

# Oracle Fusion Cloud Human Resources

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## **Implementing Payroll for China**

24C



Oracle Fusion Cloud Human Resources  
Implementing Payroll for China

24C

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# Get Help

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

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Thanks for helping us improve our user assistance!





# 1 Let's Get Started

## Implement Global Human Resources Cloud Payroll

To start an implementation of Global Human Resources Cloud Payroll for China, a user with the Application Implementation Consultant role (ORA\_PAY\_APPLICATION\_IMPLEMENTATION\_CONSULTANT\_JOB) must opt into the offerings applicable to your business requirements.

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

### Workforce Deployment Offering

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

This table specifies the primary functional areas of this offering. For the full list of functional areas and features in this offering, use the Associated Features report. Review the report when you plan the implementation of your offering.

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

## Guide Overview

This guide identifies and describes setup tasks for implementing Oracle Payroll for China.

## Objectives

This guide supports the implementation team in understanding the following concepts and the associated requisite setup tasks:

- Payroll concepts
- Geographies and addresses
- Payroll objects
- Elements, fast formulas, and balances
- Payroll calculation components
- Banking setup and payment methods
- Security profile, auditing, and data validations

For more information about related tasks, refer to the specific resources mentioned in the Other Documents section.

## Audience

This guide provides practical end-to-end guidance for Oracle Payroll for China implementations. This guide assumes that you have working knowledge of the basic principles of payroll and you're familiar with the basic payroll terminology and the Chinese legislative requirements. This guide also assumes that you have consulted these guides:

- Implementing Global Human Resources guide to complete the related prerequisite tasks required for payroll implementation.
- Oracle Applications Cloud Using Functional Setup Manager guide to have a detailed understanding of the Functional Setup Manager and the implementation tasks.

Before you start implementing the payroll application, ensure that you have:

- The Payroll license
- Completed the initial setup of the Oracle Fusion application
- Completed implementing Global Human Resources and the HR-specific tasks required for payroll implementation and processing. For example, setting up requisite jurisdictions for tax reporting.

Use this guide if you run payroll processes after implementation.

## Organization and Format

This guide provides step-by-step information to help you understand payroll concepts, implementation task order, and setup tasks necessary for you to implement Oracle Payroll for China. This guide is a combination of the Global Payroll Implementation guide and China-specific information for implementing payroll for China.

You can find specific information regarding the requisite tasks in relevant sections of this document. At the end of each topic are links to related topics. These links help you find additional information available in the Oracle Applications Help.

## Other Documents

For more information about generic and related tasks, you must refer to the guides at [docs.oracle.com/cloud/latest/globalcs\\_gs/docs.htm](https://docs.oracle.com/cloud/latest/globalcs_gs/docs.htm).

For more China-specific information, refer to the China Information Center at <https://support.oracle.com/rs?type=doc&id=2110954.2>

## Setup Tasks for Implementing China Payroll

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

Before you begin implementing Payroll for China, you must complete:

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

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

For implementing Global Payroll use the Workforce Deployment offering.

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

### Setup Tasks for Implementing China Payroll

Implementation Tasks List	Task Name	What you must do	Where to Find Information (Search on the Oracle Help Center for titles listed in this column)
<b>Prerequisite Tasks for Payroll Setup</b>			
Setup and Maintenance	Create an Implementation Project	Create an implementation project and select the enabled Workforce Deployment offering to generate the initial list of setup tasks required to implement the Global Payroll application.	<i>Create an Implementation Project for China</i>
Define Common Applications Configuration/Define Geographies for HCM	Manage Geographies	Create the geography values for China or use the Import Management task to load geography values in bulk. You can import Oracle-licensed data from Loqate for China.	<i>Geography Structures for China</i>
Define Common Applications Configuration/Define Features by Country or Territory	Features by Country or Territory	Select the value: <b>Payroll for China</b> . The country extension setting ensures that certain payroll-related features, such as element templates, work correctly in your implementation.	<i>Select Country Extensions for China</i>
	Select Address Style and Address Validation	Check the address style and address validation for your country.	<i>Change Address and Address Validation Settings</i>

Implementation Tasks List	Task Name	What you must do	Where to Find Information (Search on the Oracle Help Center for titles listed in this column)
Define Common Applications Configuration/Define Enterprise Structures for HCM	Manage Legislative Data Groups	Define at least one Legislative Data Group for each country your enterprise operates in.	<ul style="list-style-type: none"> <li>• <a href="#">Enterprise Structures for China</a></li> <li>• <a href="#">Legal Entities for China</a></li> <li>• <a href="#">Legislative Data Groups for China</a></li> </ul>
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Jurisdictions and Authorities for HCM	Manage Legal Addresses	Create legal addresses for all organizational units of the enterprise before you create legal entities.	<ul style="list-style-type: none"> <li>• <a href="#">Addresses for China</a></li> </ul>
	Manage Legal Jurisdictions	Review the predefined jurisdictions for your country and create any jurisdictions you require for specific local taxes.	<ul style="list-style-type: none"> <li>• <a href="#">Jurisdictions for China</a></li> <li>• <a href="#">Legal Authorities for China</a></li> </ul>
	Manage Legal Authorities	All legal entities must be registered against a jurisdiction that is governed by a legal authority. Create legal authorities as required for China (optional).	
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM	Manage Legal Entity	Create all legal entities that apply to the enterprise you are setting up. Designate the legal entity as a legal employer and set it as a payroll statutory unit (PSU) for payroll. You can set that as the parent PSU for the remaining legal employers.	<ul style="list-style-type: none"> <li>• <a href="#">Define Legal Entities for China</a></li> </ul>
	Manage Legal Entity Registrations (optional)	Define registration details of the legal entity you create. Register them with the appropriate government or legal authorities for the purpose of claiming and ensuring legal or commercial rights and responsibilities.	
	Manage Legal Entity HCM Information	<p>Manage legal entity HCM information to include statutory components as required.</p> <p><b>Note:</b> If the legal employer is set as a PSU, you can perform this step.</p> <p>Setup the associated LDG for this PSU.</p>	
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM/Define Legal Reporting Units for HCM	Manage Legal Reporting Unit	Define legal reporting units (LRU) also known as tax reporting units, to group employee records for tax and social reporting.	<ul style="list-style-type: none"> <li>• <a href="#">Define Legal Reporting Units for China</a></li> </ul>

Implementation Tasks List	Task Name	What you must do	Where to Find Information (Search on the Oracle Help Center for titles listed in this column)
		<p><b>Note:</b> Only a legal reporting unit created under a PSU, can be set as a tax reporting unit.</p>	
	Manage Legal Reporting Unit Registrations	Define registrations details of the LRU and register them with the appropriate government or legal authorities for the purpose of claiming and ensuring legal or commercial rights and responsibilities.	
	Manage Legal Reporting Unit HCM Information	Define the associated legal employer for a legal reporting unit. Review the LRU that employs and pays workers. Define statutory requirements as required.	
<b>Payroll Setup Tasks</b>			
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM	Legal Entity Calculation Cards	Create and edit predefined calculation cards for payroll statutory units. The payroll process uses the calculation rules defined on the cards to calculate earnings and deductions.	<ul style="list-style-type: none"> <li>• <i>Create a Legal Entity Calculation Card for China</i></li> <li>• <i>Create a Legal Reporting Unit Calculation Card for China</i></li> </ul>
Define Common Applications Configuration/Define Enterprise Structures for HCM/Define Legal Entities for HCM/Define Legal Reporting Units for HCM	Legal Reporting Unit Calculation Cards	Create the Statutory Deduction calculation cards for a tax reporting units and specify the overriding rules.	
Define Payroll/Define Payroll Business Definitions	<ul style="list-style-type: none"> <li>• Manage Organization Structure Lookups for China</li> <li>• Manage Payroll Lookups for China</li> <li>• Manage Person Lookups for China</li> <li>• Payroll Lookups</li> <li>• Payroll Value Sets</li> <li>• Descriptive Flexfields for Payroll</li> <li>• Extensible Flexfields for Payroll</li> </ul>	Create lookups, value sets, and descriptive and extensible flexfields that you need to support payroll.	<ul style="list-style-type: none"> <li>• <i>Payroll Business Definitions for China</i></li> </ul>
Define Payroll/Define Earning and Deduction Definitions	<ul style="list-style-type: none"> <li>• Elements</li> <li>• Element Classifications</li> </ul>	The application provides many predefined elements that cannot be modified at the implementation level. Define additional elements as required.	<ul style="list-style-type: none"> <li>• <i>Elements for China</i></li> <li>• <i>Primary Element Classifications for China</i></li> <li>• <i>Create a Regular Earnings Element for China</i></li> </ul>

Implementation Tasks List	Task Name	What you must do	Where to Find Information (Search on the Oracle Help Center for titles listed in this column)
	Calculation Value Definitions (optional)	Review the tables that hold the rates and values used to calculate earnings, deductions and exemption amounts.	<ul style="list-style-type: none"> <li>• <a href="#">Calculation Value Definitions for China</a></li> </ul>
	Payroll Calculation Information (optional)	Review the payroll calculation information rules and definitions generated for user-defined elements. These rules and definitions are used for calculation of earnings and deduction amounts.	<ul style="list-style-type: none"> <li>• <a href="#">Payroll Calculation information for China</a></li> </ul>
	Values Defined by Criteria	Create the criteria rules or evaluation conditions that determine a particular value or rate.	<ul style="list-style-type: none"> <li>• <a href="#">Overview of Values Defined by Criteria</a></li> </ul>
	Rate Definitions	Review the predefined rate definitions and create new definition as needed. The rate definition can either be a derived rate or a value defined by criteria.	<ul style="list-style-type: none"> <li>• <a href="#">Overview of Rate Definitions</a></li> </ul>
	Component Group Rules	Review the rules defined for earnings and deductions that belong to the same component group.	<ul style="list-style-type: none"> <li>• <a href="#">Define Earning and Deduction Definitions for China</a></li> </ul>
Define Payroll/Define Balance Definitions	<ul style="list-style-type: none"> <li>• Balance Definitions</li> <li>• Balance Groups</li> <li>• Balance Group Usages</li> <li>• Balance Exceptions</li> <li>• Balance Exception Reports</li> </ul>	The application provides many predefined balances. Review the definitions of predefined balances and create new definitions, including assigning dimensions and feeds.	<ul style="list-style-type: none"> <li>• <a href="#">Payroll Balance Definitions</a></li> <li>• <a href="#">Balance Group Usages for China</a></li> </ul>
Define Payroll/Define Payment Methods/Set Up Banks, Branches, and Accounts <b>Note:</b> Complete the requisite financial setup notes prior to this task	<ul style="list-style-type: none"> <li>• Manage Banks</li> <li>• Manage Bank Branches</li> <li>• Manage Bank Accounts</li> </ul>	Create and edit banks, branches, and accounts.	<ul style="list-style-type: none"> <li>• <a href="#">How Bank, Branch, and Account Components Work Together</a></li> </ul>
Define Payroll/Define Payment Methods	Organization Payment Methods	Create new organization payment methods and their payment sources.	<ul style="list-style-type: none"> <li>• <a href="#">How Payment Methods and Payroll Definitions Work Together for China</a></li> <li>• <a href="#">Set Up Payment Sources in Organization Payment Methods for China</a></li> </ul>
Define Payroll/Define Pay Frequency	Consolidation Groups	Review the consolidation groups assigned to payroll definitions and create new groups. They let you	<ul style="list-style-type: none"> <li>• <a href="#">Consolidation Groups</a></li> </ul>

Implementation Tasks List	Task Name	What you must do	Where to Find Information (Search on the Oracle Help Center for titles listed in this column)
		process the results from more than one payroll in a single action.	
	Time Definitions	Review predefined time definitions and create or update static and dynamic intervals of time.	<ul style="list-style-type: none"> <li>• <a href="#">Use Time Definitions for Severance Pay</a></li> </ul>
	Payroll Definitions	Create and update payroll definitions that specify the payment frequency, processing schedule, and other parameters.	<ul style="list-style-type: none"> <li>• <a href="#">Payroll Definitions for China</a></li> <li>• <a href="#">How Pay Frequency Components Work Together for China</a></li> <li>• <a href="#">Periodicity Conversion for China</a></li> </ul>
Define Payroll/Define Fast Formulas	User-Defined Tables	Review the predefined table structures and create and update new user-defined table structures.	<ul style="list-style-type: none"> <li>• <a href="#">Example to Create a User-Defined Table for Matched Row Values</a></li> </ul>
	Fast Formulas	Review predefined formulas and create new ones to validate or calculate data for payroll.	<ul style="list-style-type: none"> <li>• <a href="#">Overview of Using Fast Formulas</a></li> </ul>
Define Payroll/Define Payroll Flow Patterns	Payroll Flow Patterns	Review the predefined payroll flow patterns and create new patterns to meet specific requirements.	<ul style="list-style-type: none"> <li>• Payroll Flows</li> </ul>

## Security Reference

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

- [Securing HCM](#)
- [Security Reference for HCM](#)

## Other Document References

For more detailed information about the setup tasks and other related applications and tasks, refer to these guides at [docs.oracle.com/cloud/latest/globalcs\\_gs/docs.htm](https://docs.oracle.com/cloud/latest/globalcs_gs/docs.htm).

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

# HCM Data Roles

## Role Provisioning and Deprovisioning

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

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

### Role Provisioning Methods

You can provision roles to users:

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

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

### Role Types

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

### Automatic Role Provisioning

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

### Role Deprovisioning

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

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

### Roles at Termination

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



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

- On the termination date
- On the day after the termination date

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

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

## Reversal of Termination

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

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

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

## Date-Effective Changes to Assignments

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

# Create HCM Data Roles for Payroll Implementation Users

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

## Create the PayrollAdmin\_ViewAll Data Role

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

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

You can also go to this page by selecting **Navigator > My Client Groups > Workforce Structures > Data Roles and Security Profiles**.

2. In the Search Results section of the Manage Data Roles and Security Profiles page, click **Create**.

- Complete the fields on the Create Data Role: Select Role page as shown in the following table.

Field	Value
Data Role Name	PayrollAdmin_ViewAll
Job Role	Payroll Administrator

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

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

- Click **Review**.
- On the Create Data Role: Review page, click **Submit**.
- On the Manage Data Roles and Security Profiles page, search for the PayrollAdmin\_ViewAll data role to confirm that it exists.

## Create the PayrollMgr\_ViewAll Data Role

Follow these steps:

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

Field	Value
Data Role Name	PayrollMgr_ViewAll

Field	Value
Job Role	Payroll Manager

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

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

- Click **Review**.
- On the Create Data Role: Review page, click **Submit**.
- On the Manage Data Roles and Security Profiles page, search for the PayrollMgr\_ViewAll data role to confirm that it exists.

*Related Topics*

- [Overview of HCM Data Roles for Implementation Users](#)

## FAQ for Payroll Data Roles

### How do I provision HCM data roles to users?

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

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

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

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

## Security Profiles

### HCM Security Profiles

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

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

#### Use of HCM Security Profiles

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

#### HCM Object Types

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

- Country
- Document Type
- Job Requisition
- Legislative Data Group (LDG)
- Organization
- Payroll
- Payroll Flow
- Person
  - Managed Person
  - Public Person
- Position
- Talent Pool
- Transaction

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

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

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

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

## Security Criteria in HCM Security Profiles

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

## Access to Future-Dated Objects

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

Enable access to future-dated objects as follows:

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

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

## Security Profile Creation

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

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

## Reuse of Security Profiles

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

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

### Related Topics

- [Predefined HCM Security Profiles](#)
- [Best Practices for HCM Data Roles and Security Profiles](#)

## Payroll Security Profiles

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

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

### Payroll Period Type

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

### Regional Assignments

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

### Individual Contributors

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

## Implementation Project

### Create an Implementation Project

You must define the setup tasks for an organization hierarchy in an implementation project.

Perform these steps to create an implementation project:

1. Sign in to the Oracle Fusion application using a role that has the profile of a super user and privileges to create all organizational structures.
2. Select **Setup and Maintenance** from the Navigator.
3. On the Task panel, select **Manage Implementation Projects**.
4. On the Implementation Projects page, click **Create**.  
  
On the Create Implementation Project page, provide a name and start date for your project and click **Next**.
5. Select **Workforce Deployment** as the offering, since this parent project contains all the tasks to set up HCM organizational structures.
6. For Payroll implementations, further select **Payroll**.
7. Click **Save and Open Project**.

This parent project contains all the tasks to set up HCM organizational structures.

# Date Effectivity

## Overview

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

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

## Logical and Physical Records

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

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

Physical Record	Effective Start Date	Effective End Date	Department Manager
4	18 January, 2022		C. Woods
3	15 October, 2021	17 January, 2022	A. Chan
2	13 June, 2020	14 October, 2021	T. Romero
1	22 March, 2019	12 June, 2020	G. Martin

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

## Effective End Dates in Physical Records

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

## Object End Dates

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

## Status Values in Date-Effective Objects

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

## Future-Dated Changes

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

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

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

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

## Date-Enabled Objects

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

### Related Topics

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

## How You Delete Physical Records from Date-Effective Objects

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

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



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

## Intermediate Records

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

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

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

## First or Only Records

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

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

## Final Records

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

# Tips

## Deep Links

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

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

To access deep links:

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

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

## Search Logic Profile Options for Client List of Values

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

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

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

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

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

### Related Topics

- [Search Logic Profile Options for Client List of Values in Global Human Resources](#)

## Use Transaction Design Studio to Configure Field Displays

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

You can control the visibility of attributes that are displayed either as Delivered or Enabled, and the availability of fields and sections of a transaction based on the user's role, person's business unit, or legal employer. By default, the responsive pages display the frequently used attributes and hide the less frequently used attributes. Use Page Composer to personalize the responsive pages and display the attributes and tabs delivered within the feature.

Here's how you start HCM Experience Design Studio:

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

## Social Security Accounts

The Social Security Accounts page displays an employee's social security account information. The information about your social security accounts is displayed in the Employee Accounts and Employer Accounts sections of this page. This table lists the editable fields on this page.

Field	Displayed	Comments
View Accounts As-of Date	Yes	Displays today's date. Can be updated by users to a different date.

## Employee Accounts

This table lists the read-only fields available in the Employee Accounts section on the Social Security Accounts page.

Field	Displayed	Comments
Public Housing Fund Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.
Supplementary Public Housing Fund Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.
Basic Pension Insurance Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.
Basic Medical Insurance Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.
Supplementary Medical Insurance Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.
Unemployment Insurance Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.
Maternity Insurance Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.
Work-Related Injury Insurance Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.

Field	Displayed	Comments
Enterprise Annuity Employee Account	Conditionally	Displays if the component exists as of the effective date on the employee's personal deduction calculation card.

## Employer Accounts

This table lists the read-only fields available in the Employer Accounts section on the Social Security Accounts page.

Field	Displayed	Comments
Public Housing Fund Employer Account	Conditionally	Displays if registration information exists for the item for the tax reporting unit.
Supplementary Public Housing Fund Employer Account	Conditionally	Displays if registration information exists for the item for the tax reporting unit.
Social Insurance Employer Account	Conditionally	Displays if registration information exists for the item for the tax reporting unit.
Enterprise Annuity Employer Account	Conditionally	Displays if registration information exists for the item for the tax reporting unit.

# 2 Payroll Concepts

## Introduction

Before a customer can hire a worker in China or run any country-specific process, your implementation team must set up the organization structures required for the management of HR processes.

You can perform all setup tasks under the Workforce Deployment offering in the Setup and Maintenance work area.

A typical enterprise setup in China includes several different structures.

For these structures	Check here for more information
Legal entities, including registrations, payroll statutory units, and HCM configuration	See Legal Entities in the Help Center.
Legislative data groups	See Legislative Data Groups in the Help Center.
Legal reporting units, including registrations, tax reporting units, and HCM configuration	See the following topics in the Help Center. <ul style="list-style-type: none"> <li>• Legal Reporting Units</li> <li>• How Payroll Statutory Units, Legal Employers, and Tax Reporting Units Work Together</li> <li>• How Transmitters and Tax Reporting Units Work Together</li> </ul>
HCM organization models	See HCM Organizations in the Help Center.
Legal jurisdictions	See Jurisdictions in the Help Center.
Legal authorities	See Legal Authorities in the Help Center.

After you complete the organization structure, you must set up the workforce structure including locations, departments, and jobs.

For these structures	Check here for more information
Workforce structures, including locations, departments, and jobs	See Workforce Structures in the Help Center.
Payroll relationship records	See Payroll Relationships in the Help Center.
Define elements and configure the predefined elements	See How Elements Hold Payroll Information for Multiple Features in the Help Center.

You define these structures, which typically contain China-specific information, before you can create application users.

# Enterprise Structures

## Overview

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

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

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

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

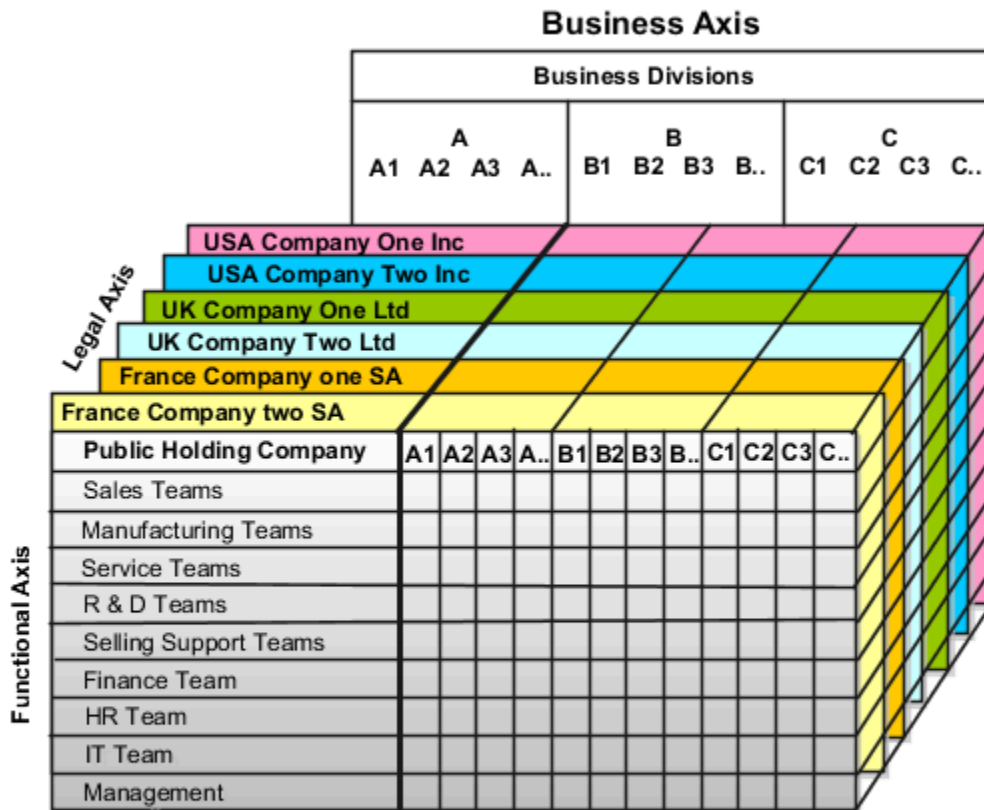
- Legal
- Managerial
- Functional

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

- Divisions
- Business Units
- Departments

Align these structures with your strategic objectives.

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



## Legal Structure

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

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

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

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

- Account for themselves to the public through statutory and external reporting.
- Comply with legislation and regulations.
- Pay income and transaction taxes.
- Process value added tax (VAT) collection on behalf of the taxing authority.

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

The figure illustrates:

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

For example, a group may have a separate company for each business in the United States (US), but have its China legal entity represent all businesses in China.

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

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

## Management Structure

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

## Functional Structure

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



## Legal Entities

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

These are the rights and responsibilities of a legal entity:

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

Their rights and responsibilities may be enforced through the judicial system.

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

- Facilitating local compliance
- Minimizing the enterprise's tax liability
- Preparing for acquisitions or disposals of parts of the enterprise
- Isolating one area of the business from risks in another area. For example, your enterprise develops property and also leases properties. You could operate the property development business as a separate legal entity to limit risk to your leasing business.

No legal entities are predefined. You must create all legal entities that apply to the enterprise you're setting up. Use the Manage Legal Entity HCM Information task in the Setup and Maintenance work area.

When defining legal entities, you must consider the following:

- Roles of Legal Entities
- Types of Legal Entities
- Registrations
- Additional Reporting Information

## Role of Legal Entities

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

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

Legal entities must comply with the regulations of jurisdictions, in which they register.

To support local reporting requirements, you create and register legal reporting units (LRU).

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

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

## Types of Legal Entities

Two types of legal entities exist:

- A legal employer is a legal entity that employs workers.
- A payroll statutory unit (PSU) is a legal entity that's responsible for paying workers, including the payment of payroll tax and social insurance. A PSU can pay and report on payroll tax and social insurance on behalf of one or many legal entities. That choice depends on the structure of your enterprise.

When defining a legal entity, you must consider the context in which it's to be used:

- If the entity is to be used in an HCM context, designate it as a legal employer. In an HCM implementation, it's mandatory to define legal employers.
- If the entity is to be used in a payroll context, designate it as a payroll statutory unit (PSU) for payroll processing and tax reporting.
- You can define a legal entity that's both a legal employer and a PSU.
- If multiple legal employers must be grouped together for tax reporting purposes, you can associate them all with a single PSU. If legal employers don't report together, they must be segregated by PSU.

## Registrations

When you create a legal entity, the entity automatically establishes a registration with the identifying jurisdiction. While creating the legal jurisdiction, select Social Insurance as the legislative category and indicate it as the identifying jurisdiction. For additional jurisdictions, use the registration code Civil Identifier for the Public Authority for Civil Information. Use the registration code Registration Number for the Ministry of Social Affairs and Labor. If the legal entity interacts with other legal authorities, you must create additional registrations as appropriate. Tax registrations are done at the LRU, or PSU level.

**Note:** Capture the registration details using the Manage Legal Reporting Unit Registrations task. This task is located in the Setup and Maintenance work area.

## Additional Reporting Information

When defining a legal entity, use the Manage Legal Entity HCM Information task in the Setup and Maintenance work area. Provide additional information required for HR and payroll reporting.

If the legal entity is also a legal employer, provide details on the Legal Employer and China Legal Employer details tabs. Indicate the Company Type of the legal employer.

To use the complete contract functionality, you must select the two-tier single contract-single assignment model. Use the **Manage Legal Entity HCM Information** task and select the employment model in the **Legal Employer Details** section.

If the legal entity is also a PSU, specify:

- Fiscal Year Start date, and select the associated Legislative Data Group.

The Fiscal Year Start Date for China is January 1, of the year of going live with the Oracle application.

**Note:** It is at the PSU level that we associate the legislative data group.

## Legal Employers

A legal employer is a legal entity that employs workers. You define a legal entity as a legal employer by selecting the Legal employer check box on the Create Legal Entity page.

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

## Legislative Data Groups

Legislative data groups (LDGs) 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. Creating an LDG is optional for China.

For China, it's recommended to have only one PSU under an LDG and have multiple legal entities mapped to the PSU.

When you create the first legal entity in China, the application automatically creates a LDG with ISO two letter country code plus Legislative Data Group. For example, when you create your first legal entity in China and if no LDG exists for China, then the application creates an LDG - **CN Legislative Data Group**.

## Payroll Statutory Units

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

A payroll statutory unit can pay and report on payroll tax and social insurance on behalf of one or many legal entities, depending on the structure of your enterprise. For example, if you're a multinational, multiple company enterprise, then you register a payroll statutory unit in each country where you employ and pay people. For China, it's recommended to have only one PSU under an LDG, and have multiple legal entities mapped to the PSU.

## Legal Reporting Units

A legal reporting unit (LRU) is the lowest level component of a legal structure that requires registration.

Use LRUs to group your workers for the purpose of tax and social insurance reporting or to represent a part of your enterprise with a specific statutory or tax reporting obligation. To use an LRU for tax reporting purposes, you must configure it as a tax reporting unit (TRU).

Use the Manage Legal Reporting Unit task in the Setup and Maintenance work area to define and configure an LRU.

The first time you create a legal entity as a payroll statutory unit (PSU), the task automatically creates an associated LRU, which you can then identify as a TRU.

When you create an LRU that belongs to a legal entity that's also a PSU, you can make the LRU a tax reporting unit (TRU) via the Manage Legal Reporting Unit HCM Information task. An LRU that belongs to a legal entity that's not a PSU can't be converted to be a TRU. Therefore, for China, multiple legal entities are mapped to one PSU, so create all the LRUs that need to be converted into TRUs under the legal entity that's also a PSU.

To define an LRU for China, you must:

What you want to do	How you do it
Create the LRU	Use the Manage Legal Reporting Unit task in the Define Legal Reporting Units for Human Capital Management work area to define and configure a legal reporting unit (LRU).
(Optional) Define contacts for the LRU for Record of Employment reporting	Use the Manage Legal Reporting Unit task to specify employer contact details at the LRU level.
Define the legal addresses	Use the Manage Legal Addresses task in the Workforce Deployment work area.
Specify registrations for the LRU	Use the Manage Legal Reporting Unit Registrations task in the Setup and Maintenance work area.
Set up the calculation card for the LRU	Use the Manage Legal Reporting Unit Calculation Cards task.
Designate the LRU as TRU	Use the Manage Legal Reporting Unit HCM Information task.

## Plan Legal Reporting Units

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

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

## Planning Legal Reporting Units

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

## Tax Reporting Units

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

When you create a legal entity and identify it as a PSU, the application automatically creates an LRU under that legal entity. You can convert this LRU to TRU using the Manage Legal Reporting Unit HCM Information task.

When you create a legal entity and don't identify it as a PSU, the application still automatically creates an LRU under that legal entity. However, you can't convert this LRU to TRU, instead you need to re-create this LRU under a legal entity that you identified as a PSU.

## How Payroll Statutory Units, Legal Employers, and Tax Reporting Units Work Together for China

When you set up legal entities, you can identify them as legal employers and payroll statutory units (PSUs), which makes them available for use in Oracle Fusion Human Capital Management (HCM).

When implementing Global Payroll for China, it's recommended that you create only one payroll statutory unit.

### Legal Employers and Payroll Statutory Units

Payroll statutory units enable you to group legal employers so that you can perform statutory reporting at a higher level, such as China individual income tax calculation. In some cases, a legal employer is also a payroll statutory unit. However, your organization may have several legal employers in one payroll statutory unit. A legal employer can belong to only one payroll statutory unit.

### Payroll Statutory Units and Legal Reporting Units

PSUs and legal reporting units (LRU) have a parent-child relationship, with the PSU being the parent. An LRU is the lowest level component of a legal structure that requires registrations.

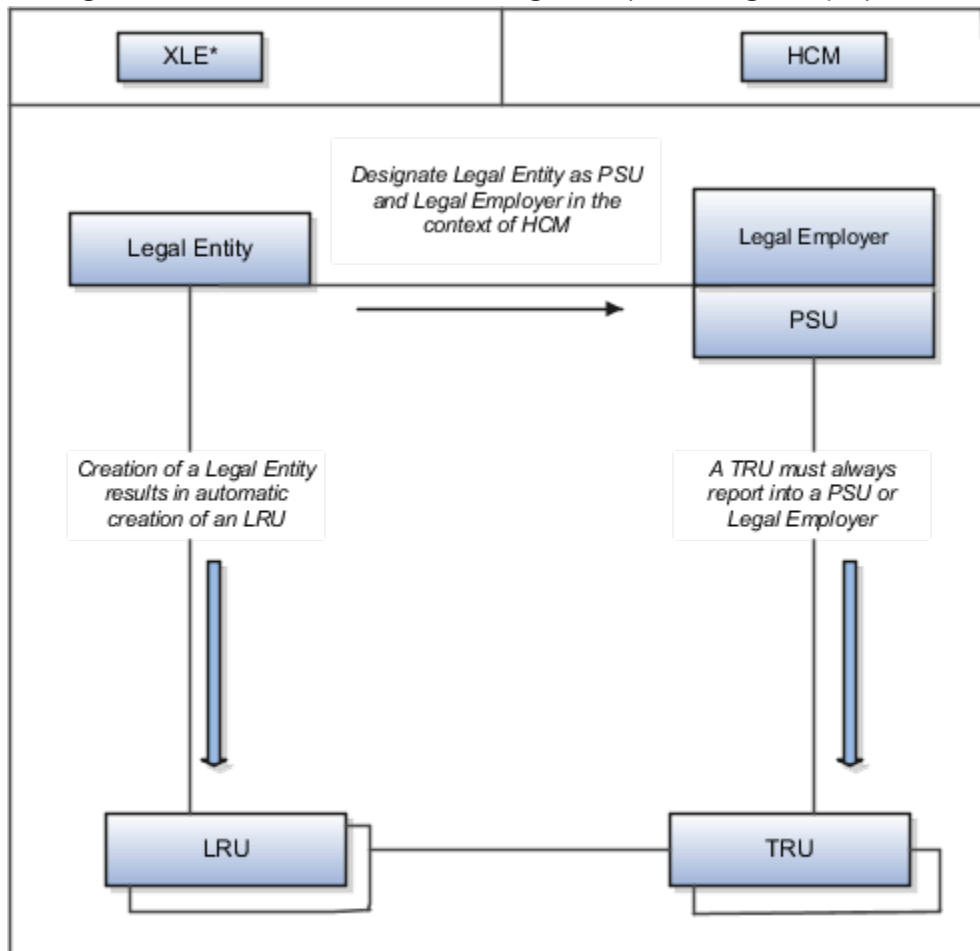
### Tax Reporting Units and Legal Employers

TRUs are indirectly associated with a legal employer through the PSU. One or more TRUs can be used by a single legal employer, and a TRU can be used by one or more legal employers. For example, assume that a single TRU is linked to

a PSU. Assume also that two legal employers are associated with this PSU. In this example, both legal employers are associated with the single TRU.

Use the Manage Legal Reporting Unit HCM Information task to designate an existing legal reporting unit (LRU) as a TRU. If you create a new LRU that belongs to a legal employer (that's not also a PSU), you select a PSU and then, when you run the Manage Legal Reporting Unit HCM Information task, you designate it as a TRU and select the legal employer.

This figure shows the relation between a Legal Entity, PSU, Legal Employer, LRU, and TRU.



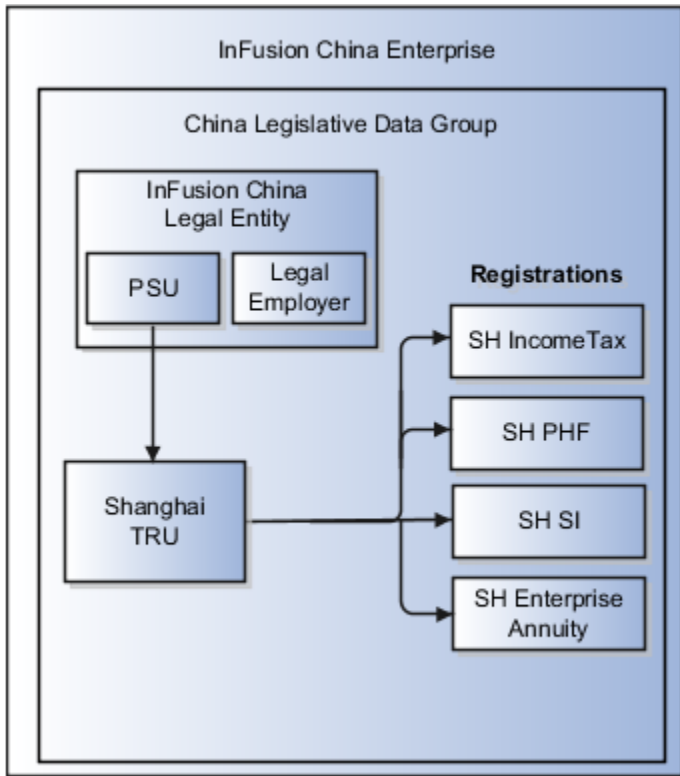
\* Oracle Legal Entity Configurator

## Examples of HCM Organization Models for China

Let's look at examples of different models for Chinese organizations in Human Capital Management (HCM). Each example includes a legislative data group (LDG). LDGs aren't an organization classification, but they're included in the example to show how you associate them with a payroll statutory

## Single Company with Single Payroll Statutory Unit and Single Tax Reporting Unit

Let's look at an example of a single company with individual income tax (IIT), public housing fund (PHF), and social insurance (SI) registrations in a single location. InFusion China is a legal entity registered in Shanghai. Tax calculation, Public Housing Fund (PHF) management, and social insurance management all follow Shanghai (SH) rules and report to the Shanghai local government authorities through the Shanghai tax reporting unit (TRU).



Setup for this model involves these steps:

1. Define an InFusion China enterprise using the Manage Enterprise HCM Information task.
2. (Optional) Create a Chinese LDG. For China, the application automatically creates an LDG when you create a legal entity for the first time.
3. Define legal jurisdictions for IIT, PHF, social insurance, and enterprise annuity. These are required when you define registration information.
4. Create a legal entity for InFusion China. Designate it as both a legal employer and a PSU.

**Note:** The application automatically creates the main legal reporting unit when you create a legal entity. The main legal reporting unit carries the registration information of the predefined identifying jurisdiction, China Income Tax.

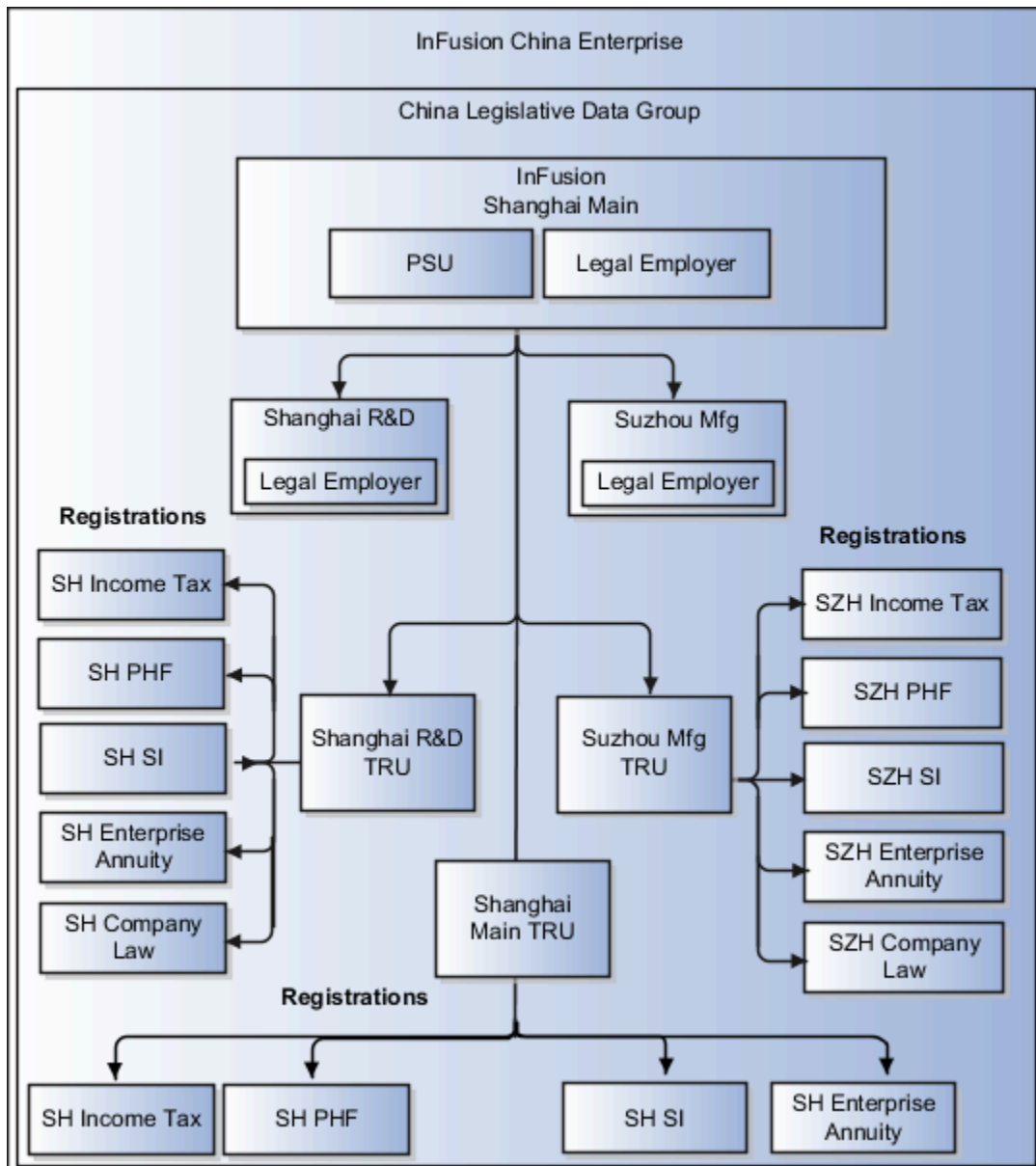
5. Set the Legal Reporting Unit Classification to **Tax Reporting Unit** on the Manage Legal Reporting Unit HCM Information page.

6. Define registration information needed to calculate payroll deductions, such as:
  - o **SH Income Tax.** Required for calculating and reporting individual income tax.
  - o **SH Public Housing Fund.** Required for calculating and reporting public housing fund contributions.
  - o **SH Social Insurance.** Required for calculating and reporting social insurance contributions. A single social insurance registration is sufficient for all types of social insurances, including basic pension, basic medical, supplementary medical, unemployment, maternity and work-related injury.
  - o **SH Enterprise Annuity.** Required for calculating and reporting enterprise annuity contributions.
  - o **SH Company Law.** Optional; captures business license registration numbers of the TRU and legal employer.

## Single Company with Single Payroll Statutory Unit and Multiple Tax Reporting Units

Let's look at an example of a single company under a single PSU with IIT, PHF, and SI registration in multiple locations. InFusion China is a registered legal entity in Shanghai. It has its head office in Shanghai and branch offices in Beijing and Guangzhou. The head office and each branch office share one payroll. It's possible for each to set up its own designated payrolls. The head office and each branch office are registered with the tax authority in their local area and submit IIT statutory reports to the local tax office on a monthly basis. Likewise, the head office and each branch office are registered with the PHF and SI management centers in their local area and submit statutory reports to the local authority. In this example, the employees' SI area and PHF contribution areas are the same as their tax area.





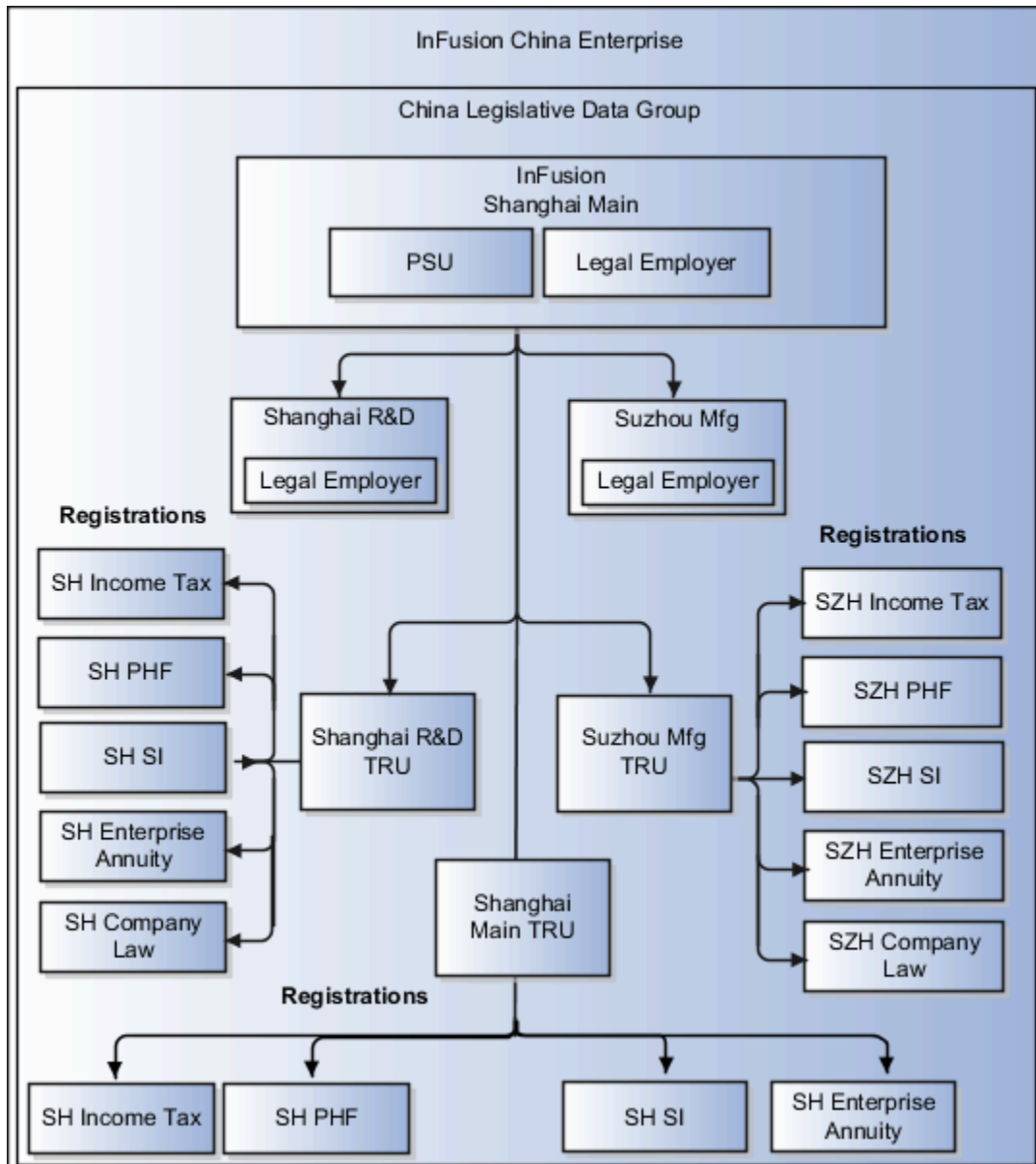
Setup for this model involves the same steps as in the previous example. In addition, you must create TRUs for the Beijing and Guangzhou branches and set up registration information. Each TRU should have a set of registrations for each type of deduction that reports to a different authority. For example, the Shanghai, Guangzhou, and Beijing TRUs would each have separate registrations for income tax, PHF, social insurance, and so on. A TRU can't have multiple registrations of same legislative category. For example, a single TRU can't have registrations for Beijing income tax reporting and Shanghai income tax reporting.

In this model, when an employee transfers from one TRU to another, the payroll run calculates the employee's PHF and SI contribution amounts according to the transfer-in TRU's policy.

## Group Company with Single PSU and Multiple TRUs

Let's look at an example of an enterprise with multiple legal employers under a single PSU. The payroll data is under one PSU, but tax, PHF, and social insurance registrations are at multiple locations. InFusion China Enterprise comprises three legal entities: the main company in Shanghai, a Research and Development company in Shanghai, and a manufacturing

company in Suzhou. The main Shanghai office is also a PSU. The Shanghai and Suzhou companies handle tax, PHF, and social insurance independently, and each reports to its local tax office, PHF authority, and SI authority separately. The employees' SI and PHF areas are the same as their tax area.



To set up this type of model, you must define three separate legal entities. The main Shanghai office is a payroll statutory unit (PSU) and a legal employer, and the other legal entities are legal employers associated with the main Shanghai office PSU. The application automatically creates three main legal reporting units, one for each legal entity. For each legal reporting unit, set the Legal Reporting Unit Classification to **Tax Reporting Unit** on the Manage Legal Reporting Unit HCM Information page. The three tax reporting units all report to the main Shanghai office PSU. However, you can't convert an LRU into a TRU if the LRU is under a legal entity that's not a PSU.

## HCM Organization Setup for China

Setting up enterprise structures for use with Oracle Fusion Human Capital Management involves several related tasks.

Specifically, you must define these entities in the order listed:

1. Legislative data group
2. Legal jurisdictions
3. Legal authorities
4. Legal addresses
5. Legal entities and legal reporting units

### Legislative Data Group

You can partition payroll and related data using legislative data groups (LDGs). At least one legislative data group is required for each country where an enterprise operates.

Use the Manage Legislative Data Groups task to create a Chinese LDG. Set the Country to **China** and the Currency to **Yuan Renminbi**. Complete other fields as appropriate for your implementation.

### Legal Jurisdictions

A jurisdiction is a physical territory, such as a group of countries, country, province, city, or county, where a particular piece of legislation applies. Beijing Social Insurance is an example of social insurance legislation that applies to organizations operating in Beijing City. You must register with an identifying jurisdiction first to do business in a country or a territory within the country. China Income Tax is the predefined identifying jurisdiction for China.

Because individual income tax, public housing fund (PHF), and social insurance are all managed locally, you must define the appropriate jurisdictions, including an identifying jurisdiction, for each territory where you operate. Jurisdiction information is necessary to ensure that statutory deductions are calculated and reported correctly.

Use the Manage Legal Jurisdictions task in Setup and Maintenance to create jurisdictions.

- You must select a territory and legislative category. China supports these legislative categories:
  - Income tax
  - Public housing fund
  - Social insurance
  - Enterprise annuity
- Select **Yes** in the Identifying Jurisdiction field if this is the identifying jurisdiction in the territory.
- In the **Legal Entity Registration Code** field, select **Legal Entity Registration Number**.
- In the **Legal Reporting Unit Registration Code** field, select **Legal Reporting Unit Registration Number**.
- Complete the optional fields as appropriate for your implementation.

### Legal Authorities

A legal authority is a government or legal body charged with powers to make laws, levy and collect fees and taxes, and remit financial appropriations for a given jurisdiction. Defining legal authorities for China is optional.

Use the Manage Legal Authorities task to create legal authorities. For each authority you create, set the Tax Authority Type to **Collecting and Reporting**.

## Legal Addresses

A legal address is the mailing address of a legal entity or legal authority. You use legal addresses when you send correspondence, such as invoices, bills, reports, and so on, to a legal entity or authority. A legal address is also the address a legal entity uses to register with a legal authority. You must create a legal address for each legal entity you plan to define.

Use the Manage Legal Address task to create legal addresses. For each address you create, select **China** as the country so that the Chinese address style is used.

## Legal Entities and Legal Reporting Units

After you complete the earlier tasks, you can create legal entities, such as legal employers and payroll statutory units, and legal reporting units.

### *Related Topics*

# Jurisdictions and Legal Authorities

## Jurisdictions

A jurisdiction represents a physical territory, such as a country, province, or city, where a particular piece of legislation applies.

You must set up jurisdictions before you create registrations, because a jurisdiction is required in the registration process. The jurisdiction has a start date and end date to show when the jurisdiction is effective and when you can register against the jurisdiction.

A tax jurisdiction is a geographic area where a tax is levied by a specific tax authority. You must set up at least one tax jurisdiction for a tax before you can make the tax available for payroll transactions.

## Identifying Jurisdiction

For each legal entity, select an identifying jurisdiction. An identifying jurisdiction is your first jurisdiction you must register with to be allowed to do business in a country. If there's more than one jurisdiction that a legal entity must register with to commence business, select one as the identifying jurisdiction. Typically, the identifying jurisdiction is the one you use to uniquely identify your legal entity. To do business in China or in a territory within China, you must create a jurisdiction per city. For example, Beijing Social Insurance is a social insurance legislation that applies to organizations operating in Beijing.

## Legal Authorities

A legal authority is a government or legal body charged with powers to make laws, levy and collect fees and taxes, and remit financial appropriations for a given jurisdiction. Use the Manage Legal Authorities task to create legal authorities.

It's optional to define legal authorities for China. To define legal authorities:

1. In the Setup and Maintenance work area, do the following:

- o Offering: Workforce Deployment
- o Functional Area: Legal Structures
- o Task: Manage Legal Authorities

Expand the entry to display a list of related tasks.

2. On the Manage Legal Authorities page, click **Create**.

3. On the Create Legal Authority page:

- o Select the **Tax Authority Type** based on the type of interaction. Typically, this is set to **Collecting and reporting**.
- o Add one or more addresses.
- o Add one or more legislative categories, such as, Income tax, Public housing fund, Social insurance, Enterprise annuity, or Supplementary public housing fund. This establishes a link between the legal authority and all jurisdictions associated with the selected legislative category.
- o Click **Save and Close**.

## Workforce Structures

### Overview

You must define workforce structures after you complete the organization structure setup. You use workforce structures to perform these tasks:

- Define additional partitioning of the workers within the organization, including divisions, and departments.
- Assign roles to workers within the organization, including grades, jobs, and positions.
- Set up actions and reasons that apply to the work relationship cycle of workers.

The implementation team is responsible for defining all the workforce structures that apply to the enterprise for which you're doing the setup. These are some of the workforce structures:

- Locations
- Departments
- Jobs
- Grade

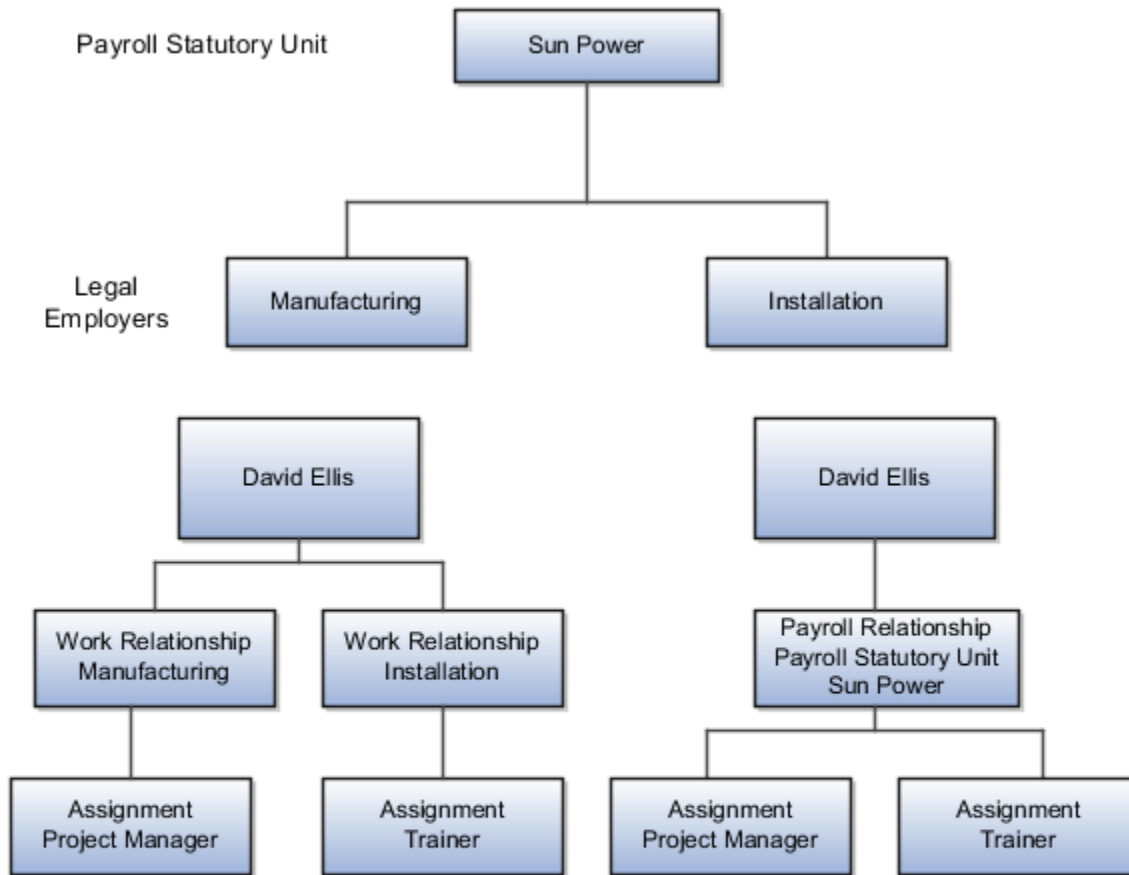
# Payroll Employment Model

## Overview

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

## Comparing the HR and Payroll Employment Models

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



*Related Topics*

- [Payroll Employment Hierarchy Profile Options](#)
- [How do I diagnose payroll employment model setup issues?](#)
- [Employment Level Options for Payroll Elements](#)

## Considerations for Selecting the Employment Model for Chinese Employers

Employment contract management is important for Chinese legal employers. You select the employment model on the Manage Legal Entity page, Legal Employer Details tab.

**Note:** Oracle recommends that you use the 2-Tier - Multiple Contract - Single Assignment employment model for China. This model supports multiple assignments under a single employment contract.

Employment Model	Can an employee sign multiple employment contracts with the legal employer?	Can an employee have multiple assignments under a single employment contract?	Do you want to capture employment contract information for employees?
2-Tier - Multiple Assignment	Supported	Not supported	Not supported
2-Tier - Single Assignment	Not supported	Not supported	Not supported
2-Tier - Single Contract - Single Assignment	Not supported	Not supported	Supported
2-Tier - Multiple Contract - Single Assignment	Supported	Supported	Supported

## Payroll Employment Hierarchy Profile Options

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

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

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

- Payroll relationship
- Assignments

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



## Profile Options for the Payroll Relationship Level

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

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

## Profile Options for the Assignment Level

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

Profile Option Codes	Profile Values
PAY_EMP_HIERARCHY_ASG_DESC_1	Assignment Name
PAY_EMP_HIERARCHY_ASG_DESC_2	Assignment Number
PAY_EMP_HIERARCHY_ASG_DESC_3	Employment Category
	Grade Name
	Job Name
	Legal Employer Name
	Location Name
	Position Name

## Override Site-level Values with User-level Values

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

### Related Topics

- [Overview of Implementing Payroll Relationship](#)

## FAQ for Payroll Employment Model

### How do I diagnose payroll employment model setup issues?

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

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

## Payroll Relationships

### Overview

A payroll relationship represents the association between a person and a payroll statutory unit (PSU). A PSU is the legal entity responsible for employee payment. Payroll relationships group a person's employment assignment records based on the payroll statutory calculation and reporting requirements. Payroll relationships

Payroll processing always occurs at the payroll relationship level. When you display the payroll process results for a person, you first select 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 assignment records. Balances don't span payroll relationships.

### Create Payroll Relationship Records

You establish a mapping between system person types and the payroll relationship types. Certain processes, such as the rehire process, use this mapping to automatically create a payroll relationship record. You must use the payroll relationship types predefined in the application. You can't create your own payroll relationship types.

This table shows the predefined payroll relationship types.

Payroll Relationship Type	Description
Standard	Person types mapped to this payroll relationship type are included in payroll runs.
Element Entries Only	Person types mapped to this payroll relationship type have only element entries created for them and are excluded from payroll processing.

Relationship mapping rules, which map system person types to payroll relationship types, can vary by country or territory. This table shows the mapping between system person types and payroll relationship types, that are applicable for China.

System Person Type	Payroll Relationship Type
Employee	Standard
Retiree	Element Entries Only
Volunteer	Element Entries Only
Pensioner	Element Entries Only
Benefit Nonworker	Element Entries Only
Nonworker	Element Entries Only
Contingent Worker	Element Entries Only
Pending Contingent Worker	Pending Worker Element Entries Only
Pending Employee	Pending Worker Standard
Contingent Worker Candidate	Candidate Element Entries Only
Employee Candidate	Candidate Standard

For China, the system person types that are mapped to the "Element Entries Only" payroll relationship type are excluded from payroll processing.

The mapping rules are predefined for legislations provided by Oracle. You can't create your own payroll relationship types and you must use the values that are predefined in the application.

A payroll relationship can't end while there are active employment assignments. When all employment assignments are ended for a payroll relationship, it could either remain active or become end dated. It depends on the legislation and the payroll relationship rules applicable for the legislation. For China, relationships that remain active, enable future rehire within the same payroll relationship and PSU.

## Payroll Relationship Rules

China supports the Lifetime Rule for payroll relationships. When you create a work assignment, the application checks whether a payroll relationship exists for an employee; if it does exist, the new work assignment is attached to it. Otherwise, a new payroll relationship is created.

When you terminate a work assignment, the associated payroll relationship gets end-dated on the final close date. In case of rehire, the application removes the end-date and attaches the new work assignment to the existing payroll relationship.

# Earnings and Deductions

## Define Earning and Deduction Definitions

The Define Earning and Deduction Definitions task list in Setup and Maintenance contains the tasks you require to set up elements and payroll components. Your implementation may include a few predefined elements, usually for legislative tax deductions.

Use the Elements task to create additional elements and the associated objects required to support their processing. The objects vary depending on the element classification and category.

## Manage Element Classifications

Elements are grouped into primary classifications that control their sequence of processing and the balances they feed. Secondary classifications are subsets of the primary classifications, which you may use to manage wage basis rules for deductions and taxes.

The primary classifications and some secondary classifications are predefined. You can't remove or change predefined classifications.

What you can do:

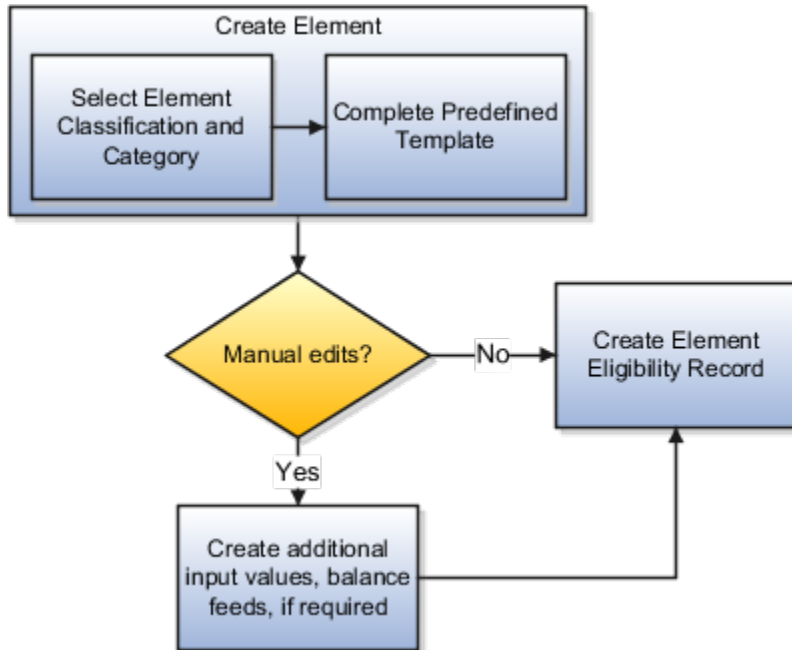
- Create additional balances that the primary classifications feed.
- Create secondary classifications.
- Specify costing setup options and frequency rules for element classifications. The default frequency rule is always each period.

## Manage Elements

Use the Elements task to review elements and to create new ones. When you create an element, your selection of the element classification and category determines the questions on a predefined template. Submitting the template generates an element, which you can edit, as required.

You must create at least one element eligibility record for all predefined and newly created elements.

This figure shows the tasks involved.



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

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

**Note:** Involuntary Deductions aren't supported for China.

Payroll components are associated with a set of rates and rules used for calculation or reporting. These components conform to manage calculation value definitions

What you can do:

- Review the tables that hold the rates and other values used to calculate deduction and exemption amounts.
- Modify some value definitions.
- Create new calculation ranges, if required

Manage the calculation information for elements that generate payroll components, such as involuntary deductions and statutory deductions.

What you can do:

- Review the calculation information such as the wage basis rules and calculation factors
- Create new calculation factors, if required.

After setup, you can add calculation components to personal calculation cards by loading data, such as time cards, or using the Calculation Cards task. In China, hiring a worker creates a personal deduction card automatically.

## Manage Component Groups

Component groups are predefined categories of calculation components managed by component group rules.

What you can do:

- View rules for component groups.
- Modify the rules, such as wage basis rules, for some deductions

After setup, you can add calculation components to personal calculation cards by:

- Loading data, such as time cards.
- Using the Calculation Cards task. In China, hiring a worker creates a personal deduction card automatically.

## Add Eligibility Rules For Predefined Elements

The task list includes this task as a reminder. Use the Elements task to define at least one element eligibility record for every predefined and newly created element.

**Note:** Ensure that you create an eligibility record for the Aggregation Information element before you starting hiring workers in China.

Element eligibility determines who can receive entries of the element. Do the following:

1. Create a name for the element eligibility record. Use a naming convention similar to the element's to easily identify the record, for example, when you set up costing for the element's eligibility record.
2. Restrict who can receive entries of the element by specifying eligibility criteria. For elements applicable to all workers, create eligibility without specifying any criteria.

## Manage Rate Definitions

Define any rates that are based on calculated payroll balances, such as an employee's average salary during the last three months. You can use rate definitions in absence plans and formulas.

You can define rates to be:

- Monetary, such as a pay rate, or non-monetary, such as an absence accrual rate defined in days or hours
- Based on a combination of elements, or a single element

## How Elements 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 will use the elements.

Here are 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 Sick Pay Vacation Pay
Benefits	Awards and Prizes Group Term Life Insurance Registered Retirement Savings Plan
Payroll	Regular Standard Earnings Bonus Earnings Tax Deductions Voluntary Deductions

For further information, see the following sections.

## Base Pay Management

You must set up salary basis and payrolls before you hire employees. Use the Salary Basis task under Compensation in My Client Groups on your Home page.

Once you establish the salary basis, to manage a worker's base pay:

1. Attach an earnings element to each salary basis.
2. Assign a salary basis (hourly, monthly or annual) for each worker.

When a manager or compensation specialist enters a base pay amount for a worker, the payroll process writes the amount to an element entry using the element input value you 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.
- Associate an absence element with an absence plan to transfer the following information for payroll processing:
  - Payments for absent time, for example, during maternity or long term sickness
  - Accrual disbursement at the end of absence plan year
  - Accrual disbursement when plan enrollment ends

- o Absence liability amounts

You can process the payments in the payroll application 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.

## Payroll

For payroll processing, you can 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.

# Object Groups

## Overview

Object groups are sets of elements or persons. Use object groups to define subsets of objects for processing or reporting.

Use the **Object Group** task to define these object group types.

- Element
- Payroll Relationship
- Work Relationship
- Process Information Group

**Note:** If you're loading an object group with a large number of inclusions or exclusions, you're recommended to use the individual Object Group Amend file to achieve that. This supports the data to be multithreaded and minimizes the processing time.

## Element Groups

Use Element groups to limit the elements processed for payroll, reporting, cost distribution, and for global transfer purposes.

This table explains the usages for an element group.

Element Group	What It Does
Run group	Specifies the elements to be processed in a payroll run.
Distribution group	Defines the elements on which the cost results are distributed



Element Group	What It Does
Configuration group	Restricts the elements that can be updated on the Element Entries page.

All element groups are static. You can select element classification to include in or exclude from the group. You can also select specific elements to include in or exclude from the group.

## Payroll Relationship Groups

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

Defining a payroll relationship group is a two-step process.

1. Specify a payroll definition. Every group is limited to the payroll relationships assigned to a single payroll that you select.
2. Optionally, define the group to be either static or dynamic.
  - a. To define a static group, select the payroll relationships and assignments to include in or exclude from the group.
  - b. To define a dynamic group, use a fast formula of type Payroll Relationship Group. The formula contains the criteria to establish the payroll relationships and assignments included in the group. Then, you can individually select additional payroll relationships and assignments to include in or exclude from the group.

## Work Relationship Groups

You can use Work relationship groups to limit the persons processed for Human resources and reporting. For example, you can use work relationship groups in your user-defined extracts. You can define the group to be either static or dynamic.

- In a static group, select the work relationships and assignments to include in or exclude from the group.
- In a dynamic group,
  - Use a fast formula of type Work Relationship Group. This formula contains the criteria to establish the work relationships and assignments included in the group.
  - Individually select additional work relationships and assignments to include in or exclude from the group.

## Process Information Groups

You use a bank reprocessing group to load the bank corrections file returned by your bank. Each payroll period, you transfer payroll payments directly into the bank accounts designated by the employee. If any of the bank account records are invalid, your bank returns a file containing these details.

For example, an employee can have an incorrect account number which results in the payment being rejected by the bank. Alternatively, the payment could have been transferred to an invalid branch number due to the closure of a bank or merger of a bank branch with another.

*Related Topics*

- [Overview of Loading Object Groups](#)
- [Example of Loading Object Groups](#)
- [Set Up Distributed Costing for an Element](#)
- [Object Group HCM Data Loader Files for Bank Reprocessing](#)

# 3 Load Payroll Data Using Transformation Formula

## Data Loader

### Load Objects with HCM Data Loader

Use HCM Data Loader for bulk-loading and maintaining payroll data.

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

- Statutory Deduction Cards at PSU, TRU, and payroll relationship level
- Payroll Relationship
- Object Groups
- Payroll Consolidation Groups
- Payroll Definitions and Time Periods
- Time Definitions
- Payroll Element Run Usage
- User-Defined Tables
- Wage Basis Rules
- Payroll Elements
- Element Entries
- Balance Definitions
- Organization Payment Method
- Personal Payment Method
- Payroll Costing

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

### Payroll Transformation Formula for HCM Data Loader

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

### Payroll Transformation Formula for HCM Spreadsheet Data Loader

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

Related Topics

# Payroll Transformation Formula for HCM Data Loader

## Overview

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

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

Let's consider these examples.

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

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

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

Flow Pattern	Privileges
Submit Payroll Flow	PAY_SUBMIT_PAYROLL_FLOW_PRIV
Load HCM Data	HRC_LOAD_HCM_DATA_PRIV

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

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

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

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

*Related Topics*

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

## How You Transform Data

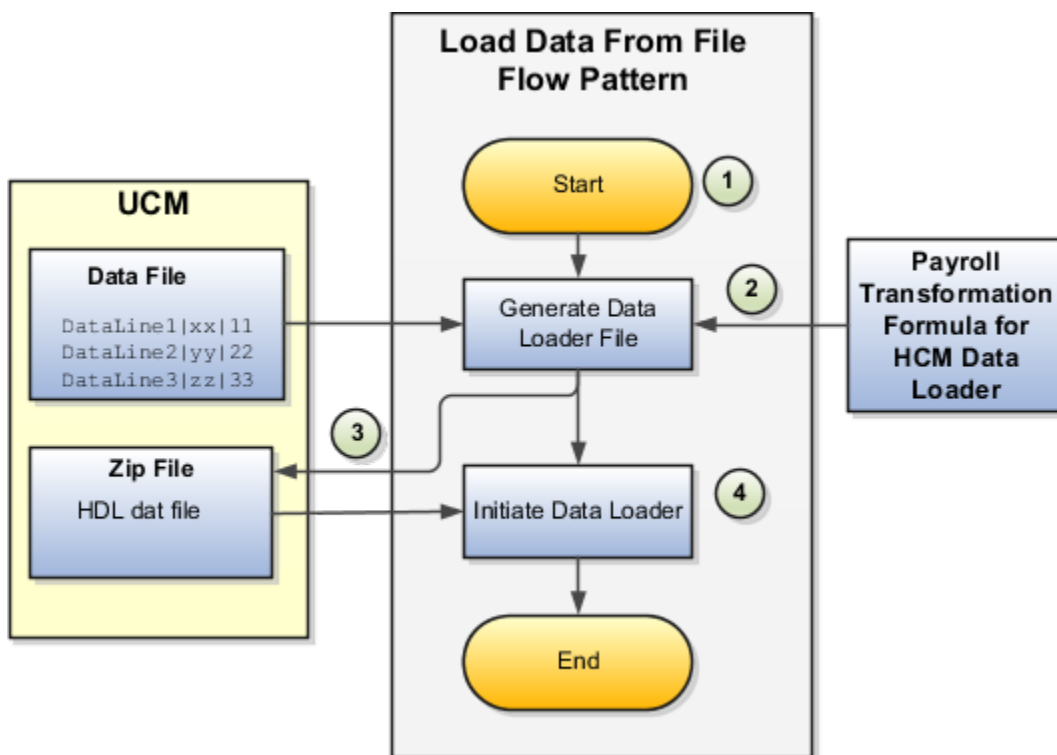
Use the **Load Data From File** flow to transform data in the source file into a format that's supported by HCM Data Loader.

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

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

- Generate Data Loader File
- Initiate Data Loader Task

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



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

1. On the Home page, click the **Submit a Flow** quick action under the **My Clients Groups** tab. On the Flow Submission page, search for, select, and submit the **Load Data From File** flow pattern.

2. The flow invokes the Payroll Transformation Formula for the Content ID. Typically, you create your transformation formula for HCM Data Loader on the Manage Fast Formulas page. The type of the formula should be HCM Data Loader.
3. The Generate Data Loader File task reads the data file line by line, producing an equivalent HCM Data Loader format for each line. Finally, it creates a compressed file of all of the transformed data files and uploads to the Oracle WebCenter Content server. Also, the task records the Content ID.
4. The **Initiate Data Loader** task takes the Content ID for the file generated by the **Generate Data Loader File** task. And it invokes HCM Data Loader. HCM Data Loader validates the data and creates valid records in the HCM cloud.

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

Task	Privilege
Submit Payroll Flow	PAY_SUBMIT_PAYROLL_FLOW_PRIV
Load HCM Data	HRC_LOAD_HCM_DATA_PRIV

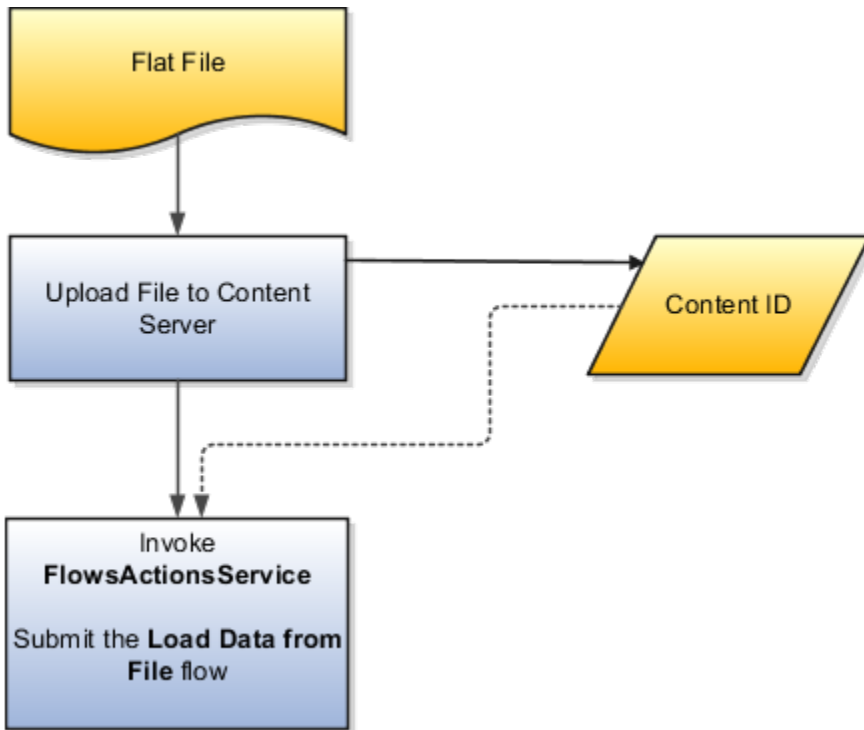
*Related Topics*

- [How To Create A Program for Automation](#)
- [Submit the Load Data From File Flow](#)
- [Transformation Formula Input Variables](#)

## How To Create A Program for Automation

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

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



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

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

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

#### Related Topics

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

## Submit the Load Data From File Flow

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

## Assumptions

This procedure has these assumptions.

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

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

## Before You Begin

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

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

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

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



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

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

#### Related Topics

- [Transformation Formula Input Variables](#)
- [Payroll Transformation Formula Operations](#)
- [Return Values for Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for Multiple Business Objects](#)

## Transformation Formula Input Variables

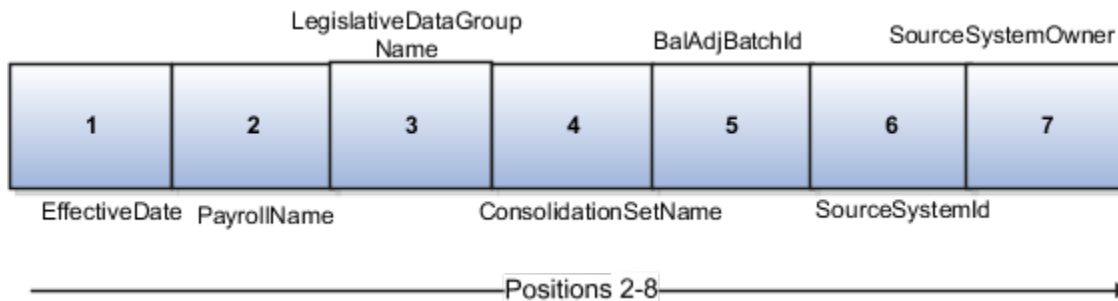
Variables, such as `FileName`, `FileDiscriminator` and `LINEREPEATNO`, are available for all formulas of HCM Data Loader Transformation formula type. Additional variables may be available depending on the selected business object.

### Positions

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

Example:

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



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

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

## FileName, FileDiscriminator, and BusinessOperation

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

Here are the details of these variables.

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

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

```

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

## LINEREPEAT And LINEREPEATNO

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

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

**Example:** The Element Entry file contains these details.

```

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

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

```

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

```

**Note:**

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

*Related Topics*

- [Payroll Transformation Formula Operations](#)
- [Return Values for Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for Multiple Business Objects](#)

## Payroll Transformation Formula Operations

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

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

Operation Type	Return Value	Example
FILETYPE	OUTPUTVALUE	DELIMITED

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

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

## Delimiter

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

This example specifies a comma character as the delimiter.

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

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

## MAP

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

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

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

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

## METADATALINEINFORMATION

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

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

For the `METADATALINEINFORMATION` operation, you specify an array per business object being processed in the formula. The number of arrays should match the number specified in the `NUMBEROFBUSINESSOBJECTS` operation. The name of the array should be `METADATA` with the number as suffix. For example, `RETURN METADATA1, METADATA2` when the `NUMBEROFBUSINESSOBJECTS` is 2.

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

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

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

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

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

Example:

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

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

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

## NUMBEROFBUSINESSOBJECTS

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

### Related Topics

- [Return Values for Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for Multiple Business Objects](#)

## Return Values for Payroll Transformation Formula for HCM Data Loader

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

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

Here's an example of return values.

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

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

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

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

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

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

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

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

### Related Topics

- [Overview of Payroll Transformation Formula For HCM Data Loader](#)
- [How You Transform Data Using Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for Multiple Business Objects](#)

## Sample Payroll Transformation Formula

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

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

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

And this code snippet has the formula for this example.

```
/* *****  
FORMULA NAME: Load Personal Payment Method  
FORMULA TYPE: HCM Data Loader  
***** */  
/* Inputs */  
INPUTS ARE OPERATION (text), LINENO (number), LINEREPEATNO (number), POSITION1 (text), POSITION2 (text),  
POSITION3 (text), POSITION4 (text), POSITION5 (text), POSITION6 (text), POSITION7 (text), POSITION8 (text)  
  
DEFAULT FOR POSITION1 IS 'NO DATA'  
DEFAULT FOR POSITION2 IS 'NO DATA'  
DEFAULT FOR POSITION3 IS 'NO DATA'  
DEFAULT FOR POSITION4 IS '2'  
DEFAULT FOR POSITION5 IS '100'  
DEFAULT FOR POSITION6 IS 'NO DATA'  
DEFAULT FOR POSITION7 IS 'NO DATA'  
DEFAULT FOR POSITION8 IS 'NO DATA'  
DEFAULT FOR LINEREPEATNO IS 1  
  
IF OPERATION='FILETYPE' THEN  
  OUTPUTVALUE='DELIMITED'  
ELSE IF OPERATION='DELIMITER' THEN  
  
(  
  OUTPUTVALUE=', '  
  RETURN OUTPUTVALUE  
)  
ELSE IF OPERATION='READ' THEN  
  OUTPUTVALUE='NONE'  
ELSE IF OPERATION='MAP' THEN  
  /*HDL Related Outputs*/  
(  
  FileName = 'PersonalPaymentMethod'  
  BusinessOperation = 'MERGE'  
  FileDiscriminator = 'PersonalPaymentMethod'  
  EffectiveStartDate=POSITION1  
  ProcessingOrder=POSITION2  
  LegislativeDataGroupName=POSITION3  
  AssignmentNumber=POSITION4  
  OrganizationPaymentMethodCode=POSITION5  
  PersonalPaymentMethodCode=POSITION6  
  PaymentAmountType=POSITION7
```

```

Amount=POSITION8
RETURN
BusinessOperation,FileName,FileDiscriminator,EffectiveStartDate,PersonalPaymentMethodCode,AssignmentNumber,Amount,P
)
ELSE
OUTPUTVALUE='NONE'
RETURN OUTPUTVALUE
/* End Formula Text */

```

### Related Topics

- [Overview of Payroll Transformation Formula For HCM Data Loader](#)
- [How You Transform Data Using Payroll Transformation Formula for HCM Data Loader](#)
- [Sample Payroll Transformation Formula for Multiple Business Objects](#)

## Sample Payroll Transformation Formula for Multiple Business Objects

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

Here's the sample of the raw input file.

```

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

```

And this code snippet has the formula for this example.

```

/*****
FORMULA NAME: Load User Defined Table and Personal Payment Method
FORMULA TYPE: HCM Data Loader
*****/
/* Inputs */
INPUTS ARE OPERATION (text), LINENO (number), LINEREPEATNO (number),POSITION1 (text), POSITION2 (text),
POSITION3 (text), POSITION4 (text), POSITION5 (text), POSITION6 (text), POSITION7 (text), POSITION8
(text),POSITION9 (text)
DEFAULT FOR POSITION1 IS 'NO DATA'
DEFAULT FOR POSITION2 IS 'NO DATA'
DEFAULT FOR POSITION3 IS 'NO DATA'
DEFAULT FOR POSITION4 IS '2'
DEFAULT FOR POSITION5 IS '100'
DEFAULT FOR POSITION6 IS 'NO DATA'
DEFAULT FOR POSITION7 IS 'NO DATA'
DEFAULT FOR POSITION8 IS 'NO DATA'
DEFAULT FOR POSITION9 IS 'NO DATA'
DEFAULT FOR LINEREPEATNO IS 1
IF OPERATION='FILETYPE' THEN
OUTPUTVALUE='DELIMITED'
ELSE IF OPERATION='DELIMITER' THEN
OUTPUTVALUE='|'
ELSE IF OPERATION='READ' THEN
OUTPUTVALUE='NONE'
ELSE IF OPERATION = 'NUMBEROFBUSINESSOBJECTS' THEN
(
OUTPUTVALUE = '2'
RETURN OUTPUTVALUE
)
ELSE IF OPERATION = 'METADATALINEINFORMATION' THEN

```



```

(
METADATA1[1] = 'UserDefinedTable' /*FileName*/
METADATA1[2] = 'UserDefinedTable' /*FileDiscriminator*/
METADATA1[3] = 'UserTableCode'
METADATA1[4] = 'RangeOrMatch'
METADATA1[5] = 'UserKeyUnits'
METADATA1[6] = 'UserRowTitle'
METADATA1[7] = 'UserTableName'
METADATA1[8] = 'LegislativeDataGroupName'
METADATA2[1] = 'PersonalPaymentMethod' /*FileName*/
METADATA2[2] = 'PersonalPaymentMethod' /*FileDiscriminator*/
METADATA2[3] = 'EffectiveStartDate'
METADATA2[4] = 'PersonalPaymentMethodCode'
METADATA2[5] = 'AssignmentNumber'
METADATA2[6] = 'Amount'
METADATA2[7] = 'ProcessingOrder'
METADATA2[8] = 'OrganizationPaymentMethodCode'
METADATA2[9] = 'PaymentAmountType'
METADATA2[10] = 'LegislativeDataGroupName'
RETURN METADATA1, METADATA2
)
ELSE IF OPERATION='MAP' THEN

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

```

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

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

*Related Topics*

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

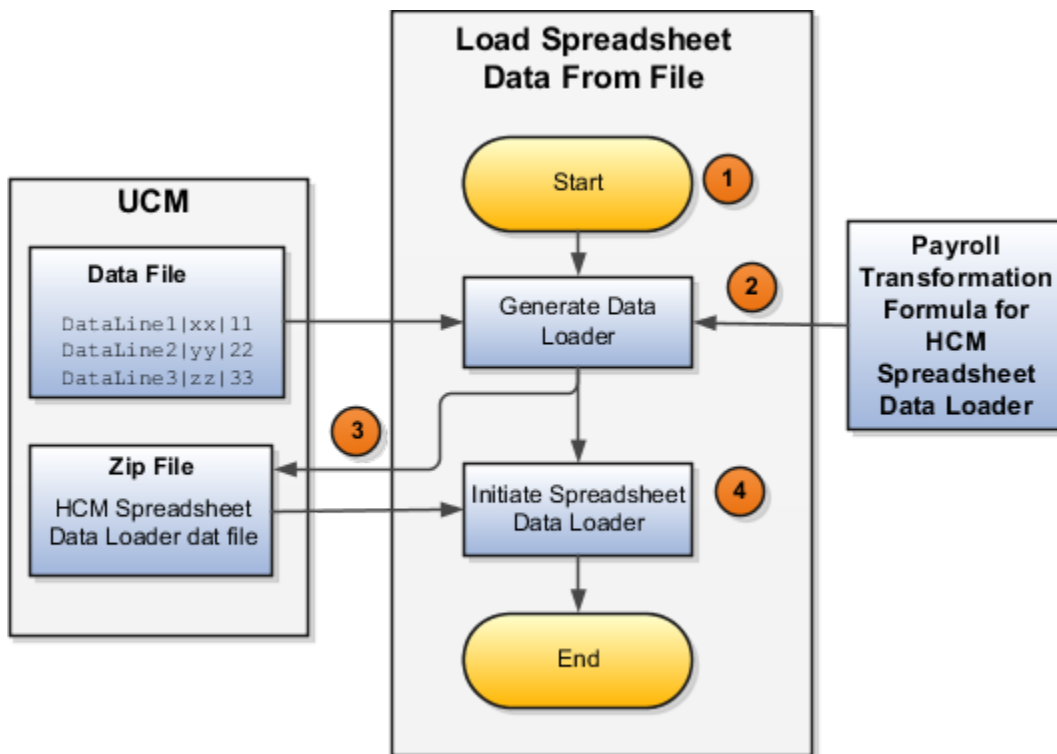
# Payroll Transformation Formula for HCM Spreadsheet Data Loader

## Overview

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

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

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



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

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

The flow is secured using these privileges:

Flow	Privilege
Submit Payroll	PAY_SUBMIT_PAYROLL_FLOW_PRIV
Load Data using HCM Spreadsheet Data Loader	HRC_LOAD_DATA_USING_HSDL_PRIV

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

#### Related Topics

- [Guidelines for Using HCM Spreadsheet Data Loader](#)
- [How Data Is Uploaded Using HCM Spreadsheet Data Loader](#)
- [HCM Spreadsheet Data Loader Templates](#)
- [Create and Edit Spreadsheet Templates](#)
- [Guidelines for Designing Spreadsheet Templates](#)

## Sample Payroll Transformation Formula for HCM Spreadsheet Data Loader

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

And this code snippet has the formula for this example.

```

/* Inputs */
INPUTS ARE OPERATION (text), LINENO (number), LINEREPEATNO (number), POSITION1 (text), POSITION2 (text),
  POSITION3 (text), POSITION4 (text), POSITION5 (text), POSITION6 (text), POSITION7 (text), POSITION8 (text)
DEFAULT FOR POSITION1 IS 'NO DATA'
DEFAULT FOR POSITION2 IS 'NO DATA'
DEFAULT FOR POSITION3 IS 'NO DATA'
DEFAULT FOR POSITION4 IS 'NO DATA'

```

```
DEFAULT FOR POSITION5 IS 'NO DATA'
DEFAULT FOR LINEREPEATNO IS 1
IF OPERATION='FILETYPE' THEN
OUTPUTVALUE='DELIMITED'
ELSE IF OPERATION='DELIMITER' THEN
OUTPUTVALUE='|'
ELSE IF OPERATION='READ' THEN
OUTPUTVALUE='NONE'
ELSE IF OPERATION = 'NUMBEROFBUSINESSOBJECTS' THEN
(
OUTPUTVALUE = '1'/*Always be 1*/
RETURN OUTPUTVALUE
)
ELSE IF OPERATION = 'METADATALINEINFORMATION' THEN
(
METADATA1[1] = 'SMUDT' /*TemplateCode*/
METADATA1[2] = 'UserDefinedTable' /*FileDiscriminator*/
METADATA1[3] = 'UserDefinedTable_UserTableCode'
METADATA1[4] = 'UserDefinedTable_LegislativeDataGroupName'
METADATA1[5] = 'UserDefinedTable_UserTableName'
METADATA1[6] = 'UserDefinedTable_RangeOrMatch'
METADATA1[7] = 'UserDefinedTable_UserRowTitle'
METADATA1[8]= 'UserDefinedTable_UserKeyUnits'
RETURN METADATA1 /*You can return only one METADATA for the respective template*/
)
ELSE IF OPERATION='MAP' THEN
(
FileName = 'SMUDT'
BusinessOperation = 'HSDL'
FileDiscriminator = 'UserDefinedTable'
UserDefinedTable_UserTableCode = POSITION1
UserDefinedTable_LegislativeDataGroupName = POSITION2
UserDefinedTable_UserTableName = POSITION1
UserDefinedTable_RangeOrMatch = POSITION3
UserDefinedTable_UserRowTitle = POSITION4
UserDefinedTable_UserKeyUnits = POSITION5
RETURN
BusinessOperation,FileDiscriminator,FileName,UserDefinedTable_UserTableCode,UserDefinedTable_LegislativeDataGroupName
)
ELSE
OUTPUTVALUE='NONE'
RETURN OUTPUTVALUE
/* End Formula Text */
```

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

#### Related Topics

- [Guidelines for Using HCM Spreadsheet Data Loader](#)
- [How Data Is Uploaded Using HCM Spreadsheet Data Loader](#)
- [HCM Spreadsheet Data Loader Templates](#)
- [Create and Edit Spreadsheet Templates](#)
- [Guidelines for Designing Spreadsheet Templates](#)

## FAQs for HCM Data Loader and HCM Spreadsheet Data Loader

### Does the order in which I load the workers' information matter?

Yes. When loading new workers using the HCM Data Loader, ensure that you load the workers' basic information first and then load the extra information. In addition, ensure that the basic information and extra information are stored in two separate .dat files.

### Why do I get an error when creating a new hire using the HCM Spreadsheet Data Loader?

To avoid the error, add the ORA\_PAY\_ELEMENT\_ENTRY\_MANAGEMENT\_DUTY duty role code to the Manage Payroll Element Entry duty role.

### How to create the association for the new hires

Here's how you can create the association for the new hires

1. On the Home Page, click **My Client Groups > Data Exchange > HCM Data Loader / HCM Spreadsheet Data Loader**.
2. Click **Import and Load Data** and then click **Run Spreadsheet Data Loader**.
3. Include the tax reporting unit attribute in the HDL dat file or HSDL template for new hires.

The association and association details for the new hires is created.



# 4 Understand Geographies, Address Styles, and Country Extensions

## Implement Global Payroll

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

### Payroll Feature Choices

As part of feature choices for payroll processing you:

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

## Hide Legislative Information

### Hide Legislative Info using Transaction Design Studio

You can hide the Person Legislative Attributes not required for your organization using the Transaction Design Studio.

Hide the China Person Legislative information as follows:

1. From the home page, navigate to **My Client Groups > Quick Actions > Transaction Configuration and Audit > HCM Experience Design Studio**
2. In the Page Attributes page, select **Legislative Info** in the **Region** dropdown.
3. Click **Edit** icon for **Person Legislative Information Attributes**
4. Click Hide for all the attributes like **Hukou Type** that you don't want to display.

# Geographies

## Geography Structures

A geography structure is a hierarchical grouping of geography types for a country.

This table describes the recommended geography structure for China:

Level	Geography Type
1	Country
2	Province
3	Prefecture
4	County
5	Township

## Manage Geography Lookups

To manage geography lookups, do these steps:

1. In the Setup and Maintenance work area, click the Tasks pane and select **Search**.
2. On the Search page, search for and select the **Define Geographies for Human Capital Management** task.
3. In the Define Geographies for Human Capital Management task list, click the **Manage Geography Lookups** task.
4. On the Manage Geography Lookups page, click **HZ\_GEO\_IDENTIFIER\_SUBTYPE**.
5. In the Lookup Codes section, add the CN\_BJ\_CODE and CN\_GEO\_CODE codes as shown in this table:

Lookup Code	Enabled	Start Date	Meaning	Description	Tag
CN_GEO_CODE	Yes	Optional	Chinese Geography Code	The geography code from the Chinese recommended national standard document 2260, which is issued by the Standardization Administration of China.	C



6. Click **Save and Close**.

## Import Country Structure

To import country structure, do these steps:

1. Review the country structure data in the **CN\_GeoStructureInterface.csv** file, which is available for download in the Document ID 1466218.1 on My Oracle Support, and make the required changes.
2. From the Navigator, under Tools, click **Import Management**, which opens the Manage Imports page.
3. Click the **Create Import Activity** button, which opens the Create Import Activity page.
4. In the **Name** field, specify a name for the import activity.
5. Form the **Object** drop-down list, select **Country Structure**.
6. Click the **Browse** button beside the **File Name** field to upload the **CN\_GeoStructureInterface.csv** file.
7. From the **Date Format** drop-down list, select **US - MM/DD/YYYY**.
8. From the **File Encoding** drop-down list, select **Unicode - UTF-8**.
9. Click **Next**.
10. On the Map Fields page, the mapping is done automatically by the application. Review the mapping information on this page and click **Next**.
11. On the Review the Submit page, click **Submit** to start the import process.
12. The search results should display as follows:

Column Header	Selected
Address Cleansing Defined	Yes
Structure Defined	Yes

13. Select the check mark under the Structure Defined column to view its structure.

## Import Geography Data

To import geography data, do these steps:

1. Review the country geography data in the **CN\_GeographyInterface.csv** file, which is available for download in the Document ID 1466218.1 on My Oracle Support, and make the required changes.
2. From the Navigator, under Tools, click **Import Management**, which opens the Manage Imports page.
3. Click the **Create Import Activity** button, which opens the Create Import Activity page.
4. In the **Name** field, specify a name for the import activity.
5. Form the **Object** drop-down list, select **Geography**.
6. Click the **Browse** button beside the **File Name** field to upload the **CN\_GeographyInterface.csv** file.
7. From the **Date Format** drop-down list, select the appropriate date format to match the format in your uploaded file. Let's say, if your uploaded file has the date format as MM/DD/YYYY, then select **US - MM/DD/YYYY** from the Data Format menu.
8. From the **File Encoding** drop-down list, select the appropriate value to match the character set you used while preparing the geographical values. The default value is **Unicode - UTF-8**. If you've included the geographical values in Simplified Chinese and you've set them up in local character set, then select the **Chinese Simplified - GB, CP936** value instead.
9. Click **Next**.

10. On the Map Fields page, the mapping is done automatically by the application. Review the mapping information on this page and click **Next**.
11. On the Review the Submit page, click **Submit** to start the import process.
12. The search results should display as follows:

Column Header	Selected
Address Cleansing Defined	Yes
Structure Defined	Yes
Hierarchy Defined	Yes

13. Select the check mark under the Hierarchy Defined column to view its hierarchy.

## Manage Geography Validation

To manage geography validations, do these steps:

1. In the Setup and Maintenance work area, click the Tasks pane and select **Search**.
2. On the Search page, search for and select the **Manage Geographies** task.
3. On the Manage Geographies page, in the **Country Name** field, enter **China** and click **Search**.
4. Click the check mark in the Validation Defined column.
5. In the Geography Mapping and Validation section, select these mapping options:

GEOGRAPHY TYPE	MAP TO ATTRIBUTE	ENABLE LIST OF VALUES	GEOGRAPHY VALIDATION
Province	Province	Select this check box	Select this check box
Prefecture	City	-	-
County	Additional address attribute 2	-	-

6. In the Geography Validation Control section, from the **Geography Validation Level for Country** drop-down list, select a value.
7. Click **Save**.

# Addresses

## Change Address and Address Validation Settings

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

### Address Styles

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

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

Address Style	What the Address Style Does
Postal Address	This address style provides the fundamental set of address attributes for a country or territory. In some cases, this style adds supplemental attributes. For instance this address style might include general address attributes that aren't relevant, such as State or Postal Code.

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

### Address Validation Based on Country Extension

Address validation is the validation of postal code.

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

Address validation is automatically enabled for some license and product extension combinations. For example, for China, the default is Supplemental Taxation and Reporting Address. However, the address style and address validation depends on the country extension.

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

For more information, see the Oracle HCM Address Validation (Doc ID 2140848.1) document on My Oracle Support.

### Disable Address Validation

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

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

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

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

## Enable Address Validation

To manually enable or disable address validation:

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

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

## Legal Addresses

A legal address is the mailing address of a legal entity or legal authority. A legal address is also the address a legal entity uses to register with a legal authority.

You can use legal addresses to send correspondence, such as invoices, bills, reports, and so on, to a legal entity or authority.

No legal addresses are predefined for China. You must create legal addresses for all organizational units of the enterprise before creating legal entities.

The format in which addresses must be entered for workers located in China is predefined and should not be modified during implementation.

Use the Manage Legal Address task to create a legal address. For each address you create, select China as the country so that the Chinese Address style is used.

The table below lists the fields in the China address style.

Field Name	Mandatory and Optional Fields
Postal Code	Optional

Field Name	Mandatory and Optional Fields
Province	Mandatory
Prefecture	Optional
County or District	Optional
Street Address	Mandatory
Additional Address Line	Optional

You can create new geographies by importing data through the interface tables. You can load data into the interface tables using the Oracle Fusion file-based data import process or a tool of your choice.

## Country Extensions

### How Country Extensions are Selected

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

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

The options available for selection is given here.

- Payroll
- Payroll Interface
- Human Resources or None

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

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

### Payroll

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

- When creating elements, the element templates generate formulas and other associated items that are required for costing or payment processing in Global Payroll.
- The new-hire process includes country-specific features, such as automatic generation of calculation cards for statutory deductions and validation of address formats.

- Payroll definitions require associated organization payment methods. You must select payment methods that include a payment source.
- Defining payment sources requires source banks in Oracle Fusion Financials.

## Payroll Interface

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

- The element templates for creating regular and supplemental earnings elements generate associated objects, such as input values, formulas, and balances. These objects are required for including employee data in the Calculate Gross Earnings process.  
For all other elements, the simplified element templates create only the element and no associated objects.
- The new hire process includes country-specific validations.
- Validations on payroll objects are less restrictive to support sending employee bank information as follows:
  - No requirement for payment sources in organization payment methods
  - No dependency on source banks in Financials

## Human Resources or None

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

- The element templates for creating standard earnings, supplemental earnings, direct payments, and taxable benefits elements with flat amount calculation rule generates the element definition and three input values, such as amount, periodicity and full time equivalent. This template for percentage calculation rule generates percentage input value and factor input value for factor calculation rule. It doesn't generate any other objects, such as fast formulas and balances.
- The element templates for creating the other elements generates only the elements and not the associated objects, such as input values, formulas, or balances.  
You can configure these elements to meet your specific business requirements, such as adding input values and formulas to a compensation element.
- Certain countries or territories have additional country-specific validation.
- Validations on payroll objects are less restrictive, as with the Payroll Interface setting.

## Select Country Extensions

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

The Vision enterprise has employees in China and France with different payroll arrangements:

- In China, the enterprise pays employees using Oracle Payroll application.
- In France, the enterprise extracts and sends payroll-related data to third-party payroll provider using Payroll Interface extract definitions.

## Set the Extension

1. In the Setup and Maintenance work area, go to the following:

- Offering: Workforce Deployment
- Functional Area: Payroll
- Task: Manage Features by Country or Territory

2. Click **Go to Task**.

3. In the **Selected Extension** list, select the extension for the countries as shown in this table.

The following table lists the country names and the product usage that you can select for this scenario.

Country	Extension
China	Payroll
France	Payroll Interface

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





# 5 Prerequisite Payroll Setup Tasks

## Prerequisite Tasks for Payroll Setup

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 tasks, 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 Features by Country or Territory
- Install and load geography and tax information data files
- Define Geographies for HCM
- Define Enterprise Structures for HCM

### Define Features by Country or Territory

Use the Manage Features by Country or Territory task to select the correct product for each of your legislations and ensure that the appropriate features work correctly in your implementation. 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.

For further information, see the [Selecting Country Extensions: Critical Choices](#) topic in the Help Center.

### Install and Load Geography and Tax Information Files

You must install Vertex prior to any payroll processing. As part of the initial setup, run the following tasks:

- Manage Geography Lookups for China
- Import Country Structure for China
- Import Geography Data for China
- Manage Geography Validation for China

### Define Enterprise Structures for HCM

Complete tasks in the task lists shown in this table.

Task List	Action
Define Legal Jurisdictions and Authorities for HCM	<ul style="list-style-type: none"> <li>• Create a legal jurisdiction if not already created or predefined.</li> <li>• Create a legal authority for each government body you interact with.</li> <li>• Create addresses for legal entities and legal authorities.</li> </ul>

Task List	Action
Define Legal Entities for HCM	<ul style="list-style-type: none"> <li>• Create at least one legislative data group to partition your payroll data.</li> <li>• Create at least one legal entity designated as a payroll statutory unit (PSU) for each legislative data group.</li> </ul> <p>For China, it's recommended to have only one PSU under an LDG. And attach multiple legal entities to this LDG. You can assign a legal entity as a legal employer.</p> <ul style="list-style-type: none"> <li>• Associate the PSU with a legislative data group.</li> <li>• Define Tax and Social Security Calculation information at the PSU level.</li> </ul>
Define Legal Reporting Units for HCM	<ul style="list-style-type: none"> <li>• Create any additional legal reporting units that you need under a PSU and designate them as tax reporting units.</li> <li>• Optionally, create calculation cards for statutory deductions for each tax reporting unit.</li> </ul>
Define Business Units for HCM	Create business units that you can use to perform one or more business functions.
Define Chart of Accounts for Enterprise Structures 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.

*Related Topics*

## Overview of Payroll Flows

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

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

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

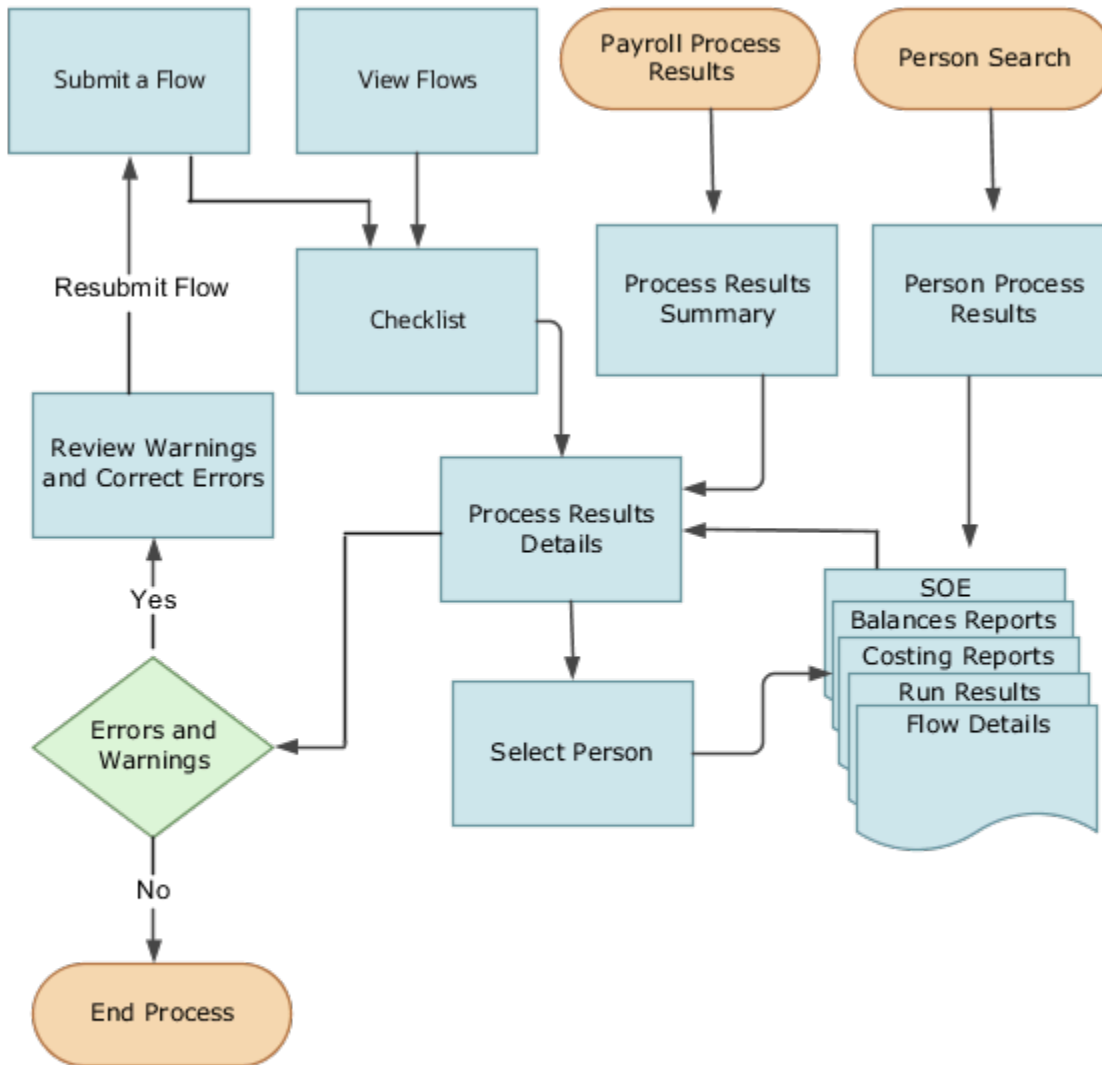
Predefined flow patterns are automatically available for you to submit all types of payroll processes and reports. A flow pattern can consist of a single task such as the Calculate Payroll flow, or multiple tasks, such as the Payroll Cycle flow. The Payroll Cycle flow includes all tasks for a payroll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

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

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

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

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



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

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

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

*Related Topics*

- [Flow Pattern Components](#)
- [Payroll Flow Patterns](#)

## Payroll Setup Tasks for Financials

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

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

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

## Chart of Account Setup

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

Task	Action
Value Sets	Create new or review existing value sets, which you will associate with a key flexfield segment.
Structures	Create account structures that specify the segments to include, their order, and the value sets that will validate the data entered in the segments.  General Ledger predefines the Accounting key flexfield.
Structure Instances	Create account structure instances, which you will use to record transactions and maintain account balances.
Value Set Values	Create groups of values, which you will assign to a key flexfield segment.
Account Hierarchies	Search, create, and edit hierarchical groupings of accounts.
Accounting Calendars	Set up accounting calendar period details. Determine the total number, frequency, and duration of the accounting periods.
Account Combinations	<ol style="list-style-type: none"> <li>1. Create account combinations if the structure instance of your chart of accounts flexfield doesn't allow dynamically created account combinations</li> <li>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.</li> <li>3. If you reconcile payments in Cash Management, create an account combination for reconciliation differences.</li> </ol>

## Ledger Setup

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

Task	Action
Primary Ledgers	Create a ledger with a chart of accounts, accounting calendar, currency and subledger accounting method.  <div style="border-left: 2px solid orange; padding-left: 10px; margin-top: 10px;"> <p><b>Note:</b> If you're creating bank information, you must create a primary ledger.</p> </div>
Legal Entities	Add the legal entities that use the ledger.  The Legal Entity HCM Information task associates the payroll statutory units for legal entities to the legislative data group.

Task	Action
Ledger Options	<ol style="list-style-type: none"> <li>1. Complete all the fields for the General Information and Accounting Calendar, and Subledger Accounting sections.</li> <li>2. In the Period Close section, select the Retained Earnings Account you will use for payroll.</li> <li>3. In the Journal Processing Intercompany subsection, select the option to launch AutoReverse after the open period.</li> </ol>
Balancing Segment Values to Legal Entities	<p>Assign specific balancing segment values to each legal entity before assigning values to the ledgers.</p> <p>By specifying this information, you can more easily identify legal entities during transaction processing and reporting</p>
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.
Reporting Currencies	<p>Review and update reporting currencies.</p> <p>Reporting currencies maintain and record subledger and general ledger journal entries in additional currencies.</p>
Review and Submit Accounting Configuration	Submit your configuration.
Open First Period	<p>Open the first period when you're ready to process transactions for the ledger.</p> <p>After you open the first period, use the Accounting Periods task in General Ledger to open and close periods, and to specify the target period that concludes the series of calendar periods.</p>

*Related Topics*

- [How Payroll Costing Components Integrate with Other Applications](#)
- [Primary Ledgers, Secondary Ledgers, and Reporting Currencies](#)
- [Payroll Setup Tasks for Subledger Accounting](#)
- [Assign Legal Entities and Balancing Segments](#)
- [Chart of Accounts Structures and Instances](#)

## Payroll Cost Allocation Key Flexfield Setup

The cost allocation key flexfield creates a structure for the financial accounting of your payroll costs.

The flexfield captures the account codes that you use to create accounting entries, and to report and track your labor costs. Consider all aspects of the flexfield and its uses during your planning.

You can configure one flexfield for each of your legislative data groups (LDG) with these steps.

- Create an account key flexfield structure based on the Cost Allocation key flexfield code.
- Create a structure instance that you associate to appropriate value sets.
- Map the structure instance to a legislative data group.

- Specify rules in Subledger Accounting to use the cost allocation key flexfield instance as the segment source in the Accounting key flexfield for the chart of accounts.

## Structure of the Cost Allocation Key Flexfield

Decide what structure to use for the cost allocation key flexfield and use the Cost Allocation Key Flexfield to set it up.

The structure of the flexfield defines the segments such as their order and the value sets used to validate the data entered in the segments. Configure each segment of the cost account. For example:

- Segment 1 = Company
- Segment 2 = Cost Center
- Segment 3 = Account Number
- Segment 4 = Project Code

For example, the salary cost account number is 01.200.60001.987654 for a company with the following cost allocation key flexfield setup:

- Company = 01
- Cost Center = 200
- Account Number = 60001
- Project Code = 987654

This table provides decision points to consider before you create the cost allocation key flexfield structure.

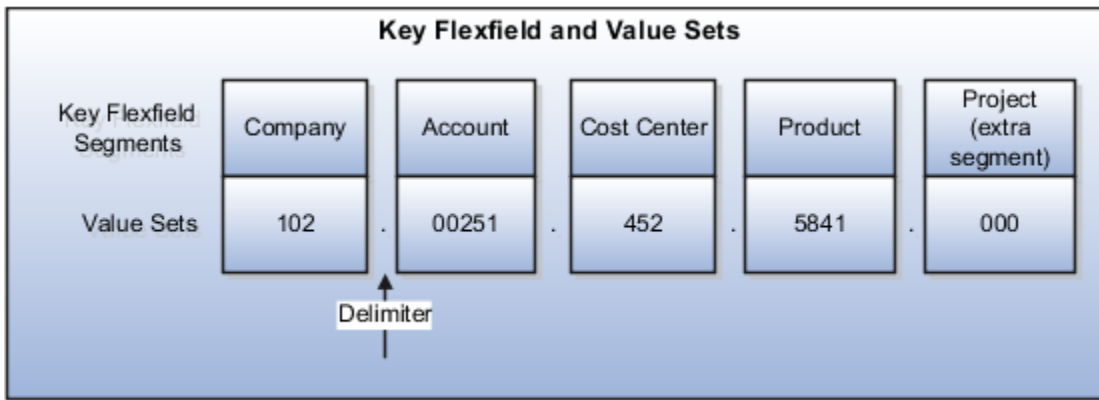
Decision	Description
How many cost allocation key flexfield segments does your Accounting flexfield include?	You must create a segment for each corresponding segment of the Accounting flexfield.
Do you need to reserve segments for future use?	You can't update the flexfield structure. You can create segments for later use, such as new lines of business, and display them as needed.
Do you capture context-sensitive information for legislative purposes?	Create additional segments to capture context-sensitive costing, such as separate liability accounts maintained for each state and state tax.
Do you capture information used by other applications?	Create additional segments, for example, to record the breakdown of costs of a project for reporting purposes.

## Value Sets for the Segments

You associate a value to each segment using the Payroll Costing Value Sets. Use either existing value sets or create value sets. For example, you might reuse an existing value set that you defined for your accounting flexfield, or create a subset of those values, which only apply to payroll.

**Tip:** Consider creating a single value when several accounts use the same value. For example, you might use a value set with a single value of zeros as a placeholder for account segments to be future use segments.

Review diagram for changes:



## Segment Labels

You can use segment labels to define the costing levels in order to enter segment information. For example, if the Company segment can be entered at the Department level, choose the segment label Department for the Company segment.

## Costing Hierarchy

Costing hierarchy defines the sequence costing entries are applied. You can define costing at different levels within the hierarchy where the lowest payroll structure level has the highest costing priority. If lower levels of the hierarchy aren't defined, they inherit the higher-level values, which simplify entry and prevents you from having to enter duplicate segment values into lower levels of the hierarchy. Enter lower levels of the hierarchy when you want to override in that instance. For example, if the company code segment is set at the payroll level, it's rarely entered for element entries.

Hierarchy structures vary with the Costing Type but all of the levels can be used with the "Costed" indicator setting.

**Note:** The costing hierarchy is different for regular element to retro element.

## Cost Hierarchy Levels

Consider which level of the cost hierarchy is the primary source of values for that segment and which levels should receive overrides. These decisions control the cost account segments displayed on the costing setup pages.

This table includes examples of the segment labels that you might specify for costing.

Context Segments	Example
Element Entry	<p>Select Element Entry to override all other levels, with one exception. Segments defined for the Priority account for that element override costing at the element entry level.</p> <p>You might select the segment for cost center at the element entry level to cover situations where a person works at another cost center for a payroll period.</p>
Person	<p>Select Person to cost at the payroll relationship and assignment level, and for elements at each of these levels.</p>



Context Segments	Example
	You might select Person to enable allocation of wages when costs are shared among several cost centers. You might need to override the activity or natural account segment that's usually enabled at the element level.
Position Assignment	Select the position with respect to a legislative data group to define the costing at position level. This is for all the persons who's associated to this position at assignment level.
Job Assignment	Select the job with respect to a legislative data group to define the costing at position level. This is used for all the persons who's associated to this position at assignment level.
Location	Select the location with respect to a legislative data group to define the costing at location level. This is used for all the persons who's associated to this location at assignment level.
Department Assignment	Select the department with respect to a legislative data group to define the costing at position level. This is for all the persons who's associated to this position at assignment level.
Element Eligibility	Select Element Eligibility for natural accounts.  You also use this level for cost center segments needed for balance sheet accounts, such as deduction elements that are usually created at the payroll relationship level.
Payroll	Select Payroll for segments that seldom change for the people assigned to the payroll, such as company, line of business, and future use segments.  <b>Tip:</b> To report costing by business unit, set up payrolls for persons in a single business unit. Specify a segment at the payroll level to record the account information for the business unit.

## Required and Optional Segments

Determine required and optional segments and whether or not you want to define a suspense account. When you set up costing and you don't specify a value for a cost account segment on any level of the costing hierarchy, the following determines the calculation:

- Segment is required or optional
- Suspense account is defined

If you define a segment as:

- Optional, regardless of whether you define a suspense account, the costing result displays a blank (null) value in the segment
- Required and the suspense account is defined, the costing result is placed in a suspense account
- Required and the suspense account isn't defined, the calculation displays an error and the person's results aren't costed

## Segments Required for the Offset Account

Decide which segments of the offset account require costing.

The offset account balances the cost account. The offset uses the segments of the cost account unless you specify a different value for the corresponding segment. For instance, if the only difference between your cost and offset accounts is the natural account segment for the element eligibility segment label, you would select the natural account for the offset account.

## Number of Structure Instances

You create structure instances of your cost allocation key flexfield that you then associate to legislative data groups. Structure instances share the same set, arrangement, and properties of the cost allocation key flexfield structure. If a legislative data group requires different value sets for the flexfield segments, create a separate instance for that legislative data group.

### Related Topics

- [Payroll Setup for Costing Accounts](#)
- [Element Costing Options](#)
- [How Payroll Costing Components Integrate with Other Applications](#)
- [Cost Hierarchy](#)
- [Overview of Generating Flexfield Database Items](#)

## Payment Reconciliation Setup

Global Payroll integrates with Cash Management and General Ledger. This integration facilitates the setup of banks, branches, and bank accounts, and the reconciliation of bank statements with payment transactions.

An administrator or implementor with the appropriate privileges performs the tasks shown in this table:

Application	Setup Steps	Task
General Ledger	Create an account combination for the reconciliation differences account.	<ul style="list-style-type: none"> <li>• Account Combinations</li> </ul>
Cash Management	Set up transaction codes that map to the payment method transaction codes used in payroll.	<ul style="list-style-type: none"> <li>• Cash Transaction Type Mapping</li> <li>• Bank Statement Transaction Codes</li> </ul>
Cash Management	Create reconciliation rules.	<ul style="list-style-type: none"> <li>• Bank Statement Reconciliation Tolerance Rules</li> <li>• Bank Statement Reconciliation Matching Rules</li> <li>• Bank Statement Reconciliation Rule Sets</li> </ul>

Application	Setup Steps	Task
Payroll	<p>Create liability, cash clearing, and cash accounts for your payment sources.</p> <p>Specify the option Transfer to General Ledger.</p>	<ul style="list-style-type: none"> <li>Costing of Payment Sources</li> </ul>

## Reconciliation Differences Account Setup

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

## Payroll Transactions Codes Setup

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

Task	Action
Bank Statement Transaction Codes	<ol style="list-style-type: none"> <li>Review the transaction and statement codes that your enterprise currently uses</li> <li>Create transaction codes for the transaction types that support your organization payment methods</li> </ol>
Cash Transaction Type Mapping	<ol style="list-style-type: none"> <li>Map transaction types to payment types used for the organization payment methods that support costing of payments.</li> <li>Identify the organization payment methods for payroll accounts, such as payroll liability, cash, and cash clearing accounts.</li> </ol>

## Reconciliation Rules Setup

Payroll processes transfer your payment entries to Cash Management for manual or automatic reconciliation with bank statements, and cost the unreconciled and reconciled payments to the appropriate account, such as the cash clearing and cash accounts.

If you reconcile transactions automatically, in Cash Management complete the tasks listed in this table.

Task	Action
Bank Statement Reconciliation Tolerance Rules	Create tolerance rules based on date, amount, or percentage that prevent or warn you when reconciliation exceeds a defined tolerance.
Bank Statement Reconciliation Matching Rules	Define bank statement automatic reconciliation matching rules.
Bank Statement Reconciliation Rule Sets	Assign a group of matching rules and tolerance rules to a bank account for reconciling bank statement lines with transactions.
Bank Accounts	Specify the Reconciliation Differences account you set up in General Ledger..

Task	Action

## Payroll Accounts Setup

Create a liability and cash account. Use **Costing of Payments** to create a cash clearing account to track payments such as checks/cheques, where a delay exists between the date the payment is issued and the date it clears.

**Note:** When you set up the accounts, it's best practice to enter the same account information that you use for the cash and cash clearing account that you created in General Ledger.

### Related Topics

- [Payroll Setup Tasks for Financials](#)
- [Considerations When You Create Accounts](#)
- [Payroll Setup Tasks for Subledger Accounting](#)
- [Reconcile Payroll Payments](#)

# 6 Set Up Enterprises and Workforce Structures

## Introduction

Setting up an enterprise structure for China involves the following tasks:

1. Defining a legislative data group
2. Defining legal jurisdictions
3. Defining legal authorities
4. Defining legal addresses
5. Defining legal entities
6. Defining legal reporting units and tax reporting units

You can perform all setup tasks under Workforce Deployment offering in the Setup and Maintenance work area. China supports all the organization models. These are the key points you must consider as you create and set up Chinese enterprise structures.

## Legislative Data Groups

Legislative data groups (LDG) are a means of partitioning payroll and related data. At least one legislative data group is required for each country or territory where an 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. When you create the first legal entity in a country or territory, the application automatically creates a LDG with ISO two letter country code plus Legislative Data Group. For example, when you create your first legal entity in China and if no LDG exists for China, then the application creates a LDG - CN Legislative Data Group.

Use the Manage Legislative Data Groups task to create a legislative data group. Set the Country to China and the Currency to Yuan Renminbi. Complete other fields as appropriate for your implementation.

## Legal Jurisdictions

A jurisdiction is a physical territory, such as a group of countries, country, province, city or county, where a particular piece of legislation applies. For example, The Beijing Social Insurance is a social insurance legislation that applies to organizations operating in the Beijing City. To do business in China or in a territory within a China, you must register with an identifying jurisdiction - China Income Tax. This manages all individual income tax, public housing fund, and social insurances locally. To ensure that all deduction calculations and reporting are accurate, manage statutory deductions and jurisdiction information.

Use the Manage Legal Jurisdictions task to create jurisdictions.

## Legal Authorities

A legal authority is a government or legal body. A legal authority is charged with powers to make laws, levy and collect fees and taxes, and remit financial appropriations for a given jurisdiction. It's optional to define legal authorities for China.

Use the Manage Legal Authorities task to create legal authorities. For each authority you create, set the Tax Authority Type to **Collecting and reporting**.

## Legal Addresses

A legal address is the mailing address of a legal entity or legal authority. You use legal addresses when you send correspondence such as invoices, bills, reports, and so on, to a legal entity or authority. A legal address is also the address a legal entity uses to register with a legal authority. You must create legal addresses before creating legal entities.

Use the Manage Legal Address task to create legal addresses. For each address you create, select China as the country so that the Chinese address style will be used.

## Legal Entities, Legal Employers, and Payroll Statutory Units

A legal entity is an entity unequivocally identified and given rights and responsibilities under Commercial Law, through registration with the territory's appropriate authority. Legal entities consist of:

- **Legal employer:** A legal employer is a legal entity that employs workers. The legal employer is captured at the work relationship level, and all assignments within that relationship are automatically with that legal employer. Legal employer information for worker assignments is also used for reporting purposes.
- **Payroll statutory unit (PSU):** Payroll statutory unit is a legal entity that's responsible for paying workers, including the payment of payroll tax and social insurance. A payroll statutory unit can pay and report on payroll tax and social insurance on behalf of one or many legal entities, depending on the structure of your enterprise. For example, if you're a multinational, multiple company enterprise, then you register a payroll statutory unit in each country where you employ and pay people. In China, you select one legal entity as a payroll statutory unit and map the rest of the legal entities to this payroll statutory unit as parent payroll statutory unit. In China, it's recommended to have only one PSU under an LDG. And have multiple legal entities attached to this legislative data group (LDG).

## Legal Reporting Units and Tax Reporting Units

A legal reporting unit (LRU) is the lowest level component of a legal structure that requires registrations. It's used to group workers for the purpose of tax and social insurance reporting or to represent a part of your enterprise with a specific statutory or tax reporting obligation. A LRU is created automatically when you create a PSU. If an LRU is used in Oracle Fusion Payroll for tax reporting purposes, then it must be designated as a tax reporting unit (TRU) using the Manage Legal Reporting Unit HCM Information task. Use a tax reporting unit to group workers for the purpose of tax and social insurance reporting.

## Legal Entities

### Define Legal Entities

This topic demonstrates how you can define and set up a legal entity for China.

Setting up a legal entity for China includes defining the following:

- A legal entity
- Legal entity registrations
- Legal entity HCM information

## Before You Begin

Before you define a legal entity, you must:

1. (Optional) Define a legislative data group (LDG) for China using the Manage Legislative Data Groups task. For China, when you create the first legal entity using the Manage Legal Entities task, the application automatically creates an LDG named CN Legislative Data Group. After selecting the **Payroll statutory unit** check box, which designates the legal entity as a PSU, you must manually associate the PSU with the LDG.
2. Use the Manage Legal Addresses task to define a legal address for the legal entity you're about to define.
3. (Optional) Define the required jurisdictions for the legal entity you're about to define.

## How to Create a Legal Entity

To create a legal entity:

1. In the Setup and Maintenance work area, go to the following:
  - o Offering: Workforce Deployment
  - o Functional Area: Legal Structures
  - o Task: Define Legal Entities for Human Capital Management

Expand the task to display a list of related tasks.

2. Click the **Select Scope** link for the Manage Legal Entity task.
3. On the Select Scope window, select **Create New** in the **Legal Entity** field.
4. Click **Apply and Go to Task**.
5. On the Manage Legal Entities page, click **Create**.
6. On the Create Legal Entity page, complete these fields, as appropriate, for this entity:
  - o In the **Country** field, select **China**.
  - o In the **Name** field, enter a name for the legal entity.
  - o In the **Legal Entity Identifier** field, enter the number that uniquely identifies this legal entity. This number is the organization code issued by a government authority.
  - o Select the **Legal Employer** check box.
  - o If this legal entity is also a payroll statutory unit (PSU), select the **Payroll statutory unit** option. If this entity belongs to an existing PSU, select a PSU from the **Payroll Statutory Unit** field.
  - o In the Registration Information section, the identifying jurisdiction is predefined as **China Income Tax**. From the **Legal Address** list, select the legal address.
  - o In both the **Legal Entity Registration Number** and **Legal Entity Unit Registration Number** fields, enter the registration number issued by the State Administration of Taxation.
7. Click **Save and Close**.

## How to Define Legal Entity Registrations

No additional legal entity registration is required for managing Global Payroll for China.

## How to Define Legal Entity HCM Information

It's optional to set up additional China-specific legal entity information because this information isn't required to process payroll for China.

To define HCM information for the legal entities you have created:

1. In the Setup and Maintenance work area, go to the following:
  - o Offering: Workforce Deployment
  - o Functional Area: Legal Structures
  - o Task: Define Legal Entities for Human Capital ManagementExpand the task to display a list of related tasks.
2. Click the **Select Scope** link for the Manage Legal Entity HCM Information task. Set the scope for this task as given in the previous task.
3. Click *Go to Task* for the Manage Legal Entity HCM Information task.
4. Click **Edit**, and then select **Correct**.
- 5.
6. On the Legal Employer tab, complete the fields in the Work Day Information and Legal Employer Information sections.
7. Click Chinese Legal Employer Details, and then enter the China-specific HCM information. Enterprise Organization Code is the only mandatory field.
8. If this entity is a payroll statutory unit, select the **Payroll Statutory Unit** tab.
9. Click **Payroll Statutory Unit Details**.
10. Enter the **Fiscal Year Start Date**, and select the **Associated Legislative Data Group**.  
You must associate the legislative data group at the PSU level.  
**Note:** Once a legislative data group is assigned to a payroll statutory unit, and employees are created under the legal employers linked to the payroll statutory unit, you should not change the legislative data group the unit is associated with.
11. Click Chinese Payroll Statutory Unit Details, and then provide values for Monthly Salary Paid Days and Leave Compensation Factor if you want to override the predefined values.  
**Note:** Monthly Salary Paid Days is used to derive each employee's daily rate for calculating termination payments. Leave Compensation Factor is used to calculate the leave payments an employee receives on termination for leaves that the employee didn't take.
12. Click **Submit**.

## Legal Reporting Units

### Define Legal Reporting Units

This topic demonstrates how you can define and set up a legal reporting unit (LRU) for China.

To define an LRU for HCM, you must:

- Create an LRU
- Define the LRU registrations
- Define the LRU HCM information



## Before You Start

Before you define an LRU, you must:

- Define a Chinese legal entity to which this LRU belongs.
- Use the Manage Legal Addresses task to define a legal address for the LRU you're about to define.
- Define the required jurisdictions for the LRU you're about to define.

## How to Create a Legal Reporting Unit

To create a legal reporting unit:

1. In the Setup and Maintenance work area, go to the following:
  - Offering: Workforce Deployment
  - Functional Area: Legal Structures
  - Task: Define Legal Reporting Units for Human Capital Management

Expand the task to display a list of related tasks.

2. Click the **Select Scope** link for the Define Legal Reporting Units for Human Capital Management task.
3. On the Select Scope window, select the **Manage Legal Reporting Unit** and select **Create New** in the **Legal Reporting Unit** field.
4. Click **Apply and Go to Task**.

An LRU with the same name as the previously created legal entity is created by default. This LRU is designated as the main legal reporting unit for the legal entity.

5. To create a second legal reporting unit for this legal entity, click **Create** on the Manage Legal Reporting Units page.
6. Complete the fields on the Legal Reporting Unit page, noting the following:
  - When you select a territory, the Jurisdiction field displays the identifying jurisdiction, such as Beijing Income Tax. If you have defined additional jurisdictions, you can select one from the list.
  - Indicate whether this is the main legal reporting unit for this legal entity.
7. Click **Save and Close**.

## How to Define Legal Reporting Unit Registrations

To use the delivered tax reports, you must set up income tax registration information for a tax reporting unit in the territory where it operates. To use the delivered public housing fund and social insurance calculation functions, set up public housing fund and social insurance registration information for a tax reporting unit in the territory where it operates.

To set the scope and define the legal reporting unit registration:

1. Set the scope for this task as follows:
  - a. Click the **Select Scope** link for the Manage Legal Reporting Unit Registrations task.
  - b. On the Select Scope window, select **Manage Legal Reporting Unit Registrations** and select **Select and Add** in the Legal Reporting Unit field.
  - c. Click **Apply and Go to Task**.

- d. On the Select and Add: Legal Reporting Unit page, search and select the legal reporting unit you have just created and click **Save and Close**.

The Scope column on the task list page should now display the selected LRU as the scope for those tasks related to the LRU.

2. Select **Go to Task** for the Manage Legal Reporting Unit Registrations task.
3. Click **Create**.
4. Enter the required information on the Create Registration page, noting the following:
  - o When you select a jurisdiction, the **Territory** field is populated automatically. For example, if you select China Income Tax, the territory is shown as China.
  - o The **Issuing Legal Authority** field displays a list of all legal authorities associated with the selected jurisdiction.
  - o The **Registered Address** field displays a list of all predefined legal addresses.
  - o In the **Legal Entity Registration Number** field, enter a valid value.
5. Click **Save and Close**.

## Jurisdictions and Legal Authorities

### Define Legal Authorities

A legal authority is a government or legal body charged with powers to make laws, levy and collect fees and taxes, and remit financial appropriations for a given jurisdiction. Use the Manage Legal Authorities task to create legal authorities.

It's optional to define legal authorities for China. To define legal authorities:

1. In the Setup and Maintenance work area, do the following:
  - o Offering: Workforce Deployment
  - o Functional Area: Legal Structures
  - o Task: Manage Legal Authorities

Expand the entry to display a list of related tasks.

2. On the Manage Legal Authorities page, click **Create**.
3. On the Create Legal Authority page:
  - o Select the **Tax Authority Type** based on the type of interaction. Typically, this is set to **Collecting and reporting**.
  - o Add one or more addresses.
  - o Add one or more legislative categories, such as, Income tax, Public housing fund, Social insurance, Enterprise annuity, or Supplementary public housing fund. This establishes a link between the legal authority and all jurisdictions associated with the selected legislative category.
  - o Click **Save and Close**.

# Workforce Structures

## Create a Location

The first workforce structures to define are the locations where business is conducted or which are of interest to the business. Locations store information about the physical location of a workforce structure and can be assigned to workers to define their physical work location.

Use the Manage Locations task in the Setup and Maintenance work area to create locations. You enter information about a location only once. Subsequently, when you set up other workforce structures you select the location from a list.

To create or manage locations:

1. In the Setup and Maintenance work area, do the following:

- o Offering: Workforce Deployment
- o Functional Area: Legal Structures
- o Task: Manage Locations

Expand the entry to display a list of related tasks.

2. Select **Go to Task** for the Manage Locations task.
3. Click **Create**.
4. On the Create Location page, enter the required information.
5. Click **Submit**.

### *Related Topics*

## Create a Department

A department is a division of a business enterprise dealing with a particular area or activity. You can assign workers to departments.

Use the Manage Departments task in the implementation task list to create departments. You can set up the overrides for workers compensation and provincial medical calculations for a department.

To create departments:

1. In the Setup and Maintenance work area, do the following:

- o Offering: Workforce Deployment
- o Functional Area: Legal Structures
- o Task: Manage Departments

Expand the entry to display a list of related tasks.

2. Select **Go to Task** for the Manage Departments task.

3. On the Manage Departments page, click **Create**.
4. On the Create Department: Description page, enter the required information.  
  
Every time you associate this department to another entity, such as a worker, the location you select here connects to that entity by default.
5. Click **Next**
6. On the Create Department: Department Details page, enter the required information and click **Next**.
7. On the Create Department: Review page, review the information and click **Submit**.

## Create a Job

A job defines a set of roles or duties that are linked to a worker. Create the job codes that are suited for its organization.

Use the Manage Jobs task in the implementation project task list to create jobs.

To create a job:

1. In the Setup and Maintenance work area, do the following:
  - o Offering: Workforce Deployment
  - o Functional Area: Legal Structures
  - o Task: Manage Job  
Expand the entry to display a list of related tasks.
2. Select **Go to Task** for the Manage Job task.
3. Click **Create**.
4. On the Create Job: Basic Details page, enter the required information and click **Next**.
5. On the Create Job: Job details page, enter job details.
6. Click Next until you see the Create Job: Review page.
7. Click **Submit**.

## Geography Information

### View and Edit Geography Information

Once you have updated your installation's geocode information using the Load Geographies for China task, you can use the Manage Geographies task to view and edit the information.

Follow these steps to verify geographies:

1. In the Setup and Maintenance work area, go to the following:
  - o Offering: Workforce Deployment
  - o Functional Area: China Payroll
  - o Task: Manage Geographies

2. In the Country Name field, type **China**, and click **Search**.
3. Select **Manage Geography Hierarchy** from the Action menu. The Manage Geography table displays rows for all China provinces.
4. Expand each entry to view the subordinate entries, such as the cities and postal codes.
5. Click an entry's link to view its geocode information in read-only mode.
6. Highlight an entry's row, and click **Edit** to make manual changes to its geocode information.
7. Click **Save and Close** when done.

## Tax Information

### View Individual Income Tax Information

Use the Calculation Value Definitions task to view the individual income tax information.

To view the individual income tax information:

1. In the Payroll section of My Client Groups, click the **Calculation Value Definitions** task.
2. In the Name field, enter **Individual Income Tax**.
3. Select a China legislative data group (LDG) and enter the **Effective As-of Date**.
4. Click **Search**. The federal and provincial basic exemption amounts for Quebec are displayed.
5. Click the Individual Income Tax link to view its detailed information.



# 7 Set Up Payroll Fundamentals

## Payroll Business Definitions

### Payroll Business Definitions

An integral part of the payroll setup is defining payroll business definitions. Use the Define Payroll Business Definitions task in the Define Payroll tasks list to create lookups, value sets, and descriptive flexfields that you need to support payroll.

You can view and edit several China-specific lookup tables used in the Oracle Fusion Payroll and Human Resource applications. These lookup tables comprise the valid values that you can select when completing specific fields in these applications.

To manage lookup tables for China, use these tasks in the Setup and Maintenance work area:

- Manage Person Lookups for China
- Manage Payroll Lookups for China
- Manage Organization Structure Lookups for China

### Person Lookups

You use person lookups in person and employment management tasks, such as Add Person, Hire Employee, and Manage Person Information. Use the Manage Person Lookups for China task to view and edit these lookups:

Lookup Type Name	Lookup Type	Where Lookup is Used
Notice Period Duration Unit	HRX_CN_DURATION_UNIT	Manage Employment page, Contract Details section
Health Status	HRX_CN_HEALTH_STATUS	Manage Person Information page, Legislative Information section
Hukou Location	HRX_CN_HUKOU_LOCATION	Manage Person Information page, Legislative Information section
Hukou and Contribution Type	HRX_CN_HUKOU_TYPE	Manage Person Information page, Legislative Information section
Copy of Personal File	HRX_CN_FILE_ARCHIVE	Additional Person Info page
Military Level	HRX_CN_MILITARY_LEVEL	Additional Person Info page
Party Membership Exceptional Status	HRX_CN_PARTY_EXCEPTION	Additional Person Info page

## Payroll Lookups

You use payroll lookups in the Manage Calculation Cards task and Regulatory and Tax Reporting processes and reports. Use the Manage Payroll Lookups for China task to view and edit these lookups:

Lookup Type Name	Lookup Type	Where Lookup is Used
Social Security Account Status Change Reason	HRX_CN_ACCT_STATUS_CHG_REASON	Manage Person Details page, Component Details section (Manage Calculation Cards task)

## Organization Lookups

You use organization lookups in the Manage Legal Entity HCM Information task. Use the Manage Organization Structures Lookups for China task to view and edit these lookups:

Lookup Type Name	Lookup Type	Where Lookup is Used
Enterprise Category	HRX_CN_ENTERPRISE_CATEGORY	Manage Legal Entity page, Chinese Legal Employer Details section

## Lookups

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

The following table lists the lookup types, lookup codes and their meaning for China.

Lookup Type	Lookup Code	Meaning
ORA_PER_ETHNICITY	AC	Achang
ORA_PER_ETHNICITY	BA	Bai
ORA_PER_ETHNICITY	BL	Blang
ORA_PER_ETHNICITY	BN	Bonan
ORA_PER_ETHNICITY	BY	Buyei
ORA_PER_ETHNICITY	CS	Korean
ORA_PER_ETHNICITY	DA	Dai



Lookup Type	Lookup Code	Meaning
ORA_PER_ETHNICITY	DE	Deang
ORA_PER_ETHNICITY	DO	Dong
ORA_PER_ETHNICITY	DR	Derung
ORA_PER_ETHNICITY	DU	Daur
ORA_PER_ETHNICITY	DX	Dongxiang
ORA_PER_ETHNICITY	EW	Ewenki
ORA_PER_ETHNICITY	GI	Gin
ORA_PER_ETHNICITY	GL	Gelao
ORA_PER_ETHNICITY	GS	Gaoshan
ORA_PER_ETHNICITY	HA	Han
ORA_PER_ETHNICITY	HN	Hani
ORA_PER_ETHNICITY	HU	Hui
ORA_PER_ETHNICITY	HZ	Hezhen
ORA_PER_ETHNICITY	JN	Jino
ORA_PER_ETHNICITY	JP	Jingpo
ORA_PER_ETHNICITY	KG	Kirgiz
ORA_PER_ETHNICITY	KZ	Kazak
ORA_PER_ETHNICITY	LB	Lhoba
ORA_PER_ETHNICITY	LH	Lahu
ORA_PER_ETHNICITY	LI	Li
ORA_PER_ETHNICITY	LS	Lisu

Lookup Type	Lookup Code	Meaning
ORA_PER_ETHNICITY	MA	Man
ORA_PER_ETHNICITY	MB	Monba
ORA_PER_ETHNICITY	MG	Mongol
ORA_PER_ETHNICITY	MH	Miao
ORA_PER_ETHNICITY	ML	Mulao
ORA_PER_ETHNICITY	MN	Maonan
ORA_PER_ETHNICITY	NU	Nu
ORA_PER_ETHNICITY	NX	Naxi
ORA_PER_ETHNICITY	OR	Oroqen
ORA_PER_ETHNICITY	PM	Pumi
ORA_PER_ETHNICITY	QI	Qiang
ORA_PER_ETHNICITY	RS	Russ
ORA_PER_ETHNICITY	SH	She
ORA_PER_ETHNICITY	SL	Salar
ORA_PER_ETHNICITY	SU	Sui
ORA_PER_ETHNICITY	TA	Tajik
ORA_PER_ETHNICITY	TJ	Tujia
ORA_PER_ETHNICITY	TT	Tatar
ORA_PER_ETHNICITY	TU	Tu
ORA_PER_ETHNICITY	UG	Uygur
ORA_PER_ETHNICITY	UZ	Uzbek

Lookup Type	Lookup Code	Meaning
ORA_PER_ETHNICITY	VA	Va
ORA_PER_ETHNICITY	XB	Xibe
ORA_PER_ETHNICITY	YA	Yao
ORA_PER_ETHNICITY	YG	Yugur
ORA_PER_ETHNICITY	YI	Yi
ORA_PER_ETHNICITY	ZA	Zang
ORA_PER_ETHNICITY	ZH	Zhuang
ORA_PER_HIGHEST_EDUCATION_LEVE	10	Graduate education
ORA_PER_HIGHEST_EDUCATION_LEVE	11	Graduation in a doctorate with diploma
ORA_PER_HIGHEST_EDUCATION_LEVE	12	Completion of a doctorate course
ORA_PER_HIGHEST_EDUCATION_LEVE	13	Not completing a doctorate course
ORA_PER_HIGHEST_EDUCATION_LEVE	14	Graduation in a master's degree with diploma
ORA_PER_HIGHEST_EDUCATION_LEVE	15	Completion of a master's degree course
ORA_PER_HIGHEST_EDUCATION_LEVE	16	Not completing a master's degree course
ORA_PER_HIGHEST_EDUCATION_LEVE	17	Graduation from graduate student class
ORA_PER_HIGHEST_EDUCATION_LEVE	18	Completion of a graduate student class course
ORA_PER_HIGHEST_EDUCATION_LEVE	19	Not completing a graduate student class course
ORA_PER_HIGHEST_EDUCATION_LEVE	20	University education
ORA_PER_HIGHEST_EDUCATION_LEVE	21	Graduation from university
ORA_PER_HIGHEST_EDUCATION_LEVE	22	Completion of a university course
ORA_PER_HIGHEST_EDUCATION_LEVE	23	Not completing a university course

Lookup Type	Lookup Code	Meaning
ORA_PER_HIGHEST_EDUCATION_LEVE	28	Graduation from regular class at university
ORA_PER_HIGHEST_EDUCATION_LEVE	30	Specialized college education
ORA_PER_HIGHEST_EDUCATION_LEVE	31	Graduation from specialized college
ORA_PER_HIGHEST_EDUCATION_LEVE	32	Completion of a specialized college course
ORA_PER_HIGHEST_EDUCATION_LEVE	33	Not completing a specialized college course
ORA_PER_HIGHEST_EDUCATION_LEVE	40	Secondary vocational education
ORA_PER_HIGHEST_EDUCATION_LEVE	41	Graduation from secondary specialized school
ORA_PER_HIGHEST_EDUCATION_LEVE	42	Completion of a secondary specialized school course
ORA_PER_HIGHEST_EDUCATION_LEVE	43	Not completing a secondary specialized school course
ORA_PER_HIGHEST_EDUCATION_LEVE	44	Graduation from vocational school
ORA_PER_HIGHEST_EDUCATION_LEVE	45	Completion of a vocational school course
ORA_PER_HIGHEST_EDUCATION_LEVE	46	Not completing a vocational school course
ORA_PER_HIGHEST_EDUCATION_LEVE	47	Graduation from skilled workers training school
ORA_PER_HIGHEST_EDUCATION_LEVE	48	Completion of a skilled workers training school course
ORA_PER_HIGHEST_EDUCATION_LEVE	49	Not completing a skilled workers training school course
ORA_PER_HIGHEST_EDUCATION_LEVE	60	Regular high school education
ORA_PER_HIGHEST_EDUCATION_LEVE	61	Graduation from regular high school
ORA_PER_HIGHEST_EDUCATION_LEVE	62	Completion of a regular high school course
ORA_PER_HIGHEST_EDUCATION_LEVE	63	Not completing a regular high school course
ORA_PER_HIGHEST_EDUCATION_LEVE	70	Secondary school education

Lookup Type	Lookup Code	Meaning
ORA_PER_HIGHEST_EDUCATION_LEVE	71	Graduation from secondary school
ORA_PER_HIGHEST_EDUCATION_LEVE	73	Not completing a secondary school course
ORA_PER_HIGHEST_EDUCATION_LEVE	80	Primary school education
ORA_PER_HIGHEST_EDUCATION_LEVE	81	Graduation from primary school
ORA_PER_HIGHEST_EDUCATION_LEVE	83	Not completing a primary school course
ORA_PER_HIGHEST_EDUCATION_LEVE	90	Other
ORA_PER_NATIONAL_IDENTIFIER_TY	CIN	Citizen Identification Number
ORA_PER_VISA_PERMIT_TYPE	CFRP	Foreigner residence permit
ORA_PER_VISA_PERMIT_TYPE	CP	Pass
ORA_PER_VISA_PERMIT_TYPE	CV	Visa
ORA_PER_VISA_PERMIT_TYPE	CWP	Work permit
PER_PASSPORT_TYPE	B	Business usage
PER_PASSPORT_TYPE	N	Not applicable
PER_PASSPORT_TYPE	P	Private usage
HRX_CN_ACCOUNT_STATUS	CLOSED	Closed
HRX_CN_ACCOUNT_STATUS	OPEN	Open
HRX_CN_ACCOUNT_STATUS	SUSPEND	Suspended
HRX_CN_ACCOUNT_STATUS	TRANSFER IN	Transfer in
HRX_CN_ACCOUNT_STATUS	TRANSFER OUT	Transfer out
HRX_CN_ACCT_STATUS_CHG_REASON	1	New enrollment
HRX_CN_ACCT_STATUS_CHG_REASON	2	Transfer in from same district

Lookup Type	Lookup Code	Meaning
HRX_CN_ACCT_STATUS_CHG_REASON	3	Transfer in from same administrative area
HRX_CN_ACCT_STATUS_CHG_REASON	4	Transfer in from different administrative area
HRX_CN_ACCT_STATUS_CHG_REASON	5	Re-enrollment
HRX_CN_ACCT_STATUS_CHG_REASON	6	Retirement
HRX_CN_ACCT_STATUS_CHG_REASON	7	Transfer out to same administrative area
HRX_CN_ACCT_STATUS_CHG_REASON	8	Transfer out to different administrative area
HRX_CN_ACCT_STATUS_CHG_REASON	9	Termination of employment contract
HRX_CN_ACCT_STATUS_CHG_REASON	10	Death
HRX_CN_ACCT_STATUS_CHG_REASON	11	Other
HRX_CN_CB_LOWER_CALC_METHOD	CITY_AVERAGE:0.6	60 percent of city average monthly salary, previous year
HRX_CN_CB_LOWER_CALC_METHOD	CITY_LOWEST_AVERAGE	City lowest average monthly salary, previous year
HRX_CN_CB_LOWER_CALC_METHOD	FIXED	Fixed amount
HRX_CN_CB_LOWER_CALC_METHOD	NA	Not applicable
HRX_CN_CB_LOWER_CALC_METHOD	PROVINCIAL_AVERAGE:0.6	60 percent of provincial average monthly salary, previous year
HRX_CN_CB_SWITCH_MONTH	1	January
HRX_CN_CB_SWITCH_MONTH	2	February
HRX_CN_CB_SWITCH_MONTH	3	March
HRX_CN_CB_SWITCH_MONTH	4	April
HRX_CN_CB_SWITCH_MONTH	5	May
HRX_CN_CB_SWITCH_MONTH	6	June

Lookup Type	Lookup Code	Meaning
HRX_CN_CB_SWITCH_MONTH	7	July
HRX_CN_CB_SWITCH_MONTH	8	August
HRX_CN_CB_SWITCH_MONTH	9	September
HRX_CN_CB_SWITCH_MONTH	10	October
HRX_CN_CB_SWITCH_MONTH	11	November
HRX_CN_CB_SWITCH_MONTH	12	December
HRX_CN_CB_SWITCH_MONTH	NA	Not applicable
HRX_CN_CB_SWITCH_PERIOD_TYPE	MONTHLY	Monthly
HRX_CN_CB_SWITCH_PERIOD_TYPE	YEARLY	Yearly in a specified month
HRX_CN_CB_UPPER_CALC_METHOD	CITY_AVERAGE:3	3 times city average monthly salary, previous year
HRX_CN_CB_UPPER_CALC_METHOD	CITY_AVERAGE:5	5 times city average monthly salary, previous year
HRX_CN_CB_UPPER_CALC_METHOD	FIXED	Fixed amount
HRX_CN_CB_UPPER_CALC_METHOD	NA	Not applicable
HRX_CN_CB_UPPER_CALC_METHOD	PROVINCIAL_AVERAGE:3	3 times provincial average monthly salary, previous year
HRX_CN_CONT_BASE_CALC_METHOD	AVERAGE	Average monthly salary in previous year
HRX_CN_CONT_BASE_CALC_METHOD	CITY_AVERAGE:0.6	60 percent of city average monthly salary in previous year
HRX_CN_CONT_BASE_CALC_METHOD	CITY_LOWEST_AVERAGE	City lowest average monthly salary in previous year
HRX_CN_CONT_BASE_CALC_METHOD	CURRENT	Current monthly salary
HRX_CN_CONT_BASE_CALC_METHOD	FIXED	Fixed amount

Lookup Type	Lookup Code	Meaning
HRX_CN_CONT_BASE_CALC_METHOD	NA	Not applicable
HRX_CN_CONT_BASE_CALC_METHOD	PREVIOUS	Previous monthly salary
HRX_CN_CONT_BASE_CALC_METHOD	PREVIOUS_SWITCH	Monthly salary in previous month of switch month
HRX_CN_CONT_BASE_CALC_METHOD	PROVINCIAL_AVERAGE:0.6	60 percent of provincial average monthly salary last year
HRX_CN_DOC_TYPE_AND_FORMULA	FOREIGNER_CODE	Foreigner Code
HRX_CN_DOC_TYPE_AND_FORMULA	FORMULA1	Formula 1
HRX_CN_DOC_TYPE_AND_FORMULA	HK_MACAO_TAIWAN_PASS	Hong Kong, Macao, or Taiwan Pass
HRX_CN_DOC_TYPE_AND_FORMULA	IDENT	Identification
HRX_CN_DOC_TYPE_AND_FORMULA	PASSPORT	Passport
HRX_CN_DURATION_UNIT	D	Days
HRX_CN_DURATION_UNIT	M	Months
HRX_CN_DURATION_UNIT	W	Weeks
HRX_CN_DURATION_UNIT	Y	Years
HRX_CN_ENTERPRISE_CATEGORY	1	Juridical enterprise
HRX_CN_ENTERPRISE_CATEGORY	2	Juridical institution
HRX_CN_ENTERPRISE_CATEGORY	3	Juridical association
HRX_CN_ENTERPRISE_CATEGORY	4	Juridical government organization
HRX_CN_ENTERPRISE_CATEGORY	5	Nonjuridical enterprise
HRX_CN_ENTERPRISE_CATEGORY	6	Nonjuridical institution
HRX_CN_ENTERPRISE_CATEGORY	7	Nonjuridical association



Lookup Type	Lookup Code	Meaning
HRX_CN_ENTERPRISE_CATEGORY	8	Nonjuridical government organization
HRX_CN_FILE_ARCHIVE	1	No file exists
HRX_CN_FILE_ARCHIVE	2	Original copy
HRX_CN_FILE_ARCHIVE	3	Secondary copy
HRX_CN_FILE_ARCHIVE	4	Film
HRX_CN_FILE_ARCHIVE	5	Original copy, secondary copy, and film
HRX_CN_FILE_ARCHIVE	6	Original copy and secondary copy
HRX_CN_FILE_ARCHIVE	7	Original copy and film
HRX_CN_FILE_ARCHIVE	8	Secondary copy and film
HRX_CN_FILE_ARCHIVE	9	Other
HRX_CN_HEALTH_STATUS	C	Ill
HRX_CN_HEALTH_STATUS	D	Disabled
HRX_CN_HEALTH_STATUS	H	Healthy
HRX_CN_HEALTH_STATUS	P	Physiological defect
HRX_CN_HEALTH_STATUS	W	Normal
HRX_CN_HUKOU_LOCATION	110000	Beijing Shi
HRX_CN_HUKOU_LOCATION	120000	Tianjin Shi
HRX_CN_HUKOU_LOCATION	130000	Hebei Sheng
HRX_CN_HUKOU_LOCATION	140000	Shanxi Sheng
HRX_CN_HUKOU_LOCATION	150000	Nei Mongol Zizhiqu
HRX_CN_HUKOU_LOCATION	210000	Liaoning Sheng

Lookup Type	Lookup Code	Meaning
HRX_CN_HUKOU_LOCATION	220000	Jilin Sheng
HRX_CN_HUKOU_LOCATION	230000	Heilongjiang Sheng
HRX_CN_HUKOU_LOCATION	310000	Shanghai Shi
HRX_CN_HUKOU_LOCATION	320000	Jiangsu Sheng
HRX_CN_HUKOU_LOCATION	330000	Zhejiang Sheng
HRX_CN_HUKOU_LOCATION	340000	Anhui Sheng
HRX_CN_HUKOU_LOCATION	350000	Fujian Sheng
HRX_CN_HUKOU_LOCATION	360000	Jiangxi Sheng
HRX_CN_HUKOU_LOCATION	370000	Shandong Sheng
HRX_CN_HUKOU_LOCATION	410000	Henan Sheng
HRX_CN_HUKOU_LOCATION	420000	Hubei Sheng
HRX_CN_HUKOU_LOCATION	430000	Hunan Sheng
HRX_CN_HUKOU_LOCATION	440000	Guangdong Sheng
HRX_CN_HUKOU_LOCATION	450000	Guangxi Zhuangzu Zizhiqu
HRX_CN_HUKOU_LOCATION	460000	Hainan Sheng
HRX_CN_HUKOU_LOCATION	500000	Chongqing Shi
HRX_CN_HUKOU_LOCATION	510000	Sichuan Sheng
HRX_CN_HUKOU_LOCATION	520000	Guizhou Sheng
HRX_CN_HUKOU_LOCATION	530000	Yunnan Sheng
HRX_CN_HUKOU_LOCATION	540000	Xizang Zizhiqu
HRX_CN_HUKOU_LOCATION	610000	Shaanxi Sheng

Lookup Type	Lookup Code	Meaning
HRX_CN_HUKOU_LOCATION	620000	Gansu Sheng
HRX_CN_HUKOU_LOCATION	630000	Qinghai Sheng
HRX_CN_HUKOU_LOCATION	640000	Ningxia Huizu Zizhiqu
HRX_CN_HUKOU_LOCATION	650000	Xinjiang Uygur Zizhiqu
HRX_CN_HUKOU_LOCATION	710000	Taiwan Sheng
HRX_CN_HUKOU_LOCATION	810000	Hong Kong "Tebixingzhengqu"
HRX_CN_HUKOU_LOCATION	820000	Macao "Tebixingzhengqu"
HRX_CN_HUKOU_LOCATION	990000	Other
HRX_CN_HUKOU_TYPE	1	Farmer
HRX_CN_HUKOU_TYPE	2	City resident
HRX_CN_HUKOU_TYPE	3	Local farmer
HRX_CN_HUKOU_TYPE	4	Nonlocal farmer
HRX_CN_HUKOU_TYPE	5	Local city resident - permanent
HRX_CN_HUKOU_TYPE	6	Local city resident - temporary
HRX_CN_HUKOU_TYPE	7	Nonlocal city resident
HRX_CN_HUKOU_TYPE	9	Other
HRX_CN_INS_CONT_DEFERRED_TYPE	CURRENT_PERIOD	Defer until probation period end date
HRX_CN_INS_CONT_DEFERRED_TYPE	NA	Not applicable
HRX_CN_INS_CONT_DEFERRED_TYPE	NEXT_PERIOD	Defer until next month of probation period end date
HRX_CN_LESS_THAN_ONE_YUAN	LESS_THAN	No payment if tax payable less than one yuan

Lookup Type	Lookup Code	Meaning
HRX_CN_LESS_THAN_ONE_YUAN	LESS_THAN_OR_EQUAL	No payment if tax payable less than or equal to one yuan
HRX_CN_LESS_THAN_ONE_YUAN	NO_EXEMPTION	No exemption
HRX_CN_MILITARY_LEVEL	1	Army
HRX_CN_MILITARY_LEVEL	2	Deputy Army
HRX_CN_MILITARY_LEVEL	3	Division
HRX_CN_MILITARY_LEVEL	4	Deputy Division
HRX_CN_MILITARY_LEVEL	5	Regiment
HRX_CN_MILITARY_LEVEL	6	Deputy Regiment
HRX_CN_MILITARY_LEVEL	7	Battalion
HRX_CN_MILITARY_LEVEL	8	Deputy Battalion
HRX_CN_MILITARY_LEVEL	9	Company
HRX_CN_MILITARY_LEVEL	10	Deputy Company
HRX_CN_MILITARY_LEVEL	11	Platoon
HRX_CN_MILITARY_RANK	11	Second lieutenant
HRX_CN_MILITARY_RANK	12	First lieutenant
HRX_CN_MILITARY_RANK	13	Captain
HRX_CN_MILITARY_RANK	21	Major
HRX_CN_MILITARY_RANK	22	Lieutenant colonel
HRX_CN_MILITARY_RANK	23	Colonel
HRX_CN_MILITARY_RANK	24	Senior colonel
HRX_CN_MILITARY_RANK	31	Major general

Lookup Type	Lookup Code	Meaning
HRX_CN_MILITARY_RANK	32	Lieutenant general
HRX_CN_MILITARY_RANK	33	General
HRX_CN_MILITARY_RANK	34	Senior general
HRX_CN_PARTY_EXCEPTION	1	Transferred from Communist Youth League
HRX_CN_PARTY_EXCEPTION	2	Rejoined the party
HRX_CN_PARTY_EXCEPTION	11	Granting of formal membership postponed
HRX_CN_PARTY_EXCEPTION	21	Registration not granted
HRX_CN_PARTY_EXCEPTION	22	Registration postponed
HRX_CN_PARTY_EXCEPTION	31	Left the party automatically
HRX_CN_PARTY_EXCEPTION	32	Name removed from the membership roll
HRX_CN_PARTY_EXCEPTION	33	Probationary party member qualification canceled
HRX_CN_PARTY_EXCEPTION	34	Dismissed from the party
HRX_CN_PARTY_EXCEPTION	99	Other
HRX_CN_PARTY_STATUS	FR	Formal
HRX_CN_PARTY_STATUS	OT	Other
HRX_CN_PARTY_STATUS	PR	Probationary
HRX_CN_PARTY_STATUS	QT	Resigned
HRX_CN_PARTY_TYPE	1	Member of the Communist Party of China
HRX_CN_PARTY_TYPE	2	Probationary member of Communist Party of China
HRX_CN_PARTY_TYPE	3	Member of the Communist Youth League of China

Lookup Type	Lookup Code	Meaning
HRX_CN_PARTY_TYPE	4	Member of the Kuomintang Revolution Committee of China
HRX_CN_PARTY_TYPE	5	Member of China Democratic League
HRX_CN_PARTY_TYPE	6	Member of China Democratic Construction Association
HRX_CN_PARTY_TYPE	7	Member of China Association of Promoting Democracy
HRX_CN_PARTY_TYPE	8	Member of China Peasants' and Workers' Democratic Party
HRX_CN_PARTY_TYPE	9	Member of China Zhi Gong Dang
HRX_CN_PARTY_TYPE	10	Member of Jiu San Society
HRX_CN_PARTY_TYPE	11	Member of Taiwan Democratic Self-Government
HRX_CN_PARTY_TYPE	12	Public figure without party affiliation
HRX_CN_PARTY_TYPE	13	General public without party affiliation
HRX_CN_ROUNDING_METHOD	ROUNDDOWN_CENT	Round down to nearest cent
HRX_CN_ROUNDING_METHOD	ROUNDDOWN_JIAO	Round down to nearest jiao
HRX_CN_ROUNDING_METHOD	ROUNDDOWN_YUAN	Round down to nearest yuan
HRX_CN_ROUNDING_METHOD	ROUNDUP_JIAO	Round up to nearest jiao
HRX_CN_ROUNDING_METHOD	ROUNDUP_YUAN	Round up to nearest yuan
HRX_CN_ROUNDING_METHOD	ROUND_CENT	Round to nearest cent
HRX_CN_ROUNDING_METHOD	ROUND_JIAO	Round to nearest jiao
HRX_CN_ROUNDING_METHOD	ROUND_YUAN	Round to nearest yuan
HRX_CN_SUB_RELATIONSHIP	10	Central government

Lookup Type	Lookup Code	Meaning
HRX_CN_SUB_RELATIONSHIP	20	Province
HRX_CN_SUB_RELATIONSHIP	40	City and region
HRX_CN_SUB_RELATIONSHIP	50	County
HRX_CN_SUB_RELATIONSHIP	60	Street, town, and township
HRX_CN_SUB_RELATIONSHIP	61	Street
HRX_CN_SUB_RELATIONSHIP	62	Town
HRX_CN_SUB_RELATIONSHIP	63	Township
HRX_CN_SUB_RELATIONSHIP	70	Resident and villager committee
HRX_CN_SUB_RELATIONSHIP	71	Resident committee
HRX_CN_SUB_RELATIONSHIP	72	Villager committee
HRX_CN_SUB_RELATIONSHIP	90	Other
HRX_CN_TAX_EXEMPTION_CATEGORY	CNRESCN	Mainland China resident with mainland China income
HRX_CN_TAX_EXEMPTION_CATEGORY	FOREIGNER	Foreigner
HRX_CN_TAX_EXEMPTION_CATEGORY	HMT	Hong Kong, Macao, or Taiwan resident
HRX_CN_TAX_EXEMPTION_CATEGORY	OVERSEAS	Overseas Chinese
HRX_CN_TAX_EXEMPTION_CATEGORY	SEAMAN	Seaman
HRX_CN_UNIT_LEVEL	1	Central government
HRX_CN_UNIT_LEVEL	3	Province or ministry
HRX_CN_UNIT_LEVEL	4	Deputy province or ministry
HRX_CN_UNIT_LEVEL	5	Region or bureau

Lookup Type	Lookup Code	Meaning
HRX_CN_UNIT_LEVEL	6	Deputy region or bureau
HRX_CN_UNIT_LEVEL	7	County
HRX_CN_UNIT_LEVEL	8	Deputy county
HRX_CN_UNIT_LEVEL	9	Section
HRX_CN_UNIT_LEVEL	10	Deputy section
ORA_HRX_CN_SEV_PAY_TAX_YOS_CAL	ORA_ADD_HALF_A_YEAR	Add 0.5 if less than 6 months, add 1 if more than 6 months
ORA_HRX_CN_SEV_PAY_TAX_YOS_CAL	ORA_ADD_ONE_YEAR	Add 1 for less than a year period
ORA_HRX_CN_TAX_CAL_METHOD	ORA_ACCUMULATIVE	Accumulative Withholding Method
ORA_HRX_CN_TAX_CAL_METHOD	ORA_MONTHLY	Monthly Withholding Method
ORA_HRX_CN_TAX_EXEMPT_METHOD	INCREMENT	Increment on a monthly basis if income is greater than 0
ORA_HRX_CN_TAX_EXEMPT_METHOD	MULTIPLY	Multiply by number of calendar months

Consider the following when managing lookups.

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

## Descriptive Flexfields

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

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

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



## Extensible Flexfields

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

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

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

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

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

Consider these aspects to understand extensible flexfields:

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

## Value Sets

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

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

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

## Profile Options

### Create and Edit Profile Options

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

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.

### How to Create a Profile Option

To create a profile option:

In the Setup and Maintenance work area, go to the following

1. In the Setup and Maintenance work area, go to the following:
  - o Functional Area: Workforce Deployment
  - o Tasks: Manage Profile Options
2. On the page, click **Actions > New**.
3. On the Create Profile Option page, enter relevant details with specific attention to the following:
  - o Use the SQL Validation field to provide an SQL statement that displays the permissible profile values to be used. Use an SQL statement to 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.

- o 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, delete it manually 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, enter these details.

Field	What you can do
Enabled	Select the levels at which you want to enable the profile option.  <b>Note:</b> 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.
Updatable	Select the profile level to update the privileges of the implementors. Deselect the check box if you don't want the implementors to modify the profile values (they appear in read-only mode).

7. Click **Save and Close**.

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

**Note:** While creating and editing profile options and profile categories, you can translate the details to the preferred languages without changing the language session of the application. To specify the translations in all the enabled language rows, use the Translation Editor option. Once the updates are made, users can view the translated text for the specific details.

# Pay Frequency

## How Pay Frequency Components Work Together

Pay frequency components provide the flexibility to implement complex time-related objects used in payroll definitions, payroll processes, and payroll tasks that use start and end dates. Pay frequency components work together to provide payroll functionality for your organization.

Each component requires its own setup and implementation.

### Consolidation Groups

Consolidation groups are used 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 run and use it to process the post-run results for the supplementary payroll separately from the regular payroll.

### Payroll Definitions

Payroll definitions are essential to your payroll implementation because they indicate the payment frequency and processing schedule. Payroll definitions associate employees with the payroll run through payroll relationships.

### Time Definitions

Time definitions can be static periods of unusual length based on a given static date, or they can create dates based on dynamic variables. Specify dynamic variables for a time span, a retrieval date, or a more complex definition type for you to use with a user-defined date. The application uses time definitions in many areas, including payroll periods, payroll employment management, balance dimensions, retroactive and proration events, element start and end dates, and overtime periods.

### Run Types

Run types control the elements and payment types you process in a payroll run. Two predefined run types, Regular and Supplemental, group the other run types and determine their processing sequence.

**Note:** For China, you must use only the Regular run type.

## Statutory and Earning Periods

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.

The statutory tax year must coincide with the dates generated for the earnings calendar. The statutory calendar ensures that the payroll run uses the correct period for taxation purposes.

China supports only the period type of Monthly Calendar.

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.

You can view period numbers and start and end dates on the Person Process Results page and statement of earnings.

## FAQs for Pay Frequency

### When would I close a payroll period?

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

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

When you update an object's organization payment method, you must make the effective start date of the organization payment method on or before the effective date of the change.

For example, to create a payroll definition effective on 4/1/2012 with a default organization payment method, the organization payment method must have an effective start date on or before 4/1/2012. You can only select an organization payment method that has an effective start date on or before the date you're creating or updating the object.

## Consolidation Groups

### Overview

Use consolidation groups to segregate or combine the results of multiple payroll runs for further downstream processing. You can process the results of more than one payroll run in a single action, or you can process the results of one payroll in separate actions.

For example, suppose you submit a regular payroll run and a supplementary payroll run for the same payroll period. If you use the same consolidation group for the regular run and the supplementary run, you can use the combined results of the regular and supplementary runs for post-run processing. Optionally, you can enter a different consolidation

group for the supplementary payroll run and use it to process the post-run results for the supplementary payroll separately from the regular payroll.

Use consolidation groups to segregate and produce one set of results per payment method for several payrolls, one set of reports, and one set of costing groups. These are runs you make in addition to your regular payroll runs.

A consolidation group is used as an input parameter for a payroll run. There are no predefined consolidation groups. Before you can use a consolidation group in a payroll run, you must create the consolidation group and assign it to a payroll definition.

To create a consolidation group:

1. Select the **Consolidation Groups** quick action under Payroll in **My Client Groups** on your Home page.
2. On the Consolidation Groups page, click **Add Row**.
3. Enter a **Name** for the consolidation group. The application assigns the same value for the consolidation group **Code**.
4. Select a **Legislative Data Group**. Adding the Description is optional, but it's useful to provide
5. Click **Save**.

Use this consolidation set code to identify the consolidation group used for a payroll run or when you load the consolidation group using services or the HCM Data Loader.

Once created, you can't change the consolidation set code. However, the consolidation group name is editable. Any changes made to the consolidation group name, doesn't have any impact on the payroll process, because the process is stamped with the consolidation set code, and hence can be identified by the code for future references.

#### *Related Topics*

- [Examples of Using Consolidation Groups](#)
- [Overview of Combining Payroll Flows](#)

## Examples of Using Consolidation Groups

Here are some examples of how you can use consolidation groups.

### Post-Run Processing

Consolidation groups facilitate separating or segregating payroll run results for supplemental processing. For most payroll post-run processing, you can use the consolidation group as an input parameter. You may want the results of a supplemental payroll run to be kept separate from those of an already submitted regular payroll run. To use a consolidation group to keep supplemental run results separate from the regular payroll runs:

1. Create a consolidation group to process the supplemental payroll run.
2. Initiate the supplemental payroll run, specifying the new consolidation group as an input parameter.

### Separate Costing and Payment

You can use multiple consolidation groups to control processing. For example, you want to process and pay a particular set of employees separately within a single payroll to keep separate records of payment and costing.

To process employees separately:

1. Create payroll relationship groups that restrict the employees.  
You can use rules to identify them dynamically or you can specify the employees by their payroll relationship numbers.
2. Create a consolidation group for each payroll relationship group you have created in the previous step.
3. Run the Calculate Payroll process for each payroll relationship group separately. Specify the new consolidation group for each run separately.
4. Use the original consolidation group to run the Calculate Payroll process in one single action and return a consolidated run result for all the employees.

## Purposes of Reporting

You can use consolidation groups for reporting purposes. For example, you may want to run the Periodic Payroll Activity Report for a subset of payrolls.

To process the report for a subset of payrolls:

1. Create a consolidation group to specify the payrolls for which you want to run the report.
2. Run the Periodic Payroll Activity Report, specifying the new consolidation group.

### Related Topics

- [Consolidation Groups](#)

# Payroll Definitions

## Overview

Payroll definitions contain calendar and offset information used to determine when you calculate and cost payments. Payroll period types, such as weekly or monthly, determine the interval at which you pay employees.

Use the Payroll Definitions task to specify payment frequency, processing schedule, and other parameters for a particular payroll.

China supports only the Monthly Calendar period type. To pay employees on a monthly basis, create a payroll definition using the Monthly Calendar 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, the offsets or calendar adjustments, and the number of years that you specify. Each payroll in the schedule is assigned a unique name. Assign employees to payroll definition on the Payroll Relationships page. You can configure the payroll calendar by increments of ten or fewer years. Create a payroll definition to replace one that expired or end-dated.

Each payroll must belong to a consolidation group, which the application requires for processing purposes and a legislative data group so make sure these exist before creating your payroll definition.

## Modifying Payroll Definitions

When you modify a payroll definition, the application adjusts the payroll schedule based on the values you have modified. Modify an existing payroll definition to increase the number of years and generate more payroll time periods that configure the payroll calendar.

**Note:** Payroll names in the payroll schedule are unique. You can edit the generated payroll names, but you must ensure they're unique within the payroll definition.

## Options to Manage Payroll Definitions

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

### Effective Start Date

The effective start date is the first date that the payroll definition is available for employee data. The start date must be on or before the earliest date of any historical data that you want to load. For example, for a payroll starting on 01-JAN-2013 with five years of historical payroll data to load, you set the start date of the payroll definition to 01-JAN-2008.

The effective start date doesn't affect the generated calendar of payroll periods. The start date for the first payroll period is based on the first period end date.

### First Period End Date

The first period end date is the end date of the first payroll period that the application generates for a payroll definition. The first period end date is typically based on the date of implementation, tax year, benefits enrollments, or a particular payment cycle. For example, if your weekly payroll work week is Saturday through Friday, and your first payment date is on 06-JAN-2012, you could use 30-DEC-2011 as your first period end date.

### Ledger

You can select a primary ledger that will be used for payroll costing. The ledger determines the accounting information, such as, the chart of accounts and the accounting calendar.

### Suspense and Default Accounts

You can associate accounts to the payroll definition that will be used by the payroll costing process for suspense and default accounting purposes.

### Number of Years

The number of years you enter represents how many years of time periods to generate starting from the beginning of the first payroll period, which is determined by the first period end date. This table shows an example for a semimonthly payroll definition.

Effective Start Date	First Period End Date	Number of Years	Generated Time Periods
01-JAN-2014	15-JUN-2014	5	01-JUN-2014 to 31-MAY-2018

Effective Start Date	First Period End Date	Number of Years	Generated Time Periods

Once you save a payroll definition, you can later only increase but not reduce its number of years because a calendar of time periods for the payroll was already generated.

**Note:** The application generates the calendar of payroll periods in increments of ten or fewer years. For example, if you want a 12-year calendar of payroll periods, you first enter 10 years and submit your changes. Then you set the payroll definition number of years to 12.

## Offsets

Depending on the payroll period type, you can elect for your payroll cycle events to occur on specific dates, or to have the application calculate dates based on offsets from period start or end dates.

This table describes the predefined payroll cycle events that you can offset.

Date	Meaning
Cutoff Date	Final date that payroll information is entered for the payroll period.  This date is for information purposes only. Your departments, such as HR, may need this payroll deadline to submit information that affects the payroll run
Payslip Availability Date	Date on which payees can view payslips.
Payroll Run Date	Date used by payroll calculation processes to retrieve effective values such as employee details. The process date, if provided when submitting a payroll process, overrides this value.  This date is predefined for your country or territory and is typically based on either date earned or date paid that payroll calculation uses as the process date.
Date Earned	Date on which the application processes element entries for the payroll run.  The date earned must be within the effective dates of the payroll period.
Date Paid	Date the employee is marked as paid. For check/cheque payments, this is the date that the check/cheque is valid for cash or deposit. For electronic funds transfer (EFT) payments, it's the transfer date.
Planned Submission Date	Date to inform the payroll administrator or payroll manager on the planned date to submit the payroll run for each payroll period.

## Dynamic Offsets

When you create a payroll definition, you can use dynamic offsets for payroll cycle events. All of the predefined payroll time periods you can use support dynamically generated dates for offsets. Use dynamic offsets to offset each payroll cycle event by a specified number of days before or after the start or end date.



## Fixed-Date Offsets

The predefined Monthly (Calendar) payroll time period supports both dynamic offsets and fixed-date offsets. Use fixed date to adjust the exact date of each of the payroll cycle events for the first payroll period. Any adjustments that you make are reflected in the payroll calendar for subsequent payroll time periods. For example, if you set the cutoff date as the 25th of the month, then all payroll periods in the calendar will have those offsets.

## Specific Date Adjustments

Once you generate the payroll time periods, you can further adjust any specific calendar dates, as needed. For example, if you know of a particular bank holiday that falls on a payment date, you might want to adjust the dates manually on the payroll calendar's time period. Make these adjustments when you create a payroll definition or any time after then, as long as the time period is in the future. Adjust the dates of an existing time definition on the Time Periods tab on the Manage Payroll Definitions page.

### Related Topics

- [Create Payroll Definitions](#)
- [Periodicity Conversion](#)
- [Statutory and Earning Periods](#)

## Create a Payroll Definition for China

This example demonstrates how to create a payroll definition for the purpose of assigning a payment method to an employee. The employee is associated with one consolidation group and one legislative data group. The payment is for a semimonthly payment frequency.

### Before You Begin

Before you begin creating a payroll definition, complete the following:

1. The legislative data group for your payrolls exist. For China, when you create the first legal entity, the system creates a legislative data group (LDG) named CN Legislative Data Group. You can use this LDG for creating payroll definitions.
2. Organization payment methods exist for your payrolls, for example, Chinese Cash.
3. Create a consolidation group assigned to the CN Legislative Data Group.

### How to Create a Payroll Definition

To create a payroll definition:

1. From your Home page, navigate to My Client Groups > Show More > Payroll > Payroll Definitions.
2. In the Search Results section of the Payroll Definitions page, click **Create**.
3. Select the **Legislative Data Group** for this payroll definition, for example CN Legislative Data Group.
4. Enter 1/1/11 as the **Effective As-of Date**. This is the start date that the payroll is available for use. 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 the following table.

Field	Monthly Value
Name	Employee Monthly
Reporting Name	Monthly
Consolidation Group	Select an existing consolidation group.
Period Type	Monthly Calendar
Ledger	Select a ledger appropriate for this payment.
First Period End Date	8/12/14
Effective Start Date	8/31/15
Default Payment Method	Chinese Cash

To enter a valid payment method, click **Add Row** in the Valid Payment Methods section, and add one or more organization payment methods that are valid for this payroll. You can select any organization payment method defined for the LDG that's linked to this payroll definition.

- 6. Click **Next**.
- 7. 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.

- 8. 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

9. On the Payroll Calendar page, adjust payroll days to account for a bank holiday, as shown in this table.

Column	Semimonthly Value	Monthly Value
Payroll Run Date	Old Value: 11/28/13 New Value: 11/27/13	Old Value: 5/27/13 New Value: 5/28/13

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

## Time Definitions

### Use Time Definitions for Severance Pay

This example illustrates how you can set up a user-defined time definition and as a payroll administrator, how you can associate it with elements so that you can extend the latest entry date for severance payments to employees.

#### Scenario

The InFusion Corporation makes severance payments, including regular salary, and car allowance. For most terminated employees, these payments should end on the termination date. However, you must be able to make payments for employees who receive severance pay.

#### Element Duration Dates

When you create an element, you select the latest entry date. The options are predefined time definitions: last standard earnings date, last standard process date, or final close date. Typically, standard earnings elements use the last standard earnings date. However, this option doesn't support severance payments because you can't have a last standard earnings date that's beyond the termination date.

To support severance payments, create a user-defined time definition based on last standard earnings date and select it as the latest entry date for payments after termination. On the payroll relationship record of terminated employees, the value of the user-defined time definition is the termination date by default, but payroll administrators can edit it to make payments for certain employees.

## Resulting Setup

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

1. Use the **Time Definitions** task under **Payroll** in **My Client Groups** on your Home page, to create a time definition.

This table lists field names and their respective values for creating a user-defined time definition.

Field	Value
Type	User-defined date
Name	Last Earnings or Severance Date
Short Name	LastEarnSevDate
User-Defined Date	Last Standard Earnings Date
User-Defined Date Usages	Assigned payroll end date Element entry end date Payroll assignment end date Payroll relationship end date Payroll term end date

This creates a time definition based on the last standard earnings date.

2. Use the Elements task to create the Regular Salary, Car Allowance, and Alimony elements.
3. In the Durations area, select **Last Earnings or Severance Date** as the latest entry date for the element.

To extend the payment date for a terminated employee, complete these steps.

1. Use the Payroll Relationships task, and search and select the terminated employee.
2. In the Payroll Details area, select the assignment.
3. In the Element Duration Dates area, in the row for the Last Earnings or Severance Date time definition, change the End Date value to the desired final entry date for payments.

For example, add 6 months of severance pay for an employee who was terminated effective 20 November 2012. Change the End Date value of the Last Earnings or Severance Date time definition to 21 May 2013.

The employee's element entries for the Regular Salary, Car Allowance, and Alimony elements end on this date.

Related Topics

## User Defined Tables

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

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

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

#### Scenario

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

#### User-Defined Table Components

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

- Basic details
- Columns
- Rows
- Values

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

	Monday - Thursday	Tuesday - Friday	Wednesday - Saturday	Thursday - Sunday
Monday	10	0	0	0
Tuesday	10	10	0	0
Wednesday	10	10	10	0
Thursday	10	10	10	10
Friday	0	10	10	10
Saturday	0	0	10	10
Sunday	0	0	0	10

## Resulting User-Defined Table Components

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

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

### Related Topics

- [User Table Validation Formula Type](#)

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

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

### Scenario

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

### User-Defined Table Components

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

- Basic details
- Columns
- Rows
- Values

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

	Executive	Manager	Technical	Clerical
1-3	1000	500	250	125
4-5	2000	1000	500	250
6-8	3000	1500	750	375
9-10	4000	2000	1000	500
10-15	5000	2500	1250	625
16-20	6000	3000	1500	750
21-99	10000	5000	2500	1250

## Resulting User-Defined Table Components

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

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

### Related Topics

- [User Table Validation Formula Type](#)

## Example to Update User Defined Tables for Managing Default Values

This example illustrates how to update user defined tables for managing China delivered default values. You can update the user defined tables to calculate the daily rate using the number of pay days within a pay period or a custom value.

1. From your home page, navigate to **My Client Groups > Quick Actions > Show More > User-Defined Tables** task.
2. In the search region, provide **China** in the name attribute, specify your China legislative data group, and click **Search**.
3. In the search results region, click on the returned result: China Default Values. Click **Edit**.
4. Check the **Effective As-of Date** on the screen. Change it to the date your new record will be effective from, if required.

Click **Next**.

5. Click **Create**. Select the **Average Number of Paid Days Per Month** in the pop-up window. Click **OK**.
6. Specify a value in the **Value** column. Click **Save**.

**Note:** For calculating the **Number of Paid Days Per Month**, you must specify a negative value in the Value column. Example: -1.

7. Repeat steps 4-6 to create values for **Number of working hours per working day** and any additional values, if required.
8. Click **Submit** to create all values.



# 8 Set Up Fast Formulas

## Using Formulas

### Overview

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

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

Uses of formula in payroll include:

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

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

## Example of Writing a Fast Formula Using Formula Text

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

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

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

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

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

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

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

```
/* DATABASE ITEM DEFAULTS BEGIN */
DEFAULT FOR per_asg_job_name IS ' '
```

```

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

```

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

## Example of Writing a Fast Formula Using Expression Editor

In this example, you create a fast formula that groups executive workers for reporting and processing. All executive workers are in department EXECT\_10000.

After you create the formula, you need to add it to the object group parameters, so that only the workers that belong to the EXECT\_10000 department are used in processing.

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

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

## Creating a Fast Formula Using the Expression Editor

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

Fields for Fast Formula	Values for Fast Formula
Formula Name	Executive Payroll Relationship Group
Type	Payroll Relationship Group
Description	Executive Workers
Legislative Data Group	Vision LDG

Fields for Fast Formula	Values for Fast Formula
Effective As-of Date	1-Jan-2010
Type of Editor	Expression Builder  <b>Note:</b> For more complex conditions to create a group, you can select Text. However, after you save the formula, you can't change the type of editor.

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

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

- Click **Compile**.
- Click **Save**.

## Formula Errors

### Formula Compilation Errors

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

#### Common Compilation Errors

Here's some of the common formula compilation errors.

Formula Compilation Error	Description
Syntax Error	The formula text violates the grammatical rules for the formula language. For example, if you use <b>IF1</b> instead of <b>IF</b> in an <b>IF</b> statement.
Incorrect Statement Order	<b>ALIAS</b> , <b>DEFAULT</b> , or <b>INPUT</b> statements come after other statements.

Formula Compilation Error	Description
Misuse of <b>ASSIGNMENT</b> Statement	Occurs when any of these conditions exist: <ul style="list-style-type: none"> <li>An <b>ASSIGNMENT</b> assigns a value to a database item.</li> <li>A context is assigned a value externally to a <b>CHANGE_CONTEXTS</b> statement.</li> <li>The formula assigns a value to a non-context variable within a <b>CHANGE_CONTEXTS</b> statement.</li> </ul> You can use <b>CHANGE_CONTEXTS</b> statements in a formula.
Misuse of <b>ALIAS</b> Statement	You can use an <b>ALIAS</b> statement only for a database item.
Missing <b>DEFAULT</b> Statement	A database item that specifies a default value must have a <b>DEFAULT</b> statement.
Misuse of <b>DEFAULT</b> Statement	You specify a <b>DEFAULT</b> statement for a variable other than as an input or a 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 <b>PAYROLL_REL_ACTION_ID</b> , <b>PAYROLL_ASSIGNMENT_ID</b> and <b>CALC_BREAKDOWN_ID</b> contexts. Typically, you use these statements in formulas of type Oracle Payroll.
Missing Function Call	The compiler doesn't recognize a function call. The combination of return type, function name, and parameter types doesn't 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 <b>+</b> operator has two permitted uses. The operands are both of data type <b>NUMBER</b> , or both of data type <b>TEXT</b> .
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 <b>NUMBER</b> value at the start of the formula, but is assigned a <b>TEXT</b> value later in the formula.
<b>EXIT</b> Statement Not Within <b>WHILE</b> Loop	A condition that eventually becomes false or an <b>EXIT</b> 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 <b>AREA1</b> as an ordinary variable, but later uses <b>AREA1</b> as a context in a <b>GET_CONTEXT</b> call.

## Formula Execution Errors

Fast formula execution errors occur when a problem arises while a formula is running. Typically, data-related issues cause these errors either in the formula or in the application database.

## Formula Execution Errors

Here's some of the formula execution errors.

Formula Execution Error	Description
Uninitialized Variable	<p>When the formula compiler can't fully determine if a variable or context is initialized, it generates a code to test if the variable is initialized.</p> <p>When the formula runs, the code displays an error if the variable or context isn't initialized.</p>
Divide by Zero	Raised when a numeric value is divided by zero.
No Data Found	<p>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.</p> <p>You can specify a default value using a <b>DEFAULT</b> statement. An error in formula function code can also cause this error message.</p>
Too Many Rows	<p>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.</p> <p>An error in the formula function code can also cause this error message.</p>
<b>NULL</b> Data Found	<p>Raised when a database item unexpectedly returns a <b>NULL</b> data value. If the database item can return a <b>NULL</b> value, then it provides a default value.</p> <p><b>Note:</b> Some database items can't return a <b>NULL</b> value. If the database items can return a <b>NULL</b> value, then you can provide a default value for that database item.</p>
Value Exceeded Allowable Range	Raised for a number of reasons, such as exceeding the maximum allowable length of a string.
Invalid Number	Raised when a formula attempts to convert a nonnumeric 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 returns an error, but doesn't provide any additional information to the formula code. The function may have sent error information to the logging destination for the executing code.
Function Returned <b>NULL</b> Value	A formula function returns a <b>NULL</b> value.
Too Many Iterations	A single <b>WHILE</b> loop, or a combination of <b>WHILE</b> loops has exceeded the maximum number of permitted iterations. This error is raised to terminate loops that can never end, which indicates a programming error within the formula.
Array Data Value Not Set	The formula tries to access an array index that has no data value. This error occurs in the formula code.

Formula Execution Error	Description
Invalid Type Parameter for <b>WSA_EXISTS</b>	You specify an invalid data type in the <b>WSA_EXISTS</b> call.
Incorrect Data Type For Stored Item	When retrieving an item using <b>WSA_GET</b> , 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 isn't found when attempting to call a formula from a formula. This error may occur due to an issue 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. Calling a formula in a recursive manner isn't permitted.
Input Data 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 in 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 in the calling formula.
Too Many Formula Calls	When a formula calls another formula in its text, resulting in a hierarchy. The maximum depth of the hierarchy is 10.

## FAQs for Fast Formulas

### When do I run the Compile Formula process?

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

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

Compilation errors occur on the 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. Typically, data-related issues either in the formula or in the application database cause these errors.





# 9 Set Up Balances

## Balance Definitions

### Payroll Balance Definitions

A balance is a positive or negative accumulation of payroll results for an element or group of elements, over a specified period of time.

The balance can be monetary values, time element, such as hours or days worked, or any other numeric value. Every time you run a payroll process, such as, Calculate Payroll or Calculate Gross Earnings, the application updates these values.

Each defined balance holds a value for an individual at one of the two levels of the employment model.

- Payroll relationship
- Assignment

Most of the balances you require are predefined. Depending on your country extension, additional balances are automatically created when you create elements. You can edit the definition of these generated balances, or create additional balances.

For example, the Employer Contributions amount on the Statement of Earnings is fed by elements with a classification of Employer Taxes or Employer Liabilities. Similarly, an employee's Taxable Benefits is fed by elements with a classification of Taxable Benefits.

### Balance Name

It's the actual name of the balance, such as, Regular Earnings. You can't have the same name for more than one balance. However, more than one balance can have the same reporting name.

A reporting name is the balance name that reports and payslips display. When multiple balances are created due to differences in setup but need to be reported the same way, you can assign the same reporting name for all of the balances.

### Balance Categories

Each balance definition has a predefined balance category for quicker processing. Balance categories are a way of grouping balances so that you can set group attributes. Balance categories are predefined, and you can't create your own balance categories or modify the balance categories. When you create a balance during the implementation phase, associate it to one of the predefined categories.

You can however, create your own localized version of the balance categories you want to use. In the Setup and Maintenance area, use the **Configure Payroll Legislations** task to view the predefined balance categories. Edit the balance category name to include a display name appropriate for your legislation.

## Units of Measure

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

## Balance Contexts

Contexts restrict the run results included in a balance value. Context values are specified as part of the balance dimensions. For example, the REGULAR\_ASG\_TU\_YTD balance is a Regular Earnings balance type with these context values associated in the balance dimension:

- Assignment
- Tax Reporting Unit

All contexts are predefined.

## Generated Balances and Database Items

The country extension you select on the Features by Country or Territory page, determines what payroll-related components the element template generates when you create an element. The element template also creates a database item for each balance dimension. You can use the database items in your formulas or HCM extracts to use the value of a balance.

This table explains the components the element template creates, based on your selection of the country extension.

Country Extension	Components Generated by the Element Template
Payroll	When you create an element, the element template creates the element and associated objects, such as input values, formulas, and balances.
Payroll Interface	When you create regular and supplemental earnings elements, the element template creates the element and associated objects, such as input values, formulas, and balances. For all other elements, the template generates no other associated objects.
Human Resources or None	The element template doesn't generate associated objects like formulas, or balances.

## Base Balances

You can specify a base balance when there is a dependent relationship between balances for processing and reporting. For example, Taxable Wages could be the base balance for Tax Withheld.

## Remuneration

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

### Related Topics

- [Balance Dimensions](#)

## Balance Types and Balance Dimensions

A balance is composed of a balance type and a balance dimension. Each payroll balance can have multiple dimensions.

Balance dimensions are predefined and typically combine these components:

- A period of time, such as run, period to date, month to date, and so on
- A level such as a payroll relationship or payroll assignment
- A context such as tax reporting unit (TRU), element, statutory reporting type, or payroll

You require contexts only for some balances.

For example, a balance titled **Assignment Tax Unit Year to Date** indicates its value is for a given employee's assignment within a particular TRU, for the year to date time period.

Select a province to view the balances for a province. If an employee has balances for multiple provinces, the balances for all provinces combined are displayed if no context is selected for the province.

### Element Balances

Element balances display Current, Month to Date, Quarter to Date, and Year to Date values at the payroll relationship, PSU, TRU, or assignment levels. You can view the balances on the View Person Process Results page by the following:

Select the classification of the elements for which you want to view the balances. If you don't select a classification, balances for all the elements classifications are displayed.

## Balance Categories

Each balance definition has a predefined balance category for quicker processing. Balance categories are a way of grouping balances so that you can set group attributes. Balance categories are predefined, and you can't create your own balance categories.

You can however, create your own localized version of the balance categories you want to use.

When creating a new balance in the implementation phase, you must associate it to one of the predefined categories. You can't add or modify the balance categories in the implementation phase.

These balance categories are predefined in the application for China:

- Absences
- Absence Accruals
- Days
- Direct Payments
- Earnings
- Employer Charges

- Hours
- Information
- Miscellaneous
- Other Units
- Pretax Nonstatutory Deductions
- Social Security Deductions
- Supplemental Earnings
- Tax Deductions
- Taxable Benefits
- Total Absences
- Total Deductions
- Total Direct Payments
- Total Earnings
- Total Employer Charges
- Total Payments
- Total Pre-Statutory Deductions
- Total Social Insurance Deductions
- Total Supplemental Earnings
- Total Tax Deductions
- Total Taxable Benefits
- Total Voluntary Deductions
- Voluntary Deductions

## Balance Feeds

The value assigned to a balance during processing is determined by the feeds defined for the balance. You can feed payroll balances by any of these options.

### Balance Feeds by Element

Balance feeds by element indicates the following:

- When you create an element, the element template creates this balance and feed automatically.
- One or more element input values add to or subtract from a balance.
- For each balance, all the input values must have the same unit of measure.
- If a balance is fed by only one element, it's called a primary balance.

## Balance Feeds by Classification

Balance feeds by classification indicates the following:

- The primary output value of every element belonging to a specific classification contributes to the balance value.
- The balance feeds can be from the primary element classifications, secondary element classifications, or the subclassifications.
- If you add a primary classification as a balance feed, you can't add its children from the secondary classification or subclassifications.

For example, if you use the Supplemental Earnings primary classification as a balance feed, you can't use both the secondary classifications and subclassifications of Supplemental Earnings as feeds to the same balance.

- The unit of measure of this input value must match the unit of measure of the balance.

## Balance Feeds for Initial Balance Loading

You can select elements in the Balance Initialization classification to feed a balance for initialization purposes only. Select one element for each level of the employment hierarchy associated with a dimension that you want to initialize.

The feeds can add to (+) or subtract from (-) a balance. The sign of a feed is independent of the sign of the result that feeds the balance. For example, deductions feed Net Pay with a negative feed. However, if an excess deduction of \$100 is returned, the deduction result itself is -\$100 and will effectively increase Net Pay by \$100.

### *Related Topics*

## Balances in Net-to-Gross Calculations

When you create an earnings element, you can indicate that it pays a person a guaranteed take-home net pay per payroll period, or a bonus of a specified net amount.

Use either or both of these options to control balance feeds.

### Enable Inclusion in Net-to-Gross Calculations

Use the Balance Definitions task to view the dimensions that are enabled for inclusion in net-to-gross calculations. You can also view which of the enabled dimensions are included by default for each new net-to-gross earnings element.

To enable a dimension, or enable and include a dimension within a balance definition for net-to-gross processing, select the Enable or Include check boxes, as required, under the Gross-Up Calculation column in the Balance Dimensions section of the Balance Definition page.

### Exclude Balances from a Specific Net-to-Gross Earnings Element

If a balance is enabled but not included, you can still use it in the processing of a specific net-to-gross earnings element. Use Balance Feeds on the Elements Overview page while creating the Gross-to-Net Earnings element and review the balances to which the net pay amount or bonus contributes. Use the Gross Balance Exclusions option to add the balance. You can also use this task to exclude balances that are included by default.

*Related Topics*

- [Create a Net-to-Gross Earnings Element](#)
- [How Net-to-Gross Earnings are Calculated](#)

## Generating Run Balances

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

Creating or updating balance definitions and balance feeds can impact balance calculations and stored balance values for run balance dimensions. When stored balance values are no longer accurate, the Run Balance Status column on the Balance Definitions task displays the status of the balance dimensions as invalid. Reports and processes continue to obtain accurate values from the summed run results, but summing run results can slow performance.

To improve performance and accuracy, recalculate the invalid balance values for saved run balance dimensions by submitting the Generate Run Balances process.

This topic covers:

- Submit the Generate Run Balances process
- Use Generating Run Balances Examples

### Submit the Generate Run Balances Process

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

- Balance definition using the Balance Definitions task, for example to add balance feeds or new balance dimensions
- Balance feeds to an element using the Elements task

When you submit the process, you specify parameters that control which balances to generate as shown in the following table.

Flow Submission Parameters	Purpose
Balances to Include	<p>Identifies the set of balances to include when submitting the process:</p> <ul style="list-style-type: none"> <li>• All balances</li> <li>• All invalid balances</li> <li>• Single balance</li> </ul> <p><b>Note:</b> If you select a single balance, you must specify both a balance and a dimension name.</p>
Balance Name	Lists balance names marked as run balances when a single balance is selected.

Flow Submission Parameters	Purpose
Dimension Name	Lists run dimensions when a single balance is selected. The list is filtered again when the balance name is selected.

## Use Generating Run Balances Examples

Here are two different ways you can use generate run balances to improve performance and accuracy in your payroll application.

- Updating a balance feed effective date  
Your enterprise stops the transportation allowance element as of January 1. This ends the balance feeds between the element input value and the related balances, such as gross-to-net. It also sets the status of the balance values for completed payroll runs to invalid. You submit the Generate Run Balance process to recalculate the balance values and set the status to valid.
- Adding a new balance feed  
You receive a notification on January 31 that a non-taxable earning became taxable as of January 1. You add a balance feed to the earnings element so that the input value feeds a taxable pay balance. You submit the Generate Run Balances process and recalculate the balance values for the taxable pay balance.

### Related Topics

- [Payroll Balance Definitions](#)

# Balance Groups and Usages

## Overview

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 in your balance group usage, such as the current payroll run, month-to-date, or year-to-date.

Use balance group usages to display balance values. You select the usage associated with the balance group. Additionally, you can sequence balances using balance group usages to display in a certain sequence, which may not necessarily be a standard sort sequence.

The Balance Group Usages applicable for China are:

- Chinese Payroll Activity Report Other Deduction Balances
- Chinese Payroll Activity Report Tax Deduction Balances
- Chinese Payroll Archive Balances
- Chinese Payroll Archive Other Balances

- Chinese State-Owned Enterprise Payroll Data Interface Report
- Chinese Direct Payments for Global Statement of Earnings
- Chinese Earnings for Global Statement of Earnings
- Chinese Employer Charges for Global Statement of Earnings
- Chinese Summary Gross to Net for Global Statement of Earnings
- Chinese Summary Information for Global Statement of Earnings
- Chinese Taxable Benefits for Global Statement of Earnings
- Chinese Tax Deductions for Global Statement of Earnings
- Chinese Statutory Deduction Register Tax Deduction Balances

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 Categories
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 tax deduction balances for the current period and year-to-date
Global Gross to Net	Direct payment balances for a group tax unit for the current period and year-to-date
Statement of Earnings	Pretax deductions for the current payroll period and year-to-date

## Rules for Editing Balance Groups and Their Usages

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



## Balance Group Rules

These are the actions you can take for both predefined and user-defined balance groups.

Action	Predefined Balance Group	User-Defined Balance Group
Create balance group	No	Yes
Edit balance group	No	Yes
Delete balance group	No	Yes
Add balance definitions	No, unless the Add button in the table menu is enabled	Yes
Remove balance definitions	No, unless the balance definitions are added by the user.	Yes
Add restrictions	No	Yes
Edit restrictions	No	No
Delete restrictions	No	Yes
Edit the balance group level	No	Yes, if the group contains no balance definitions, default inclusions or dimension restrictions.
Add default inclusions	No, unless the Add button in the table menu is enabled	Yes
Edit default inclusions	No	Yes
Delete default inclusions	No	Yes

## Balance Groups Usage Rules

The only change you can make to a predefined balance group usage is to add matrix items.

For a user-defined usage, you can:

- Edit or delete the usage
- Edit the usage details
- Add or delete matrix items
- Create, edit, or delete sorting definitions

**CAUTION:** You can't change the format type of a usage after you save it. Additionally, you can't change the sort method unless you delete the existing sort items.

## Create Balance Groups and Usages

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

### Before You Begin

If you're creating a user-defined report, create a lookup code for the report in the PAY\_BALANCE\_REPORT\_TYPE lookup.

1. In the Setup and Maintenance work area, go to the **Manage Common Lookups** task.
2. Search for and select the **PAY\_BALANCE\_REPORT\_TYPE** lookup type.
3. Add the lookup code, meaning, and description for the user-defined report in the Lookup Codes section.

### How to Create a Balance Group

To create a balance group:

1. On the Home page, click the **Balance Groups** quick action under the **My Client Groups** tab.
2. Click **Create** to open the Create Balance Group dialog box.
3. Select a legislative data group and enter a name for the balance group.
4. Click **Continue**.  
The Balance Group Details page displays.
5. Select **Employee** as the balance group level.
6. Click **Save**.
7. Select the **Balance Definitions** folder under the Balance Group Overview list.
8. Click **Select and Add**.
9. In the Select and Add: Balance Definitions dialog box, enter these values.

Field	Value
Dimension Name	Relationship Run
Category	Voluntary Deductions

10. Click **Search**.
11. In the Results section, select the balance definitions that you want to add and then click **OK**.

**Tip:** You can select multiple balance definitions in the Select and Add window. Hold down the Shift key to select a group of consecutive balance definitions. To select individual balance definitions hold down the Control key and select the balance definitions that you want to add to the balance group. Click **Apply** and keep the dialog window open to add the query to search the selected balance definitions . Click **OK** to add the selected balance definitions and close the dialog window.

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

## How to Create a Balance Group Usage

To create a balance group usage:

1. On the Home page, click the **Balance Groups** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. In the Create Balance Group Usage dialog box, complete the fields as shown in this table.

Field	Value
Legislative data group	Enter the same LDG as the balance group for which you're creating the usage.
Name	Employee voluntary deduction run balances
Balance Group	The group you created in the previous task
Format Type	Table

4. Click **Continue**.

You're returned to the Balance Group Usage Details page.

5. Select the report type (this was the report type that you added as a lookup code to the PAY\_BALANCE\_REPORT\_TYPE lookup).
6. Click **Save**.
7. Select the **Sorting** folder under Balance Group Usage Overview list.
8. From the Actions drop down list on the right, select **Create**.
9. Enter these details.

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

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

## 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	<ul style="list-style-type: none"> <li>Relationship Tax Unit Rolling 12 Month</li> <li>Assignment Tax Unit Rolling 12 Month</li> </ul>
Resident City Balance Dimensions	<ul style="list-style-type: none"> <li>Term Tax Unit Resident City Month-to-Date</li> <li>Term Tax Unit Resident City Quarter-to-Date</li> <li>Term Tax Unit Resident City Year-to-Date</li> <li>Assignment Tax Unit Resident City Month-to-Date</li> <li>Assignment Tax Unit Resident City Quarter-to-Date</li> <li>Assignment Tax Unit Resident City Year-to-Date</li> </ul>
Statutory Report Code Balance Dimensions	<ul style="list-style-type: none"> <li>Relationship Tax Unit Statutory Report Code Run</li> <li>Relationship Tax Unit Statutory Report Code Month-to-Date</li> <li>Relationship Tax Unit Statutory Report Code Quarter-to-Date</li> <li>Relationship Tax Unit Statutory Report Code Year-to-Date</li> <li>Relationship Tax Unit Statutory Report Code Period-to-Date</li> <li>Term Tax Unit Statutory Report Code Run</li> </ul>

Balance Dimension Type	Balance Dimension
	<ul style="list-style-type: none"><li>• Term Tax Unit Statutory Report Code Month-to-Date</li><li>• Term Tax Unit Statutory Report Code Quarter-to-Date</li><li>• Term Tax Unit Statutory Report Code Year-to-Date</li><li>• Term Tax Unit Statutory Report Code Period-to-Date</li><li>• Assignment Tax Unit Statutory Report Code Run</li><li>• Assignment Tax Unit Statutory Report Code Month- to-Date</li><li>• Assignment Tax Unit Statutory Report Code Quarter-to-Date</li><li>• Assignment Tax Unit Statutory Report Code Year-to-Date</li><li>• Assignment Tax Unit Statutory Report Code Period-to-Date</li></ul>



# 10 Set Up Pay Calculation Components

## Calculation Information

### Payroll Calculation Information

When you create an element, the Manage Elements task 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.

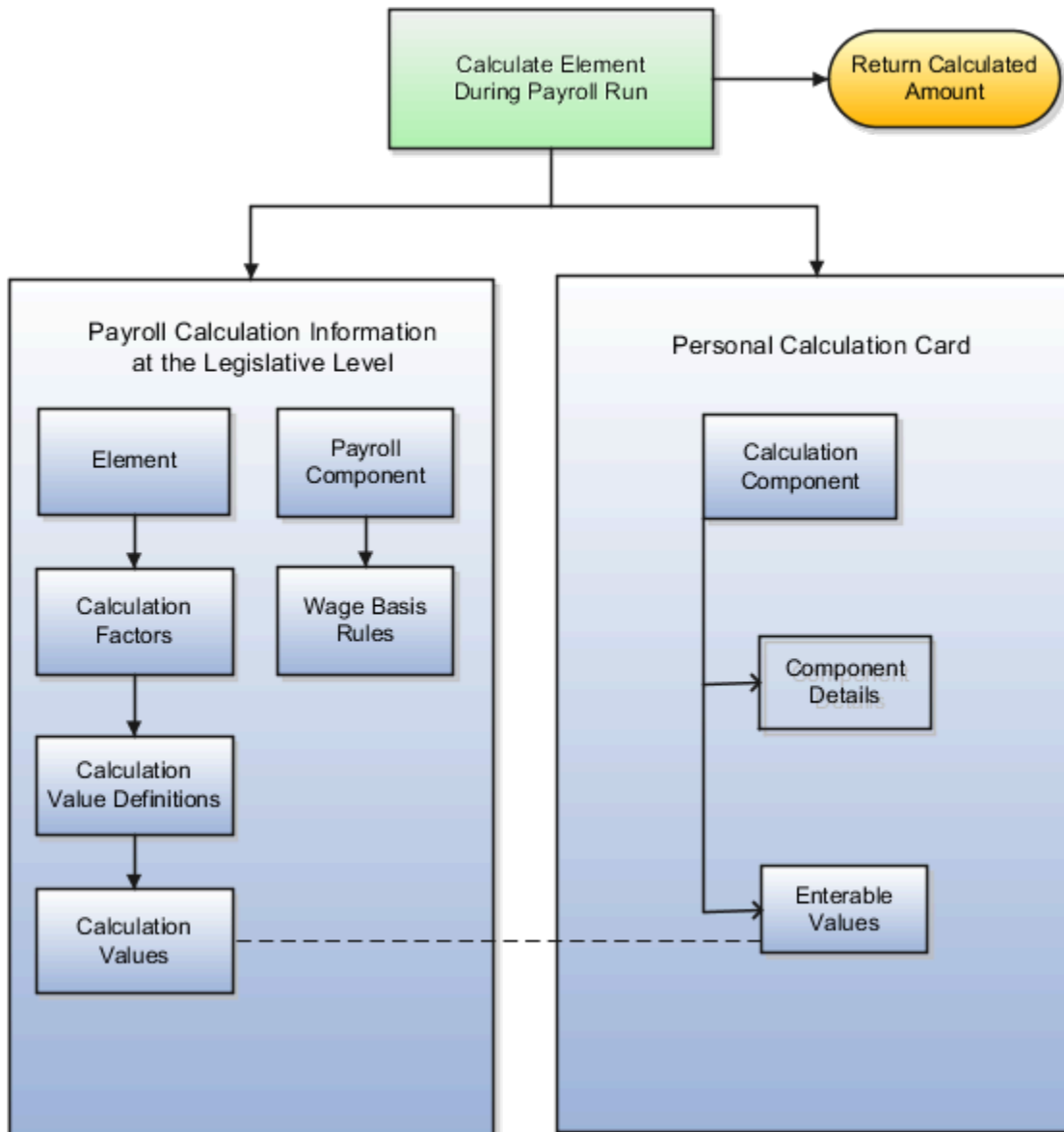
This topic explains the additional rules and definitions generated for certain classifications and categories of elements, such as involuntary deductions, absence information, and time card entries.

These rules and definitions exist within the following components:

- Elements
- Payroll components
- Calculation factors
- Calculation value definitions
- Calculation components

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:** 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

This 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 elements and other generated items on the Element Summary page, including:	Use the Manage Elements task to create elements and to view the generated elements and related items.



Calculation Information	Description	Task
	<ul style="list-style-type: none"> <li>• Status processing rule - specifies the formula that processes the element entries</li> <li>• Input values - values that can be entered for, or returned from, the calculation</li> </ul> <p>After creating an element:</p> <ul style="list-style-type: none"> <li>• You must add eligibility rules</li> <li>• You may want to add:                             <ul style="list-style-type: none"> <li>○ Input values</li> <li>○ Status processing rules</li> <li>○ Frequency rules</li> <li>○ Balance feeds</li> </ul> </li> </ul>	
Payroll components	<p>A payroll component is a group of rates and rules that the payroll run uses to calculate values for earnings and deductions.</p> <p>When you create elements for Absences, the element template creates a payroll component with the same name.</p> <p>You can view payroll components using the Absences predefined component group.</p>	Use the Manage Payroll Calculation Information task to view payroll components and their associated rules.
Calculation value definitions	<p>Calculation value definitions store calculation rates and rules, which may vary based on other criteria.</p> <p>You can use the Manage Calculation Value Definitions UI to view the product-level value definitions. For example, you can use this UI to view the Individual Income Tax Table in Annual Amounts.</p> <p>The calculation value definition controls which calculation values are enterable on a calculation card.</p>	
Calculation components	<p>Calculation components are individual calculations captured on a calculation card. When an Absences element template creates a payroll component, it also creates calculation component definitions with the same name as the element. When an absence gets recorded for a person, the component instances and absence information will be created for that person, and you can view this information using the Manage Calculation Cards task.</p>	Use the Manage Calculation Cards task to enter calculation components for a person.

## Calculation Cards

### Organization-Level Calculation Values for China

You can define calculation values for statutory deductions at several levels. This topic describes how to set them at the level of the payroll statutory unit (PSU) and tax reporting unit (TRU) calculation cards. PSU-level values override any values set at the legislative level.

**Note:** Rates and rules for processing social security and benefits deductions may vary by territory and hukou type, and you must define them at the PSU level and optionally at the TRU level. Only individual income tax (IIT) rates are predefined at the legislative level.

The calculation values allowed on a calculation card vary depending on the card level and the calculation component.

#### PSU-Level Calculation Values

Use the Manage Legal Entity Calculation Cards task in the Setup and Maintenance work area to define calculation values at the PSU level. Select the PSU, create or open the Statutory Deductions calculation card, and then enter the values on the **Enterable Calculation Values on Calculation Cards** tab. Do this at initial setup and as changes occur.

This table describes the calculation values allowed on a PSU-level calculation card.

Calculation Value Name	Calculation Components Supporting this Value	How the Value is Used
Severance Payments Tax Exemption Amount	Individual Income Tax	Defines the severance payments tax exemption amount by exemption category for a specific territory. Supported tax exemption categories are listed earlier.
Employee Contribution Rate, Employer Contribution Rate	Social security and benefits components	Defines the contribution rate for a specific territory and hukou type. For a contribution rate of 10 percent, enter a value of 0.1.
Fixed Employee Contribution Amount, Fixed Employer Contribution Amount	Social security and benefits components	Defines a flat contribution amount for a specific territory and hukou type.
Fixed Employee Contribution Base Amount, Fixed Employer Contribution Base Amount	Social security and benefits components	Defines a flat amount to use as the base for the contribution for a specific territory and hukou type.
Employee Nontaxable Contribution Threshold Rate, Employer Nontaxable Contribution Threshold Rate	All social security components except Maternity Insurance, Supplemental Medical Insurance, and Work-Related Injury Insurance	Defines the maximum contribution rate for calculating nontaxable contributions for a specific territory and hukou type. Contributions exceeding the threshold are taxed.

Calculation Value Name	Calculation Components Supporting this Value	How the Value is Used
		<p><b>Note:</b> If you provide a value for any nontaxable item (employee nontaxable contribution threshold rate, employer nontaxable contribution threshold rate, or nontaxable contribution base threshold amount), the application calculates the nontaxable and taxable contributions using the values provided.</p> <p>If you provide a base threshold amount but don't provide threshold rates, then the application uses the employee and employer contribution rates as the nontaxable contribution rates when calculating nontaxable contributions.</p>
<p>Fixed Employee Nontaxable Contribution Threshold Amount, Fixed Employer Nontaxable Contribution Threshold Amount</p>	<p>All social security components except Maternity Insurance, Supplemental Medical Insurance, and Work-Related Injury Insurance</p>	<p>Reserved for future use.</p>
<p>Nontaxable Contribution Base Threshold Amount</p>	<p>All social security components except Maternity Insurance, Supplemental Medical Insurance, and Work-Related Injury Insurance</p>	<p>Defines the maximum contribution base amount for calculating nontaxable contributions for a specific territory and hukou type.</p> <p><b>Note:</b> If you provide nontaxable contribution threshold rates but don't provide a base threshold amount, then the application uses the employee and employer contribution base amount as the nontaxable contribution base threshold amount when calculating nontaxable contributions.</p>
<p>Fixed Contribution Base Lower Limit Amount, Fixed Contribution Base Upper Limit Amount</p>	<p>Social security and benefits components</p>	<p>Defines the lowest and highest contribution base amounts that can be used when calculating the contribution amount for a specific territory and hukou type.</p>
<p>City Lowest Average Monthly Salary in Previous Year, City Average Monthly Salary in Previous Year, Provincial Average Monthly Salary in Previous Year</p>	<p>Social security and benefits components</p>	<p>Defines the values used in contribution base calculation and upper and lower limit calculation, for a specific territory and hukou type, when they're set to any of these values:</p> <ul style="list-style-type: none"> <li>• City Lowest Average Monthly Salary in Previous Year</li> <li>• 60% of City Average Monthly Salary in Previous Year</li> </ul>

Calculation Value Name	Calculation Components Supporting this Value	How the Value is Used
		<ul style="list-style-type: none"> <li>60% of Provincial Average Monthly Salary in Previous Year</li> <li>Three Times City Average Monthly Salary in Previous Year</li> <li>Five Times City Average Monthly Salary in Previous Year</li> <li>Three Times Provincial Average Monthly Salary in Previous Year</li> </ul> <p>Note: You must update these values once a year as data becomes available.</p>
Employee Contribution Rate by Years of Service Employer Contribution Rate by Years of Service	Enterprise Annuity	Defines contribution rates that vary by years of service for a specific territory and hukou type. Each calculation value defines one or more rows in a range table, rather than a single rate or amount. Each row defines a range of years and corresponding contribution rate. For example, one row might define a rate of 4 percent for first 4 years of service, and another row might define a rate of 6 percent for 5-9 years of service.

## TRU-Level Calculation Values

Use the Manage Legal Reporting Unit Calculation Cards task in the Setup and Maintenance work area to define calculation values specific to a TRU and hukou type. Select the TRU, create or open the Statutory Deductions calculation card, and then enter the values on the **Enterable Calculation Values on Calculation Cards** tab. Do this at initial setup and as changes occur, only if TRU values differ from those set at the PSU level.

Calculation values aren't allowed at the TRU level for income tax calculation components.

For social security and benefits deductions, all calculation values supported on a PSU-level calculation card are also supported at the TRU level, except for the following, which are used in the calculation of contribution base:

- Fixed Employee Contribution Base Amount
- Fixed Employer Contribution Base Amount
- Nontaxable Contribution Base Threshold Amount
- Fixed Contribution Base Lower Limit Amount
- Fixed Contribution Base Upper Limit Amount
- City Lowest Average Monthly Salary in Previous Year
- City Average Monthly Salary in Previous Year
- Provincial Average Monthly Salary in Previous Year

In addition, the calculation values you define at the TRU-level, the rounding methods you enter in the Contribution Information component details for social insurance and benefits components override the rounding methods defined at the PSU level.

## Overview of Chinese Statutory Deduction Cards

Oracle Payroll provides a set of predefined statutory deduction cards for use with Chinese legislations. It's helpful to understand these key concepts when working with deduction cards:

- Deduction groups
- Deduction card levels
- Deduction components
- Associations

### Deduction Groups

Chinese statutory deductions are categorized into these deduction groups on the deduction card:

- Taxes
- Social Security
- Benefits

Deduction groups appear in the Deduction Overview section of the Manage Deduction Cards page.

### Deduction Card Levels

You can create deduction cards at any of these levels:

- Personal (payroll relationship)
- Tax reporting unit (TRU)
- Payroll statutory unit (PSU)

Deduction cards capture different information at different levels. The information defined at a lower level overrides values defined at higher levels. For example, an exemption amount defined on a personal deduction card overrides the exemption amount defined in deduction cards at the TRU and PSU levels and in deduction ranges defined at the legislative level.

Use these tasks to manage deduction cards at each level:

- For personal deduction cards, use the Manage Personal Deductions task in the Payroll Administration work area.
- For TRU-level cards, use the Manage Legal Reporting Unit Deduction Records task in the Setup and Maintenance work area.
- For PSU-level cards, use the Manage Legal Entity Deduction Records task in the Setup and Maintenance work area.

### Deduction Components

Each deduction group supports a set of deduction components that you can add to a deduction card. Supported components vary depending on the card level. Most deduction components correspond to a specific payroll deduction, such as individual income tax. However, some components, such as Foreigner Code and Social Security Card Number, capture information used only in reporting. You can create only one deduction component per deduction type on a deduction card, except for Social Security Card Number and Foreigner Code.

Each deduction component can have one or more sets of component details that capture data used to process the deduction. For example, the component details for a medical insurance deduction component capture the employee's account number into which contributions are made.

Deduction components in the Taxes deduction group include:

- **Aggregation Information:** This component is created automatically when you create a personal statutory deduction card, but you must create an association on the card linking the component to valid employment terms. This component has no component details and allows no overrides. It applies only to personal deduction cards.
- **Individual Income Tax Deduction:** Individual income tax is a mandatory deduction for all employees in most cases. Add this component to the personal deduction card of each employee requiring the tax calculation, and select the employee's tax exemption amount category. The application determines the tax exemption amount the person is entitled to based on the category you select. For example, effective from September 1, 2011, the amount for mainland China residents with mainland China income is 3500 yuan, and the amount for expatriates is 4800 yuan. If an employee qualifies for a further tax reduction or exemption, set the Tax reduction or exemption status to **Yes**, and then create an override that defines the employee's special tax reduction rate.

Rates and rules required for calculating individual income tax are predefined at the legislative level in deduction ranges. You can set up territory-specific tax exemption amounts at the PSU level. If an employee is entitled to a special tax reduction rate, you can enter the rate as an override on the employee's deduction card.

This table describes the deduction components in the Taxes deduction group.

Component	Card Level	When to Add Component to Deduction Card	Component Details Captured	Overrides Allowed
Aggregation Information	Personal	This component defines the level at which payroll run results are split for tax deductions. This component is created automatically when you create a personal deduction card. You must associate this component with a valid employment term. This component has no component details.	None	None
Individual Income Tax Deduction	Personal	Individual income tax (IIT) is a mandatory deduction for all employees in most cases. Add this component to a personal deduction card to process IIT.  The application determines the tax exemption amount the person is entitled to based on their category. For example, effective from September 1, 2011, the exemption amount for mainland China residents with mainland China	<ul style="list-style-type: none"> <li>• Tax exemption amount category</li> <li>• Tax reduction or exemption status (entitled or not entitled)</li> </ul>	Special Tax Reduction Rate

Component	Card Level	When to Add Component to Deduction Card	Component Details Captured	Overrides Allowed
		<p>income is 3500 yuan, and the amount for expatriates is 4800 yuan. If an employee qualifies for a further tax reduction or exemption, indicate so on in the component details and then create an override that defines the employee's special tax reduction rate.</p> <p>For example, if a person qualifies for 20 percent tax reduction, you would enter 0.2 in the <b>Rate</b> field.</p>		
Foreigner Code	Personal	Add this to an expatriate worker's personal deduction card if a company is located in an area where foreigner codes are issued to expatriates, as is the practice in Shenzhen.	Foreigner code	None
Individual Income Tax Deduction	PSU	Add this component if you want to define territory-specific override values for tax exemption amounts. You must select a territory as a reference value for the component. The override values you enter will then be used when processing tax exemptions for that territory.	None	<ul style="list-style-type: none"> <li>Tax Exemption Amount (for mainland China residents)</li> <li>Tax Exemption Amount for Foreigners</li> <li>Tax Exemption Amount for Seamen</li> <li>Tax Exemption Amount for Overseas Chinese</li> <li>Tax Exemption Amount for Hong Kong, Macao and Taiwan Residents</li> </ul>

### Social Security Deduction Components

You can set up calculation methods, rounding methods, rates and amounts for social insurance, public housing fund, and enterprise deductions by territory and hukou type at the payroll statutory unit (PSU) and tax reporting unit (TRU) levels. You can create overrides for these values on a personal deduction card as needed.

Social security deductions are optional pretax deductions. You can set up calculation methods, rounding methods, rates and amounts by deduction type by territory and Hukou type at the PSU level and at the TRU level.

**Note:** Rates for social security deductions may vary by territory and Hukou type and must be defined as deduction card overrides; no rates are predefined in deduction ranges at the legislative level.

You can create overrides for these values on a personal deduction card as needed. This table describes the deduction components in the Social Security deduction group.

Component	Card Level	When to Add Component to Deduction Card	Component Details Captured	Overrides Allowed
<ul style="list-style-type: none"> <li>Public Housing Fund (PHF)</li> <li>Basic Pension Insurance</li> <li>Basic Medical Insurance</li> <li>Supplementary Medical Insurance</li> <li>Unemployment Insurance</li> <li>Maternity Insurance</li> <li>Work-Related Insurance</li> </ul>	Personal	Add one or more of these components if an employee elects to take the corresponding deduction.	<ul style="list-style-type: none"> <li>Account number into which the contribution is made and the account's status</li> <li>Method used to calculate the contribution base</li> <li>Force recalculation of contribution base indicator</li> </ul>	<ul style="list-style-type: none"> <li>Employee and employer contribution rates</li> <li>Fixed employee and employer contribution amounts</li> <li>Employee and employer nontaxable contribution threshold rates*</li> <li>Fixed employee and employer contribution base amounts</li> <li>Nontaxable contribution base threshold*</li> </ul>
Social Security Card Number	Personal	Add this to capture a person's social security number and the territory where that number was issued. A person can have multiple social security card numbers issued by different territories. This information isn't used in payroll run processing or reporting.	Card number	None
Common Information	TRU	Add this to define the social security contribution deferment type for a specific tax reporting unit. Do this during initial setup and as needed when changes occur.	Social security contribution deferment type	None
<ul style="list-style-type: none"> <li>Public Housing Fund (PHF)</li> <li>Basic Pension Insurance</li> <li>Basic Medical Insurance</li> <li>Supplementary Medical Insurance</li> <li>Unemployment Insurance</li> <li>Maternity Insurance</li> <li>Work-Related Insurance</li> </ul>	TRU	Add these components to define TRU-specific overrides and set the rounding method to use when calculating the contribution amounts if TRU-specific. Do this during initial setup and as needed when changes occur, if the values are different from those defined at the PSU level.	Contribution Information Details, including the rounding method	<ul style="list-style-type: none"> <li>Employee and employer contribution rates</li> <li>Fixed employee and employer contribution amounts</li> <li>Employee and employer nontaxable contribution threshold rates*</li> </ul>



Component	Card Level	When to Add Component to Deduction Card	Component Details Captured	Overrides Allowed
<ul style="list-style-type: none"> <li>Public Housing Fund (PHF)</li> <li>Basic Pension Insurance</li> <li>Basic Medical Insurance</li> <li>Supplementary Medical Insurance</li> <li>Unemployment Insurance</li> <li>Maternity Insurance</li> <li>Work-Related Insurance</li> </ul>	PSU	Add these components to define PSU-level overrides and other deduction processing information, such as when and how to calculate the contribution base and the rounding method to use when calculating the contribution amount. Do this during initial setup and as needed when changes occur.	<ul style="list-style-type: none"> <li>Contribution Base Information Details, including switch month, switch period, rounding method, and methods used for calculating the contribution base and upper and lower limits</li> <li>Contribution Information Details, which specifies the rounding method</li> </ul>	<ul style="list-style-type: none"> <li>Employee and employer contribution rates</li> <li>Fixed employee and employer contribution amounts</li> <li>Employee and employer nontaxable contribution threshold rates*</li> <li>Nontaxable contribution base threshold*</li> <li>Fixed employee and employer contribution base amounts</li> <li>Fixed contribution base upper and lower limits</li> <li>City lowest average monthly salary in previous year</li> <li>City and provincial average monthly salary in previous year</li> </ul>

\*Not supported for Supplemental Medical Insurance, Maternity Insurance, or Work-Related Injury Insurance

### Benefits Deduction Components

The Benefits deduction group includes the Enterprise Annuity component, an optional benefit that's provided by some employers in China, and may include other types of benefits. The component details you provide for an Enterprise Annuity are similar to those for Social Insurance components. Enterprise annuity is a post-tax deduction.

Component	Card Levels	When to Add Component to Deduction Card	Component Details Captured	Overrides Allowed
Enterprise Annuity	Personal	Add this to a personal deduction card if an employee elects to take the deduction.	<ul style="list-style-type: none"> <li>Account number into which the contribution is made and the account's status</li> <li>Method used to calculate the contribution base</li> <li>Force recalculation of contribution base indicator</li> </ul>	<ul style="list-style-type: none"> <li>Employee and employer contribution rates</li> <li>Fixed employee and employer contribution amounts</li> <li>Employee contribution rates by years of service</li> <li>Fixed employee and employer contribution base amounts</li> </ul>

Component	Card Levels	When to Add Component to Deduction Card	Component Details Captured	Overrides Allowed
Enterprise Annuity	TRU	Add this to define TRU-specific overrides and to set the rounding method to use when calculating the contribution amount, if this information is TRU-specific. Do this during initial setup and as needed when changes occur, only if the values are different from those defined at the PSU level.	Contribution Information Details, which specifies the rounding method	<ul style="list-style-type: none"> <li>Employee and employer contribution rates</li> <li>Fixed employee and employer contribution amounts</li> <li>Employee and employer contribution rates by years of service</li> </ul>
Enterprise Annuity	PSU	Add this to define PSU-level deduction processing, such as when and how to calculate the contribution base and the rounding method to use when calculating the contribution amount. Do this during initial setup and as needed when changes occur.	<ul style="list-style-type: none"> <li>Contribution Base Information Details, including switch month, switch period, rounding method, and methods used for calculating the contribution base and upper and lower limits</li> <li>Contribution Information Details, which specifies the rounding method</li> </ul>	<ul style="list-style-type: none"> <li>Employee and employer contribution rates</li> <li>Employee and employer contribution rates by years of service</li> <li>Fixed employee and employer contribution base amount</li> <li>Fixed contribution base upper and lower limits</li> <li>City lowest average monthly salary in previous year</li> <li>City and provincial average monthly salary in previous year</li> </ul>

## Tax Reporting Unit Associations

For personal deduction cards, you create associations that link components to a tax reporting unit. You must associate the Aggregation Information component with specific employment terms. You can associate one or more social insurance deduction components with different TRUs if, for example, an employee wants to contribute social insurance to a different area than they contribute individual income tax. To do so, you must first create an association linking the deduction card with the main TRU. Then you must add associations for each social security deduction component that reports to a different contribution area than the territory of the main TRU.

## Examples of Creating Calculation Cards for Deductions at Different Levels

You can create and manage calculation cards at several different levels, from an individual person to a payroll statutory unit.

Use the cards to capture information specific to a person or organization, such as an employee's tax filing status or an employer's tax identification number. Calculation card entries override default values defined at other levels. The priority of information, from highest to lowest, is as follows:

1. Personal calculation card (payroll relationship level)
2. Tax reporting unit calculation card
3. Payroll statutory unit calculation card
4. Calculation value definitions (legislative data group level)

**Note:** Not all countries or territories support creating calculation cards for payroll statutory units and tax reporting units. The enterable values at each level also vary by country or territory. The basic steps to create and manage calculation cards are the same at all levels.

Use these examples to understand when you might define calculation cards at each level.

## Personal Calculation Card

Scenario: An employee qualifies for a special reduced tax rate.

Task: Calculation Cards task in the Payroll section under My Client Groups.

## Tax Reporting Unit Card

Scenario: The income tax exemption amount is 2000 at the legislative data group level, but a tax reporting unit in a particular state or province uses an exemption amount of 2500. Enter this default value for the tax reporting unit, which can be overridden on personal calculation cards.

Task: Manage Legal Reporting Unit Calculation Cards task in the Setup and Maintenance section.

## Payroll Statutory Unit Card

Scenario: During application setup, the implementation team defines default contribution rates for the payroll statutory unit.

Task: Manage Legal Entity Calculation Cards task in the Setup and Maintenance section.

## Calculation Value Definition

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

Task: Calculation Value Definitions task in the Payroll section.

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

# Create a Legal Entity Calculation Card

This topic demonstrates how you can create a calculation card at the legal entity level. The calculation card captures information for the organization at the legislative level, you can override this information at the TRU-level.

Use the Manage Legal Entity Deduction records task to create the card.

A legal entity statutory deductions card captures the individual income tax management information specific to a territory. It also specifies the social security management information specific to a territory and hukou type. The values

entered in the Enterable Calculation Values on Calculation Cards tab on the legal entity statutory deductions card replaces the values defined at the legislative level.

Perform these tasks to create a legal entity calculation card for China:

- Create the Calculation Card
- Define the Individual Income Tax Calculation Components
- Define the Public Housing Fund Calculation Components
- Define the Social Insurance Calculation Components

## How to Create the Calculation Card

1. In the Setup and Maintenance work area, do the following:
  - Offering: Workforce Deployment
  - Functional Area: Enterprise Structures
  - Task: Define Legal Entities for Human Capital Management
 Expand the entry to display a list of related tasks.
2. Click the **Select** link for the Legal Entity Calculation Cards task.
3. On the Select Scope window, select **Select and Add** from the Legal Entity list.
4. Click **Apply and Go to Task**.
5. On the Select and Add: Legal Entity page, search for and select the legal entity and click **Save and Close**.
6. Click **Go to Task** for the Legal Entity Calculation Cards task.
7. Click **Create**.
8. On the Create Calculation Card dialog box, do the following:
  - In the **Effective As-of Date** field, enter a date.
  - From the **Name** list, select **Statutory Deductions**.
9. Click **Continue**.

## How to Define the Individual Income Tax Calculation Components

1. Select **Taxes** from the Components Groups in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. On the Create Calculation Component page, do the following:
  - From the **Calculation Component** list, select **Individual Income Tax**.
  - From the **Territory** list, select a territory.
4. Click **OK**.
5. In the Individual Income Tax: Details section, on the **Enterable Calculation Values on Calculation Cards** tab, click **Create**. Select the name of the override you want to create and then enter the overriding value. This table lists the overrides allowed for individual income tax management at the payroll statutory unit level.

OVERRIDE NAME	DESCRIPTION	VALUE TYPE	VALUE EXAMPLE
Severance Payments Tax Exemption	Severance payments tax exemption amount for mainland China citizens who work and get paid in China.	Total amount	168183.00

OVERRIDE NAME	DESCRIPTION	VALUE TYPE	VALUE EXAMPLE
Severance Payments Tax Exemption for Seaman	Severance payments tax exemption amount for mainland China seamen who work overseas and get paid in China.	Total amount	168183.00
Severance Payments Tax Exemption for Hong Kong, Macao, and Taiwan	Severance payments tax exemption amount for Hong Kong, Macao, and Taiwan residents who work in China.	Total amount	168183.00

6. Click **Save**.

## How to Define the Public Housing Fund Calculation Components

1. Select **Social Security** from the Components Groups in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. On the Create calculation component page, do the following:
  - o from the **Calculation Component** list, select **Public Housing Fund**.
  - o From the **Territory** list, select a territory.
4. Click **OK**.
5. In the Public Housing Fund: Details section, click **Create**.
6. On the Create Calculation Component Details dialog box, from the **Calculation Component Details** list, select **Contribution Base Information** and click **OK**.
7. In the Public Housing Fund: Details section, on the **Calculation Component Details** tab, click **Contribution Base Information** and complete these fields:

Field	Value
Switch Period Type	Select <b>Yearly in a specified month</b> if the contribution base is recalculated once a year, or select <b>Monthly</b> if the contribution base is recalculated every month
Switch Month	Select a month if the base is recalculated yearly, or select <b>Not applicable</b> if the base is recalculated every month
Employee Base Calculation method	Select an employee base calculation method
Employer Base Calculation method	Select an employer base calculation method
Lower Limit Calculation Method	Select a lower limit calculation method

Field	Value
Upper Limit Calculation Method	Select an upper limit calculation method
Rounding Method	Select a rounding method

8. On the **Enterable Calculation Values on Calculation Cards** tab, click **Create**. Select the name of the override you want to create and then enter the overriding value. This table lists the overrides allowed for public housing fund management at the payroll statutory unit level. Because these values vary by territory, no default values are provided for any of the items in this table. They are all set to zero at the legislative value.

OVERRIDE NAME	VALUE TYPE	VALUE EXAMPLE
City Average Monthly Salary in Previous Year	Total amount	4101.00
City Lowest Average Monthly Salary in Previous Year	Total amount	860.00
Provincial Average Monthly Salary in Previous Year	Total amount	-
Employee Contribution Rate	Rate	0.18
Employee Nontaxable Contribution Threshold Rate	Rate	0.12
Employer Contribution Rate	Rate	0.18
Employer Nontaxable Contribution Threshold Rate	Rate	0.12
Fixed Contribution Base Lower Limit Amount	Total amount	-
Fixed Contribution Base Upper Limit Amount	Total amount	-
Fixed Employee Contribution Amount	Total amount	-
Fixed Employee Contribution Base Amount	Total amount	-

OVERRIDE NAME	VALUE TYPE	VALUE EXAMPLE
Fixed Employee Nontaxable Contribution Threshold Amount	Total amount	-
Fixed Employer Contribution Amount	Total amount	-
Fixed Employer Contribution Base Amount	Total amount	-
Fixed Employer Nontaxable Contribution Threshold Amount	Total amount	-
Nontaxable Contribution Base Threshold Amount	Total amount	12303.00

9. Click **Save and Close**.

## How to Define the Social Insurance Calculation Components

Before you define the social insurance calculation components, consider the following points:

- You can add social insurance calculation components and component details to the statutory deductions card. You can add calculation components for these social insurance types to a legal entity statutory deductions card:
    - Basic Pension Insurance
    - Basic Medical Insurance
    - Supplementary Medical Insurance
    - Unemployment Insurance
    - Maternity Insurance
    - Work-Related Injury Insurance
  - For maternity insurance and work-related injury insurance, you define only the employer contribution; there is no corresponding employee contribution
  - For supplementary medical insurance, maternity insurance, and work-related injury insurance, taxable contribution calculation isn't required
1. Select **Social Security** from the Components Groups in the Calculation Card Overview section.
  2. Click **Create** in the Calculation Components section.
  3. On the Create calculation component page, do the following:
    - From the **Calculation Component** list, select a social insurance type.
    - From the **Territory** list, select a territory.
  4. Click **OK**.
  5. In the Details section of the selected social insurance type, click **Create**.

6. On the Create Calculation Component Details dialog box, from the **Calculation Component Details** list, select **Contribution Base Information** and click **OK**.
7. In the Details section of the selected social insurance type, on the **Calculation Component Details** tab, click **Contribution Base Information** and complete these fields:

Field	Value
Switch Period Type	Select <b>Yearly in a specified month</b> if the contribution base is recalculated once a year, or select <b>Monthly</b> if the contribution base is recalculated every month
Switch Month	Select a month if the base is recalculated yearly, or select <b>Not applicable</b> if the base is recalculated every month
Employee Base Calculation method	Select an employee base calculation method
Employer Base Calculation method	Select an employer base calculation method
Lower Limit Calculation Method	Select a lower limit calculation method
Upper Limit Calculation Method	Select an upper limit calculation method
Rounding Method	Select a rounding method

8. On the **Enterable Calculation Values on Calculation Cards** tab, click **Create**. Select the name of the override you want to create and then enter the overriding value.
9. Click **Save and Close**.

## Example of Setting Up a Calculation Card for Statutory Deductions for China

Let's look at an example that shows how to create calculation components, component details, and association information for a new employee using the Manage Calculation Cards task.

This example assumes that you created a Deduction Information calculation card automatically during the new hire process (or manually).

The employee in this example works in Beijing and contributes individual income tax through the main tax reporting unit (TRU) in Beijing. However, the employee wants to contribute basic pension and basic medical insurance at the hukou location of Shanghai. This employee also qualifies for a special tax reduction rate.

### Before You Start

1. Define all legal entities and related information, including payroll statutory units (PSUs), legal employers, TRUs, and registration information.
2. Define element eligibility for the Aggregation Information element.



- Complete the new hire process for the employee, and ensure that the employee has a valid payroll relationship with a Chinese payroll statutory unit under the payroll relationship. The new hire process should have created a Deductions Information calculation card for the new hire automatically.

This table summarizes the key decisions you need to consider.

Key Decisions	In This Example
What deductions will this employee take?	Individual income tax, basic medical insurance, and basic pension insurance
Does this employee have a foreigner code?	No
Does this employee qualify for a special tax exemption rate?	Yes, the employee qualifies for a 20% tax reduction rate
Is the employee's contribution area the same for all deductions?	No, individual income tax contribution is made through one TRU, while the basic pension and basic medical contributions are made through another TRU

## Open the Calculation Card

- From your Home page, navigate to **My Client Groups > Show More > Payroll**.
- Under Person Management, click **Calculation Cards**.
- On the Search Person page, search for the person, and from the Actions menu, select **Calculation Cards**.
- On the Calculation Cards page, select a **Deduction Information** from the **Calculation Card** drop-down list.
- Enter a date in the **Effective As-of Date** field and click **Search**.

The Calculation Cards: Deduction Information page appears, and the Calculation Card Overview panel shows the component groups available for this calculation card.

## Add an Individual Income Tax Component for a Special Tax Reduction Rate

- In the Calculation Card Overview panel, select **Taxes**.
- Click **Create** in the Calculation Components section.
- Select **Individual Income Tax** from the Calculation Component field, and click **OK**. A new component appears in the Calculation Components section.
- Expand the Individual Income Tax Details section, and enter these values:

Field	Value
<b>Entitled to Tax Reduction or Exemption</b>	Yes
<b>Tax Exemption Amount Category</b>	Mainland China resident with mainland China income

- Click the **Enterable Calculation Values on Calculation Card** tab.

6. Click **Create** and do the following:

- Enter these values to define a special tax reduction of 20 percent:

Field	Value
Name	Special Tax Reduction rate
Rate	0.2

- Enter these values to define a fixed special tax reduction amount of 420 for Shanghai:

Field	Value
Name	Fixed Special Tax Reduction Amount
Amount	420 (for Shanghai)

**Note:** In cases where both the special tax reduction rate and fixed special tax reduction amount are defined, the fixed special tax reduction amount takes precedence over the special tax reduction rate.

7. Click **OK**.

## Add Social Security Components

- In the Calculation Card Overview panel, select **Social Security**.
- Click **Create** in the Calculation Components section.
- Select **Basic Medical Insurance** from the Calculation Component field, and click **OK**.

A new component appears in the Calculation Components section.

- Expand the Basic Medical Insurance Details section, and enter these values:

Field	Value
Account Number	1000100
Account Status	Open
Force Contribution Base Recalculation	No (Since this is the first time you're calculating the deduction, you don't need to force recalculation.)

Field	Value

**Note:** The Employee and Employer Contribution Base Calculation Method fields are optional. Only provide values for these fields if the calculation methods for this person differ from the default methods defined for the PSU on the PSU-level calculation card.

5. Click **Create** in the Calculation Components section to create another component.
6. Select **Basic Pension Insurance** in the **Calculation Component** field, and click **OK**.
7. Expand the Basic Pension Insurance Details section, and enter **BPI44151** in the **Account Number** field.
8. For all other fields, use the values from the previous table.

**Note:** You can repeat this process as needed to add components for Public Housing Fund (PHF), Supplementary Medical Insurance, Unemployment Insurance, Maternity Insurance, and Work-Related Insurance. For Enterprise Annuity or other benefits deductions, click **Benefits** in the Calculation Card Overview pane, and then follow the earlier steps to create components and component details. You can also create overrides for social security and benefits deductions if, for example, you need to enter an employee-specific contribution rate or amount that differs from the value defined on a calculation card at the TRU or PSU level.

## Define TRU Associations

If you select a TRU during the new hire process, an association to that TRU is added to the card automatically. If you don't select a TRU, you must create the association manually.

In this example, no TRU was specified during the new hire process. The employee wants to make tax payments in Beijing and social insurance contributions in Shanghai, so you must create these TRU associations:

1. Select **Associations** in the Calculation Card Overview panel.
2. Click **Create** in the Associations section, and enter these values:

Field	Value
Tax Reporting Unit	Beijing-TRU
Calculation Component	Leave this blank to associate all components with the main tax reporting unit by default

3. Click **Create** in the Associations section, and enter the following values:

Field	Value
Tax Reporting Unit	Shanghai-TRU
Calculation Component	Basic Medical Insurance

4. Click **Create** in the Associations section, and enter these values:

Field	Value
Tax Reporting Unit	Shanghai-TRU
Calculation Component	Basic Pension Insurance

5. Click **Save**.

## Define Association Details

Association details associate the Aggregation Information calculation component with an assignment in a employment model. If you select a TRU during the new hire process, the process automatically associates the Aggregation Information component with the employment term (or assignment) created for the employee. If you don't select a TRU , you must define the association details manually:

1. In the Associations section, select the association for the **Beijing-TRU** (the main association) and then click **Create** in the Association Details section.
2. Enter these values:

Field	Value
Employment Term Number	ET102202
Calculation Component	Aggregation Information

**Note:** If the employer uses an employment model, you need to associate the component with an assignment rather than employment term.

3. Click **Save and Close**.

### Related Topics

## Create a Legal Reporting Unit Calculation Card

This topic demonstrates how you can create a calculation card at the tax reporting unit level. Use the Manage Legal Reporting Unit Calculation Cards task to create the card.

A legal reporting unit statutory deductions card captures social security management information specific to a tax reporting unit and hukou type. It also defines the policy for handling social security deductions during probation periods if deferring deduction can be arranged. It's optional to set up a legal reporting unit statutory deductions card.

The values you define at this level apply only to the employees associated with this tax reporting unit (as defined in the associations on each person's personal statutory deductions card). These values replace the deduction information

defined at the payroll statutory unit level and any values predefined at the legislative level when calculating statutory deductions for employees associated with the tax reporting unit.

Perform these tasks to create a Legal Reporting Unit calculation card for China:

- Create the Statutory Deductions Card
- Define the Public Housing Fund Calculation Components
- Define the Social Insurance Calculation Components
- Define the Common Information Calculation Components

## How to Create the Statutory Deductions Card

1. In the Setup and Maintenance work area, do the following:
  - Offering: Workforce Deployment
  - Functional Area: Enterprise Structures
  - Task: Define Legal Reporting Units for Human Capital Management
 Expand the entry to display a list of related tasks.
2. Click the **Select** link for the Legal Reporting Unit Calculation Cards task.
3. On the Select Scope window, select appropriate values from the **Legal Reporting Unit** and **Legal Reporting Unit** lists.
4. Click **Apply and Go to Task**.
5. On the Tax Reporting Unit page, click **Create**.
6. On the Create Calculation Card dialog box, do the following:
  - In the **Effective As-of Date** field, enter a date.
  - From the **Name** list, select **Statutory Deductions**.
7. Click **Continue**.

## How to Define the Public Housing Fund Calculation Components

1. Select **Social Security** from the Components Groups in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. On the Create calculation component page, do the following:
  - from the **Calculation Component** list, select **Public Housing Fund**.
  - From the **Contribution Type** list, select a value.
4. Click **OK**.
5. In the Public Housing Fund: Details section, click **Create**.
6. On the Create Calculation Component Details dialog box, from the **Calculation Component Details** list, select **Contribution Information** and click **OK**.
7. In the Public Housing Fund: Details section, on the **Calculation Component Details** tab, click **Contribution Base Information** and complete these fields:

Field	Value
Employee Amount Rounding Method	Select a value.

Field	Value
Employer Amount Rounding Method	Select a value.

- On the **Enterable Calculation Values on Calculation Cards** tab, click **Create**. Select the name of the override you want to create and then enter the overriding value. This table lists the overrides allowed for public housing fund management at the payroll statutory unit level. Because these values vary by territory, no default values are provided for any of the items in this table. They are all set to zero at the legislative value.

**Note:** Only create overrides at this level if the values are different from the values you defined on the payroll statutory unit statutory deduction card (or if you didn't define any values at that level).

OVERRIDE NAME	VALUE TYPE	VALUE EXAMPLE
Employee Contribution Rate	Rate	0.18
Employee Nontaxable Contribution Threshold Rate	Rate	0.12
Employer Contribution Rate	Rate	0.18
Employer Nontaxable Contribution Threshold Rate	Rate	0.12
Fixed Employee Contribution Amount	Total amount	-
Fixed Employee Nontaxable Contribution Threshold Amount	Total amount	-
Fixed Employer Contribution Amount	Total amount	-
Fixed Employer Nontaxable Contribution Threshold Amount	Total amount	-

- Click **Save and Close**.

You can create multiple instances of this component, one for each hukou type.

## How to Define the Social Insurance Calculation Components

Before you define the social insurance calculation components, consider the following points:

- You can add social insurance calculation components and component details to the statutory deductions card. You can add calculation components for these social insurance types to a Legal Reporting Unit statutory deductions card:
  - Basic Pension Insurance
  - Basic Medical Insurance
  - Supplementary Medical Insurance
  - Unemployment Insurance
  - Maternity Insurance
  - Work-Related Injury Insurance
- For maternity insurance and work-related injury insurance, you define only the employer contribution; there is no corresponding employee contribution
- For supplementary medical insurance, maternity insurance, and work-related injury insurance, taxable contribution calculation isn't required

1. Select **Social Security** from the Components Groups in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. On the Create calculation component page, do the following:
  - From the **Calculation Component** list, select a social insurance type.
  - From the **Contribution Type** list, select a value.
4. Click **OK**.
5. In the Details section of the selected social insurance type, click **Create**.
6. On the Create calculation Component Details dialog box, from the **Calculation Component Details** list, select **Contribution Information** and click **OK**.
7. In the Details section of the selected social insurance type, on the **Calculation Component Details** tab, click **Contribution Base Information** and complete these fields:

Field	Value
Employee Amount Rounding Method	Select a value.
Employer Amount Rounding Method	Select a value.

8. On the **Enterable Calculation Values on Calculation Cards** tab, click **Create**. Select the name of the override you want to create and then enter the overriding value.
9. Click **Save and Close**.

## How to Define the Common Information Calculation Components

1. Select **Social Security** from the Components Groups in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.

3. On the Create Calculation Component page, from the **Calculation Component** list, select **Common Information** and click **OK**.
4. In the Common Information: Details section, on the **Calculation Component Details** tab, click **Common Information**.
5. From the **Social Security Contribution Deferment Type** list, select any of these options:

Option	Description
Not applicable	Select this option if social security deductions should not be deferred during probation periods.
Defer until probation period end date	Select this option to defer social security contributions during probation periods and deduct the full amount (current and deferred) in the pay period that includes the probation end date.
Defer until next month of probation period end date	Select this option to defer social security deductions and deduct the full amount (current and deferred) in the pay period following the pay period that includes the probation end date.

6. Click **Save and Close**.

## Example of Creating a Calculation Card for a Payroll Statutory Unit for China

Let's look at an example that shows how to create a calculation card that captures individual income tax management information specific to a territory, and social security management information specific to a territory and hukou type. The information defined at the payroll statutory unit

This task involves these subtasks:

- Creating the calculation card
- Defining individual income tax information
- Defining public housing fund (PHF) information
- Defining social insurance information
- Defining benefits information, such as enterprise annuity (optional)

### Create the Calculation Card

1. Navigate to the Setup and Maintenance work area, and open the implementation project.
2. Search for the Define Legal Entities Units for Human Capital Management task, and then expand the entry to display a list of related tasks.
3. Locate the Manage Legal Entity Calculation Cards task.
 

If the legal entity you want to work with is displayed in the Selected Scope column, click the **Go to Task** icon for this task row and skip to step 9. Otherwise, continue with the next step.
4. In the Manage Legal Entity Calculation Cards task row, click the link in the **Selected Scope** column.
5. On the Select Scope window, select **Select and Add** in the **Legal Entity** field.



6. Click **Apply and Go to Task**.
7. On the Select and Add: Legal Entity window, search for the legal entity you want to work with and then select it in the Search Results.
8. Click **Save and Close**.

The Payroll Statutory Unit page for the selected legal entity is displayed. If a calculation card already exists for this entity, it appears in the Search Results.

9. Click **Create**.
10. Enter the effective as-of date, and select **Statutory Deductions** as the name of the card.
11. Click **Continue**.

## Define Individual Income Tax Information

1. Select **Taxes** in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. Select **Individual Income Tax** as the Calculation Component.
4. Select a territory, and click **OK**.
5. On the Enterable Values on Calculation Cards tab, click **Create**.
6. Select the name of the override you want to create, and then enter the overriding value.

Here's an example of the overrides you can use for severance payment at the PSU level.

Override Name	Sample Value	Comments
Severance Payments Tax Exemption	168183.00	Applies to mainland China citizens who work and get paid in China. You can also define severance payment tax exemption overrides for the employee categories listed earlier.

7. Click **OK**.
8. Repeat steps 5-7 for each override value you want to create for this component.
9. Repeat steps 2-7 as needed to create an individual income tax component for each territory in which income tax is collected.

## Define Public Housing Fund (PHF) Information

1. Select **Social Security** in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. Select **Public Housing Fund** as the Calculation Component.
4. Select a territory and a hukou type, and then click **OK**.
5. On the Calculation Component Details tab, click **Create**.
6. Select **Contribution Base Information** in the Calculation Component Details field, and click **OK**.
7. Complete the fields in the component details as shown in the following table:

Field	Sample Value	Comments
Switch Period Type	Monthly	This value causes the contribution base to be recalculated every month. If the

Field	Sample Value	Comments
		contribution base should be recalculated once a year, select <b>Yearly in a specified month</b> and then select a month in the <b>Switch Month</b> field.
Switch Month	Not applicable	Only applies if Switch Period Type is set to <b>Yearly in a specified month</b> .
Employee Base Calculation Method	Current monthly salary	
Employer Base Calculation Method	Current monthly salary	
Lower Limit Calculation Method	City lowest average monthly salary, previous year	This requires that you create an override value for City Lowest Average Monthly Salary, as described later.
Upper Limit Base Calculation Method	3 times city average monthly salary, previous year	This requires that you create an override value for City Average Monthly Salary, as described later.
Rounding Method	Round to nearest yuan	

8. On the Calculation Component Details tab, click **Create**.
9. Select **Contribution Information** in the Calculation Component Details field, and click **OK**.
10. Select the rounding methods to use when calculating the employee and employer contribution amounts.
11. Select the Enterable Calculation Values on Calculation Card tab, and click **Create**.
12. Select the name of the value you want to define, and then enter the value.

You must set up PHF calculation values for the territories where you want to calculate PHF contributions; no values are predefined. Typically you would define either a contribution amount or a rate, but not both. If you define values for both, the application uses the amount and ignores the rate. Here's the list of all the values that you can define:

- o Employee Contribution Rate
- o Employee Nontaxable Contribution Threshold Rate
- o Employer Contribution Rate
- o Employer Nontaxable Contribution Threshold Rate
- o Fixed Contribution Base Lower Limit Amount
- o Fixed Contribution Base Upper Limit Amount
- o Fixed Employee Contribution Amount
- o Fixed Employee Contribution Base Amount

- Fixed Employee Nontaxable Contribution Threshold Amount
- Fixed Employer Contribution Amount
- Fixed Employer Contribution Base Amount
- Fixed Employer Nontaxable Contribution Threshold Amount
- Nontaxable Contribution Base Threshold Amount
- City Average Monthly Salary in Previous Year
- City Lowest Average Monthly Salary in Previous Year
- Provincial Average Monthly Salary in Previous Year

**Note:** For the last three items, the contribution base calculation methods and lower and upper limit calculation methods you selected previously determine which values you must define. For example, if you select **City lowest average monthly salary, previous year** as the Lower Limit Calculation Method, then you must define a value for **City Lowest Average Monthly Salary in Previous Year**. If you select **3 times city average monthly salary, previous year** for the **Upper Limit Calculation Method**, then you must also define the **City Average Monthly Salary in Previous Year**.

13. Click **OK**.
14. Repeat steps 11-13 for each calculation value you want to define for this PHF component.
15. Repeat steps 2-14 to create another PHF component for the same territory and different hukou type or for a different territory and hukou type. You should create a component for each unique combination of territory and hukou type where PHF is calculated.

## Define Social Insurance Information

You must set up the rules and rates for social insurance deductions according to the policies of the territories where you process social insurance contributions; no rates are predefined. You can add calculation components for these social insurance types:

- Basic Pension Insurance
- Basic Medical Insurance
- Supplementary Medical Insurance
- Unemployment Insurance
- Maternity Insurance
- Work-Related Injury Insurance

The steps for creating social insurance components, adding component details, and defining overrides are similar to those required for public housing fund management, with two exceptions:

- For maternity insurance and work-related injury insurance, you only define the employer contribution; there is no corresponding employee contribution.
- For supplementary medical insurance, maternity insurance, and work-related injury insurance, taxable contribution calculation isn't required.

To define social insurance information at this level:

1. Select **Social Security** in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. Select a social insurance component, territory, and hukou type.

4. Define component details.
5. Create overrides as required to define values that're specific to a territory and hukou type.
6. Repeat this process as needed to create components for each social insurance type and for each unique combination of territory and hukou type where the social insurance contribution is calculated.

## Define Benefits Information

1. Create Benefits calculation components, such as Enterprise Annuity, as appropriate for your organization's needs. The component details and override values you provide for an Enterprise Annuity are similar to those for Social Security components.
2. Click **Save and Close** to save the calculation card.

## Example of Creating a Calculation Card for a Tax Reporting Unit for China

This example illustrates how to define a calculation card that captures social security management information specific to a tax reporting unit (TRU) and hukou type. The calculation card at the TRU level also defines the policy for deferring social security deductions during probation periods.

**Note:** The values you define at this level apply only to employees associated with the TRU (as defined in the associations on each person's Deduction Information calculation card). These values override deduction information defined at the payroll statutory unit (PSU) level and any values predefined at the legislative level.

This task involves these subtasks:

- Creating the calculation card
- Defining public housing fund (PHF) information
- Defining social insurance information
- Defining the social security deduction deferment policy (optional)
- Defining benefits information, such as enterprise annuity (optional)

## Create the Calculation Card

1. Navigate to Setup and Maintenance and open the implementation project.
2. Search for the Define Legal Reporting Units for Human Capital Management task, and then expand the entry to display a list of related tasks.
3. Locate the Manage Legal Reporting Units Calculation Cards task.

If the entity you want to work with is displayed in the Selected Scope column, click the **Go to Task** icon for this task row and skip to step 13. Otherwise, continue with the next step.

4. In the Manage Legal Reporting Unit Calculation Cards task row, click the link in the **Selected Scope** column.
5. On the Select Scope window, select **Select and Add** in the Legal Entity field.
6. Click **Apply and Go to Task**.
7. On the Select and Add: Legal Entity window, search for the parent PSU and then select it in the Search Results.
8. Click **Save and Close**.
9. On the Select Scope window, select **Select and Add** in the **Legal Reporting Unit** field.

10. Click **Apply and Go to Task**.
11. On the Select and Add: Legal Entity window, search for the TRU for which you want to create a card and then select it in the Search Results.
12. Click **Save and Close**.  
  
The Tax Reporting Unit page is displayed. If a calculation card already exists for this entity, it's displayed in the Search Results.
13. Click **Create**.
14. Enter the effective as-of date, and select **Statutory Deductions** as the name of the card.
15. Click **Continue** to begin adding components to the card.

## Define Public Housing Fund Information

1. Select **Social Security** in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. Select **Public Housing Fund** as the Calculation Component.
4. Select a hukou type, and click **OK**.
5. On the Calculation Component Details tab, click **Create**.
6. Select **Contribution Information** as the value for Calculation Component Details, and click **OK**.
7. Select the rounding methods to use when calculating the employee and employer contribution amounts, if they differ from those defined for the PSU.
8. On the **Enterable Calculation Values on Calculation Cards** tab, click **Create**.
9. Select the name of the value you want to define, and then enter the overriding value.

**Note:** Only define values at this level if they're different from the values you defined on the PSU-level calculation card (or if you didn't define any values at that level). Define values based on your business requirements.

This list shows all the values you can define. Normally you would define either a contribution amount or a rate, but not both. If you define values for both, the application uses the amount and ignores the rate

- Employee Contribution Rate
  - Employer Contribution Rate
  - Employee Nontaxable Contribution Threshold Rate
  - Employer Nontaxable Contribution Threshold Rate
  - Fixed Employee Contribution Amount
  - Fixed Employee Nontaxable Contribution Threshold Amount
  - Fixed Employer Contribution Amount
  - Fixed Employer Nontaxable Contribution Threshold Amount
10. Click **OK**.
  11. Repeat steps 8-10 for each override you want to create for this component.
  12. Repeat steps 2-10 to create a PHF component for each hukou type.

## Define Social Insurance Information

You can add calculation components for these social insurance types:

- Basic Pension Insurance

- Basic Medical Insurance
- Supplementary Medical Insurance
- Unemployment Insurance
- Maternity Insurance
- Work-Related Injury Insurance

The steps for creating social insurance components, adding component details, and defining overrides are similar to those required for public housing fund management, with two exceptions:

- For maternity insurance and work-related injury insurance, you only define the employer contribution; there is no corresponding employee contribution.
- For supplementary medical insurance, maternity insurance, and work-related injury insurance, taxable contribution calculation isn't required.

To define social insurance information at this level:

1. Select **Social Security** in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. Select a social insurance component and hukou type.
4. Define component details if they differ from the values defined for the PSU.
5. Define overrides as required using the steps provided earlier for public housing fund information.
6. Repeat this process as needed to create components for each social insurance type and hukou type.

## Define the Social Security Deduction Deferral Policy

The Common Information component defines how social security contributions should be handled during the probation period for a new hire. Defining this information is optional. By default, social security deductions aren't deferred during a probation period.

1. Select **Social Security** in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. Select **Common Information** as the Calculation Component, and click **OK**.
4. In the Calculation Component Details section, complete the Social Security Contribution Deferment Type field as follows:
  - Select **Not applicable** if social security deductions should not be deferred during probation periods.
  - Select **Defer until probation period end date** to defer social security contributions during probation periods and deduct the full amount (current and deferred) in the pay period that includes the probation end date.
  - Select **Defer until next month of probation period end date** to defer social security deductions and deduct the full amount (current and deferred) in the pay period *following* the pay period that includes the probation end date.
5. Click **OK**.

## Define Benefits Information

1. Create Benefits calculation components, such as Enterprise Annuity, as appropriate for your organization's needs. The component details and override values you provide for an Enterprise Annuity are similar to those for Social Security components.
2. Click **Save and Close** to save the calculation card.

## How Personal Calculation Card Entries Fit Together

Personal payroll calculation cards capture information specific to a particular payroll relationship. Payroll runs use this information to calculate earnings and deductions.

Actions such as hiring a person or loading data may create some cards automatically. Otherwise, you can create the card manually. You can also add components to cards and enter calculation values, which may override default values. Additionally, you can associate the card with a tax reporting unit (TRU).

To view and manage calculation cards, use the Calculation Cards task from the Payroll section.

Understanding personal calculation cards include:

- Types of calculation cards
- Calculation card creation
- Calculation components and component groups
- Enterable calculation values
- TRU associations

### Card Types

The type of calculation cards you can create and the type of information captured on a card are given below.

- Absences
- Deduction Information
- Benefits and pensions
- Voluntary deductions
- Reporting Information
- Time cards
- Organization

Additional cards may be available to capture information for reporting purposes.

The following table lists the types of cards and a brief description of each one.

Card Name	What it Does
Absences	Identifies absence data and categories, such as: <ul style="list-style-type: none"> <li>• Vacation</li> <li>• Maternity</li> <li>• Sickness</li> <li>• Other</li> </ul> Also used to track accrual balances, qualifications, or no entitlement.
Deduction Information	Identifies:

Card Name	What it Does
	<ul style="list-style-type: none"> <li>• Taxes</li> <li>• Social securities</li> <li>• Benefits</li> <li>• Associations</li> </ul>
Benefits and Pensions	Identifies: <ul style="list-style-type: none"> <li>• Contribution amounts</li> <li>• Limits</li> <li>• Payees</li> <li>• Additional contributions</li> </ul>
Reporting Information	Captures Record of Employment information for an employee.
Time Cards	Depending on how they're configured, time cards capture: <ul style="list-style-type: none"> <li>• Hours and dates worked</li> <li>• Categories of time, such as regular time, overtime, absence, vacation, and holiday</li> </ul>
Organization	Organization configuration cards at the following levels: <ul style="list-style-type: none"> <li>• Legal Entity Calculation Card at the payroll statutory unit (PSU) level</li> <li>• Legal Reporting Unit Calculation Card at the TRU level</li> </ul>

## Card Creation

Some actions create or update a card automatically, as given below:

- When you record and approve an absence in the Manage Absence Record task for an employee, the task automatically creates an Absences card, unless one already exists.
- A Deduction Information card is created automatically during:
  - New hire
  - New payroll relationship assignment
  - Mass data upload through the HCM Data Loader

## Calculation Components and Component Groups

A calculation component can have one or more references that define its context, such as the territory and hukou type for tax and social security management at payroll statutory unit and tax reporting unit calculation card.

Click a row in the Calculation Components table to see component details. Use the Component Details section to enter additional values used to calculate the component.

## Enterable Calculation Values

When you select a calculation component, you may see the Enterable Calculation Values on the Calculation Card tab. Here you can enter specific rates or other values for the person, which may override default values held on a calculation



value definition. For example, if an employee qualifies for a fixed monthly tax reduction amount, you enter the amount as an enterable value on the employee's personal calculation card.

## Tax Reporting Unit Associations

Click the Associations node in the Calculation Card Overview pane to associate a tax reporting unit with the card. Associations determine:

- Which territory's rates and rules to be used in the calculation of the components
- How the earnings and statutory deductions are aggregated for statutory calculation and reporting

Rules about what you can enter here vary by country:

- For China, all components on a calculation card are associated with the same tax reporting unit

## Create a Deduction Information Card at the Payroll Relationship Level

This procedure describes how to use the Manage Calculation Cards task to create a Deduction Information calculation card if one wasn't created automatically when the employee was hired. It also shows how to create a tax reporting unit (TRU) association and the association details.

### Before You Start

Before you create the calculation card for an employee, ensure that you do these steps.

1. Define all legal entities and related information, including payroll statutory units (PSUs), legal employers, TRUs, and registration information.
2. Define element eligibility for the Aggregation Information element.
3. Complete the new hire process for the employee, and ensure that the employee has a valid payroll relationship with a Chinese PSU.

### Create the Calculation Card

1. From your Home page, navigate to **My Client Groups > Payroll > Person Information**.
2. On the Search Person page, search for the person and from the Actions menu, select **Calculation Cards**.
3. On the Calculation Cards page, click **Create** to open the Create Calculation Card page.
4. Select **Deduction Information** in the **Name** field, and click **Continue**. The Manage Calculation Card page appears, and the Calculation Card Overview panel shows the calculation groups available for this card.

### Define Association Information

1. Select **Associations** in the Calculation Card Overview panel.
2. Click **Create** in the Associations section.
3. In the **Tax Reporting Unit** field, select the TRU.
4. Leave the **Calculation Component** field blank to associate all components on the card with this TRU by default.
5. Click **Save**.

**Note:** You must save the association before you can create association details.

6. In the Associations section, select the association you just created and then click **Create** in the Association Details section.
7. Select the assignment number.
8. Select the Aggregation Information component.
9. Click **Save and Close**.
10. You can now set up individual income tax and social security deductions for this employee using this task or the Batch Loader.

## Create a Deduction Information Calculation Card Manually

This example demonstrates how you can create the Tax Credit Information Calculation Card calculation card at the payroll relationship level and add the individual income tax, public housing fund, and social insurance deductions.

### Before You Begin

Before you start creating the card, confirm the following:

1. Define all legal entities and related information, including payroll statutory units (PSUs), legal employers, TRUs, and registration information.
2. Define element eligibility for the Aggregation Information element.
3. The new hire process for the employee is completed and the employee has a valid payroll relationship with a Chinese payroll statutory unit. The employee has at least one valid assignment under the payroll relationship. The new hire process must have created a Deductions Information calculation card for the new hire automatically.
4. The employee is assigned to a payroll.

### Create the Calculation Card

1. From your Home page, navigate to **My Client Groups > Payroll**.
2. Under Person Information, click **Calculation Cards**.
3. Search for a person and then click the link for the person.
4. On the Calculation Cards page, click **Create** to open the Create Calculation Card window.
5. In the **Effective As-of Date** field, enter or select a date from which the calculation card takes effect.
6. In the **Name** field, select **Deduction Information**.
7. Click **Continue** to display the Calculation Cards: Deduction Information page.

In the Calculation Card Overview pane, you can view the calculation groups associated with this calculation card. In this example, you can see the Taxes and Social security component groups.

### How to Add Calculation Components for Individual Income Tax Deductions

1. Select *Taxes* from the Components Groups in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. On the Create Calculation Component page, From the *Calculation Component* list, select **Individual Income Tax**.
4. Click **OK**.
5. In the Individual Income Tax: Details section, on the Calculation Component Details tab, expand the Individual Income Tax Details node and do the following:
  - o From the **Tax Exemption Amount Category** list, select a value. For example, Mainland China resident with mainland China income.

- o From the **Entitled to Special Tax Reduction or Exemption** list, select **Yes** or **No**.
6. In the Individual Income Tax: Details section, on the *Enterable Calculation Values on Calculation Cards* tab, click **Create**. Select the name of the override you want to create and then enter the overriding value. This table lists the overrides allowed for individual income tax management at the payroll relationship level.

OVERRIDE NAME	VALUE TYPE	VALUE EXAMPLE
Fixed Special Tax Reduction Amount	Total amount	420.00 (for Shanghai)
Special Tax Reduction Rate	Rate	0.2

7. Click **Save**.

## How to Add Calculation Components for Public Housing Fund Deductions

1. Select *Social Security* from the Components Groups in the Calculation Card Overview section.
2. Click **Create** in the Calculation Components section.
3. On the Create calculation component page, from the *Calculation Component* list, select **Public Housing Fund**.
4. Click **OK**.
5. In the Public Housing Fund: Details section, on the *Calculation Component Details* tab, click **Public Housing Fund Details** and complete these fields:

Field	Value
Account Number	Enter the account number.
Account Status	Select a value. For example Open or Transfer in.
Status Change Reason	Select a value. For example, New enrollment or Re-enrollment.
Contribution Type	Select a value. For example, Farmer or City resident.
Employee Contribution Base Calculation Method	Select a value.
Employer Contribution Base Calculation Method	Select a value.
Force Contribution Base Recalculation	Select Yes or No.

Field	Value

**Note:** The Employee Contribution Base Calculation Method and Employer Contribution Base Calculation Method fields are optional. You need to provide values for these fields only if the calculation methods for this person differ from the default methods defined for the PSU on the PSU-level calculation card.

- On the *Enterable Calculation Values on Calculation Cards* tab, click **Create**. Select the name of the override you want to create and then enter the overriding value. This table lists the overrides allowed for public housing fund management at the payroll statutory unit level. Because these values vary by territory, no default values are provided for any of the items in this table. They are all set to zero at the legislative value.

OVERRIDE NAME	VALUE TYPE	VALUE EXAMPLE
Employee Contribution Rate	Rate	0.18
Employee Nontaxable Contribution Threshold Rate	Rate	0.12
Employer Contribution Rate	Rate	0.18
Employer Nontaxable Contribution Threshold Rate	Rate	0.12
Fixed Employee Contribution Amount	Total amount	-
Fixed Employee Contribution Base Amount	Total amount	-
Fixed Employee Nontaxable Contribution Threshold Amount	Total amount	-
Fixed Employer Contribution Amount	Total amount	-
Fixed Employer Contribution Base Amount	Total amount	-
Fixed Employer Nontaxable Contribution Threshold Amount	Total amount	-
Nontaxable Contribution Base Threshold Amount	Total amount	12303.00

7. Click **Save and Close**.

## How to Add Calculation Components for Social Insurance Deductions

Before you define the social insurance calculation components, consider the following points:

- You can add social insurance calculation components and component details to the statutory deductions card. You can add calculation components for these social insurance types to a legal entity statutory deductions card:
    - Basic Pension Insurance
    - Basic Medical Insurance
    - Supplementary Medical Insurance
    - Unemployment Insurance
    - Maternity Insurance
    - Work-Related Injury Insurance
  - For maternity insurance and work-related injury insurance, you define only the employer contribution; there is no corresponding employee contribution
  - For supplementary medical insurance, maternity insurance, and work-related injury insurance, taxable contribution calculation isn't required
1. Select *Social Security* from the Components Groups in the Calculation Card Overview section.
  2. Click **Create** in the Calculation Components section.
  3. On the Create Calculation Component page, from the *Calculation Component* list, select a social insurance type.
  4. Click **OK**.
  5. In the Details section of the selected social insurance type, on the *Calculation Component Details* tab, complete these fields:

Field	Value
Account Number	Enter the account number.
Account Status	Select a value. For example Open or Transfer in.
Status Change Reason	Select a value. For example, New enrollment or Re-enrollment.
Contribution Type	Select a value. For example, Farmer or City resident.
Employee Contribution Base Calculation Method	Select a value.
Employer Contribution Base Calculation Method	Select a value.
Force Contribution Base Recalculation	Select Yes or No.

Field	Value

- On the *Enterable Calculation Values on Calculation Cards* tab, click **Create**. Select the name of the override you want to create and then enter the overriding value.
- Click **Save and Close**.

## How to Create an Association

You must associate the calculation card with a tax reporting unit (TRU). You must also associate the card to each employment assignment or term. A person with multiple assignments can have one TRU for each assignment, or each TRU can have one assignment or term. You can't enter multiple TRU's to an assignment or term.

- In the Calculation Card Overview pane, click **Associations**.
- Click **Create** in the Associations section.
- In the Create Association window, select **InFusion 1**, the TRU responsible for reporting deductions for this employee.
- Click **Save** to save the association.

**Note:** You must save the association before you can create association details.

## How to Create Association Details

You must associate calculation components with employment assignments or terms.

- In the Association Details section, click **Create**.
- On the Create Association Details window, select **E300100008926055** in the Assignment Number field.
- Repeat steps 1 and 2 for each assignment.
- Click **Save and Close**.

## Edit the Deduction Information Calculation Card

This topic demonstrates how you can modify the Deduction Information calculation card that was automatically generated during a new hire process. For example, you can modify the employee card to reflect employee-specific values that are different from the default values.

### Before You Begin

Before you begin confirm the following:

- The new hire process for the employee is completed and a TRU was selected on the Hire an Employee: Employment Information page.
- The employee has a payroll relationship and is assigned to a payroll.
- A calculation card definition that includes the Taxes and Social Security tax calculation exists at the legislative level.

## How to Open the Calculation Card

1. From your Home page, navigate to **My Client Groups > Payroll**.
2. Under Person Information, click **Calculation Cards**.
3. Search for a person and then click the link for the person.
4. On the Calculation Cards page, click the **Deduction Information** calculation card that was automatically created for this payroll relationship.

In the Calculation Card Overview pane, you can view the calculation groups associated with this calculation card. In this example, you can see the Taxes and Social Security component groups.

## How to Edit the Calculation Components

Here's how you can modify a component's reference values:

1. In the Calculation Card Overview section, select either **Taxes** or **Social Security**.
2. Select the component in the Calculation Components section.
3. Select *Edit - Correct* or *Edit - Update*.
4. Complete the fields on the Correct Calculation Component or Update Calculation Component window, and click **OK**.
5. Click *Save*.

## How to Edit the Calculation Component Details

Here's how you can modify component details:

1. Select the component in the Calculation Components section.
2. Select **Edit > Correct** or **Edit > Update** in the Calculation Component Details section.
3. Enter your changes to the component details, and click **Save**.

## How to Create a Tax Reporting Unit Association

You must associate the card with a TRU, if none was specified during the new hire process.

1. In the Calculation Card Overview section, click *Associations*.
2. Click *Create* in the Associations section.
3. On the Create Association window, select a TRU in the Tax Reporting Unit field.
4. Click *Save*.

**Note:** You must save the association before you can create association details.

## How to Create Association Details

You must associate calculation components with employment assignments or terms.

1. In the Association Details section, click *Create*.
2. On the Create Association Details window, select *E300100008926055* in the Assignment Number field.
3. Click *Save and Close*.

## Edit the Deduction Information Calculation Card when a person is Terminated or Rehired

Here's how you maintain the payroll relationship level deduction card in open status, when the employee's payroll relationship is end-dated after termination.

1. From the home page, navigation to **My Client Groups > Payroll > Person Information > Calculation Cards**.
2. All the components on the card are kept open, except for the Aggregation Information component.  
An error message is triggered when you try to end-date a component except for the Aggregation Information.
3. Update account details, instead of end-dating a social security component to stop contribution to the item for an employee.  
You can update account status in bulk via HSDL.
4. On employee termination and payroll relationship end-dated on final close date: Both the Aggregation Information component and Aggregation Information element entry are end-dated on the same date.
5. When employee is rehired: Remove the end data for both Aggregation Information component and the Aggregation Information element entry.

## Calculation Value Definitions

### Overview

A calculation value definition specifies how a value is provided or calculated. The value isn't necessarily monetary. 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.

There are predefined calculation value definitions used to calculate statutory and involuntary deductions. You can't edit predefined calculation value definitions.

You can create and 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.

Examples of value definition groups predefined for China include:

- Public Housing Fund
- Basic Pension Insurance
- Basic Medical Insurance
- Supplementary Medical Insurance



- Maternity Insurance
- Unemployment Insurance
- Work-Related Injury Insurance
- Enterprise Annuity
- Individual Income Tax
- Minimum Wage
- Absences
- Time
- Supplementary Public Housing Fund

## Examples of Calculation Value Definitions

Use these deduction examples to understand calculation value definition ranges for China. The calculation value definition range depends on where the employee falls in an earnings range.

### Value Definition Ranges

This table shows the sample ranges for the **Individual Income Tax Table in Annual Amounts** calculation value definition.

From Value	To Value	Tax Rate	Quick Deduction Amount
0	36000	0.03	0
36000.01	144000	0.1	2520
144000.01	300000	0.2	16920
300000.01	420000	0.25	31920
420000.01	660000	0.3	52920
660000.01	960000	0.35	85920
960000.01	9999999999	0.45	181920

## Enterable Values on Calculation Cards

Some values entered on a calculation card override values defined in a calculation value definition.

For example, the application sets the Public Housing Fund City Average Monthly Salary in Previous Year as 0 for the legislative data group (LDG), and allows the amount to be overridden at the PSU, TRU, or the payroll relationship level.

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	Offering/Functional 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	Offering: Workforce Deployment  Functional Area: Define Common Applications Configuration for Human Capital Management  Task: Manage Legal Reporting Unit Calculation Cards
3	Values for a payroll statutory unit for certain deductions, which vary by country or territory	Manage Legal Entity Calculation Cards	Offering: Workforce Deployment  Functional Area: Define Common Applications Configuration for Human Capital Management  Task: Manage Legal Reporting Unit Calculation Cards

## Allow 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 user defined calculation value definitions, you can specify an enterable calculation value in this section. You provide:
  - The display name to appear on the calculation card.
  - The value type, such as total amount or additional amount.
- Enterable values for statutory 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.

## Enterable Values on the Personal Calculation Card

Use the predefined Deduction Information personal calculation card to define components to calculate, process, and report taxes, and social securities for China.

- Component Groups and Calculation Components
- Associations
- Calculation Card Overrides

Some values entered on a calculation card override values defined in a calculation value definition.

Chinese statutory calculations are broadly categorized into these two component groups:

- Taxes
- Social Security

Component groups appear in the Calculation Card Overview section of the Calculation Cards page. Each component group supports a set of calculation components that capture data used to process the calculation.

### Taxes Component Group

The Taxes component group has these calculation components:

- Individual Income Tax: Individual income tax is a mandatory deduction for all employees in most cases. Add this component to the personal deduction card of each employee requiring the tax calculation, and select the employee's tax exemption amount category. The application determines the tax exemption amount the person is entitled to based on the category you select.
- Aggregation Information: This component is created automatically when a personal statutory deduction card is created, but you must create an association on the card linking the component to valid employment terms. This component has no component details and allows no overrides. It applies only to personal deduction cards.

### Social Security Component Group

The Social security component group has these calculation components:

- Basic Medical Insurance
- Basic Pension Insurance
- Maternity Insurance
- Public Housing Fund

- Social Security Card Number
- Supplementary Medical Insurance
- Supplementary Public Housing Fund
- Unemployment Insurance
- Work-related Injury Insurance

## Associations

A calculation card must be associated with a tax reporting unit (TRU). The association happens automatically if you specify the TRU in the new hire process. Otherwise, you need to manually create the association. This association enables the payroll process to apply rules and rates defined for the TRU when calculating deductions. It also controls the aggregation of deductions for tax reporting.

Association details link the Aggregation Information component with an assignment.

## Change TRU for an Assignment

Use the Calculation Cards task to change the TRU for a preexisting assignment on the tax card. To change the TRU:

1. In the Payroll section of My Client Groups, click the **Calculation Cards** task, which opens the Calculation Cards page.
2. Search for and select the person record.
3. Click **Deduction Information**.
4. Click **Associations** under the Component Groups tree.
5. Check the Effective As-of date and change it, if required.
6. Click **Edit** and select **Update**.
7. Update the TRU name.
8. Click **Save and Close**.

## Calculation Card Overrides

Calculation cards at different levels capture different information. The information defined at a lower-level overrides value defined at higher levels. An entry defined on the personal calculation card overrides the values defined at the TRU or payroll statutory unit level.

## Examples of Chinese Statutory Calculation Card Overrides

Let's look at a few common scenarios in which you may have to create an override on a Chinese statutory calculation card.

### Employee Qualifies for Special Tax Reduction Rate

Let's look at a scenario in which an employee qualifies for a special 20 percent reduced tax rate. To define this rate, add the Individual Income Tax calculation component to the employee's personal calculation card (if it doesn't already exist). Enter these component details:

Field	Value
Entitled to Tax Reduction or Exemption	Yes

Field	Value
Tax Exemption Amount Category	Mainland China resident with mainland China income

Use these values to create an override for this component:

Field	Value
Override Name	Special Tax Reduction Rate
Rate	0.2

### Employee Makes Fixed Amount Contribution to Public Housing Fund

Let's look at a scenario in which an employee wants to make a fixed contribution amount to the public housing fund. To define this override, first create a new association on the employee's personal calculation card for the PHF calculation component, and select the tax reporting office to which the employee will contribute this calculation. Next, use these values to create an override for this component:

Field	Value
Override Name	Fixed Employee Contribution Amount
Amount	5000

### Contribution Base Calculation Method Varies for Some Employees

The default method for calculating the contribution base for Basic Medical Insurance is Average Monthly Salary in Previous Year. However, for certain employees, you may have to use a fixed amount instead. In such situations, update the Basic Medical Insurance deduction component details on those employees' personal calculation card:

Field	Value
Employee Contribution Base Calculation Method	Fixed Amount
Force Contribution Base Recalculation	Yes

Use these values to create an override for this calculation component:

Field	Value
Override Name	Fixed Employee Contribution Base Amount
Amount	3000

## Tax Exemption Amount for Organization Is Different than Default Exemption Amount Defined for Legislation

A default tax exemption amount of 2000 is defined at the legislative level. However, the territory in which a particular payroll statutory unit (PSU) conducts business uses a tax exemption amount of 2500.

On the PSU-level calculation card (Manage Legal Entity calculation Records task in Setup and Maintenance), create an Individual Income Tax calculation component and select the territory that uses the special exemption amount. Then, use these values to create an override for this calculation component:

Field	Value
Override Name	Tax Exemption Amount
Amount	2500

## Previous Year's Average Salary Figures Must be Updated

The Employee Contribution Base Calculation Method is used when calculating the Public Housing Fund calculation in your area is set to 60 percent of City Average Monthly Salary in Previous Year. Likewise, the Upper Limit Calculation Method is set to 3 Times the Provincial Average Monthly Salary in Previous Year. These calculation methods require current values for City Average Monthly Salary in Previous Year and Provincial Average Monthly Salary in Previous Year. Once a year, as the data becomes available, you must update this information.

On the PSU-level calculation card (Manage Legal Entity calculation Records task in Setup and Maintenance), create an override for the Public Housing Fund social security using the following values:

Field	Value
Override Name	City Average Monthly Salary in Previous Year
Amount	3880

Field	Value
Override Name	Provincial Average Monthly Salary in Previous Year
Amount	3550

Field	Value

## Calculation Types in Calculation Value Definitions

The calculation type determines which values you must provide in the Calculation Values section of the Create or Edit Calculation Value Definition page.

For example, if you select Flat Amount as the calculation type, then you must provide a flat amount value. You specify a default calculation type for the definition, which you can override on individual rows in the Calculation Values section.

### Predefined Calculation Types

Predefined calculation types are available for each type of calculation. These work in conjunction with the predefined payroll formulas that contain specific rules for each calculation type, such as the CALL\_CALC\_VALUE formula.

This table describes the predefined calculation types, and indicates whether a calculation type is available for selection when you create a new value definition.

Calculation Type	Description	UOM	Available in Create Flow
Flat Amount	Uses the specified flat amount as the total amount.	Money	Yes
Flat Amount Times Multiplier	Multiplies a flat amount by a multiplier value. If you select this option, you must specify a database item that provides the value of the multiplier.	Money	Yes
Rate Definition	Retrieves a value by calling a rate definition.	Money	Yes
Number	Uses the number entered on the value definition as the calculated value.	Number	Yes
Flat Rate	Applies the specified percentage rate to the balance.  For example, to apply a rate of 10 percent, enter 10.	Number	Yes
Incremental Rate	Applies a different percentage rate to portions of the balance.  For example, assuming that the balance is 80,000, you could apply a 1 percent rate for the first 20,000 of the balance. A 3 percent rate for the next 30,000, and a 5 percent	Number	Yes

Calculation Type	Description	UOM	Available in Create Flow
	rate to the next 30,000. This is also referred to as a blended rate.		
Flat Rate by Derived Base	Applies the percentage rate to a value. This value type derives the value from another value definition.	Number	Yes
Identifier	A new calculation type is required to support identifiers. For example, the value definition could capture a job ID and the value set feature would enable the user to display the name of the job on the page.	Number	Yes
Text	Uses the specified character string as the calculated value.	Text	Yes
Date	Uses the date entered as the calculated value.	Text (YY-MM-DATE, HOURS MINS SECS)	Yes
Conditional Flat Amount	<p>Uses the specified flat amount if the condition defined in the Calculation section is met.</p> <p>For example, if a person's filing status is married or head of household, that person qualifies for an exemption. In such a scenario, you specify a flat amount value in the value definition and the condition database item returns the person's filing status.</p> <p>This calculation type supports predefined calculations, such as tax and social insurance.</p>	Money	No
Flat Calculation Total	Supports retrieving value definitions for different range value criteria, including predefined calculations, such as tax and social insurance.	Money or Number	No
Incremental Calculation (Graded)	Supports retrieving value definitions for different range value criteria, including predefined calculations, such as tax and social insurance.	Money or Number	No
Standard Formula 1	<p>Calculates the total amount based on the following formula:</p> $y = Ax - Bz$	Money or Number	No



Calculation Type	Description	UOM	Available in Create Flow
	<p>Where:</p> <ul style="list-style-type: none"> <li>• <b>y</b> is the deducted amount.</li> <li>• <b>x</b> is the calculated amount.</li> <li>• <b>A</b> and <b>B</b> are specified values.</li> <li>• <b>z</b> is a factor from a predefined formula. The value defaults to 1.</li> </ul>		
Standard Formula 2	<p>Calculates the value based on the following formula:</p> $y = (x - A) \times B + Cz$ <p>Where:</p> <ul style="list-style-type: none"> <li>• <b>y</b> is the deducted amount.</li> <li>• <b>x</b> is the calculated amount.</li> <li>• <b>A, B,</b> and <b>C</b> are specified values.</li> <li>• <b>z</b> is a factor from a predefined formula. The value defaults to 1.</li> </ul>	Money or Number	No

## Specify View Objects

A view object is a query result set. You can specify a view object to define the valid values that are available to the selected calculation type.

### Note:

- The view objects you can specify vary depending on the calculation type. For example, if the calculation type is **Conditional Flat Amount**, then specify view objects for the condition and flat amount values.
- When you specify a view object, include the fully qualified path name, such as:  
`oracle.apps.hcm.locUS.payrollSetup.details.publicView.UsStatePVO`

### Related Topics

- [How Entries of Personal Calculation Cards Fit Together](#)
- [Calculation Value Definitions Examples](#)
- [Calculation Value Definitions](#)

# Rate Definitions

## Overview of Rate Definitions

Use rate definitions to create rates such as salary rates, absence rates, time card rates, and other types of payroll rates.

Further, you can use a rate definition for different types of rate calculations. For example, use a salary rate definition to display an employee's salary on the salary page. You can also use it to display the employee's salary rate on the time card and to pay the employee's salary in Cloud Payroll.

Here are some rate types that you can create:

- Compensation rates, such as a base salary or car allowance rate.
- Rates based on a set of criteria and conditions. For example, a union rate that's based on the job and location of an employee.
- Rates with multiple rate contributors, such as an overall salary rate, which is the sum of multiple salary components.
- Rates derived on the grade of an employee, such as a base salary rate and payroll balance rates, such as pension reporting rate.
- Rates calculated based on other rates. For example, a shift allowance rate that's calculated based on a percentage of the employee's salary rate.

You can define minimum and maximum validation rules for your rate definition. For example, define a minimum rate rule to ensure that an employee isn't paid less than the minimum hourly rate for their job.

When you create a rate definition, you can define a frequency for the rate returned by the calculation, such as 50,000 annually, or 7.25 hourly. Alternatively, you can define a rate that's calculated for a unit of work, such as a shift rate, or a mileage rate. You can control if the application calculates the rate values live or retrieves it based on the results of the Generate HCM Rates process. For example, it's a common practice for salary rates to be calculated live when you enter the salary page for an employee.

As a cloud payroll user, you can calculate most rate calculations live in the payroll run. However, you'll need to perform some complex rate calculations using the Generate HCM Rates process. In this scenario, Cloud Payroll retrieves the stored rate value directly from the rates reporting table for an employee. You can use the rates generated by the Generate HCM rates process for generating reports, such as pension reports.

Use the Rate Definitions task to define and manage rate definitions.

## Categories

To create a new rate, select a category from this table.

Category	What it Does
Derived Rate	Retrieves values from one or more payroll balances or other rate definitions, including rates that retrieve element entry values. Use this option to create a rate that retrieves a value from one or more rate contributors.

Category	What it Does
Element	<p>Retrieves rate information from an element input value. When using salary rates, use this type of rate definition to create and update entries, such as create or update a salary element entry.</p> <p>Select a storage type of Amount or Factor and then select the name of a corresponding element.</p> <p>You can select one of these storage types:</p> <ul style="list-style-type: none"> <li>• Amount: Retrieves a value from or posts to the element input value with a special purpose of Primary Input Value. For example, 'Amount' is the primary input value for elements created with the flat amount calculation rule, such as salary. If you associate a flat amount salary element with a rate, the application retrieves or posts to the salary amount for an employee.</li> <li>• Factor: Retrieves a value from or posts to the element input value with a special purpose of Factor. The 'Factor' is the primary input value for elements created with the Factor calculation rule.</li> </ul> <p>Use this rate definition to apply the factor held on an element entry to a payroll balance. You can also use it to apply it to another rate definition including base rates or an overall salary rate.</p> <p>For example, the application calculates your company's car allowance rate based on a factor of salary. The application captures the factor value, such as 0.05 at the employee level on their car allowance element entry. When creating the car allowance rate definition, select your car allowance element to enable the rate to retrieve the factor value for an employee.</p> <p>In the rate contributor region, select your salary rate definition. This selection ensures that the application calculates the car allowance rate based on a factor value of the employee's salary rate.</p> <p><b>Note:</b> The element rate doesn't support the input value information that's held on Hours x Rate elements. It's a common practice for the payment rate for this type of element to be based on a recurring flat amount element, such as salary.</p> <p><b>Note:</b> Salary rates supports Factor, but the payroll run doesn't. Use the <b>Generate HCM Rates</b> process to calculate this type of rate. Also, you can use the process to retrieve the stored value in the payroll run using the predefined <code>CALL_CALC_VALUE</code> formula.</p>
Value by Criteria	<p>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.</p> <p>For example, you can define a value-by-criteria to capture car allowance and housing allowance values based on an employee's job. Define a rate definition to retrieve car allowance rates and another rate definition to retrieve housing allowance rates. Both rate definitions refer to the same value-by-criteria and use the criteria of job to retrieve the appropriate rate values for an employee.</p>
Grade Rate	<p>Retrieves values based on an employee's grade details.</p>
Formula	<p>Retrieves values from a rate definition formula. The Generate HCM Rates process supports the calculation of most formula-based rates. However, rates that include complex payroll formula contexts or use balances calculated within the payroll run, are calculated by the payroll run.</p> <p>Note: Formula rates are supported only in Global Payroll.</p>

*Related Topics*

- [Options to Configure Rate Definitions](#)
- [Rate Contributors for Derived Rates](#)
- [Configure Elements Used by Rate Definitions](#)
- [Overview of Values Defined by Criteria](#)
- [Calculate Values Defined by Criteria](#)

## Options to Configure Rate Definitions

To configure rate definitions to get your desired rates, you should know how to use the various rate definition options. For rates based on a single element entry value, you can also apply override and defaulting rules.

**Note:** Use the **HCM Generate Rates** process to calculate factor based element rates.

This table describes the fields that you can configure for the Derived Rate, Element, and Value by Criteria category types.

Field	Category	Description
Storage Type	Element	<p>If you select the Element category to define a rate, you must select a storage type of <b>Amount</b> or <b>Percentage</b>. For example, you can configure a rate definition using the Salary element. If the salary is held as a monetary value, select <b>Amount</b>. If the salary is a factor of another value, such as a balance, select <b>Percentage</b>.</p> <p><b>Note:</b> This field is hidden for all rate definition categories other than Element.</p>
Element Name	Element Derived Rate	<p>For the Element category, the field is enabled only when you select the storage type.</p> <p>If you select the Element category to define a rate, you must select an element name. This is required if you're configuring a primary rate. This is a rate that retrieves a value from a single element, such as salary.</p> <p>For the Derived Rate category, the field is enabled when you access the page.</p>
Employment Level	Derived Rate Value by Criteria	<p>Select either <b>Payroll Relationship, Term, or Assignment</b>. 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.</p>

Field	Category	Description
		<p>If the employee has multiple assignments, the rates process uses the assignment ID to identify the correct assignment record for the employee.</p> <p>Sometimes the contributor value is held at a different level to the employment level defined on the rate. In such cases, the rate process uses the employment ID to locate the correct record.</p>
Status	Element Derived Rate Value by Criteria	Set the status of a rate to active or inactive. You can't assign an inactive rate to an employee. Employees that are allocated a rate while it was active aren't impacted by a change in status to inactive.
Base Rate	Element	<p>Select this option if the rate represents a base rate that another rate uses in its calculation. For example, you might have day shift employees and night shift employees, with different base pay rates.</p> <p>If each set of employees receives an allowance that's a percentage of the base rate, define one allowance rate. And that rate is calculated based on the two rates that have the <b>Base Rate</b> option selected.</p>
Overall Salary	Element Derived Rate	If you're defining rates for use on the Salary page, use the derived rate category and define an Overall Salary. To do this, you must associate a salary element to the rate. Define an Overall Salary Information element for this purpose.
Reporting Required	Element Derived Rate Value by Criteria	<p>Select this option to indicate if the calculated rate value should be stored on the rate table for reporting purposes.</p> <p>If you're defining rates for use on the Salary page, you must select this option.</p> <p>Rate definitions with this option selected are included when the Generate HCM Rates batch process is run. Use this feature to report on primary rates and not derived rates. HCM extracts use this report to send data to third parties.</p>
Value by Criteria Name	Value by Criteria	If you select the Value by Criteria category to define a rate, you must select a Value by Criteria name. A value by criteria definition specifies one or more evaluation conditions that determine a particular value or rate.

## Returned Rate Details

You can specify the periodicity of the returned rate, factor rules, currency, decimal display, rounding rules, and minimum and maximum rules. If the process returns a rate that's outside the minimum and maximum range, you can do one of these actions.

- Set up an action that enforces the rule, displays a warning
- Forces the user to fix the error

Select the **Return FTE Rate** check box to instruct the rate definition process to return a part-time value by applying an employee's FTE to the rate value.

## Periodicities

You must specify a periodicity, such as hourly or weekly, for the returned rate and each rate contributor. However, when you use the rate in a formula, you can override the default periodicity.

The rate calculation converts each contributor to the periodicity specified on the rate contributor. It then adds or subtracts the rate contributors, even if the periodicities are different. In most cases, they will be the same. Once the rate contributors are summed up, the rate calculation then converts them into the return periodicity and currency.

For example, for a rate with a periodicity of weekly using the Standard Rate Annualized conversion formula, the rate calculation does these actions.

1. Calculates an annual figure from the value and periodicity of each contributing earning and deduction.
2. Converts the annual figure into a weekly value.

By default, rates are converted using these predefined rate conversion formulas.

- Standard Rate Annualized
- Standard Rate Daily
- Standard Working Hours Rate Annualized
- Assignment Working Hours Rate Annualized
- Periodic Work Schedule Rate Annualized

If the values in the predefined conversion rules don't meet your requirements, you can define your own.

## Factor Rules

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

- Select Value as the factor rule.
- In the Factor field, enter the number by which you want to multiply the rate.
- Add the contributor.

You can apply a factor rule to the rate definition, rate contributors, or both. For example, you can define rate contributors to calculate hourly values based on salary and bonus. You can then apply a factor of 1.0 or 100 percent to the salary balance contributor and a factor of 0.5 or 50 percent to the bonus balance contributor. The factor rule is applied to the rate before the periodicity conversion is applied.

## Minimum and Maximum Values

You can define minimum and maximum values for the returned rate, and for individual rate contributors.

Use the **Limit Violation Action** field to display an error, warning, or enforce the application to use minimum or maximum value that you enter. For example, you can enter 500 as the minimum value and then select **Enforce Rules**. If the returned value comes back as 400, the application uses 500 as the value.

This table explains the options for the minimum and maximum rate values.

Value	Comments
Null	No minimum or maximum value
A specified value	Example: 2000
Based on another rate	Uses the calculated value of the rate definition that you select.  Be careful that you don't create a loop. For example, Rate A has minimum value that's based on Rate B, which has a minimum value based on Rate A. This situation would result in a runtime error.
Value by Criteria	Minimum or maximum value based on a value by criteria definition.

## Override and Defaulting Rules

You can set override and default rules only if you select Element as the category when you define rate definitions. Set up override rules for the element associated with your rate definition. If you select the **Override Allowed** check box, you can enter rate values on the Salary page.

If an element input validation formula has been defined for the rate contributor input value, you can view it in the Override and Defaulting Rules section.

**Note:** You can't define override and defaulting rules if you select the Values by Criteria category to define a rate. But you can select a formula to validate any rate that's returned and also use formulas to create default values.

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

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

In addition, you can use a value by criteria definition as the default type. Here, the process uses the value for the first record created and carries that value forward in subsequent records, unless it's manually overridden. The rate engine reevaluates the rate that the value by criteria method creates for each subsequent record. So, this rate could change. For example you could use a value by criteria definition to enable a default value of 10 percent for bonuses that are targeted to all eligible employees.

## Contributor Rules

You can specify the periodicity for the contributor total. To process contributor totals as full-time equivalency amounts, select **Yes** in the **Process Contributor Total as FTE Amount** field. The final rate value is converted from this status to the Return Rate FTE status.

## Information

In this section, enter text that explains the purpose of the rate, how the rate is calculated, or provides further details for the rate. This section isn't available for rate definitions using the Value by Criteria categories.

### Related Topics

- [Rate Contributors for Derived Rates](#)
- [Configure Elements Used by Rate Definitions](#)
- [Configure Periodicity Conversion Rules](#)
- [Element Input Validation Formula Type](#)

## Rate Contributors for Derived Rates

You can add four different types of rate contributors to your rate definitions. These rate contributors include, Balance, Base Rate, Overall Salary, and Rate Definitions.

You can add rate contributors when you define a rate using the Derived Rate category. You can also manually add rate contributors for the Element category when the storage type is Factor.

For example, if you define a bonus rate which is 0.1 (10 percent) of average earnings, then you do these steps.

- Enter 0.1 as the factor on the element.
- Define a rate contributor based on your average earnings balance.

## Rate Contributor Types

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

Type	What it Contains	Additional Fields
Balance	Value calculated by these payroll processes. <ul style="list-style-type: none"> <li>• An employee's average salary rate over their last three months of salary payments</li> <li>• Taxable earnings for the last tax year</li> <li>• Commissions paid in the last quarter</li> </ul>	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	Employment Level



Type	What it Contains	Additional Fields
	<p><b>Note:</b> Each overall salary element must be associated with only one overall salary rate. In addition, if the rate definition is an overall salary rate, you can't select Overall Salary as the Contributor Type.</p>	
Rate Definition	<p>Other rate definitions that contribute to the rate definition you're creating.</p> <p>For example you can add regular salary, car allowance, and bonus pay rate contributors together to create an overall salary definition.</p>	Rate Name

## Reference Dates

You can select a reference date, which is the date the application uses to retrieve rate contributor information for the rate calculation. The reference date specifies the context for the balance dimension.

For example, to retrieve a rate as of the actual start of an absence, select Absence Start Date. To retrieve a rate as of a specific time period, select a specific time period.

The Reference Date field lists only these types of time definitions:

- Time Span - a period of time, such as three months
- Retrieval Date - a type of time definition that's based on a database item

Selecting a value for the Reference Date field is optional.

**Note:** If you don't select a reference date, the application uses the effective as-of date that's used by the rate engine to calculate the rate.

## Single or Multiple Rate Contributors

If the rate definition is based on multiple values, you may need to create multiple rate contributors, as explained in this table.

Rate	Number of Rate Contributors
A single earning or deduction, such as salary	One
A combination of earnings, such as the sum of salary and car allowance payments	Multiple, if salary and car allowance are stored as separate rate definitions

**Note:** All balances and element entries that contribute to a rate must use the same currency.

Example: Using multiple rate contributors, an hourly holiday pay rate could be based on adding together these values, which are all paid at the end of the previous year.

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

#### Related Topics

- [Configure Elements Used by Rate Definitions](#)
- [Create Rate Definitions for Leave](#)
- [Create a Rate Definition for Basic Salary](#)
- [Create Rate Definitions for Overall Salary](#)

## Configure Elements Used by Rate Definitions

If you create rate definitions that reference element input values, you must configure them for the different calculation rules, such as Flat Amount and Factor.

This ensures that the values calculated by the rate are consistent with the values processed through payroll.

Elements use the predefined CALL\_CALC\_VALUES formula to calculate rate values in Calculate Payroll and Generate HCM Rates. Each element also requires the necessary payroll calculation information is defined such as values definitions, calculation steps and calculation factors.

When you create elements with a category such as Time Card or Absence, you can associate a default rate definition and the application generates all the rules and definitions required to calculate the rate.

When you create elements with a category of Standard, you need to update the element formula to use CALL\_CALC\_VALUE and create the payroll calculation information required to associate the rate definition to the element and calculate the rate.

Do these element configuration steps if you're using this element for a rate definition with the category element.

1. Create an element of type **Recurring** or **Assignment level**.
2. Don't select the **Multiple Entries Allowed** check box.
3. Select a special purpose for each element input value.
  - a. **Primary Input Value** for an Amount value.
  - b. **Factor** for a Factor value.
  - c. **Periodicity** for a Periodicity value.

**Note:** When creating elements for use in rate definitions, don't select Periodically. The Rate Definition process is unable to convert rates with a periodicity of periodically to different frequencies such as annual, weekly, and daily.

4. If the flat amount is a full-time equivalent value, you must select **Yes** in the **Default** field for the Full-Time Equivalent input value.
5. Create element eligibility.

## Configure Elements to Create Rate Definitions for Flat Amount Calculations

1. On the Home page, click the **Elements** quick action under the **My Client Groups** tab.
2. Click **Create**.
3. Enter these values.

Field	Value
Legislative Data Group	Select your legislative data group
Primary Classification	Standard Earnings
Category	Standard

4. Click **Continue**.
5. Enter a name, reporting name, and description.
6. Enter the effective date.
7. Answer the questions in the Duration and Standard Rules sections.
  - Note:** Multiple entries aren't allowed.
8. For the question, At which employment level should this element be attached?, select **Assignment Level**.
9. For the question, Does this element recur each payroll period, or does it require explicit entry? select **Recurring**.
10. Click **Next**.
11. In the Calculation Rules section, select **Flat Amount** and then click **Next**.
12. Click **Submit**.
13. On the Element Summary page under the Input Values folder, select **Full-Time Equivalent**.
14. Check that these values exist.

Field	Value or Check Box Status
Name	Full-Time Equivalent
Special Purpose	Full-Time Equivalent
Unit of Measure	Character
Displayed	Selected
Allow User Entry	Selected
Required	Deselected

Field	Value or Check Box Status
Create a Database Item	Selected
Default	No
Lookup Type	PAY_TMPLT_YES_NO

## Configure Elements to Create Rate Definitions for Factor Calculations

1. Repeat steps 1 through 9 in the first procedure.
2. In the Calculation Rules section, select **Factor** and then click **Next**.
3. Click **Submit**.
4. On the Element Summary page under the Input Values folder, select **Pay Value**.
5. Check that these values exist.

Field	Value or Check Box Status
Name	Pay Value
Special Purpose	Primary output value
Unit of Measure	Money
Displayed	Selected
Allow User Entry	Selected
Required	Deselected
Create a Database Item	Selected

6. On the Element Summary page under the Input Values folder, select **Factor**.
7. Check that the following fields and values exist.

Field	Value or Check Box Status
Name	Factor

Field	Value or Check Box Status
Special Purpose	Factor
Unit of Measure	Number
Displayed	Selected
Allow User Entry	Selected
Required	Deselected
Create a Database Item	Selected

## Test Your Element Configuration

You're almost done. Now, to test your element configuration, follow these steps.

**Note:** These procedures are for payroll users only.

Step	Page	Do This Action
1	My Client Groups	Find a payroll and an employee that you can use for testing purposes.
2	Elements	For the Flat Amount element, use the Pay Value balance feed to enter an Eligible Compensation balance for the Percentage element.
3	Element Entries	Add the Flat Amount and Percentage elements to the employee as element entries and enter input values.
4	Submit a Process or Report	Enter a suitable period for the payroll you selected in step 1.
5	Submit a Process or Report	Run the payroll.
6	View Payroll Process Results	Check if the payroll results are correct.

*Related Topics*

- [Overview of Rate Definitions](#)
- [Options to Configure Rate Definitions](#)
- [Rate Contributors for Derived Rates](#)
- [Calculate Standard Earnings Rate Using Values Defined by Criteria](#)
- [Payroll Calculation Information](#)
- [Overview of Payroll Calculation Information Formulas](#)

## Create Rate Definitions for Leave

In this example, let's calculate an employee's absence rate as of a particular date.

The rate includes a combination of average salary and car allowance. The employee has an annual year-to-date salary of 26,000. The employee also receives an annual car allowance payment of 2,000. The absence rate is 26,000 + 2,000 = 28,000. To provide a daily absence rate, you convert this rate into a daily rate.

This table summarizes the key information you use in the example.

What You Need To Consider	For This Example
What elements do I need to create before I define the rate?	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Absence - Use the Absence template to create the element. Enter Sickness as the classification and Absence as the category.</li> </ul>
Which balances hold the contributing values?	<ul style="list-style-type: none"> <li>• Salary is fed by the Salary element.</li> <li>• Car Allowance is fed by the Car Allowance element.</li> </ul>
Should I process contributor totals as full-time equivalent amounts?	Yes

## Create the Rate Definition

1. On the Home page, click the **Rate Definitions** quick action under the **My Client Groups** tab.
2. In the Search Results section, click **Create**.
3. Enter these values.

Field	What You Select
Category	Derived Rate
Effective Start Date	A date that's after the creation date of the objects that you're referencing

Field	What You Select
Legislative Data Group	Your legislative data group

- Click **OK**.
- In the Basic Details section, enter these values.

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

- In the Returned Rate Details section, **Periodicity** field, select **Daily**.
- Click the Contributor Rules tab and in the **Process Contributor Total as FTE Amount** select, **Yes**.

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

## Create Rate Contributors

- In the Rate Contributors section, click **Create**.
- In the **Contributor Type** field, select Balance and click OK.
- On the Create Rate Contributors page, enter these values.

Field	What You Enter
Add or Subtract	Add
Balance Name	Regular Salary
Balance Dimension	Assignment State Period to Date
Periodicity	Daily

- Click **Save and Continue**.
- In the Rate Contributor section, click **Create**.
- In the **Contributor Type** field, select **Balance** and click **OK**.

7. On the Create Rate Contributor page, enter these values.

Field	What You Enter
Add or Subtract	Add
Balance Name	Car Allowance
Balance Dimension	Assignment State Period to Date
Periodicity	Daily

8. Click **Save and Continue**.

9. Click **Submit**.

10. Assign an Absence element entry to the employee's assignment. You will then need to pass the absence entry to payroll using the absence interface.

#### Related Topics

- [Options to Configure Rate Definitions](#)
- [Rate Contributors for Derived Rates](#)
- [Generate HCM Rates](#)
- [Integrate Absence Management with Global Payroll](#)

## Create a Rate Definition for Basic Salary

In this example, you create a primary rate for a basic salary. After you run the rate engine, the Element Entries - Person Details page displays the values for eligible employees.

Before you begin, create the salary element at the assignment level. This element contains the salary information to be retrieved by the rate definition. You can create it using the flat amount or factor calculation rule.

1. On the Home page, click the **Rate Definitions** quick action under the **My Clients Groups** tab.
2. Click **Create**.
3. Enter these values.

Field	Value
Category	Element
Effective Start Date	Enter the current date.



Field	Value
Legislative Data Group	Enter your legislative data group.
Storage Type	Amount
Element Name	Regular Salary

- Click **OK**.
- In the Returned Rate Details section, complete the fields, as shown in this table.

Field	Value
Periodicity	Annually
Periodicity Conversion Formula	Standard Rate Annualized
Currency	LDG Currency

- Click **Submit**.

*Related Topics*

- [Overview of Rate Definitions](#)
- [Options to Configure Rate Definitions](#)
- [Configure Elements Used by Rate Definitions](#)
- [Generate HCM Rates](#)

## Create Rate Definitions for Overall Salary

In this example, you create a rate definition for overall salary that includes multiple rate contributors.

You do these actions.

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

This table summarizes the key decisions for your scenario.

Decisions to Consider	In This Example
What components of pay should be included in an employee's overall salary?	<ul style="list-style-type: none"> <li>Regular Salary</li> <li>Car Allowance</li> </ul>
Should I include all pay for car allowance in the overall salary?	No. Only include 50 percent of the amount paid for car allowance.

**Note:** The overall salary rate definition is a derived rate. To populate the Overall Salary check box, select a salary element in the Element name field. You then add the regular salary rate and car allowance rate contributors to the rate definition. The rate contributors that you add should be elements that you select from the Rate Name field on the Create Rate Contributor page.

## Create the Overall Salary Rate Definition

1. On the Home page, click the **Rate Definitions** quick action under the **My Clients Groups** tab.
2. Click **Create**.
3. Enter these values.

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

4. Click **OK**.
5. Enter these values.

Field	Value
Name	Overall Salary
Short Name	OVERALL_SAL
Element Name	Salary

- In the Returned Rate Details section, enter these values.

Field	Value
Periodicity	Weekly
Periodicity Conversion Formula	Standard Rate Annualized
Currency	LDG Currency

## Add the Regular Salary Rate Contributor

- In the Calculation section, click **Create**.
- In the Create Rate Contributor dialog box, **Contributor Type** field, select **Base Rate**.
- Enter these values.

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

- Click **Save and Continue**.

## Add the Car Allowance Rate Contributor

- In the Calculation section, click **Create**.
- In the Create Rate Contributor dialog box, **Contributor Type** field, select **Rate Definition** and click **OK**.
- Enter these values.

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

Field	Value
Factor Value	0.5

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

#### Related Topics

- [Overview of Rate Definitions](#)
- [Options to Configure Rate Definitions](#)
- [Rate Contributors for Derived Rates](#)
- [Generate HCM Rates](#)

## Generate HCM Rates

Submit the Generate HCM Rates process to calculate and store most types of rate definitions.

You can use the stored rate values for reporting payroll calculations. Run this batch process frequently to ensure the stored rate values are accurate. After you run this process, you can report on the rates using extracts. The user entity includes the database items that you can use in reports.

Use this flow to calculate and store most types of rate definitions in these scenarios.

- Rates that are associated with an element. For example, a salary rate definition is associated with a salary element. The process calculates a salary rate value for all workers with a salary element entry.
- Rates values for factor based element rates. Use the Generate HCM Rates process to calculate and store rate values for factor based element rates. You can retrieve this value in the payroll run.
- Rates that are associated with a value definition. Certain types of elements, such as time elements, use payroll calculation information rules and definitions. For example, a value definition is generated for an overtime element and this is associated with an overtime rate definition. The process calculates an overtime rate value for all workers with an overtime element entry.
- Rates that are based on a value-by-criteria defined for an assignment level criteria, such as a worker's grade or location.
- Rates that are based on a formula. However, such rates are calculated in a payroll run.
- Rates that are derived. For example, a rate that's derived based on the sum of car and housing allowance rates. In this case, the Generate HCM Rates process calculates the car allowance rate, the housing allowance rate, and the derived rate.

The stored rate values can be used for reporting or retrieving for payroll calculation purposes.

The application provides database items to support the rate batch process. These array database items return all rates associated with a payroll relationship record as of a specific date.

**Note:** The REPORTING\_RATE\_VALUES and REPORTING\_RATE\_PERIODICITIES database items return values based on the return rate details defined on the rate definition. The other periodicity database items, such as REPORTING\_RATE\_QUARTERLY, return a rate that's converted to the specified periodicity.

The Generate HCM Rates process supports the database items listed in this table.

Database Items	Description
REPORTING_RATE_NAMES	Name of the rate
REPORTING_RATE_VALUES	Value of the rate
REPORTING_RATE_PERIODICITIES	Periodicity of the rate
REPORTING_RATE_FTE_FLAGS	Full-time status of the rate
REPORTING_RATE_TERM_NUMBERS	Term number associated to the rate values
REPORTING_RATE_ASG_NUMBERS	Assignment number associated to the rate values
REPORTING_RATE_WEEKLY	Weekly rate value
REPORTING_RATE_MONTHLY	Monthly rate value
REPORTING_RATE_QUARTERLY	Quarterly rate value.
REPORTING_RATE_YEARLY	Annual rate value
REPORTING_RATE_PT_WEEKLY	Part-time weekly rate value
REPORTING_RATE_PT_MONTHLY	Part-time monthly rate value
REPORTING_RATE_PT_QUARTERLY	Part-time quarterly rate value
REPORTING_RATE_PT_YEARLY	Part-time annual rate value
REPORTING_RATE_FT_WEEKLY	Full-time weekly rate value
REPORTING_RATE_FT_MONTHLY	Full-time monthly rate value
REPORTING_RATE_FT_QUARTERLY	Full-time quarterly rate value
REPORTING_RATE_FT_YEARLY	Full-time annual rate value
PER_ASG_ESTABLISHMENT_ID	Establishment
PER_ASG_UNION_ID	Worker Union ID

Database Items	Description
PER_ASG_UNION_NAME	Worker Union Name
PER_ASG_JOB_MANAGER_LEVEL	Job Manager Level
PER_ASG_JOB_MANAGER_LEVEL_NAME	Job Manager Level Name
CMP_ASSIGNMENT_SALARY_BASIS_NAME	Salary Basis
PER_ASG_COLLECTIVE_AGREEMENT_ID	Collective Agreement
PER_ASG_BARGAINING_UNIT_CODE_NAME	Bargaining Unit Name
PER_ASG_BARGAINING_UNIT_CODE	Bargaining Unit Code
PER_ASG_ACTION_CODE	Action Code
PER_ASG_ACTION_REASON_CODE	Action Reason

Run the process if these conditions apply.

- Changes to the data referenced by the rate, which may include element entries, grade rates, and values defined by criteria. This process only reports the rate values. It doesn't update, delete, create, or have any impact on the underlying objects.
- Updates to rate definitions, such as when a new rate contributor is added or removed, or the rate is made inactive.
- Changes to employee records that impact their salary rates, such as changes to job or grade.

**Note:** You should run the process before any operation that depends on the values that are stored in the table. For example, if you have a rate based on seniority, values could change simply by the passage of time.

Let's look at the steps to run the process.

1. On the Home page, click the **Submit a Flow** quick action under the **My Clients** group.
2. Select your legislative data group.
3. Select the **Generate HCM Rates** flow pattern.
4. Enter these values for the **Process Mode** field:

**Note:** Review how your company uses the information generated by the Generate HCM Rates process and ensure that you're selecting the appropriate process mode parameter. The mode controls the frequency of rate calculations performed for each employee. The higher the frequency and number of rate calculations, the more accurate the rates, but this will be reflected in the overall performance of the Generate HCM Rates process. For more information, see "Control the Start and End Date of the Rate Calculation Period".

Mode	Description	Accuracy
Fast	<p>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.</p>	<p>This is the quickest but least accurate method to calculate rate values. It misses any changes if a rate value goes up and then back down to the same value that's calculated at the start and end dates.</p> <p>Select this option when you need detailed rate details for reporting purposes, but you don't require 100% accuracy. As the name suggests, this option will deliver the best performance for the Generate HCM Rates process.</p>
Full	<p>Performs separate rate calculations for every day within the rate calculation period.</p>	<p>Slowest but most accurate method.</p> <p>This mode ensures that rates are 100% accurate, but the volume of calculations per employee is very high. It's recommended you only select this option if you are using the rates stored by the Generate HCM Rates process for payroll calculation purposes.</p>
Periodic	<p>This method works the same as Fast, except that you can specify the number of days the process calculates rates between the start and end dates.</p>	<p>The accuracy of this method is half-way between the Fast and Full modes.</p> <p>Select this option when you need more precise rate details for reporting purposes. The number of days you enter will control the accuracy and performance of the Generate HCM Rates process.</p> <p>For example, when you select a 7-day period, the process will calculate the rate for an employee at the start and end of each 7-day period. If these rates are the same, the process will assume that the employee rate did not change, and will move on to the next 7-day period. If the rates are different, the process will calculate daily rates within the 7-day period to identify the date on which the rate changed.</p> <p>When you select a 14-day period, the process will work in the same manner, but the rates will be calculated at the start and end of each 14-day period. In this example, the 7-day option is more accurate,</p>

Mode	Description	Accuracy
		<p>but the Generate HCM Rates process will take longer because it's performing more calculations than the 14-day option.</p> <p>So, the lower the number you enter in the <b>Number of Days</b> parameter, the more accurate is the rate calculation of the Generate HCM Rates process.</p>

5. Click **Next**.
6. Select a flow submission.

**Note:** If you select **Using a schedule**, you must also select a frequency, such as once, weekly or daily.

**Note:** Use the **Payroll Relationship Group** parameter to reduce the number of employees included in the Generate HCM rates process. The Payroll Relationship Group parameter supports these relationship groups:

- a. Static and dynamic payroll relationship groups.
- b. Groups that include assignment or payroll relationship records.

7. Click **Next** and then **Submit**.

## Control the Start and End Date of the Rate Calculation Period

It's essential that you understand the HCM rates configuration for your organization in detail, so that you know what type of updates can result in a rate change, and who makes those changes. You can then define the start and end date of rate calculations to meet the business requirements of your company. The shorter the time span, the fewer rate calculations will be performed, and this is reflected in the performance of the Generate HCM Rates process.

Use the **Generate HCM Rates Start Date** parameter to set an earliest start date for rate calculations. For example, set this parameter to 2020-01-01 (YYYY-MM-DD), and the Generate HCM Rates process will only recalculate rates from this date.

**Note:** This parameter applies only when you're using the Full or Periodic modes.

The rates process automatically calculates the rate changes that occur up to 2 years in the future. If this rate information is not required, use the "Set the default end date limit for the rate" batch process to stop the calculation of future dated rates. This parameter captures the number of years in advance the rates are calculated. Set to 0 to ensure that the rates are only calculated up to the process end date you entered while submitting the Generate HCM Rates process.

### Related Topics

- [Overview of Rate Definitions](#)
- [Options to Configure Rate Definitions](#)
- [Rate Contributors for Derived Rates](#)
- [Create Rate Definitions for Overall Salary](#)



## Rates Defined by Formula

You can define rates based on Fast Formula.

Let's consider an example where an employee can work in a job at a higher grade than their normal job. The rate paid to that employee is based on different criteria and includes rules, such as the minimum rate must be at least 1.00. You can use a formula to step up the grade to the next level and to return the rate assigned to that higher grade.

On the Rate Definition page, **Calculation Formula** field, select the **HCM Rates Calculate Value** formula type. The formula type supports contexts, such as assignment, payroll relationship, and job. You can select and create the correct formula for rate definitions from all standard database items.

### Write a Formula

You can write your own formula when the formula type is **HCM Rates Calculate Value**.

The formula has certain inputs and return value, but the rate always returns these values:

- Monetary Amount
- Currency
- Periodicity

Note: Formula rates are supported only in Global Payroll.

### Examples

In this formula, the return values set to 65.23, but you can add the required logic to calculate the rate return values.

```
Default for value_name is EMPTY_TEXT_NUMBER
default for value_value is EMPTY_TEXT_NUMBER
default for value_datatype is EMPTY_TEXT_NUMBER
```

inputs are

```
value_name (text_number),
value_value (text_number),
value_datatype (text_number),
```

```
AMOUNT = 65.23
CURRENCY = 'USD'
PERIODICITY = 'YEAR'
return AMOUNT, CURRENCY, PERIODICITY
```

Let's consider another example where the formula returns a rate based on a job. You can use this formula to calculate a rate value when an employee works in a job at a higher grade than at their normal job.

```
default for value_name is EMPTY_TEXT_NUMBER
default for value_value is EMPTY_TEXT_NUMBER
default for value_datatype is EMPTY_TEXT_NUMBER

default for PER_ASG_ELIG_JOBS_CURRENCY is 'UNKNOW'
default for PER_ASG_ELIG_JOBS_END_DATE is '0001/01/01 00:00:00' (date)
default for PER_ASG_ELIG_JOBS_FREQUECY is 'YEARLY'
default for PER_ASG_ELIG_JOBS_FROM_DATE is '0001/01/01 00:00:00' (date)
default for PER_ASG_ELIG_JOBS_JOB_CODE is 'UNKNOW'
default for PER_ASG_ELIG_JOBS_JOB_ID is 0
```

```
default for PER_ASG_ELIG_JOBS_JOB_NAME is 'UNKNOWN'
default for PER_ASG_ELIG_JOBS_MANUAL_RATE is 0
default for PER_ASG_JOB_ID is 0

inputs are
value_name (text_number),
value_value (text_number),
value_datatype (text_number)

AMOUNT = 0
PERIODICITY = 'YEARLY'
CURRENCY = 'USD'

l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - count is : ' || to_char(value_name.count))
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - count2 is : ' || to_char(value_value.count))
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - count3 is : ' || to_char(value_datatype.count))

l_job_id = PER_ASG_JOB_ID
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_job_id is : ' || to_char(l_job_id))

i = 0
while (i < value_name.count) loop
(
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - name is : ' || value_name[i])
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - value is : ' || value_value[i])
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - datatype is : ' || value_datatype[i])

if(value_name[i] = 'PER_ASG_JOB_ID') then
(
l_job_id = to_num(value_value[i])
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_job_id has been set with : ' || to_char(l_job_id))
)
)

i = i + 1
)

CHANGE_CONTEXTS(JOB_ID = l_job_id)
(
l_t_dummy = PER_ASG_ELIG_JOBS_CURRENCY
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)
if(l_t_dummy != 'UNKNOW') then
(
CURRENCY = l_t_dummy
)
)

l_dt_dummy = PER_ASG_ELIG_JOBS_END_DATE
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_dt_dummy is : ' || to_char(l_dt_dummy))

l_t_dummy = PER_ASG_ELIG_JOBS_FREQUECY
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)
if(l_t_dummy != 'UNKNOW') then
(
PERIODICITY = l_t_dummy
)
)

l_dt_dummy = PER_ASG_ELIG_JOBS_FROM_DATE
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_dt_dummy is : ' || to_char(l_dt_dummy))

l_t_dummy = PER_ASG_ELIG_JOBS_JOB_CODE
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)

l_n_dummy = PER_ASG_ELIG_JOBS_JOB_ID
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_n_dummy is : ' || to_char(l_n_dummy))

l_t_dummy = PER_ASG_ELIG_JOBS_JOB_NAME
l_log = PAY_INTERNAL_LOG_WRITE('[RATE_FML] - l_t_dummy is : ' || l_t_dummy)
```

```
l_n_dummy = PER_ASG_ELIG_JOBS_MANUAL_RATE
l_log = PAY_INTERNAL_LOG_WRITE(' [RATE_FML] - l_n_dummy is : '||to_char(l_n_dummy))
if(l_n_dummy > 0) then
(
AMOUNT = l_n_dummy
)
)

return AMOUNT, PERIODICITY, CURRENCY
```

#### Related Topics

- [Overview of Rate Definitions](#)

## Rates Used to Calculate Absences in Payroll

You can specify a rate for use in calculating an absence in an absence plan or an absence element.

When processing absence entries in a payroll run, the formula associated with the absence element uses the Rate Converter global formula to convert rates. The formula checks for a rate in this sequence.

1. Absence plan
2. Absence element
3. Compensation salary element

### Absence Plan

In Oracle Fusion Absence Management, you can select a rate rule on the **Entries and Balances** tab of the **Create Absence Plan** page. The rate rule calculates the units passed to payroll when you record an absence. You can select rate rules for the absence payment, final disbursement, discretionary disbursement, and liability balance calculation.

For third-party absence providers, the application transfers the rate information and override rates in the HCM Data Loader file attached to the Load Absence Batch process.

### Absence Element

If you don't specify rates in the absence plan, you can specify a rate when you create the absence elements. The type of absence information determines the rates you can select. For example, for plans where you transfer accrual balances and absences, you can select different rates for these calculations.

- Absence payments
- Discretionary disbursement
- Final disbursement
- Liability balance rate

As best practice, specify a rate in either the plan or the element. If you specify in both, ensure the rate for the element is same as the rate you selected in the corresponding plan.

### Compensation Salary Element

If the formula doesn't find a rate specified in the plan or the element, it uses the compensation salary element.

When you associate a payroll element to a salary basis, you specify an input value that holds the base pay on a worker's element entry. The monetary amount or rate recorded in the element entry is the salary value in the worker's salary

information held on the assignment. If you specify a rate, the formula uses this rate if it doesn't find one defined in the absence plan or absence element.

#### Related Topics

- [Define Payroll Elements to Process Absences](#)

## 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. This 13th month salary is a monthly figure that's calculated from the annual base salary.

The base salary in this example is held as an annual amount on an element entry as 24,000. The 13th month salary is 2,000 ( $24000 / 12$ ). If you add each of these contributors together, the sum of the contributors is 26,000 ( $24,000 + 2,000$ ).

At this point you have added an annual figure to a monthly figure, but you haven't indicated what the periodicity of the total is. On the Create Rate Definitions page, if you select Annual in the Contributor Total Periodicity field, the sum of the contributors is 26,000. If you select Monthly, the application converts the contributors to 312,000 ( $26,000 * 12$ ), which is now the annual figure.

**Note:** When the formula is called to calculate the rate, there is an option to override the return periodicity of the rate.

#### Related Topics

- [Options to Configure Rate Definitions](#)
- [Rate Contributors for Derived Rates](#)

## Values Defined by Criteria

### Overview of Values Defined by Criteria

Each value defined by criteria requires you to specify one or more evaluation conditions that determine a particular value or rate.

In cases where you specify many conditions, each condition is defined as a separate level and placed in priority order to produce a tree structure.

You control the criteria that you enter and the resulting tree structure. In each branch of the tree, you can have multiple evaluation conditions. If the conditions that you've set don't meet your requirements, the payroll process uses the value established for the default criteria that you set up. Each criterion and value, as well as the parent criteria definition, is

stored as a calculation value definition. You can define a rate definition to retrieve a rate based on values defined by criteria.

You can also search for criteria and value records, on a value defined by criteria, to quickly select a record you want to view or update. For more information, see [Search for Values Defined by Criteria](#).

## Criteria and Evaluation Conditions

Within the tree structure, you create the criteria rules. For example, you can define criteria rules based on the location of an employee. You can select or enter the specific location for each criterion, such as London, from a value set or on the criteria page.

You can also define a default criterion if an employee doesn't meet any other condition. Defining a default also includes a situation in which the application hasn't captured criteria information on the employee record, such as location. If you know the criteria definitions you set up cover all the conditions for all employees, then you don't need a default criterion.

Each criterion is stored as a calculation value definition. You must enter a name for the calculation value definition that's unique within a legislative data group. With a unique name, you can identify the record while you create the values defined by criteria hierarchy through HCM Data Loader.

You must also select a value definition group for each criterion. The group enables you to manage the value definitions within your legislative data group; it doesn't impact the behavior of the criterion. Use the Retrieval Date to determine whether the criterion uses the date earned or effective date to retrieve information. The default value is the effective date.

Once you have created a criterion, you can enter these condition details:

- **Sequence:** Define the priority of each criterion using the sequence. The application uses the sequence order to produce a tree structure, which affects processing and the value that's returned. For example, the first criteria definition has a condition of age greater than 0 years, and the next criteria definition in the sequence has the condition of age greater than 55 years. In this scenario, all employees would meet the first condition and there would be no results for the second condition. To fix this situation, you would reverse the order of the criteria definitions where the condition greater than 55 years is first in the sequence.
- **Database Item Name:** Select a database item to identify the type of criteria. For example, if your criterion is the location of an employee you could select PER\_ASG\_LOCATION\_NAME.
  - **Note:** If you're defining values by criteria for Salary Rates, select one of the database items that are supported by HR flows such as new hire and promotion.
- **Display Name:** You have the option to enter a name for the criteria. This name doesn't need to be unique and is displayed in the value by criteria hierarchy record. If you don't enter a display name, the database item description or name gets displayed.
- **Operand:** You use operands when you're creating criteria. You can specify whether the value defined by the database item should be equal to, greater than, less than, greater than or equal to, or less than or equal to the literal value. To capture multiple values for the same criteria, use the In operand. For example, if you want to give employees that work in City 1 and City 2 the same bonus, you can create a single evaluation condition for both cities using the In operand.
- **Value Sets:** Specify a value set to provide a dynamic list of values from which you can select an entry. This option is available for input values that provide text only.
- **Literal Value:** If you specify a value set, you can select an entry from a list of values you have chosen. If you leave the Value Set field blank, you can enter any information that's appropriate for the value definition that you're creating.

## Values

Create one or more value records for each criterion. Here you enter the calculation types and rates. For example, you can enter the bonus values for each location.

Each value record gets stored as a calculation value definition. You must enter a name for the calculation value definition that's unique within a legislative data group. With a unique name, you can identify the record while you create the values defined by criteria hierarchy through HCM Data Loader.

You must enter a value identifier when you define multiple value records for a criterion. This identifier enables you to define which value record should be calculated. For example, your company calculates car allowance and housing allowance rates for an employee based on their job. The job criteria details and the allowance values are captured in a Values Defined by Criteria. You can indicate which of the values captured on the Values Defined by Criteria should be calculated when processing an element in the payroll run.

If you don't enter a value identifier, the name of the calculation value definition gets displayed for the value on the hierarchy. You must select a value definition group for each value record. The group enables you to manage the value definitions within your legislative data group; it doesn't impact the behavior of the value. Use the Retrieval Date to determine whether the date earned or effective date retrieves the information of the value. The default is the effective date.

If you select a Default Calculation Type while creating the values defined by criteria, it gets displayed on each value record. Alternatively, you can enter a calculation type. You have the option to select a different calculation type for each value within the values defined by criteria depending on your business requirements.

The supported calculation types include:

- Flat Amount Times Multiplier
- Flat Calculation
- Flat Rate
- Grade Rate
- Incremental Rate
- Number
- Rate Definition
- Standard Formula 1
- Standard Formula 2

## Database Items for Values Defined by Criteria

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

You can refer to any static or dynamic database items that support these contexts:

- HR\_ASSIGNMENT\_ID
- HR\_TERM\_ID
- PAYROLL\_ASSIGNMENT\_ID
- PAYROLL\_TERM\_ID
- PAYROLL\_RELATIONSHIP\_ID

- PERSON\_ID
- CALC\_BREAKDOWN\_ID
- PAYROLL\_ID
- EFFECTIVE\_DATE
- DATE\_EARNED
- LEGISLATIVE\_DATA\_GROUP\_ID

## Database Items for Salary Rates

Perform rate calculations before information such as job and grade is submitted for the employee. While using salary rates, you can only define values by criteria that use the database items supported by HR flows such as new hire and promotion. If you refer to other types of database items, the process either returns zero or uses the default criteria.

Here's the list of database items to define values by criteria while using salary rates:

Database Item Name	Display Name
PER_ASG_ASSIGNMENT_NUMBER	Assignment Number
PER_ASG_ASSIGNMENT_ID	Assignment ID
PER_ASG_EFFECTIVE_START_DATE	Assignment Start Date
PER_PERSON_ENTERPRISE_HIRE_DATE	Hire Date
PER_ASG_JOB_ID PER_ASG_JOB_NAME	Job
PER_ASG_JOB_CODE	Job Code
PER_JOB_FAMILY_ID PER_JOB_FAMILY_NAME	Job Family
PER_ASG_BUSINESS_UNIT_ID PER_ASG_BUSINESS_UNIT_NAME	Business Unit
PER_ASG_LOCATION_ID PER_ASG_LOCATION_NAME	Location
PER_ASG_DEPARTMENT_ID PER_ASG_ORG_DEPARTMENT_NAME	Department
PER_ASG_LEGAL_ENTITY_ID	Legal Entity

Database Item Name	Display Name
PER_ASG_ORG_LEGAL_EMPLOYER_NAME	Legal Employer
PER_ASG_NORMAL_HOURS	Normal Hours
PER_ASG_EMPLOYEE_CATEGORY PER_ASG_EMPLOYMENT_CATEGORY	Assignment Category
PER_ASG_ORG_LEGAL_EMPLOYER_NAME	Legal Employer
PER_ASG_DF	Assignment Flexfield
PER_GRADES_DF	Grade Flexfield
PER_LOCATIONS_DF	Location Flexfield
PER_ASG_GRADE_CODE	Grade Code
PER_ASG_GRADE_ID PER_ASG_GRADE_NAME	Grade
PER_ASG_GRADE_LADDER_PGM_ID	Grade Ladder
PER_ASG_GRADE_STEP_ID PER_GRADE_STEP_NAME	Grade Step
PER_ASG_ESTABLISHMENT_ID	Establishment
PER_ASG_UNION_ID	Worker Union ID
PER_ASG_UNION_NAME	Worker Union Name
PER_ASG_JOB_MANAGER_LEVEL	Job Manager Level
PER_ASG_JOB_MANAGER_LEVEL_NAME	Job Manager Level Name
CMP_ASSIGNMENT_SALARY_BASIS_NAME	Salary Basis
PER_ASG_COLLECTIVE_AGREEMENT_ID	Collective Agreement



Database Item Name	Display Name
PER_ASG_BARGAINING_UNIT_CODE_NAME	Bargaining Unit Name
PER_ASG_BARGAINING_UNIT_CODE	Bargaining Unit Code
PER_ASG_ACTION_CODE	Action Code
PER_ASG_ACTION_REASON_CODE	Action Reason

### Related Topics

- [Options to Configure Rate Definitions](#)
- [Calculation Types in Calculation Value Definitions](#)
- [Generate HCM Rates](#)
- [Pay Bonuses at Different Rates](#)
- [Limit Pension Contributions](#)

## Calculate Values Defined by Criteria

Use the Values Defined by Criteria task to calculate or retrieve values based on one or more conditions. You can use values defined by criteria in rate definitions. You can also use value by criteria definitions in any formula used for validation.

If you use a third-party payroll product and want to extract the salary rate details, use the **Generate HCM Rates** process to calculate rate values. The Generate HCM Rates process is primarily used to calculate derived rate values, such as those which sum multiple salary components. However, it's also used to process primary rates, as you may define rate definitions which calculate values that are different from those stored on an element entry.

**Note:** The values that the Generate HCM Rates process creates are stored on a rates table. You can extract this information using the HCM Extract tool to send to your third-party payroll providers.

Use these examples to understand how you can calculate values defined by criteria for these elements of payroll.

### Annual Salaries

You can calculate annual salaries for employees based on their jobs. For example:

- If the employee is a Consultant, pay 45,000.
- If the employee is a Senior Consultant, pay 55,000.
- If the employee is a Principal Consultant, pay 65,000.

**Note:** If the criteria that you have set up doesn't cover all the conditions, define a default criteria condition.

## Bonus Payments

You can choose to calculate bonus payments for employees that are weighted by their location. A more complicated scenario would be to pay bonuses based on an employee's department and years of service.

- To weight a bonus payment by location, you could set up these criteria:
  - For employees working in London, pay a 15 percent bonus.
  - For employees working in Manchester, pay a 13 percent bonus.
  - For employees working in Southampton, pay a 9 percent bonus.
  - For all other employees, pay a 5 percent bonus.
- To pay a bonus based on department and years of service, you could set up these criteria:
  - If an employee working in sales has less than or equal to 5 years of service, pay a 2,000 bonus.
  - If an employee working in sales has less than or equal to 10 years of service, pay a 5,000 bonus.
  - If an employee working in sales has greater than 10 years of service, pay a 9,000 bonus.
  - For all other employees working in sales, pay a 7 percent bonus.

## Pension Contributions

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

- If an employee is a Consultant, limit maximum contributions to 2,500.
- If an employee is a Senior Consultant, limit maximum contributions to 7,500.
- If an employee is a Principal Consultant, limit maximum contributions to 12,500.
- If an employee is a Manager or higher, limit maximum contributions to 14 percent of pay.

## Hourly Rates

In the United States, labor law mandates to pay a higher rate when a locality's minimum wage is greater than the state or federal minimum wage. To fulfill this requirement, use the Values Defined by Criteria task to set up pay rates that a worker's state, county, and profession determines.

In this example, you could set up criteria for these scenarios:

- Pay carpenters working in City 1 in County 1 greater than or equal to the rate of 15 per hour.
- Pay carpenters working in City 1 in County 2 greater than or equal to the rate of 17 per hour.
- Pay carpenters working in City 1 in County 3 greater than or equal to the rate of 19 per hour.
- For all other workers, pay rate of 12 USD per hour, the prevailing state wage for laborers.

*Related Topics*

- [Overview of Values Defined by Criteria](#)
- [Generate HCM Rates](#)
- [Overview of Rate Definitions](#)

## Pay Bonuses at Different Rates

This example demonstrates how to create criteria to pay employee bonuses at different rates based on age and location. This table summarizes the key decisions for this scenario:

Decisions to Consider	In this Example
What ages and rates should be used?	<ul style="list-style-type: none"> <li>• Age 25 or less, pay 10 percent</li> <li>• Age greater than 25, pay 14 percent to City 1 employees</li> <li>• Age greater than 25, pay 16 percent to City 2 employees</li> </ul>
What locations should be used to determine bonus rates?	<ul style="list-style-type: none"> <li>• City 1</li> <li>• City 2</li> </ul>
Are there any special conditions that should be added?	Yes. In City 2 the general manager wants to pay a flat amount of 15,000 for all employees over the age of 25 who make over 100,000 per year.

In this example, we would perform these actions:

- Create the bonus rate criteria definition
- Create age criteria
- Create location criteria for age group 2
- Create a calculation value definition for age group 1
- Create calculation value definitions for locations
- Modify evaluation conditions

### Before You Start

In this example, HRX\_US\_REP\_LOCATION is used as the value set for the entry of different locations. If you don't have an equivalent value set, you may need to create one.

### Create the Bonus Rate Criteria Definition

1. On the Home page, click the **Values Defined by Criteria** quick action under the **My Client Groups** tab.
2. Click **Create**.

- Complete these fields as shown in this table.

Field	Value
Name	Bonus Rate
Effective Start Date	1/1/15
Legislative Data Group	Select your legislative data group.

- Select **Create new value definition group**.
- Enter **Bonus** in the **New Value Definition Group** field.
- Enter **Flat Rate** in the **Default Calculation Type** field.
- Click **OK**.

## Create Age Criteria

- Select the row with the Bonus Rate criteria definition.
- Click **New**.
- Select **Criteria** and click **OK**.
- For each criteria definition you create, complete these fields.

Field	Age 25 or less	Age greater than 25
Calculation Value Definition Name	Bonus Rate Age Group 1	Bonus Rate Age Group 2
Value Definition Group	Bonus	Bonus
Retrieval Date	Date Earned	Date Earned
Sequence	1	2
Database Item Name	PER_PER_PERSON_AGE	PER_PER_PERSON_AGE
Operand	<=	>
Literal Value	25	25

- Click **OK** each time you create a criteria definition.
- To create a default group for the age criteria, repeat steps 1 through 3.

7. Complete these fields:

Field	Value
Calculation Value Definition Name	Bonus Rate Age Group Default
Value Definition Group	Bonus
Retrieval Date	Date Earned

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

### Create the Location Criteria for Age Group 2

1. Select the row with the Person Age > 25 criteria definition.
2. Click **New**.
3. Select **Criteria** and click **OK**.
4. For each criteria definition you create, complete these fields.

Field	City 1	City 2
Calculation Value Definition Name	Bonus Range Age Group 2 Location 1	Bonus Range Age Group 2 Location 2
Value Definition Group	Bonus	Bonus
Retrieval Date	Date Earned	Date Earned
Sequence	1	2
Database Item Name	PER_ASG_LOCATION_ID	PER_ASG_LOCATION_ID
Display Name	Location	Location
Operand	=	=
Value Set	HRX_US_REP_LOCATION	HRX_US_REP_LOCATION
Literal Value	City 1	City 2

5. Click **OK** each time you create a criteria definition.
6. To create a default group for the location criteria, repeat steps 1 through 3.

**7.** Complete these fields:

Field	Value
Calculation Value Definition Name	Bonus Rate Age Group 2 Location Default Rate
Value Definition Group	Bonus
Retrieval Date	Date Earned

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

- [Overview of Values Defined by Criteria](#)
- [Generate HCM Rates](#)

## 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 produces a tree structure, which affects processing and the value that's returned.

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

## Payroll Event Groups

### Overview of Payroll Event Groups

A payroll event group defines the types of data changes monitored for features such as the retroactive recalculation of payroll, the retroactive recalculation of time cards, and the retropay for late hires.

There are three types of payroll event groups:

- Proration
- Retroactive
- Event Action

## Proration

Using proration, you can calculate proportionate earnings and deduction amounts whenever payroll-relevant data changes during a payroll period.

For example, you can calculate proportionate earnings and deduction amounts if:

- A person joins or leaves an organization in the middle of a payroll period
- A person's pay rate changes during a payroll period

If you want to prorate an element, such as basic salary, assign a proration event group to the element with proration points that affect a person's salary. You can use the predefined event group, or create a new one. When you create an event group, you select the events that activate proration calculation, such as changes to:

- Hourly or annual pay rates
- Working hours
- Allowances or deductions
- Assignment changes, such as grade or position

**Tip:** You can only select events that represent changes to element entries, calculation cards, calculation value definitions and assignments.

## Retroactive

Retroactive processing ensures that your payroll run for the current period reflects any backdated payments and deductions from previous payroll periods. A retroactive event group defines the types of changes that trigger a retroactive event notification. These types of changes are Entry Changes for Retro and trigger notifications when changes are made in a prior payroll period. You can make additional events trigger the recalculation process by editing the group or creating a new event group for the element. All events trigger in real time.

Within a retroactive event group, select the events that produce notifications if a backdated change occurs. Specify the entity, update type, and attribute, as shown in the examples provided in the following table.

To disable notifications for an element, within the Manage Element UI, query the 'base' element that you no longer want to be processed by retropay and remove the specified 'Retroactive Event Group'. This prevents new events from being triggered.

Entity	Update Type	Attribute
Element Entry Value	Correction	SCREEN_ENTRY_VALUE
Element Entry	Update	EFFECTIVE_START_DATE
Element Entry	Update	EFFECTIVE_END_DATE
Element Entry	Logical Date Change	
Element Entry	Insert	

Entity	Update Type	Attribute
Element Entry	Delete Changes	

## Event Actions

An event action links a process to the events within an event group. When an event occurs, the process is triggered based on a set of conditions defined on the event action. You can use event actions to control the submission of features, which use event groups of type action such as generate HCM Rates and time card reprocessing. Event actions control the aspects of submission such as, if the process is automatically submitted when an event occurs or when submitted through a payroll flow.

There are two event action submission types:

- **Manual:** The application processes the event action notifications using the 'Process Event Action' flow. Schedule this process to run on a regular basis to ensure your information is kept up to date such as your stored rate values. Also, add this task to your payroll cycle flow so it is submitted before you calculate payroll.
- **Automatic:** The application automatically submits processes such as retropay late hires, each time an event action notification is generated.

There are different types of event actions, each with its own set of submission control rules such as:

- Resubmission of time cards
- Retropay for late new hires
- Absence resubmission
- HCM Rates Recalculation
- Mexico SDI calculations

Use HCM Data Loader to create an event action.

### Related Topics

- [How Retroactive Pay Is Calculated](#)
- [Set Up Element Proration](#)
- [Overview of Loading Event Actions and Event Action Groups](#)

## Element Proration

### Set Up Element Proration

Use proration to calculate proportionate amounts for recurring elements when payroll-relevant data changes during a payroll period.

Examples of such scenarios include a person joining the enterprise or a mid-period pay increase. Proration creates two payroll run results. The first run result is for the payroll period up to the day before the event. The second one is from



the date of the event to the end of the period. When you create an element, you specify its proration event group and the calculation method.

Use proration rate conversion rules to specify a different rule than that used for periodicity. For example, you prorate based on calendar days when using work units for conversion.

To set up element proration, you do these tasks:

- Review the predefined proration event group to ensure that it includes changes you want to track. You can optionally update the event group or create a new group.
- Create an element and enable proration processing for an element.

## Review the Predefined Event Group

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

1. On the Home page, click the **Event Groups** task under the My Client Groups tab.
2. Search for the predefined event group: Entry Changes for Proration.
3. Review the types of changes that automatically trigger proration for the elements associated with this event group.

You can edit this group or create a new event group for the element, if required. For example, you might want to add changes to calculation cards or assignments.

## Enable Proration Processing for an Element

To enable proration, do these steps:

1. On the Home page, click the **Elements** task under the **My Client Groups** tab, and click **Create**.
2. On the Create Element: Additional Details page, select **Yes** for the following question: Is this element subject to proration?
3. Select the predefined event group (Entry Changes for Proration) or a new group that you created.
4. Select a **Proration Units** and **Proration Rate Conversion Rule**.
5. Select a **Proration Conversion Rule** formula.

**Note:** If the predefined conversion rules don't meet your requirements, you can create a user-defined formula.

### Related Topics

- [Overview of Payroll Event Groups](#)
- [How Prorated Earnings and Deductions are Calculated](#)
- [Create Conversion Formulas for Proration](#)

## How to Calculate the Number of Pay Days in a Pay Period

You can calculate the number of pay days within a date range based on the assigned work schedule for an employee using the following criteria:

- Work days on work patterns
- Public holidays

- Resource exception definitions

The returned number includes both scheduled work days and public holidays within the date range.

To specify the base function, for calculating the number of pay days within a date range, follow the steps below:

1. In the Payroll Calculation work area, click **Manage Fast Formulas** task
2. In Manage Fast Formulas user interface, click **Create** to create a formula.
3. In the Create Fast Formula popup, specify the formula name, type and description

Example: If April 29 and 30 are work days on a work pattern, May 1 is a public holiday. May 2 and 3 are resource exception definitions as off period. If a person's last working day is May 3, then for May pay period, which is from May 1 through 31, the no. of pay days for the employee is 1.

## Create Conversion Formulas for Proration

The predefined proration formula GLB\_EARN\_PRORATION controls how the payroll calculation prorates an element entry when it encounters an event. This could happen when there's a change to an element entry value.

You can copy and edit a predefined proration formula to modify the calculation. Then, you can select the user-defined formula as the proration formula for your element.

### Create a Formula

You must create a modified rate conversion before you create its related proration conversion rule.

1. Select the formula type **Payroll Run Proration**.
2. Search for and copy the predefined **Rate Conversion Proration** formula.
3. Add the suffix underscore **\_PRORATE** to the name.
4. Update these formula inputs:
  - PRORATE\_START\_DATE (date)
  - PRORATE\_END\_DATE (date)
  - SOURCE\_PERIODICITY (text)
  - DAYS\_WORKED (number)
  - RATE\_CONV\_FORMULA (text)
  - HOURS\_WORKED (number)
  - IN\_AMOUNT (number)
  - UNIT\_TYPE (text)
  - PRORATION\_UNIT (text)
5. Add the formula outputs for the element input values.
6. Save, submit, and compile the formula.

Some countries or territories supply predefined proration formulas that you can use as the basis for your modified version.

### Related Topics

- [Set Up Element Proration](#)
- [How Prorated Earnings and Deductions are Calculated](#)
- [Periodicity Conversion](#)

## How Prorated Earnings and Deductions are Calculated

You can select from a number of different proration conversion rules to calculate standard or supplemental earnings. Select the proration conversion rule when you create an earnings or deduction element using the Manage Elements task.

You can also calculate prorated earnings based on calendar days or work schedules.

This topic covers:

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

### How Deductions Are Calculated

Typically, you don't prorate deductions, such as deductions based on a percentage of earnings. You might prorate fixed rate deductions, such as voluntary deduction for a fitness center membership. In most cases, use the predefined global proration formula for deductions (GLB\_DEDN\_PRORATION). For this formula the proration value is the periodic value multiplied by the number of calendar days in the proration period. This figure is then divided by the number of calendar days in the payroll period.

### How Prorated Earnings are Calculated

Creating a recurring earnings element automatically associates it with a predefined proration formula (GLB\_EARN\_PRORATION). The proration formula determines how to prorate earnings in the proration period based on the proration calculation method you select.

As a guideline the global formula doesn't prorate:

- Nonrecurring elements
- Earnings elements with a calculation rule of unit multiplied by rate, if rate and hours are entered in the element entry

**Note:** Some predefined legislations provide a different default proration formula and rules.

These examples show how proration calculations are performed on earnings calculations, based on:

- Calendar days
- Work schedules

## Example: Earnings Calculation Based on Calendar Days

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

Proration Conversion Rule and Proration Units	Proration Calculation
Standard Rate Annualized rule Daily proration units	Calendar days in proration period multiplied by annual pay and divided by annual calendar days
Example:  <ol style="list-style-type: none"> <li>1. You assign a person to a monthly payroll for a salary basis of 25,000.</li> <li>2. You update the salary on 10 December, 2013 to 30,000.</li> <li>3. You calculate the December monthly payroll.</li> <li>4. The proration formula calculates 2 proration periods with 9 calendar days in the first proration period, and 22 in the second period.</li> </ol>	$(9 * 25000) / 365 + (22 / * 30000) / 365 = 616.44 + 1808.22 = 2424.66$
Standard Rate Daily rule Daily proration units	Total pay divided by calendar days in the payroll period and multiplied by calendar days in the proration period.
Example:  <ol style="list-style-type: none"> <li>1. You hire a person to a weekly payroll in the middle of the payroll period.</li> <li>2. The employee works 3 calendar days and receives a location allowance of 500.</li> <li>3. The proration formula calculates the employee's location allowance for the 3 days.</li> </ol>	$(500 / 7) * 3 = 214.29$

## Example: Earnings Calculation Based on Work Schedule

The formula calculates proration results as shown in the following table. If no working hours are defined, the proration formula checks the assignment definition for the number of working hours and frequency. If no information is found, the formula uses 40 as the number of working hours and 5 as the number of days for the work week.

Proration Conversion Rule and Proration Units	Proration Calculation
Periodic Work Schedule Rate Annualized rule Workday proration units	Work schedule days in proration period multiplied by annual pay and divided by 260 days, the default number of annual working days.  A day in a work schedule is a 24 hour period.
Example:	$(6 * 25000) / 260 + (16 * 30000) / 260 = 576.92 + 1846.15 = 2423.07$

Proration Conversion Rule and Proration Units	Proration Calculation
<ol style="list-style-type: none"> <li>1. You hire a person to a monthly payroll for an annual salary basis of 25,000.</li> <li>2. The employee works 5 days a week Monday through Friday.</li> <li>3. You increase the monthly salary to 30,000 effective 10 December, 2013.</li> <li>4. You calculate the December monthly payroll.</li> <li>5. The proration formula calculates 6 working days from 1st December to 9th December, and 16 working days from 10th December to 31st December.</li> </ol>	
<p>Periodic Work Schedule Rate Annualized rule</p> <p>Hourly proration units</p>	<p>Work schedule hours in proration period multiplied by the annual pay and divided by 2080, the default number of annual working hours.</p>
<p>Example:</p> <ol style="list-style-type: none"> <li>1. An employee assigned to a weekly payroll receives an annual salary basis of 25,000.</li> <li>2. You increase the salary to 30,000 effective 10 December, 2013.</li> <li>3. The employee works 10 hours a day from 9 December to 12 December.</li> <li>4. You calculate the weekly payroll for the week 8 December to 14 December.</li> <li>5. The proration formula calculates 2 proration periods, with 10 working hours for the first period, and 30 for the second period.</li> </ol>	<p><math>(10 * 25000) / 2080 + (30 * 30000) / 2080 = 120.19 + 432.69 = 552.88</math></p>

*Related Topics*

- [Set Up Element Proration](#)
- [Create Conversion Formulas for Proration](#)

# Periodicity

## Periodicity Conversion

Rate conversion formulas convert amounts to different periodicities for payroll calculations. These calculations use rate conversion formulas:

- Proration
- Hours multiplied by rates calculation of an element run result
- Rates based on rate definitions

## Predefined Periods

These are the predefined periods for use when setting periodicity.

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

Periodicity	Valid for Payroll Periods	Number of Periods per Year
Annually	Yes	1
Bimonthly	Yes	6
Biweekly	Yes	26
Calendar Monthly	Yes	12
Daily	No	365
Hourly	No	2920 (365 days multiplied by 8 hours)
Lunar Month	Yes	13
Periodically	No	Payroll frequency determines the number of periods to use in the rate conversion.
Quarterly	Yes	4
Semiannually	Yes	2
Semimonthly	Yes	24

Periodicity	Valid for Payroll Periods	Number of Periods per Year
Workday	No	260
Weekly	Yes	52
Work Hour	No	2080 (260 days multiplied by 8 hours)

## Define Periodicity

You can define periodicity in these ways:

Object	Task	Description
Elements	Elements	The Periodicity input value specifies the frequency of the element value.  For example, salary element entries that hold annual salary values have an annual periodicity.
Payrolls	Payroll Definitions	<b>Period Type</b> specifies the number of payroll periods.  For example, the Monthly Lunar period type includes 13 payroll periods.
Rates	Rate Definitions	Rate definition can specify the following periodicities: <ul style="list-style-type: none"> <li>• Return periodicity of the rate</li> <li>• Periodicity of each rate contributor</li> <li>• Periodicity of the calculated sum of the rate contributors</li> </ul>

## Rate Conversion Formulas

Rate conversion formulas change the periodicity of an amount.

For example, the Standard Rate Annualized conversion formula can convert an annual salary amount to a weekly amount.

This table describes the predefined formulas.

Rate Conversion Rule	Description	Example
Standard Rate Annualized	Calculates the annual rate using the input periodicity and converts the amount to an output periodicity and rate.	To convert a weekly amount to a semimonthly periodicity, the formula:  1. Multiplies the weekly amount by 52.

Rate Conversion Rule	Description	Example
	This rule uses default values, such as 2080 hours or 260 working days, to calculate the annual rate. You select the day or hourly basis during element definition.	2. Divides the result by 24.
Standard Rate Daily	Calculates the daily rate using the input periodicity and converts the amount to an output periodicity and rate.  This rule uses a default value, such as 260 working days a year, to calculate the daily rate.	To convert an annual amount to daily periodicity, the formula:  1. Divides the annual amount by 365. 2. Multiplies the result by the number of days in the payroll period.
Standard Working Hours Rate Annualized	Uses the employee's standard working hours to convert the monetary value and working hours to an annual value before calculating the rate.	The employee works 40 hours a week with a monthly salary of 1000 CAD:  $((1000*12)/(40.00*52)) = 5.77$ an hour
Assignment Working Hours Rate Annualized	Uses the employee's working hours to convert the monetary value and working hours to an annual value before calculating the rate.	The employee works 40 hours a week, with 37.5 standard working hours a week, and a monthly salary of 1000 CAD:  $((1000*12)/(37.50*52)) = 6.15$ an hour
Periodic Work Schedule Rate Annualized	Uses the employee's work schedule for the payroll period for daily and hourly conversions.	For an employee: <ul style="list-style-type: none"> <li>With a monthly salary of 1000 CAD</li> <li>Assigned a monthly payroll</li> </ul> The formula checks the work schedule details for the month.  For a daily conversion:  $1000 \text{ a month} / 20 \text{ days in the month} = 50$  <b>Note:</b> For compensation calculations where the employee isn't assigned a payroll, the rate is calculated using the weekly rate calculation. The amount is converted to an annual figure and divided by the number of days or hours in that week based on the work schedule.
China Standard Rate Conversion	Uses the employee's work schedule to calculate the daily and hourly rates.	To convert a monthly amount to a daily periodicity, the formula: <ul style="list-style-type: none"> <li>Divides the monthly amount by 21.75</li> </ul> To convert a monthly amount to an hourly periodicity, the formula: <ul style="list-style-type: none"> <li>Divides the monthly amount by 21.75 first and then further divides the remainder by 8.</li> </ul>



Rate Conversion Rule	Description	Example
		<p>For example, if the input is 10,000 yuan per month.</p> <ul style="list-style-type: none"> <li>The daily periodicity = <math>10000/21.75 = 460</math> per day</li> <li>The hourly periodicity = <math>(10000/21.75)/8 = 57.47</math> an hour</li> </ul> <p>This formula defaults the periodicity value to <b>Calendar Month</b>. You can change the input periodicity to a value other than the Calendar Month. The China Standard Rate Conversion formula calculates the daily and hourly rate according to the input periodicity you specified.</p> <p>If you set the periodicity to <b>Annually</b>, and if the input is 120,000 yuan per year.</p> <ul style="list-style-type: none"> <li>The daily periodicity = <math>(120000/12)/21.75 = 460</math> per day</li> <li>The hourly periodicity = <math>((1200/12)/21) /8 = 0.595</math> an hour</li> </ul>

The impact of the rate conversion rule is summarized below:

- **Periodicity:** The conversion rule for periodicity applies to Flat Amount, Hours \* Rate, and Days \* Rate calculation rules. You can override the periodicity used as the default for the element definition at the element entry level.
- **Work Units:** The Work Units conversion rule applies only to flat amount calculation rules for standard and supplemental earnings elements. The selection of which work units to use in reports and payslips determines the conversion calculation. The application creates the element input values using the default values of the rate conversion formulas.
- **Proration:** The element template includes a new question for proration units. Proration rate conversion rules replace the previous proration methods in the element template. You have greater flexibility, for example, to base proration on calendar days when using work units for conversion.

**Note:** If the conversion rules don't meet your requirements, you can copy and edit the rules using the Fast Formulas task in the Payroll section of My Client Groups.

## Configure Periodicity Conversion Rules

You can use the predefined periodicity conversion formulas when converting rates for hours multiplied by rate calculations of an element run result. You can also use these formulas for rates based on rate definitions and proration unless you specify another proration formula.

The conversion rule applies to the Flat Amount, Hours \* Rate, and Days \* Rate calculation rules.

Here's what you can do to use a different value instead of the predefined value for periodicity:

- Override the default periodicity for the element definition at the element entry level.
- Create your own periodicity conversion formula.

For example, you can create a formula to specify a different number of working hours when converting annual values into hourly rates.

**Note:** As a best practice, if you configure a periodicity rate formula, you should also create a related proration formula.

## Configure a Formula

Complete these steps to configure a rate conversion formula:

1. On the Home page, click the **Fast Formulas** task under the **My Client Groups** tab to search for formulas with the Rate Conversion formula type.
2. Search for and display the rate conversion formula you want to copy.
3. Create a new formula with the formula type Rate Conversion.
4. Copy the formula text into your new formula.
5. Edit the periodicity values.

For example, if you create a rate conversion formula that uses 7.5 hours instead of 8 hours for the number of work hours in a day, you would edit the periodicity as follows:

```
else if (out_periodicity = 'WORKHOUR') then
  l_amt = (l_year_amt /260)/ 7.5
```

6. Save, submit, and compile the formula.
7. Use the Elements task to search for the element and identify the formula used to calculate the element.
8. Use the Fast Formulas task to edit the formula.

Edit the rate converter call, replacing the rate conversion formula name with the name of your new formula.

```
CALL_FORMULA( 'RATE_CONVERTER',
  l_rate > 'SOURCE_AMOUNT',
  l_source_periodicity > 'SOURCE_PERIODICITY',
  l_target_periodicity > 'TARGET_PERIODICITY',
  'ANNUALIZED RATE CONVERSION' > 'method',
/* replace with the name of new formula*/
  l_actual_amount < 'TARGET_AMOUNT' DEFAULT 0)
```

9. Save, submit, and recompile the formula.

### Related Topics

- [Periodicity Conversion](#)
- [Overview of Using Formulas](#)

## Retroactive Pay

### How Retroactive Pay Is Calculated

Retroactive pay is the recalculation of prior payroll results because of changes that occurred after the original payroll calculation run.

For example, an employee receives a backdated salary award or a performance bonus.

You run the Recalculate Payroll for Retroactive Changes process to calculate retroactive pay. This process creates retroactive element entries based on retroactive events.

**Note:** Only the elements that have retroactive pay enabled will have retroactive results calculated.

## Set up Elements for Retroactive Pay

To enable retroactive processing of an element:

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

**Note:** This step is only if you want to attach your new group to an existing element. If your group exists and you are using the template to create the element, you do not need to navigate to the element page. You can attach the group from the template. This step is only if you want to have a different element pay the retroactive adjustment.

4. On the Retroactive Components page, create a full retroactive calculation with a reprocess type of 'Reprocess' and choose 'Yes' for the default component.
5. In the Retroactive Pay Elements section of the Retroactive Components page, create an entry with effective dates, adjustment type of 'Standard' and choose the target element of the results element that you want the retroactive pay process to use when creating a retroactive entry.

**Note:** This step is only if you want to have a different element pay the retroactive adjustment.

## Process Retroactive Pay

Whether creating a flow pattern for retroactive tasks, incorporating tasks into a Payroll Cycle flow pattern, or running individual processes, it is advised to run them in the following order:

1. Submit the Retroactive Notifications Report.

**Note:** You can also Review or create retroactive events on the Event Notifications page and download results to Excel to view retroactive events in a report format.

2. Submit the Recalculate Payroll for Retroactive Changes process with the Submit a Flow task or the process may run automatically as part of your payroll flow.

**Note:** This process creates one or more retroactive entries to receive the process results and never overwrites historical payroll data.

3. Submit the Retroactive Entries Report.
4. Review the Retroactive Entries Report.
5. Submit the Calculate Payroll process.

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

If you don't get the expected retroactive notification, here are some suggestions to review:

- The transaction that caused the event
- Element setup
- Element eligibility for the person
- The retroactive event group entities and attributes that are set up to trigger retroactive events
- The proration event group entities and attributes setup that triggers proration

## Exclude Retroactive Element from the Retroactive Pay Process

If you enabled the element for retroactive pay but now you don't want it included in the process, follow these steps to prevent it from being considered in the process comparison:

1. On the Element Additional Details page, Remove the two retroactive components rows.
2. On the Event Groups page, remove the event group.

**Note:** To process an element in a retroactive payroll run, the element must have retroactive components that define the processing rules. These steps remove these defined processing rules and disable event notifications.

### Related Topics

- [Create Conversion Formulas for Proration](#)
- [Overview of Payroll Event Groups](#)

## Add a Retroactive Event Notification Manually

Retroactive Events are typically created automatically when you create retroactive adjustments, such as backdated salary changes.

You can enter the retroactive event manually to generate the correct payslip, such as if payroll hasn't made the pay rate change effective last pay period for an employee being terminated effective immediately.

### Create a Payroll Relationship Event

1. Select the Event Notifications task.
2. Click **Create**.
3. Use the information in this table enter information into the Create Payroll Relationship Event window.

Field	Value
Approval Status	Awaiting Processing

Field	Value
Payroll Relationship	The person to process
Process Date	Date when the retroactive change process is run.  <div style="border-left: 2px solid orange; padding-left: 10px;"> <p><b>Note:</b> This date indicates when the element change was triggered.</p> </div>

4. Click **Save and Close**.

## Create a Retroactive Event

1. On the Event Notifications page, click the name of the person associated with the payroll relationship event you created.
2. On the Retroactive Events page, click **Create** in the Entry Details section.
3. Select the element you want to reprocess, the date the recalculate payroll runs, and a retroactive component. The element from which the change will be paid to the person is the retroactive component.
4. Repeat the previous step if you want to recalculate multiple elements for this payroll relationship.
5. Click **Submit**.

## FAQs for Pay Calculation Components

### 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 absence payment elements.

### When should I force recalculation of the contribution base for Chinese social security and benefits deductions?

If you make any change that affects a deduction's contribution base, you should force recalculation only if the base is normally calculated yearly rather than monthly. The frequency of recalculation is determined by the switch period type defined in the Contribution Base Information component

To force recalculation of the contribution base for the effective payroll run, select **Yes** in the **Force Contribution Base Recalculation** field in the Component Details section on the employee's Deduction Information calculation card. If

you want to recalculate the base only once and then resume yearly recalculation, reset this field's value to **No** after the payroll has run.

## How to add Calculation Components for Enterprise Annuity

You can add the calculation components to include the employee and employer contribution for Enterprise Annuity.

1. Navigate to **Setup and Maintenance > Manage Implementation Projects > Workforce Deployment > Define Common Applications Configuration for Human Capital Management**.
2. Select **Define Enterprise Structures for Human Capital Management > Define Legal Entities for Human Capital Management > Legal Entity Calculation Cards**.
3. Select **Enterprise Annuity** as the **Calculation Component**.
4. Select the **Enterable Calculation Values** on **Calculation Cards** tab.
5. Set up the threshold amounts or base threshold amount and threshold rates.
6. Add the **Enterprise Annuity Component**; set the **Account Status** as **Open** and then set the overriding threshold values(optional).

# 11 Set Up Payment Methods

## Bank Information

### Manage Bank Information

You can manage the bank information using the fields displayed on the user interface, which are governed by the rules defined in the table CE\_CTRY\_SPECIFIC\_UI\_RULES. We have a REST service to update these rules.

The country-specific UI rules are predefined for employee bank account common component. For seeded records, the seeded indicator will be Y and the page name will be ORA.

- Display Indicator = Y
- Required Indicator = N

The ACCOUNT\_NUMBER default has the following setting:

- Display Indicator = Y
- Required Indicator = Y

The ACCOUNT\_SUFFIX default has the following setting:

- Display Indicator = N
- Required Indicator = N

**Note:** The LABEL\_CODE is derived from the lookup\_type CE\_ACCOUNT\_FIELDS, for countries that are prompted for that information. Any field (other than account number and account suffix) that doesn't have any predefined rules will have the default behavior of Display Indicator as Y and Required option as N. Bank account field values are validated as per the Cash Management application. If you don't want to validate the data, you must select the profile option CE\_DISABLE\_BANK\_VAL as Yes. While creating a bank account, you can select the bank and branch from a predefined set of values or you can create them at runtime. If you want to select the bank and branch from the predefined values, you must select the profile option CE\_USE\_EXISTING\_BANK\_BRANCH as Yes.

**Note:** If you're setting the CE\_USE\_EXISTING\_BANK\_BRANCH profile option as Yes, the bank and branch become mandatory field. This is irrespective of country UI rules.

This table lists the delivered attributes that are required for setting up a bank account.

#### China

Country Code: CN

Attribute Name	Display Indicator	Label Code	Required: Yes or No
ACCOUNT_NUMBER	Y		Y

Attribute Name	Display Indicator	Label Code	Required: Yes or No
IBAN	N		N
ACCOUNT_TYPE	N		N
CHECK_DIGIT	N		N
ACCOUNT_NAME	Y		Y
ACCOUNT_NAME_ALT	N		N
SEC_ACCT_REF	N		N
BANK_NAME	Y		Y
BANK_CODE	N		N
BRANCH_NAME	Y		Y
BRANCH_NUMBER	N		N
BIC	N		N

## Organization Payment Methods

### Overview

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 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.

China supports these payment types:

- Cash
- Direct Deposit



## Payment Sources

If you're using Oracle Fusion Global Payroll for China 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.

**Note:** If you're 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).

This example shows one organization payment method with three different payment sources for different TRUs.

Payment Source	Tax Reporting Unit	Default Payment Source
Payroll Direct Deposit Source CN Bank of China Account	None	Yes
Payroll Direct Deposit Source Beijing Industrial and Commercial Bank of China	TRU1	No
Payroll Direct Deposit Source Shanghai China Construction Bank	TRU2	No

The first payment source that you add is the default payment source, but you can select another payment source as the default, or not have a default payment source.

To understand the effect of having a default payment source, consider these examples that describe what happens when a TRU changes, causing a payment rule to be invalid.

Approach	Use Case
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.

### Related Topics

## Considerations When You Create Accounts

Banks, branches and accounts fit together on the premise of the Bank Account model. The Bank Account model enables you to define and 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.

### Legal Entity-Based Data Access for Bank Account Setup

By default, users with the necessary function security privileges have access to create and manage all internal bank accounts.

Optionally, restrict access to bank account information based on the user's legal entity data access. This allows cash managers to add, review, or modify only the bank accounts associated with the legal entities that the user has access to. For example, only users who have been assigned a cash manager role for Vision Operations legal entity, will be able to create, review, or modify internal bank accounts associated to this legal entity.

Decentralized organizations will benefit with improved security by ensuring that users only manage the bank account setup for the organizations they are authorized for.

Business benefits include:

- Improve security and increase control of bank account setup by limiting user access to bank account information.
- Helps decentralized organizations that require users only to manage the bank account information for the organizations they are authorized for.

To enable the feature Legal Entity-Based Data Access for Bank Account Setup, you must:

1. Use the Opt in UI to enable the feature.
2. Assign users to the appropriate legal entity security context:
  - a. In the Setup and Maintenance work area, Select the Offering as Financials, Functional Area as Users and Security, and Task as Manage Data Access for Users.
  - b. On the Manage Data Access for Users page, create data access for users by entering the user name, Cash Manager as role, legal entity as security context, and legal entity name as security context value, to create the data access for the user.
  - c. Save the changes.

Once the feature is enabled, legal entity-based data access security is applied when an internal bank account is created or managed using either the UI or REST API.

### Account Use

Account Use refers to accounts created for:

- Oracle Fusion Payables

- Oracle Fusion Receivables
- Oracle Fusion Payroll

Select the appropriate use or uses when creating an account in one or more of these applications.

## Account Access

Payables and Receivables account access is secured by business unit. Before the bank account is ready for use by Payables or Receivables, you must:

1. Select the appropriate use for the application.
2. Grant access to one or more business units.

**Note:** You can only assign access to the business units that use the same ledger as the bank accounts owning the legal entity,

## User and Role Security

You can further secure the bank account so that it can only be used by certain users and roles. The default value for secure bank account by users and roles is No. For Payables and Receivables, you must have the proper business unit assigned to access a bank account even if the secure bank account by users and roles is No. If the secure bank account by users and roles is set to Yes, you must be named or carry a role assigned to the bank account to use it.

- 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. You must have the assigned Manage Bank Account Security privilege (CE\_MANAGE\_BANK\_ACCOUNT\_SECURITY\_PRIV) to modify the User and Role Security.
- If you want to restrict the access to the Security tab, you must create a customized role and remove the privilege Manage Bank Account Security (CE\_MANAGE\_BANK\_ACCOUNT\_SECURITY\_PRIV). For example, you would copy the Cash Management Administration duty role, rename it, and remove the privilege.

## GL Cash Account Segments

Consider selecting the option to enable multiple cash account combinations for reconciliation if you want to reconcile journal lines of multiple cash account combinations matching the same natural account and other specified segment values.

For example, if you set up 01-000-1110-0000-000 as your cash account, and select Account and Sub-Account as GL Cash Account Segments, you're able to manually or automatically reconcile journal lines entered on different account code combinations matching the same natural account '1110' and sub-account '0000'.

### Related Topics

- [Assign Data Access to Users](#)

## How Bank, Branch, and Account Components Work Together

Banks, branches, and accounts fit together on the premise of the Bank Account model.

The model enables you to define and keep track of all bank accounts in one place and explicitly grant account access to:

- multiple business units
- functions
- users

This eliminates the redundant duplicate bank account setup in different business units when these business units share the same bank account.

## Banks

Creating a bank is the first step in the bank account creation. You can:

- Search for existing banks to view and update
- Create a new bank from an existing party

Consider the following:

- The option to create from an existing party is implicitly implemented by the matching option.
- The option is available only after the existing party has been found with the same bank.
- If you select the matching option, the page repopulates the information from the matched party.

## Branches

Once you have created your bank, the next step is creating a branch or branches associated to the bank. The matching option is also available when creating branches. To create a new branch without using the matching option, manually enter the required information. You can also define other branch- related attributes in the same page.

If you don't use the matching option when an existing party is found, a branch with the same party name is created.

## Accounts

The four areas associated with defining an account are:

- General information
- Control of the account
- Security and access to the account
- Business unit assignment

Once the bank and branch are created, proceed to the bank account setup by doing the following:

- Select the bank branch you want to associate to your bank account.
- Assign the owner of the bank account.

**Note:** To create a bank account for Payables or Receivables, add the Business Unit Access first for the business units to use the bank account.

Consider the following:

- The Oracle Fusion Account Payables or Receivables accounts are identified by the business unit.
- The Oracle Fusion Payroll accounts are identified by the legal entity.

- The program, Inactivates Banks and Bank Branches enables you to inactivate all banks and bank branches that have no active internal and external bank accounts.
- Optionally, secure the access to bank account information based on the user's legal entity data access, by enabling the opt-in **Legal Entity-Based Data Access for Bank Account Setup**.
- Legal entity-based data access for bank account setup:
  - Improves security and increases control of bank account setup by limiting user access to bank account information.
  - Helps decentralized organizations that require users only to manage the bank account information for the organizations they are authorized for.

*Related Topics*

- [Considerations When You Create Accounts](#)
- [Reconciliation Matching Rules](#)
- [Assign Data Access to Users](#)

## How Payment Methods and Payroll Definitions 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

This 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.
Payroll Definition	<p>Establishes the payment methods for payments to employees. A default payment method is required. For China, the default payment method can only be Cash.</p> <p><b>Note:</b> You can't set the Direct Deposit payment method as the default payment method because each payee must have a personal payment method with account information to know where to deposit the money.</p>

## Configuring Payment Method Preferences: Procedure

Configure preferences related to payment methods within a legislative data group (LDG) using Payment Method Preferences. Preferences are applied when your self-service employees enter payment methods for payroll payments.

**Note:** If you support multiple organization payment methods of the same payment type, you **MUST** indicate which of these should be available to your self-service users, using the Payment Method Preferences page.

**Note:** If you intend to support multiple organization payment methods of the same payment type, then the Organization Payment Method field will appear on the Payment Methods page.

Preference Rule	Action	Example
Legislative Data Group	Choose from the list of existing LDGs for the Payment Method Preference.	Payment Method Preferences are applied to LDGs. In all cases, choose your LDG for the preference.
What organization payment methods should be available for employees to select?	Choose from the list of existing OPMs for the LDG you want available to your employees on the Payment Method page.  Note: When you choose multiple OPMs for the same payment type, employees will select from an OPM list instead of a payment type list to set up their personal payment methods.	You support check/cheque and EFT payment methods but you only want checks/cheques to be issued under certain circumstances. In this case, choose your EFT OPM and don't choose your check/cheque OPM from the list.
What is the maximum number of payment methods an employee should be allowed to create?	Enter the maximum number of payment methods you want an employee to create.  Note: This number means an employee can create as many payment methods as they want equal to or less than this number.	You want to restrict the number of personal payment methods employees can create to 1. In this case, enter 1 into the field.
What payment amount types should be available for employees to select?	Choose from the list of payment amount types you want available to your employees on the Personal Payments page.  Note: The system default is Both.	You want employees to only create payment methods with percentages. In this case, choose Percentage from the list.
What payment methods should employees not be allowed to edit?	Choose from the list of existing OPMs for the LDG you want to restrict your employees from editing on the Payment Method page.	You support paying employees by Pay Card, however, you want the personal payment method details to only be entered by professional users. In this case, choose your pay card OPM from the list for your employees to view this information but not make any edits.
Should the above selected payment methods be excluded from the 100% validation logic?	Choose Yes or No from the list to include the available payment methods that aren't allowed to be edited but are included in the 100% validation rule.	You support Pay Card, however, you want to exclude this from the 100% validation rule so that your employees' salary can't be split between Pay Card and another payment method. In this case, choose Yes from the list.

*Related Topics*

- [Bank Info for Personal Payment Methods](#)
- [Organization Payment Methods Overview](#)
- [Payment Method Rules Setup Examples](#)

## Set Up Payment Sources in Organization Payment Methods

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 China company pays its workers by Direct Deposit payments. The company sets payment rules to pay from two different banks based on tax reporting unit (TRU). You need one method to pay by Direct Deposit in Yuan Renminbi. There are three payment sources defined. One default payment source for China, one source for payments in Beijing, and one source for payments in Shanghai.

### Summary of Tasks

This worked example includes details for the tasks you perform when creating organization payment methods:

1. Create the basic details
2. Set up payment sources
3. Create payment rules

### Before You Begin

Before you set up payment sources, complete these tasks.

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.

### How to Create the Basic Details

1. From your Home page, navigate to **My Client Groups > Payroll**.
2. Under Administration, click **Organization Payment Methods**.
3. On the Organization Payment Methods page, click **Create**.
4. Select the legislative data group, for example, China LDG.
5. Select the date when you want this payment method to be available for use, and then click **Continue**.

**Tip:** Select a date that's on or before the effective date of the payroll definition or other objects that use this payment method.

6. In the Basic Details section, complete the fields as shown in this table and then click **Save**.

Field	Value
Name	Payroll Direct Deposit China

Field	Value
Payment Type	Direct Deposit
Currency	Yuan Renminbi

7. Click **Save**.

## How to Set Up Payment Sources

When you select the Direct Deposit payment type, you can enter the Direct Deposit information at these levels:

- Organization payment method level
- Payment source level
- Both levels

**Note:** Direct Deposit information entered at the payment source level takes priority over information entered at the organization payment method level.

Perform these steps 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	China Value	Beijing Value	Shanghai Value
Name	Payroll Direct Deposit Source CN	Payroll Direct Deposit Source Beijing	Payroll Direct Deposit Source Shanghai
Bank Account Name	InFusion China	InFusion China Beijing	InFusion China Shanghai
Bank Name	Bank of China	Industrial and Commercial Bank of China	China Construction Bank
Bank Branch	CN Branch	Beijing Branch	Shanghai Branch
Bank Account Number	123456789234	9876543213567891209	13579864214356789034



Field	China Value	Beijing Value	Shanghai Value

**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.

## How to Create Payment Rules

1. In the Payment Method Rules section, for Payroll Direct Deposit Source CN, 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	Beijing Value	Shanghai Value
<b>Default</b>	No	No
<b>Tax Reporting Unit</b>	Beijing TRU	Shanghai TRU
<b>Payment Source</b>	Payroll Direct Deposit Source Beijing	Payroll Direct Deposit Source Shanghai

3. Click **Submit**.

### Related Topics

## Personal Payment Methods

### Bank Info for Personal Payment Methods

You can create bank, branch, and bank account info as part of implementation, or you can let employees add their own bank info. Once created, you can use bank accounts in other Oracle applications, such as Cloud expenses.

### Enter Bank Info for PPMs

This table summarizes approaches to create bank info for employees.

Approach	Purpose
Manage Banks and Manage Bank Branches pages	Create, edit, and view your bank account information.

Approach	Purpose
	<p><b>Note:</b> In order to manage banks and branches, you must have the Manage Bank and Manage Bank Branch privileges.</p>
Payment Methods page	Create, edit and view employee bank account details to receive payroll payments.
HCM Data Loader	Use an integrated Excel workbook to load personal payment methods and employee bank account details.

You can use CE\_USE\_EXISTING\_BANK\_BRANCH profile option to control to whether or not your employee can create their own bank and branch data. On the Manage Cash Management Profile Options page, set the Use Existing Banks and Branches profile option to either Yes or No.

- If you set the option to Yes, you need to load bank and branch data. Administrators and employees select bank and branch details from a list of values in the bank region on the Payment Method page.
- If you set the option to No (default setting), you don't need to load any bank details. Administrators and employees enter their bank and branch details as free text.

## Access to PPMs and Bank Info

The table shows the privileges you need to access PPMs and bank info:

User	Privileges	Access Description
Employee Self-service	Manage Personal Payment Method	Allows users to manage their own personal payment methods
Employee Self-service	View Personal Payment Method	Allows users to view their own personal payment methods
Employee Self-service, Implementors, Administrators, or Managers	Payee Bank Account Management Duty	Allows users to create bank accounts
Implementors, Administrators, or Managers	Manage Worker Personal Payment Method	Allows access to manage employee personal payment methods
Implementors, Administrators, or Managers	View Worker Personal Payment Method	Allows access to view employee personal payment methods.

*Related Topics*

- [How Bank, Branch, and Account Components Work Together](#)
- [Configure Payment Method Preferences](#)
- [Examples of Loading Banks](#)
- [Examples of Loading Bank Branches](#)
- [Example of Loading Personal Payment Methods](#)

## How Account Number Masking in Payroll Reports Work

To prevent display of sensitive bank account information, you can use the option of masking or encrypting bank account information in these reports:

- Payslips
- Payment Register
- Third-Party Payment Register

Masking involves displaying only a few specific characters of the account number or IBAN number, usually characters at the start or end of the number. The remaining characters are obfuscated and you can't see them on the reports. For example, a customer may want to display only the last 4 characters of the account number. In such cases, an account number ABC123456 displays as XXXXX3456 in reports and UIs that support masked account numbers.

Encryption requires a secure key for decoding the encrypted account number and IBAN number through an API. The application displays the truncated account or IBAN number when the encryption is turned on and the full, clear number when the encryption is turned off.

### Settings that Affect Account Number Masking

The application stores the bank account number and IBAN number information in these columns of the database tables:

- Original column that stores the visible unmasked portion of the numbers.
- Masked column that stores the masked numbers. When masking isn't enabled, these columns store the full numbers.
- Secured column that stores the encrypted numbers and requires a secure key to retrieve the data.

This table shows how the bank account numbers are stored in the tables depending on how you configure masking and encryption.

Actual Account Number	Configuration - Masking	Configuration - Encryption	Original Column	Masked Column	Secured Column
ABC123456	No	No	ABC123456	ABC123456	ABC123456
ABC123456	Yes	No	ABC123456	XXXXX3456	ABC123456
ABC123456	Yes	Yes	3456	XXXXX3456	ABC123456

Actual Account Number	Configuration - Masking	Configuration - Encryption	Original Column	Masked Column	Secured Column

**Note:** The above table assumes that the masking setup displays only the last four characters of the bank account number.

- The first row in the table shows the default settings where both masking and encryption is turned off. The original full number is stored in all the three columns.
- The second row in the table depicts a scenario where masking is turned on but encryption is turned off. In this case the masked column displays only the last four characters of the account number.
- The third row depicts a scenario where both masking and encryption is turned on. In this case the original column contains the truncated four-digit account number. You need the secure key to retrieve the full account number from the secured column.

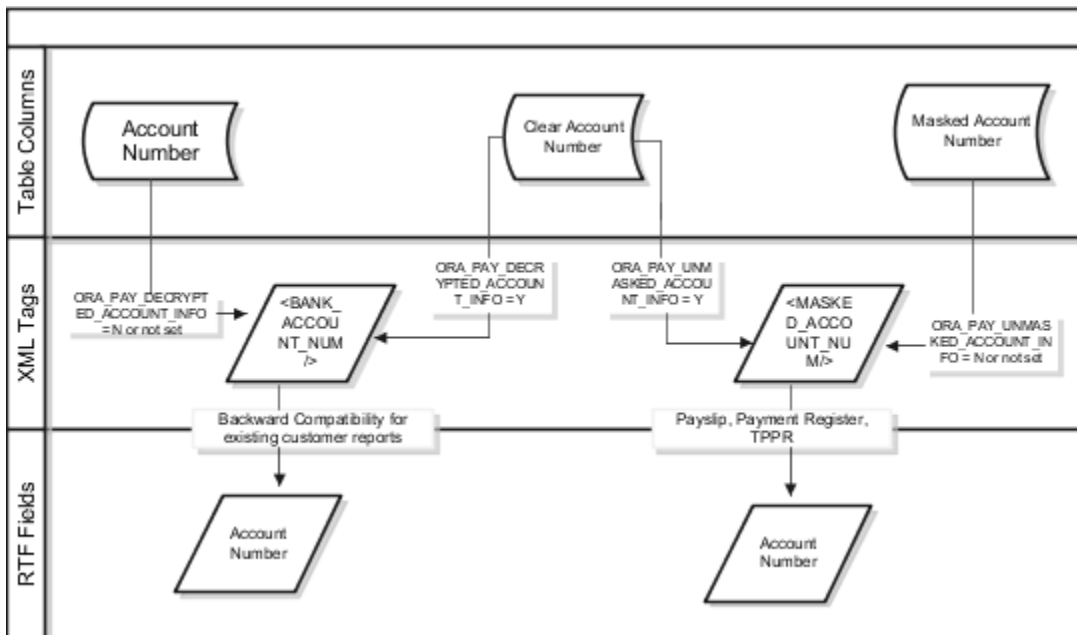
When you turn on encryption, the unsecured account number and IBAN columns only shows the visible characters as defined by masking. This means that to turn on encryption, you must turn on masking. However, you can turn on masking without turning on encryption.

### How Account Number Masking Works

Use the new **Extract Unmasked Bank Information** (ORA\_PAY\_UNMASKED\_ACCOUNT\_INFO) process configuration parameter to display either the masked or full numbers in the reports. This new parameter ensures:

- Consistency across the three reports
- Control how you display the numbers on the reports

The following figure shows how account number masking happens for the three reports.



The figure shows the following:

- The first stream layer shows the table columns that store the account number information.
- The second stream layer shows the XML tags and process configuration groups.
- The third stream layer shows the RTF fields shown on the report template.

As explained in the previous section, the application stores the account number information in three separate columns.

The new `ORA_PAY_UNMASKED_ACCOUNT_INFO` process configuration parameter controls the `MASKED_ACCOUNT_NUM` tag to display:

- The masked account number when the process configuration parameter is by default or set to *No*, or
- The clear or full account number when the process configuration parameter is set to *Yes*.

For example, if you mail a copy of the Third-Party Payment Register to the payee, you may want to mask the sensitive bank account information. If the same report is shared securely within the Payroll Department to verify the bank account details, you may run the report with the process configuration parameter set to *Yes*.

All the three reports use the `MASKED_ACCOUNT_NUM XML` field to display the Account Number.

You can use the `BANK_ACCOUNT_NUM` field if you use an older copy of the three reports. If you do so and you have turned on encryption, you can use the `ORA_PAY_DECRYPTED_ACCOUNT_INFO` parameter to switch between a clear and truncated number.

#### Related Topics

- [Options for System Security](#)
- [Enable Encryption of Sensitive Payment Information](#)

## Direct Deposits

### Direct Deposit Configuration

Direct deposit refers to the electronic transfer of an employee's net pay directly into the accounts designated by the employee. For employees who have requested direct deposit payments, the application generates a direct deposit file for China.

The direct deposit file contains the details of the net pay distribution for each employee deposit. Financial institutions use the details in the file for processing and distributing the payments.

Before you generate the direct deposit file, complete these tasks:

- Set up the financial institutions
- Set up employer account information and organization payment methods
- Set up employee account information

### Set Up Financial Institutions

Use the Manage Banks task in FSM to set up the financial institutions, branches, and account information for the organization. Before you enter the employees direct deposit account information, you must set up the financial institutions and branches that your employees use.

## Set Up Employer Account Information and Organization Payment Method

Use the Manage Organization Payment Methods task in the Payment Distribution work area to set up employer account information and organization payment methods. On the Create Organization Payment Method page, enter this information pertaining to your financial institution.

Field	Description
Payment Type	Select Direct Deposit, the name for electronic transfer of funds directly into employee designated accounts.
Financial Institution	Name of financial institution sending or receiving the direct deposit orders.

## Set Up Employee Account Information

You must create a payroll definition that uses the Direct Deposit payment method and assign all employees to this payroll. Set up the direct deposit account information for each participating employee:

- If you haven't enabled employee self-service, use the Manage Personal Payment Methods task in Person Management work area to enter employee's direct deposit information.
- If you have enabled employee self-service, individual employees can provide their direct deposit account information using the Manage Personal Payment Methods task.

The first account you enter should be the default account. If you define a second personal payment method account, you can specify the deposit amount as percent of the total amount or a flat amount.

After you have set up the employer's account information and the employee's personal payment methods, the processing of direct deposits can occur. Prior to running the direct deposit process, you must complete the following three tasks:

- Calculate Payroll
- Calculate Prepayments

# Configuring Payslips

## Add Text to Payslips

This topic explains the setup steps required to configure your payslips to display additional text. You can create element input values to store information, such as congratulatory messages and detailed earnings information, that you want displayed on payslips.

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 include:

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 payslip template, as appropriate. Refer to the Report Designer's Guide for Oracle Business Intelligence Publisher for more information.

## Examples of Input Values for Payslip Text

Create element input values to store your information, such as congratulatory messages and detailed earnings information, that you want displayed on payslips. These scenarios show you how to archive payroll information for this purpose.

### Display Earnings by Earned Weekly Period

You want to display earnings details on payslips, such as overtime pay per week within a semimonthly pay period. In this example, before modifying your payslip template, you create an element using the Information element classification. You create these input values in your element and add them to the payroll information to archive:

- Description
- Start Date
- End Date
- Hours
- Rate
- Multiple
- Amount

*Related Topics*

## Multilanguage Support for Payslips

The Generate Payslips process is run once each payroll period and it generates the payslip XMLs based on the payroll archive and prepayments data. The application creates the payslip PDFs and stores them in the Document of Records for future reference and retrieval.

## Print Payslip PDFs

Some workers may opt for a printed payslip and you must provide individual PDF payslips to them.

The application supports producing all printed payslips in a single file for ease of printing. However, for the payslip labels to be translated, each payslip must have its own individual PDF output file. To enable single PDFs, add the Bursting configuration onto the Print Delivery option within the Payslip extract definition.

For more details on how to add the Bursting option, refer to [Adding Bursting to Print Delivery Option: Procedure on the Help Center](#).

## Translate the Payslip

You can now generate individual payslips in the worker's correspondence language of choice. Run the Generate Payslips process just once and generate the payslips for the various workers in a language of their choice depending on what's set as the worker's correspondence language.

The process translates:

- The metadata, the layout labels, and the static text on the payslip template.
- The underlying data that comes from the transactional and setup tables, and the data that the Payroll Archive process archives for the payslip.

Set the process configuration parameter, Enable Payslip Translation, to **Y**, before running the Payroll Archive process. You must set this only once. If you have run the Payroll Archive before setting this parameter, you must roll back the process, set the Enable Payslip Translation parameter to **Y**, and rerun the Payroll Archive process.

## Install the Correspondence Language

Although the worker's correspondence language may be set to one of several languages, only those languages that are installed are supported for translation. To determine the number of languages you must install, consider how diverse the worker population is in terms of their preferred correspondence language.

If the correspondence language isn't one of the installed languages, the Payslip is produced in the base language.

To enable translation of the payslip labels, set the Locale property of both Document of Records and Print Delivery options within the Payslip Extract Definition to Correspondence Language. If you don't want the payslip labels to be translated, leave the Locale property blank or set it to the base language, for example, `en-us`, for US English.

For the payslip data that's not delivered by Oracle, the translated values of the data must be available in the application. Enter translated values for the base language and each of the installed languages that needs payslip translation support. For example, if you have created additional element names and its associated balances, you must also enter their translated values in the application. Otherwise, the translated values aren't reflected in the payslip PDFs.

### Related Topics

- [Overview of Translating Modified Text](#)

## Reverse Date and Net Pay in Payslip Name Format

The date and net pay are included in the payslip name by default to be compliant with the accessibility requirement in some countries.



If you are using the Chinese Online Payslip delivery option, the online payslips are generated in the format YYYY/MM/DD affixed with net pay amount, after upgrade. The date shown in the payslip name is the payment date, which is also the Date Paid in the Payroll Definitions user interface. For example: If February 3, 2021 is the payment date for a pay period; 2021/02/03\_9074.00 is the payslip name for the pay period. January 1, 2021 is the start date and January 31, 2021 is the end date, for the pay period.

If you would like to change the date format, you may update the document name of your delivery option to PAYSIP<YYYY/MM/DD> or <YYYY/MM/DD>.

If you do not have such requirement, and prefer to reverse back to the existing name format, add the parameter: **Include date and net pay in payslip name** to the configuration group you use in running the Generate Payslips process, and set the override value to 'N'.

For custom delivery option, setup a document name with a constant value. This ensures payslip always has the same name.

You can reverse the payslip name format as follows:

1. From the home page, navigate to **My Client Groups > Quick Actions > Show More > Payroll > Payroll Process Configuration**.
2. Add the parameter **Include date and net pay in payslip name** to the configuration group you use in running the Generate Payslips process.

Set the override value to **N**.

## Add Bursting to Print Delivery Option

When you enable payslip translation, both the transactional data and the labels on the payslip are translated.

As only one language can be applied to all the labels on a payslip, payslips for different languages must be in their own PDF. Add the Bursting configuration on the Print Delivery option within the Payslip Extract Definition so that payslips for different languages are in their own PDF.

### How to Add the Bursting Configuration

Complete the following steps to add Bursting to the Print Delivery option for the payslip:

1. Select the **Extract Definitions** task from **My Client Groups > Show More > Data Exchange** on your Home page.
2. In the Search window, enter **Payslip** in the Name field.
3. Select **Archive Retrieval** in the Type field.
4. Select a legislative data group and click **Search**.
5. Click **Payslip** in the Search Results region.
6. Click the **Deliver** tab in the HCM Extract Definitions: Payslip page.
7. Select the **Printed Payslip** Delivery Option Name row in the Extract Delivery Options section.

8. Complete the following in the Additional Details section.
  - a. Select **Default** in the Value column of Bursting.
  - b. Remove content in the Value column of Locale.
  - c. Select **Search** in the Attribute column of Locale.
  - d. In the Search and Select: Attribute window, enter these details.

Field	Value
Parent Data Group	Global Archive Payroll Calculation Breakdown
Attribute	Correspondence Language
Record	Global Calculation Breakdown ID Information

9. Click **Search**, and then **OK**.
10. Click **Save** and then **Submit**.

*Related Topics*

- [Overview of Translating Modified Text](#)

## Rate Precision in Payslips

Use the Payslip Rate Precision process configuration parameter to set a fixed, positive integer value as the precision value for rates displayed on the payslip. The default value is two decimal places. Set this parameter before you run the Periodic Payroll Archive process.

A fixed rate precision value ensures ease of implementation, user control, and consistency across different rates and element entries. Setting the rate precision value doesn't impact the calculation of payroll or the accuracy or precision of payments. You are only defining the number of decimal places for the rates shown on the payslip.

The precision value you set for the number of decimal places for the rates displayed on the payslip, is dependent on these two factors:

- **Currency:** Some currencies require a rate precision value higher than the default value of two.
- **Multiplying factor for the rate:** The precision value you set for the element rates displayed on the payslip is dependent on how high you expect the quantity to be. For example, if you expect the quantity, say hours to be high, set a precision value higher than the default value of two.

Here are some factors you must consider while setting the precision value.

- The precision value you set on the Archive process applies for the calculation results and appears by default on all reports that use the archived data. However, you can configure your report template to display a value that's lower than the value on the Archive process.
- Any precision value you set on the report template overrides the value you set on the Archive process. For rates needing a lower precision value, you must define it in the report template. You can't set a value that's higher than that on the Archive process.

For example, suppose you want your hourly employees to see four decimal places for rates and the salaried employees to see only two decimal places on their payslips. Set the Payslip Rate Precision process configuration parameter to four decimal places. Then, modify the report template to display the rates with two decimal places only for salaried employees.

*Related Topics*

- [Report Days and Units in Payroll Reports](#)
- [Overview of Online Payslip](#)
- [How to Configure the Payslip Report Template](#)
- [How Do I Set the Payslip Rate Precision Value](#)

## FAQ for Payment Methods

### How can I display employee work location and department on the payslip?

Define a payslip template to include the archived payroll information, including the employee's work location and department details. Use this template in the BI Publisher Report and add the report to the Generate Payslips flow.

When you submit the flow, the flow output is automatically generated based on the template included in the BI Publisher Report.

*Related Topics*



# 12 Set Up Elements

## Payroll Elements

### Overview

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, and contributions to charities or savings plans
- Employer liabilities

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 the associated items required for payroll processing

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

### Predefined Elements

The Oracle Fusion Global Payroll for China provides a suite of predefined element classifications for use when defining earnings and deduction elements.

They typically include deductions for tax and social security. 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 deduction elements as you require using the Manage Elements task.

You select the element classification and category that determine the template of questions. You answer the questions to specify the details of the element you want to create. The items that the template generates can include multiple elements, input values, formulas, balances, and other items.

**Note:** The template you use to create elements also depends on the extension you have selected 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.

You can configure any of the generated items to match your specific business requirements. For example, you can add input values, edit the formulas, or add a status processing rule to use a different formula for certain assignment statuses. You must also create element eligibility records for the elements.

This table explains the purpose of the items that you use when creating element.

Item	Purpose
Input Values	Defines the entry values available on each entry of this element, such as hours worked or amount.
Element Eligibility Records	Defines the eligibility criteria a worker's employment record must meet to be eligible for the element. For example you can use grade, payroll, salary basis, or organization as eligibility criteria.
Status Processing Rules	Identifies the formula the payroll run uses to process the element, and how to handle the formula results.
Related Formulas and Related Elements	Identifies additional elements and formulas created by the template for payroll processing.
Related Balances	Identifies the balances created by the element template for this element.

## Maintain Elements

After you create and use an element, you're limited on the updates you can make to it. This ensures the integrity of the element for retroactive processing and the balances of the input values.

You can't remove existing input values or add new ones if you 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 these 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 on the Element Entries page.
- Change the input value validation rules for minimum, maximum, lookup, or formula.
- Change your specification of which input values create database items.
- Change the reporting name. However, the database items created for the element continue to use the original name.
- Delete elements that are in **In Progress** status.

For existing elements you can now make updates to these attributes in the correction mode if the element meets the specified criteria rules for the attribute.

- Allow multiple entries in same period
- Latest Entry Date
- Output Currency
- Process once per period

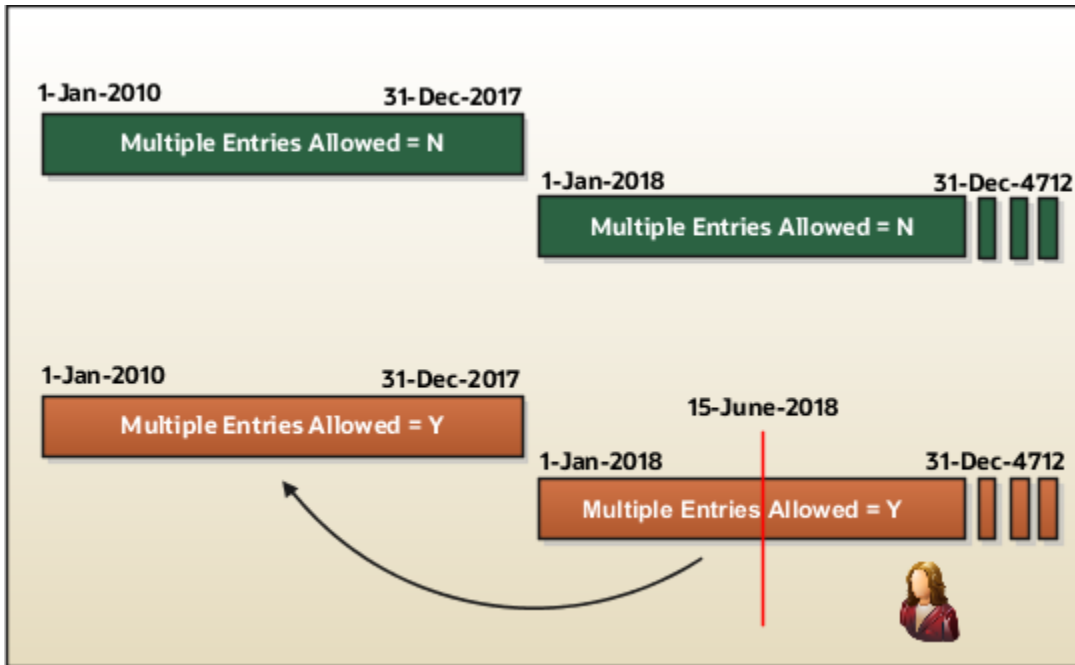
Let's assume you correct the Allow multiple entries in same period attribute, all date effective records would get updated with the change.

### Example:

An element has these two date-effective records:

- 01-Jan-2010 to 31-Dec-2017
- 01-Jan-2018 to 31-Dec-4712

And for that element, the value of **Allow multiple entries in same period** option is **N**. Effective 15-Jun-2018, you change the value of this option from **N** to **Y**. Then, as the figure shows, the application updates both the records with the value **Y**.



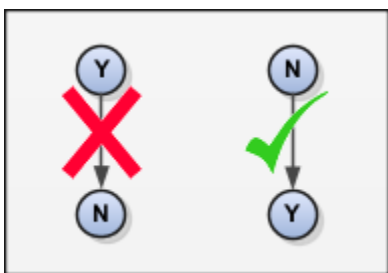
## Allow Multiple Entries

Edit the **Allow multiple entries in same period** option from **N** to **Y** even if element entries and run results exist for that element.

However, you can't edit this option in these scenarios:

- If the element is target of **Stop Entry** rules.
- If the value of the **Standard Link** option is **Y**.
- If the element is a target of indirect formula result rules.

As this figure shows, you can't change the value from **Y** to **N**. This is because such an action invalidates the existing entries and possibly could impact retroactive processing.



## Termination Rule

You can update the termination rule of an element even if element entries or run results exists for that element. Such updates don't affect the existing element entries, but impact only new element entries.

In the **Latest Entry Date** field, you can change a lower element definition date to a higher element definition date. However, you can't change a higher element definition date to a lower element definition date.

This change isn't applicable to time definitions that you define.

## Output Currency

The output currency for an element is defaulted based on the currency defined for the legislative data group. You can update the Output Currency field to a required currency under these circumstances.

- If it's a newly created element
- There isn't element eligibility for that element
- No balances exist for this element

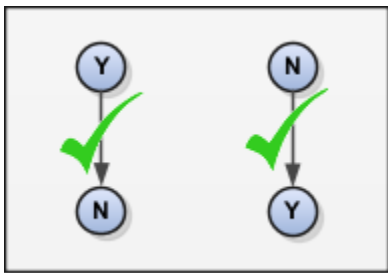
**Note:** If you calculate statutory deductions such as tax, you should not change the element output currency. All predefined tax calculations are performed using the currency of the legislative data group. All reports including payslips are also generated using the currency of the legislative data group.

Your company may have a requirement to change the element output currency for payroll calculations that don't include legislative taxes. For example, a British national who works in the USA might be paid on an expat payroll which isn't subject to US taxes.

## Process Once Per Period

Use the **Process once per period** option to check if the element entry has been processed or not.

As this figure shows, modify this field both from **Y** to **N** and **N** to **Y** even if element entries or run results exists.

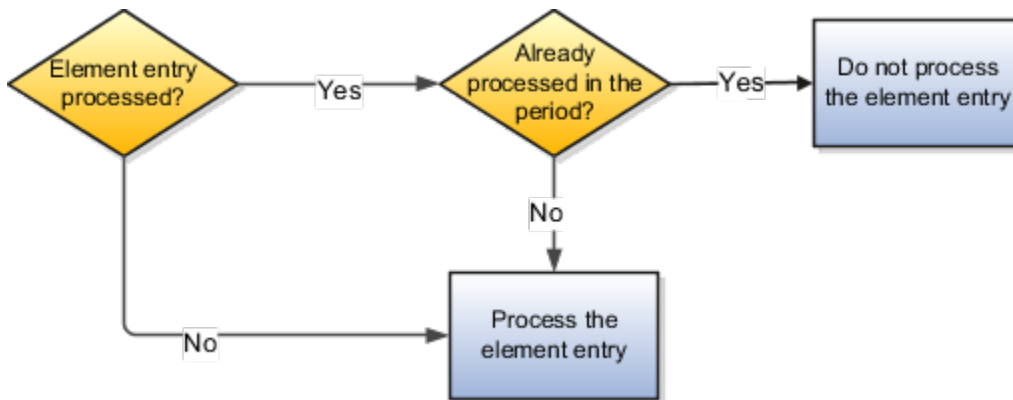


If the value of the option is **Y** and the element entry is already processed in the period, then the application doesn't process it again.

If the value of the option is **N**, then the application processes the element entry even if it's already processed in the run.

As this figure shows, depending upon the value of the option, the application processes the element entry.





## Search for Elements Using the Element Code

You can now search and view elements using the element code.

- Use the **Add Fields** option in the **Advanced Search** region to search the element using element code.
- Select **View > Columns > Element Code** to view the element code attribute with other element details.
- The element code attribute is displayed under the **Element Name** attribute in the **Element Summary** page.

## Delete In Progress Status Elements

On the Element Search page, you can delete those elements that are in the **In Progress** status. However, you can delete only those elements for which the corresponding ESS element creation process has failed .

### Related Topics

- [Payroll Element Input Values](#)

# Element Classifications

## Primary Element Classifications

Primary element classifications are defined by Oracle Fusion to meet legislative requirements, and are supplied to users with the product.

### Primary Classifications

Elements are grouped into primary classifications, such as Earnings and Voluntary Deductions. In a human resources department, you can use the primary classifications to identify groups of elements for information and analysis purposes. In a payroll department, the classifications control processing, including the sequence in which elements are processed and the balances they feed. They are designed to meet the legislative requirements of your country, so you can't change or delete them. You can create additional balances to be fed by any of the primary classifications.

For example, in a human resources department, you can use them to identify groups of elements for information and analysis purposes.

## Secondary Element Classifications

You can define secondary classifications to feed your own user defined balances.

Secondary classifications are subsets of the primary classifications. In some legislations, secondary classifications are predefined. As with primary classifications, you can't remove or change any predefined secondary classifications, and you can't disable any of the predefined balance feeds created for them.

## How Element Classification Components Work Together

When you create an element, you select a primary classification, such as Voluntary Deductions, and optionally a secondary classification, such as Enterprise Annuity Employee Contribution.

The classifications, which vary by country or territory, control the element template questions you answer to define the element.

### Primary Classifications

Primary classifications meet the legislative requirements of your country or territory, so you can't change them.

In a payroll department, the classifications control processing, including the sequence in which elements are processed and the balances they feed.

### Secondary Classifications

Secondary classifications are subsets of the primary classifications. You can't remove or change any predefined secondary classifications. However, you can create your own secondary classifications.

### 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.

## Element Classifications

The Oracle Fusion Global Payroll for China provides a suite of predefined element classifications for use when defining earnings and deduction elements.

Primary classifications are defined to meet legislative requirements of your country or territory, and hence you can't change them. In a payroll department, the classifications control processing, including the sequence in which elements are processed and the balances they feed.

Secondary classifications are subsets of the primary classifications. You can't remove or change any predefined secondary classifications. In some countries or territories, you can create your own secondary classifications.

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.

Use the Elements task in the Compensation section of My Client Groups to create elements.

## Primary and Secondary Classifications, and Subclassifications

This table lists the primary classifications and the associated secondary classifications, including subclassifications, that are applicable for China.

Primary Classifications	Secondary Classifications	Subclassifications
Absences	<ul style="list-style-type: none"> <li>• Maternity</li> <li>• Other</li> <li>• Sickness</li> <li>• Vacation</li> </ul>	<ul style="list-style-type: none"> <li>• Absences Disqualifying for Minimum Wage Protection Calculation</li> <li>• Absences Subject to Enterprise Annuity Calculation</li> <li>• Absences Subject to Leave Compensation Calculation</li> <li>• Absences Subject to Minimum Wage Protection Calculation</li> <li>• Absences Subject to Public Housing Fund Calculation</li> <li>• Absences Subject to Severance Payments Calculation</li> <li>• Absences Subject to Short Notice Pay Calculation</li> <li>• Absences Subject to Social Insurance Calculation</li> <li>• Absences Subject to Supplementary Public Housing Fund Calculation</li> </ul>
Balance Initialization	N/A	N/A
Direct Payments	N/A	N/A
Employer Charges	<ul style="list-style-type: none"> <li>• Basic Medical Insurance Employer Contribution</li> <li>• Basic Pension insurance Employer Contribution</li> <li>• Enterprise Annuity Employer Contribution</li> <li>• Maternity Insurance Contribution Employer Contribution</li> <li>• Public Housing Fund Employer Contribution</li> <li>• Supplementary Medical Insurance Employer Contribution</li> <li>• Supplementary Public Housing Fund Employer Contribution</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Medical Insurance Employer Contribution</li> <li>• Basic Pension Insurance Employer Contribution</li> <li>• Enterprise Annuity Employer Contribution</li> <li>• Maternity Insurance Employer Contribution</li> <li>• Public Housing Fund Employer Contribution</li> <li>• Supplementary Medical Insurance Employer Contribution</li> <li>• Supplementary Public Housing Fund Employer Contribution</li> </ul>

Primary Classifications	Secondary Classifications	Subclassifications
	<ul style="list-style-type: none"> <li>• Unemployment Insurance Employer Contribution</li> <li>• Work-Related Injury Insurance Employer Contribution</li> </ul>	<ul style="list-style-type: none"> <li>• Unemployment Insurance Employer Contribution</li> <li>• Work-Related Injury Insurance Employer Contribution</li> </ul>
Information	Enterprise Annuity Employer Contribution Tax	N/A
Pretax Nonstatutory Deductions	Termination Deductions	<ul style="list-style-type: none"> <li>• Pretax Nonstatutory Deductions Disqualifying for Minimum Wage Protection Calculation</li> <li>• Pretax Nonstatutory Deductions Subject to Enterprise Annuity Calculation</li> <li>• Pretax Nonstatutory Deductions Subject to Leave Compensation Calculation</li> <li>• Pretax Nonstatutory Deductions Subject to Public Housing Fund Calculation</li> <li>• Pretax Nonstatutory Deductions Subject to Severance Payments Calculation</li> <li>• Pretax Nonstatutory Deductions Subject to Short Notice Pay Calculation</li> <li>• Pretax Nonstatutory Deductions Subject to Social Insurance Calculation</li> <li>• Pretax Nonstatutory Deductions Subject to Supplementary Public Housing Fund Calculation</li> </ul>
Social Security Deductions	<ul style="list-style-type: none"> <li>• Basic Medical Insurance Employee Contribution</li> <li>• Basic Pension insurance Employee Contribution</li> <li>• Maternity Insurance Contribution Employee Contribution</li> <li>• Public Housing Fund Employee Contribution</li> <li>• Supplementary Medical Insurance Employee Contribution</li> <li>• Supplementary Public Housing Fund Employee Contribution</li> <li>• Unemployment Insurance Employee Contribution</li> <li>• Work-Related Injury Insurance Employee Contribution</li> </ul>	Social Security Deductions Subject to Minimum Wage Protection Calculation
Standard Earnings	<ul style="list-style-type: none"> <li>• Standard Nontaxable Earnings</li> <li>• Standard Taxable Earnings</li> </ul>	<ul style="list-style-type: none"> <li>• Standard Earnings Subject to Enterprise Annuity Calculation</li> <li>• Standard Earnings Subject to Leave Compensation Calculation</li> <li>• Standard Earnings Subject to Minimum Wage Protection Calculation</li> </ul>

Primary Classifications	Secondary Classifications	Subclassifications
		<ul style="list-style-type: none"> <li>Standard Earnings Subject to Public Housing Fund Calculation</li> <li>Standard Earnings Subject to Severance Payments Calculation</li> <li>Standard Earnings Subject to Short Notice Pay Calculation</li> <li>Standard Earnings Subject to Social Insurance Calculation</li> <li>Standard Earnings Subject to Supplementary Public Housing Fund Calculation</li> </ul>
Supplemental Earnings	<ul style="list-style-type: none"> <li>Annual Bonus</li> <li>Festival Special Payments</li> <li>Sales Special Payments</li> <li>Severance Payments</li> <li>Supplemental Nontaxable Earnings</li> <li>Supplemental Taxable Earnings</li> <li>Termination Payments</li> <li>Thirteenth Month Special Payments</li> <li>Variable Special Payments</li> <li>Variable Yearly Earnings</li> </ul>	<ul style="list-style-type: none"> <li>Supplemental Earnings Subject to Enterprise Annuity Calculation</li> <li>Supplemental Earnings Subject to Leave Compensation Calculation</li> <li>Supplemental Earnings Subject to Minimum Wage Protection Calculation</li> <li>Supplemental Earnings Subject to Public Housing Fund Calculation</li> <li>Supplemental Earnings Subject to Severance Payments Calculation</li> <li>Supplemental Earnings Subject to Short Notice Pay Calculation</li> <li>Supplemental Earnings Subject to Social Insurance Calculation</li> <li>Supplemental Earnings Subject to Supplementary Public Housing Fund Calculation</li> </ul>
Tax Deductions	<ul style="list-style-type: none"> <li>Annual Bonus Tax</li> <li>Regular Tax</li> <li>Severance Payments Tax</li> </ul>	N/A
Taxable Benefits	N/A	N/A
Voluntary Deductions	<ul style="list-style-type: none"> <li>Donation Deductions</li> <li>Enterprise Annuity Employee Contribution</li> </ul>	N/A

## How Element Processing Sequence is Determined

You can set a predefined sequence in which a payroll run processes elements. An element's primary classification defines a default processing priority for the element in payroll runs. Lower priority numbers process first.

Most classifications also have a priority range. You can override the default processing priority. To set the priority, edit the element on the Element Summary page. Setting a specific priority establishes the order in which the element processes with respect to other elements in the classification.

Sometimes you must prioritize the processing of certain element entries for an individual person. For example, you may need to determine the precise order in which deductions taken for wage attachments process for a person. In this case, enter a subpriority number for element entries.

## Element Employment Level

### Employment Level Options for Elements

Your enterprise uses an employment model. When you create elements, you select the employment level at which to attach the element. If you select a level below payroll relationship, each assignment record can have separate element entries.

#### Payroll Relationship Level

This level is the highest level for accumulating balances. Every payroll run processes payroll relationship elements.

Here are the typical elements to define at payroll relationship level:

- Tax Deductions
- Social Security Deductions

#### Assignment Level

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

Here are the typical elements to define at assignment level:

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

# Element Input Values

## Overview

An element's input values define the entry values available on each entry of an element. Each input value has a unit of measure, such as money or date.

Input values can include validations and conditions to control the data entry of the element entry assigned to a person. For example, an earnings element may have an input value for hours worked, 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.

**Note:** You can't add an input value to the element if any payroll process were run after the element was created. This behavior holds good irrespective of whether the payroll run included this element or not. To add input values, rollback all processes that were ran after the element creation date.

## Input Value Options

For each input value created, you can modify these attributes:

Field Value	What You Do
Display Sequence	Enter a number to control the display order of the entry value on element entries.
Special Purpose	Select how the input value is to be used. For example, you can indicate that it holds a percentage value, a rate, or third-party payee details. This value 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 <b>Required</b> , you must also select <b>Displayed</b> and <b>Allow User Entry</b> .
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 <b>Allow User Entry</b> .

Field Value	What You Do
Default	Enter a value that appears as the default value for this entry value in element entries, if needed.
Apply default at runtime	Select to apply the default value when you run the payroll process, rather than when you create the element entry. This selection ensures you use the latest value on the date of the payroll run. You can manually override the default value on the element entry.
Minimum	Enter a minimum value, if needed.
Maximum	Enter a maximum value, if needed.
Validation Formula	Enter a formula that validates the entry value entered on element entries, if needed.
Validation Source	Use with the other input value options to select the valid validation method, such as lookups or formulas.
Lookup Type	Specify a lookup type to provide a list of values for an entry value. This option is available for input values of type Character only.
Warning or Error	Use when you're validating the input value or entering a minimum or maximum value. It specifies whether a warning or an error displays if the entry fails the validation condition or doesn't meet the minimum or maximum value indicated.
Reference	<p>Use to associate a balance context with the run result.</p> <p>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 <b>Reference</b> field. Then the run result value of the input value works as a context value when updating the balance.</p> <p>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 <b>Reference</b> field first for the validation source value to be automatically populated.</p>
Value Set	Specify a value set to provide a dynamic list of values for an entry value. This option is available for input values of type Character only.

**CAUTION:** Once an element is processed, you can't update certain input value attributes, such as unit of measure. This restriction ensures that you can't change attributes that would invalidate prior results.

This table provides examples of the allowable formats, depending on the unit of measure (UOM) specified for the entry value.

Unit of Measure	Sample Entry Value	Display in Application
Character	C	Complete



Unit of Measure	Sample Entry Value	Display in Application
Integer	12345	12,345
Number	12345.6789 0.123456789	12,345.6789 0.123456789
Day	123 0.123	123 0.123
Money	12345 -12345.67	12345.00 <12345.67>
Hours in decimal format, 1 place	12345	12345.0
Hours in decimal format, 2 places	12345	12345.00
Hours in decimal format, 3 places	12345	12345.000
Hours expressed as a numeric value	12345	12345
Hours and minutes expressed as numeric values	12345	12345:00
Hours, minutes, and seconds expressed as numeric values	12345	12345:00:00
Date	2016-06-21	21-Jun-2016
Time	13:05	1:05 PM

**Note:** Display values can be derived from the meaning attribute of the view object. For example if you enter **C** as a value for the Character UOM, it displays as **Complete**. Conversion to display formats is based on the profile option value and locale.

*Related Topics*

- [How Element Setup Affects Entries and Their Values](#)
- [Payroll Elements](#)
- [Use a Value Set for an Element Input Value](#)
- [Create and Edit Profile Options](#)

## Use a Value Set for an Element Input Value

You can use value sets to provide a dynamic list of values for an element input value. Use a value set for lists containing values that already exist in tables.

For example, person name or number, legislative data group, or payroll statutory unit. The benefit of this approach is that you don't have to create and maintain a lookup type. Using value sets helps maintain consistency and accuracy in your data.

**Note:** The only type of value set supported for element input values is the table-based value set. Oracle Fusion Global Payroll doesn't support other value set types, such as Independent or Format Only.

Use the **Manage Value Sets** task in the Setup and Maintenance work area.

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

This table provides the required values that you enter when you create a value set for use on the Manage Elements page.

Field	Value
Module	Global Payroll
Validation Type	Table
Value Data Type	Character

**Note:** To enable the Value Set field on the Manage Elements page you must select Character as the Unit of Measure for the input value.

To improve the performance of your value set queries, use these contexts to filter the value set records:

- PayrollRelationshipId
- PersonId
- PayrollTermId
- PayrollAssignmentId
- LegDataGroupId
- LegCode
- SysEffectiveDate

WHERE Clause example: `pay_pay_relationships_dn.payroll_relationship_id = :{PARAMETER.PayrollRelationshipId}`

**Note:** If you use these contexts in your value set SQL, make sure the WHERE clause parameter name matches the context name.

In this example, an element contains input values for legislative data group and element name. The list of values for element name 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, here are the steps:

- Create a value set to return a list of all legislative data groups
- Create a value set that returns all elements in the legislative data group
- Add the value set codes to the Manage Elements page

## Create a Value Set to Return a List of all Legislative Data Groups

1. From the Setup and Maintenance work area, search for and select the **Manage Value Sets** task.
2. Click **Create**.
3. Complete the fields, as shown in this table.

Field	Value
Value Set Code	LDG_VS
Description	Retrieve Legislative Data Groups
Module	Global Payroll
Validation Type	Table
Value Data Type	Character
FROM Clause	<code>PER_LEGISLATIVE_DATA_GROUPS_v1</code>
Value Column Name	<code>NAME</code>
ID Column Name	<code>LEGISLATIVE_DATA_GROUP_ID</code>
WHERE Clause	<code>business_group_id=202</code>  <div style="border-left: 2px solid orange; padding-left: 10px; margin-left: 20px;"> <p><b>Tip:</b> To avoid failure of the value set, use IDs instead of names in case the display name changes in the future.</p> </div>
ORDER BY Clause	<code>NAME</code>

4. Click **Save**.

## Create a Value Set that Returns all Elements in the Legislative Data Group

1. On the **Manage Value Sets** page, click **Create**.
2. Complete the fields, as shown in this table.

Field	Value
Value Set Code	ELE_VS
Description	Elements
Module	Global Payroll
Validation Type	Table
Value Data Type	Character
FROM Clause	<code>pay_element_types_f</code>
Value Column Name	<code>base_element_name</code>
ID Column Name	<code>element_type_id</code>
WHERE Clause	<code>LEGISLATIVE_DATA_GROUP_id={PARAMETER.LDG_IP}</code>  <b>Note:</b> LDG_IP is the input value name.
ORDER BY Clause	<code>base_element_name</code>

3. Click **Save**.

## Add the Value Set Codes to the Elements Page

1. On the Home page, click the **Elements** quick action under the **My Clients Groups** tab.
2. Create a new element to meet your requirements and then click **Submit**.
3. When the Element Summary page displays, click the **Input Values** folder.
4. Click **Actions** and then select **Create Input Values**.
5. Enter the name LDG\_IP and the display sequence for the input value.

6. Select **Character** as the Unit of Measure.
7. Enter **LDG\_VS** in the Value Set field.
8. Go to the Default field and select a legislative data group.
9. Click **Save**.
10. Click **Submit**.
11. Repeat these steps to create an element input value using the ELE\_VS value set.

You can override the default values on the Element Eligibility - Input Values page for a specific eligibility record.

## Element Entries

### Enable Automatic, Multiple, or Additional Element Entries Options

You can select one of these options for an element to define how you can update its element entries:

- Automatic entry
- Allow multiple entries in same period

#### Automatic Entry

When you create an element, you can select **Yes** for the question: Should every person eligible for the element automatically receive it? This setting selects the **Automatic entry** option by default for all eligibility records you create for that element. However, you can override the selection for any specific eligibility record before you save it.

When you select this option, saving the eligibility record initiates a payroll flow to create element entries for all eligible workers. To monitor this flow, you do these tasks:

- View the progress of the process in the **Automatic Entry Status** field. If the status shows that an error occurred, you can save the eligibility record again to resubmit the flow.
- Monitor the progress of the Generate Automatic Element Entries flow on the Processes and Reports tab.

Any updates to the employment records of eligible workers, including hires and terminations, automatically update, create, or end the element entries, as appropriate.

**Tip:** If you select the **Automatic entry** option, you can't also select **Allow multiple entries** in same period.

#### Allow Multiple Entries in Same Period

This option enables you to give a person more than one entry of the element in the same pay period. Let's consider the scenario when you enter overtime hours on a weekly basis for a person that's paid monthly. In this case, you might need to enter five entries on an overtime element in each period.

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

**Note:** An element with the Automatic entry option selected can't allow multiple entries in the same period.

### Related Topics

- [Default Values for Element Entries](#)
- [Element Entry Methods](#)
- [Status of Flow Tasks](#)

## Options to Determine an Element's Latest Entry Date

An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll.

The options include: final close, last standard earning date, and last standard process date. These are the predefined options. You can create others that fit your business needs.

### Final Close

Use this option to let the element stay open for entries beyond a person's last day worked. For example, you may want the element to stay open to pay a severance package.

### Last Standard Earning Date

Use this option to stop all element entries on the date the person leaves. You can use this option for recurring entries, such as salary.

**Tip:** If you select the last standard earning date option, also select proration for the element. This ensures that the element is processed up to this date, even if it isn't active at the end of a payroll period.

### Last Standard Process Date

The application sets the value for the last standard process date to the last day of the pay period in which the person is terminated. However, you can set it to a later period when you terminate the person. The application stops all element entries on the last standard process date or on the date the assignment ends, if it's earlier.

### Related Topics

- [How Element Setup Affects Entries and Their Values](#)
- [Payroll Elements](#)

## Default Values for Element Entries

Specify default values for element entries using the Elements task. Your element setup controls when the default value affects element entries.

You can apply the default value in any of these scenarios

- When you create an element entry
- At run time

- When you use a formula to define default values on one or more entry values

You can do these actions:

- Set a default value for an input value, or select a defaulting formula for the element.
- Override the default value or formula for a specific group of employees that an element eligibility record identifies.
- Override the default value for specific employees on their element entries.

## Define Default Values at Element Entry Creation

When you create or edit input values, you can specify a default value. If you don't select the **Apply default at runtime** option, subsequent updates to the default value have no effect on existing element entries. Users can override or change the default value at any time.

## Define Default Values at Runtime

To use this method, enter the default value and select the **Apply default at runtime** option for the input value. If the element entry value is left blank, the payroll process uses the current default value from the element or element eligibility record. If you enter a value, the manual entry overrides the default value and updates to the default value don't affect that entry. If you want to restore the default value, clear the entry.

## Use a Formula to Provide Default Values

You can create a formula of type element input validation to provide default values for one or more entry values. Select this formula in the Defaulting Formula field for an element or element eligibility record.

Here's the order of precedence:

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

### *Related Topics*

- [Options to Determine an Element's Latest Entry Date](#)
- [How Element Setup Affects Entries and Their Values](#)
- [Element Input Validation Formula Type](#)

## 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.

Additionally, you can calculate entry values based on the user's entries in other entry values.

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

Page Section	Field	Purpose	When Does the Formula Run?
Element Details or Element Eligibility	Validation Formula	Validates one or more entry values for the element based on entries in other entry values.	When you save the element entry.
Element Details or Element Eligibility	Calculation Formula	Provides values for one or more entry values using a calculation formula that takes input from these entry values or other entry values.	When you save the element entry.
Element Details or Element Eligibility	Defaulting Formula	Provides default values for one or more entry values.	When you create the element entry.
Input Value	Validation Formula	Validates one entry value independent of others.	When you enter a value.

**Note:** A formula at the element eligibility level always overrides an equivalent formula at the element level.

Here are the contexts that are available to all formulas of this type:

- LEGISLATIVE\_DATA\_GROUP\_ID
- DATE\_EARNED
- EFFECTIVE\_DATE

These contexts are available to formulas only at element or element eligibility level; they aren't available to validation formulas at the input value level:

- PERSON\_ID
- PAYROLL\_RELATIONSHIP\_ID
- PAYROLL\_TERM\_ID
- PAYROLL\_ASSIGNMENT\_ID
- HR\_RELATIONSHIP\_ID
- HR\_TERM\_ID
- HR\_ASSIGNMENT\_ID

Here are the input variables that are available to formulas of this type.

Formula Usage	Input Variables	Comments
Validation formula at input value level	<code>entry_value</code>	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.



Formula Usage	Input Variables	Comments
Defaulting formula	None	Use database items or other logic instead.
Calculation formula	Any element input value name of an entry value.	Replace spaces with underscores.  You need not provide all of the available entry values.

Here are the return values that are available to formulas of this type.

Formula Usage	Return Values	Comments
Validation formula at any level.	<code>formula_status</code>	Must be either 'S' (success) or 'E' (error). Required.
Validation formula at any level.	<code>formula_message</code>	The text of the message is passed to the user if the validation fails. Optional.
Defaulting formula	Any element input value name of an entry value.	A return value overrides any default value that's provided on the input value in the element or element eligibility record.
Calculation formula	Any element input value name of an entry value.	You don't need to return all of the available entry values. You can return the entry values that were passed as input variables or other entry values.

Here are a few sample formula that you can use:

- Validation formula at input value level
- Validation formula at element or element eligibility level
- Calculation formula at element or element eligibility level
- Defaulting formula at element or element eligibility level

Validation formula at input value level:

```
inputs are entry_value(date)
if(entry_value = '01-APR-2008' (date)) then
(
formula_message = 'Valid date'
formula_status = 'S'
)
else(formula_message = 'Invalid date'
formula_status = 'E'
)
return formula_message, formula_status
```

Validation formula at element or element eligibility level:

```
inputs are hours_worked, rate, earning_date(date), comment(text)
if(hours_worked > 80) then
(
formula_message = 'You are within the working limit.
```

```
'formula_status = 'S'
)
else
(
formula_message = 'You have worked too many hours.
'formula_status = 'E'
)
return formula_message, formula_status
```

Calculation formula at element or element eligibility level:

```
inputs are hours_worked, rate, comment(text)
if(hours_worked > 80) then
(
rate = rate * 1.2
comment = 'Your rate has been increased'
)
return rate, comment
```

Defaulting formula at element or element eligibility level:

```
if(CATEGORY = 'S') then
(
rate = 20
)
else
(
rate = 30
)
rate_code = 'B'
return rate, rate_code
```

## Formula Result Rules for Elements

An element's status processing rule identifies the formula that the payroll run uses to process the element for workers with a specified assignment status. For each status processing rule, formula result rules determine what happens to each result that the formula returns.

### Status Processing Rules

An element can have one status processing rule for all assignment statuses, or a different rule for each status. For example, you could have two rules for a Wages element: Standard Wages and Paid Training Leave.

### Formula Result Rules

Formulas return formula results, such as the amount to be paid, or a message. Results can update the current element entry or another element entry with a lower processing priority.

This table explains the available result rules.

Results Rule	What's Its Use
Direct Result	The element's run result, or a direct result updating one of the element's input values.
Indirect Result	An entry to a nonrecurring element that has a lower processing priority. The target element must be at the same employment level as the source element.

Results Rule	What's Its Use
Message	<p>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 <i>Loan is repaid</i>.</p> <p>There are three severity levels for a message rule:</p> <ul style="list-style-type: none"> <li>• Error - Causes the run to roll back all processing for the employment record.</li> <li>• Warning - Doesn't affect payroll processing but warns you of a possible problem.</li> <li>• Information - Doesn't affect payroll processing.</li> </ul>
Order Indirect	Updates the subpriority of the element you select in the Target Element Name field.
Stop	<p>Uses the Date Earned of the payroll run to stop the processing of a recurring entry. A stop rule can be based upon reaching a specified accumulator, such as a balance owed of zero. The date upon which the total owed is reached appears on the Element Entries page as Settlement Date. The entries aren't actually end dated but stopped from future processing. This rule supports retroactive processes which impact the total owed balance.</p> <p>You should define the target element with Allow Multiple Entries selected. This option enables you to allocate a new entry once the value of an existing entry has reached zero. For example, once an employee has repaid a loan you can add a new loan entry for the employee. If you add a new stop entry for the same element type, use balance contexts to differentiate between the owed balances.</p> <p><b>Note:</b> Let's assume you don't select Allow Multiple Entries and you add a second loan after the first loan has been stopped by a payroll run. In this case, end date the first loan before creating the second loan.</p>
Target Indirect	An entry to a nonrecurring element that has a lower processing priority. Here, the target element is defined at a different employment level than the element being processed. For example, you could use a Target Indirect rule to update the input value of an assignment-level element from the processing of a payroll relationship element.

## Element Eligibility

### Overview

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

In these examples, you restrict who can receive an element entry:

- Your enterprise provides company cars only to people in the sales or customer support departments. You create two eligibility records, and use the Department field to specify the eligibility criteria. Select Sales Department for one record and Customer Support for the second record.



Level	Available Criteria
	<p><b>Note:</b> You're advised to define eligibility rules based on the payroll criteria for all assignment elements such as salary. Select the 'All Payroll Eligible' option if your company doesn't have eligibility rules based on an employee's payroll. The 'All Payroll Eligible' option ensures all employees who are assigned to a payroll will be eligible for the element.</p> <p>Bargaining Unit</p> <p>Collective Agreement</p> <p>Union Member</p>

**Tip:** You must define element eligibility for every element, including predefined elements. You are advised to define eligibility rules based on the payroll criteria for all assignment level elements. It is also common practice for payroll customers to define costing rules on the element eligibility record. Additional eligibility rules can be defined for compensation and benefit elements using eligibility profiles.

## Multiple Rules of Eligibility

You can define more than one eligibility record for each element, but there must be no overlap between them.

For example, you can create one record for the combination of grade A and the job of accountant. However, you can't create one record for grade A and a second for the job of accountant. These rules would imply that an accountant on grade A is eligible for the same element twice.

If you have more than one element eligibility record, you can enter different default values and costing information for each eligibility group.

### Related Topics

- [Maintain Element Eligibility](#)

## Maintain Element Eligibility

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

This table summarizes the actions you can take.

Action	What's The Result
Change the input value default values and validation	These changes affect all new entries, and updates to existing entries. Changes to runtime defaults affect existing entries too.
Delete the element eligibility record	The application automatically ends all existing recurring entries when you end the element's eligibility.

Action	What's The Result
	<p><b>Note:</b> 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.</p>

*Related Topics*

- [Payroll Element Eligibility](#)

## Add Eligibility Rules for Predefined Elements

If the country extension on the Manage Features by Country or Territory page is set to Payroll or Payroll Interface, you must add element eligibility records for predefined statutory deduction elements before you hire any workers.

Here's how you can search for the predefined elements:

1. Go to the **Elements** task.
2. Click **Go to Task**.
3. Search for these predefined elements:

Country or Territory	Predefined Element
US, Canada, Mexico	US Taxation, CA Taxation, MX Taxation
Australia, India, Singapore	Statutory Deductions
Kuwait, Saudi Arabia, United Arab Emirates, Bahrain, Qatar and Oman	Social Insurance Gratuity GOSI
China	Aggregation Information
UK	Tax and NI Pensions Automatic Enrollment
Netherlands	Tax and Social Insurance Calculations
France	French Payroll Processing

**Note:** There are no predefined elements that require eligibility rules for Germany, Ireland, Switzerland, or Hong Kong.

Here's how you can add eligibility rules:

1. Click the element name to open the Element Summary page.
2. Enter a date in the Effective As-of Date field.

Use the start date of the element, which is 1/1/1901.

3. Enter a name for the eligibility rule and click **Submit**. Since you haven't selected any eligibility criteria, all employees are eligible for the element.
4. Click **Done**.

## Earnings Elements

### Options for Creating Payroll Earnings Elements

Use the element template to create and configure earnings elements and their associated objects. The template prompts you for information that's used to create the necessary payroll objects.

You can also edit the objects created by the element template. You first create an element and then update it so that it's available for all payrolls.

Use the Elements task in the Compensation section of My Client Groups to create elements.

Primary classifications control processing, the priority in which elements are processed, and the balances they feed. They are designed to meet legislative requirements and you can't change them. Here are the predefined primary classifications you can choose for China:

- Standard Earnings
- Supplemental Earnings
- Taxable Benefits
- Direct Payments

**Note:** For standard earnings and supplemental earnings, the secondary classifications determine how the tax is calculated. Taxable benefits are always added to the taxable income. Direct payments aren't subject to tax.

Given below are some components you must consider when creating an earnings element for a China payroll.

### Earnings Elements Processing

The processing of the earnings is controlled by proration.

#### Proration

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 group, the proration rate conversion rule, and the proration units. This table lists the proration fields and the options that you can choose for each field.

Field	Option
Proration Group	Select a proration group.
Proration Rate Conversion Rule	Select any of these options: <ul style="list-style-type: none"> <li>Standard Rate Annualized</li> <li>Standard Rate Daily</li> <li>Standard Working Hours Rate Annualized</li> <li>Assignment Working Hours Rate Annualized</li> <li>China Standard Rate Conversion (the default)</li> <li>Periodic Work Schedule Rate Annualized</li> </ul>
Proration Units	Select any of these options: <ul style="list-style-type: none"> <li>Hourly</li> <li>Daily</li> <li>Workday (the default)</li> </ul>

As a guideline you must not prorate:

- Nonrecurring elements
- Earnings elements with a calculation rule of unit multiplied by rate, if rate and hours are entered in the element entry

## Employment Level

Earnings are distributed by assignment. Assignments are associated to jurisdictions, which determine the required tax calculations.

Earnings at the assignment level require no distribution, as the assignment is associated to a single jurisdiction. Oracle Fusion Global Payroll determines the earnings distribution by jurisdiction and allocates the earnings based on standard hours worked.

## Retroactive Pay

Retroactive pay is when an employee receives an adjustment in the current pay period, but the adjustment must have been effected in a previous payroll period. A recalculation is then required.

If you enable retroactive processing for an element, the retroactive pay event is associated with it and retroactive pay elements are automatically generated. When you enable retroactive processing, it:

- Recalculates them to find the changes.
- Adjust changes in the current payroll.



## Create a Regular Earnings Element

This example demonstrates how to use the element template and create a regular earnings element for China. Use the Elements task in the Compensation section of My Client Groups to create the element.

Let's look at the tasks required to create an earnings element:

1. Create the earnings element
2. Create the eligibility record for the element

### How to Create the Earnings Element

To create an earnings element:

1. From your Home page, navigate to **My Client Groups > Show More**.
2. In Compensation, click **Elements**.
3. On the Elements page, click **Create**.
4. Complete these fields, as shown in this table.

Field	Value
Legislative Data Group	Select an appropriate LDG.
Primary Classification	Standard Earnings
Secondary Classification	Standard Taxable Earnings

5. Click **Continue**.
6. On the Basic Information page, complete the fields, as shown in this table:

Field	Value
Name	Enter a name, example: Standard Earnings1
Reporting Name	Enter the name that you want to display on reports for this deduction payroll element.
Effective Date	Enter an early date so that the payroll element is available for use immediately.
Input Currency	Yuan Renminbi
Should every person eligible for the element automatically receive it?	No

Field	Value
What is the earliest entry date for this element?	First Standard Earning Date
What is the latest entry date for this element?	Last Standard Earning Date  An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll, before a pay period end date. If you select this date, then you need to enable proration so the calculation will be correct if a person leaves.
At which employment level should this element be attached?	Assignment  <b>Note:</b> Assignments are associated with jurisdictions, which determine the required tax calculations.
Does the element recur each payroll period, or does it require explicit entry?	Recurring
Process the element only once in each payroll period?	Yes
Can a person have more than one entry of the element in a payroll period?	No

7. Click **Next**. On the Additional Details page, respond to the questions, as shown in this table.

Field	Value
What is the calculation rule?	Flat amount.
Is this element subject to proration?	Yes
Proration Group	Select a proration group.
Proration Rate	China Standard Rate Conversion
Proration Units	Workday

Field	Value
Is this element subject to retroactive changes?	No

8. Click **Next** twice. Verify that the information shown on the Create Element: Review page is correct.
9. Click **Submit**.

## How to Create an Eligibility Record

On the Element Summary page, update the newly created element details.

1. In the Element Overview section, select **Element Eligibility**.
2. Select **Actions** and then **Create Element Eligibility**.
3. In the **Element Eligibility Name** field, enter a name for the eligibility record.
4. In the Eligibility Criteria section, select any criteria if you want to restrict who can pay this deduction. Or else, select **All payrolls eligible**.
5. Click **Submit**.

All the associated balances, feeds, input values, formulas, and related elements required for payroll processing are created automatically.

*Related Topics*

# Absence Elements

## Overview

Absence Management provides a means for accurate absence administration, tracking, reporting, and payroll calculations.

China supports these absence types:

- Vacation
- Sickness
- Maternity
- Other

The majority of the setup for the processing of absences is in the absence management work area. Absence management and payroll are integrated. Payroll processing requires specific information, which is passed from the Absence Management application. It's only passed if it's configured to do so in the absence plan. The payroll process uses this information to calculate the absence payment.

In the absence plan, select the Payroll Integration and associate the absence element with the plan.

Absence management gives you the ability to manage various types of absences. The process includes:

1. Create the absence element using the Manage Elements task with a primary classification of Absences.

The absence element is created in payroll and creates the calculation components the Calculation Information Repository requires.

2. Define the absence plan using the Manage Absence Plans task and select the absence element within the plan itself.
3. The person's absence calculation card can be created two ways:
  - o The employee enters their absence through self-service
  - o You enter an absence for an employee using the Manage Absence Records task.

The task:

- a. Creates the employee's absence calculation card.
- b. Links the absence plan to the calculation component on the person's calculation card.
4. Use the Manage Absence Records task to approve the absence. This transfers the daily and summary breakdown information to Oracle Fusion Global Payroll.
5. Process the payroll that includes these absence entries and view the resulting absence payment or deduction balances on the person's Statement of Earnings. After you process and archive payments, you can view the resulting absence payment or deduction balances on the person's payslip.

**Note:** Calculate the daily pay rate as per China specific rate.

## High-Level Steps

The majority of the setup for the processing of absences is in the Absence Management work area. Absence Management and Payroll Calculations are integrated. This table outlines the high-level list of all the absence and payroll steps involved to configure and process absences.

Procedure	Action
Creating Rate Definitions	Create rate definitions for calculating accruals and liability balances, and salary reductions. Payroll uses the rate definition to calculate absence payments for the employee.
Creating Absence Elements	Create an absence element for each absence plan that transfers absence payment information for payroll processing.
Creating Derived Factors	Create derived factors to define how to calculate certain eligibility criteria that change over time.
Creating Eligibility Profiles	Create eligibility profiles to define criteria that determine whether a person qualifies for objects that you associated with the profile.
Creating Absence Plans	Create an absence plan, and ensure the following is defined for payroll: <ul style="list-style-type: none"> <li>• Select the <b>Transfer absence payment information for payroll processing</b> check box.</li> <li>• Select the element for the plan in the <b>Element</b> field</li> </ul>
Creating Absence Types	Create absence types, and associate them to the absence plans.
Enrolling Employees in Absence Plans	Enroll employees in the absence plan, if explicitly required.

Procedure	Action
Processing Accruals	If an employee is enrolled in an accrual plan, you must run the accrual process.
Creating Employee Absence Records	Record an absence for the employee. This transfers the absence information to Oracle Fusion Global Payroll, assuming the absence is approved and the option to transfer information to payroll is configured.
Processing Payroll	Process the payroll that includes the absence entries.
Viewing Absence Balances	View the employee's absence and accrual balances in the Statement of Earnings payslip, cheque advice, and reports.

## Navigation

Use these tasks located in the related work areas to configure objects for processing absences in payroll:

Object	Setup Task	Work Area
Rate Definition	Manage Rate Definitions	Payroll Calculation
Absence Element	Manage Elements	Payroll Calculation
Derived Factors	Manage Derived Factors	Absence Administration
Eligibility Profile	Manage Eligibility Profiles	Absence Administration
Absence Plan	Manage Absence Plans	Absence Administration
Absence Types	Manage Absence Types	Absence Administration

## Payroll Processing

After the information is transferred to payroll and the entries are generated, you can process the payroll that includes the absence entries. Then view the resulting absence payment or deduction balances on the person's SOE.

## Absence Balance Review

Once you have processed and archived payroll, the employee's absence and accrual balances are displayed on the employee's SOE, payslip, cheque advice, and reports.

## Define Payroll Elements for Processing Absences

You define elements to calculate and process absence payments in Oracle. Create an absence element for each absence plan that transfers absence payment information for payroll processing.

When you create the plan, you must select the absence element to link it to the absence plan.

You need to create an Absence element only if the leave results in a leave payment or leave deduction. If a person is paid normal salary and is availing of annual leave, then you don't create an Absence element for the annual leave type, because no leave payment calculation is required. You need to set up integration for annual leave only if you allow employees to cash out unused leave balance on termination, enrollment end date, or special occasion, or if you pay employees leave payment other than normal salary when they take annual leave.

For example, if you're creating an Absence element for annual leave, then you need to select Vacation as the secondary classification. And, if you're creating an Absence element for a personal leave or an unpaid leave, then you need to select Other as the secondary classification.

When you define an absence element, your responses to the element template questions determine which elements, balances, formulas, and calculation components the template generates.

Define an absence element, selecting a primary classification of Absence, and a secondary classification. Typically, the predefined values for secondary classification include Vacation, Maternity, Sickness, and Other. Use the Manage Elements task in the Payroll Calculation or Setup and Maintenance work areas.

Defining an absence element involves these tasks:

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

### Complete Absence Detail Questions

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

1. Specify the calculation units to use when reporting the absence, for example that's shown on the payslip, and statement of earnings. Typically, you select Days or Hours for your reports that correspond to the units for your absence plan. When creating an absence element, select the work calculation rule to calculate the absence rate.

2. Select the absence information to transfer to payroll based on the type of absence management plan.

**Note:** Absence transactions return an error if you select the **Accrual Balances** option. Oracle recommends that you select the **Accrual Balances and Absences** option. Also, for the generated Entitlement element, deselect the **Process in payroll run** and **Process once per period** check boxes in the Element Summary page to skip the leave payment calculation during payroll run.

Absence Management Plan Type	Absence Information to Transfer	Examples
Accrual	Accrual Balances	A vacation accrual plan that isn't processed through payroll. The leave isn't shown separately on the statement of earnings.
Accrual, Leave Donation, Compensatory	Accrual Balances and Absences	A vacation accrual plan that's processed through payroll. The leave is shown separately on the statement of earnings.
Qualification	Qualification Absences	A maternity plan that's processed through payroll. The leave is shown separately on the statement of earnings.
No Entitlement	No Entitlement Absences	A no entitlement leave plan that's processed through payroll. The leave is shown separately on the statement of earnings.

## Complete Absence Payment Questions

You can choose to reduce the employee's regular earnings by the full absence payment or a defined rate. This option is defined in the Absence Payments section of the absence element template. Select the appropriate option for salaried employees, as defined in the table below.

Question	Steps
Reduce regular earnings by absence payment	Doesn't require a rate definition.
Select rate to determine absence deduction amount	<p>Select this option if your absence payment:</p> <ul style="list-style-type: none"> <li>Is at a different rate than your absence reduction</li> </ul> <p>In this case, use the associated rate fields to select the rates to determine the absence deduction amount and rate to use in the absence calculation.</p> <ul style="list-style-type: none"> <li>You're processing unpaid absences</li> </ul>

## Complete Accrual Liability and Balance Payments Questions

If you're going to transfer accrual balances, complete these questions.

Element Template Section	Question	Description
Accrual Liability and Balance Payments	Calculate absence liability?	Select this option if you want to calculate the liability balance. Use the associated rate field to select the rate to use in the liability balance calculation.
Accrual Liability and Balance Payments	Does this plan enable balance payments when enrollment ends?	Creates the Final Disbursement shadow element, if the value selected is Yes. If No, the shadow element isn't created.
Accrual Liability and Balance Payments	Does this plan enable partial payment of balance?	Creates the Discretionary Disbursement shadow element, if the value selected is Yes. If No, the element isn't created.

## Submit the Element

When you submit the element, the template automatically configures a base pay element, balances, formulas, and calculation components.

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

Element Name	Purpose
<Absence Name>	Absence element you associate with the absence plan.
<Absence Name> Accrual <Absence Name> Accrual Calculator <Absence Name> Accrual Result	Shadow elements: <ul style="list-style-type: none"> <li>Retrieves absence accrual information from Absence Management</li> <li>Processes liability</li> </ul>
<Absence Name> Entitlement <Absence Name> Entitlement Calculator <Absence Name> Entitlement Result	Shadow elements: <ul style="list-style-type: none"> <li>Retrieves absence accrual information from Absence Management</li> <li>Processes absence payments and deductions</li> </ul>
<Absence Name> Entitlement Retroactive	Shadow element used to process absence payments and deductions in retroactive processing.
<Absence Name> Discretionary Disbursement <Absence Name> Discretionary Disbursements Calculator	Shadow elements: <ul style="list-style-type: none"> <li>Retrieves partial payment information from Absence Management</li> <li>Processes these disbursements</li> </ul>



Element Name	Purpose
<Absence Name> Discretionary Disbursements Result	
<Absence Name> Discretionary Disbursement Retroactive	Shadow element used to process partial payment disbursements in retroactive processing.
<Absence Name> Final Disbursement <Absence Name> Final Disbursement Calculator <Absence Name> Final Disbursement Result	Shadow elements: <ul style="list-style-type: none"> <li>Retrieves final payment information from Absence Management, such as upon employee termination</li> <li>Processes these disbursements</li> </ul>
<Absence Name> Final Disbursement Retroactive	Shadow element used to process final payment disbursements in retroactive processing.

## Define Element Eligibility Records

Define element eligibility records for all the elements generated by the template, for example for the base element, the accrual and entitlement elements, discretionary and final disbursement elements. For example, for the element Vacation 1, you must create element eligibility as follows:

- <base element> (Vacation 1)
- <base element> accrual (Vacation 1 Accrual)
- <base element> entitlement (Vacation 1 Entitlement)

If you chose to create the final disbursement or discretionary elements, you must also create element eligibility for these shadow elements:

- <base element> discretionary disbursement (Vacation 1 Discretionary Disbursement )
- <base element> discretionary disbursement result (Vacation 1 Discretionary Disbursement Result)
- <base element> final disbursement (Vacation 1 Final Disbursement)
- <base element> final disbursement result (Vacation 1 Final Disbursement Result)

If you're processing retroactive payments, you must also create element eligibility for these retroactive shadow elements:

- <base element> entitlement retroactive (Vacation 1 Entitlement Retroactive )
- <base element> discretionary disbursement retroactive (Vacation 1 Discretionary Disbursement Retroactive)
- <base element> final disbursement retroactive (Vacation 1 Final Disbursement Retroactive)

## Define Cost Distributions

If your enterprise calculates cost distributions, specify costing element eligibility for these payment elements:

- Base absence entitlement, entitlement results, and entitlement retroactive elements
- Discretionary disbursement, disbursement result, and disbursement retroactive elements

- Final disbursement, disbursement result, and disbursement retroactive 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.

You must determine how to cost element eligibility records, including which type of costing to apply and which input value to cost. You determine which account numbers to specify for the cost account segments, such as the natural account, and which offset account balances the cost account.

*Related Topics*

## Define Payroll Elements for an Absence Accrual Plan

This example shows how you can define an absence element for a vacation accrual absence plan.

Based on your setup decisions, this procedure configures these additional elements:

- Accrual element to process absence liability amounts
- Entitlement element to process payments for absence during vacation
- Discretionary Disbursement element to process disbursement of partial time accruals
- Final Disbursement element to process accrual disbursement when the absence plan enrollment ends

The name of the element is prefixed to each additional element.

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 and absences
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

Decisions to Consider	In This Example
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 reduce earnings for employees not requiring a time card?	Reduce regular earnings by absence payment

## Before You Begin

Ensure that you configured a rate definition to determine the monetary value of a unit of absence, and depending on your enterprise, separate rates to calculate liability, discretionary disbursement, and final disbursement payments. You configure a rate definition using the Manage Rate Definitions task in the Setup and Maintenance or the Rate Definitions task in the Absences section of My Client Groups.

## How to Define an Absence Element

1. From your Home page, navigate to **My Client Groups > Show More**.
2. Under Compensation, click **Elements**.
3. On the Elements page, click **Create**.
4. In the Create Element window, complete the fields as shown in this table.

Field	Value
<b>Legislative Data Group</b>	Select your legislative data group.
<b>Primary Classification</b>	Absences
<b>Secondary Classification</b>	Vacation
<b>Category</b>	Absence

5. Click **Continue**.
6. 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
<b>Name</b>	Annual Leave

Field	Value
Reporting Name	Annual Leave
Effective Date	01/01/2010
Input Currency	Yuan Renminbi

7. In the Absence Plan Details section, complete the fields as shown in this table. Use default values for fields unless the steps specify other values.

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

8. Click **Next**.  
9. On the Create Elements: Additional Details page, in the Absence Payments section, complete this question:

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?	Select the rate to use to calculate leave payment

10. 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

Field	Value
	<p><b>Note:</b> Usually the rate is the same as the absence payment rate. You might select a different rate when estimating liability for billing purposes.</p>
Does this plan enable balance payments when enrollment ends?	<p>Yes</p> <p><b>Note:</b> The Final Disbursement element is created. If you select No, the Final Disbursement element isn't created.</p>
Which rate should the final balance payment calculation use?	Final disbursement rate
Does this plan enable partial payment of balance?	<p>Yes</p> <p><b>Note:</b> The Discretionary Disbursement element is created. If you select No, the Discretionary Disbursement element isn't created.</p>
Which rate should the discretionary disbursement use?	Discretionary disbursement rate

11. Click **Next**.
12. On the Create Element: Review page, review the information that you entered so far.
13. Click **Submit** to open the Element Summary page.

The template generates all the related elements, balances, and formulas.

## How to Define Element Eligibility

1. In the Element Overview section of the Element Summary page, click the **Element Eligibility** node.
2. Click **Create Element Eligibility** from the Actions menu.
3. In the Element Eligibility section, enter Vacation Payment Open in the **Element Eligibility Name** text box. Leave the rest of the fields on the page blank.
4. Click **Submit**.
5. Click **Done**.
6. In the Elements page, search for the other elements prefixed with your absence element name.
7. Select each element in turn and repeat the steps on the Element Summary page to define eligibility for each element.

# Voluntary and Pretax Nonstatutory Deductions

## Voluntary Deductions

Voluntary deductions are deductions that an employee chooses to pay through their salary instead of making the payments directly. The deductible amount is either a fixed amount or a percent of the total earnings during a payroll run.

Only certain earnings are taken into account when working out how much money is available to make voluntary deduction payments.

The following secondary classifications are delivered for the Voluntary Deductions primary classification:

- Donation Deductions
- Enterprise Annuity Employee Contributions

## Pretax Nonstatutory Deductions

Pretax nonstatutory deductions are deductions made before the tax calculation, and they reduce the total taxable income and tax withheld for an employee.

There's only one secondary classification delivered for the Pretax Nonstatutory Deductions primary classification: Termination Deductions.

When there are insufficient earnings to pay a pretax deduction and to pay all taxes, the pretax deduction must be reduced. When creating a Pretax Nonstatutory Deductions element, you specify whether the payroll run takes nothing or a partial amount in case it can't take the full deduction. You also choose whether or not to hold the arrears in a balance so that the payroll run can try to deduct this amount in a subsequent payroll period. The arrears are held at the Payroll Relationship level.

## Options for Creating Voluntary and Pretax Nonstatutory Deduction Elements

Elements are created using the predefined element templates. The primary purpose of the element template is to provide an intuitive user interface.

You can easily create element types and their associated objects such as balances, formulas, links, and so on that are necessary for payroll processing.

Use the Elements task in the Compensation section of My Client Groups to create Voluntary or Pretax Nonstatutory deduction elements. Here are a few factors you must consider when creating Voluntary or Pretax Nonstatutory deduction elements for China.

## Latest Entry Date

An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll. Select the last standard earning date option, and 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. If you use a fixed amount for every pay period, then you usually select **Last Standard Process Date** as the latest entry date for the element.

## Employment Level

Based on your business requirements, you can select either Payroll Relationship Level or Assignment Level. Select **Payroll Relationship Level**, so as to hold the arrears in a balance so that the payroll run can deduct the deduction amount in a subsequent payroll period. The arrears are held at the Payroll Relationship level. This level is the highest level for accumulating balances.

## Arrears or Partial Deduction

When there are insufficient earnings for a deduction, specify whether the payroll run takes nothing or a partial amount in case it can't take the full deduction. These are the options:

- Don't take a partial deduction or create arrears: This is the default answer.
- Don't take partial deduction, place all in arrears: An arrears amount is created and it's deducted in subsequent payrolls.
- Take a partial deduction, but don't create arrears.
- Take a partial deduction, place remaining in arrears.

## Proration

Typically, you don't prorate deductions, especially deductions based on fixed amount or a percentage of earnings.

## Retroactive Processing

Retroactive pay is when an employee receives an adjustment in the current pay period, but the adjustment was first incurred in a previous payroll period. A recalculation is required, and this is accomplished through the Recalculate Payroll for Retroactive Changes process.

When you create the element, specify that it's subject to retroactive changes. Select the predefined retroactive event group for the element, or create your own. When an element is subject to retroactive changes, all components for the retroactive element are created automatically.

# Create a Pretax Nonstatutory Deductions Element

This example demonstrates how you can use the element template and create a Pretax Nonstatutory Deductions element for China. Use the Elements task in the Compensation section of My Client Groups to create the element.

Creating a Pretax Nonstatutory Deductions element includes:

- Creating the Pretax Nonstatutory Deductions element
- Creating the element eligibility record

## How to Create a Pretax Nonstatutory Deductions Element

To create a deductions element:

1. From your Home page, navigate to **My Client Groups > Show More**.
2. Under Compensation, click **Elements**.
3. On the Elements page, click **Create**.
4. Enter these details.

Field	Value
Legislative Data Group	Select an appropriate LDG.
Primary Classification	Pretax Nonstatutory Deductions
(Optional) Secondary Classification	Termination Deductions

5. Click **Continue**.
6. On the Basic Information page, complete these fields.

Field	Value
Name	Enter a name, example: Pretax Nonstatutory Deductions1
Reporting Name	The name you enter is displayed on reports for this deduction payroll element.
Effective Date	Enter an early date so that the payroll element is available for use immediately.
Input Currency	Yuan Renminbi
Should every person eligible for the element automatically receive it?	No
What's the earliest entry date for this element?	First Standard Earning Date
What's the latest entry date for this element?	Last Standard Process Date  <b>Note:</b> An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll.



Field	Value
At which employment level should this element be attached?	Payroll Relationship Level  <b>Note:</b> Select Payroll Relationship Level, if you want to hold the arrears in a balance so that the payroll run can deduct the pretax amount in a subsequent payroll period. The arrears are held at the Payroll Relationship level.
What should happen if there are insufficient funds to cover the deduction?	Take a partial deduction, place remaining in arrears.
Does the element recur each payroll period, or does it require explicit entry?	Recurring
Process the element only once in each payroll period?	Yes
Can a person have more than one entry of the element in a payroll period?	No

7. Click **Next** on the Additional Details page, respond to these questions, as shown in this table.

Field	Value
What is the calculation rule?	Fixed amount deduction.
Is this element subject to proration?	No
Is this element subject to retroactive changes?	No
Processing Stop when the Total is reached?	Yes

8. Click **Next** twice. Verify that the information shown on the Create Element: Review page is correct.

9. Click **Submit**.

## How to Create an Eligibility Record

On the Element Summary page, update the newly created element details.

1. In the Element Overview section, select **Element Eligibility**.
2. Select **Actions**, and then **Create Element Eligibility**.
3. In the **Name** field, enter a name for the eligibility record.
4. In the Eligibility Criteria section, select any criteria if you want to restrict who can pay this deduction. Or else, select **All payrolls eligible**.
5. Click **Submit**.  
All the associated balances, feeds, input values, formulas, and related elements required for payroll processing are created automatically.

# Social Security and Tax Deductions

## Social Security Deductions

Social security deductions include the following:

- Basic Pension Insurance
- Basic Medical Insurance
- Supplementary Medical Insurance
- Unemployment Insurance
- Maternity Insurance
- Work-Related Injury Insurance
- Public Housing Fund
- Supplementary Public Housing Fund

The following secondary classifications are delivered for the Social Security Deductions primary classification:

- Basic Pension Insurance Employee Contribution
- Basic Medical Insurance Employee Contribution
- Supplementary Medical Insurance Employee Contribution
- Unemployment Insurance Employee Contribution
- Maternity Insurance Employee Contribution
- Work-Related Injury Insurance Employee Contribution
- Public Housing Fund Employee Contribution
- Supplementary Public Housing Fund Employee Contribution

## Tax Deductions

Tax deductions are deductions that an employer deducts from an employee's gross pay, when an employee is paid.

The following secondary classifications are delivered for the Tax Deductions primary classification:

- Annual Bonus Tax
- Regular Tax
- Severance Payments Tax

## Options for Creating Social Security and Tax Deduction Elements

Elements are created using the predefined element templates.

The primary purpose of the element template is to provide an intuitive user interface so that you can easily create element types and their associated objects such as balances, formulas, links, and so on that are necessary for payroll processing.

Use the Elements task in the Compensation section of My Client Groups to create Social Security and Tax deduction elements. You need to create the social security elements only in situations where you need to make adjustments to the employee and employer contributions. Here are a few factors you must consider when creating Social Security and Tax deduction elements for China.

### Latest Entry Date

An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll. Select **Final Close**.

### Employment Level

Select **Payroll Relationship Level**, so as to hold the arrears in a balance so that the payroll run can deduct the deduction amount in a subsequent payroll period. The arrears are held at the Payroll Relationship level. This level is the highest level for accumulating balances and pension and union dues are generally defined at this level.

### Recurring or Nonrecurring

Select **Nonrecurring**, which indicates that this element doesn't recur in each payroll period.

## Create a Social Security Deductions Element

This example demonstrates how you can use the element template and create a social security deductions element for China. Use the Elements task in the Compensation section of My Client Groups to create the element.

Creating a Social Security deductions element includes:

- Creating the social security deductions element
- Creating the input values
- Creating the element eligibility record
- Creating balance feeds

## How to Create a Social Security Deductions Element

To create a social security deductions element:

1. From your Home page, navigate to **My Client Groups > Show More**.
2. Under Compensation, click **Elements**.
3. On the Elements page, click **Create**.
4. Enter these details.

Field	Value
Legislative Data Group	Select an appropriate LDG.
Primary Classification	Social Security Deductions
Secondary Classification	Basic Pension Insurance Employee Contribution

5. Click **Continue**.
6. On the Basic Information page, complete these fields.

Field	Value
Name	Enter a name. For example: Basic Pension Insurance EE Cont Adjustment
Reporting Name	The name you enter is displayed on reports for this deduction payroll element.
Effective Date	Enter an early date so that the payroll element is available for use immediately.
Input Currency	Yuan Renminbi
Should every person eligible for the element automatically receive it?	No
What's the earliest entry date for this element?	First Standard Earning Date
What's the latest entry date for this element?	Final Close

**Note:**  
An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll.

Field	Value
At which employment level should this element be attached?	Payroll Relationship Level  <b>Note:</b> Select Payroll Relationship Level, if you want to hold the arrears in a balance so that the payroll run can deduct the pretax amount in a subsequent payroll period. The arrears are held at the Payroll Relationship level.
Does the element recur each payroll period, or does it require explicit entry?	Nonrecurring
Process the element only once in each payroll period?	Yes
Can a person have more than one entry of the element in a payroll period?	Yes

7. Click **Next** on the Additional Details page.
8. Click **Next** twice. Verify that the information shown on the Create Element: Review page is correct.
9. Click **Submit**.

## How to Create an Input Value

On the Element Summary page, update the newly created element details.

1. In the Element Overview section, select **Input Values**.
2. Select **Actions**, and then **Create Input Value**.
3. In the **Name** field, enter **Pay Value**.
4. From the **Special Purpose** list, select **Primary output value**.
5. From the **Unit of Measure** list, select **Money**.
6. Select the **Displayed**, **Allow User Entry**, **Required**, and **Create a Database Item** check boxes.
7. Click **Submit**.

## How to Create an Eligibility Record

On the Element Summary page, update the newly created element details.

1. In the Element Overview section, select **Element Eligibility**.
2. Select **Actions**, and then **Create Element Eligibility**.
3. In the **Name** field, enter a name for the eligibility record.
4. In the Eligibility Criteria section, select any criteria if you want to restrict who can pay this deduction. Or else, select **All payrolls eligible**.
5. Click **Submit**.  
All the associated balances, feeds, input values, formulas, and related elements required for payroll processing are created automatically.

## Create Balance Feeds

To display the user-defined social security deduction items on the statement of earnings and payslip, complete these steps:

1. Use the Balance Definitions task to create a balance with Social Security Deductions category with the created element specified under the Primary Details section.
2. Add the following dimensions for the new balance:
  - o Relationship, Run
  - o Relationship, Year to Date
  - o Relationship, Tax Unit, and Run
  - o Relationship, Tax Unit, and Year to Date
  - o Relationship, Tax Unit, Payslip
3. Add one balance feed for the balance by using the Social Security deductions element you created for Basic Pension Insurance.
4. Verify that the balance feed exists for the element for the following balances:
  - o Social Security Deductions
  - o Statutory Deductions
  - o Gross Deductions
  - o Net Payments
  - o Subject to Minimum Wage Protection Calculation
5. Add the balance feed to this seeded balance: Basic Pension Insurance Employee Nontaxable Contribution.
6. Use the Balance Groups task and add the newly created balance to Global Payroll Relationship Other Deductions balance group (with balance group usage: Global Payroll Relationship Other Deductions for Global Archive) with the following dimensions:
  - o Relationship, Tax Unit, Payslip
  - o Relationship, Tax Unit, and Year to Date

## Employer Charges

### Overview

Employer charges are the contributions that an employer makes for an employee for social security management.

The following secondary classifications are delivered for the Employer Charges primary classification:

- Basic Medical Insurance Employer Contribution
- Basic Pension insurance Employer Contribution
- Enterprise Annuity Employer Contribution
- Maternity Insurance Employer Contribution

- Public Housing Fund Employer Contribution
- Supplementary Medical Insurance Employer Contribution
- Supplementary Public Housing Fund Employer Contribution
- Unemployment Insurance Employer Contribution
- Work-Related Injury Insurance Employer Contribution

## Options for Creating Employer Charges Elements

Elements are created using the predefined element templates.

The primary purpose of the element template is to provide an intuitive user interface so that you can easily create element types and their associated objects such as balances, formulas, links, and so on that are necessary for payroll processing.

Use the Elements task in the Compensation section of My Client Groups to create employer charges elements. You need to create the employer charges elements only in situations where you need to make adjustments to the employee and employer contributions. Here are a few factors you must consider when creating Employer Charges elements for China.

### Latest Entry Date

An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll. Select **Final Close**.

### Employment Level

Select **Payroll Relationship Level**.

### Recurring or Nonrecurring

Select **Nonrecurring**.

## Create an Employer Charges Element

This example demonstrates how you can use the element template and create an Employer Charges element for China. Use the Elements task in the Compensation section of My Client Groups to create the element.

Creating an Employer Charges element includes:

- Creating the employer charges element
- Creating the element eligibility record

### How to Create an Employer Charges Element

To create an employer charges element:

1. From your Home page, navigate to **My Client Groups > Show More**.
2. Under Compensation, click **Elements**.
3. On the Elements page, click **Create**.
4. Enter these details.

Field	Value
Legislative Data Group	Select an appropriate LDG.
Primary Classification	Employer Charges
Secondary Classification	Basic Pension Insurance Employer Contribution

5. Click **Continue**.
6. On the Basic Information page, complete these fields.

Field	Value
Name	Enter a name. For example, Basic Pension Insurance ER Cont Adjustment
Reporting Name	The name you enter is displayed on reports for this payroll element.
Effective Date	Enter an early date so that the payroll element is available for use immediately.
Input Currency	Yuan Renminbi
Should every person eligible for the element automatically receive it?	No
What's the earliest entry date for this element?	First Standard Earning Date
What's the latest entry date for this element?	<p>Final Close</p> <p><b>Note:</b> An element's latest entry date determines how element entries process after a person is terminated or transferred to another payroll.</p>
At which employment level should this element be attached?	Payroll Relationship Level



Field	Value
	<p><b>Note:</b> Select Payroll Relationship Level, if you want to hold the arrears in a balance so that the payroll run can deduct the pretax amount in a subsequent payroll period. The arrears are held at the Payroll Relationship level.</p>
Does the element recur each payroll period, or does it require explicit entry?	Nonrecurring
Process the element only once in each payroll period?	Yes
Can a person have more than one entry of the element in a payroll period?	Yes

7. Click **Next** on the Additional Details page, respond to these questions, as shown in this table.

Field	Value
What is the calculation rule?	Fixed amount deduction
Is this element subject to retroactive changes?	No
How do you want the element to be processed when an employee has zero earnings?	Process the element

8. Click *Next* twice. Verify that the information shown on the Create Element: Review page is correct.
9. Click *Submit*.

## How to Create an Input Value

On the Element Summary page, update the newly created element details.

1. In the Element Overview section, select **Input Values**.
2. Delete the **Amount** and **Period Type** inputs values.
3. Click **Submit**.

## How to Create an Eligibility Record

On the Element Summary page, update the newly created element details.

1. In the Element Overview section, select **Element Eligibility**.

2. Select **Actions**, and then **Create Element Eligibility**.
3. In the **Name** field, enter a name for the eligibility record.
4. In the Eligibility Criteria section, select any criteria if you want to restrict who can pay this deduction. Or else, select **All payrolls eligible**.
5. Click **Submit**.

All the associated balances, feeds, input values, formulas, and related elements required for payroll processing are created automatically.

## Set Up Payroll Processing Rules

### Frequency Rules

Use frequency rules to process a recurring element at a frequency other than the one you defined for the payroll.

For example, you can use a frequency rule to process a monthly deduction in the third payroll period of the month for employees that are paid on a weekly basis. For employees that are paid on a semimonthly payroll, you can use a frequency rule to process the monthly deduction in the second period of the month only. In these cases, define a different frequency rule for each element.

Column headers dynamically display on the Element Summary page based on the frequency period. For example, if the payroll period is weekly, the column headers are Week 1, Week 2, and so on. To control how often to process the element, select the periods you want.

### Controlling the Processing of Recurring Elements

The Date field on the Element Summary page provides three values. This table explains the three options you can use to control the processing of recurring elements.

Field Value	Description	How Pay Periods are Derived
Date Earned	Date on which the application processes element entries for the payroll run.	Uses the pay period end date of the period that contains the date earned to 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.

Field Value	Description	How Pay Periods are Derived
		<p><b>Note:</b> For offset payrolls, where the effective date isn't within the start and end dates of the current period, the end date of the period that contains the effective date is used.</p> <p>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.</p>
Payroll Run Date	Date used by the payroll calculation process to retrieve effective values such as employee details.	<p>Uses the payroll run date to determine the number of pay periods in the month.</p> <p><b>Note:</b> 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.</p>

### Example of Using the Payroll Run Date Option

Let's say you deduct pre-tax medical insurance payments twice a month for all employees on your biweekly payroll. In this scenario, you should select the Payroll Run Date option. Selecting this option ensures your payroll application doesn't process more than two deductions for the month.

The pay period dates listed in this table are for a biweekly payroll.

Pay Period	Pay Period Start Date	Pay Period End Date	Payroll Run Date
1	19-December-2015	1-January-2016	6-January-2016
2	2-January-2016	15-January-2016	20-January-2016
3	16-January-2016	29-January-2016	3-February-2016

This table describes how the process 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.

## Element Frequency Rules for Terminated Employees

When you terminate an employee, the application normally ends the payment of recurring elements such as salary, therefore frequency rules can't be applied. The application processes frequency rules in the payroll period in which the employee terminates but these rules aren't processed in subsequent payroll periods. You can use element entry start and end dates to control the frequency of recurring elements for terminated employees.

### Related Topics

- [Restrict Payroll Processing](#)

## Restrict Payroll Processing

Select rules to control which payroll relationships and which elements to process in a payroll run.

For example, a skip rule or frequency rule. Specify flow parameters when you submit the calculation process to restrict the payroll relationships and further restrict the elements that the run processes. For example, Calculate Payroll or Calculate Gross

Earnings.

## Restrict the Elements Processing Based on Rules

You can create skip and frequency rules that control when the payroll run processes the recurring element.

Rules	Use To	Examples
Skip	Include or exclude the element entry for the person using rules in a formula	A once-each-period rule stops recurring element entries from processing more than once in a payroll period.
Frequency	Specify which payroll periods to process the entries	Changed to: A frequency rule might specify that the payroll run processes an element only on the first and third weeks of a month.

Rules	Use To	Examples

## Restrict the Records to Process Based on Flow Parameters

As this table shows, specify flow submission parameters to restrict the number of records for the calculation process.

Parameter	Use To
Payroll Relationship Group	Restrict processing to the payroll relationships within the group, which you can define using static or dynamic rules, based on payroll relationship or assignment information.
Element Group	Restrict processing to the elements in the group, which you can define by selecting element classifications and including or excluding specific elements.
Run Types	Determine which payroll calculations to perform and how to pay the results. The application processes an element in all the run types, unless you set up the element in these ways: <ul style="list-style-type: none"> <li>To process separately</li> <li>As a trigger for a run type, in which case it's automatically excluded from the other run types</li> </ul>

This table shows the flow submission parameters for the calculation process including dates that control which records to process:

Date	Required?	Comments
Process Date	No	This is typically the payroll run date of your payroll definition.
Payroll Period	Yes	Used to derive other dates for processing.
Date Earned	Yes	Identifies these element entries <ul style="list-style-type: none"> <li>To include in the payroll run</li> <li>That belong to a proration group and ended within the payroll period</li> </ul>

### Related Topics

- Overview of Object Groups
- Options to Determine an Element's Latest Entry Date

## FAQs for Elements

### What's the difference between a recurring and nonrecurring element?

A recurring element has an entry that applies in every pay period until the entry ends.

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

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

### What's an element's skip rule?

A skip rule is an optional formula that determines the circumstances in which an element is processed.

If you specify a skip rule for the element, payroll runs process the element only when the conditions of the formula are met. Otherwise, it skips the element. You select skip rules on the Manage Elements page.

#### *Related Topics*

- [Overview of Using Fast Formula Components](#)
- [Element Skip Formula Type](#)

### How can I create an element for retroactive processing?

When you create the element, specify that it's subject to retroactive changes. Select the predefined retroactive event group for the element or create your own to select.

When an element is subject to retroactive changes, many of the components for the retroactive element are created automatically. This includes adding the element to the retroactive event group and proration group; however you must set up the retroactive components. To process an element in a retroactive payroll run, the element must have a retroactive component that defines the processing rules. Create your own retroactive event group, proration event group and change the default values for elements in the Element page.

### When does an element get processed with a processing option of process once per period?

The first payroll run of each period processes the element entries. If this option isn't available for your country or territory, you can select a skip rule to process the element once each period.

*Related Topics*

- [What's an element's skip rule?](#)

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

The Closed for Entry option prevents the creation of all new element entries for the element. However, it doesn't affect any existing element entries.

**CAUTION:** When hiring, terminating, or updating assignments, this option prevents all element entry creation for the element, including automatic entries.

*Related Topics*

- [Element Entry Methods](#)

## What happens if I manually enter a value in an element entry value that has a runtime default value?

Any subsequent changes to the default value on the element or element eligibility record won't affect the element entry. To clear your entry, you can restore the default value.

*Related Topics*

- [Default Values for Element Entries](#)

## How 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.





# 13 Set Up Payroll Process Configuration

## Payroll Process Configuration Groups

Payroll process configuration groups provide sets of processing parameters, primarily related to logging and performance.

Select a process configuration group when you run a process, such as a new-hire flow or termination flow, or an extract process or report.

If you don't select a process configuration group, the application uses the parameters in the default group. You must specify the default group in the Process Configuration Group ACTION\_PARAMETER\_GROUPS profile option.

Here's the list of tasks you can use to set up profile options and default process configuration groups.

Action	Task and Page
Edit predefined process configuration groups	Default Group tab of the Payroll Process Configuration page.
Create additional process configuration groups	Group Overrides tab on the Process Configuration Group page.
Select a process configuration group as the default at the site or user level	Manage Administrator Profile Values task in the Setup and Maintenance area.

To open the Payroll Process Configuration page, use the **Payroll Process Configuration** task under **Show More > Payroll in My Client Groups** on the Home page.

Create a group with the logging parameters turned on to troubleshoot processes. You can also specify different performance parameter values, such as chunk size and buffer size, for running different processes.

## Parameters

### Payroll Process Configuration Parameters

Payroll processing parameters are system-level parameters that control aspects of payroll-related processes, such as flows and reports.

Values for each parameter are predefined with the application, but you can override these values as part of your initial implementation and for performance tuning. Use the Payroll Process Configuration task under Show More > Payroll in My Client Groups on the Home page.

## Processing Parameters

The effects of setting values for specific parameters may be system-wide. When you submit a process that uses flows, such as a batch upload, new hire, or report process, the process reads values from the PAY\_ACTION\_PARAMETERS table.

**Note:** You should understand the concept of array processing and how this affects performance before setting some parameters.

The application doesn't allow a blank value for any parameter. Unless the parameter is required, you must delete the parameter row.

This table describes processing parameters and lists values and predefined default values. These parameters apply to HR applications including payroll and payroll interface.

Parameter	Description	Values
Assignment ID to End Logging	Assignment ID upon which logging ends.	Default: All assignments
Assignment ID to Start Logging	Assignment ID upon which logging starts.	Default: All assignments
Balance Buffer Size	<p>Buffer size for array inserts and updates of latest balances, based on one row per balance.</p> <p><b>Tip:</b> If your trace files show differences between execute and retrieve timings, look at the buffer sizes you're using. Try setting each of these to 100.</p>	<p>Maximum: 1000</p> <p>Minimum: 1</p> <p>Default: 500</p>
Batch Error Mode	Determines error notifications for the HCM data loads.	<p>ALL = all rows</p> <p>ANY = any rows</p> <p>NONE = no errors</p> <p>Default: ANY</p>
Chunk Size	Number of payroll relationship actions that process together. See also the Parallel Processing Parameters topic.	<p>Maximum: 16000</p> <p>Minimum: 1</p> <p>Default: 20</p>
Disable Locking Code in Check Process Post-Populate Method	<p>Disables the locking code added to the post-populate method to improve check process performance.</p> <p>This parameter isn't available by default. To add the parameter, search for the lookup type PAY_ACTION_PARAMETER_TYPE on the Common</p>	<p>Yes, No</p> <p>Default: No</p> <p>Only change this value if advised by Oracle Support.</p>

Parameter	Description	Values
	Lookups page and add the lookup code ORA_DISABLE_POST_POP_FIX.	
Element Entry Buffer Size	Buffer size that payroll runs use in the initial array selects of element entries, element entry values, run results, and run result values per assignment.	Maximum: 1000 Minimum: 1 Default: 500
Formula Execution Logging	Sets the logging level to investigate formula code problems. See also the Logging Processing Parameters topic.	Unless the parameter is required, delete the parameter row.
Historic Payment	Removes the validation to look for banks active as of the process date. This validation is enforced by the payments process.  This parameter isn't available by default. You can add it in test environments only. To add the parameter, search for the lookup type PAY_ACTION_PARAMETER_TYPE on the Common Lookups page and add the lookup code HISTORIC_PAYMENT.	Yes, No  Default: No
Logging Area	Area to log code. See also the Logging Processing Parameters topic.	The values correspond to C-code entries in the form PY_ENTRY, that includes the functional area that has logging enabled.
Logging Category	Helps investigate problems with large volumes of detailed data. See also the Logging Processing Parameters topic.	You can set any number of categories by specifying multiple values. For example, enter GMPE, for general logging information, routing information, performance information, and element entry information.  Refer to the Logging Processing Parameters topic in the Related Links section for applicable values.  Unless the parameter is required, delete the parameter row.
Manual Task Processing	Determines processing of manual tasks when SOA server is unavailable.	Y, N  Default: Y
Maximum Errors Allowed	Number of payroll relationship actions that you can roll back, when rolling back a process.	Minimum: 0  Default: CHUNK_SIZE or 20
Maximum File Size for View Report Output	Maximum size in bytes of the report file to show in the output window.  This parameter isn't available by default. To add the parameter, search for the lookup type PAY_ACTION_PARAMETER_TYPE on the Common	Must be a positive number.  Default: 10000000

Parameter	Description	Values
	Lookups page and add the lookup code BL_OUTPUT_SIZE.	
Maximum Iterations Allowed per Run Action	Maximum number of iterations allowed per run action within net-to-gross calculations within the payroll run.	Minimum: 0 Default: 15
Maximum Number of Payroll Relationship Actions to Roll Back	Number of payroll relationship actions that you can roll back, when rolling back a process.	Minimum: 1 Default: 50
Multithreaded XML Generation for Extracts	Generates XML for extracts using multiple threads.	Y, N Default: N
New Hire Flow Pattern	Name of the customer-defined flow that's triggered as part of the new hire process.	Unless the parameter is required, delete the parameter row.
Notifications Expiration Offset	Number of days before a payroll flow notification is automatically deleted.	Minimum: 5 Default: 5
Payroll Batch Loader Encryption Type	The type of encryption applied to source files loaded using the HCM data loader.	<b>PGPSIGNED, PGPUNSIGNED, PGFX509SIGNED, PGFX509UNSIGNED</b> Unless the parameter is required, delete the parameter row.
Payroll Criteria for Element Eligibility	Enables eligibility by payroll for assignment-level elements.	Yes, No Default: No
Process Timeout	Number of minutes before the Run Balance Generation process times out.	Minimum: 0 Default: No timeouts limit enforced. Unless the parameter is specified, delete the parameter row.
Remove Report Assignment Actions	Removes report processing actions after generating reports.	Yes, No Default: Yes
Run Result Buffer Size	Buffer size for array inserts and updates, based on 1 row for each payroll run result.	Maximum: 1000 Minimum: 1 Default: 500
Shuffle Chunk Processing	Random processing of order chunks for assignment actions.	Yes, No Default: No

Parameter	Description	Values
Suppress Empty XML Tags in Extract Reports	Reduces the size of extract output for reports by excluding tags with blank values in XML output files.	Y, N Default: Y
Termination Flow Pattern	Name of the customer-defined flow that's triggered as part of the termination process.	Unless the parameter is required, delete the parameter row.  (No predefined Termination flow pattern).
Threads	Total number of subprocesses that you can run from the Oracle Enterprise Scheduler Service. See also the Parallel Processing Parameters topic.	Minimum: 1 Default: 1
Trace	Enables the database trace facility for application processes written in C only.	Yes, No Default: No
Trace Level	Sets the trace level of the trace event. To generate the finest level of detail, enter the highest value.	1, 4, 8, 12 Default: None
User Messaging	Enables detailed logging of user-readable information to the PAY_MESSAGE_LINES table.	Yes, No Default: No
XML_DATA_SOURCE	For document records delivery options performance purposes, determines if XML is derived from the database.	Y, N Default: Y

## Payroll-Specific Processing Parameters

This table lists the processing parameters that are applicable only for Oracle Global Payroll.

Parameter	Description	Values
Accounting Date for Transfer to General Ledger	The date to transfer and post journal entries for costing results to Oracle Fusion General Ledger.	E = Date Earned P = Process Date  DP = Date Paid from payroll time periods for calculate payroll and QuickPay only.  EVE = For the Partial Period Accrual Reversal process, date earned is used. However, if the date earned isn't defined for the time periods on the Payroll Definition page, the payroll period end date is used.

Parameter	Description	Values
		For the payroll run that includes the actual costs, the process date of the payroll run is used.  Default: P
Cost Buffer Size	Buffer size for array insert and select statements when calculating the costing of the payroll run results.	Maximum: 1000  Minimum: 1  Default: 500
Date to Retrieve Assignment Status	Date earned or date paid, used to determine the effective date for checking assignment status in payroll calculations.	E = Date earned  P = Date paid  Default: P
Earliest Retroactive Processing Date	Sets earliest date that retroactive processes are calculated. Updates made before this date aren't recalculated.  <b>Note:</b> If you define a static retroactive start date and a rolling retroactive start date, the retropay process uses the latest of the two dates. For example, if the static retroactive start date is 01-JAN-2020 and the rolling retroactive start date is 15-MAR-2019, the retropay process uses a start date of 01-JAN-2020.  Controls the start date of the retroactive period for the <b>Calculate Payroll for Retroactive Changes</b> flow (retro pay) as well as for an individual employee	Date value in <b>YYYY/MM/DD</b> format
Extract Data Group for Payroll Register	Limits the records to include in the output file based on the specified data group name.	Default: No data group
Limit Payroll Register Output by Data Group	Enables processing a subset of records to include in the output file when an extract data group parameter value is also specified.	Y, N  Default: N
Number of months in rolling period for retroactive changes	Sets the number of months in the retroactive pay rolling period.  If you don't want to limit the duration of the retroactive pay period, change the default of 12 month rolling period to 999 months.	Default: 12

Parameter	Description	Values
	<p><b>Note:</b> You can limit the number of payroll periods included in the retroactive pay process by setting the earliest start date for the process for the process for all retroactive notifications using both the <b>Earliest Retroactive Processing Date</b> parameter and this parameter. For example, you may want to set a static start date based on your payroll go-live date and use a rolling period to ensure retroactive pay doesn't calculate for more than a 24 month period. Retroactive pay uses the latest of the two dates when both parameters are set. If you don't want to limit the duration of the retroactive pay period, change the default 12 month rolling period to 999 months.</p>	
Reversal and Balance Adjustment Accounting Date	<p>Accounting date based on one of these dates:</p> <ul style="list-style-type: none"> <li>The process date of reversal or balance adjustment</li> <li>The process end date of the Transfer to Subledger Accounting task. You can use this task to transfer journal entries for costing results to Oracle Fusion General Ledger.</li> </ul>	<p>T = Transfer using end date of the Transfer to Subledger Accounting task as the accounting date</p> <p>P = Use process date of the reversal or balance adjustment as the accounting date</p> <p>Default: P</p>
Wage Basis Rules Buffer Size	<p>Used in array selects from the PAY_TAXABILITY_RULES table within the Payroll Calculation process.</p>	<p>Minimum: 100</p> <p>Default: 500</p>

*Related Topics*

- [Payroll Process Configuration Groups](#)
- [Logging Processing Parameters](#)
- [Parallel Processing Parameters](#)

## Logging Processing Parameters

Use logging parameters to investigate problems that aren't easily identified in other ways. In a normal operation, disable logging because it can impact the performance of the process you're logging.

**Note:** Prepare log files before contacting Oracle Support for assistance. Define the logging area, category, and range of assignments before resubmitting the problem.

## Logging Parameters

**Typically, you use this feature during your initial implementation and testing before you go live. In a normal operation you should disable detailed logging.**

**The three processing parameters for logging are:**

- Logging Area
- Logging Category
- Formula Execution Logging

### Logging Area

The Logging Area parameter works with the Logging Category parameter to limit the code area for logging. Even if you set the logging category, you must also set the logging area if you want to limit logging to a particular code area.

The values correspond to C-code entries in the form PY\_ENTRY, which includes the functional area that will have logging enabled.

### Logging Category

Logging categories define the type of information included in the log. You can set any number of categories by specifying multiple values to focus on specific areas that you think may be causing a problem. The application doesn't allow a blank value and you must delete the parameter row if logging isn't required.

This table explains each logging category. It provides the log output information to investigate the problems encountered.

Parameter Value	Logging Category	Description
B	Balance Information	Provides output information that shows the creation and maintenance of balances used during payroll processing.
C	C cache structures information	Provides output information that shows details of the payroll cache structures and changes to the entries within the structure. While working on a service request, Oracle may ask you to use this parameter to gather additional information.
E	Element entry information	Provides output information that shows the state of the element entries in the process memory after retrieving entries from the database. The information is provided whenever data for an entry is changed during processing.
F	Formula information	Provides output information that shows details of formula execution, including formula contexts, inputs, and outputs.
G	General logging information	Provides general information, rather than a specific information type. This parameter doesn't provide sorted output. In general, it's



Parameter Value	Logging Category	Description
		recommended that you choose parameters that provide specific types of information.
I	Balance output information	Provides output information that shows details of values written to the database from the balance buffers.
L	Balance fetching information	Provides output information that shows the balances retrieved from the database and whether or not the process will use those balances. (If balances such as Year To Date totals have expired because the year has changed, the process resets them and uses the new balance.)
M	Entry or exit routing information	Provides output information to show when any function is entered and exited.  This information is indented to show the call level, and can be used to trace the path taken through the code at the function call level. Often, this information is useful when attempting to track down a problem such as a core dump.
P	Performance information	Provides output information to show the number of times certain operations take place at the assignment and run levels and why the operation took place. This parameter is often used to balance the buffer array write operation.
Q	C cache query information	Provides output information that shows the queries being performed on the payroll cache structures. While working on a service request, Oracle may ask you to use this parameter to gather additional information.
R	Run results information	Provides output details of run results and run result values from the Run Results buffer or the Values buffer before writing them to the database. This enables verification that the buffer contents were correct.
S	C cache ending status information	Provides output information that shows the state of the payroll cache before the process exits, whether that process ends with success or an error. While working on a service request, Oracle may ask you to use this parameter to gather additional information.
T and Z	PL/SQL detail and PL/SQL output	To obtain detailed information about the PL/SQL calls made by the Payroll application, use the combination of the T parameter and the Z parameter.

Parameter Value	Logging Category	Description
		<p>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.</p> <p>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.</p>
V (USA only)	Vertex tax calculation information	Provides output information that shows the values passed in and out of a third-party Vertex tax engine. This parameter also provides a separate file in the Out directory that shows the internal settings of the Vertex engine. This logging option is available to customers in the USA only.

### Formula Execution Logging

Formula execution logging is the code area where logging is performed. This processing parameter mechanism is only available for formula logging in the payroll run. Specify parameter values as a character or combination of characters to determine the area for logging. For example, the string di (the combination of d and i) corresponds to the logging of database item cache access and formula input and output values. The default value is no logging.

**CAUTION:** Use the dump logging options in rare circumstances only. The T trace option, which generates very large amounts of data, would significantly slow down processing.

The following table lists formula execution logging parameter values and its details.

Parameter Value	Meaning
c	Change contexts
d	Database item cache access
D	Database item cache dump
f	Formula cache access
F	Formula cache dump
I	Formula input/output values
m	Miscellaneous

Parameter Value	Meaning
n	Nested calls
s	SQL execution (database item and PL/SQL formula function calls)
T	Trace (very large level that provides the inputs and outputs of every call made when executing a formula)
w	Working storage area access
W	Working storage area dump
1	Level 1 (combination of c, f, i, and m)
2	Level 2 (combination of 1, c, d, n, and w)
3	Level 3 (combination of 2, D, s, and W)
4	Level 4 (combination of 3 and F)
5	Level 5 (combination of 4 and T)

#### Related Topics

- [Payroll Process Configuration Groups](#)
- [Payroll Process Configuration Parameters](#)
- [Parallel Processing Parameters](#)

## Parallel Processing Parameters

Payroll processes are designed to take advantage of multiprocessor computers. You can improve performance of your batch processes, such as Calculate Payroll or Calculate Gross Earnings, by splitting the processing into a number of threads, or subprocesses, which run in parallel.

To improve performance you can also set the number of payroll relationship actions that process together and the size of each commit unit for the batch process.

Here's a list of parameters that you can use for parallel processing.

### Parallel Processing Parameters

#### Threads

When you submit a batch process, the Threads parameter determines the total number of subprocesses that run concurrently. The number of subprocesses equals the Threads value minus 1.

Set this parameter to the value that provides optimal performance on your computer:

- The default value of 1 is set for a single-processor computer.
- Benchmark tests on multiprocessor computers show that the optimal value is approximately 2 processes per processor.

For example, if the server has six processors, set the initial value to 12 and test the impact on performance of variations on this value.

### Chunk Size

The Chunk Size parameter:

- Indicates the size of each commit unit for the batch process.
- Determines the number of assignment actions that are inserted during the initial phase of processing.
- Sets the number of assignment actions that are processed at one time during the main processing phase.

This parameter doesn't apply to all processes, such as Generate Check Payments and Retroactive Pay.

To set the value of the Chunk Size parameter, consider the following points:

- Parameter values range from 1 to 16,000.
- The default value is 20, which was set as a result of benchmark tests.
- Each thread processes one chunk at a time.
- Large chunk size values aren't desirable.

#### *Related Topics*

- [Payroll Process Configuration Groups](#)
- [Payroll Process Configuration Parameters](#)
- [Logging Processing Parameters](#)

## FAQ 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.

# 14 Set Up Auditing and Data Validation

## Auditing Business Objects

### Audit Payroll Business Objects

Set up auditing policies to maintain a history of changes to your important data: what changed, who changed it, and when.

The audit tracks changes to attributes of payroll business objects made using the application pages, web services, or payroll processes, which use Oracle Enterprise Scheduler.

You can view the audit history to determine how a business object obtained its current value and to compare old and new values. To view the history or to create an audit report from the Audit History work area, you require appropriate duty roles and privileges. Enterprises typically assign the following two audit duty roles to the application implementation consultant and master data management application roles:

- Audit trail management, which determines the objects audited
- Audit trail report viewing to view the audit history

### Payroll Business Objects

When you set up auditing for payroll, you configure Oracle Fusion Applications business objects on the Manage Audit Policies page in the Setup and Maintenance area:

1. Select the HCM Payroll application on the Configure Business Object Attributes page.
2. Specify the attributes to audit for the objects.

For example, you might audit the start and end date attributes for the calculation card component details.

This table lists the payroll business objects you can set up for auditing payroll. You track changes to attributes specified for these objects.

Payroll Business Object	Description
Assigned Payroll	Holds date-effective attributes about payrolls assigned to a worker.
Assigned Payroll More Details	Holds details that aren't date-effective about the payroll assigned to a worker.
Calculation Card	Holds values required for calculating payroll components.
Calculation Card Component	Holds the definition of a component that represents one or more logically related payroll components.
Calculation Card Component Detail	Holds the input values of a person's calculation card.

Payroll Business Object	Description
Calculation Reporting Card	Defines the tax reporting units that report the calculation.
Calculation Reporting Card Usage	Attaches a reporting card to a person record.
Element Entry	Holds earning and deductions details for a person.
Element Entry Value	Holds the values of the compensation and benefits granted to a person.
Payroll Calculation Range Value	Defines the values or sets of values used in the calculation of a value definition.
Payroll Calculation Value Definition	Defines how a value is calculated in payroll processing.
Personal Payment Method	Holds the payment method details for a person.

#### Related Topics

- [Audit Policies](#)
- [Audit Configuration for Business Object Attributes](#)
- [Audit Reports](#)

## Audit Policies

Auditing is used to monitor user activity and all configuration, security, and data changes that have been made to an application. Auditing involves recording and retrieving information pertaining to the creation, modification, and removal of business objects.

All actions performed on the business objects and the modified values are also recorded. The audit information is stored without any intervention of the user or any explicit user action.

Use audit policies to select specific business objects and attributes to be audited. The decision to create policies usually depends on the type of information to be audited and to the level of detail required for reporting.

### Enabling Audit Functionality

For Oracle Applications Cloud, you must configure the business objects and select the attributes before enabling audit. If you enable audit without configuring the business objects, auditing remains inactive. By default, auditing is disabled for all applications. To enable and manage audit, ensure that you have a role with the assigned privilege Manage Audit Policies (FND\_MANAGE\_AUDIT\_POLICIES\_PRIV). For appropriate assignment of roles and privileges, check with your security administrator.

To enable auditing for Oracle Fusion Middleware products, select one of the levels at which auditing is required for that product. The audit levels are predefined and contain the metadata and events to be audited. For more information, see [Audit Events for Oracle Applications Cloud Middleware \(Doc ID 2114143.1\)](#) on My Oracle Support.

If you don't want an application to be audited, you can stop the audit process by setting the Audit Level option to **None**. Also, note that there's no specified retention period for the audited data or the logs. Follow your company policy for retaining or removing such data.

**Note:** You won't be able to enable audit if you're working in a sandbox. If you try to set up audit while you're in a sandbox, you will see the message "Audit setup is disabled in a sandbox". You'll also notice that the buttons associated with the audit functionality are disabled.

#### Related Topics

- [Audit Configuration for Business Object Attributes](#)
- [Overview of Audit Configuration](#)

## Audit Configuration for Business Object Attributes

Audit enables tracking the change history of particular attributes of a business object. However, those objects and their attributes must be selected for audit and auditing must be enabled for that application.

The configuration settings determine which attributes to audit for a given object, and when the audit starts and ends. Auditing takes into account all the operations performed on an object and its attributes, such as create, update, and delete. To configure audit business object attributes, use the **Manage Audit Policies** task in the Setup and Maintenance work area.

### Selecting an Application

To set up auditing, you must select a web application that contains the required business objects that can be audited. From the list of business objects, select those business objects that you want to audit. Selecting a business object also displays its attributes that are enabled for auditing.

### Selecting Attributes

For each selected business object to be audited, select the corresponding attributes to include in the audit. All attributes that belong to that object are by default selected for audit and appear on the user interface. However, you can add or remove attributes from the list. When you remove an attribute from the list, you stop auditing it even when the parent object is selected for audit. So, if you want an attribute to be audited, you must add it to the list. If the object selected in an audit hierarchy is also a part of several other audit hierarchies, the attribute configuration for that object is applicable to all the hierarchies in that application.

For business objects based on flexfields, select the Flexfields (Additional Attributes) check box to view, add, or remove flexfield attributes. The selected objects are audited.

**Note:** You can't audit LOB (BLOB, CLOB, and NCLOB), rich text, and long text attributes.

### Starting and Stopping Audit

The business object is ready for audit after you select its attributes and save the configuration changes. However, to start auditing, the audit level for Oracle Applications Cloud must be set to **Auditing** on the Manage Audit Policies page.

To stop auditing an object, you can deselect the entire object and save the configuration. As a result, all its selected attributes are automatically deselected and aren't audited. To continue to audit the business object with select

attributes, deselect those attributes that aren't to be audited. When users view the audit history for an application, they can specify the period for which they want the results. Therefore, make a note of when you start and stop auditing an application.

For example, users intend to view the audit history of an object for the previous week, but auditing for that object was stopped last month. They wouldn't get any audit results for that week, because during the entire month that object wasn't audited. Even if you enable audit for that object today, users can't get the wanted results because audit data until today isn't available.

**Note:** When users export the report summary to a Microsoft Excel file, there's a limit on the number of rows that are displayed in the file.

- For Oracle Fusion Middleware products, the maximum limit is 25000. By default, the limit is set as 10000. You can change this limit using the FND\_AUDIT\_FMW\_EVENT\_LIMIT profile option.
- For Oracle Fusion Application Business Objects, the maximum limit is 10000 per table. This is set as the default value. Sometimes, the actual rows returned might be more than the limit set, because a single transaction can update multiple tables. To decrease this limit, you can create the FND\_AUDIT\_EXPORT\_ENTITY\_LIMIT profile option and set a lesser value for it.

See *Why is it taking so long to get search results when exporting audit summary of Fusion Application Business Objects?*

## Audit Reports

You can use the Audit Reports work area to view changes to the application data, such as the business objects that were created, updated, and deleted.

To view the history or to create a report, you must have a role with the View Audit History (FND\_VIEW\_AUDIT\_HISTORY\_PRIV) privilege assigned to it. For appropriate assignment of roles and privileges, check with your security administrator.

## Audit Events

Transactional events in the application trigger the audit process based on the create, update, and delete operations. For events to trigger the audit process for the business objects, you must first enable the objects for auditing.

These are the events that trigger the audit process.

Transactional Event	When the Audit Activity is Triggered	Audit Report Content
Create	Whenever business object data is created and stored in the database	<ul style="list-style-type: none"> <li>• Name of the created object</li> <li>• Name of the user who created the object</li> <li>• Time of creation</li> </ul>
Update	Whenever the existing business object data is updated	<ul style="list-style-type: none"> <li>• Both old and updated values of the object</li> <li>• Name of the user who updated the object</li> <li>• Time of updating</li> </ul>



Transactional Event	When the Audit Activity is Triggered	Audit Report Content
Delete	Whenever the existing business object data is removed from the database	<ul style="list-style-type: none"><li>The last value that the object attributes contained</li><li>Name of the user who deleted the object</li></ul>

The event details are stored in the audit table. The attributes of the audited object data can be used in lookups and foreign keys to display values in the audit history. The application supports displaying the audited information according to the language settings configured.

For Oracle Fusion Middleware products, events such as failed sign-in attempts are used as triggers. In absence of an audit table, the information is stored in the sandbox and presented only in English.

**Note:** This topic focuses on the create, update, and delete event types available in Fusion Applications. For details on events used in the Oracle Fusion Middleware products, refer to the Oracle Fusion Middleware documentation. See: [Introduction to Oracle Fusion Middleware Audit Framework](#)

#### Related Topics

- [View Audit Reports](#)

## Data Validation

### Overview of Payroll Data Validation Report

Before you run payroll or any other statutory processes or reports, the required HR and payroll data setup must be complete for all your workers. Missing or noncompliant data can impact legal processes or reports.

The Payroll Data Validation Report provides details of missing or statutorily noncompliant data at the worker and organization level. Prior to running the payroll process or any other report, run the Payroll Data Validation Report. You can then take corrective action as necessary to complete the data setup and correct noncompliant data.

During the implementation phase, add the business rules and validation messages at the enterprise or legislative data group level. These validations are in addition to the country-specific validations that are predefined in the application.

#### Validation Levels

The data group you select when adding validation rules to the Data Validation Report determines the level of validation. For example, you might have a validation rule at the tax reporting unit level or at the person details level. When adding a validation, you must ensure a database item exists for the attribute for which you're adding the validation.

## Set Up Validation Rules

Use the delivered formula 'Global Attribute Mandatory Check' to set up validations to identify missing data. You add the validations to the Data Validation Report extract definition. Here's the summary of the required steps to set up the validation rules:

1. Identify a suitable short name for the attribute for which you want to add the validation, for example, `ASG_JOB_CODE`. Prefix it with `CST` to mean user-defined. Therefore, the short name should be `CST_ASG_JOB_CODE`.
2. Set up a lookup code to control the validation. For mandatory validations, that you set up using the delivered formula, set up the lookup code as a short name suffixed by `>MC`. For example, `CST_ASG_JOB_CODE>MC`.
3. Based on the level at which you need the validation, you must create the records and data elements in the appropriate data group. Identify the relevant data group to add the validation and create a record in the group. For example, add assignment level validations to the Assignment Data Group.

**Note:** A database item must exist for the attribute for which you're adding the validation.

4. Add the validation and create the extract definition attributes.
5. Generate and compile the formula at the report record.
6. Run the appropriate Payroll Data Validation Report to include the validations.

## Control the Validations

Use the delivered `ORA_HRX_GLB_VALIDATION_OBJECTS` lookup type to set up a lookup code that you can use to control the validation. For example, you can use this lookup code to add multiple country tags to a validation. Alternately, if the validation is no more valid for the country, remove the previously added country tag from the lookup code.

**Note:** If you don't add a country tag, the application doesn't trigger any validation.

## Validation Types

The validations can be simple or complex.

The application triggers simple validations if you haven't provided a value for an attribute required for a report or a process. For example, the Tax Reporting Registration Number is missing at the organization level or the National Identifier value is missing for a worker. You can create a simple validation by using the delivered formula 'Global Attribute Mandatory Check' and the appropriate database item group.

The application triggers complex validations when there's more than one attribute included in the validation. For example, a value is missing for a National Identifier Type pertaining to a worker.

For coding complex validations, Oracle recommends that you use data elements of type Rule with a user-defined Rule Formula to perform the validation. You must deliver these data elements in a record of type Formula.

## User-Defined Rule Formula

For coding complex validations, Oracle recommends that you use extract attributes of type Rule with a user-defined Rule Formula to perform the validation. Consider the following for coding user-defined Rule Formula:

- Check if the formula is of type Extract Rule.
- Check that the lookup code exists for the short code of the data element, and is enabled for the legislation code, for which the report is run.
- Check if the formula is associated with the correct data element. Since this is a user-defined formula, check and run only if short code matches.

- Perform the validation to return validation message text or return a NULL value. The message text should be fewer than 240 characters or the application considers only the first 240 characters of the message.

## Data Security

By default the report is submitted through an elevated user that has full data access and is secured through the list of values on the report parameters. However, you can configure the Data Validation Report to run based on the profile of the user who submits the report. For example, if a user has access to only employees within a specific payroll or department, you can configure the report to check data only for those employees.

## Validation Rules for Data Validation Report

You can add validation rules to the Data Validation Report to identify missing data required to run a process or report. You can run the report and make relevant corrections to complete the employer or payroll-related data.

Use the **Extract Definitions** task in the **Data Exchange** area in **My Client Groups** on the Home page, to add a validation rule to the Data Validation Report extract definition.

## Rule Formula

Use the delivered formula 'Global Attribute Mandatory Check' to set up validations to identify missing data. You add the validations to the Data Validation Report extract definition.

This formula includes certain important enhancements such as supporting translated messages. It also offers the ability to control the validations without you deleting the validation already configured by you or delivered by Oracle. It's not mandatory for you to migrate your existing validations from the 'Global Null Check Rule' formula to the new one. Oracle recommends migrating to the new formula to make use of the benefits.

## Validation Levels

This table describes the validation rules at the various levels.

Validation Level	Description
Employee	Add simple validations for a missing attribute at the worker level. For example, if the National Identifier value is missing for a worker.
Organization	Add simple validations for a missing attribute at the organization level. For example, a missing Tax Reporting Registration Number.
Repeating Child Entity of a Worker	Add validations at the repeating child entity of a worker. For example, you may add a validation for a missing IBAN number for one of the multiple payment methods that a worker has. You can add a validation to specify the details of the attribute value (IBAN Number). This attribute value is missing for the Entity Type (Personal Payment Method) and for the Entity Name (Personal Payment Method Name).
Repeating Child Entity of the Organization	Add validations at the repeating child entity of an organization. For example, add a validation for a missing SWIFT Code for one of the multiple organization payment methods that's valid for a payroll statutory unit. You can add a validation to specify the details of the attribute value (SWIFT Code). This attribute value is missing for the Entity Type (Organization Payment Method) and for the Entity Name (Organization Payment Method Name).

Validation Level	Description

## Data Groups

The data group you select when adding validation rules to the Data Validation Report determines the level of validation. For example, you might have a validation rule at the tax reporting unit level or at the worker details level.

The processes associated with the Data Validation Report extract definition are:

- Run Payroll Data Validation Report
- Run Worker Data Validation Report
- Data Validation Report for Payroll Interface

These reports use different data groups to report data validation. You must select a data group for any validation rules you add based on the type of data and the level you want the validation to occur.

## Payroll Data Validation Report

Add validation rules to these data groups to report payroll-related data validation:

- Payroll Statutory Units
- Tax Reporting Units
- Payroll Relationships
- Payroll Assignments

## Worker Data Validation Report

Add validation rules to these data groups to report worker-related data validation:

- Payroll Statutory Units
- Legal Employers
- Reporting Establishments
- Work Relationships
- Person Details
- Assignments

## Data Validation Report for Payroll Interface

Add validation rules to these data groups to report worker-related and payroll-related data validation for Global Payroll Interface:

- Payroll Group
- Payroll Relationship Group
- Work Relationships
- Assignments
- Payroll Relationships

- Payroll Assignments

## Usage of Tags

The report output has different sections for legal employer, reporting establishment, person, and so on. The validations reported in the different sections is based on the tag that's added for rule data element. Consider these conditions while using tags for adding validation rules for Data Validation Report.

- For reporting validations at organization level, add the validations to Organization Data Groups and the related tags, as given in the table here.

Validation Level	Data Group	Tag
Legal Employer	Legal Employers	LEMP_RULE_TEXT
Establishment	Reporting Establishments	REP_EST_RULE_TEXT
Payroll Statutory Unit	Payroll Statutory Units	PSU_RULE_TEXT
Tax Reporting Unit	Tax Reporting Units	TRU_RULE_TEXT

- For reporting validations at worker level, add the validations to the corresponding data group and the predefined tags as given in the table here.

Validation Level	Data Group	Tag
Employee or payroll relationship level validations	Identify appropriate data groups (Example: Assignment).	RULE_TEXT

- For reporting organization validations or the validations of other entities in a separate table, add the validations to the corresponding data group and the predefined tags as given here.

Validation Level	Data Group	Tag
All levels other than employee or organization	Identify appropriate data groups (Example: Assignment).	OTHERS_RULE_TEXT

*Related Topics*

- [Set Up a Lookup Code to Control the Rules for Data Validation Reports](#)
- [Overview of Payroll Data Validation Report](#)
- [Payroll Data Validation Report](#)
- [Add Rules to Data Validation Reports](#)

## Set Up a Lookup Code to Control the Rules for Data Validation Reports

Use the delivered `ORA_HRX_GLB_VALIDATION_OBJECTS` lookup type to set up a lookup code that you can use to control a validation for the Data Validation Report.

You can then use this lookup code to add multiple country tags to a validation. Alternately, you can remove a previously added country tag from the lookup code, if the validation is no more valid for the country.

**Note:** If you don't tag a country, the application doesn't trigger any validation.

To create a lookup code:

1. In the Setup and Maintenance area, select the **HCM Extract Lookups** task.
2. Search for and select **HCM Extract Lookups**.
3. Click **Create**.
4. Enter these lookup code details.

Field	Description
Lookup Code	Enter a lookup code suitable for the attribute or entity to be validated. If you want to use the Oracle delivered formula for mandatory attribute validation, enter suffix as <code>&gt;MC n</code> in the lookup code, for example <code>CST_PERSON_ADDRESS_LINE 1&gt;MC</code> .
Display Sequence	Enter a unique value for the lookup code. It is recommended to use a sequence number, between 201 to 500, for the user-defined lookup codes.
Start Date	Enter 01/01/0001.
End Date	Enter 12/31/4712.
Meaning	Enter a suitable meaning for the lookup code, for example, Person Address Line 1 Check.
Description	Enter a suitable description, for example, Person Address Line 1 Check.

Field	Description
Tag	<p>Tag an appropriate country or countries, for which the validation is to be performed. For example, <b>+FR</b>.</p> <p><b>Note:</b> If no Tag is set up, the application doesn't perform the validation for any country.</p>

5. Click **Save**.

#### Related Topics

- [Overview of Payroll Data Validation Report](#)
- [Payroll Data Validation Report](#)
- [Add Rules to Data Validation Reports](#)

## Adding Rules to Data Validation Reports

This example demonstrates how you can add a validation rule to the Data Validation Report extract definition.

Before you make changes to the extract, select a legislative data group. When you submit your changes for a new rule, the validation is available for the selected legislative data group. Depending on the validation rule and the legislative data group you add it to, the validation is included when you submit any or all of the following processes:

- Payroll Data Validation Report for identifying missing payroll data needed for processes
- Worker Validation Report for identifying missing HR data needed for processes
- Data Validation Report for Payroll Interface for identifying missing HR or payroll data of persons associated with a given object group or payroll. The primary goal of the report in this case is to validate the data before it's exported by the Global Payroll Interface process to a third-party payroll provider.

Before you add the validation rule, ensure that a database item exists to retrieve the value to be validated. The contexts required by the database item are provided by the block level to which you add the validation. For example, suppose you're adding the new validation to the Person Details data group. You are adding a rule to check whether each person's Person Address Line 1 attribute has a value. If there is no value, the report displays an error message. A database item must exist for the person address line 1 attribute. Create the records and data elements in the appropriate data group based on the level at which you need the validation.

### How to Create the Validation

To create a validation:

1. In the Name field, enter **Data Validation Report**.
2. Select **Extract Definitions** task from the **Data Exchange** area under **My Client Groups**.
3. Search for and select the extract definition to edit as follows:
  - a. In the Type list, select **Full Profile**.
  - b. Select a legislative data group.
  - c. Click **Search**.

- d. In the search results, click **Data Validation Report**.
- 4. On the Extract Definitions page, click **Switch Layout**.
- 5. In the **Session Effective Date** field, enter **01/01/0001**.
- 6. Add a new record to the Data Group to which you want to add validations as follows:
  - a. Select **Person Details** under the **Data Group** node.
  - b. In the Records section, click **Create**.  
Ensure that the Session Effective Date is 01/01/0001.
  - c. Enter these details in the **Create Extract Record** section.

Field	Value
Sequence	Enter a unique value for the records within the Data Group. It is recommended to use a sequence number between 200 and 600.  <b>Note:</b> Two records in the same Data Group can't use the same sequence number.
Name	Person Address Details
Type	Detail record
Process Type	Fast Formula

- d. Click **Save**.
- 7. Add the database item attribute as follows.
  - a. In the **Extract Attributes** section, click **Create**
  - b. Complete the fields as shown in this table. This table lists the fields and the respective values for the extract attributes.

Field	Description
Name	Enter a suitable name, for example, Person Address Line 1 Attribute. This name is used in the validation message.
Tag Name	Person_Address_Line 1_Attribute
Short Code	Enter a suitable name to match the lookup code and remove the suffix, '>MC', for example, <b>CST_PERSON_ADDRESS_LINE_1</b> .
Start Date	01/01/0001



Field	Description
End Date	12/31/4712
Data Type	Enter a value appropriate to the data that you want to check. For example, Text for address details.
Type	Database item group
Database Item Group	Person Address Line 1
Output Label	Person Address Line 1
Output Column	6

**Note:** If you don't find the Database Item Group that fetches the attribute value you want to validate, it could be that:

- The Extract Attribute is added at an incorrect level (Data Group), or
- The Database Item Group is unavailable. Verify the availability of the Database Item Groups by trying to add the extract attribute to other levels (Data Group). If the required Database Item Group is unavailable, you can contact Oracle Support.

For more information, see Database Items for Extracts and Formulas in Oracle Fusion HCM guide on My Oracle Support (1565118.1).

c. Click **Save and Close**.

8. Create another attribute for the validation rule as follows:

- a. In the **Extract Attributes** section, click **Create**
- b. Complete the fields as shown in this table. This table lists the fields and the respective values for the validation rule.

Field	Value
Name	Person Address Line 1 Rule
Tag Name	RULE_TEXT

Field	Value
	<p><b>Note:</b> Enter this value exactly.</p>
Short Code	<p><code>CST_PERSON_ADDRESS_LINE_1&gt;MC</code></p> <p><b>Note:</b> The short code must include the short code of the database item attribute you created followed by a space and the suffix: &gt;MC. The short code is case-sensitive.</p>
Start Date	01/01/0001
End Date	12/31/4712
Data Type	Text
Type	Always set as Rule.
Rule	Global Attribute Mandatory Check
Output Label	Enter a value same as the Short Code, for example, <code>CST_PERSON_ADDRESS_LINE_1-RULE</code> .
Output Column	Enter a unique value within the record, 26.
Results Display Option	Summary and detail

c. Click **Save and Close**.

9. In the **Actions** menu, select **Generate Formula**.
10. In the **Actions** menu, select **Compile Formula**.
11. Click the Extract Execution Tree node and verify that all formulas are compiled.
12. Click **Submit**.

## Worker Data Validation Report for China

Run the Worker Data Validation Report to generate a list of workers with missing or noncompliant data. Use this report to verify if the required data setup for all workers for the payroll run or process is complete.

As a payroll manager, you can run this report and make relevant corrections to complete the employee or payroll-related data. This is a prerequisite task to check for any missing data before running all the payroll processes.

## Run Worker Data Validation Report

1. From the home page, navigate to **My Client Groups > Data Exchange > HCM Extracts > Submit Extracts** or  
**My Client Groups > Payroll > Flow Submission and Results > Submit a Flow.**
2. Select a Chinese legislative data group.
3. Select the **Run Worker Data Validation Report** from the list of processes or reports.
4. Select the required **Payroll Flow** name for the process that's being run. Enter a value each time the process is run.
5. Use the **Effective As-of Date** field to specify the first effective date of the payroll process to include in the report. The data status is verified as of the selected effective date.
6. Select the **Legal Employer** for whom the report is to be run.
7. Click **Submit** and then click **Refresh** to view the task completion status.
8. When the status is **Completed**, click the **Worker Data Validation Report.pdf** link to download and save the report.
9. The report generates data with the following details:
  - o Person Name
  - o Person Number
  - o Validation Message

## Worker Data Validation Criteria

The worker data validation checks for missing values in the worker records for the **Effective As of Date** as listed here:

1. First validation check is whether the expatriate value is set for the worker or no. If the expatriate value is missing, the following fields are also checked:
  - a. Expatriate
  - b. Gender
  - c. Data of birth
  - d. Citizen identification number
  - e. Hukou type
  - f. Citizenship
  - g. Passport number
  - h. Pass number
2. If the expatriate value is set to **Yes** for the worker, the following fields are checked:
  - a. Citizenship
  - b. Passport Number if citizenship isn't Chinese
  - c. Pass number if citizenship is Chinese
3. If the expatriate value is set to **No** for the worker, the following fields are checked:
  - a. Gender
  - b. Data of birth
  - c. Citizen identification number

**d. Hukou type**

The report displays the worker records with the details of all the missing information.

## Payroll Data Validation Report for China

Run the Payroll Data Validation Report to generate a list of workers with missing or noncompliant payroll data. Use this report to verify if the required data setup for all workers for the payroll run or process is complete.

As a payroll manager, you can run this report and make relevant corrections to complete the employee or payroll-related data. This is a prerequisite task to check for any missing data before running all the payroll processes.

### Run Payroll Data Validation Report

1. From the home page, navigate to **My Client Groups > Payroll > Flow Submission and Results > Submit a Flow**.
2. Select a Chinese legislative data group.
3. Select the **Run Payroll Data Validation Report** from the list of processes or reports.
4. Select the required **Payroll Flow** name for the process that's being run. Enter a value each time the process is run.
5. Use the **Effective As-of Date** field to specify the first effective date of the payroll process to include in the report. The data status is verified as of the selected effective date.
6. Select the **Legal Employer** for whom the report is to be run.
7. Click **Submit** and then click **Refresh** to view the task completion status.
8. When the status is **Completed**, click the **Payroll Data Validation Report.pdf** link to download and save the report.
9. The report generates data with the following details:
  - o Person Name
  - o Person Number
  - o Validation Message

The messages for a payroll statutory unit on missing data setup for social security management are sorted by territory, social security type, and contribution type.

### Payroll Data Validation Criteria

The payroll data validation checks all the employee's payroll relationship deduction card for the **Effective As of Date** as listed here:

1. Check the contribution type for all the social security and enterprise annuity items on the card
  2. Check TRU association for the employees on the card
  3. Check TRU social security registration info to derive the territory value
  4. Check PSU statutory deduction card to see whether contribution base, rate or amount rules are set up for the combination of the social security type + contribution type + territory
- Note:** A validation message is displayed if no base or rate definition is set up for a particular combination of the social security type, contribution type and territory.
5. Check all the TRUs associated for the employees on the card and the registration information for the deduction components associated with the TRU

**Note:** A validation message is displayed if the registration isn't set up for a particular deduction component such as Individual Income Tax registration, Public Housing Fund registration, Social Insurance registration and Enterprise Annuity registration.

6. Check if a tax record exists for territory other than China while checking the individual income tax registration information

*Related Topics*

- [Validation Rules for Data Validation Report](#)
- [Set Up a Lookup Code to Control the Rules for Data Validation Reports](#)
- [Overview of Payroll Data Validation Report](#)
- [Add Rules to Data Validation Reports](#)

