ELSE IF OPERATION = 'METADATALINEINFORMATION' THEN
 (
 METADATA1[1] = 'BalanceAdjustmentHeader' /*FileName*/ /*Reserved*/
 METADATA1[2] = 'BalanceAdjustmentHeader' /*FileDiscriminator*/ /*Reserved*/
METADATA1[3] = 'LegislativeDataGroupName'
 METADATA1[4] = 'BatchName'
 METADATA1[5] = 'SourceSystemId'
 METADATA1[6] = 'SourceSystemOwner'

 METADATA2[1] = 'BalanceAdjustmentHeader' /*FileName*/ /*Reserved*/
 METADATA2[2] = 'BalanceAdjustmentGroup' /*FileDiscriminator*/ /*Reserved*/
 METADATA2[3] = 'EffectiveDate'
 METADATA2[4] = 'PayrollName'
 METADATA2[5] = 'LegislativeDataGroupName'
 METADATA2[6] = 'ConsolidationSetName'
 METADATA2[7] = 'BalAdjBatchId(SourceSystemId)'
 METADATA2[8] = 'SourceSystemId'
 METADATA2[9] = 'SourceSystemOwner'
 RETURN METADATA1, METADATA2 /*Only two as Return value for NUMBEROFBUSINESSOBJECTS is 2*/
 )
```

You can define variables with special characters. For example, use this structure to return the `BalAdjBatchId(SourceSystemId)` Source ID.

```
/*Return Values for the MAP Operation*/
 FileName = 'BalanceAdjustmentHeader'
 BusinessOperation = 'MERGE'
 FileDiscriminator = POSITION1
 EffectiveDate = POSITION2
 PayrollName = POSITION3
 LegislativeDataGroupName = POSITION4
 ConsolidationSetName = POSITION5
 "BalAdjBatchId(SourceSystemId)"= POSITION6
 SourceSystemId = POSITION7
 SourceSystemOwner = POSITION8

 RETURN BusinessOperation, FileDiscriminator, FileName, EffectiveDate, PayrollName,
 LegislativeDataGroupName, ConsolidationSetName, "BalAdjBatchId(SourceSystemId)", SourceSystemId,
 SourceSystemOwner

/*Note BalAdjBatchId(SourceSystemId) is enclosed by double quotes while assigning value as well as while
 putting it in the return values list */
```

Related Topics

- Overview of Payroll Transformation Formula For HCM Data Loader
- How You Transform Data Using Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for Multiple Business Objects

Sample Payroll Transformation Formula

In this example, the transformation formula specifies the transformation mechanism for an incoming comma separated delimited file. The formula's return values are the same as the list of attributes for the personal payment method object.

Here's the sample raw file for personal payment method, with comma as the delimiter.

```
2018/04/04,1,ZHRX_VS_US_TPPI_LDG_ONE,E955160008191423,ZHRX_VS_US_TPPI_Check,PPM1,M,10
```

And this code snippet has the formula for this example.

```
/*****************************************************************
FORMULA NAME: Load Personal Payment Method
FORMULA TYPE: HCM Data Loader
*****************************************************************/
/* Inputs */
INPUTS ARE OPERATION (text), LINENO (number), LINEREPEATNO (number),POSITION1 (text), POSITION2 (text),
 POSITION3 (text), POSITION4 (text), POSITION5 (text), POSITION6 (text), POSITION7 (text), POSITION8 (text)

DEFAULT FOR POSITION1 IS 'NO DATA'
DEFAULT FOR POSITION2 IS 'NO DATA'
DEFAULT FOR POSITION3 IS 'NO DATA'
DEFAULT FOR POSITION4 IS '2'
DEFAULT FOR POSITION5 IS '100'
DEFAULT FOR POSITION6 IS 'NO DATA'
DEFAULT FOR POSITION7 IS 'NO DATA'
DEFAULT FOR POSITION8 IS 'NO DATA'
DEFAULT FOR LINEREPEATNO IS 1

IF OPERATION='FILETYPE' THEN
 OUTPUTVALUE='DELIMITED'
ELSE IF OPERATION='DELIMITER' THEN

(
 OUTPUTVALUE=','
 RETURN OUTPUTVALUE
)
ELSE IF OPERATION='READ' THEN
 OUTPUTVALUE='NONE'
ELSE IF OPERATION='MAP' THEN
 /*HDL Related Outputs*/
 (
 FileName = 'PersonalPaymentMethod'
 BusinessOperation = 'MERGE'
 FileDiscriminator = 'PersonalPaymentMethod'
 EffectiveStartDate=POSITION1
 ProcessingOrder=POSITION2
 LegislativeDataGroupName=POSITION3
 AssignmentNumber=POSITION4
 OrganizationPaymentMethodCode=POSITION5
 PersonalPaymentMethodCode=POSITION6
 PaymentAmountType=POSITION7
 Amount=POSITION8
 RETURN
 BusinessOperation,FileName,FileDiscriminator,EffectiveStartDate,PersonalPaymentMethodCode,AssignmentNumber,Amount,P
 )
ELSE
 OUTPUTVALUE='NONE'
RETURN OUTPUTVALUE
/* End Formula Text */
```

Related Topics

- Overview of Payroll Transformation Formula For HCM Data Loader
- How You Transform Data Using Payroll Transformation Formula for HCM Data Loader
- Sample Payroll Transformation Formula for Multiple Business Objects

Sample Payroll Transformation Formula for Multiple Business Objects

In this example, the formula uses the user defined tables and personal payment method business objects. It converts the Person Number in the flat file into Assignment Number and uses the `METADATALINEINFORMATION` and `NUMBEROFBUSINESSOBJECTS` operations.

Here's the sample of the raw input file.

```
PPM|2018/04/04|1|ZHRX_VS_US_TPPI_LDG_ONE|955160008191423|ZHRX_VS_US_TPPI_Check|PPM1|M|10
UDT|SM_UDT_4|Range|Number|Test UDT|USA LDG
```

And this code snippet has the formula for this example.

```
/*********************************************************
FORMULA NAME: Load User Defined Table and Personal Payment Method
FORMULA TYPE: HCM Data Loader
**********************************************************/
/* Inputs */
INPUTS ARE OPERATION (text), LINENO (number), LINEREPEATNO (number),POSITION1 (text), POSITION2 (text),
 POSITION3 (text), POSITION4 (text), POSITION5 (text), POSITION6 (text), POSITION7 (text), POSITION8
 (text),POSITION9 (text)
DEFAULT FOR POSITION1 IS 'NO DATA'
DEFAULT FOR POSITION2 IS 'NO DATA'
DEFAULT FOR POSITION3 IS 'NO DATA'
DEFAULT FOR POSITION4 IS '2'
DEFAULT FOR POSITION5 IS '100'
DEFAULT FOR POSITION6 IS 'NO DATA'
DEFAULT FOR POSITION7 IS 'NO DATA'
DEFAULT FOR POSITION8 IS 'NO DATA'
DEFAULT FOR POSITION9 IS 'NO DATA'
DEFAULT FOR LINEREPEATNO IS 1
IF OPERATION='FILETYPE' THEN
 OUTPUTVALUE='DELIMITED'
ELSE IF OPERATION='DELIMITER' THEN
 OUTPUTVALUE='|'
ELSE IF OPERATION='READ' THEN
 OUTPUTVALUE='NONE'
ELSE IF OPERATION = 'NUMBEROFBUSINESSOBJECTS' THEN
 (
 OUTPUTVALUE = '2'
 RETURN OUTPUTVALUE
 )
ELSE IF OPERATION = 'METADATALINEINFORMATION' THEN
 (
 METADATA1[1] = 'UserDefinedTable' /*FileName*/
 METADATA1[2] = 'UserDefinedTable' /*FileDiscriminator*/
 METADATA1[3] = 'UserTableCode'
 METADATA1[4] = 'RangeOrMatch'
 METADATA1[5] = 'UserKeyUnits'
 METADATA1[6] = 'UserRowTitle'
 METADATA1[7] = 'UserTableName'
 METADATA1[8] = 'LegislativeDataGroupName'
 METADATA2[1] = 'PersonalPaymentMethod' /*FileName*/
 METADATA2[2] = 'PersonalPaymentMethod' /*FileDiscriminator*/
 METADATA2[3] = 'EffectiveStartDate'
 METADATA2[4] = 'PersonalPaymentMethodCode'
```

```
 METADATA2[5] = 'AssignmentNumber'
 METADATA2[6] = 'Amount'
 METADATA2[7] = 'ProcessingOrder'
 METADATA2[8] = 'OrganizationPaymentMethodCode'
 METADATA2[9] = 'PaymentAmountType'
 METADATA2[10] = 'LegislativeDataGroupName'
 RETURN METADATA1, METADATA2
 )
ELSE IF OPERATION='MAP' THEN

 IF POSITION1='UDT' THEN
 (
 FileName = 'UserDefinedTable'
 BusinessOperation = 'MERGE'
 FileDiscriminator = 'UserDefinedTable'
 UserTableCode = POSITION2
 IF POSITION3='Range' THEN
 (
 RangeOrMatch = 'R'
 )
 IF POSITION4='Number' THEN
 (
 UserKeyUnits = 'N'
 )
 UserRowTitle = POSITION5
 UserTableName = POSITION2
 LegislativeDataGroupName = POSITION6
 RETURN
 BusinessOperation,FileDiscriminator,FileName,UserTableCode,RangeOrMatch,UserKeyUnits,UserRowTitle,UserTableName,Leg
 )
 IF POSITION1='PPM' THEN
 (
 FileName = 'PersonalPaymentMethod'
 BusinessOperation = 'MERGE'
 FileDiscriminator = 'PersonalPaymentMethod'
 EffectiveStartDate=POSITION2
 ProcessingOrder=POSITION3
 LegislativeDataGroupName=POSITION4
 AssignmentNumber=GET_VALUE_SET('SAMPLE_GET_ASG_NUM','|=PERSON_NUMBER='''||POSITION5||''''')
 OrganizationPaymentMethodCode=POSITION6
 PersonalPaymentMethodCode=POSITION7
 PaymentAmountType=POSITION8
 Amount=POSITION9
 RETURN
 BusinessOperation,FileName,FileDiscriminator,EffectiveStartDate,PersonalPaymentMethodCode,AssignmentNumber,Amount,P
 )
ELSE
 OUTPUTVALUE='NONE'
RETURN OUTPUTVALUE
/* End Formula Text */
```

Note: To debug value sets, create a BI report with this query to return the required data.

```
SELECT pay_ff_functions.gvs ('SAMPLE_GET_ASG_NUM','|=PERSON_ID=100000012092216') value FROM dual;
```

Related Topics

- Overview of Payroll Transformation Formula For HCM Data Loader
- How You Transform Data Using Payroll Transformation Formula for HCM Data Loader
- How To Create A Program for Automation

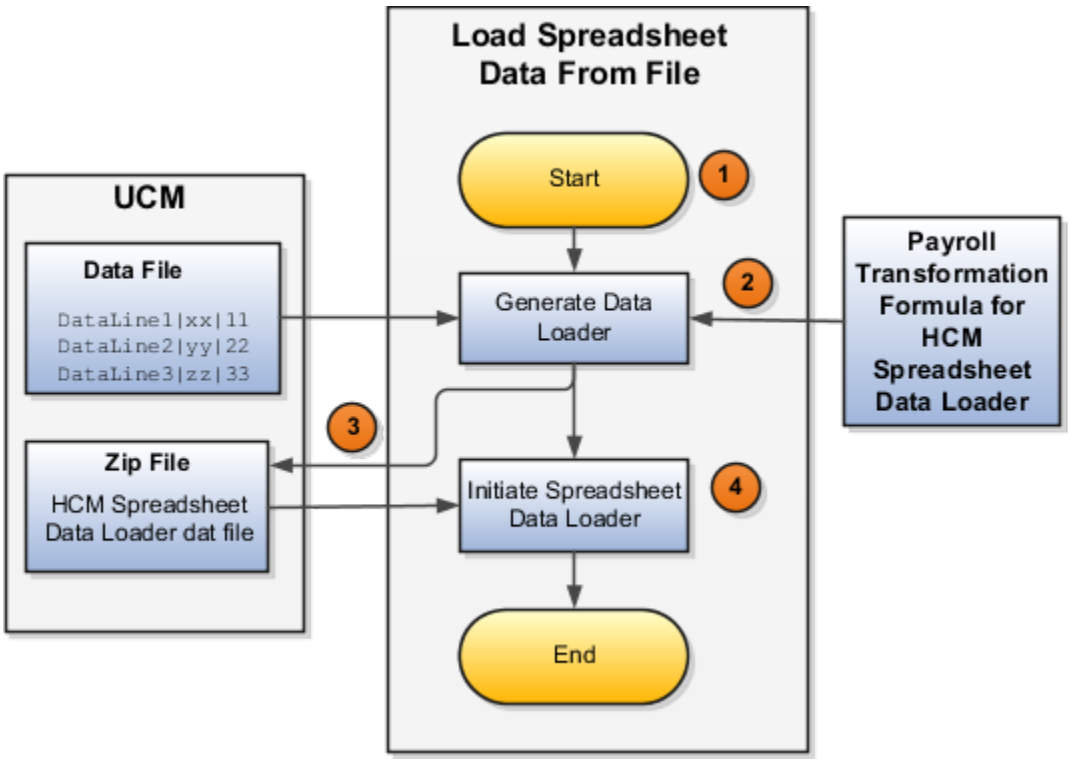
Payroll Transformation Formula for HCM Spreadsheet Data Loader

Overview of Payroll Transformation Formula for HCM Spreadsheet Data Loader

You can use HCM Spreadsheet Data Loader to load all payroll objects that HCM Data Loader supports.

As the first step,you create a spreadsheet template for the required object from the Data Exchange Work area and further download the template in CSV format. You can download CSV and XML file templates from a spreadsheet template. The Payroll Transformation Formula for HCM Spreadsheet Data Loader transforms the raw delimited file to a format that suits the template.

This figure summarizes the process of transforming data that's uploaded using HCM Spreadsheet Data Loader.



Here's a summary of how the transformation process works.

1. On the Home page, click the **Submit a Flow** quick action under the **My Clients Groups** tab. Submit the **Load Spreadsheet Data File** flow pattern.

   The flow is secured using these privileges:

Flow	Privilege
Submit Payroll	`PAY_SUBMIT_PAYROLL_FLOW_PRIV`

Flow	Privilege
Load Data using HCM Spreadsheet Data Loader	HRC_LOAD_DATA_USING_HSDL_PRIV

2. This flow pattern invokes the transformation formula for the Content ID and has these tasks:
    a. Generate Data Loader File
    b. Initiate Spreadsheet Data Loader
3. The **Generate Data Loader File** task reads the data file line by line, producing an equivalent HCM Spreadsheet Data Loader format for each line. Finally, it creates a compressed file of all the transformed data files and uploads it to Oracle WebCenter Content server.
4. The **Initiate Spreadsheet Data Loader** task takes the compressed file generated by the **Generate Data Loader File** task and invokes the HCM Spreadsheet Data Loader. The HCM Spreadsheet Data Loader creates the required data in the HCM Cloud.

Related Topics

- Guidelines for Using HCM Spreadsheet Data Loader
- How Data Is Uploaded Using HCM Spreadsheet Data Loader
- HCM Spreadsheet Data Loader Templates
- Create and Edit Spreadsheet Templates
- Guidelines for Designing Spreadsheet Templates

Sample Payroll Transformation Formula for HCM Spreadsheet Data Loader

In this example, the transformation formula specifies the transformation mechanism for an incoming pipe separated delimited file. The formula's return values are the same as the list of attributes in the template file for the User Defined Table business object.

And this code snippet has the formula for this example.

```
/* Inputs */
INPUTS ARE OPERATION (text), LINENO (number), LINEREPEATNO (number),POSITION1 (text), POSITION2 (text),
 POSITION3 (text), POSITION4 (text), POSITION5 (text), POSITION6 (text), POSITION7 (text), POSITION8 (text)
DEFAULT FOR POSITION1 IS 'NO DATA'
DEFAULT FOR POSITION2 IS 'NO DATA'
DEFAULT FOR POSITION3 IS 'NO DATA'
DEFAULT FOR POSITION4 IS 'NO DATA'
DEFAULT FOR POSITION5 IS 'NO DATA'
DEFAULT FOR LINEREPEATNO IS 1
IF OPERATION='FILETYPE' THEN
OUTPUTVALUE='DELIMITED'
ELSE IF OPERATION='DELIMITER' THEN
OUTPUTVALUE='|'
ELSE IF OPERATION='READ' THEN
OUTPUTVALUE='NONE'
ELSE IF OPERATION = 'NUMBEROFBUSINESSOBJECTS' THEN
(
OUTPUTVALUE = '1'/*Always be 1*/
RETURN OUTPUTVALUE
)
ELSE IF OPERATION = 'METADATALINEINFORMATION' THEN
(
METADATA1[1] = 'SMUDT' /*TemplateCode*/
METADATA1[2] = 'UserDefinedTable' /*FileDiscriminator*/
```

```
METADATA1[3] = 'UserDefinedTable_UserTableCode'
METADATA1[4] = 'UserDefinedTable_LegislativeDataGroupName'
METADATA1[5] = 'UserDefinedTable_UserTableName'
METADATA1[6] = 'UserDefinedTable_RangeOrMatch'
METADATA1[7] = 'UserDefinedTable_UserRowTitle'
METADATA1[8]= 'UserDefinedTable_UserKeyUnits'
RETURN METADATA1 /*You can return only one METADATA for the respective template*/
)
ELSE IF OPERATION='MAP' THEN
(
FileName = 'SMUDT'
BusinessOperation = 'HSDL'
FileDiscriminator = 'UserDefinedTable'
UserDefinedTable_UserTableCode = POSITION1
UserDefinedTable_LegislativeDataGroupName = POSITION2
UserDefinedTable_UserTableName = POSITION1
UserDefinedTable_RangeOrMatch = POSITION3
UserDefinedTable_UserRowTitle = POSITION4
UserDefinedTable_UserKeyUnits = POSITION5
RETURN
 BusinessOperation,FileDiscriminator,FileName,UserDefinedTable_UserTableCode,UserDefinedTable_LegislativeDataGroupNa
)
ELSE
OUTPUTVALUE='NONE'
RETURN OUTPUTVALUE
/* End Formula Text */
```

Note: The template code needs to be used in the Fast Formula.

Related Topics

- Guidelines for Using HCM Spreadsheet Data Loader
- How Data Is Uploaded Using HCM Spreadsheet Data Loader
- HCM Spreadsheet Data Loader Templates
- Create and Edit Spreadsheet Templates
- Guidelines for Designing Spreadsheet Templates

User Defined Tables

Example to Create a User-Defined Table for Matched Row Values

User-defined tables store a date effective list of values that you can use in a formula. Set up your own structured tables to hold data such as wage codes or shift differentials.

In this example, you create a user-defined table to store values for workers' schedules. To create a new table, use the User-Defined Tables task in the My Clients Group tab.

Scenario

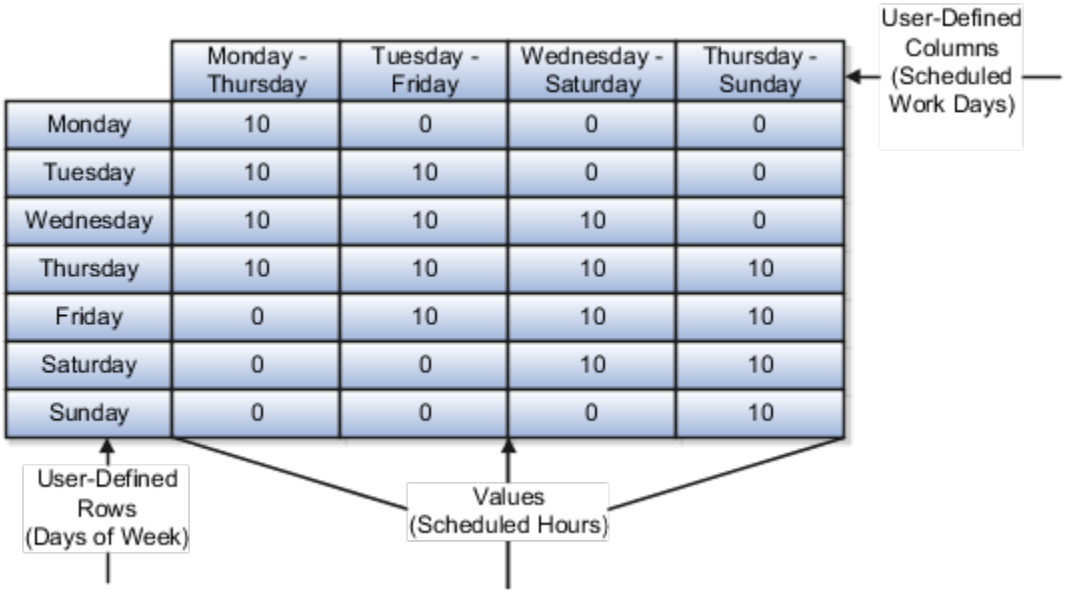
Your organization works on a 10 hour a day, four day a week rotating schedule. The employees work for four consecutive days, 10 hours a day.

User-Defined Table Components

These are the main components of the user-defined table.

- Basic details
- Columns
- Rows
- Values

As this figure shows, the user-defined table contains the schedules available in your organization.



Resulting User-Defined Table Components

This table shows the resulting user-defined table components for this scenario.

Component	In This Example
Basic Details	The Unit of measure is a text because the row values are Days of the Week. The row title is Days of the Week.
Rows	Contain the name of a day of the week.
Columns	These are the schedules, such as Monday - Thursday. The data type for each column is number because they hold a count of hours.
Values	Represent the number of hours to work each day in each schedule.

Related Topics

- User Table Validation Formula Type

Example to Create a User-Defined Table for a Range of Row Values

Click the User-Defined Tables quick action under the My Clients Groups table to create a user-defined table to store values for stock option allocations.

Scenario

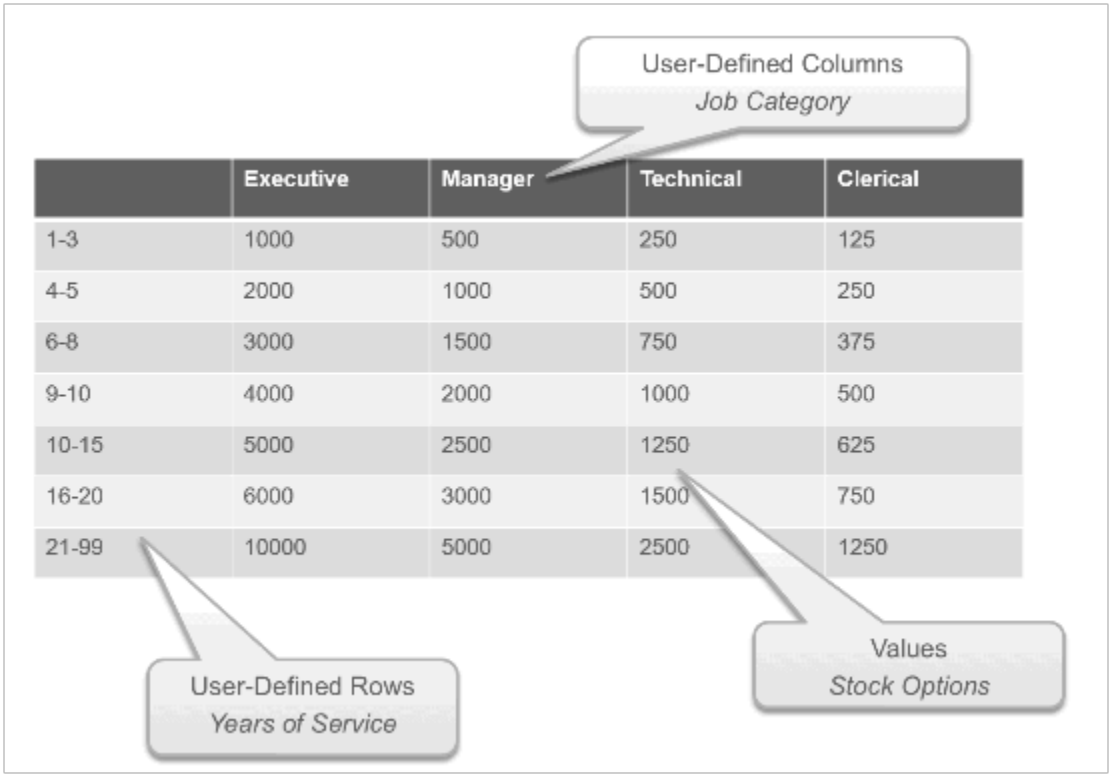
Each year, your organization offers stock options to its employees. The amount of options depends on years of service and job category of the employee receiving them.

User-Defined Table Components

The main components of the user-defined table are the definition, columns, rows, and values.

- Basic details
- Columns
- Rows
- Values

As this image shows, the user-defined table contains stock option allocations by job category and years of service.



Resulting User-Defined Table Components

This table shows the resulting user-defined table components for this scenario.

Component	In This Example
Basic Details	The unit of measure is a number since the row values are years. The row title is **Years of Service**.
Rows	Represent a range of years of service during which employees receive the same number of stock options.
Columns	Represent job categories and the data type of each column is number because they hold a number of stock options.
Values	Represent the number of stock options awarded to the specified job category during the specified years of service.

Related Topics

- User Table Validation Formula Type

Create a User-Defined Table

In this example, you create a user-defined table to hold the bonus percentages based on a person's years of service and department.

This table shows the various user-defined table components and values for those components:

- Rows represent the years of service.
- Columns represent the department.

Years of Service	Accounting	Payroll
1-5	.10	.08
6-10	.20	.16
11-99	.30	.24

Step 1: Create a User-Defined Table

1. On the Home page, click the **User-Defined Tables** quick action under the **My Clients** tab.
2. On the User-Defined Tables page in the Search Results area, click Create.
3. On the Create User-Defined Table dialog box, in the Legislative Data Group field, select US Legislative Data Group.
4. In the **Effective As-of Date** field, enter 1/1/2016.
5. Click **Continue**.

6. On the Create: User-Defined Table page in the Basic Details section in the **Name** field, enter **Bonus_Percent**.
7. In the **Range or Match** field, select Range.
8. In the **Row Title** field, enter **Years of Service**.

Step 2: Define the Accounting and Payroll Columns

1. In the User-Defined Columns section, click Create.
    - In the **Column Name** field, enter **Accounting**.
    - In the **Data Type** field, select **Number**.
2. In the User-Defined Columns section, click **Create**.
    - In the **Column Name** field, enter **Payroll**.
    - In the **Data Type** field, select **Number**.

Specify the Bonus Percent Range

1. In the User-Defined Rows section, click **Create**.
    - In the **Sequence** field, enter **10**.
    - In the **Low Range** field, enter **1** as the low range.
    - In the **High Range** field, enter **5** as the high range.
2. In the User-Defined Rows section, click **Create**.
    - In the **Sequence** field, enter **20**.
    - In the **Low Range** field, enter **6** as the low range.
    - In the High Range field, enter 10 as the high range.
3. In the User-Defined Rows section, click Create.
    - In the **Sequence** field, enter **30**.
    - In the **Low Range** field, enter **11** as the low range.
    - In the **High Range** field, enter **99** as the high range.

Step 4: Add Table Values for the Accounting Column

1. In the User-Defined Columns section, click Accounting.
2. Click **Next**.
3. On the Create User-Defined Table: User-Defined Table Values page in the User-Defined Table Values section, click **Create**.
    - On the Add User-Defined Table Values dialog box, select the first row, and then click **OK**.
    - In the **Value** field, enter **.10**.
4. Click **Create**.
    - On the Add User-Defined Table Values dialog box, select the second row, and then click **OK**.
    - In the **Value** field, enter **.20**.
5. Click Create.

- On the Add User-Defined Table Values dialog box, select the third row and click **OK**.
- In the **Value** field, enter **.30**.

Step 5: Add Table Values for the Payroll column.

1. Click **Back**.
2. In the User-Defined Columns section, click **Payroll**.
3. Click **Next**.
4. On the Create User-Defined Table: User-Defined Table Values page in the User-Defined Table Values area, click **Create**.
   - On the Add User-Defined Table Values dialog box, select the first row, and then click **OK**.
   - In the **Value** field, enter **.08**.
5. Click **Create**.
   - On the Add User-Defined Table Values dialog box, select the second row, and then click **OK**.
   - In the **Value** field, enter **.16**.
6. Click **Create**.
   - On the Add User-Defined Table Values window, select the last row, and then click **OK**.
   - In the **Value** field, enter **.24**.
7. Click **Submit**.
8. On the User-Defined Tables page, click **Done**.

User Table Validation Formula Type

The User Table Validation formula type validates entries in user-defined tables. When you create or edit user-defined tables, select the formula in the Formula field for the user-defined columns.

You can use this formula type to ensure that entries are:

- Between a specified range
- Don't contain a negative value

You can use the EFFECTIVE_DATE (text) context for formulas of this type.

You must use one input variable called ENTRY_VALUE of data type `text`.

These return values are available to formulas of this type:

Return Value	Data Type	Required	Description
FORMULA_MESSAGE	Text	N	Returns a text message for either or both statuses. The message is displayed on the Create User-Defined Table: User-Defined Table Values page.
FORMULA_STATUS	Text	Y	Returns the value S (success) or E (error).

Return Value	Data Type	Required	Description

This formula checks whether the deduction value entered in the Union A column of the Union Dues table is between 10.00 and 20.00:

```
/* Formula Name: Union A Dues Validation */
/* Formula Type: User Table Validation */
INPUTS ARE entry_value (text)
IF TO_NUMBER(entry_value) < 10.00 OR
TO_NUMBER(entry_value) > 20.00
THEN
(
formula_status = 'e'
formula_message = 'Error: Union A dues must be between $10.00 and $20.00.'
)
ELSE
(
formula_status = 's'
formula_message = ' '
)
RETURN formula_status, formula_message
```

Fast Formulas

Overview of Using Fast Formulas

Fast Formula is a simple way to write formulas using English words and basic mathematical functions. You can use information from your database in formulas without learning the database structure or a programming language.

The **Elements** task generates standard element skip and calculation formulas, and you can modify these formulas based on your requirements. Use the **Fast Formulas** task to use formulas corresponding to one or more formula types, requiring specific formula inputs and outputs.

Uses of formula in payroll include:

- **Control Processing**
  - Payroll flow patterns: Control the repetition of a payroll flow.
  - Element skip: Control when elements are processed in a payroll run.
  - Work or payroll relationship groups: Define a set of people for payroll processing, data entry, or reporting.
- **Configuration**
  - Configure payment method preferences. For example, you can limit the number and types of payment methods.
- **Validation**
  - Element entry validation: Validate one or more element entry values. Provide a default value for an element entry value, or calculate entry values based on the user's entries in other entry values.
  - User table validation: Validate entries in user-defined tables.
- **Calculation**
  - Proration formulas control how payroll runs prorate element entries when they encounter an event such as a mid-period change in an element entry value.
  - Associate more than one payroll formula with each element to perform different processing for employee assignments with different statuses.
- **Data Loading**
  - Transformation formulas convert inbound data into a format that HCM Data Loader understands.

Note: Refer Using Fast Formula guide for more information about the general formula concepts.

Example of Writing a Fast Formula Using Formula Text

In this example, you use the text editor to create a fast formula.

Here are the key decisions when deciding on which formula to create:

Key Decisions	In This Example
Is the formula for a specific legislative data group?	No, this is a global formula that can be used by any legislative data group.
Are there any contexts used in this formula?	No
Are there any database item defaults?	Yes, PER_ASG_JOB_NAME
Are there any input value defaults?	No
What are the return values?	MIN_HOURS, MAX_HOURS, FREQUENCY

Key Decisions	In This Example

Creating a Fast Formula Using the Text Editor to Determine a Manager's Scheduled Hours

1. Search for and select **Fast Formulas** in **My Client Groups**.
2. Click **Create**.
3. Complete these fields:

Fields for the Fast Formula	Values for the Fast Formula
Formula Name	Manager Range of Scheduled Hours
Formula Type	Range of Scheduled Hours
Description	Manager's Range of Hours
Effective Start Date	1-Jan-2010

4. Click **Continue**.
5. Enter these formula details in the Formula Text section:

```
/* DATABASE ITEM DEFAULTS BEGIN */
DEFAULT FOR per_asg_job_name IS ' '
/* DATABASE ITEM DEFAULTS END */
JOB_1 = PER_ASG_JOB_NAME
IF JOB_1 = 'Manager' then
(MIN_HOURS = 25
MAX_HOURS = 40
FREQUENCY = 'H')
else
(MIN_HOURS = 20
MAX_HOURS = 35
FREQUENCY = 'H')
return MIN_HOURS, MAX_HOURS, FREQUENCY
```

6. Click **Compile**.
7. Click **Save**.

Example of Writing a Fast Formula Using Expression Editor

In this example, you create a fast formula that groups executive workers for reporting and processing. All executive workers are in department EXECT_10000.

After you create the formula, you need to add it to the object group parameters, so that only the workers that belong to the EXECT_10000 department are used in processing.

Here are the key decisions when deciding on which formula to create.

Key Decisions	In This Example
Is the formula for a specific legislative data group?	Yes, InVision
What's the formula type for this formula?	Payroll Relationship Group

Creating a Fast Formula Using the Expression Editor

1. On the Home page, click the **Fast Formulas** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Complete these fields:

Fields for Fast Formula	Values for Fast Formula
Formula Name	Executive Payroll Relationship Group
Type	Payroll Relationship Group
Description	Executive Workers
Legislative Data Group	Vision LDG
Effective As-of Date	1-Jan-2010
Type of Editor	Expression Builder **Note:** For more complex conditions to create a group, you can select Text. However, after you save the formula, you can't change the type of editor.

4. Click **Continue**.
5. In the Formula Details section, click **Add After** to add a row and complete these fields:

Conjunction	Database Item Name	Data Type	Operand	Literal Value
None applicable	DEPARTMENT	Character	=	'EXECT_10000'
And	SELECT_EMP	Character	=	'YES'

6. Click **Compile**.
7. Click **Save**.

When do I run the Compile Formula process?

When you create or update multiple fast formulas simultaneously, run the Compile Formula process on the Submit a Process or Report page.

Payroll Flows

Overview of Payroll Flows

Use payroll flows to streamline and optimize your payroll operations. They help you ensure smooth and seamless end-to-end execution of the processes that address all of your payroll business requirements.

Use payroll flows to manage, effectively and efficiently, all your payroll tasks, such as calculating payrolls, running reconciliation reports, and making payroll payments.

For example, to ensure your payroll cycles are accurate, you can design a flow that includes manual tasks that request validation at each step in the process. In this way, your Financial Director can verify the payroll costing results before the flow transfers the payroll costs to the general ledger.

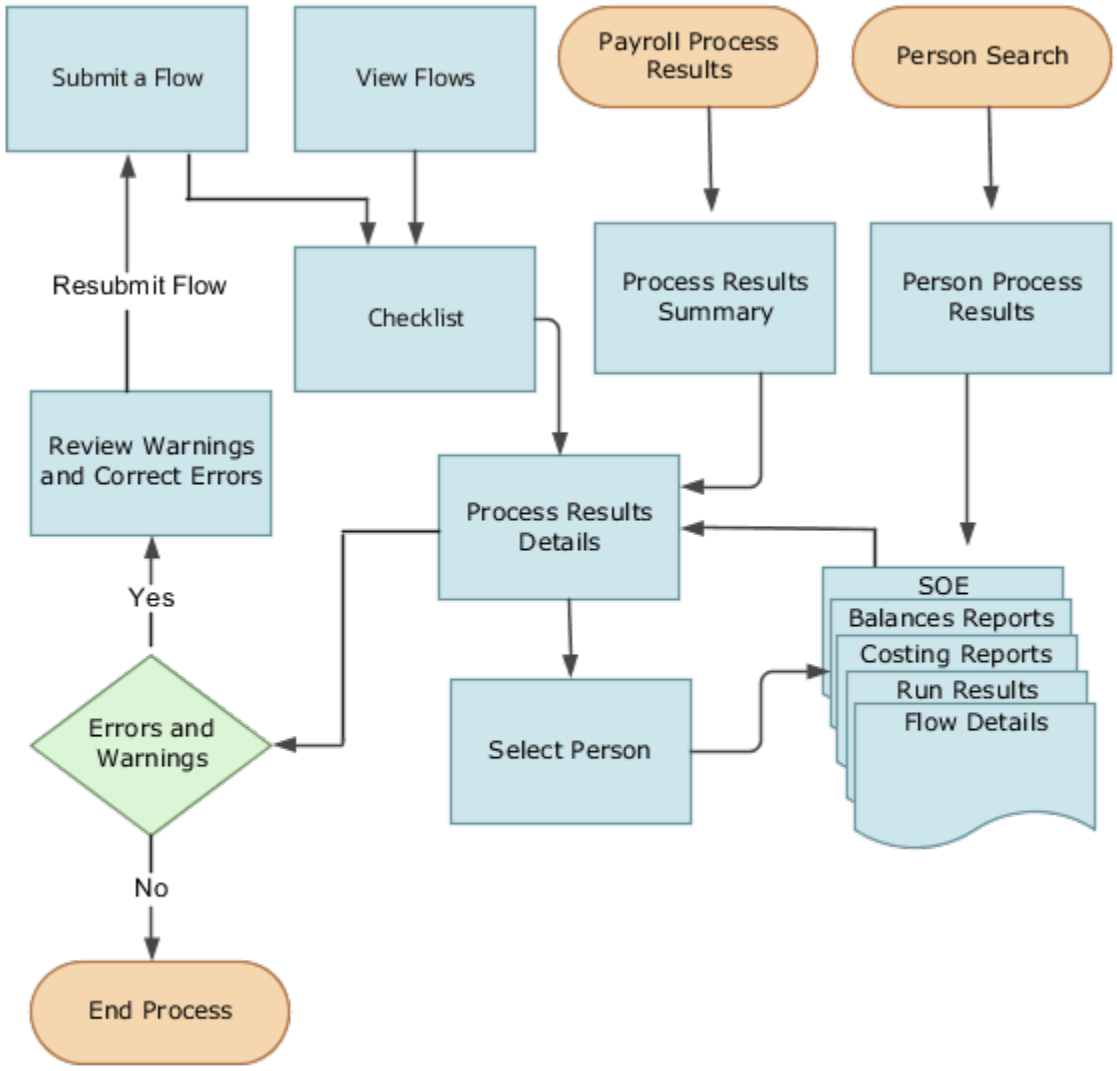
Predefined flow patterns are automatically available for you to submit all types of payroll processes and reports. A flow pattern can consist of a single task such as the Calculate Payroll flow, or multiple tasks, such as the Payroll Cycle flow. The Payroll Cycle flow includes all tasks for a payroll period in a best practice flow.

You can run the predefined flows directly, or you can use them as templates to create your own. You can even copy a predefined flow pattern and edit it to meet your business requirements, such as adding, deleting, or moving a task in the schedule.

There are also features to help you to design flows that address other complex business requirements, such as the task iterator, that automates repetitive tasks with a single flow submission. For example, use the task iterator option to generate a report for multiple payroll statutory units within your organization.

Similarly, use the flow connectors feature to isolate and review off-cycle and on-cycle payroll runs and subsequently combine the run results for downstream processing.

This workflow diagram gives you an understanding of how payroll flows work. It shows the navigation path from the pages that provide high-level flows information, such as the View Flows page, to the pages that provide detailed employee-level information, such as the Checklist and Process Results Details pages.



This table gives you a list of the payroll flow pages and a high-level description of the ongoing tasks you can perform to submit and monitor your flows.

Page Name	Tasks You Can Do On the Page
Submit a Flow	After you have created the flow pattern, use the Submit a Flow page to submit the flow. Navigate to Submit a Flow task from Quick Actions or under **Payroll** in **My Client Groups**. Use the filter options and search for the flow you want to submit. Enter a unique name for the flow and use the appropriate sections on the page to enter flow parameters, schedule your flow, and link flows if required.

Page Name	Tasks You Can Do On the Page
Checklist	A Checklist is generated for each submitted flow. The Checklist page provides a central point to monitor and manage all tasks within the flow. Use the Checklist to easily identify areas that require your attention, such as any tasks within your flow that have error messages. Perform actions on the Checklist page, such as roll back a task or mark a manual task as complete. To view further information for a specific task, select the task and navigate to the Process Results Details page.
Process Results Details	Use the Process Results Details page to view more detailed information for a flow task, such as errors and warning messages, report output, and log files.
Errors and Warnings	Use the Errors and Warnings page to view messages pertaining to persons or processes. You can also access this page from the Process Results Summary. Once you resolve all issues, navigate back to the Checklist page to continue processing any remaining tasks within your flow.
View Flows	Use the View Flows page to get an overall status of all submitted flows. Use the filter options on the page to identify flows that require your attention, such as a flow that includes tasks with error messages. Drill down on a flow to go to the Checklist page, to get more detailed information for the tasks within the flow. Navigate to View Flows task from Quick Actions or under **Payroll** in **My Client Groups**.

For more information on payroll flows, refer to the Administering Payroll Flows guide on the Oracle Help Center.

Related Topics

- Flow Pattern Components
- Payroll Flow Patterns

Flow Pattern Components

Before you begin to use flow patterns, let's walk you through a delivered flow pattern to understand flow components.

Use the Payroll Flow Patterns task under **Payroll** in **My Client Groups** to search and select a flow pattern.

For example, search for the predefined Calculate Payroll flow and click **Edit**. While creating your own flow pattern, select field options or values based on the information in this table.

Field	Description
Flow Status	Use this field to define how you can submit the flow. Select one of these options: • Active flow, to submit the flow from the flow submission page or to include the flow in automated flow submissions. • Inactive flow, to submit the flow through automated flow submissions. The flow isn't available for submission on the flow submission page. • Hidden flows aren't available for submission.
Connector Status	Use this field to decide what you want to include in the flow results. Select either of these options:

Field	Description
	• Task Flow, to consolidate results generated from tasks within the current flow and those from other connected flows. • Parameters Only flow, to include results generated from tasks within the flow. It doesn't include results from any additional flows.
Connector Name	Use this field to identify the flow pattern for the purpose of flow connector rules. This field is defaulted to the name of your flow pattern.
LDG Required	Use this field to determine availability of the flow to other legislative data groups (LDGs). Select either of these options: • Yes, to restrict the flow to a single LDG. • No, to indicate that the flow is available to all other LDGs.

Use these tabs on the Payroll Flow Patterns page to define more flow components and tasks within the flow.

Flow Connectors

Use the Connector tab to link flows at the flow pattern level and consolidate flow results for downstream processing. Use the Connected Flows field to select flows you want to connect to consolidate payroll results. The rules are automatically applied to all instances of the flow and you don't have to manually define connector rules each time you submit the flow.

For more information, refer to Considerations to Configure Flow Connectors topic in the Help Center.

Tasks

Review the task list, and if necessary, add new tasks to the flow pattern. You can edit the task name, description, and its placement in an activity or task group.

The Activity and Task Group define how the submitted flow instance is viewed hierarchically in the Checklist. In this example, the activity is 'Calculate' and the task group is 'Calculate and Validate Payroll'.

Edit the task to update the task parameters, owner and checklist information, and which notifications to send the task owner.

Optionally, select the **Process after Error** check box against a task, to allow a subsequent task to process, even if an immediately preceding task is in error. This ensures continuation of the flow.

For example if you have a flow with tasks, A ->B -> C, task B can't run if task A is in error, unless you select **Process after Error** for task B. Similarly, task C will run irrespective of the status of task B, if you select **Process after Error** for task C. After you complete the flow, you can view the errors, make corrections, roll back the errors, and resubmit the flow, if required.

Task Sequence

Since there is only one task for this flow, the sequence of the flow tasks is Start Flow > Calculate Payroll > End Flow.

For more complex multi-task flows, use the Task Sequence tab to review the task sequence and reorder, add or delete tasks, as required. Some tasks within the flow use and build upon the results of a previous task.

Parameters

Use the Parameters tab to define flow parameters, some of which you manually enter while submitting the flow, and the others are default or derived values. Define the properties of the parameters here. For example, indicate if a parameter is mandatory or optional, display the parameter on the UI or not, display format, and so on.

For more information, refer to Flow Pattern Parameters topic in the Help Center.

Outbound Integration

Use the Outbound Integration tab to configure an outbound notification with the payroll flows outbound API notifications feature. Once a task in a flow completes, it sends a completion message to an external downstream server. The server gets an automatic notification once the task completes, and it then triggers downstream non-payroll processes.

Review

Use the Review tab to preview how the flow is organized and displayed on the Checklist page.

Related Topics

- Considerations to Configure Flow Connectors
- Flow Pattern Parameters
- Sequencing Rules for Flows and Locked Tasks

Payroll Background Logging and Monitoring Flow

Use the **Payroll Background Logging and Monitoring** flow to identify and help resolve payroll queries for features that use the payroll background flow.

This flow helps you track the status of a process and troubleshoot issues. It's useful for those who manage customer environments, test payroll processes, and troubleshoot issues with payroll processes. For example, your system administer can use this flow to generate log files for features that uses the payroll background flow such as Anytime Pay.

> **Note:** These are the payroll features that use the payroll background flow:
> - Anytime Pay
> - Event Notification Processing that has rate events enabled

The payroll background process is an ESS process that runs continuously in the background to improve the performance of payroll features. Since it runs continuously, it's not required for the ESS server to start or stop whenever you submit a process, such as the submission of the QuickPay process for Anytime Pay.

When you submit the flow, leave the Legislative Data Group field blank.

Use the **Action** field to perform any of these actions on the flow.

- **Start Process**: When called by a feature, the background payroll ESS process starts automatically and will continue to run. Use this option to override this default behavior and manually start the process.
- **Stop Process**: Use this option to stop the background payroll ESS process. Any process that's already running using the payroll background process will complete, but the next process in queue will not start.
- **Report**: Use this option to report on the status of the background payroll ESS process.

- **Resubmit Process**: Use this option to resubmit a process submitted using the background payroll ESS process and is in error.

Use the **Job Identifier** field to identify a process that's submitted using the payroll background and that needs a log file or must be resubmitted. Each background process has a job ID number, similar to an ESS job number.

Use the **Report Type** field to select the type of report you want to generate using this flow. You can use these reports to identify the root cause of an issue. The types of reports you can generate are:

- **Processing Report**: This report displays all processes that are currently running or are in the payroll background queue for the day. For example, a QuickPay has been submitted for Anytime Pay but no results are generated for the employee. Use this report to check if the QuickPay is stuck in a queue of processes waiting to be completed by the payroll background process.
- **Scheduled Report**: This report identifies all pending processes in the payroll background queue for the specified date range.
- **Error Report**: This report identifies all error messages for the payroll background process. For example, you have submitted a QuickPay for Anytime Pay but no results are generated for the employee. Use this report to check if the payroll background process has hit an error that stopped the submission.
- **Log File**: Use this option to enable detailed logging information for a process submitted using the payroll background process.

Prerequisite Tasks

You'll find most of the setup tasks required for payroll processing in the Define Payroll task list in the Setup and Maintenance work area.

There are required common application configuration tasks you may have already done because other HCM applications require them. You may want to revisit tasks to address payroll-specific requirements,such as when you create tax reporting units, to verify.

If these prerequisite tasks haven't been completed, you can find them within Define Common Applications Configuration for Human Capital Management:

- Define Features by Country or Territory
- Define Geographies for HCM
- Define Enterprise Structures for HCM

Define Geographies for HCM

Verify predefined geographies, and define any other required local geographies.

For further information, see these topics in the Help Center:

- Geography Structures: Explained
- Geography Validation: Explained

Define Enterprise Structures for HCM

Complete tasks in the task lists shown in this table.

Task List	Action
Define Legal Jurisdictions and Authorities for HCM	• Create a legal jurisdiction if not already created or predefined for your country or territory. • Create a legal authority for each government body you interact with. • Create addresses for legal entities and legal authorities.
Define Legal Entities for HCM	• Create a legislative data group for each country or territory you operate in, to partition your payroll data. • Create at least one legal entity designated as a payroll statutory unit (PSU) for each legislative data group. • Associate each PSU with a legislative data group. • Create calculation cards for statutory deductions for each PSU, if supported for your country or territory.
Define Legal Reporting Units for HCM	• Create any other legal reporting units that you need under a PSU and designate them as tax reporting units (TRUs). • Define the TRUs as reporting establishments as needed. • Optionally, create calculation cards for statutory deductions for each TRU, if supported for your country or territory.
Define Business Units for HCM	Create business units that you can use to perform one or more business functions.
Define Chart of Accounts for Enterprise Structures	Create business units that you can use to perform one or more business functions.
Define Accounting Configurations for HCM	Create charts of accounts, ledgers, and accounting calendars. When you create a bank for a payment source, you must select a legal entity that's assigned to a ledger for the associated legislative data group. Payroll costing also requires these financial components.

Define Features by Country or Territory

Review and update the selected features for your countries and territories of operation. These settings control the availability of payroll-related features, such as element templates, and address style and address validation rules used in processes and reports.

Related Topics

- How Legal Employers Work with Payroll Statutory Units and Tax Reporting Units
- Legislative Data Groups
- Payroll Setup Tasks for Financials
- How Country Extensions are Selected

Setup Task List for HCM

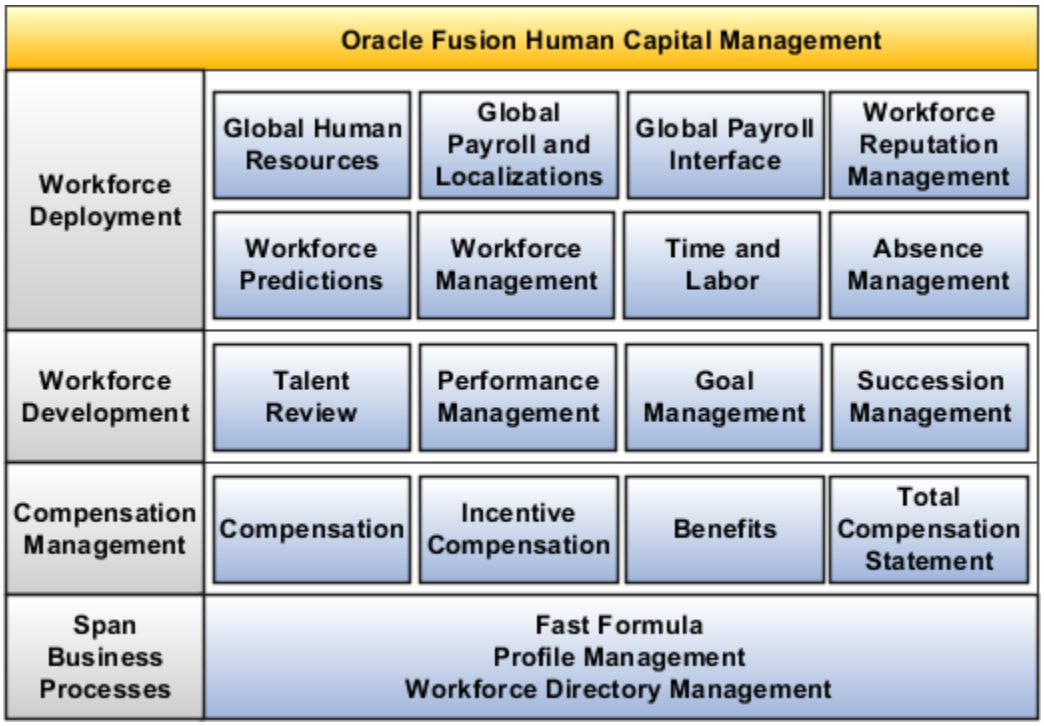
To start an implementation of Oracle HCM Cloud Service, you must have an application implementation consultant role. Select an offering to implement and generate the setup tasks.

The Service Administrator creates this user. Instructions for how to create this user are included in the post-provisioning notification.

Payroll Managers and Application Implementation Consultants use the Setup and Maintenance work area to open the setup pages associated with the Oracle HCM Cloud Service features. The Setup and Maintenance work area is also known as the Functional Setup Manager.

Generate the Setup Task List

This figure illustrates the offering in which each HCM feature is located.



Here's how you can generate the setup tasks. The documentation in this list is in the Oracle Applications Cloud Using Functional Setup Manager guide.

1. Sign in to Oracle Cloud Services.
    - Using the Oracle Cloud Services URL, sign in to Oracle Cloud Services as a user with the application implementation consultant role.

      The **Welcome** page appears.
2. Go to the Setup and Maintenance work area.
    - Select **Setup and Maintenance** under the Tools category in the Navigator to go to the Setup and Maintenance work area.
3. Browse offerings on the Getting Started page.
    - On the Getting Started with Oracle Fusion Applications page, view all Oracle Fusion Applications offerings.

4. Analyze implementation requirements of the offerings.
    - Drill down on the Oracle HCM offering of your choice to view a description, documents, and reports related to the offering on the Documents page.
5. Configure the offerings.
    - On the Configure Offerings page, configure the offerings of your choice to fit your business requirements.

      Expand any offering to find its optional offerings, called Optional Functional Areas. Select all that apply to your organization.

      Use the Select Feature Choices page to review optional or alternative business processes. Select all that apply to your enterprise. If you select the Payroll functional area, you must select the appropriate countries as feature choices.

      > **Note:** To use the Enterprise Structures Configurator, you must Select the Enterprise Structures Guided Flow feature on the Configure Offerings page. This feature is selected by default. Use the feature to set up enterprise structures.
6. Generate setup tasks.
    - Create a new implementation project on the Manage Implementation Projects page to generate setup tasks for a selected offering.
7. Review the generated setup task list.
    - The task list includes the tasks that are relevant to the offerings and optional functional areas that you selected. The most common requirements across all offerings are listed first. Next, the common tasks across product families are shown, and then the common tasks across product offerings. Tasks that are specific to product functionality are listed last.

      You can expand the task lists to see the tasks that they contain. For more information about the Functional Setup Manager, see the Oracle Applications Cloud Using Functional Setup Manager guide.

Implementation Tasks

This table lists the task areas and their associated roles.

Task Area	Role	Work Area
Define Geographies for Human Capital Management	Application Implementation Consultant	Setup and Maintenance
Defining Enterprise Structures	Application Implementation Consultant	Setup and Maintenance
Defining Features by Country or Territory	Application Implementation Consultant	Setup and Maintenance
Manage Currencies	Application Implementation Consultant	Setup and Maintenance
Defining Elements, Balances, and Formulas	Application Implementation Consultant	Setup and Maintenance

Task Area	Role	Work Area
Managing Data Security	IT Security Manager	Setup and Maintenance
Define Payroll Business Definitions	Application Implementation Consultant	Setup and Maintenance
Define Pay Frequency	Application Implementation Consultant	Setup and Maintenance
Define Earnings and Deductions Definitions	Application Implementation Consultant	Setup and Maintenance
Define Events	Application Implementation Consultant	Setup and Maintenance
Define Payment Methods	Application Implementation Consultant	Setup and Maintenance
Define Payroll Costing	Application Implementation Consultant	Setup and Maintenance
Define Object Groups	Application Implementation Consultant	Setup and Maintenance
Define Payroll Flow Patterns	Application Implementation Consultant	Setup and Maintenance

Setup Task List for Financials

Because payroll and payroll costing rely on and integrate with components of other applications, you must set up the components in Financials, such as charts of accounts and ledgers.

Set up the financial components before you set up components in Payroll, such as banks to process payments, associate a ledger to a payroll definition, and run processes to distribute costing results.

Complete these setup tasks to create the chart of accounts and ledgers. You can perform these tasks with the application implementation consultant job role can perform these tasks.

Chart of Account Setup

Complete these tasks to set up your chart of accounts information. Later, you associate the chart of accounts to a ledger.

Task	Action
Value Sets	Create new or review existing value sets, which you will associate with a key flexfield segment.
Structures	Create account structures that specify the segments to include, their order, and the value sets that will validate the data entered in the segments. General Ledger predefines the Accounting key flexfield.

Task	Action
Structure Instances	Create account structure instances, which you will use to record transactions and maintain account balances.
Value Set Values	Create groups of values, which you will assign to a key flexfield segment.
Account Hierarchies	Search, create, and edit hierarchical groupings of accounts.
Accounting Calendars	Set up accounting calendar period details. Determine the total number, frequency, and duration of the accounting periods.
Account Combinations	1. Create account combinations if the structure instance of your chart of accounts flexfield doesn't allow dynamically created account combinations 2. Create accounts for each account combination used in payroll. As a best practice, use the same account numbers for your payroll and general ledger accounts. 3. If you reconcile payments in Cash Management, create an account combination for reconciliation differences.

Ledger Setup

You perform these tasks as part of the accounting configuration setup for Global Payroll.

Task	Action
Primary Ledgers	Create a ledger with a chart of accounts, accounting calendar, currency and subledger accounting method. **Note:** If you're creating bank information, you must create a primary ledger.
Legal Entities	Add the legal entities that use the ledger. The Legal Entity HCM Information task associates the payroll statutory units for legal entities to the legislative data group.
Ledger Options	1. Complete all the fields for the General Information and Accounting Calendar, and Subledger Accounting sections. 2. In the Period Close section, select the Retained Earnings Account you will use for payroll. 3. In the Journal Processing Intercompany subsection, select the option to launch AutoReverse after the open period.
Balancing Segment Values to Legal Entities	Assign specific balancing segment values to each legal entity before assigning values to the ledgers. By specifying this information, you can more easily identify legal entities during transaction processing and reporting
Balancing Segment Values to Ledger	Optionally, assign specific primary balancing segment values to the primary and secondary ledgers to represent transactions for nonlegal entities, such as adjustments.

Task	Action
Reporting Currencies	Review and update reporting currencies. Reporting currencies maintain and record subledger and general ledger journal entries in additional currencies.
Review and Submit Accounting Configuration	Submit your configuration.
Open First Period	Open the first period when you're ready to process transactions for the ledger. After you open the first period, use the Accounting Periods task in General Ledger to open and close periods, and to specify the target period that concludes the series of calendar periods.

Related Topics

- How Payroll Costing Components Integrate with Other Applications
- Primary Ledgers, Secondary Ledgers, and Reporting Currencies
- Payroll Setup Tasks for Subledger Accounting
- Assign Legal Entities and Balancing Segments
- Chart of Accounts Structures and Instances

Setup Task List for Payment Reconciliation

Global Payroll integrates with Cash Management and General Ledger. This integration facilitates the setup of banks, branches, and bank accounts, and the reconciliation of bank statements with payment transactions.

An administrator or implementor with the appropriate privileges performs the tasks shown in this table:

Application	Setup Steps	Task
General Ledger	Create an account combination for the reconciliation differences account.	• Account Combinations
Cash Management	Set up transaction codes that map to the payment method transaction codes used in payroll.	• Cash Transaction Type Mapping • Bank Statement Transaction Codes
Cash Management	Create reconciliation rules.	• Bank Statement Reconciliation Tolerance Rules • Bank Statement Reconciliation Matching Rules • Bank Statement Reconciliation Rule Sets

Application	Setup Steps	Task
Payroll	Create liability, cash clearing, and cash accounts for your payment sources. Specify the option Transfer to General Ledger.	• Costing of Payment Sources

Reconciliation Differences Account Setup

If you reconcile payment costs before posting the costing results to General Ledger, set up a reconciliation differences account in General Ledger using Account Combinations. The reconciliation differences accounts in Cash Management records discrepancies between the bank statement and the transferred payment files, such as over and under payments.

Payroll Transactions Codes Setup

If you cost your payments, set up and map transaction codes in Cash Management for the organization payment methods.

Task	Action
Bank Statement Transaction Codes	1. Review the transaction and statement codes that your enterprise currently uses 2. Create transaction codes for the transaction types that support your organization payment methods
Cash Transaction Type Mapping	1. Map transaction types to payment types used for the organization payment methods that support costing of payments. 2. Identify the organization payment methods for payroll accounts, such as payroll liability, cash, and cash clearing accounts.

Reconciliation Rules Setup

Payroll processes transfer your payment entries to Cash Management for manual or automatic reconciliation with bank statements, and cost the unreconciled and reconciled payments to the appropriate account, such as the cash clearing and cash accounts.

If you reconcile transactions automatically, in Cash Management complete the tasks listed in this table.

Task	Action
Bank Statement Reconciliation Tolerance Rules	Create tolerance rules based on date, amount, or percentage that prevent or warn you when reconciliation exceeds a defined tolerance.
Bank Statement Reconciliation Matching Rules	Define bank statement automatic reconciliation matching rules.
Bank Statement Reconciliation Rule Sets	Assign a group of matching rules and tolerance rules to a bank account for reconciling bank statement lines with transactions.
Bank Accounts	Specify the Reconciliation Differences account you set up in General Ledger..

Task	Action

Payroll Accounts Setup

Create a liability and cash account. Use **Costing of Payments** to create a cash clearing account to track payments such as checks/cheques, where a delay exists between the date the payment is issued and the date it clears.

> **Note:** When you set up the accounts, it's best practice to enter the same account information that you use for the cash and cash clearing account that you created in General Ledger.

Related Topics

- Payroll Setup Tasks for Financials
- Considerations When You Create Accounts
- Payroll Setup Tasks for Subledger Accounting
- Reconcile Payroll Payments

2 Elements, Earnings and Deductions

Payroll Elements

Overview of Payroll Elements

Some elements are predefined. You can also create other elements to match your requirements. Each element belongs to a primary classification, according to its purpose, which determines the template you use to create it.

For information on how to secure and limit access to elements based on your business requirements, see *Secure Elements through HCM Data Roles* and *How to Restrict Access to Elements Using Element Security Profile and HCM Data Role*.

Use the template to create the elements and depending on your country extension, you create the associated items required for payroll processing.

Use the elements to represent these components:

- Earnings, such as salary, wages, and bonuses
- Compensation, such as employee stock purchase and insurance plans
- Absences from work
- Tangible items distributed to persons, such as tools, uniforms, mobile phones, or computers
- Statutory deductions, such as taxes, voluntary deductions, contributions to charities or savings plans, and involuntary deductions, such as court orders and pretax deductions
- Employer taxes and other employer liabilities

Note: You can associate a time card with a results element that has the costing definition. On the Element Summary page, you can use the base element attribute to directly link a time element to the result element.

Use Predefined Elements

The predefined elements are specific to your country or territory. They typically include deductions for tax and wage attachments. You can't make any changes to these predefined elements. However, you must create eligibility records for them.

Create Element

You can create as many earnings and deduction elements as you require using the Elements task. Let's assume that, effective 6th March, you create an element entry for a worker. In this case, the element entry has a start and end date of 6th March.

You select the element classification and category that determine the template of questions. You answer the questions to specify the details of the element you want to create. The items that the template generates can include multiple elements, input values, formulas, balances, and other items.

Note: The template you use to create elements also depends on the configuration selected for your country or territory on the Features by Country or Territory page. For example, if the country extension is set to Payroll, you use a template that generates all the items required for payroll processing. If the country extension is set to Human Resources or None, you use a basic template that generates the elements only. However, if you select an element classification, such as Standard Earnings, Supplemental Earnings, Direct Payments and Taxable Benefits, the basis template creates input values for Amount, Periodicity, and Full-Time Equivalent.

You can configure any of the generated items to match your specific business requirements. For example, you can add input values, edit the formulas, or add a status processing rule to use a different formula for certain assignment statuses. You must also create element eligibility records for the elements.

This table explains the purpose of the items that you use when creating element.

Items	Purpose
Input Values	Defines the entry values available on each entry of this element, such as hours worked or amount.
Element Eligibility Records	Defines the eligibility criteria a worker's employment record must meet to be eligible for the element. For example you can use grade, payroll, salary basis, or organization as eligibility criteria.
Status Processing Rules	Identifies the formula the payroll run uses to process the element, and how to handle the formula results.
Related Formulas and Related Elements	Identifies additional elements and formulas created by the template for payroll processing.
Related Balances	Identifies the balances created by the element template for this element.

Related Topics

- Maintain Elements
- Formula Result Rules for Elements
- Payroll Element Eligibility
- Payroll Element Input Values
- Create Earnings Elements for Payroll

Maintain Elements

After you create and use an element, you're limited on the updates you can make to it. This ensures the integrity of the element for retroactive processing and the balances of the input values.

You can't remove existing input values or add new ones if you've created entries for the element. To add an input value to an element before you create any element entries, set your effective date to the element's start date.

You can make these changes to an element that has been processed before:

- Change a required input value to be optional.

- Alter the sequence in which input values appear on the Element Entries page.
- Change the input value validation rules for minimum, maximum, lookup, or formula.
- Change your specification of which input values create database items.
- Change the reporting name. However, the database items created for the element continue to use the original name.
- Delete elements that are in **In Progress** status.

For existing elements you can now make updates to these attributes in the correction mode if the element meets the specified criteria rules for the attribute.

- Allow multiple entries in same period
- Latest Entry Date
- Output Currency
- Process once per period

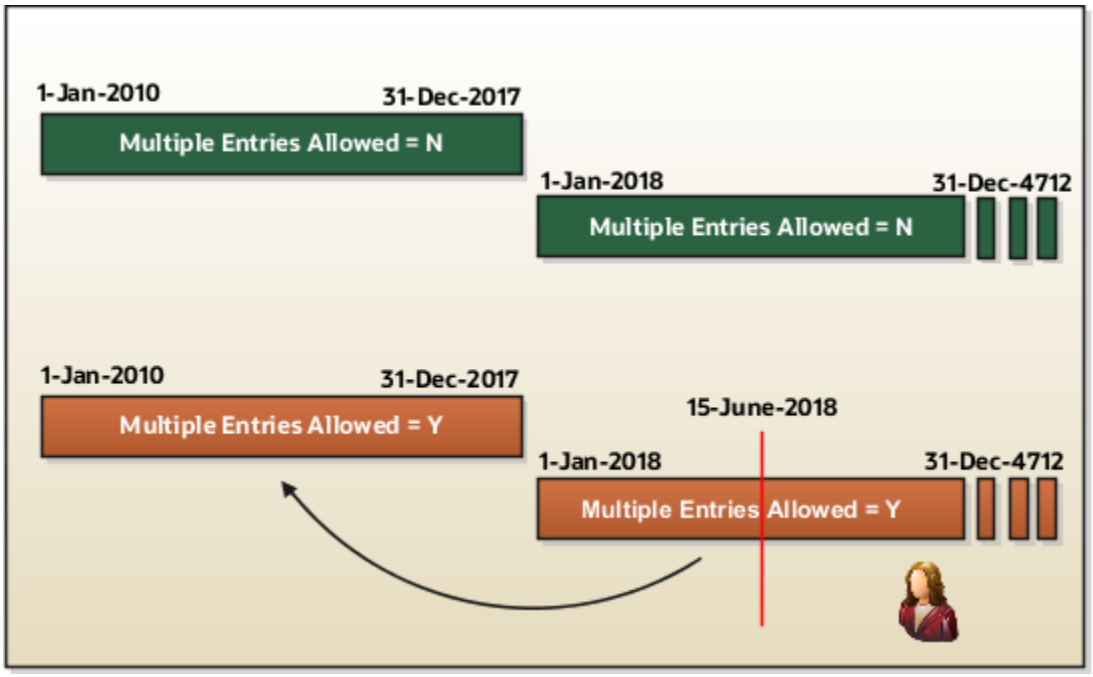
Let's assume you correct the Allow multiple entries in same period attribute, all date effective records would get updated with the change.

Example:

An element has these two date-effective records:

- 01-Jan-2010 to 31-Dec-2017
- 01-Jan-2018 to 31-Dec-4712

And for that element, the value of **Allow multiple entries in same period** option is **N**. Effective 15-Jun-2018, you change the value of this option from **N** to **Y**. Then, as the figure shows, the application updates both the records with the value **Y**.



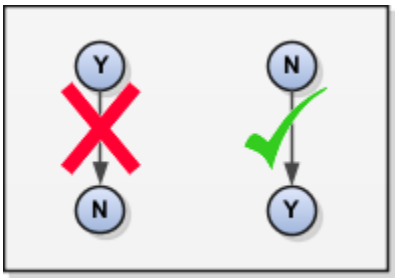
Allow Multiple Entries

Edit the **Allow multiple entries in same period** option from **N** to **Y** even if element entries and run results exist for that element.

However, you can't edit this option in these scenarios:

- If the element is target of **Stop Entry** rules.
- If the value of the **Standard Link** option is **Y**.
- If the element is a target of indirect formula result rules.

As this figure shows, you can't change the value from **Y** to **N**. This is because such an action invalidates the existing entries and possibly could impact retroactive processing.



Update Termination Rule

You can update the termination rule of an element even if element entries or run results exist for that element. Such updates don't affect the existing element entries, but impact only new element entries.

In the **Latest Entry Date** field, you can change the element duration option so that entries have a later end date. You can't select an element duration option that will result in entries having an earlier end date.

For example, you can update the dates as follows:

- Last Standard Earning Date to Last Standard Process Date
- Last Standard Process Date to Final Close
- Last Standard Earning Date to Final Close

This change isn't applicable to the time definitions that you define.

Update Output Currency

The output currency for an element is defaulted based on the currency defined for the legislative data group. You can update the Output Currency field to a required currency under these circumstances.

- If it's a newly created element
- There isn't element eligibility for that element
- No balances exist for this element

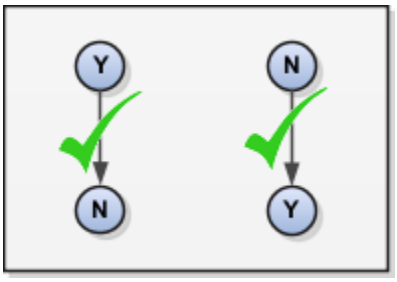
Note: If you calculate statutory deductions such as tax, you should not change the element output currency. All predefined tax calculations are performed using the currency of the legislative data group. All reports including payslips are also generated using the currency of the legislative data group.

Your company might have a requirement to change the element output currency for payroll calculations that don't include legislative taxes. For example, a British national who works in the USA might be paid on an expat payroll which isn't subject to US taxes.

Process Once Per Period

Use the **Process once per period** option to check if the element entry has been processed or not.

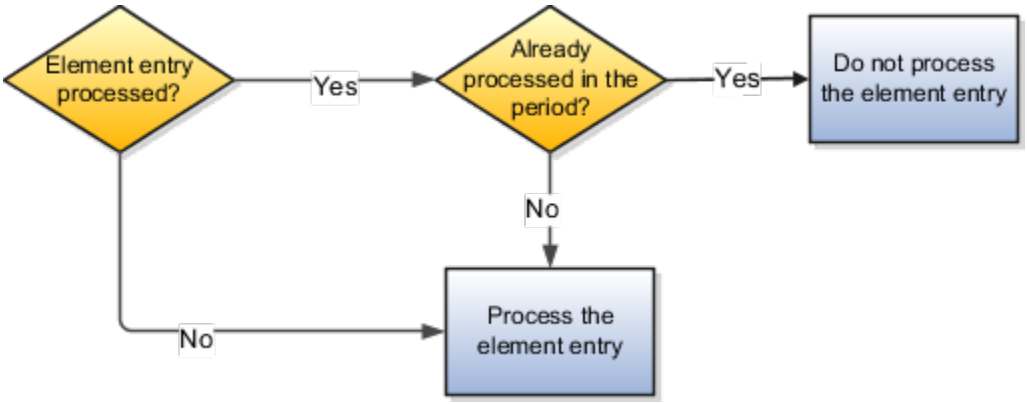
As this figure shows, change this field both from **Y** to **N** and **N** to **Y** even if element entries or run results exists.



If the value of the option is **Y** and the element entry is already processed in the period, then the application doesn't process it again.

If the value of the option is **N**, then the application processes the element entry even if it's already processed in the run.

As this figure shows, depending upon the value of the option, the application processes the element entry.



Search for Elements Using the Element Code

You can now search and view elements using the element code.

- Use the **Add Fields** option in the **Advanced Search** region to search the element using element code.
- Select **View** > **Columns** > **Element Code** to view the element code attribute with other element details.
- The element code attribute is displayed under the **Element Name** attribute in the **Element Summary** page.

Delete In Progress Status Elements

On the Element Search page, you can delete those elements that are in the **In Progress** status. However, you can delete only those elements for which the corresponding element creation scheduled process has failed.

Add New Input Values to Existing Elements

You can add new input values to an element using the HCM Data Loader (HDL), when the element has entry values created or processed in the payroll run. The new input value must meet the following criteria:

- Input value isn't required
- Default at runtime isn't enabled
- Default value isn't provided
- Default formula isn't attached
- Input value with the same name doesn't exist already for the same element

When you create a new input value for an element using the `PayrollElementDefinition` HDL object, a new flow, **Perform Post Processing of Element** with task **Create Element Entry Values** will automatically assign this value to all element entries. After the entry values are created for all impacted employees, you can change the entry value.

During the entry creation process, if the **Perform Post Processing of Element** flow errors out for any reason, you can retry or resubmit the process to create the remaining entry values. You also have the option to rollback the process, which deletes all entry values. When you delete the entry values, you must also delete the input values that were created using HDL.

Validations are provided to ensure the input and entry values are created successfully. When the **Perform Post Processing of Element** process is running, or being rolled back, the following validations will be applied:

- The element will be locked for any modification.
- The Calculate Payroll, Adjust Multiple Balances, Calculate Gross Earning, Load Initial Balances, Reverse Payroll Calculation, and Recalculate Payroll for Retroactive Changes payroll processes will be blocked from running when the postprocessing of element is being run.
- The element will continue to be in locked status if the element postprocess is rolled back but newly created input values aren't deleted. During this time, the Calculate Payroll, Adjust Multiple Balances, Calculate Gross Earning, Load Initial Balances, Reverse Payroll Calculation, and Recalculate Payroll for Retroactive Changes payroll processes will error out till the newly created input values are deleted.
- The Quickpay submission and Retry process are prevented from submission.
- The input value can't be created while a payroll process is being run.

> **Note:** The payroll processes that are running beyond 3 days will be ignored while doing the above validation check. This feature isn't intended to upgrade the existing elements with any other objects, such as upgrading the element that was created using the HR or Payroll Interface license to an element to use in Payroll processing with Payroll license. It's only for adding new input values when the above conditions are met. Consider when's the best time to create any new input values, to avoid the impact on your payroll cycle, such as overnight or weekend. Ensure that the add new input value functionality isn't planned to be run when any of the above payroll processes are running, waiting, or planned to be run, as it will impact the regular payroll cycle.

Related Topics

- Payroll Element Input Values

Earnings and Deductions

Overview of Define Earning and Deduction Definitions

The Define Earning and Deduction Definitions task list in Setup and Maintenance contains the tasks required to set up elements and payroll components.

Your implementation may include a few predefined elements, usually for legislative tax deductions. Use the Elements task to create additional elements and the associated objects required to support their processing. The objects vary depending on the element classification and category.

Manage Element Classifications

Elements are grouped into primary classifications that control their sequence of processing and the balances they feed. Secondary classifications are subsets of the primary classifications, which you may use to manage wage basis rules for deductions and taxes.

The primary classifications and some secondary classifications are predefined. You can't remove or change predefined classifications.

What you can do:

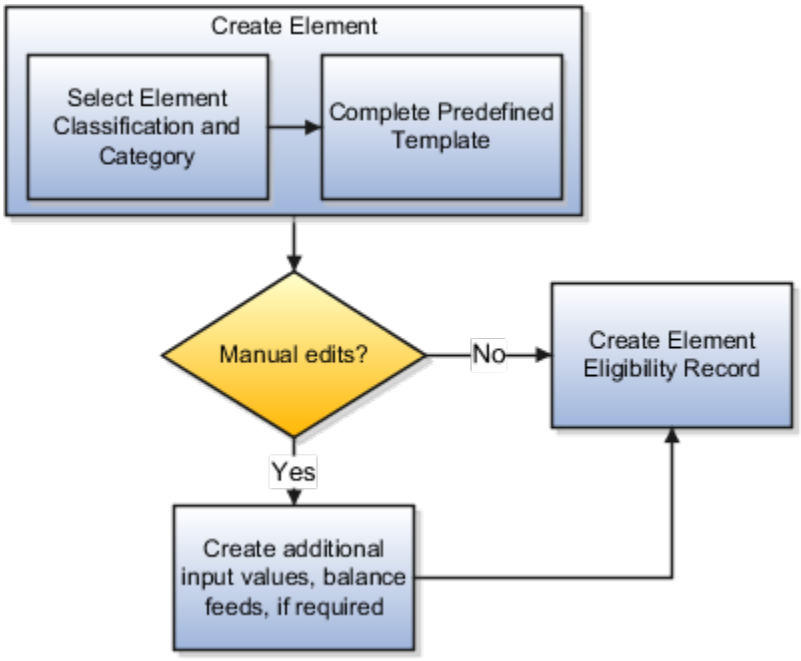
- Create additional balances that the primary classifications feed.
- Create secondary classifications, if required.
- Specify costing setup options and frequency rules for element classifications. The default frequency rule is always each period.

Manage Elements

Use the Elements task to review elements and to create new ones. When you create an element, your selection of the element classification and category determines the questions on a predefined template. Submitting the template generates an element, which you can edit, as required.

You must create at least one element eligibility record for all predefined and newly created elements.

The following figure shows the tasks involved.



Note: Make sure you set the country extension to Payroll using the Features by Country or Territory task before you create elements for payroll processing. This setting ensures that you use the appropriate element templates.

Creating certain elements also creates component groups, calculation value definitions, and other calculation information. For example, creating involuntary deductions and pension deductions may create these additional objects. Use the relevant tasks in the Define Earning and Deduction Definitions task list to review the objects generated for each element.

Payroll components are associated with a set of rates and rules used for calculation or reporting. These components conform to manage calculation value definitions

What you can do:

- Review the tables that hold the rates and other values used to calculate deduction and exemption amounts.
- Modify some value definitions. For example, you might enter a default payee for pension payments.
- Create new calculation ranges, if required

Manage the calculation information for elements that generate payroll components, such as involuntary deductions and statutory deductions.

What you can do:

- Review the calculation information supplied for your country or territory, such as the wage basis rules and calculation factors
- Create new calculation factors, if required.

Component groups are predefined categories of calculation components managed by component group rules.

What you can do:

- View rules for component groups.

- Modify the rules, such as wage basis rules, for some deductions

After setup, you add calculation components to personal calculation cards by loading data, such as time cards, or using the Calculation Cards task. In most cases, hiring a worker creates a statutory deduction card automatically.

Add Eligibility Rules For Predefined Elements

The task list includes this task as a reminder. Use the Elements task to define at least one element eligibility record for every predefined and newly created element.

> **Note:** Make sure you create an eligibility record for the statutory deduction elements like Tax, before you start hiring workers.

Element eligibility determines who can receive entries of the element. Do the following:

1. Create a name for the element eligibility record. Use a naming convention similar to the element's to easily identify the record, for example, when you set up costing for the element's eligibility record.
2. Restrict who can receive entries of the element by specifying eligibility criteria. For elements applicable to all workers, create eligibility without specifying any criteria.

Manage Rate Definitions

Define any rates that are based on calculated payroll balances, such as an employee's average salary during the last three months. You can use rate definitions in absence plans and formulas.

You can define rates to be:

- Monetary, such as a pay rate, or non-monetary, such as an absence accrual rate defined in days or hours
- Based on a combination of elements, or a single element

Related Topics

- Overview of Payroll Elements
- Payroll Element Eligibility
- How You Define Voluntary and Pre-statutory Deductions
- Payroll Calculation Information
- Create Earnings Elements for Payroll

How Payroll Elements Hold Information for Multiple Features

Use Payroll Elements to determine the payment of base pay, benefits, absences, and other earnings and deductions. Associate payroll elements with salary bases, absence plans, and the benefits object hierarchy to determine how you will use those elements.

This table provides some examples of how you can use payroll elements.

Payroll Element Usage	Examples of Payroll Elements
Base Pay Management	Annual Salary Basis

Payroll Element Usage	Examples of Payroll Elements
	Monthly Salary Basis Hourly Salary Basis
Absence Management	Absence Payment Leave Liability Discretionary Disbursement Final Disbursement
Benefits	Health Care Deduction Savings Plan Deduction Employee Stock Purchase Deduction
Time and Labor	Regular Hourly Earnings Overtime Earnings Shift Earnings
Payroll	Regular Standard Earnings Bonus Earnings Tax Deduction Involuntary Deduction

Base Pay Management

To manage base pay, you attach an earnings element to each salary basis (hourly, monthly or annual) for each worker. When a manager or compensation specialist enters a base pay amount for a worker, the application writes the amount to an element entry. The application does this by using the element input value associated with the worker's salary basis. Payroll processing uses the element entry to generate payment amounts.

Absence Management

You can manage worker absences and corresponding entitlements. You can create absence types based on predefined absence patterns, and associate them with absence plans. You can associate an absence element with an absence plan to transfer this information for payroll processing:

- Payments for absent time, for example, during maternity or long term sickness.
- Accrual disbursement at the end of absence plan year
- Accrual disbursement when plan enrollment ends
- Absence liability amounts

You can process the payments in Oracle Fusion Global Payroll or use HCM extracts to transfer the information to a third-party payroll application for processing.

Benefits

Attach payroll elements at various levels in the benefits object hierarchy to create deductions and earnings that you can process in a payroll run to calculate net pay.

Time and Labor

Create payroll elements for use in time cards, and calculate payroll or gross earnings based on the time card entries transferred to payroll. For example, for Oracle Fusion Time and Labor, you run processes that create dependent payroll attributes and time card fields for element input values. You can automate the routine import of time card entries to payroll using predefined flows.

Payroll

For Oracle Fusion Global Payroll, you define earnings and deduction elements, such as bonus and overtime earnings and involuntary deductions. These elements incorporate all components required for payroll processing, including formulas, balances, and formula result rules.

Define Elements, Balances, and Formulas

The Define Elements, Balances, and Formulas task list contains the tasks required for creating payroll elements for compensation, absences, time and labor, and HR management.

You can also use this task list if you're recording earnings, deductions, and other payroll data for reporting, compensation and benefits calculations, or transferring data to a third-party payroll provider.

> **Note:** If you're using Oracle Global Payroll, use the Define Payroll task list instead. The Define Payroll task list includes other tasks required to set up payroll processing.

Required Tasks

Your business requirements and product usage decide which required tasks you need to complete. The required tasks include:

- Elements
- Payroll Definitions, which is usually required to support elements
- Consolidation Groups, which is required for creating payroll definitions

If you use predefined Payroll Interface extracts to transfer data to a third-party payroll provider, you might need to create element subclassifications, balances, organization payment methods, and object groups. See the Global Payroll Interface documentation for more information.

Before You Begin

Before you start the Define Elements, Balances, and Formulas task list, complete the tasks these offerings contain.

Task	Use To	Why It's Important
Manage Legal Entities	Create payroll statutory units.	Ensures that hiring employees automatically creates payroll relationship records.
Manage Legal Entity HCM Information	Associate a legislative data group with each payroll statutory unit.	Ensures that hiring employees automatically creates payroll relationship records.
Manage Features by Country or Territory	Select Payroll Interface as the extension for any countries or territories where you extract HR data to send to a third-party payroll provider.	Ensures that you use the appropriate element templates to create earnings.

Configure Legislations for Human Resources

Use this task to create and edit legislative data for a country or territory that doesn't have a predefined country extension. It guides you through configuring some payroll objects and values required for creating elements, including:

- Tax year start date
- Period of service on rehire rules
- Default currency
- Element classifications
- Component groups
- Payment types

Note: Complete this task before the other tasks in this task list.

Elements

Use elements to communicate payment and distribution information to payroll applications from the source applications listed in the following table.

Source Application	Element Purpose
Compensation	• Earnings and deduction elements, such as bonuses, overtime earnings, and voluntary deductions. • Information elements to load user-defined data to use during a workforce compensation cycle.
Benefits	• Deduction elements to record activity rate calculation results, such as: o Employee contributions and employer distributions for medical options o Flex credits for flex benefits • Earnings elements to disburse unused credits as cash.
Time and Labor	Time card details such as salary, overtime hours, and shift unit payments.
Absence Management	Absence details such as number of hours, days absent, or accrual absence balance details.

Payroll Definitions

The payroll definition supplies the payroll period frequency and dates, which some applications use for payroll calculations. A payroll is assigned to the assignment record of an employee, it indicates the payroll frequency for the assignment such as weekly. This table shows which applications require payroll definitions.

Application	Payroll Definition Required?	Usage Conditions
Global Payroll Interface	Yes, optional	Required if you run the Calculate Gross Earnings process
Compensation	Yes, optional	Required if you capture salary with a frequency of payroll period
Benefits	Optional	Required to use the payroll period frequency to calculate communicated rates or values passed to payroll.
Time and Labor	Optional	N/A
Absence Management	Optional	N/A

Consolidation Groups

You must have at least one consolidation group for each legislative data group where you create elements. Payroll definitions require a consolidation group.

Other Payroll-Related Setup Tasks

Your implementation might require other tasks from My Client Groups.

Task	Requirements
Organization Payment Methods	To record personal payment methods for your employees, you need to create organization payment methods and associate them with your payroll definitions. Organization payment methods define the combination of payment type and currency to use for payments to employees or external parties.
Element Classifications	Primary element classifications are predefined. If you run the Calculate Gross Earnings process (provided with Global Payroll Interface), you might create subclassifications to feed user-defined balances.
Fast Formulas	The Elements task provides predefined payroll formulas for payroll interface users. You can also write formulas for several uses, including: • Validating user entries into element input values • Configuring compensation, benefit, and accrual plan rules • Calculating periodic values for gross earnings and defining element skip rules for the Calculate Gross Earnings process (provided with Global Payroll Interface)
Balance Definitions	If you're using Global Payroll Interface, creating earnings elements creates balances automatically. You can edit these generated balance definitions. If you're using the Calculate Gross Earnings process, you might want to create other balances for extracts or reporting.

Task	Requirements
Object Groups	You can create object groups to specify subsets of elements or payroll relationships to include in a report or process, such as the Calculate Gross Earnings process.

Related Topics

- Payroll Definitions
- Payroll Balance Definitions
- How Payroll Elements Hold Information for Multiple Features
- Overview of Using Formulas

Define Voluntary Deductions Using Reference Codes

Maintain voluntary deduction balances for each reference number provided. For example, when an employee has two loan deductions, you can maintain separate balances for each loan by specifying a unique reference for each loan.

Specify a Deduction Reference Code for each element entry that has arrears and total owed options enabled for the newly created element. The element template for voluntary deductions is modified by replacing the existing template questions for arrears and total owed.

These are the new template questions:

Template Question	Options
What should happen when there are insufficient funds to cover the deductions? If you enable arrears, a reference is required for each deduction entry.	• Don't take partial deduction or create arrears. • Don't take partial deduction, place all in arrears. • Take partial deduction, but don't create arrears. • Take a partial deduction, place remaining in arrears.
Do you want to stop processing when the total owed is reached? If you enable total owed, a reference is required for each deduction entry.	• No • Yes

If you enable the arrears option or the total owed in the above questions, the application creates a required input value named "Deduction Reference". The application uses this reference number to maintain deduction accruals and arrears. Enter the reference number while creating an element entry, such as Loan Account Number given by the bank or a financial institution when a loan is disbursed

Get Reference Code Formula

Use this formula to generate a unique reference number using a database sequence for each element entry.

You can link this formula to the Default Formula attribute in Default Entry Values and Validation Section at element level, when you don't have a reference number provided by a respective authority such as a Loan Reference Number provided by banks. For example, if an employee is contributing an amount to two different unions without receiving a reference number, but you have a requirement to capture the arrears separately for each union. You can then use the delivered

fast formula **Get Reference Code** from the Database Sequence, which generates a unique reference number for each union element entry.

The starting value returned by this formula is 100 and increments by 1 for each new element entry. You can also write your own fast formula, such as Person Number as the reference number.

Note: Using the same reference number across entries of the same element will combine the balances.

For the elements using a Benefits module that meets one of the above conditions, you must use a Default reference value for all entries or use a formula to create a reference based on the Person Number of the employee or Benefits Plan name. This is because, when an employee is enrolled into a benefits plan, an element entry is created. When there is a subsequent life event and enrollments, it end-dates the previous element entry and creates a new entry. If you use the above delivered default formula, the balances will be re-initiated.

Related Topics

- Payroll Balance Definitions

FAQs for Elements

What's the difference between a recurring and nonrecurring element?

A recurring element has an entry that applies in every pay period until the entry ends.

A nonrecurring element has an entry that applies in one pay period only. It's only processed once per pay period. The assigned payroll determines the dates of the person's pay period.

Note: A base pay element associated with a salary basis must be recurring.

When does an element get processed with a processing option of process once per period?

The first payroll run of each period processes the element entries. If this option isn't available for your country or territory, you can select a skip rule to process the element once each period.

Related Topics

- What's an element's skip rule?

What's an element's skip rule?

A skip rule is an optional formula that determines the circumstances in which an element is processed.

If you specify a skip rule for the element, payroll runs process the element only when the conditions of the formula are met. Otherwise, it skips the element. You select skip rules on the Manage Elements page.

Related Topics

- Overview of Using Fast Formula Components
- Element Skip Formula Type

What happens if I select the Closed for Entry option for an element?

The Closed for Entry option prevents the creation of all new element entries for the element. However, it doesn't affect any existing element entries.

CAUTION: When hiring, terminating, or updating assignments, this option prevents all element entry creation for the element, including automatic entries.

Related Topics

- Element Entry Methods

How can I create an element for retroactive processing?

When you create the element, specify that it's subject to retroactive changes. Select the predefined retroactive event group for the element or create your own to select.

When an element is subject to retroactive changes, many of the components for the retroactive element are created automatically. This includes adding the element to the retroactive event group and proration group; however you must set up the retroactive components. To process an element in a retroactive payroll run, the element must have a retroactive component that defines the processing rules. Create your own retroactive event group, proration event group and change the default values for elements in the Element page.

How can I create offset entries instead of deleting retroactive entries and notifications?

Retroactive payroll is an automated process that generates notifications automatically. If you're sure you have retroactive entries that aren't wanted, run retroactive payroll, let these retroactive entries generate and offset them with balancing amounts with the same retroactive elements added.

It is important that you don't delete the notifications. Run the retroactive process to generate the retroactive entries. Using the same retroactive elements, create retroactive entries with negative amounts to offset. You can upload the respective entries via HCM Data Loader. For example, if the retro process has created a retro entry for $100 of retro overtime, create a new retro overtime entry of -$100 to offset.

It is important to remember not to remove or delete the retroactive notifications. Deleting will just delay the process and those employees won't be picked up in the next retroactive process. Also, if there are any other retroactive changes in the period where the delete notification was raised, a new retroactive notification will be created and processed accordingly. For example, in the scenario above, if you deleted the notification for the $100 of retro overtime without it being processed and any other changes are made to that period, this unprocessed $100 retro overtime will be picked up in the recalculation and a retro overtime element entry is created. However, a new notification is not regenerated.

Related Topics

- How Retroactive Pay Is Calculated
- Overview of Retroactive Pay
- Retroactive Notification Report

What happens if I manually enter a value in an element entry value that has a runtime default value?

Any subsequent changes to the default value on the element or element eligibility record won't affect the element entry. To clear your entry, you can restore the default value.

Related Topics

- Default Values for Element Entries

How can I use normal elements for a retroactive element to distribute costing?

The process uses normal elements from the current period when there are no retroactive elements to distribute or the sum of retroactive group members is zero.

The process configuration parameter **Distributed costing for a retroactive element** uses normal elements because the default is Y. If you don't want to distribute on the current period elements, you can set the parameter value to N in the Default Group.

How do I change the number of decimal places used in element input values?

Monetary input values use the number of decimal places defined for the currency, such as two for USD. If your calculations require more decimal places, select a numeric unit of measure for the input value.

The level of decimal precision that you specify must match the precision value set on the Manage Currency page for the country. This ensures that the payroll processes and reports used for reconciliation and legislative reporting produce the expected results.

How can I Edit the Date for a Frequency Rule?

The date field on the Frequency Rules page is made read-only when the frequency rule is saved with at least one of the periods.

To edit the date field, clear all periods and click Submit. Now, you can edit the Date field. Remember to select your periods again. Note: You will have to clear all periods every time you want to edit the Date field.

Why can't I add a secondary element classification to process a new deduction or tax?

Primary element classifications are predefined, can vary by country or territory, and are often based on specific rules and legislative requirements. These rules and requirements can limit the types of secondary classifications that you can add to primary element classifications.

To manage your element classifications, see the setup documentation for the specific country or territory.

How do I capture information on a time card that's required by my company for payroll calculations?

You need to create a value definition to capture the information in Payroll and associate this to your time element.

If you're using Oracle Time and Labor, you also need to run the Generate Data Dictionary Time Attributes process. This process creates the attributes that are required to capture the information on the time card and pass this information to Payroll.

Related Topics

- Calculate Time Based on a User-Defined Value

Element Classifications

Primary Element Classifications

Primary element classifications are defined by Oracle Fusion to meet legislative requirements, and are supplied to users with the product.

Primary Classifications

Elements are grouped into primary classifications, such as Earnings and Voluntary Deductions. In a human resources department, you can use the primary classifications to identify groups of elements for information and analysis purposes. In a payroll department, the classifications control processing, including the sequence in which elements are processed and the balances they feed. Oracle Fusion provides primary classifications and some balances, mainly to reflect tax legislation. They are designed to meet the legislative requirements of your country, so you can't change or delete them. You can create additional balances to be fed by any of the primary classifications.

For example, in a human resources department, you can use them to identify groups of elements for information and analysis purposes.

Element Templates

You use an element template to create an element, based on the element's purpose, and the primary classification to which the element belongs.

The exact scope of each element template, including the questions displayed on the Elements page, is controlled by many factors, such as, the country extension and payroll license status of the user.

Here's a list of the primary classifications supported by the global payroll element templates:

> **Note:** The element classification name and calculation rules may vary by country because they're based on the legislation rules. For example, the Days * Rate calculation rule isn'tapplicable for the US legislation. For more information, see the Implementing Payroll guide for the respective country.

Primary Classification	Description	Category	Calculation Rules Supported
Absences	Use for elements that calculate absence payments and deductions for an employee. You must select this option for absences managed in Oracle Absences or a third-party absence product.	Absence	You can select the unit of measure for Absence reporting: • Hours • Days

Primary Classification	Description	Category	Calculation Rules Supported
Balance Initialization	Use to load initial balance values. You'd mainly use these elements when transferring balances from a legacy payroll application as part of your payroll implementation.	Standard	NA
Direct Payments	Use for payments that are made directly to employees, and aren't subject to payroll taxation, such as expense reimbursements.	Standard	• Flat Amount • Factor • Percentage of Earnings • Days * Rate • Hours * Rate
Direct Payments	Use for payments that are made directly to employees, and aren't subject to payroll taxation, such as expense reimbursements. You must select this option for direct payments captured on a time card in Oracle Time and Labor or a third-party time product.	Timecard	You can select the unit of measure for time reporting: • Hours • Other Units • Days
Employee Tax Credits	Use to capture excess tax amounts that should be deducted as part of payroll processing.	Standard	• Fixed amount deduction • Percentage deduction
Employer Charges	Use to calculate taxes that are paid by employers in accordance with their employees' gross wages and compensation.	Standard	• Fixed amount deduction • Percentage deduction
Employer Taxes	Use to calculate taxes that are paid by employers in accordance with their employees' gross wages and compensation.	Standard	• Fixed amount deduction • Percentage deduction
Information	Use to capture information that's required for the calculation of other elements or formulas. For example, this type of element may capture details to cost the hours worked to a different natural account from the regular earnings account.	Standard	NA

Primary Classification	Description	Category	Calculation Rules Supported
Involuntary Deductions	An example of an involuntary deduction is a court ordered payment taken from the employee's pay and paid to a court or an individual person.	Involuntary Deduction	NA
Pre-Statutory Deductions	Pretax deductions are deductions made from a person's gross income. They reduce the total taxable income of the person and the tax withheld.	Standard	• Fixed amount deduction • Percentage deduction
Severance Pay	Severance is a type of discretionary payment that can be made to an employee when their employment is terminated.	Standard	• Flat Amount • Factor • Days * Rate • Hours * Rate
Standard Earnings	Use for the payment of regular earnings, such as salary.	Standard	• Flat Amount • Factor • Percentage of earnings • Days * Rate • Hours * Rate
Standard Earnings	Use for the payment of regular earnings, such as salary. Select this option for standard time captured on a time card in Oracle Time and Labor or a third-party time product.	Timecard	You can select the unit of measure for time reporting: • Hours • Other Units • Days
Supplemental Earnings	Use to define an augment payment to an employee, such as bonus, incentive.	Standard	• Flat Amount • Factor • Percentage of earnings • Days * Rate • Hours * Rate
Supplemental Earnings	Use to define augment payment to an employee, such as bonus, incentive. Select this option for supplemental earnings captured on a time card in	Timecard	You can select the unit of measure for time reporting: • Hours • Other Units • Days

Primary Classification	Description	Category	Calculation Rules Supported
	Oracle Time and Labor or a third-party time product.		
Tax Deductions	Use for legal tax deductions such as income tax, resident tax, and special tax. Many elements with this classification are predefined for your legislation.	Standard	NA
Taxable Benefits	Use for elements that aren't applied to a payment balance. The difference between earnings and taxable benefits is whether the elements are applied to a payment balance or not.	Standard	• Flat Amount • Factor • Percentage of earnings • Days * Rate • Hours * Rate
Taxable Benefits	Use for elements that aren't applied to a payment balance. The difference between earnings and taxable benefits is whether the elements are applied to a payment balance or not. You must select this option for taxable benefits captured on a time card in Oracle Time and Labor or a third-party time product.	Timecard	You can select the unit of measure for time reporting: • Hours • Other Units • Days
Voluntary Deductions	Use these elements for deductions such as union dues, which the employee authorizes the employer to make voluntarily on the employee's behalf, after tax deductions.	Standard	• Fixed amount deduction • Percentage deduction

Element Category

The element category indicates whether the element is maintained using the standard element feature or the payroll calculation solution.

When you create an element, either a default value is selected in the **Category** field, based on the selected primary classification, or you can select a category from a list of values that are decided by the primary classification.

You need to select the appropriate category for each of your elements. For example, you must select the **Timecard** category when you create an element that will be used to capture time card information in Oracle Time and Labor or a third-party time product.

> **Note:** The element category is now stored in the PAY_ELEMENT_TYPES_F table, instead of template internal tables, as part of the element creation from 23C onward. The existing elements have been updated with the corresponding element category values used at the time of element creation.

Here's how you use the element categories:

- **Standard**: The information required to calculate a standard element, such as number of hours, is captured through element input values. You can view the entry details for this element on the **Standard Element Entries** region of the Calculation Entries page for an employee.
- **Calculation Information**: The information required to calculate this type of element, such as number of hours, is captured through value definitions within the calculation information repository. You can view the entry details for an employee on the Calculation Entries page. For example, absence entry details can be viewed on the Absence page and tax information can be displayed on the Tax page for the employee.

Here's a list of all element categories and the model used by each category:

Category	Element Model
Absence	Calculation Information
Involuntary Deduction	Calculation Information
Standard	Standard
Timecard	Calculation Information

Calculation Rules

Select the calculation appropriate for your element, to control which input values or value definitions are created for the element, the predefined formula associated with the element, and so on. For example, when you create an allowance element that's based on a percentage of earnings, select the Percentage calculation rule.

Here's a list of the calculation rules supported by the element template:

Name	Description
Days * Rate (including Days rule)	The element formula multiplies the number of absence days by the applicable rate. This rule is commonly used for absence payments that are paid based on the number of days an employee is absent.
Flat Amount	Select this option when the payment or deduction amount is entered for an employee. The element formula can convert the entered amount, based on the payroll frequency of the employee. For

Name	Description
	example, you can enter an annual allowance amount of $6,000 for an employee and the element will calculate $500 as payable in each monthly payroll period.
Factor	Select this option for earnings or deductions that are calculated based on a factor, using rates. For example, a company pays shift payments that are calculated as a factor of 0.05% of the employee's salary.
Hours * Rate (including Hours rule)	The element formula multiplies the number of hours entered for the employee by the applicable rate. This rule is commonly used for employees that are paid based on the number of hours submitted on a time card.
Percentage of Earnings / Percentage of Deductions	Select this option for earnings or deductions that are calculated based on a percentage. For example, a company pays car allowance payments that are calculated as 5% of the employee's salary. This type of element creates a balance called <ELEMENT_NAME> Eligible Comp. The predefined element formula uses this balance for the percentage calculation. Add balance feeds to this balance to meet your business requirements. For example, apply the salary element to this balance when the percentage calculation is based on the salary of the employee.
Other Units	This option supports payment rates that are based on units such as mileage or piecework rates. The element formula multiplies the number of units entered for the employee by the applicable rate.

Secondary Element Classifications

You can define secondary classifications to feed your own user defined balances.

Secondary classifications are subsets of the primary classifications. In some legislations, secondary classifications are predefined. As with primary classifications, you can't remove or change any predefined secondary classifications, and you can't disable any of the predefined balance feeds created for them.

How Element Classification Components Work Together

When you create an element, you select a primary classification, such as Involuntary Deductions, and optionally a secondary classification, such as Child Support.

The classifications, which vary by country or territory, control the element template questions you answer to define the element. An element may automatically inherit subclassifications from its primary classification. You can optionally select more subclassifications for an element to control the balances it feeds.

Primary Classifications

Primary classifications meet the legislative requirements of your country or territory, so you can't change them.

In a payroll department, the classifications control processing, including the sequence in which elements are processed and the balances they feed.

Secondary Classifications

Use secondary calculations to manage wage basis rules for deductions and taxes. You can't remove or change any predefined secondary classifications. In some countries or territories, you can create your own secondary classifications.

Subclassifications

Subclassifications provide a way to feed balances. Elements can have only one primary and secondary classification, but multiple subclassifications. You can create subclassifications or use predefined ones. You can specify that a subclassification automatically applies to every element in the primary classification.

> **Tip:** Each subclassification belongs to one primary classification only. If you reuse a subclassification name under different primary classifications, it's treated as a separate subclassification. And you must create separate balance feeds for each subclassification.

Costing

Each primary classification includes these costing rules:

Rule	What It Does
Allow Costing	If set to Yes, you can select any costing option for element eligibility records.
Allow Distribution	If set to Yes, you can create distribution groups with elements in this classification. For example, you can create a distribution group with all the earnings elements. And prorate tax expenses proportionately over the cost centers in which the wages were earned.

Frequency Rules

If frequency rules are enabled for a primary classification, you can use them on an element if you don't want to process it each period. For example, you can set frequency rules to process element entries on the first and third weekly payroll periods of each month. The default frequency rule is to process each period.

Related Topics

- How Element Processing Sequence is Determined
- Payroll Balance Definitions

How Element Processing Sequence is Determined

You can set a predefined sequence in which a payroll run processes elements. An element's primary classification defines a default processing priority for the element in payroll runs. Lower priority numbers process first.

Most classifications also have a priority range. You can override the default processing priority. To set the priority, edit the element on the Element Summary page. Setting a specific priority establishes the order in which the element processes with respect to other elements in the classification.

Sometimes you must prioritize the processing of certain element entries for an individual person. For example, you may need to determine the precise order in which deductions taken for wage attachments process for a person. In this case, enter a subpriority number for element entries.

Element Employment Level

Employment Level Options for Payroll Elements

Your enterprise uses an employment model. When you create elements, you select the employment level at which to attach the element. If you select a level below payroll relationship, each assignment record can have separate element entries.

Payroll Relationship Level

This level is the highest level for accumulating balances. Every payroll run processes payroll relationship elements.

Here are the typical elements to define at payroll relationship level:

- Tax deductions
- Pension
- Child support
- Medical care
- Union dues
- Benefits activity rate calculations, such as employee contributions and flex credits

Assignment Level

Use this lowest level for elements that require different entries for different assignments, or when the element applies only to specific assignments.

Here are the typical elements to define at assignment level:

- Assignment salary
- Regular hours

- Overtime
- Sales bonus
- Profit-sharing bonus

Element Configurations

Create Earnings Elements for Payroll

This example shows how to use the element template to create a regular earnings element, such as salary. After you create the earnings element, you must create at least one eligibility record for it.

Creating an Earnings Element

1. On the Home page, click the **Elements** quick action under the **My Client Groups** tab.
2. On the Elements page, click **Create**.
3. Complete the fields, as shown in this table.

Field	Value
Legislative Data Group	Your legislative data group
Primary Classification	Standard Earnings
Secondary Classification	Regular
Category	Standard

4. Click **Continue**.
5. Enter a name and other basic details, then respond to the questions as shown in this table.

   You can enter up to 50 characters for the element name. If you enter more than 50 characters, the task automatically shortens the name.

Question	Answer
Should every person eligible for the element automatically receive it?	No.
What is the earliest entry date for this element?	First Standard Earnings Date

Question	Answer
What is the latest entry date for this element?	Last Standard Earning Date **Note:** If you select this date, you must enable proration so the calculation is correct if a person leaves prior to a pay period end date.
At which employment level should this element be attached?	Assignment Level
Does the element recur each payroll period, or does it require explicit entry?	Recurring
Process the element only once in each payroll period?	Yes
Can a person have more than one entry of the element in a payroll period?	No
Process and pay element separately or with other earnings elements?	Process and pay with other earnings

6. Click **Next**.
7. On the Additional Details page, complete the fields, as shown in this table.

Question	Answer
What is the calculation rule?	Flat Amount
What is the default periodicity of this element?	Calendar Month
Periodicity Conversion Rule	Standard Rate Annualized
Is this element subject to proration?	Yes **Note:** If you aren't sure, choose Yes.

Question	Answer
Proration Group	Entry Changes for Proration
Proration Units	Hourly
Proration Rate Conversion Rule	Standard Rate Annualized
Is this element subject to retroactive changes?	Yes **Note:** If you aren't sure, choose Yes.
Retro Group	Entry Changes for Retro
Should this element be included in the earnings calculation of the FLSA overtime base rate? (USA only)	Yes
Should this element be included in the hours calculation of the FLSA overtime base rate? (USA only)	Yes

8. Click **Next**.
9. Verify that the information is correct.
10. Click **Submit**.

Creating an Eligibility Record

On the Element Summary page, update the newly created element details.

1. In the Element Overview section, select **Element Eligibility** and click **Create Element Eligibility**.
2. On the Element Eligibility name field, enter REGULAR SALARY ELIG.
3. In the Eligibility Criteria section, select All payrolls eligible.
4. Click **Submit**.

Related Topics

- Create Payroll Elements
- Define Payroll Elements for an Absence Accrual Plan

Payroll Elements for Time Card Attributes

To process pay according to time card entries, such as regular and overtime, you can create elements with the Time Card category.

Time card elements support hours-based and units-based quantities. You use the hours-based quantifies to assign people a flat payment amount through associated rates. For example, you pay people a meal allowance according to the number of meals they take daily. The related payroll elements, balances, formulas, and calculation components are automatically generated when you create a time card element.

Time cards with retroactive changes include the Expedite to payroll option that lets managers transfer the changes for expedited processing and payment.

Create Time Card Elements for Time Entries

Time card elements support hours-based and units-based quantities. You use the units-based quantities to assign people a flat payment amount through associated rates. For example, you pay people a meal allowance according to the number of meals they take daily.

When you create a time card element, you also create the related payroll elements, balances, formulas, and calculation components.

> **Tip:** If people report regular and straight time portions of overtime separately, create two elements, such as Overtime and Overtime Premium. If they report the portions together, you might use straight time instead of regular time, and create a separate element for the overtime premium.

1. **Setup and Maintenance** > **Workforce Deployment** > **Elements and Formulas** > **Elements**

1. On the Elements page, create the payroll element.
    a. On the Create Element dialog box, complete these steps:
        i. Select the legislative data group, such as **FR LDG**, **Hong Kong LDG**, or **US LDG**.
        ii. Select the primary classification, such as **Regular Earnings** or **Earnings**.
        iii. When available, select the secondary classification.
        iv. Select the **Time Card** category.
        v. Click **Continue**.
2. On the Create Element: Basic Information page, complete these steps:
    a. Enter a descriptive name, such as **Regular**, **Straight Time**, **Overtime**, or **Shift Pay**.
    b. Enter the name that you want to display on reports containing this payroll element.
    c. Select the effective date **January 1, 1951**. The early date ensures that the element attributes are immediately available to use with shifts, time cards, web clock, and time collection devices.
    d. Accept the remaining default values by clicking **Next**.

3. On the Create Element: Additional Details page, complete these steps:
    a. Select **Hours** or **Other Units** as the calculation units for reporting.
    b. Select the Work Units conversion rule. For the calculation used by each conversion rule, see *Conversion Rule Options for Configuring Additional Details of Payroll Elements*.
    c. Accept the remaining default values by clicking **Next**.
4. On the Create Element: Review page, complete these steps:
    a. Review the element configuration to ensure that everything is correct.
    b. Create the element and automatically generate all the related elements, balances, formulas, and calculation components by clicking **Submit**.

    By default, the Time Card category elements already have the appropriate value definition configurations required to support location overrides. You don't have to make any edits.

5. On the Element Summary page, configure element eligibility by completing these steps:
    a. In the Elements Overview section, select **Element Eligibility**.
    b. On the Actions menu, select **Create Element Eligibility**.
    c. In the Information section, enter an element eligibility name with a suffix that identifies the criteria. For example, for the regular element with open eligibility--no selected criteria--the name would be **Regular Open**.
    d. Select the eligibility criteria. To leave eligibility open on the element and control it with HCM groups and time processing profiles, skip this step.
    e. Click **Done**.
6. Configure element eligibility for each of the related elements, which share the same name as this element and have suffixes. Suffixes include Earnings Calculator, Earnings Distributor, Earnings Results, Retro, and Retro Results.
    a. On the Manage Elements page, search for the element that you just created.
    b. Click the related element name.
    c. On the element summary page, complete these steps:
        i. In the Elements Overview section, select **Element Eligibility**.
        ii. On the Actions menu, select **Create Element Eligibility**.
        iii. In the Information section, configure the same eligibility criteria as the original element.
        iv. Click **Submit**.
        v. Click **Done**.

Related Topics

- Time Card Required Option
- Process Time Entries in Payroll
- Create the Units-Based Meals Taken Element for Time Entries
- Time Card Updates to Payroll
- Calculate Time Based on a User-Defined Value

Time Element Value Definitions

The time element value definition captures and calculates time in cloud payrolls. The elements in this category create value definitions used in time cards. The calculation steps are associated with the calculation element that's created by the time template.

Value Definition - Name	Value Definition -Calculation Type	Description	Calculation Step-Name
<Element Name> Element Rate and Payment Rate	Rate Definition	You can calculate time using a rate definition. The rate definition details will be captured on the element rate. A default rate definition can be defined when you create a time element. Alternatively, a rate definition can be captured on the time card and passed to payroll from your time product. The payment rate identifies if there's no rate definition for the time.	Time Element Rate and Payment Rate
<Element Name> Rate Amount	Flat Amount	You can calculate time using a flat amount such as 22 USD per hour or 0.75 USD per mile. The amount can be entered on the time card. Alternatively, if the value is a fixed amount it can be entered as a default on the rate amount value definition.	Rate Amount
<Element Name> Conversion Formula	Text	When you create a time element you must specify a conversion formula. This formula converts a rate amount to the appropriate periodicity. For example, if an annual amount is captured for an hourly element this formula would convert the annual amount into an hourly amount. **Note:** This <Element Name> Conversion Formula isn't created for elements with a unit of measure.	Time Card Rate Conversion Formula
<Element Name> Reporting UOM	Text	The reporting value definition captures the unit of measure of the time element. This is derived based on the calculation unit selected for the element and will be either hours, days or units.	-
<Element Name> Time Factor	Flat Rate	Optionally you can apply a percentage to the time calculation. For example, the time calculation could be based on 22 USD * 50 percent. The factor value can be entered on the time card or entered as a default on the value definition.	Time Factor

Value Definition - Name	Value Definition -Calculation Type	Description	Calculation Step-Name
		Note: If the percentage varies based on criteria, such as the worker's location, then the details should be captured on values defined by the criteria.	
Time	Flat Amount	The predefined time value definition captures the number of time units worked. For example, '8' hours or '2' units.	Time Card Unit
Expedite	Text	The predefined expedite value definition identifies if the time has been marked for inclusion in an expedited payroll run.	Expedite
Override Pay Method	Text	The predefined override check payment method captures the organization payment method for expedited time.	Override Pay Method
Override Check Printer	Identifier	The predefined override check printer captures printer details for an expedited time.	Override Check Printer

Generate Time Attributes and Time Card Fields for Your Elements

After you create or edit earnings elements for time entries, such as Regular, Overtime, and Shift Pay, you generate time attributes for the data dictionary. Optionally, you can also generate time card fields for them.

Complete these **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** processes:

Step	Process	Description	Comments
1	Generate Data Dictionary Time Attributes, required	Creates dependent payroll attributes for all element input values, such as hours and rate	You must run the Generate Data Dictionary Time Attributes process after making any changes to time elements. Such changes include adding or deleting elements, editing input values, or editing element eligibility records.

Step	Process	Description	Comments
			CAUTION: Failure to run the process might negatively affect the setup of fields, validation of payroll time types, or transfers of time data to payroll.
2	Generate Time Card Fields, optional	Creates time card fields using time attributes from the data dictionary for the specified legislative data group	Instead of running this process, use the Time Entry Layout Components task to create time card fields and web clock buttons.

If you're using a third-party time provider, create an HCM extract for the time entry elements. The extract includes the element mapping ID that you specify in the XML file when you transfer the time entries to payroll.

Related Topics

- Time Attributes
- How Time Entry Profile Components Work Together

Set Up Overrides

You can override the default value or formula for a specific group of employees identified by an element eligibility record. Override the default value for specific employees on their element entries.

Set Up Area Overrides

Some countries or territories create time card elements with area input values for use as overrides. The overrides enable employers to tax employees based on where they work. For example, employees specify the area information where they worked on temporary assignment while away from their normal work location. These area entries are then included in the time card records transferred to payroll by the Load Time Card Batches process.

Set Up Costing Overrides

You can specify additional attributes in Time and Labor to enter costing segment values on time cards. The segments must match the segments that you can enter on element entries. Use the **Element Entries** task to search a person's record. View the available segments on the Costing tab of the Person Details page. Costing is defined on the element eligibility record of the results element. When you transfer time entries, the transfer process displays the costing on the calculation element.

As an example, the structure of your cost allocation key flexfield might specify that the department segment is entered at the element entry level. You could specify this additional attribute on the time card. Your employees can then specify the department to charge for overtime hours worked while on loan to a different department. After you transfer the time entries, the payroll calculation uses the department specified for the overtime hours to derive the costing results.

To view the results of the costing overrides transferred to payroll, perform these steps:

1. On the Home page, click the **Process Results Summary** quick action under the **My Client Groups** tab.

2. You can find a list of payrolls which have been processed on the **View Person Process Results** page. Select the correct payroll before you search for a person, then select a person on this page.
3. Click the down arrow in the **Process Results** tab.
4. Go into that person's statement of earnings.
5. Select **Costing Results**.

Related Topics

- Time Card Required Option
- Process Time Entries in Payroll

Define Payroll Elements for an Absence Accrual Plan

This example shows how to define an absence element for a vacation accrual absence plan.

Based on your setup decisions, this procedure configures these additional elements:

- Accrual element to process absence liability amounts
- Entitlement element to process payments for absence during vacation
- Discretionary Disbursement element to process disbursement of partial time accruals
- Final Disbursement element to process accrual disbursement when the absence plan enrollment ends

The name of the element is prefixed to each additional element.

> **Note:** Each absence accrual plan will have its own, specific payroll element defined. The element you define for an absence accrual plan shouldn't be used across multiple plans. You can't map one element to multiple absence accrual plans.

This table summarizes key decisions for this scenario.

Decisions to Consider	In This Example
What type of an absence are you transferring to payroll?	Accrual balances
Who's eligible to receive this element?	All workers
What units do you want to use for reporting calculations?	Days
Do you want the element to calculate absence liability?	Yes
Which rate should the calculate absence liability use?	Liability Rate
Does your absence plan enable balance payments when enrollment ends?	Yes

Decisions to Consider	In This Example
Which rate should the final disbursement payment use?	Final Disbursement Rate
Does your absence plan enable payment of partial accrual balances?	Yes
Which rate should the partial disbursement payment use?	Partial Disbursement Rate
How do you want to calculate deductions for paid absences for employees not requiring a time card? • Reduce regular earnings by the amount of the absence payment so that the worker doesn't get paid twice? • Select a rate to determine the absence deduction amount?	Reduce regular earnings by absence payment

Before You Begin

Ensure that you configured a rate definition to determine the monetary value of a unit of absence. And depending on your enterprise separate rates to calculate liability, discretionary disbursement, and final disbursement payments. You configure a rate definition using the **Rate Definitions** task.

Define an Absence Element

1. On the Elements page, click **Create**.
2. In the Create Element window, complete the fields as shown in this table.

Field	Value
Legislative Data Group	Select your legislative data group.
Primary Classification	Absences
Secondary Classification	Select an appropriate value for your legislation, such as Vacation.

3. Click **Continue**.
4. On the Create Element: Basic Information page, enter Vacation Payment in the **Name** and **Reporting Name** fields.

5. In the Absence Plan Details section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

Field	Value
What calculation units are used for reporting?	Days
Work Units Conversion Rule	Standard Rate Daily
What type of absence information do you want transferred to payroll?	Accrual Balances and Absences

6. Click **Next**.
7. On the Create Elements: Additional Details page, in the Accrual Liability and Balance Payments section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

Field	Value
Calculate absence liability?	Yes
Which rate should the liability balance calculation use?	Liability rate.
Does this plan enable balance payments when enrollment ends?	Yes
Which rate should the final balance payment calculation use?	Final disbursement rate.
How do you want Payout Amount to be taxed?	Supplemental
Absence Payout Process Mode	Process and pay with other earnings
Does this plan enable partial payments of absences?	Yes
Which rate should the discretionary disbursement use?	Discretionary disbursement rate.

Field	Value
How do you want Cash out amount to be taxed?	Regular

8. On the Create Elements: Additional Details page, in the Absence Payments section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values. For the purposes of this worked example, all fields are being entered, however, only required fields must be entered and others may be blank.

Field	Value
How do you want to reduce earnings for employees not requiring a time card?	Reduce regular earnings by absence payment.
Which rate should the absence payment calculation use?	Absence payment.

9. Click **Next**.
10. On the Create Element: Review page, review the information that you entered so far.
11. Click **Submit** to open the Element Summary page.

    The template generates all the related elements, balances, and formulas.

Define Element Eligibility

1. In the Element Overview section of the Element Summary page, click the **Element Eligibility** node.
2. Click **Create Element Eligibility** from the Actions menu.
3. In the Element Eligibility section, enter Vacation Payment Open in the **Element Eligibility Name** text box. Leave the rest of the fields on the page blank.
4. Click **Submit**.
5. Click **Done**.
6. On the Elements page, search for the other elements prefixed with your absence element name.
7. Select each element in turn and repeat the steps on the Element Summary page to define eligibility for each element.

Define Payroll Elements to Process Absences

You define elements to calculate and process absence payments in Oracle cloud. When you define an absence element, your responses to the element template questions determine which elements, balances, formulas, and calculation components the template generates.

Defining an absence element involves these steps:

- Define an absence element

- Complete absence detail questions
- Complete accrual liability and balance payment questions
- Complete absence payment questions
- Submit the element
- Define element eligibility records and cost distributions

Define an Absence Element

Use the **Elements** task to define an absence element, selecting a primary classification of Absence, and a secondary classification. Typically, the predefined values include vacation, maternity, and sickness.

Complete Absence Detail Questions

The questions you complete in the Absence Details section determine which subsequent questions the template displays. You enter this information in the Absence Details section:

1. Specify the calculation units to use when reporting the absence, for example that's shown on the payslip, and statement of earnings. Typically, you select Days or Hours for your reports that correspond to the units for your absence plan. When creating an absence element, select the work calculation rule to calculate the absence rate.
2. Select the absence information to transfer to payroll based on the type of absence management plan.

Absence Management Plan Type	Absence Information to Transfer
Accrual	Accrual Balances
Accrual, Leave Donation, Compensatory	Accrual Balances and Absences
Qualification	Qualification Absences
No Entitlement	No Entitlement Absences

Complete Accrual Liability and Balance Payment Questions

If you transfer accrual balances, complete these questions.

Question	Steps
Calculate absence liability?	1. Select Yes, if you calculate liability. 2. Select a liability rate. Usually the rate is the same as the absence payment rate. You might select a different rate when estimating liability for billing purposes.
Does this plan enable balance payments when enrollment ends?	1. Select Yes to configure a final disbursement element and to maintain balances for the disbursement hours and payments. 2. Optionally, select a rate to use for the calculation.

Question	Steps
Does this plan enable partial payment of balance?	1. Select Yes to configure a discretionary disbursement element and to maintain balances for disbursement hours and payments. 2. Optionally, select a rate to use for the calculation.

Complete Absence Payment Questions

Complete these questions:

1. Select a method to reduce regular earnings if employees don't complete a time card.:
    - Reduce regular earnings by absence payment (entitlement payment balance)
    - Select rate to determine absence deduction amount (entitlement deduction balance)

      You might select one of these options:

        - The **Reduce regular earnings** option to reduce regular earnings by the absence payment. This means that the employee is paid the same net amount as if they weren't absent.
        - The **Select rate to determine deduction amount** option when the employee isn't due to be paid for the absence at the same rate as their regular earnings. In this case, the absence deduction rate that you select will be a rate that deducts 100% of the regular earnings. However, the absence payment rate would be a different rate, for example 50%.
2. Optionally, select a rate to calculate the absence payment.

    If you have standard earnings and absence elements in the same payroll run that reduce regular earnings, the payroll calculation reduces earnings in this sequence:

    a. Using absence element entries
    b. Using any standard earnings elements that reduce regular earnings

    The salary balance isn't reduced beyond zero.
3. You can now ensure that absence entitlement payments are made to employees after terminations. Use the **Does this plan enable entitlement payments after termination?** question on the absence element template to set the entitlement element to **Final Close**.

    Example: Amelia is due to be paid maternity payments after her termination. Select **Yes** in this question to set the latest entry date of the entitlement elements to final close. With this, the absence entitlement payments are made to Amelia after her termination. When Amelia is terminated, change her employment assignment status to **Process When Earning**. Also, set the **TERM_INCLUDE_PR_LEVEL** action parameter to **Y**, so that payroll relationship level entries are considered for processing.

Submit the Element

When you submit the element, the template automatically configures a base pay element, balances, formulas, and calculation components.

The template also configures additional elements, depending on the options selected in the template to transfer absence information, as shown in this table.

Type of Absence Information to Transfer	Optional Balance Payments Selected	Additional Elements Configured
Accrual Balances	• Discretionary Disbursements • Final Disbursements	• Accrual • Discretionary Disbursement • Final Disbursement
Accrual Balances and Absences	• Discretionary Disbursements • Final Disbursements	• Accrual • Entitlement • Discretionary Disbursement • Final Disbursement
Qualification Absences	none	Entitlement
No Entitlement Absences	none	Entitlement

Define Element Eligibility Records and Cost Distributions

Define element eligibility records for all elements generated by the template, for example for your accrual, entitlement, discretionary and final disbursement elements.

If your enterprise calculates cost distributions, specify costing for all the element eligibility records. For example, for an accrual element, you do these steps

1. Define element eligibility records for the accrual, accrual results, accrual retroactive, and accrual retroactive results elements.
2. Specify costing for the accrual results and retroactive results elements.

The costing process costs the change in the liability balance since the last payroll period, debits the expense account and credits the liability account.

Related Topics

- Define Elements, Balances, and Formulas
- How Payroll Elements Hold Information for Multiple Features
- Rates Used to Calculate Absences in Payroll
- Element Costing Options
- Import Absence Entries to Payroll

Absence Elements for Compensatory and Leave Donation Plans

You can make absence payments for compensatory absence plans based on the date that the compensatory time was accrued. The Absence application passes the accrued date to the Global Payroll application so that it uses the correct rate of pay for absence.

For example, an employee is hired on 1/1/17 and is paid at a rate of 10 per hour. On 8/1/17, the employee receives a pay rise and is now paid at a rate of 12 per hour. The employee takes 3 days of leave from 10/5/17 to 10/7/17.

The employee accrued this leave as time off in lieu (TOIL) in July 2017 when they were earning 10 per hour. The application pays the employee for the 3 days leave at a rate of 10 per hour.

Compensatory Plans

When creating a rate definition to use for compensatory absence plans, in the **Reference Date** field, select the **Absence Accrued Date** value. The rate calculator calculates the rate as of the absence accrued date that's passed from the Absence application.

In the Setup and Maintenance work area, use the **Element** task to create absence elements for compensatory absence plans.

When creating such plans, in the type of absence information to transfer to payroll option, select **Accrual Balances and Absences**.

Leave Donation Plans

Workers can initiate requests to donate some or all of their accrual plan balances to coworkers who need additional time off. Administrators and managers can initiate this donation request on behalf of the worker. You can donate vacation only from Accrual and Compensatory plan types. Also, you can only donate in day or hours.

For example, Employee A is diagnosed with a long term illness and will be absent from work for a long time. You can enroll the employee into a leave donation plan. Employee B has a vacation accrual balance of 100 hours and wants to donate 10 hours to Employee A.

Now, instead of the stipulated 100 hours, Employee B will have an accrual balance of 90 hours. Employee A will have an accrual balance of 10 hours against the leave donation plan.

To use this balance, Employee A can do one of these actions:

- Enter a leave in the Absence application. The Global Payroll application receives an entitlement record for the number of hours or days that they requested.
- Take the balance as a Cash out or Payout.

Note: If Employee B earns 20 per hour and Employee A earns 10 per hour, then the application pays Employee B at 10 per hour.

When creating absence elements for leave donation plans, in the type of absence information to transfer to payroll option, select **Accrual Balances and Absences**.

Absence Elements for Payments after Termination

For absence plans that support payments after termination, set the entitlement element to **Final Close**. When creating absence element template, select **Yes** in the enable entitlement payments after termination option. Then, set each of the entitlement elements to the **Final Close** value.

On the Payroll Process Configuration page, set the **Absence and Time Calculation Entries During Payroll** parameter to one of these values:

Value	What The Application Does
Yes	Includes the absence and time calculation entries in the payroll run for those active employees that have these assignment statuses: • **Process When Earning**

Value	What The Application Does
	• **Process When One Time Entry** Further, the application includes the terminated employees in the payroll run only if they have an earning or an assignment level nonrecurring element entry.
No	Does not include the absence and time calculation entries in the payroll run for those employees that these assignment statuses: • **Process When Earning** • **Process When One Time Entry** And the application includes the terminated workers in the payroll run only if they have an assignment level nonrecurring element entry.

Related Topics

- Absence Elements for Compensatory and Leave Donation Plans
- Options to Define Compensatory Plans
- Options to Define Donation Plans

Overview of Donation Pool Plans

Donation pool plans enable employees to donate their accrued leave to a central pool, and eligible employees can then claim leave from that pool.

Donation pool elements are created so that Payroll calculates the monetary value of those employee donations and claims, and maintains the total monetary value of the donation pool. The donation pool value is credited or debited based on the donations and claims.

You can create absence accrual elements and enable them for donating to donation pools. When an employee donates leave from an accrual-based absence plan to a donation pool, the plan's element processes the donation in the payroll run, where it calculates the monetary value of the donations, and transfers that value to the nominated donation pool.

You can create donation pool elements that are associated with a donation pool plan. When an employee's claim from a donation pool is approved in Absences, the donation pool element processes the claim in the payroll run, where it calculates the monetary value of the claims, and transfers that value out of the nominated donation pool.

You can review the donations and claims that are processed in a payroll run by using the **Balance by Date** task with the **Absence Donation for Employee Balance Report** balance group usage.

Related Topics

- Overview of Donation

Donation Pool Setup for International Payroll

International Payroll customers must enable the rate definition and balance dimensions for the installed legislations of the Configure Legislations for Human Resources task.

Enable the Rate Definition and Balance Dimensions

The **Absences Donation Pool** rate definition returns a payroll balance that shows the total monetary value of a donation pool, calculated as of the last payroll run. This rate definition is used in Absences to display the total monetary value of the donation pool for the HR Administrator, when reviewing an employee's request to claim leave from a donation pool.

Here's how you enable the rate definition and balance dimensions:

1. Navigate to the **Configure Legislations for Human Resources** task.
2. On the Installed Legislations page, select your legislation from the list.
3. To enable the rate definition:
    a. In the Overview pane of your legislation page, click **Legislative Rules**.
    b. Click **Edit** and then click **Save**.
4. To enable the balance dimensions:
    a. In the Overview pane of your legislation page, click **Balance Dimensions**.
    b. Click **Edit**.
    c. Select the **Base Name** checkbox to select all balance dimensions.
    d. Click **Save**.
5. Click **Done**.

Define Payroll Elements for Absence Accrual Plans that Enable Donating to a Pool

This example shows how to define an absence element for a vacation accrual absence plan that's enabled for donating to a donation pool.

Based on your setup decisions, this procedure configures these additional elements:

- Accrual element to process absence liability amounts
- Entitlement element to process payments for absence during vacation
- Discretionary disbursement element to process disbursement of partial time accruals
- Final disbursement element to process accrual disbursement when the absence plan enrollment ends
- Donation pool element to process donations from an employee to a donation pool

The name of the element is prefixed to each additional element.

> **Note:** Each absence accrual plan will have its own, specific accrual element defined. The element you define for an accrual plan shouldn't be used across multiple plans. You can't map one element to multiple accrual plans.

This table summarizes key decisions for this scenario.

Decisions to Consider	In this Example
What units do you want to use for reporting calculations?	Days
What type of an absence are you transferring to payroll?	Accrual Balances and Absences
Do you want the element to calculate absence liability?	Yes
Which rate should the calculate absence liability use?	Liability Rate
Does your absence plan enable balance payments when enrollment ends?	Yes
Which rate will be used for the final balance payment calculation?	Final Disbursement Rate
Does this plan enable absence donation to donation pools?	Yes
Does your absence plan enable payment of partial accrual balances?	No
How do you want to calculate deductions for paid absences for employees not requiring a time card? • Reduce regular earnings by the amount of the absence payment so that the worker doesn't get paid twice? • Select a rate to determine the absence deduction amount?	Reduce regular earnings by absence payment
Does this plan enable entitlement payments after termination?	No

Define an Absence Element

Ensure that you've configured a rate definition to determine the monetary value of a unit of absence. Depending on your enterprise, you should have also configured separate rates to calculate liability, discretionary disbursement, and final disbursement payments. You configure a rate definition using the Rate Definitions task.

Here's how you create absence accrual elements for donating to a donation pool:

1. Click **My Client Groups** > **Show More** > **Payroll** > **Elements**.
2. In the **Create Element** dialog box, select your **Legislative Data Group**.
3. From the **Primary Classification** drop-down list, select **Absences**.

4. From the **Secondary Classification** drop-down list, select an appropriate value for your legislation, such as **Vacation**.

   Note: Only accrual type absence plans can donate leave to a donation pool.

5. Click **Continue**.
6. On the Create Element: Basic Information page, enter **Vacation Payment** in the **Name** and **Reporting Name** fields.
7. In the **Absence Plan Details** section, specify the fields as shown in this table. Use default values for fields unless the steps specify other values.

Field	Value
What calculation units are used for reporting?	Days
Work Units Conversion Rule	Standard Rate Daily
What type of absence information do you want transferred to payroll?	Accrual Balances and Absences

8. Click **Next**.
9. On the Create Elements: Additional Details page, in the **Accrual Liability and Balance Payments** section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

Field	Value
Calculate absence liability?	Yes
Which rate should the liability balance calculation use?	Liability Rate
Does this plan enable balance payments when enrollment ends?	Yes
Which rate should the final balance payment calculation use?	Final Disbursement Rate
Does this plan enable partial payment of balance?	No
Does this plan enable absence donation to donation pools?	Yes

Field	Value
	Note: This question is displayed only if you've selected Accrual Balances and Absences for the "What type of absence information do you want transferred to payroll?" question.
Which rate should the donation pool calculation use?	Absence Donation Rate

10. In the **Absence Payments** section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

    Note: In this worked example, all fields are being entered. However, only required fields must be entered and others might be blank.

Field	Value
How do you want to reduce earnings for employees not requiring a time card?	Reduce regular earnings by absence payment
Which rate should the absence payment calculation use?	Absence Payment
Does this plan enable entitlement payments after termination?	No

11. Click **Next**.
12. On the Create Element: Review page, review the information that you entered so far.
13. Click **Submit**.

    The template generates all the related elements, balances, and formulas.

Define Element Eligibility

1. In the **Element Overview** section of the Element Summary page, click the **Element Eligibility** node.
2. From the **Actions** menu, click **Create Element Eligibility**.
3. In the **Element Eligibility** section, enter **Vacation Payment Open** in the **Element Eligibility Name** field.

   Leave the rest of the fields on the page blank.
4. Click **Submit**.
5. Click **Done**.
6. On the Elements page, search for the other elements prefixed with your absence element name.
7. Select each element in turn and repeat the steps on the Element Summary page to define eligibility for each element.

Related Topics

- Options to Define Donation Plans
- Create a Donation Plan
- Enroll a Worker in a Donation Plan

Define Payroll Elements for Donation Pool Plans

This example shows how to define an absence element for a donation pool plan.

Based on your setup decisions, this procedure might configure these additional elements:

- Accrual element to process absence liability amounts
- Entitlement element to process payments for absence during vacation
- Discretionary disbursement element to process disbursement of partial time accruals
- Final disbursement element to process accrual disbursement when the absence plan enrollment ends
- Donation pool element to process claims from a donation pool and maintain the donation pool total

The name of the element is prefixed to each additional element.

> **Note:** Each donation pool plan will have its own, specific donation pool element defined. For example, the Emergency Donation Pool Plan will have an Emergency Donation Pool element; the Earthquake Donation Pool Plan will have an Earthquake Donation Pool element. The element you define for a donation pool plan shouldn't be used across multiple plans. You can't map one donation pool element to multiple donation pool plans.

This table summarizes the key decisions for this scenario.

Decisions to Consider	In this Example
What units do you want to use for reporting calculations?	Days
What type of an absence are you transferring to payroll?	Accrual Balances and Absences
Do you want the element to calculate absence liability?	Yes
Which rate should the calculate absence liability use?	Liability Rate
Does your absence plan enable balance payments when enrollment ends?	No
Does your absence plan enable payment of partial accrual balances?	No

Decisions to Consider	In this Example
How do you want to calculate deductions for paid absences for employees not requiring a time card? • Reduce regular earnings by the amount of the absence payment so that the worker doesn't get paid twice? • Select a rate to determine the absence deduction amount?	Reduce regular earnings by absence payment
Does this plan enable entitlement payments after termination?	No

Define a Donation Pool Element

Ensure that you've configured a rate definition to determine the monetary value of a donation pool unit. Depending on your enterprise, you should have also configured separate rates to calculate the discretionary disbursement and final disbursement payments. You configure a rate definition using the Rate Definitions task.

Here's how you define payroll elements for donation pool plans:

1. Click **My Client Groups** > **Show More** > **Payroll** > **Elements**.
2. In the **Create Element** dialog box, select your **Legislative Data Group**.
3. From the **Primary Classification** drop-down list, select **Absences**.
4. From the **Secondary Classification** drop-down list, select **Donation Pool**.
5. Click **Continue**.
6. On the Create Element: Basic Information page, enter **Emergency Donation Pool** in the **Name** and **Reporting Name** fields.
7. In the **Absence Plan Details** section, specify the fields as shown in this table. Use default values for fields unless the steps specify other values.

Field	Value
What calculation units are used for reporting?	Days
Work Units Conversion Rule	Standard Rate Daily
What type of absence information do you want transferred to payroll?	Accrual Balances and Absences

8. Click **Next**.
9. On the Create Elements: Additional Details page, in the **Accrual Liability and Balance Payments** section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

Field	Value
Calculate absence liability?	Yes
Which rate should the liability balance calculation use?	Liability Rate
Does this plan enable balance payments when enrollment ends?	No
Does this plan enable partial payment of balance?	No

10. In the **Absence Payments** section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

    Note: In this worked example, all fields are being entered. However, only required fields must be entered and others might be blank.

Field	Value
How do you want to reduce earnings for employees not requiring a time card?	Reduce regular earnings by absence payment
Which rate should the absence payment calculation use?	Absence Payment
Does this plan enable entitlement payments after termination?	No

11. Click **Next**.
12. On the Create Element: Review page, review the information that you entered so far.
13. Click **Submit**.
    The template generates all the related elements, balances, and formulas.

Define Element Eligibility

1. In the **Element Overview** section of the Element Summary page, click the **Element Eligibility** node.
2. From the **Actions** menu, click **Create Element Eligibility**.
3. In the **Element Eligibility** section, enter **Vacation Payment Open** in the **Element Eligibility Name** field.
   Leave the rest of the fields on the page blank.

4. Click **Submit**.
5. Click **Done**.
6. On the Elements page, search for the other elements prefixed with your absence element name.
7. Select each element in turn and repeat the steps on the Element Summary page to define eligibility for each element.

Related Topics

- Options to Define Donation Plans
- Create a Donation Plan
- Enroll a Worker in a Donation Plan

Frequency Rules

Use frequency rules to process a recurring element at a frequency other than the one you defined for the payroll.

For example, you can use a frequency rule to process a monthly deduction in the third payroll period of the month for employees that are paid on a weekly basis. For employees that are paid on a semimonthly payroll, you can use a frequency rule to process the monthly deduction in the second period of the month only. In these cases, define a different frequency rule for each element.

Column headers dynamically display on the Element Summary page based on the frequency period. For example, if the payroll period is weekly, the column headers are Week 1, Week 2, and so on. To control how often to process the element, select the periods you want.

Controlling the Processing of Recurring Elements

The Date field on the Element Summary page provides three values. This table explains the three options you can use to control the processing of recurring elements.

Field Value	Description	How Pay Periods are Derived
Date Earned	Date on which the application processes element entries for the payroll run.	Uses the pay period end date of the period that contains the date earned to identify the number of pay periods in the month.
Effective Date In this context the effective date is the date on which the payments are processed.	Usually this is the date between the first day and last day of the payroll period.	Uses the pay period end date of the period that contains the effective date to identify the number of pay periods in the month.

Field Value	Description	How Pay Periods are Derived
		Note: For offset payrolls, where the effective date isn't within the start and end dates of the current period, the end date of the period that contains the effective date is used. For example, you have an offset payroll where the period start date is 01-February, the end date is 14-February, and the effective date for the process is 16-February. In this case the actual period end date is 28-February because the effective date (16-February) is between 15-February and 28-February.
Payroll Run Date	Date used by the payroll calculation process to retrieve effective values such as employee details.	Uses the payroll run date to identify the number of pay periods in the month. **Note:** While the payroll run date is essentially the same as the effective date, the frequency rules process uses a different method to identify the number of the period in the month.

Example of Using the Payroll Run Date Option

Let's say you deduct pre-tax medical insurance payments twice a month for all employees on your biweekly payroll. In this scenario, you should select the Payroll Run Date option. Selecting this option ensures your payroll application doesn't process more than two deductions for the month.

The pay period dates listed in this table are for a biweekly payroll.

Pay Period	Pay Period Start Date	Pay Period End Date	Payroll Run Date
1	19-December-2015	1-January-2016	6-January-2016
2	2-January-2016	15-January-2016	20-January-2016
3	16-January-2016	29-January-2016	3-February-2016

This table describes how the process identifies the number of deductions taken for each of the date values when you process your January payroll.

Field Value	Date Used to Derive the Number of Pay Periods	Number of Deductions Taken for January
Date Earned	Pay period end date	3
Effective Date	Pay period end date	3
Payroll Run Date	Payroll run date	2 **Note:** Deductions would be taken out for the first two pay periods only because the payroll run date for the third pay period is in February.

Element Frequency Rules for Terminated Employees

When you terminate the employment of an employee, the application normally ends the payment of recurring elements such as salary, therefore frequency rules can't be applied. The application processes frequency rules in the payroll period in which the employee terminates but these rules aren't processed in subsequent payroll periods. You can use element entry start and end dates to control the frequency of recurring elements for terminated employees.

Related Topics

- Restrict Payroll Processing

Rate Conversion Rules

You can select specific formula rules when you create an element to manage rate conversions. Conversion rules apply to earnings classification elements, including standard, supplemental, absence, and time elements.

Use one of these approaches to specify these conversion rules.

- Periodicity, if you select a calculation rule for flat amount, hours multiplied by rate, or days multiplied by rate
- Work Units, if you select flat amount calculation rule for a standard or supplemental earnings element
- Proration, if the element is subject to proration

Note: Unlike earning elements, Absence and Time Card elements don't have element input for conversion rules. To edit the conversion rules for such elements after they're created, do these steps:

1. On the Calculation Value Definitions page, search for and select the time card element.
2. Change the default value for the rate conversion rule from Standard Rate Annualized to Periodic Work Schedule Rate Annualized.

Conversion Rules

This table describes the predefined formula rules.

Conversion Rule	Calculation	Example
Standard Rate Annualized	1. Converts the source amount and periodicity to an annual value using default values of 2080 hours, 260 working days. 2. Converts the amount to the required periodicity and rate.	
Standard Rate Daily	1. Calculates a daily rate using default value 260 working days. 2. Converts the amount to the required output periodicity and rate.	
Standard Working Hours Rate Annualized	1. Converts the source amount and working hours to an annual value, using the employee's standard working hours. 2. Calculates the rate.	Employee works 40 hours a week with a monthly salary of 1000 pounds: ((1000*12) / (40.00*52) = 5.77 an hour
Assignment Working Hours Rate Annualized	1. Converts the source amount and working hours to an annual value, using the employee's working hours. 2. Calculates the rate.	Employee works 40 hours a week, with a 37.5 standard working hours a week, and a monthly salary of 1000 pounds: ((1000*12) / (37.50*52) = 6.15 an hour
Periodic Work Schedule Rate Annualized	1. Converts the monetary value and work schedule to an annual value, using the employee's work schedule for the payroll period for daily and hourly conversions. 2. Calculates the rate.	Employee assigned a payroll: Employee has a monthly salary of 1000 pounds, and is assigned a monthly payroll. The formula checks the work schedule details for the month. For a daily conversion: 1000 a month / 20 days in the month = 50 Employee not assigned a payroll: 1. Rate is calculated using the weekly rate calculation. 2. The amount is converted to an annual amount. 3. The amount is divided by the number of days or hours in that week based on the work schedule.

Work Schedule Calculations

For the Periodic Work Schedule Rate Annualized rule, the formula determines whether a work schedule exists for a person. The calculation begins at the assignment level and continues in the mentioned order until it finds a schedule.

1. Assignment
2. Position
3. Job
4. Department
5. Location
6. Legal Employer
7. Enterprise

Consider these conditions to accurately calculate elements for a payroll period:

- Confirm that a work schedule assigned to a person exists at the start date of the payroll period in which you're paying the person.
- If a person has multiple assignments for a term, create the work schedule at terms or assignment level, but not at both levels. You could find calculation errors while setting up schedules at both levels.

Related Topics

- Calculation Value Definitions
- Calculation Types in Calculation Value Definitions

Element Input Values

Overview of Element Input Values

An element's input values define the entry values available on each entry of an element. Each input value has a unit of measure, such as money or date.

Input values can include validations and conditions to control the data entry of the element entry assigned to a person. For example, an earnings element may have an input value for hours worked that's required and has a unit of measure of number.

When you create an element, some input values are created automatically depending on your country extension and the element classification. You can create more input values for any element, as needed.

> **Note:** You can't add an input value to the element if any payroll process were run after the element was created. This behavior holds good irrespective of whether the payroll run included this element or not. To add input values, rollback all processes that were ran after the element creation date.

Input Value Options

For each input value created, you can change these attributes:

Field Value	What You Do
Display Sequence	Enter a number to control the display order of the entry value on element entries.
Special Purpose	Select how the input value is to be used. For example, you can indicate that it holds a percentage value, a rate, or third-party payee details. This value helps with processing the input value based on what type of information it holds.
Unit of Measure	Select the value that describes the type of value the entry value can hold, such as number or character.
Displayed	Select to display the input value on the element entry.

Field Value	What You Do
Allow User Entry	Select to enter values on element entries.
Required	Select to make the input value a required entry value on the element entry. If you select **Required**, you must also select **Displayed** and **Allow User Entry**.
Create a Database Item	Select to make the values available for formulas or HCM extract.
Rate Formula	Select a rate calculation formula, for example to return a value from a user-defined table. This option only applies to the Primary input value for elements associated with rate definitions that have the Element method and a contributor type of Amount. If you select a formula, you must not select **Allow User Entry**.
Default	Enter a value that appears as the default value for this entry value in element entries, if needed.
Apply default at runtime	Select to apply the default value when you run the payroll process, rather than when you create the element entry. This selection ensures you use the latest value on the date of the payroll run. You can manually override the default value on the element entry.
Minimum	Enter a minimum value, if needed.
Maximum	Enter a maximum value, if needed.
Validation Formula	Enter a formula that validates the entry value entered on element entries, if needed.
Validation Source	Use with the other input value options to select the valid validation method, such as lookups or formulas.
Lookup Type	Specify a lookup type to provide a list of values for an entry value. This option is available for input values of type Character only.
Warning or Error	Use when you're validating the input value or entering a minimum or maximum value. It specifies whether a warning or an error displays if the entry fails the validation condition or doesn't meet the minimum or maximum value indicated.
Reference	Use to associate a balance context with the run result. For example, you can associate a context, such as jurisdiction, with an element. Create an input value for jurisdiction and select the jurisdiction context in the **Reference** field. Then the run result value of the input value works as a context value when updating the balance. If you select a reference, then the lookup type and validation source values should be automatically set to the reference context. You must provide the **Reference** field first for the validation source value to be automatically populated.
Value Set	Specify a value set to provide a dynamic list of values for an entry value. This option is available for input values of type Character only.

CAUTION: Once an element is processed, you can't update certain input value attributes, such as unit of measure. This restriction ensures that you can't change attributes that would invalidate prior results.

This table provides examples of the allowable formats, depending on the unit of measure (UOM) specified for the entry value.

Unit of Measure	Sample Entry Value	Display in Application
Character	C	Complete
Integer	12345	12,345
Number	12345.6789 0.123456789	12,345.6789 0.123456789
Day	123 0.123	123 0.123
Money	12345 -12345.67	12345.00 <12345.67>
Hours in decimal format, 1 place	12345	12345.0
Hours in decimal format, 2 places	12345	12345.00
Hours in decimal format, 3 places	12345	12345.000
Hours expressed as a numeric value	12345	12345
Hours and minutes expressed as numeric values	12345	12345:00
Hours, minutes, and seconds expressed as numeric values	12345	12345:00:00
Date	2016-06-21	21-Jun-2016
Time	13:05	1:05 PM

Note: Display values can be derived from the meaning attribute of the view object. For example if you enter **C** as a value for the Character UOM, it displays as **Complete**. Conversion to display formats is based on the profile option value and locale.

Related Topics

- Overview of Payroll Elements
- Create and Edit Profile Options
- How Element Setup Affects Entries and Their Values
- Use a Value Set for an Element Input Value

Use a Value Set for an Element Input Value

You can use value sets to provide a dynamic list of values for an element input value. Use a value set for lists containing values that already exist in tables.

For example, person name or number, legislative data group, or payroll statutory unit. The benefit of this approach is that you don't have to create and maintain a lookup type. Using value sets helps maintain consistency and accuracy in your data.

> **Note:** The only type of value set supported for element input values is the table-based value set. Oracle Fusion Global Payroll doesn't support other value set types, such as Independent or Format Only.

Use the **Manage Value Sets** task in the Setup and Maintenance work area.

Create value sets using the **Manage Value Sets** task. You select the Table validation type to define a value set that filters values from an existing table using a SQL statement.

This table provides the required values that you enter when you create a value set for use on the Manage Elements page.

Field	Value
Module	Global Payroll
Validation Type	Table
Value Data Type	Character

> **Note:** To enable the Value Set field on the Manage Elements page you must select Character as the Unit of Measure for the input value.

To improve the performance of your value set queries, use these contexts to filter the value set records:

- PayrollRelationshipId
- PersonId
- PayrollTermId
- PayrollAssignmentId
- LegDataGroupId

- LegCode
- SysEffectiveDate

WHERE Clause example: `pay_pay_relationships_dn.payroll_relationship_id = :{PARAMETER.PayrollRelationshipId}`

> **Note:** If you use these contexts in your value set SQL, make sure the WHERE clause parameter name matches the context name.

In this example, an element contains input values for legislative data group and element name. The list of values for element name depends on the selected legislative data group. As part of setup, you can select a default legislative data group for the element, or for a specific element eligibility record.

In summary, here are the steps:

- Create a value set to return a list of all legislative data groups
- Create a value set that returns all elements in the legislative data group
- Add the value set codes to the Manage Elements page

Create a Value Set to Return a List of all Legislative Data Groups

1. From the Setup and Maintenance work area, search for and select the **Manage Value Sets** task.
2. Click **Create**.
3. Complete the fields, as shown in this table.

Field	Value
Value Set Code	LDG_VS
Description	Retrieve Legislative Data Groups
Module	Global Payroll
Validation Type	Table
Value Data Type	Character
FROM Clause	`PER_LEGISLATIVE_DATA_GROUPS_vl`
Value Column Name	`NAME`
ID Column Name	`LEGISLATIVE_DATA_GROUP_ID`
WHERE Clause	`business_group_id=202`

Field	Value
	Tip: To avoid failure of the value set, use IDs instead of names in case the display name changes in the future.
ORDER BY Clause	`NAME`

4. Click **Save**.

Create a Value Set that Returns all Elements in the Legislative Data Group

1. On the **Manage Value Sets** page, click **Create**.
2. Complete the fields, as shown in this table.

Field	Value
Value Set Code	ELE_VS
Description	Elements
Module	Global Payroll
Validation Type	Table
Value Data Type	Character
FROM Clause	`pay_element_types_f`
Value Column Name	`base_element_name`
ID Column Name	`element_type_id`
WHERE Clause	`LEGISLATIVE_DATA_GROUP_id=:{PARAMETER.LDG_IP}` **Note:** LDG_IP is the input value name.
ORDER BY Clause	`base_element_name`

Field	Value

3. Click **Save**.

Add the Value Set Codes to the Elements Page

1. On the Home page, click the **Elements** quick action under the **My Clients Groups** tab.
2. Create a new element to meet your requirements and then click **Submit**.
3. When the Element Summary page displays, click the **Input Values** folder.
4. Click **Actions** and then select **Create Input Values**.
5. Enter the name LDG_IP and the display sequence for the input value.
6. Select **Character** as the Unit of Measure.
7. Enter **LDG_VS** in the Value Set field.
8. Go to the Default field and select a legislative data group.
9. Click **Save**.
10. Click **Submit**.
11. Repeat these steps to create an element input value using the ELE_VS value set.

    You can override the default values on the Element Eligibility - Input Values page for a specific eligibility record.

Element Entries

Enable Automatic, Multiple, or Additional Element Entries Options

You can select one of these options for an element to define how you can update its element entries:

- Automatic entry
- Allow multiple entries in same period

Automatic Entry

When you create an element, you can select **Yes** for the question: Should every person eligible for the element automatically receive it? This setting selects the **Automatic entry** option by default for all eligibility records you create for that element. However, you can override the selection for any specific eligibility record before you save it.

When you select this option, saving the eligibility record initiates a payroll flow to create element entries for all eligible workers. To monitor this flow, you do these tasks:

- View the progress of the process in the **Automatic Entry Status** field. If the status shows that an error occurred, you can save the eligibility record again to resubmit the flow.
- Monitor the progress of the Generate Automatic Element Entries flow on the Processes and Reports tab.

Any updates to the employment records of eligible workers, including hires and terminations, automatically update, create, or end the element entries, as appropriate.

Tip: If you select the **Automatic entry** option, you can't also select **Allow multiple entries** in same period.

Allow Multiple Entries in Same Period

This option enables you to give a person more than one entry of the element in the same pay period. Let's consider the scenario when you enter overtime hours on a weekly basis for a person that's paid monthly. In this case, you might need to enter five entries on an overtime element in each period.

If you're creating a net-to-gross element, you must select **Allow multiple entries in same period**.

Note: An element with the Automatic entry option selected can't allow multiple entries in the same period.

Related Topics

- Default Values for Element Entries
- Element Entry Methods
- Status of Flow Tasks

Options to Determine an Element's Latest Entry Date

An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll.

The options include: final close, last standard earning date, and last standard process date. These are the predefined options. You can create others that fit your business needs.

Final Close

Use this option to let the element stay open for entries beyond a person's last day worked. For example, you may want the element to stay open to pay a severance package.

Last Standard Earning Date

Use this option to stop all element entries on the date the person leaves. You can use this option for recurring entries, such as salary.

Tip: If you select the last standard earning date option, also select proration for the element. This ensures that the element is processed up to this date, even if it isn't active at the end of a payroll period.

Last Standard Process Date

The application sets the value for the last standard process date to the last day of the pay period in which the person is terminated. However, you can set it to a later period when you terminate the person. The application stops all element entries on the last standard process date or on the date the assignment ends, if it's earlier.

Related Topics

- Overview of Payroll Elements
- How Element Setup Affects Entries and Their Values

Default Values for Element Entries

Specify default values for element entries using the Elements task. Your element setup controls when the default value affects element entries.

You can apply the default value in any of these scenarios

- When you create an element entry
- At run time
- When you use a formula to define default values on one or more entry values

You can do these actions:

- Set a default value for an input value, or select a defaulting formula for the element.
- Override the default value or formula for a specific group of employees that an element eligibility record identifies.
- Override the default value for specific employees on their element entries.

Define Default Values at Element Entry Creation

When you create or edit input values, you can specify a default value. If you don't select the **Apply default at runtime** option, subsequent updates to the default value have no effect on existing element entries. Users can override or change the default value at any time.

Define Default Values at Runtime

To use this method, enter the default value and select the **Apply default at runtime** option for the input value. If the element entry value is left blank, the payroll process uses the current default value from the element or element eligibility record. If you enter a value, the manual entry overrides the default value and updates to the default value don't affect that entry. If you want to restore the default value, clear the entry.

Use a Formula to Provide Default Values

You can create a formula of type element input validation to provide default values for one or more entry values. Select this formula in the Defaulting Formula field for an element or element eligibility record.

Here's the order of precedence:

1. A formula at the element eligibility level overrides a formula at the element level.
2. If you enter a default value for the input value and select a defaulting formula, the formula overrides the default value.

Related Topics

- How Element Setup Affects Entries and Their Values

Element Input Validation Formula Type

You can use an element input validation formula to validate one or more element entry values. You can also use this formula type to provide a default value for an element entry value.

Also, you can calculate entry values based on the user's entries in other entry values.

You select the formula on the Element Summary page in these fields:

Page Section	Field	Purpose	When Does the Formula Run?
Element Details or Element Eligibility	Validation Formula	Validates one or more entry values for the element based on entries in other entry values.	When you save the element entry.
Element Details or Element Eligibility	Calculation Formula	Provides values for one or more entry values using a calculation formula that takes input from these entry values or other entry values.	When you save the element entry.
Element Details or Element Eligibility	Defaulting Formula	Provides default values for one or more entry values.	When you create the element entry.
Input Value	Validation Formula	Validates one entry value independent of others.	When you enter a value.

Note: A formula at the element eligibility level always overrides an equivalent formula at the element level.

Here are the contexts that are available to all formulas of this type:

- LEGISLATIVE_DATA_GROUP_ID
- DATE_EARNED
- EFFECTIVE_DATE

These contexts are available to formulas only at element or element eligibility level; they aren't available to validation formulas at the input value level:

- PERSON_ID
- PAYROLL_RELATIONSHIP_ID
- PAYROLL_TERM_ID
- PAYROLL_ASSIGNMENT_ID
- HR_RELATIONSHIP_ID
- HR_TERM_ID
- HR_ASSIGNMENT_ID

Here are the input variables that are available to formulas of this type.

Formula Usage	Input Variables	Comments
Validation formula at input value level	`entry_value`	Passes the value to be validated. You must declare the input variable as the appropriate type for the element input value.
Validation formula at element or element eligibility level	Any element input value name that corresponds to an entry value.	Replace spaces in the input value name with underscores in the input variable name. It doesn't matter whether you use uppercase or lowercase for the name.
Defaulting formula	None	Use database items or other logic instead.
Calculation formula	Any element input value name of an entry value.	Replace spaces with underscores. You need not provide all the available entry values.

Here are the return values that are available to formulas of this type.

Formula Usage	Return Values	Comments
Validation formula at any level.	`formula_status`	Must be either 'S' (success) or 'E' (error). Required.
Validation formula at any level.	`formula_message`	The text of the message is passed to the user if the validation fails. Optional.
Defaulting formula	Any element input value name of an entry value.	A return value overrides any default value that's provided on the input value in the element or element eligibility record.
Calculation formula	Any element input value name of an entry value.	You don't need to return all the available entry values. You can return the entry values that were passed as input variables or other entry values.

Here are a few sample formula that you can use:

- Validation formula at input value level
- Validation formula at element or element eligibility level
- Calculation formula at element or element eligibility level
- Defaulting formula at element or element eligibility level

Validation formula at input value level:

```
inputs are entry_value(date)
if(entry_value = '01-APR-2008' (date)) then
(
formula_message = 'Valid date'
```

```
formula_status = 'S'
)
else(formula_message = 'Invalid date'
formula_status = 'E'
)
return formula_message, formula_status
```

Validation formula at element or element eligibility level:

```
inputs are hours_worked, rate, earning_date(date), comment(text)
if(hours_worked > 80) then
(
formula_message = 'You are within the working limit.
'formula_status = 'S'
)
else
(
formula_message = 'You have worked too many hours.
'formula_status = 'E'
)
return formula_message, formula_status
```

Calculation formula at element or element eligibility level:

```
inputs are hours_worked, rate, comment(text)
if(hours_worked > 80) then
(
rate = rate * 1.2
comment = 'Your rate has been increased'
)
return rate, comment
```

Defaulting formula at element or element eligibility level:

```
if(CATEGORY = 'S') then
(
rate = 20
)
else
(
rate = 30
)
rate_code = 'B'
return rate, rate_code
```

Formula Result Rules for Elements

An element's status processing rule identifies the formula that the payroll run uses to process the element for workers with a specified assignment status. For each status processing rule, formula result rules determine what happens to each result that the formula returns.

Status Processing Rules

An element can have one status processing rule for all assignment statuses, or a different rule for each status. For example, you could have two rules for a Wages element: Standard Wages and Paid Training Leave.

Formula Result Rules

Formulas return formula results, such as the amount to be paid, or a message. Results can update the current element entry or another element entry with a lower processing priority.

This table explains the available result rules.

Results Rule	What's Its Use
Direct Result	The element's run result, or a direct result updating one of the element's input values.
Indirect Result	An entry to a nonrecurring element that has a lower processing priority. The target element must be at the same employment level as the source element.
Message	A message issued by the formula under certain conditions. For example, a formula can check a loan repayment balance and, if the balance is zero, issue the message *Loan is repaid*. There are three severity levels for a message rule: • Error - Causes the run to roll back all processing for the employment record. • Warning - Doesn't affect payroll processing but warns you of a possible problem. • Information - Doesn't affect payroll processing.
Order Indirect	Updates the subpriority of the element you select in the Target Element Name field.
Stop	Uses the Date Earned of the payroll run to stop the processing of a recurring entry. A stop rule can be based upon reaching a specified accumulator, such as a balance owed of zero. The date upon which the total owed is reached appears on the Element Entries page as Settlement Date. The entries aren't actually end dated but stopped from future processing. This rule supports retroactive processes which impact the total owed balance. You should define the target element with Allow Multiple Entries selected. This option enables you to allocate a new entry once the value of an existing entry has reached zero. For example, once an employee has repaid a loan you can add a new loan entry for the employee. If you add a new stop entry for the same element type, use balance contexts to differentiate between the owed balances. **Note:** Let's assume you don't select Allow Multiple Entries and you add a second loan after the first loan has been stopped by a payroll run. In this case, end date the first loan before creating the second loan.
Target Indirect	An entry to a nonrecurring element that has a lower processing priority. Here, the target element is defined at a different employment level than the element being processed. For example, you could use a Target Indirect rule to update the input value of an assignment-level element from the processing of a payroll relationship element.

Element Eligibility

Overview of Element Eligibility

Use element eligibility to determine which people are eligible for an element. To determine eligibility, you select the criteria that people must receive entries of the element.

In these examples, you restrict who can receive an element entry:

- Your enterprise provides company cars only to people in the sales or customer support departments. You create two eligibility records, and use the Department field to specify the eligibility criteria. Select Sales Department for one record and Customer Support for the second record.
- Your enterprise offers a production bonus to people who work full-time in production and are on the weekly payroll. You create one eligibility record and select Full-time regular in the Employment Category field, Production in the Department field, and Weekly in the Payroll field.

Eligibility Criteria

You can define element eligibility using these criteria.

Level	Available Criteria
Payroll Relationship	Payroll Statutory Unit Relationship Type
Items Assignment	Legal Employer Department in which the person works Job, for example, associate professor or secretary Grade Employment Category People Group Legal Employer Department, same as in Items Job, same as in Items Grade Employment Category People Group: To set up logical entity specific people group, on the Create Element Eligibility page, select the required values in these options: • Legal Employer

Level	Available Criteria
	• People Group If you don't select a legal entity as a criteria, then the application looks for the people group associated at the enterprise level. By default, the enterprise level people group is available. **Note:** You set up all the people groups that are appropriate for your enterprise. For example, you could decide to group people by company within a multi-company enterprise, and by union membership. Location of person's office Position, which is a class of job performed in a particular organization, for example, associate professor of chemistry, or finance department secretary. Payroll All payrolls eligible **Note:** You're advised to define eligibility rules based on the payroll criteria for all assignment elements such as salary. Select the 'All Payroll Eligible' option if your company doesn't have eligibility rules based on an employee's payroll. The 'All Payroll Eligible' option ensures all employees who are assigned to a payroll will be eligible for the element. Bargaining Unit Collective Agreement Union Member

Tip: You must define element eligibility for every element, including predefined elements. You are advised to define eligibility rules based on the payroll criteria for all assignment level elements. It is also common practice for payroll customers to define costing rules on the element eligibility record. Additional eligibility rules can be defined for compensation and benefit elements using eligibility profiles.

Multiple Rules of Eligibility

You can define more than one eligibility record for each element, but there must be no overlap between them.

For example, you can create one record for the combination of grade A and the job of accountant. However, you can't create one record for grade A and a second for the job of accountant. These rules would imply that an accountant on grade A is eligible for the same element twice.

If you have more than one element eligibility record, you can enter different default values and costing information for each eligibility group.

Related Topics

- Maintain Element Eligibility

Maintain Element Eligibility

After saving an element eligibility record, you can only make certain changes. You can't update the eligibility criteria.

This table summarizes the actions you can take.

Action	What's The Result
Change the input value default values and validation	These changes affect all new entries, and updates to existing entries. Changes to runtime defaults affect existing entries too.
Delete the element eligibility record	The application automatically ends all existing recurring entries when you end the element's eligibility. **Note:** You can't delete the element eligibility record if any nonrecurring entries exist at the date you want to end the record. You must delete existing entries before you end the element's eligibility.

Related Topics

- Payroll Element Eligibility

Add Eligibility Rules for Predefined Elements

If the country extension on the Manage Features by Country or Territory page is set to Payroll or Payroll Interface, you must add element eligibility records for predefined statutory deduction elements before you hire any workers.

Here's how you can search for the predefined elements:

1. Go to the **Elements** task.
2. Click **Go to Task**.
3. Search for these predefined elements:

Country or Territory	Predefined Element
US, Canada, Mexico	US Taxation, CA Taxation, MX Taxation
Australia, India, Singapore	Statutory Deductions
Kuwait, Saudi Arabia, United Arab Emirates, Bahrain, Qatar and Oman	Social Insurance Gratuity GOSI

Country or Territory	Predefined Element
China	Aggregation Information
UK	Tax and NI Pensions Automatic Enrollment
Netherlands	Tax and Social Insurance Calculations
France	French Payroll Processing

Note: There are no predefined elements that require eligibility rules for Germany, Ireland, Switzerland, or Hong Kong.

Here's how you can add eligibility rules:

1. Click the element name to open the Element Summary page.
2. Enter a date in the Effective As-of Date field.

   Use the start date of the element, which is 1/1/1901.
3. Enter a name for the eligibility rule and click **Submit**. Since you haven't selected any eligibility criteria, all employees are eligible for the element.
4. Click **Done**.

Voluntary Deductions

Define Voluntary and Pre-statutory Deductions

Use the Elements task to define voluntary and pre-statutory deductions, such as pensions. You can manage pension deductions through calculation cards or element entries, depending on country-specific rules.

You can also manage other voluntary deductions, such as gym membership, union membership, and charity donations, through element entries.

Use these steps to set up deductions:

1. Define the elements.
2. Define the third-party payees.
3. Define a third-party payment method for each third-party payee.
4. Enter the deduction details for each person. Do this in the following ways, depending on the deduction type and your setup:
   - Configure a Benefits and Pensions calculation card.
   - Define element entry.
   - Load benefit batches.

Defining Elements

When you define a pension plan deduction, if you select the **Benefit** category, or it's selected for you, the element template defines a calculation component. You add this component to Benefits and Pensions calculation cards to assign it to your workers.

To define other voluntary deductions:

- Select the **Standard** category.

  This selection means you manage these deductions using the Element Entries task.
- After defining the element, you must add a Payee input value and select **Third-Party Payee** as the special purpose for it.

  If appropriate, enter a default value on the element or element eligibility record to populate the third-party payee details.

  > **Note:** You can streamline the creation of Voluntary Deduction and Pretax Deduction elements by reducing the number of rules created. The application creates stop rules only if you had selected the total owned option when you created the element. If you had selected **No** for the template question **Processing Stop when the Total is Reached**, the application doesn't create the stop rule for the element.

Defining Third-Party Payees

To define third-party payees, use the Third Parties page in the Administration section.

For pensions, select the **Organization** payee type and select the **Pension Provider** party usage code.

Defining Third-Party Payment Methods

To define payment methods for all external payees, you can use the Third-Party Payment Methods task in the Person Information section.

Entering Deduction Details for Each Person

For pensions using the Benefit category:

1. Configure a Benefits and Pensions calculation card for the worker.
2. Add your new pension calculation component to the card.
3. Enter the payee and other details.

If you load your pension information using the Load Benefit Batches process, the payroll application configures the calculation card automatically. Before running this process, you must generate an XML file that contains the data you want to transfer to payroll.

For other voluntary deductions, you must define element entries. If the payee isn't defaulted from the element or eligibility record, enter the payee on the element entry.

Related Topics

- Third-Party Payment Methods
- Considerations to Enter Calculation Values for Pensions
- Create Elements for Pension Deductions

Create Elements for Pension Deductions

This example shows you how to create a pension deduction element using an element template. Follow these steps:

1. Create a pension deduction element
2. Create an eligibility record for the deduction

Creating a Pension Element

1. On the Home page, click the **Elements** quick action under the My Client Groups tab.
2. Click **Create**.
3. Complete the fields, as shown in this table.

Field	Value
Legislative Data Group	Your Legislative Data Group
Primary Classification	Voluntary Deductions or Pre-statutory Deduction
Secondary Classification	Appropriate classification for your country or territory, such as Pension Plan After Tax

4. Click **Continue**.
5. Complete the Basic Information page. For the latest entry date:
    - Select **Last Standard Earning Date** if you enable proration for the element.
    - Otherwise, select **Last Standard Process Date**.
6. Click **Next**.
7. On the Additional Details page, enter the calculation rules and limits for the deduction. This table summarizes your choices.

Rules	What You Can Enter
Calculation rule	Fixed amount or percentage
Age limits	Minimum and maximum age
Maximum contribution amount	Any numeric value
Pensionable earnings limit	Minimum and maximum amount
Additional contributions allowed	Yes, or no. If yes, select calculation rule.

Rules	What You Can Enter
Employer contributions allowed	Yes, or no. If yes, select calculation rule, age limits, and amount limits
Overrides allowed	Yes, or no
Element subject to proration	Yes, or no

8. Click **Next**.
9. Verify the information is correct.
10. Click **Submit**.

    The template creates a recurring element at the payroll relationship level. It also creates a calculation component with the same name as the element. You add this component to workers' calculation cards.

Creating an Eligibility Record for the Deduction

On the Element Summary page, you can create as many eligibility records as you require:

1. In the Element Overview section, click the **Element Eligibility** link.
2. Select **Create Element Eligibility** from the Actions menu.
3. Enter a name for the eligibility record.
4. Select any criteria if you want to restrict who can pay this deduction.
5. Click **Submit**.
6. Click **Done**.

Related Topics

- Considerations to Enter Calculation Values for Pensions

Overview of Deduction Reference

Deduction Reference maintains voluntary deduction balances for each reference number provided.

The deduction reference is a mandatory input value and must be entered to maintain the balances. It should not be made non-mandatory and left blank to avoid the incorrect balance calculations.

This input value gets created in specific scenarios, as mentioned below, and there by the arrears and accrued balances are tracked with respect to a specific reference entered using Deduction Reference input value.

There are 2 element template questions in Voluntary Deductions that control the creation of deduction reference and the corresponding defined balances. You can track and report the arrears / total owed (loan) balances with respect to a specific reference and it does not combine with another entry either during the same time or even in future.

1. What should happen when there are insufficient funds to cover the deductions? If you enable arrears, a reference is required for each deduction entry. Available Options:
    a. Do not take a partial deduction or create arrears
    b. Do not take partial deduction, place all in arrears
    c. Take a partial deduction, but do not create arrears

d. Take a partial deduction, place remaining in arrears

Scenario 1: If you select either (b) or (d) options, mandatory Deduction Reference input value and the corresponding "reference" related dimensions, such as Relationship Tax Unit, Reference Run are created.

Scenario 2: If you select (a) or (c), Deduction Reference input value is not created and the non-reference related defined balances, such as Relationship Tax Unit, Run is created. Reference related dimensions are not created.

2. Do you want to stop processing when the total owed is reached? If you enable total owed, a reference is required for each deduction entry.

If you select "Yes" for the above template question, mandatory Deduction Reference input value and the corresponding "reference" related dimensions, such as Relationship Tax Unit, Reference Run are created.

> **Note:** Get Reference Code from Database Sequence is a default formula that generates a unique reference number for each element entry. You could also write the formula, such as using Person Number as the Deduction Reference, if you would like to continue the balances across entries for an employee.

Prerequisites

Review the below points before using the deduction reference functionality:

- If you would like to have the compatibility of the previous functionality prior to 21C such that the balances will be maintained across element entries, you can choose any one of the below:
  - Use the default formula to default the person number as suggested in this document.
  - Write the default formula to default the payroll relationship number as suggested in the release documentation.
  - Default a constant value.
- You should not add or delete the defined balances in balance dimensions of the primary balance of the element or balance group. Otherwise, it will cause duplicate records in the reports and in the archive.
- If you would like to maintain the balances separately for each element entry, you can use the delivered default formula, Get Reference Code from Database Sequence, that generates the unique sequence number as the reference number for each element entry.
- For the elements using a Benefits module that meets one of the above conditions, we suggest you use a Default reference value for all entries or use a formula to create a reference based on the Person Number of the employee or Benefits Plan name. This is because, when an employee is enrolled into a benefits plan, an element entry is created. When there is a subsequent life event and enrollments, it end-dates the previous element entry and creates a new entry. If you use the above delivered default formula, the balances will be re-initiated which is not expected.

  > **Note:** You need to attach the default formula at element level while using the Person Number as the default. If you are using benefits plan name as the default, you need to define the formula using extra input type and associate it at Extra Inputs section of benefits plan for deduction reference input value.

- The deduction reference input value is mandatory. Oracle does not recommend making it optional. The validation formula ensures that the element entry is not created without the deduction reference even if the deduction reference input value is made optional.

Create Fast Formula

You need to create 2 fast formulas of type “Element Input Validation” to populate the default value in deduction reference input value and raise an error exception when no value is entered in deduction reference input value.

Note: Use the delivered default formula, Get Reference Code from Database Sequence, for elements such as Loans to maintain balances with respect to each entry.

1. Formula to return the person number

   Below is the sample formula that returns the person number. Attach this formula to the Default Formula attribute in element in Default Entry Values and Validation Section.

```
/* Sample Formula Begins – Defaulting Person Number */
 DEFAULT FOR PER_PER_PERSON_NUMBER is '-1'
 Inputs are Deduction_Reference (text)
 l_person_number = PER_PER_PERSON_NUMBER
 Deduction_Reference = l_person_number
 Return Deduction_Reference
 /* End of Sample Formula – Defaulting Person Number */
```

2. Formula to validate the element entry

   Below is the sample formula that validates the element entry when no value is entered for Deduction Reference input value. Attach this formula to the Validation Formula attribute for Deduction Reference input value in Default Entry Values and Validation Section.

```
/* Sample Formula Begins – Validate required attribution of Deduction Reference input value */
 DEFAULT FOR ENTRY_VALUE IS 'NO VALUE'
 INPUTS ARE ENTRY_VALUE (text)
 IF ENTRY_VALUE WAS DEFAULTED then
 (
 FORMULA_MESSAGE = 'The deduction reference cannot be null. You must enter a value.'
 FORMULA_STATUS = 'E'
 )
 RETURN FORMULA_STATUS, FORMULA_MESSAGE
 /* End of Sample Formula – Validate required attribution of Deduction Reference input value */
```

Attach Formulas to Element

1. Attach the default formula to Default Formula attribute in Default Entry Values and Validation Section at element level.

2. Attach the validation formula to Validation Formula attribute for Deduction Reference input value in Default Entry Values and Validation Section.

Note:

- You need to date track to the start date of the element.
- If you have any date effective update record of the element, ensure that the formulas are associated to all date effective records.
- Once you attach these formulas, the default value will be populated while creating the element entry and validation will be performed.

Calculation example with and without reference

Let's examine two common examples: calculations with reference and calculations without reference.

- Deductions with Arrears only enabled
- Arrears Enabled but no Total Owed – Without Reference

Deductions with only Arrears enabled

1. Arrears Enabled but no Total Owed – Without Reference

   You create an element entry with every pay period deduction of $100. The entry starts from 01-Sep-2020. Below are the sample calculation results:

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)
Deduction1	30-Sep-2020	100	0	100	0
	31-Oct-2020	100	0	200	0
	30-Nov-2020	70	30	270	30
	31-Dec-2020	80	20	350	50

   In Nov and Dec, the employee does not have sufficient earnings and hence partial deduction has happened. At the end of the Dec-2020 period, the accrued arrears were 50.

   Now, you have end dated the entry.

   You create a new element entry of the same element in the month of Apr-2021 with every pay period deduction as $70. Below are the sample calculation results. Assume that there is a cap of $100 as maximum amount.

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)

Deduction1	30-Apr-2021	100 (70+30 from previous arrears)	-30 (from previous arrears. ideally, should be 0)	450 (ideally, it should be 70 for this entry)	20 (from previous arrears. Ideally, it should be 0)
	31-May-2021	90 (70+20 from previous arrears)	-20 (from previous arrears. ideally, should be 0)	540 (ideally, it should be 140)	0

2. Arrears Enabled but no Total Owed – With same Reference such as Person Number

   If you use the same reference number (such as Person Number) as the Deduction Reference after 21C, then the calculations would be the same as the results without reference prior to 21C.
3. Arrears Enabled but no Total Owed – With Unique Reference

   You create an element entry with every pay period deduction of $100. The entry starts from 01-Sep-2020. Below are the sample calculation results. The arrears are maintained using the reference PLN2020.

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)	Deduction Reference
Deduction1	30-Sep-2020	100	0	100	0	PLN2020
	31-Oct-2020	100	0	200	0	PLN2020
	30-Nov-2020	70	30	270	30	PLN2020
	31-Dec-2020	80	20	350	50	PLN2020

In Nov and Dec, the employee does not have sufficient earnings and hence partial deduction has happened. At the end of the Dec-2020 period, the accrued arrears were 50.Now, the user has end dated the entry.

You create a new element entry of the same element in the month of Apr-2021 with every pay period deduction as $70. Below are the sample calculation results. Assume that there is a cap of $100 as maximum amount. The entry is maintained with reference PLN2021.

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)	Deduction Reference
Deduction1	30-Apr-2021	70	0	70	0	PLN2021
	31-May-2021	70	0	140	0	PLN2021

Note: Here PLN2020 and PLN2021 are user entered unique reference numbers. You can use the delivered default formula, Get Reference Code from Database Sequence, that generates the unique reference number from database sequence that starts with 1.

Deductions with Arrears and Total Owed enabled

1. Arrears Enabled with Total Owed – Without Reference

   You create an element entry with every pay period deduction of $100 and with Total Owed as $400. The entry starts from 01-Jan-2020. Below are the sample calculation results:

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)	Remaining Balance
Deduction2	31-Jan-2020	100	0	100	0	300
	29-Feb-2020	100	0	200	0	200
	31-Mar-2020	70	30	270	30	130
	30-Apr-2020	80	20	350	50	50

   You have end dated the entry after 30-Apr-2020. Loan is not cleared. Arrears is left over and remaining balance is also left over.

   a. Total Owed in the 2nd entry is less than Total Accrued in the 1st Entry.

      You create a new element entry of the same element in the month of Aug-2020 with every pay period deduction as $70 and Total Owed as 280. Below are the sample calculation results.

      It gets end dated immediately in the 1st run as the accrued deduction from the previous entry is already 350 and the current total owed is 280. It returns the amount 70 with the assumption that it has deducted additional. It gets end dated in the 1st pay period itself.

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)	Remaining Balance
Deduction2	31-Aug-2020	-70	-50	280	0	0

   b. Total Owed in the 2nd entry is greater than Total Accrued in the 1st Entry.

      You create a new element entry of the same element in the month of Aug-2020 with every pay period deduction as $70 and Total Owed as 410. Below are the sample calculation results.

      It gets end dated immediately in the 1st run after deducting the 60 with the calculation of subtracting total accrued deduction of previous period from total owed of current period.

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)	Remaining Balance
Deduction2	31-Aug-2020	60	-50	410	0	0

2. Arrears Enabled with Total Owed – With same Reference such as Person Number

   If you use the same reference number (such as Person Number) as the Deduction Reference in the 2nd entry also after 21C, then the calculations would be same as the results without reference prior to 21C.

3. Arrears Enabled with Total Owed – With Unique Reference

You create an element entry with every pay period deduction of $100 and with Total Owed as $400. The entry starts from 01-Jan-2020. Below are the sample calculation results:

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)	Remaining Balance	Deduction Reference
Deduction2	31-Jan-2020	100	0	100	0	300	LOAN1
	29-Feb-2020	100	0	200	0	200	LOAN1
	31-Mar-2020	70	30	270	30	130	LOAN1
	30-Apr-2020	80	20	350	50	50	LOAN1

You have end dated the entry after 30-Apr-2020. Loan is not cleared. Arrears is left over, and the remaining balance is also left over.

You create a new element entry of the same element in the month of Aug-2020 with every pay period deduction as $70 and Total Owed as 350. Below are the sample calculation results.

It gets calculated correctly and the deduction balances are maintained correctly.

Element Name	Pay Period	Deduction (RUN)	Arrears (RUN)	Total Deduction (ITD)	Arrears (ITD)	Remaining Balance	Deduction Reference
Deduction2	31-Aug-2020	70	0	70	0	280	LOAN2
	30-Sep-2020	70	0	140	0	210	LOAN2
	31-Oct-2020	70	0	210	0	140	LOAN2
	30-Nov-2020	70	0	280	0	70	LOAN2
	31-Dec-2020	70	0	350	0	0	LOAN2

Note: Here LOAN1 and LOAN2 are user entered unique reference numbers. You can use the delivered default formula, Get Reference Code from Database Sequence, that generates the unique reference number from database sequence that starts with 100.

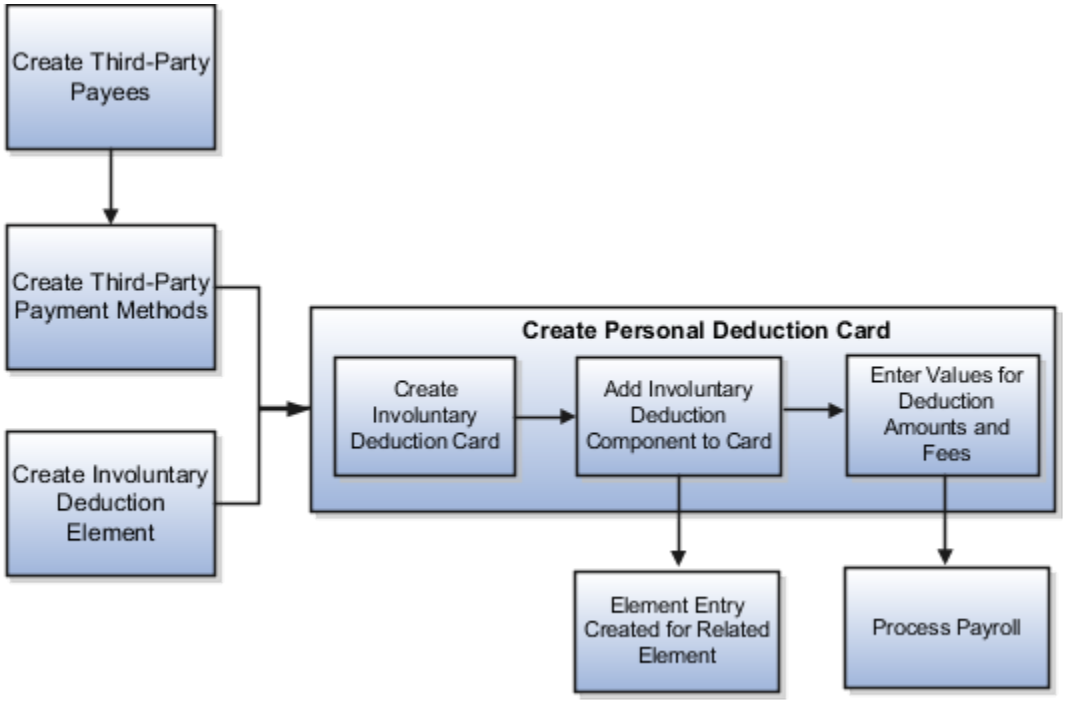
Involuntary Deductions

Add Involuntary Deductions to a Calculation Card

You use element templates to create the involuntary deduction elements supported for your legislation, such as bankruptcy orders, garnishments, child support payments, tax levies, and educational loans.

The templates also create calculation components, which you can add to a personal calculation card, so the deductions are processed during a payroll run.

This figure shows the steps involved in creating an involuntary deduction and adding it to a personal calculation card:



Prerequisites

Before you can add an involuntary deduction to a personal calculation card, you must first:

- Create a third party to receive the payment.
- Create a third-party payment method.
- Create an involuntary deduction element.

  You can create multiple elements for the same involuntary deduction type if processing information or other details vary. For example, each jurisdiction you deal with may have different processing rules for court orders.

Creating an Involuntary Deduction Calculation Card

Follow these steps:

1. In the Payroll section of My Client Groups, click the **Calculation Cards** task.
2. Search for and select the payroll relationship.
3. If the person doesn't already have an involuntary deduction calculation card, click **Create**.
4. Enter a start date for the card and select the involuntary deduction card type.
5. Click **Continue**.

Adding the Calculation Component to the Calculation Card

You can add multiple calculation components for the same or different involuntary deduction types. For example, you could add two child support components and one garnishment component to the same calculation card.

On the Calculation Cards page:

1. In the Calculation Components section, click **Add Row**.
2. Select the calculation component with the same name as the involuntary deduction element.
3. Optionally, enter a number in the Subprocessing Order field if the calculation card will include more than one calculation component.

   By default, the payroll run processes these element entries in order by date received, starting with the oldest entry.
4. Enter a reference code to uniquely identify this deduction, such as a court order number, case number, or other identifier provided by the issuing authority.
5. Complete the fields on the Calculation Component Details tab.
   - In the Involuntary Deduction Payment Details section, select all payees for the deduction.

     The payee fields display all third-party person payees associated with this payroll relationship and all external payees defined for your legislative data group.
   - In the Involuntary Deduction Rules section, specify the information you require, including:
     - The date the involuntary deduction order was received
     - The issuing authority (such as a court)
     - The frequency of the deduction such as monthly or weekly, regardless of the payroll frequency. If you leave the Frequency field blank, the application uses the payroll frequency.

Entering Values for the Deduction Amounts

You enter the order amount, fee, or other amounts used in the calculation on the calculation card. The values you enter replace any default values defined in calculation value definitions. The default order amount for an involuntary deduction is typically zero.

To create overrides on the Enterable Calculation Values on the Calculation Cards task, complete the fields as shown in the following table. The values you enter may vary by country or territory, but typically include the items described in the table below.

> **Note:** For most values, you can enter either an amount or a rate. Enter a rate if you want the application to calculate the amount as a percentage of available pay. For example, to define a rate of 20 percent for the order amount, create an Order Amount (Rate) value. Then enter 20 in the Rate field.

Calculation Value	Description
Order Amount	Rate or amount paid to the Order Amount Payee based on the frequency you specified. For example, if you specified a frequency of monthly in the component details, enter the amount to deduct each month, regardless of the payroll period. The application automatically calculates the correct amount to deduct in each payroll period. If you leave the Frequency field blank, this amount is deducted at the payroll frequency defined at the assignment level.
Organization Fee	Rate or amount paid to the Organization Fee Payee each time the deduction is processed.
Person Fee	Rate or amount paid to the Person Fee Payee each time the deduction is processed.
Processing Fee	Rate or amount paid to the Processing Fee Payee each time the deduction is processed.
Initial Fee	Rate or amount paid to Processing Fee Payee the first time this deduction is processed.
Maximum Withholding Amount and Minimum Withholding Amount	Maximum and minimum rates or amounts that can be withheld in one payroll period for this deduction.
Maximum Withholding Duration	The number of days after the Date Received that the order is valid. For example, a court order might only be valid for 90 days after the date issued.
Protected Pay Amount	Amount of the employee's pay that's exempt from this deduction. Only pay exceeding this amount is included in the deductible amount (available for the deduction).
Exemption Percentage	Percentage of the employee's pay that's exempt from this deduction.

Related Topics

- Examples of Involuntary Deduction Processing
- Third Parties Overview
- Fee and Proration Rules for Involuntary Deductions
- Third-Party Payment Methods

Fee and Proration Rules for Involuntary Deductions

Creating an involuntary deduction creates calculation value definitions that include predefined fee and proration rules. These rules vary by country and territory.

The following table describes the global rules:

Rule	Processing
Fee	Deduct the fee first, before calculating and paying the deduction amount.
Proration	Use the first come, first serve method. If a person has multiple orders and there is insufficient money to pay them all, pay the deductions in the order in which they were received. Start with the oldest.

You can override these predefined fees and proration rules. For details, see the topic Involuntary Deduction Calculation Value Override Details for the US in the Help Portal.

Related Topics

- How You Add Involuntary Deductions to a Calculation Card

Examples of Involuntary Deduction Processing

Processing rules may vary by the legislation or the legal authority issuing the order for an involuntary deduction. Let's look at some examples that illustrate the processing of fees, protected pay amounts, and when employees have multiple assignments and payrolls.

Payroll processing first calculates disposable income using the disposable income rules. Then it looks at the exemption rules to calculate the amount exempt from withholding. Using these amounts, it can calculate the amount available to deduct.

> **Note:** The payroll process calculates disposable income once, based on the highest processing priority card component. The exception is regional tax levies, which have a separate disposable income calculation.

You can use these examples to understand how involuntary deductions are processed in different scenarios:

- Involuntary deduction has initial fee and processing fee
- Deduction amount exceeds protected pay amount
- Employee has multiple assignments and payrolls
- Multiple orders exist with different protected pay amounts

Involuntary Deduction Has Initial Fee and Processing Fee

Scenario: An employee in Country 1 is issued a court order for a monthly garnishment of 500. The order is subject to two fees. Both fees are paid to the agency responsible for administering the account. The agency then forwards the payments to the recipients:

- A one time initial fee of 10
- A monthly processing fee of 10

On the involuntary deduction calculation card:

1. Add a calculation component for a garnishment.
2. In the Calculation Component Details tab:

- Select the **Order Amount Payee** and the **Processing Fee Payee**. The processing fee payee is also the initial fee payee.
- Select **Monthly** in the Frequency field.

3. In the Enterable Calculation Values tab, enter the following values:

Field	Value
Order Amount	500
Processing Fee	10
Initial Fee	10

Payroll Run Results:

- The amount of the employee's pay subject to deduction is 1000.
- During the first monthly payroll after the court order is received, both the initial fee amount and the processing fee are deducted. The total deduction amount is 520.
- In subsequent payroll runs, the order amount and the processing fee are deducted. The total deduction amount is 510.

Deduction Amount Exceeds Protected Pay Amount

Scenario: An employee in Country 2 is issued a court order for the amount of 100 per month. However, protected pay rules defined for the deduction require that the employee take home at least 700, after all deductions.

On the involuntary deduction calculation card:

1. Add a calculation component for a court order.
2. In the Calculation Component Details tab:
   - Select the **Order Amount Payee** and the **Processing Fee Payee**.
   - Select **Monthly** in the Frequency field.
3. In the Enterable Calculation Values tab, enter the following values:

Field	Value
Order Amount	100
Protected Pay	700

Payroll Run Results:

- The amount of the employee's pay subject to the deduction is 750.
- A deduction amount of 100 would leave only 650 for the final pay amount. Therefore, only 50 is deducted for the month.
- The remaining balance of 50 isn't placed in arrears, based on processing rules defined for this deduction.

Employee Has Multiple Assignments and Payrolls

Scenario: An employee has one payroll relationship with two assignments. They receive paychecks from two different payrolls. One payroll is run on a weekly basis. The other is run on a monthly basis.

The employer receives a court order to deduct 200 per month from the employee's wages. The court order amount must be deducted from all available money, regardless of the payroll. If the total order amount can't be deducted from the first payroll run, then the following occurs. The remaining balance must be deducted from one or more subsequent runs during the month, until the full amount is paid.

On the involuntary deduction calculation card:

1. Add a calculation component for a court order.
2. In the Calculation Component Details tab:
    - Select the **Order Amount Payee**.
    - Select **Monthly** in the Frequency field.
3. In the Enterable Calculation Values tab, enter the following value:

Field	Value
Order Amount	200

Payroll Run Results:

- During the first weekly payroll run, only the amount of 50 can be deducted, leaving an amount owed of 150 for the month.
- When the next weekly payroll is run, the deduction can't be taken due to insufficient pay; the balance for the month remains 150.
- The monthly payroll runs before the next weekly payroll is run. The remaining amount of 150 owed for the deduction is taken during the monthly payroll run.
- No money is deducted during the subsequent weekly payroll runs for this month.

Note: If a person has two assignments for different payroll relationships, they would typically be issued two different court orders, one for each employment. In this case, you would add each court order to a different calculation card.

Multiple Orders Exist with Different Protected Pay Amounts

Scenario: An employee in Country 2 has three court orders. Each court order has a different protected pay amount.

1. On the involuntary deduction calculation card add three calculation components for child support.

2. For each calculation component, select **Monthly** in the Frequency field.
3. Define the protected pay and order amount values for each deduction as shown in the following table:

Involuntary Deduction	Protected Pay Amount	Order Amount	Date Received
Child Support 1	500	1000	23 January 2012
Child Support 2	600	1100	2 February 2012
Child Support 3	1000	1200	2 February 2012

Payroll Run Results:

The net amount available for involuntary deductions in the payroll run is 2000 GBP. Based on the processing priority defined for child support payments, the payroll run processes the involuntary deductions in order by date received.

Here's the result:

- Child Support 1 is paid in full, leaving 1000 available for other deductions.
- Child Support 2 is paid an amount of 400 (1000 less protected pay of 600).
- Child Support 3 isn't paid. The total amount is placed in arrears, based on processing rules defined for the deduction.

Related Topics

- How You Add Involuntary Deductions to a Calculation Card

Net-to-Gross Earnings

Calculate Net-to-Gross Earnings

When you create an earnings element, you can indicate that it pays a specified net amount.

Use this feature, if you need to pay a person:

- Guaranteed take-home pay (net) per payroll period
- Bonus of a specified net amount

To create an earnings element, use the **Elements** quick action under the **My Clients Groups** tab.

You can create a net-to-gross (gross-up) element for any recurring or nonrecurring earnings element using these primary classifications:

- Standard Earnings
- Supplemental Earnings

- Taxable Benefits (Imputed Earnings)

Settings That Affect Net-to-Gross Processing

Define the deductions that are used to calculate the gross amount from the specified net amount.

Answer **Yes** to the **Use this element to calculate a gross amount from a specified net amount?** prompt in the element template to create the element as a gross-up element.

In each element entry, specify the limits of the gross-up processing as follows:

- In the **Net** value, enter the value you want the employee to receive.
- In the **To Within** value, enter the allowed difference between the desired amount and the actual amount. This limit can't be 0.

Note: If these values are the same across most entries, you can enter a default value on the element eligibility record.

How Formulas Calculate the Gross Amount

The formulas for net-to-gross processing perform these actions:

1. The predefined GLB_EARN_GROSSUP iterative formula takes as input the desired net amount (**Net** input value) and the amount by which net can differ from the desired amount (**To Within** input value).
2. In the first run, the formula performs these actions:
    a. Sets the lower gross limit to the desired net amount, and the higher gross limit to twice the desired amount.
    b. Runs a function to provide the first guess of the gross.
    c. Returns three values to the element's input values: low gross, high gross, and additional amount.
3. The element's payroll formula runs. The formula adds the additional amount to the desired amount for creating the gross amount. The formula returns this value to the element's pay value for the payroll run to process.
4. In the next iteration, the iterative formula compares the additional amount to the total value of the balances that are available for gross-up for this element entry. The additional amount must not differ from this balance total by more than the amount you specified in the **To Within** field.
    - If the additional amount equals the balance total, the iterative processing ends.
    - If the additional amount is higher or lower than the balance total by an acceptable margin, the processing ends. The formula returns the remainder (additional amount minus balance) to the element's **Remainder** input value.
    - Otherwise, the formula runs the function to generate a better estimate for gross, using the remainder to determine by how much to change the guess. The formula checks the results in another iteration.

Related Topics

- Payroll Element Eligibility
- Payroll Element Input Values
- Overview of Using Fast Formula Components
- Create a Net-to-Gross Earnings Element

Create a Net-to-Gross Earnings Element

This example demonstrates how to create a net-to-gross (gross-up) earnings element when an organization wants to pay a person a specific net amount on a bonus.

Before you create your earnings element, you may want to consider these decisions:

Decisions to Consider	In This Example
What is the primary classification of this earning?	Supplemental Earnings
Is the element recurring or nonrecurring?	Nonrecurring
Who is the bonus recipient?	Linda Swift
How much is the bonus?	1000
What is the allowed difference between the specified bonus and the actual amount paid?	.05
What is the calculation rule?	Flat amount

Create the Earnings Element

1. On the Home page, click the **Elements** quick action under the My Client Groups tab.
2. Click **Create** and then in the Create Element dialog box, select the values as shown in this table.

Field	Value
Legislative Data Group	LDG1
Primary Classification	Supplemental Earnings
Secondary Classification	Bonus
Category	Standard

3. Click **Continue**.

4. On the Create Element: Basic Information page, select the values as shown in this table.

Field or Question	Value
Name	Bonus
Reporting Name	Bonus
Effective Date	01/01/2013
Should every person eligible for the element automatically receive it?	No
What is the earliest entry date for this element?	First Standard Earning Date
What is the latest entry date for the element?	Last Standard Earning Date
At which employment level should this element be attached?	Assignment Level
Does the element recur each payroll period, or does it require explicit entry?	Nonrecurring
Process the element only once in each payroll period?	Yes
Can a person have more than one entry of this element in a payroll period?	Yes
Process and pay element separately or with other earnings elements?	Process separately and pay separately
Tax this earning across multiple pay periods?	No
Prorate this earning across all periods during which it was earned, and consider it for FLSA calculations, such as for commissions, bonuses,	No

Field or Question	Value
incentives, and other nondiscretionary earnings?	

5. Click **Next**.
6. On the Create Element: Additional Details page select the values shown in the table.

Field or Question	Value
What is the calculation rule?	Flat Amount **Note:** The default value is Flat Amount. Do not change this value. All gross-up earnings must have a calculation rule of Flat Amount.
What is the default periodicity of this element?	Periodically
Periodicity Conversion Rule	Periodic Work Schedule Rate Annualized
How do you want the work units to be reported?	None
Is this element subject to retroactive changes?	No
Use this element to calculate a gross amount from a specified net amount?	Yes
Should this element be included in the earnings calculation of the FLSA overtime base rate?	No
Should this element be included in the hours calculation of the FLSA overtime base rate?	No

7. Click **Next**.
8. Click **Submit**.

9. In the Element Overview pane, select and review each input value, as shown in the table.

Input Value	Description
Pay Value	The gross pay value to be processed in the payroll run, entered by the iterative formula when it completes gross-up calculations.
Net	The user-entered flat amount, which provides the iterative formula with the desired net pay.
Low Gross	Used by the iterative formula to hold the lower gross pay guess, which feeds into the next iteration of the formula.
High Gross	Used by the iterative formula to hold the higher gross pay guess, which feeds into the next iteration of the formula.
Remainder	The amount by which the additional pay to be paid by the employer (gross minus desired net) differs from the total of the balances that are eligible for net-to-gross processing. This amount is returned by the iterative formula.
To Within	The amount by which actual net can differ from desired net after normal processing. This amount must not be zero but can be a nominal amount such as 0.01.
Additional Amount	The amount to add to the desired net to calculate gross pay. This amount is returned by the iterative formula.

> **Note:** Not all input values are visible by default.

Create Eligibility Rules

1. In the Element Overview pane, click **Element Eligibility**.
2. Select **Create Element Eligibility** from the Actions menu.
3. In the Element Eligibility Name field, enter **Bonus**.
4. Click **Save**.

Review Iterative Processing Order

1. In the Element Overview pane, click **Bonus**.
2. In the Advanced Rules section, review the iterative order.

> **Note:** The default value is 1000. If you have more than one iterative element that may be processed in the same payroll flow, it's important to adjust the iterative order to indicate which should be processed first. Iterative order must be in the reverse sequence of the processing priority numbers. The element with the lowest iterative priority number is reduced first.

Include Balances in the Net-to-Gross Processing

Perform the following steps to include balances:

1. In the Element Overview pane, click **Balance Feeds.**
2. Review the balances to which the bonus contributes.
3. In the Element Overview pane, click **Gross Balance Exclusions**.
4. Add any balances that have been set to exclude by default if you want to include it on this specific earnings.
5. Click **Submit**.

Create an Element Entry

In this example, create the element entry for the bonus for Linda Swift.

1. On the Search page, search and select Swift, Linda.
2. In the Name field, enter **Swift, Linda**.
3. In the Legislative Data Group field, select **LDG1**.
4. In the Effective As-of Date field, enter **01/01/2013**.
5. Click **Search**.
6. In the Search Results, select **Linda Swift**.
7. Click **Create**.
8. In the Effective Date field, enter **01/01/2013**.
9. In the Element Name field, select **Bonus**.
10. In the Assignment field, select **E1026**.
11. Click **Continue**.
12. In the Net Value field, enter **1000.00**.
13. In the To Within field, enter **.05**.
14. Click **Submit**.

Related Topics

- How Net-to-Gross Earnings are Calculated
- Balances in Net-to-Gross Calculations

3 Calculation Cards and Calculation Values

Payroll Calculation Information

Overview of Payroll Calculation

When you create an element, the application generates the rules and definitions required to calculate earnings or deduction amount. For all types of elements, these rules and definitions include elements, formulas, and processing rules.

This topic explains the payroll calculation information rules and definitions generated for user-defined elements with one of the following categories:

- Absence
- Benefit
- Involuntary Deductions
- Time card

All predefined tax and social insurance elements also include payroll calculation information rules and definitions.

Note: Elements that use calculation information definitions don't capture the values required for the calculation on element input values.

Task Summary

The following table summarizes the purpose of each type of calculation information and the task you can use to view or edit it.

Calculation Information	Description	Task
Payroll calculation information	The payroll calculation information task groups rates and rules used by the payroll run to calculate values for user-defined earnings, and deductions. Predefined elements such as tax and social insurance rules also use the payroll calculation feature to provide a group of rates and rules which vary by country or territory.	Use the Payroll Calculation Information task.
Payroll components	A payroll component is a group of rates and rules that the payroll run uses to calculate values for earnings and deductions. When you create elements in certain classifications and categories, such as involuntary deductions, the element template	Use the Payroll Calculation Information task to view payroll components and their associated rules.

Calculation Information	Description	Task
	creates a payroll component with the same name. You can manage payroll components using predefined component groups, which vary by country or territory but may include social insurance, taxes, retirement plans, involuntary deductions, and benefits.	
Wage basis rules	Wage basis rules determine the earnings that contribute to a deductible amount or, for exemptions, the elements that reduce the amount subject to deduction. For example, wage basis rules might define which secondary classifications of standard and supplemental earnings are subject to a particular tax. Rules may vary based on reference criteria such as a worker's place of residence.	Use the Component Group Rules task to define the rules and references. Use the Calculation Cards task to enter reference values for workers.
Calculation value definitions	Calculation value definitions store calculation rates and rules, which may vary based on other criteria. For example you can use calculation value definitions to calculate regional income tax rates for employees, which vary based on their income levels. The calculation value definition controls which calculation values are enterable on a calculation card.	Use the Calculation Value Definitions task to view predefined definitions and the definitions that element templates create. **Note:** You can edit definitions that element templates create, such as adding default calculation values.
Calculation factors	Calculation factors indicate which calculation value definition to use when calculating the amount. For example, a calculation factor might identify which set of tax rates to use based on the tax code of the employee. If tax rates vary based on a factor such as a person's filing status, then filing status is defined as a calculation factor reference. Thus, an element may have multiple calculation factors, one for each unique set of rules and references values.	Use the Elements, Element Overview task to access calculation factors. Use the Payroll Calculation Information task to create new calculation factors. Normally, you don't need to create new factors, but if you do, you must also edit the element's payroll formula to use the new calculation factors.
Calculation components	When an element template creates a payroll component, it also creates calculation components that you can enter on personal calculation cards to enter specific details for the person.	Use the Calculation Cards task to enter calculation components for a person.

Calculation Information	Description	Task
Calculation types	A calculation type describes a way of calculating a value. For example, calculating a value as a Flat Amount or by applying a Rate to a value. There's a predefined set of Calculation Types.	Use the Calculation Value Definitions task to view calculation types.
Calculation steps	A Calculation Step is a name or label that denotes part of a payroll calculation. For example, a time calculation can consist of the following parts: • Calculate hours worked • Calculate hourly rate A regional tax calculation can consist of the following parts: • Calculate Exemptions • Calculate Allowances • Calculate Tax Each one of these is a calculation step in a fast formula.	Use the Payroll Calculation Information task.
Calculation methods	Predefined calculation methods are a way of performing a payroll calculation. For example, a tax could be calculated using a cumulative year-to-date payroll balance or a periodic payroll value.	Use the Payroll Calculation Information task.
Calculation factors	Calculation factors create an association between an element, calculation step, and a calculation value definition. Calculation factors indicate which calculation value definition to use when calculating the amount. Calculation factors can support complex calculations such as tax rates. For example, if a tax rate varies based on a factor such as a person's filing status the filing status can be defined as a calculation factor reference thus, an element may have multiple calculation factors, one for each unique set of rules and references values.	Use the Elements, Element Overview task.

Related Topics

- Wage Basis Rules
- Calculation Factors
- How You Add Involuntary Deductions to a Calculation Card

Examples of Payroll Calculation Information at the Legislative Level

To understand how the rules and definitions for calculating payroll components work together, let's examine two common examples: income tax deductions and social insurance deductions.

Each example provides sample values for the following rules and definitions:

- Component group
- References for wage basis rules
- References for calculation factors
- Wage basis rules
- Related elements
- Calculation factors for elements
- Associations for tax reporting

Individual Income Tax Deduction

A particular country or territory has a statutory deduction for an individual income tax. The exemption amount for the tax varies based on the person's residential status. The earnings classifications included in the wage basis for the tax vary by geographical region. Therefore, references are defined for both the wage basis rules and the calculation factors.

The calculation is a two-step process that calculates the exemption and then calculates the tax amount based on the reduced deductible amount.

- **Component group**: Taxes
- **Component name**: Individual Income Tax Deduction
- **References for wage basis rules**:

Reference Name	Reference Value
Geographical Region	Mainland
Geographical Region	Territory

- **References for calculation factors**:

Reference Name	Reference Value
Residential Status	Resident
Residential Status	Nonresident

Reference Name	Reference Value

- **Wage basis rules**:

Geographical Region Reference Value	Primary Classification	Secondary Classification	Use in Wage Basis?
Mainland	Standard Earnings	All secondary classifications selected	Y
Territory	Standard Earnings	All secondary classifications selected	Y
Mainland	Supplemental Earnings	Commission	Y
Territory	Supplemental Earnings	Commission	N
Mainland	Supplemental Earnings	Personal Use of Company Car	Y
Territory	Supplemental Earnings	Personal Use of Company Car	N

- **Related element**: Individual Income Tax Processor

  The processing rule (a fast formula) associated with this element drives the income tax calculation. It accesses the appropriate calculation factor, based on the resident status reference value and the current step in the calculation process.

- **Calculation factors for Individual Income Tax Processor element:**

Resident Status Reference Value	Calculation Step	Calculation Method	Calculation Value Definition	Values
Nonresident	Calculate exemption amount	None	Tax Exemption Amount for Nonresident	4800
Resident	Calculate exemption amount	None	Tax Exemption for Resident	2000
(None)	Calculate individual income tax	None	Individual Income Tax Rate	0-50000: 3% 50000-100000: 4%

Resident Status Reference Value	Calculation Step	Calculation Method	Calculation Value Definition	Values
				Over 10000: 5%

- **Tax reporting units**: All tax reporting units defined for this payroll statutory unit can report this calculation component. You associate calculation components with a specific tax reporting unit on the personal calculation card.

Social Insurance Deduction

The same country has a statutory deduction for a social insurance tax. Both the employer and the employee contribute to the social insurance tax, but their contribution rates are different. Calculation of the deduction includes several steps:

1. Calculate the base amount for the employee's contribution.
2. Calculate the base amount for the employer's contribution.
3. Calculate the employee's contribution amount.
4. Calculate the employer's contribution amount.

The following rules and definitions apply to this calculation at the legislative level:

- **Component group**: Social Insurance
- **Component name**: Medical Insurance Deduction
- **References for wage basis rules**: None
- **References for calculation factors**:

Reference Name	Reference Value
Contribution Level	Employee
Contribution Level	Employer

- **Wage basis rules**:

Primary Classification	Secondary Classification	Use in Wage Basis?
Standard Earnings	All secondary classifications selected	Y
Supplemental Earnings	All secondary classifications selected	Y

- **Related elements**: Medical Insurance Calculation element
  The processing rule (fast formula) associated with this element drives the social insurance calculation. It accesses the appropriate calculation factor, based on the contribution level reference value and the current step in the calculation process.

- **Calculation factors for Medical Insurance Calculation element**:

Contribution Level Reference Value	Calculation Step	Calculation Method	Calculation Value Definition	Values
Employee	Calculate Employee Base Amount	None	Employee Contribution Upper Limit	8000
Employee	Calculate Employer Base Amount	None	Employer Contribution Upper Limit	5000
Employer	Calculate Employee Contribution Amount	None	Employee Contribution Amount	4%
Employer	Calculate Employer Contribution Amount	None	Employer Contribution Amount	3%

- **Tax reporting units**: All tax reporting units defined for this payroll statutory unit can report this calculation component. You associate calculation components with a specific tax reporting unit on the personal calculation card.

Related Topics

- Calculation Factors
- Wage Basis Rules
- Calculation Value Definitions

Payroll Calculation Information Formulas

Overview of Payroll Calculation Information Formulas

When you create an element, the application generates the rules and definitions required to calculate the earnings or deduction amount. This includes elements, formulas, and processing rules.

Use the predefined calculation formulas to calculate and access calculation information in a payroll run. Here are the formulas that contain specific rules for each calculation type:

- `CALL_CALC_VALUE` (Fast Formula)
- `CALC_DIR_EXISTS` (Fast Formula Function)
- `GET_CALC_DETAIL` (Fast Formula)
- `CALC_DIR_GET_OVERRIDE_LEVEL` (Fast Formula)
- `CALL_CALC_VALUE_DETAILS` (Fast Formula)

The element associated with these formulas calculates the value definitions. For example, the time element template creates multiple value definitions to capture time-related information, such as number of units, rate information, and accrual date. The formula that the time elements template generates includes multiple calls to the **CALL_CALC_VALUE** formula, one call for each value definition.

You can also use the predefined **CALL_CALC_VALUE** formula to calculate rates based on a rate definition or values defined by criteria in the payroll run. In a scenario where we calculate a bonus, we can do so using a rate definition or a car allowance value based on criteria of the worker's location.

- **CALL_CALC_VALUE** (Fast Formula)

  You can use this formula to access payroll calculation information. This formula evaluates the calculation factors required to identify the value definition to be calculated. After the formula identifies the value definition, the corresponding value is calculated.

- **CALC_DIR_EXISTS** (Fast Formula Function)

  You can use this function to identify if a value definition exists for the current contextual settings. If this function returns Y, a value definition does exist. If the function returns N, no value definition was found.

- **GET_CALC_DETAIL**

  This Formula returns the details of the prior call to CALL_CALC_VALUE. For example, the value definition was for these incremental rates:

From	To	Rate
0	1000	1%
1001	10000	10%
10001	999999999	20%

CALL_CALC_VALUE formula would return an amount of 2910 for a base of 20000. Then, **GET_CALC_DETAIL** would return these values:

Base	Rate	Amount
1000	1%	10
9000	10%	900
10000	20%	2000

The formula also returns these override types and the details that this call uses.

Override Type	Meaning
R	Rate
T	Total Amount/Value to be returned.
A	Value A
B	Value B
C	Value C
AA	Additional Amount
AR	Additional Rate
RT	Range Table (Override the complete Range Items)
RD	Rate Definition
F	Flat Amount
M	Multiplier
D	Date
1	String

CALC DIR GET OVERRIDE LEVEL

This formula calls the `CALC_DIR_GET_OVERRIDE_LEVEL` function which determines the level at which the override value is used for the qualifying Calculation Unit.

For example, if the function determines the Calculation Factor, the Value Definition is used for the calculation.

The formula takes an input Parameter of override type, and then determines the level where the override type is overridden. The available override types vary based on the calculation type.

Override Type	Meaning
R	Rate
T	Total Amount/Value to be returned.
A	Value A

Override Type	Meaning
B	Value B
C	Value C
AA	Additional Amount
AR	Additional Rate
RT	Range Table (Override the complete Range Items)
RD	Rate Definition
F	Flat Amount
M	Multiplier
D	Date
1	String

It would determine where the value for the override type is retrieved.

Return	Purpose
NO_VALUE	The Value Definition (no range items) calculates no value.
NONE	There are no overrides, but the Value Definition has range items that may perform the calculation.
PREL	There's an override on the Payroll Relationship Card.
TRU	There's an override on the TRU Card.
PSU	There's an override on the PSU Card.

You can get the Rate Override level by calling the formula with an override type of 'R'.

CALL_CALC_VALUE_DETAIL

This formula is a combination of `CALL_CALC_VALUE` and `GET_CALC_DETAIL` and returns the details of both calls.

Related Topics

- Time Element Value Definitions
- Calculate Time Element Rate Using Values Defined by Criteria
- Calculate Standard Earnings Rate Using Values Defined by Criteria

Parameters for Calculation Information Payroll Formulas

Parameters for Calculation Information Payroll Formulas

Input and Output Parameters for the Calculation Information Payroll Formulas

1. **CALL_CALC_VALUE (Fast Formula)**
    - **Inputs**

Name	Data Type	Use To
Base	Number	Mandatory. The amount that the calculation would be based on. For example, if the calculation is a Flat Rate, the Rate is applied to Base for calculating the return value.
Range_Value	Number	Optional. Defaulted to Base when no value is specified. Range Value is used with the From and To values on the Range Items for identifying the Range Item to use for the calculation. For example, an Allowance could be based on the Number of Children and Employee has. The Range Value could be the Number of Children, but the Base could be Gross Earnings (as the Allowance is a factor of the Gross Earnings).
Calculation_factor	Number	Optional. Default Value 1. Some Calculation Types use a factor (z). For example, Standard Formula 1, using this parameter the caller can specify the factor to use.
Range_offset	Number	Optional. Default 0. This is similar to the Range Value. In this case, it defines the amount that has previously been considered. For example, when calculating an Incremental Rate for a

Name	Data Type	Use To
		Payroll Period, a previous Payroll Run may have calculated on a base/range of $2000. So there's a $2000 offset for the current Payroll Run.
Range_low_override	Array of Numbers	Optional. Default Empty Array. The low and high overrides work in combination, the number of rows in the arrays must match the number of Range Items in the Value Definition to be processed. Certain statutory Value Definitions are allowed to override the Ranges (From and To values).
Range_high_override	Array of Numbers	Optional. Default Empty Array. See Range_low_override.
Value_name	Array of Strings	Optional. Default Empty Array. Some Calculation Types allow parts of the Calculation to be overridden. This is performed by the value_* parameters, these arrays must have equal numbers of entries. Value_name contains the Name of the attribute (typically a DB Item) to be overridden. Value_Value contains the override value and Value_datatype is the data type of the override.
Value_value	Array of Strings	Optional. Default Empty Array. See Override_name.
Value_datatype	Array of Strings	Optional. Default Empty Array. See Override_name.

- **Outputs**

Name	Data Type	Use To
Ded_amount	Number	This amount is the returned calculated value.
Periodicity	String	Some Calculation Types return the frequency of the Amount returned. For

Name	Data Type	Use To
		example, 'YEAR' meaning Annually, hence a calculated amount of $50000 with a periodicity of Year (annually).
Out_uom	String	The Unit of Measure of the calculated Value.

2. **CALC_DIR_EXISTS (Formula Function)**
   - **Outputs**

Name	Data Type	Use To
Exists	String	Y or N.

3. **GET_CALC_DETAILS (Fast Formula)**
   - **Outputs**

Name	Data Type	Use To
Ded_amount	Number	This amount is the returned calculated value.
Periodicity	String	Some Calculation Types return the frequency of the Amount returned. For example, 'YEAR' meaning Annually, hence a calculated amount of $50000 with a periodicity of Year (annually).
Out_uom	String	The Unit of Measure of the calculated Value.
High_value	Array of Number	Range Item High Value
Base	Array of Number	Base used for this portion of the calculation.
Rate	Array of Number	Rate Used for this portion of the calculation.

Name	Data Type	Use To
Flat_amount	Array of Number	Flat Amount used for this portion of the calculation.
Multiplier	Array of Number	The multiplier used for this portion of the calculation.
Parameter	Array of String	The parameter used for this portion of the calculation.
Value_a	Array of Number	Value A used for this portion of the Calculation.
Value_b	Array of Number	Value B used for this portion of the Calculation.
Value_c	Array of Number	Value C used for this portion of the Calculation.
Val_def_name	Array of String	Name of the Value Definition used.
Override_flags	Array of String	Override Types used for this portion of the calculation.

4. CALC_DIR__GET_OVERRIDE_LEVEL (Fast Formula)
    - **Inputs**

Name	Data Type	Use To
Override_type	String	Type of Override to look for.

    - **Outputs**

Name	Data Type	Use To
Level	String	The level at which the override was found.

Calculation Cards

Calculation Entries

The Calculation Entries page consolidates all the payroll entries for an employee within a single page.

You can view element categories such as Standard Entries, Time, and Absence. Click an entry to view the earnings and deductions processed for an employee for a payroll period and the enabled calculation cards.

To view a calculation card, you must configure them as per your localization. These additional cards are accessible depending on whether data has been transferred or localizations have enabled them such as Time and Absence related information.

View the following additional reserved input values in the Standard Entries section of the Calculation Entries page:

- Primary Input
- Percentage
- Hours
- Days
- Units
- Rate

You can create an entry, or update, correct, or delete entries from the Standard Entries page. You can also add and amend costing information from this page and view the history of an element entry. There are also date range options available to change the selection of element entries that are viewable.

Use the **Creator Type** field to identify the origin of an element entry on the collapsed Standard Entries page. For example, an entry displayed on the page can be a Salary Proposal, Element Entry, Balance Adjustment, and so on. View the Time and Absence Entries region to identify if an entry has been processed or not processed by a QuickPay or Payroll process.

Calculation card information such as taxation and involuntary deductions can be accessed with the provided links. Some Calculation Cards such as Absence and Time, are read-only, while other calculation cards such as taxation are editable. You can also create a new card from the Calculation Entries page using the **Actions** drop-down list. For example, in the UK localization, you can create a new Court Order entry from the Calculation Entries page.

Security Info for the Calculation Entries Page

The following table shows the function privilege that secure access to the Calculation Entries Quick Action:

Page	Privileges	Job Roles
Calculation Entries	Manage Payroll Calculation Entries PAY_MANAGE_CALCULATION_ENTRIES	• Payroll Manager • Payroll Administrator

Page	Privileges	Job Roles
		• Payroll Interface Coordinator • Human Resource Manager • Human Resource Specialist • Human Resource Analyst

Within the Calculation Entries UI, you've access to various types of Calculation Entries, such as Standard Entries, Absences, and Time Cards. Access to those type of entries are secured independently by the following aggregate privileges:

Entry Type	Aggregate Privileges	Job Roles
Standard Entries	Manage Payroll Element Entry ORA_PAY_ELEMENT_ENTRY_MANAGEMENT_DUTY	• Payroll Manager • Payroll Administrator • Payroll Interface Coordinator • Human Resource Manager • Human Resource Specialist
Standard Entries (View Only)	View Payroll Element Entry ORA_PAY_ELEMENT_ENTRY_VIEW_DUTY	• Human Resource Analyst
Absences	View Payroll Absence Entries ORA_PAY_VIEW_PAYROLL_ABSENCE_ENTRIES	• Payroll Manager • Payroll Administrator • Payroll Interface Coordinator
Time Cards	View Payroll Time Entries (NEW) ORA_PAY_VIEW_PAYROLL_TIME_ENTRIES	• Payroll Manager • Payroll Administrator • Payroll Interface Coordinator
Other Entries held in Calculation Cards	Manage Payroll Calculation Cards ORA_PAY_PERSONAL_DEDUCTION_MANAGEMENT_DUTY	• Payroll Manager • Payroll Administrator • Payroll Interface Coordinator

If you're using predefined roles, ensure you generate your data roles. If you're using custom roles, add the new privilege and aggregate privileges depending on what types of Calculation Entries users should have access to.

Note: To have access to the Calculation Entries Quick Action, you need the new function privilege (Manage Payroll Calculation Entries) and at least one of the aggregate privileges above-mentioned.

Note: Access isn't secured independently for Calculation Entries held in Calculation Cards (such as Benefits and Pension or Involuntary Deductions).

Support for Assignment Level Security

The application supports Assignment-level security for the following calculation entry types:

1. Standard Entries (in both Manage and Read-only mode)
2. Absences
3. Time Cards

When you enable assignment-level security, the Person Search will only return those assignments in the user's person security profile.

When navigating to any of those Calculation Entries types, the following entries are displayed:

1. Entries for the selected assignment
2. Entries for the select assignment's payroll relationship
3. Entries for other assignments in the user's person security profile

Change Hire Date Support

You can change the hire date backward when an employee has a Time and Absence card entry with the element creation date later than the hire date. Changing the hire date has the following impact on the calculation entry:

- When the hire date changes to a backward date, the calculation entries are deleted from the Payroll calculation card. However, this data will be available after running the **Evaluate Absence** scheduled process. This data will always be available in the Absence application.
- When the hire date is moved to a forward date, the Absence and Time Card calculation entries with the creation date earlier than the new hire date, will be deleted from the Payroll and Absence applications.

For example, an employee is hired on 22 January 2024 and has an absence that has a start date of 22 January 2024, and an end date of 28 January 2024. When the hire date is changed to 29 January 2024, the time entries before 29 January 2024 are deleted from the Payroll application.

Here's how this feature works in the Absence application:

- All absences that are before the new hire date or spanning the new hire date will be deleted.
- Absences that are after the new hire date will be marked for reevaluation.
- Absences that are marked for reevaluation (processing status = unprocessed) will have only header. The absence type entries data, plan entries, and Payroll calculation card entries will be deleted. Later, when the **Evaluate Absence** scheduled process picks up these absences, the corresponding entries will be created.

Related Topics

- Add a Payroll and Make Payroll a Mandatory Attribute

How Entries of Personal Calculation Cards Fit Together

Personal payroll calculation cards capture information specific to a particular payroll relationship. Payroll runs use this information to calculate earnings and deductions. Actions such as hiring a person or loading data may create some cards automatically.

Otherwise, you can create the card manually. You can also add components to cards and enter calculation values, which may override default values. Additionally, you can associate the card with a tax reporting unit.

To view and manage calculation cards, use the Calculation Cards task from the Payroll section.

Card Types

The types of calculation cards you can create and the type of information captured on a card vary by country or territory. Examples include cards for:

- Statutory deductions
- Involuntary deductions
- Time card entries
- Absences
- Benefits and pensions

Additional cards may be available to capture information for reporting purposes.

Card Creation

In countries where all employees are subject to the same set of statutory deductions, the application automatically creates one or more statutory deduction calculation cards. These cards are created when you hire a new employee. In other countries, you must create calculation cards manually.

For other card types, you create calculation cards as needed for each employee. If you load absence, time card, or pension data from another application, the application automatically creates the calculation cards.

Calculation Components and Component Groups

The Calculation Card Overview pane shows a hierarchy of calculation components within component groups. For example, child support, education loan, and alimony are calculation components in the US involuntary deduction component group.

Each component relates to an element, such as an income tax deduction. Adding a calculation component to the card creates an entry for the related element.

A calculation component may have one or more references that define its context, such as the employee's place of residence or tax filing status.

Click a row in the Calculation Components table to see component details. Use the Component Details section to enter additional values used to calculate the component.

> **Note:** For some countries, the Calculation Cards page doesn't include the Calculation Components and Component Details sections. Instead, the layout of the page is specific to the data items required for the country.

Enterable Calculation Values

When you select a calculation component, you may see the Enterable Calculation Values on the Calculation Card tab. Here you can enter specific rates or other values for the person, which may override default values held on a calculation value definition. For example, if an employee qualifies for a special reduced tax rate, you enter the rate as an enterable value on their personal calculation card.

You can't override values loaded from another application, but you may be able to add values, such as adding additional contributions to a pension deduction.

Tax Reporting Unit Associations

Click the **Associations** node in the **Calculation Card Overview** pane to associate a tax reporting unit with the card. Associations determine:

- Which rates and rules held at tax reporting unit level apply to the calculation of the components
- How the calculations are aggregated for tax reporting

Rules about what you can enter here vary by country:

- Typically, all components on a calculation card are associated with the same tax reporting unit by default.
- You may be able to associate individual components with different tax reporting units.
- If a person has multiple assignments, you may be able to associate specific assignments with calculation components.

Related Topics

- Enterable Values on Calculation Cards

Examples of Creating Calculation Cards for Deductions at Different Levels

You can create and manage calculation cards at several different levels, from an individual person to a payroll statutory unit.

Use the cards to capture information specific to a person or organization, such as an employee's tax filing status or an employer's tax identification number. Calculation card entries override default values defined at other levels. The priority of information, from highest to lowest, is as follows:

1. Personal calculation card (payroll relationship level)
2. Tax reporting unit calculation card
3. Payroll statutory unit calculation card
4. Calculation value definitions (legislative data group level)

> **Note:** Not all countries or territories support creating calculation cards for payroll statutory units and tax reporting units. The enterable values at each level also vary by country or territory. The basic steps to create and manage calculation cards are the same at all levels.

Use these examples to understand when you might define calculation cards at each level.

Personal Calculation Card

Scenario: An employee qualifies for a special reduced tax rate.

Task: Calculation Cards task in the Payroll section under My Client Groups.

Tax Reporting Unit Card

Scenario: The income tax exemption amount is 2000 at the legislative data group level, but a tax reporting unit in a particular state or province uses an exemption amount of 2500. Enter this default value for the tax reporting unit, which can be overridden on personal calculation cards.

Task: Manage Legal Reporting Unit Calculation Cards task in the Setup and Maintenance section.

Payroll Statutory Unit Card

Scenario: During application setup, the implementation team defines default contribution rates for the payroll statutory unit.

Task: Manage Legal Entity Calculation Cards task in the Setup and Maintenance section.

Calculation Value Definition

Scenario: You can view the predefined income tax rates for your country, but you can't edit them.

Task: Calculation Value Definitions task in the Payroll section.

If an employer qualifies for a special tax rate, enter these values on a calculation card at the appropriate level.

Calculation Value Definitions

Overview of Calculation Value Definitions

A calculation value definition specifies how a value is provided or calculated.

The value isn't necessarily monetary. Typically, it's a flat amount or rate, but it could be a date or a text value, such as a tax code, depending on the calculation type. Some definitions hold the values in a table, so that different values apply to different employees.

For example, a graduated tax varies depending on the employee's earnings balance. The calculation value definition for this tax might contain two rows where you define the tax rate for:

- Earnings under $50,000
- Earnings above $50,000

Calculation Value Definitions Provided

Each localization provides a set of predefined calculation value definitions used to calculate statutory and involuntary deductions. You can't edit the predefined calculation value definitions.

In addition, when you create the following element types, the element template creates calculation value definitions based on your selections:

- Pensions
- Involuntary deductions
- Absences

- Time cards

Create or Edit Calculation Value Definitions

The element template creates calculation value definitions when you create elements with a certain category such as benefits, absences, and time card elements.

You can also create or edit calculation value definitions using the Calculation Value Definitions task in the Payroll section. For example, you can create value definitions to capture additional attributes that are required for your company's absence or time calculations.

You can also create value definitions to calculate a rate derived from a rate definition or values defined by criteria.

Value Definition Groups

When you create a calculation value definition, either select an existing group or create a new one. The group categorizes related calculation value definitions. The predefined set of standard groups is available to all countries or territories.

Examples of predefined value definition groups include Time and Absences. You must select these when creating value definitions for elements with the corresponding element category.

Calculation Factors

Some elements, such as statutory deductions, require a large number of calculation value definitions. They use calculation factors to determine when and how to apply each calculation value definition, based on a reference value.

For example, a calculation factor may direct the payroll process to:

- Use a calculation value definition only if the person lives in Region B.
- Annualize the calculated result to produce the final amount

Use the Payroll Calculation Information task to view and manage calculation factors.

Related Topics

- Calculation Factors
- Calculation Value Definitions Examples

Calculation Types in Calculation Value Definitions

The calculation type determines which values you must provide in the Calculation Values section of the Create or Edit Calculation Value Definition page.

For example, if you select Flat Amount as the calculation type, then you must provide a flat amount value. You specify a default calculation type for the definition, which you can override on individual rows in the Calculation Values section.

Predefined Calculation Types

Predefined calculation types are available for each type of calculation. These work in conjunction with the predefined payroll formulas that contain specific rules for each calculation type, such as the CALL_CALC_VALUE formula.

This table describes the predefined calculation types, and indicates whether a calculation type is available for selection when you create a new value definition.

Calculation Type	Description	UOM	Available in Create Flow
Flat Amount	Uses the specified flat amount as the total amount.	Money	Yes
Flat Amount Times Multiplier	Multiplies a flat amount by a multiplier value. If you select this option, you must specify a database item that provides the value of the multiplier.	Money	Yes
Rate Definition	Retrieves a value by calling a rate definition.	Money	Yes
Number	Uses the number entered on the value definition as the calculated value.	Number	Yes
Flat Rate	Applies the specified percentage rate to the balance. For example, to apply a rate of 10 percent, enter 10.	Number	Yes
Incremental Rate	Applies a different percentage rate to portions of the balance. For example, assuming that the balance is 80,000, you could apply a 1 percent rate for the first 20,000 of the balance. A 3 percent rate for the next 30,000, and a 5 percent rate to the next 30,000. This is also referred to as a blended rate.	Number	Yes
Flat Rate by Derived Base	Applies the percentage rate to a value. This value type derives the value from another value definition.	Number	Yes
Identifier	A new calculation type is required to support identifiers. For example, the value definition could capture a job ID and the value set feature would enable the user to display the name of the job on the page.	Number	Yes
Text	Uses the specified character string as the calculated value.	Text	Yes

Calculation Type	Description	UOM	Available in Create Flow
Date	Uses the date entered as the calculated value.	Text (YY-MM-DATE, HOURS MINS SECS)	Yes
Conditional Flat Amount	Uses the specified flat amount if the condition defined in the Calculation section is met. For example, if a person's filing status is married or head of household, that person qualifies for an exemption. In such a scenario, you specify a flat amount value in the value definition and the condition database item returns the person's filing status. This calculation type supports predefined calculations, such as tax and social insurance.	Money	No
Flat Calculation Total	Supports retrieving value definitions for different range value criteria, including predefined calculations, such as tax and social insurance.	Money or Number	No
Incremental Calculation (Graded)	Supports retrieving value definitions for different range value criteria, including predefined calculations, such as tax and social insurance.	Money or Number	No
Standard Formula 1	Calculates the total amount based on the following formula: `y = Ax - Bz` Where: • `y` is the deducted amount. • `x` is the calculated amount. • `A` and `B` are specified values. • `z` is a factor from a predefined formula. The value defaults to 1.	Money or Number	No
Standard Formula 2	Calculates the value based on the following formula: `y = (x - A) x B + Cz` Where: • `y` is the deducted amount. • `x` is the calculated amount.	Money or Number	No

Calculation Type	Description	UOM	Available in Create Flow
	• `A`, `B`, and `C` are specified values. • `z` is a factor from a predefined formula. The value defaults to 1.		

Specify View Objects

A view object is a query result set. You can specify a view object to define the valid values that are available to the selected calculation type.

Note:

- The view objects you can specify vary depending on the calculation type. For example, if the calculation type is **Conditional Flat Amount**, then specify view objects for the condition and flat amount values.
- When you specify a view object, include the fully qualified path name, such as: `oracle.apps.hcm.locUS.payrollSetup.details.publicView.UsStatePVO`

Related Topics

- How Entries of Personal Calculation Cards Fit Together
- Calculation Value Definitions Examples
- Calculation Value Definitions

Enterable Values on Calculation Cards

Some values entered on a calculation card override values defined in a calculation value definition.

For example, you might set a default tax rate for the legislative data group, and allow the rate to be overridden by a flat amount entered on a personal calculation card.

The following table explains where you can enter override values on calculation cards. It also provides the order in which the Calculate Payroll process checks for values entered on calculation cards. When the process finds an entered value, it stops checking and uses the values defined at that level.

Order	Type of Values	Task
1	Values for a payroll relationship on any type of calculation card	Calculation Cards
2	Values for a tax reporting unit for certain deductions, which vary by country or territory	Legal Reporting Unit Calculation Cards
3	Values for a payroll statutory unit for certain deductions, which vary by country or territory	Legal Entity Calculation Cards

Allowing Enterable Values on Calculation Cards

The ability to enter values on calculation cards is controlled by the **Enterable Calculation Values on Calculation Cards** section of the calculation value definition. Here you can set calculation values, such as specific rates or other values for the person, which could override default values held on a calculation value definition.

For example, if an employee qualifies for a special reduced tax rate, you enter the rate as an enterable value on their tax card.

- For user defined calculation value definitions, you can specify an enterable calculation value in this section. You provide:
  - The display name to appear on the calculation card.
  - The value type, such as total amount or additional amount.
- Enterable values for statutory and involuntary deductions are predefined. You can't allow new enterable values for predefined calculation value definitions.
- You can't override values loaded from another application, but you can add values, such as adding additional contributions to a pension deduction.

Enterable Value Types

The list of value types available for entry depends on the calculation type. For example, you can enter the percentage value for a flat rate calculation or the monetary value for a flat amount calculation.

The following value types are available for all calculation types except text:

Value Type	Description
Calculation value definition	Uses the calculation value definition entered on a calculation card to calculate the amount.
Total amount	Uses the amount entered on the calculation card as the total amount.
Additional amount	Adds the amount entered on the calculation card to the calculated amount.

Related Topics

- Calculation Value Definitions Examples
- Creating Calculation Cards for Deductions at Different Levels for the US

Considerations to Enter Calculation Values for Pensions

Create a Benefits and Pensions calculation card for each worker who pays a pension deduction. On the card, select the calculation component that was created automatically for your pension element, and enter the required contribution amounts and limits.

If you use the Load Benefit Batches process to transfer values, this process creates the calculation cards and enters the contribution amounts and limits.

Default Contribution Amounts and Limits

Enter default contribution amounts and limits when you create the pension element. These default values are stored as calculation value definitions. You can edit the default values using the Calculation Value Definitions page. You can also add a default payee or a separate payee for each employee by entering the payee ID in the Enterable Calculation Values area.

Enterable Calculation Values for Pensions

To enter or override a calculation value for one worker, perform these steps:

1. Open the worker's Benefits and Pension calculation card on the Calculation Cards page.
2. Add the calculation component for the pension, if it isn't already on the card.
3. With this calculation component selected, click the **Enterable Calculation Values on Calculation Cards** tab.
4. Click **Create**.
5. Select the value you want to enter. Typically, you will enter a payee, reference number, and any additional contributions. You can also override any default contribution amounts or limits.

The following table lists the calculation values you can enter.

> **Note:** If the calculation component was created by running the Load Benefit Batches process, you can only enter or override the following values: Payee, Reference Number, and Employee Additional Contribution.

Field	Required	Default Provided at Element Setup	Values
Payee	Y	N	Enter the ID of an organization with the usage of Pension Provider.
Reference Number	Y or N	N	Free text Depending on the localization rules this field may or may not be required.
Employee Contributions	Y	Y	Percent or flat amount as per element setup. Enter percentages as decimal values.
Additional Employee Contributions	N	N	Percentage or flat amount as per element setup, if additional contributions are allowed.
Minimum Age	N	Y	Numeric age
Maximum Age	N	Y	Numeric age
Maximum Contribution Amount	N	Y	Numeric amount
Minimum Pensionable Earnings	N	Y	Numeric amount

Field	Required	Default Provided at Element Setup	Values
Maximum Pensionable Earnings	N	Y	Numeric amount
Partial Deduction Allowed	Y	Y	Values = Y or N

If the element was set up to allow an employer contribution, you will also see these enterable values:

Calculation Value	Required	Default Provided at Element Setup	Values
Employer Contribution	Y	Y	Percentage or flat amount as per element setup
Minimum Age Limit for Employer Contribution	N	Y	Numeric entry
Maximum Age Limit for Employer Contribution	N	Y	Numeric entry
Maximum Contribution Amount for Employer Contribution	N	Y	Numeric amount
Minimum Pensionable Earnings Limit for Employer Contribution	N	Y	Numeric amount
Maximum Pensionable Earnings Limit for Employer Contribution	N	Y	Numeric amount

Calculation Value Definitions Examples

In these deduction examples, the calculation value depends on where the employee falls in an earnings range.

The From and To values of the range can be static or dynamic. Dynamic values are a fraction of the value of a database item, such as gross earnings. These examples also illustrate how to override the default calculation type for selected values in the range.

Static Values

The calculation value definition for a regional income tax uses a default calculation type of Flat Rate. However, for the lowest and highest incomes, a flat amount applies. For these two values, the Flat Amount calculation type overrides the default type, and uses a monetary value rather than a percentage. The **Basis of Calculation Values** field is blank, so the values are static.

The following table shows sample static values for this calculation value definition.

From Value	To Value	Calculation Type Override	Rate or Amount
0	199	Flat Amount	0
200	999	_	4 (percent)
1000	1999	_	6 (percent)
2000	999,999,999	Flat Amount	300

Dynamic Values

The calculation value definition for a tax exemption uses a default calculation type of Incremental Rate. The first and last values specify the Flat Amount calculation type, which overrides the default type. The **Basis of Calculation Values** field specifies the Gross Earnings YTD database item. This means the From and To values represent a percentage of year-to-date gross earnings.

The following table shows sample dynamic values for this calculation value definition.

From Value	To Value	Calculation Type Override	Rate or Amount
0	.1	Flat Amount	300
.1	.2	_	10 (percent)
.2	.9	_	30 (percent)
.9	1	Flat Amount	0

The first row defines a flat amount of 300 that applies to the first 10 percent of gross earnings. The second row defines a 10 percent rate that applies to the next 10 percent of gross earnings. The third row defines a 30 percent rate that applies to between 20 and 90 percent of gross earnings. The final row defines a flat amount of 0 between 90 and 100 percent.

Calculation Factors

Overview of Calculation Factors

Calculation factors define data-driven rules for calculating complex payroll elements, such as statutory deductions. Some elements may have a large number of calculation factors, one for each unique set of rules, ranges, and references values.

Calculation factors create an association between an element, a calculation step, and a calculation value definition.

The payroll run determines which calculation factor to use based on the reference values and calculation rules of the element being processed.

For example, a calculation factor for a tax deduction element might define:

- A context reference, such as a city or state
- The calculation value definition, such as a 4 percent tax rate on balances under 50,000
- Optionally a calculation method and calculation step

Navigate to the Element task and select an element to view and manage calculation factors.

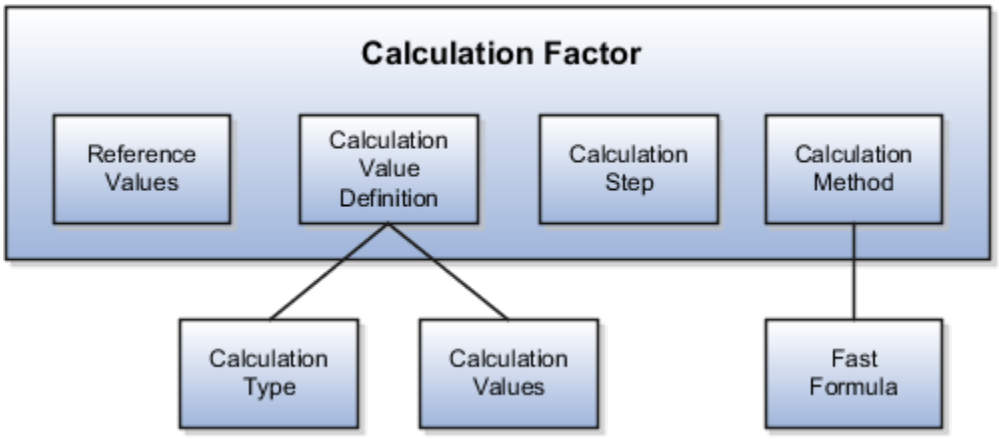
Note: Calculation factors are predefined for statutory and involuntary deductions, and should not be changed.

To view and manage calculation factors, follow these steps:

1. Select the Payroll Calculation Information task from Quick Actions list of the Payroll section.
2. Select the calculation component.
3. In the Calculation Overview section, expand the Related Elements node.
4. Expand the Calculation Factors node to display a list of all calculation factors associated with the element.
5. Create new calculation factors and edit existing ones that have an update status of Unlocked.

Note: You can't edit predefined calculation factors or their reference values. If you create a new calculation factor, you must edit the element's formula to use the new factor.

Aspects of a calculation factor are shown in the following figure:



Reference Values

A calculation factor may be associated with up to six references that define its context. For example, the calculation of a social insurance deduction might vary based on a person's age and employment status.

Each reference has a reference number that determines the order in which it's evaluated for processing relative to other references.

Navigate to the Calculation Information task and search for a payroll component to view and manage calculation factor reference information.

Calculation Value Definition

Calculation factors create an association between an element, calculation step and a calculation value definition. The calculation value definition defines the calculation type, such as flat amount or flat rate. The calculation rates and rules may vary based on the amount subject to calculation. Predefined calculation value definitions are provided for statutory and involuntary deductions.

Navigate to the Payroll Calculation Value Definition task to view and manage value definitions.

Calculation Step

A calculation step is a name or a label assigned to a calculation factor to identify its role in a complex payroll calculation.

For example, a time calculation can consist of several parts, such as:

- Calculate hourly worked
- Calculate hourly rate

And when calculating an income tax deduction, the payroll run can do the following:

- Calculate allowance
- Calculate exemptions
- Calculate tax

This tax deduction might be defined as a single element with multiple calculation steps, each defined in a separate calculation factor. You can assign the same calculation step to more than one calculation factor. Calculation steps are optional.

Navigate to the Payroll Calculation Information task to view and manage calculation steps.

Range Values

Range values capture values required for the calculation. The type of information captured is controlled by the calculation type of the value definition such as flat amount, rate (percentage) or date.

Navigate to the Payroll Calculation Value Definition task to view and manage range values.

Calculation Methods

A calculation method references a single fast formula. It's an optional component of a calculation factor. Calculation methods operate at a higher level than the calculation types defined in the calculation value definition. They provide a wrapper around the calculation of a deduction by retrieving values from a calculation value definition, applying a formula, and returning the final deduction amount for the current run.

For example, if the calculation method is set to Cumulative, which references the Core Cumulative fast formula, then the calculation process returns the total deduction amount as a cumulative year-to-date amount. Accrual calculations for payroll balance calculations typically restart at the beginning of each calendar year. This is another type of calculation method. In this case the plan rule for the accrual term start date is January 1.

Navigate to the Payroll Calculation Information task to view and manage calculation methods.

Related Topics

- Payroll Calculation Information
- Examples of Payroll Calculation Information at the Legislative Level
- Calculation Value Definitions

Examples of Calculation Factors for Payroll Deductions

To illustrate how the payroll run uses calculation factors to calculate different types of deductions, let's look at a social insurance deduction and a national income tax deduction using calculation steps.

Social Insurance Deduction

Employers in many countries or territories deduct social insurance payments from employees and also make contributions. Employee and employer rates are typically different. Such deductions often have wage limits.

The social insurance deduction processor element for this type of calculation might have the following calculation factors:

Employer or Employee Code (Reference Value)	Calculation Method	Calculation Step	Calculation Value Definition	Values
Employee	None	Calculate Social Insurance Employee Rate	Social Insurance Employee Rate	4 percent flat rate
Employer	None	Calculate Social Insurance Employer Rate	Social Insurance Employer Rate	2 percent flat rate

Employer or Employee Code (Reference Value)	Calculation Method	Calculation Step	Calculation Value Definition	Values
Employee	None	Calculate Social Insurance Employee Wage Limit	Social Insurance Employee Wage Limit	100,000 flat amount
Employer	None	Calculate Social Insurance Employer Wage Limit	Social Insurance Employer Wage Limit	100,000 flat amount

National Income Tax Deduction Using Calculation Steps

A national income tax calculation involves multiple steps. First, it calculates the allowance, then any exemption amount, and then it applies the tax rate.

The following table shows a subset of calculation factors that might be associated with a tax processor element.

Filing Status (Reference Value)	Calculation Method	Calculation Steps	Calculation Value Definition	Values
Single	None	Calculate Region A Allowance - Single	Region A Allowance - Single	10,000 flat amount
Single	None	Calculate Region A Exemption Amount - Single	Region A Exemption - Single	0 flat amount
Single	None	Calculate Region A Regular Rate - Single	Region A Rate - Single	7 percent flat rate
Married	None	Calculate Region A Allowance - Married	Region A Allowance - Married	10,000 flat amount
Married	None	Calculate Region A Exemption Amount - Married	Region A Exemption - Married	1,000 flat amount
Married	None	Calculate Region A Regular Rate - Married	Region A Rate - Married	6 percent flat rate

Related Topics

- Calculation Value Definitions

Wage Basis Rules

Overview of Wage Basis Rules

Wage basis rules determine the earnings that are subject to a deduction. For exemptions, wage basis rules determine the elements that reduce the amount subject to deduction.

Each wage basis rule is associated with a primary or secondary element classification. When you define a wage basis rule, you can associate it with up to six references that define the context for the rule.

Element Classifications

When you create a new wage basis rule, keep the following in mind regarding element classifications:

- For deduction elements, the classifications identify which types of earnings are subject to the deduction.
- For exemption elements, the classifications identify which types of earnings reduce the amount subject to calculation. For example, tax exemptions as per tax laws.

References for Wage Basis Rules

A wage basis rule may be associated with up to six references that define the context for the rule. Each reference has a number that determines the sequence in which it's evaluated for processing relative to other references. For example, if a wage basis rule for a regional tax deduction has references for both county and city, then the county reference should have a higher number than the city so that it gets evaluated first.

The wage basis rules and related references for statutory and involuntary deductions are predefined for each country.

Note: You can't edit predefined rules or references.

Creating Wage Basis Rules

You can create new wage basis rules for existing payroll components using the Component Group Rules task. The process is summarized below:

1. On the Component Group Rules page, select the group to which the new rule applies.
2. In the Calculation Component Group Overview section, click the group name and then click **Wage Basis Rules**. If wage basis rule references have been defined, click the reference.
3. In the Wage Basis Rules section, click **Create**.
4. Select the payroll component to which the rule applies.
5. Select the primary classifications to be used in the wage basis.
6. Provide the reference value for the rule, if applicable.

Using the Use in Wage Basis Check Box

Here are some rules on using the Use in Wage Basis check box that you should know about:

- If you're setting up rules for a non-US legislative data group, select the Use in Wage Basis check box for each primary classification you add as a wage basis rule.

- If you're setting up rules for a US legislative data group, there is an extra validation that prevents the insertion of a wage basis rule with no secondary classification. You can't select the Use in Wage Basis check box.

Related Topics

- Example of Wage Basis Rules

Example of Wage Basis Rules

To illustrate how wage basis rules affect a tax calculation, let's look at an example where an employee's earnings included in the wage basis vary, depending upon where the employee lives.

Taxable Earnings by Region

Brittany is a salesperson who receives a salary of 2,000 each month. Brittany also has a company car she drives. She's responsible for reporting her "Personal Use" of the company car to be taxed properly. Brittany works in her company's East Coast district, and she spends 50 percent of her time in New York and 50 percent of her time in Pennsylvania. The State of New York taxes Brittany for her personal use of the company car; however, Pennsylvania doesn't. Last month, Brittany reported personal use that equated to 100 (50 personal use in New York, and 50 personal use in Pennsylvania).

For example:

- In New York, imputed earnings such as personal use of company car amounts are included in the taxable wages.
- In Pennsylvania, imputed earnings such as personal use of company car amounts are NOT included in taxable wages.

This table shows the tax calculations that apply for each region.

Region	Earnings in Salary	Eligible Imputed Earnings	Taxable Amounts	Deduction Amount
New York	1000	50	1050	35
Pennsylvania	1000	(50 - Exempt)	1000	30

The wage basis rules for this tax calculation are as follows:

Region (Reference Value)	Primary Classification	Secondary Classification	Use in Wage Basis?
New York	Standard Earnings	Regular	Y
New York	Imputed Earnings	Personal Use of Company Car	Y
Pennsylvania	Standard Earnings	Regular	Y
Pennsylvania	Imputed Earnings	Personal Use of Company Car	N

Region (Reference Value)	Primary Classification	Secondary Classification	Use in Wage Basis?

Setting Up and Verifying the Wage Basis Rules

Use these tasks to set up the wage basis rules for Brittany and verify that her tax calculations meet the requirements as given in the previous section.

- Use the **Element Classifications** quick action under Payroll and check if the secondary classification of Personal Use of Company Car is available under the primary classification of Imputed Earnings for an US LDG.
- Use the **Elements** quick action and create an element for Company Car for the US LDG. When you create the element, under the Standard Rules section, select the element as Nonrecurring and the Employee Level as Assignment Level.
- Use the **Component Group Rules** quick action under Payroll and navigate to Regional > Related Deductions > State Tax, to create the wage basis rules. Create a wage basis rule for the secondary classification of Personal Use of Company Car and the state of NY. Ensure that for Pennsylvania's Primary Classification of Imputed Earnings the **Use in Wage Basis value** is set to **N**.
- Run a QuickPay for Brittany and check the State of Earnings to verify that the Calculated Earnings, the Imputed Earnings, Taxable Amounts, and Deductions are as given in the table in the previous section, for both Pennsylvania and New York.

How Do I Create and Verify Wage Basis Rules

This topic demonstrates how you can set up and verify wage basis rules for an employee whose earnings vary depending on where the employee lives.

Watch video

Brittany is a salesperson of a company and she uses the company car, the use of which she has to report in order to be taxed properly.

Brittany works in her company's East Coast district, and she spends 50 percent of her time in New York and 50 percent of her time in Pennsylvania.

Let's consider the following to understand how we can set up the wage basis rules for Brittany:

- She receives a salary of 2,000 each month.
- Last month, Brittany reported a total personal use of the car amount of 100. She spent 50 percent of it in New York and 50 percent of it in Pennsylvania.
- In New York, imputed earnings such as personal use of company car amounts are included in the taxable wages.
- In Pennsylvania, Brittany isn't taxed for her personal use of the company car.

Set Up and Verify the Wage Basis Rules

Use these tasks to set up the wage basis rules for Brittany and verify that her tax calculations meet the requirements as given in the previous section.

1. **Verify Availability of Element Classifications**

   Check if the secondary classification of **Personal Use of Company Car** is available under the primary classification of Imputed Earnings for an US LDG.

   a. Select the **Element Classifications** quick action under Payroll on your Home page.
   b. On the Element Classifications page, select the **US Legislative Data Group**.
   c. In the Name field enter **Imputed Earnings** and search.
   d. Click **Imputed Earnings** row in the search results section.
   e. On the Element Classifications: Imputed Earnings page, confirm that Personal Use of Company Car is available in the Secondary Classifications section.

      If you dont see the Personal Use of Company Car secondary classification, use the Add icon to create the secondary classification.

2. **Create an Element for Usage of Company Car**
   a. Use the **Elements** quick action under Payroll to confirm if an element, for example, AT Company Car, exists for computing the taxes for personal use of company car.
   b. On the Elements page, select the **US Legislative Data Group**.
   c. In the Name field enter **AT Company Car** and search. If the element doesn't exist create the element.
   d. Confirm that the element has Imputed Earnings as the Primary Classification and the Secondary Classification is Personal Use of Company Car.
   e. In the Standard Rules section, set the Recurring entry to **Nonrecurring** and the Employee Level to **Assignment**.
3. **Create Wage Basis Rules**
   a. Use the **Component Group Rules** quick action under Payroll on your Home page, and navigate to Regional > Related Deductions > State Tax.
   b. On the Component Group Rules page, select the **US Legislative Data Group** and click Search.
   c. Click **Regional** in the search results section.
   d. Navigate to Regional > Related Deductions > State Tax, and click **Wage Basis Rules**to create the wage basis rule.
   e. In the State Tax: Wage Basis Rules section, enter **Personal Use of Company Car** in the blank field above Secondary Classifications, and click **Enter**.
   f. Use the Add icon to create a wage basis rule for the state of New York. In the Create Wage Basis Rule window, enter the following as shown in this table.

Field	Value
Effective Start Date	Enter an appropriate date.
State	NY
Primary Classification	Imputed Earnings
Select all secondary classifications	No

Field	Value
Secondary Classifications	Personal Use of Company Car
Subject to wage basis rule	Yes

g. Click **Submit**.

Confirm that for Pennsylvania the **Use in Wage Basis value** is set to **N** for the Primary Classification of Imputed Earnings.

You can see that New York is now added to the Wage Basis Rules listed under Sales Tax.

4. **Run Quick Pay for Brittany and View SOE**
   a. Use the Calculate QuickPay task to run a QuickPay for Brittany.
   b. After the QuickPay process is complete, click the **Verify Payroll Results** task in the checklist.
   c. On the View Person Process Results page, click Brittany in the Search Results.
   d. In the Statement of Earnings section, view the Earnings and Taxable Benefits.
   e. Click on the Taxable Benefits amount to confirm that the calculations are for the company car.
   f. Use the Actions menu to view the Run Results. Use the filter option on the page to view the calculations for SIT Subject Withholdable balance.

FAQs for Wage Basis Rules

Why can't I edit the secondary classifications for a wage basis rule?

You probably defined the rule for the primary classification to include all secondary classifications in the wage basis.

Edit the primary classification row, and deselect the **Select all secondary classifications** option. You can then edit individual secondary classification rows, and select **Use in wage basis** only for those classifications to be considered in the wage basis.

Related Topics

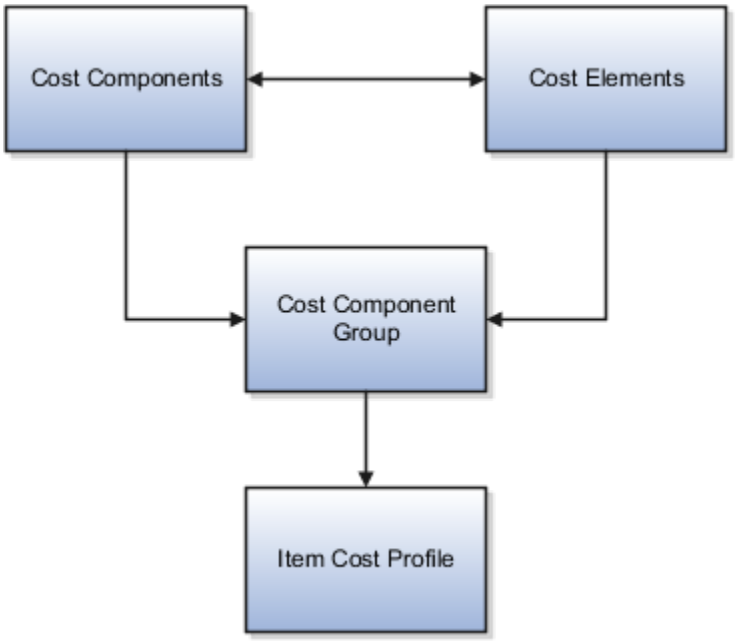
Component Group Rules

How Cost Components, Cost Elements, and Cost Component Groups Work Together

Cost components are user-defined or come from external sources, and are mapped to cost elements which the costing application uses to track the cost of items.

Use cost component groups to map cost components to cost elements, and to map source cost elements to destination cost elements when items are transferred from one inventory organization to another.

This figure illustrates the relationship between cost components, cost elements, cost component groups, and cost profiles.



Cost Components

Cost components are the most granular representation of item costs. Examples of cost components are purchase order item price, material, freight, tax, and overhead. Cost Components come from different sources:

- Predefined costs from external sources such as Purchasing, Accounts Payable, and Inventory Management
- Landed cost charges from Oracle Fusion Landed Cost Management.

Cost Elements

A cost element is the level where the costs of an item are tracked through the inventory accounting life cycle. Cost components are mapped to cost elements, which enables you to calculate item costs at different granularity levels for different business needs. For example, you may want more granularity for high-value than for low-value items.

You can define cost elements for four types of costs:

- Material cost element type for incoming material cost components.
- Overhead cost element type for costs that are calculated by the cost processor based on user-defined overhead rules.
- Profit in Inventory cost element type for tracking of internal margins when items are transferred from one inventory organization to another, including global procurement and drop shipment flows. For cost elements of this type, indicate the Profit in Inventory organization that incurs the gain or loss due to the transfer of goods.
- Adjustment cost element type for separate tracking of cost adjustments, which provides a more detailed view of item costs and profit margins.

Cost elements are defined at the set level and thereby have the advantages of set-level definitions for sharing and segregation. A Profit in Inventory cost element must be assigned to the Common cost element set so that it can be shared across cost organizations.

The following table gives examples of cost element definitions:

Cost Element Set	Cost Element	Cost Element Type	Inventory Organization
Country 1	Metals Material	Material	Not Applicable
Country 1	Plastic Material	Material	Not Applicable
Country 1	Miscellaneous Material	Material	Not Applicable
Country 1	Miscellaneous Material	Adjustment	Not Applicable
Country 1	Plant Depreciation	Overhead	Not Applicable
Country 1	Equipment Depreciation	Overhead	Not Applicable
Country 1	Freight Charges	Overhead	Not Applicable
Common	Internal Margin	Profit in Inventory	Seattle
Country 2	Dairy Material	Material	Not Applicable
Country 2	Miscellaneous Material	Material	Not Applicable
Country 2	Dairy Material	Adjustment	Not Applicable

Cost Component Groups

Use cost component groups to define mappings of cost components from external sources to cost elements in the costing application. These mappings provide flexibility in the granularity level where you track costs. You can map one cost component to one cost element for a detailed cost breakdown, or several cost components to one cost element for a less granular view of costs. For cost components and cost elements that are related to landed cost charges, you can choose to capitalize them into inventory value, or expense them. All other costs are automatically capitalized.

You can also map source cost elements to destination cost elements when transferring items from one inventory organization to another. This helps to maintain visibility of the item cost structure from the source application and across the supply chain.

You can specify a default cost component mapping to cost element to be used in cases where the source cost element doesn't have a matching destination cost element. The default cost component mapping is helpful when:

- The detailed mapping of a cost component to cost element isn't required, and you want to map it to a single cost element.
- The designated mapping for a cost component is missing. If the mapping is missing, the transaction automatically picks up the default cost component mapping.

Note: If the cost component mapping is missing, the cost processor logs a message in the processing log. If the cost component mapping is missing and there is no default mapping, you can create the mapping and the transactions will be processed in the next run. If there is a default mapping, the transaction is processed and you can review the message log to decide if you want to take further action: you can correct the mapping for future transactions, and you can create a cost adjustment to reclassify the costs as needed.

Cost component groups are one of the attributes of cost profiles, which the cost processor uses to determine how to calculate item costs. Cost component groups are defined at the set level and thereby have the advantages of set-level definitions for sharing and segregation. Cost component groups and cost profiles are both set enabled; therefore, only those cost component groups belonging to the same set as the cost profile are available to that cost profile.

Example 1: The following table describes mapping of one cost component to one cost element.

Mapping Group	Cost Component	Cost Element
MG1	PO Item Price	Material
MG1	PO Tax	Tax
MG1	Profit in Inventory	PII
MG1	Interorganization Freight	Freight Charges
MG1	Invoice Price Variance	IPV
MG1	Exchange Rate Variance	ERV
MG1	Tax Invoice Price Variance	TIPV

Example 2: The following table describes mapping of cost components to one or more cost elements.

Mapping Group	Cost Component	Cost Element
MG2	PO Item Price PO Tax NR Tax Invoice Price Variance Exchange Rate Variance Tax Invoice Price Variance	Material
MG2	Interorganization Freight	Freight Charges

Mapping Group	Cost Component	Cost Element
MG2	Profit in Inventory	PII

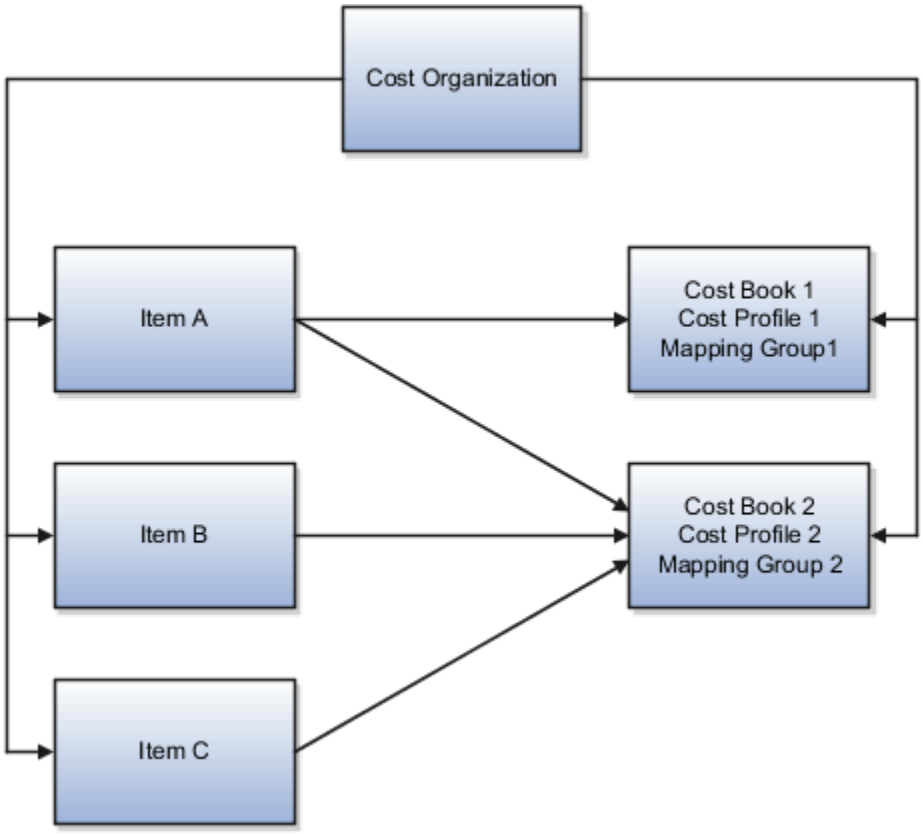
Example 3: The following table describes mapping of source cost elements to destination cost elements in an interorganization transfer.

Mapping Group	Source Cost Element Set	Source Cost Element	Destination Cost Element Set	Destination Cost Element
MG3	Country 1	Material Tax	Country 2	Material
MG3	Country 1	Freight Charges	Country 2	Freight Charges
MG3	Country 1	Other	Country 2	Other

You have flexibility in how you map cost component groups to items:

- Different items in a cost organization and book combination can have the same or different cost component group mappings if they use different cost profiles.
- One item can have different cost component group mappings in different cost books.
- Several cost organizations can share the same cost component group mappings if they belong to the same set, or if they're defined the same way in different sets.

The following figure illustrates different mappings of cost component groups to items. That is, in a cost organization, Item A maps to two cost groups, and item B and Item C maps to only one cost group.



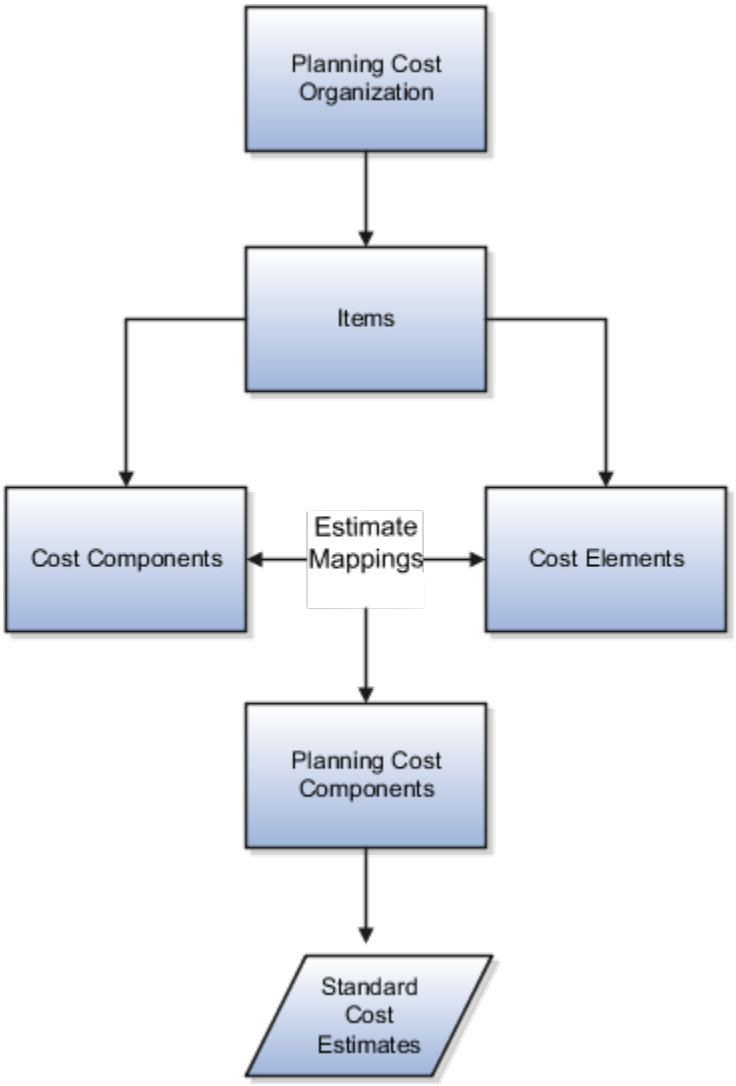
Related Topics

- Cost Profiles, Default Cost Profiles, and Item Cost Profiles
- Manage Cost Elements and Analysis Groups
- Can I delete, deactivate, or edit a user-defined cost component code?
- Can I delete or edit a cost component group mapping?

How Planning Cost Organizations, Planning Cost Components, and Cost Estimate Mappings Work Together

Standard cost planning refers to the process of estimating standard costs for use in the costing of inventory or manufacturing transactions. Planning cost organizations, planning cost components, and estimate mappings are the main elements used in the standard cost planning process.

This figure illustrates the relationship between the standard cost planning elements, and how they're used to generate standard cost estimates.



Planning Cost Organizations

Enabling a cost organization for cost planning helps to define and maintain costs across multiple locations and production facilities. One of the modeling options is to perform cost planning at the business unit level, by mapping all the inventory organizations belonging to the business unit to one cost organization.

Related Topics

4 Rates and Values by Criteria

Rate Definitions

Overview of Rate Definitions

Use rate definitions to create rates such as salary rates, absence rates, time card rates, and other types of payroll rates.

Further, you can use a rate definition for different types of rate calculations. For example, use a salary rate definition to display an employee's salary on the salary page. You can also use it to display the employee's salary rate on the time card and to pay the employee's salary in Cloud Payroll.

Here are some rate types that you can create:

- Compensation rates, such as a base salary or car allowance rate.
- Rates based on a set of criteria and conditions. For example, a union rate that's based on the job and location of an employee.
- Rates with multiple rate contributors, such as an overall salary rate, which is the sum of multiple salary components.
- Rates derived on the grade of an employee, such as a base salary rate and payroll balance rates, such as pension reporting rate.
- Rates calculated based on other rates. For example, a shift allowance rate that's calculated based on a percentage of the employee's salary rate.

You can define minimum and maximum validation rules for your rate definition. For example, define a minimum rate rule to ensure that an employee isn't paid less than the minimum hourly rate for their job.

When you create a rate definition, you can define a frequency for the rate returned by the calculation, such as 50,000 annually, or 7.25 hourly. Alternatively, you can define a rate that's calculated for a unit of work, such as a shift rate, or a mileage rate. You can control if the application calculates the rate values live or retrieves it based on the results of the Generate HCM Rates process. For example, it's a common practice for salary rates to be calculated live when you enter the salary page for an employee.

As a cloud payroll user, you can calculate most rate calculations live in the payroll run. However, you'll need to perform some complex rate calculations using the Generate HCM Rates process. In this scenario, Cloud Payroll retrieves the stored rate value directly from the rates reporting table for an employee. You can use the rates generated by the Generate HCM rates process for generating reports, such as pension reports.

Use the Rate Definitions task to define and manage rate definitions.

Categories

To create a new rate, select a category from this table.

Category	What it Does
Derived Rate	Retrieves values from one or more payroll balances or other rate definitions, including rates that retrieve element entry values. Use this option to create a rate that retrieves a value from one or more rate contributors.
Element	Retrieves rate information from an element input value. When using salary rates, use this type of rate definition to create and update entries, such as create or update a salary element entry. Select a storage type of Amount or Factor and then select the name of a corresponding element. You can select one of these storage types: • Amount: Retrieves a value from or posts to the element input value with a special purpose of Primary Input Value. For example, 'Amount' is the primary input value for elements created with the flat amount calculation rule, such as salary. If you associate a flat amount salary element with a rate, the application retrieves or posts to the salary amount for an employee. • Factor: Retrieves a value from or posts to the element input value with a special purpose of Factor. The 'Factor' is the primary input value for elements created with the Factor calculation rule. Use this rate definition to apply the factor held on an element entry to a payroll balance. You can also use it to apply it to another rate definition including base rates or an overall salary rate. For example, the application calculates your company's car allowance rate based on a factor of salary. The application captures the factor value, such as 0.05 at the employee level on their car allowance element entry. When creating the car allowance rate definition, select your car allowance element to enable the rate to retrieve the factor value for an employee. In the rate contributor region, select your salary rate definition. This selection ensures that the application calculates the car allowance rate based on a factor value of the employee's salary rate. **Note:** The element rate doesn't support the input value information that's held on Hours x Rate elements. It's a common practice for the payment rate for this type of element to be based on a recurring flat amount element, such as salary. **Note:** Salary rates supports Factor, but the payroll run doesn't. Use the **Generate HCM Rates** process to calculate this type of rate. Also, you can use the process to retrieve the stored value in the payroll run using the predefined `CALL_CALC_VALUE` formula.
Value by Criteria	Retrieves values from a single value by criteria definition. A value by criteria definition specifies one or more evaluation conditions that determine a particular value or rate. You can specify the conditions as a tree structure to define the evaluation sequence. For example, you can define a value-by-criteria to capture car allowance and housing allowance values based on an employee's job. Define a rate definition to retrieve car allowance rates and another rate definition to retrieve housing allowance rates. Both rate definitions refer to the same value-by-criteria and use the criteria of job to retrieve the appropriate rate values for an employee.
Grade Rate	Retrieves values based on an employee's grade details.
Formula	Retrieves values from a rate definition formula. The Generate HCM Rates process supports the calculation of most formula-based rates. However, rates that include complex payroll formula contexts or use balances calculated within the payroll run, are calculated by the payroll run.

Category	What it Does
	Note: Formula-based rates are only supported for rate calculations in the payroll run.

Related Topics

- Options to Configure Rate Definitions
- Rate Contributors for Derived Rates
- Configure Elements Used by Rate Definitions
- Overview of Values Defined by Criteria
- Calculate Values Defined by Criteria

Options to Configure Rate Definitions

To configure rate definitions to get your desired rates, you should know how to use the various rate definition options. For rates based on a single element entry value, you can also apply override and defaulting rules.

Note: Use the **HCM Generate Rates** process to calculate factor based element rates.

This table describes the fields that you can configure for the Derived Rate, Element, and Value by Criteria category types.

Field	Category	Description
Storage Type	Element	If you select the Element category to define a rate, you must select a storage type of **Amount** or **Percentage**. For example, you can configure a rate definition using the Salary element. If the salary is held as a monetary value, select **Amount**. If the salary is a factor of another value, such as a balance, select **Percentage**. **Note:** This field is hidden for all rate definition categories other than Element.
Element Name	Element Derived Rate	For the Element category, the field is enabled only when you select the storage type. If you select the Element category to define a rate, you must select an element name. This is required if you're configuring a primary rate. This is a rate that retrieves a value from a single element, such as salary.

Field	Category	Description
		For the Derived Rate category, the field is enabled when you access the page.
Employment Level	Derived Rate Value by Criteria	Select either **Payroll Relationship**, **Term**, or **Assignment**. This field is mandatory for all derived rates and value by criteria rate definitions. It controls which employment ID the rates process uses when calling a rate. If the employee has multiple assignments, the rates process uses the assignment ID to identify the correct assignment record for the employee. Sometimes the contributor value is held at a different level to the employment level defined on the rate. In such cases, the rate process uses the employment ID to locate the correct record.
Status	Element Derived Rate Value by Criteria	Set the status of a rate to active or inactive. You can't assign an inactive rate to an employee. Employees that are allocated a rate while it was active aren't impacted by a change in status to inactive.
Base Rate	Element	Select this option if the rate represents a base rate that another rate uses in its calculation. For example, you might have day shift employees and night shift employees, with different base pay rates. If each set of employees receives an allowance that's a percentage of the base rate, define one allowance rate. And that rate is calculated based on the two rates that have the **Base Rate** option selected.
Overall Salary	Element Derived Rate	If you're defining rates for use on the Salary page, use the derived rate category and define an Overall Salary. To do this, you must associate a salary element to the rate. Define an Overall Salary Information element for this purpose.
Reporting Required	Element Derived Rate Value by Criteria	Select this option to indicate if the calculated rate value should be stored on the rate table for reporting purposes. If you're defining rates for use on the Salary page, you must select this option. Rate definitions with this option selected are included when the Generate HCM Rates batch process is run. Use this feature to report on primary rates and not derived rates. HCM extracts use this report to send data to third parties.

Field	Category	Description
Value by Criteria Name	Value by Criteria	If you select the Value by Criteria category to define a rate, you must select a Value by Criteria name. A value by criteria definition specifies one or more evaluation conditions that determine a particular value or rate.

Returned Rate Details

You can specify the periodicity of the returned rate, factor rules, currency, decimal display, rounding rules, and minimum and maximum rules. If the process returns a rate that's outside the minimum and maximum range, you can do one of these actions.

- Set up an action that enforces the rule, displays a warning
- Forces the user to fix the error

Select the **Return FTE Rate** check box to instruct the rate definition process to return a part-time value by applying an employee's FTE to the rate value.

Periodicities

You must specify a periodicity, such as hourly or weekly, for the returned rate and each rate contributor. However, when you use the rate in a formula, you can override the default periodicity.

The rate calculation converts each contributor to the periodicity specified on the rate contributor. It then adds or subtracts the rate contributors, even if the periodicities are different. In most cases, they will be the same. Once the rate contributors are summed up, the rate calculation then converts them into the return periodicity and currency.

For example, for a rate with a periodicity of weekly using the Standard Rate Annualized conversion formula, the rate calculation does these actions.

1. Calculates an annual figure from the value and periodicity of each contributing earning and deduction.
2. Converts the annual figure into a weekly value.

By default, rates are converted using these predefined rate conversion formulas.

- Standard Rate Annualized
- Standard Rate Daily
- Standard Working Hours Rate Annualized
- Assignment Working Hours Rate Annualized
- Periodic Work Schedule Rate Annualized

If the values in the predefined conversion rules don't meet your requirements, you can define your own.

Factor Rules

You can apply a factor or multiplier to a calculated rate, or to an individual rate contributor. To apply a factor rule, do these steps.

- Select Value as the factor rule.
- In the Factor field, enter the number by which you want to multiply the rate.

- Add the contributor.

You can apply a factor rule to the rate definition, rate contributors, or both. For example, you can define rate contributors to calculate hourly values based on salary and bonus. You can then apply a factor of 1.0 or 100 percent to the salary balance contributor and a factor of 0.5 or 50 percent to the bonus balance contributor. The factor rule is applied to the rate before the periodicity conversion is applied.

Minimum and Maximum Values

You can define minimum and maximum values for the returned rate, and for individual rate contributors.

Use the **Limit Violation Action** field to display an error, warning, or enforce the application to use minimum or maximum value that you enter. For example, you can enter 500 as the minimum value and then select **Enforce Rules**. If the returned value comes back as 400, the application uses 500 as the value.

This table explains the options for the minimum and maximum rate values.

Value	Comments
Null	No minimum or maximum value
A specified value	Example: 2000
Based on another rate	Uses the calculated value of the rate definition that you select. Be careful that you don't create a loop. For example, Rate A has minimum value that's based on Rate B, which has a minimum value based on Rate A. This situation would result in a runtime error.
Value by Criteria	Minimum or maximum value based on a value by criteria definition.

Override and Defaulting Rules

You can set override and default rules only if you select Element as the category when you define rate definitions. Set up override rules for the element associated with your rate definition. If you select the **Override Allowed** check box, you can enter rate values on the Salary page.

If an element input validation formula has been defined for the rate contributor input value, you can view it in the Override and Defaulting Rules section.

> **Note:** You can't define override and defaulting rules if you select the Values by Criteria category to define a rate. But you can select a formula to validate any rate that's returned and also use formulas to create default values.

For example, you can use the HCM Rates Default Value formula type to define the number of workdays in a year for your organization.

```
workday = 250
periodicity = YEAR
return workday, periodicity, currency
```

In addition, you can use a value by criteria definition as the default type. Here, the process uses the value for the first record created and carries that value forward in subsequent records, unless it's manually overridden. The rate engine reevaluates the rate that the value by criteria method creates for each subsequent record. So, this rate could change. For

example you could use a value by criteria definition to enable a default value of 10 percent for bonuses that are targeted to all eligible employees.

Contributor Rules

You can specify the periodicity for the contributor total. To process contributor totals as full-time equivalency amounts, select **Yes** in the **Process Contributor Total as FTE Amount** field. The final rate value is converted from this status to the Return Rate FTE status.

Information

In this section, enter text that explains the purpose of the rate, how the rate is calculated, or provides further details for the rate. This section isn't available for rate definitions using the Value by Criteria categories.

Related Topics

- Rate Contributors for Derived Rates
- Configure Elements Used by Rate Definitions
- Configure Periodicity Conversion Rules
- Element Input Validation Formula Type

Configure Elements Used by Rate Definitions

If you create rate definitions that reference element input values, you must configure them for the different calculation rules, such as Flat Amount and Factor.

This ensures that the values calculated by the rate are consistent with the values processed through payroll.

Elements use the predefined CALL_CALC_VALUES formula to calculate rate values in Calculate Payroll and Generate HCM Rates. Each element also requires the necessary payroll calculation information is defined such as values definitions, calculation steps and calculation factors.

When you create elements with a category such as Time Card or Absence, you can associate a default rate definition and the application generates all the rules and definitions required to calculate the rate.

When you create elements with a category of Standard, you need to update the element formula to use CALL_CALC_VALUE and create the payroll calculation information required to associate the rate definition to the element and calculate the rate.

Do these element configuration steps if you're using this element for a rate definition with the category element.

1. Create an element of type **Recurring** or **Assignment level**.
2. Don't select the **Multiple Entries Allowed** check box.
3. Select a special purpose for each element input value.
    a. **Primary Input Value** for an Amount value.
    b. **Factor** for a Factor value.
    c. **Periodicity** for a Periodicity value.

> **Note:** When creating elements for use in rate definitions, don't select Periodically. The Rate Definition process is unable to convert rates with a periodicity of periodically to different frequencies such as annual, weekly, and daily.

4. If the flat amount is a full-time equivalent value, you must select **Yes** in the **Default** field for the Full-Time Equivalent input value.
5. Create element eligibility.

Configure Elements to Create Rate Definitions for Flat Amount Calculations

1. On the Home page, click the **Elements** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Enter these values.

Field	Value
Legislative Data Group	Select your legislative data group
Primary Classification	Standard Earnings
Category	Standard

4. Click **Continue**.
5. Enter a name, reporting name, and description.
6. Enter the effective date.
7. Answer the questions in the Duration and Standard Rules sections.

   Note: Multiple entries aren't allowed.

8. For the question, At which employment level should this element be attached?, select **Assignment Level**.
9. For the question, Does this element recur each payroll period, or does it require explicit entry? select **Recurring**.
10. Click **Next**.
11. In the Calculation Rules section, select **Flat Amount** and then click **Next**.
12. Click **Submit**.
13. On the Element Summary page under the Input Values folder, select **Full-Time Equivalent**.
14. Check that these values exist.

Field	Value or Check Box Status
Name	Full-Time Equivalent
Special Purpose	Full-Time Equivalent
Unit of Measure	Character
Displayed	Selected
Allow User Entry	Selected

Field	Value or Check Box Status
Required	Deselected
Create a Database Item	Selected
Default	No
Lookup Type	PAY_TMPLT_YES_NO

Configure Elements to Create Rate Definitions for Factor Calculations

1. Repeat steps 1 through 9 in the first procedure.
2. In the Calculation Rules section, select **Factor** and then click **Next**.
3. Click **Submit**.
4. On the Element Summary page under the Input Values folder, select **Pay Value**.
5. Check that these values exist.

Field	Value or Check Box Status
Name	Pay Value
Special Purpose	Primary output value
Unit of Measure	Money
Displayed	Selected
Allow User Entry	Selected
Required	Deselected
Create a Database Item	Selected

6. On the Element Summary page under the Input Values folder, select **Factor**.

7. Check that the following fields and values exist.

Field	Value or Check Box Status
Name	Factor
Special Purpose	Factor
Unit of Measure	Number
Displayed	Selected
Allow User Entry	Selected
Required	Deselected
Create a Database Item	Selected

Test Your Element Configuration

You're almost done. Now, to test your element configuration, follow these steps.

Note: These procedures are for payroll users only.

Step	Page	Do This Action
1	My Client Groups	Find a payroll and an employee that you can use for testing purposes.
2	Elements	For the Flat Amount element, use the Pay Value balance feed to enter an Eligible Compensation balance for the Percentage element.
3	Element Entries	Add the Flat Amount and Percentage elements to the employee as element entries and enter input values.
4	Submit a Process or Report	Enter a suitable period for the payroll you selected in step 1.
5	Submit a Process or Report	Run the payroll.

Step	Page	Do This Action
6	View Payroll Process Results	Check if the payroll results are correct.

Related Topics

- Overview of Rate Definitions
- Options to Configure Rate Definitions
- Rate Contributors for Derived Rates
- Calculate Standard Earnings Rate Using Values Defined by Criteria
- Payroll Calculation Information
- Overview of Payroll Calculation Information Formulas

Example to Calculate a Standard Earnings Rate

Let's look at an example that shows how to calculate a standard earnings rate. This example doesn't cover the payroll calculation. But it does support the configuration to calculate a rate for a standard element.

1. **Create a Rate Definition:** Use the Rates Definitions task to create a bonus rate definition.
2. **Create the Element:** Use the Elements task to create a flat amount bonus element.
    a. In the Primary Classification field, select Standard Earnings.
    b. In the Category field, select Standard.
3. **Create a Value Definition:**Use the Calculation Value Definitions task to create a bonus value definition. This is required to associate the rate definition with the bonus element.
    a. Click Create for a new value definition group and provide a name such as standard earnings.
    b. In the Calculation Type field, select Rate Definition.
    c. In the Calculation Values region:
        i. Enter values from 0 to 99999.9
        ii. Select the bonus rate definition.
4. **Create Calculation Step:** Use the Payroll Calculation Information task to create a bonus calculation step.
    a. Search for time cards in the component group field and navigate to the Calculation overview page.
    b. Navigate to all calculation steps tasks.
    c. Create a calculation step and provide a unique name such as a bonus.
5. **Create Calculation Factor on Element:** Use the Elements task to create a calculation factor.
    a. Search and select the bonus element.
    b. Select the calculation factor page.
    c. In the calculation step field, select the bonus calculation step.
    d. In the value definition, select the bonus value definition field.

6. **Edit Formula on Bonus Element:** Use the Elements task to edit the element formula.
    a. Edit the bonus element formula to calculate a bonus rate using the CALL_CALC_VALUES formula.

Note: You can refer to the element status processing rules page to identify which formula to edit.

Related Topics

- Payroll Calculation Information
- Overview of Payroll Calculation Information Formulas
- Calculate Standard Earnings Rate Using Values Defined by Criteria

Rates Defined by Formula

You can define rates based on Fast Formula.

Let's consider an example where an employee can work in a job at a higher grade than their normal job. The rate paid to that employee is based on different criteria and includes rules, such as the minimum rate must be at least 1.00. You can use a formula to step up the grade to the next level and to return the rate assigned to that higher grade.

On the Rate Definition page, **Calculation Formula** field, select the **HCM Rates Calculate Value** formula type. The formula type supports contexts, such as assignment, payroll relationship, and job. You can select and create the correct formula for rate definitions from all standard database items.

Write a Formula

You can write your own formula when the formula type is **HCM Rates Calculate Value**.

The formula has certain inputs and return value, but the rate always returns these values:

- Monetary Amount
- Currency
- Periodicity

Note: Formula-based rates are only supported for rate calculations in the payroll run.

Examples

In this formula, the return values set to 65.23, but you can add the required logic to calculate the rate return values.

```
Default for value_name is EMPTY_TEXT_NUMBER
default for value_value is EMPTY_TEXT_NUMBER
default for value_datatype is EMPTY_TEXT_NUMBER

inputs are

 value_name (text_number),
 value_value (text_number),
 value_datatype (text_number),

AMOUNT = 65.23
CURRENCY = 'USD'
PERIODICITY = 'YEAR'
```

```
return AMOUNT, CURRENCY, PERIODICITY
```

Let's consider another example where the formula returns a rate based on a job. You can use this formula to calculate a rate value when an employee works in a job at a higher grade than at their normal job.

```
default for value_name is EMPTY_TEXT_NUMBER
default for value_value is EMPTY_TEXT_NUMBER
default for value_datatype is EMPTY_TEXT_NUMBER

default for PER_ASG_ELIG_JOBS_CURRENCY is 'UNKNOW'
default for PER_ASG_ELIG_JOBS_END_DATE is '0001/01/01 00:00:00' (date)
default for PER_ASG_ELIG_JOBS_FREQUECY is 'YEARLY'
default for PER_ASG_ELIG_JOBS_FROM_DATE is '0001/01/01 00:00:00' (date)
default for PER_ASG_ELIG_JOBS_JOB_CODE is 'UNKNOW'
default for PER_ASG_ELIG_JOBS_JOB_ID is 0
default for PER_ASG_ELIG_JOBS_JOB_NAME is 'UNKNOWN'
default for PER_ASG_ELIG_JOBS_MANUAL_RATE is 0
default for PER_ASG_JOB_ID is 0

inputs are
 value_name (text_number),
 value_value (text_number),
 value_datatype (text_number)

 AMOUNT = 0
 PERIODICITY = 'YEARLY'
 CURRENCY = 'USD'

 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - count is : ' || to_char(value_name.count))
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - count2 is : ' || to_char(value_value.count))
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - count3 is : ' || to_char(value_datatype.count))

 l_job_id = PER_ASG_JOB_ID
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_job_id is : ' || to_char(l_job_id))

 i = 0
 while (i < value_name.count) loop
 (
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - name is : ' || value_name[i])
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - value is : ' || value_value[i])
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - datatype is : ' || value_datatype[i])

 if(value_name[i] = 'PER_ASG_JOB_ID') then
 (
 l_job_id = to_num(value_value[i])
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_job_id has been set with : ' || to_char(l_job_id))
 )

 i = i + 1
 )

 CHANGE_CONTEXTS(JOB_ID = l_job_id)
 (
 l_t_dummy = PER_ASG_ELIG_JOBS_CURRENCY
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)
 if(l_t_dummy != 'UNKNOW') then
 (
 CURRENCY = l_t_dummy
 )

 l_dt_dummy = PER_ASG_ELIG_JOBS_END_DATE
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_dt_dummy is : ' || to_char(l_dt_dummy))

 l_t_dummy = PER_ASG_ELIG_JOBS_FREQUECY
 l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)
 if(l_t_dummy != 'UNKNOW') then
```

```
(
PERIODICITY = l_t_dummy
)

l_dt_dummy = PER_ASG_ELIG_JOBS_FROM_DATE
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_dt_dummy is : ' || to_char(l_dt_dummy))

l_t_dummy = PER_ASG_ELIG_JOBS_JOB_CODE
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)

l_n_dummy = PER_ASG_ELIG_JOBS_JOB_ID
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_n_dummy is : '||to_char(l_n_dummy))

l_t_dummy = PER_ASG_ELIG_JOBS_JOB_NAME
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)

l_n_dummy = PER_ASG_ELIG_JOBS_MANUAL_RATE
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_n_dummy is : '||to_char(l_n_dummy))
if(l_n_dummy > 0) then
(
AMOUNT = l_n_dummy
)
)

return AMOUNT, PERIODICITY, CURRENCY
```

Related Topics

- Overview of Rate Definitions

Rates Based on Values Defined by Criteria

Use a value defined by criteria definition to specify one or more evaluation conditions that determine a particular value or rate.

You can specify the conditions as a tree structure to define the evaluation sequence. You can calculate rates based on a specific value defined by criteria value. For example, you define a value defined by criteria to capture car allowance, housing allowance and market supplement values based on an employee's job.

In this example, you define these criteria details for Jobs A and B.

This table describes the various criteria details for Job A

Criteria	Value
Car Allowance	1000
Housing Allowance	2500
Market Supplement	300

This table describes the various criteria details for Job B.

Criteria	Value
Car Allowance	2000
Housing Allowance	3500
Market Supplement	375

Now, you can define these three rates that are associated with the same value defined by criteria.

1. Rate 1 to retrieve car allowance values for employees based on their job.
2. Rate 2 to retrieve housing allowance values for employees based on their job.
3. Rate 3 to retrieve market supplement values for employees based on their job.

Value by Criteria Defined by Units

Typically, Value Defined by Criteria values are based on a period of time, such as 10 per hour or 25000 per year. But you can also define values which are calculated based on a unit.

Let's consider these examples where you need unit-based rates.

- A worker is paid 3.50 for each screw that he manufactures.
- A worker is paid mileage allowance where the rate paid varies based on the number of miles traveled and the type of vehicle.

In this example, when you create values defined by criteria, in the **Period** or **Unit** field, select **Unit**.

Related Topics

- Overview of Rate Definitions
- Options to Configure Rate Definitions
- Configure Elements Used by Rate Definitions
- Rates Defined by Formula

Rate Contributors for Derived Rates

You can add four different types of rate contributors to your rate definitions. These rate contributes include, Balance, Base Rate, Overall Salary, and Rate Definitions.

You can add rate contributors when you define a rate using the Derived Rate category. You can also manually add rate contributors for the Element category when the storage type is Factor.

For example, if you define a bonus rate which is 0.1 (10 percent) of average earnings, then you do these steps.

- Enter 0.1 as the factor on the element.
- Define a rate contributor based on your average earnings balance.

Rate Contributor Types

This table lists the types of rate contributors, descriptions, and the additional fields that display for each type.

Type	What it Contains	Additional Fields
Balance	Value calculated by these payroll processes. • An employee's average salary rate over their last three months of salary payments • Taxable earnings for the last tax year • Commissions paid in the last quarter	Balance Name Balance Dimension Divisional Balance
Base Rate	Value from the employee's Base Rate	Employment Level
Overall Salary	Value from the employee's Overall Salary rate **Note:** Each overall salary element must be associated with only one overall salary rate. In addition, if the rate definition is an overall salary rate, you can't select Overall Salary as the Contributor Type.	Employment Level
Rate Definition	Other rate definitions that contribute to the rate definition you're creating. For example you can add regular salary, car allowance, and bonus pay rate contributors together to create an overall salary definition.	Rate Name

Reference Dates

You can select a reference date, which is the date the application uses to retrieve rate contributor information for the rate calculation. The reference date specifies the context for the balance dimension.

For example, to retrieve a rate as of the actual start of an absence, select Absence Start Date. To retrieve a rate as of a specific time period, select a specific time period.

The Reference Date field lists only these types of time definitions:

- Time Span - a period of time, such as three months
- Retrieval Date - a type of time definition that's based on a database item

Selecting a value for the Reference Date field is optional.

Note: If you don't select a reference date, the application uses the effective as-of date that's used by the rate engine to calculate the rate.

Single or Multiple Rate Contributors

If the rate definition is based on multiple values, you may need to create multiple rate contributors, as explained in this table.

Rate	Number of Rate Contributors
A single earning or deduction, such as salary	One
A combination of earnings, such as the sum of salary and car allowance payments	Multiple, if salary and car allowance are stored as separate rate definitions

Note: All balances and element entries that contribute to a rate must use the same currency.

Example: Using multiple rate contributors, an hourly holiday pay rate could be based on adding together these values, which are all paid at the end of the previous year.

- Salary
- Incentive bonus
- Seniority bonus
- Other changeable components of remuneration

Related Topics

- Configure Elements Used by Rate Definitions
- Create Rate Definitions for Leave
- Create a Rate Definition for Basic Salary
- Create Rate Definitions for Overall Salary

Rates Based on Grades Details

You can calculate rates based on employee's grade details. For example, you can calculate the annual salary rate based on the grade ladder, grade, and grade step information defined for an employee.

When you define a rate definition, you can select a grade rate as a basis for the rate calculation and specify the employment level. The default employment level is Payroll Assignment. The application retrieves the grade ladder details based on assigned grade that's held on an employee's assignment record.

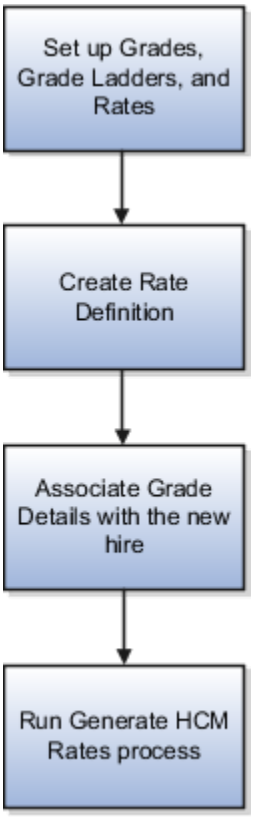
In your rate definition, you add either a rate contributor of type Grade Ladder or Retained Grade.

Calculate Rates Based on Grades

Follow these steps to calculate rates based on grades.

1. Set up grades, grade ladder, and rates for the given job to record the level of compensation for the employees.
2. Create a rate definition based on grade details. Add a rate contributor of type **Grade Ladder**.
3. Hire the employee and provide the required grade and step details.
4. Run the **Generate HCM Rates** process to calculate the rates based on the information held in the grade tables.

This flowchart describes the overall steps to calculate rates based on grade details.



Related Topics

- Example to Calculate Rates Based on Grades With Steps
- Example to Calculate Rates Based on Grades Without Steps
- Example to Calculate Rates Based on Grade Ladder With Multiple Assignments

Example to Calculate Rates Based on Grades With Steps

Scenario: You hire Sherry Callaway as a Pharmacy Technician with grade 3 and step 2. You calculate grade rate values for her annual salary payments based on grades, grade ladder, and step details.

Configuration:

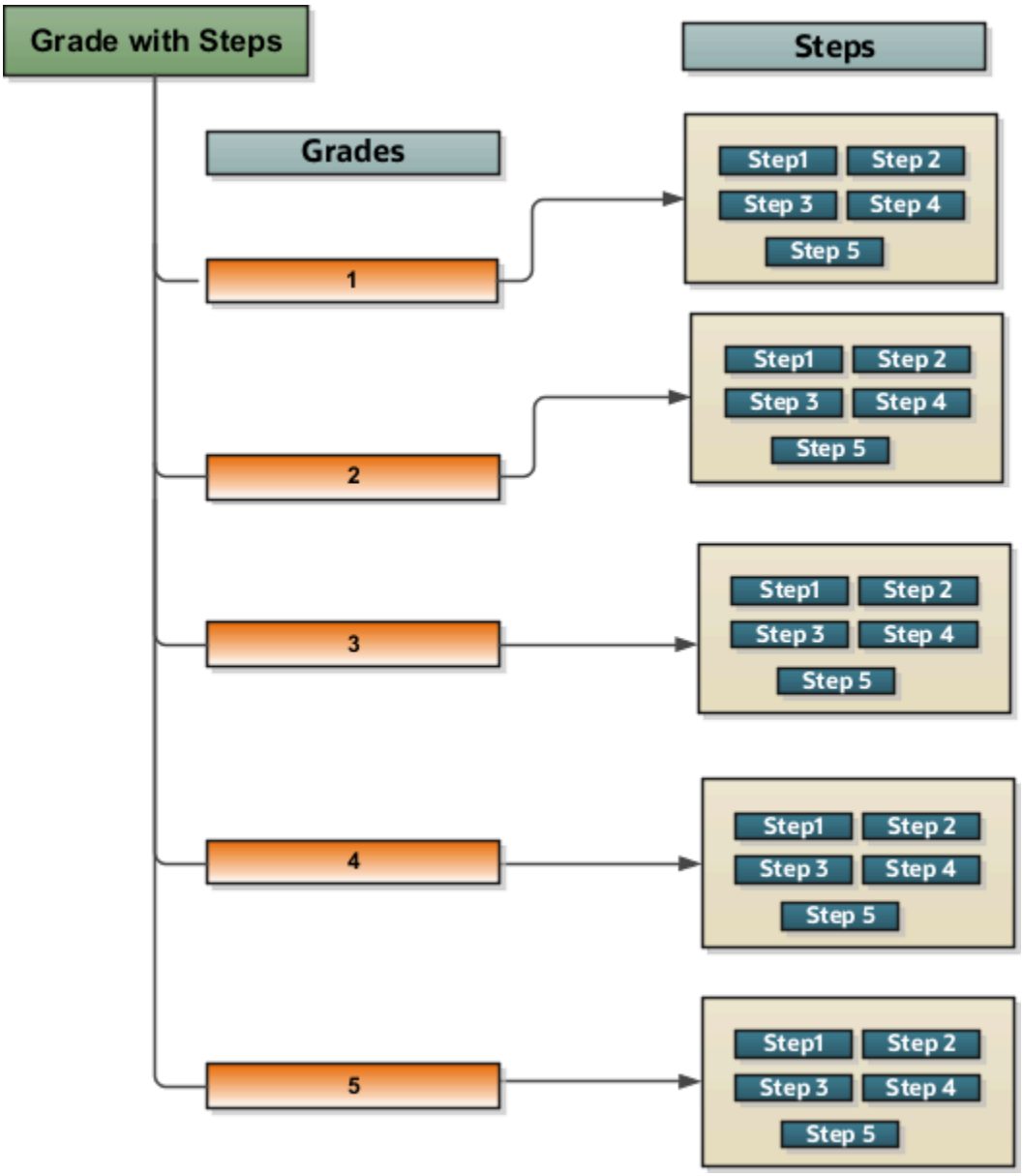
1. Set up grades, grade ladder, and rates for the **Pharmacy Technician** job to record the level of compensation for the technicians.
2. Create a rate definition based on grade details. Add a rate contributor of type **Grade Ladder**.
3. Hire Sherry in the grade 3 with Step 2.
4. Run the **Generate HCM Rates** Process to calculate the rates based on the information held in the grade tables.

Step 1: Grades, Grade Rates, and Grade Ladders

To set up the grade structure for the Pharmacy Technician job, perform these tasks:

1. Set up five different grades and add five steps for each grade.
    - Use the **Manage Grades** task to set up the grades, 1 to 5.

- On the Grade Steps page, add the five grade steps, Step 1 through Step 5, to each of the grades as shown in this illustration.



2. Use the **Progression Grade Ladders** task to create a grade ladder Pharmacy Technicians Salary with these details:

Option	Value
Grade Set	Common Set
Name	Pharmacy Technicians Salary

Option	Value
Legislative Data Group	US Legislative Data Group
Frequency	Annually
Assignment Action	Automated Grade Step Progression

- On the Grades and Steps page, add the grades with steps in the sequence in which your employees typically progress in your organization. Enter the sequence for the place of the grade on the grade ladder, with 1 being the lowest grade. The employee can move up till the grade 5.

Grade	Step 1	Step 2	Step 3	Step 4	Step 5
1	17803	18398	18990	19579	20171
2	20017	20493	21155	21717	21961
3	21840	22568	23296	24024	24752
4	24518	25335	26152	26969	27786
5	27431	28345	29259	30173	31087

Step 2: Rate Definition

Use the **Rate Definition** task to create a rate definition of category type **Grade Rate**. Include these details in the Return Rate tab.

Option	Value
Periodicity	Annually
Periodicity Formula	Standard Rate Annualized
Currency	US Dollar

Add a rate contributor of type **Grade Ladder**.

Step 3: Grade Details During Employee Hire

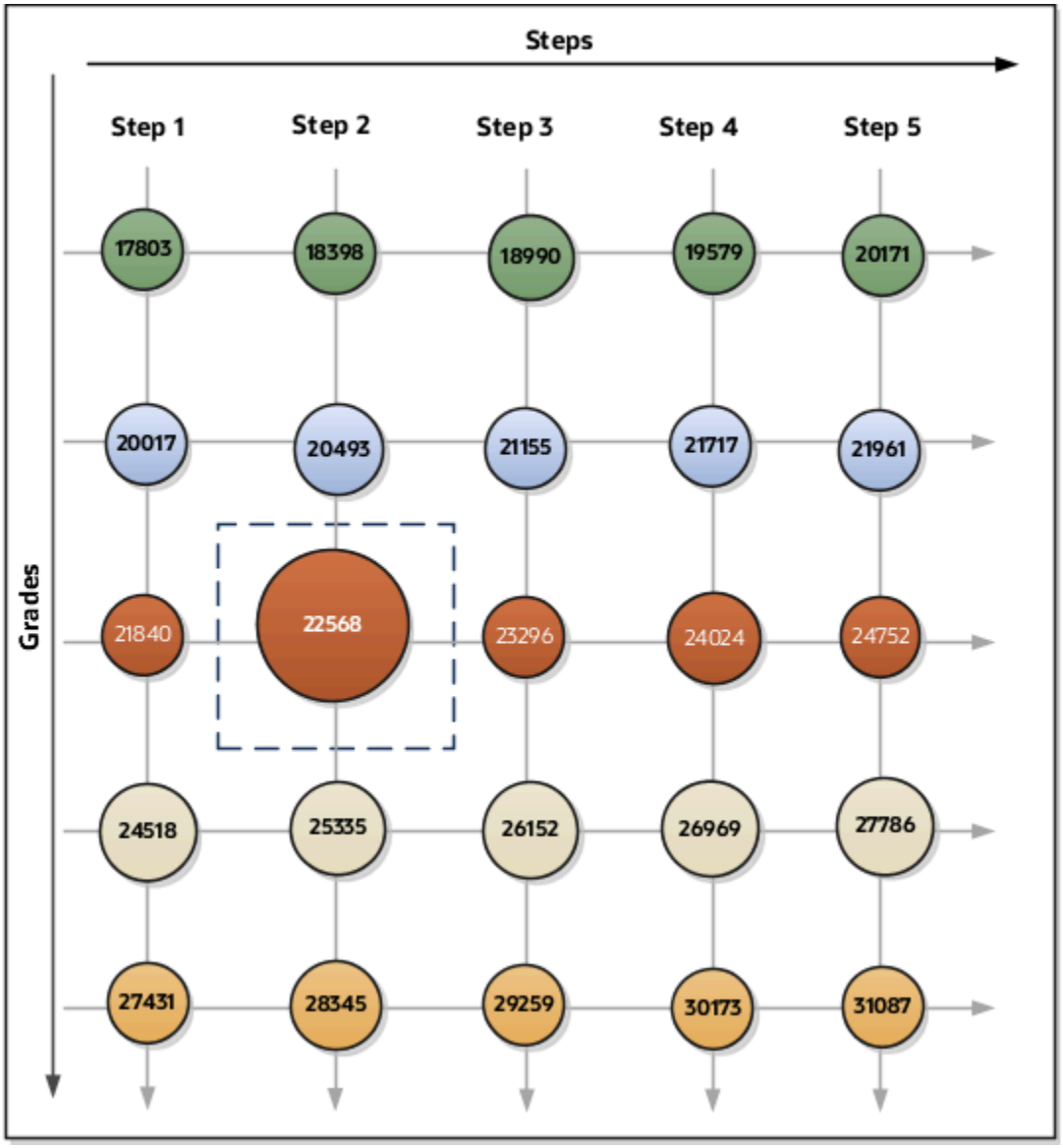
When you're hiring a new employee, add these grade ladder and grade details on the Employment Information page.

Option	Value
Grade Ladder	Pharmacy Technician Salary
Grade	3
Step	Step 2

Step 4: HCM Rates Process

On the Home page, click **My Clients Groups** and click the **Payroll** tile. Click the **Submit a Flow** task. After selecting a legislative data group, search for and submit the **Generate HCM Rates** flow.

Result: As shown in this illustration, the application returns a rate value of 22568.



Related Topics

- Rates Based on Grades Details
- Example to Calculate Rates Based on Grades Without Steps
- Example to Calculate Rates Based on Grade Ladder With Multiple Assignments

Example to Calculate Rates Based on Grades Without Steps

You can calculate rate based on grades without steps. In this example, you calculate grade rate values for annual salary payments.

Scenario

You hire Mathew as a grade 5 Developer and calculate grade rate values for his annual salary payments based on grades without steps.

Configuration

Follow these steps to calculate grade rate values for Mathew:

1. Set up grades, grade ladder, and rates for the Developer job to record the level of compensation for developers in your organization.

   Perform these steps:

   - Use the **Manage Grades** task to set up eight separate grades, 1 to 8.
   - For each grade, enter the annual salary as shown in this table.

Grade	Annual Salary Amount
1	103900
2	111800
3	119900
4	127800
5	135900
6	143700
7	151800
8	155500

   - Use the **Progression Grade Ladders** task to set up a grade ladder, **Developer Salary**, with Grades type. Add all eight grades to the ladder.
2. Create a rate definition of category **Grade Rate** based on grade details.

Option	Value
Periodicity	Annually

Option	Value
Periodicity Formula	Standard Rate Annualized
Currency	US Dollar

Add a rate contributor of type **Grade Ladder**.

3. When hiring Mathew, on the Employment Information page, add the grade ladder and grade details as shown in this table.

Option	Value
Grade Ladder	Developer Salary
Grade	5

4. Run the **Generate HCM Rates** process to calculate the rates based on the information held in the grade tables. Click the **Submit a Flow** task. After selecting a legislative data group, search for and submit the **Generate HCM Rates** process.

Results

The application returns a rate value of 135900.

Example to Calculate Rate Based on Grades Without Steps and Periodicity Conversion

In this example, you want to calculate rate values for Mathew's monthly salary based on grades without steps. To do this calculation, when creating a rate definition, you change the Standard Rate Annualized formula to a Monthly amount.

Use the steps outlined in the previous scenario to set up grades, grade ladder, and rates for the Developer job.

Create the rate definition based on grade details.

Option	Value
Periodicity	Calendar Month
Periodicity Formula	Standard Rate Annualized
Currency	US Dollar

Complete steps 3 and 4 in the previous scenario.

The application returns a rate value of 11325 (135900 / 12).

Note: For a rate with a periodicity of monthly using the Standard Rate Annualized conversion formula, the rate calculation does these actions.

- Calculates an annual figure from the value and periodicity of each contributing earning and deduction.
- Converts the annual figure into a monthly value.

Related Topics

- Rates Based on Grades Details
- Example to Calculate Rates Based on Grades With Steps
- Example to Calculate Rates Based on Grade Ladder With Multiple Assignments

Example to Calculate Rates Based on Grade Ladder With Multiple Assignments

In this example, you calculate grade rate values for monthly salary payments for an employee with multiple assignments.

Scenario

Priya Krishnan has these two assignments in the **Teacher Salary** grade ladder:

- In her primary assignment, she's a Mathematics teacher in grade 3.
- She holds a temporary assignment as the replacement teacher for the Science teacher who's on maternity leave. On this temporary assignment, she teaches Science in grade 1 in the same grade ladder.

Follow these steps to calculate grade rate values for Priya Krishnan's primary assignment.

1. Set up grades, grade ladder, and rates for the **Teacher** job to record the level of compensation for all teachers in your school.

   Perform these tasks:
   - Use the **Manage Grades** task to set up five separate grades, 1 to 5.
   - For each grade, enter the rates as shown in this table.

Grade	Annual Salary Amount
1	16600
2	19840
3	20016
4	23231

Grade	Annual Salary Amount
5	27650

- Use the **Progression Grade Ladders** task to set up a grade ladder, Teachers Salary, with Grades type. Add all five grades to the ladder.

2. Create a rate definition of category **Grade Rate**.

Option	Value
Periodicity	Monthly
Periodicity Formula	Standard Rate Annualized
Currency	US Dollar

Add a rate contributor of type **Grade Ladder**.

3. When hiring an employee, on the Employment Information page, add the grade ladder and grade details as shown in these tables.

Primary Assignment

Option	Value
Grade Ladder	Teacher Salary
Grade	3

Temporary Assignment

Option	Value
Grade Ladder	Teacher Salary
Grade	1

4. Run the **Generate HCM Rates** process to calculate rates for employee's Primary Assignment. On the Home page, click the **Submit a Flow** quick action under the **My Client Groups** tab. After selecting a legislative data group, search for and submit the **Generate HCM Rates** process.

Result

The application returns a monthly rate value of 1668 (20016/12).

Related Topics

- Rates Based on Grades Details
- Example to Calculate Rates Based on Grades With Steps
- Example to Calculate Rates Based on Grades Without Steps

Rates Based on Retained Grades

You can calculate rates based on an employee's retained grade rate details.

In certain organizations, an employee is entitled to retain their previous grade even after moving to a position of lower responsibility. The grade is retained for a fixed time beginning on the date the employee is placed in the lower-graded position, until grade retention is terminated.

For example, an organization restructure moves an employee from grade 13 to grade 12. They are placed on the retained grade of 13 for a period of time, such as two years. During such time, the employee should be paid at a higher of their assignment grade and retained grade.

If the assignment grade exceeds the retained grade, then the retained grade should be ended even if it's within the retained grade period.

It's possible that a company has multiple organization structures and therefore multiple retained grades. In such a scenario, the employee should be paid on the retained grade with the most recent date.

Related Topics

- Example to Calculate Rates Based on a Retained Grade Rate
- Example to Calculate Rates Based on Multiple Retained Grade Rates
- Create Grade Retention Page and Associate With Retained Grade Context

Example to Calculate Rates Based on a Retained Grade Rate

In this example, you calculate grade rate values for annual salary payments based on a retained grade rate without steps.

Scenario

Julianna is a Product Manager at grade 5 in the Product Manager grade ladder. As part of a company reorganization, she's moved from grade 5 to grade 4. The company put her on a retained grade of 5 for a period of 2 years. During this retained period, she will be paid the higher of her assignment grade.

In this example, you calculate grade rate values for her annual salary payments based on retained grades.

Configuration

Follow these steps to calculate rate values for Julianna:

1. Set up grades, grade ladder, and rates for the Product Manager job to record the level of compensation for product managers.
    - Use the **Manage Grade** task to set up separate grades 1 to 8.
    - For each grade, enter the annual salary as shown in this table.

Grade	Annual Salary
1	103900
2	111800
3	119900
4	127800
5	135900
6	143700
7	151800
8	155500

2. Create a rate definition based on grade rate details. Add a rate contributor of type Retained Grade Ladder.

Option	Value
Periodicity	Annually
Periodicity Formula	Standard Rate Annualized
Currency	US Dollar

3. Associate a context with the Grade Retention Info page. You must associate a context for the assignment extensible flexfield to record the retained grade information. You can either associate this context with an

existing page or you could create a new page based on your requirements. For more information on how to set up contexts, refer to the topic: Create Grade Retention Page and Associate With Retained Grade Context.

4. On the Additional Info page, set the Primary Indicator. Use the **Additional Assignment** Info task to set up the retained grade details.
    - On the Additional Assignment Info page, search for and select the employee.
    - In the **Info Group** field, select **Grade Retained Info**.
    - In the **Retained Grade** section, click **Add**.
    - In the **Primary Indicator** field, select **Yes**.

      Note: If you select the value as No, the application doesn't return any rate.
    - In the **Grade Ladder** field, select your grade ladder.
    - In the **Grade** field, select **Grade 5**.
5. Run the **Generate HCM Rates** process to calculate the rates based on the information held in the grade tables.

Results

The application returns a rate value of 135900.

Related Topics

- Example to Calculate Rates Based on Multiple Retained Grade Rates
- Create Grade Retention Page and Associate With Retained Grade Context

Example to Calculate Rates Based on Multiple Retained Grade Rates

In this example, you calculate grade rate values for annual salary payments based on multiple retained grade rates without steps.

Scenario

Prasad is a Technical Writer at grade 3 in the Technical Writer grade ladder. As part of a company reorganization, he's moved from grade 3 to grade 2. The company put him on a retained grade of 3 from 01-JAN to 31-MAR.

During this retained period, he will be paid the higher of his assignment grade. In this example, you calculate grade rate values for his annual salary payments based on retained grades.

Configuration

Follow these steps to calculate rate values for Prasad:

1. Set up grades, grade ladder, and rates for the Technical Writer job to record the level of compensation for technical writers.
   - Use the **Manage Grade** task to set up separate grades 1 to 5.
   - For each grade, enter the annual salary as shown in this table:

Grade	Annual Salary
1	101300
2	287800
3	310700
4	392100
5	401200

2. Create a rate definition based on grade rate details. Add a rate contributor of type **Retained Grade Ladder**.

Option	Value
Periodicity	Annually
Periodicity Formula	Standard Rate Annualized
Currency	US Dollar

3. Associate a context with the Grade Retention Info page. You must associate a context for the assignment extensible flexfield to record the retained grade information. You can associate this context with an existing page or you could create a new page based on your requirements.

   For more information on how to set up contexts, refer to the topic: Create Grade Retention Page and Associate With Retained Grade Context.
4. Use the **Additional Assignment Info** task to set up the retained grade details, such as **Primary Indicator**.
   - On the **Additional Assignment Info** page, search for and select the employee.
   - In the **Info Group** field, select Grade Retained Info.
   - In the **Retained Grade** section, click **Add**.

- In the **Start Date** field, select **1-Jan**.
- In the **End Date** field, select **31-Mar**.
- In the **Primary Indicator** field, select **Yes**.
- In the **Grade Ladder** field, select your grade ladder.
- In the **Grade** field, select **3**.
- In the Retained Grade section, click **Add**.
- In the **Start Date** field, select **1-Apr**.
- In the **End Date** field, select the end date.
- In the **Primary Indicator** field, select **Yes**.
- In the **Grade Ladder** field, select your grade ladder.
- In the **Grade** field, select **2**.

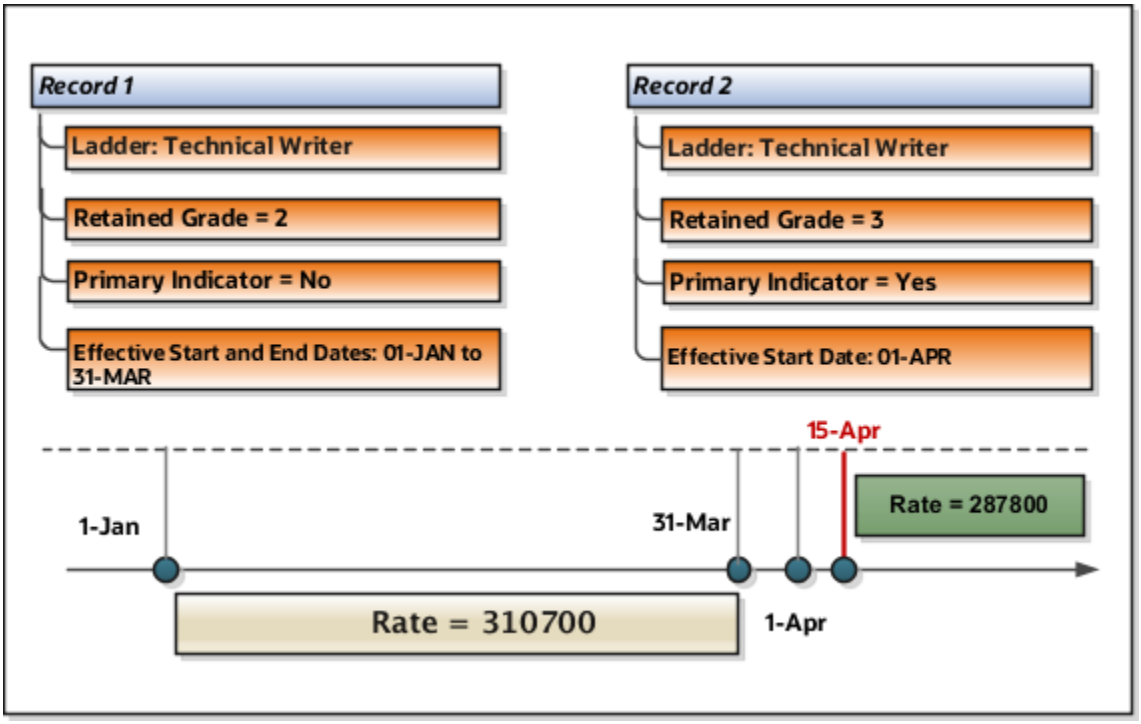
5. Run the **Generate HCM Rates** process to calculate the rates based on the information held in the grade tables.

Results

On 15-April, the compensation user updates the employee's salary rate from the retained grade rate to the grade rate. As shown in the table and illustration, the application returns these rate values.

Period	Rate
1-Jan to 31-Mar	310700
15-April 2020	287800

As shown in the illustration, depending upon the effective start and end dates, the application returns the corresponding rate value.



Related Topics

- Example to Calculate Rates Based on a Retained Grade Rate
- How do I compare rate definitions to ensure the highest rate is paid?
- Create Grade Retention Page and Associate With Retained Grade Context

Create a Rate Definition for Basic Salary

In this example, you create a primary rate for a basic salary. After you run the rate engine, the Element Entries - Person Details page displays the values for eligible employees.

Before you begin, create the salary element at the assignment level. This element contains the salary information to be retrieved by the rate definition. You can create it using the flat amount or factor calculation rule.

1. On the Home page, click the **Rate Definitions** quick action under the **My Clients Groups** tab.
2. Click **Create**.
3. Enter these values.

Field	Value
Category	Element
Effective Start Date	Enter the current date.

Field	Value
Legislative Data Group	Enter your legislative data group.
Storage Type	Amount
Element Name	Regular Salary

4. Click **OK**.
5. In the Returned Rate Details section, complete the fields, as shown in this table.

Field	Value
Periodicity	Annually
Periodicity Conversion Formula	Standard Rate Annualized
Currency	LDG Currency

6. Click **Submit**.

Related Topics

- Overview of Rate Definitions
- Options to Configure Rate Definitions
- Configure Elements Used by Rate Definitions
- Generate HCM Rates

Create Rate Definitions for Overall Salary

In this example, you create a rate definition for overall salary that includes multiple rate contributors.

You do these actions.

- Create the overall salary rate definition
- Add the regular salary rate contributor
- Add the car allowance rate contributor

This table summarizes the key decisions for your scenario.

Decisions to Consider	In This Example
What components of pay should be included in an employee's overall salary?	• Regular Salary • Car Allowance
Should I include all pay for car allowance in the overall salary?	No. Only include 50 percent of the amount paid for car allowance.

Note: The overall salary rate definition is a derived rate. To populate the Overall Salary check box, select a salary element in the Element name field. You then add the regular salary rate and car allowance rate contributors to the rate definition. The rate contributors that you add should be elements that you select from the Rate Name field on the Create Rate Contributor page.

Create the Overall Salary Rate Definition

1. On the Home page, click the **Rate Definitions** quick action under the **My Clients Groups** tab.
2. Click **Create**.
3. Enter these values.

Field	Value
Category	Derived Rate
Effective Start Date	Enter the current date.
Legislative Data Group	Select your legislative data group.

4. Click **OK**.
5. Enter these values.

Field	Value
Name	Overall Salary
Short Name	OVERALL_SAL
Element Name	Salary

6. In the Returned Rate Details section, enter these values.

Field	Value
Periodicity	Weekly
Periodicity Conversion Formula	Standard Rate Annualized
Currency	LDG Currency

Add the Regular Salary Rate Contributor

1. In the Calculation section, click **Create**.
2. In the Create Rate Contributor dialog box, **Contributor Type** field, select **Base Rate**.
3. Enter these values.

Field	Value
Add or Subtract	Add
Employment Level	Payroll Assignment
Periodicity	Weekly

4. Click **Save and Continue**.

Add the Car Allowance Rate Contributor

1. In the Calculation section, click **Create**.
2. In the Create Rate Contributor dialog box, **Contributor Type** field, select **Rate Definition** and click **OK**.
3. Enter these values.

Field	Value
Add or Subtract	Add
Rate Name	Car Allowance
Periodicity	Weekly
Factor Rule	Value

Field	Value
Factor Value	0.5

4. Click **Save and Continue**.
5. Click **Submit**.

Related Topics

- Overview of Rate Definitions
- Options to Configure Rate Definitions
- Rate Contributors for Derived Rates
- Generate HCM Rates

Create Rate Definitions for Leave

In this example, let's calculate an employee's absence rate as of a particular date.

The rate includes a combination of average salary and car allowance. The employee has an annual year-to-date salary of 26,000. The employee also receives an annual car allowance payment of 2,000. The absence rate is 26,000 + 2,000 = 28,000. To provide a daily absence rate, you convert this rate into a daily rate.

This table summarizes the key information you use in the example.

What You Need To Consider	For This Example
What elements do I need to create before I define the rate?	• Salary (assignment level) - This element contains the salary value to be retrieved by the rate definition. You must create it using the Flat Amount calculation rule. • Car Allowance (assignment level) - This element contains the car allowance value to be retrieved by the rate definition. You must create it using the Flat Amount calculation rule. • Absence - Use the Absence template to create the element. Enter Sickness as the classification and Absence as the category.
Which balances hold the contributing values?	• Salary is fed by the Salary element. • Car Allowance is fed by the Car Allowance element.
Should I process contributor totals as full-time equivalent amounts?	Yes

Create the Rate Definition

1. On the Home page, click the **Rate Definitions** quick action under the **My Client Groups** tab.
2. In the Search Results section, click **Create**.

3. Enter these values.

Field	What You Select
Category	Derived Rate
Effective Start Date	A date that's after the creation date of the objects that you're referencing
Legislative Data Group	Your legislative data group

4. Click **OK**.
5. In the Basic Details section, enter these values.

Field	Value
Name	Absence Rate - Salary and Car Allowance
Short Name	ABS RATE - SAL/CAR ALLOW

6. In the Returned Rate Details section, **Periodicity** field, select **Daily**.
7. Click the Contributor Rules tab and in the **Process Contributor Total as FTE Amount** select, **Yes**.
The balances referenced need to be populated using payroll runs for the periods covered by the balance dimension or the rate definition won't generate a meaningful value.

Create Rate Contributors

1. In the Rate Contributors section, click **Create**.
2. In the **Contributor Type** field, select Balance and click OK.
3. On the Create Rate Contributors page, enter these values.

Field	What You Enter
Add or Subtract	Add
Balance Name	Regular Salary
Balance Dimension	Assignment State Period to Date
Periodicity	Daily

4. Click **Save and Continue**.
5. In the Rate Contributor section, click **Create**.

6. In the **Contributor Type** field, select **Balance** and click **OK**.
7. On the Create Rate Contributor page, enter these values.

Field	What You Enter
Add or Subtract	Add
Balance Name	Car Allowance
Balance Dimension	Assignment State Period to Date
Periodicity	Daily

8. Click **Save and Continue**.
9. Click **Submit**.
10. Assign an Absence element entry to the employee's assignment. You will then need to pass the absence entry to payroll using the absence interface.

Related Topics

- Options to Configure Rate Definitions
- Rate Contributors for Derived Rates
- Generate HCM Rates
- Integrate Absence Management with Global Payroll

Generate HCM Rates

Submit the Generate HCM Rates process to calculate and store most types of rate definitions.

You can use the stored rate values for reporting payroll calculations. Run this batch process frequently to ensure the stored rate values are accurate. After you run this process, you can report on the rates using extracts. The user entity includes the database items that you can use in reports.

Use this flow to calculate and store most types of rate definitions in these scenarios.

- Rates that are associated with an element. For example, a salary rate definition is associated with a salary element. The process calculates a salary rate value for all workers with a salary element entry.
- Rates values for factor based element rates. Use the Generate HCM Rates process to calculate and store rate values for factor based element rates. You can retrieve this value in the payroll run.
- Rates that are associated with a value definition. Certain types of elements, such as time elements, use payroll calculation information rules and definitions. For example, a value definition is generated for an overtime element and this is associated with an overtime rate definition. The process calculates an overtime rate value for all workers with an overtime element entry.
- Rates that are based on a value-by-criteria defined for an assignment level criteria, such as a worker's grade or location.

- Rates that are based on a formula. However, such rates are calculated in a payroll run.
- Rates that are derived. For example, a rate that's derived based on the sum of car and housing allowance rates. In this case, the Generate HCM Rates process calculates the car allowance rate, the housing allowance rate, and the derived rate.

The stored rate values can be used for reporting or retrieving for payroll calculation purposes.

The application provides database items to support the rate batch process. These array database items return all rates associated with a payroll relationship record as of a specific date.

Note: The REPORTING_RATE_VALUES and REPORTING_RATE_PERIODICITIES database items return values based on the return rate details defined on the rate definition. The other periodicity database items, such as REPORTING_RATE_QUARTERLY, return a rate that's converted to the specified periodicity.

The Generate HCM Rates process supports the database items listed in this table.

Database Items	Description
REPORTING_RATE_NAMES	Name of the rate
REPORTING_RATE_VALUES	Value of the rate
REPORTING_RATE_PERIODICITIES	Periodicity of the rate
REPORTING_RATE_FTE_FLAGS	Full-time status of the rate
REPORTING_RATE_TERM_NUMBERS	Term number associated to the rate values
REPORTING_RATE_ASG_NUMBERS	Assignment number associated to the rate values
REPORTING_RATE_WEEKLY	Weekly rate value
REPORTING_RATE_MONTHLY	Monthly rate value
REPORTING_RATE_QUARTERLY	Quarterly rate value.
REPORTING_RATE_YEARLY	Annual rate value
REPORTING_RATE_PT_WEEKLY	Part-time weekly rate value
REPORTING_RATE_PT_MONTHLY	Part-time monthly rate value
REPORTING_RATE_PT_QUARTERLY	Part-time quarterly rate value
REPORTING_RATE_PT_YEARLY	Part-time annual rate value

Database Items	Description
REPORTING_RATE_FT_WEEKLY	Full-time weekly rate value
REPORTING_RATE_FT_MONTHLY	Full-time monthly rate value
REPORTING_RATE_FT_QUARTERLY	Full-time quarterly rate value
REPORTING_RATE_FT_YEARLY	Full-time annual rate value
PER_ASG_ESTABLISHMENT_ID	Establishment
PER_ASG_UNION_ID	Worker Union ID
PER_ASG_UNION_NAME	Worker Union Name
PER_ASG_JOB_MANAGER_LEVEL	Job Manager Level
PER_ASG_JOB_MANAGER_LEVEL_NAME	Job Manager Level Name
CMP_ASSIGNMENT_SALARY_BASIS_NAME	Salary Basis
PER_ASG_COLLECTIVE_AGREEMENT_ID	Collective Agreement
PER_ASG_BARGAINING_UNIT_CODE_NAME	Bargaining Unit Name
PER_ASG_BARGAINING_UNIT_CODE	Bargaining Unit Code
PER_ASG_ACTION_CODE	Action Code
PER_ASG_ACTION_REASON_CODE	Action Reason

Run the process if these conditions apply.

- Changes to the data referenced by the rate, which may include element entries, grade rates, and values defined by criteria. This process only reports the rate values. It doesn't update, delete, create, or have any impact on the underlying objects.
- Updates to rate definitions, such as when a new rate contributor is added or removed, or the rate is made inactive.
- Changes to employee records that impact their salary rates, such as changes to job or grade.

Note: You should run the process before any operation that depends on the values that are stored in the table. For example, if you have a rate based on seniority, values could change simply by the passage of time.

Let's look at the steps to run the process.

1. On the Home page, click the **Submit a Flow** quick action under the **My Clients** group.
2. Select your legislative data group.
3. Select the **Generate HCM Rates** flow pattern.
4. Enter these values for the **Process Mode** field:

> **Note:** Review how your company uses the information generated by the Generate HCM Rates process and ensure that you're selecting the appropriate process mode parameter. The mode controls the frequency of rate calculations performed for each employee. The higher the frequency and number of rate calculations, the more accurate the rates, but this will be reflected in the overall performance of the Generate HCM Rates process. For more information, see "Control the Start and End Date of the Rate Calculation Period".

Mode	Description	Accuracy
Fast	Uses the start and end date specified to calculate the rate value. If the rate value is the same for both dates, it determines that the rate value is the same over the entire period. If the start and end values are different, this method then determines a value in the middle, and compares it with the start and finish values to see where the change occurred. This process repeats until the date of the change is found. This is known as a binary chop algorithm.	This is the quickest but least accurate method to calculate rate values. It misses any changes if a rate value goes up and then back down to the same value that's calculated at the start and end dates. Select this option when you need detailed rate details for reporting purposes, but you don't require 100% accuracy. As the name suggests, this option will deliver the best performance for the Generate HCM Rates process.
Full	Performs separate rate calculations for every day within the rate calculation period.	Slowest but most accurate method. This mode ensures that rates are 100% accurate, but the volume of calculations per employee is very high. It's recommended you only select this option if you are using the rates stored by the Generate HCM Rates process for payroll calculation purposes.
Periodic	This method works the same as Fast, except that you can specify the number of days the process calculates rates between the start and end dates.	The accuracy of this method is half-way between the Fast and Full modes. Select this option when you need more precise rate details for reporting purposes. The number of days you enter will control the accuracy and performance of the Generate HCM Rates process. For example, when you select a 7-day period, the process will calculate the rate for an employee at the start and end of each 7-day period. If these rates are the same, the

Mode	Description	Accuracy
		process will assume that the employee rate did not change. and will move on to the next 7-day period. If the rates are different, the process will calculate daily rates within the 7-day period to identify the date on which the rate changed. When you select a 14-day period, the process will work in the same manner, but the rates will be calculated at the start and end of each 14-day period. In this example, the 7-day option is more accurate, but the Generate HCM Rates process will take longer because it's performing more calculations than the 14-day option. So, the lower the number you enter in the **Number of Days** parameter, the more accurate is the rate calculation of the Generate HCM Rates process.

5. Click **Next**.
6. Select a flow submission.

> **Note:** If you select **Using a schedule**, you must also select a frequency, such as once, weekly or daily.

> **Note:** Use the **Payroll Relationship Group** parameter to reduce the number of employees included in the Generate HCM rates process. The Payroll Relationship Group parameter supports these relationship groups:
>
> a. Static and dynamic payroll relationship groups.
> b. Groups that include assignment or payroll relationship records.

7. Click **Next** and then **Submit**.

Control the Start and End Date of the Rate Calculation Period

It's essential that you understand the HCM rates configuration for your organization in detail, so that you know what type of updates can result in a rate change, and who makes those changes. You can then define the start and end date of rate calculations to meet the business requirements of your company. The shorter the time span, the fewer rate calculations will be performed, and this is reflected in the performance of the Generate HCM Rates process.

Use the **Generate HCM Rates Start Date** parameter to set an earliest start date for rate calculations. For example, set this parameter to 2020-01-01 (YYYY-MM-DD), and the Generate HCM Rates process will only recalculate rates from this date.

> **Note:** This parameter applies only when you're using the Full or Periodic modes.

The rates process automatically calculates the rate changes that occur up to 2 years in the future. If this rate information is not required, use the "Set the default end date limit for the rate" batch process to stop the calculation of future dated

rates. This parameter captures the number of years in advance the rates are calculated. Set to 0 to ensure that the rates are only calculated up to the process end date you entered while submitting the Generate HCM Rates process.

Related Topics

- Overview of Rate Definitions
- Options to Configure Rate Definitions
- Rate Contributors for Derived Rates
- Create Rate Definitions for Overall Salary

Rates Used to Calculate Absences in Payroll

You can specify a rate for use in calculating an absence in an absence plan or an absence element.

When processing absence entries in a payroll run, the formula associated with the absence element uses the Rate Converter global formula to convert rates. The formula checks for a rate in this sequence.

1. Absence plan
2. Absence element
3. Compensation salary element

Absence Plan

In Oracle Fusion Absence Management, you can select a rate rule on the **Entries and Balances** tab of the **Create Absence Plan** page. The rate rule calculates the units passed to payroll when you record an absence. You can select rate rules for the absence payment, final disbursement, discretionary disbursement, and liability balance calculation.

For third-party absence providers, the application transfers the rate information and override rates in the HCM Data Loader file attached to the Load Absence Batch process.

Absence Element

If you don't specify rates in the absence plan, you can specify a rate when you create the absence elements. The type of absence information determines the rates you can select. For example, for plans where you transfer accrual balances and absences, you can select different rates for these calculations.

- Absence payments
- Discretionary disbursement
- Final disbursement
- Liability balance rate

As best practice, specify a rate in either the plan or the element. If you specify in both, ensure the rate for the element is same as the rate you selected in the corresponding plan.

Compensation Salary Element

If the formula doesn't find a rate specified in the plan or the element, it uses the compensation salary element.

When you associate a payroll element to a salary basis, you specify an input value that holds the base pay on a worker's element entry. The monetary amount or rate recorded in the element entry is the salary value in the worker's salary

information held on the assignment. If you specify a rate, the formula uses this rate if it doesn't find one defined in the absence plan or absence element.

Related Topics

- Define Payroll Elements for Processing Absences for the US

FAQs for Rate Definitions

How does periodicity conversion work when there are multiple contributors with different periodicities?

Sometimes, you may need to add a base salary, which is an annual figure, to a 13th month salary. This 13th month salary is a monthly figure that's calculated from the annual base salary.

The base salary in this example is held as an annual amount on an element entry as 24,000. The 13th month salary is 2,000 (24000 / 12). If you add each of these contributors together, the sum of the contributors is 26,000 (24,000 + 2,000).

At this point you've added an annual figure to a monthly figure, but you haven't indicated what the periodicity of the total is. On the Create Rate Definitions page, if you select Annual in the Contributor Total Periodicity field, the sum of the contributors is 26,000. If you select Monthly, the application converts the contributors to 312,000 (26,000 * 12), which is now the annual figure.

Note: When the formula is called to calculate the rate, there's an option to override the return periodicity of the rate.

Related Topics

- Options to Configure Rate Definitions
- Rate Contributors for Derived Rates

How do I use the base rate feature to calculate a rate based on multiple salary elements?

Create a rate definition for each your salary elements. And ensure that you select the Base Rate check box in the Basic Details section of the Create Rate Definition page.

For example, if you have three salary elements, you need to create three rate definitions and associate each rate definition to one of your salary elements. All of your salary rate definitions must have the Base Rate check box selected. Create an absence rate definition that has a category of Derived Rate. In the Rate Contributors section, click Create. On the Create Rate Contributor page, select Base Rate from the Contributor Type drop-down list. This rate definition calculates a rate based on all of your salary rates. And all rate definitions are identified as a base rate.

You can use the base rate to identify each of your company's salary rate definitions. You can then use the derived rate to calculate a salary rate derived from all of the salary elements. You can use the base rate and the derived rate in scenarios where your company has multiple salary elements and needs to calculate an hourly absence rate based on the salary rate of an employee.

How do I compare rate definitions to ensure the highest rate is paid?

Create a rate definition for your salary rate. Create a rate definition for your special pay rate, and then navigate to the Returned Rate Details section.

From the Minimum Rate Rule list, select Rate Definition. Then, from the Minimum Value list, select the salary rate that you created.

You can use the **Minimum Rate Rule** option in the Returned Rate Details section in scenarios where your company needs to pay an employee either the salary rate or the special pay rate, whichever is greater.

How can I calculate factor based element rates?

You can use the Generate HCM Rates process to calculate and store rate values for factor based element rates. You can retrieve these values in the payroll run.

How do I ensure the Generate HCM Rates process only recalculates rates when an employee has a rate change?

You can generate HCM rates for any employee who has an event that impacts rate amounts.

Let's consider an example where the location and element entry changes can impact the rates. You can configure events to track these changes. Rate event notifications will be generated for any employee with this type of change. The Generate HCM Rates process will only include employees who have an unprocessed rate event notification. For more information, see *Calculate Rates Based on Events*.

How do I include an employee with a retroactive rate change calculated by the Generate HCM Rates process, in Retropay?

You can track retroactive rate changes for an employee, and include the employee in the Retropay process.

The Generate HCM Rates process calculates rates for employees. In some instances, the rate change can be due to a retrospective change such as a backdated salary award for an employee, or a late change to a values defined by criteria. You can use events to track all employees who have a retrospective rate change calculated by the Generate HCM Rates and raise retro event notifications. To set up this feature, you need to add the **Pay Rates Event** entity to a retroactive event group.

> **Note:** Only a single element per employee is required to track the retroactive rate changes for each payroll period. For this reason, it's recommended that you add the event group that includes the **Pay Rates Event** entity to a limited number of recurring elements, such as salary elements.

For more information, see *Calculate Rates Based on Events* and *Generate HCM Rates*.

Values Defined by Criteria

Overview of Values Defined by Criteria

Each value defined by criteria requires you to specify one or more evaluation conditions that determine a particular value or rate.

In cases where you specify many conditions, each condition is defined as a separate level and placed in priority order to produce a tree structure.

You control the criteria that you enter and the resulting tree structure. In each branch of the tree, you can have multiple evaluation conditions. If the conditions that you've set don't meet your requirements, the payroll process uses the value established for the default criteria that you set up. Each criterion and value, as well as the parent criteria definition, is stored as a calculation value definition. You can define a rate definition to retrieve a rate based on values defined by criteria.

You can also search for criteria and value records, on a value defined by criteria, to quickly select a record you want to view or update. For more information, see *Search for Values Defined by Criteria*.

Criteria and Evaluation Conditions

Within the tree structure, you create the criteria rules. For example, you can define criteria rules based on the location of an employee. You can select or enter the specific location for each criterion, such as London, from a value set or on the criteria page.

You can also define a default criterion if an employee doesn't meet any other condition. Defining a default also includes a situation in which the application hasn't captured criteria information on the employee record, such as location. If you know the criteria definitions you set up cover all the conditions for all employees, then you don't need a default criterion.

Each criterion is stored as a calculation value definition. You must enter a name for the calculation value definition that's unique within a legislative data group. With a unique name, you can identify the record while you create the values defined by criteria hierarchy through HCM Data Loader.

You must also select a value definition group for each criterion. The group enables you to manage the value definitions within your legislative data group; it doesn't impact the behavior of the criterion. Use the Retrieval Date to determine whether the criterion uses the date earned or effective date to retrieve information. The default value is the effective date.

Once you have created a criterion, you can enter these condition details:

- **Sequence**: Define the priority of each criterion using the sequence. The application uses the sequence order to produce a tree structure, which affects processing and the value that's returned. For example, the first criteria definition has a condition of age greater than 0 years, and the next criteria definition in the sequence has the condition of age greater than 55 years. In this scenario, all employees would meet the first condition and there would be no results for the second condition. To fix this situation, you would reverse the order of the criteria definitions where the condition greater than 55 years is first in the sequence.
- **Database Item Name**: Select a database item to identify the type of criteria. For example, if your criterion is the location of an employee you could select PER_ASG_LOCATION_NAME.

  > **Note:** If you're defining values by criteria for Salary Rates, select one of the database items that are supported by HR flows such as new hire and promotion.

- **Display Name**: You have the option to enter a name for the criteria. This name doesn't need to be unique and is displayed in the value by criteria hierarchy record. If you don't enter a display name, the database item description or name gets displayed.
- **Operand**: You use operands when you're creating criteria. You can specify whether the value defined by the database item should be equal to, greater than, less than, greater than or equal to, or less than or equal to the literal value. To capture multiple values for the same criteria, use the In operand. For example, if you want to give employees that work in City 1 and City 2 the same bonus, you can create a single evaluation condition for both cities using the In operand.

- **Value Sets**: Specify a value set to provide a dynamic list of values from which you can select an entry. This option is available for input values that provide text only.
- **Literal Value**: If you specify a value set, you can select an entry from a list of values you have chosen. If you leave the Value Set field blank, you can enter any information that's appropriate for the value definition that you're creating.

Values

Create one or more value records for each criterion. Here you enter the calculation types and rates. For example, you can enter the bonus values for each location.

Each value record gets stored as a calculation value definition. You must enter a name for the calculation value definition that's unique within a legislative data group. With a unique name, you can identify the record while you create the values defined by criteria hierarchy through HCM Data Loader.

You must enter a value identifier when you define multiple value records for a criterion. This identifier enables you to define which value record should be calculated. For example, your company calculates car allowance and housing allowance rates for an employee based on their job. The job criteria details and the allowance values are captured in a Values Defined by Criteria. You can indicate which of the values captured on the Values Defined by Criteria should be calculated when processing an element in the payroll run.

If you don't enter a value identifier, the name of the calculation value definition gets displayed for the value on the hierarchy. You must select a value definition group for each value record. The group enables you to manage the value definitions within your legislative data group; it doesn't impact the behavior of the value. Use the Retrieval Date to determine whether the date earned or effective date retrieves the information of the value. The default is the effective date.

If you select a Default Calculation Type while creating the values defined by criteria, it gets displayed on each value record. Alternatively, you can enter a calculation type. You have the option to select a different calculation type for each value within the values defined by criteria depending on your business requirements.

The supported calculation types include:

- Flat Amount Times Multiplier
- Flat Calculation
- Flat Rate
- Grade Rate
- Incremental Rate
- Number
- Rate Definition
- Standard Formula 1
- Standard Formula 2

Database Items for Values Defined by Criteria

Each condition refers to a database item to identify where the value is used. It also determines the data type of the value, such as text, number, or date. Define conditions using predefined database items or the dynamically created database items when the application creates data, such as balances and elements.

You can refer to any static or dynamic database items that support these contexts:

- HR_ASSIGNMENT_ID

- HR_TERM_ID
- PAYROLL_ASSIGNMENT_ID
- PAYROLL_TERM_ID
- PAYROLL_RELATIONSHIP_ID
- PERSON_ID
- CALC_BREAKDOWN_ID
- PAYROLL_ID
- EFFECTIVE_DATE
- DATE_EARNED
- LEGISLATIVE_DATA_GROUP_ID

Database Items for Salary Rates

Perform rate calculations before information such as job and grade is submitted for the employee. While using salary rates, you can only define values by criteria that use the database items supported by HR flows such as new hire and promotion. If you refer to other types of database items, the process either returns zero or uses the default criteria.

Here's the list of database items to define values by criteria while using salary rates:

Database Item Name	Display Name
PER_ASG_ASSIGNMENT_NUMBER	Assignment Number
PER_ASG_ASSIGNMENT_ID	Assignment ID
PER_ASG_EFFECTIVE_START_DATE	Assignment Start Date
PER_PERSON_ENTERPRISE_HIRE_DATE	Hire Date
PER_ASG_JOB_ID PER_ASG_JOB_NAME	Job
PER_ASG_JOB_CODE	Job Code
PER_JOB_FAMILY_ID PER_JOB_FAMILY_NAME	Job Family
PER_ASG_BUSINESS_UNIT_ID PER_ASG_BUSINESS_UNIT_NAME	Business Unit
PER_ASG_LOCATION_ID PER_ASG_LOCATION_NAME	Location

Database Item Name	Display Name
PER_ASG_DEPARTMENT_ID PER_ASG_ORG_DEPARTMENT_NAME	Department
PER_ASG_LEGAL_ENTITY_ID	Legal Entity
PER_ASG_ORG_LEGAL_EMPLOYER_NAME	Legal Employer
PER_ASG_NORMAL_HOURS	Normal Hours
PER_ASG_EMPLOYEE_CATEGORY PER_ASG_EMPLOYMENT_CATEGORY	Assignment Category
PER_ASG_ORG_LEGAL_EMPLOYER_NAME	Legal Employer
PER_ASG_DF	Assignment Flexfield
PER_GRADES_DF	Grade Flexfield
PER_LOCATIONS_DF	Location Flexfield
PER_ASG_GRADE_CODE	Grade Code
PER_ASG_GRADE_ID PER_ASG_GRADE_NAME	Grade
PER_ASG_GRADE_LADDER_PGM_ID	Grade Ladder
PER_ASG_GRADE_STEP_ID PER_GRADE_STEP_NAME	Grade Step
PER_ASG_ESTABLISHMENT_ID	Establishment
PER_ASG_UNION_ID	Worker Union ID
PER_ASG_UNION_NAME	Worker Union Name
PER_ASG_JOB_MANAGER_LEVEL	Job Manager Level
PER_ASG_JOB_MANAGER_LEVEL_NAME	Job Manager Level Name

Database Item Name	Display Name
CMP_ASSIGNMENT_SALARY_BASIS_NAME	Salary Basis
PER_ASG_COLLECTIVE_AGREEMENT_ID	Collective Agreement
PER_ASG_BARGAINING_UNIT_CODE_NAME	Bargaining Unit Name
PER_ASG_BARGAINING_UNIT_CODE	Bargaining Unit Code
PER_ASG_ACTION_CODE	Action Code
PER_ASG_ACTION_REASON_CODE	Action Reason

Related Topics

- Options to Configure Rate Definitions
- Calculation Types in Calculation Value Definitions
- Generate HCM Rates
- Pay Bonuses at Different Rates
- Limit Pension Contributions

Search for Values Defined by Criteria

You can search for criteria and value records, on a value defined by criteria, to quickly select a record you want to view or update.

Here's how you can search the records:

1. Navigate to the Values Defined by Criteria page and select a record, such as the values defined by criteria for **Allowances**.

   Use the **Search** section to search for specific criteria and value records within the selected value defined by criteria.

   For example, you can search for a specific criteria or value on the **Allowances** value defined by criteria.
2. Enter any of the following attributes and click **Search**:
   - **Criteria Name**
   - **Criteria Display Name**
   - **Value Name**
   - **Value Identifier**

> **Note:** Click the **Reset** button to expand all records after you have performed the search.

3. To view the details of the record, click the name of the value defined by criteria (for example, **Allowances**).

   The **Criteria and Values** section (collapsed initially) displays all the top-level criteria records.
4. Use either of these methods to view and edit the records returned by the search:
   - Expand each criteria record to view the next level of criteria and value records.
   - Select **View > Expand All** to view all criteria and value records.

     > **Note:** The **Expand All** option is designed for smaller values defined by criteria that do not exceed the page display limits.

Calculate Values Defined by Criteria

Use the Values Defined by Criteria task to calculate or retrieve values based on one or more conditions. You can use values defined by criteria in rate definitions. You can also use value by criteria definitions in any formula used for validation.

If you use a third-party payroll product and want to extract the salary rate details, use the **Generate HCM Rates** process to calculate rate values. The Generate HCM Rates process is primarily used to calculate derived rate values, such as those which sum multiple salary components. However, it's also used to process primary rates, as you may define rate definitions which calculate values that are different from those stored on an element entry.

> **Note:** The values that the Generate HCM Rates process creates are stored on a rates table. You can extract this information using the HCM Extract tool to send to your third-party payroll providers.

Use these examples to understand how you can calculate values defined by criteria for these elements of payroll.

Annual Salaries

You can calculate annual salaries for employees based on their jobs. For example:

- If the employee is a Consultant, pay 45,000.
- If the employee is a Senior Consultant, pay 55,000.
- If the employee is a Principal Consultant, pay 65,000.

> **Note:** If the criteria that you have set up doesn't cover all the conditions, define a default criteria condition.

Bonus Payments

You can choose to calculate bonus payments for employees that are weighted by their location. A more complicated scenario would be to pay bonuses based on an employee's department and years of service.

- To weight a bonus payment by location, you could set up these criteria:
    - For employees working in London, pay a 15 percent bonus.
    - For employees working in Manchester, pay a 13 percent bonus.
    - For employees working in Southampton, pay a 9 percent bonus.
    - For all other employees, pay a 5 percent bonus.
- To pay a bonus based on department and years of service, you could set up these criteria:
    - If an employee working in sales has less than or equal to 5 years of service, pay a 2,000 bonus.
    - If an employee working in sales has less than or equal to 10 years of service, pay a 5,000 bonus.
    - If an employee working in sales has greater than 10 years of service, pay a 9,000 bonus.
    - For all other employees working in sales, pay a 7 percent bonus.

Pension Contributions

Your pension plan may have rules that limit contributions based on an employee's job. For example, in this scenario you could set up these criteria:

- If an employee is a Consultant, limit maximum contributions to 2,500.
- If an employee is a Senior Consultant, limit maximum contributions to 7,500.
- If an employee is a Principal Consultant, limit maximum contributions to 12,500.
- If an employee is a Manager or higher, limit maximum contributions to 14 percent of pay.

Hourly Rates

In the United States, labor law mandates to pay a higher rate when a locality's minimum wage is greater than the state or federal minimum wage. To fulfill this requirement, use the Values Defined by Criteria task to set up pay rates that a worker's state, county, and profession determines.

In this example, you could set up criteria for these scenarios:

- Pay carpenters working in City 1 in County 1 greater than or equal to the rate of 15 per hour.
- Pay carpenters working in City 1 in County 2 greater than or equal to the rate of 17 per hour.
- Pay carpenters working in City 1 in County 3 greater than or equal to the rate of 19 per hour.
- For all other workers, pay rate of 12 USD per hour, the prevailing state wage for laborers.

Related Topics

- Overview of Values Defined by Criteria
- Generate HCM Rates
- Overview of Rate Definitions

Calculate Time Based on a Default Amount

Let's look at an example that shows how to calculate time based on a default amount.

This example doesn't cover the payroll calculation. But it does support the configuration to calculate a unit of time-based on a fixed amount.

- Create Time Element: Use the Elements task to create a shift element payable at a rate of 35 per shift worked:
  - In the **Primary Classification** field, select **Standard Earnings**.
  - In the **Category** field, select a time card.
  - Click to select other units as the calculation unit.
- Add Default Amount: You can navigate to the Value Definitions page:
  - Click to select the rate amount value definition for your shift element. For example, Shift Rate Amount.
  - Click the Correct mode, to update the value from 0 to 35.

Calculate Time

Let's look at an example that shows how to calculate a percentage-based time rate when the percentage is based on criteria, such as the worker's location.

This example doesn't cover the payroll calculation, but it supports the configuration to calculate time rates based on values defined by criteria.

You can choose to calculate allowance payments that are based on a percentage of salary. The percentage rate is based on a condition such as a worker's location. Here's some criteria you could use:

- Create Values Defined by Criteria: You can calculate allowance payments that are based on a percentage of salary. The percentage rate is based on a condition such as a worker's location. Here's some criteria you could use:
  - For workers at location A, apply a percentage of 25% (0.25)
  - For workers at the location B, apply a percentage of 50% (0.50)
  - For workers at the location C, apply a percentage of 75% (0.75)
  - For workers at all other locations, apply a percentage of 30% (0.30)

Note: You must set the default calculation type as Number.

- Create Salary Rate Definition: Use the Rate Definitions task to create a salary rate definition to return a worker's salary rate:
  a. In the **Category** list, select **Element**.

b. In the **Storage Type** list, select **Amount**.
c. In the **Element Name** list, search for and select a value.

- Create Allowance Rate Definition: Use the Rate Definitions task to create an allowance definition that's calculated based on a percentage of the salary rate:
  a. In the **Category** list, select **Derived Rate**.
  b. In the **Factor Rule** field, select a value by criteria.
  c. Select the name of your percentage based values defined by criteria.
  d. Create a Rate Contributor:
     i. Select the name of your salary rate.
     ii. Select a contributor type of rate definition.

- Create Time Element: Use the Elements task to create an allowance element.
  a. In the **Primary Classification** list, select **Standard Earnings**.
  b. In the **Category** list, select **Time Card**.
  c. Select other hours as the calculation unit.
  d. For the question, Does this element have a default rate definition? Select **Yes**.
  e. In the rate name field, select the allowance rate definition.

Calculate Time Element Rate

Let's look at an example that shows how to calculate a time rate based on a set of conditions held in values defined by criteria.

This example doesn't cover the payroll calculation. But supports configuration to calculate a rate based on a set of conditions for a time element in the payroll run.

- Create Values Defined by Criteria: You can choose to calculate shift payments by the employee's location. Use the Values Defined by Criteria task to define the shift conditions. Here are few criteria that you can use:
  - For employees working in location A, pay is 10.
  - For employees working in location B, pay is 20.
  - For employees working in all other locations, pay is 0.
- Create Rate Definition: Use the Rate Definitions task to create a rate definition and associate it with the values defined by criteria.
  a. From the **Category** drop-down list, select **Value by Criteria**.
  b. From the **Criteria Name** drop-down list, select **Shift Value by Criteria**.
- Create Time Element: Use the Elements task to create a shift element:
  a. From the **Primary Classification** drop-down list, select **Standard Earnings**.
  b. From the **Category** drop-down list, select **Time Card**.
  c. For the question, Does this element have a default rate definition? Select **Yes**.

d. From the **Rate Name** drop-down list, select **Shift Rate Definition**.

Now you can navigate to the Calculation Factors task on the Element Overview page and see the shift calculation steps and value definitions created by the element template.

Calculate a Rate Using Multiple Values Defined by Criteria

You can calculate a rate using a Values Defined by Criteria by referencing another Values Defined by Criteria.

In this example you'll calculate a rate using a Values Defined by Criteria referencing another Values Defined by Criteria. Let's assume you need to calculate housing and car allowance payments based on a condition such as a worker's job. You'll have to create separate Values Defined by Criteria to capture the different levels of the allowance rates. Let's name them Standard Allowance Rates, Special Allowance Rates and TRU Allowance Rates. Here are some criteria you could use:

1. Create a Values Defined by Criteria and name it Standard Allowance Rates

   For workers on Job A
   - Pay Housing Allowance 250
   - Pay Car Allowance 400

   For workers on Job B
   - Pay Housing Allowance 650
   - Pay Car Allowance 900
2. Create a Values Defined by Criteria and name it Special Allowance Rates

   For workers on Job A
   - Pay Housing Allowance 500
   - Pay Car Allowance 750

   For workers on Job B
   - Pay Housing Allowance 350
   - Pay Car Allowance 750

3. Create a Values Defined by Criteria with calculation type as Values Defined by Criteria and name it TRU Allowance Rates.

   > **Note:** You can create a Values Defined by Criteria based on conditions that indicate whether the 'Standard Allowance Rates' and 'Special Allowance Rates' are applicable. In this example, the conditions are based on the worker's TRU.

   For workers on TRU 1

   - Pay Housing Allowance using the 'Standard Allowance Rates' Values Defined by Criteria
   - Pay Car Allowance using the 'Standard Allowance Rates' Values Defined by Criteria

   For workers on TRU 2

   - Pay Housing Allowance using the 'Special Allowance Rates' Values Defined by Criteria
   - Pay Car Allowance using the 'Special Allowance Rates' Values Defined by Criteria

4. Once you've defined the Values Defined by Criteria, create Rate Definitions for each type of value such as Housing Allowance and Car Allowance.

   Rate Definition: Housing Allowance

   - Select the Value by Criteria category
   - Select the Value by Criteria Name 'TRU Allowance Rates'
   - Select the Value 'Housing Allowance'

   Rate Definition: Car Allowance

   - Select the Value by Criteria category
   - Select the Value by Criteria Name 'TRU Allowance Rates'
   - Select the Value 'Car Allowance'

With this type of configuration, the Housing Allowance rate for an employee on TRU 2 and Job B is calculated as 350.

Enable Overrides for Time Elements

Let's look at an example that shows how to calculate a rate for a worker based on an override condition. Use values defined by criteria to calculate rates based on a condition such as location.

In this example, let's calculate a rate for a worker who lives in New York City but works in Boston.

This example doesn't cover the payroll calculation. But it does support the configuration to calculate a rate based on a set of conditions using an override value for a time element in the payroll run.

- Create Value by Criteria: You can choose to calculate bonus rates based on an override condition such as an override location. Here's some criteria you could use:
    - For workers on location A, pay 300.
    - For workers on location B, pay 450.
    - For workers on location C, pay 575.
    - For workers on all other locations, pay 600.
- Create Rate Definition: Use the Rate Definitions task to create a rate definition and associate to the bonus values defined by criteria.
    a. In the category field, select a value by criteria.
    b. In the value by the criteria name field, select the bonus values by criteria.
- Create Time Element: Use the Elements task to create a bonus element.
    a. Select standard earnings as the primary classification.
    b. In the category field, select time card.
    c. Select Yes to the question, does this element have a default rate definition?
    d. In the rate name field, select the bonus rate definition.
- Value Definition: Use the Calculation Value Definition task to create a location value definition. When a worker performs their role at a different location, the override location code can be captured on the worker's time card and passed to payroll for calculation purposes.
    a. Select time in the value definition group field.
    b. Select an identifier in the calculation type field.
    c. In the overriding rate identifier field, select the assignment location database items.

        Note: This should be the same database items as you used for the values defined by criteria condition.

    d. Create Usage Rules.
        i. In the calculation card field, select time cards.
        ii. Select your bonus calculation component.
        iii. Select the value set for location if appropriate.
    e. In the Calculation Values region:
        i. Enter values from 0 through 99999.9.
        ii. Enter a default location code value.

Calculate Time Based on a User-Defined Value

Let's look at an example that shows how to calculate time using a business-specific attribute such as company code.

This example doesn't cover the payroll calculation. But it does support the configuration to calculate a rate based on a user-defined value for a time element in the payroll run.

Create Element

You can choose to calculate relief allowance payments based on a worker's company code. Use the Elements task to create an hours rate element for relief allowance.

1. In the **Primary Classification** field, select **Standard Earnings.**
2. In the **Category** field, select **Time.**

Create Value Definition

Use the Calculation Value Definitions task to create a company code value definition. You can capture the company code on the worker's time card and pass it to payroll for calculation purposes.

1. In the **Value Definition Group** field, select **Time**.
2. In the **Calculation Type** field, select **Identifier**.
3. Select Enterable Calculation Values on the calculation card and complete these steps:
    a. Select **Identifier** as the value type.
    b. Enter a display value, such as Company.

    Note: Ensure that you select the total amount.
4. Create Usage Rules by completing these steps:
    a. In the Calculation Card field, select **Time Cards**.
    b. Select your relief allowance calculation component.
    c. Select a value set, if appropriate.

Create Calculation Step

Use the Payroll Calculation Information task to create a company code calculation step.

1. In the Component Group field, navigate to the Calculation Overview page, and search for time.
2. Navigate through all the calculation steps tasks.
3. Create a calculation step and enter a name, such as Company Code.

Create Calculation Factor on Element

Use the Elements task to create a calculation factor.

1. Search for your relief allowance element.
2. Navigate to the Calculation Factor page.
3. In the Calculation Step field, select the company code calculation step.
4. In the Value Definition field, select the company code value definition.

Edit Formula on Element

Use the Elements task to edit the element formula.

1. Edit the appropriate relief allowance element formula to use the company code value using the CALL_CALC_VALUES formula.

Note: Remember to run the Generate Data Dictionary Time Attributes process in the Oracle Time and Labor application after you've created the value definitions. This process creates the attributes necessary to capture the information, such as company code, on a time card and pass these details to Payroll.

Related Topics

- Generate Time Attributes and Time Card Fields for Your Elements
- Generate Data Dictionary Time Attributes

Calculate Standard Earnings Rate

Let's look at an example that shows how to calculate a standard earnings rate based on a set of conditions held in values defined by criteria.

This example doesn't cover the payroll calculation. But it does support the configuration to calculate a rate based on a set of conditions for a standard element in the payroll run.

- Create Values Defined by Criteria: You can choose to calculate bonus payments based on a condition such as a worker's grade. Here's some criteria you could use:
  - For workers on grade A, pay 5,000
  - For workers in grade B, pay 5,500
  - For workers in grade C, pay 6,250
  - For workers in all other grades, pay 7,650
- Create Rate Definition: Use the Rate Definitions task to create a bonus rate definition and associate this with the values defined by criteria:
  a. In the **Category** field, select value by criteria.
  b. In the **Value by the Criteria Name** field, select the bonus value by criteria.
- Create Element: Use the Elements task to create a flat amount bonus element.
  a. In the **Primary Classification** field, select **Standard Earnings**.
  b. In the **Category** field, select **Standard**.
- Create Value Definition: Use the Calculation Value Definitions task to create a bonus value definition. This is required to associate the rate definition with the bonus element.
  a. Click **Create** for a new value definition group and provide a name such as standard earnings.
  b. In the **Calculation Type** field, select **Rate Definition**.
  c. In the Calculation Values region:
     i. Enter values from 0 to 99999.9.
     ii. Select the bonus rate definition.
- Create Calculation Step: Use the Payroll Calculation Information task to create a bonus calculation step.
  a. Search for time cards in the component group field and navigate to the Calculation overview page.
  b. Navigate to all calculation steps tasks.
  c. Create a calculation step and provide a unique name such as a bonus.

- Create Calculation Factor on Element: Use the Elements task to create a calculation factor.
    a. Search and select the bonus element.
    b. Select the calculation factor page.
    c. In the calculation step field, select the bonus calculation step.
    d. In the value definition, select the bonus value definition field.
- Edit Formula on Bonus Element: Use the Elements task to edit the element formula.
    a. Edit the bonus element formula to calculate a bonus rate using the CALL_CALC_VALUES formula.

        Note: You can refer to the element status processing rules page to identify which formula to edit.

Related Topics

- Payroll Calculation Information
- Overview of Payroll Calculation Information Formulas

Pay Bonuses at Different Rates

This example demonstrates how to create criteria to pay employee bonuses at different rates based on age and location. This table summarizes the key decisions for this scenario:

Decisions to Consider	In this Example
What ages and rates should be used?	• Age 25 or less, pay 10 percent • Age greater than 25, pay 14 percent to City 1 employees • Age greater than 25, pay 16 percent to City 2 employees
What locations should be used to determine bonus rates?	• City 1 • City 2
Are there any special conditions that should be added?	Yes. In City 2 the general manager wants to pay a flat amount of 15,000 for all employees over the age of 25 who make over 100,000 per year.

In this example, we would perform these actions:

- Create the bonus rate criteria definition
- Create age criteria
- Create location criteria for age group 2
- Create a calculation value definition for age group 1
- Create calculation value definitions for locations
- Modify evaluation conditions

Before You Start

In this example, HRX_US_REP_LOCATION is used as the value set for the entry of different locations. If you don't have an equivalent value set, you may need to create one.

Create the Bonus Rate Criteria Definition

1. On the Home page, click the **Values Defined by Criteria** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Complete these fields as shown in this table.

Field	Value
Name	Bonus Rate
Effective Start Date	1/1/15
Legislative Data Group	Select your legislative data group.

4. Select **Create new value definition group**.
5. Enter **Bonus** in the **New Value Definition Group** field.
6. Enter **Flat Rate** in the **Default Calculation Type** field.
7. Click **OK**.

Create Age Criteria

1. Select the row with the Bonus Rate criteria definition.
2. Click **New**.
3. Select **Criteria** and click **OK**.
4. For each criteria definition you create, complete these fields.

Field	Age 25 or less	Age greater than 25
Calculation Value Definition Name	Bonus Rate Age Group 1	Bonus Rate Age Group 2
Value Definition Group	Bonus	Bonus
Retrieval Date	Date Earned	Date Earned
Sequence	1	2
Database Item Name	PER_PER_PERSON_AGE	PER_PER_PERSON_AGE
Operand	<=	>

Field	Age 25 or less	Age greater than 25
Literal Value	25	25

5. Click **OK** each time you create a criteria definition.
6. To create a default group for the age criteria, repeat steps 1 through 3.
7. Complete these fields:

Field	Value
Calculation Value Definition Name	Bonus Rate Age Group Default
Value Definition Group	Bonus
Retrieval Date	Date Earned

8. Select the **Default Criteria** check box and click **OK**.

Create the Location Criteria for Age Group 2

1. Select the row with the Person Age > 25 criteria definition.
2. Click **New**.
3. Select **Criteria** and click **OK**.
4. For each criteria definition you create, complete these fields.

Field	City 1	City 2
Calculation Value Definition Name	Bonus Range Age Group 2 Location 1	Bonus Range Age Group 2 Location 2
Value Definition Group	Bonus	Bonus
Retrieval Date	Date Earned	Date Earned
Sequence	1	2
Database Item Name	PER_ASG_LOCATION_ID	PER_ASG_LOCATION_ID
Display Name	Location	Location
Operand	=	=

Field	City 1	City 2
Value Set	HRX_US_REP_LOCATION	HRX_US_REP_LOCATION
Literal Value	City 1	City 2

5. Click **OK** each time you create a criteria definition.
6. To create a default group for the location criteria, repeat steps 1 through 3.
7. Complete these fields:

Field	Value
Calculation Value Definition Name	Bonus Rate Age Group 2 Location Default Rate
Value Definition Group	Bonus
Retrieval Date	Date Earned

8. Select the **Default Criteria** check box and click **OK**.

Related Topics

- Overview of Values Defined by Criteria
- Generate HCM Rates

Limit Pension Contributions

This example demonstrates how to create criteria to limit pension contributions based on the employee's job. This table summarizes the key decisions for this scenario.

Decisions to Consider	In this Example
What jobs and contribution limits should be used?	• If the employee is an Associate Consultant, limit pension contribution to 5,000 • If the employee is a Consultant, limit pension contribution to 10,000 • For all other jobs, limit pension contribution to 17 percent of annual salary

This example:

1. Creates the pension limits criteria definition
2. Creates job criteria
3. Creates the value definition for job 1

4. Creates the value definition for job 2
5. Creates the value definition for the default criteria definition

Create the Pension Limits Criteria Definition

1. On the Home page, click the **Values Defined by Criteria** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Complete these fields:

Field	Value
Name	Pension Limits
Effective Start Date	1/1/15
Legislative Data Group	Select your legislative data group.

4. Select the **Use existing value definition group** radio button.
5. Select **Limit Rules** in the Value Definition Group field.
6. Select **Flat Amount** in the Default Calculation Type field.
7. Click **OK**.

Create Job Criteria

1. Select the row with the Pension Limits criteria definition.
2. Click **New**.
3. Select **Criteria** and then click **OK**.
4. For each criteria definition you create, complete these fields:

Field	Job 1	Job 2
Calculation Value Definition Name	Job 1	Job 2
Value Definition Group	Limit Rules	Limit Rules
Retrieval Date	Date Earned	Date Earned
Sequence	1	2
Database Item Name	PER_ASG_JOB_CODE	PER_ASG_JOB_CODE
Operand	=	=
Literal Value	Associate Consultant	Consultant

Field	Job 1	Job 2

5. Click **OK** each time you create a criteria definition.
6. To create a default group for the job criteria, repeat steps 1 through 3.
7. Complete these fields:

Field	Value
Calculation Value Definition Name	Other Jobs
Value Definition Group	Limit Rules
Retrieval Date	Date Earned

8. Select the **Default Criteria** check box and click **OK.**

Create the Value Definition for Job 1

1. Select the row with the criteria definition as Job 1 = Associate Consultant.
2. Click **New**.
3. Select **Value** and click **OK**.
4. Complete these fields:

Field	Value
Calculation Value Definition Name	Contribution Limits 1
Value Definition Group	Limit Rules
Retrieval Date	Date Earned
Calculation Type	Flat Amount
Periodicity	Annually
Unit of Measure	Money
Currency	LDG Currency
Flat Amount	5,000

Field	Value

5. Click **OK** .

Create the Value Definition for Job 2

1. Select the row with the criteria definition as Job 2 = Consultant.
2. Click **New**.
3. Select **Value** and click **OK**.
4. Complete these fields:

Field	Value
Calculation Value Definition Name	Contribution Limits 2
Value Definition Group	Limit Rules
Retrieval Date	Date Earned
Calculation Type	Flat Amount
Periodicity	Annually
Unit of Measure	Money
Currency	LDG Currency
Flat Amount	10,000

5. Click **OK**.

Create the Value Definitions for the Default Criteria Definition

1. Select the row with the Default Criteria definition.
2. Click **New**.
3. Select **Value** and click **OK**.
4. Complete these fields:

Field	Value
Calculation Value Definition Name	Other Jobs

Field	Value
Value Definition Group	Limit Rules
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	.17

5. Click **OK**.

Related Topics

- Overview of Values Defined by Criteria
- Generate HCM Rates

Calculate Location Allowance Rate

Let's look at an example to calculate a location allowance, based on the hire date and location of an employee.

In this example, an employee who's hired in California or Colorado before 01-JAN-19 is eligible to location allowance payments calculated at 15% of the salary. An employee hired in these states on or after 01-JAN-19 isn't eligible to receive the location allowance.

Create the Location Allowance Values by Criteria

1. On the Home page, click the **Values Defined by Criteria** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Complete these fields:

Field	Value
Name	Location Allowance Rate
Effective Start Date	Enter a valid date
Legislative Data Group	Select your legislative data group

4. Select the **Create new value definition group** option.
5. Enter **Location Allowance** in the **New Value Definition Group** field.
6. Enter **Flat Rate** in the **Default Calculation Type** field.
7. Click **OK**.

Create Criteria for Each Location Eligible for Payment

1. Select the row with the Housing Allowance Rate criteria definition.
2. Click **New**.
3. Select **Criteria** and then click **OK**.
4. For each criteria definition you create, complete these fields:

Field	Value
Calculation Value Definition Name	Location
Value Definition Group	Location Allowance
Retrieval Date	Enter a valid date.
Sequence	Select a sequence.
Database Item Name	Select a database item name.
Operand	=
Literal Value	California

5. Click **OK** each time you create a criteria definition.
6. To create a default group for each location criteria, repeat steps 1 through 3.
7. Complete these fields:

Field	Value
Calculation Value Definition Name	Location Allowance Default Rate
Value Definition Group	Location Allowance
Retrieval Date	Date Earned

8. Select **Default Criteria** and then click **OK**.

Create Hire Date Rule Criteria for Each Location

1. Select the row with the Location = California criteria definition.
2. Click **New**.
3. Select **Criteria** and then click **OK**.

4. For each criteria definition you create, complete these fields:

Field	Value
Calculation Value Definition Name	Hire Date Rule for California
Value Definition Group	Location Allowance
Retrieval Date	Enter a valid date.
Sequence	Select a sequence.
Database Item Name	Select a database item name.
Operand	<
Literal Value	01-JAN-2019

5. Click **OK** each time you create a criteria definition.
6. To create a default group for each location criteria, repeat steps 1 through 3.
7. Complete these fields:

Field	Value
Calculation Value Definition Name	Hire Date Rule for California Default Rate
Value Definition Group	Location Allowance
Retrieval Date	Date Earned

8. Select the **Default Criteria** check box and then click **OK**.

Create Value Definitions for the Hire Date Rule for Each Location

1. Select the row with the Hire Date Rule for California criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete these fields:

Field	Value
Calculation Value Definition Name	Location Allowance for California

Field	Value
Value Definition Group	Location Allowance
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	0.15

5. Click **OK**.

Create Value Definitions for the Default Criteria Definitions

1. Under the job criteria definition, select the row with the Default Criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete these fields:

Field	Value
Calculation Value Definition Name	Housing Allowance Default Rate
Value Definition Group	Housing Allowance
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	0.0

5. Click **OK**.

Create the Rate Definition for Location Allowance

1. On the Home page, click the **Rate Definitions** quick action under the **My Client Groups** tab.
2. In the Search Results section, click **Create**.

3. Complete these fields.

Field	Value
Category	Derived Rate
Effective Start Date	Select a date that's after the creation date of the objects that you're referencing
Legislative Data Group	Select your legislative data group

4. Click **OK**.
5. In the Basic Details section on the Create Rate Definition page, complete these fields:

Field	Value
Name	Enter the name for your rate definition. For example, Rate - Location Allowance.
Short Name	Enter a short name.

6. In the Returned Rate Details section, complete these fields:

Field	Value
Factor Rule	Value by Criteria
Name	Select the value for the housing allowance that you created using values defined by criteria. For example, Location Allowance Rate.

Create Rate Contributors

1. In the Rate Contributors section, click **Create**.
2. Select **Rate Definition** as the contributor type and then click **OK**.
3. On the Create Rate Contributors page, complete these fields:

Field	Value
Add or Subtract	Add
Rate Name	Select your salary rate definition.

4. Click **Save and Continue**.
5. Click **Submit**.

Calculate Housing Allowance

Let's look at an example to calculate a housing allowance rate that's limited to maximum of 1,000 per year.

In this example, housing allowance is a percentage of the salary. The percentage value is derived based on the job of the employee.

You can choose to calculate housing allowance rates with a job criteria with a maximum rate limit. Use the **Values Defined by Criteria** task to define the conditions and housing allowance values. Use the **Rate Definitions** task to associate the values defined by criteria to the housing allowance rate and apply the maximum limit rule.

In this example, you calculate housing allowance payments based on the type of the job. Create values by criteria for housing allowance, and then define criteria for each type of job.

You can also calculate the housing allowance payments based on a percentage of salary. You can do so by first entering values for each of the job criteria conditions. For example, if the job 'Help desk Manager' is eligible for 10% of the salary, enter a rate value of 0.10. Specify the value for the default criteria as 0.00. This ensures that you don't pay the allowance to employees who don't meet the job criteria.

Create the Housing Allowance Values by Criteria

1. On the Home page, click the **Values Defined by Criteria** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Complete these fields:

Field	Value
Name	Housing Allowance Rate
Effective Start Date	Enter a valid date
Legislative Data Group	Select your legislative data group

4. Select the **Create new value definition group** option.
5. Enter **Housing Allowance** in the **New Value Definition Group** field.
6. Enter **Flat Rate** in the **Default Calculation Type** field.
7. Click **OK**.

Create Criteria for Each Job Type

1. Select the row with the Housing Allowance Rate criteria definition.
2. Click **New**.
3. Select **Criteria** and then click **OK**.

4. For each criteria definition you create, complete these fields:

Field	Value
Calculation Value Definition Name	Job
Value Definition Group	Housing Allowance
Retrieval Date	Enter a valid date.
Sequence	Select a sequence.
Database Item Name	Select a database item name.
Operand	=
Literal Value	Help Desk Manager

5. Click **OK** each time you create a new criteria definition.
6. To create a default group for the job criteria, repeat steps 1 to 3.
7. Complete these fields:

Field	Value
Calculation Value Definition Name	Housing Allowance Default Rate
Value Definition Group	Housing Allowance
Retrieval Date	Date Earned

8. Select the **Default Criteria** check box and then click **OK**.

Create Value Definitions for Each Job Type

1. Select the row with the Job = Help Desk Manager criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete these fields:

Field	Value
Calculation Value Definition Name	Help Desk Manager Rate

Field	Value
Value Definition Group	Housing Allowance
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	0.10

5. Click **OK**.

Create Value Definitions for the Default Criteria Definitions

1. Under the job criteria definition, select the row with the Default Criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete these fields:

Field	Value
Calculation Value Definition Name	Housing Allowance Default Rate
Value Definition Group	Housing Allowance
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	0.0

5. Click **OK**.

Create the Rate Definition for Housing Allowance

1. On the Home page, click the **Rate Definitions** quick action under the **My Client Groups** tab.
2. In the Search Results section, click **Create**.

3. Complete these fields.

Field	Value
Category	Derived Rate
Effective Start Date	Select a date that's after the creation date of the objects that you're referencing
Legislative Data Group	Select your legislative data group

4. Click **OK**.
5. In the Basic Details section on the Create Rate Definition page, complete these fields:

Field	Value
Name	Enter the name for your rate definition. For example, Rate - Housing Allowance.
Short Name	Enter a short name.

6. In the Returned Rate Details section, complete these fields:

Field	Value
Factor Rule	Value by Criteria
Name	Select the value for the housing allowance that you created using values defined by criteria. For example, Housing Allowance Rate.
Maximum Rate Rule	Value
Maximum Value	1,000

Create Rate Contributors

1. In the Rate Contributors section, click **Create**.
2. Select **Rate Definition** as the Contributor Type and then click **OK**.

3. On the Create Rate Contributors page, complete these fields:

Field	Value
Add or Subtract	Add
Rate Name	Select your salary rate definition.

4. Click **Save and Continue**.
5. Click **Submit**.

FAQs for Values Defined by Criteria

Does the order in which I add criteria definitions matter?

Yes, each criteria definition that you add is defined as a separate level and placed in priority order. The order produces a tree structure, which affects processing and the value that's returned.

You can change the sequence of the criteria definitions at any time to suit your business needs and fix processing problems.

How do I define minimum or maximum rules for a values by criteria rate?

Create a value by criteria definition. Create a rate definition that has a category of Value by Criteria and associate the rate definition to the value by criteria definition.

Create a rate definition that has a category of Derived Rate. Create a rate contributor with a contributor type of Rate Definition, and then select the values by criteria rate definition. You can now define return rate rules for your derived rate, such as a minimum or maximum values. These return rate rules will be applied to the values by criteria rate.

When do I define a default criteria for values defined by criteria?

You must always create a default criteria definition. The application uses this default criteria if the employee's record misses the conditions that you have set.

Why hasn't a rate been calculated based on the values specified on the values defined by criteria?

Ensure that a value identifier is entered only for those values defined by criteria that have multiple value records for a criterion.

5 Payroll Processing Rules

Payroll Process Configuration Groups

Overview of Payroll Process Configuration Groups

Payroll process configuration groups provide sets of processing parameters, primarily related to logging and performance.

Select a process configuration group when you run a process, such as a new-hire flow or termination flow, or an extract process or report.

If you don't select a process configuration group, the application uses the parameters in the default group. You must specify the default group in the Process Configuration Group ACTION_PARAMETER_GROUPS profile option.

Here's the list of tasks you can use to set up profile options and default process configuration groups.

Action	Task and Page
Edit predefined process configuration groups	Default Group tab of the Payroll Process Configuration page.
Create additional process configuration groups	Group Overrides tab on the Process Configuration Group page.
Select a process configuration group as the default at the site or user level	Manage Administrator Profile Values task in the Setup and Maintenance area.

To open the Payroll Process Configuration page, use the **Payroll Process Configuration** task under **Show More > Payroll** in **My Client Groups** on the Home page.

Create a group with the logging parameters turned on to troubleshoot processes. You can also specify different performance parameter values, such as chunk size and buffer size, for running different processes.

Payroll Process Configuration Parameters

Payroll processing parameters are system-level parameters that control aspects of payroll-related processes, such as flows and reports.

Values for each parameter are predefined with the application, but you can override these values as part of your initial implementation and for performance tuning. Use the Payroll Process Configuration task under Show More > Payroll in My Client Groups on the Home page.

Processing Parameters

The effects of setting values for specific parameters may be system-wide. When you submit a process that uses flows, such as a batch upload, new hire, or report process, the process reads values from the PAY_ACTION_PARAMETERS table.

> **Note:** You should understand the concept of array processing and how this affects performance before setting some parameters.

The application doesn't allow a blank value for any parameter. Unless the parameter is required, you must delete the parameter row.

This table describes processing parameters and lists values and predefined default values. These parameters apply to HR applications including payroll and payroll interface.

Parameter	Description	Values
Assignment ID to End Logging	Assignment ID upon which logging ends.	Default: All assignments
Assignment ID to Start Logging	Assignment ID upon which logging starts.	Default: All assignments
Balance Buffer Size	Buffer size for array inserts and updates of latest balances, based on one row per balance. **Tip:** If your trace files show differences between execute and retrieve timings, look at the buffer sizes you're using. Try setting each of these to 100.	Maximum: 1000 Minimum: 1 Default: 500
Batch Error Mode	Determines error notifications for the HCM data loads.	ALL = all rows ANY = any rows NONE = no errors Default: ANY
Chunk Size	Number of payroll relationship actions that process together. See also the Parallel Processing Parameters topic.	Maximum: 16000 Minimum: 1 Default: 20
Disable Locking Code in Check Process Post-Populate Method	Disables the locking code added to the post-populate method to improve check process performance. This parameter isn't available by default. To add the parameter, search for the lookup type PAY_ACTION_PARAMETER_TYPE on the Common	Yes, No Default: No Only change this value if advised by Oracle Support.

Parameter	Description	Values
	Lookups page and add the lookup code ORA_DISABLE_POST_POP_FIX.	
Element Entry Buffer Size	Buffer size that payroll runs use in the initial array selects of element entries, element entry values, run results, and run result values per assignment.	Maximum: 1000 Minimum: 1 Default: 500
Formula Execution Logging	Sets the logging level to investigate formula code problems. See also the Logging Processing Parameters topic.	Unless the parameter is required, delete the parameter row.
Historic Payment	Removes the validation to look for banks active as of the process date. This validation is enforced by the payments process. This parameter isn't available by default. You can add it in test environments only. To add the parameter, search for the lookup type PAY_ACTION_PARAMETER_TYPE on the Common Lookups page and add the lookup code HISTORIC_PAYMENT.	Yes, No Default: No
Logging Area	Area to log code. See also the Logging Processing Parameters topic.	The values correspond to C-code entries in the form PY_ENTRY, that includes the functional area that has logging enabled.
Logging Category	Helps investigate problems with large volumes of detailed data. See also the Logging Processing Parameters topic.	You can set any number of categories by specifying multiple values. For example, enter GMPE, for general logging information, routing information, performance information, and element entry information. Refer to the Logging Processing Parameters topic in the Related Links section for applicable values. Unless the parameter is required, delete the parameter row.
Manual Task Processing	Determines processing of manual tasks when SOA server is unavailable.	Y, N Default: Y
Maximum Errors Allowed	Number of payroll relationship actions that you can roll back, when rolling back a process.	Minimum: 0 Default: CHUNK_SIZE or 20
Maximum File Size for View Report Output	Maximum size in bytes of the report file to show in the output window. This parameter isn't available by default. To add the parameter, search for the lookup type PAY_ACTION_PARAMETER_TYPE on the Common	Must be a positive number. Default: 10000000

Parameter	Description	Values
	Lookups page and add the lookup code BI_OUTPUT_SIZE.	
Maximum Iterations Allowed per Run Action	Maximum number of iterations allowed per run action within net-to-gross calculations within the payroll run.	Minimum: 0 Default: 15
Maximum Number of Payroll Relationship Actions to Roll Back	Number of payroll relationship actions that you can roll back, when rolling back a process.	Minimum: 1 Default: 50
Multithreaded XML Generation for Extracts	Generates XML for extracts using multiple threads.	Y, N Default: N
New Hire Flow Pattern	Name of the customer-defined flow that's triggered as part of the new hire process.	Unless the parameter is required, delete the parameter row.
Notifications Expiration Offset	Number of days before a payroll flow notification is automatically deleted.	Minimum: 5 Default: 5
Payroll Batch Loader Encryption Type	The type of encryption applied to source files loaded using the HCM data loader.	`PGPSIGNED, PGPUNSIGNED, PGPX509SIGNED, PGPX509UNSIGNED` Unless the parameter is required, delete the parameter row.
Payroll Criteria for Element Eligibility	Enables eligibility by payroll for assignment-level elements.	Yes, No Default: No
Process Timeout	Number of minutes before the Run Balance Generation process times out.	Minimum: 0 Default: No timeouts limit enforced. Unless the parameter is specified, delete the parameter row.
Remove Report Assignment Actions	Removes report processing actions after generating reports.	Yes, No Default: Yes
Run Result Buffer Size	Buffer size for array inserts and updates, based on 1 row for each payroll run result.	Maximum: 1000 Minimum: 1 Default: 500
Shuffle Chunk Processing	Random processing of order chunks for assignment actions.	Yes, No Default: No

Parameter	Description	Values
Suppress Empty XML Tags in Extract Reports	Reduces the size of extract output for reports by excluding tags with blank values in XML output files.	Y, N Default: Y
Termination Flow Pattern	Name of the customer-defined flow that's triggered as part of the termination process.	Unless the parameter is required, delete the parameter row. (No predefined Termination flow pattern).
Threads	Total number of subprocesses that you can run from the Oracle Enterprise Scheduler Service. See also the Parallel Processing Parameters topic.	Minimum: 1 Default: 1
Trace	Enables the database trace facility for application processes written in C only.	Yes, No Default: No
Trace Level	Sets the trace level of the trace event. To generate the finest level of detail, enter the highest value.	1, 4, 8, 12 Default: None
User Messaging	Enables detailed logging of user-readable information to the PAY_MESSAGE_LINES table.	Yes, No Default: No
XML_DATA_SOURCE	For document records delivery options performance purposes, determines if XML is derived from the database.	Y, N Default: Y

Payroll-Specific Processing Parameters

This table lists the processing parameters that are applicable only for Oracle Global Payroll.

Parameter	Description	Values
Accounting Date for Transfer to General Ledger	The date to transfer and post journal entries for costing results to Oracle Fusion General Ledger.	E = Date Earned P = Process Date DP = Date Paid from payroll time periods for calculate payroll and QuickPay only. EVE = For the Partial Period Accrual Reversal process, date earned is used. However, if the date earned isn't defined for the time periods on the Payroll Definition page, the payroll period end date is used.

Parameter	Description	Values
		For the payroll run that includes the actual costs, the process date of the payroll run is used. Default: P
Cost Buffer Size	Buffer size for array insert and select statements when calculating the costing of the payroll run results.	Maximum: 1000 Minimum: 1 Default: 500
Date to Retrieve Assignment Status	Date earned or date paid, used to determine the effective date for checking assignment status in payroll calculations.	E = Date earned P = Date paid Default: P
Earliest Retroactive Processing Date	Sets earliest date that retroactive processes are calculated. Updates made before this date aren't recalculated. **Note:** If you define a static retroactive start date and a rolling retroactive start date, the retropay process uses the latest of the two dates. For example, if the static retroactive start date is 01-JAN-2020 and the rolling retroactive start date is 15-MAR-2019, the retropay process uses a start date of 01-JAN-2020. Controls the start date of the retroactive period for the **Calculate Payroll for Retroactive Changes** flow (retropay) as well as for an individual employee	Date value in `YYYY/MM/DD` format
Extract Data Group for Payroll Register	Limits the records to include in the output file based on the specified data group name.	Default: No data group
Limit Payroll Register Output by Data Group	Enables processing a subset of records to include in the output file when an extract data group parameter value is also specified.	Y, N Default: N
Number of months in rolling period for retroactive changes	Sets the number of months in the retroactive pay rolling period. If you don't want to limit the duration of the retroactive pay period, change the default of 12 month rolling period to 999 months.	Default: 12

Parameter	Description	Values
	Note: You can limit the number of payroll periods included in the retroactive pay process by setting the earliest start date for the process for the process for all retroactive notifications using both the **Earliest Retroactive Processing Date** parameter and this parameter. For example, you may want to set a static start date based on your payroll go-live date and use a rolling period to ensure retroactive pay doesn't calculate for more than a 24 month period. Retroactive pay uses the latest of the two dates when both parameters are set. If you don't want to limit the duration of the retroactive pay period, change the default 12 month rolling period to 999 months.	
Reversal and Balance Adjustment Accounting Date	Accounting date based on one of these dates: • The process date of reversal or balance adjustment • The process end date of the Transfer to Subledger Accounting task. You can use this task to transfer journal entries for costing results to Oracle Fusion General Ledger.	T = Transfer using end date of the Transfer to Subledger Accounting task as the accounting date P = Use process date of the reversal or balance adjustment as the accounting date Default: P
Wage Basis Rules Buffer Size	Used in array selects from the PAY_ TAXABILITY_RULES table within the Payroll Calculation process.	Minimum: 100 Default: 500

Related Topics

- Payroll Process Configuration Groups
- Logging Processing Parameters
- Parallel Processing Parameters

Logging Processing Parameters

Use logging parameters to investigate problems that aren't easily identified in other ways. In a normal operation, disable logging because it can impact the performance of the process you're logging.

Note: Prepare log files before contacting Oracle Support for assistance. Define the logging area, category, and range of assignments before resubmitting the problem.

Logging Parameters

Typically, you use this feature during your initial implementation and testing before you go live. In a normal operation you should disable detailed logging.

The three processing parameters for logging are:

- Logging Area
- Logging Category
- Formula Execution Logging

Logging Area

The Logging Area parameter works with the Logging Category parameter to limit the code area for logging. Even if you set the logging category, you must also set the logging area if you want to limit logging to a particular code area.

The values correspond to C-code entries in the form PY_ENTRY, which includes the functional area that will have logging enabled.

Logging Category

Logging categories define the type of information included in the log. You can set any number of categories by specifying multiple values to focus on specific areas that you think may be causing a problem. The application doesn't allow a blank value and you must delete the parameter row if logging isn't required.

This table explains each logging category. It provides the log output information to investigate the problems encountered.

Parameter Value	Logging Category	Description
B	Balance Information	Provides output information that shows the creation and maintenance of balances used during payroll processing.
C	C cache structures information	Provides output information that shows details of the payroll cache structures and changes to the entries within the structure. While working on a service request, Oracle may ask you to use this parameter to gather additional information.
E	Element entry information	Provides output information that shows the state of the element entries in the process memory after retrieving entries from the database. The information is provided whenever data for an entry is changed during processing.
F	Formula information	Provides output information that shows details of formula execution, including formula contexts, inputs, and outputs.
G	General logging information	Provides general information, rather than a specific information type. This parameter doesn't provide sorted output. In general, it's

Parameter Value	Logging Category	Description
		recommended that you choose parameters that provide specific types of information.
I	Balance output information	Provides output information that shows details of values written to the database from the balance buffers.
L	Balance fetching information	Provides output information that shows the balances retrieved from the database and whether or not the process will use those balances. (If balances such as Year To Date totals have expired because the year has changed, the process resets them and uses the new balance.)
M	Entry or exit routing information	Provides output information to show when any function is entered and exited. This information is indented to show the call level, and can be used to trace the path taken through the code at the function call level. Often, this information is useful when attempting to track down a problem such as a core dump.
P	Performance information	Provides output information to show the number of times certain operations take place at the assignment and run levels and why the operation took place. This parameter is often used to balance the buffer array write operation.
Q	C cache query information	Provides output information that shows the queries being performed on the payroll cache structures. While working on a service request, Oracle may ask you to use this parameter to gather additional information.
R	Run results information	Provides output details of run results and run result values from the Run Results buffer or the Values buffer before writing them to the database. This enables verification that the buffer contents were correct.
S	C cache ending status information	Provides output information that shows the state of the payroll cache before the process exits, whether that process ends with success or an error. While working on a service request, Oracle may ask you to use this parameter to gather additional information.
T and Z	PL/SQL detail and PL/SQL output	To obtain detailed information about the PL/SQL calls made by the Payroll application, use the combination of the T parameter and the Z parameter.

Parameter Value	Logging Category	Description
		This combination is typically useful for obtaining information about payroll processes that use a large amount of PL/SQL code, such as prepayments and archive. Using this parameter, the process buffers output while it's running and places it the end of the log file after processing is complete. Each payroll process instance has its own log file, located under the log subdirectory for the particular process ID.
V (USA only)	Vertex tax calculation information	Provides output information that shows the values passed in and out of a third-party Vertex tax engine. This parameter also provides a separate file in the Out directory that shows the internal settings of the Vertex engine. This logging option is available to customers in the USA only.

Formula Execution Logging

Formula execution logging is the code area where logging is performed. This processing parameter mechanism is only available for formula logging in the payroll run. Specify parameter values as a character or combination of characters to determine the area for logging. For example, the string di (the combination of d and i) corresponds to the logging of database item cache access and formula input and output values. The default value is no logging.

> **CAUTION:** Use the dump logging options in rare circumstances only. The T trace option, which generates very large amounts of data, would significantly slow down processing.

The following table lists formula execution logging parameter values and its details.

Parameter Value	Meaning
c	Change contexts
d	Database item cache access
D	Database item cache dump
f	Formula cache access
F	Formula cache dump
I	Formula input/output values
m	Miscellaneous

Parameter Value	Meaning
n	Nested calls
s	SQL execution (database item and PL/SQL formula function calls)
T	Trace (very large level that provides the inputs and outputs of every call made when executing a formula)
w	Working storage area access
W	Working storage area dump
1	Level 1 (combination of c. f, i, and m)
2	Level 2 (combination of 1, c, d, n, and w)
3	Level 3 (combination of 2, D, s, and W)
4	Level 4 (combination of 3 and F)
5	Level 5 (combination of 4 and T)

Related Topics

- Payroll Process Configuration Groups
- Payroll Process Configuration Parameters
- Parallel Processing Parameters

Parallel Processing Parameters

Payroll processes are designed to take advantage of multiprocessor computers. You can improve performance of your batch processes, such as Calculate Payroll or Calculate Gross Earnings, by splitting the processing into a number of threads, or subprocesses, which run in parallel.

To improve performance you can also set the number of payroll relationship actions that process together and the size of each commit unit for the batch process.

Here's a list of parameters that you can use for parallel processing.

Parallel Processing Parameters

Threads

When you submit a batch process, the Threads parameter determines the total number of subprocesses that run concurrently. The number of subprocesses equals the Threads value minus 1.

Set this parameter to the value that provides optimal performance on your computer:

- The default value of 1 is set for a single-processor computer.
- Benchmark tests on multiprocessor computers show that the optimal value is approximately 2 processes per processor.

  For example, if the server has six processors, set the initial value to 12 and test the impact on performance of variations on this value.

Chunk Size

The Chunk Size parameter:

- Indicates the size of each commit unit for the batch process.
- Determines the number of assignment actions that are inserted during the initial phase of processing.
- Sets the number of assignment actions that are processed at one time during the main processing phase.

This parameter doesn't apply to all processes, such as Generate Check Payments and Retroactive Pay.

To set the value of the Chunk Size parameter, consider the following points:

- Parameter values range from 1 to 16,000.
- The default value is 20, which was set as a result of benchmark tests.
- Each thread processes one chunk at a time.
- Large chunk size values aren't desirable.

Related Topics

- Payroll Process Configuration Groups
- Payroll Process Configuration Parameters
- Logging Processing Parameters

FAQs for Payroll Process Configuration

How can I improve performance and troubleshoot flows?

Add parameters to a payroll process configuration group to optimize performance and troubleshoot your payroll processes. To process large volumes of records, use the Threads and Chunk Size parameters.

To troubleshoot processes, add the Logging Category or Formula Execution Logging parameters to a configuration group and rerun the process using that configuration group. Using these parameters enables you to investigate formula code problems.

Restrict Payroll Processing

Select rules to control which payroll relationships and which elements to process in a payroll run.

For example, a skip rule or frequency rule. Specify flow parameters when you submit the calculation process to restrict the payroll relationships and further restrict the elements that the run processes. For example, Calculate Payroll or Calculate Gross

Earnings.

Restrict the Elements Processing Based on Rules

You can create skip and frequency rules that control when the payroll run processes the recurring element.

Rules	Use To	Examples
Skip	Include or exclude the element entry for the person using rules in a formula	A once-each-period rule stops recurring element entries from processing more than once in a payroll period.
Frequency	Specify which payroll periods to process the entries	Changed to: A frequency rule might specify that the payroll run processes an element only on the first and third weeks of a month.

Restrict the Records to Process Based on Flow Parameters

As this table shows, specify flow submission parameters to restrict the number of records for the calculation process.

Parameter	Use To
Payroll Relationship Group	Restrict processing to the payroll relationships within the group, which you can define using static or dynamic rules, based on payroll relationship or assignment information.
Element Group	Restrict processing to the elements in the group, which you can define by selecting element classifications and including or excluding specific elements.
Run Types	Determine which payroll calculations to perform and how to pay the results. The application processes an element in all the run types, unless you set up the element in these ways: • To process separately • As a trigger for a run type, in which case it's automatically excluded from the other run types

This table shows the flow submission parameters for the calculation process including dates that control which records to process:

Date	Required?	Comments
Process Date	No	This is typically the payroll run date of your payroll definition.
Payroll Period	Yes	Used to derive other dates for processing.
Date Earned	Yes	Identifies these element entries • To include in the payroll run • That belong to a proration group and ended within the payroll period

Related Topics

- Overview of Object Groups

Optimize Performance of Multi-Thread Processes

The automatic multi-thread feature optimizes the performance of multi-thread processes, such as the Calculate Payroll process, by automatically identifying and assigning the correct number of threads and chunk size to the process.

The automatic multi-thread feature supports all multi-thread payroll processes such as Calculate Payroll and Make EFT Payments. It also supports predefined HCM Extracts such as the Gross-to-Net report and user-defined extracts including copied extracts.

Maximum Number of Threads

By default a payroll process executes in single-threaded mode. Use the **Maximum Number of Threads** action parameter to enable the automatic multi-threading and chunk size feature. This parameter indicates the maximum, total number of sub-processes dynamically created for a process.

The application automatically assigns the optimum number of threads and generates multiple secondary sub-processes that are executed in parallel to optimize performance.

Here's a list of features supported by the automatic, multi-threading parameter:

- The number of threads is automatically determined based on the **Maximum Number of Threads** parameter plus the complexity of the process. For example, the Calculate Payroll process is a very complex process and hence the number of employees that can be calculated in each chunk should be lower than less complex calculations such as retry or prepayments. As a result, the number of threads automatically assigned to the Calculate Payroll process is higher than the number of threads used when retrying a process.
- The number of threads used doesn't exceed the maximum number defined on the **Threads** action parameter. Complex processes such as the Calculate Payroll process may use the maximum number of threads you define.
- The maximum thread setting applies to all your payrolls such as weekly and semimonthly. The total number of employees processed in each payroll can vary. The automatic multi-thread solution dynamically reduces the number of threads used for smaller payroll to ensure more resources are available for any other processes that can be run in parallel.

- Check the log file to view the number of threads used by the process. Enable logging to view the log file for the process.

Enable the Automatic, Multi-Thread Process

Use the Payroll Process Configuration task and edit the default process configuration group for the process:

- Remove the **Threads** action parameter. This determines the total number of sub-processes that run under the concurrent manager.
- Remove the **Chunk Size** action parameter. This is the number of relationship actions that should process together in chunks during the main processing phase.
- Add the **Maximum Number of Threads** action parameter. This parameter indicates the maximum, total number of sub-processes dynamically created for a process. The default value is '20' and you must specify the maximum number of threads. This action parameter enables the automatic multi-thread and chunk size feature.

  > **Note:** The value you enter in the new Maximum Number of Threads field must be the same as that given in the Threads field. For example, if '25' was defined in the Threads field, you should enter '25' in the new Maximum Number of Threads field.

- The **Threads** field determines the total number of sub-processes that run under the concurrent manager, and the new Maximum Number of Threads parameter indicates the maximum, total number of sub-processes dynamically created for the process action parameter.

Optimize Performance of the Payroll Background Process

The payroll background process is a daemon process that runs continuously to handle periodic requests for processing. It's used to submit processes such as the QuickPay for Anytime Pay process and Event Action Notifications.

Enable automatic multithreading for the payroll background process to enhance performance of the submitted payroll processes and run multiple processes concurrently.

Use the **Payroll Process Configuration** task under Payroll to search for the delivered **Pay Daemon Group** process configuration group. Edit and enable the **Pay Daemon Group** configuration group to optimize the performance of the payroll background process by automatically identifying and assigning the correct number of threads to the process. The payroll background process can then execute large number of processing requests and handle multiple processes concurrently. For example, multiple runs of QuickPay for Anytime Pay can be processed concurrently.

Use the **Maximum Number of Threads** action parameter to enable automatic multithreading for the payroll background process. This parameter indicates the maximum, total number of subprocesses dynamically created for a process. Perform these steps to enable the **Pay Daemon Group**.

1. On the Payroll Process Configuration page search for the default group and under Parameter Name search for the Maximum Number of Threads parameter and note the value.
2. Search for the delivered **Pay Daemon Group** and click **Add** under Parameter Name. Search for the Maximum Number of Threads parameter and enter an Override Value.

Set this parameter to about 10% of the Maximum Number of Threads on your default group for the process.

For example, if the **Maximum Number of Threads** action parameter is set to 30 on the default group, set it to 3 on the **Pay Daemon Group** process configuration group.

Note:

When you don't enter a value for the **Maximum Number of Threads** action parameter, the payroll background process runs using a single thread process.

The process sets the threads depending on the number of processing requests or pay daemon actions in the queue at a given time. A new thread is submitted for each 5,000 processes in the queue for the payroll background process until the **Maximum Number of Threads** is reached.

Enable Logging

Use the **Pay Daemon Group** process configuration group to control other parameters for the payroll background process, such as logging. If you want the processes running on the daemon to generate a log output, enable logging in the Pay Daemon Group.

Note: It's recommended that you enable logging on the Pay Daemon Group process configuration group and not on the default group for the process.

Logging and Monitoring the Payroll Background Process

Use the **Payroll Background Logging and Monitoring** flow to identify and resolve payroll queries for features that use the payroll background process.

This flow is useful for those who manage customer environments, test payroll processes, and troubleshoot issues with payroll processes. For example, your system administer can use this flow to generate log files for features that uses the payroll background flow such as Anytime Pay.

Note: Payroll features that use the payroll background flow include Anytime Pay and Event Notification Processing that has rate events enabled.The payroll background process is an ESS process that runs continuously in the background to improve the performance of payroll features. Since it runs continuously, it's not required for the ESS server to start or stop whenever you submit a process such as the submission of the QuickPay process for Anytime Pay.

Note: Leave the Legislative Data Group field blank when you submit the Payroll Background Logging and Monitoring flow.

Considerations for Using the Payroll Background Logging and Monitoring flow

Consider these points when you use the Payroll Background Logging and Monitoring flow.

- Leave the Legislative Data Group field blank when you submit the Payroll Background Logging and Monitoring flow.
- Use the **Actions** field to perform any of the actions given in this table on the payroll background ESS process.

Action	Description
Start Process	When called by a feature, the payroll background ESS process starts automatically and will continue to run. You can use this option to override this default behavior and manually start the process.
Stop Process	Use this option to stop the background payroll ESS process. Any process that's already running using the payroll background process will complete, but the next process in queue will not start.
Report	Use this option to report on the status of the background payroll ESS process.
Resubmit Process	Use this option to resubmit a process submitted using the payroll background ESS process and is in error.

- Use the **Job Identifier** field to identify the process submitted using the payroll background process. Each background process has a job ID number, similar to an ESS job number.
- Use the **Report Type** field to select the type of report you want to generate using this flow. These reports are intended for users who are trying to identify the root cause of an issue. This table lists the type of reports you can generate.

Type of Report	Description
Processing Report	This report displays all processes that are currently running or are in the payroll background queue for today. For example, a QuickPay has been submitted for Anytime Pay but no results are generated for the employee. Use this report to check if the QuickPay is stuck in a queue of processes waiting to be completed by the payroll background process.
Scheduled Report	This report identifies all pending processes in the payroll background queue for the specified date range.
Error Report	This report identifies all error messages for the payroll background process. For example, a QuickPay has been submitted for Anytime Pay but no results are generated for the employee. Use this report to check if the payroll background process has hit an error that stopped the submission.
Log File	Use this option to enable detailed logging information for a process submitted using the payroll background process.

Note: Use the predefined PAY DAEMON GROUP payroll process configuration group for processes submitted using the payroll background process.

Expedited Processing

Overview of Expedited Processing

Streamline the payroll processing of time card employees through expedited payroll runs. You can make immediate payments for absences, late time cards, or time card errors that an employee submits late on a time card.

You can process expedited runs only for absence and time entries that are retroactively modified on a time card and marked for expedited processing. Time card of employees that aren't marked for expedited processing are paid in the next scheduled regular payroll cycle.

When you define time and absence category elements, the application creates these value definitions for expedited processing.

- **Expedite**: Determines if this time card or absence entry corresponding to prior pay period adjustment needs to be included for expedited processing.
- **Override Payment Method**: Overrides the payment method on the Prepayments and QuickPay Prepayments process to Check. You can select this value only for time cards that you have marked for expedited processing.
- **Override Check Printer**: Tracks the check printer for the expedited time cards that are paid through check. The application ignores the Override Check Printer value if the employee isn't paid by check.

Related Topics

- How Expedited Processing Works
- Expedited Payroll Flow

Expedited Processing Rules

Expedited processing includes prior period adjustments to time, absence, and mandatory elements like taxes and percentage-based deductions. By default, the expedited run includes all the element entries for those employees who have an expedited time card.

Use Expedited Processing Rules option to exclude certain elements such as salary or flat amount based deductions from expedited payroll run. To review and create new payroll elements, use the **Elements** task in **My Client Groups**.

Expedited Processing Rule Option	Use To
Based on the element entry value	Initiate expedited processing depending on other parameters on the time card. This option applies only to time card and absence elements having the three input values and value definitions for expedited processing and is set automatically during element creation. The application processes elements with this rule based on the element entry value for 'Expedite'.

Expedited Processing Rule Option	Use To
Do not include in expedited payroll runs	Exclude elements like salary and flat amount-based deductions that are processed only once per pay period from expedited payroll runs. Set this option to include these elements only in the nonexpedited payroll run.
Include in both expedited and nonexpedited payroll runs	Include elements like taxes and percentage-based deductions in the expedited payroll runs. If you leave the Expedite Processing Rule blank, this option acts as the default behavior.

Related Topics

- How Expedited Processing Works
- Expedited Payroll Flow

Add Override Check Printer in XML File

Use the Override Check Printer attribute to track the check/cheque printer for the expedited time cards that are paid through check/cheque. The application ignores the Override Check Printer value if the employee isn't paid by check/cheque.

You can add the Override Check Printer in the XML file that the Generate Check Payments process generates.The bursting file references this Override Check Printer setting for printing the checks/cheques.

Before You Begin

Configure the list of printers in the HCM Common Lookup `ORA_EXPEDITE_CHECK_PRINTER` to find the list of values for Override Check Printer.

Add Override Check Printer

Perform these steps to add the override check printer attribute in the XML file.

1. In the **Setup and Maintenance** work area, go to the **Extensible Flexfields for Payroll** task.
2. On the Extensible Flexfields for Payroll page, click **Deploy Flexfield**.
3. In the Confirmation dialog box, click **OK**.
4. Click **Done**.
5. In the **Setup and Maintenance** work area, go to the **Manage Enterprise HCM Information** task in the **Workforce Structures** functional area.
6. On the Enterprise page, click **Edit** and select **Correct**.
7. In the Global Payroll Element Information to Archive section, click **Add**.
8. For each element entered on the time card, enter these values and click **Submit**.

Field	Value
Legislative Data Group	Appropriate LDG
Element	Any retro result element

Field	Value
Input Value 1	Override Check Printer

Related Topics

- How Expedited Processing Works
- Expedited Payroll Flow

6 Payroll Definition Details

Payroll Definitions

Overview of Payroll Definitions

When you create or modify payroll definitions, the application generates a calendar of payroll periods based on your selections. The choices you make for these values determine the resulting schedule of payroll periods:

Effective Start Date

The effective start date is the first date that the payroll definition is available for employee data. The start date must be on or before the earliest date of any historical data that you want to load. For example, for a payroll starting on 01-JAN-2013 with five years of historical payroll data to load, you set the start date of the payroll definition to 01-JAN-2008.

The effective start date doesn't affect the generated calendar of payroll periods. The start date for the first payroll period is based on the first period end date.

First Period End Date

The first period end date is the end date of the first payroll period that the application generates for a payroll definition. The first period end date is typically based on the date of implementation, tax year, benefits enrollments, or a particular payment cycle. For example, if your weekly payroll work week is Saturday through Friday, and your first payment date is on 06-JAN-2012, you could use 30-DEC-2011 as your first period end date.

Ledger

You can select a primary ledger that will be used for payroll costing. The ledger determines the accounting information, such as, the chart of accounts and the accounting calendar.

Suspense and Default Accounts

You can associate accounts to the payroll definition that will be used by the payroll costing process for suspense and default accounting purposes.

Number of Years

The number of years you enter represents how many years of time periods to generate starting from the beginning of the first payroll period, which is determined by the first period end date. This table shows an example for a semimonthly payroll definition.

Effective Start Date	First Period End Date	Number of Years	Generated Time Periods
01-JAN-2014	15-JUN-2014	5	01-JUN-2014 to 31-MAY-2018

Once you save a payroll definition, you can later only increase but not reduce its number of years because a calendar of time periods for the payroll was already generated.

Note: The application generates the calendar of payroll periods in increments of ten or fewer years. For example, if you want a 12-year calendar of payroll periods, you first enter 10 years and submit your changes. Then you set the payroll definition number of years to 12.

Offsets

Depending on the payroll period type, you can elect for your payroll cycle events to occur on specific dates, or to have the application calculate dates based on offsets from period start or end dates.

This table describes the predefined payroll cycle events that you can offset.

Date	Meaning
Cutoff Date	Final date that payroll information is entered for the payroll period. This date is for information purposes only. Your departments, such as HR, may need this payroll deadline to submit information that affects the payroll run
Payslip Availability Date	Date on which payees can view payslips.
Payroll Run Date	Date used by payroll calculation processes to retrieve effective values such as employee details. The process date, if provided when submitting a payroll process, overrides this value. This date is predefined for your country or territory and is typically based on either date earned or date paid that payroll calculation uses as the process date.
Date Earned	Date on which the application processes element entries for the payroll run. The date earned must be within the effective dates of the payroll period.
Date Paid	Date the employee is marked as paid. For check/cheque payments, this is the date that the check/cheque is valid for cash or deposit. For electronic funds transfer (EFT) payments, it's the transfer date.
Planned Submission Date	Date to inform the payroll administrator or payroll manager on the planned date to submit the payroll run for each payroll period.

Dynamic Offsets

When you create a payroll definition, you can use dynamic offsets for payroll cycle events. All of the predefined payroll time periods you can use support dynamically generated dates for offsets. Use dynamic offsets to offset each payroll cycle event by a specified number of days before or after the start or end date.

Fixed-Date Offsets

The predefined Monthly (Calendar) payroll time period supports both dynamic offsets and fixed-date offsets. Use fixed date to adjust the exact date of each of the payroll cycle events for the first payroll period. Any adjustments that you

make are reflected in the payroll calendar for subsequent payroll time periods. For example, if you set the cutoff date as the 25th of the month, then all payroll periods in the calendar will have those offsets.

Specific Date Adjustments

Once you generate the payroll time periods, you can further adjust any specific calendar dates, as needed. For example, if you know of a particular bank holiday that falls on a payment date, you might want to adjust the dates manually on the payroll calendar's time period. Make these adjustments when you create a payroll definition or any time after then, as long as the time period is in the future. Adjust the dates of an existing time definition on the Time Periods tab on the Manage Payroll Definitions page.

Related Topics

- Periodicity Conversion
- Statutory and Earning Periods
- Create Payroll Definitions

Payroll Definitions

Payroll definitions contain calendar and offset information used to determine when you calculate and cost payments. Payroll period types, such as weekly or monthly, determine the interval at which you pay employees.

Use the Payroll Definitions task to specify payment frequency, processing schedule, and other parameters for a particular payroll.

Create at least one payroll definition for each payroll period type you use to pay employees. For example, to pay employees semimonthly, create a payroll definition using the semimonthly payroll period type, ensuring that tax calculations and other calculations produce correct results for those employees.

Create Payroll Definitions

When you create a payroll definition, the application generates the complete payroll schedule based on the payroll period type, the offsets or calendar adjustments, and the number of years that you specify. Each payroll in the schedule is assigned a unique name. Assign employees to payroll definition on the Manage Payroll Relationships page. You can configure the payroll calendar by increments of ten or fewer years. Create a payroll definition to replace one that expired or end-dated.

Each payroll must belong to a consolidation group, which the application requires for processing purposes and a legislative data group so make sure these exist before creating your payroll definition.

Modify Payroll Definitions

When you modify a payroll definition, the application adjusts the payroll schedule based on the values you have modified. Modify an existing payroll definition to increase the number of years and generate more payroll time periods that configure the payroll calendar.

> **Note:** Payroll names in the payroll schedule are unique. You can edit the generated payroll names, but you must ensure they're unique within the payroll definition.

Related Topics

- Overview of Payroll Definitions
- Create Payroll Definitions

Create Payroll Definitions

This shows you how to create two payroll definitions for different payment frequencies that are associated with one consolidation group and one legislative data group.

Watch video

The InFusion Company requires payroll definitions for two sets of employees. A set of permanent salaried employees paid on a semimonthly basis and a set of temporary employees paid on a monthly basis using time card data. Costing is managed monthly and uses results from all payroll runs by using the consolidation group name as an input parameter in the costing run. You can see in this example how to create two payroll definitions with different payment periods with the same consolidation group. Both definitions are effective starting on 1/1/11 and generate payroll time periods covering five years.

Prerequisites

1. Ensure that the legislative data group for your payrolls exists, such as InFusion LDG.
2. Ensure that organization payment methods exist for your payrolls, such as InFusion Employee Check/cheque and InFusion Employee EFT.
3. Create a consolidation group named InFusion Employee Group assigned to the InFusion LDG.

Create Payroll Definitions

Create two payroll definitions:

- One to pay permanent employees on a semimonthly basis. This payroll definition includes dynamically generated offset dates.
- One to pay temporary employees using time card data on a monthly calendar basis.

Perform the following steps twice, first using the semimonthly values and then using the monthly values.

1. **Payroll Definitions task**.
2. In the Search Results section of the Payroll Definitions page, click the **Create** icon.
3. Select the InFusion LDG legislative data group from the list.
4. Enter 1/1/11 as the effective start date you want the payroll to be available for use, and then click **Continue**. In this example, the company hires all employees after the effective start date of this payroll definition, so there's no issue with loading historical employee data.
5. In the Basic Details section, complete the fields as shown in this table, and then click **Next**.

Field	Semimonthly Value	Monthly Value
Name	InFusion Employee Semimonthly	InFusion Employee Monthly

Field	Semimonthly Value	Monthly Value
Reporting Name	InFusion Semimonthly	InFusion Monthly
Consolidation Group	InFusion Employee Group	InFusion Employee Group
Period Type	Semimonthly	Monthly (Calendar)
First Period End Date	6/15/12	6/30/12
Default Payment Method	InFusion Employee Check/cheque	InFusion Employee Check/cheque
Valid Payment Method	InFusion Employee EFT	InFusion Employee EFT

6. On the Payroll Offsets page, in the **Number of Years** field, enter **5**.

> **Note:** The application generates the calendar of payroll periods in increments of 10 or fewer years. For example, if you want a 12-year calendar of payroll periods, you first enter 10 years and submit your changes. Then you edit the payroll definition, setting the number of years to 12.

7. For the semimonthly payroll, use dynamic variables to define offsets as shown in this table, and then click **Next**.

Field	Falls Value	Day Type Value	Base Date Value
Cutoff Date	5	Before	Period End Date
Planned Submission Date	4	Before	Period End Date
Payroll Run Date	0	Before	Period End Date
Payslip Availability Date	0	Before	Period End Date
Date Earned	0	Before	Period End Date
Date Paid	0	Before	Period End Date

8. For the monthly payroll, use fixed dates to define offsets as shown in this table, and then click **Next**.

Field	Value
Fixed Date	Yes
Cutoff Date	6/25/12
Date Earned	6/28/12
Payroll Run Date	6/28/12
Date Paid	6/28/12
Payslip Availability Date	6/28/12
Planned Submission Date	6/26/12

9. On the Payroll Calendar page, adjust payroll days to account for a bank holiday, as shown in this table.

Column	Semimonthly Value	Monthly Value
Payroll Run Date	Old Value: 11/28/13 New Value: 11/27/13	Old Value: 5/27/13 New Value: 5/28/13

10. Click **Next**.
11. Review the details of the payroll definition, and then click **Submit**.

Related Topics

- Payroll Definitions
- Overview of Payroll Definitions
- How Payment Methods and Payroll Definitions Work Together
- Payroll Setup for Costing Accounts
- Overview of Ledger and Subledgers

Time Card Required Option

If a worker's pay calculations depend on the worker submitting time cards, you must indicate that a time card is required at the appropriate employment level. Select the Time Card Required checkbox for each assignment level that the requirement applies.

For example, don't select the Time Card Required checkbox for these scenarios:

- A salaried employee completes project time cards for billing purposes, but isn't paid based upon those time entries.
- An hourly employee is normally paid based on a predefined work schedule and only submits a time card for overtime or when absent.

Select the Time Card Required Option

Your role determines where typically you select the Time Card Required checkbox:

- HR specialists can select the checkbox on the **Employment Information** page of the new hire flow.
- Payroll Managers and Payroll Administrators can select the **Payroll Relationship** quick action in the **My Client Groups** tab. The Payment Details section of the Person Details page includes the Time Card Required checkbox on the Assignment sections.

This table shows which hours the payroll process uses for elements with a calculation rule of hours multiplied by rate.

Time Card Required	Hours Used in Calculations
Yes	Time card entries
No	Work schedule, unless you enter hours as element entries

Related Topics

- Payroll Elements for Time Card Attributes
- Create Time Card Elements for Time Entries

FAQs for Payroll Definition

Why doesn't my payroll definition appear in search results?

Because you don't have sufficient security access to the payroll definition. Either the payroll security profile associated with your duty role privileges doesn't include the appropriate payroll definition, or you don't have the View All security profile.

You must have a privilege that enables you to manage payroll definition data, and your security profile must include the payroll you want to query. Contact your help desk for assistance.

Pay Frequency

How Pay Frequency Components Work Together

Pay frequency components provide the flexibility to implement complex time-related objects used in payroll definitions, payroll processes, and payroll tasks that use start and end dates.

Pay frequency components work together to provide payroll functionality for your organization. Each component requires its own setup and implementation.

Consolidation Groups

Consolidation groups are used process the results from more than one payroll run in a single action or process the results for one payroll in separate actions. With consolidation groups, produce one set of results per payment method for several payrolls, one set of reports, and one set of costing results. For example, you may submit a regular payroll run and a supplementary payroll run for the same payroll period. If the regular run and supplementary run both belong to the same consolidation group, use a single consolidation group to process all the results for the post-run processing. Optionally, you can enter a different consolidation group for the supplementary payroll run and use it to process the post-run results for the supplementary payroll separately from the regular payroll.

Payroll Definitions

Payroll definitions are essential to your payroll implementation because they indicate the payment frequency and processing schedule. Payroll definitions associate employees with the payroll run through payroll relationships.

Time Definitions

Time definitions can be static periods of unusual length based on a given static date, or they can create dates based on dynamic variables. Specify dynamic variables for a time span, a retrieval date, or a more complex definition type for you to use with a user-defined date. The application uses time definitions in many areas, including payroll periods, payroll employment management, balance dimensions, retroactive and proration events, element start and end dates, and overtime periods.

Run Types

Run types control the elements and payment types you process in a payroll run. Two predefined run types, Regular and Supplemental, group the other run types and determine their processing sequence. The predefined Regular and Supplemental run types include the two component run types described in this table.

Run Type Component	Description
Process Separately	Generates a separate payroll calculation for each element entry marked to process separately. After processing separate processes: • Includes element run results with normal payroll run results in a single payment. • Excludes element run results in regular tax calculation on the normal run, for example, to use supplemental tax rates.

Run Type Component	Description
Separate Payment	Creates a separate payment for each element entry marked to pay separately.

For each of the component run types, you can specify payment methods that override the default payment methods for the payroll definition. You can also select the element classifications processed by runs of this type, and exclude specific elements from these classifications.

Related Topics

- Payroll Definitions
- Examples of Using Consolidation Groups

Statutory and Earning Periods

When you create a payroll definition, a payroll earnings calendar is generated based on the first period end date.

The calendar assigns each payroll period a period name that includes the period number. In some countries, the statutory tax year doesn't coincide with the dates generated for the earnings calendar. These countries also use a statutory calendar with statutory period numbers. The statutory calendar ensures that the payroll run uses the correct period for taxation purposes.

Statutory frequencies are defined in months and weeks, and map to the payroll definition frequencies. For example, a biweekly calendar is based on a weekly statutory calendar. A quarterly payroll calendar is based on a monthly statutory calendar. Typically, countries that support semimonthly payroll periods don't use statutory periods.

When you submit a payroll calculation, such as a QuickPay process, you select a payroll period. The calculation uses the process date for the selected payroll period to identify the statutory period. The process date is the payroll run date on the payroll definition.

If your country uses a statutory calendar, you can view period numbers, start, and end dates on the Person Process Results page and statement of earnings.

Related Topics

- How Pay Frequency Components Work Together
- Payroll Definitions

FAQs for Pay Frequency

When would I close a payroll period?

Closing a payroll period can prevent changes to recurring entries. Payroll periods aren't like General Ledger periods. Closing payroll periods isn't necessary.

Why can't I find my organization payment method when creating other payroll objects?

When you update an object's organization payment method, you must make the effective start date of the organization payment method on or before the effective date of the change.

For example, to create a payroll definition effective on 4/1/2012 with a default organization payment method, the organization payment method must have an effective start date on or before 4/1/2012. You can only select an organization payment method that has an effective start date on or before the date you're creating or updating the object.

Periodicity

Periodicity Conversion

Rate conversion formulas convert amounts to different periodicities for payroll calculations. The following calculations use rate conversion formulas:

- Proration
- Hours multiplied by rates calculation of an element run result
- Rates based on rate definitions

Predefined Periods

This table lists the predefined periods that you can use to set periodicity.

If these values don't meet your requirements, you can copy a predefined rate conversion formula and edit its periodicity values.

Periodicity	Valid for Payroll Periods	Number of Periods per Year
Annually	Yes	1
Bimonthly	Yes	6
Biweekly	Yes	26
Calendar Monthly	Yes	12
Daily	No	365
Hourly	No	2920 (365 days multiplied by 8 hours)
Lunar Month	Yes	13

Periodicity	Valid for Payroll Periods	Number of Periods per Year
Periodically	No	Payroll frequency determines the number of periods to use in the rate conversion.
Quarterly	Yes	4
Semiannually	Yes	2
Semimonthly	Yes	24
Workday	No	260
Weekly	Yes	52
Work Hour	No	2080 (260 days multiplied by 8 hours)

Defining Periodicity

This table lists the different ways in which you can define periodicity:

Object	Task	Description
Elements	Elements	The Periodicity input value specifies the frequency of the element value. For example, salary element entries that hold annual salary values have an annual periodicity.
Payrolls	Payroll Definitions	**Period Type** specifies the number of payroll periods. For example, the Monthly Lunar period type includes 13 payroll periods.
Rates	Rate Definitions	Rate definition can specify the following periodicities: • Return periodicity of the rate • Periodicity of each rate contributor • Periodicity of the calculated sum of the rate contributors

Rate Conversion Formulas

Rate conversion formulas change the periodicity of an amount.

For example, the Standard Rate Annualized conversion formula can convert an annual salary amount to a weekly amount.

This table lists the predefined rate conversion formulas to change the periodicity of an amount.

Rate Conversion Rule	Description	Example
Standard Rate Annualized	Calculates the annual rate using the input periodicity and converts the amount to an output periodicity and rate. This rule uses default values, such as 2080 hours or 260 working days, to calculate the annual rate. You select the day or hourly basis during element definition.	To convert a weekly amount to a semimonthly periodicity, the formula: 1. Multiplies the weekly amount by 52. 2. Divides the result by 24.
Standard Rate Daily	Calculates the daily rate using the input periodicity and converts the amount to an output periodicity and rate. This rule uses a default value, such as 260 working days a year, to calculate the daily rate.	To convert an annual amount to daily periodicity, the formula: 1. Divides the annual amount by 365. 2. Multiplies the result by the number of days in the payroll period.
Standard Working Hours Rate Annualized	Uses the employee's standard working hours to convert the monetary value and working hours to an annual value before calculating the rate.	The employee works 40 hours a week with a monthly salary of 1000: ((1000*12)/(40.00*52) = 5.77 an hour
Assignment Working Hours Rate Annualized	Uses the employee's working hours to convert the monetary value and working hours to an annual value before calculating the rate.	The employee works 40 hours a week, with 37.5 standard working hours a week, and a monthly salary of 1000: ((1000*12)/(37.50*52) = 6.15 an hour
Periodic Work Schedule Rate Annualized	Uses the employee's work schedule for the payroll period for daily and hourly conversions.	For an employee: • With a monthly salary of 1000 • Assigned a monthly payroll The formula checks the work schedule details for the month. For a daily conversion: 1000 a month/20 days in the month = 50 **Note:** For compensation calculations where the employee isn't assigned a payroll, the rate is calculated using the weekly rate calculation. The amount is converted to an annual figure and divided by the number of days or hours in that week based on the work schedule.

The impact of rate conversion rule is summarized here.:

Periodicity: The conversion rule for periodicity applies to Flat Amount, Hours * Rate, and Days * Rate calculation rules. You can override the periodicity used as the default for the element definition at the element entry level.

Work Units: The Work Units conversion rule applies only to flat amount calculation rules for standard and supplemental earnings elements. The selection of which work units to use in reports and payslips determines the conversion calculation. The application creates the element input values using the default values of the rate conversion formulas.

For example, this table illustrates how the payroll process determines the standard work units for any given pay period:

Work Units Selected	Example
Hours	2080/24 = 86.67
Days	260/24 = 10.83
None	No input values are created

Proration: The element template includes a new question for proration units. Proration rate conversion rules replace the previous proration methods in the element template. You have greater flexibility, for example, to base proration on calendar days when using work units for conversion.

Note: If the conversion rules don't meet your requirements, you can copy and edit the rules using the Fast Formulas task under My Clients Group on your Home page.

Related Topics

- Options to Configure Rate Definitions
- Create Conversion Formulas for Proration
- Configure Periodicity Conversion Rules
- Overview of Using Formulas

Consolidation Groups

Overview of Consolidation Groups

Use consolidation groups to segregate or combine the results of multiple payroll runs for further downstream processing. You can process the results of more than one payroll run in a single action, or you can process the results of one payroll in separate actions.

For example, suppose you submit a regular payroll run and a supplementary payroll run for the same payroll period. If you use the same consolidation group for the regular run and the supplementary run, you can use the combined results of the regular and supplementary runs for post-run processing. Optionally, you can enter a different consolidation

group for the supplementary payroll run and use it to process the post-run results for the supplementary payroll separately from the regular payroll.

Use consolidation groups to segregate and produce one set of results per payment method for several payrolls, one set of reports, and one set of costing groups. These are runs you make in addition to your regular payroll runs.

A consolidation group is used as an input parameter for a payroll run. There are no predefined consolidation groups. Before you can use a consolidation group in a payroll run, you must create the consolidation group and assign it to a payroll definition.

To create a consolidation group:

1. Select the **Consolidation Groups** quick action under Payroll in **My Client Groups** on your Home page.
2. On the Consolidation Groups page, click **Add Row**.
3. Enter a **Name** for the consolidation group. The application assigns the same value for the consolidation group **Code**.
4. Select a **Legislative Data Group**. Adding the Description is optional, but it's useful to provide
5. Click **Save**.

Use this consolidation set code to identify the consolidation group used for a payroll run or when you load the consolidation group using services or the HCM Data Loader.

Once created, you can't change the consolidation set code. However, the consolidation group name is editable. Any changes made to the consolidation group name, doesn't have any impact on the payroll process, because the process is stamped with the consolidation set code, and hence can be identified by the code for future references.

Related Topics

- Examples of Using Consolidation Groups
- Overview of Combining Payroll Flows

Examples of Using Consolidation Groups

Here are some examples of how you can use consolidation groups.

Post-Run Processing

Consolidation groups facilitate separating or segregating payroll run results for supplemental processing. For most payroll post-run processing, you can use the consolidation group as an input parameter. You may want the results of a supplemental payroll run to be kept separate from those of an already submitted regular payroll run. To use a consolidation group to keep supplemental run results separate from the regular payroll runs:

1. Create a consolidation group to process the supplemental payroll run.
2. Initiate the supplemental payroll run, specifying the new consolidation group as an input parameter.

Separate Costing and Payment

You can use multiple consolidation groups to control processing. For example, you want to process and pay a particular set of employees separately within a single payroll to keep separate records of payment and costing.

To process employees separately:

1. Create payroll relationship groups that restrict the employees.

   You can use rules to identify them dynamically or you can specify the employees by their payroll relationship numbers.
2. Create a consolidation group for each payroll relationship group you have created in the previous step.
3. Run the Calculate Payroll process for each payroll relationship group separately. Specify the new consolidation group for each run separately.
4. Use the original consolidation group to run the Calculate Payroll process in one single action and return a consolidated run result for all the employees.

Purposes of Reporting

You can use consolidation groups for reporting purposes. For example, you may want to run the Periodic Payroll Activity Report for a subset of payrolls.

To process the report for a subset of payrolls:

1. Create a consolidation group to specify the payrolls for which you want to run the report.
2. Run the Periodic Payroll Activity Report, specifying the new consolidation group.

Related Topics

- Consolidation Groups for the US

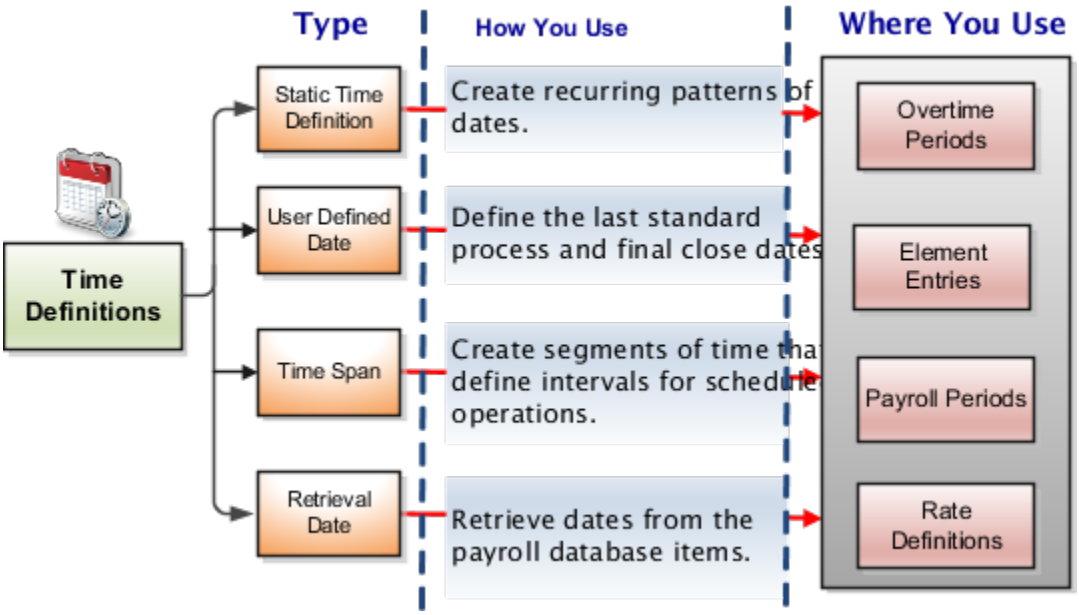
Time Definitions

Overview of Time Definitions

A time definition is either a date or a span of time. Time definitions can be static periods of unusual length based on a given static date, or they can generate dates based on dynamic variables.

You can define static definitions using multiple periods, additional adjustments, or both.

This image shows the different types of time definitions and how and where you can use them.



You can use time definitions in many areas, including payroll periods, payroll employment management, balances, retroactive and proration events, earnings start date, and overtime periods.

These sections describe the type of time definitions you can create.

Static Time Definition

Static time definitions create recurring patterns of dates, such as overtime periods. For example, a company's overtime period is a standard five day work week. You can create a static time definition with a weekly frequency that generates time periods for 3 years. Formulas can use these date patterns to allocate earnings within a payroll period.

User-Defined Date Time Definition

Use user-defined date time definitions to define the last standard process and final close dates of the element entries for an employee. The last standard process date is the last date on which the element is considered for normal processing in the payroll run. The final close date is the date from which the element is no longer considered for processing and thus is no longer date-effective.

For example, Vision Corp provides housing allowance to its employees and wants the allowance to end 30 days after the employee is terminated. You define a user-defined date time definition based on the last standard earnings date, which is the termination date plus 30 days.

Time Span Time Definitions

Use time span time definitions to create segments of time that define intervals for scheduled operations, such as payroll frequency. You can use these time definitions within other time definitions.

A company wants to make employee payments on the last day of the month and third-party payments five days later. The company creates a time definition of type time span and uses it when defining the payment method for the payee.

Retrieval Date Time Definitions

Retrieval date time definitions are based on balance fetch operations. Anything that exists in the database of Date format and owned by the payroll application can be used as a trigger.

Let's assume that the rate contributor for the severance rate definition uses a balance as of termination date. You can define a retrieval date time definition based on a database item that retrieves the termination date. You can then use this time definition as the reference date for the balance value in the rate contributor.

Related Topics

- Use Time Definitions for Severance Pay
- How Pay Frequency Components Work Together
- Rate Contributors for Derived Rates
- Example of Loading Time Definitions

Use Time Definitions for Severance Pay

This example illustrates how you can set up a user-defined time definition and as a payroll administrator, how you can associate it with elements so that you can extend the latest entry date for severance payments to employees.

Scenario

The InFusion Corporation makes severance payments, including regular salary, and car allowance. For most terminated employees, these payments should end on the termination date. However, you must be able to make payments for employees who receive severance pay.

Element Duration Dates

When you create an element, you select the latest entry date. The options are predefined time definitions: last standard earnings date, last standard process date, or final close date. Typically, standard earnings elements use the last standard earnings date. However, this option doesn't support severance payments because you can't have a last standard earnings date that's beyond the termination date.

To support severance payments, create a user-defined time definition based on last standard earnings date and select it as the latest entry date for payments after termination. On the payroll relationship record of terminated employees, the value of the user-defined time definition is the termination date by default, but payroll administrators can edit it to make payments for certain employees.

Resulting Setup

To implement a user-defined time definition for this scenario, your implementor must complete the following setup during implementation:

1. Use the **Time Definitions** task under **Payroll** in **My Client Groups** on your Home page, to create a time definition.

   This table lists field names and their respective values for creating a user-defined time definition.

Field	Value
Type	User-defined date

Field	Value
Name	Last Earnings or Severance Date
Short Name	LastEarnSevDate
User-Defined Date	Last Standard Earnings Date
User-Defined Date Usages	Assigned payroll end date Element entry end date Payroll assignment end date Payroll relationship end date Payroll term end date

This creates a time definition based on the last standard earnings date.

2. Use the Elements task to create the Regular Salary, Car Allowance, and Alimony elements.
3. In the Durations area, select **Last Earnings or Severance Date** as the latest entry date for the element.

To extend the payment date for a terminated employee, complete these steps.

1. Use the Payroll Relationships task, and search and select the terminated employee.
2. In the Payroll Details area, select the assignment.
3. In the Element Duration Dates area, in the row for the Last Earnings or Severance Date time definition, change the End Date value to the desired final entry date for payments.

   For example, add 6 months of severance pay for an employee who was terminated effective 20 November 2012. Change the End Date value of the Last Earnings or Severance Date time definition to 21 May 2013.

   The employee's element entries for the Regular Salary, Car Allowance, and Alimony elements end on this date.

Related Topics

Run Types

Overview of Run Types

Run types control elements and payment types you process in a payroll run. You may specify default payment methods to override the default payment methods on the payroll definition.

Two predefined run types, Regular and Supplemental, group the other run types and determine their processing sequence.

- The Regular run type includes these run types:
  - Regular Normal
  - Process Separately
  - Separate Payment
- The supplemental run type includes:
  - Supplemental Normal
  - Process Separately
  - Separate Payment

A Separate Payment run type creates a separate payment for each element entry marked to pay separately.

A Process Separately run type generates a separate payroll calculation for each element entry marked to process separately.

When the separate processes are completed, the element run results are included with the normal payroll run results in a single payment. You use a separate process to exclude element run results in regular tax calculation on the normal run, for example, to use supplemental tax rates. It therefore results in a lower rate for the normal run as well as for the supplemental earnings.

The run types are predefined and you will rarely create additional run types.

Related Topics

- How Pay Frequency Components Work Together

Object Groups

Overview of Object Groups

Object groups are sets of elements or persons. Use object groups to define subsets of objects for processing or reporting.

Use the **Object Group** task to define these object group types.

- Element
- Payroll Relationship
- Work Relationship
- Process Information Group

> **Note:** If you're loading an object group with a large number of inclusions or exclusions, you're recommended to use the individual Object Group Amend file to achieve that. This supports the data to be multithreaded and minimizes the processing time.

Element Groups

Use Element groups to limit the elements processed for payroll, reporting, cost distribution, and for global transfer purposes.

This table explains the usages for an element group.

Element Group	What It Does
Run group	Specifies the elements to be processed in a payroll run.
Distribution group	Defines the elements on which the cost results are distributed
Configuration group	Restricts the elements that can be updated on the Element Entries page.

All element groups are static. You can select element classification to include in or exclude from the group. You can also select specific elements to include in or exclude from the group.

Payroll Relationship Groups

Use Payroll relationship groups to limit the persons processed for payroll, data entry, and reporting.

Defining a payroll relationship group is a two-step process.

1. Specify a payroll definition. Every group is limited to the payroll relationships assigned to a single payroll that you select.
2. Optionally, define the group to be either static or dynamic.
    a. To define a static group, select the payroll relationships and assignments to include in or exclude from the group.
    b. To define a dynamic group, use a fast formula of type Payroll Relationship Group. The formula contains the criteria to establish the payroll relationships and assignments included in the group. Then, you can individually select additional payroll relationships and assignments to include in or exclude from the group.

Work Relationship Groups

You can use Work relationship groups to limit the persons processed for Human resources and reporting. For example, you can use work relationship groups in your user-defined extracts. You can define the group to be either static or dynamic.

- In a static group, select the work relationships and assignments to include in or exclude from the group.
- In a dynamic group,
    - Use a fast formula of type Work Relationship Group. This formula contains the criteria to establish the work relationships and assignments included in the group.
    - Individually select additional work relationships and assignments to include in or exclude from the group.

Process Information Groups

You use a bank reprocessing group to load the bank corrections file returned by your bank. Each payroll period, you transfer payroll payments directly into the bank accounts designated by the employee. If any of the bank account records are invalid, your bank returns a file containing these details.

For example, an employee can have an incorrect account number which results in the payment being rejected by the bank. Alternatively, the payment could have been transferred to an invalid branch number due to the closure of a bank or merger of a bank branch with another.

Related Topics

- Overview of Loading Object Groups
- Example of Loading Object Groups
- Set Up Distributed Costing for an Element

Process Information Group Security

Use the View Process Information Group Quick Action to create a bank correction group. You use a bank correction group to load the bank corrections file returned by your bank.

You can use either of these navigation paths to access the View Process Information Groups Quick Action from your Home page and create a Bank Correction group:

- My Client Groups > Show More > View Process Information Groups under Payroll
- My Client Groups > Payroll > View Process Information Groups

The View Process Information Groups Quick Action task provides access only to the Bank Correction groups. When you use this task to create a Bank Correction group, you first search for a person and then create the group in the context of the assignment of the person.

> **Note:** You must use the PAY_RESPONSIVE_PERSON_SEARCH_CLASSIC_ENABLED profile option to enable Responsive Person Search on this Quick Action.

Before you use this Quick Action task, secure the View Process Information Groups Quick Action task and the predefined roles that inherit it, using the following aggregate role privileges:

- Aggregate Role: Manage Process Information Group

  (ORA_PAY_MANAGE_PROCESS_INFORMATION_GROUP)
- Function Privilege: Manage Process Information Group

  PAY_MANAGE_PROCESS_INFORMATION_GROUP
- Data Privilege: Manage Process Information Group Data

  PAY_MANAGE_PROCESS_INFORMATION_GROUP_DATA

Update the function and data security to use this aggregate privilege. The aggregate privilege provides restriction for users to access person data based on their data security profiles.

If you're using the predefined roles of Payroll Manager and Payroll Administrator, no action is necessary. However, if you're using a user-defined version of these roles, you must ensure that the defined job roles have this aggregate privilege:

- Manage Process Information Group

  (ORA_PAY_MANAGE_PROCESS_INFORMATION_GROUP)

Note: You can also use the Object Groups task to create a Process Information Group object group. However you don't need this aggregate role privileges to use this task because you create the object group for an LDG and not in the context of a person.

Related Topics

- Overview of Object Groups

Create an Element Object Group

In this example, you create an element object group.

Watch video

1. On the Object Groups page in the Search Results section, click **Create**.
2. In the Create Object Groups dialog box, **Name** field, enter **Element Group**.
3. In the Legislative Data Group field, select **US Legislative Data Group**.
4. In the **Type** field, select **Element Group**.
5. Click **Continue**.
6. On the Create Object Group page, in the Basic Data section for the Start Date field, enter **1/1/2016**.
7. For the **End Date** field, enter **12/31/2018**.
8. Select the object group parameter.
   - In the Object Group Parameters section, in the Value column, click **Search**.
   - In the **Object Group Parameters** field, enter **%**.
   - Click **Search**.

     Note: For element groups, the usage type can be a run group, distribution group, or configuration group. This element group will be used to specify the elements to be entered in batch loader.

   - Click **Distribution Group**.

     Note: This element group will include all elements in the Standard Earnings classification, with the exception of Shift. Also, you must add federal taxes to be included.
9. Click **Next**.

7 Payroll Balances

Balance Definitions

Overview of Payroll Balance Definitions

A balance is a positive or negative accumulation of payroll results for an element or group of elements, over a specified period of time.

The balance can be monetary values, time element, such as hours or days worked, or any other numeric value. Every time you run a payroll process, such as, Calculate Payroll or Calculate Gross Earnings, the application updates these values.

Each defined balance holds a value for an individual at one of the two levels of the employment model.

- Payroll relationship
- Assignment

Most of the balances you require are predefined. Depending on your country extension, additional balances are automatically created when you create elements. You can edit the definition of these generated balances, or create additional balances.

For example, the Employer Contributions amount on the Statement of Earnings is fed by elements with a classification of Employer Taxes or Employer Liabilities. Similarly, an employee's Taxable Benefits is fed by elements with a classification of Taxable Benefits.

Balance Name

It's the actual name of the balance, such as, Regular Earnings. You can't have the same name for more than one balance. However, more than one balance can have the same reporting name.

A reporting name is the balance name that reports and payslips display. When multiple balances are created due to differences in setup but need to be reported the same way, you can assign the same reporting name for all of the balances.

Balance Categories

Each balance definition has a predefined balance category for quicker processing. Balance categories are a way of grouping balances so that you can set group attributes. Balance categories are predefined, and you can't create your own balance categories or modify the balance categories. When you create a balance during the implementation phase, associate it to one of the predefined categories.

You can however, create your own localized version of the balance categories you want to use. In the Setup and Maintenance area, use the **Configure Payroll Legislations** task to view the predefined balance categories. Edit the balance category name to include a display name appropriate for your legislation.

Units of Measure

When you create a balance, the predefined units of measure available for selection are Day, Hour (with different combinations of minutes and seconds), Integer, Money, and Number. Match the unit of measure of the balance with the unit of measure of the element input values that feed it.

Balance Contexts

Contexts restrict the run results included in a balance value. Context values are specified as part of the balance dimensions. For example, the REGULAR_ASG_TU_YTD balance is a Regular Earnings balance type with these context values associated in the balance dimension:

- Assignment
- Tax Reporting Unit

All contexts are predefined.

Generated Balances and Database Items

The country extension you select on the Features by Country or Territory page, determines what payroll-related components the element template generates when you create an element. The element template also creates a database item for each balance dimension. You can use the database items in your formulas or HCM extracts to use the value of a balance.

This table explains the components the element template creates, based on your selection of the country extension.

Country Extension	Components Generated by the Element Template
Payroll	When you create an element, the element template creates the element and associated objects, such as input values, formulas, and balances.
Payroll Interface	When you create regular and supplemental earnings elements, the element template creates the element and associated objects, such as input values, formulas, and balances. For all other elements, the template generates no other associated objects.
Human Resources or None	The element template doesn't generate associated objects like formulas, or balances.

Base Balances

You can specify a base balance when there is a dependent relationship between balances for processing and reporting. For example, Taxable Wages could be the base balance for Tax Withheld.

Remuneration

Only one balance in each legislation is predefined as the remuneration balance. This balance generates payments for employees and is predefined for the legislation. For example, a legislation might use Net Pay as the remuneration balance. This calculated balance is the sum of standard earnings and supplemental earnings minus all the deductions calculated for the run.

Related Topics

- Balance Dimensions

Balance Dimensions

Balance dimensions identify the specific value of a balance at a particular point in time. Balance dimensions are predefined and typically combine these components:

- Time span, such as run, period-to-date, or fiscal year-to-date
- Employment relationship level, either assignment or payroll relationship
- Context, required for some balances only, such as tax reporting unit, state, or payroll

For example, if you select the Core Assignment Tax Unit Year-to-Date dimension for the Gross Earnings balance, you create the defined balance GROSS_EARNINGS_ASG_TU_YTD. This defined balance accumulates gross earnings for an assignment in a specific tax reporting unit from the beginning of the calendar year-to-date.

Optionally, they can also include other context values such as tax reporting unit, tax jurisdiction, and deduction reference number.

Each payroll balance can have multiple dimensions.

Balance Feeds

The value assigned to a balance during processing is determined by the feeds defined for the balance. You can feed payroll balances by any of these options.

Balance Feeds by Element

Balance feeds by element indicates the following:

- When you create an element, the element template creates this balance and feed automatically.
- One or more element input values add to or subtract from a balance.
- For each balance, all the input values must have the same unit of measure.
- If a balance is fed by only one element, it's called a primary balance.

Balance Feeds by Classification

Balance feeds by classification indicates the following:

- The primary output value of every element belonging to a specific classification contributes to the balance value.
- The balance feeds can be from the primary element classifications, secondary element classifications, or the subclassifications.
- If you add a primary classification as a balance feed, you can't add its children from the secondary classification or subclassifications.

For example, if you use the Supplemental Earnings primary classification as a balance feed, you can't use both the secondary classifications and subclassifications of Supplemental Earnings as feeds to the same balance.

- The unit of measure of this input value must match the unit of measure of the balance.

Balance Feeds for Initial Balance Loading

You can select elements in the Balance Initialization classification to feed a balance for initialization purposes only. Select one element for each level of the employment hierarchy associated with a dimension that you want to initialize.

The feeds can add to (+) or subtract from (-) a balance. The sign of a feed is independent of the sign of the result that feeds the balance. For example, deductions feed Net Pay with a negative feed. However, if an excess deduction of $100 is returned, the deduction result itself is -$100 and will effectively increase Net Pay by $100.

Related Topics

Primary Balances

When you create an element, the element template creates a balance with a primary feed from the element to accumulate its run results. This is the primary balance for that element.

There are rules that govern primary balances and the input values that feed the balances.

For example, let's assume that Vision Corp has the following defined elements and balances that these elements feed into:

- A Bonus element that generates the Earnings Calculated input value for the Bonus balance. The primary feed for this balance is the Bonus element.
- A Festival Bonus element that's the primary feed for the Festival Bonus balance.
- Both the Bonus element and the Festival Bonus element also feed the Discretionary Earnings balance. These are non-primary feeds.

Normally, a primary balance is only fed by a single input value as it's exclusive to an element. But there are exceptions to this rule. In the above example, let's say a few years later, Vision Corp has a revised compensation policy and defines the additional Bonus_v2 element to include additional input values for sales incentives. The Bonus_v2 element should feed into the same Bonus balance.

The Bonus balance has these two feeds now:

- From the Bonus element, which is the primary feed.
- From the Bonus_v2 element to take care of sales incentives. This is a non-primary feed.

This table explains the rules for the primary balances and the input values that feed the generated balances, for this example.

Rule	In this example
A primary balance can have only one primary balance feed.	The primary balance Bonus can only have a primary feed from the Bonus element, and therefore can't have a primary feed from the Bonus_v2 element.

Rule	In this example
A primary balance can have a non-primary feed from a different input value, as long as that input value doesn't feed any other primary balance.	Since Bonus_v2 element is assigned as a non-primary feed to primary balance Bonus, it can't have its own primary balance.
An input value can feed only one primary balance.	Since Bonus and Bonus_v2 elements feed a primary balance, example Bonus balance, it can't feed any other primary balance, say Festival Bonus. However, they can feed a non-primary balance like Discretionary Earnings.

Balances in Net-to-Gross Calculations

When you create an earnings element, you can indicate that it pays a person a guaranteed take-home net pay per payroll period, or a bonus of a specified net amount.

Use either or both of these options to control balance feeds.

Enable Inclusion in Net-to-Gross Calculations

Use the Balance Definitions task to view the dimensions that are enabled for inclusion in net-to-gross calculations. You can also view which of the enabled dimensions are included by default for each new net-to-gross earnings element.

To enable a dimension, or enable and include a dimension within a balance definition for net-to-gross processing, select the Enable or Include check boxes, as required, under the Gross-Up Calculation column in the Balance Dimensions section of the Balance Definition page.

Exclude Balances from a Specific Net-to-Gross Earnings Element

If a balance is enabled but not included, you can still use it in the processing of a specific net-to-gross earnings element. Use Balance Feeds on the Elements Overview page while creating the Gross-to-Net Earnings element and review the balances to which the net pay amount or bonus contributes. Use the Gross Balance Exclusions option to add the balance. You can also use this task to exclude balances that are included by default.

Related Topics

- How Net-to-Gross Earnings are Calculated
- Create a Net-to-Gross Earnings Element

Generate Run Balances

The payroll calculation process generates run results and values for all balances. Creating or updating balance definitions and balance feeds can impact balance calculations and stored balance values for run balance dimensions.

Creating or updating balance definitions and balance feeds can impact balance calculations and stored balance values for run balance dimensions. When stored balance values are no longer accurate, the Run Balance Status column on the

Balance Definitions task displays the status of the balance dimensions as invalid. Reports and processes continue to obtain accurate values from the summed run results, but summing run results can slow performance.

To improve performance and accuracy, recalculate the invalid balance values for saved run balance dimensions by submitting the Generate Run Balances process.

This topic covers:

- Submit the Generate Run Balances process
- Use Generating Run Balances Examples

Submit the Generate Run Balances Process

Submit the Generate Run Balances process before you submit the payroll run or after you create or update these tasks:

- Balance definition using the Balance Definitions task, for example to add balance feeds or new balance dimensions
- Balance feeds to an element using the Elements task

When you submit the process, you specify parameters that control which balances to generate as shown in the following table.

Flow Submission Parameters	Purpose
Balances to Include	Identifies the set of balances to include when submitting the process: • All balances • All invalid balances • Single balance **Note:** If you select a single balance, you must specify both a balance and a dimension name.
Balance Name	Lists balance names marked as run balances when a single balance is selected.
Dimension Name	Lists run dimensions when a single balance is selected. The list is filtered again when the balance name is selected.

Use Generating Run Balances Examples

Here are two different ways you can use generate run balances to improve performance and accuracy in your payroll application.

- Updating a balance feed effective date

  Your enterprise stops the transportation allowance element as of January 1. This ends the balance feeds between the element input value and the related balances, such as gross-to-net. It also sets the status of the balance values for completed payroll runs to invalid. You submit the Generate Run Balance process to recalculate the balance values and set the status to valid.
- Adding a new balance feed

You receive a notification on January 31 that a non-taxable earning became taxable as of January 1. You add a balance feed to the earnings element so that the input value feeds a taxable pay balance. You submit the Generate Run Balances process and recalculate the balance values for the taxable pay balance.

Related Topics

- Payroll Balance Definitions

Automate Generate Run Balances

Enable automatic generation of run balances so that when you make changes to a balance feed it automatically initiates the Generate Run Balances flow.

As a result, the payroll run results and payroll reports will always display the correct and updated run balance values.

You can now automatically recalculate any run balance dimension values. Creating or updating balance definitions and balance feeds can impact balance calculations and stored balance values for run balance dimensions. The Generate Run Balances process recalculates any invalid balance values for saved run balance dimensions thereby improving the performance and accuracy of payroll calculations.

The Generate Run Balances flow generates run balances for the Balance Type ID of the balance for which you have made changes.

Note: Generation of run balances will be submitted for the same legislative data group for which the balance feed changes belong to. Create an event group and associate it to an event action that automatically runs the Generate Run Balances flow when you make changes to a balance feed.

1. Create an event action using HCM Data Loader.
2. Create an event group to identify the type of changes to be monitored. You recalculate stored run balance values for a single balance type, all balances, or all invalid balances.
3. Associate the event group to an event action that automatically runs the Generate Run Balances flow when you make changes to a balance feed.
4. Use HCM Data Loader to load an event action. Load the **Event Action.dat** file and the **Event.Group.dat** files.
5. Once you load the files successfully, you can view the created Event Action and Event Group from the Event Action Groups page. Now when the Balance Feed change happens, based on the Loader setup, the Generate Run Balances flow is automatically submitted.

Event Group and Event Action for Recalculation of Run Balances

This topic demostrates how you can create an event group and associate it to an event action to recalculate run balances.

When you create or update a balance definition or feed, you must consider if the change impacts future payroll calculations and reports only, or if there is a requirement to recalculate the balances retrospectively.

If you have a need to recalculate the balance amounts, such as the retropay calculations, you have the option to run the Generate Run Balances process. The Generate Run Balances process ensures that the retrospective balance change doesn't cause performance issues.

Use event groups to identify the type of changes that require the Generate Run Balances process to be submitted automatically.

Let's consider an example where you want to track balance definitions and balance feed changes impact balance calculations and stored balance values for run balance dimensions.

When an event in your group is triggered, a balance change event notification is triggered so that the Generate Run Balances process is automatically submitted.

This example EventGroup.dat file creates a single Event Group component and associates it to the Event Action. For the Generate Run Balances calculations, the EventGroupType attribute value must be A.

Create Event Action Group

```
METADATA|EventAction|FLEX:PAY_EVENT_ACTIONS_DDF|BaseFlowName(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
FlowInstanceName(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
FlowParameterNameOne(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
FlowParameterValueOne(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
FlowParameterNameTwo(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
FlowParameterValueTwo(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
FlowParameterNameThree(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
FlowParameterValueThree(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
ScheduleSkip(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|
ScheduleInterval(PAY_EVENT_ACTIONS_DDF=ORA_PAY_SUBMIT_FLOW_ACTION)|EventActionName|EventActionCode|
EffectiveStartDate|EffectiveEndDate|EventActionTypeCode|ActionSubmission|LegislativeDataGroupName

MERGEIEventAction|ORA_PAY_SUBMIT_FLOW_ACTION|Generate Run Balances|NK THREAD_{FLOW_NAME}|Legislative Data Group
Identifier|{LEGISLATIVEDATAGROUP_ID}|Process End Date|{SYSTEM_DATE}|Balances To Include|ORA_PAY_ALL_INVALID_BAL|
N||NK_EA_CRFL_3|1950/01/4712/12/31|ORA_PAY_SUBMIT_FLOW_ACTION|SYNC|CRFL RRF LDG US1
```

Create Event Group

```
METADATA|EventGroup|EventGroupCode|EventGroupName|EventGroupType|LegislativeDataGroupId|LegislativeDataGroupName

MERGE|EventGroup|NK_EG_CRFL_3|NK_EG_CRFL_3|A||CRFL RRF LDG US1
```

Indicate the type of events within the Event Group

```
METADATA|DateTrackedEvent|ColumnName|UpdateType|LegislativeDataGroupId|EventGroupCode|DatedObjectName|
LegislativeDataGroupName

MERGE|DateTrackedEvent||DT_INSERT||NK_EG_CRFL_3|
oracle.apps.hcm.payrolls.balances.setup.protectedModel.entity.BalanceFeedDEO|CRFL RRF LDG US1

MERGE|DateTrackedEvent||DT_ZAP||NK_EG_CRFL_3|
oracle.apps.hcm.payrolls.balances.setup.protectedModel.entity.BalanceFeedDEO|CRFL RRF LDG US1

MERGE|DateTrackedEvent|SCALE|DT_CORRECTION||NK_EG_CRFL_3|
oracle.apps.hcm.payrolls.balances.setup.protectedModel.entity.BalanceFeedDEO|
CRFL RRF LDG US1s MERGE|DateTrackedEvent|SCALE|DT_UPDATE_COLUMN||NK_EG_CRFL_3|
oracle.apps.hcm.payrolls.balances.setup.protectedModel.entity.BalanceFeedDEO|CRFL RRF LDG US1
```

Associate your Event Action to the Event Group

```
METADATA|EventGroupAction|EventActionCode|EffectiveStartDate|EffectiveEndDate|EventGroupCode|
LegislativeDataGroupName

MERGE|EventGroupAction|NK_EA_CRFL_3|1950/01/01|4712/12/31|NK_EG_CRFL_3|CRFL RRF LDG US1
```

Balance Groups and Usages

Balance Groups

Balance groups represent a collection of balance definitions, including their dimensions that you can use to retrieve balance values for reports, archives, and balance views. Balance group usages determine which reports, pages, and processes use the group to display or process balance information.

Use the **Balance Groups** task to manage your balance groups.

Balance Group Level

You can define a balance group at the employee or organization level. The balance group level determines the group level at which you can include the balance dimensions.

Employee level applies to balances at a payroll relationship level or lower. Organization level or Group level applies to any dimensions higher than the payroll relationship level, including Group Person dimensions.

Balance Definitions

On the Balance Definitions page of a balance group, you can see the balances associated with the balance group. The information includes the balance name, balance dimension, balance category, unit of measurement, and legislative data group. A balance category groups together similar balances. It is similar to the element classifications, for each element classification there is a corresponding balance category. You can also use this page to search for and add balance definitions to your own balance groups and to certain predefined balance groups.

Use **Select and Add** to add multiple balance definitions at a time.

> **Tip:** You can select multiple balance definitions in the Select and Add window. Hold down the Shift key to select a group of consecutive balance definitions. To select individual balance definitions hold down the Control key and select the balance definitions that you want to add to the balance group. Click **Apply** and keep the dialog window open to add the query to search the selected balance definitions . Click **OK** to add the selected balance definitions and close the dialog window.

Restrictions

Restrictions limit the balances that you can add to the balance group. You can add a list of balance categories, a list of balance dimensions, or a combination of balance categories and dimensions.

The **Included Balances Restricted by Category** and the **Included Balances Restricted by Dimension** check boxes are automatically updated on the Balance Group Details page as you add restrictions on the Restrictions page. For example, the standard earnings category means that the balance group is restricted to all balances based on the standard earnings category.

You can also define a balance group without any restrictions.

> **Note:** In some situations you can update a restriction if it's not used by balance definitions and default inclusions. The **Edit** button on the Restriction page is enabled if the selected row can be updated. A balance group may be defined without restrictions.

Default Inclusions

Default inclusions are combinations of balance categories and dimensions that are automatically added to the balance group. This means that any balance definition you define (manually or through the element template), or existing already for the specified category and attached to the specified dimension, is included in the balance group by default. However, if you need to include any other balance definition outside of those in the Default Inclusions, you must manually add the defined balance to the balance group.

Balance Group Usages

Balance group usages represent an instance of how a particular balance group is used.

A balance group must have at least one usage. The usage can be a report, process, or page that uses the balance values from the group. The group can also many balance group usages.

Balance group usages store detailed info about how the balance data is formatted and sequenced. Payroll reports use balance groups to determine the balances to include in specific sections of the report.

Use the **Balance Group Usages** task to manage your balance group usages.

Matrix and Table Formats

A balance group usage can use a matrix or table format to display the balance dimensions. You choose the option when you create the balance group usage.

For a matrix format, you select balance dimensions as columns in the matrix and decide their position in the matrix using **Position**. The first position must be 1, and any additional positions must be sequential. It displays only the balance dimensions that you select as columns for the matrix. If you don't specify the balance dimensions as matrix items, they don't display, regardless of what dimensions the defined balances in the balance group contain.

Sorting

Sorting determines the order in which balance types and dimensions display for the balance group usage. If you select **Table**, it returns all balances in the balance group one line at a time in the table format. If you select **Matrix**, you can add balance dimensions and decide their positions in the matrix.

This table shows the options you can use to define your sorting order.

Field	Values
Sort Method	Select one of these options: • Name, to sort by balance name. • Value, to sort by balance value.

Field	Values
	• Static Order, to sort by the sequence you specify in the Sort Items table.

You can also create a static order by selecting the balance name and sequence in **Sort Items**. For example, you can sort the summary balances for the gross-to-net report type in the processing order rather than the alphabetic order. Here's an example of a static order of the Gross to Net summary balances for the Statement of Earnings. The balances shown here are sorted in the order of Gross to Net Calculation.

- Gross Pay
- Pretax Deductions
- Employee Tax Deductions
- Involuntary Deductions
- Voluntary Deductions
- Nonpayroll Payments
- Net Payment

Examples

Report type	What balance dimensions they use
Global Archive	Archive of current and year-to-date tax code balances for areas 1, 2, and 3
Global Balance Views	Earnings default balances for the Balance Views page
Global Deduction	Balances for involuntary, pre-statutory, social insurance, and tax deductions
Global Element Results	Nonpayroll payment tax balances at the assignment and relationship levels
Global End-of-Year Archive	Payroll Relationship level balances
Global Payroll Activity Report	Earnings balances at the payroll relationship level for the current payroll period and year-to-date
Global Payroll Run Result Report	Balances for all earnings at the assignment and relationship levels
Global Statutory Deductions Report	All city, county, state, and school tax deduction balances for the current period and year-to-date
Global Gross-to-Net	Direct payment balances for a group tax unit for the current period and year-to-date
Statement of Earnings	City, county, and state pretax deductions for the current payroll period and year-to-date

Related Topics

- Balance Groups
- Payroll Balance Definitions
- Create Balance Groups and Usages

Create Balance Groups and Usages

This example demonstrates how to create a balance group and balance group usage for a user-defined report of voluntary deductions.

Before You Begin

If you're creating a user-defined report, create a lookup code for the report in the PAY_BALANCE_REPORT_TYPE lookup.

1. In the Setup and Maintenance work area, go to the **Manage Common Lookups** task.
2. Search for and select the **PAY_BALANCE_REPORT_TYPE** lookup type.
3. Add the lookup code, meaning, and description for the user-defined report in the Lookup Codes section.

How to Create a Balance Group

To create a balance group:

1. On the Home page, click the **Balance Groups** quick action under the **My Client Groups** tab.
2. Click **Create** to open the Create Balance Group dialog box.
3. Select a legislative data group and enter a name for the balance group.
4. Click **Continue**.

   The Balance Group Details page displays.
5. Select **Employee** as the balance group level.
6. Click **Save**.
7. Select the **Balance Definitions** folder under the Balance Group Overview list.
8. Click **Select and Add**.
9. In the Select and Add: Balance Definitions dialog box, enter these values.

Field	Value
Dimension Name	Relationship Run
Category	Voluntary Deductions

10. Click **Search**.

11. In the Results section, select the balance definitions that you want to add and then click **OK**.

    Tip: You can select multiple balance definitions in the Select and Add window. Hold down the Shift key to select a group of consecutive balance definitions. To select individual balance definitions hold down the Control key and select the balance definitions that you want to add to the balance group. Click **Apply** and keep the dialog window open to add the query to search the selected balance definitions . Click **OK** to add the selected balance definitions and close the dialog window.

12. Click **Submit**.
13. Click **Done**.

How to Create a Balance Group Usage

To create a balance group usage:

1. On the Home page, click the **Balance Groups** quick action under the **My Client Groups** tab.
2. Click **Create** .
3. In the Create Balance Group Usage dialog box, complete the fields as shown in this table.

Field	Value
Legislative data group	Enter the same LDG as the balance group for which you're creating the usage.
Name	Employee voluntary deduction run balances
Balance Group	The group you created in the previous task
Format Type	Table

4. Click **Continue**.

   You're returned to the Balance Group Usage Details page.
5. Select the report type (this was the report type that you added as a lookup code to the PAY_BALANCE_REPORT_TYPE lookup).
6. Click **Save**.
7. Select the **Sorting** folder under Balance Group Usage Overview list.
8. From the Actions drop down list on the right, select **Create**.
9. Enter these details.

Field	Value
Name	Any
Sort Method	Name
Sort By	Balance Type

Field	Value
Order	Ascending

10. Click **Save**.
11. Click **Done**.

Examples of Balance Group Usages

Add matrix items to predefined balance group usages and associate them with existing balance groups for use in reports, archives, and views. While you can't modify existing usages that are predefined, you can modify matrix items that are user-defined.

You can include balance dimensions for multiple time periods in your balance group usage, such as the current payroll run, month-to-date, or year-to-date.

Balance group usages are used to display balance values. You select the usage associated with the balance group. Additionally, you can sequence balances using balance group usages to display in a certain sequence, which may not necessarily be a standard sort sequence.

Here is a list of the predefined report types and the different kinds of balance dimensions they use.

Note: The report type is the owner of the balance group usage. A usage can have only one report type

Report Type	Used in Which Reports	Balances Included
Global Archive	Payroll Register Report, Payslip, Payslip Reprinting Report, Payroll Register for the Latest Process	Archive of current and year-to-date balances
Global Balance Views		Earnings default balances for the Balance Results page
Global Deduction	Deduction Report	Balances for involuntary, prestatutory, social insurance, and tax deductions
Global End of Year Archive	Archive End-of-Year Payroll Results	Payroll Relationship level balances required for End-of-Year Statutory reporting
Global Payroll Activity Report	Payroll Activity Report, Employee Active Payroll Balance Report, Payroll Activity Report for the Latest Process	Balances at the payroll relationship level for the current payroll period and year-to-date
Global Payroll Run Result Report	Payroll Balance Report	Current balances at the assignment and relationship levels

Report Type	Used in Which Reports	Balances Included
Global Statutory Deductions Report	Statutory Deductions Register	All city, county, state, federal, and school tax deduction balances for both the employee and employer in the current period and year-to-date
Global Gross-to-Net	Gross-to-Net Report	Summary balances for a group tax unit for the current period and year-to-date in the order of gross-to-net calculation.
Statement of Earnings	Statement of Earnings	Summary and detailed balances for a specific employee and payroll run.

Scenario

Related Topics

- Rules for Editing Balance Groups and Their Usages
- Balance Groups
- Balance Group Usages
- Create Balance Groups and Usages

Rules for Editing Balance Groups and Their Usages

The limitations on the changes you can make to balance groups and usages are different for predefined and user-defined groups.

Balance Group Rules

These are the actions you can take for both predefined and user-defined balance groups.

Action	Predefined Balance Group	User-Defined Balance Group
Create balance group	No	Yes
Edit balance group	No	Yes
Delete balance group	No	Yes
Add balance definitions	No, unless the Add button in the table menu is enabled	Yes
Remove balance definitions	No, unless the balance definitions are added by the user.	Yes

Action	Predefined Balance Group	User-Defined Balance Group
Add restrictions	No	Yes
Edit restrictions	No	No
Delete restrictions	No	Yes
Edit the balance group level	No	Yes, if the group contains no balance definitions, default inclusions or dimension restrictions.
Add default inclusions	No, unless the Add button in the table menu is enabled	Yes
Edit default inclusions	No	Yes
Delete default inclusions	No	Yes

Balance Groups Usage Rules

The only change you can make to a predefined balance group usage is to add matrix items.

For a user-defined usage, you can:

- Edit or delete the usage
- Edit the usage details
- Add or delete matrix items
- Create, edit, or delete sorting definitions

CAUTION: You can't change the format type of a usage after you save it. Additionally, you can't change the sort method unless you delete the existing sort items.

Balance Exceptions

Overview of Balance Exceptions

Balance exceptions define the criteria you use to identify overpayments, underpayments, and trends. The variance may also be a result of incorrect setup or adjustment.

Create a balance exception and the Balance Exception Report, and then run the Balance Exception Report. Run the report to generate a report output that displays payroll balance results as per the defined exception criteria. This information helps you detect the balance adjustments needed to correct payments or correct the balance setup.

Use the **Balance Exceptions** task to create a balance exception and consider these components when you create a balance exception.

Comparison Types

When you're creating balance exceptions, select a comparison type. Comparison types define the period that you use to determine whether an exception has occurred. For example, select Average in months as the comparison type and enter 3 in the Comparison Value field. In this scenario, the current month value is compared to the average of the previous three months.

Some comparison values are preset and you can't change them:

- Current month, Current period, Current quarter, and Current year always have a comparison value of 0.
- Previous period and Previous month have a comparison value of 1.

This table lists each comparison type that you can select and explains how it operates as a basis of comparison.

Comparison Type	How it Operates as a Basis of Comparison
Average in months	Compares the current month to date balance with the average of previous months to date. Only available if you have a Month to Date balance dimension for assignment or payroll relationship.
Current month	Compares values to the total for the current month to date balance. Doesn't use any previous month as a basis for comparison. Only available if you have a Month to Date balance dimension for assignment or payroll relationship.
Current period	Compares values to the total for the current period to date. Doesn't use any previous period as a basis for comparison. Only available if you have a Period to Date balance dimension for assignment or payroll relationship.
Current quarter	Compares values to the total for the current quarter to date. Doesn't use any previous period as a basis for comparison. Only available if you have a Quarter to Date balance dimension for assignment or payroll relationship.
Current year	Compares values to the total for the current year to date. Doesn't use any previous period as a basis for comparison. Only available if you have a Year to Date balance dimension for assignment or payroll relationship.
Previous month	Uses the previous month as a basis of comparison. Only available if you have a Month to Date balance dimension for assignment or payroll relationship.
Previous period	Uses the previous period as a basis of comparison. Only available if you have a Period to Date balance dimension for assignment or payroll relationship.

Note: **Comparison Value** field is shown for Average in Months. It is hidden for other comparison types.

If you select a Comparison Type of Average in months, you must enter a Comparison Value to determine the number of months that are averaged for the comparison.

Variance Operators

Variance operators enable you to specify the precise range of variance that you want to report on.

For example, you want to determine the monthly car allowance paid to employees in excess of 600 more than the previous month for the same payroll relationship. You can setup a balance exception for this example using these values:

- Comparison type is previous month
- Balance name is monthly car allowance
- Dimension name is relationship month to date
- Previous month amount is 500
- Variance value is 100

This table describes the effect of using each of the variance operators for balance exception reporting. The Results column indicates the effect of selecting each variance operator.

Variance Operator	Balance Exception Report Output	Results (based on sample data)
Variance, plus or minus **Note:** This operator applies only for comparison types of 'Previous', like Previous Months or Previous Period, as well as 'Average in Months'.	All relationships whose balance value either exceeds or are less than the previous month amount by the amount or percentage stated in the variance value.	Returns all relationships with a value less than or equal to 400 and greater than or equal to 600.
Less than	All relationships that are less than the previous month amount by the amount or percentage stated in the variance value.	Returns all relationships with a value of less than 400.
Less than or equal	All relationships with a current value either equal to or less than the previous month amount by the amount or percentage stated in the variance value.	Returns all relationships with a value of 400 or less.
Equal	All values that are exactly equal to the higher limit or the lower limit of the variance value.	Returns all relationships with a current value equal to 400 or 600.
Greater than	All relationships that are greater than the previous month amount by the amount or percentage stated in the variance value.	Returns all relationships with a value of more than 600.
Greater than or equal	All relationships with a current value either equal to or greater than the previous month amount by the amount or percentage stated in the variance value.	Returns all relationships with a value of 600 or more.
Does not equal	All relationships with a current value not equal to the previous month amount.	Returns all relationships with a value other than 500.

Variance Operator	Balance Exception Report Output	Results (based on sample data)

Select a Balance Type and Balance Dimension that specifies the balance value that's evaluated for the exception. You can only select balance dimensions that are compatible with the Comparison Type you specified. For example, if the Comparison Type is Current Period, you can only select balance dimensions of type 'Period to Date'.

Severity Level

Severity Level controls the order in which the exceptions are displayed in the balance exception report. Balance exceptions with the higher severity are displayed first (1 being the highest).

Using Formula Variance Type

You can write a fast formula using the Balance Exception formula type to return a variance value that you can use for identifying exceptions for a balance. To use this feature, select the Formula variance type on the Create Balance Exception page and then select the formula that you created from the **Formula Name** field.

Using Balance Variance Type

To reference two balances in the balance exception equation, select the **Balance** variance type on the Create Balance Exception page and then select the **Target Balance Name** and **Target Dimension Name**. This is applicable only when the Comparison Type is of type Current Month, Period, Quarter, or Year. The context values for **Target Dimension Name** are inherited from the **Dimension Name** you select on the left-hand side of the Create Balance Exception page as the first dimension. No additional contexts are set for **Target Dimension Name**.

Run Dimension Support

Define balance exceptions based on a balance value for a payroll run. For example, use these values to define an exception to track employees with salary greater than $2,000 in the current run.

- Comparison Type: Current Run
- Dimension: Relationship Tax Unit Run

Define the following to support this exception rule:

- Balance Name: e.g. Salary
- Variance Type: Amount
- Variance Operator: Greater Than
- Variance Value: 2,000
- Severity: 1

When you run the Balance Exception Report, the generated report shows employees having salaries greater than $2000 for the current run only.

Flow Connector Rule Support

The Balance Exception Report supports flow connector rules to view the consolidated run balances for connected flows. For example, during a payroll period, you run several off-cycle QuickPay runs to accommodate ad hoc late payments or bonus payments to your employees or payment settlements for terminated employees. You also run the usual on-cycle payroll runs for the same payroll period.

Use flow connectors to consolidate the flows. When you run the enhanced Balance Exception Report, the generated report honors the defined flow connector rules and displays run balances for all the connected flows.

Examples of Balance Exceptions

Here are two examples to illustrate two different types of balance exceptions that you may want to include in your balance exception report.

Track Increases in Commissions

Your company plans to train incoming sales staff on productivity techniques. To identify exceptional sales staff in the organization, you can run a report that lists workers whose commissions increased by 25 percent compared to their averages for the previous 3 months. You can set up a balance exception using the values in this table.

Field	Values
Balance Exception Name	Commission Increases Over 25 Percent
Comparison Type	Average in Months
Comparison Value	3
Balance Name	Commissions
Dimension Name	Relationship Month to Date
Variance Type	Percent
Variance Operator	Greater than
Variance Value	25
Severity Level	3 **Note:** Enter a lower value for a high priority exception.

Track Gross Earnings

Before you certify the current payroll run, as a payroll manager, you may want to know if the current gross payments are in line with the previous payroll run. The previous run verified the established levels of earnings that the company wants to maintain for the remainder of the quarter. This table provides an example of the values you enter to set up a balance

exception to find out if the current gross earnings exceeds the gross earnings of the previous period by more than 10 percent:

Field	Values
Balance Exception Name	Gross Earnings
Comparison Type	Previous period
Comparison Value	1
Balance Name	Gross Earnings
Dimension Name	Relationship Period to Date
Variance Type	Percent
Variance Operator	Greater than
Variance Value	10
Severity Level	1 **Note:** Enter a lower value for a high priority exception.

Balance Exception Report

Overview of the Balance Exception Report

Use the Balance Exception Report to identify potentially incorrect payments or amounts withheld. The report identifies values that vary for the same balance dimension. This variance could indicate overpayments or underpayments.

Use the **Submit a Payroll Flow** quick action under the **My Client Groups** tab to run this report.

Before you run this report:

- Use the Balance Exceptions task to create a balance exception.
- Use the Balance Exceptions and Reports task to create a balance exception report that groups together one or more balance exceptions.

- Create an Exception Report Name that you can use to run the Balance Exception Report. For instance, you can create an Exception Report Name of Monthly Car Allowances Paid in Excess of the Previous Month, to determine the monthly car allowance paid to employees in excess of 600 more than the previous month.

Report Parameters

The parameter values determine which records to include in the report. For example, you can run this report for a specific consolidation group or payroll relationship group. Predefine these groups before you can use them. Most parameters are self-explanatory, while the following have special meaning in the context of this report.

Payroll Flow

The name of the payroll flow you use to run this report. The selected flow uniquely identifies a specific instance of the report execution.

Process Start Date

Use this field to specify the first effective date of the payroll process to include in the report. All processes with an effective date same or greater than the Process Start Date are reported.

Process End Date

Use this field to specify the last effective date of the payroll process to include in the report. For Payroll Runs this is the 'Payroll Run Date'. All processes with an effective date equal to or prior to the Process End Date are reported.

> **Note:** For offset payrolls, the effective date of the payroll or QuickPay run could be after the end date of the payroll period. In such cases, ensure that your Process End Date must be on or after the effective date of the process you want to include in the report.

Balance Exception Report

The name of the Balance Exception Report you use to run this report.

Payroll

Select the required payroll name.

Process Configuration Group

Use this field to run the report for a specific process configuration group, instead of the default one. A process configuration group is used to set rules for payroll processes, such as enabling logging or setting the number of threads. You can select a value only if you have a predefined process configuration group.

> **Note:** Use the **Payroll Process Configuration** task to define a Process Configuration Group, before you can use it here.

Consolidation Group

Use this field to run the report against a consolidation group. For example, you can use this field to run this report for a subset of payrolls. You can select a value only if you have a predefined consolidation group. If you specified a value when defining the exception report, select the same value or leave it blank.

The value chosen while submission takes precedence over the one used while defining the report. If you leave the field blank, the report runs for all consolidation groups.

Payroll Statutory Unit

Select a value to report on the balances of employees in a specific PSU. If you leave the field blank, the report runs for all PSUs.

Tax Reporting Unit

Select a value to report on the balances of employees in a specific TRU. If you leave the field blank, the report runs for all the TRUs.

Location

Use this field to view the balance results for employees who have at least one assignment for the selected location. The balance values may not necessarily correspond to the location parameter only. It is also dependent on the dimensions and the other associated contexts.

Payroll Relationship Group

Use this field to run the report for persons belonging to a specific payroll relationship group. You can specify a value only if you have a predefined payroll relationship group.

> **Note:** Use the **Object Groups** task to define a process configuration group, a consolidation group, or a payroll relationship group, before you can use it here.

After you have entered the above details, in the Linked Flows section, select the payroll flow as the Current Flow and the Run Balance Exception Report as the task. This ensures that the report uses the payroll balances for the current payroll flow.

Report Results

The report provides details of payroll balance results for matching persons, filtered by the defined exception criteria, specified time frame and the selected parameters. The output report includes:

- Payroll Statutory Unit
- Tax Reporting Unit
- Person Number
- Person Name
- Payroll Relationship Number
- Employment Level
- Current Balance
- Variance Value

The report output additionally displays the Previous Balance, Difference, and Difference % columns when the Comparison Type is Previous Period or Previous Month.

Related Topics

- Balance Exceptions
- Examples of Balance Exceptions
- Balance Exception Formula Type

How to Create a Balance Exception Report

In this example, you create a balance exception and run the Balance Exception Report to compare the total payments made to your employees for the current payroll period with the payments you made in the previous payroll period.

Before you create and run the Balance Exception Report, you must create a balance exception for this example.

Create a Balance Exception

Let's look at the steps to create a balance exception to compare the net pay amounts for the current and the previous period.

1. On the Home page, click the **Balance Exceptions** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Select a legislative data group and click **OK**.
4. Complete the fields as shown in this table:

Field	Value
Balance Exception Name	Compare Net Payment Amounts to the Previous Period
Comparison Type	Previous period
Comparison Value	1 For comparison types that begin with Previous, the application enters 1 as the default value and makes it read only.
Balance Name	Net Payment
Dimension Name	Relationship Period to Date
Variance Type	Percent
Variance Operator	Greater than
Variance Value	10
Severity Level	1

Field	Value
	Note: Enter a lower value for a high priority exception.

5. Click **Submit**.

Create a Balance Exception Report

1. On the Home page, click the **Balance Exceptions and Reports** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Select the same legislative data group you selected in the previous task and click **OK**.
4. Complete the fields as shown in this table:

Field	Value
Exception Report Name	Compare Net Payment Amounts to the Previous Period
Consolidation Group	Select a value to restrict this exception report to a specific consolidation group. Leave blank to not restrict the output or to decide at the time of report submission.
Payroll	Select a value to restrict this exception report to a specific payroll. Leave blank to decide at the time of report submission, where payroll is a required parameter.

5. Click **Add**.
6. Select the **Compare Net Payment Amounts to the Previous Period** balance exception name and then click **OK**.
7. Click **Submit**.

Run the Balance Exception Report

1. On the Home page, click the **Submit a Flow** quick action under the **My Client Groups** tab.
2. Select the same legislative data group as in the previous tasks.
3. Select the **Run Balance Exception Report** flow pattern and then click **Next**.
4. Complete the fields as shown in this table:

Field	Value
Payroll Flow	Enter an appropriate name for this instance of the report.
Process End Date	Enter a value.
Balance Exception Report	Compare Net Payment Amounts to the Previous Period

Field	Value
Payroll	Select a value to restrict this exception report to a specific payroll. Enter the same name as in the previous task, if one was specified.

5. Click **Next**.

   When you enter information on the Linked Flow section of the Submit a Flow page, select Current Flow as the payroll flow and Run Balance Exception Report as the task to ensure the report uses the payroll balances results for the current payroll flow.
6. Click **Next**.
7. Click **Submit**.

   When you submit a flow, it creates an instance of the flow, the application generates a checklist by default.
8. Click **OK and View Checklist**.
9. In the task list click the **Run Balance Exception Report**. View and monitor the status of the flow on this page.
10. Click on the on the task to go to the Process Results Details page.
11. You can view the output from the Output and Log files section.

Related Topics

- Examples of Balance Exceptions
- Balance Exceptions
- Balance Exception Report for the US
- Balance Exception Formula Type

Severity Level for Balance Exceptions

Severity Level controls the order in which the exceptions are displayed in the balance exception report.

While defining a balance exception, enter a severity level to specify the priority of the exception. An exception with a lower severity level has a higher priority than one with a higher severity level value.

When you run the Balance Exception Report, you can act on the exception based on its severity level. Let's say, you have these two exceptions:

- Net Pay less than 100
- The difference in Base Salary from previous period to current period is 1000

Ideally, you should enter a lower value for the first exception, so that when you run the Balance Exception Report, the payroll user can first look into reconciling the lower Net Pay exception.

Note: The value you enter has no impact on the balance exception calculation.

Related Topics

- Examples of Balance Exceptions
- Severity Level for Balance Exceptions
- How to Create a Balance Exception Report
- Balance Exception Formula Type
- Balance Exceptions for the US

HCM Extracts for Balance Reporting

Considerations for Using HCM Extracts for Payroll Balance Reporting

Use HCM Extracts to retrieve data in bulk from the Oracle HCM Cloud application for generating reports. For large volumes of data, HCM Extracts is the recommended process for extracting and reporting Balances of employees.

Before you create the extract definition for payroll balance reporting, you must create these payroll objects:

- Balance Group to include the balance definitions and dimensions you want to use to retrieve balances for the employee.
- Balance Group Usage to represent how the balance group is used.

For a step-by-step information on how to create a balance group and balance group usage, refer the *Create Balance Groups and Usages* topic on the Oracle Help Center.

Use any of the options mentioned in these sections for extracting and reporting employee Balances.

Delivered Payroll Calculation and Balance Reports

Use any of the delivered payroll calculation and balance reports, for example, the Statutory Deduction Register for the Latest Process or the Employee Active Payroll Balance Report to retrieve the run results data.

Use the **Submit a Flow** task under Payroll and search for a report that suits your requirement. Use the Flow Submission page to define parameters you can use to extract the requisite balance information. For example, use the Run Statutory Deduction Register for the Latest Process flow to extract the year-to-date (YTD) payroll balances for large volumes of data. Use the Payroll Statutory Unit parameter to report on the balances of employees in a specific PSU.

For more information on the delivered reports that are readily available for you to use for balance reporting, refer the *Payroll Calculation and Balancing Reports* topic on the Oracle Help Center.

Delivered Employee Payroll Balances and Run Results Extract Template

Use the delivered, ready-to-use Employee Payroll Balances and Run Results Extract template to create your own user-defined extract definition. Use the template to create an extract definition by selecting the records and attributes from an available set of data elements.

You can choose the list of attributes for your extract definition in these areas:

- Payroll Relationship Actions

- Assignments
- Balances
- Run Results

Use the pre-defined filter criteria for the various data elements to further refine your extract definition. For example, use the Filter Criteria option on Balances and select an appropriate Balance Group Usage for your extract definition. If you don't select a Balance Group Usage, the process uses a dummy Balance Group Usage and the process may not give you the expected output.

For more information on filter criteria, refer the *Filter Extracts Using Advanced Filter Criteria* topic on the Oracle Help Center.

User-Defined Extract Definition

Use the **Extract Definitions** task in the Data Exchange area to create your own extract definition to generate balance reports as per your business requirements.

Consider the following when you define an extract definition for payroll balances reporting:

- Select an Extract Type of **Other Payroll Archive** so that the extract uses the archived payroll information to generate the report. The type of extract you select determines the purpose of the extract. It also determines the parameters that are automatically generated.
- For extracts based on Other Payroll Archive, the LDG is a required field. Select the same LDG you have used to create the Balance Group and the Balance Group Usage.
- Add a user entity that has **PAYROLL_REL_ACTION_ID** set as the context for the Root Data Group. Include a user entity with a payroll relationship action because you are reporting employee payroll balance calculations from the payroll run results. A payroll run result is identified by the payroll relationship action.
- Extract records represent a grouping of related data, or a physical collection of all fields required in the extract. Consider the following when you create an extract record to retrieve and report on the balance calculations:
    - Select **Detail Record** as the record type.
    - Select the name of the Balance Group you have created for the report as the **Process Type**.
    - Select the Balance Group Usage you have created for the selected Balance Group.
    - Ensure that PAYROLL_REL_ACTION_ID is set in the current or parent data group so that the context is derived.
- To retrieve the balance dimension values, add the attributes in the record as procedure elements.
- Create an attribute for each context within the balance group usage. The created attributes should have a name and a short code. For example, Name of Attribute is Payroll Action ID and the corresponding short code is **PAYROLL_ACTION_ID**. It's important that you enter the correct short code, or your extract will error and not give you the expected output results.

  For more information on short codes, refer the *Balance Dimensions and Attribute Contexts for an Extract Record* topic on the Oracle Help Center.
- Define a Run dimension in the Balance Group Usage you are using. It can be any Run dimension, for example, Assignment Tax Unit Run.

  For more information on Balance Dimensions and Contexts for the Attributes you add to the extract records, refer the *Balance Dimensions and Attribute Contexts for an Extract Definition* on the Oracle Help Center.

Once you define and save your extract definition, the application creates a flow in the same name as your extract definition. Search for the flow in the flow submission page and submit the flow to extract the data and generate the report. To get the desired results, run the extract for a valid payroll.

Related Topics

- Balance Group Usages
- Balance Dimensions and Attribute Contexts for an Extract Record
- Create Balance Groups and Usages
- Payroll Calculation and Balancing Reports

Balance Dimensions and Attribute Contexts for an Extract Record

When you create an HCM Extract Definition for payroll balance reporting, create extract attribute records that extract the correct balance dimensions.

Attributes are the individual fields inside the extract record. To retrieve the balance dimension values, select the attribute **Type** in the record as **Procedure element**.

Define a Run dimension in the Balance Group Usage you're using. It can be any Run dimension, for example, Assignment Tax Unit Run.

When balance group usage is of matrix type all dimensions are included in the same Data Group. However, if you have period-to-date (PTD) dimensions, they're included in a separate XML data group. You must include this data group in the extract definition and use short codes for the different periods, such as, run, month, quarter, year, and so on.

Short Code Details

Create an attribute for each context within the balance group usage. The created attributes should have a name and a short code. For example, Name of Attribute is Payroll Action ID and the corresponding short code is PAYROLL_ACTION_ID.

This table lists all the attribute or data elements which are valid for a balance group record and the short codes for all the attribute records you can create.

Name of Attribute	Short Code
Payroll Relationship Action Identifier	PAYROLL_REL_ACTION_ID
Calculation Breakdown Identifier	CALC_BREAKDOWN_ID
Base Balance Name	BASE_BALANCE_NAME
Run	RUN
Reporting Name	REPORTING_NAME
Base Category Name	BASE_CATEGORY_NAME
Tax Unit Identifier	TAX_UNIT_ID
Balance Type Identifier	BALANCE_TYPE_ID
Year	YEAR

Name of Attribute	Short Code
Location	LOCATION
Department	DEPARTMENT
Dimension Level	DIMENSION_LEVEL
GUID	GUID
Balance Category Identifier	BALANCE_CATEGORY_ID
Month	MONTH
Balance Value	BALANCE_VALUE
Base DB Item Suffix	BASE_DB_ITEM_SUFFIX
Base Dimension Name	BASE_DIMENSION_NAME
Period	PERIOD
Payroll Assignment Identifier	PAYROLL_ASSIGNMENT_ID
Reference Code	REFERENCE_CODE
Quarter	QUARTER
Payroll Term Identifier	PAYROLL_TERM_ID
Other	OTHER
Fiscal Quarter	FQUARTER
Fiscal Year	FYEAR
Half Year	HYEAR
Lifetime	LIFETIME
Payment	PAYMENT
Rolling 12 Months	R12MTH
Balance T2MTD	T2MONTHS
Balance T2WTD	T2WEEKS
Balance THYTD	THYEAR
Balance T4WTD	T4WEEKS
Balance TMTD	TMONTH
Balance TQTD	TQUARTER
Balance TWTD	TWEEK
Balance TYTD	TYEAR
Balance Unit Year to Date	UYEAR
Area1	AREA1
Area2	AREA2

Name of Attribute	Short Code
Area3	AREA3
Area4	AREA4
Balance Date	BALANCE DATE
Date Earned	DATE_EARNED
Deduction Type	DEDUCTION_TYPE
Element Entry Identifier	ELEMENT_ENTRY_ID
Deduction Card Identifier	DEDUCTION_CARD_ID
Insurance Type	INSURANCE_TYPE
Pension Type	PENSION_TYPE
Process Type	PROCESS_TYPE
Rate Type	RATE_TYPE
Reference Code2	REFERENCE_CODE2
Reference Number	REFERENCE_NUMBER
Reporting Time Period Identifier	REPORTING_TIME_PERIOD_ID
Resident Area1	RESIDENT_AREA1
Resident Area2	RESIDENT_AREA2
Resident Area3	RESIDENT_AREA3
Statutory Report Code	STATUTORY_REPORT_CODE
Statutory Report Type	STATUTORY_REPORT_TYPE
Third Party Payee Identifier	THIRD_PARTY_PAYEE_ID
Time Definition Identifier	TIME_DEFINITION_ID
HR Assignment Identifier	HR_ASSIGNMENT_ID
Assignment Number	ASSIGNMENT_NUMBER

Contexts for a Balance Group Usage

Use this SQL query to know the contexts required for a particular balance group usage and create attribute for each context. Attributes created should have attribute name and short code as BASE_CONTEXT_NAME in this query output.

SELECT DISTINCT

```
ctx.base_context_name,

pbgu.base_group_usage_name
```

FROM

```
pay_bal_grp_usages pbgu
```

```
pay_bal_grp_inclusions pbgi

pay_balance_attributes pba,

pay_defined_balances pdb,

pay_balance_dimensions pbd,

pay_dim_context_usages pdcu,

ff_contexts_b ctx
```

WHERE

```
pbgu.balance_group_id = pbgi.balance_group_id

AND pbgi.attribute_id = pba.attribute_id

AND pba.defined_balance_id = pdb.defined_balance_id

AND pdb.balance_dimension_id = pbd.balance_dimension_id

AND pbd.balance_dimension_id = pdcu.balance_dimension_id

AND pdcu.context_id = ctx.context_id

AND pbgu.base_group_usage_name = <base balance group usage name>;
```

Related Topics

- Balance Dimensions
- Balance Groups
- Balance Group Usages

Use the Predefined Employee Payroll Balances and Run Results Extract Template for Balance Reporting

This topic demonstrates how you can use the delivered, ready-to-use Employee Payroll Balances and Run Results Extract template to create your own user-defined extract definition to report employee balances.

Before you create the extract definition you must create these payroll objects:

1. Balance Group to include the balance definitions and dimensions you can use to retrieve balances for the employee.
2. Balance Group Usage to represent how the balance group is used.

For a step-by-step information on how to create a balance group and balance group usage, refer the *Create Balance Groups and Usages* topic on the Oracle Help Center.

Complete these steps to create an extract definition using the delivered template.

1. Navigate to the Data Exchange area under My Clients Group and select the **Extract Definitions** task.
2. Click the **Plus** icon and select **Create from Template**.
3. Select **Employee Payroll Balances and Run Results Extract** under Other Payroll Archive. Use this ready-to-use template to create an extract for employee payroll balance reporting.

4. Complete the fields as given in this table.

Field	Description
Name	Enter a name for the extract. When you submit the extract, the application creates a flow with the same name you enter here. Hence, note the name of the extract.
Start Date	Enter a start date for the extract.
Consumer	Select **Report**.
Changes Only	Select **No**.
Legislative Data Group	Select an appropriate LDG for which you are reporting the balances.

5. Click **OK**.
6. Expand the **Pay Relationship Actions** folder under Business Objects.

   Select each of the subfolders and select the attributes you want included in the extract output. When you select a subfolder, by default all the attributes related to that subfolder are shown as selected. Deselect the attributes you don't want to display in your extract.

   > **Note:** Select only the attributes you want to display in your extract. Selecting more attributes will overload the extract and impact the time taken to process the extract.

7. Select the **Assignments** check box, all the attributes related to assignments are shown selected by default. Deselect the attributes you don't want to display in your extract.
8. Similarly select the **Balances** check box and deselect the attributes you don't want to report in the extract.
9. Click **Filter Criteria** and use the drop down to select the **Balance Group** you have predefined and want to use for your balance reporting.
10. Click **Review** to review the data group and attributes. Click **Save**.
11. After the status is Ready, click **Cancel**.

Define the Extract Output Delivery Option

The Extract output is now available in the standard XML format. Complete these steps to define a delivery option for the data.

1. Go back to the **Extract Definitions** page and enter the name of the extract and click the search icon.
2. Click **Show Filters**. Enter name of the extract in the **Name** field, select the **Legislative Data Group,** and click **Search**.
3. Click on the extract definition name. By default, the Delivery Option is **None** and the Output Type is **Data**. You cannot deliver the extract output.
4. Click **Define** and deselect the **Lock Definition Description** check box.
5. Enter appropriate reasons in the **Unlock Comments** box and click **Save**.
6. Click **Cancel**.
7. On the Extract Definitions page, use the **Actions** menu and open the extract in the **Advanced Edit** mode.
8. Select **Extract Delivery Option** and click **Add** to add a row for the delivery option you're about to create.
9. For more information on adding a delivery option, refer the *Guidelines for Delivering Extracts* topic on the Oracle Help Center.

Submit the Extract

You can now submit the extract and view the extract output in the delivery option you have defined.

1. Go back to the Data Exchange page and click the **Submit Extracts** task.
2. Select the same **Legislative Data Group** you used to create the extract and search for the extract you created. The extract process creates a flow with the same name as the extract you created.
3. On the Submit a Payroll Flow page, enter the required information as given in this table.

Field	Description
Payroll Flow	Enter a flow instance name for the flow you are currently submitting.
Effective Date	Enter a date.
Payroll ID	Select the ID of the payroll you are using to extract and report the balances.
Payroll Period	Select the payroll period for which you are extracting and reporting the balances.

4. Click **Submit.**
5. Click the flow link on the Checklists page and monitor the progress of the flow.
6. Once the flow is complete, click on the flow name and view the output in the Output and Logs section.
7. You can also view the log messages for the flow.

Create an Extract Definition for Payroll Balance Reporting

This topic demonstrates how you can create an extract definition to extract and report employee balances.

Before you create the extract definition you must create these payroll objects:

1. Balance Group to include the balance definitions and dimensions you can use to retrieve balances for the employee.
2. Balance Group Usage to represent how the balance group is used.

For step-by-step information on how to create a balance group and balance group usage, refer the *Create Balance Groups and Usages* topic on the Oracle Help Center.

Complete these tasks to create the extract definition and run the extract.

1. Create a Balance Group
2. Create a Balance Group Usage
3. Create an Extract Definition
4. Define the Delivery Options
5. Submit the Extract

Create a Balance Group

Complete these steps to create a Balance Group.

1. On the Home page, click the **Balance Groups** quick action under the **My Client Groups** tab.
2. Click **Create** to open the Create Balance Group dialog box.
3. Select a legislative data group and enter a name for the balance group, for example, Employee Balance ABC.
4. Click **Continue**.

5. On Balance Group Details page select **Employee** as the balance group level.
6. Click **Save**.
7. Select the **Balance Definitions** folder under the Balance Group Overview list.
8. Click **Select and Add**.
9. In the Select and Add: Balance Definitions dialog box, enter **Gross Earnings** in the Name field.
10. Select **All** in the Match field and click **Search**.
11. In the Results section, select the row that has, for example, the following values.
    - Dimension Name: Assignment Tax Unit Run
    - Category: Total Standard Earnings
12. Click **Apply** and **OK**.

Create a Balance Group Usage

Complete these steps to create a Balance Group Usage.

1. On the Home page, click the **Balance Groups** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. In the Create Balance Group Usage dialog box, complete the fields as shown in this table.

Field	Description
Legislative Data Group	Enter the same LDG as the balance group for which you're creating the usage.
Name	Enter a name, for example, Employee voluntary deduction run balances.
Balance Group	The group you created in the previous task, for example Employee Balance ABC.
Format Type	Matrix

4. Click **Continue**.

   You're returned to the Balance Group Usage Details page.
5. In the Report Type field, select **Statement of Earnings**.
6. Select the **Matrix Items** folder under the Balance Group Usage Overview list and add balance dimensions that you want.

   > **Note:** Matrix Item node is enabled only for Matrix format type. Use this node to specify the display position of the balance value for a particular balance dimension. If you put several dimensions in the same position their values are summarized together in the group.

7. Complete the fields as given here:
   a. Select **Balance Dimensions** as the Matrix Item Type.
   b. Search and select the Name as **Assignment Tax Unit Run**.
   c. Enter **1** in the Position field.
8. Click **Save**.
9. Select the **Sorting** folder under the Balance Group Usage Overview list.

   Sorting determines the order in which the balance values in a balance group are displayed.
10. Click **Actions > Create**.
11. Complete the fields as per your requirement. Sort Items table defines the static sort order in which the balance values in a balance group are displayed and it's enabled only for sort method of Static Order. It might be sort by either Balance Type or Defined Balance.

12. Click **Save** and then **Submit**.

Create an Extract Definition

Use the **Extract Definitions** task in the Data Exchange area under My Clients Group to create your own extract definition to extract and report employee payroll balances.

Before you create the extract definition, consider the following:

- Create one extract definition because you are creating only one report.
- Search for and select a User Entity that has context to a Payroll Rel Action ID so that you can extract the balance results for the employee. If the value of Valid for Root Data Group is **Yes**, the user entity can be used as a root data group.

Complete these steps to create an extract definition.

1. Navigate to the Data Exchange area under My Clients Group and select the **Extract Definitions** task.
2. On the Extract Definitions page, click **Add** > **Create New** to open the Create Extract Definition page.
3. Select **Other Payroll Archive** and enter the information given in this table to create the Extract Definition.

Field	Description
Name	**Employee Balances Report** The application uses this name to generate the XML output file.
Start Date	Enter an appropriate date.
Consumer	Select Report since the extract is used for reporting.
Additional Details	This field is left blank for reports.
Legislative Data Group	Select an appropriate LDG. Select the same LDG you have used to create the Balance Group and the Balance Group Usage. **Note:** For extracts based on Other Payroll Archive, the LDG is a required field.

4. Click **OK**.

Create Extract Data Groups and Records

The next step is to create the Data Groups and Records.

When you create the Data Groups, the formulas are auto-generated every time you validate or compile the extract. The generated formula is specific to the user and the extract being validated or submitted. Hence leave the Formula field blank, it gets populated with the details of the auto-generated formula after you have submitted the extract definition.

i. Create the Work Relationships Data Group

1. Click **Design** to create the data groups and records.

2. Create the root data group with the following information.

Field	Description
Name	Work Relationships
Tag Name	Work_Relationships
User Entity	PER_EXT_WORK_RELATIONSHIP_ALL_UE
Threading Database Item	Extract Relationship Period Of Service Id
Threading Action Type	Relationship Action

3. Click **Save**.
4. Right-click the Work Relationships data group in the Object Name table and select **Add Record**.
5. Enter this information to create a record.

Field	Description
Name	Person Details
Tag Name	Person_Details
Type	Header Record
Process Type	Fast Formula

6. Click **Save and Close**.

ii. Create the Pay Relationship Actions Data Group

1. Right-click the Work Relationships data group and select **Add Child Data Group** to create another data group.
2. Enter this information to create the data group.

Field	Description
Name	Pay Relationship Actions
Tag Name	Pay_Relationship_Actions
User Entity	PAYROLL REL ACTIONS RANGE UE
Threading Database Item	Fast Formula
Threading Action Type	Relationship Action

Include a user entity with a payroll relationship action because you are reporting employee payroll balance calculations from the payroll run results. A payroll run result is identified by the payroll relationship action. The User Entity has a context set to PAYROLL_REL_ACTION_ID.

3. Click **Save**.

4. Click the Pay Relationship Actions data group under the Object Name list and select the **Connect Data Groups** tab.
5. Select **Add** to add a connection. Complete this information to create a data group connection.

Field	Value
Parent Data Group	Pay Relationship Actions
Parent Data Group Database Item	Extract Relationship Person Id
Data Group Database Item	PAYROLL REL ACTION PERSON IDENTIFIER

6. Click **Save**.
7. Right-click the **Pay Relationship Actions** data group in the Object Name table and select **Add Record**.
8. Enter this information to create a record.

Field	Value
Name	Rel Action Details
Tag Name	Rel_Action_Details
Type	Detail Record
Process Type	Fast Formula

9. Click **Save and Close**.

iii. Create the Balances Data Group

1. Right-click the Pay Relationship Actions data group and select **Add Child Data Group** and enter this information create a data group.

Field	Value
Name	Balances
Tag Name	Balances_Data
User Entity	ORA_HRY_BALANCE_GROUP_USAGE_UE

2. Click **Save**.
3. Right-click the **Balances** data group in the Object Name table and select **Add Record**.
4. Enter this information to create a record.

Field	Value
Name	Balance Details
Tag Name	Balance_Details

Field	Value
Type	Detail Record
Process Type	Balance Group
Balance Group Usage	Enter Name of Balance Group Usage you created for this report.

5. Click **Save and Close**.

iv. Create the Run Results Data Group

1. Right-click the Pay Relationship Actions data group and select **Add Child Data Group** and enter this information to create a data group.

Field	Value
Name	Run Results
Tag Name	Payroll_Run Results
User Entity	PAY_EXTRACT_RUN_RESULT_VALUES_UE

2. Click **Save**.
3. Right-click the **Run Results** data group in the Object Name table and select **Add Record**.
4. Enter this information to create a record.

Field	Value
Name	Run Results Details
Tag Name	Run_ Results _Details
Type	Header Record
Process Type	Fast Formula

5. Click **Save and Close**.
6. Click the Run Results data group under the Object Name list and select the **Connect Data Groups** tab.
7. Select **Add** to add a connection.
8. Enter this information to create a data group connection.

Field	Value
Parent Data Group	Run Results
Parent Data Group Database Item	PAYROLL REL ACTION IDENTIFIER
Data Group Database Item	Run Result Payroll Relationship Action Id

9. Click **Save and Close**.

v. Create the Assignments Data Group

1. Right-click the **Pay Relationship Actions** data group and select **Add Child Data Group** and enter this information create a data group.

Field	Value
Name	Assignment
Tag Name	Employee_Assignment_Data
User Entity	PER_EXT_PAY_EMPLOYEES_V2_UE

2. Click **Save**.
3. Click the **Assignments** data group under the Object Name list and select the **Connect Data Groups** tab.
4. Select **Add** to add a connection.
5. Enter this information to create a data group connection.

Field	Value
Parent Data Group	Assignments
Parent Data Group Database Item	PAYROLL REL ACTION RELATIONSHIP IDENTIFIER
Data Group Database Item	Extract Employee V2 Payroll Relationship ID

6. Right-click the **Assignments**data group in the Object Name table and select **Add Record**.
7. Enter this information to create a record.

Field	Value
Name	Assignment Details
Tag Name	Assignment_Details
Type	Header Record
Process Type	Fast Formula

8. Click **Save and Close**.

Create Attributes

Attributes are the individual fields inside the extract record. An attribute is the lowest field level of an HCM extract and represents a piece of information, for example, person first name, person last name or person date of birth. This information is displayed in the process output file.

To retrieve the balance dimension values in the report, ensure the following:

- Add a RUN dimension in the Balance Group Usage to make sure that the RUN attribute works. It can be any RUN dimension. For example, Assignment Tax Unit Run in the Balance Group Usage that we have created for this use case.

- Add the attributes (data elements) in the Balances record as procedure elements.
- When you create the attributes, enter 61 in the Output Column field for the first attribute. The value of the Output Column field of the subsequent attributes increases by 1. The Output Column values shouldn't be duplicated.

Create attributes for each record as required.

Define the Delivery Options

Follow these steps to define a delivery option.

1. Select the **Deliver** icon and then select **Add** to add a row for the delivery option you're about to create.
2. Enter these details:
    - A value in the **Delivery Option Name** field. For example, Employee Balances Report in Excel.
    - A value in the **Delivery Type** field.
3. Click **OK** and enter this information.

Field	Value
Output Type	Select a value, for example, Excel.
Report	Enter the location of the report output.
Template Name	Enter the name of the report template for this output type.
Output Name	Enter Name of the report output, for example, Employee Balances Report.
Required	Select this check box if this delivery option is a required option.

4. Ensure you enter the additional information such as, the server, username, and password for the FTP delivery type.
5. View the extract definition details and ensure the structure is valid in the Validate page by selecting the **Validate** button. Check the validation messages at the top of the page to refine your extract definition.
6. Select **Export XML Schema** to download the XML Schema Definition (.XSD) file for this extract setup. This exported file contains the structure of the extract definition: the data groups, records, and attributes.
7. Click **Save**. When you save the extract definition, the application generates a flow with the same name as your extract definition.

Submit an Extract

Use any of these options to submit the extract:

- **Submit Extracts** task from the Data Exchange area. Use the View Extract Results task to view the results of the extract run.
- **Submit a Flow** task under Payroll. Search for the flow with the same name as your extract definition and enter the requisite data and submit the flow. Use the process results pages to view the run results.

Related Topics

- Balance Group Usages
- Create Balance Groups and Usages

Troubleshoot HCM Extracts for Payroll Balance Reporting

If you review the extract run results and find that the results aren't as expected, follow these suggestions to troubleshoot the issue.

1. Check that the payroll you used to submit the extract includes processed balances. Complete these steps to know which payroll runs have processed the payroll.
    a. Navigate to the Checklists page, select the LDG you have used for the extract definition, and check the latest runs of Calculate Gross Earnings.
    b. Select the flow with the payroll name you used to submit the flow.
    c. Use the Flow Details tab to view the flow tasks, click Go to Task icon for the Calculate Gross Earnings task and check if balances are processed.
2. To check if balances are processed for a particular employee, use the View Person Process Results task to search for an employee and view the Balance Results.

Copy Balances During Global Transfer

Overview of Copying Balances

Carry forward assignment and relationship level balances using balance adjustments from the source to the target legal employer during the global transfer of employees.

Several payroll calculations would require the knowledge of prior calculations in other payroll relationships. It's necessary for the balances to be brought forward to the new payroll relationship so that calculations within the new payroll relationship are made aware of all prior results within the appropriate time frame of that balance. The overall balance that's copied includes,

- The balances calculated within the payroll relationship
- The balances copied to the source payroll relationship for prior global transfers

Any further payroll deduction calculations on the target employment record must consider the calculations in the prior employment records for the same person. The payroll run can't access balances across payroll relationships. So you must copy the final balance from the source before the first payroll run on the target employment record.

Although you're using balance adjustments for the balances copy process, the application automatically generates the adjustment element, similar to the balance initialization process. The application creates a balance feed from the initialization element for both the target and source balance. You'd require this balance feed to read what's copied to the target using the source balance in the next copy process. For example, you want to copy the Car Loan Accrued balance to the target relationship. This copy process uses a REL_ITD dimension and the application copies it into a separate balance called Prior Accrued. The source balance should include the balance calculated within the source relationship, and the balances received from any previous global transfers.

You can copy balances to the target record through these methods:

- Select the **Copy balances to the new employment record** checkbox to start the copy of balances automatically after the global transfer is complete. You can find this checkbox in the **Payroll Details** section of **Local and Global Transfer** and **Mass Legal Employer Change** flow. Once the copy process is complete,

you can view the status message on the **Change Legal Employer Dashboard**. You can preconfigure the list of balances by an object group; called **Process Information Group**. You can use the delivered **Default Global Transfer Group** or define an object group according to your requirements.

- Submit the **Transfer Balances** flow if you think that the balances aren't ready on the source at the time of global transfer and you want to start the copy later. You can identify the readiness of the balance by these two conditions,
    - Any further payroll activity on the source
    - Time left for the first payroll activity on the target

The Transfer Balances process copies balances through a balance adjustment batch with adjustments for each balance listed in the specified object group. The application records these adjustments using an application-generated element with the Balance Initialization classification. If the source defined balance has one or more balance contexts, the process creates separate adjustments for each context value.

The Transfer Balances flow consists of two tasks:

- **Create Global Transfer Adjustment Batch**: Creates the balance adjustment batch for copying balances between employment records.
- **Adjust Multiple Balances**: Processes the adjustment batch and also supports rollback and retry operations.

You can run the Transfer Balance process again if more payroll runs take place on the source employment record. This process assumes that the source balance value is the source of truth and adjusts for differences in balance values between the source and target employment records, even negative ones. So the best idea is to leave the **Exclude Target Assignment with Payroll Results** parameter in the Transfer Balances flow at its default value. This approach would prevent accidentally reversing the results of calculations on the target employment record that aren't part of the source balance value.

Before You Set Up the Object Group

There are several factors you must consider when configuring the application to copy balances between employment records.

Source and Target Balances

The source balance is the balance used to read values on the source assignment or payroll relationship. You must choose the source balance based on which calculation results should be visible to the target payroll calculation. For example, when continuing a Total Owed deduction on the target assignment or payroll relationship. You must also copy the Accrued balance, as that's what the payroll calculation checks to determine the remaining amount to deduct.

The target balance is the balance adjusted on the target assignment or payroll relationship. The most common choice for target balance is the same as source balance. However, this choice may not meet every requirement, especially if you need to separate the Previous Balance from the balance calculated within the current legal employer for reporting purposes. To meet these requirements you will require additional manual configuration, such as new balances, and should be done only when necessary.

Source Balance Dimension

To read the balance value on the source employment record you will require a defined balance, which is a combination of the balance and the associated balance dimension. The balance dimension is determined by three factors based on how the copied balance is used on the target employment record.

1. **Employment Level**: Assignment or Payroll Relationship
2. **Time Span**: The period over which the balance value must be fetched and copied. For example, an Arrears or Accrued balance for a deduction would require Inception to Date (lifetime) values. On the other hand, annual statutory limits on a pre-tax deduction would require Year to Date values.
3. **Context or References**: If you want to copy the values separately based on logical partitions such as Tax Reporting Unit, Deduction Reference, State/Province, then select the dimension that contains the necessary contexts. Calculation Breakdown is an implicit context and you can exclude this using a No Calculation Breakdown dimension. For example, if a state imposes an annual statutory limit on employee earnings, which is exempt from state income tax. In this case, you would want to copy the exempt earnings from the source legal employer for the year to date separately for each state. You can do this by using a **State Year to Date** dimension. The application reads and adjusts the balances for every value of the context, where the balance values differ between the source and target employment records.

Element Entry as a Prerequisite for Copying Balances

The most common use case for copying balances is to bring visibility of calculation results to the payroll calculation on the target payroll relationship. You can use the calculation formula associated with the element entry that uses the balance value to determine the final calculated result. You can choose to copy the balance always or only if such an element entry exists.

Although, copying balances only if an element entry exists might seem like the most efficient method by avoiding copying balance values that may never be used on the target employment record, you must consider the possibility of the following scenario:

- The application assigns an element entry after the copy process. For example, a pre-tax deduction that's subject to an annual statutory limit.

Related Topics

- Overview of Copying Balances
- Example to Carry Forward Total Owed Deductions
- Global Transfer Overview

Example to Set Up Voluntary Deduction Balance to Object Group

This example describes how to configure the list of source and target voluntary deduction balances by Process Information Group. You can add balances to the delivered Default Global Transfer Group or define an object group according to your requirements.

Here's how you can add the Car Loan Repayment balance to the object group:

1. On the Home page, click the **Object Groups** quick action under the **My Client Groups** tab.
2. Select a **Legislative Data Group**.
3. Search for and select the **Default Global Transfer Group** as the object group name.
4. Click **Edit** on the **Object Groups** page, and click **Next**.

5. In the **Object Group Store** section, select **Global Transfer Balance Adjustment** in the **Context Segment** field. Click **Search**.
6. To add a new entry, click the Create button.
7. Select the **Source Defined Balance** as **Car Loan Repayment Accrued Relationship No Calculation Breakdown Inception to Date** to read the value on the source employment record.
8. Select the **Target Balance** as **Car Loan Repayment Accrued** that's adjusted on the target employment record.
9. Optionally, select the **Prerequisite Target Element** as **Car Loan Repayment** if you want to copy the balance only when the employee has a prerequisite element entry.

FAQs for Balances

Can I calculate balances that go back 12 months?

Yes. You can use certain balance dimensions to calculate balances based on a 12-month period rolling back from the effective date. The 12-month rolling balance provides a sum total for the balance dimension that you select.

If the balance dimension is used in a payroll run or report, however, it calculates a balance based on the 12-month period prior to the effective date of the run.

For example, let's say you wanted to retrieve balances for an employee for 12 months. If the effective date is 31-AUG-2015, you can then use a balance dimension to summarize all run results for the period from 01-SEP-2014 to 31-AUG-2015.

What balance dimensions can I use to calculate balances for a 12-month roll back period?

You can use these balance dimensions to calculate balances for a 12-month roll back period:

This table lists the available balance dimension types and balance dimensions.

Balance Dimension Type	Balance Dimension
Rolling 12 Month Balance Dimensions	• Relationship Tax Unit Rolling 12 Month • Assignment Tax Unit Rolling 12 Month
Resident City Balance Dimensions	• Term Tax Unit Resident City Month-to-Date • Term Tax Unit Resident City Quarter-to-Date • Term Tax Unit Resident City Year-to-Date • Assignment Tax Unit Resident City Month-to-Date • Assignment Tax Unit Resident City Quarter-to-Date • Assignment Tax Unit Resident City Year-to-Date

Balance Dimension Type	Balance Dimension
Statutory Report Code Balance Dimensions	• Relationship Tax Unit Statutory Report Code Run • Relationship Tax Unit Statutory Report Code Month-to-Date • Relationship Tax Unit Statutory Report Code Quarter-to-Date • Relationship Tax Unit Statutory Report Code Year-to-Date • Relationship Tax Unit Statutory Report Code Period-to-Date • Term Tax Unit Statutory Report Code Run • Term Tax Unit Statutory Report Code Month-to-Date • Term Tax Unit Statutory Report Code Quarter-to-Date • Term Tax Unit Statutory Report Code Year-to-Date • Term Tax Unit Statutory Report Code Period-to-Date • Assignment Tax Unit Statutory Report Code Run • Assignment Tax Unit Statutory Report Code Month- to-Date • Assignment Tax Unit Statutory Report Code Quarter-to-Date • Assignment Tax Unit Statutory Report Code Year-to-Date • Assignment Tax Unit Statutory Report Code Period-to-Date

8 Payments

Bank Accounts

Considerations When You Create Accounts

Banks, branches and accounts fit together on the premise of the Bank Account model. The Bank Account model enables you to define and track all bank accounts in one place.

The Bank Account Model can explicitly grant account access to multiple business units, functions, and users. Consider the following when you set up bank accounts:

- Assign a unique general ledger cash account to each account, and use it to record all cash transactions for the account. This facilitates book to bank reconciliation.
- Grant bank account security. Bank account security consists of bank account use security, bank account access security, and user and role security.

Legal Entity-Based Data Access for Bank Account Setup

By default, users with the necessary function security privileges have access to create and manage all internal bank accounts.

Optionally, restrict access to bank account information based on the user's legal entity data access. This allows cash managers to add, review, or modify only the bank accounts associated with the legal entities that the user has access to. For example, only users who have been assigned the Manage Bank Account (CE_MANAGE_BANK_ACCOUNT_PRIV) privilege for Vision Operations legal entity, can create, review, or modify internal bank accounts associated with this legal entity.

Decentralized organizations will benefit with improved security by ensuring that users only manage the bank account setup for the organizations they're authorized for.
Business benefits include:

- Improve security and increase control of bank account setup by limiting user access to bank account information.
- Helps decentralized organizations that require users only to manage the bank account information for the organizations they're authorized for.

To enable the feature Legal Entity-Based Data Access for Bank Account Setup, you must:

1. Use the Opt in UI to enable the feature.
2. Assign users to the appropriate legal entity security context:
    a. In the Setup and Maintenance work area, Select the Offering as Financials, Functional Area as Users and Security, and Task as Manage Data Access for Users.
    b. On the Manage Data Access for Users page, create data access for users by entering the user name, Cash Manager as role, legal entity as security context, and legal entity name as security context value, to create the data access for the user.
    c. Save the changes.

Once the feature is enabled, legal entity-based data access security is applied when an internal bank account is created or managed using either the UI or REST API.

Account Use

Account Use refers to accounts created for:

- Oracle Fusion Payables
- Oracle Fusion Receivables
- Oracle Fusion Payroll

Select the appropriate use or uses when creating an account in one or more of these applications.

Account Access

Payables and Receivables account access is secured by business unit. Before the bank account is ready for use by Payables or Receivables, you must:

1. Select the appropriate use for the application.
2. Grant access to one or more business units.

> **Note:** You can only assign access to the business units that use the same ledger as the bank accounts owning the legal entity,

User and Role Security

You can further secure the bank account so that it can only be used by certain users and roles. The default value for secure bank account by users and roles is No. For Payables and Receivables, you must have the proper business unit assigned to access a bank account even if the secure bank account by users and roles is No. If the secure bank account by users and roles is set to Yes, you must be named or carry a role assigned to the bank account to use it.

- To set up banks, branches, and accounts, your custom role must have the security duty role Cash Management Administration. You must have the assigned the Manage Bank Account Security privilege (CE_MANAGE_BANK_ACCOUNT_SECURITY_PRIV) to modify the User and Role Security.
- To restrict the access to the Security tab, you must create a custom role and remove the Manage Bank Account Security (CE_MANAGE_BANK_ACCOUNT_SECURITY_PRIV) privilege. For example, you'd copy the Cash Management Administration duty role, rename it, and remove the privilege.

GL Cash Account Segments

Consider selecting the option to enable multiple cash account combinations for reconciliation to reconcile journal lines of multiple cash account combinations matching the same natural account and other specified segment values.

For example, if you set up 01-000-1110-0000-000 as your cash account, and select Account and Subaccount as GL Cash Account Segments, you can manually or automatically reconcile journal lines entered on different account code combinations matching the same natural account '1110' and subaccount '0000'.

Related Topics

- Assign Data Access to Users

How Bank, Branch, and Account Components Work Together

Banks, branches, and accounts fit together on the premise of the Bank Account model.

The model enables you to define and keep track of all bank accounts in one place and explicitly grant account access to:

- multiple business units
- functions
- users

This eliminates the redundant duplicate bank account setup in different business units when these business units share the same bank account.

Banks

Creating a bank is the first step in the bank account creation. You can:

- Search for existing banks to view and update
- Create a new bank from an existing party

Consider the following:

- The option to create from an existing party is implicitly implemented by the matching option.
- The option is available only after the existing party has been found with the same bank.
- If you select the matching option, the page repopulates the information from the matched party.

Branches

Once you have created your bank, the next step is creating a branch or branches associated to the bank. The matching option is also available when creating branches. To create a new branch without using the matching option, manually enter the required information. You can also define other branch- related attributes in the same page.

If you don't use the matching option when an existing party is found, a branch with the same party name is created.

Accounts

The four areas associated with defining an account are:

- General information
- Control of the account
- Security and access to the account
- Business unit assignment

Once the bank and branch are created, proceed to the bank account setup by doing the following:

- Select the bank branch you want to associate to your bank account.

- Assign the owner of the bank account.

> **Note:** To create a bank account for Payables or Receivables, add the Business Unit Access first for the business units to use the bank account.

Consider the following:

- The Oracle Fusion Account Payables or Receivables accounts are identified by the business unit.
- The Oracle Fusion Payroll accounts are identified by the legal entity.
- The program, Inactivates Banks and Bank Branches enables you to inactivate all banks and bank branches that have no active internal and external bank accounts.
- Optionally, secure the access to bank account information based on the user's legal entity data access, by enabling the opt-in **Legal Entity-Based Data Access for Bank Account Setup**.
- Legal entity-based data access for bank account setup:
  - Improves security and increases control of bank account setup by limiting user access to bank account information.
  - Helps decentralized organizations that require users only to manage the bank account information for the organizations they are authorized for.

Related Topics

- Considerations When You Create Accounts
- Reconciliation Matching Rules
- Assign Data Access to Users

Bank Account Number Masking in Payroll Reports

To prevent display of sensitive bank account information, you can use the option of masking or encrypting bank account information in these reports:

- Payslips
- Payment Register
- Third-Party Payment Register

Masking involves displaying only a few specific characters of the account number or IBAN number, usually characters at the start or end of the number. The remaining characters are obfuscated and you can't see them on the reports. For example, a customer may want to display only the last 4 characters of the account number. In such cases, an account number ABC123456 displays as XXXXX3456 in reports and UIs that support masked account numbers.

Encryption requires a secure key for decoding the encrypted account number and IBAN number through an API. The application displays the truncated account or IBAN number when the encryption is turned on and the full, clear number when the encryption is turned off.

Settings that Affect Account Number Masking

The application stores the bank account number and IBAN number information in these columns of the database tables:

- Original column that stores the visible unmasked portion of the numbers.
- Masked column that stores the masked numbers. When masking isn't enabled, these columns store the full numbers.
- Secured column that stores the encrypted numbers and requires a secure key to retrieve the data.

This table shows how the bank account numbers are stored in the tables depending on how you configure masking and encryption.

Actual Account Number	Configuration - Masking	Configuration - Encryption	Original Column	Masked Column	Secured Column
ABC123456	No	No	ABC123456	ABC123456	ABC123456
ABC123456	Yes	No	ABC123456	XXXXX3456	ABC123456
ABC123456	Yes	Yes	3456	XXXXX3456	ABC123456

Note: The above table assumes that the masking setup displays only the last four characters of the bank account number.

- The first row in the table shows the default settings where both masking and encryption is turned off. The original full number is stored in all the three columns.
- The second row in the table depicts a scenario where masking is turned on but encryption is turned off. In this case the masked column displays only the last four characters of the account number.
- The third row depicts a scenario where both masking and encryption is turned on. In this case the original column contains the truncated four-digit account number. You need the secure key to retrieve the full account number from the secured column.

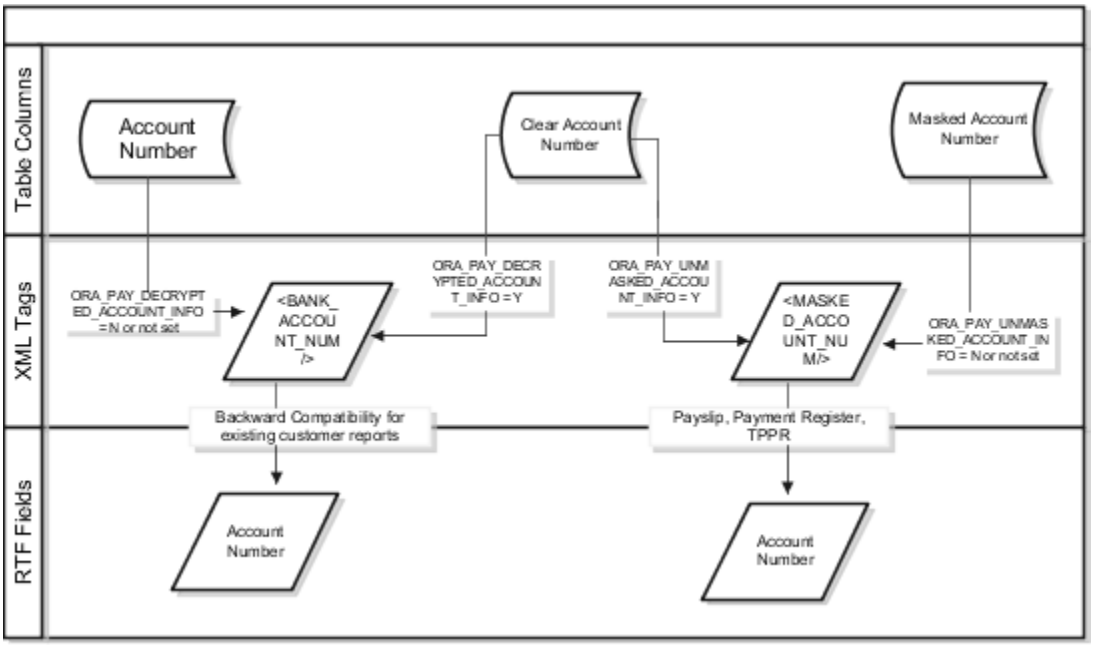
When you turn on encryption, the unsecured account number and IBAN columns only shows the visible characters as defined by masking. This means that to turn on encryption, you must turn on masking. However, you can turn on masking without turning on encryption.

How Account Number Masking Works

Use the new **Extract Unmasked Bank Information** (ORA_PAY_UNMASKED_ACCOUNT_INFO) process configuration parameter to display either the masked or full numbers in the reports. This new parameter ensures:

- Consistency across the three reports
- Control how you display the numbers on the reports

The following figure shows how account number masking happens for the three reports.



The figure shows the following:

- The first stream layer shows the table columns that store the account number information.
- The second stream layer shows the XML tags and process configuration groups.
- The third stream layer shows the RTF fields shown on the report template.

As explained in the previous section, the application stores the account number information in three separate columns.

The new `ORA_PAY_UNMASKED_ACCOUNT_INFO` process configuration parameter controls the `MASKED_ACCOUNT_NUM` tag to display:

- The masked account number when the process configuration parameter is by default or set to *No*, or
- The clear or full account number when the process configuration parameter is set to *Yes*.

For example, if you mail a copy of the Third-Party Payment Register to the payee, you may want to mask the sensitive bank account information. If the same report is shared securely within the Payroll Department to verify the bank account details, you may run the report with the process configuration parameter set to *Yes*.

All the three reports use the `MASKED_ACCOUNT_NUM XML` field to display the Account Number.

You can use the **BANK_ACCOUNT_NUM** field if you use an older copy of the three reports. If you do so and you have turned on encryption, you can use the `ORA_PAY_DECRYPTED_ACCOUNT_INFO` parameter to switch between a clear and truncated number.

Related Topics

- Options for System Security
- Enable Encryption of Sensitive Payment Information

How Do I Extract Unmasked Bank Account Details In User-Defined Reports?

To extract and display unmasked bank account numbers in user-defined reports, use these data base items (DBIs):

- Clear Bank Account Number
- Clear Bank Account IBAN

Use these DBIs from one of these user entities:

- PERSONAL_PAYMENTS
- PERSONAL_PAYMENTS_RANGE
- ORG_PAYMENTS_RANGE

By default, the Make EFT Payments and Generate Check Payments process writes unmasked bank account numbers. For any other report that uses the payment XML to write bank account details, set the **ORA_PAY_DECRYPTED_ACCOUNT_INFO** payroll action parameter to **Y**, to extract the decrypted bank account and IBAN in the payment XML.

Similarly, use the **ORA_PAY_UNMASKED_ACCOUNT_INFO** process configuration parameter and set it to **Y** so that the **MASKED_ACCOUNT_NUM** tag displays the unmasked, full bank account number in the reports.

Bank Account User Rules by Country

Country-specific user interface rules have been predefined for employee bank accounts in the simplified bank account page.

The fields displayed on the user interface are governed by the rules defined in the table CE_CTRY_SPECIFIC_UI_RULES. The tables on the UI Rules list the predefined country-specific user interface rules for employee bank accounts in the simplified bank account page.

Related Topics

- Employee Bank Account Rules by Country: Argentina to Guernsey
- Employee Bank Account Rules by Country: Hong Kong to Norway
- Employee Bank Account Rules by Country: Oman to Vietnam

Payment Methods

How Payment Methods and Payroll Definitions Work Together

When you create objects, such as payroll definitions, third-party payment methods, and personal payment methods, you select a payment method to associate with the object. Understanding the functional relationship between the payment methods and the objects that use them is important.

Functional Relationships

This table helps you understand the functional relationship of payment methods with other objects.

Object	Function
Personal Payment Method	Associates a person to a payment method, currency, and payment source for payroll payments.
Third-Party Payment Method	Associates third parties, who aren't on the payroll, to payment information, such as currency and bank. Payments to third parties might be garnishments to control how you pay or other involuntary deductions and are typically processed separately from the payroll.
Payroll Definition	Associates a default payment method for payments to employees when a personal payment method isn't defined. **Note:** You can't set EFT payment methods as default payment methods because each payee must have a personal payment method with bank account information to know where to deposit the money.
Run-Type Payment Method	Associates a default payment method for a run type for payments to employees with no personal payment method defined. This overrides the payroll default payment method. For example, your regular payroll is by EFT but you issue check/cheque bonuses once a year. Using the Separate Payment run type, the payment method overwrites the default payment method of the payroll.

Related Topics

- Organization Payment Methods Overview
- Payroll Definitions
- Third-Party Payment Methods

Organization Payment Methods

Overview of Organization Payment Methods

Organization payment methods (OPM) control how you pay payroll payments to your employees and third parties. OPMs interact with payroll definitions, payment sources, payment rules, prenotifications, and link the personal payment methods (PPMs) with your organization payment sources.

After setting up the banks, bank branches, and bank accounts that you use, you can define payment methods for your organization. OPMs include key information, such as payment type, currency, and company bank information.

You must create one organization payment method for each combination of legislative data group, payment type, and currency that you use to disburse wages and other compensation. You can also create rules to determine the distribution of payments from a specific bank account for a specific group of payees. Use the Organization Payment Methods page to view, create and edit.

Note: Create one organization payment method per payment type and currency, such as a direct deposit being paid in USD. Define payment sources and payment method rules to determine which payment source will pay which group of payees. If you decide to create more than one OPM per payment type and currency, you must configure payment method preferences to define OPMs available for employees to use.

Payment Types

When you create an organization payment method, select a payment type.

These are the most common payment types and the name of the corresponding payment processes:

Payment Types	Payment Process
Direct Deposit	Make EFT Payment
Check/cheque	Choose one of these 2 check/cheque payment processes: • Use the Generate Check Payments process to run the check process for your employees and third parties in one process. • Use the Generate Check Payments for Employees and Third Parties process to run the check process for your employees and third parties in separate processes.
International Transfer	Make EFT Payments
Cash	There's not a cash payment process. You can make cash payments outside of the application and record as an external payment.

Note: The exact list of payment types and their names can vary by country. Your enterprise may support a different range of types that are appropriate for your localization. For example, in the US, the payment type for EFT is Direct Deposit; in the UK it's BACS, and in Australia it's BECS.

Currency

Currency is typically defined as the same currency as your company's source bank account. Define currency in the OPM for payment transfers, such as EFT files.

The prepayment process supports currency conversions but it's important to make sure your localization and bank support multi-currency payments, to include the format of the payment file that supports international payments. For example, your output currency for your elements is defined as USD. All payroll calculations use your element currency, to include net payment amounts. When you define an international transfer OPM with GBP currency and associate it to an employee's personal payment method, the prepayments process converts the payment amount from USD to GBP for the employee. And, the payment process payment file contains the converted amounts in GBP to send the payment in the employee's currency.

Payment Information

Use the payment information region to capture details for your payments. For example, you can specify a maximum limit for each payment made using the organization payment method. You also have an option to define a maximum limit for the total payment transaction.

The exact content of this region can vary based on the selected payment type and your localization.

Note: You can enter payment information at the organization payment method level, the payment source level, or both. Entries at the payment source level take priority over entries at the organization payment method level. If you define details at the payment source level, to use those details when you process payments, you must enter the payment source when you submit the payment process.

Prenotifications

Prenotifications or prenotes are typically 0 amount electronic entries you send to a bank to verify the routing number and account number of the receiving bank. Use the Organization Payment Methods task, to configure following prenotification rules for direct deposit payment types.

Field Name	What it does
Prenotification Required	Designates the prenotification is required for employees.
Prenotification Amount	Designates the prenotification transaction amount. is required for employees. Default value is 0 USD.
Days	Number of days required for a prenotification wait period. Until the waiting period is complete, the employee is paid by check. For example, if you set the prenote wait period to 10 days, depending on the timing for weekly payroll runs, the employee may receive 2 checks before the direct deposit begins.

If you prenote bank accounts in your legacy system, you may choose to skip the prenote process when you implement payroll. To do this use the Payroll Bank Account Prenote Status Update data loader.

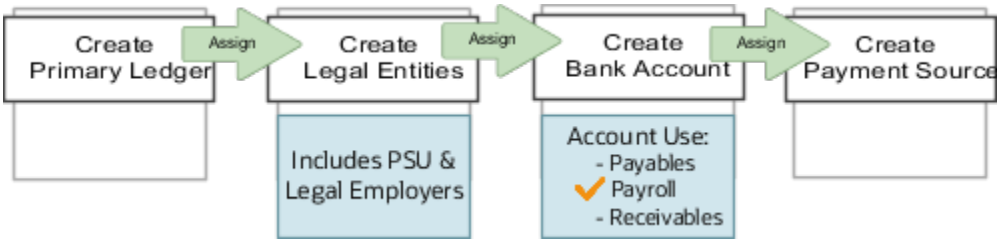
Payment Sources

Payment sources identify your company bank accounts debited for payroll payments. You must associate at least one payment source to an organization payment method.

This validation occurs to ensure the bank account on the payment source are available for payroll payments:

- Must be associated to a Payroll Statutory Unit (PSU). You must either assign a PSU legal entity to the bank account or assign a legal employer with a parent PSU to the bank account.
- Must be enabled for payroll payments. You must select Payroll in the Account Use option for the bank account.
- Must have active bank account. You must assign a bank account that's active at the time of the payroll payment.

This diagram highlights the bank account set-up required for Cloud Payroll. Use the payroll extension option on the Features by Country or Territory page to register Cloud Payroll.



Note: In order for a bank account to appear in the payment source page it must be associated to a Payroll Statutory Unit (PSU), enabled for payroll payments and active.

Note: If you use a third-party payroll product, you can create an organization payment method without a payment source record.

Note: If you cost your payments, enter cost account information on the Costing of Payment Sources page.

You can use the same bank account in different payment sources in more than one organization payment method, as in this example.

Organization Payment Method	Payment Source	Bank Account
Check/cheque	Bank of America Account A	Bank A - Account 7890045
EFT	Bank of America Account B	Bank A - Account 7890045

Payment Method Rules

Payment method rules define the appropriate payment source to be used for payment to a specific group of payees. If you define multiple payment sources for an organization payment method, you must set up payment method rules.

You can define standard payment method rules based on the tax reporting unit (TRU) of an employee. You can also use the payment criteria feature to set up payment method rules to derive payment sources within a single TRU, such as rules based on department, job or location.

This example shows payment method rules based on the TRU of the payee. The organization payment method has three different payment sources.

Payment Source	Tax Reporting Unit	Default Payment Source
Payroll EFT Source A Bank A - Account 7890045	None	Yes
Payroll EFT Source B Bank B - Account 1238900	TRU1	No
Payroll EFT Source C Bank C - Account 8765999	TRU2	No

The first payment source that you add is the default payment source, but you can select another payment source as the default, or not have a default payment source.

To understand the effect of a default payment source, consider these examples that describe what happens when a TRU changes, and causes an invalid payment rule.

Approach	Example
With a default payment source, the payment process pays employees with the default payment source.	This approach might suit a company with multiple independent franchises, each with its own TRU. If a franchise holder sells the franchise, payments don't fail.
Without a default payment source, the payments process issues error notifications to ensure that you use the appropriate payment source to fund the payment.	This approach might suit a company with strict policies about payment rule compliance.

International Transfer Payment

The international transfer payment type supports payment methods for electronic funds transfer (EFT) payments to a country different from the originating payment source.

In order for you to use this functionality, you must be able to support payments to international bank accounts. For example, the US supports a file format called IAT NACHA, which supports making payments from the US to bank accounts which reside outside of the US. Attach the file format to the 'International EFT' report category.

Related Topics

- Configure Payment Method Preferences
- Payment Method Rules Setup Examples
- Payment Sources in Organization Payment Methods Setup Examples
- How do I import organization data?
- Example of Skipping Prenotes

Payment Sources in Organization Payment Methods Setup Examples

You set up payment sources when you create organization payment methods (OPM) for payroll processing. Use the Organization Payment Methods task.

Derive Payment Source Based on TRU

You pay your workers by electronic funds transfer (EFT) payments. To comply with tax reporting unit (TRU) regulations for out-of-TRU payments, payment rules are created based on TRU to pay from two different banks. This table helps you understand your key decisions for this scenario:

Decisions to Consider	In This Example
How many OPMs do you need?	One.
How many payment sources do you need?	Three. One default payment source for the TRU1, one source for payments in TRU2, and one source for payments in TRU3.
How many bank accounts do you need?	Three. One for each payment source.
What payment method rules do you need?	Rules for bank accounts used as payment sources based on each TRU.

Prerequisites

Verify you have completed these before you continue:

1. Primary ledger is set up in Oracle Cloud General Ledger.
2. Banks, branches, and account info to use as the payment sources are set up in Oracle Cloud Cash Management.
3. Legal entity associated with the legislative data group is assigned to a general ledger.
4. TRUs are set up.

Create the OPM with Basic Details

Add new OPM in the Organization Payment Methods page with this info:

1. Click the Organization Payment Methods task.
2. In the Search Results section, click Create.
3. Select your legislative data group. This example is InFusion LDG.
4. Select the date this payment method is to be available for use.

> **Tip:** Select a date that's on or before the effective date this payment method will be used by the payroll definition or other objects.

5. Click Continue.
6. In the Basic Details section, complete the fields with this info:

Field	Value
Name	Payroll Direct Deposit
Payment Type	Direct Deposit **Note:** The available payment types for OPMs can vary by legislation.
Currency	Payment currency

7. Click Save.

Add EFT File Info

When you select the EFT payment type, you have the option enter EFT info at these levels:

> **Note:** EFT file info entered at the payment source level takes priority over info entered at the organization payment method level.

1. Payment source level
2. Organization payment method level
3. Both levels

Create Payment Sources

Perform these steps three times to create each payment source.

1. In the Payment Sources section under Payment Source Information, click Create.

2. On the Create Payment Source page, complete the fields in order, as shown in this table:

Field	Source 1	Source 2	Source 3
Name	Payroll EFT Source 1	Payroll EFT Source 2	Payroll EFT Source 3
Bank Account Name	Bank A	Bank B	Bank C
Bank Reference	123456789	234567890	345678901
Company Reference	456789012	567890123	678901234

> **Tip:** Keep your payment source names unique and specific as possible for each scenario. This naming convention helps you manage complicated combinations of OPMs and payment rules.

3. Click Continue.

Create Payment Rules

Perform these steps three times to create each payment source.

1. In the Payment Method Rules section, for Payroll EFT Source US, ensure that the default setting is Yes.
2. In the same section, click Create and select the values shown in this table to create two payment rules that map a payment source to a TRU.

Field	Source 2	Source 3
Default	No	No
Tax Reporting Unit	TRU2	TRU3
Payment Source	Payroll EFT Source 2	Payroll EFT Source 3

3. Click Submit.

Create Same Payment Source for Pay Workers and Third Parties

Your organization pays all workers and third-party payees from the same source bank account. In this scenario, no special payment method rules are required. Perform these steps for this scenario:

1. Ensure the payment source is set as the default.
2. Leave the Third-Party Payment, Tax Reporting Unit, and Payment Criteria fields blank.
3. Click Continue.

Create Separate Payment Source for Pay Workers and Third Parties in a Specified TRU

Your enterprise is based in one tax reporting unit (TRU1), but you have some workers in another tax reporting unit (TRU2). To comply with TRU1 regulations for out-of-TRU payments, you specify a payment source for the TRU2. In this scenario, your payment source for TRU1 is already set as the default payment source, so no change is needed for TRU1. Perform these steps for the TRU2 employees:

1. Add a payment method rule.
2. Select the TRU2.
3. Select the TRU2 payment source.
4. Click Continue.

Create Separate Payment Sources for Pay Workers and Third Parties in the Same TRU

You currently pay everyone in your TRU using Payment Source A. Your company recently employed a private consultant, Jon Moore, from a third-party auditing company. A new company requirement states that payments must come from a new payment source, Payment Source B. For this scenario:

1. Create John as a third-party person payee.
2. Leave the Third-Party Payment, Tax Reporting Unit, and Payment Criteria fields blank.
3. Click Continue.

Create Separate Payment Source for Pay Workers in a Specified Department

Note: This scenario has these prerequisites:

- An information element exists named Default Payer with an input value named Payment Criteria.
- A formula exists that retrieves department names and the assignment IDs of the employees associated with them.
- The processing rules in the Default Payer element refer to the formula. The result rules target field is set to Payment Criteria. The returned field is set to the value specified in the formula.

You use different payment sources to pay employees in the Sales and Development departments. Perform these steps for this scenario:

1. Create a payment method rule for each department.
2. Enter the department name in the Payment Criteria field.
3. Select the TRU and payment source.
4. Click Continue.

Related Topics

- How Bank, Branch, and Account Components Work Together
- Organization Payment Methods Overview
- Payment Method Rules Setup Examples
- Derive Payment Sources Example

Payment Method Rules Setup Examples

These examples show you can use payment method rules to handle payments to different parties and from different payment sources. Set payment method rules on the Organization Payment Methods page.

Create the Same Payment Source for Pay Workers and Third Parties

Your organization pays all workers and third-party payees from the same source bank account. In this scenario, no special payment method rules are required. Add a payment rule in the Payment Method Rules section as stated in these steps:

1. Ensure that the payment source is set as the default.
2. Leave the Third-Party Payment, Tax Reporting Unit, and Payment Criteria fields blank.

Create Separate Payment Sources for Pay Workers and Third Parties in a Specified TRU

Your organization is based in one tax reporting unit (TRU1), but you have some workers in another tax reporting unit (TRU2). To comply with TRU1 regulations for out-of-TRU payments, you specify a payment source for the TRU2. In this example, your payment source for TRU1 is already set as the default payment source, so no change is needed for TRU1. For the TRU2 employees. Add a payment rule in the Payment Method Rules section as stated in these steps:

1. Select the TRU2.
2. Select the TRU2 payment source.

Create Separate Payment Sources for Pay Workers and Third Parties in the Same TRU

You currently pay everyone in your TRU using Payment Source A. Your company recently employed a private consultant, Jon Moore, from a third-party auditing company. In this example, you have a new company requirement that states payments must come from a new payment source, Payment Source B. Add a payment rule stated in these steps:

1. Create John as a third-party person payee.
2. Add the Payment Source B payment source and a new payment method rule in your organization payment method.
3. Select the Third-Party Payment check/cheque box, Jon's name as the third-party person to pay, and Payment Source B in the payment method rule.

Create a Separate Payment Source for Pay Workers in a Specified Department

You use different payment sources to pay employees in the Sales and Development departments. Add a payment rule in the Payment Method Rules section as stated in these steps:

1. Create a payment method rule for each department.
2. Enter the department name in the Payment Criteria field.
3. Select the TRU and payment source.

Note: This scenario has these prerequisites:

- An information element exists named Default Payer with an input value named Payment Criteria.
- A formula exists that retrieves department names and the assignment IDs of the employees associated with them.
- The processing rules in the Default Payer element refer to the formula. The result rules target field is set to Payment Criteria. The returned field is set to the value specified in the formula.

Related Topics

- Derive Payment Sources Example
- Payment Sources in Organization Payment Methods Setup Examples

Derive Payment Sources Example

Use payment criteria to set up your rules to derive payment sources within a single tax reporting unit (TRU). The prepayments process uses the rules to identify the source bank information from the employee's TRU and any additional payment criteria you define.

This example uses department, but you can use other criteria, such as business unit.

Steps to Derive Payment Sources by Department

You want to pay employees in the Sales and Development departments from separate payment sources. You define the payment rules in organization payment method, create fast formulas get department names from HR and call the employees department names by Assignment ID, and create an element with the default payer information. The default payer element passes the department name as a run result value.

1. Define the payment rules .in the Organization Payment Method page.
    - Add one payment rule for each department in the Payment Method Rules section, as shown in this table:

Field	Development Department	Sales Department
Tax Reporting Unit	TRU 1	TRU 1
Payment Criteria	Development	Sales
Payment Source	Payment Source A	Payment Source B

Note: In the Payment Sources section, create the payment sources to use in the payment rules, if they don't already exist.

2. Create the formula to get department names from HR.

- Enter information on the Fast Formulas page, as shown in this table:

Field	Value
On the Fast Formulas page, create the formula with values as shown in this table:	XX_Employee_Department
Formula Type	Payroll Access to HR
Description	Formula to return the department of an employee.
Effective Date	01/01/1951 **Note:** Enter the same date used to create elements during implementation.

- In the Formula Text section, enter this content:

```
Default for PER_ASG_ORG_DEPARTMENT_NAME is ' '
l_dept_output = PER_ASG_ORG_DEPARTMENT_NAME
Return l_dept_output
```

- Click Submit.
- Click Complete.

3. Create the formula to get the departments for employees to use as payment criteria value.

> **Note:** This formula calls the department names formula to get employee department by Assignment ID, which are used to find employees values.

- Enter information on the Fast Formulas page, as shown in this table:

Field	Value
On the Fast Formulas page, create the formula with values as shown in this table:	XX_Default_Payer_Payment_Criteria
Formula Type	Payroll
Description	Formula to use the returned Department database item as Payment Criteria input for Default Payer element.

Field	Value
Effective Date	01/01/1951 **Note:** Enter the same date used to create elements during implementation.

- In the Formula Text section, enter this content:

```
Default for ASG_HR_ASG_ID is 0
SET_INPUT('HR_ASSIGNMENT_ID', ASG_HR_ASG_ID)
EXECUTE('XX_Employee_Department') /* Formula to retrieve the
Employee Department. */
Emp_Dept = GET_OUTPUT('l_dept_output','Null')
Return Emp_Dept
```

- Click Submit.
- Click Complete.

Create the Element to Derive Payment Source by Department

Create the Default Payer element with the Payment Criteria input value, and automatic element eligibility.

1. Create an element on the Elements page using the Information primary classification and the values shown in this table:

Field	Value
Name	Default Payer **Note:** This name must match exactly. This name is how the application identifies any existing payment criteria.
Reporting Name	Default Payer
Effective Date	01/01/1951 **Note:** Enter the same date used to create elements during implementation.
What is the earliest entry date for this element?	First Standard Earnings Date

Field	Value
What is the latest entry date for this element?	Last Standard Process Date

2. Edit the new element to create an input value named Payment Criteria:
    - Click Input Values in the Element Overview section.
    - Select Create Input Values from the Actions menu.
    - Enter values as shown in this table:

Field	Value
Name	Payment Criteria
Display Sequence	10
Unit of Measure	Character

    - Click Save.
3. Edit the new element to create element eligibility that is set to automatic entry:
    - Click Element Eligibility in the Element Overview section.
    - Select Create Element Eligibility from the Actions menu.
    - Enter Payment Criteria Element Eligibility in the Element Eligibility Name field.
    - Select Automatic entry.
    - Click Save.
4. Edit the new element to create processing rules:
    - Click Status Processing Rules in the Element Overview section.
    - Select Create Status Processing Rules from the Actions menu.
    - Select XX_Default_Payer_Payment_Criteria in the Formula Name field.
    - Add a row in the Result Rules section using the values in this table.

Field	Value
Result Returned	EMP_DEPT
Result Rule	Direct Result
Target Input Value	Payment Criteria

Field	Value

- Click Submit.

Related Topics

- Payment Sources in Organization Payment Methods Setup Examples

Personal Payment Methods

Overview of Personal Payment Methods

Personal payment methods (PPM) determine how you pay payroll payments to your employees. PPMs includes key information, such as bank information for direct deposits, payment type and payment amount.

If personal payments aren't created for an employee, payments are made using the default organization payment method for the employee's assigned payroll.

Related Topics

- Configure Payment Method Preferences
- How Payment Methods and Payroll Definitions Work Together
- Personal Payment Method Alerts Template

Bank Info for Personal Payment Methods

You can create bank, branch, and bank account info as part of implementation, or you can let employees add their own bank info. Once created, you can use bank accounts in other Oracle applications, such as Cloud expenses.

Enter Bank Info for PPMs

This table summarizes approaches to create bank info for employees.

Approach	Purpose
Manage Banks and Manage Bank Branches pages	Create, edit, and view your bank account information. **Note:** In order to manage banks and branches, you must have the Manage Bank and Manage Bank Branch privileges.

Approach	Purpose
Payment Methods page	Create, edit and view employee bank account details to receive payroll payments.
HCM Data Loader	Use an integrated Excel workbook to load personal payment methods and employee bank account details.

You can use CE_USE_EXISTING_BANK_BRANCH profile option to control to whether or not your employee can create their own bank and branch data. On the Manage Cash Management Profile Options page, set the Use Existing Banks and Branches profile option to either Yes or No.

- If you set the option to Yes, you need to load bank and branch data. Administrators and employees select bank and branch details from a list of values in the bank region on the Payment Method page.
- If you set the option to No (default setting), you don't need to load any bank details. Administrators and employees enter their bank and branch details as free text.

Access to PPMs and Bank Info

The table shows the privileges you need to access PPMs and bank info:

User	Privileges	Access Description
Employee Self-service	Manage Personal Payment Method	Allows users to manage their own personal payment methods
Employee Self-service	View Personal Payment Method	Allows users to view their own personal payment methods
Employee Self-service, Implementors, Administrators, or Managers	Payee Bank Account Management Duty	Allows users to create bank accounts
Implementors, Administrators, or Managers	Manage Worker Personal Payment Method	Allows access to manage employee personal payment methods
Implementors, Administrators, or Managers	View Worker Personal Payment Method	Allows access to view employee personal payment methods.

Related Topics

- How Bank, Branch, and Account Components Work Together
- Configure Payment Method Preferences
- Examples of Loading Banks
- Examples of Loading Bank Branches
- Example of Loading Personal Payment Methods

Configure Payment Method Preferences

Configure preferences related to payment methods within a legislative data group (LDG) using Payment Method Preferences. Preferences are applied when your self-service employees enter payment methods for payroll payments.

Note: *If you support multiple organization payment methods of the same payment type, you MUST indicate which of these should be available to your self-service users, using the Payment Method Preferences page.*

Note: *If you intend to support multiple organization payment methods of the same payment type, then the Organization Payment Method field will appear on the Payment Methods page.*

Preference Rule	Action	Example
Legislative Data Group	Choose from the list of existing LDGs for the Payment Method Preference.	Payment Method Preferences are applied to LDGs. In all cases, choose your LDG for the preference.
What organization payment methods should be available for employees to select?	Choose from the list of existing OPMs for the LDG you want available to your employees on the Payment Method page. Note: When you choose multiple OPMs for the same payment type, employees will select from an OPM list instead of a payment type list to set up their personal payment methods.	You support check/cheque and EFT payment methods but you only want checks/cheques to be issued under certain circumstances. In this case, choose your EFT OPM and don't choose your check/cheque OPM from the list.
What is the maximum number of payment methods an employee should be allowed to create?	Enter the maximum number of payment methods you want an employee to create. Note: This number means an employee can create as many payment methods as they want equal to or less than this number.	You want to restrict the number of personal payment methods employees can create to 1. In this case, enter 1 into the field.
What payment amount types should be available for employees to select?	Choose from the list of payment amount types you want available to your employees on the Personal Payments page. Note: The system default is Both.	You want employees to only create payment methods with percentages. In this case, choose Percentage from the list.
What payment methods should employees not be allowed to edit?	Choose from the list of existing OPMs for the LDG you want to restrict your employees from editing on the Payment Method page.	You support paying employees by Pay Card, however, you want the personal payment method details to only be entered by professional users. In this case, choose your pay card OPM from the list for your employees to view this information but not make any edits.
Should the above selected payment methods be excluded from the 100% validation logic?	Choose Yes or No from the list to include the available payment methods that aren't allowed	You support Pay Card, however, you want to exclude this from the 100% validation rule so that your employees' salary can't be split

Preference Rule	Action	Example
	to be edited but are included in the 100% validation rule.	between Pay Card and another payment method. In this case, choose Yes from the list.

Related Topics

- Bank Info for Personal Payment Methods
- Organization Payment Methods Overview
- Payment Method Rules Setup Examples

Prenotifications

The purpose of prenotifications is to validate routing numbers and account numbers of the receiving banks. Once you have set up prenotifications for your organization payment method, the prenotification status is on in the professional payment method page.

Depending on the prenote status, you may edit the prenotification status field to update the prenote status.

This table describes the prenote status and actions that you can take:

Prenote Status	Description	Statuses available?
Not Submitted	This status will show when the bank account is first created and added to a payment method.	Marked as complete
Submitted	This status will show when the payment method is processed prepayments, for the number of prenote days as defined in the Organization Payment Method page.	Marked as complete Rejected
Complete	This status will show when the prenote period has completed.	N/A
Rejected	This status can be set by the professional user if the bank rejects the bank account information.	N/A
Marked as Complete	This status can be set by the professional user if they want to bypass the prenote process for a specific employee.	N/A

For example, your prenote process requires a 5 day wait period. You have a new hire, on a monthly payroll, with the first period end date being the 30th Jan. They enter their bank account details on 15th Jan. When the payroll department runs the prepayment process with an effective date of 30th Jan, the prenote statuses will appear as follows:

Not Submitted	Submitted	Complete
15th Jan -29th Jan	30th Jan - 3rd Feb	4th Feb -

The employee will receive a check payment for the first payroll period and the bank account will be used for payment effective 4th Feb and after.

Note: A professional user can also update the prenote date field, when the status is submitted, if for example, they need longer to verify the account.

Important prenotification banner messages show at the top of the page to let you know that the bank account isn't currently used for payment because it's still in Submitted status or is in Rejected status. This table explains these banner messages:

Prenotification Banner Message	Banner Shows on Page
This bank account will be used once the prenote process is complete.	During Submitted status, from the time the bank is first entered and attached to a payment method until the prenote process is complete.
This bank account was rejected during the prenote process and will not be used.	During Rejected status, This will be shown when the bank has been marked as rejected.

Skip Prenotification

There are situations where you may choose to skip the prenote process, such as if you recently migrated data into HCM Cloud and the bank prenote was completed in your legacy system. The prenote process automatically triggers when new bank accounts are loaded. Because prepayments process pays the employees by check until prenote process is complete, you must skip the prenote process to avoid this. Manually skip the prenote process or use HCM Data Loader.

Related Topics

- Organization Payment Methods Overview
- Example of Skipping Prenotes
- Payment Sources in Organization Payment Methods Setup Examples

Personal Payment Method Alerts Template

Personal payment method (PPM) alert template automatically sends personalized email notifications to employees. Based on logic, the email notification includes details about the PPM type created, updated or deleted.

You can use the PPM_ALERT alert templates as delivered or deactivate the delivered template and create new to change logic for notification generation, email content, font size, font style, graphics and links, to meet your communication style.

Use the Alerts Composer tool to enable and configure your email notifications. The templates are in Groovy programming language and contain tokens. Tokens are placeholders where information specific to the alert is filled in and included in the email notification.

These are the tokens supported by the personal payment method template:

Token	Definition
SessionUserName	User Name of the person performing the Operation self-service user or Administrative User.
UserName	User Name of the employee associated with the PPM.
ssoUser	Identifies when the action is performed by self-service user.
PPMName	Name of the personal payment method.
PersonId	Person Id of the employee associated with the PPM.
EffectiveStartDate	Effective Start date of the PPM.
EffectiveEndDate	Effective End date of the PPM.
Operation	Action performed on PPM, such as create, update, or delete.
CREATE_EFT	Identifies when the action creates an EFT source type of PPM. If PPM is created with an EFT source Type, bank, branch, account number and masked account number are associated.
BankName	Name of bank associated with the PPM of EFT source type.
BankBranchName	Name of bank branch associated with the PPM of EFT source type.
MaskedAccountNum	Masked account number associated with the PPM of EFT source type.
CREATE_NON_EFT	Identifies when the PPM is created with a non-EFT source Type, like check.
UPDATE	Identifies when the PPM is updated.
CORRECTION	Identifies when the PPM is corrected.
END_DATED	Identifies when the PPM is end-dated.
ZAPPED	Identifies when the PPM is permanently deleted.

Both the subject and body of the delivered template contain the same logic to determine when to send an email notification, to whom, and what to include for each notification. However, the logic in the alert subject sends the content for the subject, the logic in the alert body sends content for the body, and they're sent in one single email notification. There are 6 Groovy expressions in each that cover the following 11 scenarios to send ppm alerts to the employee. With the exception of the deletion of a personal payment method, each expression handles 2 scenarios using the common IF, THEN, ELSE logic.

Scenario	Alert Logic	Email Notification
An EFT PPM (direct deposit) is created and it's created by the employee self-service user	Subject: <% if(Operation.equals('CREATE_EFT')) { %> <%if(ssoUser){%>Your PPM with bank information was created<%}else{%>Your PPM with bank information was created for you < %}%> <%} %> Body: Hello <%if(UserName !=null){%>${UserName}< %}%>z <% if(Operation.equals('CREATE_EFT')){ %> <%if(ssoUser){%>Your Personal Payment Method (${PPMName}) with bank account ending with ${MaskedAccountNum} has been created successfully. Contact your Payroll Specialist with any questions.< %}else{%> Your Personal Payment Method (${PPMName}) with bank account ending with ${MaskedAccountNum} has been created for you. Contact your Payroll Specialist with any questions.<%}%> <%} %> Thank you	Hello <%if(UserName Your Personal Payment Method (${PPMName}) with bank account ending with ${MaskedAccountNum} has been created successfully. Contact your Payroll Specialist with any questions. Thank you
An EFT PPM (direct deposit) is created and it's NOT created by the employee self-service user	Same logic as above for the ELSE expression.	Subject: Hello <%if(UserName Your PPM with bank information was created for you Body: Your Personal Payment Method (${PPMName}) with bank account ending with ${MaskedAccountNum} has been created for you. Contact your Payroll Specialist with any questions. Thank you
A non-EFT PPM (check) is created and it's created by the employee self-service user	Subject: Hello <%if(UserName !=null){%>${UserName}< %}%>z 	Your Personal Payment Method (${PPMName}) has been created successfully. Contact your Payroll Specialist with any questions.

Scenario	Alert Logic	Email Notification
	<% if(Operation.equals('CREATE_NON_EFT')) { %> <%if(ssoUser){%>Your PPM was created<%}else{%> Your PPM was created for you <%}%> <%} %> Body: Hello <%if(UserName !=null){%>${UserName}<%}%>z <% if(Operation.equals('CREATE_NON_EFT')) { %> <%if(ssoUser){%>Your Personal Payment Method (${PPMName}) has been created successfully. Contact your Payroll Specialist with any questions. <%}else{%>Your Personal Payment Method (${PPMName}) has been created successfully for you. Contact your Payroll Specialist with any questions.<%}%> <%} %> Thank you	Thank you
A non-EFT PPM (check) is created and it's NOT created by the employee self-service user	Same logic as above for the ELSE expression.	Subject: Your PPM was created for you Body: Hello <%if(UserName Your Personal Payment Method (${PPMName}) has been created successfully for you. Contact your Payroll Specialist with any questions. Thank you
A PPM is corrected and it's corrected by the employee self-service user	Subject: <% if(Operation.equals('CORRECTION')){ %> <%if(ssoUser){%>Your PPM information was updated<%}else{%> Your PPM information was updated for you<%}%><%} %> Body: Hello <%if(UserName !=null){%>${UserName}<%}%>z <% if(Operation.equals('CORRECTION')){ %> <%if(ssoUser){%> Your Personal Payment Method (${PPMName}) has been updated successfully. Contact your Payroll Specialist with any questions.<%}else{%>Your Personal Payment Method (${PPMName}) has been updated successfully for you. Contact your Payroll Specialist with any questions. <%}%> <%} %> Thank you	Subject: Your PPM information was updated Body: Hello <%if(UserName Your Personal Payment Method (${PPMName}) has been updated successfully. Contact your Payroll Specialist with any questions. Thank you

Scenario	Alert Logic	Email Notification
A PPM is corrected and it's NOT corrected by the employee self-service user	Same logic as above for the ELSE expression.	Subject: Your PPM information was updated for you Body: Hello <%if(UserName Your Personal Payment Method (${PPMName}) has been updated successfully for you. Contact your Payroll Specialist with any questions. Thank you
A PPM is updated and it's updated by the employee self-service user	Subject: <% if(Operation.equals('UPDATE')){%> <%if(ssoUser){%>Your PPM information was updated<%}else{%> Your PPM information was updated for you<%}%><%} %> Body: Hello <%if(UserName !=null){%>${UserName}<%}%>z <% if(Operation.equals('UPDATE')){%> <%if(ssoUser){%>Your Personal Payment Method (${PPMName}) has been updated successfully. Contact your Payroll Specialist with any questions.<%}else{%>Your Personal Payment Method (${PPMName}) has been updated successfully for you. Contact your Payroll Specialist with any questions. <%}%><%} %> Thank you	Subject: Your PPM information was updated Body: Hello <%if(UserName Your Personal Payment Method (${PPMName}) has been updated successfully. Contact your Payroll Specialist with any questions. Thank you
A PPM is updated and it's NOT updated by the employee self-service user	Same logic as above for the ELSE expression.	Subject: Your PPM information was updated for you Body: Hello <%if(UserName Your Personal Payment Method (${PPMName}) has been updated successfully for you. Contact your Payroll Specialist with any questions. Thank you
A PPM is end-dated and	Subject: <% if(Operation.equals('END_DATED')){%> <%if(ssoUser){%>Your PPM information was	Subject: Your PPM information was end-dated

Scenario	Alert Logic	Email Notification
it's end-dated by the employee self-service user	end-dated<%}else{%> Your PPM information was end-dated for you<%}%><%} %> Body: Hello <%if(UserName !=null){%>${UserName}<%}%>z <% if(Operation.equals('END_DATED')){%><%if(ssoUser){%>Your Personal Payment Method (${PPMName}) has been end-dated as of ${EffectiveEndDate}. Contact your Payroll Specialist with any questions. <%}else{%>Your Personal Payment Method (${PPMName}) has been end-dated as of ${EffectiveEndDate} for you. Contact your Payroll Specialist with any questions. <%}%><%} %> Thank you	Body: Hello <%if(UserName Your Personal Payment Method (${PPMName}) has been end-dated as of ${EffectiveEndDate}. Contact your Payroll Specialist with any questions. Thank you
A PPM is end-dated and it's NOT end-dated by the employee self-service user	Same logic as above for the ELSE expression.	Subject: Hello <%if(UserName Your PPM information was end-dated for you Body: Your Personal Payment Method (${PPMName}) has been end-dated as of ${EffectiveEndDate} for you. Contact your Payroll Specialist with any questions. Thank you
A PPM is deleted and there is no condition for type of user	Subject: <% if(Operation.equals('ZAPPED')){%> Your PPM information was deleted for you<%}%> Body: Hello <%if(UserName !=null){%>${UserName}<%}%>z <% if(Operation.equals('ZAPPED')){%> Your Personal Payment Method (${PPMName}) has been permanently deleted for you. Contact your Payroll Specialist with any questions.<%} %> Thank you	Subject: Hello <%if(UserName Your PPM information was deleted for you Body: Your Personal Payment Method (${PPMName}) has been permanently deleted for you. Contact your Payroll Specialist with any questions Thank you

Related Topics

- Personal Payment Methods
- Functions and Groovy Expressions

FAQs for Personal Payment Methods

Why does an inactive bank account still shows as active?

Your bank account is active until the end of the day you marked it inactive. An end date is saved as of the date you mark your bank account inactive and remains active until midnight of its inactive date.

For example, if today is the 25th of January and you mark your bank account as inactive, it's active until midnight. Tomorrow, 26th of January, when you view your bank account in the payment method page, your bank account shows an inactive status with the end date.

> **Note:** If your inactive bank account is linked to a payment method, you see a reminder banner on the payment method page to associate an active bank account with your payment method.

Related Topics

- Bank Info for Personal Payment Methods
- Considerations When You Create Accounts

Why can't I select a bank account in the payment source page?

In order for a bank account to appear in the payment source page it must be associated to a Payroll Statutory Unit (PSU), enabled for payroll payments and active.

Check these items for compliance:

- Assign a PSU legal entity to the bank account or a legal employer with a parent PSU to the bank account.
- Select Payroll in the bank account Account Use option.
- Effective dates of payment source must be within effective dates of the bank account.

Related Topics

- Payment Sources in Organization Payment Methods Setup Examples

Third-Party Payment Methods

Third-Party Payment Methods Overview

A third party is any person or entity outside of your organization and a third-party payment method (TPPM) determines how you pay them. TPPMs includes key information, such as bank information for direct deposits, and payment type.

Related Topics

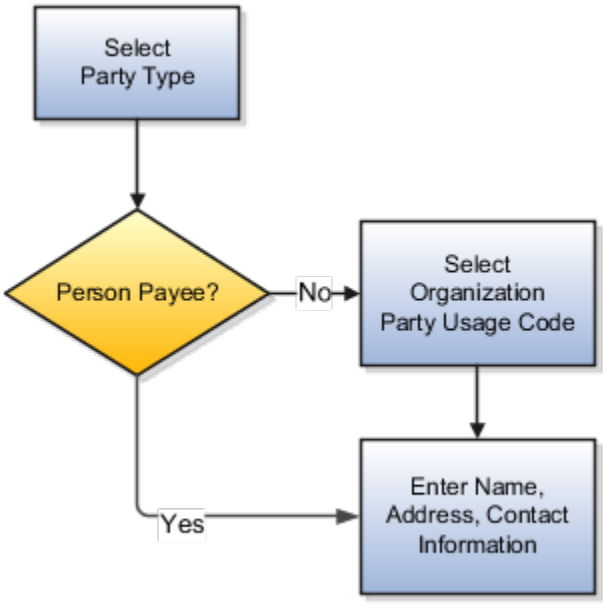
- Third-Party Payment Methods
- Employee and Third-Party Check Payments Overview
- Employee and Third-Party Check Payments Process
- Examples of Third-Party Payments
- Third Parties Overview

Third Parties Overview

You create third parties to process payments to external organizations and to people who aren't on the payroll. Use the Third Parties task to create third-party persons or organizations, such as pension providers, professional bodies, or disability organizations.

Note: When you create third-party persons and organizations, they're also defined as trading community members in the Trading Community Architecture (TCA), to allow use in other products.

This shows you the decision steps to create third parties.



Party Usage Codes

For third-party persons, the application automatically assigns a party usage code of External Payee. For third-party organizations, you assign a party usage code.

This table describes the party usage codes for third-party organizations.

Party Usage Code	Use For	Examples
External Payee	Organizations when the others party usage codes don't apply.	State Disbursement Unit for child support payments
Payment Issuing Authority	Organizations responsible for issuing instructions for involuntary deductions, such as a tax levy or bankruptcy payment order. Payment issuing authorities don't receive payments.	Court, agency, or government official
Pension Provider	Organizations that provide pension administration for employee pension deductions.	Stock broker, investment company, benefit administrator, labor union
Professional Body	Organizations entrusted with maintaining oversight of the legitimate practice of a professional occupation.	The American Society for Mechanical Engineers in the US
Bargaining Association	Organizations that represent employees in negotiations. Bargaining associations associated with trade unions may receive payments for union fees deducted from an employee's pay.	The Air Line Pilots Association International (ALPA) in Canada and the US
Disability Organization	Organizations that are authorized to make disability assessments. Disability organizations don't receive payments.	The Royal National Institute of Blind People in the UK

Related Topics

- Third-Party Payment Methods
- How Payment Methods and Payroll Definitions Work Together
- Example of Loading Organization Payment Methods
- Example of Loading Third-Party Personal Payment Method
- How do I import organization data?

Third-Party Payment Methods

Create third-party payment methods for third-party persons or external organizations. Use either the Third-Party Personal Payment Methods task or the Third-Party Organization Payment Methods task to create.

Typical payments to third parties include:

- Involuntary deductions, such as court-ordered garnishment.
- Voluntary deductions, such as pension plan or union membership payments.

> **Note:** You must use the Third Parties task to create the third party and ensure the organization payment method for the payment source exists before you create a third-party payment method.

As you create your third-party organization payment methods, you will notice additional fields that can be captured, such as whether or not to exclude the third party from the Run Third-Party Payment Rollup process or to separate worker payments by reference. These identifiers will determine how these payees are paid and reported at the time of payment.

- Use the Exclude from Third-Party Rollup Process checkbox, if you run the Run Third-Party Payment Rollup but have to pay certain third parties that require an individual check per employee payment. For example, the UK requires deduction from earnings orders, such as child maintenance payments, to be sent as separate transactions. By checking this box, payments to this third party, won't be rolled up into a single payment.

  > **Note:** When checking this box, the Separate Worker Payments by Reference box is automatically checked because it's typical for an employee making multiple payments to this third party that each payment is to be reported by reference separately. However, you may deselect, if this is your requirement.

- Use the Separate Worker Payments by Reference checkbox to generate employee payments to a given third party, based on reference. For example, if an employee is making multiple payments to a given third party, these can be generated separately, each with the corresponding reference.

  > **Note:** The calculation card's calculation component has a reference field to uniquely identify the deduction, such as a court order number, case number, or other identifier provided by the issuing authority. The prepayment process breaks down the employee payments by this reference number captured against the employee deduction, which is mandatory for all countries.

You can still select the Separate Worker Payments by Reference checkbox even if you don't select the Exclude from Third-Party Payment Rollup Process checkbox to roll up the third-party payment and separate employee payments based on reference. These choices allow you to roll up the third-party payments during the Run Third-Party Payment Rollup process and separated out by on reference during the prepayments process the employee payments to that third party. You can then retrieve the information if you need to extract the details in the payment file, or reports. For example, you need to send a single consolidated payment to a loan company but you also need the employee payments paid to multiple loans at the same loan company separated out.

- Use the Time Definition list of values to pay a third-party on a date that's different from the employee payment date. For example, you want to make employee payroll payments on the last day of the month and make third-party payments 5 days later.

To create a third-party organization payment method, follow these steps:

1. Select the Third-Party Organization Payment Methods task.
2. Click the Create icon.
3. Select a Legislative Data Group.
4. Select the Third-Party Name from the list.
5. Select the Organization Payment Method from the list.

   > **Note:** Payment Type and Currency populate based on chosen Organization Payment Method.

6. Select Effective Start Date.
7. Select Exclude from Third-Party Payment Rollup Process, if the third party isn't part of the Run Third-Party Payment Rollup.
8. Select Separate Worker Payments by Reference if separate payments are generated for employee payments to a given third party, based on reference.

9. Select the Time Definitions from the list, if you have defined a time definition to pay the third party on a different date than the rest of your third-party payments.
10. If you're creating a direct deposit to a third party, perform these additional steps in the Bank Account region to create the associated bank account.
    - Click the Create icon.
    - At a minimum, fill in the required fields identified by an asterisk.
        - *Account Number
        - *Account Type
        - Check Digit
        - Account Holder
        - Secondary Account Reference
        - *Bank
        - *Bank Branch
        - *Routing Number
    - Click the Save and Done button.
11. Click Save.
12. Click Done.

To create a third-party personal payment method, follow these steps:

1. Select the Third-Party Person Payment Methods task.
2. Search and select an employee.
3. Click the Create icon.
4. Select a Legislative Data Group.
5. Select the Third-Party Name from the list.
6. Select the Organization Payment Method from the list.

   Note: Payment Type and Currency are based on chosen Organization Payment Method.

7. Select Effective Start Date.
8. If you're creating a direct deposit to a third party, perform these additional steps in the Bank Account region to create the associated bank account.
    - Click the Create icon.
    - At a minimum, fill in the required fields identified by an asterisk.
        - *Account Number
        - *Account Type
        - Check Digit
        - Account Holder
        - Secondary Account Reference
        - *Bank
        - *Bank Branch
        - *Routing Number
    - Click the Save and Done button.

      Note: Depending on your localization, these may differ.

9. Click Save.

10. Click Done.

Note: The payroll relationship is defaulted for the employee making the payment to the third party. However, if you create a third-party personal payment method, as part of creating your third party, you must select the payroll relationship(s) of the person making payment to the third party.

Related Topics

- Organization Payment Methods Overview
- Third-Party Payment Date Options

Third-Party Payment Date Options

Use time definitions when a third-party payee wants payment on a date that's different from the employee payment date.

A time definition is either a date or a span of time. For example, employee payroll payments are on the last day of the month, whereas third-party payments are five days later. Create a time definition to define the time span and select this definition while defining the payment method for this payee.

Use the Time Definitions task to create your time definition for a time span of 5 days with values in this table.

Field	Value
Name	Specify a name: Third Party 5 Days
Short Name	Specify a short name: TP5Days
Type	Specify a type: Time Span
Period Type	Specify a period type: Daily
Period Unit	Specify the unit: 5
Adjustment Type	Specify type of adjustment: Days
Time Span Usages	Specify a usage for the time span: Third-Party Payments

Use the Time Definition field on the Third-Party Payment Methods page to assign this time definition.

Run the Generate Payments for Employees and Third Parties process twice, one for the employees and one for the third-party payees. Select the relevant process end date and enter an overriding payment date.

Related Topics

- Third-Party Payment Rollup
- Employee and Third-Party Check Payments Overview
- Third-Party Payment Methods
- Third-Party Payment Methods Overview
- Time Definitions

Examples of Third-Party Payments

These scenarios show you how to pay third-party payees. Third-party payees can be an individual person or an organization.

Child Support to a Former Spouse

While this example illustrates payment directly to a third-party person, most child support payments are payable to a third-party organization such as a State Disbursement Unit.

John Smith is an employee at your organization. Mary Smith receives a child-support payment each payroll period that's deducted from John's salary. To set up payments for Mary:

1. Create Mary as a third-party person.
2. Create Mary's third-party payment method and select the payroll relationship for John.
3. Add the child support order to John's involuntary deduction calculation card and select Mary's name in the Order Amount Payee field.

Organization Processing Fee to a County Sheriff's Office

The County Sheriff's office receives an organization fee on garnishment payments. When you create the third-party organization, designate it as an external payee before you create its third-party payment method. When you add the garnishment order to the employee's involuntary deduction calculation card, select the County Sheriff in the Organization Fee Payee field.

Related Topics

- Third-Party Payment Methods Overview
- Third Parties Overview
- Third-Party Payment Methods
- How do I generate payments to third-party payees?

Third-Party Payments

Third-Party Payment Rollup

A third-party payment is a payment you make to an external organization or to a person that isn't on the payroll.

The Run Third-Party Payment Rollup is an optional process to consolidate payments to a third-party payee into one payment, rather than make multiple individual payments to the same third-party payee. For example, you may have multiple employees that are members of the same union and you'd like to pay the union with one payment. Or, you may have an employee with multiple deductions payable to the same third-party payee, such as multiple child support orders to the children's parent. Use the Submit a Flow task to run the Run Third-Party Payment Rollup.

Third-Party Payment Register Details

You can Run Third-Party Payments Register Report to provide payment details to the third-party payee, to include the breakout of rollup payments. Use the Submit a Flow task to run the Run Third-Party Payment Register Report.

Here are the details in the output of the Run Third-Party Payments Register Report:

- Individual third-party payments with the corresponding employee deduction information
- Rollup payments and deduction information of employees who share the same rollup payments
- Consolidated total of each rollup payment
- Payments made to each individual payee
- Consolidated total of multiple deduction payments of each employee
- Component name and component reference of involuntary deductions stored on the calculation cards
- Element name of voluntary deductions

Perform these tasks, in order, to roll up the third-party payments and generate the report details:

1. Calculate and verify prepayments.
2. Run the third-party payment rollup process.
3. Generate the payments.
4. Generate the third-party payment register.

Related Topics

- Employee and Third-Party Check Payments Process
- Third-Party Payment Methods Overview
- Third-Party Payment Date Options
- Calculate Payroll Payment Distribution

Generate Employee and Third-Party Check Payments

Once you have calculated payroll, you're ready to pay your employees and third parties. Use the Generate Payments for Employees and Third Parties flow to generate check/cheque payments.

This process selects employees and third parties processed in the prepayments process within the payroll run and have a payment method of check/cheque.

Before you generate the check/cheque payments, consider these scenarios:

- You may have multiple employee deductions made to the same third-party payee, such as multiple child support orders. Rather than make individual payments for each individual employee deduction, use the Run Third-Party Payment Rollup process to combine individual employee deductions and make a single payment to the payee.
- You may have both employees and third parties to pay. Use the Run Generate Payments for Employees and Third Parties to generate your checks/cheques for employees and then again to generate checks/cheques for your third parties. Use the Payee Type field to designate which will be included in the process.
- You may have specific third parties to exclude from the Run Third-Party Payment Rollup process to produce an individual check/cheque per payment. Select the Exclude from Third-Party Payment Rollup Process checkbox on the Third-Party Organization Payment Methods page to exclude a third-party payee from the Run Third-Party Payment Rollup process.
- You may have a third-party payee that requires payments on a date that's different from the employee payment date. For example, your employee payroll payments are on the last day of the month but you may want to make third-party payments 5 days later. Use the Time Definitions task to create a time definition defining a time span of 5 days. Select this new time definition in the Time Definition field on the Third-Party Person or Organization Payment Methods UI. Enter the relevant process dates and run the prepayments process, for example, with a process date of 30, June. This stamps the effective employee payments date as 30-June and the third-party payments date as 05-July. The Generate Payments for Employees and Third Parties process is run twice:
    - Once for the employees with a last day of the month process end date, such as 30-June
    - Once for the third parties with a process end date of plus 5, such as 05-July, and an overriding payment date of 05-July
- You may have different banks with different check/cheque templates. To accommodate, you must create a report category for each separate bank and check/cheque template and then attach it to the payment source:
    - Define report categories for each unique bank and check/cheque template combination to create a report category for each separate bank and check/cheque template. Use the Organization Payment Methods page to associate the report category for third-party payee and report category for worker to the payment source.
    - Select the new report category for the requisite bank's payment source so that the process uses the correct check/cheque template when generating its check/cheque payments. Use the Organization Payment Methods task to define the payment source for third-party payments. Attach the correct report category for that payment source. Use the Report Category for Third-Party Payee or Report Category for Worker field in the Payee Information section of the Create Payment Source page.
- Define report categories for each unique bank and check/cheque template combination if you want to create a report category for each separate bank and check/cheque template. The report category for third-party payee and report category for worker are associated to the payment source in the Organization Payment Methods page.

Related Topics

- Third-Party Payment Rollup
- Third Parties Overview
- Third-Party Payment Methods
- Employee and Third-Party Check Payments Process

Employee and Third-Party Check Payments Process

The Generate Payments for Employees and Third Parties flow selects employees and third parties that:

- Are processed in the prepayments process for a given payroll.
- Have a payment method of check/cheque.

Submit the Generate Payments for Employees and Third Parties flow from the Submit a Flow page.

Prerequisites

The prerequisite tasks for the Generate Payments for Employees and Third Parties task include:

- Create the third party, create the third-party payment method, and associate an employee deduction to pay the third party.
- Add an organization payment method (OPM), to include a payment source.

  > **Note:** The bank details should already be set up.

- Add a payroll definition, to include a default payment method of check/cheque, and all valid payment methods.
- Attach a payroll to the employee.
- Attach element entries to the employee.
- Calculate payroll.
- Run the Calculate Prepayments process to calculate the distribution of net pay.
- Run the Archive Periodic Payroll Results process to archive the earnings, deductions, tax calculation details, accruals, payment methods, and so on.

Generate Employee and Third-Party Payments

Run this process to generate checks/cheques for your employees and then run the process again to generate checks/cheques for your third parties.

Follow these steps to run the Generate Payments for Employees and Third Parties flow from the Submit a Flow page:

1. Click **Submit a Flow.**
2. Select the required legislative data group.
3. Select the **Generate Payments for Employees and Third Parties** and click **Next**.
4. Enter a unique payroll flow name.

   > **Note:** Name the flow with a name to easily identify the process later. You need to be able to determine what you have already run and you may need to locate it to roll back the process.

5. Specify the required payroll name.
6. Select the payee type for which the check/cheque payment process is run. The available options are *Employee* or *Third Party*. You can generate the check payments for either employees or third parties.
7. Enter a Process Start Date to define the date range of this process.
8. Enter a Process End Date to define the date range of this process.
9. Select the required consolidation group to view the payments for all payrolls that are included in this consolidation group.

   > **Note:** A consolidation group defines a grouping of different payrolls for reporting purposes. This isn't a mandatory field. If you don't select a value, the process uses the default consolidation group assigned to the payroll.

10. Select the OPM you want to use for this process.

    > **Note:** The value you select determines the payment source to make the payments. There could be multiple payment sources in the OPM.

11. Select the payment source to process for the above payment method. This parameter is optional. If you have defined attributes, such as a payment file limit or report category, at the payment source level, you should enter the payment source. When you enter the payment source, the defined attributes are applied.

    > **Note:** You can have different payment sources (bank accounts), with different banks, which have different check/cheque templates. You must then run the check/cheque process for each payment source and each set of payees. Select the correct payment source so that the correct stationary is used for the payments.

    > **Tip:** To accommodate this requirement, you must first create a report category for each separate bank and check/cheque template. Attach the created report category to the appropriate bank's payment source so that the correct check/cheque template is used to generate the check/cheque payments.

12. Optionally, specify an **Overriding Payment Date** on which a payment is due to be made to the payee.
13. Specify the **Start Check/cheque Number** in the sequence of checks/cheques used for payroll processing.
14. Specify the **End Check/cheque Number** in the sequence of checks/cheque used for payroll processing.
15. Select a **Process Configuration Group** if available. Use a process configuration group to set rules for payroll processes, such as passwords or number of threads. If you don't select a process configuration group, the process uses the parameters in the default group.
16. Click **Next**.
17. Click **Submit**.

Related Topics

- Third-Party Payment Rollup
- Employee and Third-Party Check Payments Overview
- Examples of Using Consolidation Groups
- Payroll Process Configuration Groups

Reprocess Rejected EFT Payments

Overview of Reprocessing Rejected EFT Payments

A bank can reject an Electronic Funds Transfer (EFT) payment because of:

- Incorrect bank account details
- Employee has closed their bank account without notifying the employer

Here's what you can do to reissue a check:

- End date the employee's personal payment method
- Inactivate the employee's bank account. You must inactivate the invalid bank account so that it's not used for future payments.
- Void the payment and make an external payment against the rejected EFT payment.

Use the Process Bank Corrections File flow pattern from the Payroll Checklist work area to reissue check payments against rejected EFT payments.

Before you run the flow, complete these tasks.

1. Transform the information returned by the bank into the requisite Object Group HCM Data Loader file format.
2. Provide a unique name in the **Object Group Name** field each time you create an HCM Data Loader file.
3. Load the Object Group HCM Data Loader file into the Oracle Web Center Content server.

Here's the list of payroll tasks the Process Bank Corrections File flow pattern includes:

Task Name	Description
1. Upload Bank Corrections File	Stores the information entered in the Object Group HCM Data Loader file into the object group table. The bank information is stored in the object group table, under the 'Process Information Group' object group type in the payroll application.
2. Update Personal Payment Methods	Determines through this built-in logic whether the personal payment method needs end dating or updating. The logic is as follows: • If there is a value in the **Replacement Bank Number**, the **Replacement Account Number**, or the **Replacement Account Type** field, then the process updates the Personal Payment Method. • If any of the above mentioned fields are blank, then the process end dates the Personal Payment Method. This task uses the Payment Reference number to identify the Personal Payment Method linked to the bank account identified as incorrect. It also inactivates the incorrect bank details to stop them being used in future payments. **Note:** The flow task doesn't create a new Personal Payment Method. You must create one manually.
3. Void Payments	Marks the original payments as void.

Task Name	Description
4. Make External Payments	Runs the external payment process to ensure that the payments voided in the previous task are paid externally.
5. Generate Check Payments	Runs the HCM Extract Report to retrieve the check number and other information from the external payment record to produce the report output. The delivered HCM Extract Report has a built-in logic to generate the check number, if not available.

Steps 3-5 run only if you have to reissue an external check for a rejected EFT payment.

> **Note:** You can use the delivered default check template or configure the template to include additional attributes such as a company logo.

Since a payslip is already issued, this flow doesn't generate the payslip.

Related Topics

- Object Group HCM Data Loader Files for Bank Reprocessing

Object Group HCM Data Loader Files for Bank Reprocessing

Before you run the Process Bank Corrections File flow, use the HCM Data Loader to load the information returned by the bank.

The bank returns a file containing details of the payments that are rejected. Before you load the information, transform this information returned by the bank into the HCM Data Loader .dat file formats required by the Object Group HCM Data Loader.

Provide a unique name in the **Object Group Name** field each time you create an HCM Data Loader .dat file. You must then load the Object Group HCM Data Loader file into the Oracle Web Center Content server.

The bank information is stored in the Object Group table, under the Process Information Group Object Group Type. Use the Object Group UI and the name given in the Object Group HCM Data Loader file to view the information loaded by the **ObjectGroup.dat** and **ObjectGroupStore.dat** files, as part of the Process Bank Corrections Flow.

When you load the **ObjectGroupStore.dat** file into the Oracle Web Center Content server, a UCM ID is generated. The Process Bank Corrections File flow uses the UCM ID to retrieve and use the bank information necessary for the flow.

Load Process Information Group Object Group

Create and use the following HCM Data Loader .dat files to process the bank information by the HCM Data Loader.

- ObjectGroup.dat file to create the object group
- ObjectGroupStore.dat file to load the bank information returned by the bank

ObjectGroup.dat File Format

This table lists the attributes for loading the ObjectGroup.dat file.

HCM Data Loader Attribute	Required	User Interface Prompt	Description
ObjectGroupName	Yes	Name	The name of the object.
ObjectGroupCode	Yes	Doesn't appear on the UI.	The code of the object group.
LegislativeDataGroup	Yes	Legislative Data Group	THE NAME OF THE LEGISLATIVE DATA GROUP.
ObjectGroupTypeCode	Yes	The meaning of the code is displayed in the Type field.	The code of the object group type. The supported value for the process information group type is **PROCINFO**.
StartDate	Yes	Start Date	The start date of the object group.
EndDate	Yes	End Date	The end date of the object group.

ObjectGroupStore.dat File Format

This table lists the attributes for loading the ObjectGroupStore.dat file.

HCM Data Loader Attribute	Required	User Interface Prompt	Description
ObjectGroupCode		Doesn't appear on the UI.	The code of the object group.
LegislativeDataGroup		Legislative Data Group	THE NAME OF THE LEGISLATIVE DATA GROUP.
SequenceNumber	Yes	Sequence	A unique identifier for a row of data in the object group store file.
assignmentNumber		Assignment Number	The assignment number of the employee whose payment is rejected, or whose bank information needs updating.
paymentDate		Payment Date	The original payment date of the rejected payment.
processDate		Process Date	This date overrides the process date entered in the flow. The date entered here, is stamped against each process in the flow. It's the date the personal payment method is end dated and the payment is voided. Enter a value if you want one particular payment to have a different payment date to that of

HCM Data Loader Attribute	Required	User Interface Prompt	Description
			the payment date entered in the flow.
paymentReference	Yes	Payment Reference	A unique identifier for a specific payment line, such as the payment in the original NACHA file that was sent to the bank.
Amount		Amount	The original amount of the rejected payment.
checkNumber		Check Number	The check number used in the External manual payment task and printed on the manual external payment check template.
replacementBranchNumber		Replacement Branch Number	Enter a value if the branch number (routing transit number) needs updating. If a value is entered in this column, it tells the process that the bank account associated to the personal payment method (PPM) used for payment needs updating.
replacementAccountType		Replacement Account Type	Enter a value if the employee's account type needs updating. If a value is entered in this column, it tells the process that the bank account associated to the PPM used for payment needs updating.
replacementAccountNumber		Replacement Account Number	Enter a value if the employee's account number needs updating. If data is entered in this column, it tells the process that the bank account associated to the PPM used for payment needs updating.
makeExternalPayment		Make External Payment	Enter 'Yes' if you want to void the original payment and make a manual external check payment. Valid values for this attribute are 'Yes' or 'No'.
`Returnreasoncode`		Return Reason Code	The reason for rejecting an EFT payment. The entered value is stamped on the external manual pay record.
`Employeename`		Employee Name	Name of the employee whose payment is rejected, or whose bank information needs updating.

The Update Personal Payment Methods task within the flow determines, through built in logic, whether the personal payment method needs end dating or updating. The logic is as follows:

- If there's a value in the 'Replacement Branch Number' field, the 'Replacement Account Number' field or the 'Replacement Account Type' field, then the process updates the Personal Payment Method.
- If any of the above mentioned fields are null then the process end dates the Personal Payment Method.

You can delete information loaded to the process information group object group type using the HCM Data Loader. You must take care when deleting the records, because you can't recover the deleted records.

For more information on creating the HCM Data Loader .dat files and using the HCM Data Loader to upload data, refer to the HCM Data Loader User's Guide on My Oracle Support.

Related Topics

- Reprocessing Rejected EFT Payments

Configure Payslips and Checks

Overview of Online Payslip

A payslip is a printable record of a payment made to an employee during a payroll pay period or as a bonus or commission payment.

It includes details of the payment, such as employee and employer information, pay period, earnings, deductions and accruals, and net pay distribution details.

Use these two predefined templates to configure the payslip template to include your specific statutory requirements:

- Payslip Main Template
- Payslip Sub Template

For more information, refer to 'Configure the Payslip Report Template' topic in the Help Center.

After you configure the payslip template, and before you generate the payslips, consider the following.

Task	Where to find more information
Generate the worker's payslips in a language of their choice depending on what's set as the workers correspondence language.	Refer to these topics in the Help Center: • Multilanguage Support for Payslips • Generate Payslips in the Worker's Correspondence Language • Add Bursting to Print Delivery Option
Mask or encrypt bank account information to prevent display of sensitive information.	Refer to 'How Account Number Masking in Payroll Reports Work' in the Help Center.
Set the precision value for the number of decimal places for the rates displayed on the payslip.	Refer to 'Rate Precision in Payslips' in the Help Center.

Task	Where to find more information
Add text and input values to payslips.	Refer to 'How to Add Text to Payslips and Checks' and 'Examples of Input Values for Payslip and Check Text' in the Help Center.

The **Generate Payslips** process is run once each payroll period and it generates the payslip XMLs based on the payroll archive and prepayments data. The payslip PDFs are created and stored in the **Document of Records** for future reference and retrieval.

During the payslip process, payslip template files get downloaded, including files for multiple installed languages. You can quickly retrieve payslip templates that support large templates or multiple templates for different languages.

You can preview payslips PDF documents directly from the **Payslip** page without having to download. Use options in payslip preview window to zoom, scroll, print, download, or save payslip document. Use back arrow to exit payslip preview window and return to payslip list.

Multicurrency Support for Payslips Page

Configure the payslip page to support multicurrency payments.

A typical international organization, such as a United Nations organization, has employees working in many different countries. These employees often receive salary payments in a currency other than their base currency, such as the currency of their work location or the currency of their home country. The base currency is the currency of the legislative data group (LDG) you belong to.

In some instances, the employee chooses to receive salary payments split between multiple currencies. For example, John opts to receive 50% of his salary in GBP and remaining pay in the bank account of his home .

John has a calculated net pay of 1000 USD of which 50% converts to 375 GBP and the remaining 50% is 500 USD. The payslip page displays a net pay value in the base currency.

To configure the payslip page for multicurrency payments, perform the following:

- Create an organization payment method with payment type of **international transfer**.
- Configure personal payment methods with an **international transfer** payment type and associate to the international bank accounts.

  For our example:
  a. Define two bank accounts and two personal payment methods for John, one for the US and one for the UK.
  b. When you create the personal payment method for the UK bank account, select international transfer as the payment type and associate the UK bank account.
  c. Enable the ORA_PAY_PAYSLIP_DISPLAY_NET_PAY_BALANCE_CURRENCY for the payslip page to reflect correct net pay amount, in the base currency of the LDG.

Related Topics

- Overview of Online Payslip

How to Configure the Payslip Report Template

Use the predefined payslip template and edit it to include legislative requirements as mandated by your country or territory. For example, you may want to add your company logo or add additional fields to the template.

Configuring the delivered payslip template includes these tasks:

1. Create a copy of the delivered payslip report
2. Edit a copy of the payslip sub template to include additional components as per your requirements
3. Add the changed template to the report
4. Set the priority of the payslip report as Critical
5. Test the configured payslip report in BI Publisher

Create a Copy of the Delivered Payslip Report

You can either copy the report template or use the Customize function to create an exact copy of the delivered report template. It is recommended that you use the Customize feature because of these advantages:

- The copied report has the same privileges as original report.
- Creates the necessary folder structure and keeps the same name as the original Payslip report.
- Ensures that the copied report is placed in the same folder structure under the 'Custom' folder and the BI Publisher automatically chooses to use this modified report and you don't have to add the delivery option changes.
- If you choose to copy the template, you must manually add the delivery options.

Note: You must have BI Publisher Developer or BI Publisher Administrator role to create or edit reports from the BI Publisher.

1. Navigate to **Tools > Reports and Analytics**.
2. Click **Browse Catalog** to open BI analytics in a new tab.
3. Navigate to **/Shared Folders/Human Capital Management/Payroll/Regulatory and Tax Reporting/ Country Name** folder to open the delivered Online Payslip for a country.

   For example, for Canada, you can find the Canada Payslip Report at /Shared Folders/Human Capital Management/Payroll/Regulatory and Tax Reporting/Canada folder.
4. Select **More > Customize** for the payslip report.
5. Navigate to **/Shared Folders/Custom/Human Capital Management/Payroll/ Regulatory and Tax Reporting** folder and check if you can see the report in the folder. It is recommended that you save all user-defined or configured reports in the Custom catalog folder under Shared Folders. Any reports created outside of the Custom folder will not be migrated and will be lost during patching or upgrade.
6. Click **More > Permissions** to verify the permissions of the report. You should have permissions for the Generate Payslips account with Read, Traverse, Run Publisher Report, Schedule Publisher Report, View Publisher Output Custom Permissions. If you don't have these privileges, add it manually.If you have the BI Administrator or BI Author privileges, the Permission menu is enabled.
7. Navigate to the copied report in the **/Shared Folders/Custom/Human Capital Management/Payroll/ Regulatory and Tax Reporting** folder.
8. Click **Edit**. Save a copy of this template.
9. Click on **View a list** found on the top right of the page. Make a note of these values.

Field	Value
Name	Name of the report, for example CAOnlinePayslip
Template File	CA_Online_Payslip.rtf
Type	RTF
Output Format	HTML, PDF, Excel, RTF
Default Template	HTML
Default Layout	Yes
View Online	Yes
Active	Yes
Locale	English

10. Click **View Thumbnails** link and delete the downloaded template.

Edit Copy of the Payslip Sub Template

Edit the delivered Payslip Sub Template and include the legislative and statutory changes you want to incorporate.

1. Navigate to **/Shared Folders/Human Capital Management/Payroll/Payment Distribution/Payslip Sub Templates.**
2. Click **Edit**.
3. Click **Locale**.
4. Open the template and make the required changes and save the template in the Custom folder.

For more information on how you can edit RTF report template, refer to these topics on the Oracle Help Center.

- Create and Edit RTF Report Layout Templates
- How can I change the logo in the layout template?

Add the Revised Template to the Copied Report

Use these steps to add the revised template to the report you created in the first task.

1. Navigate to **/Shared Folders/Custom/Human Capital Management/Payroll/Payment Distribution/Payslip Sub Templates.**
2. Click **Edit**.
3. Click **Add New Layout**.
4. Select Upload and enter these details in the Upload Template File page.

Field	Value
Layout Name	Name of the report you created in the first task.
Template Name	Select the template you just modified in the second task.
Type	RTF
Locale	English

5. Click **View a list.**
6. Enter details you noted in step 9 in the first task and click **Save**.

Set the Priority of the Payslip Report as Critical

The Priority of payslip report on the BI server is by default set as Normal and hence is processed on first in, first out basis. To avoid interruptions, set the priority of the payslip report as Critical, so that it is executed on priority.

1. Navigate to the copied report in the **/Shared Folders/Custom/Human Capital Management/Payroll/ Regulatory and Tax Reporting** folder.

   > **Note:** You should make any revisions only to the copied version of the report.

2. Click **Edit** and then click **Properties**.
3. On the Report Properties window, under the General tab, select **Critical** in the Job Priority field
4. Click **OK**.

   > **Note:** Setting the report as critical reduces chances of failure when there is an issue with the BI server or a performance issue with a previous report job in the process.

Test the Configured Payslip Template in BI Publisher

To test the configured template, you must first run the delivered template and generate the payslip.

1. Navigate to **/Shared Folders/Human Capital Management/Payroll/ Regulatory and Tax Reporting/ Country Name** folder to open the delivered Online Payslip for the country.
2. Select **Job History** for the delivered report.
3. Clear the value of the fields **Start Processing** and **Owner**.
4. Click **Search** and choose first row with success status.
5. Click **Report Job Name** link.
6. Record the value of these fields: Archive Action Identifier, Delivery Option Identifier, and Payroll Action Identifier.
7. Follow these steps to test your configured report template in the custom folder.
   a. Navigate to **/Shared Folders/Custom/Human Capital Management/Payroll/ Regulatory and Tax Reporting/Country Name** folder and open the report you created.
   b. Enter values for Archive Action Identifier, Delivery Option Identifier, and Payroll Action Identifier fields you noted.
   c. Click **Apply**.

8. Verify that the payslip is generated successfully.

> **Note:** If the payslip didn't generate successfully, check your configured report and template for errors.

Expand Payslip Name to Include Date and Amount Details

Add information into the payslip title to uniquely identify each document.

This topic applies to the global payslip template.

The payslip document name on the **Payslip** page includes payment date and net pay in the title and link. With each payslip link uniquely named, it easier to identify and choose the correct payslip to view, print or download.

If you are using a seeded localization payslip templates or your own payslip templates, the name format may differ. For example, if you are using a your own payslip template, you must store the intended payment date and payment date in the respective property fields, **Information Date 2** and **Issue Date**, in your delivery option for the file name. This data is then reflect the payslip title.

You can remove the date and net pay from the document title by setting the **Include date and net pay in payslip name** (ORA_PAYSLIP_NAME_DETAIL) action parameter to **N**.

> **Note:** The payslip document name is generated during the process. Therefore, the date shown in the payslip attachment name link won't adhere to the user's date preference set for the UI view.

Change Date Format

In the document name field on your delivery option, enter the date format you want to appear in the document name, such as <MM/DD/YYYY>. If you want to keep the string, such a Payslip, append the date format after the string.

Remove the Existing Document Name

If you have a string, such as Payslip, in the document name field but want to remove it and just display the document name as date and net pay, you can remove the string. However, you must enter the date format that you want to display, such as <MM/DD/YYYY> so that the application knows to remove the delivery option output name as part of the attachment name.

If you decide later to change the action parameter to **N** because there is no longer a string in the document name field, the attachment name is then the delivery option output name. Re-enter a string in the document name field if you don't want it to be the delivery option output name.

Related Topics

- Overview of Online Payslip
- How to Configure the Payslip Report Template

Add Text to Payslips and Checks

Configure your checks/cheques and payslips to display additional text. Depending on your implementation, in addition to these steps, you may also need a new formula.

Setup steps:

1. Create the information element, its element eligibility, and the input values you want displayed.
2. If you need a formula to calculate the run results, perform the following steps:
    a. On the Manage Fast Formulas page, create a formula of type Payroll to return the values that you want to add.
    b. On the Manage Elements page, edit the information element to:
        - Create a status processing rule associated with your new formula.
        - Add formula result rules to return formula results to the element's input values.
3. On the Manage Enterprise HCM Information page, in the Organization Information EFF section, add the information element and input values.

    > **Note:** The Organization Information EFF configuration is at the enterprise level. For each LDG you want to archive payroll information, you must add a separate row for the information element.

4. Create employee element entries, unless you selected the **Automatic Entry** option for the element.
5. After calculating the payroll and prepayments, run the Archive Periodic Payroll Results process.
6. Modify the check/cheque template or payslip template, as appropriate. Refer to the Report Designer's Guide for Business Intelligence Publisher for more information.

Related Topics

- Examples of Input Values for Payslip and Check Text

Examples of Input Values for Payslip and Check Text

Create element input values to store your information, such as congratulatory messages and detailed earnings information, that you want displayed on checks/cheques or payslips. These scenarios show you how to archive payroll information for this purpose.

Display Earnings by Earned Weekly Period

You want to display earnings details on payslips, such as overtime pay per week within a semimonthly pay period. In this example, before modifying your payslip template, you create an element using the Information element classification. You create these input values in your element and add them to the payroll information to archive:

- Description
- Start Date
- End Date
- Hours

- Rate
- Multiple
- Amount

Display a Message on a Check/Cheque

You want to display a message on a check/cheque, such as a birthday or a congratulations message. In this example, before modifying your check/cheque template, you could create an element using the Information element classification with the following input values:

- Message Title
- Message Description

Related Topics

- Add Text to Payslips and Checks

Multilanguage Support for Payslips

The Generate Payslips process is run once each payroll period and it generates the payslip XMLs based on the payroll archive and prepayments data. The application creates the payslip PDFs and stores them in the Document of Records for future reference and retrieval.

Print Payslip PDFs

Some workers may opt for a printed payslip and you must provide individual PDF payslips to them.

The application supports producing all printed payslips in a single file for ease of printing. However, for the payslip labels to be translated, each payslip must have its own individual PDF output file. To enable single PDFs, add the Bursting configuration onto the Print Delivery option within the Payslip extract definition.

For more details on how to add the Bursting option, refer to Adding Bursting to Print Delivery Option: Procedure on the Help Center.

Translate the Payslip

You can now generate individual payslips in the worker's correspondence language of choice. Run the Generate Payslips process just once and generate the payslips for the various workers in a language of their choice depending on what's set as the worker's correspondence language.

The process translates:

- The metadata, the layout labels, and the static text on the payslip template.
- The underlying data that comes from the transactional and setup tables, and the data that the Payroll Archive process archives for the payslip.

Set the process configuration parameter, Enable Payslip Translation, to **Y**, before running the Payroll Archive process. You must set this only once. If you have run the Payroll Archive before setting this parameter, you must roll back the process, set the Enable Payslip Translation parameter to **Y**, and rerun the Payroll Archive process.

Install the Correspondence Language

Although the worker's correspondence language may be set to one of several languages, only those languages that are installed are supported for translation. To determine the number of languages you must install, consider how diverse the worker population is in terms of their preferred correspondence language.

If the correspondence language isn't one of the installed languages, the Payslip is produced in the base language.

To enable translation of the payslip labels, set the Locale property of both Document of Records and Print Delivery options within the Payslip Extract Definition to Correspondence Language. If you don't want the payslip labels to be translated, leave the Locale property blank or set it to the base language, for example, `en-us`, for US English.

For the payslip data that's not delivered by Oracle, the translated values of the data must be available in the application. Enter translated values for the base language and each of the installed languages that needs payslip translation support. For example, if you have created additional element names and its associated balances, you must also enter their translated values in the application. Otherwise, the translated values aren't reflected in the payslip PDFs.

Related Topics

- Overview of Translating Modified Text

Add Bursting to Print Delivery Option

When you enable payslip translation, both the transactional data and the labels on the payslip are translated.

As only one language can be applied to all the labels on a payslip, payslips for different languages must be in their own PDF. Add the Bursting configuration on the Print Delivery option within the Payslip Extract Definition so that payslips for different languages are in their own PDF.

How to Add the Bursting Configuration

Complete the following steps to add Bursting to the Print Delivery option for the payslip:

1. Select the **Extract Definitions** task from **My Client Groups > Show More > Data Exchange** on your Home page.
2. In the Search window, enter **Payslip** in the Name field.
3. Select **Archive Retrieval** in the Type field.
4. Select a legislative data group and click **Search**.
5. Click **Payslip** in the Search Results region.
6. Click the **Deliver** tab in the HCM Extract Definitions: Payslip page.
7. Select the **Printed Payslip** Delivery Option Name row in the Extract Delivery Options section.
8. Complete the following in the Additional Details section.
    a. Select **Default** in the Value column of Bursting.
    b. Remove content in the Value column of Locale.
    c. Select **Search** in the Attribute column of Locale.
    d. In the Search and Select: Attribute window, enter these details.

Field	Value
Parent Data Group	Global Archive Payroll Calculation Breakdown

Field	Value
Attribute	Correspondence Language
Record	Global Calculation Breakdown ID Information

9. Click **Search**, and then **OK**.
10. Click **Save** and then **Submit**.

Related Topics

- Overview of Translating Modified Text

Rate Precision in Payslips

Use the Payslip Rate Precision process configuration parameter to set a fixed, positive integer value as the precision value for rates displayed on the payslip. The default value is two decimal places. Set this parameter before you run the Periodic Payroll Archive process.

A fixed rate precision value ensures ease of implementation, user control, and consistency across different rates and element entries. Setting the rate precision value doesn't impact the calculation of payroll or the accuracy or precision of payments. You are only defining the number of decimal places for the rates shown on the payslip.

The precision value you set for the number of decimal places for the rates displayed on the payslip, is dependent on these two factors:

- Currency: Some currencies require a rate precision value higher than the default value of two.
- Multiplying factor for the rate: The precision value you set for the element rates displayed on the payslip is dependent on how high you expect the quantity to be. For example, if you expect the quantity, say hours to be high, set a precision value higher than the default value of two.

Here are some factors you must consider while setting the precision value.

- The precision value you set on the Archive process applies for the calculation results and appears by default on all reports that use the archived data. However, you can configure your report template to display a value that's lower than the value on the Archive process.
- Any precision value you set on the report template overrides the value you set on the Archive process. For rates needing a lower precision value, you must define it in the report template. You can't set a value that's higher than that on the Archive process.

For example, suppose you want your hourly employees to see four decimal places for rates and the salaried employees to see only two decimal places on their payslips. Set the Payslip Rate Precision process configuration parameter to four decimal places. Then, modify the report template to display the rates with two decimal places only for salaried employees.

Related Topics

- Overview of Online Payslip
- How Do I Set the Payslip Rate Precision Value
- Report Days and Units in Payroll Reports
- How to Configure the Payslip Report Template

How Do I Set the Payslip Rate Precision Value

The precision value defines how many decimal points the payslip uses when showing rate amounts. While the default is two decimal places, you can change it. Changing the precision value doesn't change the accuracy of the payroll calculations.

To change the default payslip rate precision value, you must change how the rates are captured in the periodic payroll archive.

1. Start the Payroll Process Configuration task from **My Client Groups > Show More > Payroll**.
2. Create a configuration group, and give it a meaningful name.
3. Select the **Details** tab, add a row, and select **Payslip Rate Precision**.
4. Set the number of decimal places in the **Override Value** field.
5. Click **Save**.

When you run the Archive Periodic Payroll Results process, use the **Process Configuration Group** parameter to select this configuration group.

You can modify the precision value set on the report template itself, and this value will override the value you set on the archive process. For example, suppose you want your hourly employees to see four decimal places for rates on their payslips and the salaried employees to see only two decimal places. In this case, follow these steps to make the changes.

1. Set the Payslip Rate Precision process configuration parameter to four decimal places.
2. Modify the payslip report template to display the rates with two decimal places only for salaried employees.

To modify the payslip report template, refer to 'How to Configure the Payslip Report Template' in the Help Center.

Related Topics

- Rate Precision in Payslips
- Overview of Online Payslip
- How to Configure the Payslip Report Template

Add a New Balance Dimension to an Existing Balance in the Payslip XML

This topic explains how you can add a new balance dimension to an existing balance, if the balance isn't displayed on the payslip.

After you add the balance dimension, you can display the balance dimension on the payslip XML.

For example, add the Inception to Date balance dimension to the Absence Accruals balance and display the Assignment Inception to Date Absence Plan balance in the Payslip XML.

You can add balance dimensions to other balance group records in the Archiver. Add dimensions that have the same level as the records in the balance group. For example, to add a relationship-level balance dimension, find balance group records in the Archiver that correspond to payroll or assignment relationships and add dimensions starting with 'Relationship'.

Here's the list of tasks you must complete:

1. Associate the balance dimension to the balance group.
2. Generate Payments (Generate Check Payment and Make EFT Payment, if applicable)
3. Archive Periodic Payroll Results

Note: Complete these tasks in the order as listed above.

Complete these tasks only if you want to regenerate the payslips to include the newly added balance dimension.

Associate the Balance Dimension to the Balance Group

Associate the Inception to Date dimension to the Absence Accruals balance group so that the values for the absence accrual balances are retrieved for the inception to date period. Use either of these options to add the balance dimension.

- Manually add a specific dimension to the group. Use this option if you want to add a specific dimension and not all the dimensions under a category to the balance group. Follow steps 4 and 5, given here.
- Use Default Inclusions, as given in steps 6 and 7, to add all existing dimensions within a category and any new dimensions that you include to a category.

Complete these steps to add a balance dimension to a balance group.

1. Navigate to **Balance Groups** under Payroll in My Client Groups on the Home page.
2. Enter these details and click **Search** for the requisite balance group.

Field	Value
Balance Group Usage	Global Absence Accruals for Global Archive
Legislative Data Group	Select a Legislative Data Group.

3. Click **Global Absence Accruals Balance Group** in the Search results section, to open the balance group page.
4. Click **Balance Definitions** in the left pane. Check if the Balance Name and Dimension Name appears in the list.
5. If not, use the **Select and Add** option under **Actions** and add the Assignment Inception to Date Balance Dimension. Click **Save**.

   Note: Alternately, if you want to view all of the balance dimensions within the category, you can use the Default Inclusions, and perform steps 6 and 7.

6. Select the correct Balance Category and Balance Dimension row and click **Default Inclusions** in the left pane.

7. Click **Add** and enter these details to create an Inclusion item.

Field	Value
Balance Category	Absence Accruals
Balance Dimension	Assignment Inception to Date
Legislative Data Group	Select a Legislative Data Group

8. Click **Save** and then **Submit**.

Add the Balance Dimension to the Balance Group Usage

Complete these steps to add the Assignment Inception to Date balance dimension to the Global Report Archive Balance Group Usages.

1. Navigate to **Balance Group Usages** under Payroll in My Client Groups on the Home page.
2. Enter these details and click **Search** for the requisite balance group.

Field	Value
Balance Group Usage	Global Absence Accruals for Global Archive
Legislative Data Group	Select a Legislative Data Group.

3. Click **Global Absence Accruals Balance Group** in the Search results section, to open the balance group page.
4. Click **Matrix Items** in the left pane. Check if the Dimension Name appears in the list.
5. If not, use the **Select and Add** option under **Actions** and add these details to create the Matrix Item. .

Field	Value
Matrix Item Type	Balance Dimension
Name	Assignment Inception to Date
Position	Enter the next numeric Position
Legislative Data Group	Select a Legislative Data Group.

Note: You can select any Assignment level balance for the Inception to Date dimension, for example, Assignment Inception to Date or Assignment Tax Unit Inception to Date balance.

6. Click **Save** and then **Submit**.

Run the Archive and Payments Process

1. Run the Archive Periodic Payroll Results and Payment processes, so that you include the newly added balance dimension in the archive and payments run. The payslip displays the newly added balance dimension only if you include it in the archive and payments processes

Generate the Payments and Payslips

1. Run the following processes:
    - Generate Check Payments or Make EFT Payments
    - Generate Payslips
2. After you run the Payslip, download the Payslip XML from Reports and Analytics > Report Job History. Confirm that the Balance values at ASG ITD dimension is showing in the Payslip XML in tag < LIFETIME> under the <GLB_PAY_ARCH_PAY_ASG_ABSENCE_ACCRUALS> node.

    In the Payslip XML, the <LIFETIME> tag contains values of the Inception-to-Date dimension. The <YEAR> tag contains values of the Year-to-Date dimension, and you must add the YTD balance dimension if you need YTD values on the Payslip XML.

    These are the XML tags or short codes you can use for the balance dimensions:

    - PERIOD
    - MONTH
    - QUARTER
    - YEAR
    - TMONTH
    - TQUARTER
    - THYEAR
    - TYEAR
    - FMONTH
    - FQUARTER
    - FHYEAR
    - FYEAR
    - HYEAR
    - MONTHS
    - LIFETIME
    - R1MTH
    - R3MTH
    - R6MTH
    - R12MTH
3. Configure the Payslip RTF template if you want to add the newly added Balance dimension to the Payslip PDF.

Related Topics

- Examples of Input Values for Payslip and Check Text
- How to Configure the Payslip Report Template

Disable or Override the Printed Delivery Option for the Payslip

A delivery option defines where and how the report output is delivered, including the output file format, choice of template, and optionally a destination such as an FTP server.

A report category is a set of delivery options grouped together so that you can generate the report in more than one output format with a single submission of the report.

You can define your own delivery option and include it in a report category, or you can also disable the delivery option for the report.

Use the Payslip Reprinting Report if the count of employees getting the printed payslips is very less compared to the overall employee population. This helps in optimizing the processing time to generate the printed payslips. Disable the Printed Payslip delivery option if you don't plan to use it.

Complete these tasks to disable the predefined Printed Payslip delivery option for the payslip.

1. Create a delivery option and set the start date and end date of the payslip to very early dates, for example from 01/01/1951 to 31/01/1951.
2. Override the existing printed delivery option using this newly created delivery option.

Here are the steps required to disable the Printed Payslip delivery option for the Payslip.

1. Select the **Extract Definitions** task in the Data Exchange work area on the Home page.
2. Click **Show Filters**.
3. In the Search window, enter **Payslip** in the Name field.
4. Select **Archive Retrieval** in the Type field.
5. Select a legislative data group (LDG) and click **Search**.
6. Click the pencil icon to edit the **Payslip** in the Search Results region.
7. Select the **Extract Delivery Options** tab under the Hierarchy panel on the left, and complete these steps.
    a. Add **Overriding Delivery Mode** column to the Extract Delivery Options table if it isn't already present.
    b. Click **Add** to add a row for the delivery option you're about to create.
    c. Enter these details.

Field	Value
Start Date	01/01/1951
End Date	31/01/1951
Delivery Option Name	Printed Payslip
Output Type	Select a value, for example, PDF.

Field	Value
Report	Enter the same location as in the Printed Delivery option.
Template Name	Enter the same name as in the Printed Delivery option.
Output Name	Enter Name of the report output, for example, Printed Payslip.
Delivery Type	Select None.
Required	Select this checkbox if this delivery option is a required option.
Overriding Delivery Mode	Select an existing printed delivery option you want to override, example, US Printed Payslip.

When you run the payslip, because the dates defined for the delivery option doesn't match with the actual print dates, the printed payslips aren't generated.

8. Click **Save and Close**.

Override the Printed Delivery Option for the Payslip

Follow these steps to override an existing delivery option, example, the US Printed Payslip, and create and use a new delivery option.

Override the printed payslip with a new delivery option using a custom data model only if the Payslip Reprinting Report doesn't filter the employees as required. You need to identify and filter employees who have opted for a printed payslip.

1. Create a delivery option as given in the previous section.
2. Set the **Start Date** and **End Date** of the new delivery option to the actual print dates.
3. Create a custom data model and report template. For more information on how to create the custom data model and report template, see the Define the BI Publisher template in HCM Extracts topic on the Oracle Help Center.

   For printing the payslip for a group of employees who have opted for the printed payslip, use the data set logic from the original payslip data model. Select the Payslip XML for the selected employees by filtering on

`source_type='PRA'` from the `pay_file_details` table. For example, the SQL in the custom data model is as given here:

```
select file_fragment

from pay_file_details

where source_type='PRA'

and source_id = '<Get the employee_payslip_rel_action_id>'
```

As an example, see the SQL in Payslip Bursting Data Model here, **/Shared Folders/Human Capital Management/Payroll/Payment Distribution/Data Models/Payslip Bursting Data Model**.

4. Select the **Required** checkbox to use the new delivery option instead of the one you're overriding.
5. Use the **Overriding Delivery Mode** field to select the delivery option you want to override.

Related Topics

- Add Bursting to Print Delivery Option
- Delivery Options for Extract-Based Payroll Reports
- Define the BI Publisher Template in HCM Extracts

9 Events, Retroactive Pay and Proration

Payroll Event Groups

Overview of Payroll Event Groups

A payroll event group defines the types of data changes monitored for features such as the retroactive recalculation of payroll, the retroactive recalculation of time cards, and the retropay for late hires.

There are three types of payroll event groups:

- Proration
- Retroactive
- Event Action

Proration

Using proration, you can calculate proportionate earnings and deduction amounts whenever payroll-relevant data changes during a payroll period.

For example, you can calculate proportionate earnings and deduction amounts if:

- A person joins or leaves an organization in the middle of a payroll period
- A person's pay rate changes during a payroll period

If you want to prorate an element, such as basic salary, assign a proration event group to the element with proration points that affect a person's salary. You can use the predefined event group, or create a new one. When you create an event group, you select the events that activate proration calculation, such as changes to:

- Hourly or annual pay rates
- Working hours
- Allowances or deductions
- Assignment changes, such as grade or position

> **Tip:** You can only select events that represent changes to element entries, calculation cards, calculation value definitions and assignments.

Retroactive

Retroactive processing ensures that your payroll run for the current period reflects any backdated payments and deductions from previous payroll periods. A retroactive event group defines the types of changes that trigger a retroactive event notification. These types of changes are Entry Changes for Retro and trigger notifications when changes are made in a prior payroll period. You can make additional events trigger the recalculation process by editing the group or creating a new event group for the element. All events trigger in real time.

Within a retroactive event group, select the events that produce notifications if a backdated change occurs. Specify the entity, update type, and attribute, as shown in the examples provided in the following table.

To disable notifications for an element, within the Manage Element UI, query the 'base' element that you no longer want to be processed by retropay and remove the specified 'Retroactive Event Group'. This prevents new events from being triggered.

Entity	Update Type	Attribute
Element Entry Value	Correction	SCREEN_ENTRY_VALUE
Element Entry	Update	EFFECTIVE_START_DATE
Element Entry	Update	EFFECTIVE_END_DATE
Element Entry	Logical Date Change	
Element Entry	Insert	
Element Entry	Delete Changes	

Event Actions

An event action links a process to the events within an event group. When an event occurs, the process is triggered based on a set of conditions defined on the event action. You can use event actions to control the submission of features, which use event groups of type action such as generate HCM Rates and time card reprocessing. Event actions control the aspects of submission such as, if the process is automatically submitted when an event occurs or when submitted through a payroll flow.

There are two event action submission types:

- Manual: The application processes the event action notifications using the ‘Process Event Action’ flow. Schedule this process to run on a regular basis to ensure your information is kept up to date such as your stored rate values. Also, add this task to your payroll cycle flow so it is submitted before you calculate payroll.
- Automatic: The application automatically submits processes such as retropay late hires, each time an event action notification is generated.

There are different types of event actions, each with its own set of submission control rules such as:

- Resubmission of time cards
- Retropay for late new hires
- Absence resubmission
- HCM Rates Recalculation
- Mexico SDI calculations

Use HCM Data Loader to create an event action.

Related Topics

- How Retroactive Pay Is Calculated
- Set Up Element Proration
- Overview of Loading Event Actions and Event Action Groups

Event Action Notifications

When an event is triggered, the application filters the applicable event groups which include that event, and generates event notifications for each event action included in those event groups.

Let's consider an example where the application triggers an event for a worker due to a change in their job. This event is included in an Event Action Group associated with the HCM Rates Recalculation event action. As a result, the application creates an event action notification for the worker, for HCM Rates Recalculation in the Awaiting Processing status.

When the rates process is run, the application determines all workers with an event action notification of HCM Rates Recalculation in the awaiting processing status and recalculates rates for these employees. Once this process is completed successfully, the notification status is updated to Completed.

You can view and manage event notifications in two ways:

- For event notifications related to retroactive payroll and proration, use the **Event Notifications** page. You can configure the events that trigger these notifications using the **Event Groups** page.
- For all other event notifications associated with event actions such as time card resubmission, retroactive payroll for late hires and generate HCM rates, use the **Event Action Notifications** page. The event action groups configure these event actions and loads them through HCM Data Loader.

In order to visualize the impact of an event and the underlying cause for an event notification, you can navigate between event notifications and events. You can view event action notifications and drill down to view the events associated with that event notification to detect the type of change, when the change occurred, and who made the change. You can use the **Event Notifications** button on the Event Action Notifications page to navigate to the Event Notifications page for the selected person. This lets you view retropay notifications for the selected person. The back arrow on the Event Notifications page returns you to Event Action Notifications page.

Alternatively, you can also view the events raised for a person on the Events page, including those events that didn't raise any event notification. You can then drill down to view the event notifications associated with an event.

The Event Action Groups page consists of the event group setup. Here you can view all the event action groups loaded through HCM Data Loader and see if any are set up to watch the type of event you're interested in.

Event Notification Status

When an event is triggered, the payroll application generates event notifications for features such as the retroactive recalculation of payroll and retropay for late hires. The Notification Status attribute supports these values for an event:

- Not Started: Notification processing hasn't yet started.
- Complete: Notification processing is complete.
- Error: Notification processing has failed.
- Event Canceled: The event has been canceled.

  Use the event notification status to review and take an appropriate action on an event.

Calculate Rates Based on Events

You can calculate rates based on events triggered for the employee.

Use HDL Data Loader to perform the following set-up steps:

1. Create an event action for generate HCM rates. The event action defines the set of conditions for the rates event process. For example, indicate if the rates processes should be automatically submitted when an event is raised or if the recalculation should be initiated manually using the 'Process Event Action' flow.
2. Create an event group to identify the type of changes to be monitored for rate recalculations such as assignment updates.
3. Associate the HCM Rates event action to your HCM Rates event group.

Some points to consider when implementing rates based on events:

- If you are monitoring element entry changes in your rates event action group, you must enable event processing using the background flow. Set the action parameter 'Process Payroll Events on Background Payroll Flow' to 'Y'.

  > **Note:** This setting will move all payroll event processing to a payroll process which continuously runs in the background. The evaluation and generation of all payroll event notifications and actions will no longer be performed as part of the main transactions such as a new hire.

- You can set the submission type of the rates event action to 'Manual' which indicates the rates will be recalculated when the user submits the 'Process Event Action' flow. This flow will generate reports to validate the results of the rates process:
  - Person Process Status Report: This report lists all the employees included in the process, the status of their rate calculation, and any warning or error messages.
  - Rates Report: This report indicates rate values calculated for each employee included in the process, the effective start date of the rate and details of when the rate was last recalculated.
- You also have the option to automatically submit the rates process each time an event notification is raised for an employee, but no reports are generated for this type of action submission.
- When you implement rates, you should first run the Generate HCM Rates process to calculate and capture rate values for all employees. Going forward, use the event feature to recalculate rates for any employee who has an event such as a salary update. If you are using the Process Event Action flow to recalculate rates, it is recommended you run the process on a daily basis.
- If you calculate rates based on payroll balances, you may still need to run the Generate HCM Rates process because changes to this type of rate are not event based.

Related Topics

- Overview of Loading Event Actions and Event Action Groups
- Example of Loading Event Actions for HCM Rates Recalculation
- Example of Loading Event Group and Associating to an Event Action for HCM Rates Recalculation

Submit the Process Event Actions Manual Process Flow

Use the **Process Event Actions** flow to submit all unprocessed event action notifications with a manual submission type. For example, use the flow to calculate rates for all employees with an unprocessed rate event action notification.

Here's how you submit the flow:

1. Navigate to **My Client Groups > Show More > Payroll > Submit a Flow**.
2. On the Flow Submission page, leave the **Legislative Data Group** field blank.
3. In the **Select a Flow** section, search for the **Process Event Actions** flow pattern.

   The Submit a Payroll Flow - Process Event Actions page is displayed.
4. In the **Payroll Flow** field, enter the name for the instance of the process event actions flow.
5. From the **Event Action Type** drop-down list, select the type of event action.

   For example, select the **HCM Rates Recalculation** event action to calculate rates for all employees with an unprocessed event action notification.

   > **Note:** You create the event action groups using HCM Data Loader. For more information, see *Overview of Loading Event Actions and Event Action Groups*.

6. From the **Event Action** drop-down list, select a user-defined event action to be included in the process event actions flow.

   The displayed options are filtered based on the selected event action type such as **HCM Rates Recalculation**. This list displays all event actions for the specified event action type, which are set to **Manually Later**.
7. (Optional) From the **Process Configuration Group** drop-down list, select a group. If you don't select any group, by default, the process configuration group created for the selected event action, is used.
8. Specify the schedule and (optional) linked flows.
9. Click **Submit**.

When you submit this process for **HCM Rates Recalculation**, it generates a report with the rate values calculated for each employee included in the process. You can validate the results of the processes submitted by the **Process Event Actions** flow using the generated report. This lists all the employees included in the process, the status of the process, and any warnings or error messages. The **Process Event Actions Manual** flow pattern will be displayed on the View Flows, Checklist, and Process Results Summary pages.

Related Topics

- Overview of Loading Event Actions and Event Action Groups

Retroactive Pay

How Retroactive Pay Is Calculated

Retroactive pay is the recalculation of prior payroll results because of changes that occurred after the original payroll calculation run.

For example, an employee receives a backdated salary award or a performance bonus.

You run the Recalculate Payroll for Retroactive Changes process to calculate retroactive pay. This process creates retroactive element entries based on retroactive events.

Note: Only the elements that have retroactive pay enabled will have retroactive results calculated.

Set up Elements for Retroactive Pay

To enable retroactive processing of an element:

1. On the Event Groups page, review the types of changes that automatically trigger a retroactive notification for the predefined event group, called Entry Changes for Retro. It is recommended you use this group or you can create a new event group for the element, if required.
2. On the Element Additional Details page, select **Yes** for these questions:
    - Is this element subject to proration?
    - Is this element subject to retroactive changes?
3. On the Element page, select the predefined event group or a new group that you have created.

    Note: This step is only if you want to attach your new group to an existing element. If your group exists and you are using the template to create the element, you do not need to navigate to the element page. You can attach the group from the template.This step is only if you want to have a different element pay the retroactive adjustment.

4. On the Retroactive Components page, create a full retroactive calculation with a reprocess type of 'Reprocess' and choose 'Yes' for the default component.
5. In the Retroactive Pay Elements section of the Retroactive Components page, create an entry with effective dates, adjustment type of 'Standard' and choose the target element of the results element that you want the retroactive pay process to use when creating a retroactive entry.

    Note: This step is only if you want to have a different element pay the retroactive adjustment.

Process Retroactive Pay

Whether creating a flow pattern for retroactive tasks, incorporating tasks into a Payroll Cycle flow pattern, or running individual processes, it is advised to run them in the following order:

1. Submit the Retroactive Notifications Report.

    Note: You can also Review or create retroactive events on the Event Notifications page and download results to Excel to view retroactive events in a report format.

2. Submit the Recalculate Payroll for Retroactive Changes process with the Submit a Flow task or the process may run automatically as part of your payroll flow.

    Note: This process creates one or more retroactive entries to receive the process results and never overwrites historical payroll data.

3. Submit the Retroactive Entries Report.
4. Review the Retroactive Entries Report.
5. Submit the Calculate Payroll process.

Note: Always run the Recalculate Payroll for Retroactive Changes process immediately before you run a payroll. Otherwise, if you run it after the Calculate Payroll process, retroactive adjustments are held over until the next payroll period.

If you don't get the expected retroactive notification, here are some suggestions to review:

- The transaction that caused the event
- Element setup
- Element eligibility for the person
- The retroactive event group entities and attributes that are set up to trigger retroactive events
- The proration event group entities and attributes setup that triggers proration

Exclude Retroactive Element from the Retroactive Pay Process

If you enabled the element for retroactive pay but now you don't want it included in the process, follow these steps to prevent it from being considered in the process comparison:

1. On the Element Additional Details page, Remove the two retroactive components rows.
2. On the Event Groups page, remove the event group.

Note: To process an element in a retroactive payroll run, the element must have retroactive components that define the processing rules. These steps remove these defined processing rules and disable event notifications.

Related Topics

- Create Conversion Formulas for Proration
- Overview of Payroll Event Groups

Add a Retroactive Event Notification Manually

Retroactive Events are typically created automatically when you create retroactive adjustments, such as backdated salary changes.

You can enter the retroactive event manually to generate the correct payslip, such as if payroll hasn't made the pay rate change effective last pay period for an employee being terminated effective immediately.

Create a Payroll Relationship Event

1. Select the Event Notifications task.
2. Click **Create**.
3. Use the information in this table enter information into the Create Payroll Relationship Event window.

Field	Value
Approval Status	Awaiting Processing
Payroll Relationship	The person to process

Field	Value
Process Date	Date when the retroactive change process is run. **Note:** This date indicates when the element change was triggered.

4. Click **Save and Close**.

Create a Retroactive Event

1. On the Event Notifications page, click the name of the person associated with the payroll relationship event you created.
2. On the Retroactive Events page, click **Create** in the Entry Details section.
3. Select the element you want to reprocess, the date the recalculate payroll runs, and a retroactive component. The element from which the change will be paid to the person is the retroactive component.
4. Repeat the previous step if you want to recalculate multiple elements for this payroll relationship.
5. Click **Submit**.

Retroactive Pay for Late Hires

Use retropay for late hires to identify employees entered in the application after the regular payroll has been processed. The application detects and processes late hires when regular payroll result exists for a date later than the employee's hire date.

For example, Jane was hired on 22-Mar-2022, but the HR team entered her details late into the application. Jane wasn't included in the payroll run that was processed and paid on 26-Mar-2022.

The application will create a payroll action for Jane for the 26-Mar-2022 payroll period. Also, the application displays the payroll action on the process results page with action status 'Retroactively Added'. This action enables retropay to calculate her missing earnings for the 26-March payroll period.

You can also use retropay for late hires to support changes in the hire date. For example, David Ellis was entered in the application with a hire date of 01-Nov, but they actually commenced employment on 01-Oct-2022. Retropay for late hires enables retropay to calculate David' earnings for the October payroll periods.

Set Up Retropay For Late Hires

To enable retropay for late hires, create a new Event Group and Event Action for their legislative data group.

The event group identifies the late hire. The event action creates a payroll action for the late hire. Also, the employee appears in the process results for that payroll with the action status as Retroactively Added.

This lets late hires to be processed within the Recalculate Payroll for Retroactive Changes process. This flow pattern contains two tasks:

- Calculate Payroll for Late Hire

- Late Hire Retropay Notification

These tasks replace the need to manually enter an element entry against the late hire, as the Late Hire Retropay Notification task automatically creates the notification. You can view the late hire details for an employee using the Person Results and Payroll Checklist pages.

Use the sample HCM Data Loader (.DAT file) to enable all or some of the following events:

- **Create Flow:** If set to Y, generates the Evaluate Late Hire flow pattern with its Calculate Payroll for Late Hire and Late Hire Retropay Notification tasks.
- **Hire Date Later**: If set to Y, the retroactive net pay result is generated when an employee's hire date is later than the payroll process date.
- **Run Payroll Relationship Group**: If set to Y, the retroactive net pay result is generated even when the original payroll was run with a payroll relationship group.
- **Additional Assignments**: If set to Y, the retroactive net pay result is generated when a late assignment is added to a payroll relationship.

You can view the flow results in the View Flows, Process Results, and Person Results pages.

- Use the View Flows page to drill down to the Evaluate Late Hires details.
- Use the Person Results page to drill down to the Calculate Payroll for Late Hires details.

For more information on the sample .DAT files for these event groups and event actions, see "*Example of Loading Retropay for Late Hires Event Action*" in the HCM Data Loading Business Objects guide.

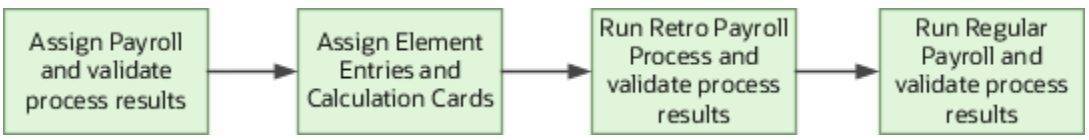
As this illustration shows, you follow a three step process to set up retropay for late hires.

Configure Employee Details

After you have enabled the feature, and you late hire the employee on 01-Mar-2022, complete these payroll steps to recalculate payroll for the retroactive changes.

1. Assign Payroll
2. (Optional) Assign Element Entries and Calculation Cards
3. (Optional) Review the Hire Date Flow to ensure both tasks are complete
4. (Optional) Review the employee's Process Results to see the retroactively added Calculate Payroll process
5. (Optional) Review Event Notification
6. Run Retro Payroll Process
7. Run Regular Payroll

As shown in this illustration, add a payroll to the employee to control how and when the employee is paid and verify the process results. Assign element entries and calculation cards. Then, run the retropay process, which picks up the retro notification and processes the late hire. Validate the process results. Finally, run the process for regular payroll and validate the process results.



If the original payroll run used a relationship group, restricting who was processed, this new late hire feature ignores that run. This is only applicable if you haven't enabled allowing payrolls with payroll relationship groups to be enabled in the Event Action HDL. The late hire only adds late hires to payroll calculations that weren't restricted by a relationship group.

Related Topics

- Example of How to Transfer Payrolls
- Guidelines for Loading Time and Labor Event Groups

Element Proration

Set Up Element Proration

Use proration to calculate proportionate amounts for recurring elements when payroll-relevant data changes during a payroll period.

Examples of such scenarios include a person joining the enterprise or a mid-period pay increase. Proration creates two payroll run results. The first run result is for the payroll period up to the day before the event. The second one is from the date of the event to the end of the period. When you create an element, you specify its proration event group and the calculation method.

Use proration rate conversion rules to specify a different rule than that used for periodicity. For example, you prorate based on calendar days when using work units for conversion.

To set up element proration, you do these tasks:

- Review the predefined proration event group to ensure that it includes changes you want to track. You can optionally update the event group or create a new group.
- Create an element and enable proration processing for an element.

Review the Predefined Event Group

When you create or update a recurring element, you can make it subject to proration.

1. On the Home page, click the **Event Groups** task under the My Client Groups tab.
2. Search for the predefined event group: Entry Changes for Proration.
3. Review the types of changes that automatically trigger proration for the elements associated with this event group.
   You can edit this group or create a new event group for the element, if required. For example, you might want to add changes to calculation cards or assignments.

Enable Proration Processing for an Element

To enable proration, do these steps:

1. On the Home page, click the **Elements** task under the **My Client Groups** tab, and click **Create**.
2. On the Create Element: Additional Details page, select **Yes** for the following question: Is this element subject to proration?
3. Select the predefined event group (Entry Changes for Proration) or a new group that you created.

4. Select a **Proration Units** and **Proration Rate Conversion Rule**.
5. Select a **Proration Conversion Rule** formula.

Note: If the predefined conversion rules don't meet your requirements, you can create a user-defined formula.

Related Topics

- Overview of Payroll Event Groups
- How Prorated Earnings and Deductions are Calculated
- Create Conversion Formulas for Proration

Create Conversion Formulas for Proration

The predefined proration formula GLB_EARN_PRORATION controls how the payroll calculation prorates an element entry when it encounters an event. This could happen when there's a change to an element entry value.

You can copy and edit a predefined proration formula to modify the calculation. Then, you can select the user-defined formula as the proration formula for your element.

Create a Formula

You must create a modified rate conversion before you create its related proration conversion rule.

1. Select the formula type **Payroll Run Proration**.
2. Search for and copy the predefined **Rate Conversion Proration** formula.
3. Add the suffix underscore **_PRORATE** to the name.
4. Update these formula inputs:
    - PRORATE_START_DATE (date)
    - PRORATE_END_DATE (date)
    - SOURCE_PERIODICITY (text)
    - DAYS_WORKED (number)
    - RATE_CONV_FORMULA (text)
    - HOURS_WORKED (number)
    - IN_AMOUNT (number)
    - UNIT_TYPE (text)
    - PRORATION_UNIT (text)
5. Add the formula outputs for the element input values.
6. Save, submit, and compile the formula.

Some countries or territories supply predefined proration formulas that you can use as the basis for your modified version.

Related Topics

- Set Up Element Proration
- How Prorated Earnings and Deductions are Calculated
- Periodicity Conversion

How Prorated Earnings and Deductions are Calculated

You can select from a number of different proration conversion rules to calculate standard or supplemental earnings. Select the proration conversion rule when you create an earnings or deduction element using the Manage Elements task.

You can also calculate prorated earnings based on calendar days or work schedules.

This topic covers:

- How deductions are calculated
- How prorated earnings are calculated
- Examples of earnings calculation based on calendar days
- Example of earnings calculation based on work schedule

How Deductions Are Calculated

Typically, you don't prorate deductions, such as deductions based on a percentage of earnings. You might prorate fixed rate deductions, such as voluntary deduction for a fitness center membership. In most cases, use the predefined global proration formula for deductions (GLB_DEDN_PRORATION). For this formula the proration value is the periodic value multiplied by the number of calendar days in the proration period. This figure is then divided by the number of calendar days in the payroll period.

How Prorated Earnings are Calculated

Creating a recurring earnings element automatically associates it with a predefined proration formula (GLB_EARN_PRORATION). The proration formula determines how to prorate earnings in the proration period based on the proration calculation method you select.

As a guideline the global formula doesn't prorate:

- Nonrecurring elements
- Earnings elements with a calculation rule of unit multiplied by rate, if rate and hours are entered in the element entry

Note: Some predefined legislations provide a different default proration formula and rules.

These examples show how proration calculations are performed on earnings calculations, based on:

- Calendar days
- Work schedules

Example: Earnings Calculation Based on Calendar Days

The formula calculates proration results as shown in the following table.

Proration Conversion Rule and Proration Units	Proration Calculation
Standard Rate Annualized rule Daily proration units	Calendar days in proration period multiplied by annual pay and divided by annual calendar days
Example: 1. You assign a person to a monthly payroll for a salary basis of 25,000. 2. You update the salary on 10 December, 2013 to 30,000. 3. You calculate the December monthly payroll. 4. The proration formula calculates 2 proration periods with 9 calendar days in the first proration period, and 22 in the second period.	(9 * 25000) / 365 + (22 / * 30000) / 365 = 616.44 + 1808.22 = 2424.66
Standard Rate Daily rule Daily proration units	Total pay divided by calendar days in the payroll period and multiplied by calendar days in the proration period.
Example: 1. You hire a person to a weekly payroll in the middle of the payroll period. 2. The employee works 3 calendar days and receives a location allowance of 500. 3. The proration formula calculates the employee's location allowance for the 3 days.	(500 / 7) * 3 = 214.29

Example: Earnings Calculation Based on Work Schedule

The formula calculates proration results as shown in the following table. If no working hours are defined, the proration formula checks the assignment definition for the number of working hours and frequency. If no information is found, the formula uses 40 as the number of working hours and 5 as the number of days for the work week.

Proration Conversion Rule and Proration Units	Proration Calculation
Periodic Work Schedule Rate Annualized rule Workday proration units	Work schedule days in proration period multiplied by annual pay and divided by 260 days, the default number of annual working days. A day in a work schedule is a 24 hour period.
Example:	(6 * 25000) / 260 + (16 * 30000) / 260 = 576.92 + 1846.15 = 2423.07

Proration Conversion Rule and Proration Units	Proration Calculation
1. You hire a person to a monthly payroll for an annual salary basis of 25,000. 2. The employee works 5 days a week Monday through Friday. 3. You increase the monthly salary to 30,000 effective 10 December, 2013. 4. You calculate the December monthly payroll. 5. The proration formula calculates 6 working days from 1st December to 9th December, and 16 working days from 10th December to 31st December.	
Periodic Work Schedule Rate Annualized rule Hourly proration units	Work schedule hours in proration period multiplied by the annual pay and divided by 2080, the default number of annual working hours.
Example: 1. An employee assigned to a weekly payroll receives an annual salary basis of 25,000. 2. You increase the salary to 30,000 effective 10 December, 2013. 3. The employee works 10 hours a day from 9 December to 12 December. 4. You calculate the weekly payroll for the week 8 December to 14 December. 5. The proration formula calculates 2 proration periods, with 10 working hours for the first period, and 30 for the second period.	(10 * 25000) / 2080 + (30 * 30000) / 2080 = 120.19 + 432.69 = 552.88

Related Topics

- Set Up Element Proration
- Create Conversion Formulas for Proration

10 Auditing and Data Validation

Audit Payroll Business Objects

Set up auditing policies to maintain a history of changes to your important data: what changed, who changed it, and when.

The audit tracks changes to attributes of payroll business objects made using the application pages, web services, or payroll processes, which use Oracle Enterprise Scheduler.

You can view the audit history to determine how a business object obtained its current value and to compare old and new values. To view the history or to create an audit report from the Audit History work area, you require appropriate duty roles and privileges. Enterprises typically assign the following two audit duty roles to the application implementation consultant and master data management application roles:

- Audit trail management, which determines the objects audited
- Audit trail report viewing to view the audit history

Payroll Business Objects

When you set up auditing for payroll, you configure Oracle Fusion Applications business objects on the Manage Audit Policies page in the Setup and Maintenance area:

1. Select the HCM Payroll application on the Configure Business Object Attributes page.
2. Specify the attributes to audit for the objects.

   For example, you might audit the start and end date attributes for the calculation card component details.

This table lists the payroll business objects you can set up for auditing payroll. You track changes to attributes specified for these objects.

Payroll Business Object	Description
Assigned Payroll	Holds date-effective attributes about payrolls assigned to a worker.
Assigned Payroll More Details	Holds details that aren't date-effective about the payroll assigned to a worker.
Calculation Card	Holds values required for calculating payroll components.
Calculation Card Component	Holds the definition of a component that represents one or more logically related payroll components.
Calculation Card Component Detail	Holds the input values of a person's calculation card.
Calculation Reporting Card	Defines the tax reporting units that report the calculation.

Payroll Business Object	Description
Calculation Reporting Card Usage	Attaches a reporting card to a person record.
Element Entry	Holds earning and deductions details for a person.
Element Entry Value	Holds the values of the compensation and benefits granted to a person.
Payroll Calculation Range Value	Defines the values or sets of values used in the calculation of a value definition.
Payroll Calculation Value Definition	Defines how a value is calculated in payroll processing.
Personal Payment Method	Holds the payment method details for a person.

Related Topics

- Audit Policies
- Audit Configuration for Business Object Attributes
- Audit Reports

Audit Element Security Profiles

Complete these tasks to enable audit of the element security profiles business object and its child objects and track and view changes to element security profiles.

1. Enable auditing of the Element Security Profile and its attributes
2. Run the Audit Report

Enable Audit of the Element Security Profile

Follow these steps to enable auditing of the Element Security Profile and its attributes.

1. Search for and use the **Manage Audit Policies** task from Setup and Maintenance.
2. On the Manage Audit Policies page, select **Auditing** as the Audit Level for Oracle Fusion Applications. This setting turns on the auditing functionality.
3. Click **Configure Business Object Attributes**.
4. On the Configure Business Object Attributes page, select **Global Payroll** as the Product. The business objects associated with that product appear in the Objects section.
5. Select the check boxes for the **Element Security Profile** and its attributes **Legislative Data Group**, **Element**, and **Element Classification**.
6. Click **Save and Close**.

Run the Audit Report

After you have enabled auditing, use the Audit Reports quick action to view the change history of the Element Security Profile and its attributes Legislative Data Group, Element, and Element Classification.

Note: To view the change history of a business object or to create a report, you must have a role with the View Audit History (FND_VIEW_AUDIT_HISTORY_PRIV) privilege assigned to it.

1. Navigate to **Tools > Audit Reports** from the Home page.
2. On the Audit Reports page, select the values as shown in this table.

Field Name	Value
Date	Select **Equals** and use the date picker to set a date as on which you want to track the change history of the Element Security Profile and its attributes.
Product	Global Payroll
Event Type	Select **Equals** and the **All** check box.
Business Object Type	Select one of these: o Element Security Profile o Element Security Profile - Legislative Data Group o Element Security Profile - Element o Element Security Profile - Element Classification

3. To audit security profiles and all their objects, select **Element Security Profile**, and select the check box **Include child objects**. To audit a specific object within the security profiles, select that object from the list.
4. Click **Search.**

Transactional events in the application trigger the audit process based on the create, update, and delete operations on the enabled business object and its attributes or child objects. The report output displays the event type, business object type and attribute name, and the old and new values.

When an element is removed from the Element Security Profile, it is tracked in the Audit Report. However, when an element that is included in a security profile is deleted from the Manage Element page, it is automatically removed from the security profile. This deletion isn't shown in the Audit Report.

Payroll Validations for Absence and Time Entries

You can upload and manage time and absence entries to the Oracle Payroll application from any of these source applications:

- Oracle Time and Labor or Oracle Absence Management application
- Any third-party absence or time collection application

When you are using a third-party absence or time collection application, use HCM Data Loader (HDL) to load this information to the Oracle Payroll: application:

- Load absence information using the **AbsenceEntry.dat** file.
- Load time information using the **PayrollTimeCard.dat** file.

Ensure you're using the correct business objects to load this information onto the Oracle Payroll application using the HDL. This helps you reconcile all absence and time entries processed by Oracle Payroll with the information held in the source application.

If you're using Oracle Absence Management, the absence details are automatically transferred to payroll when an absence is approved. If you're using Oracle Time and Labor, you can transfer time entries to payroll using the Load Time Card Batches process.

> **Note:** If you're using the generic calculation card **CalculationCard.dat** file. to load absence or time into payroll, you must change your integration to use the absence and time files. Using these files helps reduce the errors you face using the generic calculation card business object to load this type of information. A warning message displays when you load absence and time information using the generic calculation card file. A warning message is also displayed if you enter or update absence and time information on the classic calculation card page because this information should be managed in the source application to enable you to reconcile absence and time entries.

> **Note:** You are not impacted by this change if you import absence and time from a third-party system using standard element entries.

Audit Policies

Auditing is used to monitor user activity and all configuration, security, and data changes that have been made to an application. Auditing involves recording and retrieving information pertaining to the creation, modification, and removal of business objects.

All actions performed on the business objects and the modified values are also recorded. The audit information is stored without any intervention of the user or any explicit user action.

Use audit policies to select specific business objects and attributes to be audited. The decision to create policies usually depends on the type of information to be audited and to the level of detail required for reporting.

Enabling Audit Functionality

For Oracle Applications Cloud, you must configure the business objects and select the attributes before enabling audit. If you enable audit without configuring the business objects, auditing remains inactive. By default, auditing is disabled for all applications. To enable and manage audit, ensure that you have a role with the assigned privilege Manage Audit Policies (FND_MANAGE_AUDIT_POLICIES_PRIV). For appropriate assignment of roles and privileges, check with your security administrator.

To enable auditing for Oracle Fusion Middleware products, select one of the levels at which auditing is required for that product. The audit levels are predefined and contain the metadata and events to be audited. For more information, see *Audit Events for Oracle Applications Cloud Middleware (Doc ID 2114143.1)* on My Oracle Support.

If you don't want an application to be audited, you can stop the audit process by setting the Audit Level option to **None**. Also, note that there's no specified retention period for the audited data or the logs. Follow your company policy for retaining or removing such data.

Note: You won't be able to enable audit if you're working in a sandbox. If you try to set up audit while you're in a sandbox, you will see the message "Audit setup is disabled in a sandbox". You'll also notice that the buttons associated with the audit functionality are disabled.

Related Topics

- Audit Configuration for Business Object Attributes
- Overview of Audit Configuration

Audit Configuration for Business Object Attributes

Audit enables tracking the change history of particular attributes of a business object. However, those objects and their attributes must be selected for audit and auditing must be enabled for that application.

The configuration settings determine which attributes to audit for a given object, and when the audit starts and ends. Auditing takes into account all the operations performed on an object and its attributes, such as create, update, and delete. To configure audit business object attributes, use the **Manage Audit Policies** task in the Setup and Maintenance work area.

Selecting an Application

To set up auditing, you must select a web application that contains the required business objects that can be audited. From the list of business objects, select those business objects that you want to audit. Selecting a business object also displays its attributes that are enabled for auditing.

Selecting Attributes

For each selected business object to be audited, select the corresponding attributes to include in the audit. All attributes that belong to that object are by default selected for audit and appear on the user interface. However, you can add or remove attributes from the list. When you remove an attribute from the list, you stop auditing it even when the parent object is selected for audit. So, if you want an attribute to be audited, you must add it to the list. If the object selected in an audit hierarchy is also a part of several other audit hierarchies, the attribute configuration for that object is applicable to all the hierarchies in that application.

For business objects based on flexfields, select the Flexfields (Additional Attributes) check box to view, add, or remove flexfield attributes. The selected objects are audited.

Note: You can't audit LOB (BLOB, CLOB, and NCLOB), rich text, and long text attributes.

Starting and Stopping Audit

The business object is ready for audit after you select its attributes and save the configuration changes. However, to start auditing, the audit level for Oracle Applications Cloud must be set to **Auditing** on the Manage Audit Policies page.

To stop auditing an object, you can deselect the entire object and save the configuration. As a result, all its selected attributes are automatically deselected and aren't audited. To continue to audit the business object with select attributes, deselect those attributes that aren't to be audited. When users view the audit history for an application, they

can specify the period for which they want the results. Therefore, make a note of when you start and stop auditing an application.

For example, users intend to view the audit history of an object for the previous week, but auditing for that object was stopped last month. They wouldn't get any audit results for that week, because during the entire month that object wasn't audited. Even if you enable audit for that object today, users can't get the wanted results because audit data until today isn't available.

Note: When users export the report summary to a Microsoft Excel file, there's a limit on the number of rows that are displayed in the file.

- For Oracle Fusion Middleware products, the maximum limit is 25000. By default, the limit is set as 10000. You can change this limit using the FND_AUDIT_FMW_EVENT_LIMIT profile option.
- For Oracle Fusion Application Business Objects, the maximum limit is 10000 per table. This is set as the default value. Sometimes, the actual rows returned might be more than the limit set, because a single transaction can update multiple tables. To decrease this limit, you can create the FND_AUDIT_EXPORT_ENTITY_LIMIT profile option and set a lesser value for it.

  See *Why is it taking so long to get search results when exporting audit summary of Fusion Application Business Objects?*

Audit Reports

You can use the Audit Reports work area to view changes to the application data, such as the business objects that were created, updated, and deleted.

To view the history or to create a report, you must have a role with the View Audit History (FND_VIEW_AUDIT_HISTORY_PRIV) privilege assigned to it. For appropriate assignment of roles and privileges, check with your security administrator.

Audit Events

Transactional events in the application trigger the audit process based on the create, update, and delete operations. For events to trigger the audit process for the business objects, you must first enable the objects for auditing.

These are the events that trigger the audit process.

Transactional Event	When the Audit Activity is Triggered	Audit Report Content
Create	Whenever business object data is created and stored in the database	• Name of the created object • Name of the user who created the object • Time of creation
Update	Whenever the existing business object data is updated	• Both old and updated values of the object • Name of the user who updated the object • Time of updating

Transactional Event	When the Audit Activity is Triggered	Audit Report Content
Delete	Whenever the existing business object data is removed from the database	• The last value that the object attributes contained • Name of the user who deleted the object

The event details are stored in the audit table. The attributes of the audited object data can be used in lookups and foreign keys to display values in the audit history. The application supports displaying the audited information according to the language settings configured.

For Oracle Fusion Middleware products, events such as failed sign-in attempts are used as triggers. In absence of an audit table, the information is stored in the sandbox and presented only in English.

Note: This topic focuses on the create, update, and delete event types available in Fusion Applications. For details on events used in the Oracle Fusion Middleware products, refer to the Oracle Fusion Middleware documentation. See: *Introduction to Oracle Fusion Middleware Audit Framework*

Related Topics

- View Audit Reports

Data Validation

Overview of Payroll Data Validation Report

Before you run payroll or any other statutory processes or reports, the required HR and payroll data setup must be complete for all your workers. Missing or noncompliant data can impact legal processes or reports.

The Payroll Data Validation Report provides details of missing or statutorily noncompliant data at the worker and organization level. Prior to running the payroll process or any other report, run the Payroll Data Validation Report. You can then take corrective action as necessary to complete the data setup and correct noncompliant data.

During the implementation phase, add the business rules and validation messages at the enterprise or legislative data group level. These validations are in addition to the country-specific validations that are predefined in the application.

Validation Levels

The data group you select when adding validation rules to the Data Validation Report determines the level of validation. For example, you might have a validation rule at the tax reporting unit level or at the person details level. When adding a validation, you must ensure a database item exists for the attribute for which you're adding the validation.

Set Up Validation Rules

Use the delivered formula 'Global Attribute Mandatory Check' to set up validations to identify missing data. You add the validations to the Data Validation Report extract definition. Here's the summary of the required steps to set up the validation rules:

1. Identify a suitable short name for the attribute for which you want to add the validation, for example, `ASG_JOB_CODE`. Prefix it with `CST` to mean user-defined. Therefore, the short name should be `CST_ASG_JOB_CODE`.
2. Set up a lookup code to control the validation. For mandatory validations, that you set up using the delivered formula, set up the lookup code as a short name suffixed by `>MC`. For example, `CST_ASG_JOB_CODE>MC`.
3. Based on the level at which you need the validation, you must create the records and data elements in the appropriate data group. Identify the relevant data group to add the validation and create a record in the group. For example, add assignment level validations to the Assignment Data Group.

   Note: A database item must exist for the attribute for which you're adding the validation.

4. Add the validation and create the extract definition attributes.
5. Generate and compile the formula at the report record.
6. Run the appropriate Payroll Data Validation Report to include the validations.

Control the Validations

Use the delivered `ORA_HRX_GLB_VALIDATION_OBJECTS` lookup type to set up a lookup code that you can use to control the validation. For example, you can use this lookup code to add multiple country tags to a validation. Alternately, if the validation is no more valid for the country, remove the previously added country tag from the lookup code.

Note: If you don't add a country tag, the application doesn't trigger any validation.

Validation Types

The validations can be simple or complex.

The application triggers simple validations if you haven't provided a value for an attribute required for a report or a process. For example, the Tax Reporting Registration Number is missing at the organization level or the National Identifier value is missing for a worker. You can create a simple validation by using the delivered formula 'Global Attribute Mandatory Check' and the appropriate database item group.

The application triggers complex validations when there's more than one attribute included in the validation. For example, a value is missing for a National Identifier Type pertaining to a worker.

For coding complex validations, Oracle recommends that you use data elements of type Rule with a user-defined Rule Formula to perform the validation. You must deliver these data elements in a record of type Formula.

User-Defined Rule Formula

For coding complex validations, Oracle recommends that you use extract attributes of type Rule with a user-defined Rule Formula to perform the validation. Consider the following for coding user-defined Rule Formula:

- Check if the formula is of type Extract Rule.
- Check that the lookup code exists for the short code of the data element, and is enabled for the legislation code, for which the report is run.
- Check if the formula is associated with the correct data element. Since this is a user-defined formula, check and run only if short code matches.

- Perform the validation to return validation message text or return a NULL value. The message text should be fewer than 240 characters or the application considers only the first 240 characters of the message.

Data Security

By default the report is submitted through an elevated user that has full data access and is secured through the list of values on the report parameters. However, you can configure the Data Validation Report to run based on the profile of the user who submits the report. For example, if a user has access to only employees within a specific payroll or department, you can configure the report to check data only for those employees.

Validation Rules for Data Validation Report

You can add validation rules to the Data Validation Report to identify missing data required to run a process or report. You can run the report and make relevant corrections to complete the employer or payroll-related data.

Use the **Extract Definitions** task in the **Data Exchange** area in **My Client Groups** on the Home page, to add a validation rule to the Data Validation Report extract definition.

Rule Formula

Use the delivered formula 'Global Attribute Mandatory Check' to set up validations to identify missing data. You add the validations to the Data Validation Report extract definition.

This formula includes certain important enhancements such as supporting translated messages. It also offers the ability to control the validations without you deleting the validation already configured by you or delivered by Oracle. It's not mandatory for you to migrate your existing validations from the 'Global Null Check Rule' formula to the new one. Oracle recommends migrating to the new formula to make use of the benefits.

Validation Levels

This table describes the validation rules at the various levels.

Validation Level	Description
Employee	Add simple validations for a missing attribute at the worker level. For example, if the National Identifier value is missing for a worker.
Organization	Add simple validations for a missing attribute at the organization level. For example, a missing Tax Reporting Registration Number.
Repeating Child Entity of a Worker	Add validations at the repeating child entity of a worker. For example, you may add a validation for a missing IBAN number for one of the multiple payment methods that a worker has. You can add a validation to specify the details of the attribute value (IBAN Number). This attribute value is missing for the Entity Type (Personal Payment Method) and for the Entity Name (Personal Payment Method Name).
Repeating Child Entity of the Organization	Add validations at the repeating child entity of an organization. For example, add a validation for a missing SWIFT Code for one of the multiple organization payment methods that's valid for a payroll statutory unit. You can add a validation to specify the details of the attribute value (SWIFT Code). This attribute value is missing for the Entity Type (Organization Payment Method) and for the Entity Name (Organization Payment Method Name).

Validation Level	Description

Data Groups

The data group you select when adding validation rules to the Data Validation Report determines the level of validation. For example, you might have a validation rule at the tax reporting unit level or at the worker details level.

The processes associated with the Data Validation Report extract definition are:

- Run Payroll Data Validation Report
- Run Worker Data Validation Report
- Data Validation Report for Payroll Interface

These reports use different data groups to report data validation. You must select a data group for any validation rules you add based on the type of data and the level you want the validation to occur.

Payroll Data Validation Report

Add validation rules to these data groups to report payroll-related data validation:

- Payroll Statutory Units
- Tax Reporting Units
- Payroll Relationships
- Payroll Assignments

Worker Data Validation Report

Add validation rules to these data groups to report worker-related data validation:

- Payroll Statutory Units
- Legal Employers
- Reporting Establishments
- Work Relationships
- Person Details
- Assignments

Data Validation Report for Payroll Interface

Add validation rules to these data groups to report worker-related and payroll-related data validation for Global Payroll Interface:

- Payroll Group
- Payroll Relationship Group
- Work Relationships
- Assignments
- Payroll Relationships

- Payroll Assignments

Usage of Tags

The report output has different sections for legal employer, reporting establishment, person, and so on. The validations reported in the different sections is based on the tag that's added for rule data element. Consider these conditions while using tags for adding validation rules for Data Validation Report.

- For reporting validations at organization level, add the validations to Organization Data Groups and the related tags, as given in the table here.

Validation Level	Data Group	Tag
Legal Employer	Legal Employers	`LEMP_RULE_TEXT`
Establishment	Reporting Establishments	`REP_EST_RULE_TEXT`
Payroll Statutory Unit	Payroll Statutory Units	`PSU_RULE_TEXT`
Tax Reporting Unit	Tax Reporting Units	`TRU_RULE_TEXT`

- For reporting validations at worker level, add the validations to the corresponding data group and the predefined tags as given in the table here.

Validation Level	Data Group	Tag
Employee or payroll relationship level validations	Identify appropriate data groups (Example: Assignment).	`RULE_TEXT`

- For reporting organization validations or the validations of other entities in a separate table, add the validations to the corresponding data group and the predefined tags as given here.

Validation Level	Data Group	Tag
All levels other than employee or organization	Identify appropriate data groups (Example: Assignment).	`OTHERS_RULE_TEXT`

Related Topics

- Set Up a Lookup Code to Control the Rules for Data Validation Reports
- Overview of Payroll Data Validation Report
- Payroll Data Validation Report
- Add Rules to Data Validation Reports

Set Up a Lookup Code to Control the Rules for Data Validation Reports

Use the delivered ORA_HRX_GLB_VALIDATION_OBJECTS lookup type to set up a lookup code that you can use to control a validation for the Data Validation Report.

You can then use this lookup code to add multiple country tags to a validation. Alternately, you can remove a previously added country tag from the lookup code, if the validation is no more valid for the country.

Note: If you don't tag a country, the application doesn't trigger any validation.

To create a lookup code:

1. In the Setup and Maintenance area, select the **HCM Extract Lookups** task.
2. Search for and select **HCM Extract Lookups**.
3. Click **Create**.
4. Enter these lookup code details.

Field	Description
Lookup Code	Enter a lookup code suitable for the attribute or entity to be validated. If you want to use the Oracle delivered formula for mandatory attribute validation, enter suffix as **>MC** n the lookup code, for example **CST_PERSON_ADDRESS_LINE 1>MC**.
Display Sequence	Enter a unique value for the lookup code. It is recommended to use a sequence number, between 201 to 500, for the user-defined lookup codes.
Start Date	Enter 01/01/0001.
End Date	Enter 12/31/4712.
Meaning	Enter a suitable meaning for the lookup code, for example, Person Address Line 1 Check.
Description	Enter a suitable description, for example, Person Address Line 1 Check.

Field	Description
Tag	Tag an appropriate country or countries, for which the validation is to be performed. For example, `+FR`. **Note:** If no Tag is set up, the application doesn't perform the validation for any country.

5. Click **Save**.

Related Topics

- Overview of Payroll Data Validation Report
- Payroll Data Validation Report
- Add Rules to Data Validation Reports

Adding Rules to Data Validation Reports

This example demonstrates how you can add a validation rule to the Data Validation Report extract definition.

Before you make changes to the extract, select a legislative data group. When you submit your changes for a new rule, the validation is available for the selected legislative data group. Depending on the validation rule and the legislative data group you add it to, the validation is included when you submit any or all of the following processes:

- Payroll Data Validation Report for identifying missing payroll data needed for processes
- Worker Validation Report for identifying missing HR data needed for processes
- Data Validation Report for Payroll Interface for identifying missing HR or payroll data of persons associated with a given object group or payroll. The primary goal of the report in this case is to validate the data before it's exported by the Global Payroll Interface process to a third-party payroll provider.

Before you add the validation rule, ensure that a database item exists to retrieve the value to be validated. The contexts required by the database item are provided by the block level to which you add the validation. For example, suppose you're adding the new validation to the Person Details data group. You are adding a rule to check whether each person's Person Address Line 1 attribute has a value. If there is no value, the report displays an error message. A database item must exist for the person address line 1 attribute. Create the records and data elements in the appropriate data group based on the level at which you need the validation.

How to Create the Validation

To create a validation:

1. In the Name field, enter **Data Validation Report**.
2. Select **Extract Definitions** task from the **Data Exchange** area under **My Client Groups**.
3. Search for and select the extract definition to edit as follows:
    a. In the Type list, select **Full Profile**.
    b. Select a legislative data group.
    c. Click **Search**.

d. In the search results, click **Data Validation Report**.

4. On the Extract Definitions page, click **Switch Layout**.
5. In the **Session Effective Date** field, enter **01/01/0001**.
6. Add a new record to the Data Group to which you want to add validations as follows:
   a. Select **Person Details** under the **Data Group** node.
   b. In the Records section, click **Create**.

      Ensure that the Session Effective Date is 01/01/0001.
   c. Enter these details in the **Create Extract Record** section.

Field	Value
Sequence	Enter a unique value for the records within the Data Group. It is recommended to use a sequence number between 200 and 600. **Note:** Two records in the same Data Group can't use the same sequence number.
Name	Person Address Details
Type	Detail record
Process Type	Fast Formula

   d. Click **Save**.
7. Add the database item attribute as follows.
   a. In the **Extract Attributes** section, click **Create**
   b. Complete the fields as shown in this table. This table lists the fields and the respective values for the extract attributes.

Field	Description
Name	Enter a suitable name, for example, Person Address Line 1 Attribute. This name is used in the validation message.
Tag Name	Person_Address_Line 1_Attribute
Short Code	Enter a suitable name to match the lookup code and remove the suffix, '`>MC`', for example, `CST_PERSON_ADDRESS_LINE_1`.
Start Date	01/01/0001

Field	Description
End Date	12/31/4712
Data Type	Enter a value appropriate to the data that you want to check. For example, Text for address details.
Type	Database item group
Database Item Group	Person Address Line 1
Output Label	Person Address Line 1
Output Column	6

Note: If you don't find the Database Item Group that fetches the attribute value you want to validate, it could be that:

- The Extract Attribute is added at an incorrect level (Data Group), or
- The Database Item Group is unavailable. Verify the availability of the Database Item Groups by trying to add the extract attribute to other levels (Data Group). If the required Database Item Group is unavailable, you can contact Oracle Support.

For more information, see Database Items for Extracts and Formulas in Oracle Fusion HCM guide on My Oracle Support (1565118.1).

c. Click **Save and Close**.

8. Create another attribute for the validation rule as follows:

a. In the **Extract Attributes** section, click **Create**
b. Complete the fields as shown in this table. This table lists the fields and the respective values for the validation rule.

Field	Value
Name	Person Address Line 1 Rule
Tag Name	RULE_TEXT

Field	Value
	Note: Enter this value exactly.
Short Code	`CST_PERSON_ADDRESS_LINE_1>MC` **Note:** The short code must include the short code of the database item attribute you created followed by a space and the suffix: `>MC`. The short code is case-sensitive.
Start Date	01/01/0001
End Date	12/31/4712
Data Type	Text
Type	Always set as Rule.
Rule	Global Attribute Mandatory Check
Output Label	Enter a value same as the Short Code, for example, `CST_PERSON_ADDRESS_LINE_1-RULE`.
Output Column	Enter a unique value within the record, 26.
Results Display Option	Summary and detail

c. Click **Save and Close**.

9. In the **Actions** menu, select **Generate Formula**.
10. In the **Actions** menu, select **Compile Formula**.
11. Click the Extract Execution Tree node and verify that all formulas are compiled.
12. Click **Submit**.

Data Security in Payroll Data Validation Reports

Configure the Data Validation Report to run based on the profile of the user who submits the report.

For example, if a user has access to employees only within a specific payroll or department, you can configure the report to only report data for those employees. The access the user has is defined by the data security profile attached to the user's role.

Here are the tasks required to configure and run the report based on the profile of the user submitting the report:

1. Sign in as IT Security Manager and define HCM data roles and setup data security. Assign the data roles to the application user as per the requirement of your enterprise.
2. Sign in as Payroll Manager and secure the 'Payroll Data Validation Report' at the Legislative Data Group level.
3. Sign in as application user to whom the privileges are assigned and run the report.

Define Data Roles and Assign Data Roles to the Application User

No predefined HCM data roles exist. While creating an HCM data role, include a job role. The secured HCM object types that the job role accesses are identified automatically, and sections for the appropriate security profiles appear. Select or create security profiles for those object types in the HCM data role.

For each object type, you can include only one security profile in an HCM data role, which is known as Security Profile. Consider the following to complete the setup.

- You must have the IT Security Manager Job role to perform this task.
- To create an HCM data role, use the Assign Security Profiles to Role task in the Setup and Maintenance work area.
- For more information on setting up the data security as per the requirement of the enterprise, see Oracle Human Capital Management Cloud Securing HCM.

Here are the steps required to configure the report based on the profile of the user submitting the report.

1. Search and select the **Payroll Flow Patterns** task from **Payroll** in **My Client Groups** on your Home page.
2. Search for the **Run Payroll Data Validation Report** flow pattern.
3. Select the required **Legislative Data Group**.
4. Click **Edit**.
5. Click **Go to Task** and click **Edit**.
6. Select the row and click the **Edit** on the tool bar for the row.
7. Select the **Secure Process or Report** check box and click **Save**.
8. Alternately, you can click on **Remove all Updates**.

Repeat these steps for each Legislative Data Group, where the setting must apply. This configuration, although done on the delivered flow pattern, is preserved during patching and upgrades.

Submit Report

When you submit the report, consider the following:

- Select the Payroll Statutory Unit (PSU) from a secured list of values. If the user's data security is restricted by the PSU, then the user can only run the report for that PSU they have access to, even if the report is run as the elevated user by default.
- If the user's data access is restricted based on other attributes like department or payroll, configure the report based on the user profile. This is only if you must restrict the report to the profile of the user submitting the report and only data for the department or payroll is reported.

11 Implementing Payroll Costing

Overview of Payroll Costing

Payroll costing tracks all your costs incurred to compensate your employees and distribute those costs to General Ledger. For example, salary, bonuses, paid leave, employer-paid portion of all payroll taxes are tracked and disbursed as expenses to your work structure.

- The *Payroll Cost Allocation* key flexfield is the basis for the accounting entries to be created and reported to track your labor costs. Consider all aspects and impact of this flexfield and its uses during your planning.
- *Calculate Payroll* flow calculates payroll, produces run results and costs them to your work structure and costing hierarchy:
    - Cross-Validation Rules validate payroll cost account combinations during the costing process and prevent invalid combinations entries sent to general ledger.
    - Payroll costing derives a cost account number for each payroll run result. Typically each segment of the cost account number represents the general ledger accounting structure; however this may not always be the case.
    - Payroll costing values are mapped to various segments of the customer's general ledger accounting structure.
- *Calculate Costing of Payments* flow creates costing results based on the prepayment results. And, when applicable, after the cash management reconciliation it allocates costs for payment results, to include voided, cleared and external payments.
- *Calculate Retroactive Costing* flow recalculates costs for retroactive changes to costing.
- *Cost Adjustments* are corrective actions applied to the payroll run costing result and, based on the payroll run, to reports and calculations.
- *Calculate Partial Period Accruals* flow calculates costs for a pay period that overlaps two accounting periods to create accrual entries for partial pay.
- *Transfer to Subledger Accounting* flow transfers payroll costs to subledger accounting (SLA) for review, reports and posts to the General Ledger.
- *Reverse Transfer to Subledger Accounting* flow reverses the payroll subledger accounting entries that were posted in final mode using the Create Accounting process.

Setup Tasks and Considerations

Set up enterprise structures, legal entities, and organizations to create and maintain information related to people, employment, and work structures. The setup also includes tasks to define payroll business objects required for processing and costing payroll, processing payments, and generating statutory reports.

Use this table of setup tasks to plan your implementation of payroll and payroll costing for your business requirements.

Payroll	Description
Cost Accounting	Legal entities, legal reporting units, tax reporting units, payroll statutory units, legal authorities, legal registrations and jurisdictions, and legal authorities.

Payroll	Description
Cost and Profit Planning	Organization structures, business units, and organization models that best suit your business process.
Landed Cost Management	Configure elements and formulas to record earnings and deductions for processing payroll and reporting.
Project Costing Base	Define payroll objects and payment methods required for payroll calculations and reporting, and processing and making payments.

Payroll Costing Setup

Use Payroll Costing and Cost Allocation setup tasks to configure key flexfields, value sets, descriptive flexfields, messages and other costing structures.

Start your implementation of Global Human Resources Cloud Payroll Costing as a user with the Application Implementation Consultant role (ORA_PAY_APPLICATION_IMPLEMENTATION_CONSULTANT_JOB). Refer to the Functional Setup Manager guide to manage the opt-in and setup of your offerings.

You typically set up costing during your initial payroll implementation. As new objects, such as payrolls, departments and jobs are added, you may have additional configuration but only at the costing level.

- Costing setup may use person-specific data, such as a department or a legislative area like state, county or city, referred to as contexts.
- Unique costing for a person or an element entry may be entered on an as needed basis during regular payroll processing.

Refer to the Administering Global Payroll Costing guide in the Oracle Help Center for details about implementing and administering payroll costing.

Related Topics

- Overview of Payroll Flows
- About This Administering Global Payroll Costing Guide
- How Payroll Costing Components Integrate with Other Applications
- How Distributed Costing Is Calculated
- Payroll Costing Results Report

12 Implementing Payroll Core

Overview of Payroll Core

Implement Payroll Core for countries that Oracle doesn't have a localized version of the payroll application.

The Payroll Core application is a flexible payroll solution for companies that manage different pay structures for employees working around the world. These employees are often not subject to local pay rules like taxes, overtime, or minimum wage but they must adhere to unique international pay practices.

Oracle provides localized versions of the global payroll product to meet country-specific statutory and legislative requirements for several countries across the globe: United States, Canada, Mexico, United Kingdom, China, Kuwait, Saudi Arabia, United Arab Emirates, Qatar, and Bahrain at present time.

With Payroll Core, Oracle allows you to set up payroll requirements for countries Oracle doesn't support. Payroll Core typically includes the following:

- A generic set of features for you to run the basic payroll processes.
- A set of payroll objects that you must configure for the specific country. For example, you must define the country and set the default currency of the country that you are processing payroll and paying your employees.
- The application doesn't have any predefined objects like jurisdictions, elements, balances, payment types, and so on. You must define these objects as required.
- Taxation isn't delivered, but it can be configured with Elements and Fast Formulas.

Setup Tasks for Implementing Payroll Core

To implement the Payroll Core application, sign-in as a user with Application Implementation Consultant or Payroll Implementor role and opt into the offerings applicable to your business requirements.

Refer to the Functional Setup Manager guide to manage the opt-in and setup of your offerings.

Before you begin implementing Payroll Core, you must complete:

- Initial application setup.
- Implementation of Global Human Resources and HR setup tasks for implementing and processing payroll. For more information, refer to the Implementing Global Human Resources.

The Payroll Core application is best suited for countries that do not have complex local taxes and social insurance calculations and hence has no requirement for setting up calculation components and calculation cards. The application uses elements and formulas to calculate employee wages and compensation and aggregate balance accruals.

Before you begin, refer to the 'Setup Tasks for Implementing Global Payroll' topic in the Implementing Global Payroll guide. The following sections explain the points that you must consider and are specific to the Payroll Core application.

To implement Payroll Core you will need to perform most of these tasks from the Setup and Maintenance work area. Use **My Enterprise** on the Home page to navigate to Setup and Maintenance.

Prerequisite Tasks for Payroll Core Setup

Before you set up the payroll components ensure that you have completed these tasks.

1. Create an Implementation Project

   Setup tasks for organization structures are defined in an implementation project. Create an implementation project and select the Workforce Deployment offering to generate the setup tasks required to set up the Payroll Core application.
2. Create Country

   Use the Manage Territories task and search for your territory on the Manage Territories page. If you find your territory, you can edit the description to match your requirements. Don't edit territory names or codes. Use the territory code and name to verify geographies, create legal addresses, and select the country extension.

   If you are unable to find your country in the predefined territories list in the application, create the country.
3. Select Default Currency

   On the Manage Territories page, select the default currency for the country. This is the currency in which balances are accumulated for this legislation.
4. Verify Geographies

   Use the territory code to verify predefined geographies and load any additionally required local geographies.
5. Define Enterprise Structures for HCM

   The Enterprise classification represents the top most structure in the organization. A person exists within the context of an enterprise. An enterprise doesn't adhere to any legislation. Country specific attributes are stored at the level of a Legal Entity.
   a. Define a legislative data groups (LDGs) for your country and associate it with one or more payroll statutory units (PSUs). Each PSU can belong to only one LDG. An LDG is used to partition your payroll and related data. Payroll-related info, such as elements, is organized by LDG.
   b. Create legal addresses for all organizational units of the enterprise before you create legal entities. A legal address is the address of record for an entity.
   c. Define a legal entity that is both a legal employer and a PSU. Define Legal Entity HCM information as required.

Payroll Setup Tasks

1. Select Country Extensions and Address Validation Rules

   Since you are processing payroll and paying your employees, select Payroll as your country extension. Select the address style and address validation for your country. The address style you select determines which address attributes are available and maintained in the application. The combination of address style and address validation determines the level of validation.
2. Define Payroll Legislations
   a. Use the Configure Legislations for Human Resources task to define legislative rules. Legislative rules govern default values and determine how you manage employee records in your organization. Base your selections for the following attributes on the statutory requirements of your country.
      - Payroll relationship rule for your country determines how employment records are created when employees are hired or rehired.
      - If you plan to capture information for payroll payment purposes, map a person type to a payroll relationship type. Select appropriate values for your country.

   b. Use the Configure Payroll Legislations task to define payroll-related data, such as legislative rules, element classifications, payment types, component groups, balance dimensions, and other related objects.

3. Define Elements

   Elements are the building blocks of payroll and benefits. You can define elements using the element template. Define elements to calculate specific earnings, deductions, and other payroll data for reporting, compensation, absences, and benefits calculations.

4. Define Balances

   Payroll balances show the accumulation of values over a period of time. The values can be currency, hours, or any other numeric value. Balances are created automatically when creating elements. You can edit the definition of these generated balances, or create additional balances for calculations or reporting.

   The value assigned to a balance during processing is determined by balance feeds defined for the balance. Balance feeds can be by element input values or by balance classification run results. When you create a new balance, it must be associated with a category and categories cannot be added or modified.

5. Define Formulas

   The Elements task generates standard element skip and calculation formulas. Use the Fast Formulas task to modify the formulas to suit your requirements. Refer to 'Overview of Using Fast Formulas' for more information on formula types and how you can use them to control processing and validate element entry values.

6. Define Payroll Definitions

   When you create a payroll definition, the application generates the complete payroll schedule based on the payroll period type, the offsets or calendar adjustments, and the number of years that you specify. Each payroll in the schedule is assigned a unique name. Assign employees to a payroll definition on the Payroll Relationships page.

7. Define Payment Methods and Payment Types

   Create at least one Organization Payment Method (OPM) for each combination of LDG, payment type, and currency that you use to disburse wages and other compensation. When you create an OPM, select a payment type and define at least one payment source for each OPM.

Other Document References

For more detailed information about the setup tasks and other related applications and tasks, refer to these guides at docs.oracle.com/cloud/latest/globalcs_gs/docs.htm.

- Implementing Global Payroll
- Administering Global Payroll
- Administering Global Payroll Flows
- Administering Fast Formula
- Administrating Payroll Costing
- Implementing Absence Management
- Implementing Benefits
- Implementing Time and Labor
- Implementing Workforce Compensation

TRU Defaulting Rules for Payroll Core

For an international payroll legislation such as United Nations, you can automatically assign a Tax Reporting Unit (TRU) to a newly hired employee.

The TRU triggers the creation of a deduction card for the employee and the necessary TRU and assignment associations. This information ensures that an international employee is successfully processed in the Calculate Payroll process.

Use the Configure Legislations for Human Resources task and select any of the TRU defaulting rule options in the Deduction Card – Tax Reporting Unit Association section on the Legislative Rules page. The option you select controls how deduction cards and associations are created for a newly hired employee. The three TRU defaulting rule options are explained here.

Assign Employee Details Using Main TRU

Select this option if you have these requirements:

- You don't have a need to calculate employee taxes.
- You are paying all your employees within a legislative data group in the same currency.
- You don’t have to capture tax reporting information at employee level for tax calculation purposes.

The payroll run assigns the main TRU for the organization to the newly hired employee and automatically creates the deduction card and association at the assignment level.

Assign Employee Details Using TRU Currency

Select this option if you have these requirements:

- Your organization has employees who are in multiple countries and are paid in different currencies within a single legislative data group.
- You don’t have a requirement to calculate employee taxes.

For each currency that you pay your employees, define a TRU within a payroll statutory unit.

The payroll run uses the salary basis currency of the employee to assign a TRU with the corresponding currency to the newly hired employee. For example, when an employee is assigned to a salary basis with a currency of USD, they are assigned to the TRU that also has a USD currency.

The run automatically creates the deduction card and association at assignment level.

Enter Employee Details

Select this option if you have a need to capture tax reporting information at employee level for tax calculation purposes.

During new hire manually assign a TRU, deduction card, and assignment association to an employee.

Considerations to Assign Employee Details Using TRU Currency

While configuring an international payroll legislation, select the **Assign employee details using TRU currency** option if you have the following requirements:

- You have an organization that has employees in multiple countries and you pay the employees in multiple currencies.
- You don't have a requirement to calculate employee taxes.
- You need to generate separate payroll reports for each currency.

Here are some aspects you must consider while configuring the legislation.

Create TRU

For each currency that you pay your employees, define a tax reporting unit (TRU) within a payroll statutory unit (PSU) and capture the currency of the TRU. For example, create a TRU for Afghan Afghani currency and a separate TRU for Euros. All employees located in countries which use the euro currency, such as those based in France or Slovenia, are allocated to the same TRU. Define both the TRUs within a single PSU.

Note: You must only create a single TRU for each currency.

Use the TRU to group employees, within a Legislative Data Group (LDG), based on their salary currency.

This approach facilitates the following:

- You can calculate payroll balances for each different currency and TRU.
- You can generate separate payroll reports for each currency. TRU is a supported context for balances used in payroll reports such as the payslip.

Salary Basis Currency of Employee

The payroll run uses the salary basis currency of the employee to identify a TRU and associate it to the employee. The salary basis currency of an employee is derived from the input currency of the element associated to the salary basis.

For example, when an employee is assigned to a salary basis with a currency of Euro, the payroll run assigns the employee to the TRU that also has a Euro currency.

Note: Define the elements at the assignment level.

What Happens when you Process Payroll?

Subsequently, when you run the payroll, the payroll run initiates and completes the following:

- Identifies the TRU based on the salary basis currency of the employee and associates the TRU to the employee.

- Creates the tax card and the assignment association.
- Calculates payroll and completes all other processes. The payroll run uses the TRU context and calculates balances for each different currency and TRU.

Updates to the Initial Configuration

For any subsequent updates, consider the following:

- If an employee moves to another country and payment currency, consider the following:
  - Define a new TRU for the new currency and manually assign the new TRU to the employee.
  - Create a new assignment and a new tax card for the new assignment. An employee can't have multiple, concurrent tax cards. You must end the original tax card and create a new one for the new assignment.
- During a global transfer, consider the following:
  - For transfers within the same PSU or legal employer, create a new assignment under the same payroll relationship. TRU and assignment associations are created for the existing deduction card.
  - For transfers to a different PSU or legal employer, create a new assignment under a new payroll relationship. A new deduction card, TRU and assignment association are created.