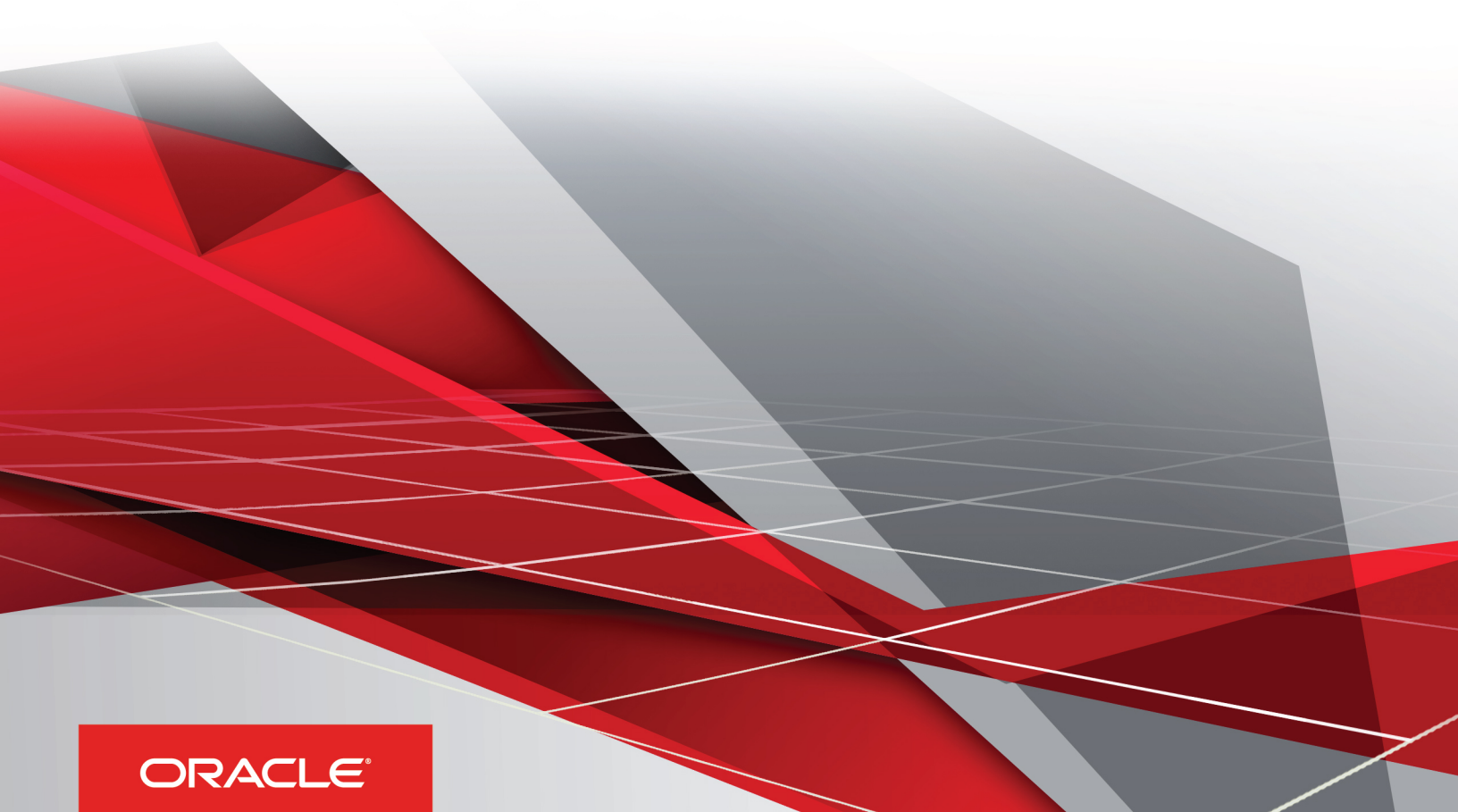
Oracle

Global Human Resources Cloud
Implementing Time and Labor

Release 12

This guide also applies to on-premises implementations



Oracle® Global Human Resources Cloud Implementing Time and Labor

Part Number E74166-02

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Preface

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

Oracle Applications Help

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

Using Applications Help

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

Additional Resources

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1 Time and Labor Implementation Overview

Implementing Time and Labor: Overview

To implement permanent and contingent worker time entry, you configure time card, calendar, and web clock displays as well as time collection device export data. To process and transfer time to time consumers, configure device event mappings; repeating periods; time categories, consumers, and rules; and time entry and processing profiles. In the Setup and Maintenance work area, use the Time and Labor functional area tasks in the Workforce Deployment offering.

Getting Started

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

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

Time and Labor Task Lists

You can access the Time and Labor setup tasks using the search field on the Offerings page in the Setup and Maintenance work area. You can also select the Workforce Deployment offering, click Setup, and select the Time and Labor functional area. You can show only required tasks or all tasks for the functional area.

If you already implemented Oracle Fusion Global Human Resources, which is required for Time and Labor processing, you have completed many prerequisite tasks. Use the Elements and Formulas functional area if you pay worked time based on time card entries. The Implementing Global Human Resources guide explains these tasks.

Use Time and Labor setup tasks to define:

- Time entry configurations
- Time collection device configurations
- Time rules
- Time and Labor setup profiles

Define Time Entry Configurations

The following table describes the tasks that you use to create and edit time entry formats to provide flexible forms of time entry.

Task	Description
Manage Workforce Management Lookups	View and update lookups used in workforce management.
Manage Time and Labor Value Sets	Create and edit sets of values for use with time entry layout components.
Manage Workforce Management Value Sets	Create and edit sets of values for use in rule templates and time categories.
Manage Repeating Time Periods	Create and edit time period definitions that produce repeating periods for use as time card, approval, and accrual processing periods.
Generate Data Dictionary Time Attributes	Create time attributes for payroll time types and absence management types that are used to create time entry layout components. Defined attributes are available on the Manage Time Entry Layout Components page.
Generate Time Card Fields	Create multiple-attribute time card fields for the selected legislative data group, with the option to include absence types when defining time card fields.
Manage Time Entry Layout Components	Create and edit a collection of properties that enables different user groups to report time for different time attribute values. Associate a data source, which is either a value set or a delivered view object, with each time entry layout component.
Manage Time Layout Sets	Create and edit a collection of different time entry layouts for entering, reviewing, and approving time. Associate time entry layout components with layout sets.
Manage Time Categories	Create and edit a group of time entries that is used for summarizing, validating, and transferring time and for processing time rules. Create time categories by specifying the time attribute fields.
Manage Time Consumer Sets	Create and edit time consumer sets to define a set of rules for each time consumer: • Approval periods • Timings of validations • Time categories for validations • Transfer of time
Manage HCM Groups	Create group definitions that are used by worker time entry and processing setup profiles as well as time device processing profiles.
Evaluate HCM Group Membership	Evaluate the membership of an HCM group and populate the group based on a specific date or range of dates. Run this process so that workers can report time. During implementation, refresh the predefined groups so that all workers in the enterprise are associated with a default layout set and a default profile.

Define Time Collection Device Configurations

The following table describes the tasks that you use to configure the import, validation, and processing of time reported using supplier-provided time collection devices.

Task	Description
Manage Time Device Event Mapping	Create and edit mappings of supplier device events to corresponding application events. Also, link the device events to the payroll time types that each worker is eligible for.
Manage Time Device Event Mapping Sets	Create and edit time device event mapping sets, which group event mappings for a time collection device.
Manage Time Device Export Data	Create and edit export data configurations used to send person and other data, such as payroll time type and published schedules, to time collection devices.
Manage Time Device Processing Profiles	Create and edit an association of event mapping, time device, and submission rule sets and export data to validate and process time device events.

Define Time Rules

The following table describes the tasks that you use to create and edit time entry, calculation, device, and submission rules to apply to time cards. These rules validate time entries and then generate new compensation results.

Task	Description
Manage Fast Formulas	Create fast formulas with a formula type of time device rule, time entry rule, time submission rule, or time calculation rule. Associate these formulas with rule templates.
Manage Time Repository Rule Template	Create and edit rule templates that enable reuse of a formula to define multiple rules. Use time categories in rule templates to summarize time and compare different categories of time.
Manage Time Repository Rules	Create and edit time rules based on rule templates. • Time entry rules validate time entries and generate messages. • Time calculation rules generate calculated time, which is transferred to time consumers, such as payroll and project costing. • Time device rules evaluate time events imported from time collection devices, create or update time entries, and create time entry exceptions. • Time submission rules determine when to automatically save and submit time card entries created with time events imported from time collection devices.
Manage Time Repository Rule Sets	Create and edit collections of time rules and rule sets, and assign them to workers using worker time processing profiles and time device processing profiles.

Define Time and Labor Setup Profiles

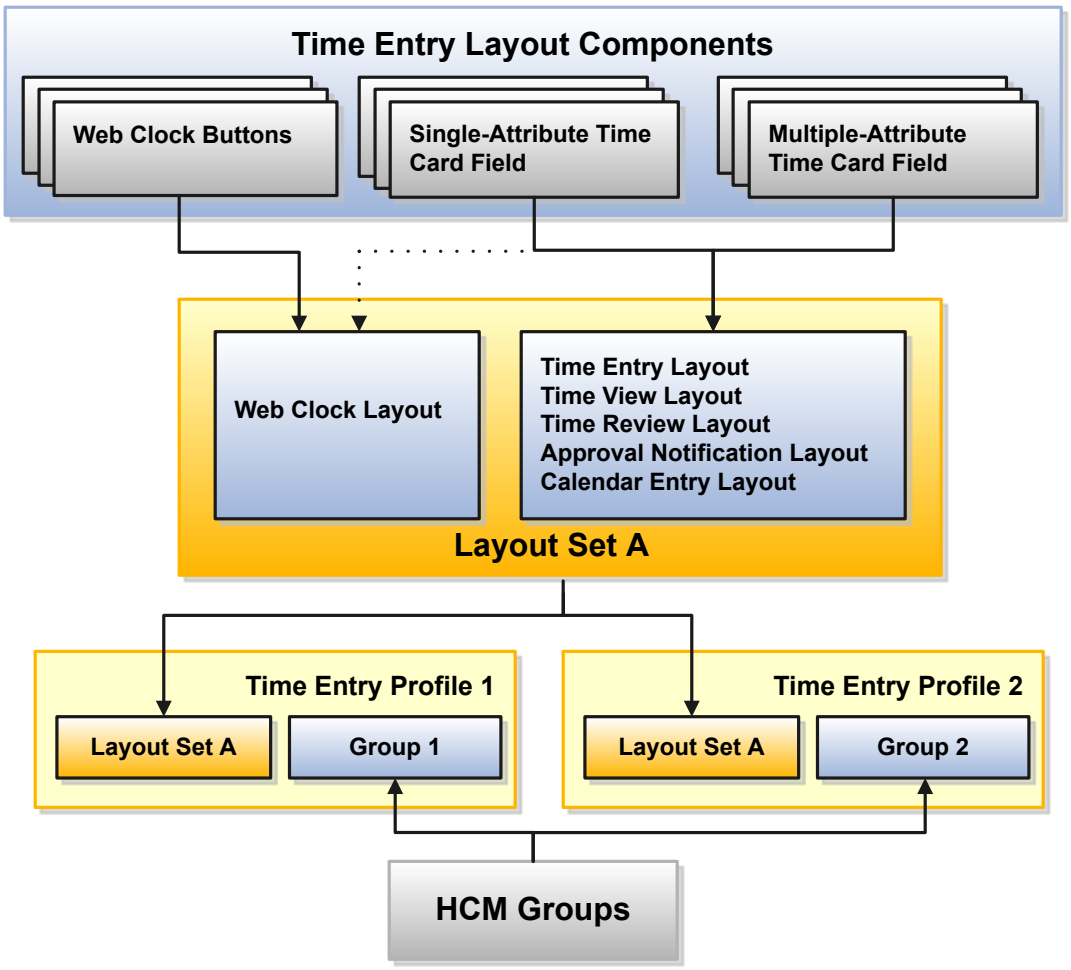
The following table describes the tasks that you use to create and edit worker associations with time entry and time processing setup profiles. These profiles control the entry, approval, and transfer of time to integrating time consumers.

Task	Description
Manage Worker Time Processing Profiles	Create and update an association of rule sets, a time consumer set, and time card periods to report, validate, approve, and transfer time.
Manage Worker Time Entry Profiles	Create and update an association of a layout set and time entry actions to control access to any time entries.

Time Entry Profile Components: How They Work Together

Time entry profiles associate worker groups with the time card, calendar, and web clock page layouts to report, review, and submit time. A time entry layout component specifies how a time attribute appears on time pages and transfers to the time consumer. You can use a layout component in multiple page layouts with or without variation in display properties.

The following figure shows the relationship among layout components, layout sets, worker time entry profiles, and groups.



Time Attributes

A time attribute is a qualifier associated with a time event or time entry. It reflects how the time is paid, costed, billed, or recorded as an information entry.

Layout Components

A layout component specifies how a time attribute appears on the time card, calendar, or web clock. It also determines the time attribute values that transfer to the time consumer.

Layout and Layout Sets

A layout determines the layout components that appear on the following pages:

- Create and edit time cards
- Review time cards
- Time card approval
- Calendar
- Web clock

Layouts help to reduce time reporting errors because you can specify buttons, fields, and values that are meaningful to the workers. A layout set is a collection of layouts. You can associate a layout component with multiple layouts. For example, you want workers to identify payroll costing for certain payroll time type attributes. In one layout set, you configure a time card field with the display label Department. In a different layout set, you configure the same time card field with the display label Cost Center.

Worker Time Entry Profile

Add a layout set to worker time entry profiles so that the workers see only those layout components that are relevant to them.

Groups

A group is a collection of workers who share common time reporting and processing characteristics. Add a group to a time entry profile to assign the profile to workers in the group. All workers in the group inherit the layouts and time entry action configurations from the associated worker time entry profile.

Each group can have only one setup profile at any point in time.

Related Topics

- Troubleshooting Time Card Profile Assignment: Explained
- Defining Groups: Worked Example
- Configuring the Various Time Entry Layouts: Worked Example
- Time Entry Layout Components: Explained

Managing an Implementation

Enabling Offerings: Explained

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

Enabling Offerings and Functional Areas

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

Enabling Features

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

Enabling Offerings: Procedure

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

Enabling Offerings

To enable offerings, follow these steps.

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

2 Effective Dates in Time and Labor

Date-Effective Objects in Time and Labor: Explained

The following setup objects use date effectivity to retain history as they change over time:

- Time Entry Rule Set
- Time Calculation Rule Set
- Worker Time Processing Setup Profile
- Worker Time Entry Setup Profile

When you edit a setup profile, ensure that the start date of the profile edit corresponds with the start date of the associated reporting period.

Date Effectivity: Explained

Date effectivity preserves a history of changes made to the attributes of some objects. Professional users 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.

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, 2011		C. Woods
3	15 October, 2010	17 January, 2011	A. Chan
2	13 June, 2009	14 October, 2010	T. Romero
1	22 March, 2007	12 June, 2009	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. However, 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 following worker promotion on 25 October, 2011 to take effect on 18 January, 2012.

Physical Record	Effective Start Date	Effective End Date	Grade
2	18 January, 2012		IC2
1	14 October, 2010	17 January, 2012	IC1

Physical record 2 becomes current on 18 January, 2012. From 14 October, 2010 until 17 January, 2012 physical record 1 is current and available to transactions. Users who can access the object history can see physical record 2 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

- Making Multiple Updates to Date-Effective Objects in One Day: Explained
- Deleting Physical Records from Date-Effective Objects: Explained

Correcting Date-Effective Objects: Examples

You can correct most attributes of date-effective objects, regardless of whether they occur in current, past, or future physical records.

If you correct the effective start date of an object's first physical record, then the revised date must be before the current effective start date. For the second and subsequent records, the revised date must be between the record's current effective start and end dates.

Correcting a Current Error

On 11 March, 2011 you create a location definition but enter the wrong phone. On 21 March, 2011, you search for the definition and select the **Correct** action. Before correction, the object history is as follows.

Physical Record	Effective Start Date	Effective End Date	Location Phone
1	11 March, 2011		650.555.0175

After correction, the object history is as follows.

Physical Record	Effective Start Date	Effective End Date	Location Phone
1	11 March, 2011		650.555.0176

Because you corrected the object, no change history exists.

Correcting a Past Error

A worker's assignment history is as follows.

Physical Record	Effective Start Date	Effective End Date	Job	Working at Home
4	20 October, 2010		Line Manager	No
3	18 August, 2010	19 October, 2010	Senior Administrator	No
2	10 May, 2010	17 August, 2010	Senior Administrator	Yes
1	25 July, 2009	9 May, 2010	Administrator	Yes

You learn that the worker's job was actually Project Leader from 10 May to 19 October, 2010. As this period spans physical records 2 and 3, you must correct both.

To retrieve physical record 2, you set the effective as-of date in the person search to any date between 10 May and 17 August, 2010. You select the assignment from the search results and make the correction.

You then retrieve physical record 3 and make the same correction.

Updating Date-Effective Objects: Examples

When you update a date-effective object, you insert a physical record in the object's history. Typically, the inserted record follows the current record and the effective start date is today. However, you can also enter future-dated changes and update past records.

Entering Future-Dated Changes

The grade EC3 exists from 17 June, 2009. Its ceiling step changes from 1 January, 2012. On 30 November, 2011, you change the grade's ceiling step and enter an effective start date of 1 January, 2012. This change creates a physical record in the grade definition, as shown in this table.

Physical Record	Effective Start Date	Effective End Date	Ceiling Step
2	1 January, 2012		4
1	17 June, 2009	31 December, 2011	3

From 1 January, 2012 physical record 2 is in effect. Until then, physical record 1 is in effect.

Applying Historical Updates to Later Records

Jennifer Watts has one assignment, as follows:

Physical Record	Effective Start Date	Effective End Date	Grade	Location
2	18 September, 2010		A1	Area Office
1	10 April, 2010	17 September, 2010	A1	HQ

You promote Jennifer to grade A2 from 1 July, 2010. You update her assignment with an effective start date of 1 July, 2010 and enter grade A2. This update:

- Inserts a physical record between existing records 1 and 2
- Sets the effective end dates of physical record 1 to 30 June, 2010 and of the inserted record to 17 September, 2010

You also correct existing physical record 2 to change the grade from A1 to A2.

Jennifer's assignment history is now as follows:

Physical Record	Effective Start Date	Effective End Date	Grade	Location
3	18 September, 2010		A2	Area Office
2	1 July, 2010	17 September, 2010	A2	HQ
1	10 April, 2010	30 June, 2010	A1	HQ

Effective Date FAQs

What's the effective as-of date?

A date value that filters search results. For any date-effective object that matches the other search criteria, the search results include the physical record for the specified effective as-of date. The effective as-of date is one of the search criteria. Therefore, objects with effective dates that don't include the specified date don't appear in the search results. By default, the effective as-of date is today's date.

What's the difference between updating and correcting a date-effective object?

When you update an object, you insert a physical record in the object's history. Typically, the inserted record follows the current physical record, and the effective start date is today's date. However, you can edit the object history or create a future-dated change by setting an appropriate effective start date.

When you correct a date-effective object, you edit the information in an existing physical record. You don't create a physical record.

What happens when I end date an object?

The date that you enter becomes the final effective end date for the object. If physical records exist for the object beyond the effective end date, either they're deleted automatically or you delete them.

The object's history remains available. For example, the object may appear in search results if the search criteria include an effective as-of date that's within the object's effective dates.

3 Repeating Time Periods For Time Cards, Approvals, and Absence Accruals

Repeating Time Periods: Explained

Create repeating time period definitions that continually generate periods, such as weekly periods that start on Sunday. Use the Manage Repeating Time Periods task in the Setup and Maintenance work area. Saving the definition generates periods for ten years before and after the current date.

Create various repeating periods to use as:

- Time card periods
- Approval periods
- Absence accrual periods

You must use the same time period for the time card entry period and time card approval period.

Time Card Periods

Time card periods determine how often workers must submit their time card. When you configure a worker time processing profile, you associate a repeating time period as the time card entry period. For example, if you want time reporters to submit time cards every week, then you must select a weekly repeating time period.

Approval Periods

An approval period is the date range during which the approver can approve a submitted time card. When you configure a time consumer set, you associate a repeating time period as the approval period.

Absence Accrual Periods

An absence accrual period is a time interval in which workers accrue time within an accrual term. When you create an absence plan, use the repeating period to determine how often a worker accrues leave in an accrual term.

Repeating Time Period: How It's Calculated

Define the time card, approval, and absence accrual periods with repeating time periods of different types and lengths. This topic explains how the period definition calculates and generates continuous periods.

Settings that Affect Repeating Period Calculation

Using the Manage Repeating Time Period task in the Setup and Maintenance work area, specify the following:

- Values for period type, period length, and pattern starting date.

- Dates within which to preview your period definitions.

The following table describes the settings.

Setting	Description
Period Type	Weekly
Period Length	Select Biweekly or specify the number of weeks in a single period.
Sample Start Date	Enter an example starting date to set the pattern for periods longer than one day.
Preview Period Dates	Enter start and end dates with a valid range to test the generated instances of the time period within the preview period.

How the Period is Calculated

The following table shows how the pattern starting date works with the period type and duration to generate repeating periods within the test dates indicated:

Period Type	Length of Period	Sample Start Date	Preview Period Dates	Period Generation Logic	Period Examples
Weekly	Biweekly	05/01/12	Start date: 01/01/12 End date: 05/31/12	Generates periods every 14 days from the pattern starting date. All periods start on the same day of the week.	10 January - 23 January 24 January - 6 February 7 February - 20 February 21 February - 5 March 6 March - 19 March 20 March - 2 April 3 April - 16 April 17 April - 30 April 1 May - 14 May 15 May - 28 May
Monthly	Calendar month	05/04/12	Start date: 01/01/12 End date: 07/31/12	Generates periods from a specified day in one month up to that day in the following month.	4 January - 3 February 4 February - 3 March

Period Type	Length of Period	Sample Start Date	Preview Period Dates	Period Generation Logic	Period Examples
					4 March - 3 April 4 April - 3 May 4 May - 3 June 4 June - 3 July
Semimonthly	N/A	05/04/12	Start date: 05/01/12 End date: 07/31/12	Generate periods using a pattern. • The first of the semimonthly periods starts on the numeric day of the pattern starting date and lasts for 15 days. • The second period starts the day after the first period ends. It lasts through the day before the numeric day of the pattern starting date in the next month.	4 May - 18 May 19 May - 3 June 4 June - 18 June 19 June - 3 July 4 July- 18 July

The preview start date and end dates aren't used to generate time periods. The first period generated might or might not match the pattern starting date you entered, depending on how you define the preview period.

Repeating Time Periods FAQ

Why can't I edit some repeating time periods?

You can't edit predefined repeating time periods. After you create and save a repeating period definition, you can edit only the name and description.

4 Data Dictionary: Time Attributes and Custom Time Attributes

Managing Time Attributes and the Data Dictionary: Explained

The data dictionary provides one place to define all possible attributes regardless of the source. Time entry layout components that you add to time layouts must use data dictionary time attributes as their basis. The delivered data dictionary includes the primary time attributes for projects, payroll, and absence time. You can load additional payroll and absence time attributes as well as custom attributes.

Data Dictionary

The data dictionary:

- Contains metadata used for processing time data and presenting data to users in a meaningful way.
- Supplies data sources and consumers with the information required to present and process time data:
    - What attributes to store
    - Where the attributes are physically kept in the repository
    - How to verify valid values

Example: User-friendly display names for time attributes and attribute values are stored in the data dictionary as alternate names.

Time Attributes

A time attribute is a qualifier associated with a time event or time entry. The qualifier reflects how the time is paid, costed, billed, or recorded as an information entry.

You can:

- Associate time attributes with time entry layout components for use on worker time cards, calendars, and web clocks.
- Use time attributes in time calculation rules, time categories, and time card approval rules.

The following table has examples of time attributes and values delivered by Oracle Fusion Global Payroll, Oracle Fusion Project Costing, and Oracle Fusion Absence Management.

Integrating Application	Time Attribute	Attribute Description	Example Values
Global Payroll	Payroll Time Type	Categorizes time for payroll processing according to the value selected	Regular, Overtime, and Vacation

Integrating Application	Time Attribute	Attribute Description	Example Values
Project Costing	Expenditure Type	Categorizes time for costing and billing according to the value selected	Billable and Nonbillable
Absence Management	Absence Management Type	Categorizes time for absence processing according to the value selected.	Paid Maternity and Vacation

The delivered data dictionary includes the primary time attributes for projects, payroll, and absence time.

Generate Data Dictionary Time Attributes Process

After completing the prerequisite payroll and absence setup tasks, you must run the Generate Data Dictionary Time Attributes process to create the following attributes:

- Payroll-dependent attributes for all element input values, such as rate, rate code, state, city, and so on
- Payroll costing attributes
- Absence reason attributes

Caution: You must run the Generate Data Dictionary Time Attributes process after making any changes to time elements. Such changes include adding or deleting elements, editing input values, or editing element eligibility records. Failure to run the process might negatively affect the following actions:

- Set up of time card fields
- Validation of payroll time types
- Transfer of time to payroll

Currently, this process doesn't create any attributes for projects time.

Custom Time Attributes

You can create custom time attributes that you define in the workforce management data dictionary and store in the time repository. You can optionally associate dependent attributes with your independent custom attributes.

Using custom time attributes, you can use time cards to record additional information to meet company-specific requirements. For example, you create the custom time attribute Meal Taken so that workers can specify whether they took a meal during their shift. You cannot use custom attributes to transfer time to Payroll, Project Costing, or Absence Management.

Related Topics

- Time Entry Layout Components: Explained
- Creating Elements for Time Card Entries: Procedure

Creating Nonrecurring Earnings Elements for Time Entries: Procedure

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

Tip: If you report the regular and straight time portions of overtime separately, create two elements, such as Overtime and Overtime Premium. If you report the portions together, you might use straight time instead of regular time, and create a separate element for the overtime premium.

To create a nonrecurring earnings element, complete the following steps:

1. Select the legislative data group, such as FR LDG, Hong Kong LDG, or US LDG.
2. Select the primary classification.

Category	Primary Classification
Time Card	Regular Earnings or Earnings
Standard	Standard Earnings, Supplemental Earnings, or Irregular Earnings

3. When available, select the secondary classification.
4. For localization that support it, select the Time Card category. For localization that doesn't support the Time Card category, selecting standard or supplemental earnings automatically sets the category to Standard.
5. Click **Continue**.
6. Complete the basic information.
    a. Enter a descriptive name, such as Regular, Straight Time, Overtime, or Shift Pay.
    b. Enter the name that you want to display on reports containing this payroll element.
    c. Select the effective date **January 1, 1951**. The early date ensures that the element attributes are immediately available to use with worker shifts, time cards, web clock, and time collection devices.
    d. For standard-category elements, complete the following basic information fields. For time card category elements, skip to the next step.

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
At which employment level should this element be attached?	Assignment Level

Field	Value
Does this element recur each payroll period, or does it require explicit entry?	Nonrecurring
Can a person have more than one entry of this element in a payroll period?	Yes

7. Accept the remaining default values by clicking **Next**.
8. Complete the additional details using the following steps for either the Time Card or Standard category.

   For Time Card category elements, complete the following additional details:

   a. Select **Hours X Rate** as the calculation units for reporting.
   b. Select the work units conversion rule.

Conversion Rule	Calculation	Example
Standard Rate Annualized	i. Convert the source amount and periodicity to an annual value using default values of 2080 hours, 260 working days. ii. Convert the amount to the required periodicity and rate.	None
Standard Rate Daily	i. Calculate a daily rate using default value 260 working days. ii. Convert the amount to the required output periodicity and rate.	None
Standard Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's standard working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week with a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (40.00*52) = 5.77 an hour
Assignment Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week, with a 37.5 standard working hours a week, and a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (37.50*52) = 6.15 an hour
Periodic Work Schedule Rate Annualized	i. Convert the monetary value and work schedule to an annual value, using the employee's work schedule for the payroll period for daily and hourly conversions. ii. Calculate the rate.	Scenario for worker assigned a monthly payroll: • The worker has a monthly salary of 1000 US dollars. • The formula checks the work schedule details for the month. Daily conversion calculation: 1000 a month / 20 days in the month = 50

Conversion Rule	Calculation	Example
		For worker not assigned a payroll: The calculation uses the weekly rate and converts the result to an annual amount. The calculation then divides the annual amount by the number of days or hours in that week based on the work schedule.

c. Accept the remaining default values by clicking **Next**.

For Standard category elements, complete the following additional details:

a. Select **Hours X Rate** as the calculation rule.
b. Select **Hourly** as the default periodicity.
c. Select the periodicity conversion rule.

Conversion Rule	Calculation	Example
Standard Rate Annualized	i. Convert the source amount and periodicity to an annual value using default values of 2080 hours, 260 working days. ii. Convert the amount to the required periodicity and rate.	None
Standard Rate Daily	i. Calculate a daily rate using default value 260 working days. ii. Convert the amount to the required output periodicity and rate.	None
Standard Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's standard working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week with a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (40.00*52) = 5.77 an hour
Assignment Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week, with a 37.5 standard working hours a week, and a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (37.50*52) = 6.15 an hour
Periodic Work Schedule Rate Annualized	i. Convert the monetary value and work schedule to an annual value, using the employee's work schedule for the payroll period for daily and hourly conversions. ii. Calculate the rate.	Scenario for worker assigned a monthly payroll: • The worker has a monthly salary of 1000 US dollars. • The formula checks the work schedule details for the month. Daily conversion calculation: 1000 a month / 20 days in the month = 50

Conversion Rule	Calculation	Example
		For worker not assigned a payroll: The calculation uses the weekly rate and converts the result to an annual amount. The calculation then divides the annual amount by the number of days or hours in that week based on the work schedule.

   d. Select **Yes** that this element is subject to retroactive changes.
   e. Select the retro group. The delivered value is **Entry Changes for Retro**, which you can edit. You can also create and select your own retro group using the Manage Events Group task in the Payroll Calculation work area.
9. For US elements, review the default values for the FLSA rules and override as appropriate.
10. Create the element.
    a. Review the element configuration to ensure everything is correct.
    b. Click **Submit**.

    By default, the Time Card and Standard category elements already have the appropriate input values configurations required to support location overrides. You don't have to make any edits.
11. Configure element eligibility.
    a. In the Elements Overview section, select **Element Eligibility**.
    b. On the Actions menu, select **Create Element Eligibility**.
    c. In the Element Eligibility, Information section, enter an element eligibility name with a suffix that identifies the criteria. For example, for the regular element with open eligibility (no selected criteria) the name would be Regular Open.
    d. Select the eligibility criteria. To leave eligibility open on the element and control it with HCM groups and time processing profiles, skip this step.
12. Click **Done** to return to the Manage Elements page.
13. Configure element eligibility for each of the related elements, which share the same name as this element and have suffixes. Suffixes include Earnings Calculator, Earnings Distributor, Earnings Results, Retro, and Retro Results.
    a. Search for the element that you just created.
    b. Click the related element name to open the element summary page.
    c. In the Elements Overview section, select **Element Eligibility**.
    d. On the Actions menu, select **Create Element Eligibility**.
    e. In the Element Eligibility Information section, configure the same eligibility criteria as the original element.
    f. Click **Submit**.
    g. Click **Done**.
14. For Standard category elements, create the calculation components. A separate topic provides the details for this procedure.

Related Topics

- Processing Time Entries in Payroll: Explained
- Time Card Required Option: Critical Choices
- Elements: How They Hold Payroll Information for Multiple Features

Creating Calculation Components for Standard Category Elements: Procedure

You must create calculation components for nonrecurring time entry earnings elements created with the Standard category and the calculation rule Hours X Rate. Example elements include regular, overtime, double-time, and shift pay elements.

For each existing element with the Standard category and Hours X Rate calculation rule, complete the following steps:

1. Submit the Create Time Card Calculation Components process.
2. Complete the element eligibility.
3. Submit the Compile Formula process.

Submit the Create Time Card Calculation Components Process

In either the Payroll Checklist or Payroll Administration work area, complete the following steps:

1. Click the **Submit a Process or Report** task.
    a. Select the legislative data group that you associated with the element.
    b. In the Process or Report section table, select the **Create Time Card Calculation Components** flow pattern.
2. Click **Next**.
    a. Enter the parameters, as shown in the following table.

Field	Value
Payroll Flow	Descriptive name for this specific flow process, such as Create Regular element time card calculation components
Process Date	Select the effective date **January 1, 1951**. The early date ensures that the element calculation components are immediately available to use with worker shifts, time cards, web clock, and time collection devices.

3. Click **Next**.
4. Skip entering flow interaction by clicking **Next**.
5. Accept the schedule defaults by clicking **Next**.
    a. Review the flow and parameter details to ensure everything is correct.
6. Click **Submit**.
    a. On the Confirmation dialog box, click **OK and View Checklist**.
7. Go to the payroll flow task that you created to confirm that the process completed without errors or warnings.
    a. View the process results.
    b. Check for any errors or warnings.
8. Configure element eligibility for the element with the suffix CIR, such as Regular CIR.
    a. On the Manage Elements page in the Payroll Calculation work area, search for the element for which you just created the calculation components.

b. Click the element with the suffix CIR, such as Regular CIR, to open the element summary page.
c. In the Elements Overview section, select **Element Eligibility**.
d. On the Actions menu, select **Create Element Eligibility**.
e. In the Element Eligibility, Information section, configure the same eligibility criteria as the original element.
f. Click **Submit**.
g. Click **Done**.

Submit the Compile Formula Process

After you create the calculation components for all of your elements, submit the Compile Formula process in the Manage Payroll Checklist work area. You can perform a bulk compile by entering wildcards in the Formula and Formula Type parameters.

1. Click the **Submit a Process or Report** task.
    a. Select the legislative data group that you associated with the element.
    b. In the Process or Report section table, select the **Compile Formula** flow pattern.
2. Click **Next**.
    a. Enter the parameters, as shown in the following table.

Field	Value
Payroll Flow	Descriptive name for this specific flow process, such as Create Regular element time card calculation components
Formula	To perform a bulk compile, enter **%**. For a more focused compile, enter the <element name>%, for example, Regular%.
Formula Type	%

3. Click **Next**.
4. Skip entering flow interaction by clicking **Next**.
5. Accept the schedule default values by clicking **Next**.
    a. Review the flow and parameter details to ensure everything is correct.
6. Click **Submit**.
    a. On the Confirmation dialog box, click **OK and View Checklist**.
7. Go to the payroll flow task that you created to confirm that the process completed without errors or warnings.
    a. View the process results.
    b. Check for any errors or warnings.

Related Topics

- Overtime Calculation Components: How They Work Together
- Creating Labor Costing Multipliers: Examples

Generating Time Attributes and Time Card Fields for Your Elements: Procedure

After you create or edit time entry earnings elements, such as regular, overtime, double-time, and shift pay, you generate time attributes for the data dictionary. Optionally, you can also generate card fields for them.

Complete the processes listed in the following table using the Define Time and Labor task list in the Setup and Maintenance work area.

Step	Process	Description	Comments
1	Generate Data Dictionary Time Attributes (Required)	Creates dependent payroll attributes for all element input values, such as hours and rate	You must run the Generate Data Dictionary Time Attributes process after making any changes to time elements. Such changes include adding or deleting elements, editing input values, or editing element eligibility records. **Caution:** Failure to run the process might negatively affect the setup of time card fields, the validation of payroll time types, or the transfer of time to payroll.
2	Generate Time Card Fields (Optional)	Creates time card fields using the data dictionary time attributes for the specified legislative data group	Instead of running this process, use the Manage Time Entry Layout Components task to create time card fields and web clock buttons.

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

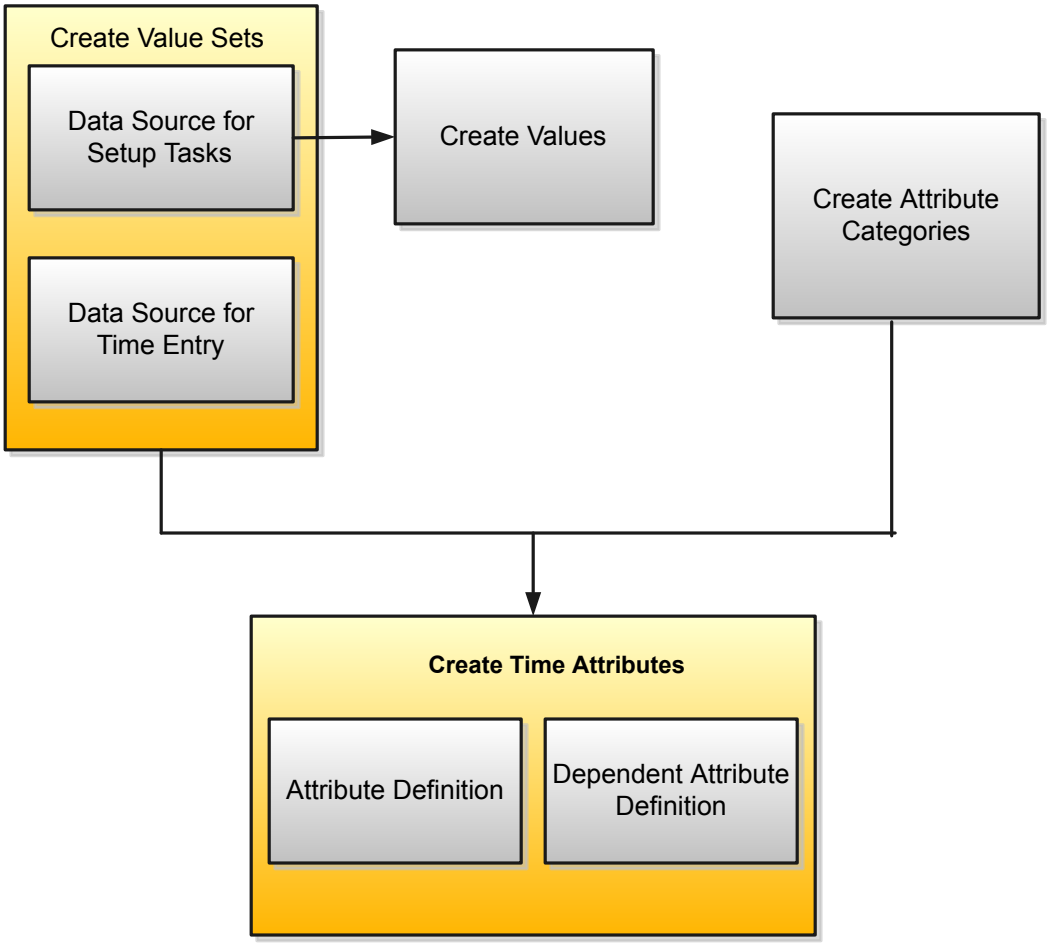
Related Topics

- Time Entry Layout Components: Explained

Creating Custom Time Attributes: Procedure

Create custom time attributes to use with worker time cards to record additional information to meet company-specific requirements. You can create dependent time attributes for the custom attribute. Saving your time attribute and dependent attributes adds them to the data dictionary.

The following figure shows the steps that you follow to create a time attribute:



Follow this basic process for creating custom time attributes:

1. Create value sets.
2. Create values for the independent value sets, as appropriate.
3. Create attribute categories, as required.
4. Create a time attribute.
5. Optionally, create dependent time attributes for the independent attribute.

Create Value Sets

You create at least one value set for each independent and dependent time attribute. If your list of values is the same for both the setup tasks and time entry, you can create just one value set. Use that value set with both the data source for setup tasks and the data source for time entry. To limit time entry choice lists to valid values for each worker, you must create an unfiltered and a filtered value set.

Use the Manage Time and Labor Value Sets task in the Setup and Maintenance work area to:

1. Create an unfiltered value set for use by administrators during setup tasks, such as creating time categories or rules.
    a. In the **Module** field, select **Time and Labor Web Entry Configurations**.
    b. Select one of the following validation types: **Format Only**, **Independent**, or **Table**.
    c. Select the appropriate data type for the values in the set.
    d. Save your configuration.
2. Create a table-validated set for use as the filtered data source for time entry. The task maintains the values that you want to use in an application table.
    a. In the **Module** field, select **Time and Labor Web Entry Configurations**.
    b. In the **Validation Type** field, select **Table**.
    c. Select the appropriate data type for the values in the set.
    d. Use the SQL WHERE clause to add filter variables that limit the valid values to a subset of values.

       When creating time card fields, you map these filter variables to time attributes that limit choice lists to valid values for the worker.
    e. Save your configuration.

Create Values for Value Sets

How you populate the value sets depends on the validation type of the value set, as shown in the following table:

Validation Type	Populating the Value Sets
Independent validation	Click **Manage Values** on the Create Value Sets page to add values.
Table-validated	You don't have to define or maintain values because they are managed as part of the referenced table or view

Create Attribute Categories

Use the Manage Common Lookups task in the Setup and Maintenance work area to create attribute categories for the ORA_HWM_ATTR_CATEGORY lookup type. For example, you can create attribute categories for different legislative data groups to use with your third-party payroll application. These new attribute categories are available for use when you create time attributes. Use categories for grouping and reporting purposes.

An attribute category can include a limited number of time attributes. This limit depends on the data type of the time attribute, as shown in the following table.

Data Type	Maximum Number of Time Attributes Supported
Text	40
Number	40
Date	20

If you have more than the specified number of attributes, you must create another category. To retain the relationship between the categories for reporting, you might want to use the same category name with an appended number.

Create Time Attributes

Use the Manage Custom Time Attributes task in the Setup and Maintenance work area to create the attribute and any associated dependent attributes. To create time attributes, enter a name and description and select:

1. The classification type, which indicates whether the attribute has dependent attributes.
2. The data type of the attribute, which must match the data type of the associated value set.
3. The data source value sets to appear at the top of the data source list when configuring the time card fields that use the attributes.
4. An attribute category value to group time attributes for reporting purposes.

   You create your own attribute categories as lookup type values.

When you select an attribute category, the data dictionary location that stores the custom time attribute appears. The location value also indicates the number of times this attribute category was used for grouping time attributes.

Add Dependent Time Attributes

If you select the classification type **With dependent attributes**, add dependent time attributes to your independent time attribute. In the Dependent Time Attributes section of the Create Custom Attributes page:

1. Click **Create**.
2. Select the data type, which must match the data type of the selected data sources.
3. Select the data source value sets that must appear at the top of the data source list when configuring the dependent time card fields

Related Topics

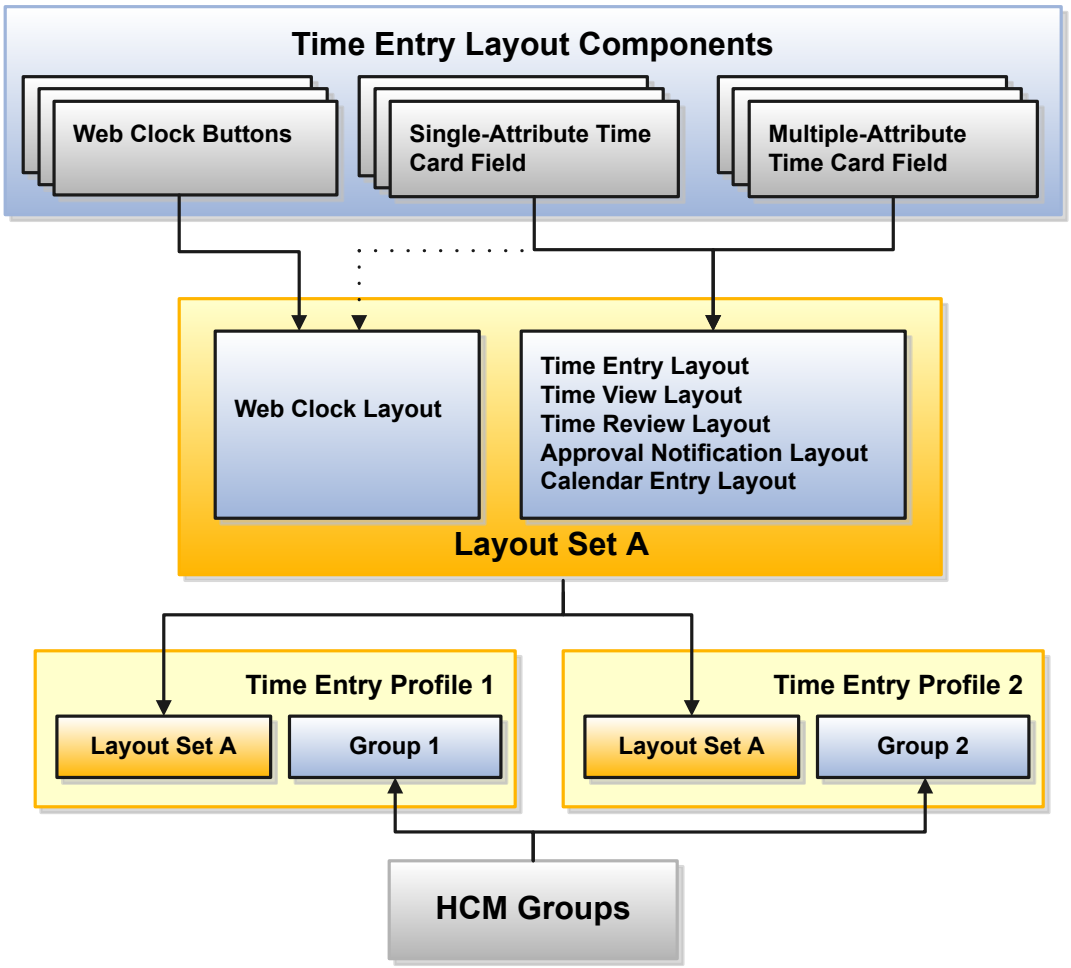
- Defining Value Sets: Critical Choices
- Value Sets: Explained
- Planning Value Sets: Points to Consider
- Time Entry Layout Component Data Sources: Explained

5 Time Entry Layout Components Overview and Requirements

Time Entry Profile Components: How They Work Together

Time entry profiles associate worker groups with the time card, calendar, and web clock page layouts to report, review, and submit time. A time entry layout component specifies how a time attribute appears on time pages and transfers to the time consumer. You can use a layout component in multiple page layouts with or without variation in display properties.

The following figure shows the relationship among layout components, layout sets, worker time entry profiles, and groups.



Time Attributes

A time attribute is a qualifier associated with a time event or time entry. It reflects how the time is paid, costed, billed, or recorded as an information entry.

Layout Components

A layout component specifies how a time attribute appears on the time card, calendar, or web clock. It also determines the time attribute values that transfer to the time consumer.

Layout and Layout Sets

A layout determines the layout components that appear on the following pages:

- Create and edit time cards
- Review time cards
- Time card approval
- Calendar
- Web clock

Layouts help to reduce time reporting errors because you can specify buttons, fields, and values that are meaningful to the workers. A layout set is a collection of layouts. You can associate a layout component with multiple layouts. For example, you want workers to identify payroll costing for certain payroll time type attributes. In one layout set, you configure a time card field with the display label Department. In a different layout set, you configure the same time card field with the display label Cost Center.

Worker Time Entry Profile

Add a layout set to worker time entry profiles so that the workers see only those layout components that are relevant to them.

Groups

A group is a collection of workers who share common time reporting and processing characteristics. Add a group to a time entry profile to assign the profile to workers in the group. All workers in the group inherit the layouts and time entry action configurations from the associated worker time entry profile.

Each group can have only one setup profile at any point in time.

Related Topics

- Troubleshooting Time Card Profile Assignment: Explained
- Defining Groups: Worked Example
- Configuring the Various Time Entry Layouts: Worked Example

Time Entry Layout Components: Explained

A time entry layout component specifies how a time attribute appears on time card, calendar, or web clock pages and transfers to the time consumer. Create and define layout components using the Manage Time Entry Layout Components task in the Setup and Maintenance work area.

Layout component types are:

- Single-attribute time card field
- Multiple-attribute time card field
- Web clock buttons

Each of these layout components can include dependent time card fields.

Single-Attribute Time Card Field

A single-attribute time card field has only one time attribute associated with it. For example, Task is a single-attribute field that has TaskID as the only associated time attribute. You use single-attribute fields most frequently with lists of values that are dynamic and update automatically as new values are added. Some of the values might not be relevant to the time reporter because the list of values is dynamic.

Multiple-Attribute Time Card Field

A multiple-attribute time card field contains one or more time attributes. It stores multiple values internally, but displays only one value to the time reporter or time viewer. For example, when the time reporter selects the hours type display value **Regular**, the save action stores the values shown in the following table.

Time Attribute	Stored Value
Payroll Time Type	Regular
Expenditure Type	Billable

You use multiple-attribute fields most frequently with payroll time card fields for the following reasons:

- Payroll fields are relatively static.
- You can modify the display name that appears to the time reporter and viewer.

After you associate a multiple-attribute field with a layout, you shouldn't plan to delete it. Since you can use a maximum of 20 multiple-attribute fields across all layouts, plan carefully when you create the fields and associate them with layouts.

Web Clock Buttons

Each web-clock-buttons layout component contains at least one, and typically more than one, web clock button. Each button has one or more attributes. The button stores the multiple values internally, but displays only one value to the time reporter or viewer. For example, when the time reporter clicks Clock Out, the action stores the attribute values shown in the following table.

Attribute	Stored Value
Application Event	Out
Payroll Time Type	Regular

The create web clock buttons page automatically includes the Application Event clock attribute in the button definition table. The attribute choice list values are **In**, **In and Out**, **Out and In**, and **Out**.

Dependent Time Card Field

A dependent time card field is always a single-attribute field that is related to an independent field or button. Whether the dependent field appears on the time card or web clock depends on the related independent field or button and the availability setting. The following table describes how time reporters must report time for the two time reporting methods.

Time Reporting Method	How Time Reporters Report Time
Time card	They select a value for the related independent field on the time card before they can select the dependent field value.
Web clock	They select a value for the related independent field or click a button before they can select the dependent field value.

The availability setting of the dependent field might further require time reporters to complete either of the following actions before the dependent field appears:

- Enter a specific value in the related independent field.
- Click the related independent button.

Generally, the application determines dependent time attributes from payroll element input values, such as Rate override and Location override, or payroll costing segments. For example, you configure the field so that after selecting a Payroll Time Type value (independent field), time reports can select a State value (dependent field).

You always define dependent time card fields in the context of an independent field or web clock button.

Related Topics

- Defining Single-Attribute Time Card Fields: Procedure
- Defining Multiple-Attribute Time Card Fields: Procedure
- Defining Dependent Time Card Fields: Procedure
- Managing Time Attributes and the Data Dictionary: Explained
- Defining Web Clock Buttons: Procedure

Time Entry Layout Component Data Sources: Explained

When defining single-attribute, multiple-attribute, and dependent time card fields, you select time entry and setup task data sources for the specified time attribute. When defining web clock buttons, you select the setup task data source for the specified time attribute. Typically, the recommended data source appears at the top of the choice list. Time field entries use a filtered data source while time card field, web clock button, and time category setup tasks use unfiltered data sources. The data source choice list values are either private view objects or value sets.

Time Entry Data Source Filters

The time entry data sources delivered by Absence Management, Global Payroll, and Project Costing provide filters for many of their independent time attributes. They don't provide filters for many of their dependent time attributes.

For the time entry data sources that include filter variables, you must select the filter input attribute for each filter variable. A filter input attribute is the attribute that supplies the value that filters the time card field data source. For multiple-attribute time card fields, each choice list in the dialog box contains all of the time entry data source filtering values provided by all of the time attributes.

Data Source Filter Examples

Both a single-attribute field and multiple-attribute field use the Payroll Time Type time attribute. The multiple-attribute field also uses the Expenditure Type time attribute. The following table shows the time entry data source filter variables for each field.

Single-Attribute Filter Variables	Multiple-Attribute Filter Variables
• pAssignmentID • pEffectiveDate	• pProjectUnitId • pEffectiveDate • pAssignmentID • pStartTime • pStopTime pEffectiveDate is included in the Filter Variables choice list only once, even though this filter variable is provided by the time entry data sources for both time attributes.

Data Source Types

Data sources are either private view objects or value sets:

- A private view object is an Oracle component that simplifies querying and working with business object rows. Private view object values appear in the choice list on the time card for the selected time attribute. Oracle Fusion Global Payroll provides separate private view objects for the time entry and setup task data sources.
- A value set is a collection of values that appear in choice lists for a time attribute. Oracle Fusion Project Costing provides the same value set for both the time entry and setup task data sources.

Time and Labor Value Sets

Create value sets to associate with custom time attributes using the Manage Time and Labor Value Sets task in the Setup and Maintenance work area. You configure any filter variables and filter input attributes used with the time entries data source while creating the value set. Use the common Manage Value Sets task to create payroll value sets for use with segments in the payroll cost allocation key flexfield.

Related Topics

- Value Sets: Explained
- Setting Up the Cost Allocation Key Flexfield: Procedure
- Defining Value Sets: Critical Choices
- Creating Custom Time Attributes: Procedure

How Many Time Entry Objects to Create: Points to Consider

You must create separate worker time entry profiles for each unique combination of a time layout set and time card access settings. You want to create one layout set for workers who share similar time entry requirements.

Create time entry objects using the tasks and work areas identified in the following table.

Task	Work Area
Manage Value Sets	Setup and Maintenance
Manage Time Entry Layout Components	Setup and Maintenance
Manage Layout Sets	Time Management
Manage Time Layout Sets	Setup and Maintenance
Manage HCM Groups	Setup and Maintenance
Manage Worker Time Entry Setup Profiles	Time Management
Manage Worker Time Entry Profiles	Setup and Maintenance

Best Practice for an Optimum Configuration

The more time entry layout components, layout sets, profiles, and groups that you create, the greater the ongoing maintenance effort. You want to find a balance between optimizing the time entry experience for your time reporters and the effort required to maintain that experience.

Time Entry Layout Components and Layout Sets

For layout components configured to enable label overrides, you can change the display label when you edit the layouts in a layout set. Create different layout sets for different worker groups that use the same layout component with different labels. For example, you want workers to identify payroll costing for certain payroll time type attributes. For the same field, some workers see the label Department, other workers see Cost Center, and yet other workers see Costing Override.

Use the questions in the following table to help you determine the time entry layout components and layout sets that you require.

Question	Examples and Comments
What type of time do your workers report?	Examples: Project costing, payroll, absence, a combination
What layout components--time card fields and web clock buttons--do they use to report time?	Examples: Expenditure type, project ID or name, payroll time type or worked hours type, absence type, cost center, start shift, end shift, meal, break

How frequently do your workers report time with the fields? Regularly, infrequently, or does frequency vary among different worker groups?	Example: You have a worker group who regularly reports payroll costing and another group who does so infrequently. The following configurations support both worker groups with a single time card field and two layout sets:
	• Time card field: You decide to add payroll costing as a dependent field of the Payroll Time Type field. You configure the dependent field to appear regardless of the selected payroll time type value.
	• Layout set:
	  ○ In one layout set, you configure the time entry layout so that the payroll costing field shows as part of the main time entry table.
	  ○ In a second layout set, you configure the time entry layout so that the payroll costing field appears in the entry-level dialog box. You edit the display name in each layout set to show the name most expected by that group of workers.

Should your workers all see the same time attribute choice list values or only those values that apply to their time entries? If you plan to differentiate choice list values, how do you want to do that?	Examples: • Based on assignment • Based on exemptions, such as overtime in the US
Can you do this differentiation by creating a value set or using a delivered Oracle Fusion Global Payroll private view object? Do you have to create different time card fields?	If you create value sets, you must create time card fields to use those value sets. You can limit the number of required value sets by creating table-defined value sets. Use the logic of the filter variable to constrain the values available for each worker based on other independent time attribute values. You can filter values using values specified for related independent layout components that appear on the time card or web clock. You can also use values from: • The time card itself, such as time period start and end dates • Hidden fields, such as Assignment Values for hidden fields automatically populate based on: • The worker's primary assignment • Values provided for related independent layout components

Question	Examples and Comments
Should your workers all see the same layout component labels?	Use the questions in the following table to help you determine the time entry layout components and layout sets that you require.

Time Entry Profile Time Card Access Settings

If all workers have the same time card access settings configurations with the same date ranges, you create one profile per layout set.

Create one profile for each worker group when the different groups have:

- Different time card access setting configurations
- The same time card access setting configurations for different date ranges

Groups

You associate one or more groups with each profile. Define separate groups wherever the worker characteristics are unique across profiles or groups of profiles. For example, you group your workers into separate groups for the following reasons:

- One worker group reports only payroll and absence time
- A second worker group reports project costing, payroll, and absence time

Related Topics

- Time Entry Profile Components: How They Work Together
- Managing Layout Sets: Explained
- Setup Profiles: Explained

Dependent Time Card Field Availability: Critical Choices

When defining dependent time card fields, you specify the availability of the dependent field in relation to the independent field or button values. Indicate whether the dependent field is available with all values of the independent time attribute or select the specific related attribute values.

Availability Decision Factors

Your availability selection affects where you can configure the dependent field on layouts. The selection also affects when time reporters see the dependent field on time cards and web clocks. The following table lists and analyzes some factors to consider when deciding which dependent field availability option to select:

Decision Factor	Available for All Independent Values	Available for Selected Independent Values
Can I use the dependent field on the calendar?	Yes	No.

Decision Factor	Available for All Independent Values	Available for Selected Independent Values
When does the dependent field appear?	It always appears, as configured in the time card matrix or a dialog box, when the layout configuration includes the independent attribute.	It appears for entry only after the time reporter selects one of the specified independent attribute values.
Where can I display the dependent field on the time card layout?	• In the matrix • In row-level or entry-level details dialog box • In the calendar dialog	Only in a row-level or entry-level details dialog box. The independent time attribute must be in the matrix of the layout before you can display the dependent field in a dialog box.
In what scenarios is each availability option recommended?	When the dependent field: • Is used frequently • Should appear in the time card matrix, on the calendar, on the web clock, or all	When the dependent field: • Is used infrequently • Should never appear in the time card matrix or on the calendar
What are the drawbacks of each availability option?	The dependent field: • Choice list values might be inappropriate • Could be available for selection, but there is no corresponding input value in the payroll element for some of the independent attribute values	Time card matrix and calendar can't display the dependent field
When can I use dependent fields on web clocks?	When the dependent field applies to all defined web clock buttons	When the dependent field applies to only one or a subset of web clock buttons

Payroll Costing Examples

Your employees work in a retail or grocery store with multiple departments. The following table provides example setup scenarios and time reporting results.

Setup Scenario	Time Reporting Results
You want time reporters to always select the department after they select a payroll time type. Time reporters should easily find the dependent field in the time card matrix or on the calendar. So, you specify that the dependent Department field is available for all independent Payroll Time Type attribute values.	The Department field always appears in the time card matrix and on the calendar, regardless of the payroll time type that the time reporter selects. The time reporter can select a department.
You want time reporters to select a department after selecting the Overtime payroll time type. Time reporters use this dependent field infrequently and you want it to appear	If the time reporter selects: • Overtime payroll time type, the Department field appears in the row-level details dialog box and the time reporter can select a department.

Setup Scenario	Time Reporting Results
only in the row-level details dialog box. So, you specify that the dependent Department field is available only when time reporters select Overtime as the independent Payroll Time Type attribute value.	• Regular payroll time type, the Department field doesn't appear anywhere on the page, including dialog boxes. The time reporter can't select a department.
You want time reporters to select a department after clicking Transfer. You specify that the dependent Department field is available for only the Transfer button. You then add the Department field on the web clock layout.	The Department field appears when the time reporter clicks Transfer on the web clock.

Time Entry Layout Components FAQ

What happens if the dependent field is available for all independent attribute values, but doesn't apply to all of those values?

Depending on how the value set is configured, choice list values:

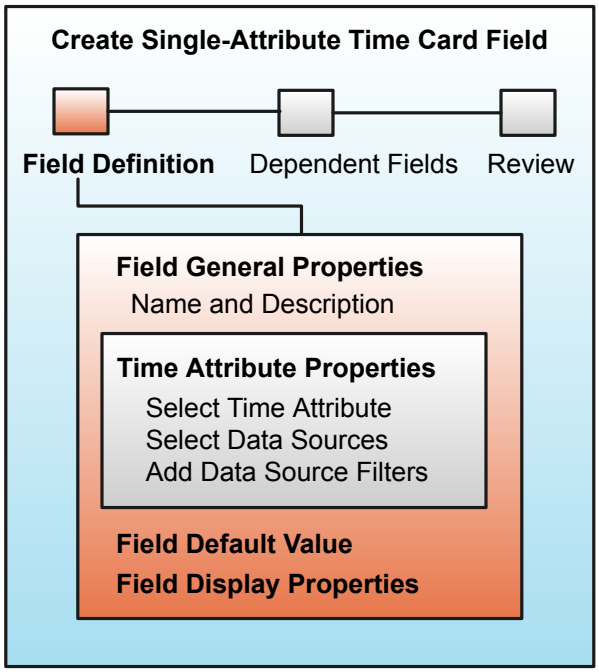
- Might be inappropriate
- Might be available for selection, but there is no corresponding input value in the payroll element for some of the independent attribute values

6 Time Entry Layout Components Procedures

Defining Single-Attribute Time Card Fields: Procedure

You can create a time card field that has a single associated time attribute and use it on time cards, calendars, and web clocks. The first step is to define the properties of the field and its associated attribute. In the optional second step, you can define associated dependent fields. Review the definition details in the final step.

The following figure shows field definition as the first step in the guided process when creating a single-attribute time card field.



Single-attribute field definition includes defining field properties and properties of the associated time attribute. This topic explains the basic process for defining a single-attribute field, as shown in the figure and summarized in the following steps:

1. Enter the name and description.
2. Specify the time attribute and data sources.
3. Specify the filters for the time entry data source, as appropriate.
4. Optionally, specify the default field value.
5. Specify field-level display properties.

For details on defining dependent fields, see the Defining Dependent Time Card Fields: Procedure topic.

Before creating time card fields, ensure that the payroll and absence time attributes, as well as any custom time attributes, exist in the data dictionary.

Enter General Properties

To create a field and define its general properties, use the Manage Time Entry Layout Components task in the Setup and Maintenance work area. On the Field Definition page, enter a name and description according to the best practice detailed in the following table.

Field	Details
Name	Enter a unique short name, possibly using agreed on abbreviations, such as PTT for payroll time type. The name that you enter appears in the **Name** choice list on the Time Card Matrix page of the Edit Layout dialog box. The Name choice list displays only 15 characters.
Description	Document the purpose of the time card field

Specify the Time Attribute, Data Sources, and Filters

To configure the time attribute and data sources:

1. Select the time attribute, such as Payroll Time Type.
2. Select the data sources for the specified time attribute. Typically, the correct data source for the selected attribute appears at the top of the choice list.
3. Add any filters provided by the time entry data source by selecting the filter variable and corresponding variable input attributes. For example, the following table shows the filter variables and filter input attributes that are provided by the Payroll Time Type attribute data source.

Filter Variables	Filter Input Attributes
pAssignmentID	Assignment
pEffectiveDate	Start Time

The time entry data sources delivered by Absence Management, Global Payroll, and Project Costing:

- Provide filters for many of their independent time attributes
- Don't provide filters for many of their dependent time attributes

Specify Default Field Values

You can specify default values for new time entries. New time entry refers to the value that automatically populates when the time card displays the field. Time reporters add fields to a time card when they open the time card or add an attribute row.

To configure default values:

1. Select the population method for new field entries from the options described in the following table.

Option	Description
No default value	Don't automatically populate the new field with an entry.

Option	Description
Specific value	Select the specific value to use as the default time entry value. The following sources populate the **Specific Display Value** choice list: o For single-attribute time card fields, the unfiltered setup data source that you selected earlier o For multiple-attribute fields, the display values that you entered in the Display Value and Multiple Attribute Definition section
Function	The selected function, such as Based on primary assignment, is a formula used to derive the default time entry value. The formula uses the filtered time entry data source that you selected earlier.

2. Optionally, populate new entries based on another time card field. This field appears for only specific time attributes. For example, if you select the **Expenditure Type** time attribute, you can specify to populate new entries based on the **Expenditure Type Name** attribute value.

Specify Field Display Properties

To configure the display properties:

1. Select the display type, such as Text box, Smart choice list, or Hidden field. Hidden fields never appear on the time card.
2. Edit the display name, as appropriate. This name is the default column header on the time card matrix and field label in time card and calendar dialog boxes. The name is also the default field label on the web clock page.

> **Note:** To fully render the display name on time card, calendar, and web clock pages and dialog boxes, limit the name to 70 characters or less.

3. Enable or disable override on layouts. Enabling the override lets you tailor the display name to different time reporters using different layout sets.
4. Specify whether the time card field is required. Required fields always appear on the time card.

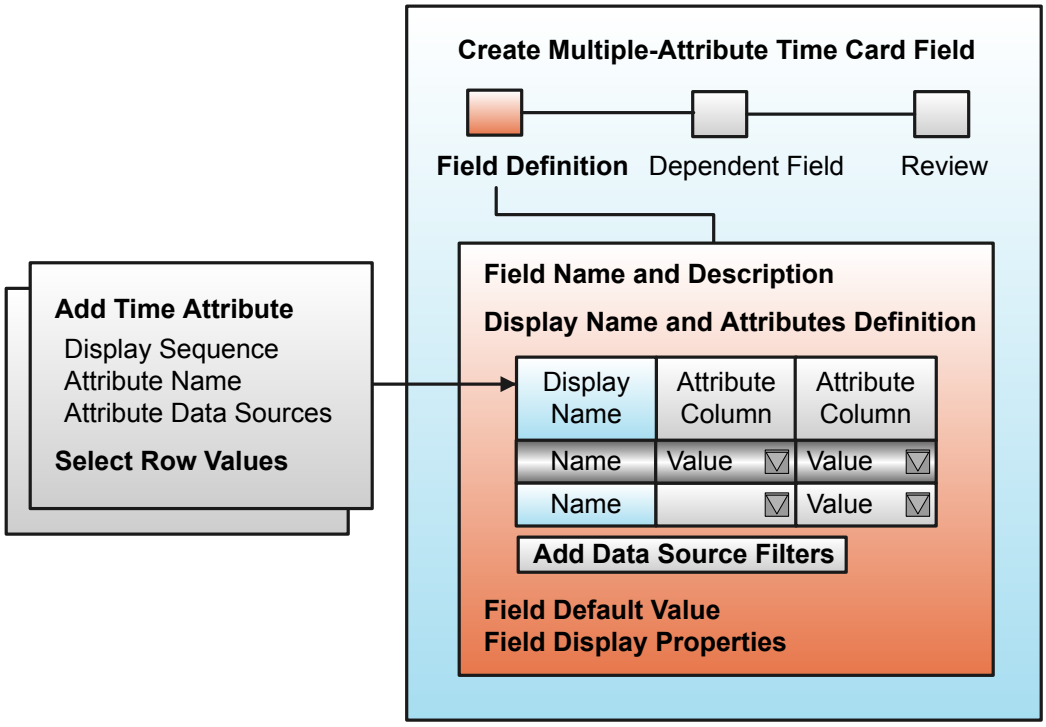
Related Topics

- Time Entry Layout Component Data Sources: Explained
- Managing Time Attributes and the Data Dictionary: Explained

Defining Multiple-Attribute Time Card Fields: Procedure

You can create a time card field that has a single display name and stores multiple time attribute values for a single time entry. The first step is to define the properties of the field and the structure of its associated attributes. In the optional second step, you can define associated dependent fields. Review the definition details in the final step.

The following figure shows field definition as the first step in the guided process when creating a multiple-attribute time card field.



Multiple-attribute field definition includes combining multiple associated time attributes in a column and row structure.

This topic explains the basic process for defining a multiple-attribute field, as shown in the figure and summarized in the following steps:

1. Enter the field name and description.
2. Create the multiple-attribute definition structure:
    a. Add time attribute columns to the multiple-attribute definition table.
    b. Specify filters for the time entry data sources for the definition table.
3. Add and configure each row in the multiple-attribute definition table.
4. Optionally, specify the default field value.
5. Specify field-level display properties.

For details on defining dependent fields, see the Defining Dependent Time Card Fields: Procedure topic.

Before creating time card fields, ensure that the payroll and absence time attributes, as well as any custom time attributes, exist in the data dictionary.

Enter General Properties

To create a field and define its general properties, use the Manage Time Entry Layout Components task in the Setup and Maintenance work area. On the Field Definition page, enter a name and description according to the best practice detailed in the following table.

Field	Details
Name	Enter a unique short name, possibly using agreed on abbreviations, such as PTT for payroll time type. The name that you enter appears in the **Name** choice list on the Time Card Matrix page of the Edit Layout dialog box. The Name choice list displays only 15 characters.
Description	Document the purpose of the time card field

Configure the Time Attribute Columns of Your Multiple-Attribute Definitions Table

Add time attributes as columns in the Display Value and Multiple Attribute Definition section table. Include the Identifier time attribute in your table structure. The identifier ensures that time attribute combinations are always unique and therefore retrievable when entering the same time attribute combination for a different display value. The time repository stores the specified attributes, not the display values. If the attribute or attribute combination isn't unique, there is no guarantee that the time repository would retrieve the expected attribute or attribute combination.

1. Select **Add Time Attribute** on the **Actions** menu of the Display Value and Multiple Attribute Definition section toolbar.
2. In the Add Time Attribute dialog box:
    a. Set the attribute display sequence to specify where the column appears in the table. By setting the sequence, you also ensure that the column order persists across application sessions.
    b. Select the time attribute, such as Payroll Time Type.
    c. Select the data sources for the specified time attribute. Typically, the correct selection for the selected attribute appears at the top of the choice list.
    d. Specify whether the time attribute is required for the definition structure.
    e. Click **OK** to return to the Field Definition page.
3. Repeat steps 1 and 2 until you add all of the time attributes for this time card field definition.

Specify Filters for the Time Entry Data Sources

Add any filters provided by the time entry data sources for the time attributes in the attribute definition table. Select the filter variables and corresponding filter input attributes. For example, the following table shows the filter variables and input attributes that the Expenditure Type and Payroll Time Type time attribute data sources provide.

Filter Variables	Filter Input Attributes
pAssignmentID	Assignment
pEffectiveDate	Start Time
pProjectUnitID	Project Unit
pStartTime	Start Time
pStopTime	Stop Time

The time entry data sources delivered by Absence Management, Global Payroll, and Project Costing:

- Provide filters for many of their independent time attributes
- Don't provide filters for many of their dependent time attributes

Add and Configure Each Row of the Multiple-Attribute Definitions Table

Add and configure all of the rows before creating and defining dependent fields. You do this because the time attribute values that you select in the definitions table populate the Independent Attribute Value choice list. You use this choice list after setting the dependent field availability for specific, rather than all, time attribute values. For each row that you add to the attribute definitions table:

1. Enter the display name value, which is what time reporters see instead of the attribute value or combination of values selected in the row.
2. Select the time attribute values, which the time repository stores.

> **Caution:** If you set Payroll Time Type and Absence Management Type attribute values on the same row, it could result in double payment. The reason for the possible double payment is because payroll and absence values transfer to payroll for processing through different routes.

The following table provides examples of display values for various time attribute values and attribute value combinations. An identifier is required for the third and fourth rows to ensure that the attribute value combinations remain unique. An identifier is optional for the last two rows.

Value Displayed on the Time Card	Expenditure Type Name	Payroll Time Type	Absence Management Type	Identifier
Bereavement			Bereavement	
Vacation			Vacation	
Regular Professional	Billable Time	Regular TL US LDG		Regular Professional
Regular Administrator	Billable Time	Regular TL US LDG		Regular Administrative
Overtime Professional	Professional Overtime	Overtime TL US LDG		
Overtime Administrator	Administrative Overtime	Overtime TL US LDG		

3. (Optional) Edit the **From Date**, which is automatically set to the current date.

   The **Enable** option is also automatically set to Yes. As a result, the list of attribute values includes the display value as of the specified from date.

Specify Default Field Values

You can specify default values for new time entries. New time entry refers to the value that automatically populates when the time card displays the field. Time reporters add fields to a time card when they open the time card or add an attribute row.

To configure default values:

1. Select the population method for new field entries from the options described in the following table.

Option	Description
No default value	Don't automatically populate the new field with an entry.
Specific value	Select the specific value to use as the default time entry value. The following sources populate the **Specific Display Value** choice list: o For single-attribute time card fields, the unfiltered setup data source that you selected earlier o For multiple-attribute fields, the display values that you entered in the Display Value and Multiple Attribute Definition section
Function	The selected function, such as Based on primary assignment, is a formula used to derive the default time entry value. The formula uses the filtered time entry data source that you selected earlier.

2. Optionally, populate new entries based on another time card field. This field appears for only specific time attributes. For example, if you select the **Expenditure Type** time attribute, you can specify to populate new entries based on the **Expenditure Type Name** attribute value.

Specify Field Display Properties

To configure the display properties:

1. Select the display type, such as Text box, Smart choice list, or Hidden field. Hidden fields never appear on the time card.
2. Edit the display name, as appropriate. This name is the default column header on the time card matrix and field label in time card and calendar dialog boxes. The name is also the default field label on the web clock page.

> **Note:** To fully render the display name on time card, calendar, and web clock pages and dialog boxes, limit the name to 70 characters or less.

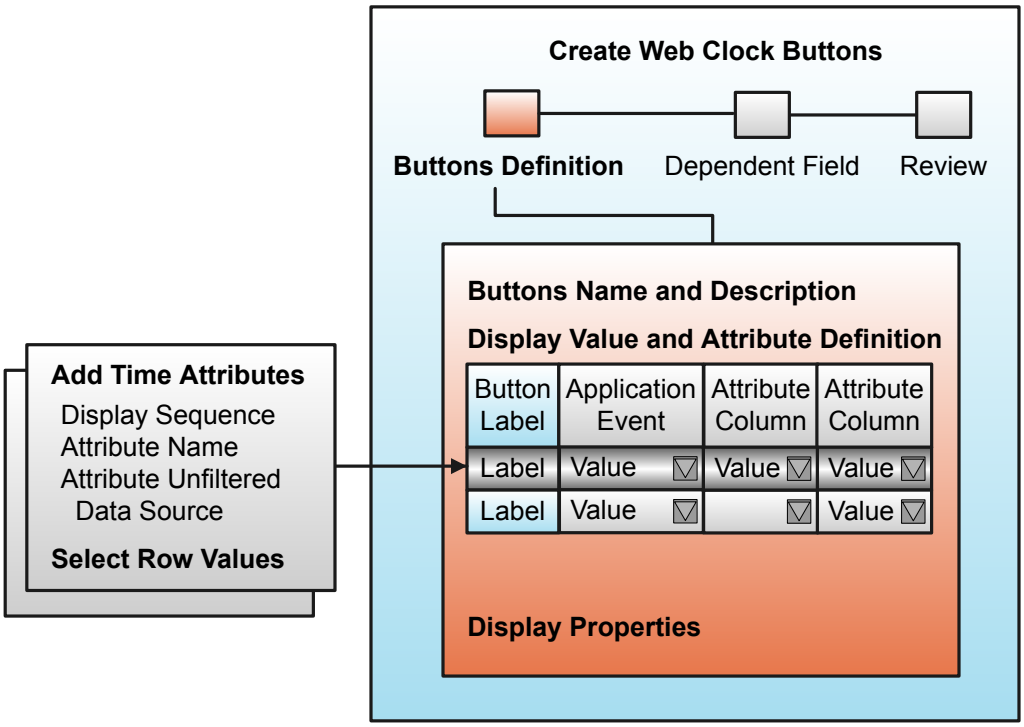
3. Enable or disable override on layouts. Enabling the override lets you tailor the display name to different time reporters using different layout sets.
4. Specify whether the time card field is required. Required fields always appear on the time card.

Related Topics

- Creating Elements for Time Card Entries: Procedure
- Time Entry Layout Component Data Sources: Explained
- Managing Time Attributes and the Data Dictionary: Explained

Defining Web Clock Buttons: Procedure

Create groups of web clock buttons for use with the web clock layout. Each button in the group has a single display name and can store multiple time attribute values for a single time event. The first step in creating the group of buttons is to define the properties of the buttons and the structure of the associated attributes. In the optional second step, you can define associated dependent time card fields. Review the definition details in the final step.



Use the Buttons Definition page to include a combination of associated time attributes in a column and row structure.

This topic explains the basic process for defining a group of web clock buttons, as shown in the figure and summarized in the following steps:

1. Enter the name and description for this group of buttons.
2. Create the attribute definition structure by adding time attribute columns to the attribute definition table.
3. Add and configure each button as a row in the attribute definition table.
4. Specify display properties that apply to all buttons in the group.

For details on defining dependent fields, see the Defining Dependent Time Card Fields: Procedure topic.

Before you create web clock buttons, ensure that the payroll and absence time attributes, and any custom time attributes, exist in the data dictionary.

Enter General Properties

To create web clock buttons and define their general properties:

1. Use the Manage Time Entry Layout Components task in the Setup and Maintenance work area.
2. On the Button Definition page, enter a name and description.

Configure the Time Attribute Columns of Your Attribute Definitions Table

Add time attributes as columns in the Display Value and Multiple Attribute Definition section table. The attribute definition structure automatically includes the Application Event clock attribute in the basic definition table. The delivered choice list values are **In**, **In and Out**, **Out and In**, and **Out**.

1. On the Display Value and Multiple Attribute Definition section toolbar, click **Add Time Attribute**.
2. In the Add Time Attribute dialog box:
    a. Set the attribute display sequence to specify where the column appears in the table. By setting the sequence, you also ensure that the column order persists across application sessions.
    b. Select the time attribute, such as Payroll Time Type.
    c. Select the data sources for the specified time attribute. Typically, the correct selection for the selected attribute appears at the top of the choice list.

       You must select a filtered data source, but it doesn't apply for web clock buttons, only for time entry fields.
    d. Specify whether the time attribute is required for the definition structure.
    e. Click **OK** to return to the Buttons Definition page.
3. Repeat steps 1 and 2 until you add all of the time attributes for the definition of these buttons.

Add and Configure Each Row of the Attribute Definition Table

Add and configure all of the rows before creating and defining dependent fields. You do this because the time attribute values that you select in the definitions table populate the Independent Attribute Value choice list. You use this choice list after setting the dependent field availability for specific, rather than all, time attribute values. For each row that you add to the attribute definitions table:

1. Enter the button label applicable to the combination of attributes, which time reporters view on the web clock. For example, Morning Shift, Morning Break, Midmorning Shift, or Lunch.
2. Select the time attribute values, which the time repository stores. For **Out and In** or **In and Out** clock application events, the selected time attributes apply to the second event in the pair. The time attributes for the second event in the preceding pair apply to the first event in the current pair.

    Caution: If you set Payroll Time Type and Absence Management Type attribute values on the same row, it could result in double payment. The reason for the possible double payment is because payroll and absence values transfer to payroll for processing through different routes.
3. (Optional) Edit the **From Date**, which is automatically set to the current date.

    The **Enable** option is also automatically set to Yes. As a result, the list of attribute values includes the display value as of the specified from date.

Specify Field Display Properties

To configure the display properties, you enable the override option. You can customize the display name to different time reporters using different layout sets.

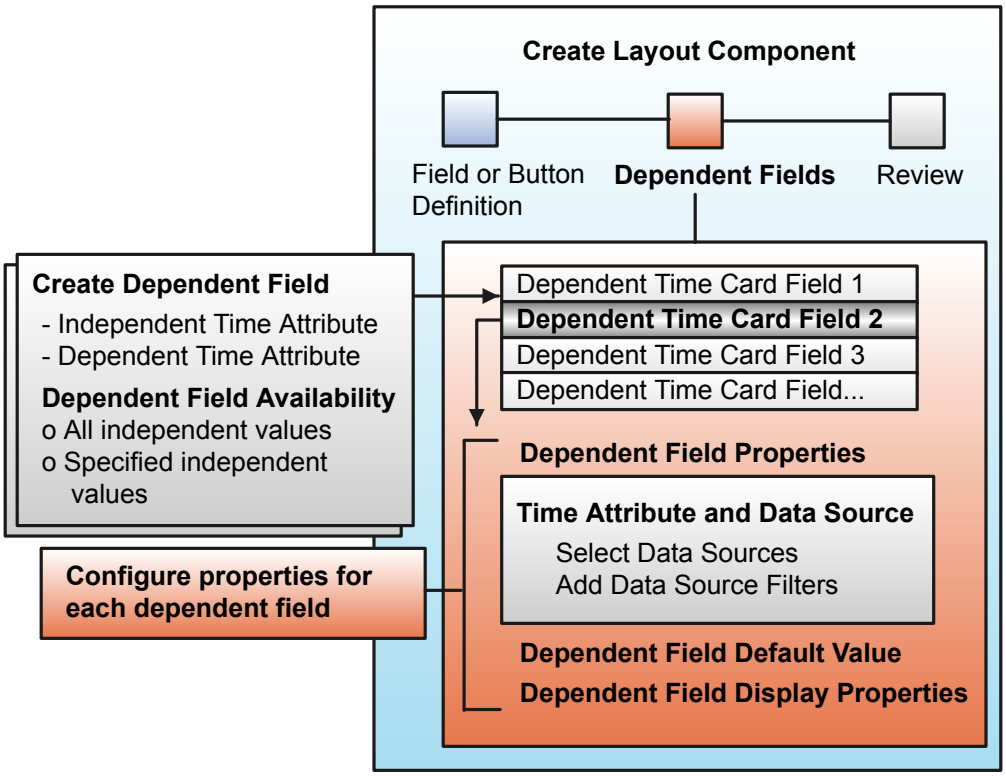
Related Topics

- Creating Elements for Time Card Entries: Procedure
- Managing Time Attributes and the Data Dictionary: Explained

Defining Dependent Time Card Fields: Procedure

You can define dependent time card fields in the optional second step of the guided process to create time entry layout components. Review the independent field or button definition and associated dependent field details in the final step.

The following figure shows dependent field definition as the second step in the guided process when creating time entry layout components.



Create and add one or more single-attribute dependent time card fields within the definition of an independent time card field or web clock button. For each dependent field associated with the independent field or button, define the dependent field properties and data sources of the associated dependent time attribute.

This topic explains the basic process for defining dependent fields, as shown in the figure and summarized in the following steps:

1. Create the dependent field. Each dependent field that you create appears as a row in the table at the top of the Dependent Field Definition page.
2. Optionally, edit the dependent time card field properties, as appropriate.
3. Select the data sources for the dependent time attribute and add filters, as appropriate.
4. Optionally, specify default dependent field values.
5. Specify the dependent field display properties.

   You can also create all dependent fields first, then select each field in the table in turn and complete steps 2 through 5.

The focus of this topic is defining dependent fields, which are always single-attribute fields. For details on defining single-attribute and multiple-attribute fields, see the Defining Single-Attribute Time Card Fields: Procedure and Defining Multiple-Attribute Time Card Fields: Procedure topics.

Create the Dependent Field

To create the dependent field:

1. On the General Properties section toolbar of the Dependent Field Definition page, click the **Create** button.
2. On the Create Dependent Time Card Field dialog box:
   a. Enter a name and description according to the best practice detailed in the following table.

Field	Details
Name	Enter a unique short name, possibly using agreed on abbreviations, such as PTT for payroll time type. The name that you enter appears in the **Name** choice list on the Time Card Matrix page of the Edit Layout dialog box. The Name choice list displays only 15 characters.
Description	Document the purpose of the time card field

   b. Select the dependent time attribute for the specified independent time attribute, such as Overtime_City for location or Department for payroll costing.
   c. Select the availability of the dependent time attribute using the two option descriptions in the following table:

Available for all attribute values	Available for specified attribute values
The dependent field always appears, as configured when time card and web clock layout configurations include the independent attribute.	The dependent field appears for entry only after the time reporter selects: • One of the specified independent attribute values • A specified button on the web clock
You can display the dependent field: • On the calendar • In the time card matrix • On the time card row-level details dialog box • On the time card entry-level details dialog box • On the web clock	You can display the dependent field on the: • Time card row-level details dialog box • Time card entry-level details dialog box • Web clock You can't display the dependent field: • On the calendar

Available for all attribute values	Available for specified attribute values
	• In the time card matrix
Choice list values might be inappropriate for the time card worker or missing, depending on the configuration of the data source for the dependent field.	Choice list values are appropriate for the time card worker.

d. If you select the **For specific independent time attribute values** option, add the specific independent time attribute values.

3. Click **OK** to return to the Dependent Field Definition page.

Edit the Dependent Time Card Field Properties

In the Dependent Time Card Field Properties section, you can edit the name and description that you entered when creating the dependent field, as appropriate.

Specify the Dependent Time Attribute Data Sources and Add Filters

For the selected dependent field, such as Store Departments:

1. Select the data sources for the specified time attribute. Typically, the correct data source for the selected attribute appears at the top of the choice list.
2. Add any filters provided by the time entry data source by selecting the filter variable and corresponding variable input attributes. For example, the following table shows the filter variables and filter input attributes that are provided by the Payroll Time Type attribute data source.

Filter Variables	Filter Input Attributes
pAssignmentID	Assignment
pEffectiveDate	Start Time

The time entry data sources delivered by Absence Management, Global Payroll, and Project Costing don't provide filters for many of their dependent time attributes.

Specify Default Field Values

You can specify default values for new time entries. New time entry refers to the value that automatically populates when the time card displays the field. Time reporters add fields to a time card when they open the time card or add an attribute row.

To configure default values:

1. Select the population method for new field entries from the options described in the following table.

Option	Description
No default value	Don't automatically populate the new field with an entry.

Option	Description
Specific value	Select the specific value to use as the default time entry value. The following sources populate the **Specific Display Value** choice list: o For single-attribute time card fields, the unfiltered setup data source that you selected earlier o For multiple-attribute fields, the display values that you entered in the Display Value and Multiple Attribute Definition section
Function	The selected function, such as Based on primary assignment, is a formula used to derive the default time entry value. The formula uses the filtered time entry data source that you selected earlier.

2. Optionally, populate new entries based on another time card field. This field appears for only specific time attributes. For example, if you select the **Expenditure Type** time attribute, you can specify to populate new entries based on the **Expenditure Type Name** attribute value.

Specify Field Display Properties

To configure the display properties:

1. Select the display type, such as Text box, Smart choice list, or Hidden field. Hidden fields never appear on the time card.
2. Edit the display name, as appropriate. This name is the default column header on the time card matrix and field label in time card and calendar dialog boxes. The name is also the default field label on the web clock page.

   Note: To fully render the display name on time card, calendar, and web clock pages and dialog boxes, limit the name to 70 characters or less.
3. Enable or disable override on layouts. Enabling the override lets you tailor the display name to different time reporters using different layout sets.
4. Specify whether the time card field is required. Required fields always appear on the time card.

Related Topics

- Dependent Time Card Field Availability: Critical Choices

Configuring Time Card Fields for Location Overrides: Procedure

Enable time reporters to enter location override information when they report time worked in a location other than their normal work location. Create dependent time card fields for Payroll Time Types with location fields, such as State, County, and City in the US.

To configure location overrides for time entry, complete the following steps in the Setup and Maintenance work area:

1. Prepare location time attributes.
2. Create dependent location time card fields.
3. Configure dependent location field data sources and filters.

4. Add dependent location fields to the layout set.

Prepare Time Attributes

To prepare location attributes for use in time card fields, complete the following steps:

1. Create nonrecurring Time Card or Standard category earnings elements with the necessary location input values for the legislative data group using the Manage Elements task.
2. Generate the location time attributes using the Generate Data Dictionary Time Attributes task.

The delivered location attributes have data sources and choice list filters, and transfer to Oracle Fusion Global Payroll after final approval.

Create Dependent Location Time Card Fields

You can capture only a single location level, such as State, or multiple location levels, such as State, County, and City. Set up each location level as a dependent time card field of the related independent attribute.

Use the Manage Time Entry Layout Components task to complete the following steps:

1. Create or edit an independent time card field that has the Payroll Time Type time attribute.
2. Click **Next** to open the second page of the guided process.
3. Click the **Create** button to add location attributes as dependent time card fields:
    a. Identify the independent attribute.
    b. Select the location attribute.
    c. Enter field name and description properties.
    d. Select the availability setting for the location field. The selection determines your display options in time layouts.
    e. Click **OK** to create the dependent location field.

Configure Dependent Location Data Sources and Filters

For each dependent location field, complete the following steps:

1. Select the data sources for the location attribute, typically the top value in the list.
2. Add the time entry data source filter variables and input attributes. If you use multiple location levels, you set up the data source filters as shown in the following US example.

Dependent Field	Filter Variable	Variable Input Attribute	Available Values for Dependent Field
State	None	None	All values in the State data source
County	pCodeLevel1	State	All counties in the selected State
City (step 1)	pCodeLevel1	State	None
City (step 2)	pCodeLevel2	County	All cities in the selected County in the selected State

Add Dependent Location Fields to the Layout Set

Add the dependent location fields to the appropriate layouts in the layout sets, in the display sequence that makes the appropriate choice list values available. For example, when city values depend on the selected state and county values, you display the State field first, followed by County, and then City. If you display the City field first, the choice list is empty. The availability setting that you selected when creating the dependent time card field determines your display options in time card layouts.

Related Topics

- Dependent Time Card Field Availability: Critical Choices
- Creating Elements for Time Card Entries: Procedure
- Managing Layout Sets: Explained
- Creating Nonrecurring Earnings Elements for Time Entries: Procedure

Configuring Time Card Fields for Payroll Costing: Procedure

Enable time reporters to enter payroll costing information by creating dependent time card fields for the independent Payroll Time Type attribute.

Follow these steps in the Setup and Maintenance work area to configure payroll costing for time entry:

1. Prepare the costing time attributes.
2. Create dependent costing time card fields.
3. Configure dependent costing field data sources and filters.
4. Add dependent costing fields to the layout set.

Prepare Costing Time Attributes

To prepare costing attributes for use in time card fields, follow these steps:

1. Create payroll value sets using the Manage Value Sets task.
2. Set up the cost allocation key flexfield using the Manage Cost Allocation Key Flexfield task.
3. Setup the cost allocation key flexfield usage to be available at the element entry level.
4. Generate the costing time attributes using the Generate Data Dictionary task.

Create Dependent Costing Time Card Fields

Set up costing as a single-attribute dependent time card field of the related independent Payroll Time Type time attribute.

Using the Manage Time Entry Layout Components task:

1. Create or edit an independent time card field that has the Payroll Time Type time attribute.
2. On the second step of the guided process, click the **Create** button to add costing attributes as dependent time card fields:
    a. Identify the independent attribute.

b. Search for and select the costing attribute, such as Appropriations or Department.
c. Enter field name and description properties.
d. Indicate whether the costing field is available to all independent attribute values or select the specific related attribute values. The availability setting that you select determines your display options in time card layouts.

   The following table identifies the appropriate availability setting for legislative data groups that do and don't share costing structures.

Shared by LDGs	Availability Setting
Yes	You can make the costing structure available to all independent attribute values.
No	You must create multiple dependent fields and specify the independent attribute values for each dependent field.

e. Click **OK** to add the dependent location field to the table.

Configure Dependent Costing Data Sources and Filters

Select each dependent costing field and:

1. Select the data sources for the costing attribute, typically the top value in the list.
2. Add the time entry data source filter variables and input attributes.

Add Dependent Costing Fields to the Layout Set

Add the dependent costing fields to the appropriate layouts in the layout sets. The availability setting that you selected when creating the dependent time card field determines your display options in time card layouts.

Related Topics

- Setting Up the Cost Allocation Key Flexfield: Procedure
- Payroll Cost Allocation Key Flexfield Setup: Critical Choices
- Dependent Time Card Field Availability: Critical Choices

Creating a Single-Attribute Time Card Field: Worked Example

This example shows how to create a single-attribute time card field that stores Absence Management Type and Absence Type Reason time attribute values.

The following table summarizes the key decisions when configuring the single-attribute independent and dependent fields.

Decisions to Consider	Independent Field	Dependent Field
What is the time attribute?	Absence Type	Absence Type Reason

Decisions to Consider	Independent Field	Dependent Field
Do you want to use the default data source at the top of each choice list?	Yes	Yes
Do you want to automatically populate new time entries?	Yes, with the specific value Sick Time	No
Should the dependent field be available for all or specific independent time attribute values?	Not applicable	Specific value, Sick Time
What is the display type?	Smart choice list	Smart choice list
Do you want to enable override on layouts?	Yes	Yes
Is the field required on the time card?	No	No

Summary of the Tasks

Create a single-attribute time card field using the following basic process:

1. Define the field.
2. Create the dependent field.
3. Define the dependent field.

Create the Single-Attribute Field

1. In the Setup and Maintenance work area, search for and go to the Manage Time Entry Layout Component task.
2. On the Search Results section toolbar, click the **Create** button.
3. In the Create Layout Component dialog box, select **Single attribute**.
4. Click **OK** to open the Create Time Card Field: Field Definition page.

Define the Field

1. In the General Properties section, complete the fields as shown in the following table.

Field	Value
Name	AbsenceMgmtTCF
Description	Uses the independent Absence Management Type time attribute and the dependent Absence Reason Type time attribute.

2. In the Time Attribute and Data Source section, complete the fields as shown in the following table.

Field	Value
Time Attribute	Absence Management Type
Filtered Data Source for Time Entry	List of Absence Types for User
Unfiltered Data Source for Setup Tasks	List of Absence Types for Administrator

3. Click **Add Filters** to open the Add Time Entry Data Source Filters dialog box.
   a. Add the filter variables and filter input attributes provided by the time entry data source, as shown in the following table.

Filter Variable	Filter Input Attribute
pAssignmentID	Assignment
pEffectiveDate	Start Time

   b. Click **OK** to return to the Create Time Card Field: Field Definition page.
4. In the Default Values section, complete the fields as shown in the following table.

Field	Value
Population Method for New Entry	Specific value
Specific Display Value	Sick Time

5. In the Display Properties section, complete the fields as shown in the following table. Use default values for fields unless the table specifies other values.

Field	Value
Display Type	Smart choice list
Enable override on layouts	Yes
Required on the Time Card	No

6. Click **Next** to open the Create Time Card: Dependent Field Definition page.

Create the Dependent Field

1. On the General Properties section toolbar, click the **Create** button.
2. In the Create Dependent Time Card Field dialog box, complete the dependent fields as shown in the following table.

Field	Value
Name	AbsenceReasonDTCF
Dependent Time Attribute	Absence Type Reason
Description	Dependent field for the independent Absence Management Type time attribute
Availability	For specific independent time attribute values
Independent Time Attribute Value	Sick Time

3. Click **OK** to return to the Create Time Card Field: Dependent Field Definition page.

Define the Dependent Field

1. In the Time Attribute and Data Source section, complete the fields as shown in the following table. The time entry data source for this dependent time attribute doesn't provide any filters for you to add.

Field	Value
Time Attribute	Absence Type Reason
Filtered Data Source for Time Entry	List of Absence Reasons
Unfiltered Data Source for Setup Tasks	List of Absence Reasons

2. In the Display Properties section, complete the fields as shown in the following table. Use default values for fields unless the steps specify other values.

Field	Value
Display Type	Smart choice list
Enable override on layouts	Yes
Required on the Time Card	No

3. Click **Next** to open the Create Time Card Field: Review page.
4. Review the time card information.
5. Click **Save and Close** to return to the Manage Layout Components page.

Related Topics

- Time Entry Layout Component Data Sources: Explained

- Dependent Time Card Field Availability: Critical Choices

Creating a Multiple-Attribute Time Card Field: Worked Example

This example shows how to create a multiple-attribute time card field that stores values for three independent time attributes and one dependent time attribute.

This table summarizes the key decisions when configuring the independent multiple-attribute field and dependent single-attribute field.

Decisions to Consider	Independent Multiple Attribute Field	Dependent Single-Attribute Field
What are the time attributes?	Expenditure Type Name, Payroll Time Type, and Absence Management Type	Department
Do you want to use the default data source at the top of each choice list?	Yes	Yes
Do you want to automatically populate new time entries?	No	No
Should the dependent field be available for all or specific independent time attribute values?	Not applicable	Specific values Overtime Billable and Overtime Nonbillable
What is the display type?	Smart choice list	Smart choice list
Is the field required on the time card?	Yes	No

Summary of the tasks

Create a multiple-attribute time card field using the following basic process:

1. Configure the multiple-attribute definition structure.
2. Add the filters for the time entry data sources.
3. Add and configure the rows in the definitions table.
4. Optionally, specify the default multiple-attribute field value.
5. Specify the multiple-attribute field display properties.
6. Create the dependent field.
7. Define the dependent field.

Create the Multiple-Attribute Time Card Field

1. In the Setup and Maintenance work area, search for and go to the Manage Time Entry Layout Component task.
2. On the Search Results section toolbar, click the **Create** button.
3. In the Create Layout Component dialog box, select **Multiple attribute**.
4. Click **OK** to open the Create Time Card Field: Field Definition page.
5. In the **General Properties** section, complete the fields as shown in the following table.

Field	Value
Name	ExpendPayAbsMATCF
Description	Uses the independent Expenditure Type Name, Payroll Time Type, and Absence Management Type time attributes and the dependent Department time attribute.

Configure the Display Value and Multiple Attribute Definition Structure

Repeat the following steps four times in the Display Value and Multiple Attribute Definition section. First, add the Expenditure Type time attribute and then add the Payroll Time Type, Absence Management Type, and Identifier attributes.

1. On the **Actions** menu, select **Add Time Attribute** to open the Add Time Attribute dialog box.
   a. Complete the fields for each time attribute, as shown in the following table. Use default values for fields unless the table specifies other values.

Field	Expenditure Type Name	Payroll Time Type	Absence Management Type	Identifier
Attribute Display Sequence	5	10	15	20
Time Attribute	Expenditure Type Name	Payroll Time Type	Absence Management Type	Identifier
Filtered Data Source for Time Entry	PJC_ EXPENDITURE_ TYPES_ EXPEND_T_V	List of Payroll Time Types for User	List of Payroll Time Types for User	Default format value set for text
Unfiltered Data Source for Setup Tasks	PJC_ EXPENDITURE_ TYPES_ EXPEND_A_T_V	List of Payroll Time Types for Administrator	List of Payroll Time Types for Administrator	Default format value set for text
Time Attribute Required	No	No	No	No

   b. Click **OK** to return to the Create Time Card Field: Field Definition page.
2. After you add the first time attribute, repeat step 1 to add the remaining three time attributes.

After you add the fourth time attribute, continue to the next section.

Add the Filters for the Time Entry Data Sources

1. Click **Add Filters** to open the Add Time Entry Data Source Filters dialog box.
   a. Add the filter variables and input attributes provided by the time entry data sources for all three time attributes, as shown in the following table.

Filter Variable	Filter Input Variable
pAssignmentID	Assignment
pEffectiveDate	Start Time
pProjectUnitID	Project Unit
pStartTime	Start Time
pStopTime	Stop Time

   b. Click **OK** to return to the Create Time Card Field: Field Definition page.

Add and Configure Each Row of the Multiple-Attribute Definitions Table

Repeat the following steps six times in the Display Value and Multiple Attribute Definition section to add and define the rows.

1. On the section toolbar, click the **Add** button.
2. Complete the fields as shown in the following table. Use default values for fields unless the table specifies other values.

Value Displayed on Time Card	Expenditure Type Name	Payroll Time Type	Absence Management Type	Identifier
Bereavement			Bereavement	
Vacation			Vacation	
Regular Professional		Regular TL US LDG		Reg Prof
Regular Administrator		Regular TL US LDG		Reg Admin
Overtime Billable	Prof Overtime	Overtime TL US LDG		

Value Displayed on Time Card	Expenditure Type Name	Payroll Time Type	Absence Management Type	Identifier
Overtime Nonbillable	Admin Overtime	Overtime TL US LDG		

3. Repeat steps 1 and 2 until you have added and defined all six rows.

   Processing handles time entries with these values as follows:

   - Absence Management retrieves the first and second row attribute values.
   - The third and fourth row attribute values transfer to Global Payroll.
   - The fifth and sixth row attribute values transfer to Project Costing and Global Payroll, respectively.

Define the Field Display Properties

1. In the Display Properties section, complete the display fields as shown in the following table. Use default values for fields unless the steps specify other values.

Field	Value
Component Type	Smart choice list
Required on the Time card	Yes

2. Click **Next** to open the Create Time Card Field: Dependent Field Definition page.

Create the Dependent Field

1. On the General Properties section toolbar, click the **Create** button.
2. In the Create Dependent Time Card Field dialog box, complete the fields for the dependent time card field, as shown in the following table.

Field	Value
Name	Department
Independent Time Attribute	Payroll Time Type
Dependent Time Attribute	Department
Availability	For specific independent time attribute values
Independent Time Attribute Values	Overtime Billable Overtime Nonbillable

Field	Value
	The values that you set for the time attributes in the multiple-attribute definitions table populate this choice list.

3. Click **OK** to return to the Create Time Card Field: Dependent Field Definition page.

Define the Dependent Field

1. In the Time Attribute and Data Source section, select the fields as shown in the following table. The time entry data source for this dependent time attribute doesn't provide any filters for you to add. Use default values for fields unless the steps specify other values.

Field	Value
Filtered Data Source for Time Entry	Progress_ Department
Unfiltered Data Source for Setup Tasks	Progress_ Department

2. In the Display Properties section, complete the fields, as shown in the following table. Use default values for fields unless the steps specify other values.

Field	Value
Component Type	Smart choice list
Required on the Time Card	No

3. Click **Next** to open the Create Time Card Field: Review page.
4. Review the time card field information.
5. Click **Save and Close** to return to the Manage Layout Components page.

Related Topics

- Time Entry Layout Component Data Sources: Explained
- Dependent Time Card Field Availability: Critical Choices

Creating Web Clock Buttons: Worked Example

This example shows how to create web clock buttons that store values for the independent Clock Event and Payroll Time Type time attributes. For payroll costing purposes, you add the dependent Department time attribute value for all payroll time type values.

Summary of the Tasks

Create web clock buttons using the following basic process:

1. Configure the attribute definition structure.
2. Add and configure the rows in the attribute definition table.
3. Specify the display properties.
4. Create the dependent field.
5. Define the dependent field time attribute, data sources, default values, and display properties.

Create the Web Clock Buttons

1. In the Setup and Maintenance work area, search for and go to the Manage Time Entry Layout Components task.
2. On the Search Results section toolbar, click the **Create** button.
3. In the Create Layout Component dialog box, select **Web clock buttons**.
4. Click **OK** to open the Create Web Clock Buttons: Buttons Definition page.
5. In the General Properties section, complete the fields as shown in the following table.

Field	Value
Name	Clock Events for Payroll Time
Description	Uses the independent Application Event clock attribute, Payroll Time Type time attribute, and the dependent Department time attribute

Configure the Button Label and Attribute Definition Structure

In the Display Value and Multiple Attribute Definition section, add the Payroll Time Type time attribute.

1. On the Display Value and Multiple Attribute Definition section toolbar, click **Add Time Attribute** to open the Add Time Attribute dialog box.
2. Complete the fields for the Payroll Time Type time attribute, as shown in the following table. The data sources that you select are typically at the top of their choice lists. Use default values for fields unless the table specifies other values.

Field	Value
Attribute Display Sequence	10
Time Attribute	Payroll Time Type
Unfiltered Data Source for Setup Tasks	List of Payroll Time Types for Administrator

Field	Value
Filtered Data Source for Time Entry	List of Payroll Time Types for User
Time Attribute Required	No

3. Click **OK** to return to the Create Web Clock Buttons: Buttons Definition page.

Add and Configure Each Row of the Attribute Definition Table

Repeat the following steps six times in the Display Value and Multiple Attribute Definition section to add and define the rows.

1. On the section toolbar, click the **Add** button.
2. Complete the fields as shown in the following table. Use default values for fields unless the table specifies other values.

Button Label	Application Event	Payroll Time Type
Clock In	In	Regular TL US LDG
Out for Break	Out and In	Paid Break US LDG The Generate Time Cards from Time Collection Device process uses the payroll time type value associated with the preceding **In** event when it creates the **Out** part of this **Out and In** clock application event. The process uses the payroll time type selected for this button label when it creates the **In** event.
Back from Break	Out and In	Regular TL US LDG The Generate Time Cards from Time Collection Device process uses the payroll time type value associated with the **In** part of the preceding **Out and In** event when it creates the **Out** part of this **Out and In** clock application event. The process uses the payroll time type selected for this button label when it creates the **In** event.
Out for Meal	Out and In	Unpaid Meal The Generate Time Cards from Time Collection Device process uses the payroll time type value associated with the **In** part of the

Button Label	Application Event	Payroll Time Type
		preceding **Out and In** event when it creates the **Out** part of this **Out and In** clock application event. The process uses the payroll time type selected for this button label when it creates the **In** event.
Back from Meal	Out and In	Regular TL US LDG The Generate Time Cards from Time Collection Device process uses the payroll time type value associated with the **In** part of the preceding **Out and In** event when it creates the **Out** part of this **Out and In** clock application event. The process uses the payroll time type selected for this button label when it creates the **In** event.
Clock Out	Out	Regular TL US LDG

3. Repeat steps 1 and 2 until you have added and defined all six rows.
4. Click **Add Filters** to open the Add Time Entry Data Source Filters dialog box.
   a. Add the filters as shown in the following table:

Filter Variable	Filter Input Attribute
pAssignmentId	Assignment
pEffectiveDate	Start Time

   b. Click **OK** to return to the Create Web Clock Buttons: Buttons Definition page.

Define the Display Properties

1. In the Display Properties section, enable override of the web clock button labels on the web clock layout.
2. Click **Next** to open the Create Web Clock Buttons: Dependent Field Definition page.

Create the Dependent Field

1. On the General Properties section toolbar, click the **Create** button.
2. In the Create Dependent Time Card Field dialog box, complete the fields for the dependent time card field, as shown in the following table.

Field	Table
Name	Department
Independent Time Attribute	Payroll Time Type
Dependent Time Attribute	Department
Availability	For all independent time attribute values

3. Click **OK** to return to the Create Web Clock Buttons: Dependent Field Definition page.

Define the Dependent Field

1. In the Time Attribute and Data Source section, select the fields as shown in the following table. The time entry data source for this dependent time attribute doesn't provide any filters for you to add. Use default values for fields unless the steps specify other values.

Field	Value
Filtered Data Source for Time Entry	Department
Unfiltered Data Source for Setup Tasks	Department

2. In the Display Properties section, complete the fields, as shown in the following table. Use default values for fields unless the steps specify other values.

Field	Value
Display Type	Smart choice list
Required on the Time Card	No

3. Click **Next** to open the Create Web Clock Buttons: Review page.
4. Review the information for the web clock buttons.
5. Click **Save and Close** to return to the Manage Layout Components page.

7 Layout Sets and Time Entry Formats

Manage Layout Sets: Explained

Create a collection of layouts that determine the appearance of the time card, calendar, and web clock pages. Create different layout sets for workers with different requirements. Assign a layout set to one or more worker time entry profiles. The profiles ensure that the workers see only those time card fields and web clock buttons that are relevant to them.

When you create a layout set, you select one or more time consumers and then generate a set of predefined layouts for the time consumers. You then configure and save the generated layouts. Use the Manage Layout Sets task in the Time Management work area.

You can't delete layouts from a layout set.

Predefined Layout Sets

The predefined layout sets available for use in worker time entry profiles are:

- Projects and Payroll Layout Set
- Projects Team Membership and Payroll Layout Set
- Projects Layout Set Filtered by Project Team Members
- Payroll Layout Set
- Projects Layout Set

Layouts

A layout determines the time card fields that appear on the time card. It also determines the buttons and fields that appear on a web clock. Layouts help to reduce time entry errors because you can use the buttons, fields, and values that are meaningful to the workers.

The following table lists the predefined layouts that you use to customize the different time card, calendar, and web clock pages.

Layout	Time Card Page
Time Entry Layout	Create Time Card on personal computers
Time Review Layout	Review Time
Time View Layout	View Time Card
Time Approval Notification Layout	Approve Time Card
Calendar Entry Layout	Report Time
Web Clock Layout	Web Clock

Layout	Time Card Page

Layout Configuration

You can use the Edit Layout guided process to configure each layout as summarized in the following table. For the time review, view, and approval layouts, you configure two layouts, reported time and calculated time.

Edit Layout Page	Layout Configuration	Time Card Usage Description
Time Card Matrix (Time Card Fields in the Calendar Entry Layout)	• Replace the default time card fields and add additional time card fields to display on the create, review, view, and approve time card pages. The sequence of the time card fields is important for data filter dependencies. • Modify time card field display labels and entry properties. To fully render the field display labels, limit them to 70 characters or less.	The table that displays time attributes, days, and dates that contain hours or time entries
Row Level Details	• Add time card fields that you want to display separately Example: Dependent fields of previously entered time or optional attributes that you don't want to appear on the create, review, view, and approve time card pages. • Modify the dependent field and dialog box display labels. To fully render the field display labels, limit them to 70 characters or less.	Dependent time card fields that appear in the row-level details dialog box of the time card Example: You configure a payroll layout to display the **Department** dependent field in the Additional Attributes dialog box, whenever the **Premium** time attribute value is selected on the time card.
Comments	• Configure the Comments column to appear either on the entry-level details dialog box or on the create, review, view, and approve time card pages. • Modify the display label and date format.	The Comments column in the time card table or the entry-level details dialog box
Entry Level Details	• Add time card fields that you want to display in the entry-level details dialog box of the create, review, view, and approve time card pages. • Modify the dependent field and dialog box display labels. To fully render the field display labels, limit them to 70 characters or less. Modify the dependent field date format.	Dependent time card fields that appear in the entry-level details dialog box of the time card
Drag and Drop Values	Select up to five time card field values to display in the Drag to Report Time section of the Time page. To fully render the field display labels, limit them to 70 characters or less.	Time card values that appear in the Drag to Report Time section of the Time page.

Edit Layout Page	Layout Configuration	Time Card Usage Description
Web Clock Properties	Hide or show seconds on the clock, enable the button logic rule, and enable viewing of daily time events.	Appearance of digital clock Earlier buttons become unavailable after the time reporter clicks a button later in the sequence Daily time events appear in the Actions panel tab
Buttons	Set the button grid layout for the web clock and add buttons to the web clock.	Buttons that appear on the web clock and how many per row
Time Card Fields	• Add time card fields to display on the web clock and review, view, and approve time card pages. The sequence of the time card fields is important for data filter dependencies. • Modify time card field display labels. To fully render the field display labels, limit them to 70 characters or less.	Time card fields that appear on the web clock

Dependent Time Card Field Availability in Layout Sets

When adding dependent fields to a layout, you're constrained by the availability option selected on the Dependent Field Definition page. The following table describes the effect that the two dependent field availability options have on layout configurations.

Available for all attribute values	Available for specified attribute values
The dependent field always appears, as configured when time card and web clock layout configurations include the independent attribute.	The dependent field appears for entry only after the time reporter selects: • One of the specified independent attribute values • A specified button on the web clock
You can display the dependent field: • On the calendar • In the time card matrix • On the time card row-level details dialog box • On the time card entry-level details dialog box • On the web clock	You can display the dependent field on the: • Time card row-level details dialog box • Time card entry-level details dialog box • Web clock You can't display the dependent field: • On the calendar • In the time card matrix
Choice list values might be inappropriate for the time card worker or missing, depending on the configuration of the data source for the dependent field.	Choice list values are appropriate for the time card worker.

Related Topics

- Dependent Time Card Field Availability: Critical Choices

Time Entry Format: Critical Choices

Specify whether time reporters enter time as a number of hours or as start and stop times, or both hours and times when you configure page layouts. You must include the correct formats in the layouts to ensure accuracy of reported and calculated time. Use the Manage Layout Sets task in the Time Management work area. You specify time entry format in the Time Entry Properties section of the Edit Layout dialog box.

Time Entry Formats

The following table lists the time entry formats and describes each.

Time Entry Format	Appearance on Time Card for Each Day	Time Entry by Time Reporters
Display hours only	One column, labeled **Hours**	Enter the number of hours
Display start and stop time	Two columns, labeled **Start** and **Stop**	Enter clock times
Display hours and times	Three columns, labeled **Start**, **Stop**, and **Hours**	Enter either the number of hours or clock times for each time card row. Entering both times and hours in a single time card row results in an error message.

Time Entry Format for Calculated Time

For the time review, view, and approval layouts, you configure two sections:

- Reported Time
- Calculated Time

If your Time Entry layout includes **Start** and **Stop** columns, then your Calculated Time sections must use the **Display hours and times** time entry format. Calculated time always displays totals as a number of hours in the summary row.

Absence and Payroll Time Entry Format

Absence entries resolve according to the worker's schedule. Select the time entry format that is supported for the schedule type applicable to workers who use the layout set. The following table describes the different schedule types with the correct time entry formats for each.

Configuring the Various Time Entry Layouts: Worked Example

This example shows how to create a layout set for the payroll time consumer and configure the following layouts in that layout set:

- Time Entry Layout
- Time Review Layout
- Time View Layout
- Time Approval Notification Layout

The following table summarizes the key decisions common to all layouts.

Decisions to Consider	Time Entry, Time Review, Time View, and Time Approval Notification Layouts
Who is the time consumer?	Payroll
Do you want to display any time card fields on the Create Time Card, Review Time, View Time Card, and Approve Time Card pages?	Yes, the Job and Hours Type fields
Do you want to change any default time card field display name on the time matrix section of the following pages? • Create Time Card • Review Time • View Time Card • Approve Time Card	Yes, change the Hours Type display name to Type of Hours
Do you want to display any time card fields on the Additional Attributes dialog box of the following pages? • Create Time Card • Review Time • View Time Card • Approve Time Card	Yes, the Absence Reason and Absence Type fields
Do you want to change any default time card field display name in the Additional Attributes dialog box of the following pages? • Create Time Card • Review Time • View Time Card • Approve Time Card	Yes, change Absence Reason to Reason of Absence

Decisions to Consider	Time Entry, Time Review, Time View, and Time Approval Notification Layouts
Do you want to change the Additional Attributes label in the Additional Attributes dialog box and on the Additional Attributes column of the following pages? • Create Time Card • Review Time • View Time Card • Approve Time Card	Yes, change to Additional Payroll Attributes
Do you want to display row-level comments on the time card or in the Daily Details dialog box?	Daily Details dialog box
Do you want to change the Comments label on the Comments dialog box?	Yes, change to Daily Comments
Do you want to display any time card fields in the Daily Details dialog box of the following pages? • Create Time Card • Review Time • View Time Card • Approve Time Card	Yes, the Rate Multiplier field
Do you want to change the Daily Details label in the Daily Details dialog box and Daily Details column of the following pages? • Create Time Card • Review Time • View Time Card • Approve Time Card	Yes, change to Payroll Daily Details

The following table summarizes the key decisions that are different for each layout.

Decision to Consider	Time Entry Layout	Time Review Layout	Time View Layout	Time Approval Notification Layout
Allow time reporters to enter negative hours?	No	Not applicable	Not applicable	Not applicable
What is the format for reporting and displaying time?	Display start and end time	Display start and end time	Display start and end time	Not applicable
What is the format for displaying calculated time?	Display hours and times	Display hours and times	Display hours and times	Display hours and times

Decision to Consider	Time Entry Layout	Time Review Layout	Time View Layout	Time Approval Notification Layout
Enter or display hours to how many decimal places?	2	Not applicable	Not applicable	Not applicable
How many time entry rows must appear on the time reporting pages?	5	Not applicable	Not applicable	Not applicable
What is the format for displaying date in the time matrix section of the Create Time Card, Review Time, and View Time Card pages?	Month Date, Day	Month Date, Day	Month Date, Day	Not applicable
What is the format for displaying date in the Entry Level Details section of the Create Time Card, Review Time, and View Time Card pages?	Month Date, Day	Month Date, Day	Month Date, Day	Not applicable

Summary of the Tasks

Prerequisite: The Job and Hours Type time card fields exist.

In the Time Management work area, create a layout set for the Payroll time consumer using the following basic process:

1. Create the payroll layout set.
2. Configure the time entry layout to customize the Create Time Card page.
3. Configure the time review layout to customize the Review Time page.
4. Configure the time view layout to customize the View Time page.
5. Configure the approval notification layout to customize the Approve Time page.

Create the Payroll Layout Set

1. In the Tasks panel drawer, click Manage Layout Sets to open the Manage Layout Sets page.
2. On the Search Results section toolbar, click the **Create** button to open the Generate Layout Set page.
3. In the Time Consumer group, select **Payroll**. Ensure that no other time consumers are selected.
4. Click **Generate Layout Set** to open the Define Layout Set page.
5. In the Basic Information section, complete the fields as shown in the following table.

Field	Value
Name	Payroll Layout Set

Field	Value
Description	Payroll layout set that includes the displayed assignment number and payroll time card fields.

6. Click **Save**.

Configure the Time Entry Layout

1. In the Define Layout Set page Time Entry Layout row, click **Configure Layout** to open the Configure Time Entry Layout page.
2. On the Time Entry section toolbar, click **Edit Layout** to open the Edit Layout dialog box Time Card Matrix page.
   a. In the Time Card Fields section, delete **Assignment Number** and **Payroll Time Type**.
   b. Add **Job** and **Hours Type**.
   c. Change the **Hours Type** display label to **Work Hours Type**.
   d. In the Time Entry Properties section **Time Entry Format** field, select **Display start and end time**.
   e. In the **Date Format** field, select **January 01, Monday**.
3. Click **Next** to open the Row Level Details page of the Edit Layout dialog box.
   a. Add two time card fields, **Absence Reason** and **Absence Type**.
   b. Change the **Absence Reason** display label to **Reason of Absence**.
   c. Change the Display Properties section **Label on the Time Card** value to **Additional Payroll Attributes**.
4. Click **Next** to open the Comments page of the Edit Layout dialog box.
   a. In the Comments Column Display group, select the **In the entry level detail page** option.
   b. Change the Display Properties section **Label on the Time Card** value to **Daily Comments**.
5. Click **Next** to open the Entry Level Details page of the Edit Layout dialog box.
   a. In the Time Card Fields section, add **Rate Multiplier**.
   b. Change the Display Properties section **Label on the Time Card** value to **Payroll Daily Details**.
   c. In the **Date Format** field, select **January 01, Monday**.
6. Click **Save and Close** to return to the Configure Time Entry Layout page.

Configure the Time Review, Time View, and Approval Notification Layouts

On the Define Layout Sets page, configure the time review, view, and approval notification layouts using the following steps:

1. In the appropriate layout row, click **Configure Layout** to open the configure layout page.
2. Edit the reported time and calculated time layouts using the following steps:
   a. On the Time Card Matrix page of the Edit Layout dialog box, complete the following actions.

Action	Values
Delete the existing time card fields.	• Assignment Number • Payroll Time Type
Add the specified time card fields.	• Job • Hours Type

Action	Values
Set the time entry format.	Reported time: Display start and end time Calculated time: Display hours and times
Set the date format.	January 01, Monday

b. On the Row Level Details page of the Edit Layout dialog box, complete the following actions.

Action	Values
Add the specified time card fields.	• Absence Reason • Absence Type Change the **Absence Reason** display label to **Reason of Absence**.
Change the time card label.	Additional Payroll Attributes

c. On the Comments page of the Edit Layout dialog box, complete the following actions.

Action	Values
Select the comments column display.	In the entry level detail page
Change the time card label.	Daily Comments

d. On the Entry Level Details page of the Edit Layout dialog box, complete the following actions.

Action	Values
Add the specified time card field.	Rate Multiplier
Change the time card label.	Payroll Daily Details
Set the date format.	January 01, Monday

e. Click **Save and Close** to return to the configure layout page.

Layout Sets FAQ

Why can't I edit some layout sets?

You can't edit predefined layout sets, such as Projects Layout Set and Payroll Layout Set. However, you can duplicate these layouts to make the required modifications.

8 Time Categories: Considerations and Usage

How Many Time Processing Objects to Create: Points to Consider

You must create separate worker time processing profiles for each unique combination of the following objects:

- Time card period
- Time consumer set
- Time calculation and time entry rule sets

Create time processing objects using the tasks and work areas identified in the following table.

Task	Work Area
Manage Repeating Time Periods	Setup and Maintenance
Manage Time Categories	Setup and Maintenance
Manage Time Consumer Sets	Setup and Maintenance
Manage Time Rules, Manage Time Rule Sets Manage Time Repository Rules, Manage Time Repository Rule Sets	Time Management Setup and Maintenance
Manage HCM Groups	Setup and Maintenance
Manage Worker Time Processing Setup Profiles Manage Worker Time Processing Profiles	Time Management Setup and Maintenance

Best Practice for an Optimum Configuration

The more time periods, categories, consumer sets, rule sets, profiles, and groups that you create, the greater the ongoing maintenance effort. You want to find a balance between optimizing the time processing experience for your workers and the effort required to maintain that experience.

Objects that can affect the number of required time consumer sets are the required time consumers and the unique objects for each consumer:

- Time category
- Validate on time card actions

- Approval period

Approval and Time Card Periods

The time consumer set approval period and time processing profile time card period must match. You must have a separate time processing profile and consumer set for each worker group with a unique time card period.

Time Categories and Time Consumer Sets

What type of time--such as project costing, payroll, absence, or a combination--do your workers report and how frequently? The type of time and the frequency that your workers report it affects how you configure time categories and time consumer sets. The following table provides some scenarios about the time that worker groups report and corresponding possible time category and consumer configurations.

Scenario	Time Category	Time Consumer Sets
Some workers always report only payroll and absence time.	Create a time category that identifies all reported time values for the following time attributes: • Absence Management Type • Payroll Time Type	Create a time consumer set for only the Global Payroll time consumer.
Some workers always report only project costing and absence time.	Create a time category that identifies all reported time values for the following time attributes: • Absence Management Type • Project • Task • Expenditure Type	Create a time consumer set for only the Project Costing time consumer.
Some workers regularly, but not always report project costing time and always report payroll and absence time.	Create a time category that identifies all reported time values for the following time attributes: • Absence Management Type • Payroll Time Type • Project • Task • Expenditure Type	Create a single time consumer set for both the Project Costing and Global Payroll time consumers.

Time Consumer Validate on Time Card Actions

Create one consumer set for each worker group when different groups have different Validate on Time Card Actions settings for the same time consumer. The following table provides examples of how you might create different Global Payroll time consumer groups based on the Validate on Time Card Action selection.

Validate on Time Card Actions Selection	Example Groups
Save and Submit	Workers who report time one or more times a day within a time card period Workers whose entries you want to report during the time entry process

Validate on Time Card Actions Selection	Example Groups
Submit only	Workers who create and complete their time cards at one time Time and Labor managers who correct time exceptions

Time Entry and Time Calculation Rule Sets

You can associate only one time entry and one time calculation rule set with a time processing profile. Use rules sets to associate rules with worker groups that have similar vacation, time validation, and time processing requirements. You can associate as many rules with a rule set as you want.

Use the following questions to help you determine the rules that you require.

Question	Example
How do you validate reported time for your workers?	You create exceptions for: • Certain workers when the total reported time card hours exceed 42 for the week • Other workers when the total reported time card hours exceed 10 hours a day
How do you calculate reported time for your workers?	You pay workers an overtime rate of 1.5 times their regular pay. • For California workers, the overtime rate applies for every worked hour over 8 hours within a 24-hour period. • For Florida workers, the overtime rate applies for every hour worked over 40 hours in a 7-day period.

Groups

You associate one or more groups with each profile. Define separate groups wherever the worker characteristics are unique across profiles or groups of profiles. For example, you group your workers into separate groups for the following reasons:

- One worker group reports only payroll and absence time
- A second worker group reports project costing, payroll, and absence time

Related Topics

- Repeating Time Periods: Explained
- Creating Time Consumer Sets: Points to Consider
- Setup Profiles: Explained
- Time Entry Validation and Processing Configuration: Explained

Time Categories: How They Work with Time Consumer Sets and Time Entry Rules

A time category classifies time entries into types, such as sick time, vacation time, or regular time. Use time categories:

- To determine attributes for time consumer sets
- As conditions for time entry rules

Category Determines Attributes for a Consumer Set

Determine the time attributes to transfer to the time consumer by associating a time category when you configure a time consumer set. For example, a payroll consumer might not require time entries reported against projects. Therefore, you would associate a time category that contains only payroll-related attributes.

Category as a Condition for Time Entry Rules

Time entry rules validate the time card data. When you configure a time entry rule, select a time category as the condition that time entries must meet for the rule to apply.

Related Topics

- Time Consumer Sets: Explained

Using Time Category Condition Components: Explained

Create a time category by specifying conditions that the time entry must meet to belong to that category. A condition can combine several attributes into an expression that must be true, for the time entry to belong to the time category. Example: Define a time category that identifies any time entry that contains the attribute Overtime OR the attribute Overtime Project.

Time categories can contain other time categories. For example, define time categories for Sickness and Vacation. Then define a third category called Absence that contains these two categories. Create and edit time categories using the Manage Time Categories task in the Setup and Maintenance work area.

This topic describes:

- Condition components
- Compound and grouped conditions

Condition Components

A condition contains the following components:

- Time Attribute: Collects information that indicates the type of time, such as Payroll Time Type. It also indicates the category of task being performed, such as Task and Expenditure Type.
- Value Type: Represents a classification of the time category value. The following table lists the different value types that you can use to define time categories.

Value Type	Description
Any value	Any value reported for the time attribute is included in this time category.
Null value	If there is no value reported for the time attribute, then that time entry is included in that time category.
Specific value	Select a value for the time attribute from the list of values for that time attribute.
Value set	Select a value set from the list of value sets.

- Operator: Combines two conditions to return a set of filtered results. An AND operator returns results if both conditions are met and an OR operator returns results if either condition is met.

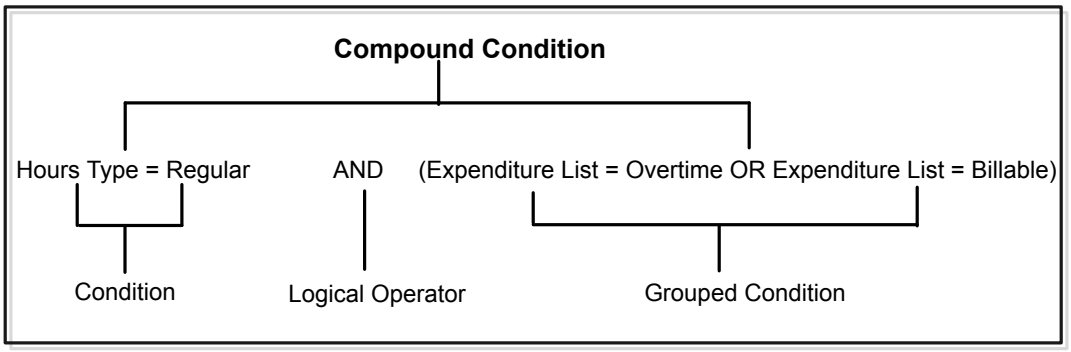
Compound and Grouped Conditions

Variations for building conditions include:

- Connecting two or more conditions by logical operators, such as AND or OR, to create a compound condition that returns true or false
- Grouping two or more conditions within parentheses to form a separate statement within a compound condition
- Grouping a condition within another grouped condition

Example: Define a time category to include the grouped conditions (Payroll Time Type = Regular) AND (Expenditure = Overtime OR Expenditure = Billable). The entry on the time card satisfies the time category rule when it satisfies the first condition and one of the two grouped conditions.

The following figure shows a compound condition containing three conditions, two of which are grouped.



Creating Time Categories: Worked Example

This example shows how to create two time categories and embed them into a summary category definition that summarizes compensation-only hours. The two time categories are Project Category and Expenditure Category. The summary category is Project Development Cost Category.

The following table summarizes the key decisions for this scenario.

Decisions to Consider	Project Category	Expenditure Category	Project Development Cost Category (Summary Category)
What is the time attribute?	Project ID	Task ID	Project Development Cost
What is the type of attribute value?	Specific value	Specific value	Not applicable
What are the time attribute values?	Design and Development	Straight Time and Overtime	Not applicable
What are the operators?	OR	OR	OR
Embed categories?	No	No	Project Category and Expenditure Category

Summary of Tasks

Create three categories:

1. Create two time categories using time attributes.
2. Create a summary category by embedding the two time categories.

Creating Time Categories Using Time Attributes

Perform the following steps twice to create two time categories, Project ID and Expenditure Type. Use the Manage Time Categories task in the Setup and Maintenance work area.

1. On the Search Results section toolbar, click the **Create** button to open the Create Time Category page.
2. Complete the fields as shown in the following table.

Field	Category 1	Category 2
Category Name	Project ID	Expenditure Type

Field	Category 1	Category 2
Description	Identifies time entries with associated Design or Development project ID attribute values.	Identifies time entries with associated Straight Time or Overtime expenditure type attribute values.

3. In the first condition row, complete the Category 1 or Category 2 fields, as shown in the following table.

Field	Category 1	Category 2
Time Attribute	Project ID	Expenditure Type
Value type	Specific value	Specific value
Attribute Value	Design	Straight Time
Operator	OR	OR

4. In the second condition row, complete the Category 1 or Category 2 fields, as shown in the following table.

Field	Category 1	Category 2
Time Attribute	Project ID	Expenditure Type
Value Type	Specific value	Specific value
Attribute value	Development	Overtime

5. Select the newly created condition rows.
6. On the toolbar, click the **Add Parentheses** button.
7. Click **Save and Close** to return to the Manage Time Categories page.

Adding Categories to the Project Development Cost Category

1. On the Search Results section toolbar, click the **Create** button to open the Create Time Category page.
2. Complete the fields for the summary time category, as shown in the following table.

Field	Value
Category Name	Project Development Cost Category
Description	Summarizes project development cost attributes.

3. On the Category Condition section toolbar, click the **Embed a Time Category** button to open the Embed Time Category dialog box.
4. In the **Time Category Name** field, select **Project ID Category**.

5. Click **OK** to return to the Create Time Category page.
6. Repeat steps 3 through 5 to embed the second time category, selecting **Expenditure Type Category** instead of **Project ID Category**.
7. In the **Project ID** with **Development** row, select the **OR** operator.
8. Press and hold **Ctrl** and select the blank rows.
9. Click **Save and Close** to return to the Manage Time Categories page.

Time Category FAQs

Can I ungroup only one condition in a group?

If you select any one of the time category conditions in that group and click **Remove Parentheses**, then all time category conditions are ungrouped.

How can I embed an existing time category into a new one?

Use the **Embed Time Category** option to insert the condition of an existing time category. The embedded time category appears in read-only format, along with its attribute fields and values.

9 Time Consumer Sets: Considerations and Usage

Time Consumer Sets: Explained

A time consumer set specifies approval periods, validation rules, and time transfer rules for one or more time consuming applications.

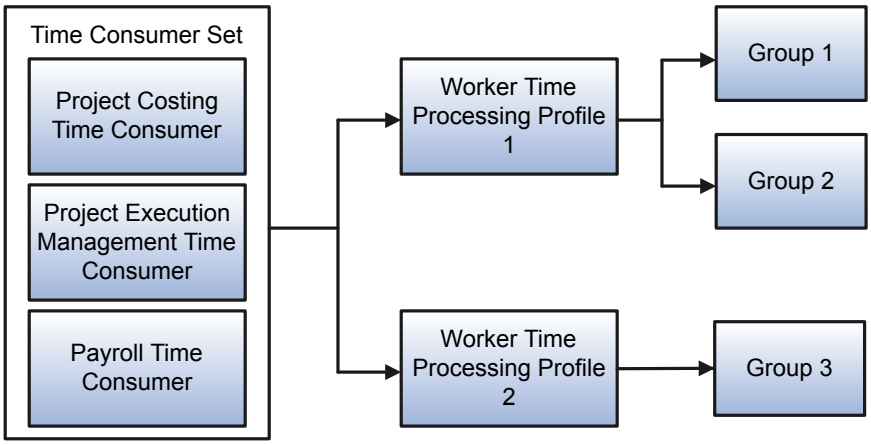
Time Consumers

The following products and offering consume time data from Oracle Fusion Time and Labor:

- Oracle Fusion Global Payroll to validate, approve, and transfer reported time entries to payroll for payment
- Oracle Fusion Project Costing to bill customers for time worked on a given project
- Project Execution Management offering of Oracle Fusion Project Portfolio Management to determine staffing availability for projects

Consumer Set Assignment to Workers

You can assign a time consumer set to more than one worker time processing profile. However, a setup profile can contain only one time consumer set. The following figure shows how to assign a time consumer set to different groups of workers through worker time processing profiles.



Creating Time Consumer Sets: Points to Consider

A time consumer set can have multiple time consumers with different validation requirements. When defining time consumer sets, you must decide:

- The time consumers
- Whether to enable time card submission informational workflow
- The time category
- If validations must execute on the time card
- If the time card is required by time consumers
- The approval period
- If the time card must be approved by other time consumers before being transferred to payroll

Use the Manage Time Consumer Set task in the Setup and Maintenance work area to create a time consumer set.

Time Consumer

You can select more than one time consumer in one time consumer set. For example, the delivered time consumer set, Projects and Payroll Time Consumer Set, contains three time consumers:

- Project Costing
- Global Payroll
- Project Execution Management

This time consumer set transfers the project time entries to Oracle Fusion Project Costing and payroll time entries to Oracle Fusion Global Payroll. It also transfers absence time entries to the Project Execution Management offering in Oracle Fusion Project Portfolio Management.

Enable Time Card Submission Informational Workflow

You can specify whether to send informational notifications to workers, their managers, and time approvers when time reporters or time submission rules submit time cards. You might want to select No for any time consumer sets associated with workers for whom you regularly approve many time cards at one time. You perform mass approvals using the Manage Time Cards page in the Time Management work area.

Time Category

Select the time category, which contains the time attributes to send to the time consumers. For example, a payroll time consumer doesn't want time entries reported against project values, so you select a time category that contains only payroll-related attributes. The Project Execution Management time consumer automatically uses the delivered All Absence Entries time category.

Validate on Time Card Actions

The following table describes the values in the Validate on Time Card Actions choice list.

Field Value	Description
Submit Only	Default processing. Validates time entries when workers click Next to submit their time card, but not when they click Save.
Submit and Save	Validates time entries when workers click Save, Save and Close, and Next.

Required Time Card Status

If the time consumer requires the time card for all time periods, in the **Required Time Card Status** field, select **Yes**.

Approval Period

Select a repeating time period as an approval period. For example, if you want approvers to approve the time card once every week, then you must select a repeating period with a Weekly definition.

> **Caution:** The approval period that you select for each time consumer must match the repeating period of the time processing profile containing the time consumer set. Specifying different approval periods for the selected time consumers causes issues when you try to assign groups to the time processing profile.

Approval Required

Specify whether all time consumers in the time consumer set must approve the time card before transferring time to the required time consumer. For example, the payroll time consumer wants to receive only those time cards that both projects and payroll time approvers approved.

Time Entry Validation and Processing Configuration: Explained

Oracle Fusion Global Payroll, Oracle Fusion Project Costing, and Oracle Fusion Absence Management deliver validation rules that apply to time reported using Oracle Fusion Time and Labor. For example, absence validations ensure that workers enter absence for only those absence types that they are eligible for.

The following table describes the default validation and processing associated with the time card Next, Save, and Submit buttons.

Button	Validation and Processing Description
Next	Clicking Next on the time card: • Validates absence, payroll, and project time entries • Applies time entry rules

Button	Validation and Processing Description
	• Applies time calculation rules • Generates of calculated time entries
Save	Clicking Save on the time card: • Always initiates the absence-delivered validations. • Doesn't initiate project-delivered and payroll-delivered validations. To configure validation on the Save button, use the Manage Time Consumer Sets task. Select Submit and save in the Validate on Time Card Actions field. Validations on the Save button are identical to those described for the Next button.
Submit	Clicking Submit on the time card sets the time card status to Submitted and starts the approval flow.

Time Consumer Set FAQ

Why can't I edit some time consumer sets?

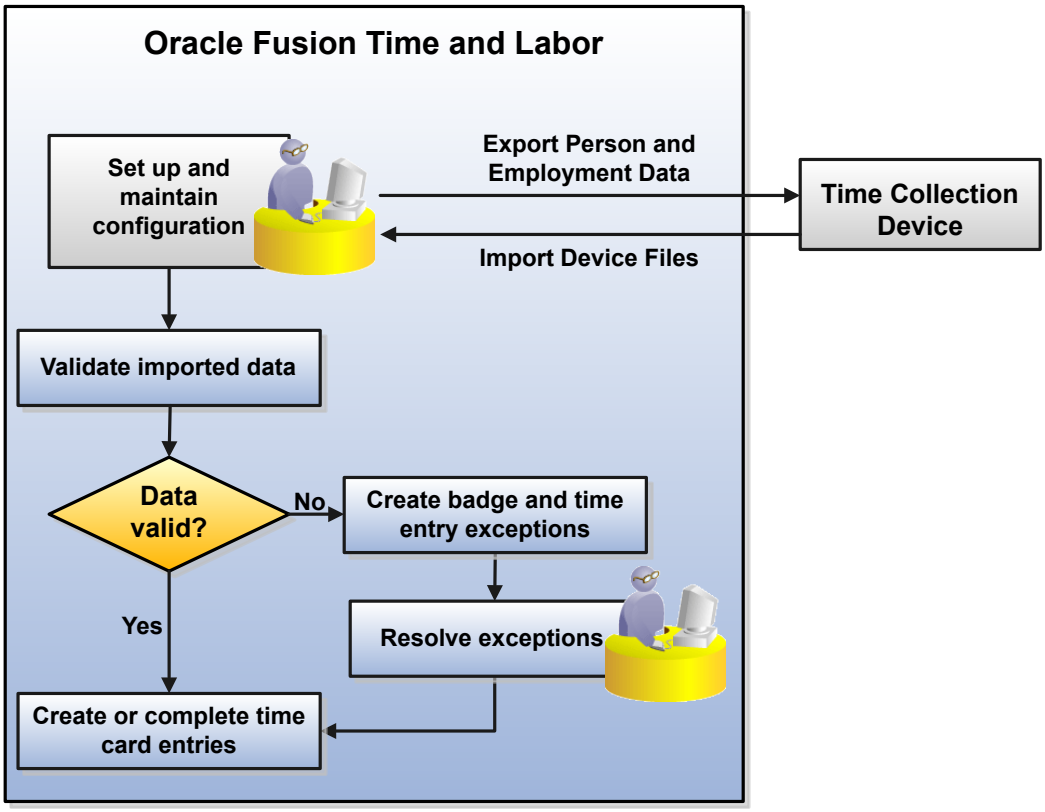
You can't edit those time consumer sets that are associated with a worker time processing profile. Also, after you save a new time consumer set, you can't include new time consumers in, or exclude existing time consumers from, the set.

10 Time Collection Device Events: Considerations and Configurations

Processing Time Collection Device Events: Overview

To process time collection device events, you regularly export data to the devices, import data from them, and handle exceptions. To process web clock device events, you regularly import reported time data and handle exceptions. To set up time device event processing, you configure supplier lookups, event mappings and export data. To set up web clock event processing, you configure web clock buttons, the web clock layout, and worker time entry profiles. To complete setup for both time collection devices and web clock, you also configure rules, device processing profiles, and worker groups.

The following figure shows ongoing data transfers between Oracle Fusion Time and Labor and a third-party time collection device. It also shows the validation and processing of the imported time device and web clock events.



Setting Up and Maintaining Time Collection Device Configurations

For third-party time collection methods, you must complete the time entry and processing object configuration tasks. You must also complete the following configuration tasks to transfer data to and from third-party devices, and process time device and web clock events.

Setup Task	Work Area	Applicable Collection Method
Manage Workforce Management Lookups • ORA_HWM_TCD_SUPPLIERS • ORA_HWM_TCD_SUPPLIER_EVENTS	Setup and Maintenance	Time collection device files
Manage Time Device Event Mappings	Time Management Setup and Maintenance	Time collection device files
Manage Time Device Event Mapping Sets	Time Management Setup and Maintenance	Time collection device files
Configure Time Event resources and requests	Documented in REST API for Oracle Global Human Resources Cloud on http://docs.oracle.com	Time collection device files
Manage Time Device Export Data	Setup and Maintenance	Time collection device files
Configure Time Collection Device Setup Data Export business object services and service data objects	Documented in SOAP Web Services for Oracle HCM Cloud on http://docs.oracle.com	Time collection device files
Manage Scheduled Processes - Workforce Management Time Device Export Data Export Time Device Data Configuration	Time Management Setup and Maintenance	Time collection device files
Manage Rules Manage Time Repository Rules	Time Management Setup and Maintenance	Web clock and time collection device files
Manage Rule Sets Manage Time Repository Rule Sets	Time Management Setup and Maintenance	Web clock and time collection device files
Manage Time Device Processing Profiles	Time Management Setup and Maintenance	Web clock and time collection device files
Manage Scheduled Processes - Generate Time Cards from Time Collection Device	Time Management	Web clock and time collection device files

Exporting Data to Time Collection Devices

Export data for time collection devices includes person information, payroll time types, and published worker schedules. Use the Workforce Management Time Device Export Data process to:

- Run a one-time, full export of data to the time collection devices during implementation
- Maintain current data on the time device by scheduling full and partial recurring and one-time exports

Schedule this process using either of these two tasks:

- Export Time Device Data Configuration task in the Setup and Maintenance work area
- Manage Scheduled Processes task in the Time Management work area

Web clock doesn't require export data because it gets person and schedule data directly from the time repository. Relevant payroll time type data is contained in each web clock button definition.

For details on configuring the Time Collection Device Setup Data Export business object services and service data objects, see SOAP Web Services for Oracle HCM Cloud on http://docs.oracle.com.

Importing Time Events from Time Devices and Web Clock

The Generate Time Cards from Time Collection Device process imports time reported using third-party time collection devices and web clock. You transfer time data from a third-party time collection device using the Time Event REST web service. Typically, the time collection device performs time event transfers in regularly scheduled batches.

The Generate Time Cards from Time Collection Device process handles imported time events using one of the following methods, depending on the verification results:

- Returns inaccurately formed resources in an error status
- Saves accurately formed resources to the time repository for further functional validations

For details on configuring the Time Event resources and requests, see REST API for Oracle Global Human Resources Cloud on http://docs.oracle.com.

Validating and Processing Imported Time Device and Web Clock Events

The Generate Time Cards from Time Collection Device process validates imported time device events using event mappings, which link supplier device events to application events. It processes valid time device and web clock events using time device rules, published worker schedules, and defined shift limits. The following table describes the application processing actions that occur depending on the validation results.

Validation Results	Application Processing Action
Valid	• Creates incomplete time card entries for In application events

Validation Results	Application Processing Action
	• Completes time card entries after receiving the corresponding Out application event
Invalid	• Creates time card entry exceptions

Handling Exceptions

Time-device-related exceptions typically occur when the application can't:

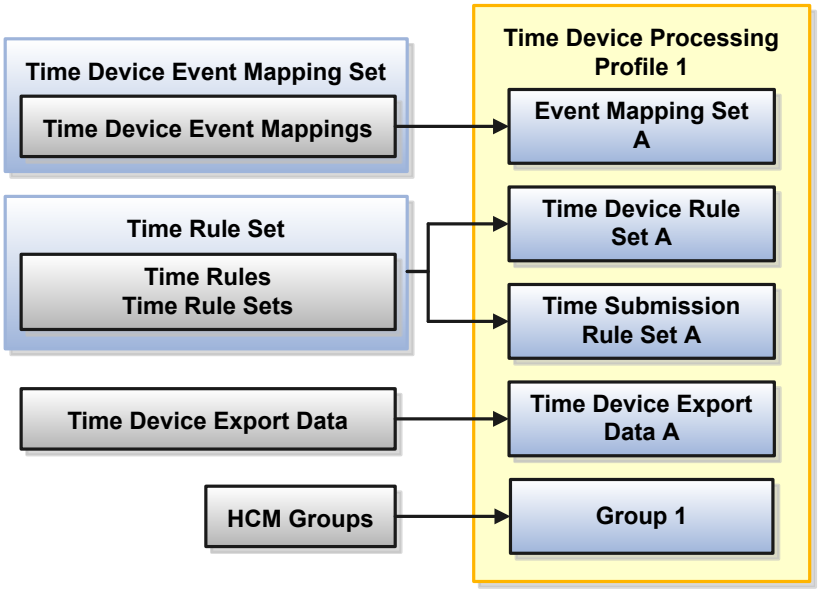
- Identify the worker for the time event
- Match the imported supplier device event with an application event

In the Time Management work area, you can review and fix unidentified worker exceptions using the Resolve Badge Exceptions task. You can also review and fix Time entry exceptions using either the Resolve All Exceptions by Worker or Manage Time Entries task.

Time Device Processing Profile Components: How They Work Together

A time device processing profile maps third-party device events to application events and time attributes to create time entries used in associated validation and submission rules. It also identifies the data to export to the third-party devices. Create these profiles using the Manage Time Device Processing Profiles task in the Time Management work area.

The following figure shows the relationship among the components that comprise the time device processing profiles.



Time Device Event Mappings and Mapping Sets

To process time collection device events, you must map the supplier device events to corresponding application events. You can also link the device events to the payroll time types that each worker is eligible for. A time device event mapping set groups related time device event mappings for different locations, dates, or other criteria.

To process web clock events, you set an application event and payroll time types that each worker is eligible for when defining web clock buttons. Typically, you define multiple web clock buttons for groups of workers, dates, or other criteria when creating a web clock buttons layout component.

Time Device Rules and Rule Sets

Time device rules validate time events imported from a time device or the web clock. For example, determine whether a time event falls within the worker's grace period for the In or Out application event. Time device rule sets group related time device rules that are applicable for a given time device processing profile.

Time Submission Rules and Rule Sets

Time submission rules evaluate whether the imported time event matches criteria to automatically save or submit the generated time card containing the time event. For example, rule criteria specify that after the fifth Out application event, submit the generated time card. Workers report only shift start (In) and end (Out) time events, Monday through Friday. When workers sign out on Friday, their generated time cards satisfy the time submission rule criteria and the rule submits their time cards. When you create a time submission rule, the Save action also creates a corresponding rule set. Each time submission rule set can contain only one rule.

Time Device Export Data

Time device export data is person and other data, such as payroll time type and published schedules, to send to a third-party time collection device. Time devices use export data to complete each time event transaction. Using this data, the time device provides all of the information required to process each supplier device event.

Web clock doesn't required export data because it gets person and schedule data directly from the time repository. Relevant payroll time type data is contained in each web clock button definition.

Time Device Processing Profile

Each time device processing profile includes one or more of the following:

- A time device event mapping set; leave blank if processing web clock time data
- A time device rule set
- A time submission rule set
- Time device export data; leave blank if processing web clock time data

Each profile also includes one or more groups.

Groups

A group is a collection of persons that share common time reporting and processing characteristics. Select a group on the time device processing profile to assign the profile to workers in the group. All workers in the group inherit the event

mappings, device and submission rules, and export data from the associated time device processing profile. Each group can have only one time device processing profile at any point in time.

Related Topics

- Troubleshooting Time Card Profile Assignment: Explained
- Defining Groups: Worked Example

How Many Time Device Processing Objects to Create: Points to Consider

You must create separate time device processing profiles for each unique combination of event mapping set, export data, and device and submission rule sets. You want to create a profile for workers who share similar time device entry and processing requirements.

Create time device processing objects using the tasks and work areas identified in the following table.

Setup Task	Work Area	Applicable Devices
Manage Time Entry Layout Components	Setup and Maintenance	Web clock
Manage Layout Sets Manage Time Layout Sets	Time Management Setup and Maintenance	Web clock
Manage Worker Time Entry Setup Profiles Manage Worker Time Entry Profiles	Time Management Setup and Maintenance	Web clock
Manage Time Device Event Mappings	Time Management Setup and Maintenance	Time collection device
Manage Time Device Event Mapping Sets	Time Management Setup and Maintenance	Time collection device
Manage Time Device Export Data	Setup and Maintenance	Time collection device
Manage Rules Manage Time Repository Rules	Time Management Setup and Maintenance	Web clock and time collection device
Manage Rule Sets Manage Time Repository Rule Sets	Time Management Setup and Maintenance	Web clock and time collection device
Manage Time Device Processing Profiles	Time Management	Web clock and time collection device

Setup Task	Work Area	Applicable Devices
	Setup and Maintenance	

Best Practice for an Optimum Configuration

The more time device event mapping sets, export data, and device and submission rule sets that you create, the greater the ongoing maintenance effort. You want to find a balance between optimizing the time entry experience for your time reporters and the effort required to maintain that experience.

Time Device Event Mappings and Web Clock Button Definitions

Use the following questions to help you determine the time event mappings or web clock button definitions that you require:

- What events do you record with your time collection devices or web clock, for example shift start, break, meal, and shift end? To ensure accurate time event validation and processing, there can't be any ambiguity about the time events that each device provides. They must clearly and consistently map to an In, Out, In and Out, or Out and In application event. For example:
    - You identify when workers start their work using the Start Shift time device event, which maps to the In application event.
    - You identify when workers take a break using either of the following methods. Map one time device event, Break, to the Out and In application event. Or, map two time device events, Shift End and Break In, to the Out and In application events, respectively.
- What are the time attributes and attribute values that correspond to the time device or web clock events? For example, the Start Shift, Break, and Meal time device events all map to the Payroll Time Type time attribute. As the following table shows, the events each have different attribute values.

Time Device Event	Payroll Time Type Attribute Value
Start Shift	Regular
Break	Paid Break
Meal	Unpaid meal

Using discrete time attributes enables you to report in greater detail, but might require additional event mappings and mapping sets or web clock buttons. For example, since you pay breaks and shifts at the same rate, you could use the same Payroll Time Type attribute value for both. Since you don't pay for meals, you could decide not to associate any time attribute. Time device rules could still validate the event but time calculation rules would ignore it.

Time Device Event Mapping Sets and Web Clock Buttons

You can associate only one mapping set with a time device processing profile. You can associate as many mappings with a mapping set as you want.

You indirectly associate web clock events with a time device processing profile by:

1. Associating a web clock with workers using the worker time entry setup profile

2. Assigning the same workers to a time device processing profile that doesn't include an event mapping set or time device export data

When you create a web clock buttons layout component, you can define as many web clock buttons as you want.

Use the following questions to help you determine the time device event mapping sets or web clock buttons and button definitions that you require:

- Are there unique events for time collection devices or web clocks in different areas, buildings, or regions?
- Are there events that are relevant only in certain years, for example, some time attributes relate to a location that you closed?
- Do you group certain time device or web clock events together for the purpose of payroll eligibility? For example, some payroll-related time attributes are effective for only certain date ranges.

Time Device Export Data

You can associate only one time device export data record with each time device processing profile. You must create a separate time device export data record for each unique combination of data that you regularly send to the time collection device. Examples of export data are:

- Person identification data, such as first and last name and badge ID
- Other data, such as payroll time types and published worker schedules

Use the following questions to help you determine the export data records that you require:

- What data does the time device require to provide complete time event records?
- What data, if any, do workers require when they report time using the device? For example, you require workers to select their location when they report time.

Because web clock is part of the delivered Time and Labor solution, you don't have to create and send export data to provide relevant information.

Time Device and Submission Rule Sets

You can associate only one time device and one time submission rule set with a time device processing profile. Use rules sets to associate rules with worker groups that have similar time device or web clock event validation and submission requirements. You can associate as many time device rules with a rule set as you want. When you create a time submission rule, the application automatically creates the rule set, as each time submission rule set can contain only one rule.

Use the following questions to help you determine the rules that you require:

- Do you want to validate time device or web clock events against published worker schedules and designated shift limits? Or do you want to accept all time entries automatically? Shift limits consist of a grace period, start and end early and late periods, and start and end early and late violation types.
- Do you want to validate that certain worker groups satisfy a specified minimum rest period between shifts?
- Do you want to automatically save time card entries created with the time device or web clock events and submit the time cards? What conditions, such as the type or number of events initiate an automatic save? What conditions, such as number of events, duration, or schedule, initiate an automatic submission? For example, automatically submit time cards after the eighth time event on the last day of the time card period.

Groups

You associate one or more groups with each profile. Define separate groups wherever the worker characteristics are unique among profiles or groups of profiles. For example, you group your workers into separate groups based on the country where they work.

Time Device Event Mappings and Sets: Explained

To process time collection device events, you must map the supplier device events to events recognized by Oracle Fusion Time and Labor. Also, link the device events to the payroll time types that each worker is eligible for. Bundle related mappings into time device event mapping sets, which you include in time device processing profiles.

Use the following tasks in the Time Management work area to create and maintain event mappings and mapping sets:

- Manage Time Device Event Mappings
- Manage Time Device Event Mapping Sets

Event Mappings

Event mappings link supplier device events to application events. They also identify the time attributes and default attribute values that correspond to each device event. The following table describes the four application event values, which correspond to the start and stop of activities, such as a shift, break, or meal.

Application Event	Description	Example
In	Used with the specified time attributes to create the start time event for an activity.	Start shift
In and Out	Used with the specified time attributes to create the start time event for one activity and the stop time event for another activity.	Start break and stop shift
Out and In	Used with the specified time attributes to create the stop time event for one activity and the start time event for another activity.	Stop shift and start break
Out	Used with the specified time attributes to create the stop time event for an activity.	Stop shift

When creating event mappings, you would typically use either the **In and Out** or **Out and In** value within a mapping set, but not both.

Event Mapping Sets

Mapping sets group mappings for a specific supplier device and the workers who use the device.

Caution: Including multiple mappings for the same supplier device event in a single mapping set leads to unpredictable processing. For example, you map the same supplier device event to different pay time type and costing time attribute combinations of Regular and Administration and Regular and Engineering. You include both mappings in the same mapping set. The import process has no logic that determines which mapping the process uses for each imported time device event. For best results, name and describe your device event mappings so that you include only one mapping per supplier device event in each mapping set.

Event Mappings Usage

Time and Labor matches imported supplier device events to event mappings in the mapping set associated with the time device processing profile.

The following table describes the action that the application takes, depending on whether it finds a match.

Match Found	Application Action
Yes	For In events, create an incomplete time card entry using the time attributes specified in the matching event mapping. For Out events, complete the corresponding, existing time card entry.
No	Create a time card entry exception. Use the Resolve All Exceptions by Worker or Manage Time Entries task to review and fix these exceptions.

Supplier-Related Choice Lists

You identify the supplier and supplier device event on the Create Time Device Event Mapping page, using lookup types described in the following table.

Event Mapping Choice List	Lookup Type	Description
Supplier	ORA_ HWM_ TCD_SUPPLIERS	The company that supplied the time collection device
Supplier Device Event	ORA_ HWM_ TCD_ SUPPLIER_ EVENTS	The time events recognized by the time collection device supplier, such as Clock In or Meal Out

Use the Manage Workforce Management Lookups task in the Setup and Maintenance work area to create values for these lookup types and edit existing values.

Note: Supplier device event lookup codes must start with the supplier lookup code. For example, if you have a supplier lookup code ABC, start the corresponding supplier device event lookup codes with ABC_.

Time Device Event Mappings: Example

This example shows how to create mappings between supplier device events and application events. It also shows when you would include and exclude time attributes in the mappings.

Event Mapping Scenario

The AB Company supplies the time collection device for this mapping set example. Hourly workers must register their presence for their shifts and absences for breaks and meals. Breaks are paid at regular rates while meals aren't paid.

Event Mapping Set

The following table shows supplier device events mapped to application events and time attribute values in the mapping set of workers who use this device.

Event Mapping Name	Supplier Device Event	Application Event	Time Attribute	Default Values
AB Start Shift	Start Shift	In	Payroll Time Type	Regular
AB Stop Shift, Start Break	Start Break	Out and In	Payroll Time Type	Out: Regular In: Paid Break
AB Stop Break, Start Shift	Stop Break	Out and In	Payroll Time Type	Out: Paid Break In: Regular
AB Stop Shift, Start Meal	Start Meal	Out and In	Payroll Time Type	Out: Regular In: Unpaid Meal
AB Stop Meal, Start Shift	Stop Meal	Out and In	Payroll Time Type	Out: Unpaid Meal In: Regular
AB Stop Shift	Stop Shift	Out	Payroll Time Type	Regular

Analysis

The Out and In application event ensures that there are no gaps when workers report breaks and meals within a shift. Though there is one application event in this instance, Oracle Fusion Time and Labor creates two time events, one Out event followed

immediately by an In event. For example, in the AB Stop Shift, Start Break mapping, the Out event corresponds to stopping the shift. The In event corresponds to starting the break.

Payroll elements created for time card usage provide the default values for the Payroll Time Type attribute.

Resulting Time Card Entries

The following table shows the time entries that the application creates as a worker uses the time collection device to report time throughout the day.

Time Attribute Values	Wednesday Start	Wednesday Stop
Regular	08:00	10:00
Paid Break	10:00	10:15
Regular	10:15	12:00
Unpaid Lunch	12:00	13:00
Regular	13:00	15:00
Paid Break	15:00	15:15
Regular	15:15	17:00

Sending Export Data to Time Collection Devices: Points to Consider

When you send export data to time collection devices, you must specify which export mode and run option to use. Use the Workforce Management Time Device Export Data process to run a onetime, full export of data to the time collection devices during implementation. Maintain current data on the time device by scheduling full and partial recurring and onetime exports.

Schedule this process using one of these two tasks:

- Manage Scheduled Processes task in the Time Management work area
- Export Time Device Data Configuration task in the Setup and Maintenance work area

Prerequisites

Before you can send export data to a time collection device, you must complete the following tasks:

1. Create the export data using the Manage Time Device Export Data task in the Setup and Maintenance work area.

2. Associate the time device export data with a profile using the Manage Time Device Processing Profiles task in the Time Management work area.

Time Device Export Modes

The following table describes the available time device export modes.

Export Mode	Description
Full export	Send all valid data to the time collection device. Select this mode for the initial export during implementation.
Purge and full export	Delete all existing data from the time collection device and then send all valid data.
Updates only export	Send only changes made to valid data since the last export.

The initial export determines what data to send using the Start Date and Number of Days in Period values for the time device export data. The process exports data that is valid as of the specified start date and through the specified number of days in the period.

Run Options

The following table lists purposes for running the export data process and the corresponding Run options to use.

Purpose	Run Option
Initial data export during implementation	As soon as possible (default selection)
Onetime exports	**Once** frequency using a schedule on the Advanced tab
Recurring data exports	Using a schedule on the Advanced tab

With recurring exports, each process exports the specified data that is valid for the current period within the specified start and end dates.

Time and Labor Shift Limits: Explained

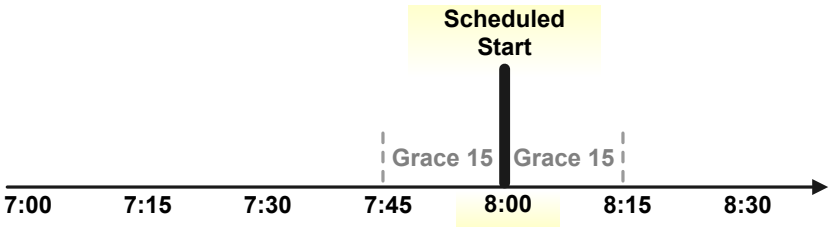
Shift limits identify acceptable deviations from scheduled start and stop times of shifts. They also help time device rules identify the shift to use when evaluating reported time device or web clock events. Shift limits consist of the following properties:

- Grace period
- Start and end early and late periods
- Violation types

Set shift limit properties using the Manage Shift Properties task.

Grace Period

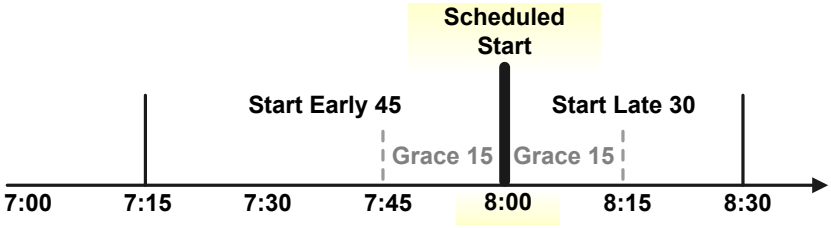
A grace period is the number of minutes that workers can deviate from their published scheduled start and stop times without incurring attendance violations. This deviation applies both before and after the scheduled time. For example, the following figure shows the valid start time range when the grace period is 15 minutes and scheduled shift start time is 8:00.



Start and End Early and Late Periods

Early and late periods define, in minutes, ranges before and after the scheduled start and end times. These ranges help time device rules evaluate time device and web clock events using identified shift start or stop times.

Example: The following figure shows start early and late ranges when the start early period is 45 minutes and the start late period is 30 minutes. The scheduled start time is 8:00 and the grace period is 15 minutes.



The following table describes the start early and late periods and their corresponding time ranges.

Period Description	Range Description
The 45-minute start early period includes the 15-minute grace period.	The start early range is 7:15 to 8:00.
The 30-minute start late period includes the 15-minute grace period.	The start late range is 8:00 to 8:30.

Violation Types

Time device rules create time entry exceptions for reported time device or web clock events:

- Within the specified start and end early or late periods

- Outside of the grace period, if specified

Time entry exceptions include an exception type of Information, Warning, or Error, which determines what message the time and labor manager reviewing the exception sees. The device rule uses the violation type that you set for a start or end early or late period as the time entry exception type. If you don't set a violation type, it uses the message severity from the rule. Time event processing also uses the rule message severity for time events outside of any specified start and end early and late periods.

Time Collection Device and Web Clock Events: How They're Processed

Time device rules process time events imported from time collection devices or web clock. They determine whether the time device or web clock events are valid and generate time entry exceptions, as appropriate. Any schedule deviation rules included in the rule set use published worker schedules and defined shift limits.

Settings That Affect Time Event Processing

The following table identifies the settings that affect time event processing and the Time Management work area tasks that you use to manage the settings.

Settings	Task
Published worker schedule	Manage Planned Schedule View Published Schedule
Shift limits: • Grace period • Start early and late periods and violation types • End early and late periods and violation types	Manage Shift Properties
Time device rule message severity	Manage Time Device Rules

How Time Events Are Processed

Time event processing and device rules use published schedules and shift limits in the following processing steps:

1. Determine whether the time event corresponds to the start or end of the shift.
2. Identify the worker's schedule and any shift limits using person information provided by the time collection device or web clock.

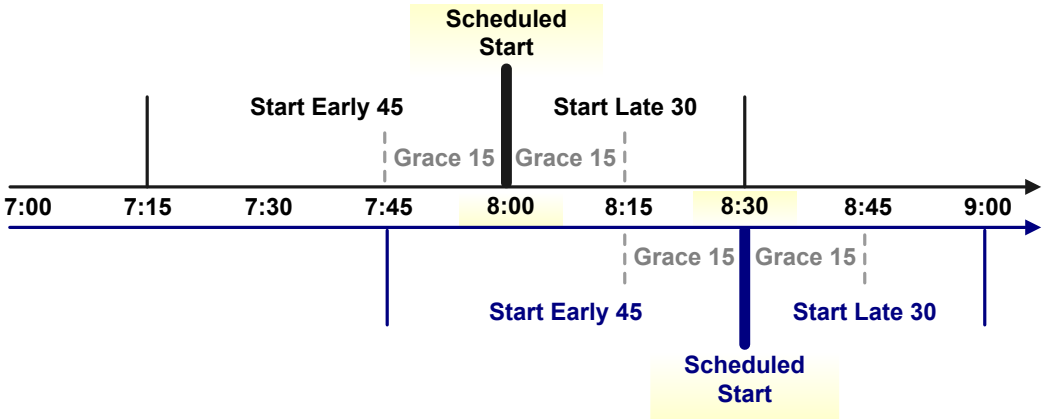
3. Determine whether the time event violates grace periods set for scheduled shift start and stop times or durations. Depending on the device rules associated with the worker's profile, rules might also validate whether the rest period between shifts is too short or long.
4. Create time entry exceptions for time events that fail processing and associate the appropriate time entry exception type and message. For example, is the time event too early or late or too short or long. The device rule uses the violation type that you set for a start or end early or late period as the time entry exception type. If you don't set a violation type, it uses the message severity from the rule. Time event processing also uses the rule message severity for time events outside of any specified start and end early and late periods.

Example

The following table identifies published schedule, shift limit, and time device rule settings for two workers.

Setting	Value
Grace Period (in minutes)	15
Start Early Period (in minutes)	45
Start Late Period (in minutes)	30
Start Early Period Violation Type	Information
Start Late Period Violation Type	Blank
Time Device Rule Message Severity	Warning

The following figure shows shift limit timelines for two scheduled start times. The shift limits for the 8:00 start time are above the timeline and for the 8:30 start time below.



The following table describes processing results for various reported times for two scheduled start times based on the settings identified in the preceding table.

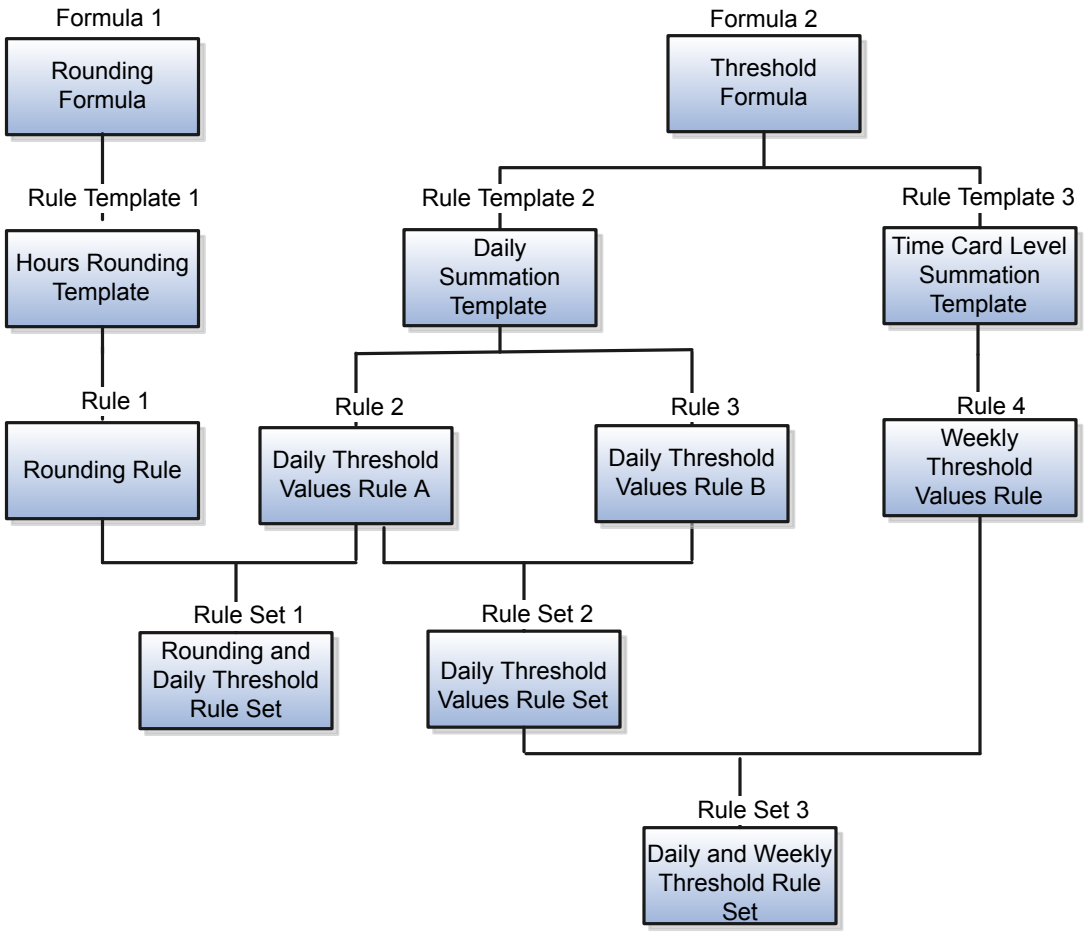
Reported Time	08:00 Scheduled Start	08:30 Scheduled Start
07:27	Time entry exception created with an exception type of Information. Reason: The time event is outside of the 15-minute grace period but within the 45-minute start early period.	Time entry exception created with an exception type of Error. Reason: The time event is outside of the start early period.
08:14	Time card entry started with an Incomplete status. Reason: The time event is within the 15-minute grace period and it marks the start of the shift.	Time entry exception created with an exception type of Information. Reason: The time event is outside of the 15-minute grace period but within the 45-minute start early period.
08:19	Time entry exception created with an exception type of Warning. Reason: The time event is outside of the 15-minute grace period but within the 30-minute start late period. Since there isn't a violation type, the time device rule message severity applies.	Time card entry started with an Incomplete status. Reason: The time event is within the 15-minute grace period and it marks the start of the shift.
08:50	Time entry exception created with an exception type of Error. Reason: The time event is outside of the start late period.	Time entry exception created with an exception type of Warning. Reason: The time event is outside of the 15-minute grace period but within the 30-minute start late period. Since there isn't a violation type, the time device rule message severity applies.

11 Time Formulas, Rule Templates, Rules, and Rule Sets

Formulas and Time Repository Rule Components: How They Work Together

Use time repository rule templates to create rules based on formulas. Group rules of the same type into a rule set. Assign rule sets to a worker or group of workers using worker time and time device processing profiles.

The following figure shows the relationship between formula, rule templates, rules, and rule sets.



Formula

Formulas contain the logic for processing time. The delivered formulas used with time rules were created using Oracle Fusion Fast Formula. Create your own formulas using the Manage Fast Formulas task in the Setup and Maintenance work area. You can associate a formula with more than one rule template.

Rule Templates

Rule templates are tools that simplify the adaptation of formulas into rules. A template exposes the exact parameters that the associated formula requires and the output variables that the formula uses to return results. For example, an overtime rule template specifies an overtime threshold parameter and a pay time type output variable.

You can use one formula with multiple rule templates by varying the template configuration. For example, one rule template uses the overtime threshold formula to calculate daily overtime. Another template uses the same formula to calculate overtime for the time card period.

Rules

Use rules to specify the values for the parameters and output variables of the selected template. For example, a US weekly overtime rule specifies the overtime threshold value of 40 hours and the Overtime pay time type output. You can use one template to create multiple rules by varying the parameter and output values. For example, you use the template that calculates daily overtime to create two rules:

- One rule has an overtime threshold value of 8 hours. The rule pays time below the threshold at the regular hourly rate and time above the threshold at 1.5 times the regular hourly rate.
- One rule has an overtime threshold value of 12 hours. The rule ignores time below the threshold and pays time above the threshold at 2 times the regular hourly rate.

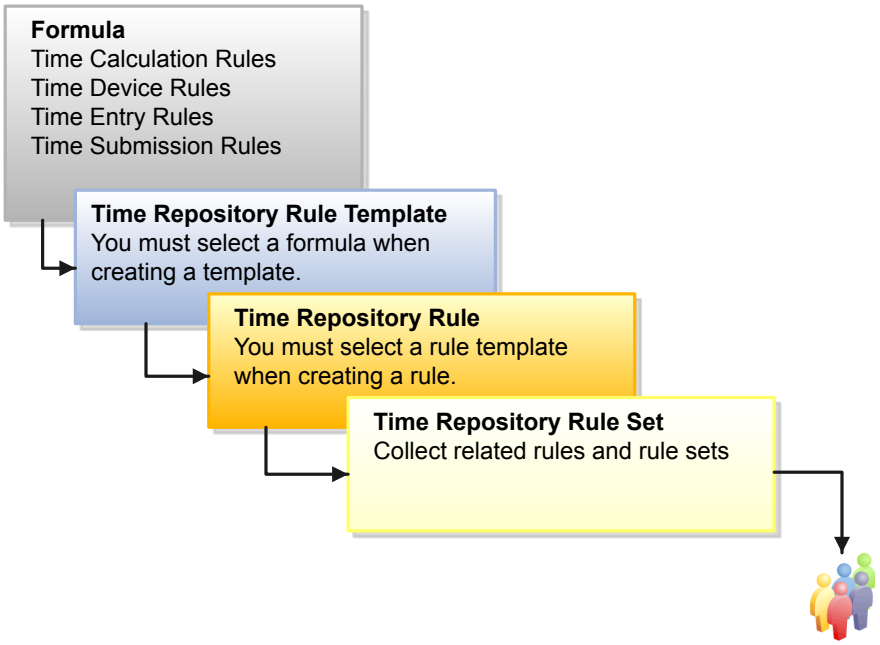
Rule Sets

Create a collection of rules and rule sets of the same type. Assign rule sets to groups of workers with similar vacation, time validation, and time processing requirements.

Formulas and Time Repository Rule Template Types: Explained

Use formulas with time repository rule templates to create a variety of rules. For example, the Period Maximum Hours Template uses the WFM_PERIOD_MAXIMUM_TIME_ENTRY_RULE formula to compare reported time category hours to defined maximum hours. Rules created with the template can specify all or certain time categories and define different maximum hours, such as 8 or 12.

The following figure shows how to use the formulas to create rule templates. Then, you create rules using the templates and combine the rules into rule sets for worker time and time device processing profiles.



Create formulas using the Manage Fast Formulas task in the Setup and Maintenance work area. Manage time repository templates, rules, and rule sets in the Time Management work area.

Formulas

Formulas contain:

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

You can use a single formula in multiple rule templates.

Rule Templates

Rule templates make it easy to adapt a formula for use with different rules. The formula parameters and output variables are easy to identify and configure in a template. You don't have to work with the whole formula statement to figure out which details you must change to achieve a particular result.

When you create a rule, you select a template to use rather than a formula. The template automatically populates the description of all output variables and helps you enter correct parameter values. You can create multiple rules from a single template, varying the parameter and output values of each rule.

The rule template ensures that:

- The parameters are of the correct parameter type.
- The output uses only specific time attributes.

- The correct number of outputs is associated with the formula results.

Formula and Template Types

The formula type determines the template type. The following table lists and describes formula types that you can use when configuring templates to create time repository rules.

Formula and Template Type	Description	Example Rule Usages
Time calculation	Creates or updates time card entries and uses the data to create calculated results based on formula logic.	Handle overtime or premium pay by updating reported time or creating additional calculated time.
Time device	Evaluates time events imported from time collection devices and creates time entry exceptions.	Create time entry exceptions for entries affected by reported time outside the specified grace period.
Time entry	Validates time card entries and generates a message with a defined severity.	When reported time exceeds a specified weekly maximum, display the specified message.
Time submission	Determines when to automatically save and submit time card entries created with time events imported from time collection devices.	• Automatically save a time card after each Out application event. • Automatically submit a time card after receiving the Out application event for the last scheduled shift of the week.

Time and Labor Fast Formula Reference Guide

The Time and Labor Fast Formula Reference guide explains how to use Fast Formula with Time and Labor. This guide provides the contexts, database items, and input variables for the formula types used in Time and Labor. It also provides sample formulas and the fixed parameters, valid functions, and return variables for each.

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

Time Repository Rule Template Definition Options: Points to Consider

Attach a formula to a time repository rule template and configure the parameters and output variables provided by the formula. Use the Manage Rule Templates task in the Time Management work area. The following table identifies the options that you can configure for each template type.

Option	Time Calculation	Time Device	Time Entry	Time Submission
Rule Classification	Yes	Yes	Yes	Yes

Option	Time Calculation	Time Device	Time Entry	Time Submission
Rule Execution Type	Yes	No	No	No
Summation Level	Yes	Yes	Yes	Yes
Reporting Level	No	Yes	Yes	No
Suppress Duplicate Messages Display	No	Yes	Yes	No
Process Empty Time Card	No	No	Yes	No
Time Card Events that Trigger Rule	Yes	No	Yes	No

Rule Classification

The rule classification is the subtype within the template type. The choice list values vary among the template types. Examples include Business message, Comparison validation, Variance, Supplier event, and Hours entered.

Rule Execution Type

For time calculation rules, use the **Rule Execution Type** option to specify whether rules must create additional hours or update existing hours.

Example

Scenario: Threshold 8 Overtime is a time calculation rule that compares reported time to a defined daily threshold value of 8 hours. Time worked over the scheduled 8 hours pays at 1.5 times the regular rate. The regular rate is 10 USD per hour.

Results: The following table shows the calculation details for this rule scenario using each rule execution type when reported time is 10 hours.

Rule Execution Type	Calculation Description	Calculation Example
Create	Rule processing creates total calculated time of 12 hours, which is 2 hours more than the reported time. • Keeps the 10 hours of Regular time at the regular hourly rate • Creates 2 hours of Premium time at .5 times the regular hourly rate	(10 hours x 10 USD) + (2 hours x 5 USD) = 110 USD
Update	Rule processing creates total calculated time of 10 hours, which matches the reported	(8 hours x 10 USD) + (2 hours x 15 USD) = 110 USD

Rule Execution Type	Calculation Description	Calculation Example
	time. Processing adjusts the pay rate for 2 of the 10 reported hours. • 8 hours of Regular time at the regular hourly rate • 2 hours of Overtime at 1.5 times the regular hourly rate	

Summation Level

Select the summation level to specify the level at which the rule applies. The following table describes the rule application logic for each summation level option.

Summation Level	Rule Application Logic
Details	Process the rule against all time entries.
Day	Process the rule against hours entered for the entire day.
Time Card	Process the rule against hours entered for the entire period.

Reporting Level

For time entry rules, specify the level at which to display the rule message results. The following table describes the rule application logic for each reporting level option.

Reporting Level	Rule Application Logic
Details	Display rule results for all time entries.
Day	Display rule results for hours reported for the entire day.
Time Card	Display rule results for hours reported for the entire period.

Suppress Duplicate Messages Display

Depending on the trigger actions configured in the rule template, the time entry or time device rule might generate repeated messages for the same condition. Specify how to handle the generation of repeated messages by select from the following Suppress Duplicate Messages Display setting values.

Suppression Value	Description
Yes	Display the message just once.
No	Display the message every time the message generation event occurs.

The suppress message display option works with the reporting level option.

Example

The time entry rule configuration produces a warning message when workers exceed a maximum of 20 hours for a week. When time reporters save, submit, and resubmit their time cards they initiate the rule.

A worker reports time for 10 hours per day for 5 days, saving the time card each day. The following table describes how frequently messages would appear based on the reporting level and whether you suppress duplicate messages.

Reporting Level	Suppress Duplicate Messages Display	
Time Card	Either Yes or No	Once
Day	No	Three successive days after reported time reaches 20 hours
Day	Yes	Once, on the third day when the reported time for the week exceeds the maximum of 20 hours

Process Empty Time Card

For time entry rules only, you can specify whether to process time cards with zero time entry values. If you select **Yes**, then the rule processes all entries, not just those with hours.

Time Card Events That Trigger Rule

Select the time card actions--Save, Submit, Resubmit, and Delete--that cause the time calculation or time entry rule to run. The following table describes the default selections for each template type.

Template Type	Default Selections
Time calculations	**Submit** and **Resubmit** You can't edit these selections. You can select **Save**. You can edit this selection in rules that you create with this template type.
Time entry	None You can edit any selections in rules created with this template type. Typically, you select: • **Save** for rules with details and daily summation levels, such as when a rule validates a daily minimum • **Submit** and **Resubmit** with time card summation levels, such as when a rule validates a weekly maximum

Input Parameters in Time Repository Rule Templates and Rules: Explained

Formulas contain parameters that time repository rules use to provide values to the formulas for time validation and processing. Use the Create Rule Template Parameters page to configure the parameter settings in rules that you create with the template. The following table describes the parameters and identifies whether they are visible and editable when you create rule templates and rules.

Setting	Description		
Display Sequence	Determines the order of the parameters on the Create Rule page; the lower the number, the higher the priority	Edit	Not shown
Formula Parameter Name	Uniquely identifies the parameter within the associated formula	Read only	Not shown
Parameter Type	Determines the expected format of the parameter value, such as value set; fixed text, number, date; time category; exclude; or message Selecting **Exclude** prevents the parameter from appearing in any rules created with the template.	Select	Not shown
Required	Determines whether the parameter must be used in rules created with the template	Select	Read only
Value Set	Determines the values that appear in the Value choice list on the Create Rule page for rules created with this template Available only if the parameter type is Value Set	Select	Not shown
Display name	Identifies the parameter that appears in the Rule Parameters section	Enter	Read only
Value	Shows the specific rule entry or selection to pass to the formula for use in time processing	Not shown	Select or enter

Output Variables in Time Repository Rule Templates and Rules: Explained

Formulas contain output variables, which they use to return processing results to the time repository rule. On the Create Rule Template Outputs page, specify a display name for the formula output variables that return results. For time entry and time device rules, specify the message severity.

> **Tip:** When creating time calculation rule templates, you can add time attributes as output variables. Use the Grouping Structure option to associate these time attributes with output values derived from the associated formula.

The following table describes the output variable settings and identifies whether they are visible and editable when you create rule templates and rules.

Setting	Description	Visible and Editable in Template	Visible and Editable in Rule
Display Sequence	Determines the order of the output variables on the Create Rule page	Edit	Not shown
Output Name	Uniquely identifies the variable within the associated formula	Read only	Not shown
Message Severity	Determines whether the exception type for time entry and time card exceptions is Information, Warning, or Error	Select	Select
Display Name	Identifies the variable that appears in the Outputs section of rules created with this template	Enter	Read only

The following table describes the output variable settings that are unique to time calculation rule templates and rules.

Setting	Description	Time Calculation Rule Template	Time Calculation Rule
Output Group	Collects variables and associated time attributes for calculation processing	Select	Read only
Time Attribute	Determines the time attribute Select the Measure time attribute for all measure output variables, such as OUT_MEASURE_UNDER and OUT_MEASURE_OVER.	Select	Read-only

Setting	Description	Time Calculation Rule Template	Time Calculation Rule
Value Type	Determines whether the person creating rules with this template enters or selects the time attribute value Example: Data source	Read only	Not shown
Value Set	Determines the values in Value choice list on the create and edit rule pages of rules created with this template If the value type is Value Set, you must select the specific value set.	Select	Not shown
Output Source	Identifies the source of the variable or time attribute, Formula or User-defined	Read only	Not shown
Value	Specific time attribute value to use with the output variable results	Not shown	Select or Enter

Output Groups for Time Calculation Rule Template and Rule Output Variables: Explained

Use output groups when creating time calculation rule templates to identify the time attributes that store the output variables. The associated formula provides the output variables and groups, one group for each output variable. You select the time attribute values as you create rules using the rule template. In the Time Management work area, create templates using the Manage Rule Templates task and rules using the Manage Rules task.

Scenario

You create a weekly time calculation rule template based on the formula WFM_THRESHOLD_TIME_CALCULATION_RULE, which has the following two outputs:

- OUT_MEASURE_UNDER
- OUT_MEASURE_OVER

The Output Group choice list contains the following values:

- Output Group 1
- Output Group 2

Grouping Structure

On the Outputs page, you complete the following actions:

- For OUT_MEASURE_OVER, change the output group to Output Group 2.
- Set the time attribute for both measure output variables to Measure.
- Add one time attribute to each output group, as shown in the following table:

Output Name	Time Attribute	Output Group	Display Name
PAY_TYPE_UNDER	Payroll Time Type	Output Group 1	Pay for Under Threshold
PAY_TYPE_OVER	Payroll Time Type	Output Group 2	Pay for Over Threshold

On the Outputs section toolbar:

- Use Grouping Structure to review your output groups in a hierarchy format.
- Use Reorder to edit the display sequence.

Time Attribute Values in the Rule

You create a rule using this template and set the payroll time type values for PAY_TYPE_UNDER and PAY_TYPE_OVER to Regular and Overtime, respectively. The rule sets calculated hours below the threshold value to regular time and the hours above the threshold value to overtime.

Related Topics

- Creating a Time Calculation Rule Template: Worked Example
- Creating a Time Calculation Rule: Worked Example

Time Repository Rule Explanation Text: Explained

Describe the business purpose of the time repository rule template on the Create Rule Template Explanation page. Use message tokens as placeholders for parameter and output values. Creating a rule with the template substitutes the rule's values for the message tokens in the rule explanation text.

This topic provides an example of how explanation text uses tokens in the template and rule, along with some best practice tips. By default, the Message Tokens choice list values are the parameter and output variable names provided by the associated formula. If you configure display names for the parameters and output variables in the rule template, then the choice list values are the display names.

Example Template and Rule Scenario

Template: You create a time calculation rule template that evaluates all reported time and determines the appropriate payroll time type based on a defined limit.

Rule: You use the template to create a rule that evaluates total reported time for all payroll time card entries against a 40-hour threshold. It associates time below the threshold with the Regular payroll time type and time above the limit with the Overtime payroll time type.

Message Tokens

The messages tokens to insert as placeholders in this scenario are:

- {WORKED_TIME_CONDITION}
- {DEFINED_LIMIT}
- {OUT_PAY_TYPE_UNDER}
- {OUT_PAY_TYPE_OVER}

Template Text with Message Tokens

The following explanation is the full text with the message tokens inserted.

Explanation: Compare the total hours reported for the {WORKED_TIME_CONDITION} time category to the threshold maximum {DEFINED_LIMIT} hours. Associate the hours under the threshold with the {OUT_PAY_TYPE_UNDER} payroll time type and any hours above the threshold with the {OUT_PAY_TYPE_OVER} payroll time type.

Rule Text with Values

The following explanation is the full text with the specified rule values substituted for the message tokens.

Explanation: Compare the total reported hours defined in the All Payroll Entries time category to the threshold maximum 40 hours. Associate the hours under the threshold with the Regular payroll time type and the hours above the threshold with the Overtime payroll time type.

Best Practices

The following are some best practices when writing text that includes tokens:

- Include abbreviations in tokens are easy to recognize.
- Qualify tokenized text by inserting a word or phrase right before or after the token that describes what the token is.
- Ensure that the qualifier text and the token name make sense together, as shown in the examples in following table.

Example of Incorrect Pairing	Examples of Correct Pairings
The time card was approved by the approver {STATUS}.	The approver {APPROVER_ NAME} approved the time card. The invoice was approved and is now in status {STATUS}.

- Read your explanation text without the token to check if the explanation makes sense.
- Use tokens for numbers carefully. Qualify tokens for numbers that are objects, such as number of hours or time type. If a token represents an amount that could be singular or plural, the text must support both scenarios.

Time Calculation Rule Set Processing Order: Explained

The time calculation rules run in a defined processing order in the rule set. Processing order one processes first. The following example shows the processing order for a rule set that incorporates two other rule sets.

Rule set A definition:

Processing Order	Rule Member
1	Rule 1
2	Rule 2

Rule set B definition:

Processing Order	Rule Member
1	Rule 3
2	Rule 4

Rule set C definition:

Processing Order	Rule Member
1	Rule 5
2	Rule set B
3	Rule 6
4	Rule set A

The order of processing rules in Rule Set C is as follows:

1. Rule 5
2. Rule 3
3. Rule 4
4. Rule 6
5. Rule 1
6. Rule 2

Analyzing Rule Processing Details: Explained

You can view the formulas, rules, and rule sets used to validate and process a worker's time card. Use the Analyze Rule Processing Details task in the Time Management work area to analyze the processing logs and diagnose any errors. Correct errors using the relevant task. Example: For errors detected when processing a rule template, use the Manage Rule Template task to search for the rule template and fix the error.

The following table describes specific aspects of worker's time card that you can view on the Rule Processing Details page.

Information	Description
Rule Details	Click **Rule Definition** to view details of the time repository rule that includes the parameters and output values.
Rule and Rule Set Processing Logs	Click **Rule Processing Log** and **Rule Set Processing Log** to view the processing logs that help to diagnose processing issues.
Formula Details	Click **Formula Details** to view details of the formula associated with the rule templates.

Time Rule Templates and Rules FAQs

Why can't I edit some rule templates?

You can't edit templates used to create rules, regardless of whether these rules are associated with a worker time processing profile or not.

Why can't I edit some rules?

You can't edit rules that were associated with a time processing profile to generate time card entries.

12 Time Rule Templates, Rules, and Rule Sets: Procedure

Creating Time Repository Rule Templates: Procedure

Use formulas to build templates for creating many time repository rules. The rule template ensures that:

- The parameters are of the correct parameter type
- The output variables use only specific time attributes
- The correct number of output variables are associated with the formula results

To create time rule templates:

1. In the Time Management work area Tasks panel drawer, click **Manage Rule Templates** to open the Manage Rule Templates page.
2. On the Search Results section toolbar, click the **Create** button to open the Create Rule Template dialog box.
    a. Select the template type.
    b. Select the formula to associate with the template.
3. Click **Continue** to open the Create Rule Template: Definition page.
    a. Complete the Basic Information section.
    b. In the Time Card Events that Trigger Rule section, select the time card actions that initiate the rule. This step isn't applicable to time device and time submission rule templates.

        Tip: You can edit the Save setting when creating time calculation rules. You can edit all action settings when creating time entry rules.
4. Click **Next** to open the Create Rule Template: Parameters page.
    a. In the Parameters section, configure the parameters provided by the associated formula.
5. Click **Next** to open the Create Rule Template: Outputs page.
    a. In the Outputs section, configure the output variables provided by the associated formula.

        For time calculation rule templates only, you also:

        - Select a time attribute for each output variable.

            For measure output variables, select the **Measure** time attribute.
        - Select the output group for each output variable.

            The associated formula provides the output groups, one group for each output variable.
        - Optionally, add time attributes and select an output group to associate each attribute with one or more output variables.

            If you don't add time attributes outside of the formula, then the application uses the time attribute from the reported time.

6. Click **Next** to open the Create Rule Template: Explanation page.
    a. Enter the business purpose of the rule template in the Explanation field. Customize the explanation for each rule created with the template by inserting message tokens to act as placeholders. The template dynamically generates the Message Tokens choice list from the parameters provided by the associated formula. The rule explanation substitutes parameter values set in the rule for the tokens.

Source	Example Explanation
Template	When the total reported hours for the {WORKED_ TIME_ CONDITION} time category exceed the maximum {DEFINED_ LIMIT} hours, display the message {MESSAGE_ CODE}.
Rule	When the total reported hours for the All Payroll Entries time category exceed the maximum 45 hours, display the message HWM_ FF_ TER_ PERIOD_ GT_MAX_ERR.

7. Click **Next** to open the Create Rule Template: Review page.
8. Click **Save and Close** to return to the Manage Rule Templates page.

Related Topics

- Formulas and Time Repository Rule Template Types: Explained
- Time Repository Rule Template Definition Options: Points to Consider
- Input Parameters in Time Repository Rule Templates and Rules: Explained
- Output Variables in Time Repository Rule Templates and Rules: Explained
- Output Groups for Time Calculation Rule Template and Rule Output Variables: Explained

Creating Time Repository Rules: Procedure

Create time repository rules that validate and process time, using corresponding time rule templates.

1. In the Time Management work area Tasks panel drawer, click **Manage Rules** to open the Manage Rules page.
2. On the Search Results section toolbar, click the Create button to open the Create Rule dialog box.
    a. Enter a rule name.
    b. Select the template type.
    c. Select the rule template to use to create the rule.
    d. Click **Continue** to open the Create Rule page.
3. In the Basic Information section, enter a description.
4. In the Time Card Events that Trigger Rule section, check whether the default values from the selected template match your rule requirements. This section isn't included in the time device and time submission rule templates.
5. In the Rule Parameters section, enter or select values for the parameters from the selected rule template.
6. In the Outputs section, select values for the variables from the selected rule template.
    - For time calculation rules, select the time attribute values.
    - For time device, entry, and submission rules, select the message severity.

7. Click **Save and Close** to return to the Manage Rules page. Every time that you create a time submission rule, the application automatically creates a corresponding rule set. Each time submission rule set can contain only one rule.

Related Topics

- Formulas and Time Repository Rule Template Types: Explained
- Input Parameters in Time Repository Rule Templates and Rules: Explained
- Output Variables in Time Repository Rule Templates and Rules: Explained
- Output Groups for Time Calculation Rule Template and Rule Output Variables: Explained

Creating Time Repository Rule Sets: Procedure

Create a collection of time repository rules and rule sets. For example, a time entry rule set has two rules. One rule requires workers to report at least 8 hours per day. The other rule requires that workers report no more than 45 hours per week. The rule set validates all time card entries and displays a warning message when time is below the daily minimum or above the weekly maximum. Assign rule sets to groups of workers with similar vacation and time validation and processing requirements.

1. In the Time Management work area Tasks panel drawer, click **Manage Rule Sets** to open the Manage Rule Sets page.
2. On the Search Results section toolbar, click **Create** to open the Create Rule Set dialog box.
    a. Enter the rule set name.
    b. Select the rule set type.
    c. Edit the effective date, as required. The default value is the current system date. Select a date that coincides with the start of a time card period.
    d. Click **Continue** to open the Create Rule Set page.
3. In the Basic Information section, enter a description.
4. Edit the effective date to control when the new rule or rule edits take effect.
5. In the Rule Set Members section, add the rules and rule sets that you want to include in this rule set. For the members, the lower the processing sequence, the higher the processing priority.
6. Click **Save and Close** to return to the Manage Rule Sets page.

Related Topics

- Formulas and Time Repository Rule Template Types: Explained
- Time Calculation Rule Set Processing Order: Explained

Creating a Time Calculation Rule Template: Worked Example

This example shows how to create a time calculation rule template that compares the reported hours with a threshold value. The hours above and below the threshold value are converted to separate pay types.

This example configures the template to:

- Update reported time by reapportioning calculated results, rather than creating additional hours.
- Automatically set rules created with this template to run whenever time reporters save, submit, or resubmit time cards. This configuration ensures that the rules run whenever time reporters save their time cards, typically after entering worked time at the end of each day. The rules also run when time reporters edit and submit their time cards without saving.
- Pay calculated time under and above the threshold using the PayrollTimeType time attribute. Time under the threshold uses the Regular attribute value and over the threshold uses the Overtime attribute value.
- Customize the explanation to each rule created with this template, using parameter and output variable values set in each rule.

Creating a Time Calculation Rule Template

1. In the Time Management work area Tasks panel drawer, click **Manage Rule Templates** to open the Manage Rule Templates page.
2. On the Search Results section toolbar, click the **Create** button.
3. In the Create Rule Template dialog box, complete the following steps.
   a. In the **Template Type** field, select **Time calculation rule**.
   b. In the **Formula Name** field, select **WFM_THRESHOLD_TIME_CALCULATION_RULE**.
   c. Click **Continue** to open the Create Rule Template: Definition page.
4. In the Basic Information section, complete the fields as shown in the following table.

Field	Value
Name	Daily Threshold Hours Template
Description	Handle daily overtime for a specified worked time condition using a defined threshold limit. Update reported time by adjusting it and pay worked time using the Payroll Time Type time attribute.
Rule Classification	Threshold
Rule Execution Type	Update Reason: Handle overtime by splitting the existing total hours between two Payroll Time Type time attribute values.
Summation Level	Day

   a. In the **Time Card Events that Trigger Rule** section, select **Save**.
5. Click **Next** to open the Create Rule Template: Parameters page.
   a. In the Parameters section, complete the fields as shown in the following table.

Formula Parameter Name	Parameter Type	Display Name
DEFINED_LIMIT	Fixed number	Daily Overtime Threshold Value
WORKED_ TIME_ CONDITION	Time category	Category of Reported Time

Formula Parameter Name	Parameter Type	Display Name

6. Click **Next** to open the Create Rule Template: Outputs page.
    a. In the Outputs section, add two output variables with the output names **OUT_PAY_TYPE_UNDER** and **OUT_PAY_TYPE_OVER**, respectively.
    b. Complete the fields for all output variables, as shown in the following table.

Field	OUT_MEASURE_UNDER	OUT_PAY_TYPE_UNDER	OUT_MEASURE_OVER	OUT_PAY_TYPE_OVER
Display Sequence	1	2	3	4
Output Group	Output Group: 1	Output Group: 1	Output Group: 2	Output Group: 2
Time Attribute	Measure	PayrollTimeType	Measure	PayrollTimeType
Value Type	Not applicable	Fixed text	Not applicable	Fixed text
Display Name (in rule)	Total Time Under Threshold	Pay Time Type for Under Threshold	Total Time Over Threshold	Pay Time Type for Over Threshold

7. Click **Next** to open the Create Rule Template: Explanation page.
    a. In the Explanation section, create the following explanation. Place your cursor where you want to insert a placeholder. Use the Message Tokens choice list to insert the appropriate token placeholder.

    Compare the total hours reported for the {Category of Reported Time} time category to the maximum threshold {Daily Overtime Threshold} hours. Associate the hours under the threshold with the {Pay Time Type for Under Threshold} payroll time type. Associate any hours above the threshold with the {Pay Time Type for Over Threshold} payroll time type.
8. Click **Next** to review the template on the Create Rule Template: Review page.
9. Click **Save and Close** to return to the Manage Rule Templates page.

Creating a Time Calculation Rule: Worked Example

This example shows how to create a time calculation rule to pay for time worked over 8 hours per day using the Overtime payroll time type. It configures the rule to update reported time by adjusting calculated results, rather than creating additional hours. It pays calculated time under the threshold using the Regular Hours time attribute value and over the threshold using the Overtime Hours time attribute value.

Prerequisites

1. Create the Daily Threshold Hours Template time calculation rule template.

Creating a Time Calculation Rule

1. In the Time Management work area Tasks panel drawer, click **Manage Rules** to open the Manage Rules page.
2. On the Search Results section toolbar, click the **Create** button to open the Create Rule dialog box.
   a. Complete the fields as shown in the following table.

Field	Value
Name	Daily Threshold 8 Hours Update TCR
Template Type	Time calculation rule
Rule Template Name	Daily Threshold Hours Template

   b. Click **Continue** to open the Create Time Calculate Rule: Daily threshold 8 Hours Update TCR page.
3. In the Basic Information section **Description** field, enter the following text:

   Evaluates all reported time entries for a day and creates calculated Regular Hours and Overtime Hours entries using the overtime threshold 8 hours
4. In the Rule Parameters section, complete the fields as shown in the following table.

Display Name	Value
Daily Overtime Threshold	8
Category of Reported Time	All Payroll Entries

5. In the Outputs section, complete the fields as shown in the following table.

   Note: Because the output value type defined in the rule template is Fixed Text, you must enter the exact value provided in the time card field.

Display Name	Value
Pay Time Type for Under Threshold	Regular Hours
Pay Time Type for Over Threshold	Overtime Hours

6. Click **Save and Close** to return to the Manage Rules page.

Creating a Time Calculation Rule Set: Worked Example

This example shows how to create a time calculation rule set that contains two rules to handle overtime for specified weekly and daily thresholds.

Prerequisites

1. Create the following time calculation rules:
    - Weekly Threshold 40 Hours Update TCR
    - Daily Threshold 8 Hours Update TCR

Creating a Time Calculation Rule Set

1. In the Time Management work area Tasks panel drawer, click **Manage Rule Sets** to open the Manage Rule Sets page.
2. On the Search Results section toolbar, click the **Create** button to open the Create Rule Set dialog box.
    a. In the **Name** field, enter **Overtime Hours**.
    b. In the **Rule Set Type** field, select **Time calculation rule**.
    c. In the **Effective Start Date** field, select the appropriate date for the rule to take effect.

       Select a date that coincides with the start of a time card period.
    d. Click **Continue** to open the Create Rule Set: Overtime Hours page.
3. In the Basic Information section, enter a description.
4. On the Rule Set Members section toolbar, click the **Add** button twice to add two rule members.
5. Complete the fields for the two rule members, as shown in the following table.

Field	Value for the First Rule	Value for the Second Rule
Processing Sequence	1	2
Member Type	Rule	Rule
Member Name	Daily Threshold 8 Hours Update TCR	Weekly Threshold 40 Hours Update TCR

6. Click **Save and Close** to return to the Manage Rule Sets page.

13 HCM Groups

Membership: Explained

Create groups of people with similar characteristics using the Manage HCM Groups task in the Setup and Maintenance work area. A group might have a fixed number of people or you might update the members on a defined basis. A worker can belong to more than one group.

This topic describes:

- Defining membership conditions
- Including or excluding individuals or other groups
- Setting embedded group priority
- Evaluating and refreshing membership
- Viewing group membership
- Locking membership

Defining Membership Conditions

Use personal and employment criteria to define conditions that must be satisfied to include or exclude persons from a group.

Some examples of personal criteria include:

- Person Type
- Date of Birth
- Full Name

Employment criteria include:

- Assignment Status
- Department Name
- Job Name

Example: Create a group, Associate Marketers, that includes hourly workers in the Marketing department. Define the conditions as shown in following table.

Field	Condition 1 Value	Condition 2 Value
Evaluation Criteria	Department Name	Job Name
Operator	Equal to	Equal to
Value	Marketing	Associate Marketer
Logical Operator	AND	Not applicable

Including or Excluding Individuals or Other Groups

You can determine the group membership by adding individual workers and other groups with either Include or Exclude membership statuses.

Example: To create a larger group that includes the hourly workers in the Marketing department, add the Hourly Marketing group with membership status equal to Include.

Setting Embedded Group Priority

When you embed groups within another group, a worker can exist in more than one group. In such a case, the priority number assigned to the embedded groups determines the group membership. The lowest number has the highest priority.

Example: Joe Smith is a member of the following two groups embedded in the Marketing group, with the following membership statuses:

Priority	Group Name	Status
1	Promotions	Exclude
2	Advertising	Include

Joe Smith would be excluded from the Marketing group because the Promotions group, his top priority embedded group, is excluded.

Evaluating and Refreshing Membership

After defining the group, click **Refresh Group Membership** on the Manage HCM Groups page to evaluate group membership and update the list of members. You can schedule regular refreshes using advanced options.

Viewing Group Membership

Specify a date within a range of dates to view the group membership as of that date.

Locking Membership

Select **Yes** in the **Locked** option to prevent refreshing of the group definition as of a specific date.

Example: You can lock all members of a group, senior managers, as of 12-June-2013 so that the same set of workers is always processed.

Note: Locking the group membership is a permanent action and you can't reverse it.

Group Membership: How It's Evaluated

A group definition can include or exclude a person in multiple ways. The application evaluates the group definition in a specific order to determine the final membership status of each person as of a particular date.

Settings That Affect Group Membership

The following conditions affect the group membership:

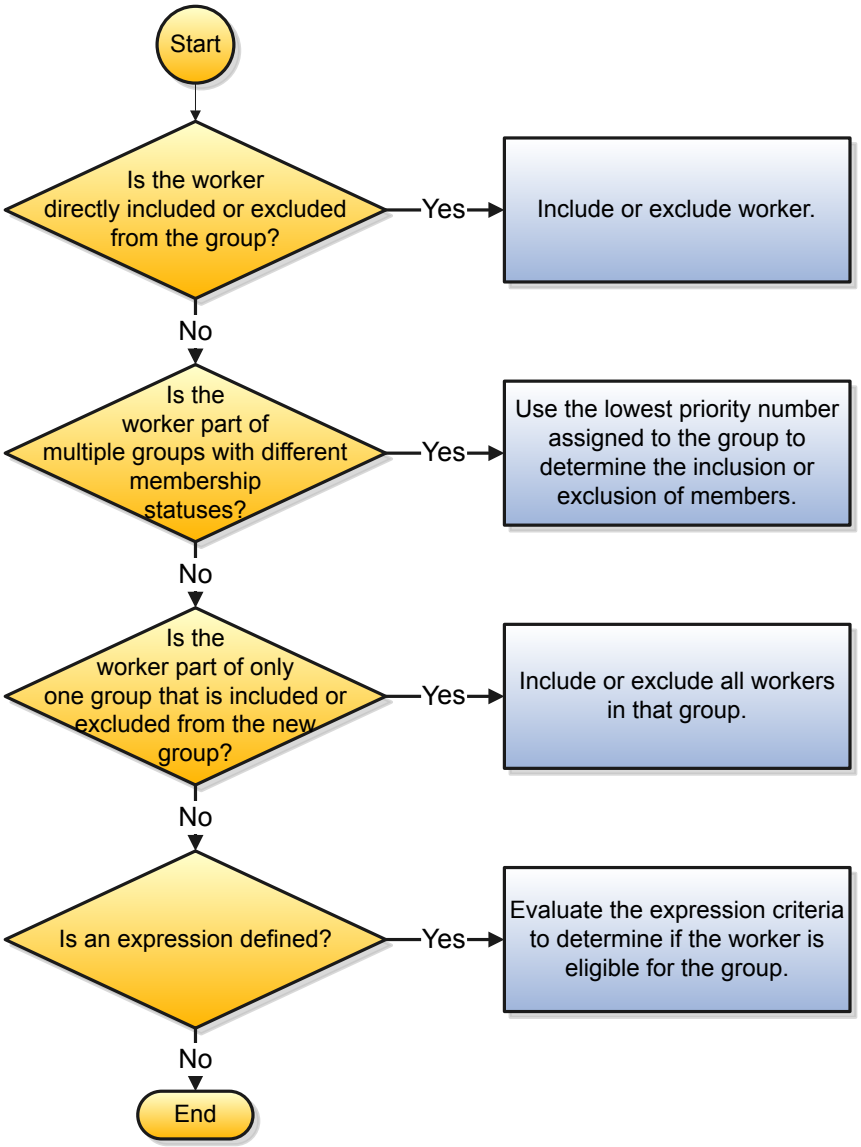
- Individual inclusion or exclusion status of the person
- Inclusion or exclusion status of a defined group of persons that is embedded in the group definition
- Priority number of each embedded group
- Eligibility for selection criteria

How the Group Membership Is Evaluated

The Evaluate Group Membership process evaluates the membership of a group in the following order:

1. When you individually include or exclude a worker, then the associated include or exclude membership status determines the final membership status of the worker.
2. When you include or exclude a group, then the include or exclude membership status of the group determines the membership of all workers in that group.
3. When a worker is a member of multiple groups with different inclusion or exclusion membership statuses, the priority numbers assigned to the groups determine membership. The group having the lowest status number takes priority.
4. When you add evaluation criteria using attributes, relational, and logical operators, the filtered results returned by the different conditions determine the group membership.

The following figure illustrates that individual membership status has the highest priority in determining group membership. Embedded group status has a higher priority than eligibility criteria.



Defining Groups: Worked Example

This example shows how to create two groups and embed those first two groups into a third group. The workers in the Borrowed Workers group are trained to be part of the year end processing group. No other borrowed workers are eligible for training and to work on year end tasks.

The following table summarizes the key decisions for this scenario.

Decisions to Consider	Accounting Workers	Borrowed Workers	Year End Processing Group
How do you want to evaluate the group definition?	For a date range	As of run date	For a date range
What condition do you want to use to build the selection criteria for the group?	Department Name Equal to Accounting	Not applicable	Not applicable
What is the group that you want to include in this group definition?	Not applicable	Not applicable	Accounting Workers and Borrowed Workers
What are the members that you want to include or exclude from this group definition?	Not applicable	Members to Include: Tate Scott, Veronica Adriano, Fen Lee, Marsha Able, and Priya Krishnan	Not applicable
Should you refresh the group membership?	Yes	No	Yes

Summary of the Tasks

Create three groups, embedding the first two groups into the third.

1. Create two groups, one by adding selection condition and the other by including members explicitly.
2. Create the third group by embedding the first two groups.

Defining a Group by Creating Group Criteria

1. In the Setup and Maintenance work area, search for and go to the **Manage HCM Groups** task to open the Manage Groups page.
2. On the Search Results section toolbar, click the **Create** button to open the Create Group page.
    a. In the Group Information section, complete the fields as shown in the following table. Use default values for fields unless the steps specify other values.

Field	Value
Name	Accounting Workers
Description	Only workers who work for the accounting department
Evaluation Period	For a date range. Number of Days Before Evaluation Date: 30 and Number of Days

    b. On the Evaluation Criteria section toolbar, click the **Create** button to open the Evaluation Criteria dialog box.
        i. Complete the fields, as shown in the following table.

Field	Criteria
Attribute	Department Name
Operator	Equal to
Value	Accounting

c. Click **Save and Close** to return to the Create Group page.

3. Click **Save and Close** to return to the Manage Groups page.
4. On the Search Results section toolbar, click **Refresh Group Membership** to open the Refresh Group Membership page.
   a. In the **Group** field, select **Accounting Worker**.
   b. Select the **Evaluation Date** as the current date.
5. Click **Submit** to return to the Manage Groups page.

Defining a Group by Including Members Explicitly

1. On the Search Results section toolbar, click the **Create** button to open the Create Group page.
   a. In the Group Information section, complete the fields as shown in the following table. Use default values for fields unless the steps specify other values.

Field	Value
Name	Borrowed Workers
Description	Workers who temporarily support accounting workers.

   b. On the Include or Exclude Members section toolbar, click **Add Members to Include** to open the Search and Select: Members to Include dialog box.
      i. In the **Job** field, select **Support Analyst**.
      ii. Click **Search**.
      iii. Select the members Tate Scott, Veronica Adriano, Fen Lee, Marsha Able, and Priya Krishnan.
   c. Click **OK** to add the members with an Include status and return to the Create Group page.
2. Click **Save and Close** to return to the Manage Groups page.
3. On the Search Results section toolbar, click **Refresh Group Membership** to open the Refresh Group Membership page.
   a. In the **Group** field, select **Borrowed Workers**.
   b. Select the **Evaluation Date** as the current date.
4. Click **Submit** to return to the Manage Groups page.
5. In the Search Results section, select the **Borrowed Workers** group.
6. On the toolbar **Actions** menu, select **Edit**.
7. In the **Locked** field, select **Yes**.

Defining a Group by Embedding a Group

1. On the Search Results section toolbar, click the **Create** button to open the Create Group page.
   a. In the Group Information section, complete the fields as shown in the following table.

Field	Value
Name	Year End Processing
Description	Contains workers who would work on the year-end financials
Locked	No
Evaluation Period	For a date range. Number of Days Before Evaluation Date: 30 Number of Days After Evaluation Date: 30

   b. On the Include or Exclude Groups section toolbar, click the **Add** button twice.
   c. Complete the fields, as shown in the following table.

Field	Value 1	Value 2
Priority	1	2
Name	Accounting Workers	Borrowed Workers
Condition	Include	Include

2. Click **Save and Close** to return to the Manage Groups page.
3. On the Search Results section toolbar, click **Refresh Group Membership** to open the Refresh Group Membership page.
   a. In the **Group** field, select **Year End Processing** .
   b. Select **Evaluation Date** as the current date.
   c. In the **Remove Future-Dated Group Members** field, select **No**.
4. Click **Submit** to return to the Manage Groups page.

HCM Groups FAQ

Why can't I edit some groups?

You can't edit predefined groups and groups that are associated with a worker time entry profile.

14 Setup Profiles: Access Configurations, and Troubleshooting

Setup Profiles: Explained

Setup profiles associate workers with a set of configurable time card, calendar, and web layouts and sets of rules for time entry and time processing. Assign profiles to either an individual worker or a group of workers. Use the following tasks to configure and assign worker setup profiles:

- Worker Time Entry Setup Profile
- Worker Time Processing Setup Profile

This topic discusses the following aspects of setup profiles:

- Types of setup profiles
- Group Assignment
- Profile Priority
- Default Profile

Types of Setup Profile

Time entry profiles and time processing profiles help you assign the correct layouts and validations to diverse sets of workers.

Examples:

- Workers who report only exceptions to the normal work schedule
- Workers who report time against projects and tasks

The following table shows how two profile type assignments help you vary the time reporting experience for diverse groups:

Profile Type	Profile Contents
Worker time entry profile	• Layouts for reporting time • Rules for time card actions that control when workers can enter, update, and delete their time
Worker time processing profile	• The time card period • Time entry and time calculation rule sets • Consumer set, validation, approval, and transfer processing

Group Assignment

Use start and end dates to manage the assignment of a profile to groups. You can assign a single profile to more than one group of workers at a time. For example, assign the USA_Workers time entry profile to:

- Full_Time_USAWorkers group

- Part_Time_USAWorkers group

You can't associate a single group with more than one profile of the same type at any given time. For example, the Full_Time_USAWorkers group can't have both the USA_Workers time entry profile and UK_Workers time entry profile assigned to it.

Priority

Assign each setup profile a unique priority number with reference to other profiles of the same profile type. The priority number determines the profile used to create the time card if a worker is eligible for more than one profile. Number one is the highest priority. For example, a single worker is a member of two groups:

- Group A: Time entry profile priority is 5
- Group B: Time entry profile priority is 3

The application uses the time entry profile with priority 3 for that worker.

Default Profile

By default, all workers in an organization are members of a delivered group that has a profile assigned to it. The application uses this default profile for any worker who isn't eligible for any other setup profile through either individual or group assignment.

Configuring Time Card Access Settings: Procedure

You can specify the layout set to use for each worker and configure when workers can create, view, edit, and delete time cards. Use the Manage Worker Time Entry Setup Profile task in the Time Management work area.

To configure time card access, on the Profile Values page:

1. Select the date on which the access settings become effective.
2. Enable the time card statuses in which users can access the time card to perform for each time entry action.
3. Enter the number of days into the past or future that a worker can take the action in each enabled status. For example, enable workers to change any entered, saved, or submitted time cards up to five days before the current date. If that day falls in a prior time card period, then workers can edit both the current and previous time cards. If you don't enter the number of days, the worker has unlimited access to perform the action on the time card in the enabled status.

Worker Profile: How It's Derived

Through group membership, a worker can be eligible for multiple time entry and time processing profiles. The application derives from the eligible profiles only one profile of each type for each worker.

These setup profiles determine the following:

- Time Card period
- Rules
- Time Card access privilege
- Layouts

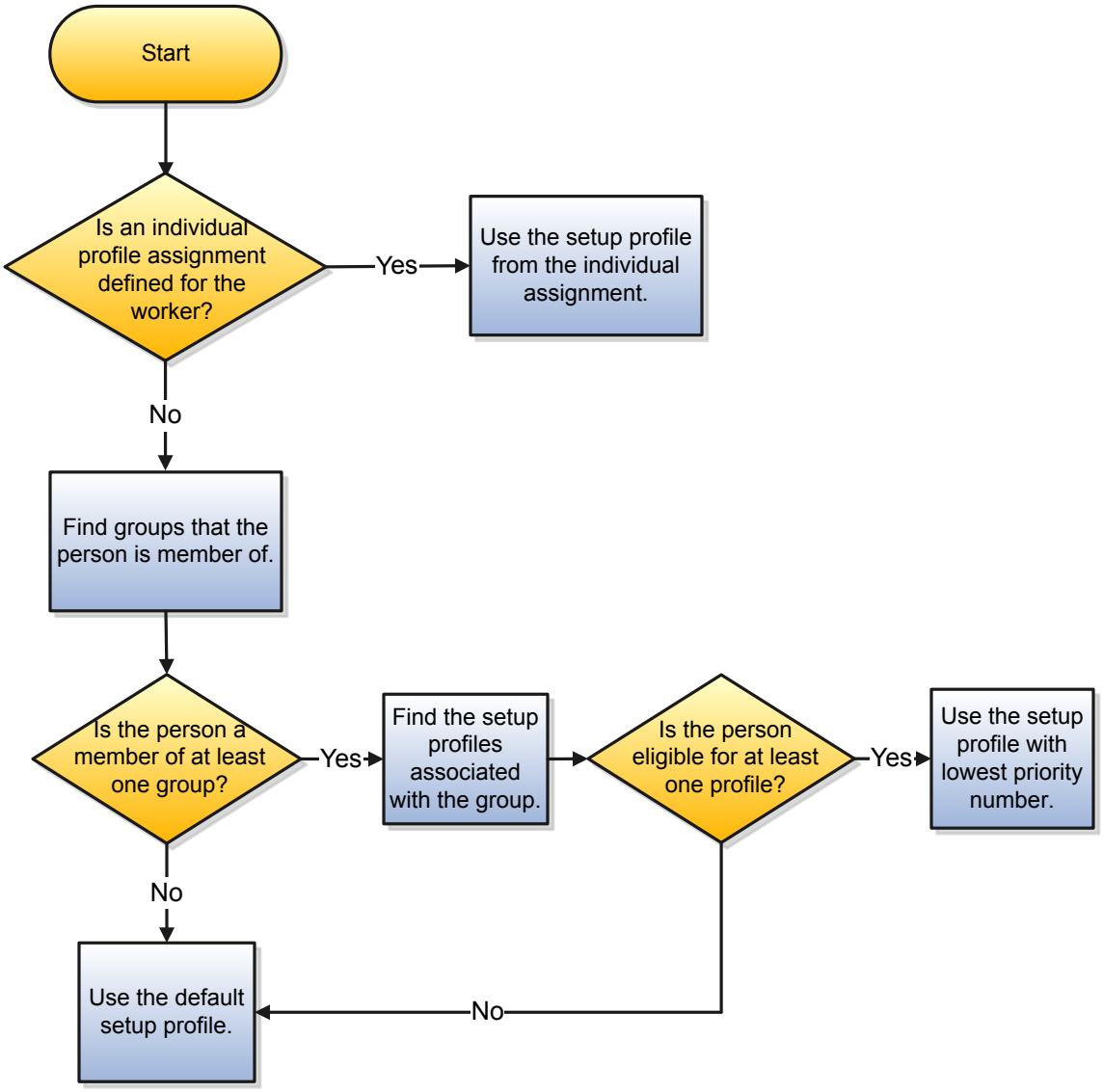
Settings that Affect Profile Assignment

Profile assignment settings resolve to a final profile assignment through the priority sequence shown in the following table.

Setting	Processing Description
Individual Assignment	Individual assignment of a worker to a setup profile takes highest priority and overrides any group profile assignment.
Group Assignment	The application uses the profile with the lowest priority when multiple group memberships qualify a worker for multiple profiles of the same type.
Default Group Assignment	Ensure that all workers who don't have any individual or group profile assignments have a profile and can report time.

How the Worker Profile is Derived

The following figure shows resolving a worker's profile assignment through the priority sequence.



Related Topics

- Setting Up Processing of Project Time Cards: Explained

Troubleshooting Time Card Profile Assignment: Explained

Use the Manage Setup Profiles task to investigate any of the following issues that you might encounter for a worker or group.

- Time card, calendar, or web clock page layouts might not appear.
- Processing rules might return unexpected results.

Comparing Profiles

Compare a worker's setup profile values from both individual and group assignments. Use the comparison to decide if you assign the worker a new profile that overrides any profile associations based on group memberships.

To compare profiles, click **Troubleshoot**:

1. Select a worker.
2. Specify the profile evaluation date.
3. Click **Evaluate** to list the setup profiles that are assigned to the worker effective on that date.
4. Select up to three of the worker's setup profiles and view the various time entry values for those profiles.

Overriding Group Profile

Use the Assign Profile to Person option to assign a profile directly to any worker with incorrect time cards or calculated time. This individual profile assignment overrides all profile associations based on group memberships.

Disassociating a Profile Assigned to an Individual

Disassociate a profile assigned to a person using the Delete Override option. If multiple direct setup profiles assignments remain, then the individual profile with the lowest priority number takes priority. For example, you assign the worker to profiles A and B and profile A has a higher priority than B. A worker's job responsibility changes, so profile A is no longer accurate for the worker. To disassociate profile A, click **Delete Override**. The application automatically assigns profile B to the worker. If there are no other individual setup profile assignments, then the group profile with lowest priority number takes priority.

15 Integrations with Absence Management, Payroll, and Projects

Using Time and Labor with Absence Management

Prerequisite Setup of Absence Management for Use with Time and Labor: Procedure

Enable workers to report absences and view accrual balances in their time cards by integrating Oracle Fusion Absence Management with Oracle Fusion Time and Labor. To successfully integrate Absence Management with Time and Labor, you must complete the following prerequisite setup:

- Set up absence configurations.
- Configure absence time card fields.
- Configure layouts, including time entry format.

Set up Absence Configurations

To report absence types from the time card, you must:

- Ensure that a work schedule exists for the primary worker assignment.
- Set the absence type units of measure to hours.
- Enable the absence type for time card entry.
- Enroll workers in an absence accrual plans that are associated with the absence type. Ensure that the plan balances are up to date.

Configure Absence Time Card Fields

In the Setup and Maintenance work area, use the Time and Labor tasks described in the following table to generate time attributes and time card fields.

Task	Description
Generate Data Dictionary Attributes	Creates data dictionary time attributes for a selected time consumer that categorize time or defines time card fields
Generate Time Card Fields	Creates multiple-attribute time card fields for the specified legislative data group using data dictionary time attributes

Configure Layouts, Including Time Entry Format

Use the Manage Time Entry Layout Components task to display absence data in various ways for time entry:

Time Card Field Option	Time Card Field Description
Absence type	Create a single-attribute time card field that displays only the absence type.
Payroll and absence time types	Create a multiple-attribute time card field that combines absence and payroll time types. These time types can have different display names for time entry than they have in payroll or absence management.
Reason code or comment	Configure the Reason Code as a dependent time card field associated with independent absence attribute, such as Illness. Display the dependent reason time card field in the Additional Attributes or Daily Details dialog box on the time card.

Absence entries resolve according to the worker's schedule. Use the Manage Layout Sets task to specify the time entry format that is supported for the schedule type: hours only, start and end times, or both hours and times. The following table describes the different schedule types with the correct time entry formats for each.

Schedule Type	Time Entry on the Time Card	Time Entry Format to Select on the Layout Set
Work Schedule	Absence start and end times	Either **Display start and end times** or **Display hours and time**
Elapsed or Duration Schedule	Number of absence hours	Either **Display hours only** or **Display hours and times**

Related Topics

- Absence Management Components: How They Work Together

Time Entry Validation and Processing Configuration: Explained

Oracle Fusion Global Payroll, Oracle Fusion Project Costing, and Oracle Fusion Absence Management deliver validation rules that apply to time reported using Oracle Fusion Time and Labor. For example, absence validations ensure that workers enter absence for only those absence types that they are eligible for.

The following table describes the default validation and processing associated with the time card Next, Save, and Submit buttons.

Button	Validation and Processing Description
Next	Clicking Next on the time card: • Validates absence, payroll, and project time entries • Applies time entry rules • Applies time calculation rules • Generates of calculated time entries
Save	Clicking Save on the time card: • Always initiates the absence-delivered validations.

Button	Validation and Processing Description
	• Doesn't initiate project-delivered and payroll-delivered validations. To configure validation on the Save button, use the Manage Time Consumer Sets task. Select Submit and save in the Validate on Time Card Actions field. Validations on the Save button are identical to those described for the Next button.
Submit	Clicking Submit on the time card sets the time card status to Submitted and starts the approval flow.

Using Time and Labor with Global Payroll

Prerequisite Setup of Global Payroll for Use with Time and Labor: Procedure

Validate, approve, and transfer reported time to payroll for payment by integrating Oracle Fusion Global Payroll applications with Oracle Fusion Time and Labor. To successfully integrate Global Payroll with Time and Labor, you must complete the following prerequisite setup:

- Set up payroll configurations.
- Generate time attributes.
- Configure payroll time card fields and layouts.
- Configure worker groups and time processing profiles.

Set up Payroll Configurations

Complete the following payroll setup tasks, documented in detail in the Oracle Global Human Resources Cloud Implementing Global Payroll guide:

1. Create elements in Global Payroll to store payroll time types in the time card and pass time to payroll or a third-party payroll application for processing.
2. Run the Generate Data Dictionary Time Attributes process.

   Caution: You must run this process after changing time elements, such as adding or deleting elements, editing input values, or editing element eligibility records. Failure to run the process could negatively affect the:
   - Setup of time entry layout components
   - Validation of payroll time types
   - Transfer of time to payroll

3. Confirm that the Time Card Required field is selected for each person who reports time.

Generate Time Attributes

The delivered data dictionary includes the primary time attributes for projects, payroll, and absence time. After the payroll administrator sets up the payroll elements, run additional processes on the time card elements, as described in the following table.

Process	Description
Generate Data Dictionary Time Attributes	Creates dependent payroll attributes for all element input values, such as rate, rate code, state, country, and city.
Generate Time Card Fields (optional)	Creates time card fields using data dictionary time attributes, for the specified legislative data group. You can also use the Manage Time Entry Layout Components task in the Setup and Maintenance work area.

These process tasks are available in the Setup and Maintenance work area.

Configure Payroll Time Card Fields and Layouts

Payroll time entries on the time cards contain predefined payroll time card fields, such as pay time type and assignment number.

- Use the Manage Time Entry Layout Components task to create a time card field or web clock button. Be sure to enable layout set overrides.
- Use the predefined payroll layout set if you don't have to make changes to the delivered time card fields or labels.
- Use the Manage Time Layout Sets task to create a new payroll layout based on predefined payroll layout. Customize the time card fields displayed on all time entry, review, and approval pages.

These tasks are available in the Setup and Maintenance work area.

Configure Worker Groups and Time Processing Profiles

Time periods for reporting and approving time can be weekly or biweekly. Approval periods match the reporting period. Therefore, the approval workflow tasks initiate as soon as time reporters submit time cards. Your payroll periods can be weekly, biweekly, semimonthly, or monthly. To align payroll periods with time card periods, organize your workers into easily identifiable HCM groups. Assign these groups to the correct worker time processing profile containing a weekly or biweekly time card period.

Related Topics

- Time Entry Validation and Processing Configuration: Explained
- Creating Elements for Time Card Entries: Procedure

Define Elements, Payrolls, and Formulas: Overview

The Define Elements, Balances, and Formulas task list contains the tasks required for creating payroll elements for compensation and HR management. You can use this task list if you're recording earnings, deductions, and other payroll data for reporting, compensation and benefits calculations, or transferring data to a third-party payroll provider.

Note: If you're using Oracle Fusion Global Payroll, use the Define Payroll task list instead. The Define Payroll task list includes additional tasks required to set up payroll processing.

Required Tasks

Your business requirements and product usage determine which required tasks and other payroll-related tasks you perform. The required tasks are:

- Manage Elements
- Manage Payroll Definitions, which is usually required to support elements
- Manage Consolidation Groups, which is required for creating payroll definitions

If you use predefined Payroll Interface extracts to transfer data to a third-party payroll provider, you may need to create element subclassifications, balances, organization payment methods, and object groups. Refer to the Global Payroll Interface documentation for more information.

Prerequisite Tasks

The Workforce Deployment and Compensation Management offerings include the Define Elements, Balances, and Formulas task list. These offerings contain other tasks that you must complete first, as shown in the following table.

Task	Use To	Why It's Important
Manage Legal Entities	Create payroll statutory units.	Ensures that hiring employees automatically creates payroll relationship records.
Manage Legal Entity HCM Information	Associate a legislative data group with each payroll statutory unit.	As above.
Manage Features by Country or Territory	Select Payroll Interface as the extension for any countries or territories where you extract HR data to send to a third-party payroll provider.	Ensures that you use the appropriate element templates to create earnings.

Configure Legislations for Human Resources

Use this task to create and edit legislative data for a country or territory that doesn't have a predefined country extension. It guides you through configuring some payroll objects and values required for creating elements, including:

- Tax year start date
- Period of service on rehire rules
- Default currency
- Element classifications
- Component groups
- Payment types

Important: Complete this task before the other tasks in this task list.

Manage Elements

Use elements to communicate payment and distribution information to payroll applications from the source applications listed in the following table.

Source Application	Element Purpose	Requirements
Compensation	• Earnings and deduction elements, such as bonuses, overtime earnings, and voluntary deductions. • Information elements to load custom data to use during a workforce compensation cycle.	Required for compensation plans and base pay, no matter which HR and payroll applications you're using.

Benefits	• Deduction elements to record activity rate calculation results, such as:
	  ○ Employee contributions and employer distributions for medical options
	  ○ Flex credits for flex offerings
	• Earnings elements if you set up your flex offering to disburse unused credits as cash.
		Required if you use element entries to communicate benefits rate information to any payroll application.
		
		Restriction: You must select Payroll Relationship as the employment level.

Time and Labor	Earnings elements with input value of Hours.	Required if you pay worked time based on time card entries.
Absence Management	Earnings elements with input value of Hours.	Required if you process absence payments and book employer liability of accrual balances through Global Payroll or Global Payroll Interface.

Manage Payroll Definitions

Employees' employment terms or assignments include their assigned payrolls. The payroll definition supplies the payroll period frequency and end dates, which some applications use for calculations. The following table shows which Oracle Fusion HCM applications require payroll definitions.

Application	Payroll Definition Required?	Usage Conditions
Global Payroll Interface	Yes	N/A
Compensation	Yes	N/A
Benefits	Optional	Required to use the payroll period frequency to calculate communicated rates or values passed to payroll.
Time and Labor	Optional	Required to pass time entries to payroll calculation cards for payroll processing or for extract to a third-party payroll application.

Application	Payroll Definition Required?	Usage Conditions
Absence Management	No	N/A

Manage Consolidation Groups

You must have at least one consolidation group for each legislative data group where you create elements. Payroll definitions require a consolidation group.

Other Payroll-Related Setup Tasks

Your implementation might require other tasks in the Define Elements, Balances, and Formulas task list, as shown in the following table.

Task	Requirements
Manage Organization Payment Methods	If you want to record personal payment methods for your employees, you must create organization payment methods and associate them with your payroll definitions. Organization payment methods define the combination of payment type and currency to use for payments to employees or external parties.
Manage Element Classifications	Primary element classifications are predefined. If you run the Calculate Gross Earnings process (provided with Global Payroll Interface), you might create subclassifications to feed user-defined balances.
Manage Fast Formulas	You can write formulas for a number of uses, including: • Validating user entries into element input values • Configuring compensation, benefit, and accrual plan rules • Calculating periodic values for gross earnings and defining element skip rules for the Calculate Gross Earnings process (provided with Global Payroll Interface)
Manage Balance Definitions	If you're using Global Payroll Interface, creating earnings elements creates balances automatically. You can edit these generated balance definitions. If you're using the Calculate Gross Earnings process, you may want to create additional balances for extracts or reporting.
Manage Object Groups	You can create object groups to specify subsets of elements or payroll relationships to include in a report or process, such as the Calculate Gross Earnings process.

Related Topics

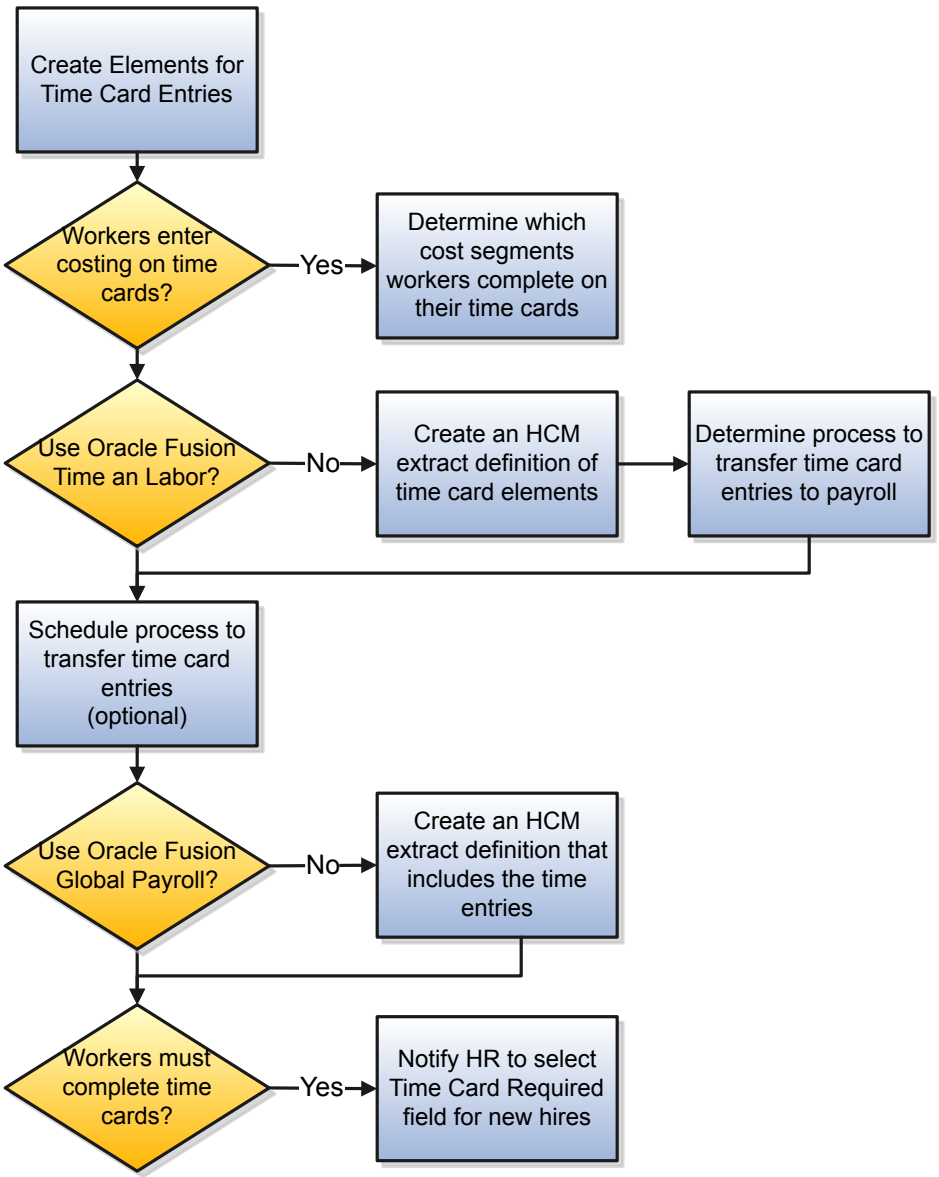
- Using Formulas: Explained
- Payroll Definitions: Explained
- Payroll Balance Definitions: Explained
- Implementing Payroll Interface: Procedure
- Elements: How They Hold Payroll Information for Multiple Features

Prerequisite Payroll Setup for Importing Time Entries: Explained

Before you can import time card entries for processing in a payroll run or extracting for a third-party payroll provider, you complete payroll setup tasks. These tasks vary depending on your configuration, specifically whether your enterprise:

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

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



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

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

Related Topics

- Creating Elements for Time Card Entries: Procedure
- Importing Time Card Entries to Payroll: Procedure
- Scheduling Flows: Explained
- Extract Components: How They Work Together

Creating Nonrecurring Earnings Elements for Time Entries: Procedure

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

Tip: If you report the regular and straight time portions of overtime separately, create two elements, such as Overtime and Overtime Premium. If you report the portions together, you might use straight time instead of regular time, and create a separate element for the overtime premium.

To create a nonrecurring earnings element, complete the following steps:

1. Select the legislative data group, such as FR LDG, Hong Kong LDG, or US LDG.
2. Select the primary classification.

Category	Primary Classification
Time Card	Regular Earnings or Earnings
Standard	Standard Earnings, Supplemental Earnings, or Irregular Earnings

3. When available, select the secondary classification.
4. For localization that support it, select the Time Card category. For localization that doesn't support the Time Card category, selecting standard or supplemental earnings automatically sets the category to Standard.
5. Click **Continue**.
6. Complete the basic information.
    a. Enter a descriptive name, such as Regular, Straight Time, Overtime, or Shift Pay.
    b. Enter the name that you want to display on reports containing this payroll element.
    c. Select the effective date **January 1, 1951**. The early date ensures that the element attributes are immediately available to use with worker shifts, time cards, web clock, and time collection devices.
    d. For standard-category elements, complete the following basic information fields. For time card category elements, skip to the next step.

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

Field	Value
At which employment level should this element be attached?	Assignment Level
Does this element recur each payroll period, or does it require explicit entry?	Nonrecurring
Can a person have more than one entry of this element in a payroll period?	Yes

7. Accept the remaining default values by clicking **Next**.
8. Complete the additional details using the following steps for either the Time Card or Standard category.

   For Time Card category elements, complete the following additional details:

   a. Select **Hours X Rate** as the calculation units for reporting.
   b. Select the work units conversion rule.

Conversion Rule	Calculation	Example
Standard Rate Annualized	i. Convert the source amount and periodicity to an annual value using default values of 2080 hours, 260 working days. ii. Convert the amount to the required periodicity and rate.	None
Standard Rate Daily	i. Calculate a daily rate using default value 260 working days. ii. Convert the amount to the required output periodicity and rate.	None
Standard Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's standard working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week with a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (40.00*52) = 5.77 an hour
Assignment Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week, with a 37.5 standard working hours a week, and a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (37.50*52) = 6.15 an hour
Periodic Work Schedule Rate Annualized	i. Convert the monetary value and work schedule to an annual value, using the employee's work schedule for the payroll period for daily and hourly conversions. ii. Calculate the rate.	Scenario for worker assigned a monthly payroll: • The worker has a monthly salary of 1000 US dollars. • The formula checks the work schedule details for the month.

Conversion Rule	Calculation	Example
		Daily conversion calculation: 1000 a month / 20 days in the month = 50 For worker not assigned a payroll: The calculation uses the weekly rate and converts the result to an annual amount. The calculation then divides the annual amount by the number of days or hours in that week based on the work schedule.

c. Accept the remaining default values by clicking **Next**.

For Standard category elements, complete the following additional details:

a. Select **Hours X Rate** as the calculation rule.
b. Select **Hourly** as the default periodicity.
c. Select the periodicity conversion rule.

Conversion Rule	Calculation	Example
Standard Rate Annualized	i. Convert the source amount and periodicity to an annual value using default values of 2080 hours, 260 working days. ii. Convert the amount to the required periodicity and rate.	None
Standard Rate Daily	i. Calculate a daily rate using default value 260 working days. ii. Convert the amount to the required output periodicity and rate.	None
Standard Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's standard working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week with a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (40.00*52) = 5.77 an hour
Assignment Working Hours Rate Annualized	i. Convert the source amount and working hours to an annual value, using the employee's working hours. ii. Calculate the rate.	Scenario: Worker works 40 hours a week, with a 37.5 standard working hours a week, and a monthly salary of 1000 US dollars. Calculation: ((1000*12) / (37.50*52) = 6.15 an hour
Periodic Work Schedule Rate Annualized	i. Convert the monetary value and work schedule to an annual value, using the employee's work schedule for the payroll period for daily and hourly conversions. ii. Calculate the rate.	Scenario for worker assigned a monthly payroll: • The worker has a monthly salary of 1000 US dollars. • The formula checks the work schedule details for the month.

Conversion Rule	Calculation	Example
		Daily conversion calculation: 1000 a month / 20 days in the month = 50 For worker not assigned a payroll: The calculation uses the weekly rate and converts the result to an annual amount. The calculation then divides the annual amount by the number of days or hours in that week based on the work schedule.

   d. Select **Yes** that this element is subject to retroactive changes.
   e. Select the retro group. The delivered value is **Entry Changes for Retro**, which you can edit. You can also create and select your own retro group using the Manage Events Group task in the Payroll Calculation work area.
9. For US elements, review the default values for the FLSA rules and override as appropriate.
10. Create the element.
    a. Review the element configuration to ensure everything is correct.
    b. Click **Submit**.

    By default, the Time Card and Standard category elements already have the appropriate input values configurations required to support location overrides. You don't have to make any edits.
11. Configure element eligibility.
    a. In the Elements Overview section, select **Element Eligibility**.
    b. On the Actions menu, select **Create Element Eligibility**.
    c. In the Element Eligibility, Information section, enter an element eligibility name with a suffix that identifies the criteria. For example, for the regular element with open eligibility (no selected criteria) the name would be Regular Open.
    d. Select the eligibility criteria. To leave eligibility open on the element and control it with HCM groups and time processing profiles, skip this step.
12. Click **Done** to return to the Manage Elements page.
13. Configure element eligibility for each of the related elements, which share the same name as this element and have suffixes. Suffixes include Earnings Calculator, Earnings Distributor, Earnings Results, Retro, and Retro Results.
    a. Search for the element that you just created.
    b. Click the related element name to open the element summary page.
    c. In the Elements Overview section, select **Element Eligibility**.
    d. On the Actions menu, select **Create Element Eligibility**.
    e. In the Element Eligibility Information section, configure the same eligibility criteria as the original element.
    f. Click **Submit**.
    g. Click **Done**.
14. For Standard category elements, create the calculation components. A separate topic provides the details for this procedure.

Related Topics

- Elements: How They Hold Payroll Information for Multiple Features
- Creating Calculation Components for Standard Category Elements: Procedure

Creating Calculation Components for Standard Category Elements: Procedure

You must create calculation components for nonrecurring time entry earnings elements created with the Standard category and the calculation rule Hours X Rate. Example elements include regular, overtime, double-time, and shift pay elements.

For each existing element with the Standard category and Hours X Rate calculation rule, complete the following steps:

1. Submit the Create Time Card Calculation Components process.
2. Complete the element eligibility.
3. Submit the Compile Formula process.

Submit the Create Time Card Calculation Components Process

In either the Payroll Checklist or Payroll Administration work area, complete the following steps:

1. Click the **Submit a Process or Report** task.
    a. Select the legislative data group that you associated with the element.
    b. In the Process or Report section table, select the **Create Time Card Calculation Components** flow pattern.
2. Click **Next**.
    a. Enter the parameters, as shown in the following table.

Field	Value
Payroll Flow	Descriptive name for this specific flow process, such as Create Regular element time card calculation components
Process Date	Select the effective date **January 1, 1951**. The early date ensures that the element calculation components are immediately available to use with worker shifts, time cards, web clock, and time collection devices.

3. Click **Next**.
4. Skip entering flow interaction by clicking **Next**.
5. Accept the schedule defaults by clicking **Next**.
    a. Review the flow and parameter details to ensure everything is correct.
6. Click **Submit**.
    a. On the Confirmation dialog box, click **OK and View Checklist**.
7. Go to the payroll flow task that you created to confirm that the process completed without errors or warnings.
    a. View the process results.
    b. Check for any errors or warnings.
8. Configure element eligibility for the element with the suffix CIR, such as Regular CIR.
    a. On the Manage Elements page in the Payroll Calculation work area, search for the element for which you just created the calculation components.
    b. Click the element with the suffix CIR, such as Regular CIR, to open the element summary page.
    c. In the Elements Overview section, select **Element Eligibility**.

d. On the Actions menu, select **Create Element Eligibility**.
e. In the Element Eligibility, Information section, configure the same eligibility criteria as the original element.
f. Click **Submit**.
g. Click **Done**.

Submit the Compile Formula Process

After you create the calculation components for all of your elements, submit the Compile Formula process in the Manage Payroll Checklist work area. You can perform a bulk compile by entering wildcards in the Formula and Formula Type parameters.

1. Click the **Submit a Process or Report** task.
   a. Select the legislative data group that you associated with the element.
   b. In the Process or Report section table, select the **Compile Formula** flow pattern.
2. Click **Next**.
   a. Enter the parameters, as shown in the following table.

Field	Value
Payroll Flow	Descriptive name for this specific flow process, such as Create Regular element time card calculation components
Formula	To perform a bulk compile, enter **%**. For a more focused compile, enter the <element name>%, for example, Regular%.
Formula Type	%

3. Click **Next**.
4. Skip entering flow interaction by clicking **Next**.
5. Accept the schedule default values by clicking **Next**.
   a. Review the flow and parameter details to ensure everything is correct.
6. Click **Submit**.
   a. On the Confirmation dialog box, click **OK and View Checklist**.
7. Go to the payroll flow task that you created to confirm that the process completed without errors or warnings.
   a. View the process results.
   b. Check for any errors or warnings.

Related Topics

- Overtime Calculation Components: How They Work Together
- Creating Labor Costing Multipliers: Examples

Generating Time Attributes and Time Card Fields for Your Elements: Procedure

After you create or edit time entry earnings elements, such as regular, overtime, double-time, and shift pay, you generate time attributes for the data dictionary. Optionally, you can also generate card fields for them.

Complete the processes listed in the following table using the Define Time and Labor task list in the Setup and Maintenance work area.

Step	Process	Description	Comments
1	Generate Data Dictionary Time Attributes (Required)	Creates dependent payroll attributes for all element input values, such as hours and rate	You must run the Generate Data Dictionary Time Attributes process after making any changes to time elements. Such changes include adding or deleting elements, editing input values, or editing element eligibility records. **Caution:** Failure to run the process might negatively affect the setup of time card fields, the validation of payroll time types, or the transfer of time to payroll.
2	Generate Time Card Fields (Optional)	Creates time card fields using the data dictionary time attributes for the specified legislative data group	Instead of running this process, use the Manage Time Entry Layout Components task to create time card fields and web clock buttons.

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

Related Topics

- Managing Time Attributes and the Data Dictionary: Explained
- Time Entry Layout Components: Explained

Time Card Required Option: Critical Choices

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

- A salaried employee completes project time cards for billing purposes, but isn't paid based upon those time entries

- An hourly employee is normally paid based on a predefined work schedule and only submits a time card for overtime or when absent

Selecting the Time Card Required Option

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

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

The following table shows which hours the payroll calculation uses for elements with a calculation rule of hours multiplied by rate.

Time Card Required	Hours Used in Calculations
Yes	Time card entries
No	Work schedule, unless you enter hours as element entries

Related Topics

- Creating Elements for Time Card Entries: Procedure

Processing Time Entries in Payroll: Explained

Most time card applications and providers apply validation rules when workers submit their time cards. Typically, you import time entries to payroll by submitting the Load Time Card Batches process. The process validates that the persons in the batch are eligible for the time card elements, and rejects records for terminated workers..

Aspects of working with time card entries include:

- Validating time card entries
- Importing time for terminated workers
- Resolving transfer errors
- Viewing time card entries
- Viewing costing overrides
- Correcting time card entries

Validating Time Card Entries

You use the Load Time Card Batches task to transfer time card entries to payroll from Oracle Fusion Time and Labor or a third-party time provider. The payroll application validates the time card entries to confirm that the worker isn't terminated and is eligible for the element.

Importing Time for Terminated Workers

To avoid release of information on planned terminations, time providers usually hide and ignore the future termination date until it's formally announced. Workers reporting time in Time and Labor can report time entries beyond their termination date,

without any indication that they are ineligible for the time entered. Line managers can view and approve these entries, but the Load Time Card Batches process will reject time card entries beyond the termination date.

Resolving Import Errors

Resolve the underlying problem for the error in your time and labor application, and then import the corrected entry. Don't manually correct errors in payroll.

For example, if you use Oracle Fusion Time and Labor, you can take the following steps:

1. The payroll manager rolls back individual records or the entire transfer process in payroll.
2. The Time and Labor administrator corrects the cause of the error, and resets the status of the corrected time cards to Submitted. The administrator routes the time card for approval.
3. The next time the payroll manager imports the time cards using the Load Time Card Batches process, the process retrieves the corrected time card entries.

If you use a third-party time provider, you can roll back the Load Time Card Batches process. After resolving the transfer error with the time provider, you resubmit the Load Time Card Batches process.

You can continue to import corrected time card entries until the payroll calculation starts for the payroll period that includes the entries. Corrections submitted after that time are processed as a retroactive change in the next payroll period.

Viewing Time Card Entries

Submitting the Load Time Card Batches process creates or updates a time calculation card for each person included in the batch. Use the Manage Calculation Cards task in the Payroll Calculation work area to view time card entries. There is only one time calculation card for each payroll relationship. The card includes time entries for multiple assignments for the same payroll relationship. It displays the employee's time entries for the effective-as-of-date specified on the search.

Viewing Costing Overrides

Some time attributes associated with element entries, such as costing overrides, aren't stored on the calculation card. You can view these entries using the Manage Element Entries task in the Payroll Calculation work area. The Costing tab on Manage Person Details page displays the costing overrides for the effective date used for your search. Costing entered on the time card is at the element entry level, which overrides costing at the every level except the priority account.

The following table shows how the element that displays the costing override depends on the element category and the elements generated by the template.

Category Selected When Creating the Element	Related Elements Generated by Template	Element with Costing Override
Time Card category	Yes	Related calculation element Costing is defined on the element eligibility record of the results element. Submitting the Load Time Card Batches process displays costing for imported time entries on the calculation element.
Time Card category or Standard category	No	Base element
Standard category and you submit the Calculate Time Card Components process	Yes	Related element with the suffix CIR

For example, the employee might select a cost center on the time card to reflect where the employee worked overtime. When the payroll calculation process derives the account number for the overtime element, it uses the cost center from the time card. You can view the costing override on the person's calculation card. After you submit the payroll run, you can view the costing results on the Person Process Results page.

Correcting Time Card Entries

Any updates and corrections must occur in the application used to report time. You can continue to import new and updated time entries to payroll until you calculate the payroll for the period that includes the time entries.

If you import a late time card after the payroll is run for that payroll period, you can still process that time entry. Use one of the methods shown in the following table.

Method	Action
Pay the time card entries in the next payroll period as retroactive pay	Submit the Recalculate Payroll for Retroactive Changes process in the Payroll Calculation work area. The process creates retroactive element entries for each element that has a retroactive change. If the imported time card entry includes a rate change, the element's formula recalculates the amount.
Process QuickPay	1. Roll back the records processed for the workers from the payroll run. 2. Submit the Calculate QuickPay process from the Payroll Calculation work area.
Process workers in a separate payroll run	1. Roll back the records processed for the workers from the payroll run. 2. Create a payroll relationship group that includes these workers and process a payroll run for the time card entries.

Related Topics

- File Format for Importing Time Entries to Payroll
- Payroll Batch Loader Tasks: Explained
- Importing Time Card Entries to Payroll: Procedure
- Creating Elements for Time Card Entries: Procedure

Using Time and Labor with Project Costing

Prerequisite Setup of Project Costing for Use with Time and Labor: Procedure

Bill customers for time worked on a project by workers and contingent workers through integration between Oracle Fusion Project Costing and Oracle Fusion Time and Labor. Employ delivered integrated setups to:

- Automatically validate reported project time entries
- Transfer validated entries to Project Costing

To successfully integrate Project Costing with Time and Labor, you must complete the following prerequisite setup:

- Classify departments as expenditure organizations.

- Populate the Projects table.

Classify Departments as Expenditure Organizations

To enable time card submission, the department on the worker's Employment record must be an expenditure organization. To classify a department as an expenditure organization, the projects administrator can:

1. Edit each department by selecting the **Classify as project expenditure organization** check box. Use the Manage Project Organization Classifications task in the Setup and Maintenance work area.
2. Use the Submit Process to Denormalize Organization Hierarchy task to run the process.

Populate the Projects Table

Populate the Project tables in Oracle Fusion Project Foundations so that values are available for the following delivered time card fields. When Project Foundation tables contain values, the time card choice lists can include them. The choice lists use value sets, which show the value and description.

- Project Name for Project Team Members
- Project Name
- Project Number
- Task Number
- Project Unit
- Expenditure Type
- Expenditure Type Name
- Organization
- Expenditure Type Class (application linkage function)
- Billable
- Work Type
- Optional Expenditure Type
- Optional Expenditure Type Name
- Optional Project Name
- Optional Project Name for Project Team Members
- Optional Project Number
- Optional Project Number for Project Team Members
- Optional Task Number
- Optional task Number for Project Team Members

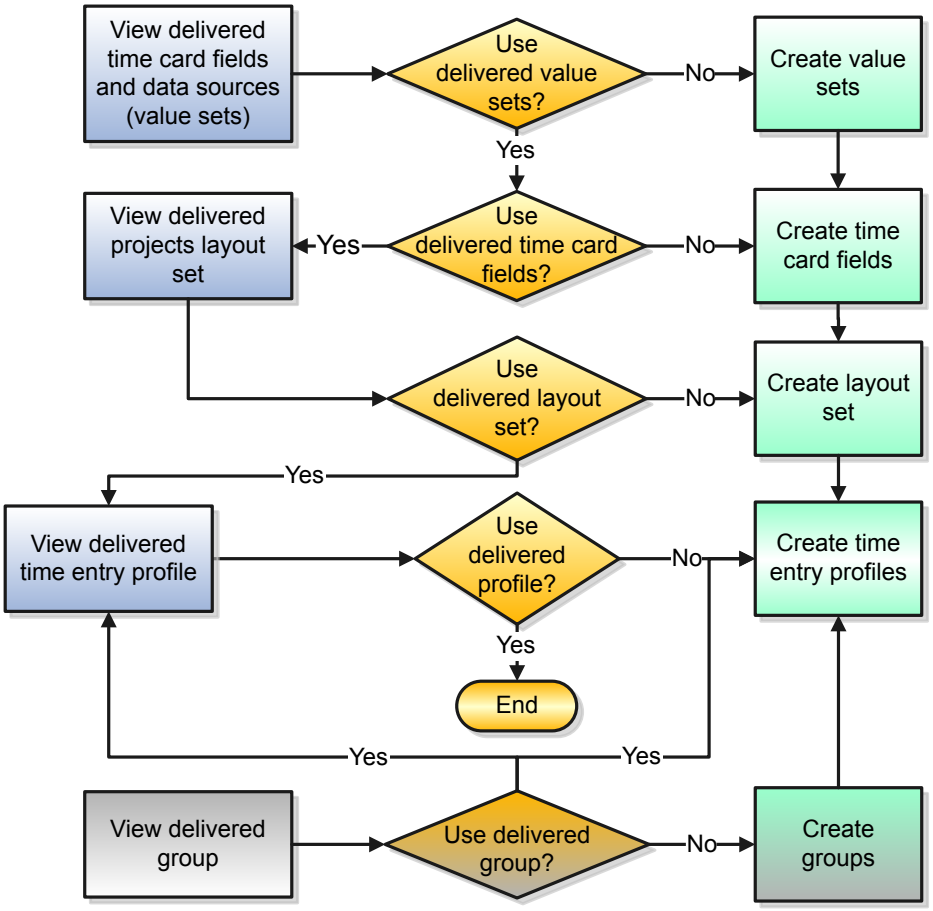
Related Topics

- Oracle Fusion Time and Labor and Oracle Fusion Project Costing: How They Work Together

Setting Up Time Entry for Project Costing: Explained

Configure Oracle Fusion Time and Labor to enable permanent and contingent workers to report project costing time. Reporting time involves creating and configuring time card fields, layouts, groups, and worker time entry profiles. Time and Labor delivers time repository objects already configured to support project costing specific time entry, including team membership.

As the following figure shows, you can use the delivered objects to enable your workers to report project costing time, or you can create custom objects.



Prerequisites

Set up initial assignment information and payroll relationships for workers in the New Person work area using the Hire a Person task. View and maintain worker assignments and payroll relationships using the following tasks in the Person Management work area:

- Manage Employment
- Manage Payroll Relationships

Filter time card choice lists based on project team membership by assigning workers to project teams. Enable team membership by editing the Projects Party table using the Manage Project Definition in the Project Financial Management work area.

Time Card Fields

The delivered primary assignment and project costing specific time card fields include data sources for field choice list values. In the Setup and Maintenance work area, use the tasks described in the following table to manage value sets and time card fields.

Task	Description
Manage Value Sets	• View the delivered sets and create custom sets. The data sources for project-specific field choice lists are value sets.
Manage Time Entry Layout Components	• View the definitions for the relevant delivered fields. • Create other single-attribute time card fields based on the delivered fields. To save time when creating fields, search for and duplicate the closest delivered project costing specific field.

Layout Set

In the Time Management work area, use the Manage Layout Sets task to:

- Review individual layouts in the delivered layout sets:
  - Projects Layout Set
  - Projects Layout Set Filtered by Project Team Members

  Both layout sets filter choice lists by the worker's primary assignment. The second layout set also filters project costing and task number choice lists by team membership.
- Create a project layout set using the Project Costing time consumer to edit one or more layouts, enabling project team membership as appropriate.
  - Change the display names of time card fields
  - Add or delete time card fields

Groups

The delivered Projects Usage group includes all workers with a payroll relationship. To filter the workers in the group, create additional groups. In the Setup and Maintenance work area, use the Manage HCM Groups task to create permanent and contingent worker groups.

- Use personal and employment criteria to define conditions that must be satisfied for persons to be included in or excluded from a group.
- Explicitly include or exclude individuals and other groups, as appropriate.
- Set embedded group priority when you include or exclude other groups. A worker can exist in more than one group, so the priority number assigned to the embedded groups determines the group membership. The lowest number has the highest priority.
- Refresh group membership to evaluate group membership and update the list of members.

Time Entry Profiles

The delivered Projects Time Entry Profile enables your workers to enter project time using the delivered time card fields, layout set, and group. Create custom profiles to use different groups or project layout sets, including the delivered Projects Layout

Set Filtered by Project Team Members layout set. Custom profiles also enable you to configure when workers can create, view, edit, and delete time cards.

Use the Manage Worker Time Entry Setup Profile task in the Time Management work area to create and manage time entry profiles. To save time when creating project costing time entry profiles, search for and duplicate the delivered Projects Time Entry Profile profile.

> **Note:** The priority number determines the profile used to create the time card if a worker is eligible for more than one profile. To ensure that workers who are eligible for multiple profiles use the correct profile, move that profile to the top of the list. This action changes the profile priority to 1, which is the highest priority.

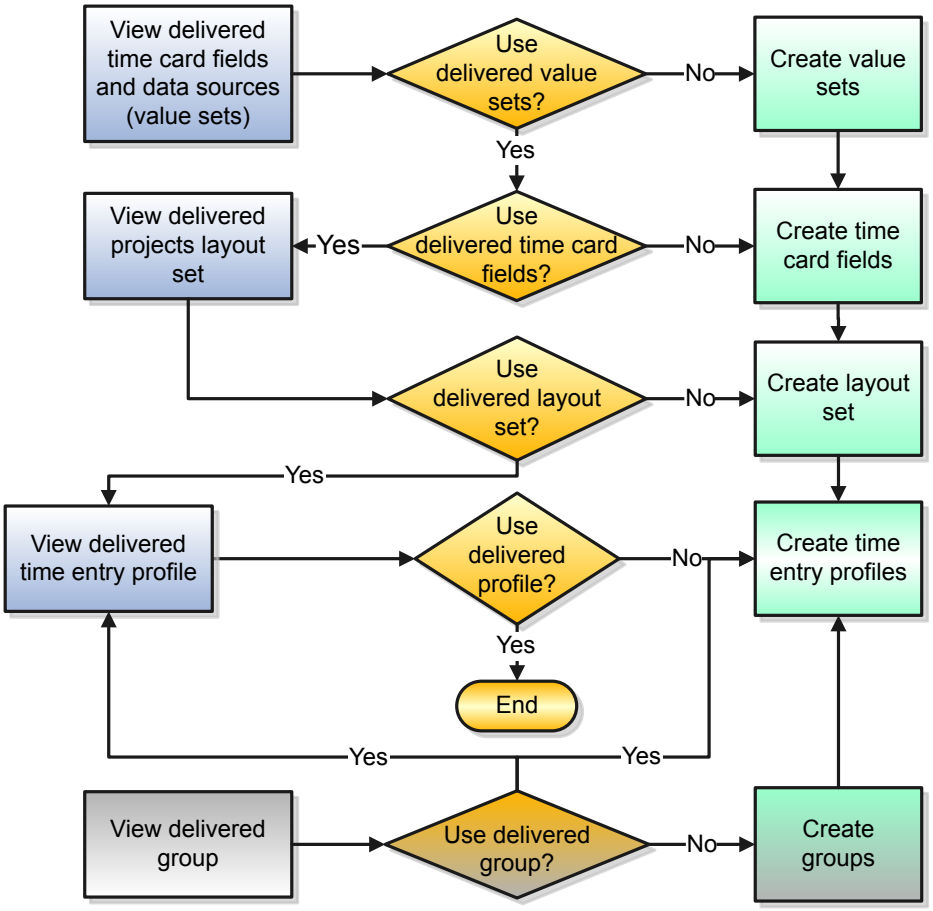
Related Topics

- Defining Single-Attribute Time Card Fields: Procedure
- Managing Layout Sets: Explained
- HCM Group Membership: Explained
- Worker Profile: How It's Derived

Setting Up Combined Time Entry for Project Costing and Global Payroll: Explained

Configure Oracle Fusion Time and Labor to enable permanent and contingent workers to report project costing, payroll, and absence time using the same time card. Reporting time involves creating and configuring time card fields, layouts, groups, and worker time entry profiles. The delivered time repository includes objects already configured to support project-specific time entry, including team membership.

As the following figure shows, your workers can use delivered objects to report project and payroll time, or you can create and use custom objects.



Prerequisite HR and Absence Setup

Set up initial assignment information, work schedule, and payroll relationships for workers in the New Person work area using the Hire a Person task. View and maintain worker assignments and payroll relationships using the following tasks in the Person Management work area:

- Manage Employment
- Manage Work Schedule Assignment
- Manage Payroll Relationships

To report absences from the time card, you must complete the following setup tasks. The Oracle Global Human Resources Cloud Implementing Absence Management guide documents these tasks in detail:

- Configure the absence type units of measure to either hours or calendar days.
- Enable the absence type for time card entry.
- Ensure that the plan balances are up to date.

Also, workers must be enrolled in any absence accrual plans that are associated with the absence type. The Oracle Global Human Resources Cloud Using Absence Management guide documents this task.

Prerequisite Payroll Setup

Complete the following payroll setup tasks, documented in detail in the Oracle Global Human Resources Cloud Implementing Global Payroll guide:

1. Create elements in Global Payroll to store payroll time types in the time card and pass time to payroll or a third-party payroll application for processing.
2. Run the Generate Data Dictionary Time Attributes process.

   Caution: You must run this process after changing time elements, such as adding or deleting elements, editing input values, or editing element eligibility records. Failure to run the process could negatively affect the:
   - Setup of time entry layout components
   - Validation of payroll time types
   - Transfer of time to payroll
3. Confirm that the Time Card Required field is selected for each person who reports time.

Prerequisite Project Costing Setup

Complete the following project setup tasks:

- Classify worker Employment record departments as expenditure organizations.
- Populate the Projects table in Oracle Fusion Project Foundation.

Time Card Fields

The delivered time repository includes primary assignment and project-specific time card fields. It also delivers the multiple-attribute Time Type time card field, which includes payroll time type and absence management time attributes. All fields include data sources for field choice list values. In the Setup and Maintenance work area, use the tasks described in the following table to manage value sets and time card fields.

Task	Description
Manage Value Sets	• View the delivered sets and create custom sets. The data sources for projects-specific field choice lists are value sets.
Manage Time Entry Layout Components	• View the definitions for the relevant delivered fields. • Create single-attribute time card fields based on the delivered fields. To save time when creating fields, search for and duplicate the closest delivered project-specific field. • Finalize the Time Type field, which provides the multiple-attribute definition structure.

Finalize the Time Type field by completing the following steps for each field definition row that you add to the definitions table:

1. Enter the display name value, which is what time reporters see instead of the attribute value or combination of values selected in the row.
2. Select the time attribute values, which the time repository stores.

> **Caution:** If you set Payroll Time Type and Absence Management Type attribute values on the same row, it could result in double payment. The reason for the possible double payment is because payroll and absence values transfer to payroll for processing through different routes.

The following table provides examples of display values for various time attribute values and attribute value combinations. An identifier is required for the third and fourth rows to ensure that the attribute value combinations remain unique. An identifier is optional for the last two rows.

Value Displayed on the Time Card	Expenditure Type Name	Payroll Time Type	Absence Management Type	Identifier
Bereavement			Bereavement	
Vacation			Vacation	
Regular Professional	Billable Time	Regular TL US LDG		Regular Professional
Regular Administrator	Billable Time	Regular TL US LDG		Regular Administrative
Overtime Professional	Professional Overtime	Overtime TL US LDG		
Overtime Administrator	Administrative Overtime	Overtime TL US LDG		

3. (Optional) Edit the **From Date**, which is automatically set to the current date.
   The **Enable** option is also automatically set to Yes. As a result, the list of attribute values includes the display value as of the specified from date.

Layout Set

In the Time Management work area, use the Manage Layout Sets task to:

- Review individual layouts in the delivered Projects and Payroll Layout Set object. The layout set filters choice lists by the worker's primary assignment and includes the absence management time entries consumed by Project Execution Management.
- Create a project layout set using the Project Costing time consumer to edit one or more layouts, enabling project team membership as appropriate.
  - Change the display names of time card fields.
  - Add or delete time card fields.

Groups

The delivered Projects and Payroll Usage group includes all workers with a payroll relationship. To filter the workers in the group, you must create additional groups.

- Use personal and employment criteria to define conditions that must be satisfied for persons to be included in or excluded from a group.
- Explicitly include or exclude individuals and other groups, as appropriate.

- Set embedded group priority when you include or exclude other groups. A worker can exist in more than one group, so the priority number assigned to the embedded groups determines the group membership. The lowest number has the highest priority.
- Refresh group membership to evaluate group membership and update the list of members.

Time Entry Profiles

The delivered Projects and Payroll Time Entry Profile enables your workers to enter project costing, project execution management, and payroll time using delivered time card fields, layout set, and group. Create custom profiles to use different groups or layout sets, including the delivered Projects Layout Set Filtered by Project Team Members layout set. Custom profiles also enable you to configure when workers can create, view, edit, and delete time cards.

Use the Manage Worker Time Entry Setup Profile task in the Time Management work area to create and manage time entry profiles. To save time when creating only project costing and combined project and payroll time entry profiles, search for and duplicate either of the delivered project profiles:

- Projects Time Entry Profile
- Projects and Payroll Time Entry Profile

Note: The priority number determines the profile used to create the time card if a worker is eligible for more than one profile. To ensure that workers who are eligible for multiple profiles use the correct profile, move that profile to the top of the list. This action changes the profile priority to 1, which is the highest priority.

Related Topics

- Defining Multiple-Attribute Time Card Fields: Procedure
- Managing Layout Sets: Explained
- HCM Group Membership: Explained
- Worker Profile: How It's Derived

Delivered Time Card Fields and Data Sources for Project Time Entry: Explained

The delivered time repository includes projects-specific time card fields and data sources to expedite time entry setup for:

- Only project costing
- Project costing, project execution management, and payroll combined

In the Setup and Maintenance work area, use the tasks described in the following table to manage value sets and time card fields.

Task	Description
Manage Value Sets	View the delivered value sets selected as data sources for the delivered time card fields.
Manage Time Card Fields	• View the delivered fields • Finalize the Time Type field

Primary Assignment ID

Project time entry includes the delivered Primary Assignment ID time card field. The data sources use the same List of Assignments private view object, which contains all workers who have a payroll relationship.

Single-Attribute Projects Time Card Fields

The following table lists the delivered single-attribute project costing specific time card fields and the value sets that are the data sources. It also identifies which layout sets use each time card field.

Delivered Projects Time Card Fields	Filtered Time Entry Value Set	Unfiltered Setup Tasks Value Set	Layout Set
Project Number	PJC_ PROJECTS_ NUMBER_ EXPEND_T_V	PJC_ PROJECTS_ NUMBER_ EXPEND_A_T_V	Projects Layout Set
Optional Project Number	PJC_ PROJECTS_ NUMBER_ EXPEND_T_V	PJC_ PROJECTS_ NUMBER_ EXPEND_A_T_V	Projects and Payroll Layout Set
Project Number for Project Team Members	PJC_ PROJECTS_ NUMBER_ TEAMMEMBER_ T_V	PJC_ PROJECTS_ NUMBER_ EXPEND_A_T_V	Projects Layout Set Filtered by Project Team Members
Project Unit	PJC_ PROJECT_ UNIT_T_V	PJC_ PROJECT_ UNIT_T_V	Projects Layout Set Projects Layout Set Filtered by Project Team Members Projects and Payroll Layout Set
Task Number	PJC_ TASKS_ EXPEND_T_V	PJC_ TASKS_ EXPEND_A_T_V	Projects Layout Set
Optional Task Number	PJC_ TASKS_ EXPEND_T_V	PJC_ TASKS_ EXPEND_A_T_V	Projects
Task Number for Project Team Members	ORA_ PJC_ TASKS_ EXPEND_ TEAMMEMBER_ T_V	PJC_ TASKS_ EXPEND_A_T_V	Projects Layout Set Filtered by Project Team Members
Expenditure Type Name	ORA_ PJC_ EXPENDITURE_ TYPES_ NAME_T_V	ORA_ PJC_ EXPENDITURE_ TYPES_ NAME_A_T_V	Projects Layout Set Projects Layout Set Filtered by Project Team Members
Expenditure Type Class	PJC_ EXPEND_ TYPE_ CLASS_T_V	PJC_ EXPEND_ TYPE_ CLASS_T_V	Projects Layout Set Projects Layout Set Filtered by Project Team Members Projects and Payroll Layout Set
Expenditure Type(hidden)	PJC_ EXPENDITURE_ TYPES_ EXPEND_T_V	PJC_ EXPENDITURE_ TYPES_ EXPEND_A_T_V	Projects Layout Set Projects Layout Set Filtered by Project Team Members Projects and Payroll Layout Set

Delivered Projects Time Card Fields	Filtered Time Entry Value Set	Unfiltered Setup Tasks Value Set	Layout Set

Multiple-Attribute Projects and Payroll Time Card Field

The following table lists the time attributes that provide the field definition structure for the multiple-attribute Time Type field. This time card field contains time attributes for both Project Costing and Project Execution Management as well as Global Payroll. It also identifies the corresponding data sources.

Time Attribute	Filtered Time Entry Data Source	Unfiltered Setup Tasks Data Source	Data Sources Type
Expenditure Type Name	ORA_ PJC_ EXPENDITURE_ TYPES_ NAME_T_V	ORA_ PJC_ EXPENDITURE_ TYPES_ NAME_A_T_V	Value set
Payroll Time Type	List of Payroll Time Types for User	List of Payroll Time Types for Administrator	Private view object
Absence Management Type	List of Absence Types for User	List of Absence Types for Administrator	Private view object
Identifier	Default format value set for text	Default format value set for text	Value set

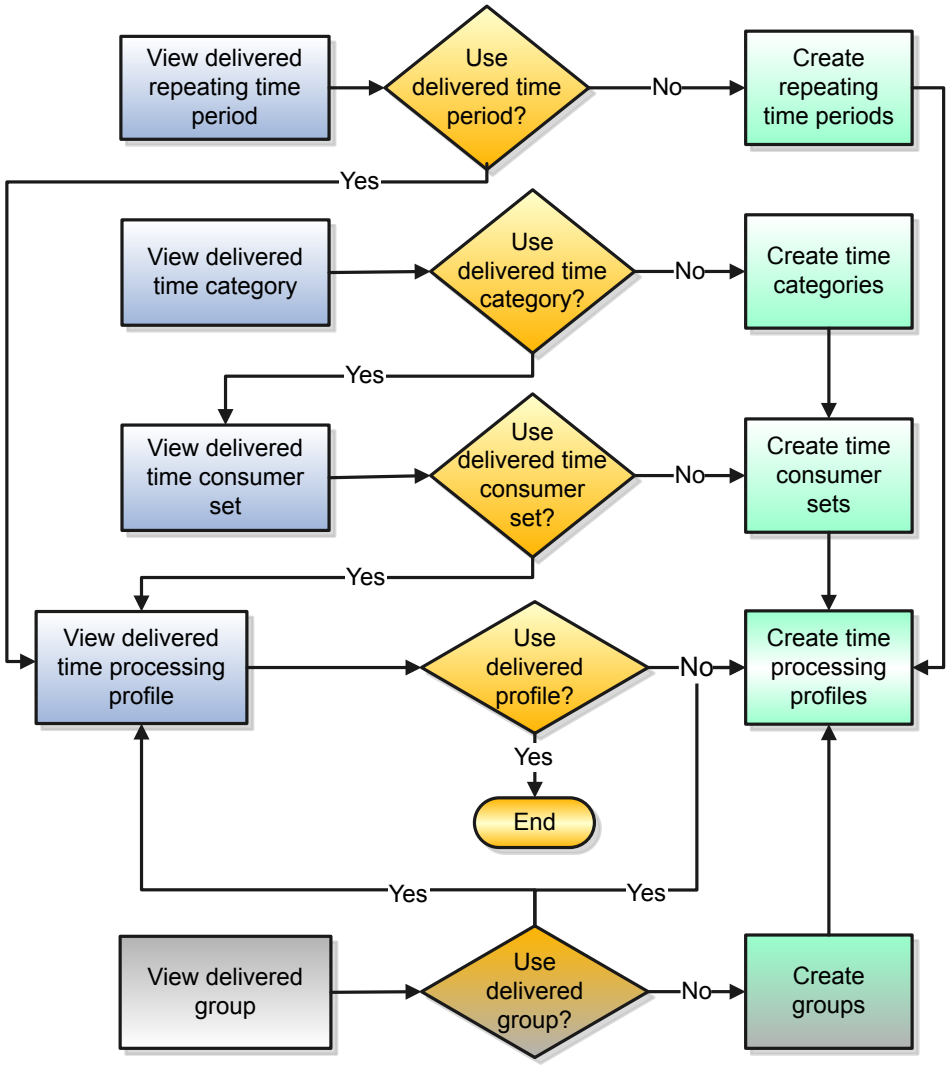
Related Topics

- Time Entry Layout Components: Explained
- Time Entry Layout Component Data Sources: Explained

Setting Up Processing of Project Time Cards: Explained

Configure Oracle Fusion Time and Labor to process only project costing or combined project and payroll time reported by permanent and contingent workers. Time processing involves creating and configuring repeating periods, time categories, consumer sets, groups, and time processing profiles. The delivered time repository includes objects already configured to support project-specific time processing.

As the following figure shows, you can use the delivered objects to process reported project time, or you can create custom objects.



Repeating Time Periods

You can use the following two delivered repeating time periods to process project time:

- Projects Weekly Starting Monday
- Projects and Payroll Weekly Starting Monday

In the Setup and Maintenance work area, use the Manage Repeating Time Periods task to:

- View the configuration of the delivered periods. Delivered time consumer sets and processing profiles use them to identify approval periods and time card periods respectively.
- Create other period definitions that continually generate periods.

Time Category

In the Setup and Maintenance work area, use the Manage Time Categories task to:

- View the delivered All Project Entries category. This category contains all time entries reported with the Project, Task, and Expenditure Type time attributes.
- Create other time categories by specifying the conditions that the time entry must satisfy to belong to the category. Project Execution Management uses the delivered All Absence Entries time category.

Time Consumer Set

The two time consumer sets delivered that you can use to processing project time are Projects Only and Projects and Payroll. In the Setup and Maintenance work area, use the Manage Time Consumer Sets task to:

- View the configuration of the delivered sets. The Projects and Payroll time consumer set includes configurations for both Project Costing and Project Execution Management.
- Create time consumer sets to specify different time categories, approval periods, validation rules, and transfer rules for time consuming applications.

Groups

The delivered Projects Usage group includes all workers with a payroll relationship. To filter the workers in the group, create additional groups. In the Setup and Maintenance work area, use the Manage HCM Groups task to create permanent and contingent worker groups.

- Use personal and employment criteria to define conditions that must be satisfied for persons to be included in or excluded from a group.
- Explicitly include or exclude individuals and other groups, as appropriate.
- Set embedded group priority when you include or exclude other groups. A worker can exist in more than one group, so the priority number assigned to the embedded groups determines the group membership. The lowest number has the highest priority.
- Refresh group membership to evaluate group membership and update the list of members.

Time Processing Profiles

The two delivered project-specific processing profiles are Projects Time Processing Profile and Projects and Payroll Time Processing Profile. The Projects profile processes time for only Project Costing. The Projects and Payroll profile processes time for both Project Costing and Project Execution Management as well as Global Payroll. In the Time Management work area, use the tasks described in the following table to manage rule templates, rules, rule sets, and processing profiles.

Task	Description
• Manage Rule Templates • Manage Rules • Manage Rule Sets	The delivered profiles don't include rule sets because the delivered time repository doesn't include rules or rule sets. Use delivered rule templates or your custom templates to create any rules and rule sets that you want to include for time processing.
Manage Worker Time Processing Setup Profiles	View the delivered profiles, which process reported time using delivered time periods, time consumer sets, and groups. Create other processing profiles that include time entry and time calculation rule sets. The priority number determines the profile used to process the time card if a worker is eligible for more than one profile. To ensure that workers who are eligible for multiple profiles use the correct

Task	Description
	profile, move that profile to the top of the list. This action changes the profile priority to 1, which is the highest priority. To save time when creating profiles, search for and duplicate the closest delivered project-specific profile.

Related Topics

- Repeating Time Period: How It's Calculated
- Using Time Category Condition Components: Explained
- Creating Time Consumer Sets: Points to Consider
- HCM Group Membership: Explained
- Worker Profile: How It's Derived

16 Time Card Approvals

Overview

Route payroll-related time entries or project-related time entries to the appropriate approvers using delivered approval workflow tasks. Typically, you route payroll-related time to the line manager and project-related time to a project manager. You can customize these tasks to satisfy your business requirements.

Important aspects of time card approval flow include:

- Approval periods
- Approval groups
- Approval tasks and rules
- Approval flow

Approval Periods

Use the Manage Repeating Time Periods task to define approval periods, for each time consumer. The approval period is the same as the time card period. When the approval period is met, the time card is ready to be routed for approval.

Approval Groups

Approval groups are defined lists of approvers used to define the approval routing within the approval rules of the approval task. Configure approval groups using the BPM worklist.

Time Card Approval Tasks and Rules

Approval tasks define event-driven configurations and approval rules define configurations that determine the routing. View and modify the time card approval tasks and rules, using either of these tasks in the Setup and Maintenance work area:

- Manage Task Configurations for Human Capital Management
- Manage Approval Transactions for Human Capital Management

This table lists the predefined approval tasks and task rules for payroll and project costing time entry approvals:

Delivered Approval Task and Rule	Task and Rule Description	Additional Routing
Payroll Time Card Approval	Routes payroll time entries that contain payroll time types to the line manager if the total hours for a time card exceed 40 hours.	Automatically approve time entries totaling less than 40 hours
Project Time Card Approval	Routes time entries that contain a reported project, task, and expenditure type to the appropriate project manager.	If no project manager exists, the time entries route to the worker's line manager.

Approval Flow

These points summarize the normal approval flow:

- A time card is approved when all approvers approve the time card.
- A time card is rejected when any of the approvers reject the time card.
- The worker receives notification when the time card is approved or rejected.

You can define approval rules to override this normal approval flow. Use the Manage Worker Time Entry Profiles task to control when the worker can update the time card during the approval process. This task is available in the Setup and Maintenance work area.

Related Topics

- Repeating Time Periods: Explained

Defining Approvals for Human Capital Management: Explained

You can manage approval policies using the tasks Manage Approval Transactions for Human Capital Management and Manage Task Configurations for Human Capital Management.

Managing Approval Transactions

Using the Manage Approval Transactions page, you can configure approval policies for many HCM tasks, including, but not limited to, the following:

- Hire
- Promote
- Transfer
- Terminate

You can select approvers for a task, arrange approvers in the required sequence, define approval rules for each approver, and configure conditions for each rule.

Managing Task Configurations

The Manage Task Configurations for Human Capital Management task navigates to the BPM Worklist. You can use the BPM Worklist to review and configure approval policies for HCM tasks; however, we recommend that you use the Manage Approval Transactions for Human Capital Management task. Using either UI, you can configure the following approval details:

- When to issue approval notification
- Who can access task contents
- What actions are available to approvers
- What to do when errors occur during approval routing

- When tasks expire or when should tasks be escalated
- When approvers can add additional approvers

Approval Flow

Approval Management configuration options for Oracle Fusion Human Capital Management determine most of the actions that are available to the participants in the approval process. For example:

- Either approver can reject the transaction. By default, the approval process stops when the transaction is rejected.
- The second-level manager can push the transaction back to the first-level manager, who then has a second opportunity to review the transaction and either approve or reject it, as appropriate.
- Insertion of approvers in the approval list is permitted.
- Approvers can delegate their approval responsibilities to other approvers.

If you change the default settings of the Approval Management configuration options for a task, then different actions or action outcomes become available to this approval flow.

Managing HCM Approval Transactions: Explained

To manage approval transactions, use the Manage Approval Transactions for Human Capital Management task in the Setup and Maintenance work area.

You can search for approval transactions and perform the following actions on a transaction:

- Configure approval rules
- View the failed and pending processes
- Bypass approvals

Approval Rules Configuration

To view or configure the approval rules for a transaction, search for the transaction and click the Configure button in the Rules column in the search results. You can edit and save the approval rules in the Manage Approval Rules interface.

Failed and Pending Processes

An approval process may fail due to various reasons, for example, if there is a network or database outage or an issue in the approval rules setup. An approval process may also remain in a pending state waiting for approval. The Manage Approval Transactions page provides you information on whether a process has failed or is pending, and how many instances of the process have failed or are pending. You can drill down to each instance and view further details. For failed processes, you can view the error message generated in the application, and for pending processes, you can view the list of approvers. You can either withdraw a failed process or configure the approval rules and resubmit the process. If you withdraw the process, then the process is canceled and the user can begin the flow again.

Bypassing Approvals

The application automatically initiates the approval process upon submitting a transaction, if the transaction has approvals configured. You can override this behavior by enabling the Bypass Approvals option for the transaction. If you bypass approval for a transaction, the transaction is committed immediately upon submit and is not routed for approval.

Note:

When you submit a termination transaction, you can select the Deferred processing option to postpone processing the transaction until the termination date. This option is typically used in future-dated terminations. However, if you enable Bypass Approvals for the termination transaction, the Deferred processing option will not be available for selection.

Related Topics

- Hiding Terminations: Critical Choices

The Manager Hierarchy: How It's Maintained

In many situations, a person's manager hierarchy must be readily available. For example, a person's line manager may be required during an approval process, and business intelligence reports often retrieve data based on a manager hierarchy. This topic describes how the manager hierarchy is maintained.

How the Manager Hierarchy Is Maintained

A person's manager hierarchy could be derived from active data tables, but the impact of that approach on performance is unpredictable. Therefore, the complete manager hierarchy for each person is extracted from data tables and stored in a separate manager hierarchy table. This table is known as the denormalized manager hierarchy. The denormalized manager hierarchy ensures that a person's manager hierarchy is both easily accessible and up to date.

Whenever a change is made to a person's manager hierarchy through the application pages, the change is reflected automatically in the denormalized manager hierarchy table. You use the Refresh Manager Hierarchy process to populate the denormalized manager hierarchy table when person records are migrated from other applications.

You run the Refresh Manager Hierarchy process in the Scheduled Processes work area. To run the process, you must have the Human Resource Specialist job role. The process has no default schedule. You can run the process occasionally to perform a complete refresh of the denormalized manager hierarchy. Alternatively, you can specify a schedule to run the process at regular intervals. Refresh Manager Hierarchy processes all types of manager hierarchies.

In addition to performing full refreshes of the manager hierarchy, you can perform incremental refreshes. With this approach, you refresh the hierarchy based on manager changes occurring in the previous N days. Schedule a full refresh every month or quarter and an incremental refresh every day or week, for example.

Approval Management Configuration Options for Oracle Fusion Human Capital Management: Explained

Approval Management has the following default configuration options for all applications in the Oracle Fusion Human Capital Management family.

Configuration Option	Default Value	Effect of Default Value
Ad hoc insertion of approvers	True	Ad hoc insertion of approvers in the approval list is allowed. Users who add approvers may also modify or remove the approvers that they add.
Allow delegate	True	Approvers can delegate their approval responsibilities to other users. One approver replaces another, but the approver list is otherwise unaltered.
Allow push back	True	An approver can push the transaction back to the previous approver, who thereby has a second opportunity to review the transaction.
Allow reassign	True	Any approver can reassign the approval to a different approver. The approval list is recalculated based on the new approver.
Allow request information	True	Approvers can request more information from another approver or the person who submitted the transaction.
Allow self-approval	False	The person who submits the transaction can't approve it.
Allow withdraw	True	The requester or an administrator can withdraw a transaction while the approval process is incomplete. Approvers who have already approved are notified of the withdrawal. The transaction is removed from the worklists of approvers who haven't yet approved.
On error notify	Human Resources Application Administrator	A Human Resources Application Administrator is notified automatically when an error occurs.
Period before task expires	None	Approval tasks don't expire.
Period before task escalates	None	Approval tasks aren't escalated to other approvers.
Escalated approver	None	Approval tasks aren't escalated to other approvers.
Repeated approver frequency	Once per approval	An approver receives one notification per transaction, even when the approver appears multiple times in the approver list.
Re-evaluate approver list	True	The approver list is regenerated after every response.

Configuration Option	Default Value	Effect of Default Value
Rejection outcome	Stop all	When an approver rejects a transaction, the approval process stops and the transaction is canceled.

Managing Approval Rules: Explained

Use the Manage Approval Transactions for Human Capital Management task to configure approval policies for HCM tasks such as Hire or Promote. This interface works in conjunction with the BPM Worklist, but enables users to identify approvers and configure approval rules easily for some frequently performed HCM tasks.

Configuring Approval Policies

For a selected task, you can configure the approval policy by arranging approvers in the required order, defining approval rules for each approver, and submitting the approval policy. The approval policy takes effect immediately and supersedes the current approval policy for the selected task; however, in-progress approvals complete as expected and do not switch to the new policy.

Approvers

You can add the following types of approvers:

- Management Hierarchy or Supervisory Hierarchy
- Users
- Approval groups, which you define in BPM Worklist
- Position hierarchy
- Representatives, who are workers with assigned responsibilities, for example Benefits Representative
- Application role
- Job-level based line manager hierarchy
- Self auto approve

When to Use the BPM Worklist

Use the BPM Worklist to:

- Configure notifications, including when notifications are issued
- Configure process details, such as expiration and escalation policies
- Define approval groups
- Define approval rules in advanced mode

For any HCM tasks that are not available in the Manage Approval Transactions interface, you can use the BPM Worklist to configure all aspects of approvals. To configure in the BPM Worklist, use the Manage Task Configurations for Human Capital Management task.

Approver Types: Explained

You can include any number of approvers of various types in your approval sequence by dragging and dropping them into the approval flow. This topic explains each of the approver types.

Management Hierarchy or Supervisory Hierarchy

You can include the following predefined types of managers in your approval sequence:

- Line manager
- Resource manager
- Project manager
- Regional manager

If your enterprise defines additional types of managers, then they appear automatically in the Approvers section of the Manage Approval Rules page. You can include them in the approval sequence.

Users

You can include one or more Oracle Fusion Applications users in the approval sequence.

Approval Groups

You create approval groups using the BPM Worklist. When defining your approval sequence, you can enter the names of one or more existing approval groups.

Position Hierarchy

If you include a position hierarchy in your approval sequence, then position holders are invited to approve the transaction. For positions with more than one position holder, the transaction is approved by the first position holder to approve.

Responsibility Holders

You can include holders of the following predefined responsibilities in your approval sequence:

- Human Resources Representative
- Benefits Representative
- Union Representative
- Payroll Representative

If your enterprise defines additional responsibility types, then they appear automatically in the Approvers section of the Manage Approval Rules page. You can include them in the approval sequence.

Human Resource (HR) Specialists assign responsibilities to workers using the Manage Areas of Responsibility task. A worker becomes an approver for a transaction if he or she has that responsibility for the transaction subject. For example, if you specify the Benefits Representative as an approver for a promotion, then the Benefits Representative of the worker who is being promoted is invited to approve the promotion.

Note: If you use a responsibility holder, then ensure that responsibility holders are already defined in the application. For example, if you include a HR representative as an approver for an employee process, then all employees must have HR representatives assigned to them.

Application Roles

You can use any of the existing duty roles to include in your approval sequence. If your enterprise defines duty roles for security purposes, then you can enter the duty role to include them in the approval sequence. Users with job or data roles that inherit the duty role become transaction approvers.

Job Level

You can include a job level in your approval sequence.

Job level routings are based on the manager hierarchy defined in Oracle Fusion Human Capital Management. The approval list is generated based on the starting level specified in a rule and continues until an approver with a sufficient job level is found. The approval flow uses the job level defined in the Manage Jobs interface.

Related Topics

- Areas of Responsibility: Explained

HCM Approval Rules: Explained

Using the Manage Approval Transactions for Human Capital Management task, you can specify one or more approval rules for each task. To create more than one approval rule, you either add a rule or duplicate a selected rule and edit it as appropriate. When you create multiple approval rules for a task, they are evaluated in the order of the rule's priorities. When the priorities are the same for different rules, they are executed in an undefined order, sequentially.

Approval rules comprise one or more IF statements and one or more THEN statements.

IF Statements (Conditions)

IF statements are tests that determine when an approval rule takes effect. For example, you could specify that an approval rule for a promotion takes effect when the worker's department is Sales or the worker's job is Area Manager.

You can specify multiple IF statements. If you join multiple statements with "AND" operators, then all statements must be true before the approval rule takes effect. If you join multiple statements with "OR" operators, then at least one of the statements must be true before the approval rule takes effect.

THEN Statements (Actions)

THEN statements specify:

- Who the approvers are
- What actions approvers can take

The following table summarizes the approval actions.

Approval Action	Description
Approval required	Notifications are issued to the identified approvers and their response is required.
Automatic approval	No notifications are issued to the identified approvers. The transaction is either approved or rejected automatically, and the approvers are recorded as having approved or rejected the transaction. The value of the **Set Outcome To** attribute for manager hierarchies determines whether the transaction is approved or rejected.
FYI only	Notifications are issued to the identified approvers, but no response is expected.

Management Hierarchy Approval-Rule Attributes

When you define approval policies using the Manage Approval Transactions for Human Capital Management task, you can create one or more approval rules for manager hierarchies of predefined and locally defined types. This topic describes the values that you can specify in the THEN statements of approval rules for manager hierarchies.

Attributes

The following table summarizes the attributes of the manager-hierarchy approval rules and their default values.

Attribute Name	Description	Values	Default Value
Action Type	Allows users to choose from Approval required (participants need to act on the transaction), Information only (participants get FYI notifications), and Automatic approval (participants do not need to act, transaction is auto approved).	• Approval required • Information only • Automatic approval	Approval required
Route Using	Allows users to choose which manager to route through.	• Resource manager • Line manager • Project manager • Regional manager • Custom Manager Types	Line Manager
Approval Chain of	Allows users to choose which approval chain to use.	• Requestor • User • Worker • Worker's Current Line Manager • Worker's Proposed Line Manager	Requestor
Start With Changed from Initial Approver	• Identifies both the first approver and the manager hierarchy. By default, approval requests are sent to	• Manager • Employee • Second Level Manager	Manager

Attribute Name	Description	Values	Default Value
	the requester's first-level manager, and the manager hierarchy is the one associated with the requester's primary assignment. The requester is the worker who submits the transaction. • If you select a user in Approval Chain of, then the manager hierarchy is the one associated with that user's primary assignment. For example, when promoting one of your direct reports you could select as initial approver a human resource (HR) specialist who is outside your manager hierarchy; approval requests from this rule would be directed to the manager hierarchy of the HR specialist's primary assignment. • If you select a user who is not a manager, then the rule fails.		
Number of Levels	• Controls how far up the selected manager hierarchy approval requests are sent. The first level is based on the **Start With** value. • Approval routing stops when either the number of levels or the topmost approver is reached, whichever occurs first.	• Worker's Current Line Manager • 1 or higher	1
Top Approver	• Specifies an approver above whom approvals are not routed. • Approval routing stops when either the number of levels or the topmost approver is reached, whichever occurs first. For the top approver value, you can select: • A different manager (first-level or second-level, as appropriate). • A user who is a manager from the same manager	• Worker • Worker's Proposed Line Manager • Requestor • User • Manager • Second Level Manager	• Manager

Attribute Name	Description	Values	Default Value
	hierarchy as the initial approver. If you select a user who is not a manager or is from a different manager hierarchy from the initial approver, then the topmost approver is not found. In this case, routing of approvals stops when the number-of-levels value is reached.		
Set Outcome ToThis only renders when Action Type is set to Automatic approval.	Specifies the outcome for automatic approvals. If you set this value to **Approve**, then all identified approvers are recorded as having approved the transaction, even though the approval is automatic. Similarly, if you set this value to **Reject**, then all identified approvers are recorded as having rejected the transaction.	• Approve • Reject	None

Position Hierarchy Approval-Rule Attributes

When you define approval policies using the Manage Approval Transactions for Human Capital Management task, you can create one or more approval rules for a specified position hierarchy.

Attributes

The following table summarizes the attributes of the position-hierarchy approval rules and their default values.

Attribute Name	Description	Values	Default Value
Action Type	Allows users to choose from Approval required (participants need to act on the transaction), Information only (participants get FYI notifications), and Automatic approval (participants do not need to act, transaction is auto approved).	• Approval required • Information only • Automatic approval	Approval required
Job Level	• The number of job levels. Approvals are routed to approvers between the initial and topmost approvers in the position hierarchy based on this value.	Minimum and maximum values relative to: • Initial approver • Requester	At most 1 relative to initial approver At least 1 relative to initial approver

Attribute Name	Description	Values	Default Value
	• You can specify the job levels as absolute values (for example, a minimum of 2 and a maximum of 4). Alternatively, you can specify the values relative to either the initial approver or the requester. The requester is the person who submits the transaction. • Approval routing stops when either the number of job levels or the topmost approver is reached, whichever is sooner.	Absolute minimum and maximum values	
Position Hierarchy	• The name of the position hierarchy • You can select from all position hierarchies in the enterprise	All position hierarchies in the enterprise	None
Starting PositionChanged from Initial Approver	• The position of the first approver • The approval notification is sent to all workers who have the position, and the transaction is approved by the first worker to approve	All positions in the selected position hierarchy	None
Job Level	• The number of job levels. Approvals are routed to approvers between the initial and topmost approvers in the position hierarchy based on this value. • You can specify the job levels as absolute values (for example, a minimum of 2 and a maximum of 4). Alternatively, you can specify the values relative to either the initial approver or the requester. The requester is the person who submits the transaction. • Approval routing stops when either the number of job levels or the topmost approver is reached, whichever is sooner.	Minimum and maximum values relative to: • Initial approver • Requester Absolute minimum and maximum values	At most 1 relative to initial approver At least 1 relative to initial approver
Top Position	• The position of the topmost approver • The approval notification is sent to all workers who	All positions in the selected position hierarchy	None

Attribute Name	Description	Values	Default Value
	have the position, and the transaction is approved by the first worker to approve • Approval routing stops when either the number of levels or the topmost approver is reached, whichever is sooner		
Include	Allows users to choose which approvers to include.	• All Approvers • First and last approvers • Last approver only	All approvers

Defining an HCM Approval Policy: Worked Example

This example shows how to define an approval policy for employee hires in the Sales department using the Manage Approval Transactions for Human Capital Management task.

If the Department of the new hire is Sales, approvals should route to the first level line manager of the requester and FYI only to the HR Representative of the worker.

If the Department of the new hire is Finance, approvals should route to the second level line manager of the requester and FYI only to the HR Representative of the worker.

The following table summarizes key decisions for this scenario.

Decisions to Consider	This Example
Who will approve employee hire requests?	• Managers in the Sales department. • The human resources representative of any new hire doesn't need to approve but is informed of the hire after the relevant manager has approved.
Which approval actions must approvers take?	• Managers must approve the hire. • The human resources representative receives an approval notification for all hires, but no response is needed.
Can the required level of management approval vary?	The required level of approval varies with the grade of the new hire. The requester's: • First-level manager approves the trainee grades 1 through 3 • Second-level manager approves the professional grades 4 and above

Summary of the Tasks

To define the approval policy in this example, you:

1. Navigate to the Manage Approval Rules: Hire an Employee page.
2. Assemble the approval sequence.
3. Define the approval rule for trainee grades.
4. Define the approval rule for professional grades.
5. Define the approval rule for all grades.

Navigating to the Manage Approval Rules: Hire an Employee Page

1. In the Setup and Maintenance work area, click the Search button and search for the task Manage Approval Transactions for Human Capital Management.
2. In the Search Results region, click the task name.
3. On the Manage Approval Transactions page, enter the search term Hire in the **Name** field.
4. Click **Search**.
5. In the Search Results region, click the Configure button in the Rules column for the transaction Hire an Employee.

Assembling the Approval Sequence

1. On the Manage Approval Rules: Hire an Employee page, confirm that an entry for Line Manager appears in the Approval Sequence region.
2. In the Approvers region, click the **Add** icon on the Human Resources Representative entry to add it to the right of the Line Manager entry in the Approval Sequence region.

Defining the Approval Rule for Trainee Grades

1. In the Approval Sequence region, select the Line Manager entry.
2. Click the **Edit** icon to edit the rule settings.
3. In the **Name** field of the **Edit Rule Settings** window, enter the rule name SalesHiresTraineeGrades. (The name can't contain spaces.)
4. In the IF statement for the SalesHiresTraineeGrades rule, click the **Add** icon to the right of the first condition to create an additional condition.
5. Complete the fields of the two condition statements as shown in this table.

Attribute Name	Operator	Attribute Value	And or Or
Department	==	Sales	and
Grade	<=	3	

6. In the THEN statement for the SalesHiresTraineeGrades rule, complete the fields as shown in this table.

Field	Value
Action	Approval required
Route Using	Line Manager
Approval Chain of	Requestor
Start with	Manager
Number of Levels	1
Top Approver	Manager

Defining the Approval Rule for Professional Grades

1. Click **Add Rule**.
2. Click the **Edit** icon to edit the rule settings.
3. In the **Name** field of the **Edit Rule Settings** window, enter the rule name SalesHiresProfessionalGrades.
4. In the IF statement for the SalesHiresProfessionalGrades rule, click the **Add** icon to the right of the first condition twice to create two additional conditions.
5. Complete the fields of the three condition statements as shown in this table.

Attribute Name	Operator	Attribute Value	And or Or
Department	==	Sales	and
Grade	>	3	and
Grade	<=	6	

6. In the THEN statement for the SalesHiresProfessionalGrades rule, complete the fields as shown in this table.

Field	Value
Action	Approval required
Route Using	Line manager
Approval Chain of	Requester
Start with	Second Level Manager
Number of Levels	1

Field	Value
Top Approver	Second Level Manager

Defining the Approval Rule for All Grades

1. In the Approval Sequence region, select the Human Resources Representative entry.
2. In the Rules region for the new rule, click the **Edit** icon to edit the rule settings.
3. In the **Name** field of the **Edit Rule Settings** window, enter the rule name SalesHiresAll Grades.
4. In the IF statement for the SalesHiresAllGrades rule, complete the fields of the condition statement as shown in this table.

Attribute Name	Operator	Attribute Value
Department	==	Sales

5. In the THEN statement of the SalesHiresAllGrades rule, complete the fields as shown in this table.

Field	Value
Action	Information Only
Representative Type	Human Resource Representative
Representative of	Worker's Proposed Representative

6. Click Submit.

17 Time Repository Data Extract Considerations

Using HCM Extract: Points to Consider

Extract time repository transaction data to send to third parties, such as a third-party payroll provider. The data available to extract is similar to the data transferred to project costing and payroll time consumers, including hidden derived values and custom time attributes. Extracted data can include schedule information, person information, dates, and assignment entries that exist in the time repository, for all time entries.

Using the Manage Extract Definitions task in the Data Exchange work area, configure the data included in the extract by specifying:

- Extract type
- Data groups and records, including attributes
- Filter criteria

Extract Type

To extract time card data, select **HR Archive** as the extract type.

Data Groups and Records

When creating data groups for the extract, select user entities that start with **`HWM_EXT_`**. User entities are available for:

- Calculated time information
- Reported time information
- Time card status

For reported time and calculated time, you can build the data group hierarchy by selecting user entities at various levels of time card details. The following table lists and describes the available levels for reported and calculated time.

Level	Description
Time card header	A grouping of hours for a person over the time card period
Time card header attribute	Additional information that applies to the entire time card period, such as a comment explaining why it was submitted late
Time card day	A 24-hour period within the time card, such as Monday, Tuesday, or Wednesday
Time card day attribute	Additional information that applies to a 24-hour period within the time card, such as a comment applicable to all hours for Monday
Time card entry	A range of time defined by start and stop times or a time duration on the time card

Level	Description
Time card entry attribute	Additional information that applies to a time entry, such as the project name, payroll time type, department, and so on

Filter Criteria

You can use available database items to create filter conditions that refine the contents of the extract. Examples of available filter criteria include:

- Status values, such as time card status, approval status, or transfer status
- Time consumer
- Selected time attribute values, including custom time attributes
- Calculated time, reported time, or both types of time entries
- Person name or assignment
- HR attributes that you can use to identify the person or assignment values, such as Department, Job, Position, and Manager. For example, all persons with Job = X
- Date and date ranges for example, effective date minus time card start date is less than 90 days

Related Topics

- Extract Components: How They Work Together
- Defining an Extract: Worked Example

Glossary

accrual term

Period of time, often one year, for which accruals are calculated.

application event

The time event recognized by the Oracle Fusion Time and Labor application. Event mappings link supplier device events, such as Meal Out, with application events, such as Out and In, to create time card entries.

assignment

A set of information, including job, position, pay, compensation, managers, working hours, and work location, that defines a worker's or nonworker's role in a legal employer.

ceiling step

Highest step within a grade that a worker may progress to.

data sources

The list of valid time attribute values for time entry and setup tasks. These lists are supplied by Absence Management for absence attributes, Global Payroll for payroll time type attributes, and Project Costing for project time attributes.

date-effective object

An object with a change history. Professional users can retrieve the object as of a current, past, or future date.

effective as-of date

A date used for filtering search results for date-effective objects. For objects that match the search criteria, the search results include the physical record in effect on the specified date.

effective end date

For a date-effective object, the end date of a physical record in the object's history. A physical record is available to transactions between its effective start and end dates.

effective start date

For a date-effective object, the start date of a physical record in the object's history. A physical record is available to transactions between its effective start and end dates.

element

Component in the calculation of a person's pay. An element may represent a compensation or benefit type, such as salary, wages, stock purchase plans, pension contributions, and medical insurance.

element classification

Provides various element controls, such as the processing order, balances feeds, costing, and taxation. Oracle predefines primary element classifications and some secondary classifications. You can create other secondary classifications.

enterprise

An organization with one or more legal entities under common control.

export data

Data sent to the time collection device to complete each time device event transaction. Completed transactions include all of the information that Time and Labor requires to process the time event. Export data includes person information, such as first and last name and badge IDs, and other information, such as payroll time type and published worker schedules.

grace period

Number of minutes that workers can start or stop shifts early or late, without incurring attendance violations. Example: The grace period is 15 minutes and shift start and end times are 8:00 and 17:00, respectively. The ranges of valid start and stop times are 7:45 to 8:15 and 16:45 to 17:15.

grade

A component of the employment model that defines the level of compensation for a worker.

job

A generic role that is independent of any single department or location. For example, the jobs Manager and Consultant can occur in many departments.

layout

A collection of configurations that determine the time card fields displayed and the arrangement of the various time entry options on the time card pages.

layout set

A set of layout configurations that determine the appearance of the time card and calendar when reporting, reviewing, or viewing time.

logical record

One or more physical records that constitute a date-effective object.

offering

A comprehensive grouping of business functions, such as Sales or Product Management, that is delivered as a unit to support one or more business processes.

payroll relationship

Defines an association between a person and a payroll statutory unit based on payroll calculation and reporting requirements.

personal payment method

Method of payment to a person for a particular payroll. When an administrator assigns a person to a new payroll, payments are made using the default organization payment method for the new payroll until a personal payment method exists.

physical record

A single record, with effective start and end dates, in the history of a date-effective object. Each physical record is a row in a database table.

position

A specific occurrence of one job that is fixed within one department. It is also often restricted to one location. For example, the position Finance Manager is an instance of the job Manager in the Finance Department.

repeating time period

A daily, weekly, or monthly time period definition that continually produces time periods for use when reporting and approving time, and accruing absences. Example: Weekly periods starting on Sundays.

rule template

A reusable configuration that simplifies creating rules from formulas. The template specifies exactly which parameters the associated formula requires and the output value or message that the formula returns.

supplier device event

The time event recognized by the time collection device supplier, such as Clock In or Meal Out. Event mappings link supplier device events with application events, such as In or Out, and time attributes to create time card entries.

time attribute

A qualifier associated with a time event or time entry that reflects how the time is paid, costed, billed, or recorded as an information entry. For example, the payroll time type attribute indicates whether time for payroll consumers should be paid as Regular, Overtime, or Vacation.

time card field

Container for one or more time attributes with valid values and specifications for displaying the attributes on the time card.

time category

A defined classification of the types of time entries, such as worked time or scheduled time, that can be referenced in rules, time summaries, and analytics. Time categories can contain other time categories. For example, the Absence time category contains Sickness and Vacation time categories.

time collection device

A hardware device or software method used to collect time reporting data. Devices include true swipe clocks, a computer or tablet, a kiosk with a touch screen, a cash register that collects in and out times, a badge reader, and a biometric recognition device.

time consumer

An application that uses calculated time data for processing. For example, a payroll consumer uses reported time to calculate worker pay and a project costing consumer uses reported time to bill customers for a given project.

time consumer set

Specifies approval periods, time category and validation actions, and time transfer rules for each time consumer. A consumer set might be for either a payroll or project costing time consumer, or both.

time device processing profile

A collection of time device event mapping, device rule, and submission rule sets as well as export data. Assign a time device processing profile to all workers who use the same time collection device to report time events.

time entry

A range expressed as start and stop times or a duration in hours, along with the associated attribution that details the kind of work performed. Examples: 9 am to 5 pm working on Project A or 8 hours of Regular work.

time event

A single In or Out time transaction reported using a time collection device.

work relationship

An association between a person and a legal employer, where the worker type determines whether the relationship is a nonworker, contingent worker, or employee work relationship.

worker time entry profile

A collection of layout rules and specifications that determine the appearance of the time card and control when workers can take action on their time card.

worker time processing profile

A collection of the time card period and the time entry and time calculation rule sets for both the worker and the time consumer.