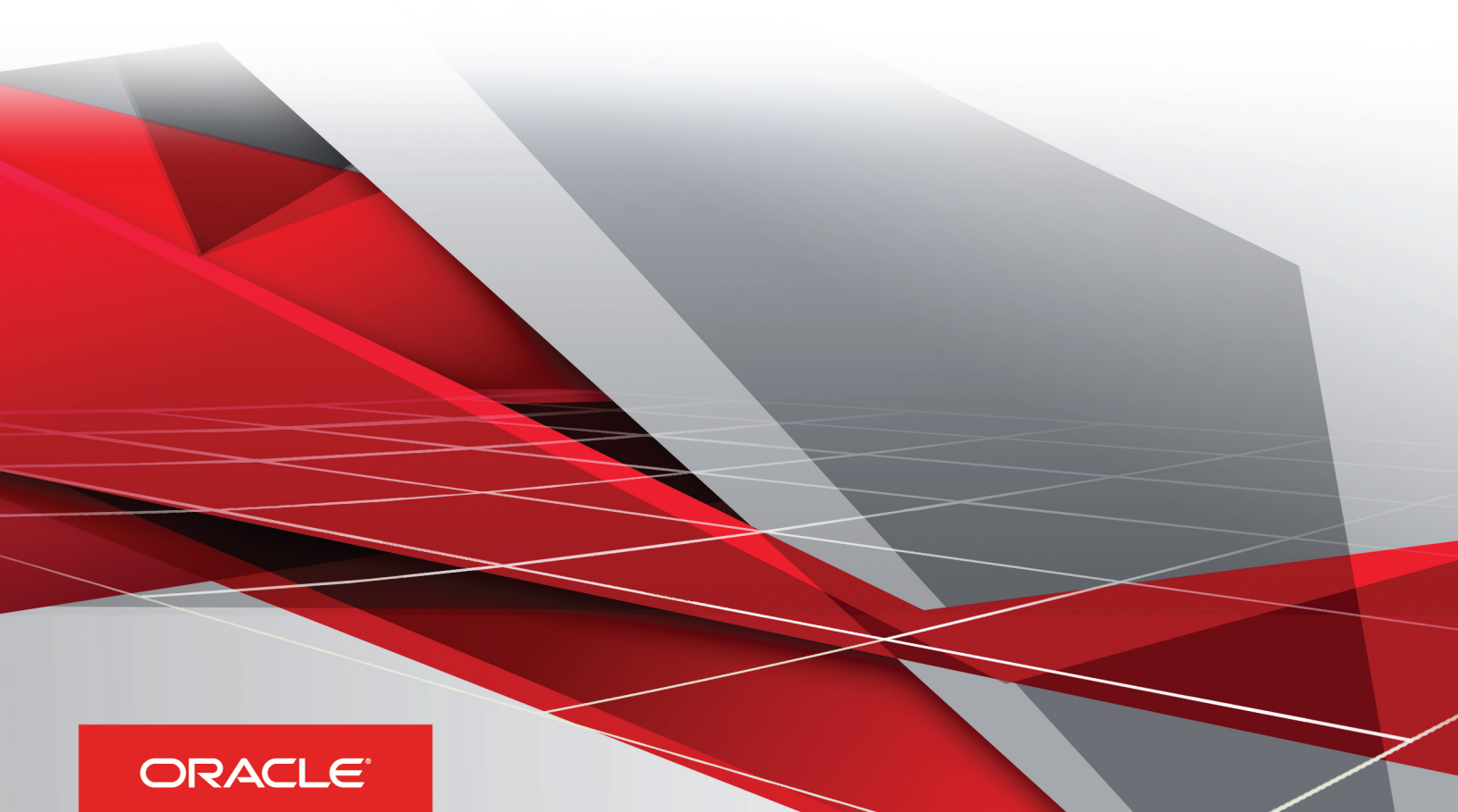
Oracle

Global Human Resources Cloud
Implementing Global Payroll

Release 12

This guide also applies to on-premise implementations



Oracle® Global Human Resources Cloud Implementing Global Payroll

Part Number E74162-01

Authors: Janet McCandless, Angela Brown, Carla Fabrizio, Juliette Fleming, Tim Bisset, Toni Kunz

Contents

Preface

This preface introduces information sources that can help you use the application.

Oracle Applications Help

Use the help icon to access Oracle Applications Help in the application. If you don't see any help icons on your page, click the Show Help icon in the global area. Not all pages have help icons. You can also access Oracle Applications Help at https://fusionhelp.oracle.com.

Using Applications Help

Watch: This video tutorial shows you how to find help and use help features.

Additional Resources

- **Community:** Use **Oracle Applications Customer Connect** to get information from experts at Oracle, the partner community, and other users.
- **Guides and Videos:** Go to the **Oracle Help Center** to find guides and videos.
- **Training:** Take courses on Oracle Cloud from **Oracle University** .

Documentation Accessibility

For information about Oracle's commitment to accessibility, see the **Oracle Accessibility Program** .

Comments and Suggestions

Please give us feedback about Oracle Applications Help and guides! You can send e-mail to: oracle_fusion_applications_help_ww_grp@oracle.com.

1 Overview

Implementing Global Payroll: Overview

To plan your payroll implementation, consider the feature choices for the Payroll functional area, and the key decisions highlighted in this topic. To get started, use the Getting Started page in the Setup and Maintenance work area. Then configure your offerings and generate your task list.

Getting Started

You implement Global Payroll using the Payroll functional area in the Workforce Deployment offering.

Before you begin, use the Getting Started page in the Setup and Maintenance work area to access reports for this offering. These reports include:

- Lists of setup tasks
- Descriptions of the options and features you can select when you configure the offering
- Lists of business objects and enterprise applications associated with the offering

Payroll Feature Choices: Countries and Costing

On the Configure Offerings page in the Setup and Maintenance work area, enable the Payroll functional area for implementation.

On this page, you also select feature choices for payroll processing:

- Select the countries or territories for which you are processing payroll.
- Select the Payroll Costing feature choice if you want to cost your payroll. If you select this choice, select the appropriate subledger accounting rules:
    - The Maintain Subledger Application and Accounting Method option enables you to review predefined subledger data.
    - Both options enable you to integrate subledger accounting with payroll.

Tip: For each country or territory where you are processing payroll, select the Payroll extension on the Manage Features by Country or Territory page. In addition, on the Manage Currencies page, set the appropriate precision for each country's currency. For example, Global Payroll customers who pay and report in USD must set the precision value to 2. Setting precision ensures that the payroll processes and reports used for reconciliation and legislative reporting produce the expected results. For each country or territory where you are sending payroll data to a third-party payroll provider:

- Don't select that country or territory on the Select Feature Choices page.
- Do select the Payroll Interface extension on the Manage Features by Country or Territory page. Do set currency precision on the Manage Currencies page.

Payroll Task Lists

You can access the payroll setup tasks on the Applications Administration tab of the Overview page in the Setup and Maintenance work area. Select the Workforce Deployment offering and the Payroll functional area.

Alternatively, create an implementation project for the Payroll functional area to generate a task list for the project. The application implementation manager or consultant can assign and track each task.

If you have already implemented Oracle Fusion Global Human Resources, which is required for payroll processing, you have completed many prerequisite tasks. The Implementing Global Human Resources guide explains these tasks. Most of the additional tasks required to implement payroll processing are in the Define Payroll task list.

Key Decisions

As you plan your payroll implementation, your key decisions include the ones highlighted in the following table.

Decision	Considerations
How many payroll definitions do you require?	You create at least one payroll definition for each payroll frequency, such as weekly or semimonthly, in a legislative data group.
Which elements do you require?	Create elements to handle all the earnings and deductions you want to process.
Which payment types do you want to support, and how many organization payment methods do you need?	You create at least one payment method for each combination of payment type and currency in a legislative data group.
Do you plan to cost your payroll?	If so, create a Cost Allocation key flexfield structure that matches your accounting structures. The flexfield segments record account numbers for costing processes such as the calculation of payroll and payments. Plan at which costing level, such as payroll, element or department levels, to make each segment of your accounts available for entry. See the Oracle Global Human Resources Cloud Implementing Payroll Costing guide for more details.
Does the predefined payroll cycle flow pattern meet your requirements for the sequence of tasks in your regular payroll cycle?	If not, you can copy the flow pattern and customize it. You can also design additional flow patterns to handle other common scenarios.
What integrations do you need, for example with time entry or benefits applications?	The Integrating with Oracle HCM Cloud guide provides the information you require to support your integrations.
How will you load personal information such as payment methods, bank details, and tax details?	Use the payroll batch loader to load most payroll information. See the Integrating with Oracle HCM Cloud guide for more details.

Related Topics

- Define Payroll: Overview

- What's the difference between precision, extended precision, and minimum accountable unit for a currency?

Payroll Data Loading: Overview

You can load payroll data for initial migration or mass data entry using the payroll batch loader, predefined processes, and web services. You can also automate the regular import of time cards, absence entries, and benefit enrollments using predefined flows.

This overview outlines your options to meet the following data loading requirements:

- Loading setup data
- Exporting and importing setup data between test and production environments
- Ongoing data loading

Loading Setup Data

You can use HCM Data Loader during implementation to migrate HCM setup data, including element entries and salaries. However, for most payroll-related setup data and worker data, as shown in the following table, use the payroll batch loader. You can load the data from a spreadsheet or a file.

Payroll Setup Data	Worker Data
Balances in balance groups	Assigned payrolls
Elements	Bank details for personal payment methods
Formula globals	Element entries
Object groups	Initial balance values
Payroll definitions	
User-defined tables	

Use the Batch Loader task in the Payroll Administration, Data Exchange, or Data Exchange work area to perform the following actions:

1. Enter the data in a workbook format that's specific to the object type or create a batch from a file using a transformation formula.
2. Save your entries to staging tables.
3. Validate the data in staging tables.
4. Submit the Transfer Batch flow to load the data to the application tables. For initial balance values, use the Load Initial Balances flow instead.

Exporting and Importing Setup Data Between Environments

Typically, you initially migrate data to a test environment. After successful testing, you can move the data to your production environment using one of the following tasks:

- Use the Manage Configuration Packages task in the Setup and Maintenance work area to export and import a configuration package.
- Use the Create Batch for an Object process in the Payroll Administration work area to select specific objects, such as elements or formulas, to migrate.

Ongoing Data Loading

You can use the payroll batch loader and predefined batch processes to load element entries and other payroll data on an ongoing basis. You can automate the submission of the flows using the Flow Actions web service.

Specific flows exist for loading payroll-related data for payroll processing, such as the Load Absence Batches process, where you specify the interface type and XML file containing the data to load.

To import data from a third-party payroll provider, such as processed payroll data or payslips, you can use the HCM Data Loader.

Related Topics

- Implementation Project Based Export and Import: Explained
- Migrating Objects Using the Payroll Batch Loader: Procedure

2 Key Payroll Concepts

Enterprise Structures

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 are 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.

Legislative Data Groups: Explained

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 groups. 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 are within one country.
- Can contain many legal entities that act as payroll statutory units.

Payroll Statutory Units, Legal Employers, and Tax Reporting Units: How They Work Together

When you set up legal entities, you can identify them as legal employers and payroll statutory units, which makes them available for use in Oracle Fusion Human Capital Management (HCM). Depending on how your organization is structured, you may have only one legal entity that is also a payroll statutory unit and a legal employer, or you may have multiple legal entities, payroll statutory units, and legal employers.

Legal Employers and Payroll Statutory Unit

Payroll statutory units enable you to group legal employers so that you can perform statutory calculations at a higher level, such as for court orders or for United Kingdom (UK) statutory sick pay. In some cases, a legal employer is also a payroll statutory unit. However, your organization may have several legal employers under one payroll statutory unit. A legal employer can belong to only one payroll statutory unit.

Payroll Statutory Units and Tax Reporting Units

Payroll statutory units and tax reporting units have a parent-child relationship, with the payroll statutory unit being the parent.

Tax Reporting Units and Legal Employers

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, assume that a single tax reporting unit is linked to a payroll statutory unit. Assume also that two legal employers are associated with this payroll statutory unit. In this example, both legal employers are associated with the single tax reporting unit.

Use the Manage Legal Reporting Unit HCM Information task to designate an existing legal reporting unit as a tax reporting unit. If you create a new legal reporting unit that belongs to a legal employer (that is not also a payroll statutory unit), you select a parent payroll statutory unit and then, when you run the Manage Legal Reporting Unit HCM Information task, you designate it as a tax reporting unit and select the legal employer.

Related Topics

- Legal Entities: Explained
- What's a legal employer?
- What's a tax reporting unit?

HCM Organization Models: Examples

These examples illustrate different models for human capital management (HCM) organizations that include a legislative data group (LDG).

The example includes LDGs, which aren't organization classification, to show how to partition payroll data by associating them with a payroll statutory unit.

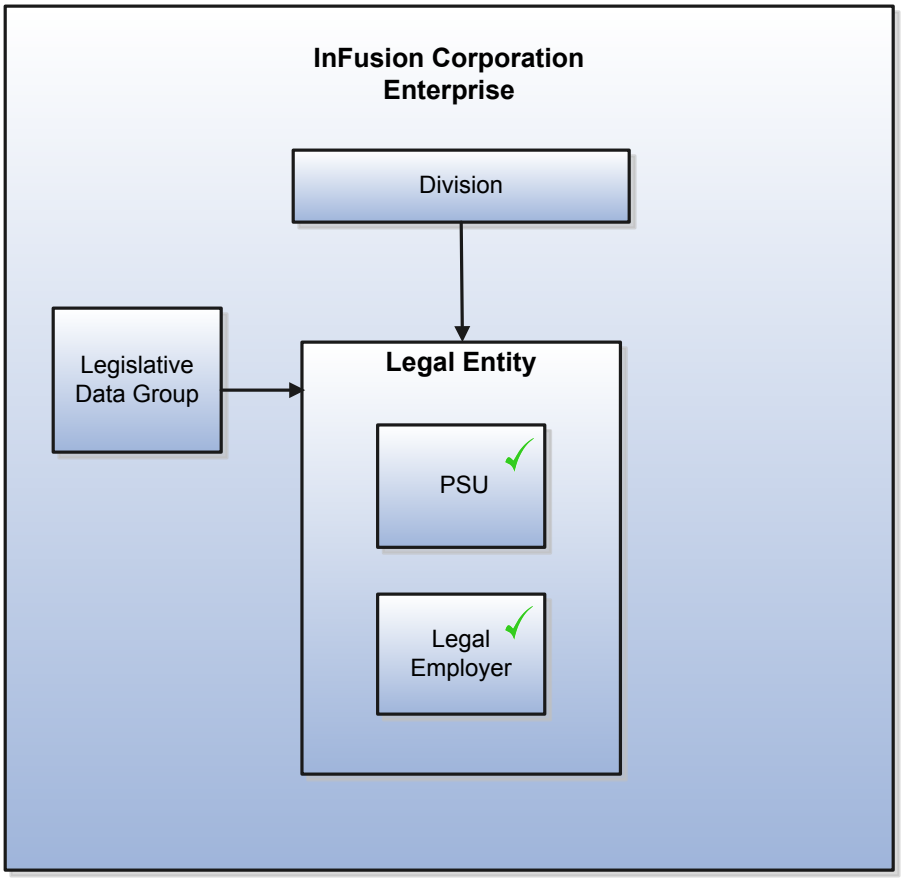
Simple Configuration

This example illustrates a simple configuration that does not include any tax reporting units.

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

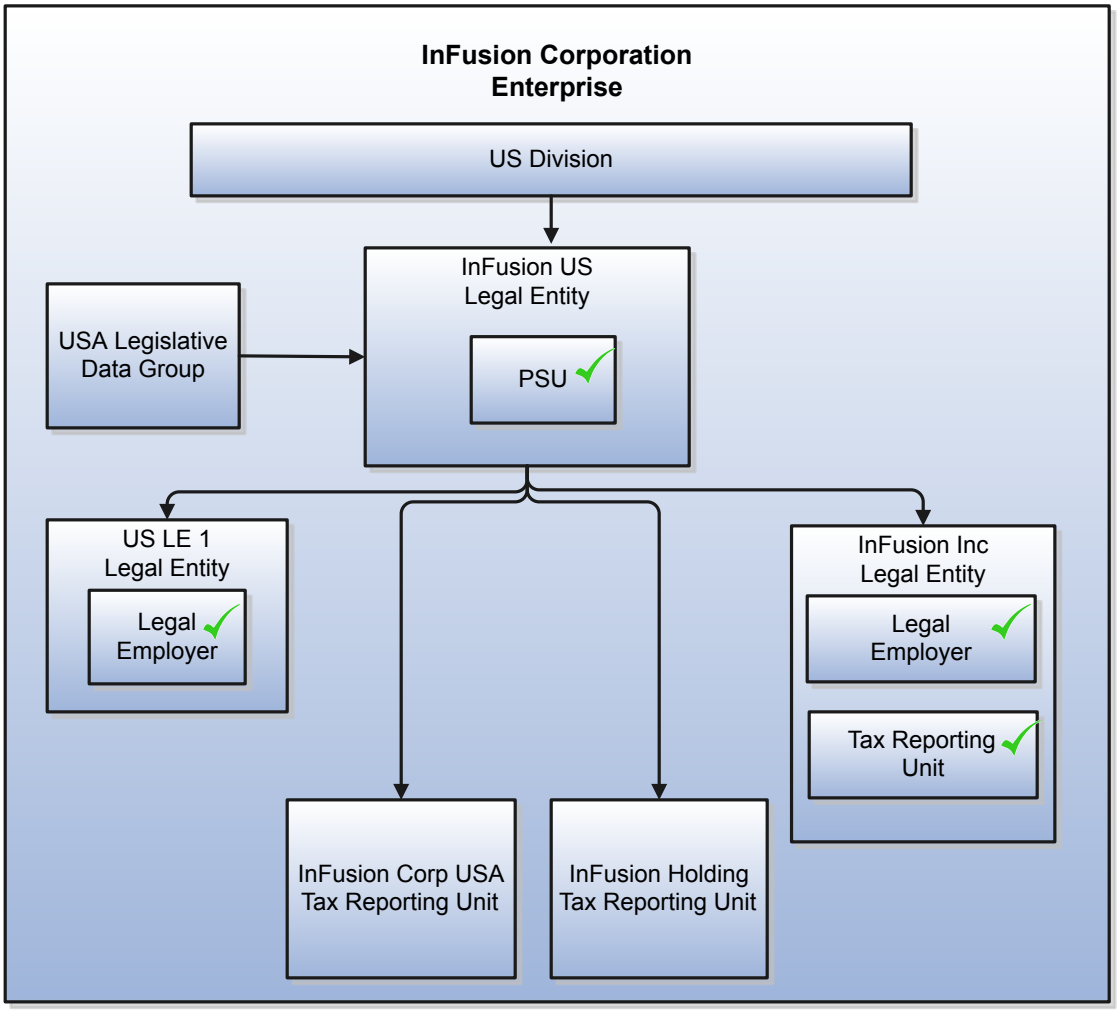
This example illustrates a more complex configuration. In this enterprise, you define one legal entity, InFusion US as a payroll statutory unit with two separate legal entities, which are also legal employers. This model shows multiple legal employers that are associated with a single payroll statutory 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.

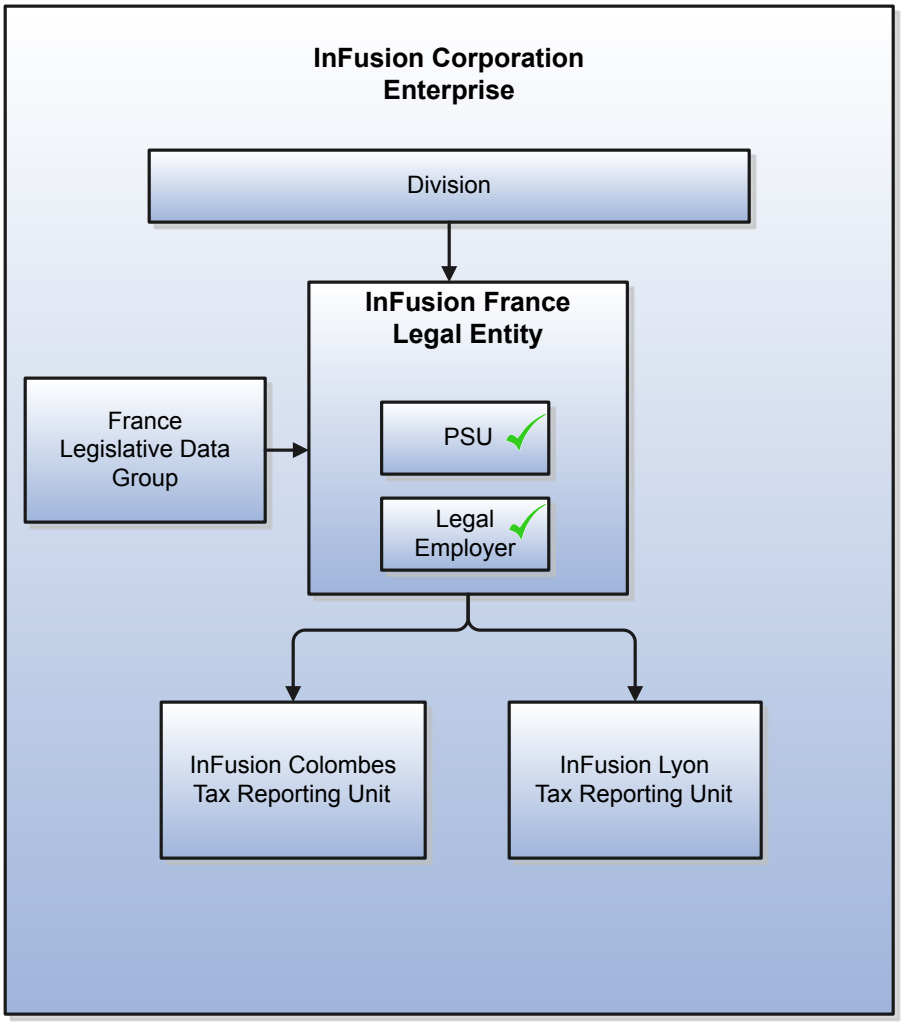


One Payroll Statutory Unit and Two Tax Reporting Units

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 that has two tax reporting units.



One Payroll Statutory Unit with Several Tax Reporting Units

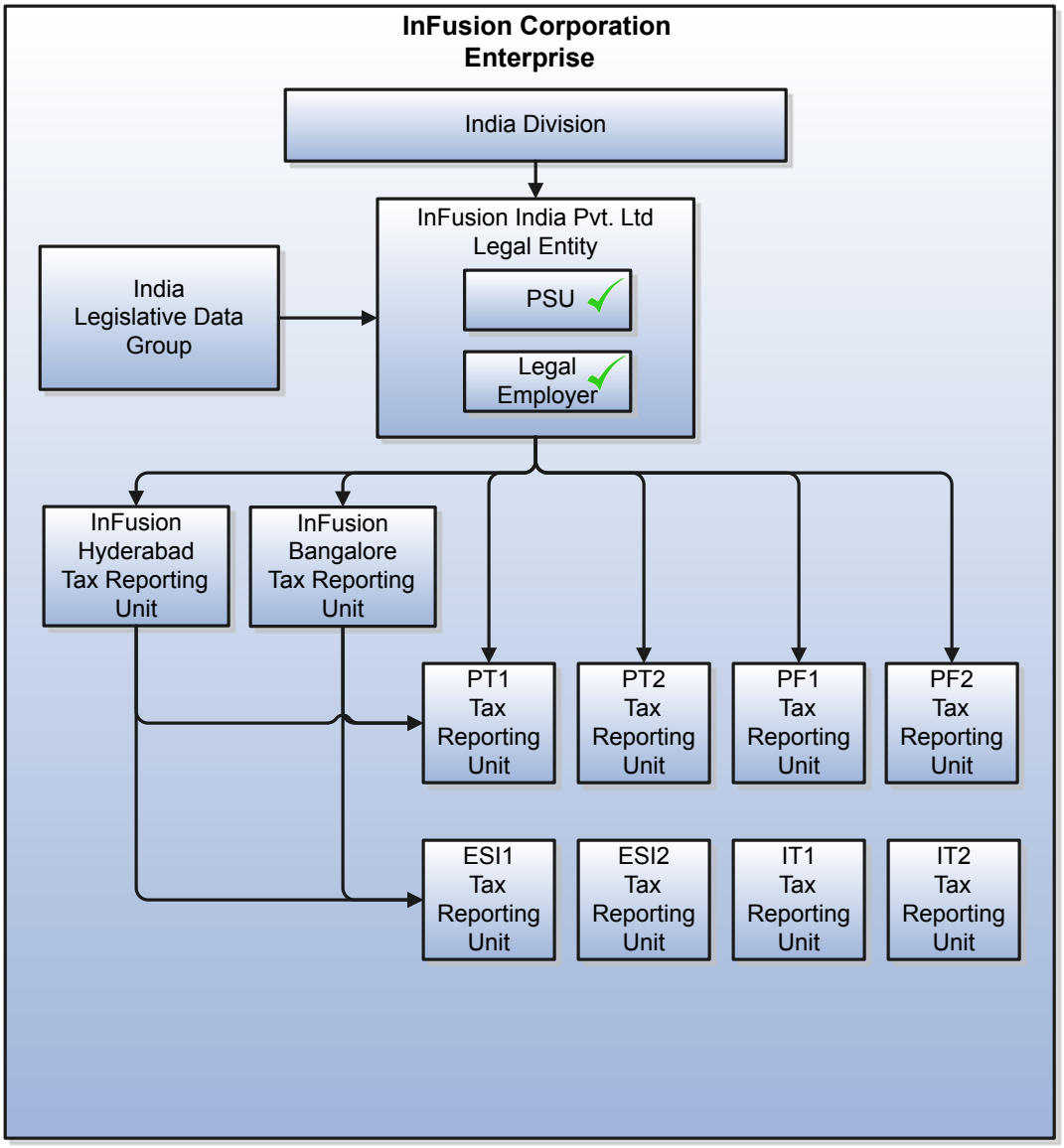
In this model, the enterprise has one legal entity. Legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently.

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 is 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

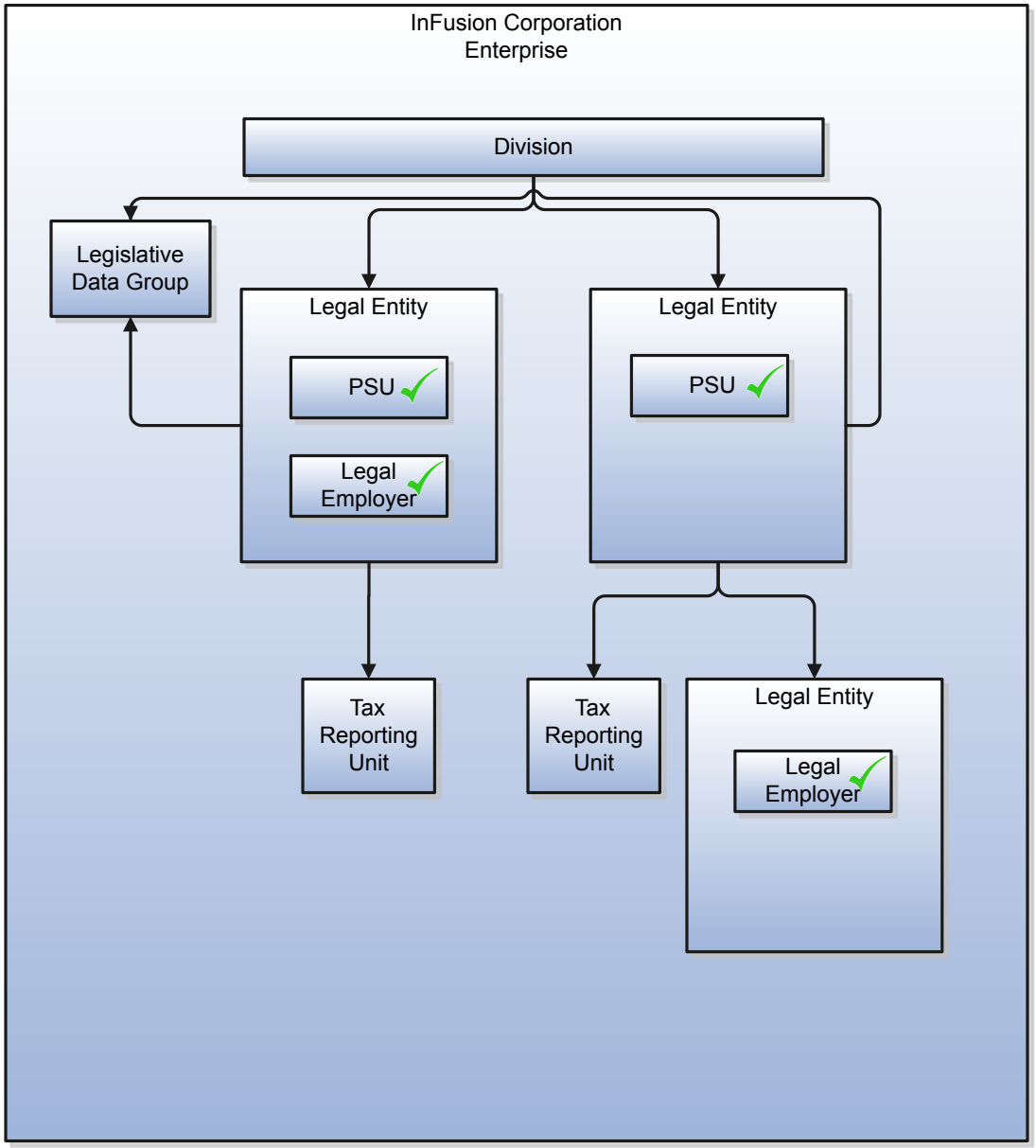
In this model, the enterprise has two legal entities. The legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently.

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.



Related Topics

- Legal Entities: Explained

Payroll Relationships and the Payroll Employment Model

Payroll Relationships: Explained

A payroll relationship represents the association between a person and a payroll statutory unit, which is the legal entity responsible for employee payment. Payroll relationships group a person's employment terms and assignment records based the payroll statutory calculation and reporting requirements. Payroll relationships also facilitate the capture and extraction of HR and payroll-related data sent to a third party, such as a payroll provider for payroll processing.

Payroll processing always occurs at the payroll relationship level. When you display the results of a payroll process for a person, you start by selecting the person's payroll relationship record and then drill down to view details.

Payroll relationships aggregate balances at the payroll relationship level. Within a payroll relationship, payroll processes can aggregate balances for multiple employment terms and assignment records. Balances don't span payroll relationships.

Creation of Payroll Relationship Records

When you hire a person, the new-hire process automatically creates a payroll relationship record for that person. As you add employment terms or assignments for that person, the following factors control whether the event creates a new payroll relationship and makes the person eligible for payroll processing:

- System person type
- Payroll statutory unit
- Country-specific and predefined relationship mapping rules
- Payroll relationship types

Relationship mapping rules, which map person types to payroll relationship types, can vary by country or territory. For example, in the US, the mapping rules ensure that the Employee person type is configured for payroll processing, whereas the Contingent Worker person type is excluded from payroll processing.

Note: Payroll relationships and work relationships have no direct association.

Related Topics

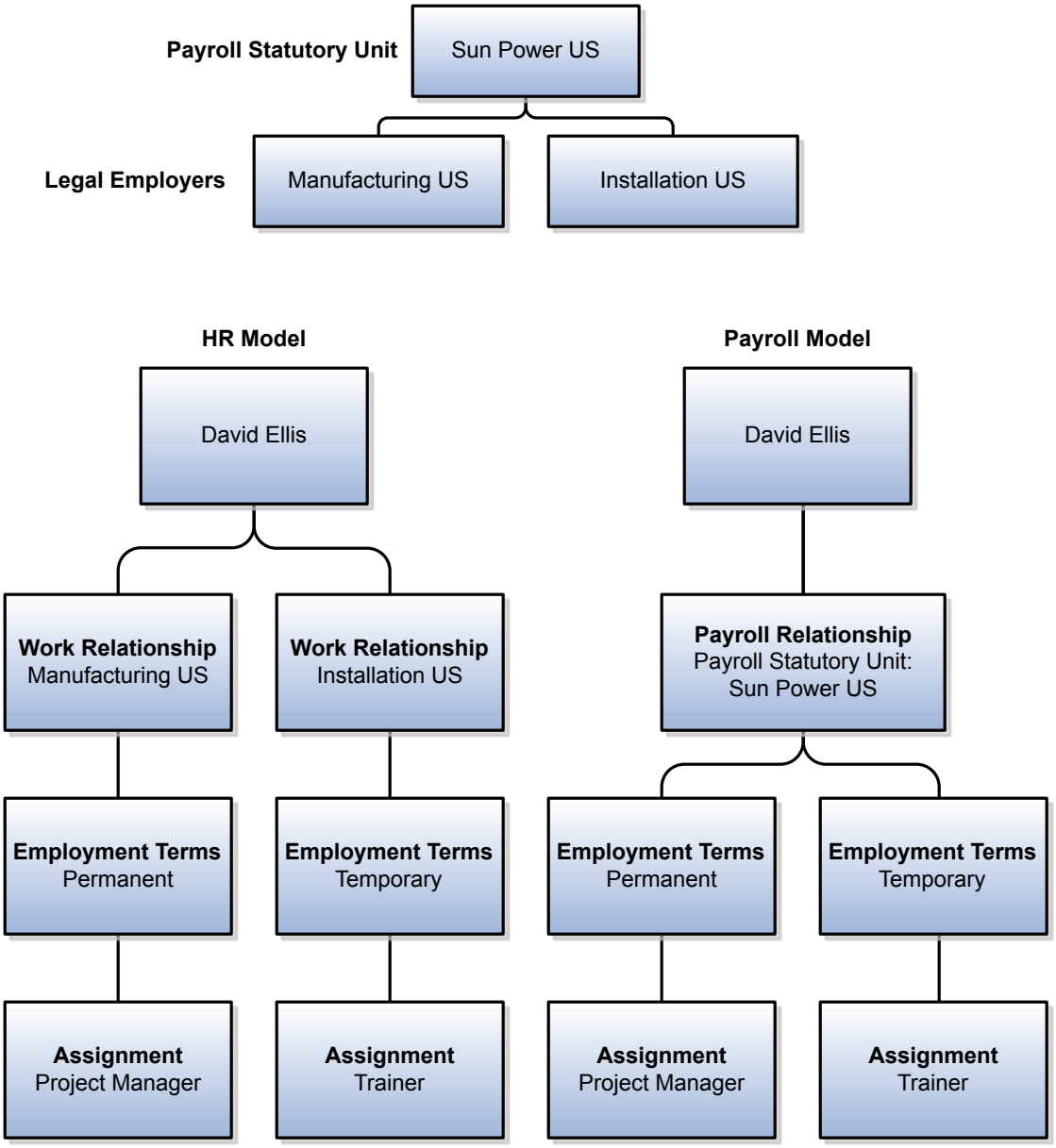
- Element Duration Dates in Payroll Relationships: Explained
- Setting End Dates for Terminations: Examples

Payroll Employment Model: Explained

In the payroll employment model, each person has a payroll relationship to a payroll statutory unit (PSU), and one or more assignments to a payroll and other employment structures. In a three-tier model, each person can also have an employment terms record that groups assignments within a payroll relationship. You hold some element entries, typically deductions, at the payroll relationship level, and others at lower employment levels.

Comparing the HR and Payroll Employment Models

The following figure contrasts the HR employment model and the payroll employment model in a US example where two legal employers belong to one PSU. In this example, David Ellis has two different employment terms and assignments. The resulting structure creates two work relationships in the HR model and one payroll relationship in the payroll model.



Payroll Employment Levels

Your enterprise uses either a two-tier employment model or a three-tier employment model. The primary difference between these models is that only the three-tier model supports assigned payrolls at the employment terms level. You can use profile options to control which three items of information display to identify the employment records at each level.

Note: Employees with multiple terms or assignments paid on payrolls using different frequencies, such as monthly and semimonthly, must have different employment terms or assignments for each payroll.

Related Topics

- Payroll Employment Hierarchy Profile Option: Critical Choices
- Employment Level for Elements: Critical Choices

Payroll Relationship Rules: Explained

The payroll relationship rule determines what happens when you terminate the last active employment terms or assignment record for a payroll relationship. The rule also determines whether the application creates a payroll relationship when you add a new terms or assignment record for an employee. This topic describes the predefined rules and shows which countries use each rule.

Each localization uses one of the following payroll relationship rules:

- Lifetime rule
- Continuous period of service rule
- Independent rule

How Rules Affect Payroll Relationships

The following table shows how these rules affect the status and creation of payroll relationships.

Rule	On Terminating Last Terms or Assignment	On Creating Subsequent Terms or Assignment	Countries
Lifetime	Status remains Active	Use existing payroll relationship for the same payroll relationship type and PSU	Canada Germany Netherlands Singapore United States
Continuous Period of Service	Status becomes Inactive one day after termination	Depending on date validation, use existing payroll relationship for the same type and PSU, or create payroll relationship	Australia China Hong Kong India Kuwait Mexico Saudi Arabia Switzerland

Rule	On Terminating Last Terms or Assignment	On Creating Subsequent Terms or Assignment	Countries
			United Arab Emirates Unite Kingdom
Independent	Status becomes Inactive and payroll relationship ends one day after termination	Create a payroll relationship and enforce only one record per payroll relationship	None

Date Validation for the Continuous Period of Service Rule

Under the Continuous Period of Service Rule, when a payroll relationship exists, date validation occurs to determine whether to use the existing payroll relationship or to create one. The application compares the start date of the new terms or assignment to the last standard earnings date of the existing payroll relationship. If the start date is before the last standard earnings date, the application uses the existing payroll relationship, otherwise, it creates a new one.

Related Topics

- Terminations: How They Affect Payroll Processing

FAQs for Payroll Relationships and the Payroll Employment Model

How do I diagnose payroll employment model setup issues?

After creating enterprise structures, you can run the Payroll Employment Model Setup Validation test if you have access to the Diagnostic Dashboard. 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 area.

How can I validate data after legislative setup?

You can run data validation reports from the Payroll Checklist work area to identify any missing attributes based on statutory rules of the legislative data group.

Use the Run Payroll Data Validation Report process to list noncompliant or missing statutory information for a person by payroll statutory unit (PSU). For example, your report might list all people in the PSU with a missing tax reporting unit.

Use the Run Worker Data Validation Report process to list noncompliant or missing statutory information for a worker by legal employer. For example, your report might list all workers in the legal employer with a missing date of birth, job, or department.

Related Topics

- Adding Rules to Data Validation Reports: Worked Example

When should I change payroll relationship rules?

You shouldn't need to change payroll relationship rules after implementation. If there are any updates to payroll relationship rules after employment records already exist, those updates will affect only newly created employment records. If employment records already exist, it is best not to change payroll relationship rules to ensure that new and existing employment records have the same rules.

Elements and Other Calculation Information

Elements: How They Hold Payroll Information for Multiple Features

Elements are building blocks that help determine the payment of base pay, benefits, absences, and other earnings and deductions. You associate your elements with salary bases, absence plans, and the benefits object hierarchy to determine how you'll use the elements.

This table provides some examples of how you can use elements.

Element Usage	Examples of Elements
Base Pay Management	Annual Salary Basis
	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

Element Usage	Examples of Elements
	Involuntary Deduction

Base Pay Management

To manage base pay, you attach a single earnings element to each salary basis to hold base pay earnings, and assign a salary basis to 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 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 the following information for payroll processing:

- Payments for absent time during maternity or long term sickness
- Disbursement of partial time accruals
- 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 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 elements for use in time cards, and calculate payroll or gross earnings based on the time card entries transferred to payroll. You transfer the element input values to your time provider. For example, for Oracle Fusion Time and Labor, you run processes which 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 the components required for payroll processing, including formulas, balances, and formula result rules.

Related Topics

- Creating Payroll Elements for Payroll Interface: Worked Example
- Creating Payroll Elements for an Absence Accrual Plan: Worked Example
- Creating Earnings Elements for Payroll: Worked Example
- Creating Elements for Time Card Entries: Procedure

3 Payroll Task Lists

Enabling Offerings: Explained

When planning your implementation, you decide what business processes your organization or company performs or supports. These decisions determine the offerings and functional areas you want to implement. You then configure the offerings and functional areas that support the activities your organization or company performs. During the configuration process, you specifically enable offerings and functional areas for use before you implement them.

Enabling Offerings and Functional Areas

Use the Setup and Maintenance work area to help decide which offerings to enable for implementation. Once you decide to use an offering, you can select the Configure button to choose the configuration details and enable the offering, associated functional areas, and features. All the base functional areas of an offering are automatically enabled for implementation when you enable the parent offering. You choose which optional functional areas to enable. The functional areas appear in an expandable and collapsible hierarchy to facilitate progressive decision making for implementation.

Enabling Features

Features are optional or alternative business rules or methods used to fine-tune business processes and activities supported by an offering or a functional area. If features are available for the offering or functional areas, you can enable them to help meet your business requirements, if desired. In general, the features are set with a default configuration based on their typical usage in most implementations. You should always review the available features for the offering and functional areas and select them as appropriate. Dependent features appear visible when the feature choice they depend on is selected for implementation.

Enabling Offerings: Procedure

You enable offerings to customize the functionality that matches the services you plan on implementing.

Enabling Offerings

To enable offerings, follow these steps.

1. Open the Setup and Maintenance work area **(Navigator > Setup and Maintenance)**.
2. In the Setup and Maintenance Offerings page, select the offering you're using, then click **Configure**.
3. In the Configure page, select the **Enable** check box for the offering. Also select the **Enable** check box for each of the functional areas you want to use.
4. Click the Features icon for the offering or functional area you have enabled, then enable any features you require. Select **Done** when complete.
5. Select **Done** to return to the Offerings page then repeat the same steps for each of the offerings you are using.

Prerequisite Tasks for Payroll Setup: Overview

The Define Payroll task list in the Setup and Maintenance work area contains most of the setup tasks required for payroll processing. However, first you must complete the required common application configuration tasks. You may have already done some of these tasks because other HCM applications require them. Revisit tasks to address payroll-specific requirements, such as creating tax reporting units.

Perform the prerequisite tasks in the following task lists within Define Common Applications Configuration for Human Capital Management:

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

Define Geographies for HCM

Verify predefined geographies and load any additionally required local geographies.

Define Enterprise Structures for HCM

Complete tasks in the task lists shown in the following 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 for each legislative data group. • Associate each payroll statutory unit with a legislative data group. • Optionally, create calculation cards for statutory deductions for each payroll statutory unit, if supported for your country or territory.
Define Legal Reporting Units for HCM	• Create any additional tax reporting units that you need. • Optionally, create calculation cards for statutory deductions for each tax reporting unit, if supported for your country or territory.
Define Business Units for HCM	Create business units that you use to associate other objects
Define Chart of Accounts for Enterprise Structures 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 countries and territories you operate in. 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

- Payroll Statutory Units, Legal Employers, and Tax Reporting Units: How They Work Together
- Legislative Data Groups: Explained
- Payroll Legislative Data: Explained
- Selecting Country Extensions: Critical Choices

Payroll Setup Tasks for Financials: Explained

Payroll integrates with Oracle Fusion Financials. You must set up components in Financials, such as chart of accounts and ledgers, before you can set up banks to process payments, associate a ledger to a payroll definition, and run processes to distribute costing results.

Complete the following setup tasks in the Setup and Maintenance work area for the chart of accounts and ledgers. The application implementation consultant job role can perform the following tasks.

Chart of Account Setup Tasks

Complete the following tasks to set up your chart of accounts information. Later, you associate the chart of accounts to a ledger.

Task	Action
Manage Chart of Accounts Value Sets	Create new or review existing value sets, which you will associate with a key flexfield segment.
Manage Chart of Accounts 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. Oracle Fusion General Ledger predefines the Accounting key flexfield.
Manage Chart of Accounts Structure Instances	Create account structure instances, which you will use to record transactions and maintain account balances.
Manage Chart of Accounts Value Set Values	Create groups of values, which you will assign to a key flexfield segment.
Manage Account Hierarchies	Search, create, and edit hierarchical groupings of accounts.
Manage Accounting Calendars	Set up accounting calendar period details. Determine the total number, frequency, and duration of the accounting periods.

Task	Action
Manage 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 Oracle Fusion Cash Management, create an account combination for reconciliation differences.

Ledger Setup Tasks

You perform the following tasks as part of the accounting configuration setup for Global Payroll.

Task	Action
Manage Primary Ledgers	Create a ledger with a chart of accounts, accounting calendar, currency and subledger accounting method. **Note:** If you are creating bank information, you must create a primary ledger.
Assign Legal Entities	Add the legal entities that use the ledger. The Manage Legal Entity HCM Information task associates the payroll statutory units for legal entities to the legislative data group.
Specify 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.
Assign 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
Assign 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.
Manage 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 are ready to process transactions for the ledger. After you open the first period, use the Manage Accounting Periods in General Ledger to open and close periods, and to specify the target period that concludes the series of calendar periods.

Related Topics

- Payroll Costing Components: How They Work Together
- Ledgers: Points to Consider
- Payroll Setup Tasks for Subledger Accounting: Procedure
- Assigning Legal Entities and Balancing Segments: Examples
- Chart of Accounts Structure and Instances: Critical Choices

Setting Up Reconciliation for Payments: Procedure

Oracle Fusion Global Payroll integrates with Oracle Fusion Cash Management and Oracle Fusion 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 implementer with the appropriate privileges performs the tasks shown in the following table in the Setup and Maintenance work area:

Application	Setup Steps	Task
General Ledger	Create an account combination for the reconciliation differences account.	Manage Account Combinations
Cash Management	Set up transaction codes that map to the payment method transaction codes used in payroll.	• Manage Cash Transaction Type Mapping • Manage Bank Statement Transaction Codes
Cash Management	Create reconciliation rules.	• Manage Bank Statement Reconciliation Tolerance Rules • Manage Bank Statement Reconciliation Matching Rules • Manage Bank Statement Reconciliation Rule Sets
Payroll	1. Create liability, cash clearing, and cash accounts for your payment sources. 2. Specify the option Transfer to General Ledger.	Manage Costing of Payment Sources

This topic covers the steps for setting up the following objects:

- Reconciliation differences account
- Payroll transaction codes
- Reconciliation rules
- Payroll accounts

Setting Up Reconciliation Differences Account

If you reconcile payment costs before posting the costing results to Oracle Fusion General Ledger, set up a reconciliation differences account in General Ledger using the Manage Account Combinations task. The reconciliation differences accounts in Cash Management records discrepancies between the bank statement and the transferred payment files, such as over and under payments.

Setting Up Payroll Transactions Codes

If you cost your payments, set up and map transaction codes in Cash Management for the organization payment methods.

Task	Action
Manage 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
Manage 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.

Setting Up Reconciliation Rules

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 the following table.

Task	Action
Manage 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.
Manage Bank Statement Reconciliation Matching Rules	Define bank statement automatic reconciliation matching rules.
Manage 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.
Manage Bank Accounts	Specify the Reconciliation Differences account you set up in Oracle Fusion General Ledger..

Setting Up Payroll Accounts

Create a liability and cash account. Create a cash clearing account to track payments such as checks, where a delay exists between the date the payment is issued and the date it clears. Use the Manage Costing of Payments task in the Setup and Maintenance work area or in the Accounting Distribution work area of Oracle Fusion Global Payroll.

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

- Organization Payment Methods: Explained
- Creating Accounts: Points to Consider
- Payroll Setup Tasks for Subledger Accounting: Procedure
- Reconciling Payroll Payments: Procedure

Define Payroll: Overview

The Define Payroll task list contains the tasks required to set up earnings and deductions, payment methods, flow patterns, and other definitions required for payroll processing. Perform these tasks in the Setup and Maintenance work area, and manage them in the payroll work areas.

Note: If you're not using Oracle Fusion Global Payroll, use the Define Elements, Balances, and Formulas task list instead to create your earnings, deductions, and other payroll data. That task list contains a smaller set of tasks to create elements for non-payroll purposes, such as compensation and HR management only, or to transfer data to a third-party payroll provider.

The Workforce Deployment offering includes the Define Payroll task list and other tasks you must complete. If you cost your payroll run results or payments, configure the Workforce Deployment offering to include the Payroll Costing feature choice.

Note: Complete the prerequisite tasks for payroll before performing the tasks described here. Also, after completing the tasks in the Define Payroll task list, secure your new payroll definitions and payroll flows using the Define Data Security for HCM task list.

Define Payroll Business Definitions

Perform these steps:

- Create any lookup codes, value sets, and descriptive flexfields that you need to extend the fields and lists of values available on pages that support these features.
- Use profile option values to specify the information to display in the payroll employment hierarchy for workers on the statement of earnings and other pages.

Define Pay Frequency

Perform these steps:

1. Create at least one consolidation group for each legislative data group.
2. Create at least one payroll definition for each payroll frequency, such as weekly or semimonthly, within a legislative data group.

3. Review the predefined time definitions and run types, and create new ones if required.

Define Fast Formulas

Create any formulas you require for validating user entries into element input values and user-defined tables, or for configuring compensation, benefit, and accrual plan rules.

Creating elements for earnings and deductions automatically creates payroll formulas to process them. You shouldn't normally need to create your own payroll formulas, but you can create skip rule formulas or proration formulas, if required.

Define Balance Definitions

Use predefined balances or the balances automatically generated when you create new elements. Optionally, perform the following tasks:

- Edit the balance definitions.
- Create additional balances to include in reports and processes.
- Create reports to identify balance exceptions after payroll processing.

When you migrate payroll data from another system, you must set initial balance values. You load the values into batch views, typically using the payroll batch loader, and then submit the Load Initial Balances process from the Payroll Calculation work area.

Define Earning and Deduction Definitions

Use the Manage Elements task to create earnings and deductions.

1. Create each element and then edit it to create at least one element eligibility record.
2. Create additional input values and balance feeds, if required.
3. Create eligibility records for predefined elements.

Tip: Before you create elements for payroll processing, check that you set the country extension to Payroll using the Manage Features by Country or Territory task. This setting ensures you create elements using the appropriate element templates.

Creating some elements also creates component groups, calculation value definitions, and other calculation information. Use the relevant tasks in this task list to review these definitions. You can enter calculation values for some components.

Some earnings and deductions reference rate definitions. You can review predefined rate definitions and create new ones, if required.

Define Events

Review payroll event groups containing events that trigger proration or retroactive processing of elements. You can create new event groups if required.

Define Payment Methods

Create payment methods and sources for paying workers and third parties. Before creating payment methods, create any required source banks, branches, accounts and third-party organizations and people.

If you plan to reconcile bank statements with payment transactions using Oracle Fusion Cash Management, set up:

- Transaction codes that map to the payment method transaction codes
- A Reconciliation Differences account
- Reconciliation rules

Define Payroll Costing

This task list includes the tasks to set up costing in Oracle Fusion Subledger Accounting and in payroll. Perform the following steps:

1. Configure the cost allocation key flexfield for each legislative data group.
2. Configure the Subledger Accounting rules.
3. Set up account information at each level of the cost hierarchy you use to manage cost results, such as payroll, element, department, and job level.

See the Oracle Global Human Resources Cloud Implementing Payroll Costing guide for more details.

Define Object Groups

Create object groups to specify subsets of elements or payroll relationships to include in reports or processes. For example, use element groups to:

- Restrict which elements process in a payroll run.
- Create a group of earnings elements over which you distribute employer costs for employer taxes and liabilities.

Define Payroll Flow Patterns

Perform these steps:

- For payroll flow patterns:
    a. Review the predefined flow patterns that list the sequence of manual and automated tasks performed during the payroll cycle.
    b. Create any additional patterns used by your enterprise.
- For payroll process configuration groups:
    a. Create configuration groups to specify the action parameters to use when you run payroll processes.
    b. Select a default group in the Process Configuration Group profile option.

Tip: You can create additional groups, for example to switch on logging parameters when you are troubleshooting processes.

Related Topics

- Payroll Data Loading: Overview
- Payroll Costing Components: How They Work Together

Define Earning and Deduction Definitions: Overview

The Define Earning and Deduction Definitions task list in the Setup and Maintenance work area 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 Manage 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 typically 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:

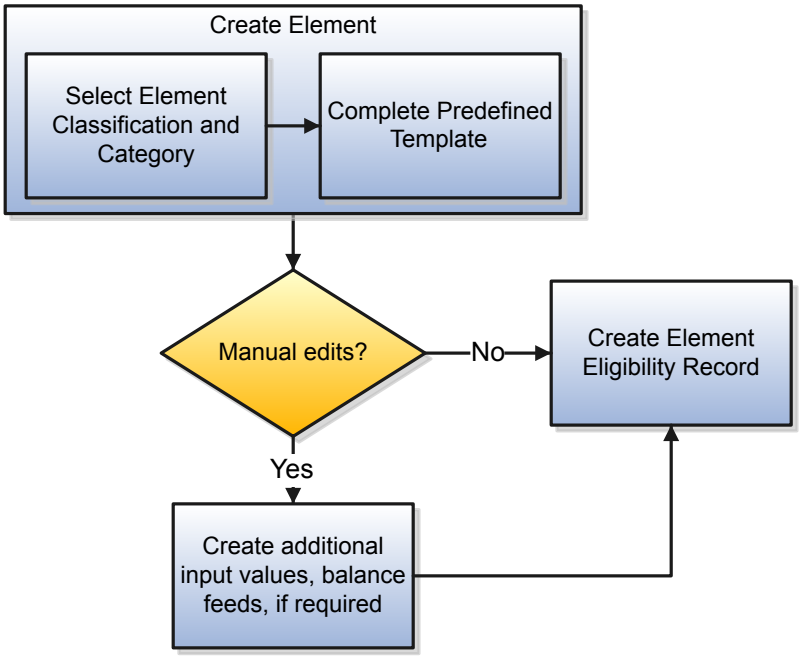
- Create additional balances that the primary classifications feed.
- Create secondary classifications for some countries or territories.
- Specify costing setup options and frequency rules for element classifications. The default frequency rule is always each period.

Manage Elements

Use the Manage 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 Manage Features by Country or Territory task before you create elements for payroll processing. This setting ensures that you use the appropriate element templates.

Creating some elements also creates component groups, calculation value definitions, and other calculation information. For example, creating involuntary deductions and pension deductions creates these additional objects for some countries and territories. Use the relevant tasks in the Define Earning and Deduction Definitions task list to review the objects generated for each element.

Manage Calculation Value Definitions

Payroll components are associated with a set of rates and rules used for calculation or reporting.

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 Payroll Calculation Information

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.

Manage Component Group Rules

Component groups are predefined categories of calculation components.

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 Manage Calculation Cards task in the Payroll Calculation work area. In most countries, 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 Manage 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 predefined statutory deduction element 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 that you make available to all workers, don't specify 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

- Elements: Explained
- Element Eligibility: Explained
- Creating Voluntary and Pre-statutory Deductions: Procedure
- Payroll Calculation Information: Explained
- Creating Earnings Elements for Payroll: Worked Example

4 Country Extensions

Selecting Country Extensions: Critical Choices

Select the correct country extension setting for each of your countries and territories on the Manage 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. 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 Oracle Fusion Global Payroll or any predefined Payroll Interface extracts for a country or territory, you must set its extension to the appropriate payroll setting.

The extensions available for selection for some countries or territories may be restricted. The full list of extensions is as follows:

- Payroll
- Payroll Interface
- Human Resources or None

The country extension selection ensures that all payroll-related features function correctly for Global Payroll. The other product settings you select control the functions of payroll-related features when you aren't using Global Payroll, as described in the following sections.

Payroll

Setting the country extension to Payroll has the following implications:

- 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

Setting the country extension to Payroll Interface has the following effects:

- 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 validation.
- Validations on payroll objects are less restrictive to support sending employee bank information as follows:
  - No requirement for organization payment methods in payroll definitions
  - No requirement for payment sources in organization payment methods

- No dependency on source banks in Financials

Human Resources or None

Setting the country extension to Human Resources or None has the following effects:

- The element templates for creating earnings and deductions elements generate only the elements and no 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.

Related Topics

- Setting Up Reconciliation for Payments: Procedure
- Payroll Legislative Data: Explained
- Changing Address Style and Address Validation Settings: Critical Choices

Selecting Country Extensions: Worked Example

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 for this scenario.

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

Setting the Extension

1. From the Setup and Maintenance work area, search for the Manage Features by Country or Territory task, and then click **Go to Task**.
2. In the **Selected Extension** list, select the extension for the following countries as shown in this table.

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

- Changing Address Style and Address Validation Settings: Critical Choices

5 Profile Options

Payroll Employment Hierarchy Profile Option: Critical Choices

You can use profile options to specify the values you want to display for each level of the payroll employment hierarchy. The hierarchy appears in the View Person Process Results pages. You can specify up to three values at each level to help identify the record. For example, you might select legal employer name and job name to identify employment terms records, and assignment name and number to identify assignment records.

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

- Payroll relationship
- Employment terms
- Assignments

To define profile option settings and values, select the Manage Payroll Employment Hierarchy Profile Option Values task in the Setup and Maintenance work area.

Profile Options for the Payroll Relationship Level

The following 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
PAY_ EMP_ HIERARCHY_ REL_DESC_2	Number
PAY_ EMP_ HIERARCHY_ REL_DESC_3	Payroll Statutory
	Unit Name
	Payroll Relationship Type

Profile Options for the Employment Terms Level

The following table lists the profile option codes and available profile values at the site level for the employment terms level of the payroll employment hierarchy.

Profile Option Codes	Profile Values
PAY_ EMP_ HIERARCHY_ TERM_DESC_1	Employment Category

Profile Option Codes	Profile Values
PAY_ EMP_ HIERARCHY_ TERM_DESC_2 PAY_ EMP_ HIERARCHY_ TERM_DESC_3	Legal Employer Name Grade Name Job Name Position Name Payroll Name Location Name

Profile Options for the Assignment Level

The following 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 PAY_ EMP_ HIERARCHY_ ASG_DESC_2 PAY_ EMP_ HIERARCHY_ ASG_DESC_3	Assignment Name Assignment Number Employment Category Grade Name Job Name Legal Employer Name Location Name Position Name

Overriding 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 and override it with job for the payroll administrator who manages records for a group of workers who are not assigned to positions.

Related Topics

- Payroll Relationships: Explained

Creating and Editing Profile Options: Procedure

Use profile options to centrally 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, search for and open the **Manage Profile Options** task.
2. 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. Under **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. Under **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.

Related Topics

- Hierarchy in Profile Levels: Explained
- Setting Profile Option Values: Procedure

6 Pay Frequency

Pay Frequency Components: How They Work Together

Pay frequency components together provide the flexibility to implement complex time-related objects used in payroll definitions, payroll processes, and payroll tasks that use start and end dates. This topic explains how the following pay frequency components work together to provide payroll functionality for your organization. Each of the following components requires its own setup and implementation:

- Consolidation Groups
- Payroll Definitions
- Time Definitions
- Run Types

Consolidation Groups

Use consolidation groups to 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, you 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 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. You can specify dynamic variables for a time span, a retrieval date, or a more complex definition type 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 to 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 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.
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.

Consolidation Group Usage: Examples

You create consolidation groups by selecting the Manage Consolidation Groups task from the Payroll Calculation work area. The following scenarios provide examples of how you can use consolidation groups.

Post-Run Processing

Consolidation groups facilitate separating 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 separately from those of the regular payroll process that was already performed. To use a consolidation group to keep supplemental run results separate from the regular payroll runs:

1. Create a new consolidation group used to label 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 a new consolidation group to specify when running the Calculate Payroll process.
2. 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.
3. Run the Calculate Payroll process for each payroll relationship group separately. Specify the original consolidation group in the first run and the new consolidation group in the next run.

Supplemental Processing for Special Circumstances

You may want a supplemental payroll run for a special circumstance. For example, you have a main payroll run and three QuickPay runs. Because one of the QuickPay runs is for a termination, you process it prior to the others.

To process the QuickPay for this special circumstance:

1. Create a consolidation group to specify when you process the QuickPay for the termination.
2. Submit a QuickPay process, specifying the new consolidation group.
3. Process the other three payroll runs using their default consolidation groups.

Payroll Definitions: Explained

Payroll definitions contain calendar and offset information, which determines when to calculate and cost payments. Use the Manage Payroll Definitions task in the Payroll Calculation work area to specify payment frequency, processing schedule, and other parameters for a particular payroll. Payroll period types, such as weekly or monthly, determine the interval at which you pay employees.

Create at least one payroll definition for each payroll period type that 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.

Creating Payroll Definitions

When you create a payroll definition, the application generates the complete payroll schedule based on the payroll period type, any offsets or calendar adjustments, and the number of years that you specify. Each payroll in the schedule is assigned a unique name. After you have saved a payroll definition, you can assign employees to it on the Manage Payroll Relationships page. A common scenario for creating a payroll definition is to replace one that is expired or end-dated.

Each payroll must belong to a consolidation group, which the application requires for processing purposes. Before you can create a payroll definition, the legislative data group and the consolidation group to use for it must already exist.

Modifying Payroll Definitions

When you modify a payroll definition, the application adjusts the payroll schedule based on the values you have modified. A common scenario for modifying an existing payroll definition is to increase the number of years and generate more payroll time periods that extend the payroll calendar.

Note: You can extend the payroll calendar by increments of ten or fewer years.

The names of the payrolls in the payroll schedule are unique. You can edit the generated payroll names, but you must ensure they are unique within the payroll definition.

Managing Payroll Definitions: Points to Consider

When you create or modify payroll definitions, the application generates a calendar of payroll periods based on your selections. The choices you make for the following values determine the resulting schedule of payroll periods:

- Effective start date
- First period end date
- Number of years
- Offsets
- Changes to specific dates

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 1/1/2013 with five years of historical payroll data to load, you set the start date of the payroll definition to 1/1/2008.

The effective start date does not 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 1/6/12, you could use 12/30/11 as your first period end date.

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
1/1/1986	6/15/2014	5	6/ 1/ 2014-5/31/18

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 edit the payroll definition setting the 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 can be entered for the payroll period.
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 payments, this is the date that the check is valid for cash or deposit. For electronic funds transfer (EFT) payments, it is the transfer date.

Dynamic Offsets

When creating 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. Using dynamic offsets, you can offset each payroll cycle event by a specified number days before or after the start or end date, as shown in this table.

Offset Day Types	Offset Value	Base Date Values
Number of work days	Before	Period Start Date
Number of calendar days	After	Period End Date

For example, you might want to set the cutoff date three work days before the payroll end date. This offset accommodates differences in the number of days in the payroll period and also accounts for weekends and holidays.

Fixed-Date Offsets

The predefined Monthly (Calendar) payroll time period supports using both dynamic offsets and fixed-date offsets. Using fixed dates, you can 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. You can make these adjustments when creating 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.

Creating Payroll Definitions: Worked Example

This example demonstrates how to create two payroll definitions for different payment frequencies that are associated with one consolidation group and one legislative data group.

In this example, the InFusion US company creates payroll definitions for two sets of employees. One set is permanent salaried employees who are paid on a semimonthly basis, and the other is temporary employees that are paid on a monthly basis using time card data.

The business requires that a single monthly costing process uses results from different payroll runs by using the consolidation group name as an input parameter in the costing run. This example creates 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 US LDG.
2. Ensure that organization payment methods exist for your payrolls, such as InFusion US Employee Check and InFusion US Employee EFT.
3. Create a consolidation group named InFusion US Employee Group assigned to the InFusion US LDG.

Creating the Payroll Definitions

Create two payroll definitions:

- One to pay permanent employees a flat amount by electronic funds transfer (EFT) on a semimonthly basis. This payroll definition includes dynamically generated offset dates.
- One to pay temporary employees by check 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. In the Payroll Calculation work area, click **Manage Payroll Definitions**.
2. In the Search Results section of the Manage Payroll Definitions page, click the **Create** icon.
3. Select the InFusion US 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, your company hires all employees after the effective start date of this payroll definition, so there is 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 US Employee Semimonthly	InFusion US Employee Monthly
Reporting Name	InFusion US Semimonthly	InFusion US Monthly
Consolidation Group	InFusion US Employee Group	InFusion US Employee Group
Period Type	Semimonthly	Monthly (Calendar)
First Period End Date	6/15/12	6/30/12
Default Payment Method	InFusion US Employee EFT	InFusion US Employee Check

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	Offset Value	Base Date Value
Cutoff Date	5	Work Days	Before	Period End Date
Payroll Run Date	3	Work Days	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	6/30/12
Payroll Run Date	6/27/12
Date Paid	6/30/12

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	Old Value: 5/27/13

Column	Semimonthly Value	Monthly Value
	New Value: 11/27/13	New Value: 5/28/13

10. Click **Next**.
11. Review the details of the payroll definition, and then click **Submit**.

Periodicity Conversion: Explained

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, and rates based on rate definitions. If the periodicity values used in the predefined formulas don't meet your requirements, you can create your own formula. Copy the text from the predefined formula and edit it. For example, edit the periodicity values in your formula to specify a different number of working hours to use when converting annual values into hourly rates.

This topic covers the following aspects:

- Defining periodicity
- Customizing rate conversion formulas

Defining Periodicity

The following table lists the objects where you define periodicity.

Object	Description
Element	The Periodicity input value specifies the frequency of the element value. For example, salary element entries that hold annual salary values have a periodicity of Annual.
Payroll Definition	Period Type specifies the number of payroll periods. For example, a period type of Monthly Lunar includes 13 payroll periods.
Rate	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

The following table lists predefined values. If these values don't meet your requirements, you can copy a predefined rate conversion formula and edit its periodicity values.

Periodicity	Used as a Payroll Period	Number of Periods in a Year
Annually	Yes	1
Bimonthly	Yes	6

Periodicity	Used as a Payroll Period	Number of Periods in a Year
Biweekly	Yes	26
Calendar Monthly	Yes	12
Daily	No	365
Hourly	No	2920 (365 days multiplied by 8 hours)
Lunar Month	Yes	13
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)

Customizing Rate Conversion Formulas

The rate conversion formulas convert the periodicity of an amount to a different periodicity. For example, the annualized rate conversion formula converts an annual salary amount to a weekly amount. The following table describes the two predefined formulas.

Formula	Calculation	Example
Annualized Rate Conversion	The formula converts the: 1. Source amount and periodicity to an annual value. 2. Amount to the required periodic rate.	To convert a weekly amount to a semimonthly periodicity, the formula: 1. Multiplies the weekly amount by 52. 2. Divides the result by 24.
Daily Rate Conversion	The formula: 1. Calculates a daily rate. 2. Converts amount to the required periodic 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.

Related Topics

- Customizing Periodicity Conversion Rules: Procedure
- Using Formulas: Explained
- Creating Rate Definitions: Points to Consider
- Customizing Conversion Formulas for Proration: Procedure

Statutory and Earning Periods: Explained

When you create a payroll definition, you generate a payroll earnings calendar 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 and start and end dates on the Person Process Results page and statement of earnings.

Using Time Definitions for Severance Pay: Example

The following example illustrates how to set up a user-defined time definition and associate it with elements so that payroll administrators can extend the latest entry date for severance payments to employees.

Scenario

The InFusion Corporation makes severance payments, including regular salary, car allowance, and alimony. For most terminated employees, these payments should end on the termination date. However, payroll administrators must be able to extend 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 extend it beyond the termination date.

Analysis

To support severance payments, InFusion creates a user-defined time definition based on last standard earnings date and selects 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 extend payments for certain employees.

Resulting Setup

To implement a user-defined time definition for this scenario, InFusion must complete the following setup during implementation:

1. Using the Manage Time Definitions task, create a time definition with the following values:

Field	Value
Type	User-defined date
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. Using the Manage Elements task, 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, the payroll administrator then performs the following steps:

1. Using the Manage Payroll Relationship task, search for 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

- Element Duration Dates in Payroll Relationships: Explained
- Creating Earnings Elements for Payroll: Worked Example
- Creating Payroll Elements for Payroll Interface: Worked Example

Restricting Payroll Processing: Critical Choices

You can control which payroll relationships and which elements to process in a payroll run by selecting rules such as a skip rule or frequency rule. You can also restrict the payroll relationships and further restrict the elements that the run will process in a run by specifying flow parameters when you submit the calculation process such as Calculate Payroll or Calculate Gross Earnings.

Restrict the Elements to Process Based on Rules

When you create an element, you specify eligibility rules that control who is eligible to receive an element. You can also create skip and frequency rules that control which recurring elements the payroll run processes, as shown in the following table.

Rules	Descriptions	Examples
Skip	Determines whether to 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	Specifies which payroll periods to process the entries	Frequency rule might specify that the formula process an element only on the first and third weeks of a month.

Restrict the Records to Process Based on Flow Parameters

Restrict the number of records for the calculation process by specifying flow submission parameters as shown in the following table.

Parameter	Description
Payroll Relationship Group	Restricts processing to the payroll relationships within the group, which you can define using static or dynamic rules, based on payroll relationship, term, or assignment information.
Element Group	Restricts processing to the elements in the group, which you can define by selecting element classifications and including or excluding specific elements.

Parameter	Description
Run Types	Determines 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: • To process separately • As a trigger for a run type, in which case it is automatically excluded from the other run types

The flow submission parameters for the calculation process include dates that control which records to process as shown in the following table.

Date	Required?	Comments
Process Date	No	Usually the payroll run date of your payroll definition.
Payroll Period	Yes	Used to derive other dates for processing.
Date Earned	Yes	Identifies the element entries • To include in the payroll run • That belong to a proration group and ended within the payroll period

Related Topics

- Determining an Element's Latest Entry Date: Critical Choices

Frequency Rules: Explained

Use frequency rules to process a recurring element at a frequency other than the one 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.

For these cases, you would define a different frequency rule for each payroll.

You can control how often to process the element. Column headers that display on the Element Summary page are dynamic based on the frequency period. For example, if the payroll period is weekly, the column headers are Week 1, Week 2, and so on. You then select the periods in which you want the element processed.

Controlling the Processing of Recurring Elements

The Date field on the Element Summary page provides three values.

This table explains the three options that 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 determine 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.	In most cases 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 determine the number of pay periods in the month. **Note:** For offset payrolls, where the effective date is not 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 determine 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 determine the number of the period in the month.

Using the Payroll Run Date Option: Example

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 that your payroll system 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 determines 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 since the payroll run date for the third pay period is in February.

Object Groups: Explained

Use object groups to define subsets of objects for processing or reporting. You can manage object groups from the Payroll Calculation work area. To load a batch of object groups, use the batch loader in the Payroll Administration, Data Exchange, or Checklist work area.

There are four types of object groups:

- Element
- Payroll Relationship
- Work Relationship
- Deduction Card

Element Groups

Element groups limit the elements processed for payroll, reporting, or cost distribution purposes.

There are two usages for an element group:

Element Group	Usage
Run group	Specifies the elements to use in a process.
Distribution group	Defines the grouping of elements to distribute element costing results.

All element groups are static. You select the element classifications to add and then include or exclude additional elements from the group. Or you can select specific elements to include without using element classifications.

Payroll Relationship Groups

Payroll relationship groups limit the persons processed for payroll, data entry, and reporting.

To define the group:

- Specify a payroll definition. Every group is limited to the payroll relationships assigned to a single payroll that you select.
- Optionally, further define the group statically or dynamically:
    - Statically

      Select the payroll relationships, terms, and assignments to include in or exclude from the group.
    - Dynamically

      Use a fast formula of type Payroll Relationship Group. The formula contains the criteria to establish the payroll relationships, terms, and assignments included in the group. Then you can individually select additional payroll relationships, terms, and assignments to include in or exclude from the group.

Work Relationship Groups

Work relationship groups limit the persons processed for human resources and reporting. For example, you can use work relationship groups in custom extracts.

You can define the group statically or dynamically:

- Statically

  Select the work relationships, terms, and assignments to include in or exclude from the group.
- Dynamically

  Use a fast formula of type Work Relationship Group. This formula contains the criteria to establish the work relationships, terms, and assignments included in the group. Then you can individually select additional work relationships, terms, and assignments to include in or exclude from the group.

Deduction Card Groups

Deduction card groups are read-only. They are automatically created when calculation cards are created. For example, in the UK, they are used for year-end processing.

Related Topics

- Writing a Fast Formula Using Expression Editor: Worked Example

FAQs for Pay Frequency

When would I close a payroll period?

Closing a payroll period can prevent expected changes to recurring entries. Payroll periods aren't like General Ledger periods. Closing payroll periods is not necessary.

Why can't I find my organization payment method when creating other objects?

You can only select organization payment methods that are effective starting on the date the object you are creating or updating. When updating an object's organization payment method, the effective start date of the organization payment method must be 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.

7 User-Defined Tables

Creating a User-Defined Table for Matched Row Values: Example

This example illustrates how to create a user-defined table to store values for workers' schedules. To create a new table, use the Manage User-Defined Tables task in the Payroll Calculation work area.

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.

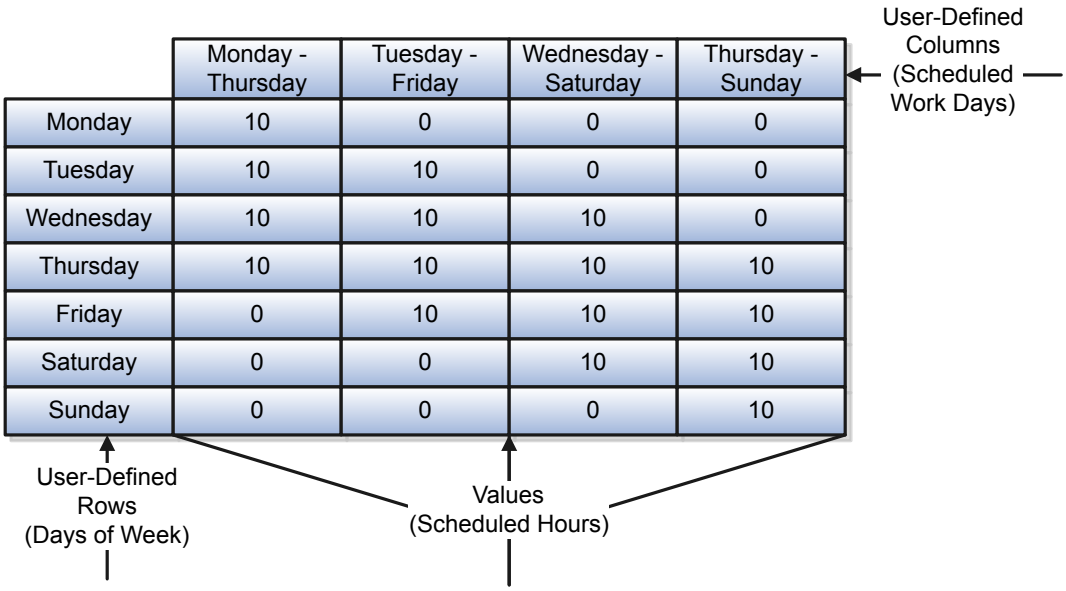
User-Defined Table Components

The main components of the user-defined table are:

- Basic details
- Columns
- Rows
- Values

Analysis

In this example, the user-defined table contains the schedules available in your organization, as shown in the following figure.



Resulting User-Defined Table Components

In this example:

- Basic details include:
  - Unit of measure, which is text since the row values are days of the week.
  - Row title, which is Days of the Week.
- Rows contain the name of a day of the week.
- Columns are the schedules, such as Monday - Thursday. The data type for each column is number because they hold a number of hours.
- Values are the number of hours to work each day in each schedule.

Creating a User-Defined Table for a Range of Row Values: Example

This example illustrates how to create a user-defined table to store values for stock option allocations. To create a new table, use the Manage User-Defined Tables task in the Payroll Calculation work area.

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.

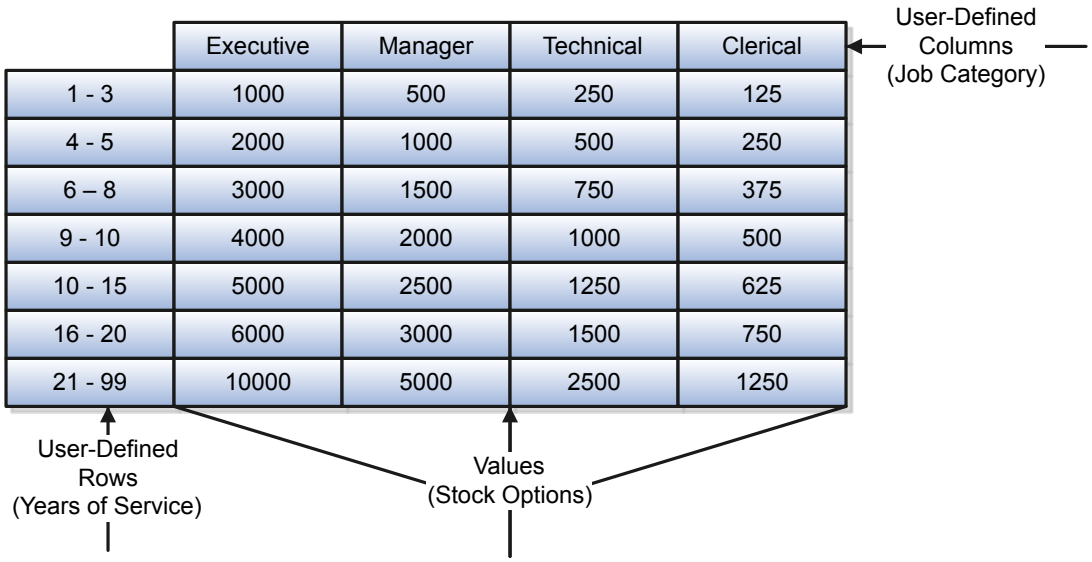
User-Defined Table Components

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

- Basic details
- Columns
- Rows
- Values

Analysis

In this example, the user-defined table contains stock option allocations by job category and years of service, as shown in the following figure.



Resulting User-Defined Table Components

In this example:

- Basic details include:
  - Unit of measure, which is number since the row values are years.
  - Row title, which is Years of Service.
- Rows represent a range of years of service during which employees receive the same number of stock options.
- Columns are job categories, and the data type of each column is number because they hold a number of stock options.
- Values are the number of stock options awarded to the specified job category during the specified years of service.

User Table Validation Formula Type

The User Table Validation formula type validates entries in user-defined tables. Select the formula in the **Formula** field for user-defined columns when you create or edit user-defined tables.

For example, you can use this formula type to ensure that entries are:

- Between a specified range
- Not a negative amount

Contexts

The EFFECTIVE_DATE (text) context is used for formulas of this type.

Input Variables

There must be one input variable and it must be called ENTRY_VALUE. The data type is text.

Return Values

The following 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).

Sample Formula

This formula checks that the deduction 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
```

8 Fast Formulas

Using Formulas: Explained

Fast formulas are generic expressions of calculations or comparisons that you want to repeat with different input variables. Each formula usage summarized in this topic corresponds to one or more formula types, requiring specific formula inputs and outputs. You can use the Manage Fast Formulas task in the Setup and Maintenance work area, or work areas relevant to the formula type, such as Payroll Calculation.

Note: Requirements for specific formula inputs and outputs are explained in separate chapters of the Oracle Global HR Cloud: Using Fast Formula guide.

Calculate Payrolls

You can write payroll calculations and skip rules for elements to represent earnings and deductions.

With fast formulas you can:

- Associate more than one payroll formula with each element to perform different processing for employee assignments with different statuses.
- Define elements and formulas for earnings and deductions with highly complex calculations requiring multiple calls to the database.
- Associate a skip rule formula with an element to define the circumstances in which it's processed.
- Customize the predefined proration formula to control how payroll runs prorate element entries when they encounter an event, such as a mid-period change in an element entry value.

Define Custom Calculations for Benefits Administration

You can use formulas to structure your benefit plans. Formulas provide a flexible alternative to the delivered business rules. Use formulas to configure:

- Date calculations, such as enrollment start and end dates, rate or coverage start and end dates, waiting periods and enrollment periods, or action item due dates
- Calculations of rate and coverage amount, minimum and maximum, or upper and lower limits
- Certification requirements
- Partial month and proration calculations
- Eligibility and participation evaluation

For example, you can write a formula to calculate benefits eligibility for those cases where the provided eligibility criterion does not accommodate your particular requirements.

Note: For more information, see Benefits Fast Formula Reference Guide (1456985.1) on My Oracle Support at https://support.oracle.com.

Validate Element Inputs or User-Defined Tables

Use lookups or maximum and minimum values to validate user entries.

For more complex validations you can write a formula to check the entry. You can also use a formula to validate entries in user tables.

Edit the Rules for Populating Work Relationship or Payroll Relationship Groups

You can define criteria to dynamically populate a payroll relationship group or work relationship group.

When you create a payroll relationship group or work relationship group formula type, you can choose to use an expression editor or a text editor. The expression editor makes it easy to build criteria to define the group. For more complex conditions, such as validations, you can select the text editor.

Define Custom Configuration for Compensation

To extend the existing flexibility of compensation plan configuration write formulas to customize:

- Start and end dates for compensation allocations under individual compensation plans
- Person selection, hierarchy determination, column default values, and currency selection for workforce compensation plans
- The source of items displayed in total compensation statements

Define Formulas to Create Rule Templates for Time and Labor

Use formulas with time repository rule templates to create rules. The formulas contain delivered combinations of rule parameters and output results. You can use one formula with multiple rule templates by varying the template configuration.

When creating a rule template, you select a formula name and then configure the parameter type and display name of the parameters and variables. You don't have to work with the entire formula statement to determine which details to change to achieve a particular outcome.

Use formulas in Time and Labor to utilize:

- Logic for processing or calculating time
- Parameters that enable rules to pass values to the formula for use in calculations
- Output variables that the formula uses to return calculation results to the rules

For example, the Period Maximum Hours Template uses the WFM_PERIOD_MAXIMUM_TIME_ENTRY_RULE formula to compare reported time category hours to defined maximum hours.

Note: For more information, see Time and Labor Fast Formula Reference Guide (1990057.1) on My Oracle Support at https://support.oracle.com.

Writing a Fast Formula Using Formula Text: Worked Example

This example demonstrates how to create a fast formula using the text editor to return the range of scheduled hours for managers and a different range for other workers.

Before you create your formula, you may want to determine the following:

Decisions to Consider	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.
What is the formula type for this formula?	Range of Scheduled Hours
Are there any contexts used in this formula?	No
Are there any database item defaults?	Yes, ASG_JOB
Are there any input value defaults?	No
What are the return values?	MIN_HOURS, MAX_HOURS, FREQUENCY

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

1. On the Overview page in the Setup and Maintenance work area, search for the Manage Fast Formulas Task.
2. Click **Go to Task**.
3. On the Manage Fast Formula page, click the **Create** icon to create a new formula.
4. On the Create Fast Formula page, complete the fields as shown in this table.

Field	Value
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

5. Click **Continue**.

6. Enter the following formula details in the Formula Text section:

```
/* DATABASE ITEM DEFAULTS BEGIN */
DEFAULT FOR asg_job IS ' '
/* DATABASE ITEM DEFAULTS END */
JOB_1 = ASG_JOB
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
```

7. Click **Compile**.
8. Click **Save**.

Related Topics

- Using Formula Components: Explained
- Formula Operators: Explained

Writing a Fast Formula Using Expression Editor: Worked Example

This example demonstrates how to create a fast formula that groups executive workers for reporting and processing. All executive workers are in department EXECT_10000. Once the formula is created, it will be added to the object group parameters so that only those workers in department EXECT_10000 are used in processing.

Before you create your formula, you may want to determine the following:

Decisions to Consider	In This Example
Is the formula for a specific legislative data group?	Yes, InVision
What is the formula type for this formula?	Payroll Relationship Group

Creating a Fast Formula Using the Expression Editor

1. On the Payroll Calculation Tasks page, click **Manage Fast Formulas** to open the Manage Fast Formulas page.
2. On the Manage Fast Formula page, click the **Create** icon to create a new formula.
3. On the Create Fast Formula page, complete the fields as shown in this table.

Field	Value
Formula Name	Executive Payroll Relationship Group

Field	Value
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, once 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 to enter the fields in this table.

Conjunction	Database Item Name	Data Type	Operand	Literal Value
	DEPARTMENT	Character	=	'EXECT_10000'
And	SELECT_EMP	Character	=	'YES'

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

Related Topics

- Formula Operators: Explained

Formula Compilation Errors: Explained

Compilation errors display in the Manage Fast Formulas page after you compile the formula. The compiler aborts the compilation process when it encounters an error. Error messages display the line number and type of error encountered.

Common Compilation Errors

This table lists the type and description of several common formula compilation errors.

Formula Error	Description
Syntax Error	The formula text violates the grammatical rules for the formula language. An example is using IF1 instead of IF for an IF statement.
Incorrect Statement Order	ALIAS, DEFAULT, or INPUT statements come after other statements.

Formula Error	Description
Misuse of ASSIGNMENT Statement	Occurs when any of these conditions exist: • An **ASSIGNMENT** assigns a value to a database item. • A context is assigned a value externally to a **CHANGE_CONTEXTS** statement. • The formula assigns a value to a non-context variable within a **CHANGE_CONTEXTS** statement. CHANGE_CONTEXTS statements can be used in a formula.
Misuse of ALIAS Statement	You can only use an ALIAS statement for a database item.
Missing DEFAULT Statement	A database item that specifies defaulting must have a DEFAULT statement.
Misuse of DEFAULT Statement	A DEFAULT statement is specified for a variable other than an input or database item.
Uninitialized Variable	The compiler detects that a variable is uninitialized when used. The compiler can't do this in all cases. This error often occurs when the formula includes a database item that requires contexts that the formula type doesn't support. The formula treats the database item as a local variable. For example, balance database items require the PAYROLL_ REL_ACTION_ID PAYROLL_ ASSIGNMENT_ID and CALC_ BREAKDOWN_ ID contexts. Generally you can only use them in formulas of type Oracle Payroll.
Missing Function Call	The compiler does not recognize a function call. The combination of return type, function name, and parameter types does not match any available function.
Incorrect Operator Usage	An instance of a formula operator use doesn't match the permitted uses of that operator. For example, the + operator has two permitted uses. The operands are both of data type NUMBER, or both of data type TEXT.
Inconsistent Data Type Usage	The formula uses a formula variable of more than one data type. Or the formula uses a database item or context with the wrong data type. For example, Variable A is assigned a NUMBER value at the start of the formula, but is assigned a TEXT value later in the formula.
EXIT Statement Not Within WHILE Loop	A condition that eventually becomes false or an EXIT call for exiting the loop doesn't exist.
Misuse of Context	The formula uses a variable as a context, or a context as a variable. For example, a formula assigns a value to AREA1 as an ordinary variable, but later uses AREA1 as a context in a GET_CONTEXT call.

Formula Execution Errors: Explained

Fast formula execution errors occur when a problem arises while a formula is running. The usual cause is a data problem, either in the formula or in the application database.

Formula Execution Errors

This table lists the type and description of each formula execution error.

Formula Error	Description
Uninitialized Variable	Where the formula compiler can't fully determine if a variable or context is initialized, it generates code to test if the variable is initialized. When the formula executes, this code displays an error if the variable or context isn't initialized.
Divide by Zero	Raised when a numeric value is divided by zero.
No Data Found	Raised when a non-array type database item unexpectedly fails to return any data. If the database item can't return data, then it should provide a default value. You can do this by creating a default statement. An error in formula function code can also cause this error message.
Too Many Rows	Raised when a non-array type database item unexpectedly returns more than a single row of data. The cause is an incorrect assumption made about how the data is being accessed. An error in the formula function code can also cause this error message.
NULL Data Found	Raised when a database item unexpectedly returns a NULL data value. If the database item can return a NULL value, then it provides a default value. **Note:** Some database items can't return a NULL value. If it can, then you can provide a default value for that database item.
Value Exceeded Allowable Range	Raised for a variety of reasons, such as exceeding the maximum allowable length of a string.
Invalid Number	Raised when a formula attempts to convert a non numeric string to a number.
User Defined Function Error	Raised from within a formula function. The error message text is provided as part of the formula error message.
External Function Call Error	A formula function returned an error, but didn't provide any additional information to the formula code. The function might have sent error information to the logging destination for the executing code.
Function Returned NULL Value	A formula function returned a NULL value.

Formula Error	Description
Too Many Iterations	A single WHILE loop, or a combination of WHILE loops, has exceeded the maximum number of permitted iterations. The error is raised to terminate loops that can never end. This indicates a programming error within the formula.
Array Data Value Not Set	The formula attempted to access an array index that has no data value. This error occurs in the formula code.
Invalid Type Parameter for WSA_EXISTS	An invalid data type was specified in the WSA_EXISTS call.
Incorrect Data Type For Stored Item	When retrieving an item using WSA_GET, the actual data type doesn't match that of the stored item. This error occurs within the calling formula.
Called Formula Not Found	The called formula couldn't be resolved when attempting to call a formula from a formula. This issue could be due to an error in the calling formula, or because of installation issues.
Recursive Formula Call	An attempt was made to call a formula from itself. The call could be made directly or indirectly from another called formula. Recursive formula calling isn't permitted.
Input Has Different Types In Called and Calling Formulas	When calling a formula from a formula, the input data type within the called formula doesn't match the data type specified from the calling formula.
Output Has Different Types In Called and Calling Formulas	When calling a formula from a formula, the output data type within the called formula doesn't match the data type specified from the calling formula.
Too Many Formula Calls	There are too many formula calls from other formulas.

FAQs for Fast Formulas

When do I run the Compile Formula process?

When you create or update multiple fast formulas at the same time, run the Compile Formula process on the Submit a Process or Report page from the Payroll Administration work area.

What's the difference between a formula compilation error and an execution error?

Compilation errors occur on the Manage Fast Formulas page when you compile the formula. An error message explains the nature of the error. Common compilation errors are syntax errors resulting from typing mistakes. You can view error messages on the dashboard or go to the messages tab directly after the process is run.

Execution errors occur when a problem arises while a formula is running. The usual cause is a data problem, either in the formula or in the application database.

9 Balance Definitions

Balances

Payroll Balance Definitions: Explained

Payroll balances show the accumulation of values over a period of time. Payroll processes, such as Calculate Payroll and Calculate Gross Earnings, update the balance values. The values can be currency, hours, or any other numeric value. You manage balance definitions in the Payroll Calculation work area.

Most of the balances you require are predefined, and depending on your country extension, the application creates additional balances automatically when you create elements. You can edit the definition of these generated balances, or create additional balances for calculations or reporting.

Important aspects of balance definitions are:

- Balance Categories
- Unit of Measure
- Generated Balances and Database Items
- Base Balances
- Remuneration

Balance definitions also include balance dimensions and balance feeds. Balance groups are collections of balances that you associate with usages to determine the reports, pages, and processes that use the balances in the group.

Balance Categories

Each balance definition has a predefined balance category for quicker processing. Balance categories are specific to a country or territory.

Units of Measure

The predefined units of measure available for selection are Day, Hour (with different combinations of minutes and seconds), Integer, Money, and Number. The unit of measure of the balance must match the unit of measure of the element input values that feed it.

Generated Balances and Database Items

The element template creates a primary feed to a new balance when you create:

- An earnings element in a legislative data group that uses the Payroll Interface country extension
- Any element in a legislative data group that uses the Payroll country extension

You select the type of extension on the Manage Features by Country or Territory page.

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.

Base Balances

You can specify a base balance when there is a dependent relationship between balances for processing and reporting. For example, Loan Repayment could be the base balance for Loan Repayment Arrears.

Remuneration

Only one balance in each legislative data group is predefined as the remuneration balance. This balance generates payments for employees. For example, the remuneration balance might be Net Pay. This calculated balance is the sum of standard earnings and supplemental earnings minus all the deductions calculated for the run.

Balance Dimensions: Explained

Each payroll balance can have multiple dimensions, which define the specific value to retrieve. 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, terms, or payroll relationship
- Context, required for some balances only, such as tax reporting unit, element, 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.

Balance Feeds: Explained

You can feed payroll balances by element input values and by run results from all the elements in a classification.

Balance Feeds by Element

Balance feeds by element indicate one or more element input values to add or subtract from a balance. For each balance feed, all input values must use the same unit of measure. For example, you wouldn't mix money and hours in the same balance feed.

Each element and input value can be the primary feed for one balance only. When you create an element, the element template creates this balance and feed automatically.

Balance Feeds by Classification

Balance feeds defined by primary or secondary element classification or by a subclassification use the input value that has the special purpose of primary output value. The unit of measure of this input value must match the unit of measure of the balance.

If you add a primary classification as a balance feed, you can't add its children from the secondary or subclassifications. For example, if you use the Supplemental Earnings primary classification as a balance feed, you can't also use any other children of Supplemental Earnings. Also, you can't use both secondary classifications and subclassifications in the same balance feed.

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.

Related Topics

- Initial Balance Loading: Explained

Balances in Net-to-Gross Calculations: Points to Consider

You can determine which deduction balances the net-to-gross processing uses to calculate the gross amount from the desired net amount for an earnings element. You set the default values on the Manage Balance Definitions page. You can also fine-tune which of the enabled balances are included for a specific net-to-gross earnings element.

Enabling Inclusion in Net-to-Gross Calculations

The Balance Dimensions page of the Manage Balance Definitions task shows which dimensions are enabled for inclusion in net-to-gross calculations. It also shows which of the enabled dimensions are included by default for each new net-to-gross earnings element.

Excluding 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. To do so, you add the balance using the Gross Balance Exclusions link on the Element Summary page. You can also use this page to exclude balances that are included by default.

Related Topics

- Net-to-Gross Earnings: How They're Calculated
- Creating a Net-to-Gross Earnings Element: Worked Example

Generating Run Balances: Explained

The payroll calculation process generates run results and values for frequently used balances. Creating or updating balance definitions and balance feeds can impact balance calculations and stored balance values for run balance dimensions.

When stored balance dimensions are no longer accurate, the Save Run Balances column on the Manage Balance Definitions page 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 from the Payroll Checklist or Payroll Calculation work areas.

This topic covers:

- Submitting the Generate Run Balances process
- Using Generating Run Balances Examples

Submitting the Generate Run Balances Process

Submit the process before you submit the payroll run or after you create or update these tasks:

- Balance definition using the Manage Balances task, for example to add balance feeds or new balance dimensions
- Balance feeds to an element using the Manage 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, or a 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.

Using Generating Run Balances Examples

There are different ways you can use generate run balances to improve performance and accuracy in your payroll system.

- 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 notification January 31 that an earning, which is not taxable, becomes 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.

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
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

Balance Groups

Balance Groups and Usages: Explained

Balance groups represent a collection of balance definitions, which you can use to retrieve balance values for reports, archives, and balance views. You manage balance groups in the Payroll Calculation work area.

Important aspects of balance groups include:

- Balance group level
- Balance definitions
- Restrictions
- Default inclusions
- Balance group usages
- Matrix and table formats
- Sorting

Balance Group Level

The balance group level (employee or organization) determines the balance dimensions that you can include in the group.

Balance Definitions

On the Balance Definitions page of the Manage Balance Groups task you can see the balances associated with the balance group. The information includes the balance name, dimension, unit of measurement, and legislative data group. You can also use this page to search for and add balance definitions to your own balance groups and to certain predefined balance groups.

Restrictions

Restrictions control which balance definitions you can add to the balance group. Balance group restrictions are a list of balance categories, a list of balance dimensions, or a list of balance categories and dimensions that belong together. Restrictions limit the balances that you can add to the balance group based on a particular category or dimension or a combination of category and dimension. For example, the standard earnings category means that the balance group is restricted to all balances based on the standard earnings category. In addition to standard earnings, this balance group would be restricted to balances for bonus pay, hourly salary, and overtime.

Default Inclusions

Default inclusions are combinations of balance categories and dimensions. Any balance definitions you subsequently create, manually or through the element template, that meet those criteria are automatically included in the group.

Balance Group Usages

Balance group usages represent an instance of how a particular balance group is used. Balance group usages also store detailed information about how the balance data is formatted. A balance group should have at least one usage but can also have many balance group usages.

Matrix and Table Formats

A balance group usage can use a matrix or table format. For a matrix format, you select balance dimensions as columns in the matrix.

Only the balance dimensions that you select as columns for the matrix are displayed. If you do not specify the balance dimensions as matrix items, they do not display, regardless of what dimensions are contained in the defined balances in the balance group.

If you use the matrix format, you can also select a sorting option for the rows. If you don't select a sorting option, the rows are returned in random order.

If you select Table, all the balances in the balance group are returned one line at a time in the table format. If you select the Matrix format, you can add balance dimensions and decide their position in the matrix.

Sorting

Sorting determines the order in which balance types and dimensions display for the balance group usage.

You can select one of the sort methods listed below.

- Name - Sorts balance values by balance name.
- Value - Sorts balances by the actual balance value.
- Static Order - Sorts balance values according to the sequence that you specify in the Sort Items table.

Balance Group Usages: Examples

For predefined balance group usages you can add matrix items to the group 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, such as the current payroll run, month to date, or year to date, in your balance group usage.

Scenario

Create Balance Group Usage for a Custom Report

Here are some examples of typical balance group usages using the predefined report types, including the different kinds of balance dimensions that may be used.

Note: The report type is the owner of the balance group usage. A usage can have only one report type.

Report Type	Balance Dimensions
Global Archive	Archive of current and year-to-date city 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	Direct payments tax balances at the assignment, term 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, term and relationship levels
Global Statutory Deductions Report	All city, county, state, and school tax deduction balances for the current period and year-to-date

Report Type	Balance Dimensions
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

Rules for Editing Balance Groups and Their Usages: Explained

The limitations on the changes you can make to balance groups and usages are different for predefined and user-defined groups.

Balance Group Rules

This table explains 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 predefined and user-defined balance definitions	No, unless the Add button in the table menu is enabled	Yes
Delete predefined balance definitions	Yes	Yes
Add restrictions	No	Yes
Edit restrictions 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.	No	No **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.
Add restrictions	No	Yes
Edit the balance group level	No	Yes, if the group contains no balance definitions or default inclusions
Add default inclusions	No, unless the Add button in the table menu is enabled	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.

Creating Balance Groups and Usages: Worked Example

This example demonstrates how to create a balance group and balance group usage for a custom report of voluntary deductions.

Prerequisite

If you are creating a custom 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 custom report in the Lookup Codes section.

Creating a Balance Group

1. In the Payroll Calculation work area, select **Manage Balance Groups**.
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 the following 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** to add the selected balance definitions and keep the dialog window open. Click **OK** to add the selected balance definitions and close the dialog window.

12. Click **Submit**.
13. Click **Done**.

Create a Balance Group Usage

1. In the Payroll Calculation work area, select **Manage Balance Group Usages**.
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 are 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 are 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. Complete the fields as shown in this table.

Field	Value
Name	Any
Sort Method	Name
Sort By	Balance Type
Order	Ascending

10. Click **Save**.
11. Click **Done**.

Balance Exceptions

Balance Exceptions: Examples

Balance exceptions define the criteria that you want to use in balance exception reports to identify overpayments, underpayments, and trends. This information can help detect the balance adjustments needed to correct payments and identify people in your organization who are leading in specific areas such as sales. The following examples illustrate two different types of balance exceptions that you may want to include in your balance exception reports.

You create reports using the Manage Balance Exceptions task in the Payroll Calculation work area.

Tracking Increases in Commissions

InFusion US 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. To find out who the sales leaders are, set up a balance exception using the values in the following 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 Period to Date
Variance Type	Percent
Variance Operator	Greater than
Variance Value	25
Severity Level	3

Tracking Gross Earnings

Before InFusion US certifies its current payroll run, the payroll manager wants to know if 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. The table below provides an example of the values you enter to set up a balance exception to find out if gross earnings exceed 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

Comparison Types and Variance Operators for Balance Exceptions: Explained

Use balance exception reports to identify potential overpayments or underpayments. Comparison types define the period that is used to determine whether an exception has occurred. Variance operators enable you to specify the precise range of variance that you want to report on.

Comparison Types

When you're creating balance exceptions, you must select a comparison type. For example, if you select Average in months as the comparison type and enter 3 in the Comparison Value field, the current month 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 with the average of previous months to date. Only available if you have the balance dimensions ASG_MONTH or _PER_MONTH.
Current month	Compares values to the total for the current month to date. Doesn't use any previous month as a basis for comparison.

Comparison Type	How it Operates as a Basis of Comparison
Current period	Compares values to the total for the current period to date. Doesn't use any previous period as a basis for comparison.
Current quarter	Compares values to the total for the current quarter to date. Doesn't use any previous period as a basis for comparison.
Current year	Compares values to the total for the current year to date. Doesn't use any previous period as a basis for comparison.
Previous month	Uses the previous month as a basis of comparison.
Previous period	Uses the previous period as a basis of comparison.

Variance Operators

The table that follows describes the variance operators that you can use for your balance exception reports.

The Results column indicates the effect of selecting each variance operator assuming that the following sample data is used:

- Comparison type is previous month
- Balance name is monthly car allowance
- Dimension name is relationship previous month to date
- Previous month amount is 500
- Variance value is 100

Variance Operator	Balance Exception Report Output	Results (based on sample data)
Variance, plus or minus	All relationships that either exceed 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 400 and greater than 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.

Variance Operator	Balance Exception Report Output	Results (based on sample data)
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.

Note: 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 ID field.

Creating a Balance Exception Report: Worked Example

This example demonstrates how to create and run a balance exception report. The report compares the total payments you made to your employee population for the current payroll period with the payments you made in the previous period.

Before you create your report, you may want to determine the following:

Decisions to Consider	In This Example
Which balance holds the values to compare?	Net Payment
What period of time should the balances be compared to?	Previous period
How many periods do you want to compare the balances to?	1

Creating a balance exception report involves creating a balance exception, creating the report, and then running the report.

Creating a Balance Exception

To derive net pay amounts for the previous period:

1. Open the Payroll Calculation work area, and then click **Manage Balance Exceptions**.
2. Click **Create**.
3. Select the InFusion US 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

Field	Value
Dimension Name	Relationship Period to Date
Variance Type	Percent
Variance Operator	Greater than
Variance Value	10
Severity Level	1

5. Click **Submit**.

Creating a Balance Exception Report

1. In the Tasks pane, click **Manage Balance Exceptions and Reports**.
2. Click **Create**.
3. Select the InFusion US legislative data group 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	InFusion US Weekly
Payroll	InFusion US Weekly Payroll

5. Click **Add**.
6. Select the **Compare Net Payment Amounts to the Previous Period** balance exception name and then click **OK**.
7. Click **Submit**.

Running the Balance Exception Report

1. In the Tasks pane, click **Submit a Process or Report**.
2. Select the **InFusion US** legislative data group.
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	InFusion Weekly Balance Report
Process End Date	9/7/12
Balance Exception Report	Compare Net Payment Amounts to the Previous Period

Field	Value
Payroll	InFusion US Weekly

5. Click **Next**.

   When you enter information on the Submit a Process or Report - Flow Interaction 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**.
8. Click **OK and View Checklist**.
9. In the task list click **Go to Task** for the Run Balance Exception Report.
10. Click the **View Results** link associated with the process number for the report.
11. When the View results page opens, click the report link. The output is in PDF format.

10 Elements

Element Classifications

Element Classification Components: How They 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 additional 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 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.

Secondary Classifications

Secondary classifications are subsets of the primary classifications. Use them 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 the following costing rules:

- Allow Costing: If this rule is set to Yes, you can select any costing option for element eligibility records.
- Allow Distribution: If this rule is set to Yes, you can create distribution groups with elements in this classification. For example, you can create a distribution group with all of the earnings elements and prorate tax expenses proportionately over the cost centers in which the wages were earned.
- Debit or Credit: This rule determines whether a positive amount is costed as a debit or a credit.

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

- Payroll Balance Definitions: Explained

Element Processing Sequence: How It's Determined

You can set a predefined sequence in which a payroll run will process 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. To set the priority you edit the element on the Element Summary page. Setting a specific priority is useful if you need to establish 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 you can enter a subpriority number for element entries.

Elements

Elements: Explained

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. The template creates the elements and, depending on your country extension, associated items required for payroll processing.

> **Note:** You can enter up to 50 characters for the element name. If you enter more than 50 characters, the application will automatically shorten the name.

Elements can represent:

- 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

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.

Element Creation

You can create as many earnings and deductions as you require using the Manage Elements task.

You select the element classification and category which determine:

- The template of questions you answer to specify the details of the element you want to create.
- The items that the template generates, which can include multiple elements, input values, formulas, balances, and other items as set out in the table below.

Note: The template you use to create elements also depends on the extension selected for your country or territory on the Manage 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. You can also use the batch loader from the Data Exchange or Checklist work area to load elements or migrate elements between environments.

The following table explains the purpose of the items used in element creation.

Item	Purpose
Input Values	Define the entry values available on each entry of this element, such as hours worked or amount.
Element Eligibility Records	Define 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	Identify the formula the payroll run uses to process the element, and how to handle the formula results.
Related Formulas and Related Elements	Identify additional elements and formulas created by the template for payroll processing.
Related Balances	Identify the balances created by the element template for this element.

Related Topics

- Creating Earnings Elements for Payroll: Worked Example

Element Input Values: Explained

An element's input values define the entry values available on each entry of this 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, which is 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 additional input values for any element, as needed.

Input Value Options

For each input value created you can modify these attributes:

Field	Purpose
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 assists 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.
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 if you want 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 the Allow User Entry check box.
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.

Field	Purpose
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 are 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 on the Manage Elements - Element Overview, Input Values page.

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

Unit of Measure	Sample Entry Value	Display in Application
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 could display as **Complete**. Conversion to display formats is based on the profile option value and locale.

Related Topics

- Element Entries: How Element Setup Affects Entries and Their Entry Values
- Creating and Editing Profile Options: Procedure

Employment Level for Elements: Critical Choices

Your enterprise uses either a two-tier employment model or a three-tier 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 terms or 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.

Typical elements to define at payroll relationship level are:

- Tax deductions
- Pension
- Child support
- Medical care
- Union dues
- Benefits activity rate calculations, such as employee contributions and flex credits

Employment Terms Level

If you use a three-tier model, use this level to help manage multiple assignments. Also use it to satisfy tax and reporting requirements at a lower level than the payroll statutory unit. Create employment terms salary elements at this level.

Assignment Level

Use this lowest level for elements that require different entries for different assignments, or when the element applies only to specific assignments.

Typical elements to define at assignment level are:

- Assignment salary
- Regular hours
- Overtime
- Sales bonus
- Profit-sharing bonus

Rate Conversion Rules: Explained

Manage rate conversions by selecting specific formula rules when you create an element. Conversion rules apply to earnings classification elements, including standard, supplemental, absence, and time elements.

You can specify conversion rules for:

- 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

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.	Employee works 40 hours a week with a monthly salary of 1000 pounds: ((1000*12) / (40.00*52) = 5.77 an hour

Conversion Rule	Calculation	Example
	2. Calculates the rate.	
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. It begins at the assignment level and continues in the following order until it finds a schedule.

1. Assignment
2. Position
3. Job
4. Department
5. Location
6. Legal Employer
7. Enterprise

To ensure you 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 are paying the person.
- If a person has multiple assignments for a term, create the work schedule at the terms level or the assignment level, but not at both levels. Setting up schedules at both levels can produce calculation errors.

Maintaining Elements: Explained

After you create and use an element, updates to the element are limited to ensure 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 have 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 the following changes to an element that has been previously processed:

- Change a required input value to be optional.
- Alter the sequence in which input values appear in 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 will continue to use the original name.

Enabling Automatic, Multiple, or Additional Element Entries: Critical Choices

You can select options for an element to define how you can update its element entries. The options include:

- Automatic entry
- Allow multiple entries in same period
- Additional entry

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 can 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.
- If you have access to payroll work areas, you can also monitor the progress of the Generate Automatic Element Entries flow on the Processes and Reports tab. You can navigate to the Processes and Reports tab through these work areas: Payroll Dashboard, Payroll Checklist or Payroll Calculation.

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. For example, if you enter overtime hours on a weekly basis for a person that is paid monthly, you might need to enter five entries on an overtime element in each period.

If you are creating a net-to-gross element, you must select **Allow multiple entries in same period**.

Note: An element with the Automatic entry option selected cannot allow multiple entries in the same period.

Additional Entry

This option enables you to add an occasional one-time entry for recurring elements. This additional entry can override or add to the normal entry amount.

Related Topics

- Element Entry Methods: Explained
- Monitoring the Status of Flow Tasks: Explained

Determining an Element's Latest Entry Date: Critical Choices

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

This option enables the element to 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

This option stops all element entries on the date the person leaves. You should 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 value for last standard process date is automatically set to the last day of the pay period in which the person is terminated. You can, however, set it to a later period when you terminate a person. It stops all element entries on the last standard process date or on the date the assignment ends, if this is earlier.

Related Topics

- Element Entries: How Element Setup Affects Entries and Their Entry Values
- Element Duration Dates in Payroll Relationships: Explained

Default Values for Element Entries: Critical Choices

You specify default values for element entries using the Manage Elements task in the Payroll Calculation work area. Your element setup controls when the default value affects element entries. You can apply the default value only when an element entry is created, or you can apply the latest default value at run time. Another option is to use a formula to provide default values on one or more entry values.

You can:

- 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 identified by an element eligibility record.
- Override the default value for specific employees on their element entries.

Defining Elements to Provide 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 run time** option, then subsequent updates to the default value have no effect on existing element entries. Users can override or change the default value at any time.

Defining Elements to Provide Default Values at Run Time

To use this method, enter the default value and select the **Apply default at run time** 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 in the element entry value, the manual entry overrides the default value and updates to the default value don't affect that entry. You can clear the entry if you want to restore the default value.

Using 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. The order of precedence is as follows:

- A formula at the element eligibility level overrides a formula at the element level.
- If you enter a default value for the input value and select a defaulting formula, the formula overrides the default value.

Related Topics

- Element Entries: How Element Setup Affects Entries and Their Entry 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, or to calculate entry values based on the user's entries in other entry values.

You select the formula on the Element Summary page in the following fields:

Page Section	Field	Purpose	When the Formula Runs
Element Details, or Element Eligibility	Validation Formula	To validate one or more entry values for the element based on entries in other entry values.	When you save the element entry.

Page Section	Field	Purpose	When the Formula Runs
Element Details, or Element Eligibility	Calculation Formula	To provide values for one or more entry values using a calculation that takes input from these or other entry values.	When you save the element entry.
Element Details, or Element Eligibility	Defaulting Formula	To provide default values for one or more entry values.	When you create the element entry.
Input Value	Validation Formula	To validate one entry value independently of others.	When you enter the value.

Note: In all cases, a formula at the element eligibility level overrides an equivalent formula at the element level.

Contexts

The following contexts are available to all formulas of this type:

- LEGISLATIVE_DATA_GROUP_ID
- DATE_EARNED
- EFFECTIVE_DATE

The following contexts are available to formulas at element or element eligibility level only, not 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

Input Variables

The following input variables 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.

Formula Usage	Input Variables	Comments
Calculation formula	Any element input value name of an entry value.	Replace spaces with underscores. You don't need to provide all of the available entry values.

Return Values

The following return values 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	Text of message passed to user if the validation fails. Optional.
Defaulting formula	Any element input value name of an entry value.	A return value overrides any default value 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 of the available entry values. You can return the entry values that were passed in as input variables, or other entry values.

Sample Formula

This section contains the following sample formulas:

- 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
```

Using a Value Set for an Element Input Value: Worked Example

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, such as 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.

Create value sets using the Manage Value Sets task in the Setup and Maintenance work area. You select the Table validation type to define a value set that filters values from an existing table using a SQL statement.

The following 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

Field	Value

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 is dependent 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, the steps are:

- 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

Creating 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

Field	Value
FROM Clause	PER_ LEGISLATIVE_ DATA_ GROUPS_vl
Value Column Name	NAME
Value Column Type	VARCHAR2
Value Column Length	240
ID Column Name	LEGISLATIVE_ DATA_GROUP_ID
ID Column Type	NUMBER
ID Column Length	18
WHERE Clause	business_ group_id=202 **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**.

Creating 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
Value Column Type	VARCHAR2

Field	Value
Value Column Length	80
ID Column Name	element_ type_id
ID Column Type	NUMBER
ID Column Length	18
WHERE Clause	LEGISLATIVE_ DATA_ GROUP_ id= :{PARAMETER. LDGIP} **Note:** LDG_IP is the input value name.
ORDER BY Clause	base_ element_name

3. Click **Save**.

Adding the Value Set Codes to the Manage Elements Page

1. From the Payroll Calculation Work Area, click the **Manage Elements** task.
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.

Formula Result Rules for Elements: Explained

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 target element entry with a lower processing priority, meaning that it's processed later in the run.

The following table explains the available result rules.

Rule	Purpose
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 - This causes the run to roll back all processing for the employment record. • Warning - This does not affect payroll processing but warns you of a possible problem. • Information - This does not 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 are not actually end dated but stopped from future processing. This supports retroactive processes which impact the total owed balance. You should define the target element with Allow Multiple Entries selected. This 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:** If you do not select Allow Multiple Entries and you want to add a second loan after the first loan has been stopped by a payroll run, end date the first loan before creating the second loan.
Target Indirect	An entry to a nonrecurring element that has a lower processing priority, where 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 terms-level element.

Setting Up Balances for Percentage Elements: Explained

When you create a deduction element, you can select the Percentage deduction calculation rule. This creates a balance called <ELEMENT NAME> Eligible Comp. In this balance definition, you can define the balance feed from the earnings element result value as either pay value or output value.

When you define the balance feed on the Element Summary page, make sure the effective date is early enough to define the balance feed and capture the history. For example, you may want to define the balance feed with an effective date of 01-January-1951 or something similar. When you click the Balance Feeds link on the Manage Balance Definitions page, the effective date is shown as the system date. You need to change the effective date so it will capture the history.

After you capture the earnings input values, enter the percentage deduction in the Percentage input value of the deduction element.

For example, let's say you entered 10000 as the basic salary and 10 percent as the basic deduction.

- If the basic salary pay value is 10000, your basic deduction is 1000.
- If the basic salary pay value is 5000, your basic deduction is 500.

How does the Hours X Rate calculation rule work for elements?

If the input value for hours is left blank on the Manage Element Entries page for the employee, the number of hours calculated is based on the employee's work schedule. If you enter zero for the input value, then no hours are calculated and the pay value will be zero.

Element Eligibility

Element Eligibility: Explained

Element eligibility determines which people are eligible for an element. To determine eligibility, you select the criteria that people must have to receive entries of the element.

Eligibility Criteria

You can define element eligibility using the following criteria.

Level	Available Criteria
Payroll Relationship	Payroll Statutory Unit
	Relationship Type
Terms	Legal Employer
Assignment	Department in which the person works
	Job, for example, associate professor or secretary
	Grade
	Employment Category
	People Group

Level	Available Criteria
	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

Tip: You must define element eligibility for every element, including predefined elements. If you want the element to be available to all workers, add an eligibility name and save the element eligibility record with no additional criteria selected. This is the usual practice for compensation and benefit elements where you determine eligibility using eligibility profiles.

Examples of Eligibility Criteria

In the following 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.
- You 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.

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.

Maintaining Element Eligibility: Explained

After saving an element eligibility record, you can only make certain changes. You can't update the eligibility criteria.

The following table summarizes the actions you can take.

Action	Result
Change the input value default values and validation	These changes affect all new entries, and updates to existing entries. Changes to run time defaults affect existing entries too.

Action	Result
Delete the element eligibility record	Existing recurring entries are ended automatically 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.

Adding Eligibility Rules for Predefined Elements: Procedure

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.

To search for the predefined elements:

1. Search for the Manage Elements task in the Setup and Maintenance work area.
2. Click **Go to Task**.
3. Search for the predefined elements, which are as follows:

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	Social Insurance Gratuity
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.

To 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.

You are recommended to 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**.

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 is ended.

A nonrecurring element has an entry that applies in one pay period only. It's only processed once per pay period. The payroll to which the person is assigned determines the dates of the pay period.

Note: A base pay element associated with a salary basis must be recurring.

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 the element is skipped from processing. You select skip rules on the Manage Elements page.

Related Topics

- Using Formula Components: Explained

How can I create an element for retroactive processing?

When you create the element, specify that it's subject to retroactive changes. You can select the predefined retroactive event group for the element, or create your own. When an element is subject to retroactive changes, all components for the retroactive element are created automatically. This includes adding the element to the predefined retroactive event group and proration group. You can create your own retroactive event group and proration event group and change the default values for the element in the Manage Element flow.

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.

What happens if I select the Closed for Entry option for an element?

This 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: Explained

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. However, you can clear your entry if you want to restore the default value.

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.

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 refer to the setup documentation for the specific country or territory.

11 Earnings, Time, and Absence Elements

Creating Earnings Elements for Payroll: Worked Example

This example shows how payroll managers create a regular earnings element, such as salary, using an element template. After you create the earnings element, you must create at least one eligibility record for it.

Creating an Earnings Element

1. In the Payroll Calculation work area, click **Manage Elements**.
2. 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

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 application will automatically shorten 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
What is the latest entry date for this element?	Last Standard Earning Date **Note:** If you select this date, then you need to enable proration so the calculation will be 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

Question	Answer
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
Is this element subject to proration?	Yes
Proration Group	Entry Changes for Proration
Is this element subject to retroactive changes?	Yes
Retro Group	Entry Change 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 Actions, 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

- Creating Payroll Elements for Payroll Interface: Worked Example

Creating Payroll Elements for Processing Absences: Procedure

You create elements to calculate and process absence payments in Oracle. When you create 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 the following steps:

- Creating an absence element
- Completing absence detail questions
- Completing accrual liability and balance payment questions
- Completing absence payment questions
- Submitting the element
- Creating element eligibility records and cost distributions

Creating an Absence Element

Create an absence element, selecting a primary classification of Absence, and a secondary classification. Typically, the predefined values include vacation, maternity, sickness, and other. Use the Manage Elements task in the Payroll Calculation or Setup and Maintenance work areas.

Completing Absence Detail Questions

The questions you complete in the Absence Details section determine which subsequent questions the template displays. You enter the following information in the Absence Details section:

1. 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	Accrual Balances and Absences
Qualification	Qualification Absences
No Entitlement	No Entitlement Absences

2. Specify the calculation units to use when reporting the absence, for example that is shown on the payslip, and statement of earnings. Typically, you select units for your reports that correspond to the units for your absence plan. If you select different units, the application uses 8 hours to convert days to hours.

Completing Accrual Liability and Balance Payment Questions

If you transfer accrual balances, complete the questions shown in the following table.

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 create a final disbursement element and to maintain balances for the disbursement hours and payments. 2. Optionally, select a rate to use for the calculation.
Does this plan enable partial payment of balance?	1. Select Yes to create a discretionary disbursement element and to maintain balances for disbursement hours and payments. 2. Optionally, select a rate to use for the calculation.

Completing Absence Payment Questions

Complete the following questions:

1. Select a method to reduce regular earnings if employees don't complete a time card, or the time card entries aren't used as a basis for calculating pay:
    - Reduce regular earnings by absence payment (entitlement payment balance)
    - Select rate to determine absence deduction amount (entitlement deduction balance)

    You might select this method when the amount to deduct isn't 100 percent of the person's regular salary.

    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.
2. Optionally, select a rate to calculate the absence payment.

Submitting the Element

When you submit the element, the template automatically creates a base and retroactive pay element, balances, formulas, and calculation components. For some countries the template creates related elements, such as results and calculator elements.

The template also creates additional elements, depending on the options selected in the template to transfer absence information, as shown in the following table.

Type of Absence Information to Transfer	Optional Balance Payments Selected	Additional Elements Created
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

Creating Element Eligibility Records and Cost Distributions

Create element eligibility records for all the 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 the following steps

1. Create 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 would cost the change in the liability balance since the last payroll period, debit the expense account and credit the liability account.

Related Topics

- Costing of Elements: Critical Choices
- Importing Absence Entries to Payroll: Procedure
- Rates Used to Calculate Absences in Payroll: Explained

Creating Payroll Elements for an Absence Accrual Plan: Worked Example

This example shows how to create an absence element for a vacation accrual absence plan. Based on your setup decisions, this procedure creates the following 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.

The following 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 is 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
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 does not get paid twice? • Select a rate to determine the absence deduction amount?	Reduce regular earnings by absence payment

Prerequisites

Ensure that you created 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 create a rate definition using the Manage Rate Definitions task in the Setup and Maintenance or Payroll Calculation work area.

Creating an Absence Element

1. In the Setup and Maintenance work area or the Payroll Calculation work area, use the **Manage Elements** task.
2. Click **Create**.

3. 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.
Category	Absence

4. Click **Continue**.
5. On the Create Element: Basic Information page, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

   You can enter up to 50 characters for the element name. If you enter more than 50 characters, the application will automatically shorten the name.

Field	Value
Name	Vacation Payment
Reporting Name	Vacation Payment

6. 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 type of absence information do you want transferred to payroll?	Accrual Balances and Absences
What calculation units are used for reporting?	Days

7. Click **Next**.
8. 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

Field	Value
Which rate should the final balance payment calculation use?	Final disbursement rate.
Does this plan enable partial payments of absences?	Yes
Which rate should the discretionary disbursement use?	Discretionary disbursement rate.

9. 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.

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.

10. Click **Next**.
11. On the Create Element: Review page, review the information that you entered so far.
12. Click **Submit** to open the Element Summary page.
    The template generates all the related elements, balances, and formulas.

Creating 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. In the Manage 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 create eligibility for each element.

Creating Elements for Time Card Entries: Procedure

You create nonrecurring elements to process pay based on time card entries, such as elements for regular, overtime, double-time, and shift pay. Creating a time card element generates all the related elements, balances, formulas, and calculation components. You then transfer the elements to your time provider.

This topic covers the following procedures:

- Creating earnings elements

- Creating calculation components for standard-category elements
- Converting elements for use in time cards
- Setting up area overrides
- Setting up costing overrides

Creating Earnings Elements

The steps for creating a time card element depend on whether the time card template is available for your country. If the template is available, follow the steps in this section. Otherwise, create an earnings element using the Standard category, and specify an hours multiplied by rate calculation rule. Follow the steps in the section below to create calculation components for your element.

Complete these steps to create an element using the time card template:

1. Create an earnings element on the Manage Elements page of the Payroll Calculation work area.
2. Select a primary classification of standard or supplemental earnings.
3. Select the Time Card category.
4. Complete the information on the Basic Details page.
5. On the Additional Details page:
    a. Select the calculation units to use in reports.

       Typically, you select time units that match the time units entered on time cards for that element. If you select different units, the application uses 8 hours to convert days to hours.
    b. Optionally, select a default rate to calculate time.

       When calculating the run result for the element entry, the formula uses the default rate unless a rate is entered on the person's time card.
6. Complete the element eligibility information for the new time element, and its associated retroactive and related elements, such as the result and calculation elements.

Note: If the straight time portion of overtime is reported separately from regular time, create two elements, such as overtime and overtime premium elements. If the regular and straight time portions of overtime are reported together, you might use straight time instead of regular time, and create a separate element for the overtime premium.

Creating Calculation Components for Standard-Category Elements

You can create calculation components for elements created with the Standard category rather than the Time Card category. Complete the following steps for each existing element:

1. Submit the Create Time Card Calculation Components process from the Payroll Checklist or Payroll Administration work area.

   These elements must have a calculation rule of hours multiplied by rate.
2. Complete the element eligibility information for the element and its associated retroactive and its related elements, including the result element, and the element with a suffix of CIR.
3. After you run the process to convert your elements, submit the Compile Formula process in the Manage Payroll Calculations work area. Perform a bulk compile by entering wild cards in the Formula and Formula Type parameters.

Generate Time Card Fields for Your Elements

After creating elements, generate time card fields for them. For Time and Labor, perform the processes listed in the following table using the Define Time and Labor task list in the Setup and Maintenance work area.

Process	Description
Generate Data Dictionary Time Attributes	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. **Caution:** Failure to run the process might negatively impact the setup of time card fields, the validation of payroll time types, or the transfer of time to payroll.
Generate Time Card Fields	Creates time card fields using the data dictionary time attributions for the specified legislative data group. You can use the Manage Time Card Fields task to create time card fields for single and multiple attributes.

If you are using a third-party time provider, create an HCM extract for the time card elements. The extract includes the element's mapping ID that you specify in the XML file when you transfer the time entries to payroll.

Setting 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 would 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.

Setting 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 Manage Element Entries task in the Payroll Calculation and search for a person's record. View the available segments on the Costing tab of the Manage 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 could 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.

Use the Manage Element Entries task in the Payroll Calculation work are to view costing overrides transferred to payroll. The results display on the Costing tab of the Manage Person Details page.

Related Topics

- Processing Time Entries in Payroll: Explained

- Elements: How They Hold Payroll Information for Multiple Features

Time Card Required Option: Critical Choices

If a worker's pay calculations depend upon the worker submitting time cards, you must indicate that a time card is required at the appropriate employment level. Select the Time Card Required check box at the Terms level, or for each assignment level that the requirement applies. Don't select the Time Card Required check box 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

Selecting the Time Card Required Option

Your role determines where typically you select the Time Card Required check box:

- HR specialists can select the check box on the Employment Information page of the new hire flow.
- Payroll managers and payroll administrators can select the Manage Payroll Relationship task in the Payroll Calculations or Payroll Administration work areas. The Payment Details section of the Manage Person Details page includes the Time Card Required check box on the Terms and Assignment sections.

The following table shows which hours the payroll calculation 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

- Processing Time Entries in Payroll: Explained

Net-to-Gross Earnings: How They're Calculated

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 a guaranteed take-home pay (net) per payroll period, or a bonus of a specified net amount. To create an earnings element, use the Manage Elements task in the Payroll Calculation work area.

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

You define which deductions are used to calculate the gross amount from the specified net amount.

You must create the element as a gross-up element by answering Yes to the question "Use this element to calculate a gross amount from a specified net amount?"

In each element entry, you 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 can't be zero.

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 do the following:

1. The predefined iterative formula, GLB_EARN_GROSSUP, 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 sets the lower gross limit to the desired net amount, and the higher gross limit to twice the desired amount. Then it runs a function to provide the first guess of the gross. The formula returns three values to the element's input values: low gross, high gross, and additional amount.
3. The element's payroll formula runs. It adds the additional amount to the desired amount to create the gross amount and 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, then the iterative processing ends.
    - If the additional amount is above or below the balance total by an acceptable margin, then the processing ends and 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

- Element Eligibility: Explained
- Using Formula Components: Explained
- Element Input Values: Explained

Creating a Net-to-Gross Earnings Element: Worked Example

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 determine the following:

Decisions to Consider	In This Example
What is the primary classification of this earnings?	Supplemental Earnings
Is the element recurring or nonrecurring?	Nonrecurring
Who is the bonus recipient?	Linda Swift
How much is the bonus?	1000 USD
What is the allowed difference between the specified bonus and the actual amount paid?	.05 USD

Creating the Earnings Element

Perform the following steps to create the element:

1. In the Payroll Calculation work area, click **Manage Elements**.
2. Click **Create** and then select the values shown in the table in the Create Element window.

Field	Value
Legislative Data Group	US LDG
Primary Classification	Supplemental Earnings
Secondary Classification	Bonus
Category	Standard

3. Click **Continue**.
4. On the Create Element: Basic Information page select the values shown in the table.

Field or Question	Value
Name	Bonus
Reporting Name	Bonus
Effective Date	01/01/2013
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
Does the element recur each payroll period, or does it require explicit entry?	Nonrecurring
Process and pay element separately or with the other earnings elements?	Process separately and pay separately **Note:** All gross-up earnings elements must be processed and paid separately from other elements.

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.
Use this element to calculate a gross amount from a specified net amount?	Yes

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.

Input Value	Description
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.

Creating Eligibility Rules

Perform the following steps to 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**.

Reviewing Iterative Processing Order

Perform the following steps to review the 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 is 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.

Including 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**.

Creating an Element Entry

In this example, create the element entry for the bonus for Linda Swift.

1. In the Payroll Calculation work area, select **Manage Element Entries**.
2. In the Name field, enter **Swift, Linda**.
3. In the Legislative Data Group field, select **US LDG**.
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**.

> **Note:** If you want to pay a net-to-gross element, without the net-to-gross processing, add the flat amount in the Amount field. This amount will be the gross paid. It will be reduced by the applicable deductions.

13. In the To Within field, enter **.05**.
14. Click **Submit**.

Related Topics

- Balances in Net-to-Gross Calculations: Points to Consider

File Format for Importing Absence Entries to Payroll

When you submit the Load Absence Batches process, you specify the attachment for the XML file that contains the absence data. This topic explains the XML file format and XML tags you must use in the file.

You submit the Load Absence Batches process from the Payroll Administration work area. The process creates a new calculation card or updates an existing card for each worker whose absence information is transferred.

XML File Format for Importing Absence Information to Payroll

When you create a file to transfer absence information to payroll, use the following format.

```
<ABSENCE_LIST>
 <ABSENCE>
 <ABSENCE_TYPE>
 <ACTION>
 <ABSENCE_ID>
 <MAPPING_ID>
 <MAPPING_NAME>
```

```
<LDG_ID>
<LDG_NAME>
<HR_TERM_ID>
<TERM_NUMBER>
<HR_ASSIGNMENT_ID>
<ASSIGNMENT_NUMBER>
<ABSENCE_RATE_ID>
<ABSENCE_RATE_NAME>
<ABSENCE_UNIT>
<ABSENCE_UOM>
<ADJUSTMENT_UNIT>
<FACTOR>
<CALCULATION_DATE>
<PERIODICITY>
<ABSENCE_START>
<ABSENCE_END>
<ABSENCE_DATE_LIST>
<ABSENCE_DATE>
<LEAVE_DATE>
<ACCRUED_DATE>
<OVERRIDING_FACTOR>
<OVERRIDING_RATE_ID>
<OVERRIDING_RATE_NAME>
<OVERRIDING_UOM>
<OVERRIDING_UNIT>
<\ABSENCE_DATE>
<\ABSENCE_DATE_LIST>
<\ABSENCE>
<\ABSENCE_LIST>
```

XML Tags

This table describes the purpose of the tags used in the XML file.

XML Tag	Description
ABSENCE_LIST	Outermost tag that contains a set of absences.
ABSENCE	Tag containing information about a particular absence.
ABSENCE_TYPE	Type of absence that is being transferred to payroll, such as accrual, accrual with entitlement, or entitlement.
ACTION	Type of action that will be performed, such as CREATE, REMOVE, and MODIFY.
ABSENCE_ID	Unique identifier for the absence from the source application. Never use the same ID twice to identify another absence.
MAPPING_ID	Identifier for the payroll component definition, which is used to create the absence in payroll.
MAPPING_NAME	Name used for the mapping.
LDG_ID	ID of the legislative data group associated with the record.

XML Tag	Description
LDG_NAME	Name of the legislative data group associated with the record.
HR_TERM_ID	Unique ID for the HR Terms. You can provide either the TERM_NUMBER or the HR_ TERM_ID. If you provide the TERM_NUMBER then you must also provide the legal employer details.
TERM_NUMBER	Number that identifies the employment terms for the absence.
HR_ ASSIGNMENT_ID	This is the HR Assignments unique ID. You can provide either the ASSIGNMENT_ NUMBER or the HR_ ASSIGNMENT_ID. If you provide the ASSIGNMENT_ NUMBER then you must also provide the legal employer details.
ASSIGNMENT_ NUMBER	Number that identifies the employment assignment for the absence.
ABSENCE_ RATE_ID	Unique identifier for the absence rate.
ABSENCE_ RATE_NAME	Name of the rate used to calculate the payment amount.
ABSENCE_UNIT	Unit of time in which the absence is recorded.
ABSENCE_UOM	Unit of measure being used for the absence (for example, days, hours or weeks).
ADJUSTMENT_ UNIT	Unit of time in which an adjustment is being made to the absence.
FACTOR	Factor that is used in the calculation of the absence.
CALCULATION DATE	Date used for payroll calculations, such as the payment calculation for maternity leave based on the baby's due date.
PERIODICITY	Used with the amount or rate, the periodicity is the frequency that determines the absence rate.
ABSENCE_START	Date the absence started.
ABSENCE_END	Date the absence ended.
ABSENCE_ DATE_LIST	List of dates in which the absence occurred.
ABSENCE_DATE	Date the absence is being reported.
LEAVE_DATE	Date on which the leave of absence occurred.
ACCRUED_DATE	Date on which the absence was accrued.
OVERRIDING_ FACTOR	Factor that is being used to override the calculation of the absence.

XML Tag	Description
OVERRIDING_ RATE_ID	Unique identifier for the rate being used to override the absence.
OVERRIDING_ RATE_NAME	Name of the overriding rate that will be used to calculate the absence.
OVERRIDING_UOM	Unit of measure being used to override the absence (for example, days, hours or weeks).
OVERRIDING_ UNIT	Unit of time in which an override is being made to the absence.

Related Topics

- Importing Absence Entries to Payroll: Procedure

File Format for Importing Time Entries to Payroll

You import time entries from a third-party provider by submitting the Load Time Card Batches process from the Payroll Checklist or Payroll Administration work areas. When you submit the process, you specify the batch XML file that includes your time entries. This topic explains the XML file format and XML tags you must use in the file.

You submit the Load Time Card Batches process from the Payroll Administration work area. The process creates a new calculation card or updates an existing card for each worker with time entries included in the batch.

XML File Format for Importing Time Entries

When you create a file to transfer time card entries to payroll, use the following structure.

```
<TIME_CARD_LIST>
<TIME_CARD>...
<ACTION>
<TIME_CARD_ID>
<MAPPING_ID>
<MAPPING_NAME>
<LDG_ID>
<LDG_NAME>
<HR_TERM_ID>
<TERM_NUMBER>
<HR_ASSIGNMENT_ID>
<ASSIGNMENT_NUMBER>
<LEGAL_EMPLOYER_ID>
<LEGAL_EMPLOYER_NAME>
<TIME_CARD_START>
<TIME_CARD_END>
<TIME_ITEM_LIST>...
<TIME_ITEM>
<TIME_TYPE>
{
<PAYMENT_RATE_ID>
<PAYMENT_RATE_NAME> |
<RATE_AMOUNT>
<PERIODICITY>
```

```
<FACTOR> |
<AMOUNT>
<PERIODICITY>
}
<TIME_UNIT>
<TIME_UOM>
<TIME_ITEM_START>
<TIME_ITEM_END>
<COST_SEGMENTS>
<SEGMENT1..30>
</COST_SEGMENTS>
<PROPERTIES_LIST>..
<PROPERTY_ITEM>
<NAME>
<VALUE>
</PROPERTY_ITEM>
</PROPERTIES_LIST>
</TIME_ITEM>
</TIME_ITEM_LIST>
</TIME_CARD>
</TIME_CARD_LIST>
```

XML Tags

This table describes the purpose of the tags used in the XML file.

XML Tag	Description
TIME_CARD_LIST	Parent tag that contains a set of time cards.
TIME_CARD	Object that contains the information about a specific time card.
ACTION	Action to perform, such as CREATE, REMOVE, MODIFY.
TIME_CARD_ID	Unique identifier for this time card.
MAPPING_ID	Identifier for the payroll component definition. Specify the Mapping ID or the Mapping Name. If none is included, the process uses the default interface type Import Time XML and attempts to find a mapping.
MAPPING_NAME	Name used for the mapping. Specify the mapping name or the mapping ID. If none is included, the process uses the default interface type Import Time XML and attempts to find a mapping.
LDG_NAME	Name of the legislative data group (LDG) for this record. Specify the identifier or name of the LDG. All the records in the XML file must belong to the same LDG. If you don't include the LDG_ID or the LDG_NAME, the application uses the legislative data group you entered for the Load Time Card Batches process.
LDG_ID	Identifier for the LDG for this record.

XML Tag	Description
	Specify the identifier or name of the LDG. All the records in the XML file must belong to the same LDG. If you don't include the LDG_ID or the LDG_NAME, the application uses the LDG you entered for the Load Time Card Batches process.
TERM_NUMBER	Number that identifies the employment terms for the time entry.
ASSIGNMENT_ NUMBER	Number that identifies the employment assignment for the time entry.
TIME_ CARD_START	Start date of the time card.
TIME_CARD_END	End date of the time card.
TIME_ITEM_LIST	Tag that contains a set of time items.
TIME_ITEM	Object that contains information about a specific hour item.
TIME_TYPE	Name supplied by the time application that maps to the payroll element and calculation component.
PAYMENT_ RATE_ID	Identifier for the rate definition used to calculate the payment amount.
PAYMENT_ RATE_NAME	Name of the rate definition used to calculate the payment amount.
RATE_AMOUNT	Actual rate used to calculate the payroll amount.
AMOUNT	Flat amount used to calculate the rate based on periodicity.
PERIODICITY	Frequency that determines the rate value, used with amount or rate amount.
FACTOR	Multiplier applied to the derived rate to calculate the payment amount.
TIME_UNIT	Number of units for the Unit of Measure specified in TIME_UOM. For example, if the UOM is hours, 8 units is 8 hours worked.
TIME_UOM	Unit of measure for specifying time unit, such as hours.
TIME_ ITEM_START	Start time for the time entry.
TIME_ITEM_END	Ending time for the time entry.
COST_SEGMENTS	List of the costing segments.
PROPERTY_LIST	Set of properties for the time item.
PROPERTY_ITEM	Additional information that is captured. For example, a value definition for the property item State would return State and the name of the State.

XML Tag	Description
NAME	Name of a property for the time item.
VALUE	Value of a property for the time item.

Related Topics

- Prerequisite Payroll Setup for Importing Time Entries: Explained
- Importing Time Card Entries to Payroll: Procedure

12 Deductions

Creating Voluntary and Pre-statutory Deductions: Procedure

Use the Manage Elements task to create voluntary and pre-statutory deductions, such as pensions. You manage pension deductions through calculation cards or element entries, depending on country-specific rules. You manage other voluntary deductions, such as gym membership, union membership, and charity donations, through element entries.

Use these steps to set up deductions:

1. Create the elements.
2. Create the third-party payees.
3. Create a third-party payment method for each third-party payee.
4. Enter the deduction details for each person, which can be done in the following ways, depending on the deduction type and your setup:
    - Create a Benefits and Pensions calculation card.
    - Create an element entry.
    - Load benefit batches.

Creating Elements

When you create a pension plan deduction, if you select the **Benefit** category, or it's selected for you, the element template creates a calculation component. You add this component to Benefits and Pensions calculation cards to assign it to your workers.

To create other voluntary deductions:

- Select the **Standard** category.
  This selection means that you manage these deductions using the Manage Element Entries page.
- After creating the element, you must add a Payee input value and select **Third-Party Payee** as the special purpose for this input value.
  If appropriate, you can enter a default value on the element or element eligibility record to populate the third-party payee details.

Creating Third-Party Payees

To create third-party payees use the Manage Third Parties page in the Payment Distribution work area. For pensions, select the **Organization** payee type and select the **Pension Provider** party usage code.

Creating Third-Party Payment Methods

To create payment methods for all external payees, use the Manage Third-Party Payment Methods task in the Payment Distribution work area.

Entering Deduction Details for Each Person

For pensions created with the Benefit category, create a Benefits and Pensions calculation card for the worker, add your new pension calculation component to the card, and enter the payee and other details.

If you load your pension information using the Load Benefit Batches process, the payroll application creates the calculation card automatically. Before running this process, you must create an XML file that contains the data you want to transfer to payroll.

For other voluntary deductions, create element entries. If the payee is not defaulted from the element or eligibility record, enter the payee on the element entry.

Related Topics

- Creating a Personal Calculation Card: Worked Example
- Creating Third-Party Payment Methods: Procedure

Creating Elements for Pension Deductions: Worked Example

This example shows you how to create a pension deduction element using an element template. Follow these steps in the Payroll Calculation work area:

1. Create a pension deduction element
2. Create an eligibility record for the deduction

Creating a Pension Element

1. In the Payroll Calculation work area, click **Manage Elements**.
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
Category	Benefit

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. The following 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 numerical value
Pensionable earnings limit	Minimum and maximum amount
Additional contributions allowed	Yes, or no. If yes, select calculation rule.
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**.

Entering Calculation Values for Pensions: Points to Consider

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, as described in this topic. If you use the Load Benefit Batches process to transfer values from a benefits application, this process creates the calculation cards for you and enters the contribution amounts and limits.

Default Contribution Amounts and Limits

You enter some 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 Manage 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 on the Calculation Cards tab.

Enterable Calculation Values for Pensions

To enter or override a calculation value for one worker, follow these steps:

1. Open the worker's Benefits and Pension calculation card on the Manage 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.

Field	Required	Default Provided at Element Setup	Values
Additional Employee Contributions	N	N	Percentage or flat amount as per element setup, if additional contributions are allowed.
Minimum Age	N	Y	Numerical age
Maximum Age	N	Y	Numerical age
Maximum Contribution Amount	N	Y	Numerical amount
Minimum Pensionable Earnings	N	Y	Numerical amount
Maximum Pensionable Earnings	N	Y	Numerical amount
Partial Deduction Allowed	Y	Y	Values = Y or N

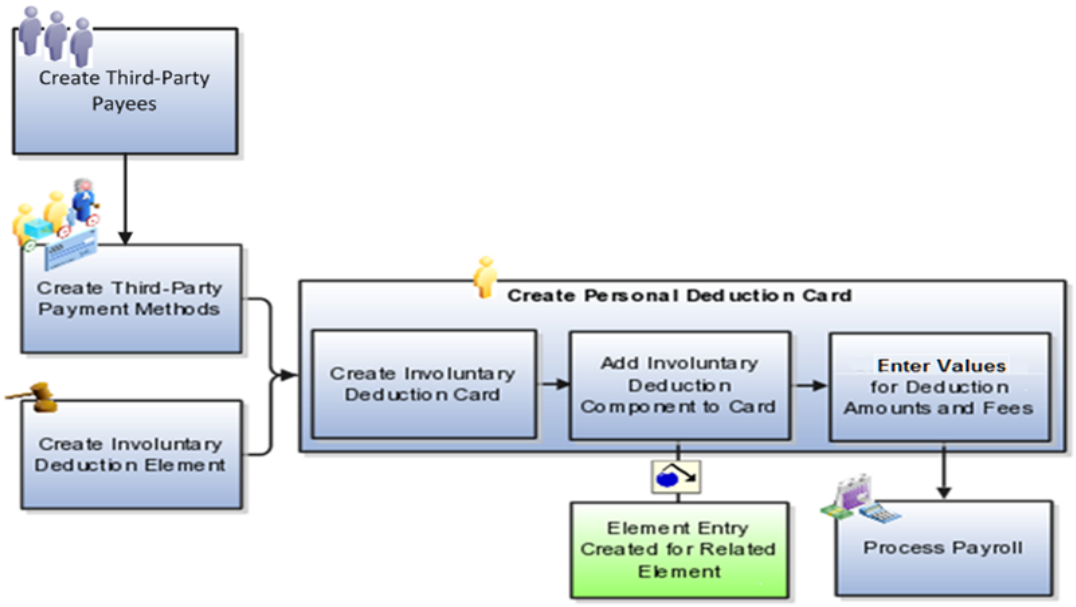
If the element was set up to allow an employer contribution, you will also see these enterable values:

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	Numerical entry
Maximum Age Limit for Employer Contribution	N	Y	Numerical entry
Maximum Contribution Amount for Employer Contribution	N	Y	Numerical amount
Minimum Pensionable Earnings Limit for Employer Contribution	N	Y	Numerical amount
Maximum Pensionable Earnings Limit for Employer Contribution	N	Y	Numerical amount

Adding Involuntary Deductions to a Calculation Card: Procedure

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 Administration or Payroll Calculation work area, click the **Manage 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 Manage 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 tab, complete the fields as shown in the following table. The values you can 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 and 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.

Calculation Value	Description
	If you leave the Frequency field blank, this amount is deducted at the payroll frequency defined at the terms or 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 is exempt from this deduction. Only pay exceeding this amount will be included in the deductible amount (available for the deduction).
Exemption Percentage	Percentage of the employee's pay that is exempt from this deduction.

Related Topics

- Creating Third Parties: Points to Consider
- Creating Third-Party Payment Methods: Procedure

Fee and Proration Rules for Involuntary Deductions: Explained

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's insufficient money to pay them all, pay the deductions in the order in which they were received, starting with the oldest.

Involuntary Deduction Processing: Examples

Processing rules may vary by the legislation or the legal authority issuing the order for an involuntary deduction. These examples illustrate the processing of fees, protected pay amounts, and when employees have multiple assignments and payrolls.

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: A US employee is issued a court order for a monthly garnishment of 500 USD. 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 10 USD one-time initial fee
- A 10 USD monthly processing fee

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 USD.
- 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 USD.

- In subsequent payroll runs, the order amount and the processing fee are deducted. The total deduction amount is 510 USD.

Deduction Amount Exceeds Protected Pay Amount

Scenario: A UK employee is issued a court order for the amount of 100 GBP per month. However, protected pay rules defined for the deduction require that the employee take home at least 700 GBP, 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 GBP.
- A 100 GBP deduction amount would leave only 650 GBP for the final pay amount. Therefore, only 50 GBP is deducted for the month.
- The remaining balance of 50 GBP 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 USD 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 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 50 USD can be deducted, leaving an amount owed of 150 USD 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 USD.
- The monthly payroll runs before the next weekly payroll is run. The remaining 150 USD 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: A UK employee 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 GBP available for other deductions.
- Child Support 2 is paid an amount of 400 GBP (1000 less protected pay of 600).
- Child Support 3 is not paid. The total amount is placed in arrears, based on processing rules defined for the deduction.

File Format for Importing Pension Deductions to Payroll

When you submit the Load Benefit Batches process, you specify the attachment for the XML file that contains the benefit data. This topic explains the XML file format and XML tags you must use in the file. You submit the Load Benefit Batches process from the Payroll Checklist or Payroll Administration work areas. The process creates a new calculation card or updates an existing card for each worker whose pension information is transferred.

XML File Format for Importing Pension Deductions to Payroll

When you create a file to transfer pension deduction information to payroll, use the following format.

```
<BENEFIT LIST>
<BENEFIT>...
<ACTION>
<BENEFIT_ID>
<MAPPING_ID>
<LDG_ID>
<LDG_NAME>
{
<HR_TERM_ID>
<TERM_NUMBER>
<HR_ASSIGNMENT_ID>
<ASSIGNMENT_NUMBER>
}
<LEGAL_EMPLOYER_ID>
<LEGAL_EMPLOYER_NAME>
<BENEFIT_START>
<BENEFIT_END>
{
<BENEFIT_RATE_ID>
<BENEFIT_RATE_NAME> |
<AMOUNT>
<PERIODICITY>
<BENEFIT_MAX_ELECTION>
<BENEFIT_REF_NUMBER>
}
</BENEFIT>
</BENEFIT_LIST>
```

XML Tags

This table describes the purpose of the tags used in the XML file.

XML Tag	Description
BENEFIT_LIST	Outermost tag that contains a set of benefits.
BENEFIT	Tag containing information about a particular benefit.
ACTION	The type of action that will be performed, such as CREATE, REMOVE, and MODIFY.

XML Tag	Description
BENEFIT_ID	Unique identifier for the benefit from the source application. Never use the same ID twice to identify another benefit.
MAPPING_ID	Identifier for the payroll component definition, which is used to create the benefit in payroll.
LDG_ID	ID of the legislative data group associated with the record.
LDG_NAME	Name of the legislative data group associated with the record.
HR_TERM_ID	Unique ID for the employment terms. You can provide either the TERM_NUMBER or the HR_ TERM_ID. If you provide the TERM_NUMBER then you must also provide the legal employer details.
TERM_NUMBER	Number that identifies the employment terms for the pension deduction.
HR_ ASSIGNMENT_ID	Unique ID for the assignment. You can provide either the ASSIGNMENT_ NUMBER or the HR_ ASSIGNMENT_ID. If you provide the ASSIGNMENT_ NUMBER then you must also provide the legal employer details.
ASSIGNMENT_ NUMBER	Number that identifies the employment assignment for the pension deduction.
LEGAL_ EMPLOYER_ID	ID of the legal employer name that the term or assignment belongs to.
LEGAL_ EMPLOYER_NAME	Legal employer name that the term or assignment belongs to.
BENEFIT_START	Start date of the benefit.
BENEFIT_END	End date of the benefit.
BENEFIT_ RATE_ID	ID of the rate that will be used to calculate the payment amount.
BENEFIT_ RATE_NAME	Name of the rate that will be used to calculate the payment amount.
AMOUNT	Amount that is used to calculate the rate using the periodicity.
PERIODICITY	Used with the amount or rate, the periodicity is the frequency that determines the rate value.
BENEFIT_ MAX_ELECTION	Annual maximum election amount that can be processed.
BENEFIT_ REF_NUMBER	Employee's reference number with the provider of the pension (benefit organization).

Related Topics

- Running the Load Benefit Batches Process: Procedure

13 Proration and Retroactive Pay

Payroll Event Groups: Explained

A payroll event group defines the types of data changes that trigger retroactive event notifications or prorated calculation of a person's earnings or deductions.

There are two types of payroll event groups:

- Proration
- Retroactive

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
- 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, terms, 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.

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.

Entity	Update Type	Attribute
Element Entry Value	Correction	SCREEN_ ENTRY_VALUE

Entity	Update Type	Attribute
Element Entry	Update	EFFECTIVE_ START_DATE
Element Entry	Update	EFFECTIVE_ END_DATE
Element Entry	Logical Date Change	
Element Entry	Insert	
Element Entry	Delete Changes	

Related Topics

- How can I create an element for retroactive processing?

Setting Up Element Proration: Procedure

Proration calculates proportionate amounts for recurring elements when payroll-relevant data changes during a payroll period, such as a person joining the enterprise or a mid-period pay increase. Proration creates two payroll run results: one for the payroll period up to the day before the event, and one 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.

To set up element proration, you:

- Review the predefined proration event group to ensure that it includes changes you want to track, and optionally update the event group or create a new group
- Enable proration processing for an element

Reviewing the Predefined Event Group

When you create or update a recurring element, you can make it subject to proration.

1. In the Payroll Calculation work area, select the Manage Event Groups task.
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.

Enabling Proration Processing for an Element

To enable proration:

1. Select the Manage Elements task 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 method.

Related Topics

- Creating and Assigning a Work Schedule: Worked Example

Prorated Earnings and Deductions: How They're Calculated

Select from a number of different types of proration methods when creating a standard or supplemental earnings element. You select the calculation method when you create the element using the Manage Elements task in the Payroll Calculation work area. The options include calculating the prorated values based on calendar days, working days and working hours.

This topic covers:

- How deductions are calculated
- How prorated earnings are calculated
- How elements based on work schedules are calculated
- Example of earnings calculation based on work schedule
- Example of earnings calculation based on calendar days

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 involuntary deduction for a fitness center membership. If you use the predefined global proration formula for deductions (GLB_DEDN_PRORATION), the proration value is the periodic value multiplied by the number of calendar days in the proration period and 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.

How Elements Based on Work Schedules Are Calculated

The proration formula calculates elements at the assignment, terms, and payroll relationship level. The formula identifies whether a work schedule exists for a person. It checks for a schedule at the assignment level and continues in the following order until it finds a schedule.

1. Assignment

2. Position
3. Job
4. Department
5. Location
6. Legal Employer
7. Enterprise

To ensure you accurately calculate prorated elements for a payroll period:

- Ensure that a work schedule assigned to a person exists at the start date of the payroll period in which you are paying the person.
- If a person has multiple assignments for a term, create the work schedule at the terms level or the assignment level, but not at both levels. Setting up schedules at both levels can produce calculation errors.

Example: Earnings Calculation Based on Work Schedule

The formula calculates proration results as shown in the following table.

Work Schedule Proration Method	Proration Calculation
Working Days and Fixed Rate	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: 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 1 December to 9 December, and 16 working days from 10 December to 31 December.	(6*25000)/260 + (16*30000)/ 260 = 576.92 + 1846.15 = 2423.07
Working Hours and Fixed Rate	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.	(10*25000)/ 2080 + (30*30000)/ 2080 = 120.19 + 432.69 = $552.88

Work Schedule Proration Method	Proration Calculation
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.	

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.

Example: Earnings Calculation Based on Calendar Days

The formula calculates proration results as shown in the following table.

Calendar Days Proration Method	Proration Calculation
Calendar Days and Fixed Rate	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
Calendar Days and Variable Rate	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

Customizing Conversion Formulas for Proration: Procedure

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 is a change to an element entry value. You can copy and edit a predefined proration formula to customize the calculation. You then select the custom formula as the proration formula for your element.

Creating a Formula

As a prerequisite, create a customized rate conversion before you create its related proration conversion rule. Follow these rules to write a formula:

1. Select the formula type called Payroll Run Proration.
2. Search for and copy the predefined Rate Conversion Proration formula.
3. Add the suffix underscore PRORATE to the name (_PRORATE).
4. Update the 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 customized version.

Related Topics

- Periodicity Conversion: Explained

Retroactive Pay: How It Is Calculated

Retroactive pay is the recalculation of prior payroll results due to changes that occur after the original calculation was run. To process retroactive pay, run the Recalculate Payroll for Retroactive Changes process. This process creates retroactive element entries based on retroactive events. You can view automatically-created retroactive events or create them manually. Only elements that are set up to include a retroactive event group can have retroactive element entries.

Examples of prior period adjustments that could trigger a retroactive event are:

- An employee receives a pay award that is backdated to a previous pay period.

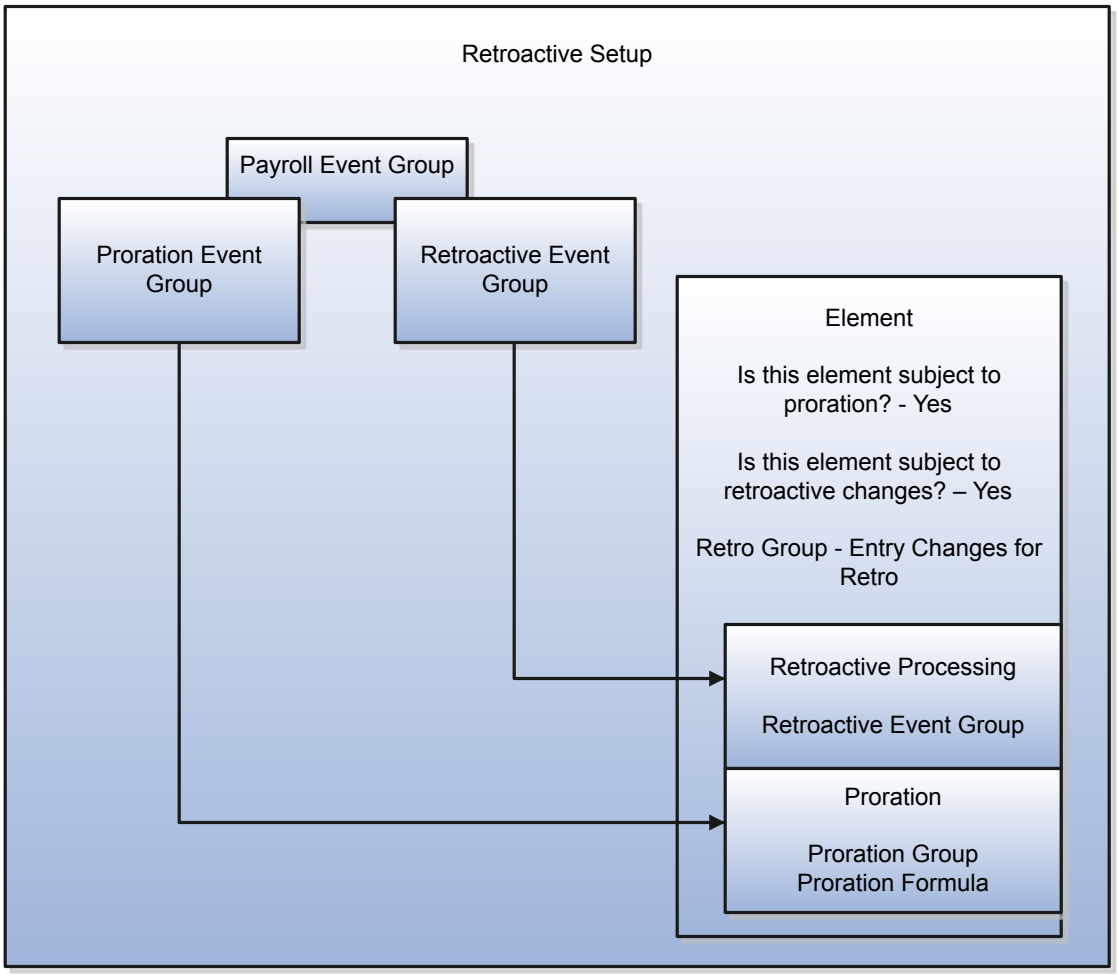
- The payroll department makes a backdated correction for an error that occurred in a previous pay period.

Settings That Affect Retroactive Pay

To enable retroactive processing of an element:

1. On the Manage Event Groups page, review the types of changes that automatically trigger a retroactive notification for the predefined event group, which is called Entry Changes for Retro. You can edit this group or create a new event group for the element, if required.
2. On the Create Element: Additional Details page, select **Yes** for the following questions:
    - Is this element subject to proration?
    - Is this element subject to retroactive changes?
3. Select the predefined event group or a new group that you have created.

This figure illustrates retroactive setup.



How Retroactive Pay Is Calculated

To process retroactive pay:

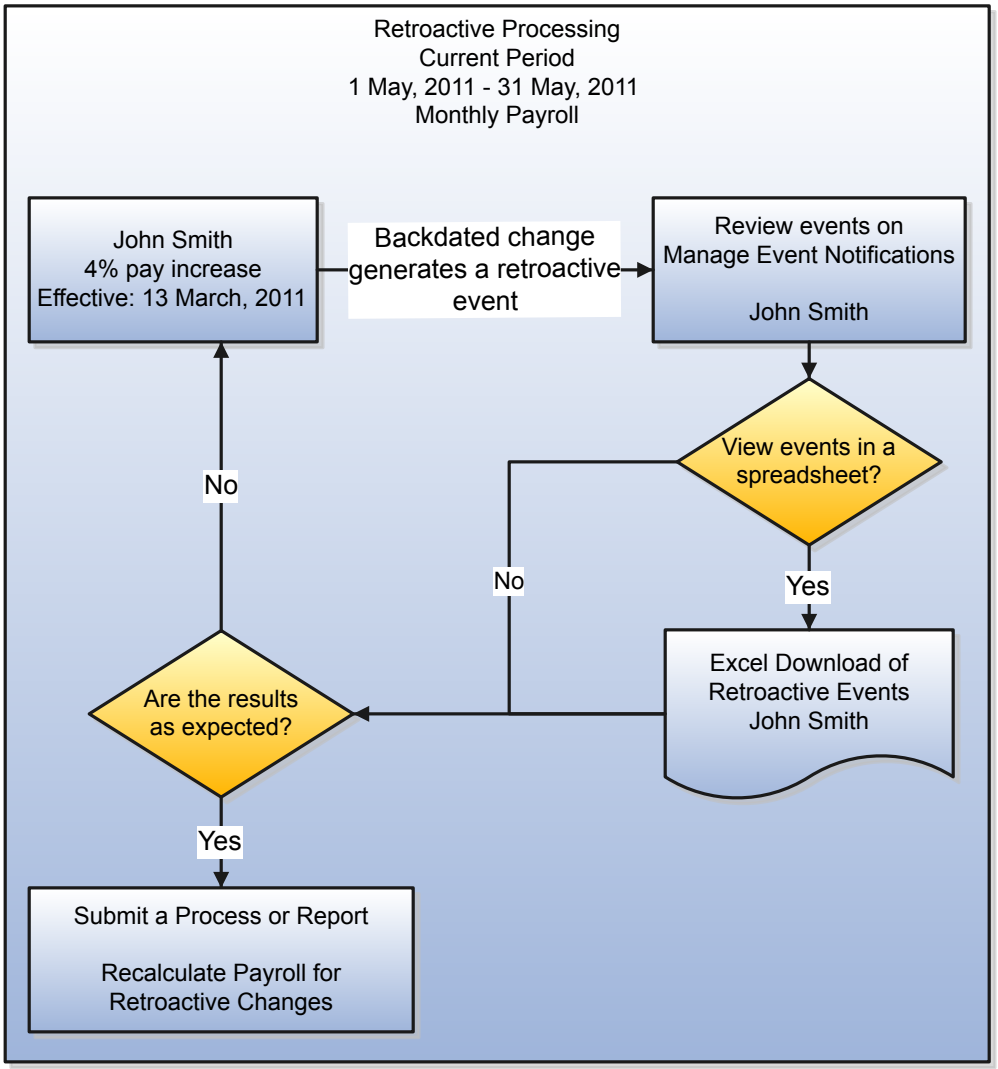
1. In the Payroll Calculation work area, review or create retroactive events on the Manage Event Notifications page. You can download results to Excel to view retroactive events in a report format.
2. Submit the Recalculate Payroll for Retroactive Changes process. You can use the Submit a Process or Report task, or the process may run automatically as part of your payroll flow. This process never overwrites historical payroll data. Instead, it creates one or more retroactive entries to receive the process results.
3. Run the Calculate Payroll process.

Note: Always run the Recalculate Payroll for Retroactive Changes process immediately before you run a payroll. If you run it after the Calculate Payroll process, retroactive adjustments are held over until the next payroll period.

If you do not get a retroactive notification that you expect to get, review:

- The originating transaction causing 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

This figure illustrates retroactive processing for a person getting a pay increase retroactively.



Adding a Retroactive Event Manually: Worked Example

Normally you create retroactive adjustments, such as backdated salary changes, which automatically create retroactive events. This example shows how to create a retroactive event manually. In this example an employee, whose pay rate was supposed to change last pay period, is being terminated. Payroll hasn't made the change yet, so we need to add the retroactive event manually to generate the correct payslip

Creating a Payroll Relationship Event

1. Select the Manage Event Notifications task in the Payroll Calculation work area. On the Manage Event Notifications page.
2. Click **Create**.
3. In the Create Payroll Relationship Event window, complete these fields.

Field	Value
Approval Status	Awaiting Processing
Payroll Relationship	The person to process
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**.

Creating a Retroactive Event

1. On the Manage Event Notifications page, click the name of the person associated with the event you created.
2. On the Manage Retroactive Events page, click **Create** in the Entry Details section.
3. Select the element you want to reprocess, the date from which to recalculate payroll runs, and a retroactive component.

   The retroactive component is the element from which the change in pay will be paid to the person.
4. Repeat the previous step if you want to recalculate multiple elements for this payroll relationship.
5. Click **Submit**.

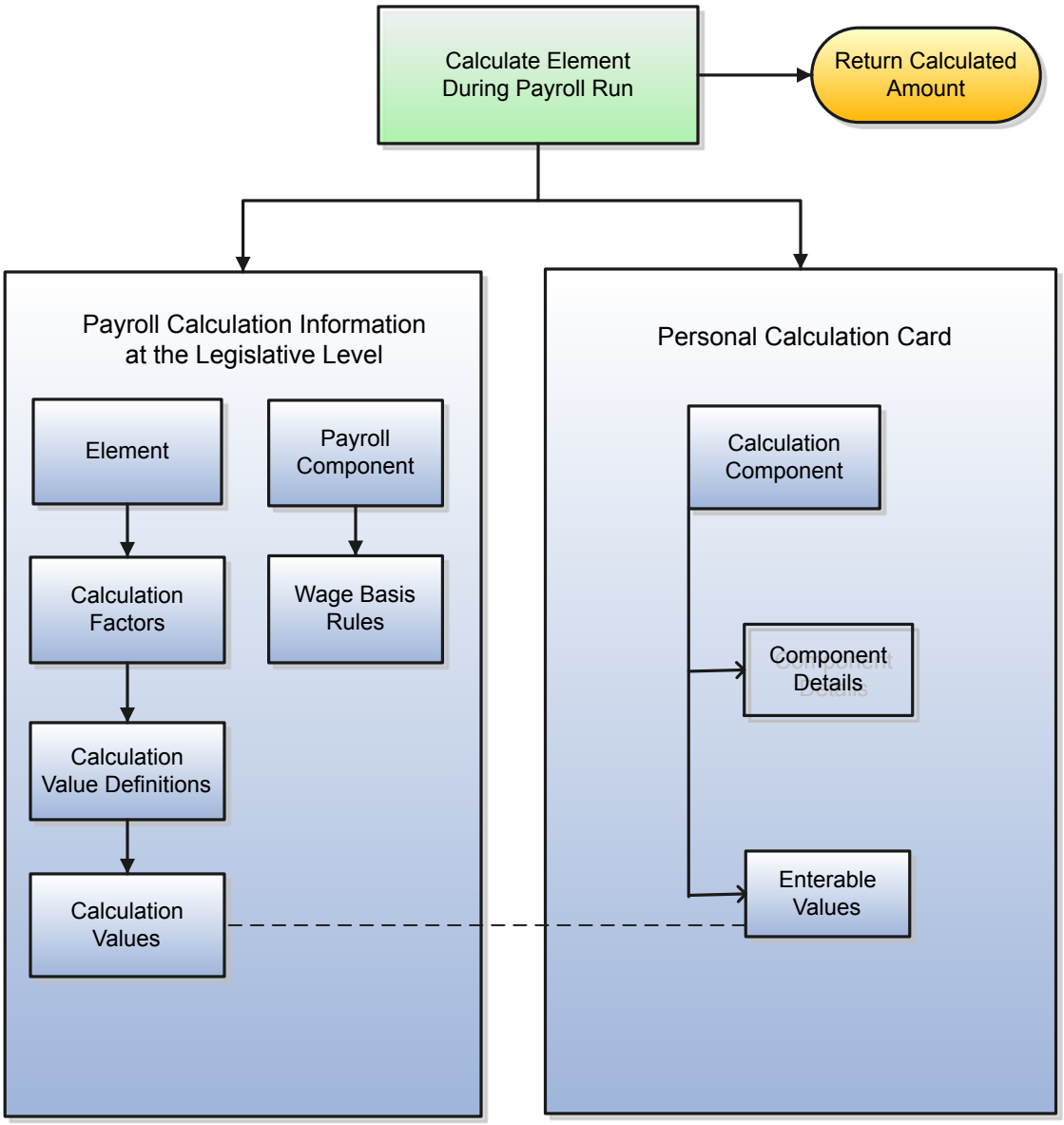
14 Calculation Information

Payroll Calculation Information: Explained

When you create an element, the application generates the rules and definitions required to calculate an earnings or deduction amount. For all types of elements, these rules and definitions include elements, formulas, and processing rules. This topic explains the additional rules and definitions generated for certain classifications and categories of elements, such as involuntary deductions, absence information, and time card entries.

The following figure shows the relationship between the payroll calculation information held at the legislative data group level and the values you can enter on a personal calculation card.

> **Note:** In some countries or territories you can also create calculation cards for a specific tax reporting unit (TRU) or payroll statutory unit (PSU) to capture information such as an employer's contribution rate.



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
Elements	Elements specify how and when an earnings or deduction should be processed. When you create an element, several related elements are typically created with the same name prefix. You can view the related	Use the Manage Elements task to create elements and to view the generated elements and related items. After creating an element: • You must add eligibility rules

Calculation Information	Description	Task
	elements and other generated items on the Element Summary page, including: • Status processing rule - specifies the formula that processes the element entries • Input values - values that can be entered for, or returned from, the calculation	• You may want to add: o Input values o Status processing rules o Frequency rules o Subclassifications o Balance feeds
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 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.	Manage Payroll Calculation Information task to view payroll components and their associated rules.
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 Manage Component Group Rules task to define the rules and references. Use the Manage 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 Manage 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.	Use the Manage Component Group Rules task to view calculation factors defined for a component group. Use the Manage 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

Calculation Information	Description	Task
	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.	the element's payroll formula to use the new calculation factors.
Calculation components	Calculation components are individual calculations captured on a calculation card. 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 Manage Calculation Cards task to enter calculation components for a person.

Related Topics

- Adding Involuntary Deductions to a Calculation Card: Procedure

Payroll Calculation Information at the Legislative Level: Examples

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

- **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 Status Reference Value	Calculation Step	Calculation Method	Calculation Value Definition	Values
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% 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.

Calculation Cards

Creating Calculation Cards for Deductions at Different Levels: Examples

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: Manage Calculation Cards task in the Payroll Administration work area.

Tax Reporting Unit Card

Scenario: The income tax exemption amount is 2000 USD at the legislative data group level, but a tax reporting unit in a particular state or province uses an exemption amount of 2500 USD. 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 work area.

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 work area.

Calculation Value Definition

Scenario: You can view the predefined income tax rates for your country, but you cannot edit them.

Task: Manage Calculation Value Definitions task in the Payroll Calculation work area.

If an employer qualifies for a special tax rate, enter these values on a calculation card at the appropriate level.

Related Topics

- Creating a Personal Calculation Card: Worked Example

Calculation Value Definitions

Calculation Value Definitions: Explained

A calculation value definition specifies how a value is provided or calculated. The value is not 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 USD
- Earnings above 50,000 USD

Calculation Value Definitions That are Provided for You

Each localization provides a set of predefined calculation value definitions used to calculate statutory and involuntary deductions. You can't edit predefined calculation value definitions.

In addition, when you create elements for pensions, involuntary deductions, absences, and time cards, the element template creates calculation value definitions based on your selections in the template.

Creating or Editing Calculation Value Definitions

You can create or edit calculation value definitions using the Manage Calculation Value Definitions task in the Payroll Calculation area. For example, you can set defaults, turn the values into a range (0 -100), and make them enterable on the calculation card.

Value Definition Groups

When you create a calculation value definition, you can select an existing group or create a new one. The group categorizes related calculation value definitions. A set of standard groups is delivered with the application and available to all countries or territories.

Examples of value definition groups include:

- City tax information
- Social insurance information

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 Manage Payroll Calculation Information task in the Payroll Calculation work area to view and manage calculation factors.

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)

From Value	To Value	Calculation Type Override	Rate or Amount
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, which means that 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 USD 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 zero between 90 and 100 percent.

Enterable Values on Calculation Cards: Explained

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	Work Area
1	Values for a payroll relationship on any type of calculation card	Manage Calculation Cards	Payroll Calculation or Payroll Administration
2	Values for a tax reporting unit for certain deductions, which vary by country or territory	Manage Legal Reporting Unit Calculation Cards	Setup and Maintenance

Order	Type of Values	Task	Work Area
3	Values for a payroll statutory unit for certain deductions, which vary by country or territory	Manage Legal Entity Calculation Cards	Setup and Maintenance

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:

- For custom 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.

Enterable Value Types

The list of value types available for entry depends on the calculation type. For example, you can allow users to 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.

Calculation Types in Calculation Value Definitions: Explained

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

You can choose from several predefined calculation types, as described in this table:

Calculation Type	Description
Flat Amount	Uses the specified flat amount as the total deduction amount.

Calculation Type	Description
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.
Conditional Flat Amount	Uses the specified flat amount if the condition defined in the Calculation section is met. For example, a person might qualify for an exemption if their filing status is married or head of household. If you select this option, you must specify a database item that provides the value of the condition.
Flat Rate	Applies the specified rate to the balance. For example, to apply a rate of 10 percent, enter 10.
Incremental Rate	Applies a different rate to portions of the balance. For example, assuming that the balance is 80,000 USD, 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.
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.
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. • A, B, and C are specified values. • z is a factor from a predefined formula. The value defaults to 1.
Text	Uses the specified character string as the calculated value.

Specifying 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 that:

- The view objects you can specify vary depending on the calculation type. For example, if the calculation type is **Conditional Flat Amount**, then you can 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

- Personal Calculation Cards: How Their Entries Fit Together

Wage Basis Rules

Wage Basis Rules: Explained

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.

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 Manage Component Group Rules task in the Payroll Calculation work area. The process is summarized below:

1. On the Manage 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 are 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 are setting up rules for a US legislative data group, there's 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.

You must complete the process using these steps:

1. Add the record with the check box deselected.
2. Select the row with the correct combination of deduction and primary and secondary classification.
3. Correct the data.
4. Select the Use in Wage Basis check box.

Wage Basis Rules: Example

To illustrates 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 waitress who receives a salary of 1,000 USD each month plus tips. Brittany is subject to an income tax that is calculated at the rate of 10 percent of the deductible amount, which can vary based on where she lives.

For example:

- In Dover County, tips are included in the deductible amount.
- In Smith County, tips are not included.

This table shows the tax calculations that apply for each region.

Region	Earnings in Salary	Earnings in Tips	Deductible Amount	Deduction Amount
Dover County	1000	1500	2500	250
Smith County	1000	(1500 - Exempt)	1000	100

The wage basis rules for this tax calculation are as follows:

Region (Reference Value)	Primary Classification	Secondary Classification	Use in Wage Basis?
Dover County	Earnings	Salary	Y
Dover County	Earnings	Tips	Y
Smith County	Earnings	Salary	Y
Smith County	Earnings	Tips	N

Region (Reference Value)	Primary Classification	Secondary Classification	Use in Wage Basis?

Calculation Factors

Calculation Factors: Explained

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. 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

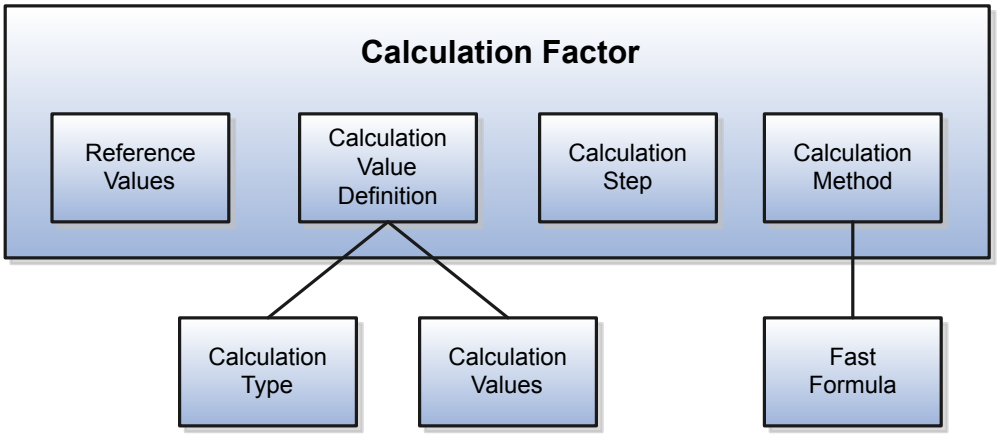
Note: Calculation factors are predefined for statutory and involuntary deductions, and should not need to be changed.

To view and manage calculation factors, follow these steps:

1. Select the Manage Payroll Calculation Information task in the Payroll Calculation work area.
2. Select the payroll 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.

Calculation Value Definition

Each calculation factor is associated with a calculation value definition that 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.

Calculation Step

A calculation step is a label assigned to a calculation factor to identify its role in a complex calculation.

For example, when calculating an income tax deduction, the payroll run might do the following:

1. Calculate the allowance.
2. Calculate any exemption amount.
3. Apply the tax rate to the reduced deductible amount.

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.

Calculation Method

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.

Calculation Factors for Payroll Deductions: Examples

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
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

Filing Status (Reference Value)	Calculation Method	Calculation Steps	Calculation Value Definition	Values
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

FAQs for Calculation Information

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 the **Use in wage basis** option only for those classifications to be considered in the wage basis.

Why can't I create payroll components on the Manage Calculation Information page?

You can view existing components on this page, but you can't create new components. Use the Manage Elements task to create new elements. Creating some elements also creates associated calculation components. These elements can include involuntary deductions, pensions, and absence payment elements.

15 Rate Definitions

Rate Definitions: Explained

You can create rate definitions to calculate compensation rates and other rates, such as accrual rates, using payroll balances, element entry values, or values defined by criteria. If the rate is based on more than one balance or element entry, or if it references other rate definitions, you can specify multiple rate contributors. Use one of these work areas to access the Manage Rate Definitions task: Setup and Administration, Payroll Calculation, or Absence Administration.

Categories

When you create a new rate, you must select a category.

Each category is described in the following table.

Category	Description
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 a value from or posts to an element input value. The element input value must have a special purpose of either Primary Input Value or Factor, as follows: • Select the Primary Input Value special purpose for an amount value, such as a salary figure. • Select the Factor special purpose for a factor value, such as a car allowance that you calculate as 3 per cent of average earnings (factor = 0.03).
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.

Related Topics

- Values Defined by Criteria: Explained
- Manage Values Defined by Criteria: Examples

Creating Rate Definitions: Points to Consider

To create rate definitions you should know how to use the fields in the Returned Rate Details, Override and Defaulting Rules, and Contributor Rules sections to get your desired rate. For rates based on a single element entry value, you can also apply override and defaulting rules.

This table describes the fields that appear in the Basic Details section on the Create Rate Definition page 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 create 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 this field isn't enabled until you select the storage type. Selecting an element automatically fills in the Name and Short Name fields with the element name. If you select the Element category to define a rate, you must select an element name. This is required if you are creating a primary rate. This is a rate which retrieves a value from a single element such as salary. For the Derived Rate category, the Element Name 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. If the contributor value is held at a different level to the employment level defined on the rate, the rates process uses the employment ID to locate the correct record.
Status	Element Derived Rate Value by Criteria	You can set the status of a rate to active or inactive. An inactive rate can't be assigned 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 check box 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

Field	Category	Description
		rate, you only need to define one allowance rate that's calculated based on the two rates that have the Base Rate check box selected.
Overall Salary	Element Derived Rate	If you're defining rates for use on the Salary page, you must use the derived rate category and define an Overall Salary. To do this you must associate a salary element to the rate. It's recommended that you define an Overall Salary Information element for this purpose.
Reporting Required	Element Derived Rate Value by Criteria	Select this check box 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 check box selected are included when the Generate HCM Rates batch process is run. Use this feature to report on primary rates, not derived rates. It's also used for HCM extracts to send data to third parties.
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

Use this section of the page to 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 set up an action that enforces the rule, displays a warning, or forces the user to fix the error. Additionally, you can 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. When you use the rate in a formula, you can, however, 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, the rate calculation then converts them into the return periodicity and currency.

For example, for a rate with a periodicity of weekly using the annualization conversion formula, the rate calculation does the following:

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 the following values:

- 52 weeks in a year
- 12 months in a year
- 260 working days in a year

To specify different conversion rates, you can define your own formula using the Rate Converter formula type and select it in the Periodicity Conversion Formula field.

Factor Rules

You can apply a factor or multiplier to a calculated rate, or to an individual rate contributor. To apply a factor rule:

- 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. If the calculation returns a rate that's outside the minimum or maximum range, you can set up an action if the value is out of the minimum or maximum range.

Use the Limit Violation Action field to display an error, warning, or enforce the system 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 system uses 500 as the value.

The following 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. **Caution:** Be careful that you don't create a loop. For example, Rate A has minimum value that is 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

This tab only displays if you select Element as the category when you create your rate definition. On this tab, you can 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.

> **Note:** You can't define override and defaulting rules if you select the Values by Criteria category to define a rate,

You can select a formula to validate any rate that is returned and also use formulas to create default values.

For example you could use the HCM Rates Default Value formula type to define the number of workdays in a year for your organization.

```
workday = 250
periodicity = YEAR
currency = USD
return workday, periodicity, currency
```

In addition, you can use a value by criteria definition as the default type. In this example, the process uses the value for the first record created and then carries that value forward in subsequent records, unless it's manually overridden. The rate created using the value by criteria method is reevaluated by the rate engine for each subsequent record and could therefore 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

This tab enables you to specify the periodicity for the contributor total. You can also decide to process contributor totals as full-time equivalency amounts by selecting 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.

> **Note:** This tab is not available for rate definitions using the Element and Value by Criteria categories. In addition, you can't define contributor rules if you select the Value by Criteria category to define a rate.

Information

This tab enables you to enter text that instructs or explains the purpose of the rate, how the rate is calculated, or provides further details for the rate. Entering information in this section is optional. This tab is not available for rate definitions using the Value by Criteria categories.

Rate Contributors for Derived Rates: Points to Consider

There are four different types of rate contributors that you can add to your rate definition. 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, you enter 0.1 as the factor on the element input and define a rate contributor based on your average earnings balance.

Fields that are common to the different rate contributor types include: Reference Date, Add or Subtract, Periodicity, Factor Rule, Factor Value, the Minimum and Maximum Rate fields, and Return FTE Rate.

Rate Contributor Types

The following table lists the types of rate contributors, descriptions, and the additional fields that display for each type.

Type	Description	Additional Fields
Balance	Value calculated by payroll processes, such as: • 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:** If the rate definition is an Overall Salary Rate, you can't select Overall Salary as a Contributor Type.	Employment Level
Rate Definition	Enables you to include other rate definitions that contribute to the rate definition you are creating. For example you can add regular salary, car allowance, and bonus pay rate contributors together to create an overall salary definition.	Rate Name

Add and Subtract

Select Add to add the rate contributor to the rate definition. If you want to subtract the information from the rate definition, select Subtract. For example, you may want to subtract an employee's sign-on bonus from their overall salary.

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 the following types of time definitions:

- Time Span - a period of time, such as three months
- Retrieval Date - a type of time definition that is 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 is used by the rate engine to calculate the rate.

Divisional Balance

You can use this field to divide the calculated rate contributor by the balance that you select.

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 the following 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 the following values, which are all paid at the end of the previous year:

- Salary
- Incentive bonus
- Seniority bonus
- Other changeable components of remuneration

Configuring Elements to Use Rate Definitions: Procedure

If you create rate definitions that reference element input values, you must configure them for the different calculation rules: Flat Amount and Factor. This ensures that the values calculated by the rate are consistent with the values processed through payroll. There are a number of important element configuration steps you must complete if you're using the rate feature.

For example, the element should be:

- Recurring
- Assignment level

In addition, you must:

- Not select the Multiple Entries Allowed check box.

- Select a special purpose for each element input value:
  - Select Primary Input Value for an Amount value.
  - Select Factor for a Factor value.
  - Select Periodicity for a Periodicity value.

  Note: When creating elements for use in rate definitions, do not select Periodically as a value in the Periodicity field. The Rate Definition process is unable to convert rates with a periodicity of periodically to different frequencies such as annual, weekly, and daily.
- 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.
- Create element eligibility.

To set up payroll processing to create rate definitions, configure elements for the following calculation rules:

- Flat Amount
- Factor

Configuring Elements to Create Rate Definitions for Flat Amount Calculations

Do the following:

1. From the Payroll Calculation work area, click the **Manage Elements** task.
2. Click **Create**.
3. Complete the fields as shown in this table.

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 Durations and Standard Rules sections.

   Note: Multiple entries are not allowed.
8. Select **Assignment Level**.
9. Select **Recurring**.
10. In the Calculation Rules section, select **Flat Amount** and then click **Next**.
11. Click **Submit**.
12. On the Element Summary page under the Input Values folder, select **Full-Time Equivalent**.
13. Check that the following fields and 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
Required	Deselected
Create a Database Item	Selected
Default	No
Lookup Type	PAY_ TMPLT_YES_NO

Configuring Elements to Create Rate Definitions for Factor Calculations

Do the following:

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 the following fields and 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

Testing Your Element Configuration

To test your element configuration, follow the steps below.

Note: These procedures are for payroll customers only.

Step	Page	Action
1	Payroll Dashboard	Find a payroll and an employee that you can use for testing purposes.
2	Manage Elements	For the Flat Amount element use the Pay Value balance feed to enter an Eligible Compensation balance for the Percentage element.
3	Manage 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.
6	View Payroll Process Results	Check if the payroll results are correct.

Creating Rate Definitions for Leave: Worked Example

This example shows how to calculate an employee's absence rate as of a particular date. The rate includes a combination of average salary and car allowance. In this example, the employee has an annual year-to-date salary of 26,000 GBP. The employee also receives an annual car allowance payment of 2,000 GBP. The absence rate is 26,000 + 2,000 = 28,000 GBP. This rate is then converted into a daily rate for the purpose of providing a daily absence rate.

The following table summarizes the key information that you'll use in the examples:

Decisions to Consider	In 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

Creating the Rate Definition

1. In the Payroll Calculation or Setup and Maintenance work area, select the **Manage Rate Definitions** task.
2. In the Search Results section, click **Create**.
3. Complete the fields as shown in this table.

Field	Value
Category	Derived Rate
Effective Start Date	Select a date that is after the creation date of the objects that you are 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 the fields as shown in this table.

Field	Value
Name	Absence Rate - Salary and Car Allowance
Short Name	ABS RATE - SAL/CAR ALLOW

Field	Value

6. In the Returned Rate Details section, select **Daily** as the value for the Periodicity field.
7. Go to the Contributor Rules tab and then select **Yes** as the value for the Process Contributor Total as FTE Amount field.

   The balances referenced need to be populated using payroll runs for the periods covered by the balance dimension or the rate definition will not generate a meaningful value.

Creating Rate Contributors

1. In the Rate Contributors section, click **Create**.
2. Select **Balance** as the Contributor Type and then click **OK**.
3. On the Create Rate Contributors page, complete the fields as shown in this table.

Field	Value
Add or Subtract	Add
Balance Name	Regular Salary
Balance Dimension	Assignment Period to Date
Periodicity	Daily

4. Click **Save and Continue**.
5. Click **Create**.
6. Select **Balance** as the Contributor Type and then click **OK**.
7. On the Create Rate Contributor page, complete the fields as shown in this table.

Field	Value
Add or Subtract	Add
Balance Name	Car Allowance
Balance Dimension	Assignment Period to Date
Periodicity	Daily

8. Click **Save and Continue**.
9. Click **Submit**.
10. Assign an Absence element entry to the employee's assignment.

> **Note:** You will then need to pass the absence entry through to payroll using the absence interface.

Related Topics

- Integrating Absence Management with Global Payroll: Procedure

Creating a Rate Definition for Basic Salary: Worked Example

This example demonstrates how to create a primary rate for a basic salary. After you run the rate engine, the Manage Element Entries - Manage Person Details page displays the values for eligible employees.

Prerequisite

Note: Before you define the rate, 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.

Creating the Basic Salary Rate Definition

1. In the Payroll Administration work area, click the **Manage Rate Definitions** task.
2. Click **Create**.
3. Complete the fields, as shown in this table.

Field	Value
Category	Element
Effective Start Date	Enter the current date.
Legislative Data Group	Enter your legislative data group.

4. Click **OK**.
5. Complete the fields, as shown in this table.

Fields	Value
Storage Type	Amount
Element Name	Regular Salary

6. In the Returned Rate Details section, complete the fields, as shown in this table.

Field	Value
Periodicity	Annual

Field	Value
Periodicity Conversion Formula	ANNUALIZED RATE CONVERSION
Currency	US Dollar

7. Click **Submit**.

Creating Rate Definitions for Overall Salary: Worked Example

This example demonstrates how to create a rate definition for overall salary that includes multiple rate contributors.

The following table summarizes the key decisions for this 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.

In this example, we will:

- Create the overall salary rate definition
- Add the regular salary rate contributor
- Add the car allowance rate contributor

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.

Creating the Overall Salary Rate Definition

1. In the Payroll Administration work area, click the **Manage Rate Definitions** task.
2. Click **Create**.
3. Complete the fields, as shown in this table.

Field	Value
Category	Derived Rate
Effective Start Date	Enter the current date.

Field	Value
Legislative Data Group	Select your legislative data group.

4. Click **OK**.
5. Complete the fields, as shown in this table.

Field	Value
Name	Overall Salary
Short Name	OVERALL_SAL
Element Name	Salary

6. In the Returned Rate Details section, complete the fields, as shown in this table.

Field	Value
Periodicity	Weekly
Periodicity Conversion Formula	ANNUALIZED RATE CONVERSION
Currency	US Dollar

Adding the Regular Salary Rate Contributor

1. In the Calculation section, click **Create**.
2. Enter **Base Rate** in the Contributor Type field and then click **OK**.
3. Complete the fields as shown in this table.

Field	Value
Add or Subtract	Add
Employment Level	Payroll Assignment
Periodicity	Weekly

4. Click **Save and Continue**.

Adding the Car Allowance Rate Contributor

1. In the Calculation section, click **Create**.
2. Enter **Rate Definition** in the Contributor Type field and then click **OK**.
3. Complete the fields as shown in this table.

Field	Value
Add or Subtract	Add
Rate Name	Car Allowance
Periodicity	Weekly
Factor Rule	Value
Factor Value	0.5

4. Click **Save and Continue**.
5. Click **Submit**.

Generating HCM Rates: Procedure

Submit the Generate HCM Rates flow to calculate and store rates for reporting purposes or inclusion in 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.

Rates calculated by this process are restricted to:

- Employees with an Overall Salary rate
- Rates that contribute to the Overall Salary rate
- Rates where the Reporting Required option is selected

Database items are provided 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 is 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	Terms 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
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

Run the process if any of the following 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 prior to 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.

To run the process:

1. In the Payroll Administration work area, select the **Submit a Process or Report** task.
2. Select your legislative data group.
3. Select the **Generate HCM Rates** flow pattern.
4. Fill in the following fields:
    - Payroll Flow
    - Process Mode

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 is calculated at the start and end dates.
Full	Calculates the rate for every day between the start and end date.	Slowest but most accurate method.
Interval	This method works the same as Fast except 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 Fast and Full.

    - Process Start Date
    - Process End Date
5. Click **Next**.
6. Select a flow submission: either **As soon as possible** or **Using a schedule**.

    Note: If you select **Using a schedule**, you must also select a frequency, such as once, weekly or daily.
7. Click **Next** and then **Submit**.

Using the Rate Calculation Formula: Explained

Oracle provides a rate calculation formula called RATE ENGINE. Applications and other formulas can call this formula to calculate a rate using a rate definition.

To call this formula from a formula:

- Specify the name of the rate definition as an input.
- Optionally pass other formula inputs, such as periodicity. This periodicity overrides the return periodicity specified on the rate definition.

The rate calculation formula returns a value and a periodicity.

Rates Used to Calculate Absences in Payroll: Explained

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 to the absence element uses the global formula Rate Converter to convert rates. The formula checks for a rate in the following sequence:

- Absence plan
- Absence element
- Compensation salary element

This topic covers the different locations where you define rates for processing absences in payroll.

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 rate information and override rates are transferred to payroll from the Payroll Administration work area in the XML 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 to calculate the absence payment, discretionary disbursement, final disbursement, and liability balance. rate.

As best practice, specify a rate in either the plan or the element. If you specify a rate for the element, such as the rate for the final disbursement, ensure it is the same rate as the one 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 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 or employment terms. 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

- Creating Payroll Elements for Processing Absences: Procedure

FAQ 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, which is a monthly figure that is 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 have added an annual figure to a monthly figure, but you haven't indicated what the periodicity of the total is in the Returned Rate Details section 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, it 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 is an option to override the return periodicity of the rate.

16 Values Defined by Criteria

Manage Values Defined by Criteria: Examples

Use the Manage 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 have a requirement 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 is 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 calculated by the Generate HCM Rates process 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 position. 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

Bonus Payments

You can chose 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, years of service, and annual salary.

- To weight a bonus payment by location, you could set up criteria like this:
  - 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, years of service, and annual salary, you could set up criteria like this:
  - If an employee working in sales has less than or equal to 5 years of service and an annual salary over 45,000, pay a 2,000 bonus
  - If an employee working in sales has less than or equal to 10 years of service and an annual salary over 45,000, pay a 5,000 bonus

- If an employee working in sales has greater than 10 years of service and an annual salary over 45,000, pay a 9,000 bonus
- For all other employees working in sales, pay a 7 percent bonus based on their annual salary

Pension Contributions

Your pension plan may have rules that limit contributions based on an employee's annual salary. For example, in this scenario you could set up the following criteria:

- Employees making less than or equal to 25,000, limit maximum contributions to 2,500
- Employees making less than or equal to 50,000, limit maximum contributions to 7,500
- Employees making less than or equal to 100,000, limit maximum contributions to 12,500
- Employees making greater than 100,000, limit maximum contributions to 14 percent of pay

Hourly Rates

In the United States there is a law that establishes the requirement for paying the local prevailing wages on public works projects for laborers and mechanics. To fulfill this requirement you can use the Manage Values Defined by Criteria task to set up rates of pay that are determined by a worker's state, county, and profession.

In this example, you could set up criteria to:

- Pay carpenters working in New Jersey in Ocean County greater than or equal to 15 USD per hour
- Pay carpenters working in New Jersey in Essex County greater than or equal to 17 USD per hour
- Pay carpenters working in New Jersey in Union County greater than or equal to 19 USD per hour
- For all other workers, pay 12 USD, the prevailing state wage for laborers

Related Topics

- Generating HCM Rates: Procedure
- Rate Definitions: Explained

Values Defined by Criteria: Explained

Each calculation value definition 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 no conditions are met, 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.

Values defined by criteria comprise the components listed in the following table.

Component	Requirement
Criteria Definition (evaluation condition)	At least one but you can have many.
Default Criteria Definition	Should have at least one in most cases to cover all conditions. If you have a situation that where the criteria you set up covers all conditions, then you don't need a default criteria definition.
Name	Refers to the name of the value definition. This is a mandatory field. This name must be unique across all value definitions within a legislative data group. It's required to enable customers to identify the parent record when creating the hierarchy through the HCM Data Loader.
Value Definition Group	Grouping that helps you manage value definitions. This is a mandatory field.
Retrieval Date	Determines whether the criteria definition uses the date earned or effective date to retrieve information. The default value is effective date.
Display Name	Refers to the name of the hierarchy record created within the context of the value definition. This name does not 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 displays.
Value Definitions	You can have multiple values included with a value definition. Each one is identified by the value identifier.
Database Items	One per criteria definition
Operands	One per criteria definition
Value Sets	Optional
Literal Values	One per criteria definition If you use the **In** operand, you can enter multiple values.
Rate	Used when you are creating a calculation value. If you select Flat Rate or Incremental Rate as the calculation type, you must enter a rate in this field.

Criteria Definitions and Evaluation Conditions

Within the tree structure you create the criteria definitions that hold the actual values or rates. There are many types of values that can be held, such as percentage, number, cash amount, or text.

You can also define a periodicity, which allows the value to be specified as a periodic value. Additionally, you can define a value in a currency that's different from the default currency specified at the legislative data group.

The supported calculation types include:

- Flat Amount
- Flat Amount Times Multiplier

- Flat Calculation
- Flat Rate
- Incremental Rate
- Number
- Rate Definition
- Standard Formula 1
- Standard Formula 2

Value Definitions

After creating the criteria, you create value definitions to hold the values for each criterion. This is where you enter the calculation types and rates. If you are using a calculation type that's a flat amount, flat amount times multiplier, or number, you can also specify a periodicity.

To view or modify the calculation values you entered, click the appropriate link to access the Manage Calculation Value Definition task. On this page you can change from and to values, override the calculation type, add new rows, change rates, and change currency. The From Value and To Value fields on this page are monetary.

You can capture multiple values for a single criterion if you specify a unique value identifier for each value. The tree structure shows this identifier instead of the value definition name. For example you may want to pay employees bonuses at different rates based on their annual salaries. In this case you can use value identifiers to define different rates for each salary range using the From Value and To Value fields.

Database Items

Each condition references a database item to identify where the value is used. It also determines the data type of the value, which is text, number, or date. Define conditions using predefined database items or the dynamically created database items that are generated when certain data is created, such as balances and elements.

Here is a partial list of database items that you can reference in the new hire flow:

- Grade
- Job
- Job Code
- BU (Business Unit)
- Location
- Department
- Worker Category
- Assignment Category
- Employee Category
- Salary Basis
- Legal Employer
- Period of Service (Seniority)
- Number of Dependents (between the ages 3 and 18)

Note: You can only reference database items for objects that are defined in the new hire flow, which are used to calculate salary basis. If you reference other types of database items, the process either returns zero or it uses the default criteria.

Operands

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 New York and Chicago 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 Values

If you specify a value set, you can select an entry from a list of values, which is based on the selected value. If you leave the Value Set field blank, you can enter any type of information that is appropriate for the value definition that you are creating.

Related Topics

- Generating HCM Rates: Procedure
- Rate Definitions: Explained

Using Values Defined by Criteria to Pay Bonuses Based on Age and Location: Worked Example

This example demonstrates how to create criteria to pay employee bonuses at different rates based on age and location.

The following table summarizes the key decisions for this scenario.

Decisions to Consider	In this Example
What ages and rates should be used?	• Less than age 25, pay 10 percent • Less than age 35, pay 14 percent to London employees • Less than age 35, pay 16 percent to San Francisco employees • All other locations and ages greater than 35, pay 5 percent
What locations should be used to determine bonus rates?	• London • San Francisco
Are there any special conditions that should be added?	Yes. In San Francisco the general manager wants to pay a flat amount of 15,000 USD for all employees under the age of 35 who make over 100,000 USD per year.

Decisions to Consider	In this Example

In this example, we will:

- 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
- Create calculation value definitions for default criteria definitions
- Modify evaluation conditions

Prerequisite

In this example we are using HRX_US_REP_LOCATION 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.

Creating the Bonus Rate Criteria Definition

1. In the Payroll Administration work area, click the **Manage Values Defined by Criteria** task.

   This task is also available in the Setup and Maintenance and Compensation work areas.
2. Click **Create**.
3. Complete the 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 the **Create new value definition group** radio button.
5. Enter **Bonus** in the New Value Definition Group field.
6. Enter **Flat Rate** in the Default Calculation Type field.
7. Click **OK**.

Creating Age Criteria

1. Select the row with the Bonus Rate criteria definition.

2. Click **New**.
3. Select **Criteria** and then click **OK**.
4. For each criteria definition you create, complete the fields as shown in this table.

Field	Age less than 25	Age less than 35
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	<	<
Literal Value	25	35

5. Click **OK** each time you create a new criteria definition.
6. To create a default group for the age criteria, repeat steps 1 to 3.
7. Complete the fields, as shown in this table.

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 then click **OK**.

Creating the Location Criteria for Age Group 2

1. Select the row with the Person Age < 35 criteria definition.
2. Click **New**.
3. Select **Criteria** and then click **OK**.
4. For each criteria definition you create, complete the fields as shown in this table.

Field	London	San Francisco
Calculation Value Definition Name	Bonus Range Age Group 2 Location 1	Bonus Range Age Group 2 Location 2
Value Definition Group	Bonus	Bonus

Field	London	San Francisco
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	=	=
Value Set	HRX_ US_ REP_LOCATION	HRX_ US_ REP_LOCATION
Literal Value	London	San Francisco

5. Click **OK** each time you create a new criteria definition.
6. To create a default group for the location criteria, repeat steps 1 to 3.
7. Complete the fields, as shown in this table.

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 then click **OK**.

Creating a Calculation Value Definition for Age Group 1

1. Select the row with the Person Age < 25 criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete the fields, as shown in this table.

Field	Value
Calculation Value Definition Name	Bonus Rate Age Group 1 Rate
Value Definition Group	Bonus
Retrieval Date	Date Earned
Calculation Type	Flat Rate

Field	Value
Rate	.10

5. Click **OK**.

Creating Calculation Value Definitions for Locations

1. Select the row with the Location = London criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete the fields, as shown in this table.

Field	Value
Calculation Value Definition Name	Bonus Rate Age Group 2 Location Rate 1
Value Definition Group	Bonus
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	.14

5. Click **OK**.
6. Select the row with the Location = San Francisco criteria definition.
7. Click **New**.
8. Select **Value** and then click **OK**.
9. Complete the fields, as shown in this table.

Field	Value
Calculation Value Definition Name	Bonus Rate Age Group 2 Location Rate 2
Value Definition Group	Bonus
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	.16

10. Click **OK**.

Creating Value Definitions for the Default Criteria Definitions

1. Under the location criteria definition, select the row with the Default Criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete the fields, as shown in this table.

Field	Value
Calculation Value Definition Name	Age Group Location Default Rate
Value Definition Group	Bonus
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	.05

5. Click **OK**.
6. To create a calculation value definition for all other employees that don't meet any criteria, select the row with the last Default Criteria definition.
7. Repeat the steps described above except for the Calculation Value Definition Name field. Enter **Bonus Default Rate** instead.
8. Click **OK**.

Modifying Evaluation Conditions

1. To modify the evaluation conditions for the San Francisco location, click the Bonus Rate Age Group 2 Location Rate 2 link.
2. Scroll down to the Calculation Values section.
3. Enter **100,000** in the To Value field.
4. Click **Add Row**.
5. Enter **100,000.01** in the From Value field and **999,999,999,999** in the To Value field.

   From and to values are monetary, unless you are using a database item.
6. Select **Flat Amount** in the Calculation Type Override field.
7. Enter **15,000** in the Flat Amount field.
8. Click **OK** and then **Submit**.

Related Topics

- Generating HCM Rates: Procedure

Using Values Defined by Criteria to Limit Pension Contributions: Worked Example

This example demonstrates how to create criteria to limit pension contributions based on annual salary amounts. The following table summarizes the key decisions for this scenario.

Decisions to Consider	In this Example
What salaries and contribution limits should be used?	• Salary less than or equal to 50,000, limit pension contribution to 5,000 • Salary less than or equal to 100,000, limit pension contribution to 10,000 • All other salary amounts, limit pension contribution to 17 percent of annual salary

In this example, we will:

- Create the pension limits criteria definition
- Create salary criteria
- Create the value definition for salary amount 1
- Create the value definition for salary amount 2
- Create the value definition for the default criteria definition

Creating the Pension Limits Criteria Definition

1. In the Payroll Administration work area, click the **Manage Values Defined by Criteria** task.

   This task is also available in the Setup and Maintenance and Compensation work areas.
2. Click **Create**.
3. Complete the fields, as shown in this table.

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**.

Creating Salary 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 the fields as shown in this table.

Field	Salary less than or equal to 50,000	Salary less than or equal to 100,000
Calculation Value Definition Name	Salary less than or equal to 50,000	Salary less than or equal to 100,000
Value Definition Group	Limit Rules	Limit Rules
Retrieval Date	Date Earned	Date Earned
Sequence	1	2
Database Item Name	CMP_ ASSIGNMENT_ SALARY_AMOUNT	CMP_ ASSIGNMENT_ SALARY_AMOUNT
Operand	< =	< =
Literal Value	50,000	100,000

5. Click **OK** each time you create a new criteria definition.
6. To create a default group for the salary criteria, repeat steps 1 to 3.
7. Complete the fields, as shown in this table.

Field	Value
Calculation Value Definition Name	Salary Greater Than 100,000
Value Definition Group	Limit Rules
Retrieval Date	Date Earned

8. Select the **Default Criteria** check box and then click **OK.**

Creating the Value Definition for Salary Amount 1

1. Select the row with the Salary Amount < = 50,000 criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete the fields, as shown in this table.

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	USD
Flat Amount	5,000

5. Click **OK**.

Creating the Value Definition for Salary Amount 2

1. Select the row with the Salary Amount < = 100,000 criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete the fields, as shown in this table.

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	USD
Flat Amount	10,000

5. Click **OK**.

Creating the Value Definitions for the Default Criteria Definition

1. Select the row with the Default Criteria definition.
2. Click **New**.
3. Select **Value** and then click **OK**.
4. Complete the fields, as shown in this table.

Field	Value
Calculation Value Definition Name	Salary Greater Than 100,000
Value Definition Group	Limit Rules
Retrieval Date	Date Earned
Calculation Type	Flat Rate
Rate	.17

5. Click **OK**.

Related Topics

- Generating HCM Rates: Procedure

FAQ 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 is used to produce a tree structure, which affects processing and the value that is returned.

For example, if the first criteria definition has the condition of salary greater than 0, and the next criteria definition in the sequence has the condition of salary greater than 100,000, all salaries 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 100,000 is first in the sequence.

You can change the sequence of the criteria definitions at any time to suit your business needs and fix processing problems.

17 Payment Methods

Bank, Branch, and Account Components: How They 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 under 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.

Related Topics

- Reconciliation Matching Rules: Explained

Creating Accounts: Points to Consider

Banks, branches and accounts fit together on the premise of the Bank Account model. The Bank Account model enables you to define and keep track of 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.

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.

> **Note:** You must assign the security duty role Cash Management Administration to the Cash Manager job role to provide access for setting up banks, branches, and accounts.

Entering Bank Information for Personal Payment Methods: Critical Choices

You can enter bank, branch, and bank account information centrally as part of implementation, or you can let employees add their own bank information. You can share this information across multiple applications for different purposes.

The following table summarizes several approaches for creating bank information for employees.

Approach	Purpose
Manage Banks page and Manage Bank Branches page	View, create, or edit banks and branches centrally for outgoing payments or receiving payments
Manage Personal Payment Methods page	Create or edit employee bank account details for receiving payments
Payroll batch loader	Load personal payment methods and employee bank account details using an integrated Excel workbook

Controlling Who Can Manage Banks and Branches

The following table shows the roles that are typically involved in managing bank information, what actions they can take by default, and which pages they use.

Role	Can Create Banks and Branches?	Can Create Employee Bank Account Details?	Location
Cash Manager	Yes	No	Manage Banks page and Manage Bank Branches page, Setup and Maintenance work area
Payroll Administrator Payroll Coordinator Payroll Manager	Depends on duty role or profile option	Yes	Manage Personal Payment Methods page, Payment Distribution work area

Role	Can Create Banks and Branches?	Can Create Employee Bank Account Details?	Location
Employee	Depends on duty role or profile option	Yes	Manage Payment Methods page, Portrait

You can use a profile option to control access to create 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 it to **Yes**, you can load bank and branch data so that administrators and employees select bank details from a list of values on the Create Personal Payment Method page.
- If you set it to **No** (default setting), you can't load any bank details. Administrators and employees enter their bank and branch details as free text.

Related Topics

- Payroll Batch Loader Workbooks for Bank Data
- Payroll User Interface Configuration Formula Type

Configuring Payment Method Preferences: Procedure

You can customize preferences related to payment methods using a user-defined table and fast formulas. After you create your formulas for the configuration that you require, you attach formula names as values for the corresponding preferences in the user-defined table. This topic describes the configuration steps and available preferences.

1. Use the Manage Fast Formulas task to create the formula using the Payroll User Interface Configuration formula type.
2. On the Manage User-Defined Tables page, select the legislative data group that you to manage the user-defined table, and then search for and select **PAYROLL_USER_INTERFACE_CONFIGURATION**.

   Note: The formulas attached in the user-defined table are effective at the enterprise level. The legislative data group isn't significant. However, to make any later edits to the table, you must select the same legislative data group.

3. Click **Edit**, and then click **Next**.
4. On the User-Defined Table Values page, click **Add** and select the row for one of the values, and then click **OK**.

Value	Purpose
Default Organization Payment Method	Controls which payment methods can be created using the simplified user interface.
Payment Types Available to Workers	Limits personal payment methods to be based only on organization payment methods of the specified payment types.
Maximum Number of Personal Payment Methods	Limits the number of personal payment methods that employees can create.

Value	Purpose
Show Percentage or Amount	Sets a restriction to display only the Percentage amount type and field on the Manage Personal Payment Methods page.

5. In the Value field, enter the name of your formula. You must enter the formula name exactly as you created it on the Manage Fast Formulas page.

> **Note:** Each preference that you customize must have its own formula.

Related Topics

- Payroll User Interface Configuration Formula Type

Organization Payment Methods: Explained

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 for validating or processing the distribution of payments. Create as many organization payment methods as required for your enterprise. Use the Manage Organization Payment Methods page in the Payment Distribution work area.

Important aspects of organization payment methods are:

- Payment types
- Payment sources
- Payment rules

Payment Types

When creating an organization payment method, you select a payment type. You can create more than one organization payment method with the same payment type.

The most common payment types are:

- Electronic funds transfer (EFT)
- Check
- Cash

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.

> **Tip:** When selecting the EFT payment type, you can enter EFT information at the payment method level, the payment source level, or both. Entries at the payment source level take priority over entries at the organization payment level. For example, if you define details at the payment source level, then to use those details when processing payments, you must enter the payment source when submitting the payment process.

Payment Sources

If you're using Oracle Fusion Global Payroll for payroll processing, you must define at least one payment source for each organization payment method. Each payment source must be associated with an active bank account in Oracle Fusion Cash Management. If you define additional details at the payment source level, then to use those details when processing payments, you must enter the payment source name when submitting the payment process.

You can use the same bank account in different payment sources in more than one organization payment method, as illustrated in the following example.

Payment Method	Payment Source	Bank Account
Check	Check	Bank A - Account 7890045
EFT	EFT	Bank A - Account 7890045

Note: If you are costing your payments, enter cost account information on the Manage Costing of Payment Sources page in the Accounting Distribution work area.

Payment Rules and Default Payment sources

If you define multiple payment sources, you can use payment rules to determine the appropriate payment source based on tax reporting unit (TRU).

The following example shows one organization payment method with three different payment sources for different TRUs.

Payment Source	Tax Reporting Unit	Default Payment Source
Payroll EFT Source US Bank A - Account 7890045	None	Yes
Payroll EFT Source California Bank B - Account 1238900	California TRU	No
Payroll EFT Source Texas Bank C - Account 8765999	Texas TRU	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 having a default payment source, consider the following examples that describe what happens when a TRU changes, causing a payment rule to be invalid.

Approach	Example
With a default payment source, the payment process pays employees using 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.

Prenotifications: Explained

A prenotification or a prenote is typically an entry that must be sent at least 10 banking days prior to the first live payroll credit issued. A prenote's purpose is to validate routing number and account numbers of the receiving bank or credit union.

To set prenotification information, set the following options in the organization payment method for electronic funds transfer (direct deposit) or international transfer payment types:

- **Prenotification Required**: Select to designate that the prenotification process is required for payments.
- **Prenotification Days**: Specify the duration of the prenotification wait period. Payment is issued by check until the waiting period is completed. For example, if the prenotification period is 10 days for a weekly payroll, depending on the timing, the payments processes might issue two paychecks before transfer starts.

Payment Methods and Payroll Definitions: How They Work Together

You select organization payment methods when creating other objects, such as payroll definitions, third-party payment methods, and personal payment methods. This topic describes the functional relationship between organization payment methods and the objects that use them.

Functional Relationships

The following table describes the functional relationship of organization payment methods with other objects.

Object	Function
Personal Payment Method	Associates a person to a payment method, currency, and payment source.
Third-Party Payment Method	Enables separate payment information for payments to third parties who aren't on the payroll. Payments to third parties, such as garnishments or other involuntary deductions, are typically check payments processed separately from the payroll.
Payroll Definition	Establishes the default payment method for payments to employees who have no personal payment method defined.

Object	Function
	Note: You can't set EFT payment methods as default payment methods because each payee must have a personal payment method with account information to know where to deposit the money.
Run-Type Payment Method	Overrides a payroll's default payment method for payments to employees with no personal payment method defined. For example, your regular payroll is by EFT but you issue check bonuses once a year. Using the Separate Payment run type, the payment method overwrites the default payment method of the payroll.

Related Topics

- Payroll Definitions: Explained
- Creating Third-Party Payment Methods: Procedure

Setting Up Payment Sources in Organization Payment Methods: Worked Example

This example demonstrates how to set up payment sources when creating organization payment methods for payroll processing. You set up payment sources on the Manage Organization Payment Methods page.

In this example, the InFusion US company pays its workers by electronic funds transfer (EFT) payments. To comply with state regulations for out-of-state payments, the company sets payment rules to pay from two different banks based on tax reporting unit (TRU). The following table summarizes the key decisions for this scenario.

Decisions to Consider	In This Example
How many organization payment methods do you need?	One method to pay by EFT in US dollars.
How many payment sources do you need?	Three. One default payment source for the US, one source for payments in Texas, and one source for payments in California.
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 TRU.
Is notification required to alert the source financial institution before processing EFT payments?	Yes. Ten days before EFT payments.

Summary of Tasks

This worked example includes details for the following tasks you perform when creating organization payment methods:

1. Creating the basic details
2. Adding EFT file information
3. Setting up payment sources
4. Creating payment rules

Prerequisites

This worked example assumes that the following tasks are complete:

1. The primary ledger is set up in Oracle Fusion General Ledger.
2. The banks, branches, and account information to use as the payment sources are set up in Oracle Fusion Cash Management.
3. The legal entity associated with the legislative data group is assigned to a general ledger.
4. TRUs are set up.

Creating the Basic Details

1. In the Payment Distribution work area, click **Manage Organization Payment Methods**.
2. In the Search Results section, click **Create**.
3. Select the legislative data group, for example, InFusion US LDG.
4. Select the date when you want this payment method to be available for use, and then click **Continue**.

   Tip: Select a date that is on or before the effective date of the payroll definition or other objects that use this payment method.

5. In the Basic Details section, complete the fields as shown in this table and then click **Save**.

Field	Value
Name	Payroll Direct Deposit US
Payment Type	Direct Deposit **Note:** The available payment types for organization payment methods can vary by legislation.
Currency	US Dollar

6. Click **Save**.

Adding EFT File Information

When you select the EFT payment type, you can enter EFT information at the following levels:

- Organization payment method level
- Payment source level
- Both levels

Note: EFT file information entered at the payment source level takes priority over information entered at the organization payment method level.

In this example, you set the EFT information at the organization payment method level because the company requires notification of planned transfers within 10 days before the transfer date.

1. In the Payment Information section, enter values as shown in this table.

Field	Value
Prenotification Required	Yes
Prenotification Days	10

2. Click **Save**.

Setting Up Payment Sources

Perform the following 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, and then click **Continue**.

Field	US Value	Texas Value	California Value
Name	Payroll EFT Source US	Payroll EFT Source Texas	Payroll EFT Source California
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 as specific as possible for each scenario. This naming convention helps when managing complicated combinations of organization payment methods and payment rules.

Creating Payment Rules

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	Texas Value	California Value
Default	No	No
Tax Reporting Unit	Texas TRU	California TRU
Payment Source	Payroll EFT Source Texas	Payroll EFT Source California

3. Click **Submit**.

Payment Method Rules: Examples

The following scenarios illustrate how you might use payment method rules to handle payments to different parties and from different payment sources. You set payment method rules on the Manage Organization Payment Methods page in the Payment Distribution work area.

Pay Workers and Third Parties Using the Same Payment Source

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. Ensure that the payment source is set as the default and that you leave the Third-Party Payment, Tax Reporting Unit, and Payment Criteria fields blank.

Pay Workers and Third Parties in a Specified TRU Using a Separate Payment Source

Your enterprise is based in California, but you have some workers in Texas. To comply with California state regulations for out-of-state payments, you specify a payment source for the Texas tax reporting unit (TRU). In this scenario, your payment source for California is already set as the default payment source, so no change is needed for California. You add a payment method rule, select the Texas TRU, and select the Texas payment source.

Pay Workers and Third Parties in the Same TRU Using Separate Payment Sources

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. You create John as a third-party person payee. In your organization payment method, you add the Payment Source B payment source and a new payment method rule. In the payment method rule, you select the Third-Party Payment check box, Jon's name as the third-party person to pay, and Payment Source B.

Pay Workers in a Specified Department Using a Separate Payment Source

You want to pay employees in the Sales and Development departments using different payment sources. You create a payment method rule for each department, enter the department name in the Payment Criteria field, select the TRU and payment source.

This scenario has the following 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.

Deriving Payment Sources by Department: Worked Example

You can use payment criteria to set up rules that derive payment sources within a single tax reporting unit (TRU). The prepayments process identifies the source bank information using the employee's TRU and any additional payment criteria that you define. This example uses department, but you can use other criteria, such as business unit.

The tasks to complete this setup are Manage Organization Payment Method, Manage Elements, and Manage Fast Formulas. The key steps in this example are:

1. Define the payment rules in the organization payment method.
2. Create the formula to get department names from HR.
3. Create the formula that calls the department names formula to get employee department by Assignment ID.
4. Create the Default Payer information element.

In this example, the enterprise wants to pay employees in the Sales and Development departments from separate payment sources. You create an element to pass the department name as a run result value.

Defining Payment Rules

1. On the Manage Organization Payment Method page, in the Payment Sources section, create the payment sources to use in the payment rules, if they don't already exist.
2. In the Payment Method Rules section, add one payment rule for each department, as shown in this table.

Field	Development Department	Sales Department
Tax Reporting Unit	First America	First America
Payment Criteria	Development	Sales
Payment Source	HSBC New York	HSBC Boston

Creating the Department Formula

Use the following steps to create the formula that retrieves the database items from HR for department names.

1. On the Manage Fast Formulas page, create the formula with values as shown in this table.

Field	Value
Formula Name	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.

2. In the **Formula Text** section, enter the following content:

```
Default for PER_ASG_ORG_DEPARTMENT_NAME is ' '
l_dept_output = PER_ASG_ORG_DEPARTMENT_NAME
Return l_dept_output
```

3. Click **Submit**.
4. Click **Compile**.

Creating the Payment Criteria Formula

Use the following steps to create the formula that retrieves the departments for employees to use as payment criteria values.

1. On the Manage Fast Formulas page, create the formula with values as shown in this table.

Field	Value
Formula Name	XX_ Default_ Payer_ Payment_ Criteria
Formula Type	Oracle Payroll
Description	Formula to use the returned Department database item as Payment Criteria input for Default Payer element.
Effective Date	01/01/1951 **Note:** Enter the same date used to create elements during implementation.

2. In the **Formula Text** section, enter the following 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
```

3. Click **Submit**.
4. Click **Compile**.

Creating the Default Payer Element

Perform the following steps to create the Default Payer element with the Payment Criteria input value, and automatic element eligibility.

1. On the Manage Elements page, create an element using the Information primary classification and the values shown in this table, and then submit your changes.

Field	Value
Name	Default Payer The name must match exactly. This name is how the application identifies any existing payment criteria.
Reporting Name	Default Payer
Effective Date	01/01/1951

Field	Value
	Note: Enter the same date used to create other elements during implementation.
What is the earliest entry date for this element?	First Standard Earnings Date
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 as follows:
   a. In the Element Overview section, click **Input Values**, and then select **Create Input Values** from the Actions menu.
   b. Enter values as shown in this table.

Field	Value
Name	Payment Criteria
Display Sequence	10
Unit of Measure	Character

   c. Click **Save**.
3. Edit the new element to create element eligibility that is set to automatic entry as follows:
   a. In the Element Overview section, click **Element Eligibility**, and then select **Create Element Eligibility** from the Actions menu.
   b. In the **Element Eligibility Name** field, enter **Payment Criteria Element Eligibility**.
   c. Select **Automatic entry**.
   d. Click **Save**.
4. Edit the new element to create processing rules as follows:
   a. In the Element Overview section, click **Status Processing Rules**, and then select **Create Status Processing Rules** from the Actions menu.
   b. In the **Formula Name** field, select **XX_Default_Payer_Payment_Criteria**.
   c. In the Result Rules section, add a row using the values in this table.

Field	Value
Result Returned	EMP_DEPT
Result Rule	Direct Result
Target Input Value	Payment Criteria

   d. Click **Submit**.

Configuring Payment Method Preferences: Procedure

You can customize preferences related to payment methods using a user-defined table and fast formulas. After you create your formulas for the configuration that you require, you attach formula names as values for the corresponding preferences in the user-defined table. This topic describes the configuration steps and available preferences.

1. Use the Manage Fast Formulas task to create the formula using the Payroll User Interface Configuration formula type.
2. On the Manage User-Defined Tables page, select the legislative data group that you to manage the user-defined table, and then search for and select **PAYROLL_USER_INTERFACE_CONFIGURATION**.

> **Note:** The formulas attached in the user-defined table are effective at the enterprise level. The legislative data group isn't significant. However, to make any later edits to the table, you must select the same legislative data group.

3. Click **Edit**, and then click **Next**.
4. On the User-Defined Table Values page, click **Add** and select the row for one of the values, and then click **OK**.

Value	Purpose
Default Organization Payment Method	Controls which payment methods can be created using the simplified user interface.
Payment Types Available to Workers	Limits personal payment methods to be based only on organization payment methods of the specified payment types.
Maximum Number of Personal Payment Methods	Limits the number of personal payment methods that employees can create.
Show Percentage or Amount	Sets a restriction to display only the Percentage amount type and field on the Manage Personal Payment Methods page.

5. In the Value field, enter the name of your formula. You must enter the formula name exactly as you created it on the Manage Fast Formulas page.

> **Note:** Each preference that you customize must have its own formula.

Related Topics

- Payroll User Interface Configuration Formula Type

Customizing Payslips and Checks

Adding Text to Payslips and Checks: Procedure

Customizing your checks and payslips to display additional text requires the setup steps described in this topic. You must create an information element with input values, add the input values to the Organization Information EFF flexfield, and modify the output template. Depending on your implementation, you also may require a new formula.

Summary of the 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 Oracle 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 for which 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 template or payslip template, as appropriate. Refer to the Report Designer's Guide for Oracle Business Intelligence Publisher for more information.

Input Values for Payslip and Check Text: Examples

You can create element input values to store information, such as congratulatory messages and detailed earnings information, that you want displayed on checks or payslips. The following scenarios illustrate how you can archive payroll information for this purpose.

Display Earnings by Earned Weekly Period

For example, 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 the following 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

You want to display a birthday congratulations message on checks. In this example, before modifying your check template, you could create an element using the Information element classification with the following input values:

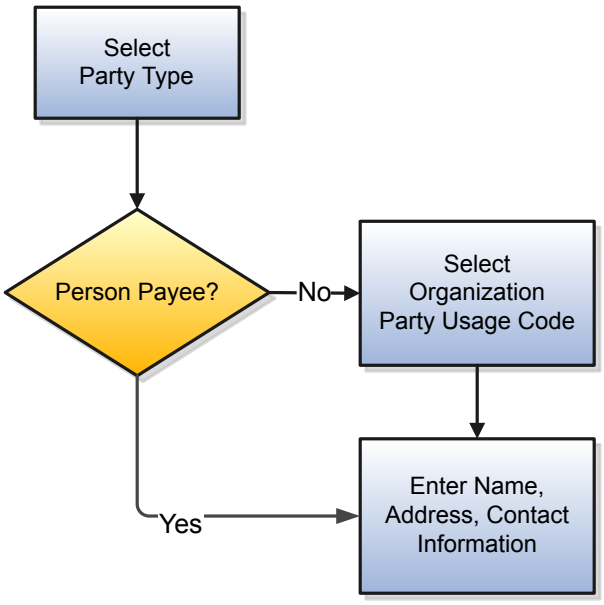
- Message Title
- Message Description

Third-Party Payment Methods

Creating Third Parties: Points to Consider

You create third parties to process payments to external organizations and people who aren't on the payroll. Third-party types are Person and Organization. You can create third-party organizations for payments, such as pension providers or professional bodies, or third-party organizations that don't receive payments, such as disability organizations. Use the Manage Third Parties task in the Payment Distribution work area or the Batch Loader task from the Payroll Administration, Data Exchange, or Checklist work area.

The following figure illustrates the steps to create third parties.



Party Usage Codes

Creating third parties on the Manage Third Parties page creates corresponding records for them as trading community members. 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.

The following table describes the party usage codes for third-party organizations.

Party Usage Code	Use For	Examples
External Payee	Organizations that can be associated with employee calculation cards or element entries. Use this party usage code for organizations when the others don't apply.	County Sheriff for involuntary deductions
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

- Creating Third-Party Payment Methods: Procedure
- Payroll Batch Loader Workbook for Third-Party Organizations

Third-Party Payments: Examples

The following scenarios illustrate how you can pay third-party people and organizations.

Child Support to a Former Spouse

John Smith is an employee at your organization. Mary Smith receives a child-support payment each payroll period that is 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.

Processing Fee to a County Sheriff's Office

The County Sheriff's office receives a processing fee on garnishment payments. When you create the third-party organization, you 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, you select the County Sheriff in the Organization Fee Payee field.

Related Topics

- Creating Third-Party Payment Methods: Procedure

FAQ for Payment Methods

What is the International Transfer payment type?

This payment type supports payment methods for electronic funds transfer (EFT) payments in a different country from the originating payment source. Payroll managers can create EFT payment methods for employees to transfer funds to foreign banks if an International Transfer organization payment method exists for their legislative data group.

18 Payroll Flow Patterns

Creating Flow Patterns: Procedure

Use flow patterns or create new patterns required to complete your extract reports and processes or payroll tasks. You build flow patterns from predefined tasks, such as processes, reports, and manual tasks that verify results.

Work areas include tasks to submit flows, such as Submit a Payroll Process or Report, or Submit Extracts. Submitting a flow pattern generates a flow and if the flow includes several tasks, a checklist.

Building a Flow Pattern

Complete the following steps to create a flow pattern:

1. Select the Manage Payroll Flow Patterns task in the Payroll Checklist work area or the Refine Extracts flow from the Data Exchange work area.
2. Create a new flow pattern or search for and select an existing flow pattern to copy.
3. Select a legislative data group.
4. On the Basic information page, specify the following information.
    a. LDG Required, as shown in the following table

LDG Required	Result
No	Flow pattern available to all legislative data groups
Yes	Flow pattern restricted by legislative data group

    b. Default Flow option.
5. Select the activities and tasks to include in the flow pattern.

    The activity associated with the task determines the work area where you can submit the flow.
6. On the Tasks page, complete the following information.
    - Optionally, rename the task and description and change the activity or task group for the task.

      For example, you might place all your reports in the Statutory activity and rename each verification task so it includes the report name.
    - Select a task owner.
    - Skip the step to specify the duration dates that determine when to send the notification to alert the flow or task owner to start a task or that it is overdue. Return to this step after you complete flow parameters on the Parameters page.
    - Select the type of notifications received by the flow or task owner.
7. On the Task Sequence page, review the task sequence and reorder, add or delete tasks, as required.

    All flow patterns begin with a Start task and conclude with an End task. Tasks are sequential but you can start processing on more than one task, for example to run reports concurrently.

> **Tip:** Specify the order in which the tasks display in the checklist by specifying a value for the sequence on the Edit Task Details Owners and Checklist page

8. On the Parameters page, select the parameters to complete when submitting the flow pattern.

   The application uses the flow parameters to submit and complete the tasks in the flow pattern, or as a basis for deriving values to submit the remaining tasks in the flow pattern.
9. On the Task Parameters page, review the parameters, and if necessary update the parameters.

   For example, you might specify a constant if the value is the same for all tasks, such as the Process Configuration Group parameter.
10. Review the resulting checklist for the flow pattern before submitting the flow pattern.
11. Define a security profile for it using the Manage Payroll Flow Security Profile task in the Setup and Maintenance work area.

    The HCM data role security controls who can submit the flow pattern or view the resulting flow from the Payroll Dashboard or payroll work areas.

Related Topics

- Sequencing Rules for Flows and Locked Tasks: Explained

Checklist and Flow Tasks: Explained

A flow can consist of one or more tasks. The flow pattern determines the sequence of tasks executed in a flow. Submitting a flow from the Data Exchange or payroll work areas generates a checklist. Use the flow's checklist to monitor and manage the tasks included in the flow.

Depending on the flow pattern, the checklist might include:

- Automatic tasks, such as extracts, reports, and processes
- Manual tasks, such as verification tasks required to complete a flow

Working with Checklists

Use the checklist while working with flows to perform the following activities:

- Monitor the status of the flow tasks
- Manage the flow tasks, such as reassigning tasks, marking tasks completed, and performing corrective actions
- View task details, such as a list of records processed by the flow

For payroll, while working on a task in the flow, you can remain in the Payroll Checklist work area or go to a related work area that includes tasks in the regional area. For example, while reviewing the results for the Calculate Payroll task, you might go to the Payroll Calculation work area to review the person's calculation card or element entries.

Related Topics

- Monitoring the Status of Flow Tasks: Explained

Editing Flow Tasks: Points to Consider

Edit flow patterns you create or copy. This topic suggests points to keep in mind when you add, delete, or move a task in a flow pattern.

Editing Tasks

Refer to the following table for examples of edits to flow pattern tasks. You perform these edits on the Task Sequence tab of the Manage Payroll Flow Patterns page. For payroll flow patterns, use the Manage Payroll Flow Patterns task in the Payroll Checklist work area. For extract flow patterns, use the Refine Extracts task in the Data Exchange work area.

Edits	Impact	Examples
Add a task	You add a task to position it as the last task in the activity or task group. Update the task sequence. If you repeat a task, rename it to make clear its purpose on the checklist.	You add a manual verification task after each report. You rename each task with the report name.
Delete a task	When you delete a task you may impact subsequent tasks in the flow that depend on its results. Review the subsequent tasks.	You delete a task. The Parameter Basis of the next task is Bind to Task and its Basis Value is the value of the deleted task. You update the Parameter Basis of the subsequent task as required, for example, to Bind to Flow.
Move a task to a different activity	The activity determines the work areas where you can submit the flow patterns you define, and controls how the checklist displays.	You move a task in a payroll flow pattern for a report from the Payments activity to the Statutory activity. The flow owner can view the report results from the Payroll Checklist or Regulatory and Tax Reporting work areas, but not the Payment Distribution work area.
Reorder the list of tasks displayed in a checklist	The sequence specified for the task further determines the task order within an activity on the checklist.	You decide to flatten the checklist sequence to group all the tasks within a single activity. 1. On the Tasks page, you confirm that each task belongs to the same activity and task group. 2. You edit each task, specifying a value in the Sequence column on the Edit Task Details Owners and Details page. The lowest number is used for the first task in the checklist. For example, you might specify a sequence of 10 for the payroll calculation task and 20 for the prepayments calculation task.

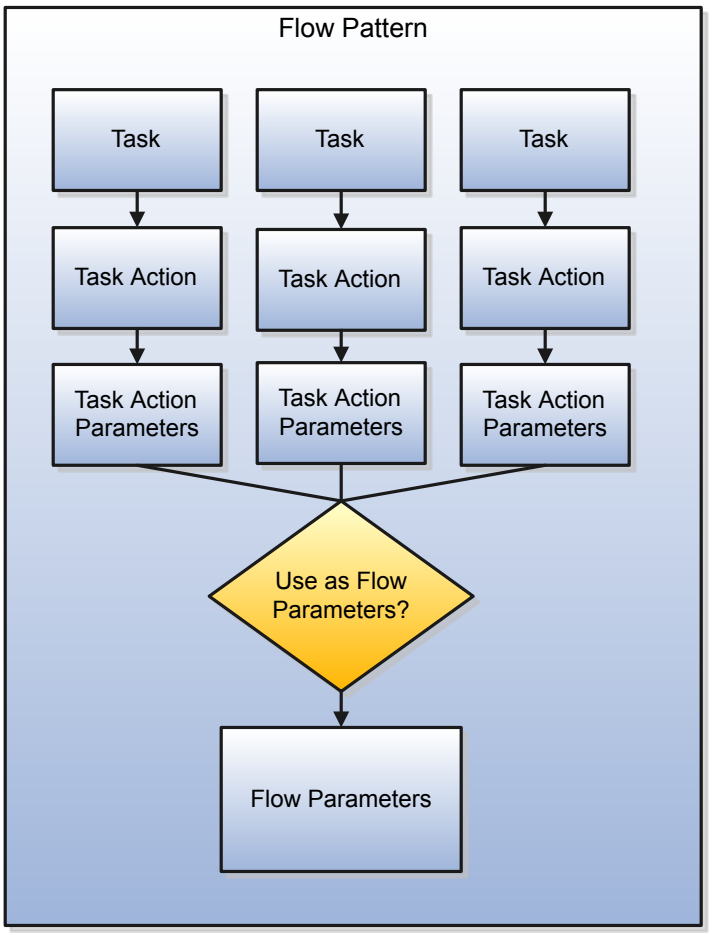
Related Topics

- Sequencing Rules for Flows and Locked Tasks: Explained

Flow Pattern Parameters: Explained

Each task in a flow pattern supports task actions, such as submit, roll back, mark for retry, retry, and view. Task action parameters control how the application processes a task and how the task relates to other tasks in the flow pattern. Flow parameters, a subset of task parameters, supply the information required to successfully complete the tasks in the flow pattern.

The following figure shows the relationship of the tasks, task parameters, and flow parameters in a flow pattern.



When you create a flow pattern, you review and edit the task parameters for the Submit and Initialize task actions. After submitting the flow pattern, you can edit the parameters for the remaining task actions, such as Mark for Retry, Retry, and Roll Back. The parameter details you can edit include:

- Display and display format
- Lookups and value sets
- Usage
- Sequence

- Parameter Basis and Basis Value

Display and Display Format

Display parameters control the format and availability of the flow parameter, as shown in the following table.

Parameters	Purpose
Display	Determines whether the parameter displays when submitting the flow
Display Format	Identifies the type of data displayed, such as a date or text, or choice list

Display parameters work with other parameters, such as Parameter Basis and Basis Value. For example, most task action parameters don't display the Request parameter because the application obtains the value for this parameter from the context.

Lookups and Value Sets

Use lookups and value sets for descriptive flexfields to control and validate the data used in the payroll flow pattern.

The following table describes which parameter basis to use for the different methods for obtaining the lookup value.

Lookup Value	Parameter Basis
Entered when submitting a flow	Bind to Flow
Derived by the application from existing tables, such as the value for the payroll statutory unit	Bind to Flow Task or Context Binding
Derived by application from a Post SQL process	Post SQL Bind

Usage

A parameter can receive information (input) or generate information (output) that subsequent tasks can use as input. For example, for the Calculate Payroll task, the Payroll Process parameter for the Submit task action generates an output value for the payroll action ID, which the Retry task action uses as input.

The following table describes the typical settings for a parameter whose usage is output.

Parameter Option	Setting
Display	No
Parameter Basis	• Bind to Flow, the application derives the value from the flow parameter and the updates the flow parameters table with the output value • If you select no value, the output value results from the task's output

Sequence

Control the order in which the application processes and displays the parameters by specifying the sequence. Sequence numbers provide default logic for the application to derive the order in which to process the parameters. For example, if you have two lookups and the values of the second lookup depends on the first lookup, set the first lookup to a lower sequence number than the second one

Parameter Basis and Basis Value

The Parameter Basis controls how the application derives the value for the parameter. The Basis Value further specifies the value the application uses for the parameter.

The following table lists the Parameter Basis options and gives examples of when you might select them.

Parameter Basis	Description	Basis Value Available	Example
Use Specified Value	Assigns a specific value to the parameter.	Text is entered as constant or value entered by the person who submits the flow.	Specify a constant if the value is the same for all tasks, such as the payroll statutory unit.
Bind to Context	Derives the value from the context of the current flow instance or the task instance of the flow pattern.	Select flow, task, or the Request. The application will automatically generate the parameter value.	If the task includes a Request parameter, bind it to the flow context. Tasks in the flow reference this task using the Request ID generated by the application. Bind the legislative data group parameter to a task parameter that supplies the legislative data group. For example, the legislative data group for prepayments uses the payroll as context, because it's already associated with the legislative data group.
Bind to Flow Parameter	Derives the value from one of the flow parameter values.	Application will automatically derive the parameter value.	Bind a parameter to the flow that several tasks share to avoid multiple occurrences of the same parameter.
Bind to Flow Task Parameter	Binds the value to the output of the previous task.	Select a value from the previous task's parameters.	Bind a parameter to a task, such as Retry corrective action, so that when the flow owner resubmits the task to retry it, the application uses the output of the Submit task parameter.
Bind to Task Parameter	Resolves the value for the task parameter.	Select a value from the current task's parameters.	Bind a parameter to the task if several tasks share a parameter, such as a start date, but one task requires a different date.

Parameter Basis	Description	Basis Value Available	Example
No value specified	Stops the application from generating a parameter value when the task executes.	Application will generate a blank value.	Not applicable
Post SQL Bind	Calculates the parameter but doesn't display it on the user interface.	SQL statement will calculate the parameter value.	Bind a parameter using the Post SQL bind to generate data. For example, use a post SQL process to generate the process date from the payroll period and payroll parameters.
SQL Bind	Calculates and displays value on the user interface.	SQL statement will calculate the parameter value.	Bind a parameter using SQL For example use SQL Bind to calculate the payment type parameter for the Generate Check Payment task. The application obtains the payment type ID for the check payment record. Use SQL Bind to prompt the task owner to enter a reason for a corrective action, such as a QuickPay.

Flow Task Start and Due Dates: Critical Choices

Specify duration dates and notification options in the payroll flow pattern to give flow owners adequate time before a task starts to prepare and before a task is due to address any issues.

Task Start and Due Dates

Specify the following duration dates on the Tasks page of the Manage Payroll Flow Patterns page:

- Start date, the date the task owner should start the task

  Note: The start date applies to notifications only. You schedule when a flow starts on the Scheduling page when you submit the flow.

- Due date, the date the task owner should complete the task

To specify duration dates:

1. Select the flow parameter date to use as the basis for the duration date
2. Optionally, offset the date by specifying a plus or minus value depending on whether the date falls before or after the duration date.

Notifications

Select notifications to send error and warning messages, and to inform the task owner when a task starts or ends. The receipt of notifications depends on the duration dates and their offsets.

1. Specify the notifications the task owner receives.
2. Optionally, specify the number of days before the application automatically deletes a notification from storage.

   Use the Manage Payroll Process Configuration task in the Setup and Maintenance work area to complete the Notification Expiration Offset parameter.

Related Topics

- Scheduling Flows: Explained

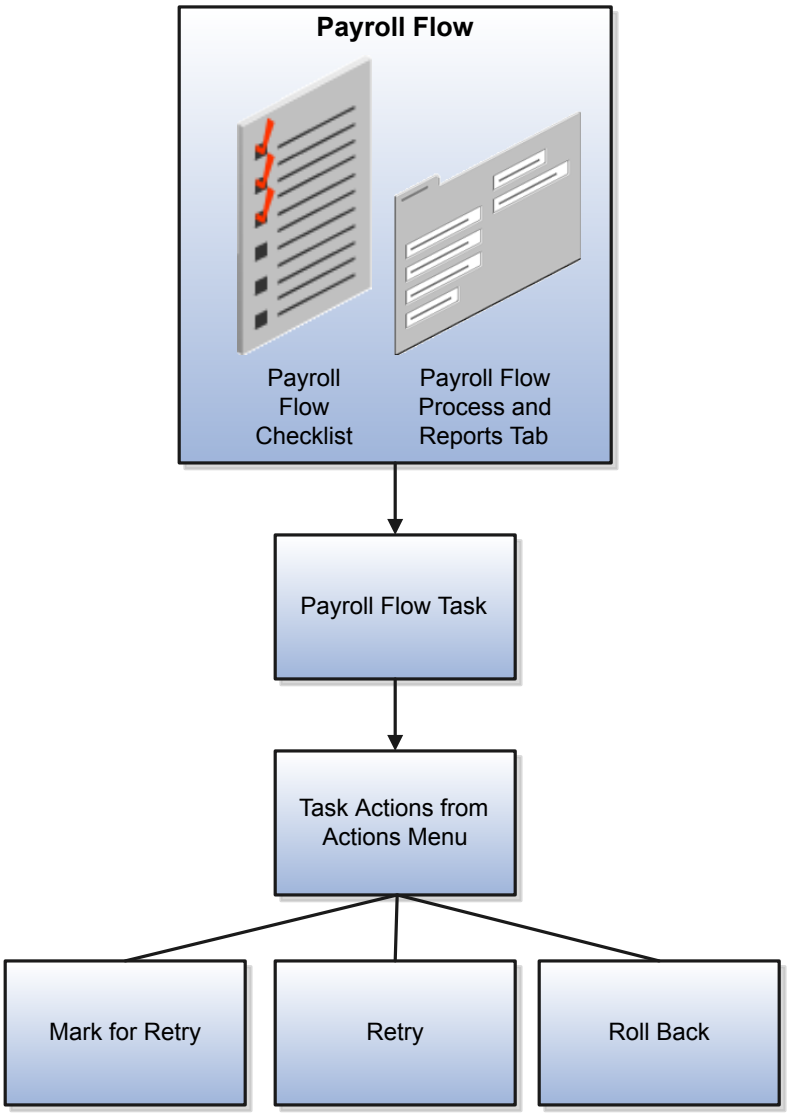
Managing Corrective Tasks in a Payroll Flow Pattern: Points to Consider

Before defining flow patterns to correct payroll run or payment results, consider whether flow owners can correct individual records or tasks by using task actions, predefined processes, or predefined flows, such as the Cancel Payments flow.

Using Task Actions

Most tasks support corrective task actions at the task level or individual record level. The type of task and its status determine which corrective actions the flow owner can select from the Actions menu when viewing results.

The following figure shows the task actions available from the Actions menu when working on the Payroll Flow Checklist or the Processes and Reports tab of the payroll flow.



You can confirm whether the task includes the task actions by performing these steps:

1. Edit your flow pattern on the Manage Payroll Flow Pattern page of the Payroll Checklist work area.
2. Select the task on the Tasks tab, and edit it.
3. Review the Execution Mode column on the Edit Task Details: Basic Information page to confirm that the task supports the Mark for Retry, Retry, and Roll Back task actions.

Using Predefined Processes

Flow owners can use the Submit a Process or Report task from a payroll work area to submit corrective processes:

- Roll Back Process

- Retry Payroll Process

The flow owner might use these processes to roll back or retry a flow that includes a single process and that is in progress with errors.

Using Flow Patterns

If your enterprise performs several tasks to correct problems, flow owners can use a predefined flow pattern, such as the Cancel Payment flow.

- A predefined flow pattern, such as the Cancel Payment flow

  The Cancel Payment flow pattern includes tasks to view the person process results, void the payment, process an external payment to prevent reissue of the original payment, and reverse the original prepayment and payroll run calculations.
- A flow pattern you create, such as a flow pattern to reissue a lost check

  This flow pattern might include tasks to void the payment, issue an external payment, and view the person process results.

Editing Flow Patterns: Examples

Review these scenarios to better understand how to edit flow patterns to meet the requirements of your enterprise. Use the Manage Payroll Flow Pattern task in the Payroll Checklist work area or the Refine Extracts task in the Data Exchange work area for the following scenarios:

- Updating a parameter to use a specified value
- Supplying a reason for a corrective action
- Adding tasks and reordering the task sequence
- Automatically incrementing dates in a scheduled extract

Updating a Parameter to Use a Specified Value

Your payrolls use a single process configuration group named InFusion UK Consolidation Group. You want to specify a constant for the configuration group task action parameter and hide the parameter to avoid data entry mistakes. You perform the following steps.

1. Query the flow pattern you defined for the payroll cycle.
2. On the Parameters tab of the Manage Payroll Flow Pattern page, edit the Process Configuration Group parameter.

   You enter the values shown on the following table.

Parameter Detail	Value
Display	No
Display Format	Text

Parameter Detail	Value
Lookup	No value
Usage	Input Parameter
Parameter Basis	Constant Bind
Basis Value	InFusion UK Configuration Group

Supplying a Reason for a Corrective Action

Your enterprise typically issues electronic funds transfer payments. You defined a flow pattern to issue check payments and to verify them. You want to track the reason managers issue checks, so you add a flow parameter to capture that information.

1. Query the payments flow pattern you defined.
2. On the Parameters tab of the Manage Payroll Flow Pattern page, Select and Add the Reason parameter to include it as a flow submission parameter, and complete the parameter details as shown in the following table.

Parameter Detail	Value
Display	Yes
Display Format	Text
Lookup	No value
Usage	Input Parameter
Parameter Basis	Context Binding
Basis Value	Payroll Flow

Adding Tasks and Reordering the Task Sequence

Your flow pattern includes a Calculate Gross Earnings process and the Element Results Register Report. You decide to add two extract reports that run concurrently, followed by a verification task, and to simplify the checklist so that it is a single list. You perform the following steps:

1. From the Data Exchange work area, select the Refine Extracts task.
2. On the Refine HCM Extracts page, query the flow pattern.

3. On the Tasks tab of the Manage Payroll Flow Patterns page:
    a. Add the first extract report, specifying the same Activity and Task Group as the Calculate Gross Earnings.
    b. Add the second extract report, specifying the same Activity and Task Group as the Calculate Cross Earnings.
    c. Add a manual verification task, specifying the same Activity and Task Group as the Calculate Cross Earnings.
4. Edit each task, specifying a sequence number on the Edit Task Details Owners and Details page.

    The lowest number is used for the first task in the checklist. For example, you might specify a sequence of 10 for the Calculate Gross Earnings task, 20 for the first extract report, 30 for the second extract report, and 40 for the manual verification task.
5. On the Tasks Sequence tab, reorder the sequence of reporting tasks so that the two extract reports run concurrently.

Task	Following Task
Start Flow	Calculate Gross Earnings
Calculate Gross Earnings	First extract report
Calculate Gross Earnings	Second extract report
First extract report	Manual verification task
Second extract report	Manual verification task
Manual verification task	End Flow

Automatically Incrementing Dates in Scheduled Extract

You create a flow pattern to extract weekly payroll data that requires the user to enter a process date parameter. You schedule the extract to run weekly. The application evaluates the flow parameters at the time of submission, and the task parameters when the task starts executing. To automatically increment the date field, so that the application derives the dates from the defaulted date parameter, you edit the task parameters.

You use the Refine Extracts task from the Data Exchange work area, or the manage Flow Patterns task from the checklist work area. You edit the task parameters on the task's Basic Information page by performing the following actions:

1. Select the Process Date parameter.
2. Select Context binding from the Parameter Basis field.
3. Select System Date from the Basis Value field.

Editing a Flow Pattern: Worked Example

This example demonstrates how to edit a QuickPay flow pattern that you copied to change the task owner and to notify the flow owner in advance of the payments process.

The following table summarizes the key decisions for this scenario.

Decisions to Consider	In this Example
Who is the task owner for the Verify Prepayments Result task?	Payroll Manager Operations role
When does the prepayments verification task start?	Two days before the process date for the Generate Check Payments task starts

Prerequisites

1. Create a QuickPay flow pattern by copying the predefined QuickPay flow pattern, entering a name for the flow pattern and the legislative data group.

Specifying a Task Owner

1. In the Payroll Checklist work area, click the Manage Payroll Flow Patterns task from the task pane.
2. On the Manage Payroll Flow Patterns page, search for the QuickPay flow pattern that you created, and edit the flow pattern.
3. On the Tasks tab, select the Verify Prepayment Results task, and click the **Edit Task** icon.
4. On the Edit Task Details: Owner and Checklist page, select the Payroll Manager Operations role as the checklist owner.
5. On the Edit Task Details: Duration and Notifications page, in the Duration region, complete the fields, as shown in this table.

Field	Value
Due Date	Process Date
Offset	-2

6. In the Notifications region, select the Flow Task Start Notification option.
7. Click **Submit**, and return to the Manage Payroll Flow Patterns page.
8. On the Manage Payroll Flow Patterns page, click **Submit**.

Creating a Flow Pattern to Reissue a Check: Worked Example

This example demonstrates how to create a payroll flow pattern to issue a replacement check that an employee lost or didn't receive.

The following table summarizes the key decisions for this scenario.

Decision to Consider	In This Example
Which tasks should the flow pattern include and in what sequence?	Verify a Payment, Void Payment, Generate Check Payment
Who has access to submit the flow?	InFusion Payroll Manager
Which notifications should the flow owner receive?	Error and Warning notifications
Which predefined task or flow parameters do you want to override?	Process Configuration Group parameter for the Void Payment task

Creating the Payroll Flow Pattern

1. In the Payroll Checklist work area, select the Manage Payroll Flow Patterns task from the task pane, and create a new flow pattern for the legislative data group.
2. On the Create Payroll Flow Pattern: Basic Information page, complete the fields, as shown in this table.

Region	Field	Value
Basic Information	Flow Pattern	InFusion Reissue Check
Activities	Activities to Include	Payment
Tasks	Available Tasks	Void Payment, Generate Check Payments, Verify a Payment

3. Click **Next**.
4. On the Create Payroll Flow Pattern: Tasks page, select the Verify the Payment task.
5. In the Owner and Checklist region, click the Owner field, and select Fusion Payroll Manager.
6. On the Create Flow Pattern: Tasks Sequence page, confirm tasks follow this sequence: Verify a Payment, Void Payment, Generate Check Payment. Correct the sequence, if necessary.
7. On the Create Payroll Flow Pattern: Flow Parameters page, click **Select and Add**. Select multiple parameters from the Select and Add window, as shown in this table.

Field	Value
Void Payment	Start Check Number, End Check Number, Process Configuration Group, Process Date, Payroll Process, Reason **Note:** With the exception of the Reason parameter, only the Generate Check Payment task uses these parameters. Add them only once as flow parameters to cover both tasks.
Generate Check Payment	Payroll, Start Date, Consolidation Group, Organization Payment Method, Overriding Payment Date, Payment Source, Payment Type

8. Select the row for the Process Configuration Group flow parameter and edit the flow parameters, as shown in this table:

Field	Action
Display	No
Display Format	Text
Lookups	No value
Parameter Basis	Use Specified Value
Basis Value	InFusion Process Configuration Group

You don't need to edit the Process Configuration task parameter. The application uses the details specified for the flow parameter, not the task parameter details.

9. On the Create Payroll Flow Pattern: Review page, preview the resulting payroll checklist, and submit the flow pattern.

Adding a BI Publisher Report to a Flow: Procedure

Add single or multiple BI Publisher reports to your copied or user-defined flow pattern. When you submit the flow, the report automatically generates an output file that you can view. The output file is based on the template used for the BI Publisher report, such as an html template. The Run BI Publisher Report task belongs to the Statutory activities in the flow pattern.

Adding Your Report to a Flow

Follow these steps to add the task to add your BI Publisher report to an existing extract flow.

1. Use the Manage Flow Patterns task in the Payroll Checklist work area or the Refine Extracts task in the Data Exchange work area or the area.
2. Search and select the flow that you will customize.
3. On the Manage Flow Pattern page, on the Tasks tab, click the **Edit** button
4. Click the **Select and Add** button on the menu bar. In the Search Tasks dialog, search for and select Run BI Publisher Report. Click the **Done** button.
5. On the Task Sequence page, confirm the sequence is correct.
6. On the Flow Parameters page, add a required parameter for the first argument of the BI Publisher report.

   The flow parameters map to the BI Publisher arguments. For example, if your report is based on a SQL query, the first argument is the first bind variable of a SQL query data model.

   > **Tip:** To easily determine the sequence of arguments, view the list of parameters for the generated report in BI Publisher.

7. Optionally, rename the parameter to a more meaningful name.
8. On the Task parameters page, in the Parameter Details section, complete the following steps:
   a. Confirm that the Parameter Basis for the First Argument value is Bind to Flow.
   b. Specify a value for the Report Name and Report Path parameters.

For example, if the BI Publisher data model is saved to the Custom folder in Shared Folders you would specify `/Custom/yourBIreport.xdo`.

c. Specify values for other arguments if required.

9. Review the flow and submit it.

Creating a Flow within a Flow: Worked Example

This example describes how to copy the Transfer Batch flow and modify it to include a custom flow pattern you created. In this example, the custom flow you add submits a report to check for any batch line errors after transferring a batch. If the transfer fails, you can skip the transfer process or mark it as complete, and then view the report for error details.

Summary of Tasks

This worked example includes details for the following tasks:

1. Creating the parent flow pattern
2. Adding the report flow to the parent flow
3. Testing the flow

Creating the Parent Flow Pattern

1. In the Payroll Checklist work area, select the **Manage Payroll Flow Patterns** task.
2. Search for and select the row for **Transfer Batch**, and then click the **Copy** icon.
3. Enter the name of the new flow pattern, such as **Transfer Batch with Error Report**.
4. Enter a description, such as "Transfer a batch and view any batch line errors that occurred." and then click **Save and Close**.
5. Search for and select the Transfer Batch and Error Report flow pattern, and then click **Edit**.
6. Add the parameter that derives batch name from the batch ID as follows:
   a. On the Parameters tab, click **Add**.
   b. Select the added row and click **Edit**.
   c. Add values as shown in this table.

Field	Value
Flow Parameter	Batch Name
Use for Searches	No
Display	No
Display Format	Text
Sequence	3

Field	Value
Usage	Input parameter
Parameter Basis	Post SQL Bind
Basis Value	select batch_name from pay_ batch_ headers where batch_id = :BATCH

7. Click **Save**.

Adding the Report Flow to the Parent Flow

1. On the Tasks tab, click **Select and Add**.
2. In the Search window, search for and select **Submit Another Flow**, and then click **Done**.
3. In the row for Submit Another Flow, click the **Edit** icon in the menu bar and set the values as shown in this table.

Field	Value
Task	Run Batch Lines Report
Activity	Statutory
Task Group	Reporting
Description	Submit the batch lines error report for the specified batch.

4. Edit task parameters as follows:
   a. In the row for Run Batch Lines Report, click **Edit Task**.
   b. Configure the predefined task parameters as shown in this table.

Parameter	Parameter Basis	Basis Value
Flow Name	Constant Bind	The name of the flow, for example Batch Lines Report. **Note:** This value is case-sensitive. Enter the name exactly.
From Flow Instance ID	Context Binding	Payroll flow
From Flow Task Instance ID	Context Binding	Payroll task
Use to Calculate Results	Constant Bind	Y
Parameter Name 1	Constant Bind	Batch Name

Parameter	Parameter Basis	Basis Value
Parameter Value 1	Bind To Flow	Batch Name

c. Click **Next**, and optionally complete the owner and checklist information.
d. Click **Next**, and optionally complete the duration and notification information.
e. Click **Submit**.

5. Edit the task sequence as follows:
   a. On the Task Sequence tab, edit the following two rows as shown in this table

Start Flow	Following Task
Transfer Batch	Run Batch Lines Report
Run Batch Lines Report	End Flow

   b. Click **Submit**.

Testing the Flow

1. Create and save a test batch that should cause an error.
   Alternatively, you can search for an existing batch that was transferred with errors using this SQL query:
   ```
   select * from pay_batch_headers where batch_status = 'E';
   ```
2. On the Submit a Process or Report page, select a legislative data group.
3. Select the **Transfer Batch with Error Report** task, and then click **Next**.
4. Enter a unique name for the current flow instance.
5. Enter the name of the batch with errors that you saved or queried, and then click **Submit**.
6. Click **OK and View Checklist**, and then click the **Refresh** icon until the Transfer Batch task shows as in progress with error.
7. View the report in the flow as follows:
   a. Select the row with the Transfer Batch task, and then select **Skip Task** in the Actions menu.
   b. In the row for Run Batch Lines Report, click **Go to Task**.
   c. In the Processes and Results section, click the name of the report.
   d. In the row for Run BI Publisher Report, click **Go to Task**.
   e. On the Process and Reports tab, click **View Results**.
   f. Click the PDF file name to open the report.

Creating a Report to View Batch Line Errors: Worked Example

This example describes how to create a flow to view a report showing errors that occurred while transferring a batch using the payroll batch loader. After you create the report and the flow pattern for it, you can add it to other flow patterns. For

example, for a custom flow pattern that includes the Transfer Batch flow task, you could add this flow immediately after that task.

In this example, the SQL query that defines the data model for the report takes the batch name as a bind variable. The bind variable enables the batch name to be user-entered when run alone, or dynamically derived when run within another flow.

Summary of Tasks

This worked example includes details for the following tasks:

1. Creating the report data model and output file name
2. Creating the report template
3. Creating the flow pattern to submit the report

Prerequisites

This worked example assumes you completed the following prerequisites:

1. The following software is installed:
    - JRE version 7 or later
    - Microsoft Word
    - Oracle BI Desktop Integration for Word

    Tip: Select the Download BI Desktop Tools menu in the Get Started section of the Oracle Business Intelligence home page to download the Template Builder for Word installer.
2. You know the name of an existing batch that has transferred with errors. You will use this batch name for testing your report.

    Tip: You can use the following SQL query to retrieve the batch names: `select * from pay_batch_headers where batch_status = 'E';`

Creating the Report Data Model and Output File Name

1. Sign in as a user with the Oracle Business Intelligence administration privileges.
2. Create a SQL-based data model for the report as follows:
    a. In the Navigator, select **Reports and Analytics**.
    b. On the Reports and Analytics work area, click **Browse Catalog**.
    c. On the Catalog page, select **New**, and then select **Data Model**.
    d. On the Diagram tab, click **New Data Set**, and then click **SQL Query**.
    e. In the SQL Query window, enter values as shown in this table, and then click **OK**.

Field	Value
Name	Batch Lines Report

Field	Value
Data Source	ApplicationDB_ HCM
Type of SQL	Standard SQL
SQL Query	select 'Marker' as Marker, bl.batch_ line_id bl.batch_ line_status line_text, bl.line_ sequence from pay_ batch_headers bh, pay_ batch_lines bl, pay_ message_lines ml where bh.batch_id = bl.batch_id and bl.batch_ line_id = ml.source_ id and bh.batch_name = :batchName

Note: Ensure that you don't include a semicolon at the end of your SQL query.

f. In the Add Parameter window, select **batchName**, and then click **OK**.
g. On the Parameters page, in the **Display Label** field, enter **Batch Name**.

3. To change the name of the output file from Default Document.pdf, follow these steps:
   a. In the left pane, select **Bursting**.
   b. On the Bursting page, click **Create New Bursting**.
   c. Set field values as shown in this table.

Field	Value
Data Source	ApplicationDB_ HCM
Split By	/DATA_ DS/G_1/MARKER
Delivery By	/DATA_ DS/G_1/MARKER
SQL Query	select 'Marker' as KEY, 'Batch Lines Report' as TEMPLATE, 'PDF' as OUTPUT_FORMAT, 'Batch Lines Report - '|| to_ char(sysdate 'YYYY-MM-DD: HH:MI:SS') as output_name from dual

Note: Ensure that you don't include a semicolon at the end of your SQL query.

4. Click the **Save As** icon and save the data model under the path **Shared Folders/Custom/** with the name **BatchReportDataModel**.
5. Test that the data model query returns data as follows:
   a. In the left pane, click **Data Sets**.
   b. On the Data tab, enter the name of an existing batch that transferred successfully with errors, and then click **View**.

   You should see values for BATCH_LINE_ID and BATCH_LINE_STATUS and any messages that occurred.

   Note: The batch name field is case sensitive, so enter the name exactly. If you don't see values or if you entered incorrect SQL syntax, edit the SQL for the data model and try again.

6. Click **Save As Sample Data**, and then click **OK**.
7. Click **Export**, and then save the XML file to your file system. You will use this when designing your report template.

8. Click **Save**.

Creating the Report Template

1. Generate the report template as follows:
    a. On your data model page, click **Create Report**.
    b. In the Create Report window, click **Cancel**, and then click **OK**.
    c. Click the **Select Data Model** icon, select your data model, and then click **OK**.
    d. Click the **Generate** icon.
    e. In the **Template Name** field, **Batch Lines Report**, and then click the **Generate** button.
    f. Click **Edit** and open the file in Microsoft Word.
    g. Save the RTF file to your file system.
2. In Microsoft Word, modify your template as follows:
    a. Delete the **MARKER** and **BATCH_LINE_ID** columns from the table.
    b. Change the column headings to user-friendly values, such as Status, Error Text, and Line Number.
    c. Click the **Field** icon and insert **BATCHNAME** before the batch lines table.
    d. Insert text before the BATCHNAME field, such as **Batch Lines Errors for Batch** followed by a colon and space character.
    e. Make any other layout changes, as needed, such as changing column width.
    f. Save and close the RTF file.
3. Upload your modified template as follows:
    a. On the report page, under your report icon, click **Properties**.
    b. Click the **Upload** icon.
    c. Click **Browse** to select your RTF template, and then click **OK**.
    d. In the Upload Template File window, in the **Locale** field, select the same local that is listed as the default local, and then click **OK**.
    e. Click **OK** to overwrite the existing template for that locale.
    f. Click **Save**, and then click **Return**.
4. Set the default format as follows:
    a. At the top-right corner, click **View a List**.
    b. In the **Default Format** field, select **PDF**.
    c. Click **Save Report**.
    d. In the Save As window, in the **Name** field, enter **Batch Lines Report**, and then click **OK**.
5. Ensure that the report has the correct role access as follows:
    a. On the Catalog page, locate the batch lines report.
    b. On the More menu for Batch Lines Report, click **Permissions**.
    c. Click **Add users/roles** to add roles, as necessary.

        Tip: If you have several roles to add, search for and add the BI Consumer role with full control, which most other roles inherit.

    d. Click **OK**.
6. Test your report as follows:
    a. On the Catalog page, for the batch lines report, click **Edit**.
    b. Ensure that the name of your data model displays above the report icon. If it doesn't, add it and save your changes.

c. On the Catalog page, for the batch lines report, click **Open**.
d. In the **Batch Name** field, enter the batch name you entered previously. You should see the data in the sample report.

Creating the Flow Pattern

1. Ensure that you are signed in as a user with payroll administration privileges.
2. On the Payroll Checklist work area, select the **Manage Payroll Flow Patterns** task.
3. Click **Create**, and then click **Continue**, with no legislative data group selected.
4. On the Basic Information page, enter the values as shown in this table, and then click **Next**.

Field	Value
Flow Pattern	Batch Lines Report
Description	Submit a report to view batch line errors for a specified batch transferred using the payroll batch loader.
LDG Required	Optional
Default Flow	Yes
Activities to Include	Statutory
Selected Tasks	Run BI Publisher Report

5. Click **Next** to accept default values until you are on the Parameters page.
6. Add the Batch Name parameter as follows:
   a. Click **Select and Add**.
   b. Search for and select **First Argument**, and then click **OK**.
   c. Click **Edit** and change its values as shown in this table, and then click **Next**.

Field	Value
Flow Parameter	Batch Name
Use for Searches	No
Display	Mandatory
Display Format	Text
Sequence	2
Usage	Input parameter

Field	Value
Parameter Basis	Post SQL Bind
Basis Value	select batch_name from pay_ batch_ headers where batch_id = :BATCH

7. On the Task Parameters page, edit the **Report Path** parameter as shown in this table.

Field	Value
Display	Yes
Parameter Basis	Constant Bind
Basis Value	/Custom/Batch Lines Report.xdo

8. Select the **First Argument** parameter and ensure that its values are as shown in this table.

Field	Value
Parameter Basis	Bind to Flow
Basis Value	Batch Name

9. Click **Next**, and then click **Submit**.
10. Test your flow as follows:
    a. In the Payroll Checklist work area, select the **Submit a Process or Report** task.
    b. Select **Batch Lines Report**, and then click **Next**.
    c. Enter a unique name for the current flow instance.
    d. Enter the same batch name that you used when creating the report, and then click **Submit**.
    e. Click **OK and View Checklist**, and then click the **Refresh** icon until the status shows as completed.
    f. In the row for Run BI Publisher Report, click **Go to Task**.
    g. On the Process and Reports tab, click **View Results**.
    h. Click the PDF file name to open the report.

Customizing the QuickPay Flow Pattern: Procedure

When you start a QuickPay process using the Calculate QuickPay task, the checklist displays the tasks included in the predefined QuickPay flow pattern. To base the checklist on a customized flow pattern, you update the FLOW_DEFINITION user-defined table. When required, you can always start a QuickPay process using the predefined or other QuickPay flow pattern. Use the Submit a Payroll Flow task in the Payroll Checklist work area.

This topic covers the following procedures:

- Replace the predefine QuickPay flow
- Revert to the predefined QuickPay flow

Replacing the Predefined QuickPay Flow

As a prerequisite, you copy and update the predefined QuickPay flow pattern. You then complete the steps to update the FLOW_DEFINITION user-defined table.

Create a customized flow pattern.

1. Use the Manage Payroll Flow Pattern task in the Payroll Checklist work area.
2. Copy the predefined QuickPay flow pattern, and specify its legislative data group.
3. Update the new flow pattern with the tasks to include in your QuickPay flow.

Complete the following steps for the FLOW_NAME column.

1. Use the Manage User-Defined Tables task in the Payroll Calculation work area. Specify the legislative data group as a search criteria. Search for and open the FLOW_DEFINITION table.

   Note: Each legislative data group can have only one flow pattern specified for the Calculate QuickPay task.

2. Click the **Edit** button at the top of the page.
3. Specify the **Effective As-Of Date**.
4. In the User-Defined Columns section, select **FLOW_NAME**.
5. In the User-Defined Rows section, click **Create**.
6. In the Sequence field, enter the number **1**.
7. In the Exact field, enter a name, such as **Enter Flow Name**.
8. Click **Next**.
9. On the Edit User-Defined Table page in the User Defined Table Values section, click **Create**.
10. In the Add User-Defined Table Values dialog, select the name you specified for the **Exact** field.
11. In the Value field, enter **QUICK_PAY**.
12. Save your work.
13. Click **Back** to return to the Edit User-Defined Table page.

Complete the following steps for the FLOW_NAME_OVERRIDE column.

1. On the Edit User-Defined table page, in the User-Defined Columns section, select **FLOW_QUICKPAY_OVERRIDE**.
2. Click **Next**.
3. On the Edit User-Defined Table page in the User Defined Table Values section, click **Create**.
4. In the Add User-Defined Table Values dialog, select the name you specified for the Exact field.
5. In the Value field, enter the name of your customized QuickPay flow pattern.
6. Click **Submit**.

Reverting to the Predefined QuickPay Flow

The Calculate QuickPay task uses the user-defined table value specified in the last column of the FLOW_DEFINITION table. As a result, if you no longer want to use your customized default QuickPay flow, edit the user-defined table values.

1. Use the Manage User-Defined Tables task and search for the FLOW_DEFINITION table for your legislative data group.
2. Edit the FLOW_NAME_OVERRIDE column. Delete the name of your customized QuickPay in the **Value** field in the User-Defined Table Values section.
3. Review the FLOW_NAME column. Keep **QUICK_PAY** in the **Value** field in the User-Defined Table Values section.

Related Topics

- Creating a User-Defined Table for Matched Row Values: Example
- Creating a User-Defined Table for a Range of Row Values: Example
- QuickPay: How It's Processed

FAQs for Payroll Flow Patterns

Can I edit a predefined flow pattern?

You can't edit predefined flow patterns, but you can edit payroll flow patterns that you copy or create. For example, you might copy a predefined flow pattern and customize it to your requirements, such as adding a report extract you defined, or displaying additional flow parameters. You might create a new flow pattern that includes only the tasks you perform during a specific phase of the payroll cycle, such as the end of an accounting period or at the end of a quarter.

Can I skip the flow parameters for a single-task payroll flow pattern?

No, you must specify flow parameters required to successfully complete the task. Typically, these parameters include the mandatory task action parameters. You can also specify optional parameters that serve to restrict the results of the flow.

How can I rearrange tasks in a flow pattern?

Edit the task sequence by selecting a different task in the Following Task column. Every flow pattern begins with a Start Flow task, which does not belong to an Activity or Task Group, and concludes with an End Flow task.

When creating a flow, use the Manage Payroll Flow Pattern task in the Payroll Checklist work area or the Refine Extracts task in the Data Exchange work area. Rearrange tasks on the Task Sequence page. When editing a flow, select the task and edit its sequence on the Create Flow Pattern: Basic Information page. When you submit a flow, processes in the flow use and build upon the results of previous processes. To maintain data integrity, ensure the sequenced tasks follow a consecutive order.

Related Topics

- Sequencing Rules for Flows and Locked Tasks: Explained

How can I run tasks concurrently in a flow?

Use the Manage Payroll Flow Patterns task in the Payroll Checklist. Search for and open your flow pattern. Click the Task Sequence tab. You specify that each concurrent task follows the same previous task.

For example, you create a flow pattern with a payroll calculation task and two reports. The flow ends when both reports complete. For the first row, you specify the Start Flow task with the Calculate Payroll as the following task. For the second

row, you specify Calculate Payroll as the task, and the first report as the following task. For the third row, you specify Calculate Payroll as the task, and the second report as the following task. For the fourth row, you specify the first report as the task and End Flow as the following task. For the last row, you specify the second report as the task and End Flow as the following task.

What happens if I don't enter a task owner in a flow pattern?

The person who submits the flow becomes the flow owner and the task owner. The person's security privileges determine whether the person can submit the flow.

Why don't the duration dates in the flow pattern display?

The start and end dates and their offsets display after you complete the flow parameter dates. Use the Manage Payroll Flow Patterns task in the Payroll Checklist work area or the Refine Extracts task in the Data Exchange work area. Enter the flow parameters on the Parameters page, and then return to the Tasks page to enter the duration dates.

If your flow pattern doesn't specify dates as flow parameters, the duration list of values is blank. Change the values for the Duration list by displaying the date parameters for tasks in your flow pattern.

Can I automate a QuickPay flow using a service?

No, because QuickPay tasks require user input. The Flow Actions service is only for flows that don't require user action.

19 Payroll Process Configuration

Payroll Process Configuration Groups: Explained

Payroll process configuration groups provide sets of processing parameters, primarily related to logging and performance. When you run a process, such as a new-hire flow or termination flow, or an extract process or report, you can select a process configuration group.

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.

Use this table to locate the areas where you set up profile options and configuration groups.

Action	Work Area	Task and Page
Edit predefined process configuration groups	Setup and Maintenance or Payroll Calculation	Default Group tab of the Manage Payroll Process Configuration page
Create additional process configuration groups	Setup and Maintenance or Payroll Calculation	Group Overrides tab on the Manage Process Configuration Group page
Select a process configuration group as the default at the site or user level	Setup and Maintenance	Manage Default Process Configuration Group Profile Option Values task or the Manage Administrator Profile Values task

You might 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.

Related Topics

- Setting Profile Option Values: Procedure

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 Manage Payroll Process Configuration task in the Setup and Maintenance work area.

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, it 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 following 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 fetch 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 payroll batch loader uploads.	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 Manage Common Lookups page and add the lookup code ORA_ DISABLE_ POST_POP_FIX.	Yes, No Default: No Don't change this value unless advised by Oracle Support.
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

Parameter	Description	Values
Formula Execution Logging	Sets the logging level to investigate formula code problems. See also the Logging Processing Parameters topic.	Default: No logging
Historic Payment	Removes the validation to look for banks active as of the process date. This validation is usually 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 Manage Common Lookups page and add the lookup code HISTORIC_ PAYMENT.	Yes, No Default: No
Logging Area	Area where code logging is performed. 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 will have logging enabled.
Logging Category	Helps investigate problems with large volumes of detailed data. See also the Logging Processing Parameters topic.	GMPE or blank for no logging. You can specify multiple values. Default: No logging
Manual Task Processing	Enables 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 Manage Common Lookups page and add the lookup code BI_ OUTPUT_SIZE.	Must be a positive number. Default: 10000000
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
New Hire Flow Pattern	Name of the customer-defined flow that is triggered as part of the new-hire process.	Default: No value (predefined New Hire flow pattern)
Notifications Expiration Offset	Number of days before a payroll flow notification is automatically deleted.	Minimum: 5

Parameter	Description	Values
		Default: 5
Payroll Batch Loader Encryption Type	The type of encryption applied to source files loaded using the payroll batch loader.	PGPSIGNED, PGPUNSIGNED, PGPX509SIGNED, PGPX509UNSIGNED Default: No encryption
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 timeout limit enforced.
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
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 is triggered as part of the termination process.	Default: No value (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

Parameter	Description	Values
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

The following table lists the processing parameters that are applicable only for Oracle Fusion 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 EVE = For the Partial Period Accrual Reversal process, date earned is used. If the date earned isn't defined for the time periods on the Payroll Definition page, the payroll period end date is used. 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	The earliest date that retroactive processes are calculated. Updates made before this date are not recalculated.	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

Parameter	Description	Values
Override Location for Tax Libraries	Directory location for Quantum tax libraries.	There are no set values. Values must be directory structures where the tax libraries are stored. Default: $VERTEX_ TOP/lib
Reversal and Balance Adjustment Accounting Date	Accounting date based on one of the following dates: • The process date of reversal or balance adjustment • The process end date of the Transfer to Subledger Accounting task, which you can use 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

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 default value is no logging.

The following table explains each logging category.

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 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.

Parameter Value	Logging Category	Description
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. 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 and Canada 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 and Canada 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 shoes each formula execution logging parameter value.

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
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)

Parallel Processing Parameters

Payroll processes are designed to take advantage of multiprocessor machines. 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.

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 server:

- The default value of 1 is set for a single-processor machine.
- Benchmark tests on multiprocessor machines 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.

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.

20 Security Profiles

Creating Payroll Security Profiles: Examples

These examples illustrate different methods you can use to provide access to payrolls for members of the Payroll department. You first organize your payroll definitions into appropriate payroll security profiles using the Manage Payroll Security Profiles task. Then you 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

Using a payroll security profile to organize payroll definitions by payroll period type is the most common example. You create one security profile for 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 target employees' work areas. For example, you can create one for Canadian facilities and another for European facilities.

Individual Contributors

Your company requires that payroll managers access only the payroll definitions that they manage. In this scenario, the payroll security profile includes only those payrolls.

Flow Security and Flow Owners: Explained

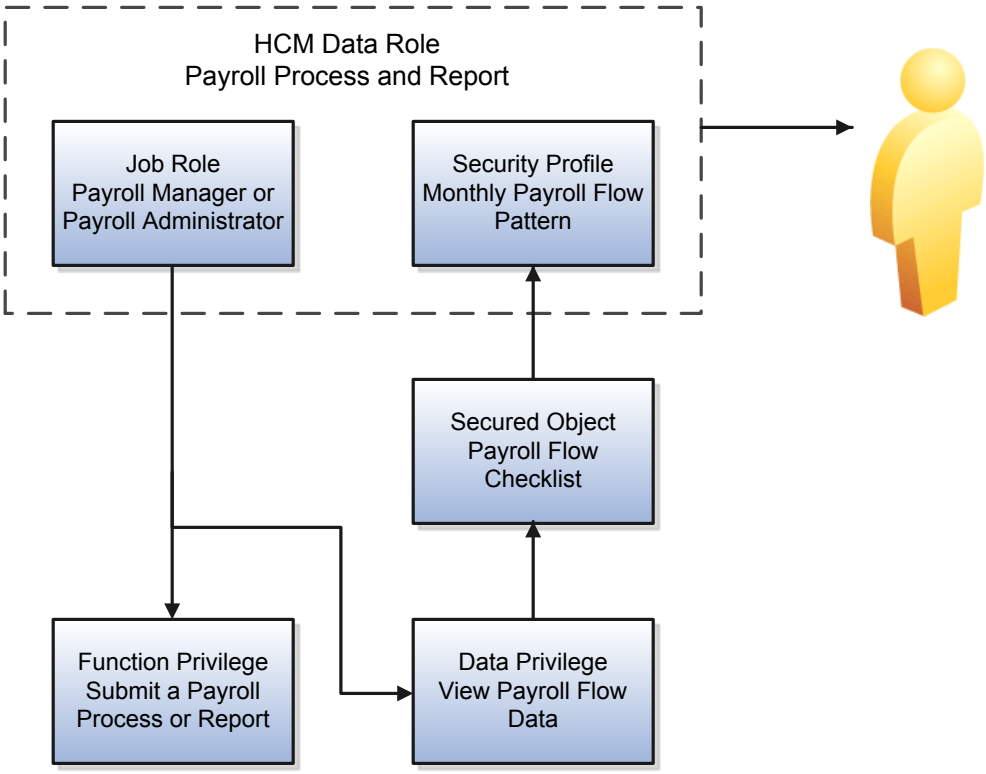
Your HCM data role security determines which flows you can submit or view. This topic explains how the HCM data roles and flow security work together. You define security for flow patterns using the Manage Payroll Flow Security Profile task in the Setup and Maintenance work area.

Submitting a flow generates a checklist of the included tasks. You become the owner of the flow and its tasks. If a flow pattern designates tasks to different owners, you remain the flow owner. Either you or the owner of a task can reassign the task to someone else, for example, to cover situations where the task is overdue and the task owner is on leave.

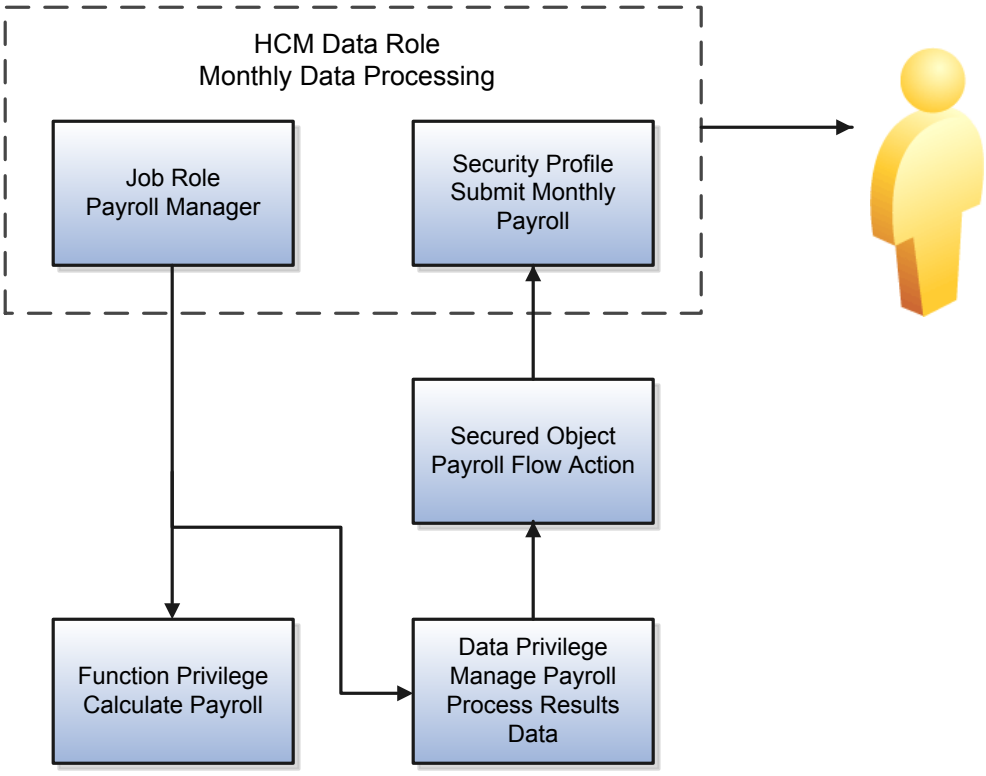
Payroll Flow Security and HCM Data Roles

HCM data roles secure the access to flows through data privileges and to the tasks on a checklist through functional privileges.

The following figure illustrates how the payroll manager and payroll administrator can submit a process or report and can view the results of the monthly payroll flow. Either the payroll manager or the payroll administrator can submit the flow and perform its tasks or have the tasks reassigned to them.



The following figure illustrates how only the payroll manager can calculate the payroll. The payroll manager can't reassign this task to a payroll administrator, because the administrator doesn't have the necessary functional privileges.



Troubleshooting

The following table describes what action to take if you encounter problems submitting or completing a task in a flow.

Problem	Solution
Can't submit or view a flow	Confirm that the data role assigned to you includes a security profile for the payroll flow pattern.
Can't perform a task, such as a process or report	Confirm that your data role is based on a job or abstract role that includes functional privileges to perform that task.

Related Topics

- Checklist and Flow Tasks: Explained
- Flow Pattern Parameters: Explained

Creating Flow Pattern Security Profiles: Examples

The following examples illustrate different methods you can use to organize payroll flows into appropriate security profiles. Use the Assign Security Profiles to Role task in the Setup and Maintenance work area to grant workers access to those profiles by data role.

Payroll Processing and QuickPay Flows

Payroll administrators are responsible for payroll processing. The payroll flow security profiles for the payroll administrator data role include the Payroll Cycle flow and the QuickPay flow.

End of Year Reporting

Some payroll administrators are responsible for year-end reporting. The payroll flow security profiles for their data role includes the End of Year flow and the Archive End-of-Year Payroll Results flow.

Hiring and Terminations

HR administrators are responsible for hiring and terminating employees. The payroll flow security profiles for the HR specialist data role includes the New Hire flow and the Termination flow.

21 Auditing and Data Validation

Auditing Payroll Business Objects: Explained

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

You manage duty roles in the Oracle Fusion Middleware Authorization Policy Manager (APM) using the Manage Duties task.

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 work 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.

The following table lists the payroll objects to audit.

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
Calculation Reporting Card Usage	Attaches a reporting card to a person record

Payroll Business Object	Description
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

Managing Audit Policies: Explained

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 at https://support.oracle.com.

If you don't want an application to be audited, you can stop the audit process by setting the Audit Level option to **None**.

Related Topics

- Configuring Audit: Highlights
- Audit Events for Oracle Applications Cloud Middleware

Configuring Audit Business Object Attributes: Points to Consider

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. Your 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, navigate to the Manage Audit Policies page 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.

> **Tip:** For business objects based on flexfields, select the Flexfields (Additional Attributes) check box to view and add or remove flexfield attributes, to include or exclude them from the audit.

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 are not audited. To continue to audit the business object with select attributes, deselect those attributes that are not 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.

Audit History: Explained

Using audit history you can 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 assigned privilege View Audit History (FND_VIEW_AUDIT_HISTORY_PRIV). For appropriate assignment of roles and privileges, check with your security administrator.

To open the Audit History work area, from the Navigator menu, select Audit Reports.

The default search displays a summary of the audit history in the search results table. It includes key data such as date, user, event type, business object type, and description. For a detailed report, search again with modified search criteria. You can export the report summary to Microsoft Excel.

The following table lists the search parameters used and the outcome of their selection in the detailed report.

Search Parameter	Result of Selection
Business Object Type **Note:** This parameter is applicable only for the business objects that belong to Oracle Applications Cloud.	• Narrows the search results to that specific business object within the selected product. • Enables the Show Attribute Details check box.
Include Child Objects	Displays all the child objects that were listed under the business object when audit was set up. For example, a sales order object that contains several items as child objects. **Note:** Displays the objects at the immediate parent-child level only. To view the children at subsequent levels, select the child object as the business object type and search again.
Show Attribute Details	Enables the attribute list so that users can select either all attributes or a specific attribute to view the changes. Based on the selection, the search results indicate whether the attribute is created, updated or deleted, and the corresponding old and replaced values.
Show Extended Object Identifier Columns	Displays the instances (contexts) in which the business object was used. The context values identify the objects and the transactions in which they were used. Each context is unique and assigns a unique description to the business object.

Note: The default report displays a standard set of columns that contain prominent details of the audit history. To view additional details, you can customize the display of columns.

Related Topics

- Audit Event Types: Explained

Adding Rules to Data Validation Reports: Worked Example

This example demonstrates how to add a validation rule to the Data Validation Report extract definition. Before making changes to the extract, you select a legislative data group. When you submit your changes for a new rule, that validation is available for that legislative data group. Depending on the validation rule and the data group you add it to, the validation will be included when you submit either or both of the following processes:

- Run Payroll Data Validation Report
- Run Worker Validation Report

The following table summarizes the key decisions for this scenario.

Decisions to Consider	In This Example
Which data group does the new validation belong in?	Person Details Based on the level at which you need the validation, you must create the records and data elements in the appropriate data group.
What type of validation are you adding?	A rule to check whether each person's Person Address Line 1 attribute has no value. If there is no value, the report displays an error message.

Prerequisites

1. A database item exists that fetches the value to be validated. The contexts required by the database item are provided by the block level to which you can add the validation. In this example, a database item must exist for the person address line 1 attribute.

Creating the Validation

1. In the **Data Exchange** work area, select **Manage Extract Definitions.**
2. Search for and select the extract definition to edit as follows:
    a. In the Type list, select **Full Profile**.
    b. Select your legislative data group, for example US LDG.
    c. Click **Search**.
    d. In the search results, click **Data Validation Report**.
3. On the Manage Extract Definitions page, click **Switch Layout**.
4. In the **Session Effective Date** field, enter **01/01/0001**.
5. Add a detail record 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. Complete the fields in the **Create Extract Record** section as shown in this table:

Field	Value
Sequence	6
Name	Person Address Details
Type	Detail record
Process Type	Fast Formula

d. Click **Save**.

6. Add the database item attribute as follows.
   a. In the **Extract Attributes** section, click **Create**
   b. Complete the fields as shown in this table:

Field	Value
Name	Person Address Line1 Attribute
Tag Name	Person_ Address_ Line1_ Attribute
Short Code	Person Address Line 1 **Note:** This value displays in the validation message in the report. For example, for the global null check rule, the following validation message displays: A value for the attribute Person Address Line 1 is required.
Start Date	01/01/0001
End Date	12/31/4712
Data Type	Text
Type	Database item group
Database Item Group	Person Address Line1
Output Label	Person Address Line 1
Output Column	6

   c. Click **Save and Close**.

7. 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:

Field	Value
Name	Person Address Line1 Rule
Tag Name	RULE_TEXT **Note:** Enter this value exactly.
Short Code	Person Address Line 1 Rule **Note:** The short code must include the short code of the database item attribute you created followed by a space and the suffix: Rule. The short code is case sensitive.
Start Date	01/01/0001
End Date	12/31/4712
Data Type	Text
Type	Rule
Rule	Global Null Check Rule
Output Label	Person Address Line 1 Rule
Output Column	26
Results Display Option	Summary and detail

   c. Click **Save and Close**.
8. In the **Actions** menu, select **Generate Formula**.
9. In the **Actions** menu, select **Compile Formula**.
10. Click the Extract Execution Tree node and verify that all formulas are compiled.
11. Click **Submit**.

Glossary

absence plan

A benefit that entitles workers to accrue time for the purpose of taking leave and receiving payments during absence periods.

absence type

A grouping of absences, such as illness or personal business that is used for reporting, accrual, and compensation calculations.

assignment

A set of information, including job, position, pay, compensation, managers, working hours, and work location, that defines a worker's or nonworker's role in a legal employer.

assignment level

See sourcing assignment level.

assignment statement

A statement that formulas use to set a value for a local variable.

balance dimension

The scope of a balance value, such as the period of time over which it accumulates, and whether it relates to an assignment, terms, or a payroll relationship.

balance feed

Input value from an element, or all elements in a classification, that adds to, or subtracts from, a balance.

benefits object hierarchy

A structure that enables efficient management of benefits that share similar attributes. The four object types used to structure benefits offerings are programs, plan types, plans, and options.

calculation card

Captures values required for payroll calculations for some earnings and deductions, such as absence payments and involuntary deductions. For some countries, you can also create various types of cards to hold default values for tax reporting units or payroll statutory units.

calculation component

An individual calculation captured on a calculation card, which is typically associated with an element.

calculation factor

A data-driven rule for calculating a deduction or exemption.

calculation method

An optional component of a calculation factor that supports complex calculations. It specifies a formula to return the final value, such as a cumulative year-to-date amount.

calculation type

The amount or percent based method used to calculate a pricing guideline. Values include Percent of, Percent off, Margin percent, Amount off, and Absolute value.

calculation value definition

The rates, amounts, or rules that payroll runs use to calculate the components listed on a calculation card.

consolidation group

A grouping of payroll runs within the same period for the same payroll, for which you can run reporting, costing, and post-run processing. You can specify a default consolidation group for each payroll definition.

cost hierarchy

The ordering of the levels at which a value for a payroll costing account segment is available for entry. The application builds each segment of the account number by checking levels of the hierarchy. For example, to build the suspense or default account number, the application checks the department and payroll levels. For the cost account number, it starts with the element entry level and continues to the payroll level until it finds a value. For the offset account, it checks only the element level.

database item

An item of information that has special programming attached, which formulas and HCM extracts use to locate and retrieve the data.

deductible amount

The aggregated contributions that are subject to a deduction after applying wage basis rules.

deduction card group

A grouping of calculation cards for year-end processing.

dimension

See

distribution

Amount paid to a participant from a plan such as a savings plan or a flexible spending account.

element

Component in the calculation of a person's pay. An element may represent a compensation or benefit type, such as salary, wages, stock purchase plans, pension contributions, and medical insurance.

element classification

Provides various element controls, such as the processing order, balances feeds, costing, and taxation. Oracle predefines primary element classifications and some secondary classifications. You can create other secondary classifications.

element eligibility

The association of an element to one or more components of a person's employment record. It establishes a person's eligibility for that element. Persons are eligible for the element if their assignment components match the components of the element eligibility.

element entry

The record controlling an employee's receipt of an element, including the period of time for which the employee receives the element and its value.

element group

Group of one or more elements, which you define for running various payroll processes, reports, or for cost distribution purposes. Use element groups to limit the elements processed by a payroll batch process.

element template

Predefined questions that you answer to create elements and associated items. Templates vary depending on the element classification, country, and products you are using.

eligibility profile

A user-defined set of criteria used to determine whether a person qualifies for a benefits offering, variable rate or coverage, compensation plan, checklist task, or other object for which eligibility must be established.

employment terms

A set of information about a nonworker's or employee's job, position, pay, compensation, working hours, and work location that all assignments associated with the employment terms inherit.

fast formula

A simple way to write formulas using English words and basic mathematical functions. Formulas are generic expressions of calculations or comparisons that repeat with different input values.

final close date

The last date on which a payroll run can process element entries. Typically, the last effective date of the payroll record.

flow

An occurrence of a flow pattern that you manage from a payroll work area or from the Data Exchange work area using the View Extracts task. The data security for your role determines which flows you can submit and access.

flow checklist

A sequence of automatic and manual flow tasks grouped into activities, such as extract reports and processes, or tasks related to payroll processing. Submitting a flow generates a checklist that you use to monitor the flow and manage its tasks.

flow pattern

A series of tasks performed in a predefined order, which are grouped into activities, such as extract reports and processes, or tasks that cover a phase of the payroll process. The flow pattern is used to generate a flow, which you can manage from its checklist.

flow task

A process or report, or manual task such as verifying results. A flow pattern can include more than one flow task.

formula

Combination of operators, functions, dimension and member names, and numeric constants used to calculate database members.

HCM data role

A job role, such as benefits administrator, associated with instances of HCM data, such as all employees in a department.

input value

Field defined for an element that holds information about an element entry that's needed for calculation. For example, hours worked, an alternate payment rate, or the amount of a bonus or deduction.

last standard earnings date

Date on which standard earnings stop accumulating, typically the date of the termination or payroll transfer.

last standard process date

Last date on which element entries are considered for normal processing in a payroll run. Typically, the last day of the payroll period in which a termination or payroll transfer occurs.

legal employer

A legal entity that employs people.

legislation

The base definition that governs certain rules so that Oracle Global Human Resources can perform differently for different countries and territories in order to meet statutory requirements. Can be predefined by Oracle or defined during implementation using the Manage Legislations for Human Resources task.

legislative data group

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.

lookup code

An option available within a lookup type, such as the lookup code BLUE within the lookup type COLORS.

lookup type

The label for a static list that has lookup codes as its values.

object group

User-defined set of elements or people that restrict the items you want to include in various processes and reports.

payment source

Bank account or other source of funds associated with organization payment methods.

payroll batch loader

An integrated Microsoft Excel workbook loader that helps you enter data more easily into HCM tables. Used for entering balances, balance groups, elements, element entries, payroll definitions, assigned payrolls, bank information for personal payment methods, formula global values, and user-defined tables.

payroll employment group

Group of people that payroll runs use for processing, data entry, and reporting.

payroll processing parameters

System-level information that controls settings for flow processes, such as logging, chunk size, and other options that affect process performance.

payroll relationship

Defines an association between a person and a payroll statutory unit based on payroll calculation and reporting requirements.

payroll relationship type

A predefined value that controls and groups person records into payroll relationships. If a person has more than one payroll relationship type in the same PSU, such as employee and contingent worker, multiple payroll relationships exist for that person.

payroll statutory unit

A legal entity registered to report payroll tax and social insurance. A legal employer can also be a payroll statutory unit, but a payroll statutory unit can represent multiple legal employers.

profile option level

The category or layer that defines a profile option. Site, Product, and User are the predefined levels.

profile option value

The setting mapped to the level of a profile option. A profile option may have multiple values set at different levels, such as Site or User.

reduced deductible amount

The final deductible amount after all exemptions are subtracted.

retroactive process

A process that recalculates the amount to pay a person in the current period to account for retrospective changes that occurred in previous payroll periods.

salary basis

Characterizes worker's base pay. Identifies payroll details used to pay base earnings, period of time pay is quoted, factor used to annualize base pay, components used to itemize adjustments into different reasons, and grade rate used for salary validation.

system person type

The type used to classify the person at the system level in human resources. For example, the system person type can be either employee or contingent worker. In human resources, user-defined person types are associated with system person types.

tax reporting unit

A legal entity that groups workers for the purpose of tax and social insurance reporting.

unit of measure

A division of quantity that is adopted as a standard of measurement.

user-defined table

Structure of rows and columns that maintains date effective lists of values. Tables store values as cells for specific row and column combinations.

wage basis rule

Determines the classifications of earnings that are subject to a deduction. Also referred to as a taxability rule.

work relationship group

Group of people that you can define for reporting, for example in HCM extracts.