Oracle

Global Human Resources Cloud
Implementing Time and Labor

Release 13 (update 18B)
Contents

Preface

1 Time and Labor Implementation and Effective Dating Overview 1
   Implementing Time and Labor: Overview 1
   Date-Effective Objects in Scheduling and Time and Labor: Explained 2
   Effective Date FAQs 3
   Managing an Implementation 3

2 Time Entry Configurations Overview 5
   Configuring Time Entry Objects: Overview 5
   Change Audit of Time Cards: Explained 8
   Components Composing a Time Entry Profile: How They Work Together 10
   How Many Time Entry Objects to Create: Points to Consider 11

3 Data Dictionary: Time Attributes and Custom Time Attributes 17
   Managing Time Attributes and the Data Dictionary: Explained 17
   Units of Measure for Time and Labor: Explained 18

4 Time Attribute and Custom Time Attribute Configuration Procedures 21
   Creating Nonrecurring Earnings Elements for Time Entries: Procedure 21
   Creating Calculation Components for Standard Category Elements: Procedure 25
   Generating Time Attributes and Time Card Fields for Your Elements: Procedure 27
   Creating the Units-Based Meals Taken Element for Time Entries: Worked Example 28
   Creating Custom Time Attributes: Procedure 31

5 Layout Components for Time Entry: Overview 35
   Layout Components for Time Entry: Explained 35
   Data Sources for Layout Components: Explained 37
   Availability of Dependent Fields for Time Entry: Critical Choices 38
   Time Entry Layout Components FAQ 40
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Layout Components for Time Entry: Procedures</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Defining Single-Attribute Fields for Time Entry: Procedure</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Defining Multiple-Attribute Fields for Time Entry: Procedure</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Defining Buttons for Web Clock: Procedure</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Defining Dependent Fields for Time Entry: Procedure</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Configuring Dependent Fields for US Location Overrides: Procedure</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Configuring Dependent Fields for Labor Costing Overrides: Procedure</td>
<td>55</td>
</tr>
<tr>
<td>7</td>
<td>Layout Components for Time Entry: Worked Examples</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Configuring the Time Type Multiple-Attribute Field for Combined Project and Payroll Entries: Worked Example</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Creating the Absence and Payroll Multiple-Attribute Field: Worked Example</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Creating Shift, Break, and Meal Web Clock Buttons: Worked Example</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Creating the Meal, Department, and Location Dependent Fields: Worked Example</td>
<td>66</td>
</tr>
<tr>
<td>8</td>
<td>Time Entry Identification for Validations, Calculations, and Approvals: Time Categories</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Time Categories: How They Work with Time Processing Objects</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Using Condition Components in Time Categories: Explained</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Creating a Units-Based Time Category for Meals Taken: Worked Example</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Creating 2 Time Categories for Overtime Calculations: Worked Example</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Time Category FAQs</td>
<td>80</td>
</tr>
<tr>
<td>9</td>
<td>Layout Sets and Time Entry Formats</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Manage Layout Sets: Explained</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Time Entry Format: Critical Choices</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Creating a Payroll Layout Set That Includes Absence and Override Fields: Worked Example</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Layout Sets FAQ</td>
<td>91</td>
</tr>
<tr>
<td>10</td>
<td>Employee and Manager Associations with Time Objects</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Associating Employees and Managers with Time Entry, Processing, and Device Processing Objects: Overview</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Membership: Explained</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Group Membership: How It's Evaluated</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>Defining Groups: Worked Example</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>HCM Groups FAQ</td>
<td>100</td>
</tr>
</tbody>
</table>
11 Time Entry Setup Profile Configurations and Troubleshooting

- Time Entry Setup Profiles: Explained
- Time Setup and Device Processing Profiles: How They're Derived
- Troubleshooting Assignments of Time Setup and Device Processing Profiles: Explained

12 Time Processing Configurations Overview

- Configuring Time Processing Objects: Overview
- Change Audit of Time Cards: Explained
- Components Composing a Time Processing Profile: How They Work Together
- How Many Time Processing Objects to Create: Points to Consider

13 Repeating Time Periods For Time Cards, Approvals, Absence Accruals, and Balances

- Repeating Time Periods: Explained
- Repeating Time Period: How It’s Calculated
- Repeating Time Periods FAQ

14 Time Consumer Validation, Approval, and Transfer Configurations

- Time Consumer Sets: Explained
- Creating Time Consumer Sets: Points to Consider
- Configuring Time Card and Time Entry Approvals: Explained
- Time Card Approval and Informational Notification Configurations: Examples
- Validation, Calculation, and Approval Rules Initiated by Time Card Action: Explained
- Time Consumer Set FAQ

15 Rule-Based Validation, Calculation, Allocation, Save, and Submit Configuration Overviews

- Formulas and Time Rule Components: How They Work Together
- Formulas and Types of Time Rule Templates: Explained
- Work Day Definition: Explained
- Time Allocations and Allocation Assignments: Explained
- Time Balance Dimensions and Definitions: Overview

ORACLE
16 Rule Template and Rule Parameter, Output, and Explanation Details 153

- Definition Options for Time Rule Templates: Points to Consider 153
- Parameters in Time Rule Templates and Rules: Explained 156
- Outputs in Time Rule Templates and Rules: Explained 157
- Output Groups in Time Calculation Rule Templates and Rules: Explained 159
- Explanation Text in Time Rule Templates and Rules: Explained 160
- Processing Order in Time Calculation Rule Sets: Explained 161
- Analyzing Processing Details for Time Rules and Rule Sets: Explained 162
- Rule Templates and Rules FAQs 163

17 Rule-Based Validation, Calculation, Allocation, Save, and Submit 165
Configuration Procedures

- Creating Time Rule Templates: Procedure 165
- Creating Time Rules: Procedure 166
- Creating Time Rule Sets: Procedure 167
- Configuring Workforce Compliance Checks and Exception Alerts: Procedure 168
- Creating a Rule Template That Calculates the Daily Threshold for Expenditure and Payroll Time Types: Worked Example 169
- Creating a Rule That Calculates the Daily 8-Hour Threshold for Expenditure and Payroll Time Types: Worked Example 172
- Creating and Assigning a Cost Center, Program, and Fund Time Allocation: Worked Example 173
- Creating the Projects and Payroll Time Calculation Rule Set: Worked Example 177

18 Time and Compliance Exceptions and Alerts 179

- Configuring Workforce Compliance Checks and Exception Alerts: Procedure 179
- Alert Notifications for Time Exceptions: Overview 180

19 Time Processing Setup Profile Configurations and Troubleshooting 181

- Time Processing Setup Profiles: Explained 181
- Time Setup and Device Processing Profiles: How They're Derived 182
- Troubleshooting Assignments of Time Setup and Device Processing Profiles: Explained 183
# Time Collection Device Configurations

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing Events from Time Collection Devices: Overview</td>
<td>185</td>
</tr>
<tr>
<td>Components Composing a Time Device Processing Profile: How They Work Together</td>
<td>188</td>
</tr>
<tr>
<td>How Many Time Device Processing Objects to Create: Points to Consider</td>
<td>190</td>
</tr>
<tr>
<td>Mappings and Mapping Sets for Time Device Events: Explained</td>
<td>194</td>
</tr>
<tr>
<td>Mappings for Time Device Events: Example</td>
<td>196</td>
</tr>
<tr>
<td>Sending Export Data to Time Collection Devices: Points to Consider</td>
<td>197</td>
</tr>
<tr>
<td>Shift Limits in Time Processing: Explained</td>
<td>198</td>
</tr>
<tr>
<td>Time Collection Device and Web Clock Events: How They're Processed</td>
<td>200</td>
</tr>
</tbody>
</table>

# Integrations with Absence Management, Payroll, and Projects

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Time and Labor with Absence Management</td>
<td>205</td>
</tr>
<tr>
<td>Using Time and Labor with Global Payroll</td>
<td>211</td>
</tr>
<tr>
<td>Using Time and Labor with Project Costing</td>
<td>221</td>
</tr>
</tbody>
</table>

# Time Entry and Processing Best Practice Configurations

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Entry and Processing Best Practice Configurations for Terminations and Rehires: Examples</td>
<td>235</td>
</tr>
<tr>
<td>Time Entry and Processing Best Practice Configurations for Hires and Terminations: Examples</td>
<td>239</td>
</tr>
<tr>
<td>Time Entry and Processing Best Practice Configurations for Time Data Clean Up: Examples</td>
<td>243</td>
</tr>
</tbody>
</table>

# Time Repository Data Extract Considerations

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using HCM Extract: Points to Consider</td>
<td>247</td>
</tr>
</tbody>
</table>
Preface

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

Using Oracle Applications

Using Applications Help

Use help icons 📡 to access help in the application. If you don’t see any help icons on your page, click your user image or name in the global header and select Show Help Icons. Not all pages have help icons. You can also access Oracle Applications Help.

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

You can also read Using Applications Help.

Additional Resources

- **Community:** Use Oracle Cloud Customer Connect to get information from experts at Oracle, the partner community, and other users.

- **Guides and Videos:** Go to the Oracle Help Center to find guides and videos.

- **Training:** Take courses on Oracle Cloud from Oracle University.

Conventions

The following table explains the text conventions used in this guide.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates user interface elements, navigation paths, or values you enter or select.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates file, folder, and directory names, code examples, commands, and URLs.</td>
</tr>
<tr>
<td>&gt;</td>
<td>Greater than symbol separates elements in a navigation path.</td>
</tr>
</tbody>
</table>

Documentation Accessibility

For information about Oracle’s commitment to accessibility, visit the Oracle Accessibility Program website.

Videos included in this guide are provided as a media alternative for text-based help topics also available in this guide.
Contacting Oracle

Access to Oracle Support
Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit My Oracle Support or visit Accessible Oracle Support if you are hearing impaired.

Comments and Suggestions
Please give us feedback about Oracle Applications Help and guides! You can send an e-mail to: oracle_fusion_applications_help_ww_grp@oracle.com.
Implementing Time and Labor: Overview

This rule-based time management application lets you address simple to complex time reporting for permanent and contingent employees. Employees can report time using time cards, calendar, web clock, or third-party time collection devices, such as badge and biometric readers. Time and labor managers can report, review, and submit employee time using time cards and processes that generate mass time.

For web clock and third-party devices, the import process validates event-related time data and creates or completes time entries. Time and labor managers resolve any badge and time entry exceptions identified during this validation. For all collection methods, time card save and submit actions initiate time entry rules that validate reported time. Managers resolve any time entry exceptions identified during this validation. Next, calculation rules run using the time data validated by the time entry rules. Then, time consumer validation runs for the relevant calculated time data. Finally, time consumer administrators transfer time data for further processing, such as payroll and project costing. The following figure summarizes this flow.
Getting Started

Before you start, use the Offerings page in the Setup and Maintenance work area to view 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

Time and Labor setup tasks are in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor 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.

Show all Time and Labor setup tasks to define:

- Time entry configurations
- Time processing configurations
- File processing configurations for time collection devices

Related Topics

- Configuring Time Entry Objects: Overview
- Processing Events from Time Collection Devices: Overview
- Configuring Time Processing Objects: Overview

Date-Effective Objects in Scheduling and Time and Labor: Explained

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

- Scheduler Profile
- Time Entry Rule Set
- Worker Time Entry Setup Profile
- Time Calculation Rule Set
- Worker Time Processing Setup Profile
- Time Device Rule Set
- Time Device Processing Profile
When you edit a profile, ensure that the edit start date corresponds with the start date of the associated reporting period.

**Related Topics**
- Date Effectivity: Explained
- Updating Date-Effective Objects: Examples
- Correcting Date-Effective Objects: Examples

**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.

**Managing an Implementation**

**Enabling Offerings: Explained**
Offerings and their functional areas are presented in an expandable and collapsible hierarchy to facilitate progressive decision making regarding whether or not you want to implement them. An offering or its functional areas can either be opted into or
not opted into for implementation. Implementation managers decide which offerings to enable for implementation. Although all of the functional areas that represent core functionality of an offering are automatically enabled for implementation when a parent offering is enabled for implementation, you can select which of the optional functional areas are enabled. You can identify which functionality is already opted into by looking at the check box in the Enable column.

Related Topics

• Configuring Offerings

Configuring Offerings: Procedure

Enable offerings to modify functionality so that it matches the services you plan to implement. You need the Configure Oracle Fusion Applications Offering privilege (ASM_CONFIGURE_OFFERING_PRIV) to enable offerings.

Enable Offerings

To enable offerings, follow these steps:

1. Click Navigator > My Enterprise > Offerings work area.
2. In the Offerings page, select the offering you want to implement.
3. Click the Opt In Features button.
4. In the Opt In page, select the Enable check box for the offering.
5. Review functional area hierarchy. Select the Enable check box to opt into functional areas as applicable to your business operations.
6. Click the Features icon in the Features column for the functional area you enabled to opt into and enable applicable features.
   o Depending on the feature type, a check box for Yes or No features or a Features icon for single and multiple choice features is displayed in the Enable column.
   o To enable a feature, select the check box for Yes or No types or click Features and select the appropriate choices for single and multiple choice features.
7. Click Done when you’re finished to return to the Opt In page.
8. Click Done to return to the Offerings page.

Repeat the same steps for each offering you want to implement or if you must change the opt-in configuration of any functional areas or features of an enabled offering.

Related Topics

• Configuring Offerings
2 Time Entry Configurations Overview

Configuring Time Entry Objects: Overview

Employees can report time using time cards, calendar, web clock, or third-party time collection devices, such as badge and biometric readers. Time and labor managers can report, review, and submit employee time using time cards and processes that generate mass time. This figure summarizes these methods.

For all time collection methods, complete these configuration tasks to support ongoing activities for time reporting, adjustment, and exception resolution. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manage Elements</td>
<td>Create the payroll elements required for payroll processing of time data transferred to the Global Payroll time consumer.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>2</td>
<td>Submit a Process or Report task, Create Time Card Calculation Components process</td>
<td>Create the calculation components required for payroll processing of time data transferred to the Global Payroll time consumer. You must complete this task for each Standard category element. You ignore this task for any Time Card category elements.</td>
<td>Payroll Administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Payroll Checklist</td>
</tr>
<tr>
<td>3</td>
<td>Generate Data Dictionary Time Attributes</td>
<td>Associate time attributes stored in the data dictionary with:</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Payroll elements and element input values, known in Global Payroll as value definitions. These associations enable the payroll processing of time data transferred to</td>
<td></td>
</tr>
<tr>
<td>Sequence</td>
<td>Task</td>
<td>Description</td>
<td>Work Area</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>4</td>
<td>Generate Time Card Fields</td>
<td>Optionally, create multattribute fields for the selected legislative data group. You have the option to include absence types when defining time card fields.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>5</td>
<td>Manage Time and Labor Value Sets</td>
<td>Create lists of values for your own data sources, such as choice lists for custom time attributes. For example, you create the <strong>Meal Taken</strong> custom time attribute with a data source that contains these values: Breakfast, Lunch, and Supper.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>6</td>
<td>Manage Custom Time Attributes</td>
<td>Record additional employee time data to meet organization-specific requirements. Saving a custom time attribute adds it to the data dictionary.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>7</td>
<td>Manage Time Entry Layout Components</td>
<td>Create and edit layout components, such as the delivered <strong>Expenditure Type</strong> and <strong>Payroll Time Type</strong> fields. These fields and buttons are a collection of properties that enables different user groups to report time using different time attributes and values. Associate a data source, which is either a value set or a delivered</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Sequence</td>
<td>Task</td>
<td>Description</td>
<td>Work Area</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>7</td>
<td>Time Entry Configurations Overview</td>
<td>view object, with each layout component. You use your layout components to configure time entry, review, view, approval, and calendar layouts. Review the delivered layout components to determine whether you require additional ones. You don’t create layout components for third parties with this task. You do use layout components created with this task to configure:</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Manage Time Categories</td>
<td>Create and edit categories that identify the time entries to use on the time totals tab of time review, view, and approval notification pages. For example, add Straight Time, Training, and Vacation time categories to the time totals tab.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>9</td>
<td>Manage Time Layout Sets</td>
<td>Create and edit a set of different layouts for the pages that employees and managers use to: Enter, view, review, and approve time. Enter and view shift time attributes. Delete and add layout components and set various properties to change a page’s appearance. Review the delivered layout sets to determine whether you require additional ones. You don’t create third-party device layouts with this task. You do use these layouts to configure:</td>
<td>Setup and Maintenance Time Management</td>
</tr>
<tr>
<td>Sequence</td>
<td>Task</td>
<td>Description</td>
<td>Work Area</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>10</td>
<td>Manage HCM Groups</td>
<td>Create and edit group definitions used to associate worker time entry setup profiles directly with members and indirectly with their managers. You can also use these groups when generating time events, entries, and cards for multiple employees. Review the delivered groups to determine whether you require additional ones.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>11</td>
<td>Evaluate HCM Group Membership</td>
<td>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 employees can report time. During implementation, refresh the predefined groups so that all enterprise employees are associated with a default layout set and a default profile.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>12</td>
<td>Manage Time Entry Setup Profiles</td>
<td>Create and edit the association of a layout set directly with employees and indirectly their managers. Also configure time entry access controls separately for employees and managers. While you don’t create time entry layouts for third-party devices, you do use layouts to create the time cards that managers review when managing exceptions. This profile directly links the employee, and indirectly the employee’s manager, to the appropriate layout set. This profile also controls settings for time card access.</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>

**Related Topics**

- Generating Time Cards: Points to Consider
Change Audit of Time Cards: Explained

Track time card statuses so that you know who did what time card action—such as save, submit, and approve—and when. Also track who edited, added, or deleted time entries; when the changes were made; and the reason for each change.

This topic covers:

- Prerequisite setup tasks
- Adding change audit reasons
- Viewing change audit detail

Prerequisite Setup Tasks

Complete these setup tasks to enable change audit for your employees’ time cards. The tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Purpose</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Workforce Management Lookups</td>
<td>Add change audit reasons as lookup codes in the ORA_HWM_CA_REASONS lookup type to support your time card audit policies. These codes compose change audit reason choice lists on time card pages and dialog boxes.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Time Layout Sets</td>
<td>Identify the fields to combine to uniquely identify time entries on the change audit dialog boxes of these time card pages: time entry, view, review, and approval notifications.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Layout Sets</td>
<td>Use the edit layout guide processes to edit the fields of the time entry, reported time, and calculated time matrices, as appropriate.</td>
<td>Time Management</td>
</tr>
<tr>
<td>Manage Worker Time Processing Profiles</td>
<td>Enable change audit for the employees associated with the time processing profile and optionally require change audit reasons.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Worker Time Processing Setup Profiles</td>
<td></td>
<td>Time Management</td>
</tr>
</tbody>
</table>

Adding Change Audit Reasons on Time Cards

After you enable change audit, changes are automatically tracked from the specified starting point. Time reporters don’t have to do anything. If you require reasons, then after time reporters make edits and click Next, Save, or Save and Close, the Change Audit Reason dialog box opens. Time reporters then specify the reason for the change, either the same reason for all changes or individually, per entry.
Viewing Change Audit Data on Time Cards

Use the Change Audit icon in the Time Card Details section of time cards to view each status of the time card. The change audit also shows who made the change and when. Use the same icon on the Time Entry, Reported Time, and Calculated Time section toolbars to view entry-level changes. The icon next to each time entry shows the fields set on the layouts as identifiers, and the time entry value for each identifier.

Components Composing a Time Entry Profile: How They Work Together

Time entry setup profiles enable employees to report, review, and submit time using time cards, calendar, and web clock. They enable managers to report, review, and submit employee time using time cards. They also enable managers to generate time events, time entries, and time cards for 1 or multiple employees at a time. Create these setup profiles using the Manage Worker Time Entry Setup Profiles task in the Time Management work area.

This figure summarizes how the components of the profile work together and the following sections provide details and examples for each component.
Time Attributes
A time attribute reflects how time is paid, costed, billed, or recorded as an information entry and qualifies the associated time event or time entry. Delivered time attributes include **Payroll Time Type**, **Absence Management Type**, and **Expenditure Type**. You can also create your own, as required.

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.

Time Category
A time category identifies the time entries to use to calculate the corresponding time total on time review, view, and approval notification pages. For example, add **Straight Time**, **Training**, and **Vacation** time categories to the time totals tab of time card pages.

Layout and Layout Sets
A layout determines the layout components that appear on these 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 employees. A layout set is a collection of layouts. You can associate a layout component with multiple layouts. For example, you want employees to identify payroll costing for certain time attributes. In one layout set, you configure a field with the name **Department**. In a different layout set, you configure the same field with the name **Cost Center**.

Worker Time Entry Setup Profile
Add a layout set to time entry profiles so that the employees see only those layout components that are relevant to them.

Groups
A group enables you to assign the time entry profile to multiple employees who share time reporting characteristics. All group members and their managers inherit the layouts in the layout set of the associated time entry profile. Each group can be associated with only 1 time entry profile at a time.

**Related Topics**
- Layout Components for Time Entry: Explained
- Managing Layout Sets: Explained
- HCM Group Membership: Explained
How Many Time Entry Objects to Create: Points to Consider

You must create separate worker time entry setup profiles for each unique combination of time entry objects, as shown in this figure. The more time entry objects 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.

This figure provides a visual summary of how the components of the time entry profile work together. The following sections provide some combination of guidelines, considerations, questions, and examples to help determine how many time entry objects to create.

Create time entry objects using the tasks and work areas identified in this table. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Value Sets</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>
Custom Time Attributes
Create as many custom time attributes as you require for employees to record company-specific time information outside of payroll, absences, and project costing.

Time Entry Layout Components, Time Categories, and Layout Sets
For layout components configured to enable overrides, you can change the display name when you edit the layouts in a layout set. Create different layout sets for different employee groups that use the same layout component with different names. For example, you want employees to identify payroll costing for certain time attributes. For the same field, some employees see the name Department, others see Cost Center, and yet others see Costing Override. Also, create different layout sets for employees requiring different time categories to show calculated time totals.

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

<table>
<thead>
<tr>
<th>Question</th>
<th>Examples and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of time do your employees report?</td>
<td>Examples: Project costing, payroll, absence, a combination, or information that is company specific</td>
</tr>
<tr>
<td>What layout components do they use to report time?</td>
<td>Examples: Expenditure type, project ID or name, payroll time type or worked hours type, absence type, cost center, start shift, end shift, meal, break</td>
</tr>
</tbody>
</table>
| How frequently do your employees report time with the fields? Regularly, infrequently, or does frequency vary among different employee groups? | Example: You have an employee group who regularly reports payroll costing and another group who does so infrequently. These configurations support both employee groups with a single 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 value for the payroll time type. |
<table>
<thead>
<tr>
<th>Question</th>
<th>Examples and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should your employees all see the same values for the time attribute</td>
<td>Examples:</td>
</tr>
<tr>
<td>choice list or only those values that apply to their time entries? If</td>
<td>• Based on assignment</td>
</tr>
<tr>
<td>you plan to differentiate choice list values, how do you want to do</td>
<td>• Based on exemptions, such as overtime in the US</td>
</tr>
<tr>
<td>that?</td>
<td></td>
</tr>
<tr>
<td>Can you filter the choice list values by creating a value set or using</td>
<td>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 employee based on values selected for the independent time attribute.</td>
</tr>
<tr>
<td>private view object delivered by Oracle Fusion Global Payroll? Do you</td>
<td>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:</td>
</tr>
<tr>
<td>have to create different fields?</td>
<td>• The time card itself, such as time period start and end dates</td>
</tr>
<tr>
<td></td>
<td>• Hidden fields, such as Assignment</td>
</tr>
<tr>
<td>Should your employees all see the same name for the layout component?</td>
<td>Values for hidden fields automatically populate based on:</td>
</tr>
<tr>
<td>Should your employees all view the same time totals?</td>
<td>• The employee’s primary assignment</td>
</tr>
<tr>
<td>Do you want to automatically allocate time entries to payroll cost</td>
<td>• Values provided for related independent layout components</td>
</tr>
<tr>
<td>segments?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: You use the delivered Payroll Time Type time entry field. You want certain employees to see the field name Type of Hours Worked and other employees to see Time Type.</td>
</tr>
<tr>
<td></td>
<td>Example: You have reservist employees and you want their reservist time to show in their time totals. You don’t want to include reservist time totals for employees who are reservists.</td>
</tr>
<tr>
<td></td>
<td>Example: Allocate an employee’s daily hours evenly to the 1111 and 2222 departments.</td>
</tr>
<tr>
<td></td>
<td>You can create time allocations using just the dependent Payroll Time Type cost attributes and no time entry fields. To view the allocations, you must create the dependent fields and add them to time card layouts.</td>
</tr>
</tbody>
</table>

**Time Card Access Settings on Time Entry Setup Profiles**

If employees and their managers have the same settings configuration for time card access, with the same date ranges, create 1 profile per layout set. If subsets of employee managers have different configurations or use different date ranges, then create one profile for each subset of managers and their employees.

Create 1 profile for each employee group when the different groups have:

- Different settings configurations for time card access
- The same settings configurations for time card access for different date ranges
Groups
You associate 1 or more groups with each profile. Define separate groups wherever the employee characteristics are unique across profiles or groups of profiles. For example, you group your employees into separate groups for these reasons:

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

Related Topics
- Managing Layout Sets: Explained
- Layout Components for Time Entry: Explained
- Data Sources for Layout Components: Explained
3 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. Layout components that you add to time layouts must use time attributes from the data dictionary 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 reflects how time is paid, costed, billed, or recorded as an information entry and qualifies the associated time event or time entry.

You can:

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

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

<table>
<thead>
<tr>
<th>Integrating Application</th>
<th>Time Attribute</th>
<th>Attribute Description</th>
<th>Example Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Payroll</td>
<td>Payroll Time Type</td>
<td>Categorizes time for payroll processing according to the value selected</td>
<td>Regular, Overtime, and Vacation</td>
</tr>
</tbody>
</table>
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 these attributes:

- Payroll-dependent attributes for all element input values, such as rate, rate code, state, and city
- 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 these actions:

- Setup 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 data dictionary of the workforce management offering and store in the time repository. You can optionally associate dependent attributes with your independent custom attributes.

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

**Related Topics**

- Creating Nonrecurring Earnings Elements for Time Entries: Procedure
- Layout Components for Time Entry: Explained
Units of Measure for Time and Labor: Explained

You can create payroll and custom time attributes to store and display quantities as either hours or units. Typically, you use hours-based and units-based time entries for the purposes described in this table.

<table>
<thead>
<tr>
<th>Unit of Measure</th>
<th>Use</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Hours           | Reflect how to pay, cost, and bill worked and calculated time through associated rates. | • 8 hours of regular time per work day  
• 10 hours of regular time per work day converted by calculation rules into 8 hours of regular time and 2 hours of overtime  
• 7 hours of regular time per work day spent on project A and 1 hour of regular time spent on miscellaneous administration  
• 8 hours of regular time per work day for two days and 8 hours of absence for three days |
| Units           | Assign employees a flat payment amount through associated rates. | • Pay the employee 25 USD for each meal taken, up to 3 meals per day.  
• Pay the employee an extra 100 USD for each worked shift when the employee is in charge and handled related duties. |

Displaying Time Attributes

You can create single- and multiattribute time entry fields that use hours-based and unit-based time attributes. You can use only hours-base time attributes when you create web clock buttons. This table describes the use of hours-based and units-based fields by layout.

<table>
<thead>
<tr>
<th>Layouts</th>
<th>Unit of Measure</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time entry, review, view, and approval notification</td>
<td>Hours and Units</td>
<td>Create, edit, view, and approve pages display hours-based and units-based fields. On the time entry layout, you can also set whether these pages display the Unit column.</td>
</tr>
</tbody>
</table>
| Calendar | Hours and Units | The dialog box used to report time displays hours-based and unit-based fields. Depending on the time entry selection, the dialog box provides:  
• Fields for the time reporter to select start and stop times  
• A quantity field for the time report to enter a duration of hours or the number of units |
### Data Dictionary: Time Attributes and Custom Time Attributes

<table>
<thead>
<tr>
<th>Layouts</th>
<th>Unit of Measure</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web clock</td>
<td>Hours</td>
<td>The web clock can display hours-based fields in addition to the standard buttons.</td>
</tr>
<tr>
<td>Shift</td>
<td>Hours</td>
<td>The calendar dialog box with shift details displays read-only, hours-based fields and values. The dialog boxes used to create and edit shifts, opened from the Manage Planned Schedules page, display hours-based fields that you can edit.</td>
</tr>
</tbody>
</table>

**Related Topics**
- Creating Custom Time Attributes: Procedure
Creating Nonrecurring Earnings Elements for Time Entries: Procedure

Payroll administrators create nonrecurring earnings elements to process pay based on hour entries from time cards, such as regular, overtime, double-time, and shift pay. In countries that support the Time Card category, they can also create units-based elements that assign employees a flat payment amount through associated rates. For example, pay employees meal allowances based on the number of meals taken daily. Creating a time card element generates all of the related elements, balances, formulas, and calculation components. They then transfer the created time card elements to their time management application.

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

To create a nonrecurring earnings element, complete these tasks:

1. Create the payroll element.
2. Configure element eligibility for the related elements.

Creating the Payroll Element

Use the Manage Elements task in the Setup and Maintenance work area, Workforce Deployment offering.

1. On the Manage Elements page toolbar, click the Create icon.
2. On the Create Element dialog box, complete these steps:
   a. Select the legislative data group, such as FR LDG, Hong Kong LDG, or US LDG.
   b. Select the primary classification.

<table>
<thead>
<tr>
<th>Category</th>
<th>Primary Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Card</td>
<td>Regular Earnings or Earnings</td>
</tr>
<tr>
<td>Standard</td>
<td>Standard Earnings, Supplemental Earnings, or Irregular Earnings</td>
</tr>
</tbody>
</table>

c. When available, select the secondary classification.

d. For localization that supports 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.

e. Click Continue.
3. On the Create Element: Basic Information page, complete these steps:

   a. Enter a descriptive name, such as *Regular, Straight Time, Overtime, or Shift Pay.*

   b. Enter the name that you want to display on reports containing this payroll element.

   c. Select the effective date *January 1, 1951.* The early date ensures that the element attributes are immediately available to use with shifts, time cards, web clock, and time collection devices.

   d. For elements with the **Standard** category, complete these basic information fields. For elements with the **Time Card** category, skip to substep 5.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the earliest entry date for this element?</td>
<td>First Standard Earning Date</td>
</tr>
<tr>
<td>What is the latest entry date for this element?</td>
<td>Last Standard Earning Date</td>
</tr>
<tr>
<td>At what employment level should this element be attached?</td>
<td>Assignment Level</td>
</tr>
<tr>
<td>Does this element recur each payroll period, or does it require an explicit entry?</td>
<td>Nonrecurring</td>
</tr>
<tr>
<td>Can a person have more than one entry of this element in a payroll period?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

4. On the Create Element: Additional Details page, complete these steps.

   For elements with the **Time Card** category, complete these additional details:

   a. Select either **Hours X Rate** or **Other Units** as the calculation units for reporting.

   b. Select the Work Units conversion rule.

<table>
<thead>
<tr>
<th>Conversion Rule</th>
<th>Calculation</th>
<th>Example</th>
</tr>
</thead>
</table>
   | Standard Rate Annualized                  | i. Convert the source amount and periodicity to an annual value using default values of 2080 hours, 260 working days.  

   | Standard Rate Annualized                  | ii. Convert the amount to the required periodicity and rate.                 | N/A                            |

   | Standard Rate Daily                      | i. Calculate a daily rate using default value 260 working days.              | N/A                            |

   | Standard Rate Daily                      | ii. Convert the amount to the required output periodicity and rate.           |                                |

   | Standard Working Hours Rate Annualized   | i. Convert the source amount and working hours to an annual value, using the employee’s standard working hours. | Scenario: The employee works 40 hours a week with a monthly salary of 1000 US dollars. |
c. Accept the remaining default values by clicking Next and continuing to step 5.

For Standard category elements, complete these additional details:

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

<table>
<thead>
<tr>
<th>Conversion Rule</th>
<th>Calculation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Rate Annualized</td>
<td>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.</td>
<td>N/A</td>
</tr>
<tr>
<td>Standard Rate Daily</td>
<td>i. Calculate a daily rate using default value 260 working days. ii. Convert the amount to the required output periodicity and rate.</td>
<td>N/A</td>
</tr>
<tr>
<td>Standard Working Hours Rate Annualized</td>
<td>i. Convert the source amount and working hours to an annual value, using the employee's standard working hours. ii. Calculate the rate.</td>
<td>Scenario: The employee works 40 hours a week with a monthly salary of 1000 US dollars.</td>
</tr>
</tbody>
</table>
### Conversion Rule

<table>
<thead>
<tr>
<th>Conversion Rule</th>
<th>Calculation</th>
<th>Example</th>
</tr>
</thead>
</table>
| 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: The employee works 40 hours a week, with a 37.5 standard working hours a week, and a monthly salary of 1000 US dollars.  
|                                                      | Calculations: (1000*12) / (40.00*52) = 5.77 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 an employee assigned a monthly payroll:  
|                                                      |                                                | • The employee 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  
|                                                      |                                                | For an employee 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 retroactive group. The delivered group is **Entry Changes for Retro**, which you can edit. You can also create and select your own retroactive group using the **Manage Events Group** task in the Payroll Calculation work area.

**f.** For US elements, review the default values for the FLSA rules and override as appropriate.

**g.** Click **Next**.

### 5. On the Create Element: Review page, complete these steps:

**a.** Review the element configuration to ensure everything is correct.

**b.** Click **Submit** to create the element.

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.

### 6. On the Element Summary page, configure element eligibility by completing these steps:

**a.** In the Elements Overview section, select **Element Eligibility**.

**b.** On the **Actions** menu, select **Create Element Eligibility**.

**c.** In the Information section, enter an element eligibility name with a suffix that identifies the criteria. For example, for the regular element with open eligibility--no selected criteria--the name would be **Regular Open**.

**d.** Select the eligibility criteria. To leave eligibility open on the element and control it with HCM groups and time processing profiles, skip this step.

**e.** Click **Done**.
Configuring Element Eligibility for the Related Elements

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**.

1. On the Manage Elements page, search for the element that you just created.
2. Click the related element name.
3. On the element summary page, complete these steps:
   a. In the Elements Overview section, select **Element Eligibility**.
   b. On the **Actions** menu, select **Create Element Eligibility**.
   c. In the Information section, configure the same eligibility criteria as the original element.
   d. Click **Submit**.
   e. Click **Done**.

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

Payroll administrators must create calculation components for earnings elements with the **Standard** category and **Hours X Rate** calculation rule, and used with time cards. 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 these steps:

1. Submit the **Create Time Card Calculation Components** process to create calculation components for time card entries.
2. Configure element eligibility for the related element with the **CIR** suffix.
3. Submit the **Compile Formula** process to compile the formulas for the calculation components.

Creating Calculation Components for Time Card Elements

In either the Payroll Checklist or Payroll Administration work area, complete these 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.
   c. Click **Next**.
2. On the Submit a Process or Report: Enter Parameters page, complete these steps:
   a. Enter the parameters, as shown in this table.

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

   b. Click Next.


5. On the Submit a Process or Report: Review page, complete these steps:
   a. Review the flow and parameter details to ensure everything is correct.
   b. Click Submit.
   c. On the Confirmation dialog box, click OK and View Checklist.

6. On the Payroll Flow page, Task Details tab you should see a green check mark in the Upload File row, Task Type column. If not, on the toolbar, click the Refresh icon intermittently until you do.

7. Click the Go to Task icon.
   a. On the Upload File page, click Done to complete the submission and initiate the time data transfer.


9. On the Overview page, search for and click your payroll flow.
   a. View the process results.
   b. Check for any errors or warnings.

Configuring Element Eligibility for the Related Element with the CIR Suffix

Configure element eligibility for the element with the suffix CIR, such as Regular CIR. In either the Payroll Check list or Payroll Administration work area, complete these steps:

1. On the Manage Elements page, in the Payroll Calculation section, search for the element that you just created the calculation components for.
2. Click the element with the suffix CIR, such as Regular CIR.
3. In the Elements Overview section, select Element Eligibility.
4. On the Actions menu, select Create Element Eligibility.
5. In the Information section, configure the same eligibility criteria as the original element.
6. Click Submit.
7. Click Done.
Compiling the Formulas for the Calculation Components

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.
   c. Click Next.
2. On the Submit a Process or Report: Enter Parameters page, complete these steps:
   a. Enter the parameters, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Flow</td>
<td>Descriptive name for this specific flow process, such as Create calculation components for the Regular time card element.</td>
</tr>
<tr>
<td>Formula</td>
<td>To perform a bulk compile, enter %.</td>
</tr>
<tr>
<td></td>
<td>For a more focused compile, enter the &lt;element name&gt;%, for example, Regular%.</td>
</tr>
<tr>
<td>Formula Type</td>
<td>%</td>
</tr>
</tbody>
</table>

   b. Click Next.
5. On the Submit a Process or Report: Review page, complete these steps:
   a. Review the flow and parameter details to ensure everything is correct.
   b. Click Submit.
   c. On the Confirmation dialog box, click OK and View Checklist.
6. On the Payroll Flow page, Task Details tab you should see a green check mark in the Upload File row, Task Type column. If not, on the toolbar, click the Refresh icon intermittently until you do.
7. Click the Go to Task icon.
   a. On the Upload File page, click Done to complete the submission and initiate the time data transfer.
9. On the Overview page, search for and click your payroll flow.
   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 earnings elements for time entries, such as Regular, Overtime, and Shift Pay, you generate time attributes for the data dictionary. Optionally, you can also generate time card fields for them.

Complete the processes in this table using the Time and Labor functional area in the Setup and Maintenance work area, Workforce Deployment offering.

<table>
<thead>
<tr>
<th>Step</th>
<th>Process</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Generate Data Dictionary Time Attributes, required</td>
<td>Creates dependent payroll attributes for all element input values, such as hours and rate</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Caution:</strong> Failure to run the process might negatively affect the setup of fields, validation of payroll time types, or transfers of time data to payroll.</td>
</tr>
<tr>
<td>2</td>
<td>Generate Time Card Fields, optional</td>
<td>Creates time card fields using time attributes from the data dictionary for the specified legislative data group</td>
<td>Instead of running this process, use the Manage Time Entry Layout Components task to create time card fields and web clock buttons.</td>
</tr>
</tbody>
</table>

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
- Components Composing a Time Entry Profile: How They Work Together
Creating the Units-Based Meals Taken Element for Time Entries: Worked Example

This example shows how to create a units-based meals taken element with an associated flat rate from payroll. To create the nonrecurring earnings element, complete these tasks:

1. Create the payroll element using the **Time Card** category.
2. Configure element eligibility for the related elements.
3. Generate the time attributes in the data dictionary.

Only countries with localizations that include the **Time Card** category can currently create units-based payroll elements.

Prerequisite Setup

The **Meal Rate** rate definition was created using the **Manage Rate Definitions** task in the Payroll Calculations work area.

Creating the Payroll Element Using the Time Card Category

Use the **Manage Elements** task in the Setup and Maintenance work area, Workforce Deployment offering.

1. On the Manage Elements page toolbar, click the **Create** icon.
2. On the Create Element dialog box, complete these steps:
   
a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative Data Group</td>
<td>FR LDG</td>
</tr>
<tr>
<td>Primary Classification</td>
<td>Earnings</td>
</tr>
<tr>
<td>Category</td>
<td>Time Card</td>
</tr>
</tbody>
</table>

b. Click **Continue**.

3. On the Create Element: Basic Information page, complete these steps:
   
a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Meals Taken</td>
</tr>
<tr>
<td>Reporting Name</td>
<td>Meals Taken</td>
</tr>
<tr>
<td>Description</td>
<td>Units-based nonrecurring earnings element with an associated pay rate</td>
</tr>
</tbody>
</table>
b. Accept the remaining default values by clicking Next.

4. On the Create Element: Additional Details page, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date</td>
<td>January 1, 1951</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the calculation rule?</td>
<td>Meals Taken</td>
</tr>
<tr>
<td>Does this element have a default rate definition?</td>
<td>Yes</td>
</tr>
<tr>
<td>Rate Name</td>
<td>Meal Rate</td>
</tr>
<tr>
<td>If you don't specify a default rate, the element uses the rate from the salary record.</td>
<td></td>
</tr>
<tr>
<td>Effective Date</td>
<td>January 1, 1951</td>
</tr>
</tbody>
</table>

b. Click Next.

5. On the Create Element: Review page, complete these steps:
   a. Review the element configuration to ensure everything is correct.
   b. Click Submit.

6. On the Element Summary: Meals Taken page, configure element eligibility by completing these steps:
   a. In the Elements Overview section, select Element Eligibility.
   b. On the toolbar Actions menu, select Create Element Eligibility.
   c. In the General Information section, Element Eligibility Name field, enter Meals Taken Open. Appending Open is a standard method to easily identify that no eligibility criteria constrains the employees to whom the element applies. Time and Labor administrators and managers typically constrain eligibility using HCM groups and worker time entry and processing setup profiles.
   d. Click Submit.
   e. Click Done.

Configuring Element Eligibility for Related Elements

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.

1. On the Manage Elements page, search for the element that you just created.
2. Click the related element name.
3. On the element summary page, complete these steps:
   a. In the Elements Overview section, select Element Eligibility.
   b. On the toolbar Actions menu, select Create Element Eligibility.
   c. In the General Information section, Element Eligibility Name field, enter the element name and append the term Open, for example Meals Taken Earnings Calculator Open.
Generating the Time Attributes in the Data Dictionary

Use the **Generate Data Dictionary Time Attributes** task in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

1. On the Generate Data Dictionary Time Attributes page, in the **Legislative Data Group** field, select **FR LDG**.
2. Click **Submit**.
3. On the Confirmation dialog box, click **OK**.

Creating Custom Time Attributes: Procedure

Create custom time attributes to use with employee 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.

Create custom time attributes using this basic process in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area:

1. Create value sets, including the data sources used during setup tasks and with time entries.
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.

Creating Value Sets

You create at least one value set for each independent and dependent time attribute using the **Manage Time and Labor Value Sets** task. 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 unfiltered data source and the filtered data source. To limit choice lists for time entries to valid values for each employee, you must create an unfiltered and a filtered value set.

To create an unfiltered value set for use by administrators during setup tasks, such as creating time categories or rules, complete these steps:

1. On the Manage Time and Labor Value Sets page, click the **Create** icon.
2. On the Create Value Set page, complete these steps:
   a. In the **Module** field, select **Time and Labor Web Entry Configurations**.
   b. Select one of these validation types: **Format Only**, **Independent**, or **Table**.
   c. Select the appropriate data type for the values in the set.
   d. Save and close your configuration.

To create a table-validated set for use as the filtered data source for time entry complete these steps. The task maintains the values that you want to use in an application table.

1. On the Manage Time and Labor Value Sets page, click the **Create** icon.
2. On the Create Value Set page, complete these steps:
   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.
   e. Save and close your configuration.

Creating Values for Value Sets
How you populate the value sets depends on the validation type of the value set, as shown in this table:

<table>
<thead>
<tr>
<th>Validation Type</th>
<th>Populating the Value Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent validation</td>
<td>On the Create Value Sets page, click Manage Values to add values.</td>
</tr>
<tr>
<td>Table-validated</td>
<td>You don’t have to define or maintain values because they are managed as part of the referenced table or view</td>
</tr>
</tbody>
</table>

Creating 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 use the delivered Custom category to identify time attributes not delivered as part of the application. You can also create categories that logically group multiple custom time attributes to help when adding time attributes as part of setup tasks. These categories can also help with reporting. These new attribute categories are available for use when you create time attributes.

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 this table.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Maximum Number of Time Attributes Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>40</td>
</tr>
<tr>
<td>Number</td>
<td>40</td>
</tr>
<tr>
<td>Date</td>
<td>20</td>
</tr>
</tbody>
</table>

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.

Creating Time Attributes
Create the attribute and any associated dependent attributes.
1. In the Time and Labor section, click Manage Custom Time Attributes.
2. On the Manage Custom Time Attributes page, click the **Create** icon.

3. On the Create Time Attribute page, complete these steps:

   a. Enter a name and description.
   b. Select the classification type, which indicates whether the attribute has dependent attributes
   c. Select the data type of the attribute, which must match the data type of the associated value set
   d. Optionally, select the unit of measure used for payroll and reporting purposes
   e. Select the data source value sets that appear first in the data source choice lists when configuring time card fields that use the attributes.
   f. Select 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.

**Adding Dependent Time Attributes**

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

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 first in the choice lists for the data source when configuring the dependent fields.

**Related Topics**

- Defining Value Sets: Critical Choices
- Value Sets: Explained
- Planning Value Sets: Points to Consider
- Managing Time Attributes and the Data Dictionary: Explained
- Data Sources for Layout Components: Explained
5 Layout Components for Time Entry: Overview

Layout Components for Time Entry: Explained

A 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 components are of these types:

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

Each of these layout components can include dependent fields.

Single-Attribute Field

A single-attribute field has only 1 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 Field

A multiattribute field contains 1 or more time attributes. It stores multiple values internally, but displays only 1 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 this table.

<table>
<thead>
<tr>
<th>Time Attribute</th>
<th>Stored Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Time Type</td>
<td>Regular</td>
</tr>
<tr>
<td>Expenditure Type</td>
<td>Billable</td>
</tr>
</tbody>
</table>

You use multiattribute fields most frequently with payroll time attributes for these reasons:

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

You cannot delete a multiattribute field from a layout used by a time entry setup profile. Since you can use a maximum of 20 multiattribute 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 1, and typically more than 1, web clock button. Each button has 1 or more attributes. The button stores the multiple values internally, but displays only 1 value to the time reporter or viewer. For example, when the time reporter clicks **Clock Out**, the action stores the attribute values shown in this table.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Stored Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Event</td>
<td>Out</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>Regular</td>
</tr>
</tbody>
</table>

The create buttons page automatically includes the **Clock Event** time attribute in the button definition table. The attribute values are **In**, **In and Out**, **Out and In**, and **Out**.

Dependent Field

A dependent 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. This table describes how time reporters must report time for the 2 time reporting methods.

<table>
<thead>
<tr>
<th>Time Reporting Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time card</td>
<td>Time reporters must select a value for the related independent field on the time card before they can select the dependent field value.</td>
</tr>
<tr>
<td>Web clock</td>
<td>Time reports must select a value for the related independent field or click a button before they can select the dependent field value.</td>
</tr>
</tbody>
</table>

The availability setting of the dependent field might further require time reporters to complete either of these 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 values of payroll elements, such as rate override and location override, or payroll costing segments. For example, you configure the field so that time reporters must select a **Payroll Time Type** value, before they can select the dependent **State** value.

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

**Related Topics**

- Managing Time Attributes and the Data Dictionary: Explained
- Defining Single-Attribute Fields for Time Entry: Procedure
- Defining Multiple-Attribute Fields for Time Entry: Procedure
- Defining Dependent Fields for Time Entry: Procedure
Data Sources for Layout Components: Explained

When defining single-attribute, multiattribute, and dependent fields, you select a filtered data source and an unfiltered data source for the specified time attribute. When defining web clock buttons, you select the unfiltered data source for the specified time attribute. Typically, the recommended data source is the first value in the choice list. The choice list values for data sources are either private view objects or value sets.

Data Source Filters for Time Entry

The filtered data sources delivered by Oracle Fusion Absence Management, Oracle Fusion Global Payroll, and Oracle Fusion 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 filtered data sources that include filter variables, you must select the filter input attribute for each filter variable. A filter input attribute supplies the value that filters the field data source. For multiattribute fields, filter variable and input attribute value choice lists contain all of the values from all of the filtered data sources for all of the time attributes.

Data Source Filter Examples

Both a single-attribute field and multiattribute field use the Payroll Time Type time attribute. The multiattribute field also uses the Expenditure Type time attribute. This table shows the filter variables provided by the filtered data source for each time entry field.

<table>
<thead>
<tr>
<th>Single-Attribute Filter Variables</th>
<th>Multiattribute Filter Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>• pAssignmentID</td>
<td>• pProjectUnitId</td>
</tr>
<tr>
<td>• pEffectiveDate</td>
<td>• pEffectiveDate</td>
</tr>
<tr>
<td></td>
<td>• pAssignmentID</td>
</tr>
<tr>
<td></td>
<td>• pStartTime</td>
</tr>
<tr>
<td></td>
<td>• pStopTime</td>
</tr>
</tbody>
</table>

pEffectiveDate is included in the Filter Variables choice list only once, even though this filter variable is provided by the filtered 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. Values for private view objects appear in the choice list on the time card for the selected time attribute. Global Payroll provides separate private view objects for the filtered and unfiltered data sources.
- A value set is a collection of values that appear in choice lists for a time attribute. Project Costing provides the same value set for both the filtered and unfiltered 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. This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area. You configure any filter variables and filter input attributes used with the filtered 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. In the Setup and Maintenance work area, on the Tasks panel, click Search. On the Search page, search for and select the common task.

Related Topics

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

Availability of Dependent Fields for Time Entry: Critical Choices

When defining dependent time entry 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. This table lists and analyzes some factors to consider when deciding which availability option to select for the dependent field.

<table>
<thead>
<tr>
<th>Decision Factor</th>
<th>Available for All Independent Values</th>
<th>Available for Selected Independent Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can I use the dependent field on the calendar?</td>
<td>Yes</td>
<td>No.</td>
</tr>
<tr>
<td>When does the dependent field appear?</td>
<td>It always appears, as configured in the time card matrix or a dialog box, when the layout configuration includes the independent attribute.</td>
<td>It appears for entry only after the time reporter selects one of the values specified for the independent attribute.</td>
</tr>
</tbody>
</table>
| Where can I display the dependent field on the time card layout? | • In the matrix  
• In the dialog box for row-level or entry-level details  
• In the calendar dialog | Only in the dialog box for row-level or entry-level details.  
The independent time attribute must be in the matrix of the layout before you can display the dependent field in a dialog box. |
### Decision Factor

<table>
<thead>
<tr>
<th>Available for All Independent Values</th>
<th>Available for Selected Independent Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>In what scenarios is each availability option recommended?</td>
<td>When the dependent field:</td>
</tr>
<tr>
<td></td>
<td>• Is used frequently</td>
</tr>
<tr>
<td></td>
<td>• Should appear in the time card matrix, on the calendar, on the web clock, or all</td>
</tr>
</tbody>
</table>

### What are the drawbacks of each availability option?

<table>
<thead>
<tr>
<th>Available for All Independent Values</th>
<th>Available for Selected Independent Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dependent field:</td>
<td>Time card matrix and calendar can’t display the dependent field</td>
</tr>
<tr>
<td></td>
<td>• Choice list values might be inappropriate or missing</td>
</tr>
<tr>
<td></td>
<td>• Could be available for selection, but there is no corresponding input value in the payroll element for some of the independent attribute values</td>
</tr>
</tbody>
</table>

### When can I use dependent fields on web clocks?

<table>
<thead>
<tr>
<th>When the dependent field applies to all defined web clock buttons</th>
<th>When the dependent field applies to only one or a subset of web clock buttons</th>
</tr>
</thead>
</table>

### Payroll Costing Examples

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

<table>
<thead>
<tr>
<th>Setup Scenario</th>
<th>Time Reporting Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>You want time reporters to always select the department after they select a payroll time type.</td>
<td>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.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>You want time reporters to select a department after selecting Overtime in the Payroll Type field.</td>
<td>If the time reporter selects:</td>
</tr>
<tr>
<td>Time reporters use this dependent field infrequently and you want it to appear only in the dialog box with row-level details. So, you specify that the dependent Department field is available only when time reporters select the value Overtime for the independent Payroll Time Type attribute.</td>
<td>• Overtime, the Department field appears in the dialog box with row-level details and the time reporter can select a department</td>
</tr>
<tr>
<td>You want time reporters to select a department after clicking Transfer.</td>
<td>• Regular, the Department field doesn’t appear anywhere on the page, including dialog boxes. The time reporter can’t select a department</td>
</tr>
<tr>
<td>The Department field appears when the time reporter clicks Transfer on the web clock.</td>
<td></td>
</tr>
</tbody>
</table>
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.

### Related Topics

- Defining Dependent Fields for Time Entry: Procedure

### 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 Layout Components for Time Entry: Procedures

Defining Single-Attribute Fields for Time Entry: 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. This table summarizes the basic process for each step in the create time card field guided process.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Name</th>
<th>Summary of Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Field Definition</td>
<td>1. Enter the general properties.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Configure the time attributes, data sources, and filters for the filtered data source, as appropriate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Add and configure each row in the attributes definition table. This step doesn't apply to single-attribute fields.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Optionally, configure a default field value.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Configure the field-level display properties.</td>
</tr>
<tr>
<td>2</td>
<td>Dependent Field Definition</td>
<td>Optional step, available only if the independent time attribute defined during the Field Definition step has dependent attributes defined in the data dictionary.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Create the dependent field. Each dependent field that you create appears as a row in the table on the Dependent Field Definition page.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Optionally, edit the dependent field properties, as appropriate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Select the data sources for the dependent time attribute and add filters for the filtered data source, as appropriate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Optionally, configure a default value for the dependent field.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Configure the field-level display properties for the dependent field.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You can also create all dependent fields first, then select each field in the table in turn and complete steps 2 through 5.</td>
</tr>
<tr>
<td>3</td>
<td>Review</td>
<td>1. Review and save your definition details.</td>
</tr>
</tbody>
</table>

For details on defining dependent fields, see the Defining Dependent Fields for Time Entry: 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.

### Entering 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. The task is part of the Workforce Deployment offering, Time and Labor functional area. On the Field Definition page, enter a name and description according to the best practice detailed in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>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 <strong>Name</strong> choice list on the Edit Layout dialog box, Time Card Matrix page. The <strong>Name</strong> choice list displays only 15 characters.</td>
</tr>
<tr>
<td>Description</td>
<td>Document the purpose of the time card field</td>
</tr>
</tbody>
</table>

### Configuring 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 filtered data source and unfiltered data source for the specified time attribute. Typically, the correct value for the selected attribute is the first value in the choice list.
3. Add any filters for the filtered data source by selecting the filter variable and corresponding input attributes. For example, this table shows the filter variables and filter input attributes that are provided by the **Payroll Time Type** attribute data source.

<table>
<thead>
<tr>
<th>Filter Variables</th>
<th>Filter Input Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pAssignmentID</td>
<td>Assignment</td>
</tr>
<tr>
<td>pEffectiveDate</td>
<td>Start Time</td>
</tr>
</tbody>
</table>

The filtered 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

### Configuring 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 values described in this table.
<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No default value</td>
<td>Don’t automatically populate the new field with an entry.</td>
</tr>
<tr>
<td>Specific value</td>
<td>Automatically populate the new field with the specified value.</td>
</tr>
<tr>
<td></td>
<td>These sources populate the Specific Display Value choice list:</td>
</tr>
<tr>
<td></td>
<td>o For single-attribute fields, the unfiltered data source that you selected earlier.</td>
</tr>
<tr>
<td></td>
<td>o For multiattribute fields, the display names in the Display Name and Multiple Attribute Definition section.</td>
</tr>
<tr>
<td>Function</td>
<td>Automatically populate the new field with the value derived by the selected function, such as Based on primary assignment. The function uses the filtered data source.</td>
</tr>
<tr>
<td></td>
<td>This option is available only if functions are delivered for the time attribute.</td>
</tr>
</tbody>
</table>

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.

Configuring Field-Level 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 name on time card and calendar dialog boxes. The name is also the default field name 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

• Managing Time Attributes and the Data Dictionary: Explained
• Creating Nonrecurring Earnings Elements for Time Entries: Procedure
• Data Sources for Layout Components: Explained

Defining Multiple-Attribute Fields for Time Entry: 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. Multiattribute field definition includes combining multiple associated time attributes in a column and row structure. Since you
can use a maximum of 20 multiattribute fields across all layouts, plan carefully when you create the fields and associate them with layouts. This table summarizes the basic process for each step in the create time card field guided process.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Name</th>
<th>Summary of Actions</th>
</tr>
</thead>
</table>
| 1            | Field Definition            | 1. Enter the general properties.  
2. Configure the time attributes, data sources, and filters for the filtered data source, as appropriate.  
3. Add and configure each row in the attributes definition table. This step doesn’t apply to single-attribute fields.  
4. Optionally, configure a default field value.  
5. Configure the field-level display properties. |
| 2            | Dependent Field Definition  | Optional step, available only if the independent time attribute defined during the Field Definition step has dependent attributes defined in the data dictionary.  
1. Create the dependent field. Each dependent field that you create appears as a row in the table on the Dependent Field Definition page.  
2. Optionally, edit the dependent field properties, as appropriate.  
3. Select the data sources for the dependent time attribute and add filters for the filtered data source, as appropriate.  
4. Optionally, configure a default value for the dependent field.  
5. Configure the field-level display properties for the dependent field. |
| 3            | Review                      | 1. Review and save your definition details. |

For details on defining dependent fields, see the Defining Dependent Fields for Time Entry: 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.

**Entering 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. The task is part of the Workforce Deployment offering, Time and Labor functional area. On the Field Definition page, enter a name and description according to the best practice detailed in this table.
Configuring the Time Attributes, Data Sources, and Filters

Add time attributes as columns in the Display Value and 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 combination of time attributes for different display values. The time repository stores the specified attributes, not the display values. If the attribute or attribute combination isn’t unique, the time repository can’t retrieve the expected attribute or attribute combination.

1. On the toolbar, click **Add Time Attribute**.
2. On the Add Time Attribute dialog box, complete these steps:
   a. Set the attribute display sequence to specify where the column appears in the table. Setting the sequence also ensures that the column order persists across application sessions.
   b. Select the time attribute, such as **Payroll Time Type**.
   c. Select the unfiltered data source and filtered data source for the specified time attribute. Typically, the correct value for the selected attribute is the first value in the choice list.
   d. Specify whether the time attribute is required for the definition structure.
   e. Click **OK**.
3. Repeat steps 1 and 2 until you add all of the time attributes for this field definition.
4. Add any filters provided by the filtered data sources for the time attributes in the attribute definition table. Select the filter variables and corresponding input attributes. For example, this table shows the filter variables and input attributes provided by the **Expenditure Type** and **Payroll Time Type** time attribute data sources.

<table>
<thead>
<tr>
<th>Filter Variables</th>
<th>Filter Input Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pAssignmentID</td>
<td>Assignment</td>
</tr>
<tr>
<td>pEffectiveDate</td>
<td>Start Time</td>
</tr>
<tr>
<td>pProjectUnitID</td>
<td>Project Unit</td>
</tr>
<tr>
<td>pStartTime</td>
<td>Start Time</td>
</tr>
<tr>
<td>pStopTime</td>
<td>Stop Time</td>
</tr>
</tbody>
</table>

The filtered 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
Adding and Configuring 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 display value that time reporters see instead of the attribute value or combination of values selected in the row.
2. Select the time attribute values that the time repository stores.

⚠️ **Caution:** If you set values for project or payroll and absence time attributes on the same row, the time entry routes to Absence Management. Project or payroll time data transferred to Project Costing and Global Payroll, respectively, doesn’t include any time entry shared with absence.

This table provides examples of display values for various time attribute 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 2 rows.

<table>
<thead>
<tr>
<th>Display Value</th>
<th>Expenditure Type Name</th>
<th>Payroll Time Type</th>
<th>Absence Management Type</th>
<th>Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bereavement</td>
<td></td>
<td></td>
<td></td>
<td>Bereavement</td>
</tr>
<tr>
<td>Vacation</td>
<td></td>
<td></td>
<td></td>
<td>Vacation</td>
</tr>
<tr>
<td>Regular Professional</td>
<td>Billable Time</td>
<td>Regular TL US LDG</td>
<td></td>
<td>Regular Professional</td>
</tr>
<tr>
<td>Regular Administrator</td>
<td>Billable Time</td>
<td>Regular TL US LDG</td>
<td></td>
<td>Regular Administrative</td>
</tr>
<tr>
<td>Overtime Professional</td>
<td>Professional Overtime</td>
<td>Overtime TL US LDG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overtime Administrator</td>
<td>Administrative Overtime</td>
<td>Overtime TL US LDG</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Configuring 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 values described in this table.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No default value</td>
<td>Don’t automatically populate the new field with an entry.</td>
</tr>
<tr>
<td>Specific value</td>
<td>Automatically populate the new field with the specified value.</td>
</tr>
</tbody>
</table>
These sources populate the **Specific Display Value** choice list:

- For single-attribute fields, the unfiltered data source that you selected earlier.
- For multiattribute fields, the display names in the Display Name and Multiple Attribute Definition section.

## Function

Automatically populate the new field with the value derived by the selected function, such as **Based on primary assignment**. The function uses the filtered data source.

This option is available only if functions are delivered for the time attribute.

### Configuring Field-Level 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 name on time card and calendar dialog boxes. The name is also the default field name 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
- Configuring the Time Type Multiple-Attribute Field for Combined Project and Payroll Entries: Worked Example
- Creating the Absence and Payroll Multiple-Attribute Field: Worked Example
- Data Sources for Layout Components: Explained

### Defining Buttons for Web Clock: 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 values for multiple time attributes associated with a single time event. Defining buttons includes combining
multiple associated time attributes in a column and row structure. This table summarizes the basic process for each step in the create time card field guided process.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Name</th>
<th>Summary of Actions</th>
</tr>
</thead>
</table>
| 1            | Field Definition            | 1. Enter the general properties.  
2. Configure the time attributes, data sources, and filters for the filtered data source, as appropriate.  
3. Add and configure each row in the attributes definition table. This step doesn't apply to single-attribute fields.  
4. Optionally, configure a default field value.  
5. Configure the field-level display properties. |
| 2            | Dependent Field Definition  | Optional step, available only if the independent time attribute defined during the Field Definition step has dependent attributes defined in the data dictionary.  
1. Create the dependent field. Each dependent field that you create appears as a row in the table on the Dependent Field Definition page.  
2. Optionally, edit the dependent field properties, as appropriate.  
3. Select the data sources for the dependent time attribute and add filters for the filtered data source, as appropriate.  
4. Optionally, configure a default value for the dependent field.  
5. Configure the field-level display properties for the dependent field. |
| 3            | Review                      | 1. Review and save your definition details. |

For details on defining dependent fields, see the Defining Dependent Fields for Time Entry: 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.

**Entering 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. This task is part of the Workforce Deployment offering, Time and Labor functional area.
2. On the Button Definition page, enter a name and description.
Configuring the Time Attributes, Data Sources, and Filters

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

1. On the toolbar, click Add Time Attribute.
2. In the Add Time Attribute dialog box, complete these steps:
   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 unfiltered data source and filtered data source for the specified time attribute. Typically, the correct value for the selected attribute is the first value in 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.
3. Repeat steps 1 and 2 until you add all of the time attributes for the definition of these buttons.

Adding and Configuring 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 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 values for project or payroll and absence time attributes on the same row, the time entry routes to Absence Management. Project or payroll time data transferred to Project Costing and Global Payroll, respectively, doesn’t include any time entry shared with absence.

Configuring Field Display Properties

To configure the display properties, you enable the override option. You can edit 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
- Creating Shift, Break, and Meal Web Clock Buttons: Worked Example
Defining Dependent Fields for Time Entry: Procedure

You can define dependent fields in the optional second step of the guided process to create layout components for time entry. This table summarizes the basic process for each step in the create time card field guided process.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Name</th>
<th>Summary of Actions</th>
</tr>
</thead>
</table>
| 1            | Field Definition                   | 1. Enter the general properties.  
2. Configure the time attributes, data sources, and filters for the filtered data source, as appropriate.  
3. Add and configure each row in the attributes definition table. This step doesn’t apply to single-attribute fields.  
4. Optionally, configure a default field value.  
5. Configure the field-level display properties. |
| 2            | Dependent Field Definition         | Optional step, available only if the independent time attribute defined during the Field Definition step has dependent attributes defined in the data dictionary.  
1. Create the dependent field. Each dependent field that you create appears as a row in the table on the Dependent Field Definition page.  
2. Optionally, edit the dependent field properties, as appropriate.  
3. Select the data sources for the dependent time attribute and add filters for the filtered data source, as appropriate.  
4. Optionally, configure a default value for the dependent field.  
5. Configure the field-level display properties for the dependent field. |
| 3            | Review                             | 1. Review and save your definition details. |

The focus of this topic is defining dependent fields, which are always single-attribute fields. For details on defining independent fields and web clock buttons, see these topics:

- Defining Single-Attribute Fields for Time Entry: Procedure
- Defining Multiple-Attribute Fields for Time Entry: Procedure
- Defining Buttons for Web Clock: Procedure topic
Creating the Dependent Field

To create the dependent field:

1. On the Dependent Field Definition page toolbar, click the **Create** button.
2. On the Create Dependent Time Card Field dialog box, complete these steps:
   a. Enter a name and description according to the best practice detailed in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name that you enter appears in the <strong>Name</strong> choice list on the Edit Layout dialog box, Time Card Matrix page. The <strong>Name</strong> choice list displays only 15 characters. We recommend that you enter a unique short name, possibly using agreed on abbreviations, such as OT for overtime. Also, you can select a dependent time attribute from either of two levels. For example, at the general level you can select <strong>Rate Amount</strong>. At the detailed level, you can select <strong>Rate Amount for US Regular</strong> or <strong>Shift Premium</strong>. To facilitate accurate layout configurations, we recommend that your unique short name include the suffix Det or Gen, as appropriate. Examples: RateGen, DeptOTDet</td>
</tr>
<tr>
<td>Description</td>
<td>Document the purpose of the time card field, such as:</td>
</tr>
<tr>
<td></td>
<td>• Override rate amount to provide as the payroll input value</td>
</tr>
<tr>
<td></td>
<td>• Override rate amount to provide as the payroll input value for the <strong>US Regular</strong> time attribute</td>
</tr>
<tr>
<td></td>
<td>• Department corresponding to the reported time</td>
</tr>
<tr>
<td></td>
<td>• Department corresponding to the worked overtime</td>
</tr>
<tr>
<td></td>
<td>• County corresponding to the reported time, provided as the payroll input value</td>
</tr>
<tr>
<td></td>
<td>• County code corresponding to the reported time, provide for the <strong>US Hourly</strong> costing segment</td>
</tr>
<tr>
<td>b.</td>
<td>Select the dependent time attribute for the specified independent time attribute, such as <strong>Overtime_City</strong> for location or <strong>Department</strong> for payroll costing.</td>
</tr>
<tr>
<td>c.</td>
<td>Select the availability of the dependent time attribute based on the considerations for the two options in this table:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Considerations</th>
<th>Available for all attribute values</th>
<th>Available for specified attribute values</th>
</tr>
</thead>
<tbody>
<tr>
<td>When does the dependent field appear?</td>
<td>Always, as configured when layout configurations for time cards and web clock include the independent attribute.</td>
<td>Only after the time reporter selects:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One of the specified values for the independent attribute</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A specified button on the web clock</td>
</tr>
<tr>
<td>Where can I display the dependent field appear?</td>
<td>• On the calendar • In the time card matrix • On time cards, on the dialog box with row-level details • On time cards, on the dialog box with entry-level details • On the web clock</td>
<td>• Time card, on the dialog box with row-level details • Time card, on the dialog box with entry-level details • Web clock</td>
</tr>
</tbody>
</table>
### Considerations

<table>
<thead>
<tr>
<th>Available for all attribute values</th>
<th>Available for specified attribute values</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can’t display the dependent field:</td>
<td></td>
</tr>
<tr>
<td>• On the calendar</td>
<td></td>
</tr>
<tr>
<td>• In the time card matrix</td>
<td></td>
</tr>
</tbody>
</table>

| Appropriateness of choice list values | Values might be inappropriate or missing for the time card employee, depending on the configuration of the data source for the dependent field. | Values are appropriate for the time card employee. |

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

**3. Click OK.**

### Editing the Dependent Field Properties

In the Dependent Time Card Field Properties section, you can edit the name and description, as appropriate.

### Configuring the Dependent Time Attribute Data Sources and Add Filters

For the selected dependent field, such as **Store Departments**:

1. Select the filtered data source and unfiltered data source for the specified time attribute. Typically, the correct value for the selected attribute is the first value in the choice list.
2. Add any filters for the filtered data source by selecting the filter variable and corresponding input attributes. For example, this table shows the filter variables and filter input attributes that are provided by the **Payroll Time Type** attribute data source.

<table>
<thead>
<tr>
<th>Filter Variables</th>
<th>Filter Input Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pAssignmentID</td>
<td>Assignment</td>
</tr>
<tr>
<td>pEffectiveDate</td>
<td>Start Time</td>
</tr>
</tbody>
</table>

The filtered data sources delivered by these applications don’t provide filters for many of their dependent time attributes:

- Oracle Fusion Absence Management
- Oracle Fusion Global Payroll
- Oracle Fusion Project Costing

### Configuring 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 values described in this table.
### Layout Components for Time Entry: Procedures

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No default value</td>
<td>Don’t automatically populate the new field with an entry.</td>
</tr>
<tr>
<td>Specific value</td>
<td>Automatically populate the new field with the specified value.</td>
</tr>
<tr>
<td></td>
<td>These sources populate the <strong>Specific Display Value</strong> choice list:</td>
</tr>
<tr>
<td></td>
<td>◦ For single-attribute fields, the unfiltered data source that you selected earlier.</td>
</tr>
<tr>
<td></td>
<td>◦ For multiattribute fields, the display names in the Display Name and Multiple Attribute Definition section.</td>
</tr>
<tr>
<td>Function</td>
<td>Automatically populate the new field with the value derived by the selected function, such as <strong>Based on primary assignment</strong>. The function uses the filtered data source.</td>
</tr>
<tr>
<td></td>
<td>This option is available only if functions are delivered for the time attribute.</td>
</tr>
</tbody>
</table>

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.

### Configuring Field-Level 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 name on time card and calendar dialog boxes. The name is also the default field name 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 the Meal, Department, and Location Dependent Fields: Worked Example
- Availability of Dependent Fields for Time Entry: Critical Choices

### Configuring Dependent Fields for US 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 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 these steps in the Setup and Maintenance work area, Workforce Deployment offering:

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

### Preparing Time Attributes

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

1. Create nonrecurring earnings elements using the **Time Card** or **Standard** category with the necessary input values for location by legislative data group. Use 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 payroll after final approval.

### Creating Dependent Location 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 in the Time and Labor functional area to complete these steps:

1. Create or edit an independent time card field that has the **Payroll Time Type** time attribute.
2. Click **Next**.
3. On the Dependent Field Definition, click the **Create** icon to add location attributes as dependent 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.

### Configuring Data Sources and Filters for Dependent Location Fields

For each dependent location field, complete these steps:

1. Select the unfiltered data source and filtered data source for the location attribute, typically first value in each choice list.
2. Add the filter variables and input attributes for the filtered data source. If you use multiple location levels, you configure the data source filters as shown in this US example.

<table>
<thead>
<tr>
<th>Dependent Field</th>
<th>Filter Variable</th>
<th>Variable Input Attribute</th>
<th>Available Values for Dependent Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>N/A</td>
<td>N/A</td>
<td>All values in the <strong>State</strong> data source</td>
</tr>
<tr>
<td>County</td>
<td>pCodeLevel1</td>
<td>State</td>
<td>All counties in the selected <strong>State</strong></td>
</tr>
</tbody>
</table>
Adding 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 field determines your display options in time card layouts.

Related Topics

- Managing Layout Sets: Explained
- Creating Nonrecurring Earnings Elements for Time Entries: Procedure
- Creating the Meal, Department, and Location Dependent Fields: Worked Example
- Availability of Dependent Fields for Time Entry: Critical Choices

Configuring Dependent Fields for Labor Costing Overrides: Procedure

Enable time reporters to enter payroll costing information by creating dependent fields for the independent Payroll Time Type time attribute. To configure payroll costing for time entry, complete these steps in the Setup and Maintenance work area using the Workforce Deployment offering:

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.

Preparing Costing Time Attributes

To prepare costing attributes for use in time card fields, complete 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. Set up 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 Time Attributes task.
Creating Dependent Costing Fields

Set up costing as a single-attribute dependent time card field of the related independent Payroll Time Type time attribute. Use the Manage Time Entry Layout Components task in the Time and Labor functional area to complete these steps:

1. Create or edit an independent time card field that has the Payroll Time Type time attribute.
2. Click Next.
3. On the Dependent Field Definition page, click the Create icon to add costing attributes as dependent 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. Select the availability setting for the costing field. The selection determines your display options in time card and web clock layouts. This table identifies the appropriate availability setting for legislative data groups that do and don’t share costing structures.

<table>
<thead>
<tr>
<th>Shared by LDGs</th>
<th>Availability Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>You can make the costing structure available to all independent attribute values.</td>
</tr>
<tr>
<td>No</td>
<td>You must create multiple dependent fields and specify the independent attribute values for each dependent field.</td>
</tr>
</tbody>
</table>

   e. Click OK to create the dependent location field.

Configuring Data Sources and Filters for Dependent Costing Fields

For each dependent costing field, complete these steps:

1. Select the unfiltered data source and filtered data source for the costing attribute, typically the initial value in the list.
2. Add the filter variables and input attributes for the filtered data source.

Adding 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 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
- Creating the Meal, Department, and Location Dependent Fields: Worked Example
- Availability of Dependent Fields for Time Entry: Critical Choices
7 Layout Components for Time Entry: Worked Examples

Configuring the Time Type Multiple-Attribute Field for Combined Project and Payroll Entries: Worked Example

This example shows how to configure combined project costing, payroll, and absence time attributes for the delivered Time Type field. You must configure this time card field before delivered layouts that handle combined payroll and project costing time entries work correctly.

Summary of the Tasks

Configure the Time Type multiple-attribute field using this basic process:

1. Add and configure rows in the attribute definition table.
2. Configure the multiattribute field display properties.
   - Enable time reporters and adjusters to select values from smart choice lists.
   - Don’t require the independent field on the time card.
3. Create and define the dependent field. Another worked example shows how to create these fields: Absence Reason, Meals Rate, Meals Rate Periodicity, Department, State, County, and City.
4. Review and save the definition details for the independent and dependent fields.

Editing the Time Type Multiple-Attribute Field

Complete this task using the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

1. In the Time and Labor area, click the Manage Time Entry Layout Components task.
2. On the Manage Layout Components page, search for and click the Time Type multiattribute field.

Adding and Configuring Each Row of the Attribute Definition Table

On the Edit Time Card Field: Field Definition page, add as many rows as appropriate for the combined time that you want employees to be able to report. For this example, complete these steps eight times to add and configure all of the table rows.

1. On the toolbar, click the Add icon.
2. Configure the fields for each row, as shown in this table. Use default values for fields unless the table specifies other values.
<table>
<thead>
<tr>
<th>Value Displayed on Time Card</th>
<th>Expenditure Type Name</th>
<th>Payroll Time Type</th>
<th>Absence Management Type</th>
<th>Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bereavement</td>
<td>N/A</td>
<td>N/A</td>
<td>Bereavement</td>
<td>N/A</td>
</tr>
<tr>
<td>Vacation</td>
<td>N/A</td>
<td>N/A</td>
<td>Personal Time Off</td>
<td>N/A</td>
</tr>
<tr>
<td>Paid holiday</td>
<td>N/A</td>
<td>Regular US</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sick</td>
<td>N/A</td>
<td>N/A</td>
<td>Sick</td>
<td>N/A</td>
</tr>
<tr>
<td>Regular professional</td>
<td>Professional Straight Time US</td>
<td>Regular US</td>
<td>N/A</td>
<td>Regular Professional US</td>
</tr>
<tr>
<td>Regular nonbillable</td>
<td>Administrative Straight Time US</td>
<td>Regular US</td>
<td>N/A</td>
<td>Regular Administrative US</td>
</tr>
<tr>
<td>Overtime billable</td>
<td>Professional Overtime</td>
<td>Overtime US</td>
<td>N/A</td>
<td>OT Professional US</td>
</tr>
<tr>
<td>Overtime nonbillable</td>
<td>Administrative Overtime</td>
<td>Overtime US</td>
<td>N/A</td>
<td>OT Administrative US</td>
</tr>
</tbody>
</table>

Processing handles time entries with these values as follows:

- Absence Management retrieves the attribute values from the first and second rows.
- Project Costing and Global Payroll transfer their respective attribute values from the last four rows.

Creating and Defining Dependent Fields

On the Dependent Field Definition page, you can also define dependent fields for the independent Absence Management Type and Payroll Time Type time attributes. Another worked example provides details on how to create and define these dependent fields:

<table>
<thead>
<tr>
<th>Independent Time Attribute</th>
<th>Dependent Time Attribute</th>
<th>Parent Attribute Value</th>
<th>Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Time Type</td>
<td>Rate Amount</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>Department</td>
<td>N/A</td>
<td>Cost</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>State</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>County</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>City</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
</tbody>
</table>
The basic process that the other worked example follows is:

1. Create the dependent field. Each dependent field that you create appears as a row in the table on the Dependent Field Definition page.
2. Optionally, edit the dependent field properties, as appropriate.
3. Select the unfiltered data source and filtered data source for the dependent time attribute, and add filters for the filtered data source, as appropriate.
4. Optionally, configure default values for the dependent field.
5. Configure the field-level display properties for the dependent field.

Reviewing and Saving the Definition Details for the Independent Field and Any Dependent Field

On the Review page, complete these steps:

1. Review the definition details for the independent and any dependent fields.
2. Click **Save and Close**.
3. On the Confirmation dialog box, click **OK**.

Related Topics

- Availability of Dependent Fields for Time Entry: Critical Choices
- Defining Multiple-Attribute Fields for Time Entry: Procedure
- Defining Dependent Fields for Time Entry: Procedure
- Data Sources for Layout Components: Explained

Creating the Absence and Payroll Multiple-Attribute Field: Worked Example

This example shows how to create the most common combined time entry field, which uses these time attributes: *Absence Management Type* and *Payroll Time Type*. This layout component enables you to control the choice list values that employees see when reporting independent and dependent absence-related and payroll-related time entries.

Summary of Tasks

Configure the combined absence and payroll layout component using this basis process.

1. Enter the general properties.
2. Configure the time attributes, data sources, and filters for the filtered data source.
3. Add and configure each row in the attributes definition table to create the combined independent field and choice list values.
4. Configure the field-level display properties.
   - Enable time reporters and adjusters to select values from smart choice lists.
● Enable editing of the field name and display values on any layout.
● Require the independent field on the time card.

5. Create and configure any dependent fields. Another worked example shows how to create these fields: **Meals Rate**, **Meals Rate Periodicity**, **Department**, **State**, **County**, and **City**.

6. Review and save the definition details for the independent and dependent fields.

### Entering the General Properties

Use the Manage Time Entry Layout Components task in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

1. On the Manage Layout Components page toolbar, click the **Create** icon.
2. On the Create Layout Component dialog box, complete these steps:
   a. Select **Multiple attribute time card field**.
   b. Click **OK**.
3. On the Create Time Card Field: Field Definition page, complete these steps to enter the general properties:
   a. In the **Name** field, enter **AbsencePayrollTime**.
   b. In the **Description** field, enter **Combined absence and payroll time attributes with these dependent fields: Absence Reason, Meals Rate, State, County, and City**.

### Configuring the Time Attributes, Data Sources, and Filters

1. Repeat these steps twice to add these time attributes to the attributes definition structure: **Absence Management Type** and **Payroll Time Type**. Note that this example doesn’t include the **Identifier** time attribute because it uses each time attribute value only once.
   a. On the toolbar, click **Add Time Attribute**.
   b. On the Add Time Attribute dialog box, complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Time Attribute 1 Value</th>
<th>Time Attribute 2 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute Display Sequence</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Time Attribute</td>
<td>Absence Management Type</td>
<td>Payroll Time Type</td>
</tr>
<tr>
<td>Unfiltered Data Source for Setup Tasks</td>
<td>List of Absence Types for Administrator</td>
<td>List of Payroll Time Types for Administrator</td>
</tr>
</tbody>
</table>
   c. Click **OK**.
2. On the Create Time Card Field: Field Definition page, click **Add Filters**.
   a. On the Add Time Entry Data Source Filters dialog box, add the filter variables and input attributes, as shown in this table. Provide the variables and input attributes.

<table>
<thead>
<tr>
<th>Filter Variable</th>
<th>Filter Input Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>pAssignmentId</td>
<td>Assignment</td>
</tr>
</tbody>
</table>
Adding and Configuring Each Row in the Attributes Definition Table

1. On the Create Time Card Field: Field Definition page, add rows to the attribute definition, completing the fields as shown in this table.

<table>
<thead>
<tr>
<th>Display Value</th>
<th>Absence Management Type</th>
<th>Payroll Time Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bereavement</td>
<td>Bereavement</td>
<td>N/A</td>
</tr>
<tr>
<td>Jury duty</td>
<td>Jury Duty US</td>
<td>N/A</td>
</tr>
<tr>
<td>Meals Taken</td>
<td>N/A</td>
<td>Meals Taken US</td>
</tr>
<tr>
<td>Military reserve</td>
<td>Military Reserve US</td>
<td>N/A</td>
</tr>
<tr>
<td>Not worked</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Public holiday not worked</td>
<td>Holiday US</td>
<td>N/A</td>
</tr>
<tr>
<td>Sick</td>
<td>Sick</td>
<td>N/A</td>
</tr>
<tr>
<td>Training</td>
<td>N/A</td>
<td>Training US</td>
</tr>
<tr>
<td>Travel</td>
<td>N/A</td>
<td>Travel US</td>
</tr>
<tr>
<td>Vacation</td>
<td>Vacation</td>
<td>N/A</td>
</tr>
<tr>
<td>Worked</td>
<td>N/A</td>
<td>Regular US</td>
</tr>
</tbody>
</table>

Configuring Field-Level Display Properties

1. Complete the display properties fields, as shown in this table. Use default values for fields unless the steps specify other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Type</td>
<td>Smart choice list</td>
</tr>
</tbody>
</table>
Field | Value
--- | ---
Enable override on layouts | Yes

2. Click **Next**.

Creating and Defining Dependent Fields

On the Dependent Field Definition page, you can also define dependent fields for the independent **Absence Management Type** and **Payroll Time Type** time attributes. Another worked example provides details on how to create and define these dependent fields:

<table>
<thead>
<tr>
<th>Independent Time Attribute</th>
<th>Dependent Time Attribute</th>
<th>Parent Attribute Value</th>
<th>Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Time Type</td>
<td>Rate Amount</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>Department</td>
<td>N/A</td>
<td>Cost</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>State</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>County</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>City</td>
<td>N/A</td>
<td>InputValue</td>
</tr>
</tbody>
</table>

The basic process that the other worked example follows is:

1. Create the dependent field. Each dependent field that you create appears as a row in the table on the Dependent Field Definition page.
2. Optionally, edit the dependent field properties, as appropriate.
3. Select the unfiltered data source and filtered data source for the dependent time attribute, and add filters for the filtered data source, as appropriate.
4. Optionally, configure default values for the dependent field.
5. Configure the field-level display properties for the dependent field.

Reviewing and Saving the Definition Details for the Independent Field and Any Dependent Field

On the Review page, complete these steps:

1. Review the definition details for the independent and any dependent fields.
2. Click **Save and Close**.
3. On the Confirmation dialog box, click **OK**.

**Related Topics**

- Defining Multiple-Attribute Fields for Time Entry: Procedure
Creating Shift, Break, and Meal Web Clock Buttons: Worked Example

This example shows how to create web clock buttons that store values for these independent time attributes: Clock Event and Payroll Time Type.

Summary of the Tasks

Create web clock buttons using this basic process:

1. Configure the time attributes, data sources, and filters for the time entry data source, as appropriate.
2. Add and configure each row in the attribute definition table.
3. Configure the button-level display properties.
4. Create and configure any dependent fields. Another worked example shows how to create these payroll-based dependent fields: Meals Rate, Meals Rate Periodicity, Department, State, County, and City. You can include any of them in the web clock button configuration.
5. Review and save the definition details for the web clock buttons and any dependent fields.

Use the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

Creating the Web Clock Buttons

1. In the Time and Labor area, click the Manage Time Entry Layout Components task.
2. On the Manage Layout Components page toolbar, click the Create button.
3. On the Create Layout Component dialog box, complete these steps:
   a. Select Web clock buttons.
   b. Click OK.
4. On the Create Web Clock Buttons: Buttons Definition page, complete the general properties fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Clock Events for Payroll Time</td>
</tr>
<tr>
<td>Description</td>
<td>Uses the independent Application Event clock attribute, Payroll Time Type time attribute, and the dependent Department time attribute</td>
</tr>
</tbody>
</table>

Configuring the Time Attributes, Data Sources, and Filters

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

1. On the Display Names and Attribute Definition section toolbar, click Add Time Attribute.
2. On the Add Time Attribute dialog box, complete the fields for the **Payroll Time Type** time attribute, as shown in this table. The unfiltered data source and filtered data source that you select is typically the first value in each choice list. Use default values for fields unless the table specifies other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute Display Sequence</td>
<td>10</td>
</tr>
<tr>
<td>Time Attribute</td>
<td>Payroll Time Type</td>
</tr>
<tr>
<td>Unfiltered Data Source for Setup Tasks</td>
<td>List of Payroll Time Types for Administrator</td>
</tr>
<tr>
<td>Filtered Data Source for Time Entry</td>
<td>List of Payroll Time Types for User</td>
</tr>
<tr>
<td>Time Attribute Required</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Click **OK**.

### Add and Configure Each Row of the Attribute Definition Table

On the Create Web Clock Buttons: Buttons Definition page, repeat these steps six times to add and define the rows.

1. On the Display Names and Attribute Definition section toolbar, click the **Add** icon.
2. Complete the fields as shown in this table. Use default values for fields unless the table specifies other values. The **Generate Time Cards from Time Collection Device** process creates:
   a. The **Out** event of the **Out and In** event using the payroll time type associated with the preceding **In** event
   b. The **In** event of the **Out and In** event using the payroll time type selected for the button

<table>
<thead>
<tr>
<th>Button Label</th>
<th>Clock Event</th>
<th>Payroll Time Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clock In</td>
<td>In</td>
<td>Regular US LDG</td>
</tr>
<tr>
<td>Out for Break</td>
<td>Out and In</td>
<td>Paid Break US LDG</td>
</tr>
<tr>
<td>Back from Break</td>
<td>Out and In</td>
<td>Regular US LDG</td>
</tr>
<tr>
<td>Out for Meal</td>
<td>Out and In</td>
<td>Unpaid Meal</td>
</tr>
<tr>
<td>Back from Meal</td>
<td>Out and In</td>
<td>Regular US LDG</td>
</tr>
<tr>
<td>Clock Out</td>
<td>Out</td>
<td>Regular US LDG</td>
</tr>
</tbody>
</table>

3. Repeat steps a and b until you have added and defined all six rows.
4. Click **Add Filters**.
   a. On the Add Time Entry Data Source Filters dialog box, add the filter variables and input attributes, as shown in this table. The filtered data source provides the variables and input attributes.
Define the Display Properties

1. On the Create Web Clock Buttons: Buttons Definition page, in the Display Properties section, enable override of the button names on web clock layouts.
2. Click Next.

Creating and Defining Dependent Fields

On the Dependent Field Definition page, you can also define dependent fields for the independent Payroll Time Type time attribute. Another worked example provides details on how to create and define these dependent fields:

<table>
<thead>
<tr>
<th>Dependent Time Attribute</th>
<th>Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate Amount</td>
<td>InputValue</td>
</tr>
<tr>
<td>Department</td>
<td>Cost</td>
</tr>
<tr>
<td>State</td>
<td>InputValue</td>
</tr>
<tr>
<td>County</td>
<td>InputValue</td>
</tr>
<tr>
<td>City</td>
<td>InputValue</td>
</tr>
</tbody>
</table>

The basic process that the other worked example follows is:

1. Create the dependent field. Each dependent field that you create appears as a row in the table on the Dependent Field Definition page.
2. Optionally, edit the dependent field properties, as appropriate.
3. Select the unfiltered data source and filtered data source for the dependent time attribute, and add filters for the filtered data source, as appropriate.
4. Optionally, configure default values for the dependent field.
5. Configure the field-level display properties for the dependent field.
Reviewing and Saving the Definition Details for the Buttons and Any Dependent Fields

On the Review page, complete these steps:

1. Review the definition details for the independent and any dependent fields.
2. Click Save and Close.
3. On the Confirmation dialog box, click OK.

Related Topics

- Defining Buttons for Web Clock: Procedure
- Defining Dependent Fields for Time Entry: Procedure

Creating the Meal, Department, and Location Dependent Fields: Worked Example

This example shows how to create the dependent fields based on payroll time entries. The dependent payroll fields are Meal Rate, Meal Rate Periodicity, Department, State, County, and City. These fields store reported and calculated data for transfer to the payroll time consumer.

You can add these dependent fields for any multiattribute field that includes the independent Payroll Time Type time attribute. For example, add these dependent fields to the delivered Time Type time card field, which supports combined absence, project, and payroll time entries.

Note: To add dependent fields to a single-attribute payroll field, duplicate and edit the delivered Payroll Time Type field. Don’t directly edit the delivered field to avoid possible issues with future upgrades.

Summary of Tasks

Create and configure each dependent field using this basis process.

1. Create the dependent fields by creating and defining each dependent field. Use dependent time attributes at the general rather than detailed level.
2. Set the meal override rate field as text entry. Set the other fields as smart choice lists.
3. Don’t require the dependent fields on any time card containing the independent time attribute.
4. Enable editing of the rate and department names for the dependent field on any layout.
5. Don’t enable editing of location field names on any layout.
6. Review and save the definition details for the independent and dependent fields.

Prerequisite set up: The multiattribute field definition for this layout component includes the Payroll Time Type time attribute.
Creating and Defining the Meal Override Rate Dependent Field

1. On the General Properties section toolbar, click the Create icon.

2. On the Create Dependent Time Card Field dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>MealOvrrdRt</td>
</tr>
<tr>
<td>Independent Time</td>
<td>Payroll Time Type</td>
</tr>
<tr>
<td>Dependent Time Attribute</td>
<td>Rate</td>
</tr>
</tbody>
</table>

   b. Press Enter.
   c. On the Search and Select: Time Attributes dialog box, complete these steps:

   The default search results level is General, which is what you want for these dependent time attributes.
   i. In the search results section, select Rate Amount of the collection InputValue.
   ii. Click OK.
   d. On the Create Dependent Time Card Field dialog box, in the Description field, enter Override the default meal allowance.
   e. In the Availability section, select For specific independent time attribute values.
      i. In the Independent Time Attribute Value field, select Meals Taken.
   f. Click OK.

3. On the Create Time Card Field: Dependent Field Definition page, complete the time attribute and data source fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered Data Source for the Time Entry</td>
<td>Default format value set for number</td>
</tr>
<tr>
<td></td>
<td>This data source has no filters to add</td>
</tr>
<tr>
<td>Unfiltered Data Source for Setup Tasks</td>
<td>Default format value set for number</td>
</tr>
</tbody>
</table>

4. Complete the display properties fields, as shown in this table. Use default values for fields unless the steps specify other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Type</td>
<td>Text box</td>
</tr>
<tr>
<td>Display Name</td>
<td>Meal Override Rate</td>
</tr>
</tbody>
</table>
Creating and Defining the Meal Rate Periodicity Dependent Field

This periodicity field is required with the **Meal Override Rate** field to ensure proper payroll processing after transferring time data to Global Payroll.

1. On the General Properties section toolbar, click the **Create** icon.
2. On the Create Dependent Time Card Field dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>MealRtPdcty</td>
</tr>
<tr>
<td><strong>Independent Time Attribute</strong></td>
<td>Payroll Time Type</td>
</tr>
<tr>
<td><strong>Dependent Time Attribute</strong></td>
<td>Rate</td>
</tr>
</tbody>
</table>

b. Press **Enter**.

c. On the Search and Select: Time Attributes dialog box, complete these steps:

   The default search results level is **General**, which is what you want for these dependent time attributes.

   i. In the search results section, select **Rate Amount** of the collection **InputValue**.
   ii. Click **OK**.

d. On the Create Dependent Time Card Field dialog box, in the **Description** field, enter **Override the default meal allowance**.

e. In the Availability section, select **For specific independent time attribute values**.

   i. In the **Independent Time Attribute Value** field, select **Meals Taken**.

   f. Click **OK**.

3. On the Create Time Card Field: Dependent Field Definition page, complete the time attribute and data source fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered Data Source for the Time Entry</td>
<td>Default format value set for number</td>
</tr>
</tbody>
</table>

   This data source has no filters to add

| Unfiltered Data Source for Setup Tasks | Default format value set for number |
4. Complete the display properties fields, as shown in this table. Use default values for fields unless the steps specify other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Type</td>
<td>Text box</td>
</tr>
<tr>
<td>Display Name</td>
<td>Meal Rate Periodicity</td>
</tr>
</tbody>
</table>

Creating and Defining the Department Dependent Field

1. On the General Properties section toolbar, click the Create icon.
2. On the Create Dependent Time Card Field dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Department</td>
</tr>
<tr>
<td>Independent Time Attribute</td>
<td>Payroll Time Type</td>
</tr>
<tr>
<td>Dependent Time Attribute</td>
<td>Depart</td>
</tr>
</tbody>
</table>

b. Press Enter.

c. On the Search and Select: Time Attributes dialog box, complete these steps:
   i. In the search results section, select Department of the cost segment collection named Cost.
   ii. Click OK.

d. On the Create Dependent Time Card Field dialog box, in the Description field, enter Department where the hours were worked.

e. In the Availability section, select For all independent time attribute values.

f. On the Warning dialog box with the message that the dependent field always appears on the time card with the independent attribute, click Yes.

g. On the Create Dependent Time Card Field dialog box, click OK.
3. On the Create Time Card Field: Dependent Field Definition page, complete the time attribute and data source fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered Data Source for Time Entry</td>
<td>Select the appropriate costing segment data source, which is typically the first value in the choice list. This data source has no filters to add.</td>
</tr>
</tbody>
</table>
Oracle Global Human Resources Cloud
Implementing Time and Labor

Chapter 7
Layout Components for Time Entry: Worked Examples

Field | Value
--- | ---
Unfiltered Data Source for Setup Tasks | Select the appropriate costing segment data source, which is typically the first value in the choice list.

4. Complete the display properties fields, as shown in this table. Use default values for fields unless the steps specify other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Type</td>
<td>Smart choice list</td>
</tr>
<tr>
<td>Enable override on layouts</td>
<td>Yes</td>
</tr>
<tr>
<td>Required on the Time Card</td>
<td>No</td>
</tr>
</tbody>
</table>

Creating and Defining the State Dependent Field

1. On the General Properties section toolbar, click the Create icon.
2. On the Create Dependent Time Card Field dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>State</td>
</tr>
<tr>
<td>Independent Time Attribute</td>
<td>Payroll Time Type</td>
</tr>
<tr>
<td>Dependent Time Attribute</td>
<td>State</td>
</tr>
</tbody>
</table>

b. Press Enter.
c. On the Search and Select: Time Attributes dialog box, complete these steps:
   The default search results level is General, which is what you want for these dependent time attributes.
   i. In the search results section, select State of the collection InputValue.
   ii. Click OK.
d. On the Create Dependent Time Card Field dialog box, in the Description field, enter State where the hours were worked.
e. In the Availability section, select For all independent time attribute values.
f. On the Warning dialog box with the message that the dependent field always appears on the time card with the independent attribute, click Yes.
g. On the Create Dependent Time Card Field dialog box, click OK.
3. On the Create Time Card Field: Dependent Field Definition page, complete the time attribute and data source fields, as shown in this table.
Creating and Defining the County Dependent Field

1. On the General Properties section toolbar, click the **Create** icon.
2. On the Create Dependent Time Card Field dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>County</td>
</tr>
<tr>
<td>Independent Time Attribute</td>
<td>Payroll Time Type</td>
</tr>
<tr>
<td>Dependent Time Attribute</td>
<td>County</td>
</tr>
</tbody>
</table>

b. Press **Enter**.

c. On the Search and Select: Time Attributes dialog box, complete these steps:

   The default search results level is **General**, which is what you want for these dependent time attributes.

   i. In the search results section, select **County** of the collection **InputValue**.
   ii. Click **OK**.

d. On the Create Dependent Time Card Field dialog box, in the **Description** field, enter **County where the hours were worked**.

e. In the Availability section, select **For all independent time attribute values**.

f. On the Warning dialog box with the message that the dependent field always appears on the time card with the independent attribute, click **OK**.

g. On the Create Dependent Time Card Field dialog box, click **OK**.
3. On the Create Time Card Field: Dependent Field Definition page, in the Time Attribute and Data Source section, complete these steps:
   a. In the Filtered Data Source for Time Entry field, select List of values for payroll US state field for Geocode.
   b. Click Add Filters.
   c. On the Add Time Entry Data Source Filters dialog box, complete these steps:
      i. In the Filter Variable field, select pCodeLevel1.
      ii. In the corresponding Filter Input Attribute field, enter State.
      iii. Press Enter.
      iv. On the Search and Select: Time Attributes dialog box, complete these steps:
         a. In the Collection field, select Payroll input value.
         b. Click Search.
         c. In the search results section, select State.
         d. Click OK.
   d. On the Create Time Card Field: Dependent Field Definition page, in the Unfiltered Data Source for Setup Tasks field, select List of values for payroll US state field for Geocode.

4. Complete the display properties fields, as shown in this table. Use default values for fields unless the steps specify other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Type</td>
<td>Smart choice list</td>
</tr>
<tr>
<td>Required on the Time Card</td>
<td>No</td>
</tr>
</tbody>
</table>

Creating and Defining the City Dependent Field

1. On the General Properties section toolbar, click the Create icon.

2. On the Create Dependent Time Card Field dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>City</td>
</tr>
</tbody>
</table>

| Independent Time Attribute    | Payroll Time Type      |
| Dependent Time Attribute      | City                   |

b. Press Enter.

c. On the Search and Select: Time Attributes dialog box, complete these steps:
The default search results level is General, which is what you want for these dependent time attributes.

i. In the search results section, select City of the collection InputValue.

ii. Click Yes.

d. On the Create Dependent Time Card Field dialog box, in the Description field, enter City where the hours were worked.

e. In the Availability section, select For all independent time attribute values.

f. On the Warning dialog box with the message that the dependent field always appears on the time card with the independent attribute, click OK.

g. On the Create Dependent Time Card Field dialog box, click OK.

3. On the Create Time Card Field: Dependent Field Definition page, in the Time Attribute and Data Source section, complete these steps:

a. In the Filtered Data Source for Time Entry field, select List of values for payroll US state field for Geocode.

b. Click Add Filters.

c. On the Add Time Entry Data Source Filters dialog box, complete these steps:

   i. In the Filter Variable field, select pCodeLevel1.

   ii. In the corresponding Filter Input Attribute field, enter State.

   iii. Press Enter.

   iv. On the Search and Select: Time Attributes dialog box, complete these steps:

      a. In the Collection field, select Payroll input value.

      b. Click Search.

      c. In the search results section, select State.

      d. Click OK.

   v. On the Add Time Entry Data Source Filters dialog box, in the Filter Variable field, select pCodeLevel2.

   vi. In the corresponding Filter Input Attribute field, enter County.

   vii. On the Search and Select: Time Attributes dialog box, complete these steps:

       a. In the Collection field, select Payroll input value.

       b. Click Search.

       c. In the search results section, select County.

       d. Click OK.

d. On the Add Time Entry Data Source Filters dialog box, click OK.

e. On the Create Time Card Field: Dependent Field Definition page, in the Unfiltered Data Source for Setup Tasks field, select List of values for payroll US state field for Geocode.

4. Complete the display properties fields, as shown in this table. Use default values for fields unless the steps specify other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Type</td>
<td>Smart choice list</td>
</tr>
<tr>
<td>Required on the Time Card</td>
<td>No</td>
</tr>
</tbody>
</table>

5. Click Next.
Related Topics

- Defining Dependent Fields for Time Entry: Procedure
- Availability of Dependent Fields for Time Entry: Critical Choices
Time Entry Identification for Validations, Calculations, and Approvals: Time Categories

Time Categories: How They Work with Time Processing Objects

A time category consists of conditions that identify the time entries to use in time rules, summaries, analytics, and transfers. For example, include all time data with any payroll attribute value in transfers to Global Payroll. Include only time entries with the attribute values Regular US, Training US, and Travel US in overtime calculations.

In a Time Consumer Set

You must select a time category for each time consumer that you select in a time consumer set. The time category determines which time entries the time validation rules in the time consumer set apply to. It also determines which time entries compose the time data transferred to the time consumer. Typically, you use the delivered All Project Entries and All Payroll Entries time categories, respectively with these time consumers: Project Costing and Global Payroll. The All Payroll Entries time category includes both hours-based and units-based time data.

In a Time Allocation

You must select a time category for every source that you include in a time allocation. You include a time allocation in 1 or more time calculation rules. This time category determines which time entries to use to calculate the corresponding outputs for the allocation. For example, allocate all time entries with a payroll attribute value of Regular as follows:

- 25 percent to department 1001
- 35 percent to department 1002
- 40 percent to department 1003

You can use only hours-based time categories in time allocations.

In Time Rules and Rule Sets

When you create time rules, you select a time category that determines which time entries to use in validations, calculations, and submissions. Examples of what the time category determines are:

- The end and start entries to compare with the defined rest period
- The entries to compare with the employee’s total scheduled hours
- The entries to allocate across the specified cost segments
- The entries to use when dividing reported daily or period time by the specified threshold value to calculate regular and overtime hours
- The entries that initiate the rule that automatically saves or submits the time card

When you create time rule sets, you can optionally select a time category for 1, multiple, or all time rule set members. Add time categories at this level only when the category criteria apply to the entire time card. For example, you set the Statutory
Time for OT time category on the rule set member. Time cards that contain entries for only Regular US, Training US, and Travel US initiate this rule set member. Time cards with different, or additional entries don't initiate this rule set member.

Related Topics
- Time Consumer Sets: Explained

Using Condition Components in Time Categories: Explained

Create a time category by specifying conditions that the time entry must meet to belong to that category. A time category can include only hours-based or units-based time entries, or both. For example, the delivered All Payroll Entries time category includes all time entries with payroll attribute values, regardless of their units of measure. A condition can combine several attributes into an expression that must be true, for the time entry to belong to the time category. For example, define an hours-based time category that identifies any time entry with these payroll attribute values: Regular US, Training US, and Travel US. Define a units-based time category that identifies any time entry with the payroll attribute value Meals Taken.

Time categories can contain time categories with the same unit of measure. For example, you configure the hours-based Statutory Time for OT category to identify these payroll attribute values Regular US, Training US, and Travel US. Then you configure the hours-based Union Time for OT category by completing these steps:

1. Embedding the Statutory Time for OT category
2. Adding the payroll attribute value Jury Duty US

Create and edit categories using the Manage Time Categories task in the Setup and Maintenance work area, Workforce Deployment Offering, Time and Labor functional 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. The unit of measure selection filters the available time attributes.

- **Value Type**: Represents a classification of the time category value. This table lists the different value types that you can use to define time categories. Selecting the track usage option filters condition value types to only values that can be saved for use in balance definitions and reports.

<table>
<thead>
<tr>
<th>Value Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any value</td>
<td>Any value reported for the time attribute is included in this time category.</td>
</tr>
<tr>
<td>Blank value</td>
<td>If there is no value reported for the time attribute, then that time entry is included in that time category.</td>
</tr>
<tr>
<td>Specific value</td>
<td>Select a value for the time attribute from the list of values for that time attribute.</td>
</tr>
</tbody>
</table>
### Compound and Grouped Conditions

Variations for building conditions include:

- Connecting 2 or more conditions by logical operators, such as AND or OR, to create a compound condition that returns true or false
- Grouping 2 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 a compound condition composed of the components and values shown in this table.

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single condition</td>
<td>(Payroll Time Type = Regular)</td>
</tr>
<tr>
<td>Logical operator</td>
<td>AND</td>
</tr>
<tr>
<td>Grouped condition</td>
<td>(Expenditure Type = Overtime OR Expenditure Type = Billable)</td>
</tr>
</tbody>
</table>

The time category identifies all of the time entries that match the first condition and 1 of the 2 grouped conditions.

### Creating a Units-Based Time Category for Meals Taken: Worked Example

This example shows how to create a time category. It identifies the **Payroll Time Type** time attribute value **Meals Taken US** for use in rules that calculate meal allowances and reports.

### Creating the Units-Based Category

Use the Setup and Maintenance work area, Workforce Deployment Offering, Time and Labor functional area.

1. In the Time and Labor area, click **Manage Time Categories**.
2. On the Manage Time Categories toolbar, click the **Create** icon.

3. On the Create Time Category page, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Meals Taken US</td>
</tr>
<tr>
<td>Description</td>
<td>Identifies the time entries with the associated Payroll Time Type attribute value of Meals Taken US</td>
</tr>
<tr>
<td>Track Usage</td>
<td>Yes</td>
</tr>
<tr>
<td>UOM</td>
<td>Units</td>
</tr>
</tbody>
</table>

   b. Complete the condition row, as shown in this table.

<table>
<thead>
<tr>
<th>Time Attribute</th>
<th>Value Type</th>
<th>Attribute Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Time Type</td>
<td>Specific Value</td>
<td>Meals Taken US</td>
</tr>
</tbody>
</table>

   c. Click **Save and Close**.

   d. On the Confirmation dialog box, click **OK**.

Creating 2 Time Categories for Overtime Calculations: Worked Example

This example shows how to create 2 time categories that identify specific values for the **Payroll Time Type** attribute, for use in rules that calculate overtime. The **Statutory Time for OT** category identifies time entries with these attribute values: **Regular US**, **Training US**, and **Travel US**. The **Union Time for OT** category identifies time entries with those same attribute values as well as **Jury Duty US**. The **Union Time for OT** category embeds and builds on the **Statutory Time for OT** category.

Creating the Category Statutory Time for OT

Use the **Manage Time Categories** task in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

1. On the Manage Time Categories page toolbar, click the **Create** icon.

2. On the Create Time Category page, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Statutory Time for OT</td>
</tr>
</tbody>
</table>
Implementing Time and Labor

Chapter 8

Time Entry Identification for Validations, Calculations, and Approvals: Time Categories

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Identifies time entries with the <strong>Regular US LDG</strong>, <strong>Training US LDG</strong>, and <strong>Travel US LDG</strong> values for the associated <strong>Payroll Time Type</strong> attribute</td>
</tr>
<tr>
<td>UOM</td>
<td>Hours</td>
</tr>
</tbody>
</table>

**Creating the Category Union Time for OT**

1. On the Manage Time Categories page toolbar, click the **Create** icon.
2. On the Create Time Category page, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Union Time for OT</td>
</tr>
<tr>
<td>Description</td>
<td>Identifies time entries with the <strong>Regular US</strong>, <strong>Training US</strong>, <strong>Travel US</strong>, and <strong>Jury Duty US</strong> value for the associated <strong>Payroll Time Type</strong> attribute</td>
</tr>
<tr>
<td>UOM</td>
<td>Hours</td>
</tr>
</tbody>
</table>

   b. On the toolbar, click the **Embed a Time Category** icon.
   c. On the Embed Time Category dialog box, complete these steps:
      i. In the **Time Category Name** field, select **Statutory Time for OT**.
      ii. Click **OK**.
   d. On the Create Time Category page, in the **Travel US LDG** row, select the **OR** operator.
   e. Add the fourth condition, as shown in this table.

<table>
<thead>
<tr>
<th>Time Attribute</th>
<th>Value Type</th>
<th>Attribute Value</th>
<th>Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Time Type</td>
<td>Specific Value</td>
<td>Regular US</td>
<td>OR</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>Specific Value</td>
<td>Training US</td>
<td>OR</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>Specific Value</td>
<td>Travel US</td>
<td>N/A</td>
</tr>
</tbody>
</table>

   c. Select the newly created condition rows.
   d. On the toolbar, click the **Add Parentheses** icon.
   e. Click **Save and Close**.
   f. On the Confirmation dialog box, click **OK**.
Time Category FAQs

Can I ungroup only one time category condition in a group?

Selecting any one of the conditions in that group and clicking the **Remove Parentheses** icon ungroups all of the conditions. You can then regroup conditions as appropriate.

How can I embed an existing time category in a new category?

Use the **Embed Time Category** icon to insert the condition of an existing time category. The embedded category appears in read-only format, along with its time attributes and attribute values.
9 Layout Sets and Time Entry Formats

Manage Layout Sets: Explained

Generate and update a collection of layouts that determine time card, calendar, web clock, shift page and dialog box appearances, and change audit identifiers. Generate different layout sets for employees with different requirements. This figure summarizes how time attributes, layout components, and categories compose these layout sets that time entry setup profiles associate with employees using HCM groups.

The profiles ensure that the employees and their managers see only those time card fields and web clock buttons that are relevant to them.

When you create a layout set, you select 1 or more time consumers and generate a set of delivered layouts for the time consumers. You then configure 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 delivered layout sets available for use in 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:

- Fields that appear on time card pages and approval notifications
- Fields that act as time entry identifiers on change audit dialog boxes
- Buttons and fields that appear on a web clock
- Fields that appear on shift dialog boxes
- Time categories used to calculate and display time totals on time review, view, and approval notification pages

Layouts help to reduce time entry errors because you can use the buttons, fields, and values that are meaningful to the employees. This table lists the delivered layouts that you use to configure the different time card, calendar, web clock, and shift pages and dialog boxes. Manager layouts automatically inherit worker configurations. You can optionally make additional edits to manager layouts that employees don’t see, or see as read-only.

<table>
<thead>
<tr>
<th>Layout</th>
<th>User Configurations</th>
<th>Time Card Page or Dialog Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Entry Layout</td>
<td>Worker, Manager, optional</td>
<td>Create Time Card page on personal computers opened from the Manage Time Cards page</td>
</tr>
<tr>
<td>Time Review Layout</td>
<td>Worker, Manager, optional</td>
<td>Review Time page opened from the Manage Time Cards page</td>
</tr>
<tr>
<td>Time View Layout</td>
<td>Worker, Manager, optional</td>
<td>View Time Card page opened from the Manage Time Cards page</td>
</tr>
<tr>
<td>Time Approval Notification Layout</td>
<td>Worker, Manager, optional</td>
<td>Approve Time Card opened from the Pending Notifications dialog box or Worklists page</td>
</tr>
<tr>
<td>Calendar Entry Layout</td>
<td>Worker</td>
<td>Overtime bar on the calendar page</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report Time dialog box opened from the calendar page</td>
</tr>
<tr>
<td>Web Clock Layout</td>
<td>Worker, optional</td>
<td>Web Clock page of the Web Clock work area</td>
</tr>
</tbody>
</table>
Layout Sets and Time Entry Formats

Layout Configuration

You can use the Edit Layout guided process to configure each worker and manager layout. This table summarizes that process across all layouts.

- For the time entry layout, you configure the time entry and time totals tables. You also specify which fields to include as identifiers on change audit dialog boxes.
- For the time review, view, and approval layouts, you configure the reported time and calculated time tables, as well as each corresponding time totals table. You also specify which fields to include as identifiers on change audit dialog boxes.
- For the calendar entry and web clock layouts, you configure only the worker layout because no corresponding manager layout exists.
- For the calendar entry, web clock, and shift layouts, you don’t configure a time totals table.

<table>
<thead>
<tr>
<th>Edit Layout Page</th>
<th>Layout Configuration</th>
<th>Description of Time Card Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Card Matrix</td>
<td>Replace the default fields and add additional fields to display on these pages and dialog boxes:</td>
<td>On time card pages, the table that displays time attributes, days, and dates that contain hours or time entries.</td>
</tr>
<tr>
<td></td>
<td>- Time entry, review, view, and approval notification pages in the Time and Time Management work areas</td>
<td>On change audit dialog boxes opened from time card pages, the fields and values that uniquely identify each time entry.</td>
</tr>
<tr>
<td></td>
<td>- Dialog boxes for reporting time and viewing shift details from the calendar in the Time work area</td>
<td>On the dialog box for reporting time, the fields that display time attributes, days, and dates that contain hours or time entries.</td>
</tr>
<tr>
<td></td>
<td>- Dialog boxes on the Manage Planned Schedules page of the Time Management work area for creating and editing shifts</td>
<td>On the dialog boxes for viewing shift details and creating and editing shifts, the Time Attributes section fields.</td>
</tr>
</tbody>
</table>

On time card pages, the table that displays 
attributes, days, and dates that contain hours or time entries.

On change audit dialog boxes opened from 
time card pages, the fields and values that 
uniquely identify each time entry.

On the dialog box for reporting time, the 
fields that display time attributes, days, and 
dates that contain hours or time entries.

On the dialog boxes for viewing shift details 
and creating and editing shifts, the Time Attributes section fields.
<table>
<thead>
<tr>
<th>Edit Layout Page</th>
<th>Layout Configuration</th>
<th>Description of Time Card Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Modify entry properties for time entry, review, view, and approve layouts as well as the calendar time entry layout.</td>
<td></td>
</tr>
<tr>
<td>Row Level Details</td>
<td>Add fields that you want to display in a separate dialog box on the time entry, review, view, and approval notification pages. Example: Dependent fields of previously entered time or optional attributes that you don’t want to appear in the main matrix of the time card. Modify the display names for dependent fields and dialog boxes. To fully render the display names, limit them to 70 characters or less.</td>
<td>Dependent time card fields that appear on the dialog box for row-level details. Example: You configure a payroll layout to display the dependent Department field on the Additional Attributes dialog box whenever Premium is selected in the time card matrix.</td>
</tr>
<tr>
<td>Comments</td>
<td>Configure the Comments column to appear either on the dialog box for entry-level details or on the time entry, review, view, and approval notification pages. Modify the display name and date format.</td>
<td>The Comments column in the time card matrix or the dialog box for entry-level details</td>
</tr>
<tr>
<td>Entry Level Details</td>
<td>Add fields that you want to display on the dialog box for entry-level details. This dialog box appears on the time entry, review, view, and approval notification pages. Modify the display names for dependent fields and dialog boxes. To fully render the display names, limit them to 70 characters or less. Modify the date format for the dependent fields.</td>
<td>Dependent fields that appear on the dialog box for entry-level details.</td>
</tr>
<tr>
<td>Drag and Drop Values</td>
<td>Select up to five field values to display in the Drag to Report Time section of the Time page. To fully render the field display names, limit them to 70 characters or less.</td>
<td>Time card values that appear in the Drag to Report Time section of the Time page.</td>
</tr>
<tr>
<td>Details of Time Totals</td>
<td>Select the time category whose conditions time entries must meet for inclusion in the overtime bar quantity and set the decimal precision for the hours.</td>
<td>Overtime hours that appear on the overtime bar of the calendar page.</td>
</tr>
<tr>
<td>Web Clock Properties</td>
<td>Hide or show seconds on the clock, enable the button logic rule, and enable viewing of daily time events.</td>
<td>Appearance of the digital clock on the web clock page. Earlier buttons become unavailable after the time reporter clicks a button later in the sequence. Daily time events appear on the Actions panel tab.</td>
</tr>
</tbody>
</table>
### Edit Layout Page

<table>
<thead>
<tr>
<th>Buttons</th>
<th>Set the button grid layout for the web clock and add buttons to the web clock.</th>
<th>Buttons that appear on the web clock page and how many per row.</th>
</tr>
</thead>
</table>

### Time Card Fields

- Add fields to display on the web clock and review, view, and approve time card pages.
- The sequence of the fields is important for data filter dependencies.
- Modify field display names. To fully render the field display names, limit them to 70 characters or less.

### Hours

- Add time categories measured in hours to the Time Totals table on the time entry, review, view, and approval notification pages.
- Modify the display name and time entry properties.

### Units

- Add time categories measured in units to the Time Totals table on the time entry, review, view, and approval notification pages.
- Modify the display name and time entry properties.

### Availability of Dependent Fields in Layout Sets

When adding dependent fields to a layout, you’re constrained by the availability option selected on the Dependent Field Definition page. This table describes the effect that the 2 availability options for dependent fields have on layout configurations.

<table>
<thead>
<tr>
<th>Considerations</th>
<th>Available for all attribute values</th>
<th>Available for specified attribute values</th>
</tr>
</thead>
<tbody>
<tr>
<td>When does the dependent field appear?</td>
<td>Always, as configured when layout configurations for time cards and web clock include the independent attribute.</td>
<td>Only after the time reporter selects:</td>
</tr>
</tbody>
</table>
| | | • One of the specified values for the independent attribute  
| | | • A specified button on the web clock |
| Where can I display the dependent field appear? | • On the calendar  
| | | • In the time card matrix  
| | | • On time cards, on the dialog box with row-level details  
| | | • On time cards, on the dialog box with entry-level details  
| | | • On the web clock  
| | | • Time card, on the dialog box with row-level details  
| | | • Time card, on the dialog box with entry-level details  
| | | • Web clock  
| | | You can’t display the dependent field:  
| | | • On the calendar  
| | | • In the time card matrix |
| Appropriateness of choice list values | Values might be inappropriate or missing for the time card employee, depending on | Values are appropriate for the time card employee. |
Considerations

<table>
<thead>
<tr>
<th>Considerations</th>
<th>Available for all attribute values</th>
<th>Available for specified attribute values</th>
</tr>
</thead>
<tbody>
<tr>
<td>the configuration of the data source for the dependent field.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Related Topics**

- Availability of Dependent Fields for Time Entry: Critical Choices

## Time Entry Format: Critical Choices

Specify whether time reporters enter time as number of hours, 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 the time entry format on the Edit Layout dialog box, in the Time Entry Properties section.

### Time Entry Formats

This table lists the time entry formats and describes each.

<table>
<thead>
<tr>
<th>Time Entry Format</th>
<th>Appearance on Time Card for Each Day</th>
<th>Time Entry by Time Reporters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display hours only</td>
<td>One column, labeled <strong>Hours</strong></td>
<td>Enter the number of hours</td>
</tr>
<tr>
<td>Display start and stop time</td>
<td>Two columns, labeled <strong>Start</strong> and <strong>Stop</strong></td>
<td>Enter clock times</td>
</tr>
<tr>
<td>Display hours and times</td>
<td>Three columns, labeled <strong>Start</strong>, <strong>Stop</strong>, and <strong>Hours</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

### Time Entry Format for Calculated Time

For the time review, view, and approval layouts, you configure 2 sections:

- Reported Time
- Calculated Time

If your time entry layout includes **Start** and **Stop** columns, then your Calculated Time sections must use the time entry format **Display hours and times**. 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 employee’s schedule. Select the time entry format that is supported for the schedule type applicable to employees who use the layout set. This table describes the different schedule types with the correct formats for each.
Creating a Payroll Layout Set That Includes Absence and Override Fields: Worked Example

This example shows how to configure worker and manager layouts in a layout set for the payroll time consumer. These layout configurations

- Replace the independent Payroll Time Type field with the AbsencePayrollTime field created in a separate worked example.
- Add absence fields created in a separate worked example to the row-level dialog box.
- Add dependent override fields created in a separate worked example to the entry-level dialog box.
- Edit some display names.
- Set various time entry properties for independent and dependent fields.

Summary of the Tasks

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

1. Create the payroll layout set.
2. Configure the time entry layout for workers.
3. Configure the time entry layout for managers.
4. Configure the time review layout for workers.
5. Configure the calendar entry layout for workers.
6. Configure the shift layout.

Prerequisite Setup

Before configuring this layout set, you must complete these tasks in the Setup and Maintenance work area. These tasks are part of the Workforce Deployment offering, Time and Labor functional area.

1. Create the Meals Taken element and calculation components.
2. Generate the absence management and payroll time attributes in the data dictionary.
3. Create the AbsencePayrollTime multiattribute field with these dependent fields: Absence, Meal, Department, and Location.
Creating the Absence and Payroll Layout Set

1. In the Time Management work area, on the Tasks panel tab, click Manage Layout Sets.
2. On the Manage Layout Sets page toolbar, click the Create icon.
3. On the Generate Layout Set page, complete these steps:
   a. Select Manager, Shift, Web clock, and Payroll.
   b. Ensure that Project Costing isn’t selected.
   b. Click Generate Layout Set.
4. On the Define Layout Set page, complete these steps:
   a. Complete the basic information fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Payroll Layout Set</td>
</tr>
<tr>
<td>Description</td>
<td>Includes row-level department and absence fields for the time entry, review, view, and approval layouts. Includes entry-level rate and location fields for the time entry, review, view, and approval layouts. Includes time and hours sliders on the calendar layout and location fields for the shift layout.</td>
</tr>
</tbody>
</table>

b. Click Save.

Configuring the Time Entry Layout for Workers

Complete these steps to configure first the worker and then the manager layout. Saving the worker layout edits enables you to also apply them to the remaining worker and manager layouts in the set. Saving the manager layout edits applies them to the remaining manager layouts in the set.

2. On the Configure Time Entry Layout page, click the Worker tab. Edit the worker layout first so that the manager layout inherits the edits, which you can then revise as required. The worker layout doesn’t inherit any manager layout edits.
4. On the Edit Layout dialog box, complete these steps:
   a. Complete these actions for each page. Click Next to open subsequent pages in the Edit Layout dialog box guided process.

<table>
<thead>
<tr>
<th>Guided Process Page</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Card Matrix (affects the time entry page)</td>
<td>i. Replace the Payroll Time Type field with AbsencePayrollTime.</td>
</tr>
<tr>
<td></td>
<td>ii. In the Time Entry Properties section, select these check boxes:</td>
</tr>
<tr>
<td></td>
<td>o Enable time to span midnight</td>
</tr>
<tr>
<td></td>
<td>o Display unit of measure</td>
</tr>
<tr>
<td></td>
<td>iii. Ensure that the time entry format is Display hours and time. This selection best supports the reporting of both absence and payroll time.</td>
</tr>
</tbody>
</table>
In the **Date Format** field, select **Mon, Jan 01**.

### Guided Process Page

#### Row Level Details (affects the dialog box on the time entry page)

1. Add these fields:
   - Department
   - Absence
   - Absence Reason
2. Change the **Label on the Time Card** value to **Department and Absence Details**.

#### Comments (affects the dialog box on the time entry page)

1. Select **In the entry level detail page**.
2. Change the **Label on the Time Card** value to **Daily Comments**.

### Guided Process Page

#### Entry Level Details (affects the dialog box on the time entry page)

1. Add these fields:
   - Default Payroll Rate
   - State
   - County
   - City
2. Change the **Label on the Time Card** value to **Daily Pay Details**.
3. In the **Date Format** field, select **Mon, Jan 01**.

**b.** Click **Save and Close**.

**c.** On the Warning dialog box with the message asking whether to copy changes to the other layouts in the set, click **Yes**. Only edits to the fields in the time card matrix and time entry properties copy to the calendar entry and shift layouts. Edits on the row-level and entry-level pages don’t copy.

**d.** On the Confirmation dialog box, click **OK**.

5. On the Configure Time Entry Layout page, click the **Time Totals** tab.

6. On the Time Totals section toolbar, click **Edit Layout**.

7. On the Edit Layout dialog box, complete these steps:

   - **a.** Complete these actions for each page. Click **Next** to open subsequent pages in the Edit Layout dialog box guided process.

<table>
<thead>
<tr>
<th>Guided Process Page</th>
<th>Actions</th>
</tr>
</thead>
</table>
   | Hours               | i. Add these time categories: **Statutory Time for OT** and **Overtime**
   |                     | ii. In the **Date Format** field, select **Mon, Jan 01**. |
   | Units               | i. Add the time category **Allowances**. |
   |                     | ii. In the **Date Format** field, select **Mon, Jan 01**. |

**b.** Click **Save and Close**.

**c.** On the Warning dialog box with the message asking whether to copy changes to the other layouts in the set, click **Yes**.

**d.** On the Confirmation dialog box, click **OK**.
Configuring the Time Entry Layout for Managers

On the Configure Time Entry Layout page, Manager tab, complete these steps:

1. On the Time Entry section toolbar, click **Edit Layout**.
2. On the Edit Layout dialog box, complete these steps for the Entry Level Details page. Click **Next** to open subsequent pages in the guided process. The edits to the worker layout were inherited by this manager layout.
   a. Add the **Meal Override Rate** field.
   b. Select the display option **Worker layout read only**.
   c. Add the hidden **Meal Rate Periodicity** field.
   d. Click **Save and Close**.
   e. On the Warning dialog box with the message asking whether to copy changes to the other layouts in the set, click **Yes**.
   f. On the Confirmation dialog box, click **OK**.

Configuring the Calendar Entry Layout for Workers

1. On the Configure Time Review Layout page header, in the layout choice list, select **Calendar Entry Layout**.
2. On the Configure Calendar Entry Layout page, Worker tab, click **Edit Layout**.
3. On the Edit Layout dialog box, complete these steps:
   a. Select these check boxes:
      - Display hours slider
      - Display time slider
   b. Click **Save and Close**.

Configuring the Shift Layout

1. On the Configure Calendar Entry Layout page header, in the layout choice list, select **Shift Layout**.
2. On the Configure Shift Layout page, Worker tab, click **Edit Layout**.
3. On the Edit Layout dialog box, complete these steps:
   a. Add these time card fields, in the specified order:
      i. State
      ii. County
      iii. City
   b. Click **Save and Close**.
4. On the Configure Shift Layout page, click **Save and Close**.
5. On the Edit Layout Set: Absence and Payroll page, click **Save and Close**.
6. On the Confirmation dialog box, click **OK**.
7. On the Manage Layout Sets page, click **Done**.

**Related Topics**
- Creating the Units-Based Meals Taken Element for Time Entries: Worked Example
Layout Sets FAQ

Why can't I edit some layout sets?

You can’t edit delivered layout sets, such as Projects Layout Set and Payroll Layout Set. However, you can duplicate these layouts to make the required modifications.
10 Employee and Manager Associations with Time Objects

Associating Employees and Managers with Time Entry, Processing, and Device Processing Objects: Overview

You associate employees and their managers with time entry, processing, and device processing objects using HCM groups and profiles. Create groups using the Manage HCM Groups task in the Setup and Maintenance work area.

Groups and Time Entry Objects

Payroll, project, absence, and custom time attributes compose layout components for time entry. These layout components, which are either time entry fields or web clock buttons, and time categories compose the layouts in a layout set. Associate employees with layout sets using worker time entry setup profiles and HCM group assignments.
Groups and Time Processing Objects

Time categories compose time consumer sets. They can optionally be associated with rules and rule sets composing time entry or time calculation rule sets. Time card periods and consumer sets as well as optional overtime periods and rule sets compose time processing setup profiles. Associate employees and their managers with these objects using worker time processing setup profiles and HCM group assignments.

Groups and Time Device Processing Objects

Time device event mappings compose mapping sets. Time device rules and a single submission rule compose respective rule sets. These mapping and rule sets and a device export data configuration compose time device processing profiles.
Associate employees and their managers with these sets and export data objects using worker time device processing profiles and HCM group assignments.

**Membership: Explained**

Create groups of people with similar characteristics using the **Manage HCM Groups** task. A group might have a fixed number of people or you might update the members on a defined basis. An employee can belong to more than one group. The task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

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
- Bargaining Unit
- Collective Agreement
- Department Name
- Job Name
- Labor Union
- Location

Example: Create the **Associate Marketers** group, which includes hourly employees in the Marketing department. Define the conditions, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Condition 1 Value</th>
<th>Condition 2 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation Criteria</td>
<td>Department Name</td>
<td>Job Name</td>
</tr>
<tr>
<td>Operator</td>
<td>Equal to</td>
<td>Equal to</td>
</tr>
<tr>
<td>Value</td>
<td>Marketing</td>
<td>Associate Marketer</td>
</tr>
<tr>
<td>Logical Operator</td>
<td>AND</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Including or Excluding Individuals, Value Sets, or Other Groups

You can determine group membership by adding individual employees, value sets, and other groups with either **Include** or **Exclude** membership statuses. For example, to create a larger group that includes the **Hourly Marketing** group, add **Hourly Marketing** with the **Include** membership status.

To create a group that includes members using a value set, first create the value set. For example, you create the **All Part-Time Employees with an Annual Salary Basis** value set that contains this query:

```sql
SELECT ASG.PERSON_ID
FROM PER_ALL_ASSIGNMENTS_M ASG
, CMP_SALARY SAL
, CMP_SALARY_BASES SB
, HR_LOOKUPS EMP_CAT
WHERE ASG.ASSIGNMENT_ID = SAL.ASSIGNMENT_ID
AND SAL.SALARY_BASIS_ID = SB.SALARY_BASIS_ID
AND SYSDATE BETWEEN ASG.EFFECTIVE_START_DATE AND ASG.EFFECTIVE_END_DATE
AND SYSDATE BETWEEN Sal.Date_From AND SAL.DATE_TO
AND ASG.PRIMARY_FLAG = 'Y'
AND ASG.EMPLOYMENT_CATEGORY = EMP_CAT.lookup_code
AND emp_cat.lookup_type = 'EMP_CAT'
and emp_cat.lookup_code = 'PR'
and sb.name = 'Annual Basis'
```

In this example query, ‘PR’ identifies the **Part-Time Regular** employment category. Depending on the status that you use when adding the value set, the group includes or excludes employees that match the query. You can include any employee assignment or payroll attributes in your value set queries and filters.
Setting Embedded Group Priority

When you embed groups within another group, an employee 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 these membership statuses:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Group Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Promotions</td>
<td>Exclude</td>
</tr>
<tr>
<td>2</td>
<td>Advertising</td>
<td>Include</td>
</tr>
</tbody>
</table>

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, evaluate group membership and update the list of members by clicking Refresh Group Membership on the Manage HCM Groups page. 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

To prevent refreshing the group definition as of a specific date, in the Locked field, select Yes. For example, you lock all members of the Senior Managers group as of June 12, 2018 to always use that same set of employees in time processing.

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

These 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
How the Group Membership Is Evaluated

The **Evaluate Group Membership** process evaluates employee membership within a group as explained in this table:

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Membership Evaluation</th>
<th>Membership Status When True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the employee directly included in or excluded from the group?</td>
<td>Include or exclude the employee accordingly.</td>
</tr>
<tr>
<td>2</td>
<td>Is the employee part of multiple child groups or value sets with different membership statuses?</td>
<td>Use the child group or value set that the employee is part of with the lowest priority to include or exclude the employee accordingly.</td>
</tr>
<tr>
<td>3</td>
<td>Is the employee part of only one child group or value set that is included in or excluded from the parent group?</td>
<td>Include or exclude the employee accordingly.</td>
</tr>
<tr>
<td>4</td>
<td>Does the employee match evaluation criteria composed of attributes, relational operators, and logical operators?</td>
<td>Include the employee. By default, every employee is included in these delivered groups:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Payroll Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Projects and Payroll Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Project Execution Management Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Projects Usage</td>
</tr>
</tbody>
</table>

Defining Groups: Worked Example

This example shows how to create 2 groups and embed them into a third group. You determine membership in the first group using evaluation criteria. You determine membership in the second group using a value set. Create groups using the **Manage HCM Groups** task. This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

Creating a Group Using Evaluation Criteria

1. On the Manage Groups page, click the **Create** icon.
2. On the Create Group page, complete these steps:
   a. Complete the group information fields, as shown in this table. Use default values for fields unless the steps specify other values.
b. On the Evaluation Criteria section toolbar, click the **Create** icon.

   i. On the Evaluation Criteria dialog box, repeat these steps 3 times to add all of the evaluation criteria:

   a. Add a criterion, as shown in this table.

<table>
<thead>
<tr>
<th>Employment Attribute</th>
<th>Operator</th>
<th>Value</th>
<th>Logical Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective Agreement</td>
<td>Equal To</td>
<td>Registered Nurses</td>
<td>And</td>
</tr>
<tr>
<td>Labor Union</td>
<td>Equal To</td>
<td>Yes</td>
<td>And</td>
</tr>
<tr>
<td>Location Components</td>
<td>Equal To</td>
<td>(State) California</td>
<td>N/A</td>
</tr>
</tbody>
</table>

b. After adding each of the first 2 criterion, click **Apply and Add Another**. After adding the third criterion, click **Save and Close**.

c. On the Create Group page, select all 3 rows of the Evaluation Criteria table.

d. On the toolbar, click the **Add Parentheses** icon to group the criteria into a single condition.

e. Click **Save and Close**.

f. On the Confirmation dialog box, click **OK**.

3. On the Manage Groups page, click **Refresh Group Membership**.

4. On the Refresh Group Membership page, complete these steps:

   a. In the **Group** field, select **RN in CA on Primary Assign**.

   b. In the **Evaluation Date** field, select the current date.

   c. Click **Submit**.

   d. On the Confirmation dialog box, click **OK**.

Creating a Group Using a Value Set

1. On the Manage Groups page, click the **Create** icon.

2. On the Create Group page, complete these steps:

   a. Complete the group information fields, as shown in this table. Use default values for fields unless the steps specify other values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>All PTE with Annual</td>
</tr>
</tbody>
</table>
b. On the Include or Exclude Groups section toolbar, click the Add Value Set icon to insert a value set table row.
   c. Select the All Part-Time Employees with an Annual Salary Basis value set.
   d. Click Save and Close.
   e. On the Confirmation dialog box, click OK.

3. On the Manage Groups page, click Refresh Group Membership.
4. On the Refresh Group Membership page, complete these steps:
   a. In the Group field, select All PTE with Annual.
   b. In the Evaluation Date field, select the current date.
   c. Click Submit.
   d. On the Confirmation dialog box, click OK.

Creating a Group with Other Groups Embedded

1. On the Manage Groups page, click the Create icon.
2. On the Create Group page, complete these steps:
   a. Complete the group information fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>RN in CA on Primary Assign and All PTE with Annual</td>
</tr>
<tr>
<td>Description</td>
<td>Employees with the Registered Nurses collective agreement, in a labor union, in California and all part-time equivalent employees with an annual salary basis</td>
</tr>
</tbody>
</table>

   b. In the Include or Exclude Groups section, add the 2 new groups, as shown in this table.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RN in CA on Primary Assign</td>
</tr>
<tr>
<td>2</td>
<td>All PTE with Annual</td>
</tr>
</tbody>
</table>

   c. Click Save and Close.
   d. On the Confirmation dialog box, click OK.
3. On the Manage Groups page toolbar, click Refresh Group Membership.
   a. In the Group field, select RN in CA on Primary Assign and All PTE with Annual.
   b. In the Evaluation Date field, select the current date.
   c. In the Remove Future-Dated Group Members field, select No.
   d. Click Submit.
   e. On the Confirmation dialog box, click OK.
HCM Groups FAQ

Why can't I edit some groups?
You can’t edit delivered groups and groups that are associated with a worker time entry setup profile.

How can I maintain group membership for large employee populations and frequent hiring?
Schedule the Evaluate Group Membership process using the As of run date parameter and a daily frequency. The process automatically increments the Evaluation Date parameter based on the first run date. Because we aren’t sure at what time on what day the Wait runs, we modify the Evaluation Date only when the process runs. For example, server loads can delay the running of the process. Also, using the original time during the Wait status helps you identify the original process, since you can have multiple processes scheduled.
Chapter 10

Employee and Manager Associations with Time Objects
11 Time Entry Setup Profile Configurations and Troubleshooting

Time Entry Setup Profiles: Explained

Time entry setup profiles enable employees to report, review, and submit time using time cards, calendar, and web clock. They indirectly enable managers to report, review, and submit employee time using time cards. They also enable managers to generate time events, time entries, and time cards for 1 or multiple employees at a time. Create these setup profiles using the Manage Worker Time Entry Setup Profiles task in the Time Management work area.

This figure shows how worker time entry setup profiles associate layout sets with employees and their managers using HCM groups.

This topic discusses the following aspects of setup profiles:

- Time Card Access Settings
- Group Assignment
- Profile Priority
- Default Profile

Setting Allowable Actions for Time Entry

You can configure when employees and managers can create, view, edit, and delete time cards by enabling the relevant status and related time entry actions. This includes empowering employees who report time with time collection devices to edit incomplete entries for time cards with Incomplete and In error statuses.

Also enter the number of days into the past or future that employees and their managers can perform the entry action for each enabled status. For example, enable employees to adjust entered, saved, and submitted time cards up to 5 days before the current date. If that day falls in a prior time card period, then employees can edit both the current and previous time cards. To limit manager adjustments for all actions and statuses to the last quarter and next month, enter 90 days before and
30 days after. Employees or managers can always perform the entry action on their time cards with the enabled statuses if you don’t configure the days fields.

**Note:** Consider prior period ranges for allowable adjustments to time data when setting days before values on the Manager View tab.

The configuration on the Manager View tab applies to all managers of employees associated with the profile. Configure the Manager View tab to support your regular time card adjustment policies. To handle exceptions that fall outside of the regular adjustment periods:

1. Edit the relevant profile to remove the relevant days before or after values.
2. Make your time card adjustments.
3. Edit the relevant profile to reenter the relevant days before or after values.

**Schedule Options**

Indicate whether schedulers can create shifts and edit shift properties for employees associated with the profile or only view existing shift details. By default, schedulers can edit shift properties.

**Note:** The configuration of this option on imported schedule events overrides the configuration on the time entry setup profile. For example, you configure a profile to allow edits and import schedule events configured to not allow edits. Schedulers can’t edit those imported schedule events.

**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 1 group of employees at a time. For example, assign the USA_Employees profile to these groups:

- FullTime_USAemployees group
- PartTime_USAemployees group

You can’t associate a single group with more than 1 profile of the same type at any given time. For example, the FullTime_USAemployees group can’t have active assignments for both of these time entry profiles: USA_Employees and UK_Employees.

**Priority**

Assign each setup profile a unique priority number relative to other profiles of the same profile type. The priority number determines the profile used to create the time card if an employee is eligible for more than 1 profile. Number 1 is the highest priority. For example, a single employee is a member of two groups:

- Group A: The priority for the profile is 5.
- Group B: The priority for the profile is 3.

The application uses the profile with priority 3 for that employee.

**Default Profile**

By default, all employees in an organization are members of a delivered group associated with a time entry profile. The application applies this default profile for any employee who isn’t eligible for any other profile through either individual or group assignment.
Related Topics

- Components Composing a Time Entry Profile: How They Work Together

Time Setup and Device Processing Profiles: How They're Derived

Through group membership, an employee can be eligible for multiple time entry, processing, and device processing profiles. The application derives from the eligible profiles only 1 profile of each type, for each employee. This table identifies the configurations that each profile associates with the assigned employees and their managers.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Configurations for Associated Employees and Their Managers</th>
</tr>
</thead>
</table>
| Worker Time Entry Setup Profile | • Time card, calendar, and web clock layouts  
                             | • Time entry actions allowed by time card status                                                                       |
| Worker Time Processing Setup Profile | • Time card and overtime periods  
                             | • Time consumers                                                        |
|                               | • Time entry and calculation rules                                                                                      |
| Time Devices Processing Profile | • Time device mappings                                                                                                 |
|                               | • Time device and submission rules                                                                                     |
|                               | • Time device export data                                                                                            |

How Each Employee Profile Is Derived

The application derives the final profile assignment based on the priority sequence shown in this table.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Assignment Type</th>
<th>Derivation Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Individual Assignment</td>
<td>The profile with this assignment has the highest priority and overrides all group profile assignments.</td>
</tr>
<tr>
<td>2</td>
<td>Group Assignment</td>
<td>The profile with the lowest priority applies when multiple group memberships qualify an employee for multiple profiles of the same type.</td>
</tr>
<tr>
<td>3</td>
<td>Default Group Assignment</td>
<td>The profile with this group assignment applies to all employees who don’t have any profile assignments so that they can report time.</td>
</tr>
</tbody>
</table>
Troubleshooting Assignments of Time Setup and Device Processing Profiles: Explained

You troubleshoot time entry, processing, and device processing profiles to resolve these issues:

- Unexpected absence or appearance of time card, calendar, web clock, or shift layouts might not appear for the employee or manager.
- Unexpected results from time entry, calculation, device, or submission rules

In the Time Management work area, use these tasks to investigate any of these issues that you might occur for an employee or group:

- Manage Worker Time Entry Setup Profiles
- Manage Worker Time Processing Setup Profiles
- Manage Time Device Processing Profiles

Comparing Profiles

Use the Assign Profile to Person option to assign a profile directly to any employee with incorrect time cards, validations, or calculated time. This individual profile assignment overrides all profile assignments based on group memberships.

1. Click Troubleshoot.
2. Select an employee.
3. Specify the profile evaluation date.
4. Click Evaluate to list the profiles with an effective employee assignment on that date.
5. Select up to 3 of the employee’s profiles and view the various values for those profiles.

Deleting a Profile Override for an Individual

Use the Assign Profile to Person option to assign a profile directly to any employee 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

Remove a direct profile assignment for an employee by clicking Delete Override. If multiple direct assignments remain, then the individual profile with the lowest priority number applies. For example, you assign the employee to profiles A and B and profile A has a higher priority than B. The employee’s job responsibility changes and profile A no longer applies for the employee, so you delete the profile A override. The application automatically applies profile B to the employee. If there are no other individual assignments, then the group profile with lowest priority number takes priority.
12 Time Processing Configurations Overview

Configuring Time Processing Objects: Overview

Employees can report time using time cards, calendar, web clock, or third-party time collection devices, such as badge and biometric readers. Time and labor managers can report, review, and submit employee time using time cards and processes that generate mass time.

For web clock and third-party devices, the import process validates event-related time data and creates or completes time entries. Time and labor managers resolve any badge and time entry exceptions identified during this validation. For all collection methods, time card save and submit actions initiate time entry rules that validate reported time. Managers resolve any time entry exceptions identified during this validation. Next, calculation rules run using the time data validated by the time entry rules. Then, time consumer validation runs for the relevant calculated time data. Finally, time consumer administrators transfer time data for further processing, such as payroll and project costing. The following figure summarizes this flow.

Retroactive changes to employee data, such as a change to the payroll relationship or overtime period, can necessitate recalculation and transfer of time card data.
For all time collection methods, complete these configuration tasks in the sequence listed to enable validations, calculations, approvals, and transfers of time data. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manage Repeating Time Periods</td>
<td>Create and edit time period definitions that produce repeating time periods for different uses based on business requirements. Periods are used with time cards, approvals, accrual processing, overtime, and balances. Review the delivered repeating periods to determine whether you require additional ones.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>2</td>
<td>Manage Workforce Management Value Sets</td>
<td>Review delivered lists of values for use in time categories and rule templates. Create additional ones if the delivered lists don’t meet your business requirements.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>3</td>
<td>Manage Workforce Management Lookups</td>
<td>Review delivered lookup values for use with change audit reasons, time rule classifications, and time collection device exceptions, suppliers and supplier event fields. Add additional lookup codes to the WFM lookup types if the delivered codes don’t meet your business requirements.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>4</td>
<td>Manage Time Categories</td>
<td>Create and edit categories that identify the time entries to use in time rules, summaries, analytics, and transfers based on business requirements. Review the delivered time categories to determine whether you require additional ones.</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>
| 5        | Manage Time Consumer Sets                 | Create and edit configurations that specify whether to enable informational workflow for employees, managers, and approvers, across the selected time consumers, for these processes:  
  - Mass submit and approve time cards  
  - Generate time cards  
  - Generate time entries | Setup and Maintenance      |
<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Manage Shift Properties</td>
<td>Configure shift limits, which you can include in various time rules.</td>
<td>Setup and Maintenance Time Management</td>
</tr>
<tr>
<td>7</td>
<td>Manage Time Allocations</td>
<td>Create and edit automatic allocations of employee hours to specific cost segments, such as Department, Fund, and Program, for payment. Make allocations by hours worked, percentages of hours worked, or allocate hours equally.</td>
<td>Setup and Maintenance Time Management</td>
</tr>
<tr>
<td>8</td>
<td>Manage Time Allocation Assignments</td>
<td>Assign time allocations to employees directly or using HCM groups. Allocation assignments use effective dating to determine which allocation to use in time rules applicable for the employee and time card period.</td>
<td>Time Management</td>
</tr>
<tr>
<td>9</td>
<td>Manage Fast Formulas</td>
<td>Create formulas to use in place of, or in addition to, the delivered workforce management formulas. For detailed information, see Using Fast Formulas on <a href="http://docs.oracle.com">http://docs.oracle.com</a>.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>10</td>
<td>Manage Time Repository Rule Templates</td>
<td>Create and edit rule templates, based on business requirements, to define submission, validation, and calculation rules. Use time categories in rule templates to summarize time and compare different categories of time.</td>
<td>Setup and Maintenance Time Management</td>
</tr>
<tr>
<td></td>
<td>Manage Rule Templates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sequence</td>
<td>Task</td>
<td>Description</td>
<td>Work Area</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>11</td>
<td>Manage Time Repository Rules</td>
<td>Create and edit rules based on rule templates.</td>
<td>Setup and Maintenance Time Management</td>
</tr>
</tbody>
</table>
|          | Manage Rules | • 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 validate 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. | |
| 12       | Manage Time Repository Rule Sets | Create and edit collections of time submission, validation, and calculation rules and rule sets. Assign them directly to employees and indirectly to their managers using worker time processing setup profiles and time device processing profiles. | Setup and Maintenance Time Management |
|          | Manage Rule Sets | Create and edit group definitions used to associate worker time processing setup profiles directly with members and indirectly with their managers.  
Review the delivered groups to determine whether you require additional ones. | Setup and Maintenance |
<p>| 14       | 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 employees can report time. During | Setup and Maintenance |</p>
<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Manage Time Processing Setup Profiles</td>
<td>Create and edit an association of rule sets, a time consumer set, and time card periods to report, validate, approve, and transfer time. The worker time processing setup profiles directly link employees, and indirectly link their managers, to time entry validation and calculation rules. These rules also apply to time entries created using third-party device events and web clock events. Review the time processing profiles to determine whether you require additional ones.</td>
<td>Setup and Maintenance Time Management</td>
</tr>
<tr>
<td>16</td>
<td>HCM Data Loader</td>
<td>Automatically identify retroactive changes to employee data that necessitate recalculating time card data using WFM events and actions. Load these events and actions that using these business objects, available under the product area Global Payroll - Define:</td>
<td>Data Exchange</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Event Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Event Group Translation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Event Action</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Event Action Translation</td>
<td></td>
</tr>
</tbody>
</table>

**Related Topics**
- Recalculating Time Card Data Affected by Retroactive Changes to Employee Data: Overview

### Change Audit of Time Cards: Explained

Track time card statuses so that you know who did what time card action--such as save, submit, and approve--and when. Also track who edited, added, or deleted time entries; when the changes were made; and the reason for each change.

This topic covers:
- Prerequisite setup tasks
- Adding change audit reasons
- Viewing change audit detail
Prerequisite Setup Tasks

Complete these setup tasks to enable change audit for your employees’ time cards. The tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Purpose</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Workforce Management Lookups</td>
<td>Add change audit reasons as lookup codes in the ORA_HWM_CA_REASONS lookup type to support your time card audit policies. These codes compose change audit reason choice lists on time card pages and dialog boxes.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Time Layout Sets</td>
<td>Identify the fields to combine to uniquely identify time entries on the change audit dialog boxes of these time card pages: time entry, view, review, and approval notifications. Use the edit layout guide processes to edit the fields of the time entry, reported time, and calculated time matrices, as appropriate.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Worker Time Processing Profiles</td>
<td>Enable change audit for the employees associated with the time processing profile and optionally require change audit reasons.</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>

Adding Change Audit Reasons on Time Cards

After you enable change audit, changes are automatically tracked from the specified starting point. Time reporters don’t have to do anything. If you require reasons, then after time reporters make edits and click Next, Save, or Save and Close, the Change Audit Reason dialog box opens. Time reporters then specify the reason for the change, either the same reason for all changes or individually, per entry.

Viewing Change Audit Data on Time Cards

Use the Change Audit icon in the Time Card Details section of time cards to view each status of the time card. The change audit also shows who made the change and when. Use the same icon on the Time Entry, Reported Time, and Calculated Time section toolbars to view entry-level changes. The icon next to each time entry shows the fields set on the layouts as identifiers, and the time entry value for each identifier.

Components Composing a Time Processing Profile: How They Work Together

A worker time processing setup profile determines the time card period and time entries to use with associated validation, calculation, approval, and transfer rules. Also, specify whether to record change audits for time card statuses and time
entries. Create these profiles using the Manage Worker Time Processing Setup Profiles task in the Time Management work area.

This figure summarizes how the components composing a time processing profile work together. The following sections provide details and examples for each component.

---

**Repeating Time Periods**

This table describes the repeating time periods used in time consumer sets and time processing profiles.

<table>
<thead>
<tr>
<th>Period Usage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Cards</td>
<td>Determine how often employees must submit their time card. When you configure a time processing profile, you associate a repeating time period as the time card period. For example, if you want time reporters to submit time cards every week, then you must select a weekly repeating period.</td>
</tr>
<tr>
<td>Overtime</td>
<td>The date range when time calculation rules can evaluate reported time and determine how much of that time is overtime, if any. An employee’s overtime period can match or differ from the time card period. For example, your employees report time using time cards with a weekly time card period that starts on Saturdays. You calculate employee overtime using a weekly overtime period that starts on Mondays.</td>
</tr>
<tr>
<td>Approvals</td>
<td>The date range when 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.</td>
</tr>
</tbody>
</table>
Time Category
A time category identifies the time entries to use in time rules, summaries, analytics, and transfers. For example, use all
Straight Time, Training, or Vacation time entries.

Time Consumer Set
A time consumer set specifies whether to enable, for all or no consumers, informational workflow related to time card
submissions for employees and managers. It also specifies by each consumer in the set, which time card actions initiate
validation and the time category, approval period, and time transfer rule. For example, use a consumer set to transfer project
time data to Oracle Fusion Project Costing and payroll time data to Oracle Fusion Global Payroll.

Time Calculation Rules and Rule Set
Time calculation rules create or update time entries and use the data to create calculated results based on formula logic. For
example, an employee reports 10 hours of Regular time. A calculation rule edits that time entry to be 8 hours and creates
another time entry of 2 hours of Overtime time.

A calculation rule set contains time calculation rules and rule sets for association with a time processing profile. The rules in
the profile rule set also apply to employee time entries created using web clock events and third-party device events.

Time Entry Rules and Rule Set
Time entry rules validate time card entries and generate messages with a defined severity. For example, when reported time
exceeds a specified weekly maximum, the specified message appears when the employee clicks Save or Next.

An entry rule set contains time entry rules and rule sets for association with a time processing profile. The rules in the profile
rule set also apply to employee time entries created using web clock events and third-party device events.

Time Processing Setup Profile
A time processing profile determines which employee time entries from the specified date range to use in validations,
calculations, transfers, and change audits. Groups associated with the profile determine the employees and managers to
whom the profile applies.

Groups
A group enables you to assign the time processing profile to multiple employees who share common time reporting and
processing characteristics. All group members and their managers inherit the time card period, consumer set, and calculation
and entry rules from the associated profile. Each group can be associated with only 1 time processing profile at a time.

How Many Time Processing Objects to Create: Points to Consider
You must create separate worker time processing profiles for each unique combination of the time processing objects, as
shown in this figure. The more processing objects that you create, the greater the ongoing maintenance effort. You want to
find a balance between optimizing the time processing experience for your employees 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 these unique objects for each consumer:

- Time category
- Validate on time card actions
- Approval period

Create time processing objects using the tasks and work areas identified in this table. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Repeating Time Periods</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Time Categories</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Time Consumer Sets</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage Time Rules, Manage Time Rule Sets</td>
<td>Time Management</td>
</tr>
<tr>
<td>Manage Time Repository Rules, Manage Time Repository Rule Sets</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Manage HCM Groups</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>
Time Card, Approval, and Overtime Periods

You must have a separate time processing profile and consumer set for each group with a unique combination of time card, approval, and overtime periods. The approval periods of the time consumer set must match the time card period of the setup profile.

Time Categories and Time Consumer Sets

What type of time--such as project costing, payroll, absence, or a combination--do your employees report and how frequently? The time type and employee reporting frequency affect how you configure time categories and time consumer sets. Since you can associate only 1 time category with a time consumer, we recommend that you use these delivered categories: All Project Entries and All Payroll Entries. The more time categories and time consumer sets that you create, the greater the maintenance effort. The delivered category All Payroll Entries includes both hours-based and units-based time entries.

This table provides some scenarios about the time that employee groups report and possible corresponding time category and consumer configurations.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Time Category</th>
<th>Time Consumer Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some employees always report only payroll and absence time.</td>
<td>Use the delivered category All Payroll Entries or your category of relevant payroll time attributes. Absence time entries automatically transfer to Absence Management and don’t transfer to Global Payroll.</td>
<td>Create a time consumer set with only Global Payroll selected.</td>
</tr>
<tr>
<td>Some employees always report only project costing and absence time.</td>
<td>Use the delivered time category All Project Entries or your category of relevant project time attributes. Absence time entries automatically transfer to Absence Management and don’t transfer to Project Costing.</td>
<td>Create a time consumer set with only Project Costing selected.</td>
</tr>
<tr>
<td>Some employees regularly, but not always report project costing time and always report payroll and absence time.</td>
<td>Use the delivered time categories All Payroll Entries and All Project Entries or your categories of relevant project and payroll time attributes, respectively. Absence time entries automatically transfer to Absence Management and don’t transfer to either Global Payroll or Project Costing.</td>
<td>Create a single time consumer set with both Project Costing and Global Payroll selected.</td>
</tr>
<tr>
<td>Some employees always report only payroll and absence time and always or frequently track the number of meals that they take.</td>
<td>Use the delivered category All Payroll Entries, which includes both hours-based and units-based time entries, or your category of relevant payroll time attributes. Absence time entries automatically transfer to</td>
<td>Create a time consumer set with only Global Payroll selected.</td>
</tr>
</tbody>
</table>
Oracle Global Human Resources Cloud  
Implementing Time and Labor  
Chapter 12  
Time Processing Configurations Overview

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Time Category</th>
<th>Time Consumer Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence Management and don’t transfer to Global Payroll.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Time Categories and Time Allocations**
Create as many time categories as you require to identify the time entries that you want to allocate to various cost segments.

**Time Consumer Validate on Time Card Actions**
Create 1 consumer set for each employee group when different groups have different settings for validation by time card actions for the same time consumer. This table provides examples of how you might create different groups of Global Payroll time consumers based on the Validate on Time Card Action selection.

<table>
<thead>
<tr>
<th>Selection for Validate on Time Card Actions</th>
<th>Example Groups</th>
</tr>
</thead>
</table>
| Save and Submit                            | Employees who report time every day within a time card period  
Employees whose entries you want to report during the time entry process |
| Submit only                                | Employees 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 1 time entry and 1 time calculation rule set with a time processing profile. Use rules sets to associate rules with employee groups that have similar requirements for vacation, time validation, and time processing. You can associate as many rules with a rule set as you want.

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

<table>
<thead>
<tr>
<th>Question</th>
<th>Example</th>
</tr>
</thead>
</table>
| How do you validate reported time for your employees? | You create exceptions for:  
• Certain employees when the total reported time card hours exceed 42 for the week  
• Other employees when the total reported time card hours exceed 10 hours a day |
| How do you calculate reported time for your employees? | You pay employees an overtime rate of 1.5 times their regular pay.  
• For California employees, the overtime rate applies for every worked hour over 8 hours within a 24-hour period.  
• For Florida employees, the overtime rate applies for every hour worked over 40 hours in a 7-day period. |
Groups
You associate 1 or more groups with each profile. Define separate groups wherever the employee characteristics are unique across profiles or groups of profiles. For example, you group your employees into separate groups for these reasons:

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

Related Topics
- Repeating Time Periods: Explained
- Time Categories: How They Work with Time Processing Objects
- Creating Time Consumer Sets: Points to Consider
- Time Processing Setup Profiles: Explained
- Validation, Calculation, and Approval Rules Initiated by Time Card Action: Explained
Repeating Time Periods: Explained

Create configurations that continually generate time 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 based on usage descriptions, validations, and filtering information provided in this table.

<table>
<thead>
<tr>
<th>Usage</th>
<th>Description</th>
<th>Validations</th>
<th>Page Where the Usage Filters Period Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time cards</td>
<td>Determine how often employees must submit their time card. When you configure a worker time processing setup profile, you associate a repeating time period as the time card period. For example, if you want time reporters to submit time cards every week, then you must select a weekly period.</td>
<td>Weekly or Biweekly</td>
<td>Manage Worker Time Processing Setup Profiles</td>
</tr>
<tr>
<td>Approvals</td>
<td>The date range when 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.</td>
<td>Weekly or Biweekly</td>
<td>Manage Time Consumer Sets</td>
</tr>
<tr>
<td>Accrual Processing</td>
<td>A time interval when employees accrue time within an accrual term. Use these periods when you create absence plans.</td>
<td>All periods greater than or equal to 7 days</td>
<td>Manage Absence Plans</td>
</tr>
<tr>
<td>Overtime</td>
<td>The date range when time calculation rules can evaluate reported time and determine how much of that time is overtime, if any. An employee’s overtime period can match or differ from the time card period. For example, your employees report time using time cards with a weekly time card period that starts on Saturdays. You calculate employee overtime using a weekly overtime period that starts on Mondays.</td>
<td>Weekly or Biweekly</td>
<td>Manage Worker Time Processing Setup Profiles</td>
</tr>
</tbody>
</table>
Repeating Time Period: How It's Calculated

Configure the repeating time periods used with time cards, approvals, accrual processing, overtime, and balances. These periods vary in type and length. This topic explains how the period configuration calculates and generates continuous periods.

Settings That Affect Repeating Period Calculation

Specify this information using the Manage Repeating Time Period task in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area:

- Values for period type, period length, and pattern starting date.
- Date ranges to preview your period configurations.

This table describes the settings.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period Type</td>
<td>Select Daily, Weekly, Monthly, or Semimonthly.</td>
</tr>
<tr>
<td>Period Length</td>
<td>Constrained by the period type selection. For example, if you select the Weekly period type, you would select Biweekly or enter the number of weeks in a single period.</td>
</tr>
<tr>
<td>Sample Start Date</td>
<td>Enter an example starting date to set the pattern for periods longer than one day.</td>
</tr>
<tr>
<td>Preview Period Dates</td>
<td>Enter start and end dates with a valid range to test the generated instances of the time period within the preview period.</td>
</tr>
</tbody>
</table>

How the Period Is Calculated

This table shows how the pattern starting date works with the period type and duration to generate repeating periods within the test dates indicated:
## Repeating Time Periods For Time Cards, Approvals, Absence Accruals, and Balances

<table>
<thead>
<tr>
<th>Period Type</th>
<th>Length of Period</th>
<th>Sample Start Date</th>
<th>Preview Period Dates</th>
<th>Period Generation Logic</th>
<th>Period Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>Biweekly</td>
<td>05/01/12</td>
<td>Start date: 01/01/12</td>
<td>Generates periods every 14 days from the pattern starting date. All periods start on the same day of the week.</td>
<td>10 January - 23 January</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>End date: 05/31/12</td>
<td></td>
<td>24 January - 6 February</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7 February - 20 February</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21 February - 5 March</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6 March - 19 March</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20 March - 2 April</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 April - 16 April</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17 April - 30 April</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 May - 14 May</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15 May - 28 May</td>
</tr>
<tr>
<td>Monthly</td>
<td>Calendar month</td>
<td>05/04/12</td>
<td>Start date: 01/01/12</td>
<td>Generates periods from a specified day in one month up to that day in the following month.</td>
<td>4 January - 3 February</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>End date: 07/31/12</td>
<td></td>
<td>4 February - 3 March</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 March - 3 April</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 April - 3 May</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 May - 3 June</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 June - 3 July</td>
</tr>
<tr>
<td>Semimonthly</td>
<td>N/A</td>
<td>05/04/12</td>
<td>Start date: 05/01/12</td>
<td>Generate periods using a pattern.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>End date: 07/31/12</td>
<td>- The first of the semimonthly periods starts on the numeric day of the pattern starting date and lasts for 15 days.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- The second period starts the day after the first period ends. It lasts through the day before the numeric</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 May - 18 May</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19 May - 3 June</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 June - 18 June</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19 June - 3 July</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 July - 18 July</td>
</tr>
</tbody>
</table>
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, depending on how you configure the preview period.

### Repeating Time Periods FAQ

#### Why can't I edit some repeating time periods?

You can't edit delivered repeating time periods. After you save a repeating time period, you can edit only the name and description.
14 Time Consumer Validation, Approval, and Transfer Configurations

Time Consumer Sets: Explained

A time consumer set specifies approval periods, validation rules, and time transfer rules for 1 or more applications and offerings that consume time data.

Time Consumers

These 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 Employees

You can assign a time consumer set to more than 1 employee time processing setup profile. However, a processing setup profile can contain only 1 time consumer set. This figure summarizes how to associate a time consumer set with different groups of employees through 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 information workflow initiated by time card submission
- The time category
- If validations must execute on the time card
- If the time card is required by time consumers
- The approval routing, periods, levels, and data
- If other time consumers in the set must approve the time card before the data can transfer

Create time consumer sets using the Manage Time Consumer Set task. The task is part of the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

Time Consumer

You can select one or more time consumers in one set. For example, the delivered 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 Informational Workflow Initiated by Time Card Submission

You can specify whether to send informational notifications to employees, their managers, and time approvers across the selected time consumers, for these processes:

- Mass submit and approve time cards
- Generate time cards
- Generate time entries
- Generate time cards from time collection devices

You might want to select No for any time consumer sets associated with employees for whom you regularly approve many time cards at one time. You perform mass approvals using the Manage Time Cards task in the Time Management work area.
Time Category
Select the time category that identifies the time data to transfer to the time consumer. For example, a payroll time consumer doesn't want time entries with project attribute values, so you select a time category that identifies only payroll-related entries. The project execution management time consumer automatically uses the delivered All Absence Entries category.

Validate on Time Card Actions
This table describes the Validate on Time Card Actions options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit Only</td>
<td>Default processing. Validates time entries when employees click Next to submit their time cards, but not when they click Save.</td>
</tr>
<tr>
<td>Submit and Save</td>
<td>Validates time entries when employees click Save, Save and Close, and Next.</td>
</tr>
</tbody>
</table>

Required Time Card Status
This option applies to reporting. To identify missing time cards for employees associated with this time consumer set who regularly submit time cards, select Yes. Select No for employees who submit time cards sporadically, such as to report absences, training, and other exceptions.

Approval Routing, Periods, Levels, and Data
The options described in this table determine approval workflow for the time consumers composing the time consumer set.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence Approval Routing</td>
<td>Specify whether to route absence entries on time cards using absence or time approval rules.</td>
</tr>
<tr>
<td></td>
<td>• If you select Absence approval rules, the approval process uses the absence approval task to approve absence entries. It uses the time card approval task to approve worked time entries. The time card is approved when both approval tasks complete.</td>
</tr>
<tr>
<td></td>
<td>• If you select Time approval rules, the approval process uses the time card approval tasks to approve all time card entries including absence entries.</td>
</tr>
<tr>
<td></td>
<td>This selection applies to all time consumers selected in the time consumer set.</td>
</tr>
<tr>
<td>Approval</td>
<td>Select a repeating time period to define the approval period for the time consumer. 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.</td>
</tr>
<tr>
<td></td>
<td>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 repeating periods for the time consumers causes issues when you try to assign groups to the time processing profile.</td>
</tr>
</tbody>
</table>

125
**Option** | **Description**
--- | ---
Entry-level approval | If you want email and Worklist approval notifications to include only time entries pertinent to the approver, select this option. Approvers never see time card data that they aren't responsible for approving.

If you want email and Worklist approval notifications to include all time card data for the approver, don’t select this option. Approvers see the time data that they are responsible for approving, as well as any time data that they can’t approve.

---

Time Data for Approval Rules to Evaluate | Specify the time card data that approval rules should evaluate:
--- | ---

- Reported time
- Calculated time with reported absences

If you select entry-level approval for the time consumer, then approval rules can only evaluate reported time.

**Approval Required**

Specify whether other time consumers in the set must approve the time card before the time data can transfer to this time consumer. For example, the payroll time consumer wants to receive only the related data approved by both project costing and payroll time approvers.

**Time Card and Time Entry Approvals: Explained**

Approve project only, payroll only, and combined project and payroll time cards or time entries using approval rules delivered as part of actionable workflow tasks. You must complete these setup tasks to configure time data approvals that use delivered approval workflows. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

**Task** | **Description** | **Work Area**
--- | --- | ---
Manage Repeating Time Periods | Define approval periods for each time consumer. The approval period must match the time card period. When the approval period is met, the time card is ready to be routed for approval. | Setup and Maintenance

Manage Time Consumer Sets | Specify whether to send only the pertinent time entry data to the approver. Leaving this option deselected configures the process to send all time card data to the approver, including nonpertinent data. Further, specify whether approval processing should evaluated reported time or calculated time with reported absences. | Setup and Maintenance

Manage Worker Time Entry Setup Profiles | Control when employees can update time cards during the approval process. | Setup and Maintenance

---
Time Card Level Approvals

Delivered actionable approval rules route project and payroll time card data as follows:

- Route pertinent and nonpertinent project time entries to the derived project manager. When the delivered rule can’t derive the project manager, it routes the time entries to the employee’s line manager for review.
- Automatically approve payroll time entries when they total less than or equal to 40 hours. Route payroll entries to the employee’s line manager for review when total payroll entries exceed 40 hours.

This figure visually represents the workflow of these delivered approval rules.

The delivered approval workflow tasks handle approvals, rejections, and employee notifications as follows:

- 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 employee is notified when the time card is approved or rejected.

Time Entry Level Approvals

Delivered actionable approval rules route project and payroll time entry data as follows:

- Route pertinent project time entries to the appropriate approvers to review and approve or reject. Approved project time entries are ready for transfer to the project costing time consumer.
- Route payroll time entries to the appropriate approver to review and approve or reject. Approved payroll time entries aren’t ready for transfer to payroll until all time entries for the time card period are approved.
Configuring Time Card and Time Entry Approvals: Explained

Route payroll-related or project-related time card data to the appropriate approvers using delivered approval workflow tasks. You can configure these delivered approval rules to satisfy your business requirements. Use these tasks in the Define Approval Management for Human Capital Management task list:

- Manage Task Configurations for Human Capital Management
- Manage Approval Groups

Search for the task list by clicking **Search** on the Setup and Maintenance work area, Tasks panel tab.

Manage Task Configurations for Human Capital Management

Approval tasks are event-driven configurations containing rules that determine the approval routing and approvers for business objects, such as time cards. The Assignees tab provides a technical view of each task and is where you go to the task rules. The time card approval tasks are:

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProjectTimeCardApproval</td>
<td>1. Supports approval configurations that use project data on the time card, for the specified employee and time card period.</td>
</tr>
<tr>
<td></td>
<td>2. Sends configured approvers actionable notifications to approve or reject the time entries that each approver is responsible for. The approvers see all project time data, even the data that they don’t approve.</td>
</tr>
<tr>
<td></td>
<td>3. Notifies specified recipients based on time card status, for example, notifies time card owners when time cards are approved or rejected.</td>
</tr>
<tr>
<td>ProjectTimeCardApprovalELA</td>
<td>1. Supports approval configurations that use project data on the time card, for the specified employee and time card period.</td>
</tr>
<tr>
<td></td>
<td>2. Sends configured approvers actionable notifications to approve or reject only the time entries that each approver is responsible for. Project data for the time entry is ready to transfer as soon as the entry is approved.</td>
</tr>
<tr>
<td></td>
<td>3. Notifies specified recipients based on time entry status, for example, notifies time card owners when the time entry is approved or rejected.</td>
</tr>
<tr>
<td>TimeCardApproval</td>
<td>1. Supports approval configurations that use payroll data on the time card, for the specified employee and time card period.</td>
</tr>
<tr>
<td></td>
<td>2. Sends the configured approvers actionable notifications to approve or reject the time entries that each approver is responsible for. The approvers see all payroll time data, even the data that they don’t approve.</td>
</tr>
</tbody>
</table>
### Task Name | Description
--- | ---
| 3. | Notifies specified recipients based on time card status, for example, notifies time card owners when time cards are approved or rejected.

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| **TimecardApprovalELA** | 1. Supports approval configurations that use payroll data on the time card, for the specified employee and time card period.  
2. Sends the configured approvers actionable notifications to approve or reject only the time entries that each approver is responsible for. Payroll data for the time card isn’t ready for transfer until all time card entries are approved.  
3. Notifies specified recipients based on time entry status, for example, notifies time card owners when the time entry is approved or rejected. |
| **TimeCardApprovalFYI** | Sends an information notification to employees when their time entries for the specified time card period are approved or rejected.  
You can disable this task so that employees don’t receive informational notifications when their time cards are approved and rejected. Because this task isn’t rule based, you can’t configure it to disable only one notification. For example, you can’t disable the notification informing employees that their time cards were approved while keeping enabled the notification about rejected time cards. |

The **TimecardApproval** task has two approval paths:

- One for time card level approval rules and approver
- One for time entry level approval rules and approvers

By default, the delivered **TimecardApproval** task evaluates payroll time entries only when the entire time card is ready for approval.

⚠️ **Caution:** Keep both paths active to avoid issues with approval routing for payroll time entries. For the path that you want to ignore, use this configuration: IF Task is Task, THEN call IgnoreParticipant. For the path that you want to use, configure the rule to meet your payroll approval requirements.

### Manage Approval Groups

By default, the delivered actionable time card approval workflow tasks route time cards using the dynamically determined supervisor hierarchy. You can identify specific approvers to route to instead using the **Manage Approval Groups** task. The informational workflow task routes the time card notification to the employee on the time card.

**Related Topics**

- Defining Approvals for Human Capital Management: Explained
- Managing HCM Approval Transactions: Explained

### Time Card Approval and Informational Notification Configurations: Examples

You control time card approvals with time consumer sets and time card approval workflows. The configuration examples in this topic give you ideas on how you can configure the delivered workflows to support your approval policies.
Edit the delivered **TimecardApproval** workflow using the **Manage Task Configurations for Human Capital Management** task in the Setup and Maintenance work area. Note that on the Configuration tab, the **Once per stage** task aggregation ensures the approval process sends only one notification per approver.

**ApprovalTimeRecordGroup** attribute values vary by implementation. To determine your **ApprovalTimeRecordGroup** attribute value mapping, create your own data model report in the Reports and Analytics work area based on this query:

```sql
SELECT * FROM FUSION.hxt_tm_col_attr_map WHERE LOCATION like 'Approval' AND ENTERPRISE_ID = '<ent_id>';```

## Manual and Automatic Approvals Based on Payroll Values

You want line managers to review and approve any time cards with overtime hours. You want to automatically approve any time cards with only regular hours. The key configuration assumptions for this scenario are:

**Key configuration assumptions:**
- The environment has the **Payroll Time Type** attribute value **Overtime**.
- The relevant time consumer set has 1 of these payroll approval rule configurations:
  - Uses reported time data when employees can report overtime hours
  - Uses calculated time data when overtime is calculated from other reported time

Complete these steps for the delivered **TimecardApproval** workflow task, on the Assignees tab, in the **TimeEntryApprovalRules** path.

1. Create the rule to manually approve overtime.
   a. Create this **IF** expression:
      ```java
      ApprovalTimeRecordGroup.measure more than 0 and ( ApprovalTimeRecordGroup.attributeChar5 is "Overtime")
      ```
   b. Complete the **THEN** fields, as shown in this table.

<table>
<thead>
<tr>
<th>THEN Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Builder</td>
<td>Supervisory</td>
</tr>
<tr>
<td>Response Type</td>
<td>Required</td>
</tr>
<tr>
<td>Number of levels</td>
<td>1</td>
</tr>
<tr>
<td>Starting Participant</td>
<td>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null)</td>
</tr>
<tr>
<td>Top Participant</td>
<td>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null)</td>
</tr>
<tr>
<td>Auto Action Enabled</td>
<td>False</td>
</tr>
<tr>
<td>Auto Action</td>
<td>null</td>
</tr>
</tbody>
</table>
2. Create the rule to automatically approve time cards with only regular hours.

   a. Create this **IF** expression:

      `ApprovalTimeRecordGroup.attributeChar5 isn't "Overtime"`

   b. Complete the **THEN** fields, as shown in this table.

<table>
<thead>
<tr>
<th>THEN Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule Name</td>
<td>ManApproveOT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THEN Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Builder</td>
<td>Supervisory</td>
</tr>
<tr>
<td>Response Type</td>
<td>Required</td>
</tr>
<tr>
<td>Number of levels</td>
<td>1</td>
</tr>
<tr>
<td>Starting Participant</td>
<td><code>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null,null)</code></td>
</tr>
<tr>
<td>Top Participant</td>
<td><code>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null,null)</code></td>
</tr>
<tr>
<td>Auto Action Enabled</td>
<td>True</td>
</tr>
<tr>
<td>Auto Action</td>
<td>&quot;APPROVE&quot;</td>
</tr>
<tr>
<td>Rule Name</td>
<td>AutoApproveReg</td>
</tr>
</tbody>
</table>

### Automatic and Manual Approvals Based on Time Entry Source

You want to automatically approved time cards where all entries are from a time collection device. You want 2 levels of line managers to review and approve any time cards with entries from sources other than time collection devices.

Complete these steps for the delivered **TimecardApproval** workflow task, on the Assignees tab, in the **TimeEntryApprovalRules** path.

1. Create the rule to automatically approve time cards with entries from only time collection devices.

   a. Create this **IF** expression:

      `ApprovalTimeRecordGroup.attributeChar18 is "ORA_HWM_TIME_COLLECTIONDEVICE"`

   b. Complete the **THEN** fields, as shown in this table.
2. Create the rule to manually approve time cards with entries from sources other than time collection devices.

a. Create this **IF** expression:

   \[
   \text{ApprovalTimeRecordGroup.attributeChar18 isn't "ORA_HWM_TIME_COLLECTION_DEVICE"}
   \]

b. Complete the **THEN** fields, as shown in this table.

<table>
<thead>
<tr>
<th>THEN Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Builder</td>
<td>Supervisory</td>
</tr>
<tr>
<td>Response Type</td>
<td>Required</td>
</tr>
<tr>
<td>Number of levels</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Starting Participant</th>
<th>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Participant</td>
<td>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null)</td>
</tr>
<tr>
<td>Auto Action Enabled</td>
<td>False</td>
</tr>
<tr>
<td>Auto Action</td>
<td>null</td>
</tr>
<tr>
<td>Rule Name</td>
<td>ManApproveNonTCD</td>
</tr>
</tbody>
</table>
Actionable and Informational Approval Notifications for Reported Time and Cost Segment

You want to send line managers actionable notifications to review and approve time card entries. You also want to send department managers informational notifications for any time entries associated with their departments.

Key configuration assumption: The relevant time consumer set is configured so that the payroll approval rules use reported, instead of calculated, time data.

Complete these steps for the delivered **TimecardApproval** workflow task, on the Assignees tab, in the **TimeEntryApprovalRules** path.

1. Create the actionable notification rule for line managers.
   a. Create this **IF** expression:
      
      ```
      1 is 1
      ```
   b. Complete the **THEN** fields, as shown in this table.

<table>
<thead>
<tr>
<th>THEN Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Builder</td>
<td>Supervisory</td>
</tr>
<tr>
<td>Response Type</td>
<td>Required</td>
</tr>
<tr>
<td></td>
<td>This response type makes the notification an actionable, rather than informational, notification.</td>
</tr>
<tr>
<td>Number of levels</td>
<td>1</td>
</tr>
<tr>
<td>Starting Participant</td>
<td><code>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null,null)</code></td>
</tr>
<tr>
<td>Top Participant</td>
<td><code>HierarchyBuilder.getManager(&quot;supervisory&quot;,Task.payload.process.Requester,-1,null,null)</code></td>
</tr>
<tr>
<td>Auto Action Enabled</td>
<td>False</td>
</tr>
<tr>
<td>Auto Action</td>
<td>null</td>
</tr>
<tr>
<td>Rule Name</td>
<td><code>ActionLineMgs</code></td>
</tr>
</tbody>
</table>

2. Create the informational notification rule for relevant department managers.
   a. Create this **IF** expression:
      
      ```
      ApprovalTimeRecordGroup.entryDepartmentManager ins't ""
      ```
   b. Complete the **THEN** fields, as shown in this table.
## Actionable and Informational Approval Notifications for Calculated Time and Cost Segment

You want to send line managers actionable notifications to review and approve calculated time card entries. You also want to send department managers informational notifications for any reported time entries associated with their departments.

Key configuration assumption: The relevant time consumer set is configured so that the payroll approval rules use calculated, instead of reported, time data.

Complete these steps for the delivered TimecardApproval workflow task, on the Assignees tab, in the TimeEntryApprovalRules path.

1. Create the actionable notification rule for line managers using calculated time data.

   a. Create this **IF** expression:

   ```
   1 is 1
   ```

   b. Complete the **THEN** fields, as shown in this table.

<table>
<thead>
<tr>
<th>THEN Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Builder</td>
<td>Supervisory</td>
</tr>
<tr>
<td>Response Type</td>
<td>FYI</td>
</tr>
<tr>
<td>Number of levels</td>
<td>1</td>
</tr>
<tr>
<td>Starting Participant</td>
<td>HierarchyBuilder.getPrincipal(ApprovalTimeRecordGroup.entryDepartmentManager,-1,&quot;&quot;,&quot;&quot;)</td>
</tr>
<tr>
<td>Top Participant</td>
<td>HierarchyBuilder.getPrincipal(ApprovalTimeRecordGroup.entryDepartmentManager,-1,&quot;&quot;,&quot;&quot;)</td>
</tr>
<tr>
<td>Auto Action Enabled</td>
<td>False</td>
</tr>
<tr>
<td>Auto Action</td>
<td>null</td>
</tr>
<tr>
<td>Rule Name</td>
<td>InfoDeptMgrs</td>
</tr>
</tbody>
</table>

   This response type makes the notification an actionable, rather than informational, notification.
2. Create the informational notification rule for relevant department managers.

a. Create this **IF** expression:

\[ \text{ApprovalTimeRecordGroup.entryDepartmentManager} \neq \"\" \]

b. Complete the **THEN** fields, as shown in this table.

<table>
<thead>
<tr>
<th>THEN Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Builder</td>
<td>Supervisory</td>
</tr>
<tr>
<td>Response Type</td>
<td>FYI</td>
</tr>
<tr>
<td>Number of levels</td>
<td>1</td>
</tr>
<tr>
<td>Starting Participant</td>
<td><code>HierarchyBuilder.getPrincipal(ApprovalTimeRecordGroup.entryDepartmentManager,,-1,&quot;&quot;,&quot;&quot;)</code></td>
</tr>
<tr>
<td>Top Participant</td>
<td><code>HierarchyBuilder.getPrincipal(ApprovalTimeRecordGroup.entryDepartmentManager,,-1,&quot;&quot;,&quot;&quot;)</code></td>
</tr>
<tr>
<td>Auto Action Enabled</td>
<td>False</td>
</tr>
<tr>
<td>Auto Action</td>
<td>null</td>
</tr>
<tr>
<td>Rule Name</td>
<td>InfoDeptMgrsReptTime</td>
</tr>
</tbody>
</table>
Validation, Calculation, and Approval Rules Initiated by Time Card Action: Explained

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

This table describes the default validation and processing associated with the time card buttons.

<table>
<thead>
<tr>
<th>Button</th>
<th>Validation and Processing Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next</td>
<td>• Validates absence, payroll, and project time entries&lt;br&gt;• Applies time entry rules&lt;br&gt;• Applies time calculation rules, including any allocation rules&lt;br&gt;• Generates calculated time entries</td>
</tr>
<tr>
<td>Save</td>
<td>• Always initiates the absence-delivered validations&lt;br&gt;• Doesn't initiate project-delivered and payroll-delivered validations</td>
</tr>
<tr>
<td>Save and Close</td>
<td></td>
</tr>
</tbody>
</table>

To configure validation on the save buttons, use the Manage Time Consumer Sets task. In the Validate on Time Card Actions field, select Submit and save. Validations on the save buttons are identical to those described for the Next button.

Submit

Sets the time card status to Submitted and starts the approval workflow

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.
Rule-Based Validation, Calculation, Allocation, Save, and Submit Configuration Overviews

Formulas and Time Rule Components: How They Work Together

Use rule templates from the time repository to create rules based on formulas. Group rules of the same type into a rule set. Assign rule sets to an employee or group of employees using worker time setup and device processing profiles.
This figure shows the relationship among formulas, rule templates, rules, and rule sets. The following sections describe these relationships.

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. As shown in the preceding figure, formula 1, Rounding Formula, composes rule template 1, Hours Rounding. Formula 2, Threshold Formula, composes rule template 2, Daily Summation, and rule template 3, Time Card Level Summation.
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 outputs that the formula uses to return results. For example, an overtime rule template specifies an overtime threshold parameter and a pay time type output.

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 outputs of the selected template. For example, a weekly overtime rule for the US specifies the overtime threshold parameter 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 2 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 over 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 over the threshold at 2 times the regular hourly rate.

As shown in the preceding figure, rule template 1 is used to create rule 1, Rounding. Rule template 2 is used to create rule 2, Daily Threshold values A, and rule 3, Daily Threshold Values B. Rule template 3 is used to create rule 4, Weekly Threshold Values.

Rule Sets

Create a collection of rules and rule sets of the same type. Assign rule sets to groups of employees with similar requirements for vacation, time validation, and time processing. As shown in the preceding figure, Rules 1 and 2 compose rule set 1, Rounding and Daily Threshold. Rules 2 and 3 compose rule set 2, Daily Threshold Values. Rule 4 and rule set 2 compose rule set 3, Daily and Weekly Threshold.

Related Topics

- Definition Options for Time Rule Templates: Points to Consider
- Parameters in Time Rule Templates and Rules: Explained

Formulas and Types of Time Rule Templates: Explained

Use formulas with time rule templates to create a variety of rules. For example, the template 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.
This 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 setup and device processing profiles.

Create formulas using the Manage Fast Formulas task in the Setup and Maintenance work area. Search for the task using the Tasks panel tab. 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
- Outputs 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 outputs are easy to identify and configure in a template. You don’t have to work with the whole formula statement to figure out what 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 outputs 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. This table lists and describes formula types that you can use when configuring templates to create time repository rules.

<table>
<thead>
<tr>
<th>Formula and Template Type</th>
<th>Description</th>
<th>Example Rule Usages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time calculation</td>
<td>Creates or updates time card entries and uses the data to create calculated results based on formula logic.</td>
<td>Handle overtime or premium pay by updating reported time or creating additional calculated time.</td>
</tr>
<tr>
<td>Time device</td>
<td>Evaluates time events imported from time collection devices and creates time entry exceptions.</td>
<td>Create time entry exceptions for entries affected by reported time outside the specified grace period.</td>
</tr>
<tr>
<td>Time entry</td>
<td>Validates time card entries and generates a message with a defined severity.</td>
<td>When reported time exceeds a specified weekly maximum, display the specified message.</td>
</tr>
</tbody>
</table>
| 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 guides explain how to use Fast Formula with Time and Labor. These guides provide the contexts, database items, and parameters for the formula types used in Time and Labor. They also provide sample formulas and the fixed parameters, valid functions, and outputs for each.

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

Work Day Definition: Explained
Work day definitions consist of a day start time and a spanning days rule. The grouping threshold and tie handling are parameters of the spanning days rule. Create definitions that support your policies for processing absence and time data. Use the Manage Work Day Definitions task in the Setup and Maintenance work area. The task is available in the Workforce Management and Time and Labor functional areas of the Workforce Deployment offering. Assign a work day definition to an employee on the Manage Employment tab of the Person Management work area. Use the Assignment Hours Details icon next to the Working Hours field.

You can use work day definitions in absence calculations, time calculations, or both.
Spanning Days Rule

Spanning days rule options include:

- Day with most hours
- Split at day start time
- Start day
- Stop day
- Scheduled shift reference day

Time calculations use the specified rule to determine the day that owns time entries that span multiple days. Absence calculations use the specified rule to determine the reference day. The reference date determines the day on which to add time to or subtract time from plan and time off in lieu balances. For example, an employee is scheduled to work night shifts starting Monday evening and ending Saturday morning. Each shift starts at 10:00 PM and ends at 6:00 AM. Work days for this employee start at 12:00 AM. The employee schedules an absence from 10:00 PM Monday, January 11 to 6:00 AM Tuesday, January 12. If the selected spanning days rule is:

- **Start day**, the reference day is the date that the absence starts. The absence calculation determines that payroll should process all 8 hours of absence for Monday, January 11.

- **Split at day start**, there are two reference days, Monday and Tuesday. The absence calculation determines that payroll should process 2 hours of absence for Monday, January 11 and 6 hours of absence for Tuesday, January 12.

If you use work day definitions for both absence and time calculations, ensure that the calculations generate the expected results.

Grouping Threshold

You can group time entries based on the minutes of nonworked time between the entries. For example, you have a grouping threshold of 240 minutes. Time entries separated by nonworked time that is less than 240 minutes are grouped together. Rather than considering each time entry individually, the spanning days rule considers the grouped time entries:

<table>
<thead>
<tr>
<th>Spanning Days Rule</th>
<th>Grouping Threshold Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day with most hours</td>
<td>Summed duration of the grouped entries</td>
</tr>
<tr>
<td>Start day</td>
<td>Start day of the earliest entry in the group</td>
</tr>
<tr>
<td>Stop day</td>
<td>Stop day of the latest entry in the group</td>
</tr>
</tbody>
</table>

Scenario 1: The day start is **4:00 AM** and the grouping threshold is **240** minutes. The spanning days rule is either **Start day** or **Stop day**.

<table>
<thead>
<tr>
<th>Payroll Hours</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>10:00 PM -- 03:00 AM</td>
<td>05:00 AM -- 08:00 AM</td>
<td>05:00 AM -- 08:00 AM</td>
<td>07:30 AM -- 10:00 AM</td>
<td>05:00 AM -- 08:00 AM</td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>11:00 PM -- 04:00 AM</td>
<td>10:00 PM -- 03:00 AM</td>
<td>10:00 PM -- 03:00 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Scenario 2: The day start is 4:00 AM and the grouping threshold is 240 minutes. The spanning days rule is Day with most hours.

<table>
<thead>
<tr>
<th>Payroll Hours</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>10:00 PM -- 03:00 AM</td>
<td>05:00 AM -- 08:00 AM</td>
<td>05:00 AM -- 08:00 AM</td>
<td>07:30 AM -- 10:00 AM</td>
<td></td>
<td>04:00 AM -- 08:00 AM</td>
</tr>
<tr>
<td>Regular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:00 PM -- 04:00 AM (from Day 2)</td>
<td>05:00 AM -- 08:00 AM (from Day 2)</td>
<td></td>
<td></td>
<td></td>
<td>05:00 AM -- 08:00 AM (from Day 5)</td>
</tr>
<tr>
<td></td>
<td>10:00 PM -- 03:00 AM (from Day 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:00 PM -- 04:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>07:30 AM -- 10:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:00 PM -- 03:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>04:00 AM -- 08:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05:00 AM -- 08:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05:00 AM -- 08:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05:00 AM -- 08:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:00 PM -- 03:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>04:00 AM -- 08:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05:00 AM -- 08:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Payroll Hours

<table>
<thead>
<tr>
<th>Payroll Hours</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Daily Reported Hours</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>2.5</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time calculations use...</th>
<th>Regular</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10:00 PM -- 03:00 AM (today)</td>
<td>11:00 PM -- 04:00 AM (today)</td>
<td>10:00 PM -- 03:00 AM (today)</td>
<td>07:30 AM -- 10:00 AM (today)</td>
<td>11:00 PM -- 02:00 AM (from Day 5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regular</td>
<td>05:00 AM -- 08:00 AM (from Day 2)</td>
<td>05:00 AM -- 08:00 AM (from Day 3)</td>
<td></td>
<td></td>
<td>04:00 AM -- 08:00 AM (today)</td>
<td></td>
</tr>
</tbody>
</table>

| Total Daily Calculated Hours | 8 | 8 | 5 | 2.5 | 7 |

### Tie Handling

Work day definitions that use the spanning days rule **Day with most hours**, may have instances where duration totals for both days are the same. When this happens, the tie handling selection applies; either **Time entry start** or **Time entry stop**.

Scenario: The day start is **4:00 AM** and the spanning days rule is **Day with most hours**. The tie-handling rule is either **Time entry start** or **Time entry stop**.
### Time Allocations and Allocation Assignments: Explained

Automatically allocate employee hours to specific cost segments, such as **Department**, **Program**, and **Fund**. For example, allocate an employee’s daily hours evenly to the 1111 and 2222 departments. Assign these allocations to employees directly or using time calculation rules.

#### Time Allocations

Create and edit employee time allocations using the **Manage Time Allocations** task in the Time Management work area. For each source row:

1. Specify whether to allocate employee hours by percentages, hours, or equally. For hours-type allocations, further specify whether to summarize hours by day or period.
2. Specify the time category that time allocation rules use to identify the employee hours to include and exclude.
3. Configure the output columns by adding all relevant time attributes.
4. Complete one or more output rows.

<table>
<thead>
<tr>
<th>Payroll Hours</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence</td>
<td>12:00 AM -- 08:00 AM (from Day 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:00 AM -- 08:00 AM (from Day 5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Daily Calculated Hours</td>
<td>12</td>
<td>8</td>
<td>8</td>
<td>12</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Tie-handling: Stop Day

<table>
<thead>
<tr>
<th>Time calculations used...</th>
<th>Regular</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08:00 AM -- 12:00 PM (today)</td>
<td>12:00 AM -- 08:00 AM (today)</td>
<td>08:00 AM -- 12:00 PM (today)</td>
<td>12:00 AM -- 08:00 AM (today)</td>
<td>12:00 AM -- 08:00 AM (today)</td>
<td></td>
</tr>
<tr>
<td>Absence</td>
<td></td>
<td>12:00 AM -- 08:00 AM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:00 PM -- 08:00 PM (today)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Daily Calculated Hours</td>
<td>4</td>
<td>8</td>
<td>16</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>
This table provides a sample configuration of a source row.

<table>
<thead>
<tr>
<th>Processing Sequence</th>
<th>Allocation Type</th>
<th>Summation Level</th>
<th>Time Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hours</td>
<td>Day</td>
<td>Union Time for OT</td>
</tr>
</tbody>
</table>

This table provides a sample configuration of output columns and rows for the sample source row.

<table>
<thead>
<tr>
<th>Processing Sequence</th>
<th>Hours</th>
<th>Department</th>
<th>Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>1111</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>2222</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>999</td>
<td></td>
<td>3003</td>
</tr>
</tbody>
</table>

Tip: When the summation level is Day, the total hours should equal or exceed 24 hours. When the summation level is Time card, the total hours should equal or exceed the time card period. A final hourly value of 999 safely covers any overflow for all summation levels, since a blank value isn’t valid.

For the source table, the processing sequence determines in what order the allocation rules evaluate time category conditions. For the output table, the processing sequence determines in what order to generate the allocation output. You can enter your source and output rows in any order and reorder them as required to get the expected allocation output.

Allocation Assignment

After you create a time allocation, you can assign it to employees using these 2 methods:

<table>
<thead>
<tr>
<th>Assignment Method</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign a time allocation to a specific employee or all members of an HCM group.</td>
<td>Create allocation assignments using the Manage Allocation Assignments task in the Time Management work area. Set a specific date range for the assignment or leave it open ended by specifying only a start date.</td>
</tr>
<tr>
<td>Assign a time allocation to all members of one or more HCM groups.</td>
<td>In the Time Management work area, complete these tasks:</td>
</tr>
</tbody>
</table>

1. To specify a default allocation, create 1 or more time calculation rule templates using the Manage Rule Templates task. Use the delivered OFA_WFM_TCR_ALLOCATION_TIME_AP formula or create your own.
2. Create time calculation rules based on the delivered template Time Allocation Template or your rule templates using the Manage Rules task. As part of the rule creation, you can optionally associate a time allocation with the rule. Or, you can override a default allocation set in the selected rule template.
3. Create a time calculation rule set that includes the relevant allocation rule or rules using the Manage Rule Sets task.
4. Associate the time calculation rule set with time processing profiles using the Manage Worker Time Processing Setup Profiles task.
When employees have time allocations assigned to them through both methods, the direct allocation assignment takes priority over assignments derived from the time processing profile. A best practice is to create a default time allocation and assign it to appropriate employees through time processing profiles. Then, assign more specialized allocations for specific employees and HCM groups using the Manage Allocation Assignments task.

**Note:** To allocate employee time according to the assigned time allocation, you must create a time allocation rule, even if you don’t specify an allocation name. You must then include the allocation rule in the time calculation rule set associated with the time processing profile.

### Overriding and Viewing Time Allocations

You can view and override time allocation outputs on time cards after completing these time entry configurations.

<table>
<thead>
<tr>
<th>Action</th>
<th>Task</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create dependent cost fields for the independent Payroll Time Type attribute that correspond to the cost time attributes in the allocation.</td>
<td>Manage Time Entry Layout Components</td>
<td>Setup and Maintenance, Workforce Deployment Offering, Time and Labor functional area</td>
</tr>
<tr>
<td>Add the dependent cost fields to layouts.</td>
<td>Manage Layout Sets</td>
<td>Time Management</td>
</tr>
<tr>
<td>• To enable employees and managers to override allocations, add the fields to time entry layouts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• To enable only managers to override allocations, add the fields to the manager layouts. Show the override values to employees as read only or not at all.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• To enable employees and managers to view allocation outputs, add the fields on the Worker tab, in the Calculate Time section. Add the fields to the time card matrices of these layouts: time view, review, and approval notification.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• To enable only managers to view allocation outputs, on the Manager tab, in the Calculate Time section. Add the fields to the time card matrices of these layouts: time view, review, and approval notification.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Related Topics**

- Configuring Dependent Fields for Labor Costing Overrides: Procedure
- Managing Layout Sets: Explained
• Creating Time Rule Templates: Procedure
• Creating Time Rules: Procedure
• Creating and Assigning a Cost Center, Program, and Fund Time Allocation: Worked Example

Time Balance Dimensions and Definitions: Overview

Create your own database items you can include relevant time data in fast formulas that include employee balances, such as absence accruals. Database items are formula language variables with values resulting from database queries. They make formulas simpler to write and maintain because you avoid writing and updating complex queries to access the database. You can create your own database items by creating balance dimensions and time balance definitions.

Balance Dimensions

Use time balance dimensions to specify the level and time period to use when summarizing time for employee balances. This table describes the summary level.

<table>
<thead>
<tr>
<th>Dimension Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment</td>
<td>Summarize time balances by each assignment for the employee</td>
</tr>
<tr>
<td>Person</td>
<td>Summarize time balances across all assignments for the employee</td>
</tr>
</tbody>
</table>

This table describes the period types.

<table>
<thead>
<tr>
<th>Period Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence accrual time period</td>
<td>The time period set in the absence accrual calculation.</td>
</tr>
<tr>
<td>Profile overtime period</td>
<td>The repeating period with the Overtime usage associated with the employee’s assignment. Otherwise, the repeating period with the Overtime usage selected on the worker’s time processing profile. This profile selection is optional, so there isn’t any guarantee that the profile can provide this period.</td>
</tr>
<tr>
<td>Repeating time period</td>
<td>The repeating time period that includes the Balances usage.</td>
</tr>
</tbody>
</table>

Examples of how the dimension level and period type work together are:

• A balance dimension summarizes time for employees across all of their assignments using the overtime period set in worker time processing profiles.
• Another balance dimension summarizes time for employees by each of their assignments using a specified repeating time period with the Balances usage.
The application uses name, grouping, and time period values to automatically generate a dimension suffix. This dimension suffix forms part of the automatically-generated definition name of the balance definition. For example, you create a time balance dimension with this configuration:

<table>
<thead>
<tr>
<th>Field</th>
<th>Example Configuration Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Reg Hrs by Person</td>
</tr>
<tr>
<td>Dimension Level</td>
<td>Person</td>
</tr>
<tr>
<td>Period Type</td>
<td>Repeating Period</td>
</tr>
<tr>
<td>Time Period</td>
<td>Biweekly Starting Sunday</td>
</tr>
</tbody>
</table>

The application-generated suffix, which forms part of the database item name, is `_REG_HRS_BY_PERSON_PER_RP`.

Create balance dimensions using the Manage Balance Dimensions task in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area. You can also use this task to view delivered balance dimensions.

### Time Balance Definitions

Time balance definitions consist of 1 balance dimension and 1 or more time categories. When you create balance definitions, you must select a unit of measure, either Hours or Units. This selection constrains the time categories that you can select to identify the time data to add to or subtract from the time balance.

After you enter a name for the balance definition and select the balance dimension, the application automatically generates the definition name. This automatically-generated definition name, which includes the automatically-generated dimension suffix, is the database item name used in your fast formulas that include time balances. For example, you create a time balance dimension with this configuration:

<table>
<thead>
<tr>
<th>Field</th>
<th>Example Configuration Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Reg Hrs Time Bal Def</td>
</tr>
<tr>
<td>Entry Unit of Measure</td>
<td>Hours</td>
</tr>
<tr>
<td>Balance Dimension</td>
<td>Reg Hrs by Person</td>
</tr>
</tbody>
</table>

This selection associates the dimension suffix `_REG_HRS_BY_PERSON_PER_RP` with the time balance definition.

Effective Start Date: January 1, 2018

Time Category Name: Reg Hrs

Add or Subtract: Add
The application-generated dimension, or database item, name is

**REG_HRS_TIME_BAL_DEF_REG_HRS_BY_PERSON_PER_RP.**

Create balance definitions using the **Manage Time Balance Definitions** task in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

**Sample Fast Formula with New Database Item**

This sample formula includes the new database item created from the preceding example time balance dimension and definition configurations.

```
DEFAULT FOR HWM_CTXARY_RECORD_POSITIONS is EMPTY_TEXT_NUMBER
DEFAULT FOR measure is EMPTY_NUMBER_NUMBER
DEFAULT FOR StartTime is EMPTY_DATE_NUMBER
DEFAULT FOR StopTime is EMPTY_DATE_NUMBER

default FOR REG_HRS_TIME_BAL_DEF_REG_HRS_BY_PERSON_PER_RP is 0

INPUTS ARE HWM_CTXARY_RECORD_POSITIONS, measure, StartTime, StopTime
ffs_id = GET_CONTEXT(HWM_FFS_ID, 0)
rule_id = GET_CONTEXT(HWM_RULE_ID, 0)

NullDate = '01-JAN-1900' (DATE)
NullText = '**FF_NULL**'

groupTypeId = 101
out_msg_ary = EMPTY_TEXT_NUMBER

ctxPersonId = GET_CONTEXT(HWM_RESOURCE_ID, 0)
ctxPeriodEndTime = GET_CONTEXT(HWM_CTX_PERIOD_END_DATE, NullDate)

pMaxHr = get_rvalue_number (rule_id, 'DEFINED_LIMIT', 0)
pMsgCd = get_rvalue_text (rule_id, 'MESSAGE_CODE', 'HWM_FF_TER_PERIOD_GT_MAX_WRN')

tcRecCount = HWM_CTXARY_RECORD_POSITIONS.count

if (tcRecCount > 0 ) then
{
  balValueCur = 0
  CHANGE_CONTEXTS(EFFECTIVE_DATE = ctxPeriodEndTime, PERSON_ID = ctxPersonId, GRP_TYPE_ID = groupTypeId)

  IF (REG_HRS_TIME_BAL_DEF_REG_HRS_BY_PERSON_PER_RP WAS NOT DEFAULTED) THEN
  {
    balValueCur = REG_HRS_TIME_BAL_DEF_REG_HRS_BY_PERSON_PER_RP
    rLog = add_rlog (ffs_id, rule_id, 'Balance Value: ' || TO_CHAR(balValueCur) ||
      ' - DBI_CONTEXTS: EFFECTIVE_DATE= ' ||
      TO_CHAR( GET_CONTEXT(EFFECTIVE_DATE, nullDate) ) ||
      ', PERSON_ID=' || TO_CHAR( GET_CONTEXT(PERSON_ID, 0) ) ||
      ', GRP_TYPE_ID=' || TO_CHAR( GET_CONTEXT(GRP_TYPE_ID,0) )
    )
  } /* Change Context */

  if (balValueCur > pMaxHr ) then
  {
    out_msg_ary[tcRecCount] = get_output_msg1 ('FND ,pMsgCd ,'DEF_LIMIT' , TO_CHAR( pMaxHr ) )
  }
}
```
Related Topics

- Overriding Work Locations for Accurate Absence Accrual Calculations: Overview
16 Rule Template and Rule Parameter, Output, and Explanation Details

Definition Options for Time Rule Templates: Points to Consider

Attach a formula to a time rule template and configure the parameters and outputs provided by the formula. Use the Manage Rule Templates task in the Time Management work area. This table identifies the options that you can configure for each template type. The following sections provide detailed information and examples for each option.

<table>
<thead>
<tr>
<th>Option</th>
<th>Time Calculation</th>
<th>Time Device</th>
<th>Time Entry</th>
<th>Time Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule Classification</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Default Allocation</td>
<td>Yes, after selecting a time allocation formula</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Rule Execution Type</td>
<td>Yes, if the associated formula references it</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Summation Level</td>
<td>Yes, if the associated formula references it</td>
<td>Yes, if the associated formula references it</td>
<td>Yes, if the associated formula references it</td>
<td>Yes, if the associated formula references it</td>
</tr>
<tr>
<td>Reporting Level</td>
<td>No</td>
<td>Yes, if the associated formula references it</td>
<td>Yes, if the associated formula references it</td>
<td>No</td>
</tr>
<tr>
<td>Suppress Duplicate Messages Display</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Process Empty Time Card</td>
<td>No</td>
<td>No</td>
<td>Yes, if the associated formula references it</td>
<td>No</td>
</tr>
<tr>
<td>Time Card Events that Trigger Rule</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

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.
Default Allocation

Optionally select a default time allocation created using the Manage Time Allocations task in the Time Management work area. When creating allocation rules from calculation rule templates you can do one of these actions:

- Select an allocation, if a default allocation wasn’t selected in the template.
- Leave the default allocation, if already selected in the template.
- Override the default allocation selected in the template.

Rule Execution Type

For time calculation rules that reference it, 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: This table shows the calculation details for this rule scenario using each rule execution type when reported time is 10 hours.

<table>
<thead>
<tr>
<th>Rule Execution Type</th>
<th>Calculation Description</th>
<th>Calculation Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create</td>
<td>Rule processing creates total calculated time of 12 hours, which is 2 hours more than the reported time.</td>
<td>(10 hours * 10 USD) + (2 hours * 5 USD) = 110 USD</td>
</tr>
<tr>
<td></td>
<td>- Keeps the 10 hours of regular time at the regular hourly rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Creates 2 hours of premium time at .5 times the regular hourly rate</td>
<td></td>
</tr>
<tr>
<td>Update</td>
<td>Rule processing creates total calculated time of 10 hours, which matches the reported time. Processing adjusts the pay rate for 2 of the 10 reported hours.</td>
<td>(8 hours * 10 USD) + (2 hours * 15 USD) = 110 USD</td>
</tr>
<tr>
<td></td>
<td>- 8 hours of regular time at the regular hourly rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 2 hours of overtime at 1.5 times the regular hourly rate</td>
<td></td>
</tr>
</tbody>
</table>

Summation and Reporting Levels

Select the summation level to specify at what level the rule applies. This table describes the rule logic for each summation level option.

<table>
<thead>
<tr>
<th>Summation Level</th>
<th>Rule Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Process the rule against all time entries that match the time category conditions.</td>
</tr>
</tbody>
</table>
Rule Template and Rule Parameter, Output, and Explanation

Details

<table>
<thead>
<tr>
<th>Summation Level</th>
<th>Rule Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>Process the rule against hours entered for the entire day that match the time category conditions.</td>
</tr>
<tr>
<td>Time Card</td>
<td>Process the rule against hours entered for the entire period that match the time category conditions.</td>
</tr>
</tbody>
</table>

For time entry rules, specify at what level to display the rule message results. This table describes the rule logic for each reporting level option.

<table>
<thead>
<tr>
<th>Reporting Level</th>
<th>Rule Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Display rule results for all time entries that match the time category conditions.</td>
</tr>
<tr>
<td>Day</td>
<td>Display rule results for hours reported for the entire day that match the time category conditions.</td>
</tr>
<tr>
<td>Time Card</td>
<td>Display rule results for hours reported for the entire period that match the time category conditions.</td>
</tr>
</tbody>
</table>

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 one of these two values.

<table>
<thead>
<tr>
<th>Suppression Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Display the message just once.</td>
</tr>
<tr>
<td>No</td>
<td>Display the message every time the message generation event occurs.</td>
</tr>
</tbody>
</table>

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

Example

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

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

<table>
<thead>
<tr>
<th>Reporting Level</th>
<th>Suppress Duplicate Messages Display</th>
<th>Message Display Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Card</td>
<td>Either Yes or No</td>
<td>Once</td>
</tr>
<tr>
<td>Day</td>
<td>No</td>
<td>3 successive days after reported time reaches 20 hours</td>
</tr>
</tbody>
</table>
Process Empty Time Card
For time entry rules only, you can specify whether to process time cards that contain days with no 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. This table describes the default selections for each template type.

<table>
<thead>
<tr>
<th>Template Type</th>
<th>Default Selections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time calculations</td>
<td><strong>Submit</strong> and <strong>Resubmit</strong></td>
</tr>
<tr>
<td></td>
<td>You can’t edit these selections.</td>
</tr>
<tr>
<td></td>
<td>You can select <strong>Save</strong>. You can edit this selection in rules that you create with this template type.</td>
</tr>
<tr>
<td>Time entry</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>You can edit any selections in rules created with this template type.</td>
</tr>
<tr>
<td></td>
<td>Typically, you select:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Save</strong> for rules with details and daily summation levels, such as when a rule validates a daily minimum</td>
</tr>
<tr>
<td></td>
<td>• <strong>Submit</strong> and <strong>Resubmit</strong> with the summation level of time card, such as when a rule validates a weekly maximum</td>
</tr>
</tbody>
</table>

Parameters in Time 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. This table describes the parameters and identifies whether they are editable and visible when you create rule templates and rules.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
<th>Editable</th>
<th>Visible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Sequence</td>
<td>Determines the order of the parameters on the Create Rule page; the lower the number, the higher the priority</td>
<td>Edit</td>
<td>Not shown</td>
</tr>
</tbody>
</table>
### Outputs in Time Rule Templates and Rules: Explained

Formulas contain outputs, 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 outputs 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 outputs. Use the Grouping Structure option to associate these time attributes with output values derived from the associated formula.

This table describes the output settings and identifies whether they are visible and writable when you create rule templates and rules.
## Output Settings

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

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
<th>Visible and Writable in Time Calculation Rule Template</th>
<th>Visible and Writable in Time Calculation Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Sequence</td>
<td>Determines the order of the outputs on the Create Rule page</td>
<td>Edit</td>
<td>Not shown</td>
</tr>
<tr>
<td>Output Name</td>
<td>Uniquely identifies the output within the associated formula</td>
<td>Read only</td>
<td>Not shown</td>
</tr>
<tr>
<td>Message Severity</td>
<td>Determines whether the exception type for time entry and time card exceptions is <strong>Information</strong>, <strong>Warning</strong>, or <strong>Error</strong></td>
<td>Select</td>
<td>Select</td>
</tr>
<tr>
<td>Display Name</td>
<td>Identifies the variable that appears in the Rule Outputs section of rules created with this template</td>
<td>Enter</td>
<td>Read only</td>
</tr>
</tbody>
</table>

### Time Attribute

- **Select the** Measure **time attribute for all measure outputs, such as OUT_MEASURE_UNDER and OUT_MEASURE_OVER.**

### Value Type

- Determines whether the person creating rules with this template enters or selects the time attribute value

  **Example:** Data source

### Value Set

- Determines the values in the Value choice list on the create and edit pages of rules created with this template

  If the value type is Value Set, you must select the specific value set.

### Output Source

- Identifies the source of the output or time attribute, Formula or User-defined
### Output Groups in Time Calculation Rule Templates and Rules: Explained

When creating time calculation rule templates, use output groups to identify the time attributes that store outputs. The associated formula provides the outputs and groups, 1 group for each output. You select the time attribute output 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 rule template that calculates time data weekly based on the WFM_THRESHOLD_TIME_CALCULATION_RULE formula, which has these 2 outputs:

- OUT_MEASURE_UNDER
- OUT_MEASURE_OVER

The Output Group choice list contains these values:

- Output Group 1
- Output Group 2

#### Grouping Structure

On the Outputs page, you complete these actions:

- For OUT_MEASURE_OVER, change the output group to Output Group 2.
- Set the time attribute for both measure outputs to Measure.
- Add 1 time attribute output to each output group, as shown in this table:

<table>
<thead>
<tr>
<th>Output Name</th>
<th>Time Attribute</th>
<th>Output Group</th>
<th>Display Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAY_TYPE_UNDER</td>
<td>Payroll Time Type</td>
<td>Output Group 1</td>
<td>Pay for Under Threshold</td>
</tr>
<tr>
<td>PAY_TYPE_OVER</td>
<td>Payroll Time Type</td>
<td>Output Group 2</td>
<td>Pay for Over Threshold</td>
</tr>
</tbody>
</table>

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 values of the payroll time type for **PAY_TYPE_UNDER** and **PAY_TYPE_OVER** to **Regular** and **Overtime**, respectively. The rule sets calculated hours under the threshold value to regular time and the hours over the threshold value to overtime.

**Related Topics**
- Creating a Rule Template That Calculates the Daily Threshold for Expenditure and Payroll Time Types: Worked Example
- Creating a Rule That Calculates the Daily 8-Hour Threshold for Expenditure and Payroll Time Types: Worked Example

**Explanation Text in Time Rule Templates and Rules: Explained**

Describe the business purpose of the time 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 values in the **Message Tokens** choice list are the parameter and output names provided by the associated formula. If you configure display names for the parameters and outputs 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 entries against a 40-hour threshold. It associates time under the threshold with the payroll time type **Regular** and time over the threshold with **Overtime**.

**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**

This explanation is the full text with the message tokens inserted. **Compare the total hours reported for the time category [WORKED_TIME_CONDITION] to the threshold maximum hours [DEFINED_LIMIT]. Associate the hours**
under the threshold with the payroll time type {OUT_PAY_TYPE_UNDER} and any hours over the threshold with {OUT_PAY_TYPE_OVER}.

Rule Text with Values
This explanation is the full text with the specified rule values substituted for the message tokens. Compare the total reported hours defined in the time category All Payroll Entries to the threshold maximum hour 40. Associate the hours under the threshold with the payroll time type Regular and the hours over the threshold with Overtime.

Best Practices
These 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.

<table>
<thead>
<tr>
<th>Example of Incorrect Pairing</th>
<th>Examples of Correct Pairings</th>
</tr>
</thead>
<tbody>
<tr>
<td>The time card was approved by the approver (STATUS).</td>
<td>The approver [APPROVER_NAME] approved the time card.</td>
</tr>
<tr>
<td></td>
<td>The invoice was approved and is now in status (STATUS).</td>
</tr>
</tbody>
</table>

- 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.

Processing Order in Time Calculation Rule Sets: Explained
The time calculation rules run in a defined processing order in the rule set. Processing order one processes first. This example shows the processing order for a rule set that incorporates two other rule sets.

Rule set A definition:

<table>
<thead>
<tr>
<th>Processing Order</th>
<th>Rule Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rule 1</td>
</tr>
<tr>
<td>2</td>
<td>Rule 2</td>
</tr>
</tbody>
</table>

Rule set B definition:

<table>
<thead>
<tr>
<th>Processing Order</th>
<th>Rule Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rule 3</td>
</tr>
</tbody>
</table>
Chapter 16
Rule Template and Rule Parameter, Output, and Explanation Details

### Rule set C definition:

<table>
<thead>
<tr>
<th>Processing Order</th>
<th>Rule Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rule 5</td>
</tr>
<tr>
<td>2</td>
<td>Rule set B</td>
</tr>
<tr>
<td>3</td>
<td>Rule 6</td>
</tr>
<tr>
<td>4</td>
<td>Rule set A</td>
</tr>
</tbody>
</table>

The order of processing rules in rule set C is:

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

### Analyzing Processing Details for Time Rules and Rule Sets: Explained

You can view the formulas, rules, and rule sets used to validate and process an employee'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.

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

<table>
<thead>
<tr>
<th>Information</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule details</td>
<td>Click Rule Definition to view details of the time repository rule that includes the parameter and output values.</td>
</tr>
<tr>
<td>Processing logs for the rule and rule set</td>
<td>Click Rule Processing Log and Rule Set Processing Log to view the processing logs that help to diagnose processing issues.</td>
</tr>
<tr>
<td>Formula details</td>
<td>Click Formula Details to view details of the formula associated with the rule templates.</td>
</tr>
</tbody>
</table>
Rule Templates and Rules FAQs

Can I create absence entries using time calculation rules?
No. Time reporters must manually create absence entries for time cards.

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 setup profile.

Why can't I edit some rules?
You can’t edit rules that were associated with a worker time processing setup profile to generate time card entries.
17 Rule-Based Validation, Calculation, Allocation, Save, and Submit Configuration Procedures

Creating Time Rule Templates: Procedure

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

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

Create time rule templates using the Manage Rule Templates task in the Time Management work area.

1. On the Manage Rule Templates page toolbar, click the Create icon.
2. On the Create Rule Template dialog box, complete these steps:
   a. Select the template type.
   b. Select the formula to associate with the template.
   c. Click Continue.
3. On the Create Rule Template: Definition page, complete these steps:
   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 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.

   c. Click Next.
4. On the Create Rule Template: Parameters page, complete these steps:
   a. Configure the parameters provided by the associated formula.
   b. Click Next.
5. On the Create Rule Template: Outputs page, complete these steps:
   a. Configure the outputs provided by the associated formula. The delivered time allocation formula doesn’t contain any outputs. You specify rule outputs in time allocation configurations that you create using the Manage Time Allocation task.

   For time calculation rule templates only, you also:
   - Select a time attribute for each output. For measure outputs, select the Measure time attribute.
   - Select the output group for each output. The associated formula provides the output groups, one group for each output.
• Optionally, add time attributes and select an output group to associate each attribute with one or more outputs. If you don’t add time attributes outside of the formula, then the application uses the time attribute from the reported time.

Example: You use the same payroll time attribute for the parameters and outputs for the reported and calculated regular time entries. You add an attribute for the calculated overtime entry. So, you don’t include a time attribute in the output group with outputs under the threshold. You do include a time attribute in the output group for over threshold outputs.

b. Click Next.

6. On the Create Rule Template: Explanation page, complete these steps:

a. Enter the business purpose of the rule template in the Explanation field. Configure 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.

<table>
<thead>
<tr>
<th>Source</th>
<th>Example Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template</td>
<td>When the total reported hours for the {WORKED_TIME_CONDITION} time category exceed the maximum {DEFINED_LIMIT} hours, display the message {MESSAGE_CODE}.</td>
</tr>
<tr>
<td>Rule</td>
<td>When the total reported hours for the time category All Payroll Entries exceed the maximum 45 hours, display the message HWM_FF_TER_PERIOD_GT_MAX_ERR.</td>
</tr>
</tbody>
</table>

b. Click Next.


Related Topics

• Formulas and Time Rule Components: How They Work Together
• Definition Options for Time Rule Templates: Points to Consider
• Parameters in Time Rule Templates and Rules: Explained
• Output Groups in Time Calculation Rule Templates and Rules: Explained
• Outputs in Time Rule Templates and Rules: Explained

Creating Time Rules: Procedure

Create time rules that validate and process time using the Manage Rules task in the Time Management work area.

1. On the Manage Rules page toolbar, click the Create icon.
2. On the Create Rule dialog box, complete these steps:

   a. Enter a rule name.
   b. Select the template type.
   c. Select the rule template to use to create the rule.
   d. Click Continue.
3. On the Create Rule page, complete these steps:
   a. In the Basic Information section, enter a description.
   b. 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.
   c. In the Rule Parameters section, enter or select values for the parameters from the selected rule template.
   d. In the Outputs section, select values for the outputs from the selected rule template. The delivered time allocation formula doesn’t contain any outputs. You specify rule outputs in time allocation configurations that you create using the Manage Time Allocation task.
      • For time calculation rules, select the time attribute values.
      • For time device, entry, and submission rules, select the message severity.
   e. Click Save and Close. 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 Rule Components: How They Work Together
- Parameters in Time Rule Templates and Rules: Explained
- Outputs in Time Rule Templates and Rules: Explained
- Output Groups in Time Calculation Rule Templates and Rules: Explained

Creating Time 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 employees to report at least 8 hours per day. The other rule requires that employees report no more than 45 hours per week. The rule set validates all time card entries and displays a warning message when time is under the daily minimum or over the weekly maximum. Assign rule sets to groups of employees with similar vacation and time validation and processing requirements.

Create rule sets using the Manage Rule Sets task in the Time Management work area.

1. On the Manage Rule Sets page toolbar, click the Create icon.
2. On the Create Rule Set dialog box, complete these steps:
   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.
3. On the Create Rule Set page, complete these steps:
   a. In the Basic Information section, enter a description.
   b. Edit the effective date to control when the new rule or rule edits take effect.
   c. 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.
   d. Click Save and Close.
### Configuring Workforce Compliance Checks and Exception Alerts: Procedure

Prevent exceptions by checking compliance outside of the time management process. You can create compliance rules that generate alerts based on time card data and unprocessed time events using these tasks. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manage Fast Formulas</td>
<td>Create formulas to use in workforce compliance rules.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>2</td>
<td>Manage Workforce Management Lookups</td>
<td>Review delivered lookup values for use with time collection device exceptions. Add additional lookup codes to the ORA_HWM_TCD_EXCEPTION_TYPE lookup type if the delivered codes don’t meet your business requirements.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>3</td>
<td>Manage Time Repository Rule Templates</td>
<td>Create and edit workforce compliance rule templates. Use time categories in rule templates to summarize time and compare different categories of time.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td>Manage Rule Templates</td>
<td></td>
<td>Time Management</td>
</tr>
<tr>
<td>4</td>
<td>Manage Time Repository Rules</td>
<td>Create and edit workforce compliance rules based on your rule templates.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td>Manage Rules</td>
<td></td>
<td>Time Management</td>
</tr>
<tr>
<td>5</td>
<td>Manage Time Repository Rule Sets</td>
<td>Create and edit collections of workforce compliance rules and rule sets.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td>Manage Rule Sets</td>
<td></td>
<td>Time Management</td>
</tr>
<tr>
<td>6</td>
<td>Manage HCM Groups</td>
<td>Create and edit group definitions used to associate workforce compliance rules with members and indirectly with their managers. Review the delivered groups to determine whether you require additional ones.</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>
Implementing Time and Labor

Chapter 17
Rule-Based Validation, Calculation, Allocation, Save, and Submit Configuration Procedures

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Create Alert Template</td>
<td>Configure notifications that alert appropriate users of workforce compliance issues before they become exceptions by email or through Worklist. The delivered notification is HWM Time Exceptions from Compliance Rules.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Edit Alert Template</td>
<td></td>
<td>Alerts Composer</td>
</tr>
</tbody>
</table>

After you configure the workforce compliance objects, you schedule recurring compliance alerts using the **Manage Scheduled Processes** task in the Time Management work area. In the Process Details dialog box for the **Generate Time Exceptions from Compliance Rules** process complete these steps:

1. Click **Advanced**.
2. On the Parameters tab, select the appropriate combination of workforce compliance rule set, HCM group name, and date range.
3. Select **Send alert immediately** and then the applicable alert templates.
4. On the Schedule tab, specify whether to run the process as soon as possible or using a schedule. Configure a schedule to run the process with a recurring frequency.
5. Submit the configured process.

**Related Topics**
- Formulas and Types of Time Rule Templates: Explained

Creating a Rule Template That Calculates the Daily Threshold for Expenditure and Payroll Time Types: Worked Example

This example shows how to create a time calculation rule template that calculates daily regular and overtime using time category and threshold parameters. The calculation converts hours-based time attributes over and under the threshold value to separate time attributes for expenditure and payroll time 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.
- Calculate time under and over the threshold using these time attributes: **PJC_EXPENDITURE_TYPE_NAME** and **PayrollTimeType**.
- Edit the explanation for each rule created with this template, using parameter and output variable values set in each rule.
Creating a Time Calculation Rule Template

Use the Manage Rule Templates task in the Time Management work area.

1. On the Manage Rule Templates page toolbar, click the Create icon.
2. On the Create Rule Template dialog box, complete these steps:
   a. Complete the rule template fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template Type</td>
<td>Time calculation rule</td>
</tr>
<tr>
<td>Formula Name</td>
<td>WFM_THRESHOLD_TIME_CALCULATION_RUL</td>
</tr>
</tbody>
</table>

b. Click Continue.

3. On the Create Rule Template: Definition page, complete these steps:
   a. Complete the basic information fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Daily Threshold for Expenditure and Pay Types</td>
</tr>
<tr>
<td>Description</td>
<td>Calculates daily time for specific expenditure and payroll types using time category and threshold parameters</td>
</tr>
<tr>
<td>Rule Classification</td>
<td>Threshold</td>
</tr>
<tr>
<td>Rule Execution Type</td>
<td>Update</td>
</tr>
<tr>
<td>Summation Level</td>
<td>Day</td>
</tr>
</tbody>
</table>

b. In the Time Card Events that Trigger Rule section, select Save.

   c. Click Next.

4. On the Create Rule Template: Parameters page, complete these steps:
   a. Complete the parameter fields, as shown in this table.

<table>
<thead>
<tr>
<th>Formula Parameter Name</th>
<th>Parameter Type</th>
<th>Display Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFINED_LIMIT</td>
<td>Fixed number</td>
<td>Daily Threshold</td>
</tr>
<tr>
<td>WORKED_TIME_CONDITION</td>
<td>Time category</td>
<td>Time Category</td>
</tr>
</tbody>
</table>
5. On the Create Rule Template: Outputs page, complete these steps:
   a. On the Outputs toolbar, click Add four times to insert four table rows.
   b. Complete the two existing and four new outputs, as shown in this table. This worked example showcases using different under threshold project and payroll time attributes than those selected for the reported time. If you use the same time attributes in the output that you do in the parameters, you don’t have to include rows 2 and 3.
   
   ![Note:](image)
   After inserting the four rows, the first time that you click a field, a comprehensive message about all of the missing required values appears. Click OK to close the message and complete the fields.

<table>
<thead>
<tr>
<th>Display Sequence</th>
<th>Output Name</th>
<th>Output Group</th>
<th>Time Attribute</th>
<th>Value Type</th>
<th>Display Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OUT_MEASURE_UNDER</td>
<td>Output Group 1</td>
<td>Measure</td>
<td>N/A</td>
<td>Under Calculated Hours</td>
</tr>
<tr>
<td>2</td>
<td>EXPEND_ATTRIBUTE_UNDER</td>
<td>Output Group 1</td>
<td>PJC_EXPENDITURE_TYPE_NAME</td>
<td>Data source</td>
<td>Under Expenditure Type</td>
</tr>
<tr>
<td>3</td>
<td>PAY_ATTRIBUTE_UNDER</td>
<td>Output Group 1</td>
<td>PayrollTimeType</td>
<td>Data source</td>
<td>Under Pay Type</td>
</tr>
<tr>
<td>4</td>
<td>OUT_MEASURE_OVER</td>
<td>Output Group 2</td>
<td>Measure</td>
<td>N/A</td>
<td>Over Calculated Hours</td>
</tr>
<tr>
<td>5</td>
<td>EXPEND_ATTRIBUTE_OVER</td>
<td>Output Group 2</td>
<td>PJC_EXPENDITURE_TYPE_NAME</td>
<td>Data source</td>
<td>Over Expenditure Type</td>
</tr>
<tr>
<td>6</td>
<td>PAY_ATTRIBUTE_OVER</td>
<td>Output Group 2</td>
<td>PayrollTimeType</td>
<td>Data source</td>
<td>Over Pay Type</td>
</tr>
</tbody>
</table>

c. On the Outputs section toolbar, click Reorder.
d. On the Reorder Display Sequence dialog box, complete these steps:
   i. Reorder the display sequence as specified in the preceding table.
   ii. Click OK.
e. On the Create Rule Templates: Outputs page, click Next.

6. On the Create Rule Template: Explanation page, complete these steps:
a. In the Explanation section, create this 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 daily hours identified by the time category {WORKED_TIME_CONDITION} with the threshold {DEFINED_LIMIT}. For hours under the threshold, set the expenditure type name to {EXPEND_ATTRIBUTE_UNDER} and the pay time type to {PAY_ATTRIBUTE_UNDER}. For hours over the threshold, set the expenditure type name to {EXPEND_ATTRIBUTE_OVER} and the pay time type to {PAY_ATTRIBUTE_OVER}.
Creating a Rule That Calculates the Daily 8-Hour Threshold for Expenditure and Payroll Time Types: Worked Example

This example shows how to create a time calculation rule that calculates daily regular time and overtime for expenditure and payroll types. It configures the rule to use an 8-hour threshold and update reported time by adjusting calculated results, rather than creating additional hours. It pays calculated time under the threshold using the Regular Hours attribute value and over the threshold using Overtime Hours.

Prerequisites

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

Creating a Time Calculation Rule

Use the Manage Rules task in the Time Management work area.

1. On the Manage Rules page toolbar, click the Create icon.
2. On the Create Rule dialog box, complete these steps:
   a. Complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Daily Threshold 8 Hours Update TCR</td>
</tr>
<tr>
<td>Template Type</td>
<td>Time calculation rule</td>
</tr>
<tr>
<td>Rule Template Name</td>
<td>Daily Threshold Hours Template</td>
</tr>
</tbody>
</table>
   b. Click Continue.
3. On the Create Time Calculate Rule: Daily 8-Hour Threshold for Expenditure and Pay Types page, complete these steps:
   a. In the Basic Information section, Description field, enter this text: **Calculates daily regular time and overtime for expenditure and payroll types using all time entries and an 8-hour threshold.**
   b. Complete the rule parameter fields, as shown in this table.
<table>
<thead>
<tr>
<th>Display Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Overtime Threshold</td>
<td>8</td>
</tr>
<tr>
<td>Time Category</td>
<td>All Payroll Entries</td>
</tr>
</tbody>
</table>

c. In the Outputs section, search for and select these output values:

<table>
<thead>
<tr>
<th>Display Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under Expenditure Type</td>
<td>Professional Straight Time</td>
</tr>
<tr>
<td>Under Pay Type</td>
<td>Regular</td>
</tr>
<tr>
<td>Over Expenditure Type</td>
<td>Professional Overtime</td>
</tr>
<tr>
<td>Over Pay Type</td>
<td>Overtime</td>
</tr>
</tbody>
</table>

d. Click **Save and Close**.

### Creating and Assigning a Cost Center, Program, and Fund

**Time Allocation: Worked Example**

This worked example automatically allocates time entries associated with regular payroll time attributes to the different cost centers, programs, and funds. These allocations are based on hours-based, daily thresholds. It also automatically allocates 100 percent of time entries associated with on call payroll time attributes to a specific cost center.

The basic process for creating the time allocation and associating it with employees is:

1. Create the time allocation.
2. Assign the time allocation to one or more persons, groups, or both.
3. Create a time calculation rule that initiates time allocation calculations.
4. Associate the time calculation rule that initiates time allocation with employees.

### Prerequisite Setup

Complete these setup tasks before creating the time allocation and associating it with employees.

1. Configure time entry objects.
2. Configure layout sets and time entry profiles.
1. Configure Time Entry Objects

You must complete these tasks in the Setup and Maintenance work area, Workforce Deployment offering before creating this allocation:

1. Prepare costing attributes, including Cost Center, Program, and Fund, for use in time card fields by completing these tasks:
   a. Create payroll value sets using the Manage Value Sets task.
   b. Set up the cost allocation key flexfield using the Manage Cost Allocation Key Flexfield task.
   c. Set up the cost allocation key flexfield usage to be available at the element entry level.
   d. Generate the costing time attributes using the Generate Data Dictionary Time Attributes task.
2. Create payroll elements and calculation components for time cards that uniquely identify regular and on call hours using the Manage Elements task.
3. Create time entry fields that enable employees and managers to report relevant time using the Manage Time Entry Layout Components task.
4. Create time categories that uniquely identify regular and on call time entries using the Manage Time Categories task.
5. Create time calculation rules to automatically generate relevant time entries using the Manage Time Repository Rules and Manage Time Repository Rule Sets tasks.
6. Create the RN in CA on Primary Assign group using the Manage HCM Groups task.

2. Configure Layout Sets and Time Entry Profiles

To view and override time allocations, you must also complete these tasks:

1. Add the dependent fields for the cost segments to time review, view, and approval notification layouts in a layout set.
2. Associate the layout set with the relevant employees and their managers using worker time entry setup profiles and HCM groups.

Creating the Cost Center, Program, and Fund Time Allocation

1. In the Time Management work area, on the Tasks panel tab, click Manage Time Allocations.
2. On the Manage Time Allocations page toolbar, click the Create icon.
3. On the Create Time Allocation page, in the Allocation Name field, enter Cost Center, Program, Fund.
4. In the Description field, enter Allocates regular, holiday premium, and on call hours among Cost Center, Program, and Fund cost segments.
5. In the Source section, create and complete rows, as shown in this table.

<table>
<thead>
<tr>
<th>Processing Sequence</th>
<th>Allocation Type</th>
<th>Summation Level</th>
<th>Time Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hours</td>
<td>Daily</td>
<td>Regular</td>
</tr>
<tr>
<td>2</td>
<td>Percentage</td>
<td>N/A</td>
<td>On Call</td>
</tr>
</tbody>
</table>

6. Configure the output for the first source by completing these steps:
   a. In the Source section, select the first row, which contains the Regular time category.
b. In the Output section, add the time attributes, as shown in this table.

<table>
<thead>
<tr>
<th>Attribute Display Sequence</th>
<th>Time Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cost Center</td>
</tr>
<tr>
<td>2</td>
<td>Program</td>
</tr>
<tr>
<td>3</td>
<td>Fund</td>
</tr>
</tbody>
</table>

c. Complete the output rows, as shown in this table.

<table>
<thead>
<tr>
<th>Processing Sequence</th>
<th>Hours</th>
<th>Cost Center</th>
<th>Program</th>
<th>Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>2210</td>
<td>1000</td>
<td>1110</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>3320</td>
<td>2000</td>
<td>1120</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>4430</td>
<td>3000</td>
<td>1130</td>
</tr>
</tbody>
</table>

7. Configure the output for the second source by completing these steps:
   a. In the Source section, select the second row, which contains the On Call time category.
   b. In the Output section, add the Cost Center time attribute.
   c. Complete the output row, as shown in this table.

<table>
<thead>
<tr>
<th>Processing Sequence</th>
<th>Percentage</th>
<th>Cost Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>5000</td>
</tr>
</tbody>
</table>

8. Click **Save and Close**.

9. On the Manage Time Allocations page, click **Done**.

### Assigning the Time Allocation to Employees

1. On the Tasks panel tab, click **Manage Allocation Assignments**.
2. On the Manage Allocation Assignments page toolbar, click the **Create** icon.
3. On the Create Allocation Assignment: Assignment Definition page, complete these steps:
   a. In the **Allocation Name** field, search for and select **Cost Center, Program, Fund**.
   b. Add an assignment range with the start date of today.
   c. Click **Next**.
4. On the Create Allocation Assignment: Person Assignments page, complete these steps:
   a. In the **Group Name** field, select **RN in CA on Primary Assign**.
   b. Click **Search**.
   c. Click **Next** to assign the allocation to all **RN in CA on Primary Assign** group members.
5. On the Create Allocation Assignment: Review page, complete these steps:
   a. Review the assignment definition and ranges, and the person assignments.
b. Click **Save and Close**.

6. On the Manage Allocation Assignments page, click **Done**.

---

### Creating the Calculation Rule That Initiates the Time Allocation

1. On the Tasks panel tab, click **Manage Rules**.
2. On the Manage Rules page toolbar, click the **Create** icon.
3. On the Create Rule dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Initiate Time Allocations</td>
</tr>
<tr>
<td>Template Type</td>
<td>Time calculation rule</td>
</tr>
<tr>
<td>Rule Template Name</td>
<td>Time Allocation Template</td>
</tr>
</tbody>
</table>

b. Click **Continue**.

4. On the Create Rule: Initiate Time Allocations page, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Initiate any time allocation calculations assigned to employees with time processing profiles containing this rule</td>
</tr>
<tr>
<td>Match Total Allocated Hours with Hours Identified by the Allocation</td>
<td>Yes</td>
</tr>
</tbody>
</table>

b. Click **Save and Close**.

5. On the Manage Rules page, click **Done**.

---

### Associating the Time Calculation Rule That Initiates Time Allocation with Employees

1. Add the Initiate Time Allocations rule to the appropriate time calculation rule sets. If you use other time calculation rules to calculation regular and on call hours, position this rule after them in the rule set processing sequence.
2. Add the time calculation rule sets to appropriate worker time processing setup profiles.

**Related Topics**

- Configuring Dependent Fields for Labor Costing Overrides: Procedure
- Managing Layout Sets: Explained
- Time Allocations and Allocation Assignments: Explained
Creating the Projects and Payroll 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 these time calculation rules:
   1. Daily 8-Hour Threshold for Expenditure and Pay Types
   2. Cost Center, Program, Fund

Creating a Time Calculation Rule Set

Use the Manage Rule Sets task in the Time Management work area.

1. On the Manage Rule Sets page toolbar, click the Create icon.
2. On the Create Rule Set dialog box, complete these steps:
   a. Complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Use Writers</td>
</tr>
<tr>
<td>Rule Set Type</td>
<td>Time calculation rule</td>
</tr>
<tr>
<td>Effective Start Date</td>
<td>The appropriate date for the rule to take effect</td>
</tr>
</tbody>
</table>

b. Click Continue.
3. On the Create Rule Set: US Writers page, complete these steps:
   a. In the Basic Information section, enter a description.
   b. On the Rule Set Members section toolbar, click the Add icon twice to add two rule members.
   c. Complete the fields for the two rule members, as shown in this table.

<table>
<thead>
<tr>
<th>Rule</th>
<th>Processing Sequence</th>
<th>Member Type</th>
<th>Member Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>1</td>
<td>Rule</td>
<td>Daily 8-Hour Threshold for Expenditure and Pay Types</td>
</tr>
<tr>
<td>Second</td>
<td>2</td>
<td>Rule</td>
<td>Initiate Time Allocations</td>
</tr>
</tbody>
</table>
d. Click *Save and Close*. 
## Time and Compliance Exceptions and Alerts

### Configuring Workforce Compliance Checks and Exception Alerts: Procedure

Prevent exceptions by checking compliance outside of the time management process. You can create compliance rules that generate alerts based on time card data and unprocessed time events using these tasks. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manage Fast Formulas</td>
<td>Create formulas to use in workforce compliance rules.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>2</td>
<td>Manage Workforce Management Lookups</td>
<td>Review delivered lookup values for use with time collection device exceptions. Add additional lookup codes to the ORA_HWM_TCD_EXCEPTION_TY lookup type if the delivered codes don’t meet your business requirements.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>3</td>
<td>Manage Time Repository Rule Templates</td>
<td>Create and edit workforce compliance rule templates. Use time categories in rule templates to summarize time and compare different categories of time.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td>Manage Rule Templates</td>
<td></td>
<td>Time Management</td>
</tr>
<tr>
<td>4</td>
<td>Manage Time Repository Rules</td>
<td>Create and edit workforce compliance rules based on your rule templates.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td>Manage Rules</td>
<td></td>
<td>Time Management</td>
</tr>
<tr>
<td>5</td>
<td>Manage Time Repository Rule Sets</td>
<td>Create and edit collections of workforce compliance rules and rule sets.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td>Manage Rule Sets</td>
<td></td>
<td>Time Management</td>
</tr>
<tr>
<td>6</td>
<td>Manage HCM Groups</td>
<td>Create and edit group definitions used to associate workforce compliance rules with members and indirectly with their managers. Review the delivered groups to determine whether you require additional ones.</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>
After you configure the workforce compliance objects, you schedule recurring compliance alerts using the **Manage Scheduled Processes** task in the Time Management work area. In the Process Details dialog box for the **Generate Time Exceptions from Compliance Rules** process complete these steps:

1. Click **Advanced**.
2. On the Parameters tab, select the appropriate combination of workforce compliance rule set, HCM group name, and date range.
3. Select **Send alert immediately** and then the applicable alert templates.
4. On the Schedule tab, specify whether to run the process as soon as possible or using a schedule. Configure a schedule to run the process with a recurring frequency.
5. Submit the configured process.

**Related Topics**
- Formulas and Types of Time Rule Templates: Explained

### Alert Notifications for Time Exceptions: Overview

Configure alert notifications for time exceptions so that managers can more quickly resolve them. In the Alerts Composer work area, add resource alerts that use either the `timeRecords` or `timeRecordGroups` resource. You schedule when the alert is sent while you are adding the resource alert.
Time Processing Setup Profiles: Explained

Use worker time processing setup profiles to associate time data validations, approvals, calculations, allocations, and transfers with employees and their managers. Assigning profiles to either an individual employee or a group of employees automatically assigns the profiles to their managers.

This figure shows the components that compose time processing profiles. Configure and assign these profiles using the Worker Time Processing Setup Profiles task in the Time Management work area.

This topic discusses these aspects of setup profiles:

- Group Assignment
- Profile Priority
- Default Profile

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 1 group of employees at a time. For example, assign the USA_Employees profile to these groups:

- FullTime_USA_employees group
PartTime_USAemployees group

You can't associate a single group with more than one profile of the same type at any given time. For example, the FullTime_USAemployees group can't have active assignments for both of these time processing profiles: USA_Employees and UK_Employees.

Priority

Assign each setup profile a unique priority number relative to other profiles of the same profile type. The priority number determines the profile used to create the time card if an employee is eligible for more than 1 profile. Number 1 is the highest priority. For example, a single employee is a member of two groups:

- Group A: The priority for the profile is 5.
- Group B: The priority for the profile is 3.

The application uses the profile with priority 3 for that employee.

Default Profile

By default, all employees in an organization are members of a delivered group associated with a time processing profile. The application applies this default profile for any employee who isn’t eligible for any other processing profile through either individual or group assignment.

Related Topics

- Troubleshooting Assignments of Time Setup and Device Processing Profiles: Explained
- Time Setup and Device Processing Profiles: How They're Derived
- Components Composing a Time Processing Profile: How They Work Together

Time Setup and Device Processing Profiles: How They're Derived

Through group membership, an employee can be eligible for multiple time entry, processing, and device processing profiles. The application derives from the eligible profiles only 1 profile of each type, for each employee. This table identifies the configurations that each profile associates with the assigned employees and their managers.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Configurations for Associated Employees and Their Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worker Time Entry Setup Profile</td>
<td>• Time card, calendar, and web clock layouts</td>
</tr>
<tr>
<td></td>
<td>• Time entry actions allowed by time card status</td>
</tr>
<tr>
<td>Worker Time Processing Setup Profile</td>
<td>• Time card and overtime periods</td>
</tr>
<tr>
<td></td>
<td>• Time consumers</td>
</tr>
<tr>
<td></td>
<td>• Time entry and calculation rules</td>
</tr>
<tr>
<td>Time Devices Processing Profile</td>
<td>• Time device mappings</td>
</tr>
<tr>
<td></td>
<td>• Time device and submission rules</td>
</tr>
<tr>
<td></td>
<td>• Time device export data</td>
</tr>
</tbody>
</table>
How Each Employee Profile Is Derived

The application derives the final profile assignment based on the priority sequence shown in this table.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Assignment Type</th>
<th>Derivation Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Individual Assignment</td>
<td>The profile with this assignment has the highest priority and overrides all group profile assignments.</td>
</tr>
<tr>
<td>2</td>
<td>Group Assignment</td>
<td>The profile with the lowest priority applies when multiple group memberships qualify an employee for multiple profiles of the same type.</td>
</tr>
<tr>
<td>3</td>
<td>Default Group Assignment</td>
<td>The profile with this group assignment applies to all employees who don’t have any profile assignments so that they can report time.</td>
</tr>
</tbody>
</table>

Related Topics

- Setting Up Processing of Project Time Cards: Explained
- Troubleshooting Assignments of Time Setup and Device Processing Profiles: Explained

Troubleshooting Assignments of Time Setup and Device Processing Profiles: Explained

You troubleshoot time entry, processing, and device processing profiles to resolve these issues:

- Unexpected absence or appearance of time card, calendar, web clock, or shift layouts might not appear for the employee or manager.
- Unexpected results from time entry, calculation, device, or submission rules

In the Time Management work area, use these tasks investigate any of these issues that you might occur for an employee or group:

- Manage Worker Time Entry Setup Profiles
- Manage Worker Time Processing Setup Profiles
- Manage Time Device Processing Profiles
Comparing Profiles

Use the **Assign Profile to Person** option to assign a profile directly to any employee with incorrect time cards, validations, or calculated time. This individual profile assignment overrides all profile assignments based on group memberships.

1. Click **Troubleshoot**.
2. Select an employee.
3. Specify the profile evaluation date.
4. Click **Evaluate** to list the profiles with an effective employee assignment on that date.
5. Select up to 3 of the employee’s profiles and view the various values for those profiles.

Deleting a Profile Override for an Individual

Use the **Assign Profile to Person** option to assign a profile directly to any employee 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

Remove a direct profile assignment for an employee by clicking **Delete Override**. If multiple direct assignments remain, then the individual profile with the lowest priority number applies. For example, you assign the employee to profiles A and B and profile A has a higher priority than B. The employee’s job responsibility changes and profile A no longer applies for the employee, so you delete the profile A override. The application automatically applies profile B to the employee. If there are no other individual assignments, then the group profile with lowest priority number takes priority.
Chapter 20

Time Collection Device Configurations

Processing Events from Time Collection Devices: 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 events, you regularly import reported time data and handle exceptions. To set up processing of time device events, you configure supplier lookups, event mappings, and export data. To set up processing of web clock events, you configure web clock buttons, the web clock layout, and worker time entry setup profiles. To complete setup for both time collection devices and web clock, you also configure rules, device processing profiles, and employee groups.

This figure shows the ongoing process of collecting time device and web clock events through to creation or completion of time entries. You regularly export person and employment data to third-party time devices and import time device and web clock events. The import process initiates validations of the imported time data and identifies any badge and time entry exceptions for resolution by time and labor managers. The process uses valid events to create or complete time entries.
Setting Up and Maintaining Time Collection Device Configurations

For third-party collection methods, you must complete the time entry and processing object configuration tasks. You must also complete these configuration tasks in the sequence listed to:

- Transfer data to and from third-party devices.
- Process time device and web clock events.

Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Setup Task</th>
<th>Work Area</th>
<th>Applicable Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manage Workforce Management Lookups</td>
<td>Setup and Maintenance</td>
<td>Time collection device files</td>
</tr>
<tr>
<td></td>
<td>• ORA_HWM_TCD_SUPPLIER1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ORA_HWM_TCD_SUPPLIER2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Manage Time Device Event Mappings</td>
<td>Time Management</td>
<td>Time collection device files</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setup and Maintenance</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Manage Time Device Event Mapping Sets</td>
<td>Time Management</td>
<td>Time collection device files</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setup and Maintenance</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Configure Time Event resources and requests</td>
<td>Documented in REST API</td>
<td>Time collection device files</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for Oracle Global Human</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resources Cloud on <a href="http://docs.oracle.com">http://docs.oracle.com</a></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Manage Time Device Export Data</td>
<td>Setup and Maintenance</td>
<td>Time collection device files</td>
</tr>
<tr>
<td>6</td>
<td>Configure Time Collection Device Setup Data</td>
<td>Documented in SOAP Web</td>
<td>Time collection device files</td>
</tr>
<tr>
<td></td>
<td>Export business object services and service data</td>
<td>Services for Oracle HCM Cloud on <a href="http://docs.oracle.com">http://docs.oracle.com</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>objects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Manage Scheduled Processes - Workforce Management</td>
<td>Time Management</td>
<td>Time collection device files</td>
</tr>
<tr>
<td></td>
<td>Management Time Device Export Data</td>
<td>Setup and Maintenance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Export Time Device Data Configuration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Manage Rules</td>
<td>Time Management</td>
<td>Web clock and time collection device files</td>
</tr>
<tr>
<td></td>
<td>Manage Time Repository Rules</td>
<td>Setup and Maintenance</td>
<td></td>
</tr>
</tbody>
</table>
Exporting Data to Time Collection Devices

Export data for time collection devices includes person information, payroll time types, and published employee 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 2 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 data is contained in each 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 devices and web clock. You transfer time data from a third-party time device using the Time Event REST web service. Typically, the time collection device performs time event transfers in regularly scheduled batches.

The process handles imported time events using one of these 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 employee schedules, and defined shift limits. This table describes the application processing actions that occur depending on the validation results.

<table>
<thead>
<tr>
<th>Validation Results</th>
<th>Application Processing Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>• Creates incomplete time entries for In application events</td>
</tr>
<tr>
<td></td>
<td>• Completes time entries after receiving the corresponding Out application event</td>
</tr>
<tr>
<td>Invalid</td>
<td>• Creates time entry exceptions</td>
</tr>
</tbody>
</table>

Handling Exceptions

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

- Identify the employee 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 employee 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.

**Related Topics**

- Components Composing a Time Processing Profile: How They Work Together

Components Composing a Time Device Processing Profile: How They Work Together

A time device processing profile associates employees with maps of third-party device events to application events and time attributes. The **Generate Time Cards from Time Collection Devices** process uses these maps to create time entries. These time entries are used in the validation and submission rules associated with the profile. The profile 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.
This figure summarizes how the device processing profile components work together. The following sections provide details and examples for each component.

Time Device Event Mappings and Mapping Sets
To process device events, you must map them to corresponding application events. You can also link the device events to the payroll time types that each employee 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 employee is eligible for when defining web clock buttons. Typically, you define multiple buttons for groups of employees, dates, or other criteria when creating a layout component for web clock.

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 employee’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 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. Employees report only shift start (In) and end (Out) time events, Monday through Friday. When employees sign out on Friday, their generated time cards satisfy the criteria in the time submission rule and the rule submits their time cards. When you create a time submission rule, clicking Save also creates a corresponding rule set. Each 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 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 require export data because it gets person and schedule data directly from the time repository. Relevant payroll time data is contained in each button definition.

Time Device Processing Profile

Each device processing profile includes 1 or more of these objects:

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

Each profile also includes 1 or more groups.

Groups

A group is a collection of persons that share common time reporting and processing characteristics. Select a group on the device processing profile to assign the profile to employees in the group. All employees in the group inherit the event mappings, device and submission rules, and export data from the associated profile. Each group can have only 1 device processing profile at a time.

Related Topics

- Defining Groups: Worked Example
- Troubleshooting Assignments of Time Setup and Device Processing Profiles: Explained

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

You must create separate time device processing profiles for each unique combination of device processing components, as shown in this figure. You want to create a profile for employees who share similar time entry and processing requirements for third-party time devices and web clock. The more device processing objects that you create, the greater the ongoing
maintenance effort. You want to find a balance between optimizing the device processing experience for your employees and the effort required to maintain that experience.

Create time device processing objects in the sequence listed using the tasks and work areas identified in this table. Tasks in the Setup and Maintenance work area are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Setup Task</th>
<th>Work Area</th>
<th>Applicable Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manage Time Entry Layout Components</td>
<td>Setup and Maintenance</td>
<td>Web clock</td>
</tr>
<tr>
<td>2</td>
<td>Manage Layout Sets</td>
<td>Time Management</td>
<td>Web clock</td>
</tr>
<tr>
<td>3</td>
<td>Manage Worker Time Entry Setup Profiles</td>
<td>Time Management</td>
<td>Web clock</td>
</tr>
<tr>
<td>4</td>
<td>Manage Time Device Event Mappings</td>
<td>Time Management</td>
<td>Time collection device</td>
</tr>
<tr>
<td>5</td>
<td>Manage Time Device Event Mapping Sets</td>
<td>Time Management</td>
<td>Time collection device</td>
</tr>
<tr>
<td>6</td>
<td>Manage Time Device Export Data</td>
<td>Setup and Maintenance</td>
<td>Time collection device</td>
</tr>
</tbody>
</table>
Time Device Event Mappings and Web Clock Button Definitions

Use these 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:
  
  o You identify when employees start their work using the Start Shift time device event, which maps to the In application event.
  o You identify when employees take a break using either of these methods. Map 1 time device event, Break, to the Out and In application event. Or, map 2 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 this table shows, the events each have different attribute values.

<table>
<thead>
<tr>
<th>Time Device Event</th>
<th>Payroll Time Type Attribute Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Shift</td>
<td>Regular</td>
</tr>
<tr>
<td>Break</td>
<td>Paid Break</td>
</tr>
<tr>
<td>Meal</td>
<td>Unpaid meal</td>
</tr>
</tbody>
</table>

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 1 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 employees using the worker time entry setup profile
2. Assigning the same employees to a time device processing profile that doesn’t include an event mapping set or time device export data

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

Use these questions to help you determine the 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 events from time devices or web clock 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 1 time device export data record with each device processing profile. You must create a separate 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 employee schedules

Use these 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 employees require when they report time using the device? For example, you require employees 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 1 time device and 1 submission rule set with a device processing profile. Use rules sets to associate rules with employee groups that have similar validation and submission requirements for events from third-party time devices or web clock. 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 submission rule set can contain only 1 rule.

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

- Do you want to validate time device or web clock events against published employee 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 employee 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 device processing profile. Define separate groups wherever the employee characteristics are unique among profiles or groups of profiles. For example, you group your employees into separate groups based on the country where they work.

Mappings and Mapping Sets for Time Device Events: Explained
To process events imported from time collection devices, 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 mapping sets, which you include in time device processing profiles.

Use these 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. This table describes the 4 application event values, which correspond to the start and stop of activities, such as a shift, break, or meal.

<table>
<thead>
<tr>
<th>Application Event</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>Used with the specified time attributes to create the start time event for an activity.</td>
<td>Start shift</td>
</tr>
<tr>
<td>In and Out</td>
<td>Used with the specified time attributes to create the start time event for one activity and the stop time event for another activity.</td>
<td>Start break and stop shift</td>
</tr>
<tr>
<td>Out and In</td>
<td>Used with the specified time attributes to create the stop time event for one activity and the start time event for another activity.</td>
<td>Stop shift and start break</td>
</tr>
<tr>
<td>Out</td>
<td>Used with the specified time attributes to create the stop time event for an activity.</td>
<td>Stop shift</td>
</tr>
</tbody>
</table>

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 device event to these combinations of pay type and costing time attributes: 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 1 mapping per supplier device event in each mapping set.

Event Mappings Usage

The **Import Time Cards from Time Collection Devices** process matches supplier device events to event mappings composing the mapping set in the device processing profile. This table describes the time entry action that the process takes, depending on whether it finds a match.

<table>
<thead>
<tr>
<th>Match Found</th>
<th>Process Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>For In events, create an incomplete time entry using the time attributes specified in the matching event mapping. For Out events, complete the corresponding, existing time entry.</td>
</tr>
<tr>
<td>No</td>
<td>Create a time entry exception. Use the Resolve All Exceptions by Worker or Manage Time Entries task to review and fix these exceptions.</td>
</tr>
</tbody>
</table>

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 this table.

<table>
<thead>
<tr>
<th>Event Mapping Choice List</th>
<th>Lookup Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier</td>
<td>ORA_HWM_TCD_SUPPLIERS</td>
<td>The company supplying the time collection device</td>
</tr>
<tr>
<td>Supplier Device Event</td>
<td>ORA_HWM_TCD_SUPPLIER EVENTS</td>
<td>The time events recognized by the time collection device supplier, such as Clock In or Meal Out</td>
</tr>
</tbody>
</table>

Use the **Manage Workforce Management Lookups** task to create values for these lookup types and edit existing values. This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.
Note: Lookup codes for supplier device events must start with the supplier lookup code. For example, if you have a supplier lookup code ABC, start the lookup code for the corresponding supplier device event with ABC_.

Related Topics
- Lookups: Explained

Mappings for Time Device Events: 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 employees 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

This table shows a mapping set composed of mappings between supplier device and application events and corresponding time attributes and attribute values.

<table>
<thead>
<tr>
<th>Event Mapping Name</th>
<th>Supplier Device Event</th>
<th>Application Event</th>
<th>Time Attribute</th>
<th>Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB Start Shift</td>
<td>Start Shift</td>
<td>In</td>
<td>Payroll Time Type</td>
<td>Regular</td>
</tr>
<tr>
<td>AB Stop Shift, Start Break</td>
<td>Start Break</td>
<td>Out and In</td>
<td>Payroll Time Type</td>
<td>Out: Regular</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In: Paid Break</td>
</tr>
<tr>
<td>AB Stop Break, Start Shift</td>
<td>Stop Break</td>
<td>Out and In</td>
<td>Payroll Time Type</td>
<td>Out: Paid Break</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In: Regular</td>
</tr>
<tr>
<td>AB Stop Shift, Start Meal</td>
<td>Start Meal</td>
<td>Out and In</td>
<td>Payroll Time Type</td>
<td>Out: Regular</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In: Unpaid Meal</td>
</tr>
<tr>
<td>AB Stop Meal, Start Shift</td>
<td>Stop Meal</td>
<td>Out and In</td>
<td>Payroll Time Type</td>
<td>Out: Unpaid Meal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In: Regular</td>
</tr>
<tr>
<td>AB Stop Shift</td>
<td>Stop Shift</td>
<td>Out</td>
<td>Payroll Time Type</td>
<td>Regular</td>
</tr>
</tbody>
</table>
Analysis

The **Out and In** application event ensures that there are no gaps when employees report breaks and meals within a shift. Although there is one application event in this instance, the **Generate Time Cards from Time Collection Device** import process creates 2 time events. The first time event is an **Out** event, immediately followed 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** time attribute.

Resulting Time Card Entries

This table shows the time entries that the **Generate Time Cards from Time Collection Device** import process creates as an employee badges in and out.

<table>
<thead>
<tr>
<th>Time Attribute Values</th>
<th>Wednesday Start</th>
<th>Wednesday End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>08:00</td>
<td>10:00</td>
</tr>
<tr>
<td>Paid Break</td>
<td>10:00</td>
<td>10:15</td>
</tr>
<tr>
<td>Regular</td>
<td>10:15</td>
<td>12:00</td>
</tr>
<tr>
<td>Unpaid Lunch</td>
<td>12:00</td>
<td>13:00</td>
</tr>
<tr>
<td>Regular</td>
<td>13:00</td>
<td>15:00</td>
</tr>
<tr>
<td>Paid Break</td>
<td>15:00</td>
<td>15:15</td>
</tr>
<tr>
<td>Regular</td>
<td>15:15</td>
<td>17:00</td>
</tr>
</tbody>
</table>

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

Schedule this process using one of these 2 tasks:

- **Manage Scheduled Processes** task in the Time Management work area
Prerequisites
Before you can send export data to a time collection device, you must complete these tasks:

1. Create the export data using the **Manage Time Device Export Data** task. This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.
2. Associate the device export data with a profile using the **Manage Time Device Processing Profiles** task in the Time Management work area.

Time Device Export Modes
This table describes the available modes for the time device export.

<table>
<thead>
<tr>
<th>Export Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full export</td>
<td>Send all valid data to the time device.</td>
</tr>
<tr>
<td></td>
<td>Select this mode for the initial export during implementation.</td>
</tr>
<tr>
<td>Purge and full export</td>
<td>Delete all existing data from the time device and then send all valid data.</td>
</tr>
<tr>
<td>Updates only export</td>
<td>Send only changes made to valid data since the last export.</td>
</tr>
</tbody>
</table>

The initial export determines what data to send using the values **Start Date** and **Number of Days in Period** for the 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
This table lists purposes for running the export data process and the corresponding Run options to use.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Run Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial data export during implementation</td>
<td>As soon as possible (default selection)</td>
</tr>
<tr>
<td>Onetime exports</td>
<td>Once frequency using a schedule on the Advanced tab</td>
</tr>
<tr>
<td>Recurring data exports</td>
<td>Using a schedule on the Advanced tab</td>
</tr>
</tbody>
</table>

With recurring exports, each process exports the specified data that is valid for the current period within the specified start and end dates.
Shift Limits in Time Processing: 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 employees 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, this figure shows the valid range for start time when the grace period is 15 minutes and scheduled shift start time is 8:00.

![Grace Period Example](image)

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: This 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.

![Start and End Periods Example](image)

This 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 set for the start or end early or late period as the exception type for the time entry. 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 employee schedules and defined shift limits.

### Settings That Affect Time Event Processing
This table identifies the settings that affect time event processing and the Time Management work area tasks that you use to manage the settings.

<table>
<thead>
<tr>
<th>Settings</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published employee schedule</td>
<td>Manage Planned Schedule</td>
</tr>
<tr>
<td></td>
<td>View Published Schedule</td>
</tr>
<tr>
<td>Shift limits:</td>
<td>Manage Shift Properties</td>
</tr>
<tr>
<td>- Grace period</td>
<td></td>
</tr>
<tr>
<td>- Start early and late periods and violation types</td>
<td></td>
</tr>
</tbody>
</table>
Settings | Task
---|---
End early and late periods and violation types | Manage Time Device Rules
Message severity in the time device rule | Manage Time Device Rules

How Time Events Are Processed

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

1. Determine whether the time event corresponds to the start or end of the shift.
2. Identify the employee'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 employee'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 exception type and message for the time entry. For example, is the time event too early or late or too short or long. The device rule uses the violation type set for a start or end early or late period as the exception type for the time entry. 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

This table identifies these example settings for 2 employees: shift limits and message severity in the time device rule.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace Period (in minutes)</td>
<td>15</td>
</tr>
<tr>
<td>Start Early Period (in minutes)</td>
<td>45</td>
</tr>
<tr>
<td>Start Late Period (in minutes)</td>
<td>30</td>
</tr>
<tr>
<td>Start Early Period Violation Type</td>
<td>Information</td>
</tr>
<tr>
<td>Start Late Period Violation Type</td>
<td>Blank</td>
</tr>
<tr>
<td>Message Severity in the Time Device Rule</td>
<td>Warning</td>
</tr>
</tbody>
</table>
This figure shows shift limit timelines for 2 scheduled start times. The shift limits are above the timeline for the 8:00 start time and below it for the 8:30 start time.

This table describes processing results for various reported times for 2 scheduled start times based on the settings identified in the preceding table.

<table>
<thead>
<tr>
<th>Reported Time</th>
<th>08:00 Scheduled Start</th>
<th>08:30 Scheduled Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:27</td>
<td>Time entry exception created with an exception type of <strong>Information</strong>. Reason: The time event is outside of the 15-minute grace period but within the 45-minute start early period.</td>
<td>Time entry exception created with an exception type of <strong>Error</strong>. Reason: The time event is outside of the start early period.</td>
</tr>
<tr>
<td>08:14</td>
<td>Time card entry started with an <strong>Incomplete</strong> status. Reason: The time event is within the 15-minute grace period and it marks the start of the shift.</td>
<td>Time entry exception created with an exception type of <strong>Information</strong>. Reason: The time event is outside of the 15-minute grace period but within the 45-minute start early period.</td>
</tr>
<tr>
<td>08:19</td>
<td>Time entry exception created with an exception type of <strong>Warning</strong>. 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 message severity in the time device rule applies.</td>
<td>Time card entry started with an <strong>Incomplete</strong> status. Reason: The time event is within the 15-minute grace period and it marks the start of the shift.</td>
</tr>
<tr>
<td>08:50</td>
<td>Time entry exception created with an exception type of <strong>Error</strong>. Reason: The time event is outside of the start late period.</td>
<td>Time entry exception created with an exception type of <strong>Warning</strong>. 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 message severity in the time device rule applies.</td>
</tr>
<tr>
<td>Reported Time</td>
<td>08:00 Scheduled Start</td>
<td>08:30 Scheduled Start</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>type, the message severity in the time device rule applies.</td>
</tr>
</tbody>
</table>
21 Integrations with Absence Management, Payroll, and Projects

Using Time and Labor with Absence Management

Integrating Absence Management and Time and Labor: Procedure

Enable employees 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 these applications, you must complete these setup tasks:

- 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 employee assignment.
- Set the absence type units of measure to hours.
- Enable the absence type for time card entry.
- Enroll employees 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

Use these tasks to generate time attributes and time card fields. The tasks are in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate Data Dictionary Attributes</td>
<td>Creates time attributes in the data dictionary for a selected time consumer that categorize time or defines time card fields</td>
</tr>
<tr>
<td>Generate Time Card Fields</td>
<td>Creates multiattribute fields for the specified LDG using time attributes in the data dictionary</td>
</tr>
</tbody>
</table>

Configure Layouts, Including Time Entry Format

You can configure the display of absence data on various dialog boxes and pages in the Time and Time Management work areas. Use the Manage Time Entry Layout Components task, which is also in the Time and Labor functional area.
**Possible Time Card Field** | **Field Description**
--- | ---
Absence type | Create a single-attribute field that displays only the absence type.
Payroll and absence time types | Create a multiattribute 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 field associated with independent absence attribute, such as Illness. Display the dependent reason field in the Additional Attributes or Daily Details dialog box on the time card.

Absence entries resolve according to the employee’s schedule. Use the Manage Layout Sets task in the Time Management work area to specify the time entry format that is supported for the schedule type. Time entry formats are: hours only, start and end times, or both hours and times. This table describes the different schedule types with the correct time entry formats for each.

<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Time Entry on the Time Card</th>
<th>Time Entry Format to Select on the Layout Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Schedule</td>
<td>Absence start and end times</td>
<td>Either Display start and end times or Display hours and time</td>
</tr>
<tr>
<td>Elapsed or Duration Schedule</td>
<td>Number of absence hours</td>
<td>Either Display hours only or Display hours and times</td>
</tr>
</tbody>
</table>

**Related Topics**
- Absence Management Components: How They Work Together

**Compensatory Time: Overview**

Employees are often required to work excess hours outside of their regular work schedule, such as overtime hours or hours worked on a holiday. These excess hours can be converted to earned compensatory time off, also known as time off in lieu (TOIL), instead of monetary compensation. Employees can then record absences against the defined compensatory plan specific to your policies when they take time off in the future.

To earn and use compensatory time, employees:

1. Report earned time on the same Oracle Fusion Time and Labor time cards that they use to report regular worked hours. This earned time transfers to Oracle Fusion Absence Management and updates the corresponding plan balance.
2. Apply for paid time off using the corresponding compensatory absence plan.

You must complete some setup tasks to:
- Provide seamless integration between Time and Labor and Absence Management.
- Ensure automatic transfer of compensatory time reported on time cards to the corresponding absence plans.
Prerequisite Setup Tasks in Absence Management

To implement compensatory time in Absence Management, you must complete these configuration tasks. The tasks are in the Absence Management work area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manage Absence Plans</td>
<td>Create an absence plan with plan type Compensatory and define the related attributes associated with compensatory time.</td>
</tr>
<tr>
<td>2</td>
<td>Manage Absence Types</td>
<td>Create an absence type for compensatory time absence entry.</td>
</tr>
<tr>
<td>3</td>
<td>Manage Absence Plans</td>
<td>Associate the absence type to the compensatory time plan.</td>
</tr>
</tbody>
</table>

After you define the absence plan and absence type, you can enroll an employee in the associated compensatory plan. Use the Manage Absence Records task in the Person Management work area.

Prerequisite Setup Tasks in Time and Labor

To report and calculate earned compensatory time and take compensatory absences you must complete these time entry and processing configuration tasks. The tasks are in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area:

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Generate Data Dictionary Time Attributes</td>
<td>Generate the Absence Management time attributes used to create compensatory time layout components.</td>
</tr>
<tr>
<td>2</td>
<td>Manage Time Entry Layout Components</td>
<td>Create a multiattribute time entry field that includes the time attributes Absence Management Type and Compensatory Time Absence Plan. In one row, you select the absence management type that decrements the employee’s earned compensatory time—the compensatory absence. In another row, you select the compensatory time absence plan that increments the employee’s earned compensatory time. Optionally, create a dependent field to set an expiration date for earned compensatory time.</td>
</tr>
<tr>
<td>3</td>
<td>Manage Time Layout Sets</td>
<td>Add the multiattribute field that includes compensatory time to the time entry, review, view, and approval notification layouts as well as the calendar entry layout. Optionally add</td>
</tr>
</tbody>
</table>
Sequence | Task | Description
--- | --- | ---
4 | Manage Worker Time Entry Setup Profiles | Create profiles that associate employees and their managers with the layout set that includes the compensatory time fields.
5 | Manage Time Repository Rule Templates | Create rule templates, rules, and rule sets to calculate earned compensatory time, as required.
| Manage Time Repository Rules | | |
| Manage Time Repository Rule Sets | | |
6 | Manage Worker Time Processing Setup Profiles | Create profiles that associate employees and their managers with the time calculation rule set that calculates earned compensatory time.

**Related Topics**
- Compensatory Plan: Points to Consider
- Generating Time Attributes and Time Card Fields for Your Elements: Procedure
- Defining Multiple-Attribute Fields for Time Entry: Procedure
- Managing Layout Sets: Explained
- Formulas and Time Rule Components: How They Work Together

**Validation, Calculation, and Approval Rules Initiated by Time Card Action: Explained**

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

This table describes the default validation and processing associated with the time card buttons.

<table>
<thead>
<tr>
<th>Button</th>
<th>Validation and Processing Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next</td>
<td></td>
</tr>
</tbody>
</table>
- Validates absence, payroll, and project time entries  
- Applies time entry rules  
- Applies time calculation rules, including any allocation rules  
- Generates calculated time entries |
| Save |  
- Always initiates the absence-delivered validations  
- Doesn’t initiate project-delivered and payroll-delivered validations |
| Save and Close | |
To configure validation on the save buttons, use the Manage Time Consumer Sets task. In the Validate on Time Card Actions field, select Submit and save. Validations on the save buttons are identical to those described for the Next button.

Submit

Sets the time card status to Submitted and starts the approval workflow.

Overriding Work Locations for Accurate Absence Accrual Calculations: Overview

For US employees to accurately accrue time off, the time entry process reads and stores the work location set in employee assignments. Enable these employees to override the assignment work location on their time cards using these delivered time attributes: **Work Location Overrides** and **Work Location with US Hierarchy Overrides**. The data sources for the work location override time attributes use a delivered value set of valid HR work locations. You can create your own value set using the delivered one as a template.

Also define time balances for US employees using delivered time balance dimensions that include state (area1), county (area2), and city (area3) location attributes. Then, use the time balances and generated time balance database items in absence accrual formula to include time card hours in absence calculations. This table describes the supported actions for each time attribute:

<table>
<thead>
<tr>
<th>Delivered Time Attribute</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Location Override</td>
<td>Overrides the work location of time balances used by absence accruals</td>
</tr>
<tr>
<td>Work Location with US Hierarchy Overrides</td>
<td>• Overrides the work location of time balances used by absence accruals</td>
</tr>
<tr>
<td></td>
<td>• Transfers the state, county, and city values to payroll for processing</td>
</tr>
</tbody>
</table>

Setup Configuration Tasks

Before you can override work locations, you must correctly configure Global Payroll element and work location override objects. You must also complete these time entry and processing setup configuration tasks. These setup and maintenance tasks are part of the Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Generate Data Dictionary Time Attributes</td>
<td>Associate time attributes stored in the data dictionary with payroll elements and element input values, known in Global Payroll as value definitions. These associations enable the payroll processing of time data transferred to the Global Payroll time consumer.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>2</td>
<td>Manage Time Entry Layout Components</td>
<td>Create the work location time entry fields and associate the</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td>Sequence</td>
<td>Task</td>
<td>Description</td>
<td>Work Area</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Manage Time Layout Sets</td>
<td>Create different layout sets for the pages that employees and managers use to enter, view, review, and approve time data, including work location overrides. Add override work location time entry fields when you want to enable employees or managers to override the work location of the employee’s assignment.</td>
<td>Setup and Maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You don’t create third-party device layouts with this task. You do use these layouts to configure:</td>
<td>Time Management</td>
</tr>
</tbody>
</table>
|          |                           | • Time card pages that managers use to resolve device-related time exceptions  
|          |                           | • The approval notification layout                                                                                                                                                                                                                                                                                                                                                       |                             |
| 4        | Manage Time Categories    | Create and edit categories that identify the time entries to use in time balances, rules, summaries, and transfers based on business requirements.                                                                                                                                                                                                                                                   | Setup and Maintenance       |
## Integrations with Absence Management, Payroll, and Projects

### Using Time and Labor with Global Payroll

#### Integrating Global Payroll and Time and Labor: Procedure

Validate, approve, and transfer reported time to payroll for payment by integrating Oracle Fusion Global Payroll with Oracle Fusion Time and Labor. To successfully integrate these applications, you must complete these setup tasks:

- Set up payroll configurations.
- Generate time attributes.
- Configure time entry fields and layouts for payroll entries.
- Configure employee groups and time processing profiles.

---

### Table: Sequence, Task, and Description

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Task</th>
<th>Description</th>
<th>Work Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Manage Time Balance Dimensions</td>
<td>View the list of delivered time balance dimensions that use the US state, county, and city summation contexts, and the absence accrual period.</td>
<td>Setup and Maintenance</td>
</tr>
</tbody>
</table>

| 6        | Manage Time Balance Definitions | Create the time balance definitions to use in absence accrual fast formula. The time balance definition combines 1 of the delivered time balance dimensions and 1 or more time categories. The balance dimension sums entries based on the US state (area1), county (area2), and city (area3) values. The created balance definition defines a database item that you can use in the absence accrual fast formula. | Setup and Maintenance |

### Related Topics

- Time Balance Dimensions and Definitions: Overview
- Layout Components for Time Entry: Explained
- Managing Layout Sets: Explained
- Using Condition Components in Time Categories: Explained
- Managing Time Attributes and the Data Dictionary: Explained
Set up Payroll Configurations

Complete these payroll setup tasks, documented in detail in the guide Oracle Global Human Resources Cloud Implementing Global Payroll:

1. Create elements to store payroll time types from the time card and transfer time to payroll or a third-party application for processing. Use the Manage Elements task in the Payroll Calculations work area.

2. Create rate definitions to show default and payroll calculated rates on time cards and receive overrides from time card entries. Use the Manage Rate Definitions task in the Payroll Calculations work area. For values by criteria rate definitions, first create the value definitions using the Manage Values Defined by Criteria task in the same work area.

3. Create the relevant calculation value definitions to link elements and rate definitions. Use the Manage Calculation Value Definitions task in the Payroll Calculations work area.


⚠️ 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 layout components for time entry
- Validation of payroll time types
- Transfer of time to payroll

5. Confirm that the field Time Card Required is selected for each person who reports time. Use the Manage Employment task in the Person Management work area.

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 this table.

<table>
<thead>
<tr>
<th>Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate Data Dictionary Time Attributes</td>
<td>Creates dependent payroll attributes for all element input values, such as Rate, Rate Code, State, Country, and City.</td>
</tr>
<tr>
<td>Generate Time Card Fields, optional</td>
<td>Creates time card fields using time attributes in the data dictionary, for the specified LDG. You can also use the Manage Time Entry Layout Components task.</td>
</tr>
</tbody>
</table>

These process tasks are available in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

Configure Time Card Fields and Layouts for Payroll Entries

Payroll time entries on the time cards include delivered payroll fields, such as Payroll 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 as appropriate. Dependent time card fields that show calculated rates provided by payroll should populate new entries using the function Based on payroll rate.
- Use the delivered payroll layout set if you don’t have to make changes to the delivered time entry fields or labels.
Use the **Manage Time Layout Sets** task to create a payroll layout set based on the delivered payroll layout set. Configure the fields displayed on all time entry, review, and approval pages.

These tasks are available in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

### Configure Employee 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 employees into easily identifiable HCM groups. Assign these groups to the correct time processing profile containing time card periods that are either weekly or biweekly.

#### Related Topics

- Define Elements, Balances, and Formulas: Overview
- Prerequisite Payroll Setup for Importing Time Entries: Explained
- Creating Elements for Time Card Entries: Procedure
- Validation, Calculation, and Approval Rules Initiated by Time Card Action: Explained
- Processing Time Entries in Payroll: Explained

### Creating Nonrecurring Earnings Elements for Time Entries: Procedure

Payroll administrators create nonrecurring earnings elements to process pay based on hour entries from time cards, such as regular, overtime, double-time, and shift pay. In countries that support the **Time Card** category, they can also create units-based elements that assign employees a flat payment amount through associated rates. For example, pay employees meal allowances based on the number of meals taken daily. Creating a time card element generates all of the related elements, balances, formulas, and calculation components. They then transfer the created time card elements to their time management application.

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

To create a nonrecurring earnings element, complete these tasks:

1. Create the payroll element.
2. Configure element eligibility for the related elements.

### Creating the Payroll Element

Use the **Manage Elements** task in the Setup and Maintenance work area, Workforce Deployment offering.

1. On the Manage Elements page toolbar, click the **Create** icon.
2. On the Create Element dialog box, complete these steps:
   a. Select the legislative data group, such as **FR LDG**, **Hong Kong LDG**, or **US LDG**.
   b. Select the primary classification.
c. When available, select the secondary classification.
d. For localization that supports 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**.
e. Click **Continue**.

3. On the Create Element: Basic Information page, complete these steps:

   a. Enter a descriptive name, such as **Regular, Straight Time, Overtime**, or **Shift Pay**.
   b. Enter the name that you want to display on reports containing this payroll element.
   c. Select the effective date **January 1, 1951**. The early date ensures that the element attributes are immediately available to use with shifts, time cards, web clock, and time collection devices.
   d. For elements with the **Standard** category, complete these basic information fields. For elements with the **Time Card** category, skip to substep 5.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the earliest entry date for this</td>
<td>First Standard Earning Date</td>
</tr>
<tr>
<td>element?</td>
<td></td>
</tr>
<tr>
<td>What is the latest entry date for this</td>
<td>Last Standard Earning Date</td>
</tr>
<tr>
<td>element?</td>
<td></td>
</tr>
<tr>
<td>At what employment level should this</td>
<td>Assignment Level</td>
</tr>
<tr>
<td>element be attached?</td>
<td></td>
</tr>
<tr>
<td>Does this element recur each payroll</td>
<td>Nonrecurring</td>
</tr>
<tr>
<td>period, or does it require an explicit</td>
<td></td>
</tr>
<tr>
<td>entry?</td>
<td></td>
</tr>
<tr>
<td>Can a person have more than one entry of</td>
<td>Yes</td>
</tr>
<tr>
<td>this element in a payroll period?</td>
<td></td>
</tr>
</tbody>
</table>

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

4. On the Create Element: Additional Details page, complete these steps.

   For elements with the **Time Card** category, complete these additional details:

   a. Select either **Hours X Rate** or **Other Units** as the calculation units for reporting.
b. Select the Work Units conversion rule.

<table>
<thead>
<tr>
<th>Conversion Rule</th>
<th>Calculation</th>
<th>Example</th>
</tr>
</thead>
</table>
| 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.               | N/A           |
| Standard Rate Daily                     | i. Calculate a daily rate using default value 260 working days.              | N/A           |
| 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: The employee 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: The employee 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 an employee assigned a monthly payroll:  
     |                                                                            | • The employee 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 |               |
|                                         |                                                                            | For an employee 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 and continuing to step 5.

For Standard category elements, complete these additional details:

a. Select Hours X Rate as the calculation rule.

b. Select Hourly as the default periodicity.
c. Select the periodicity conversion rule.

<table>
<thead>
<tr>
<th>Conversion Rule</th>
<th>Calculation</th>
<th>Example</th>
</tr>
</thead>
</table>
| 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. | N/A                   |
| Standard Rate Daily                    | i. Calculate a daily rate using default value 260 working days.             | N/A                   |
|                                        | ii. Convert the amount to the required output periodicity and rate.          |                       |
| 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: The employee works 40 hours a week with a monthly salary of 1000 US dollars.  
Calculation: \( \frac{(1000 \times 12)}{(40.00 \times 52)} = 5.77 \) 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: The employee works 40 hours a week, with a 37.5 standard working hours a week, and a monthly salary of 1000 US dollars.  
Calculation: \( \frac{(1000 \times 12)}{(37.50 \times 52)} = 6.15 \) 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 an employee assigned a monthly payroll:  
- The employee 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  
For an employee 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 retroactive group. The delivered group is Entry Changes for Retro, which you can edit. You can also create and select your own retroactive group using the Manage Events Group task in the Payroll Calculation work area.  
f. For US elements, review the default values for the FLSA rules and override as appropriate.  
g. Click Next.
5. On the Create Element: Review page, complete these steps:
   a. Review the element configuration to ensure everything is correct.
   b. Click Submit to create the element.

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.

6. On the Element Summary page, configure element eligibility by completing these steps:
   a. In the Elements Overview section, select Element Eligibility.
   b. On the Actions menu, select Create Element Eligibility.
   c. In the Information section, enter an element eligibility name with a suffix that identifies the criteria. For example, for the regular element with open eligibility—no selected criteria—the name would be Regular Open.
   d. Select the eligibility criteria. To leave eligibility open on the element and control it with HCM groups and time processing profiles, skip this step.
   e. Click Done.

Configuring Element Eligibility for the Related Elements

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.

1. On the Manage Elements page, search for the element that you just created.
2. Click the related element name.
3. On the element summary page, complete these steps:
   a. In the Elements Overview section, select Element Eligibility.
   b. On the Actions menu, select Create Element Eligibility.
   c. In the Information section, configure the same eligibility criteria as the original element.
   d. Click Submit.
   e. Click Done.

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
- Creating the Units-Based Meals Taken Element for Time Entries: Worked Example

Creating Calculation Components for Standard Category Elements: Procedure

Payroll administrators must create calculation components for earnings elements with the Standard category and Hours X Rate calculation rule, and used with time cards. 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 these steps:

1. Submit the **Create Time Card Calculation Components** process to create calculation components for time card entries.
2. Configure element eligibility for the related element with the **CIR** suffix.
3. Submit the **Compile Formula** process to compile the formulas for the calculation components.

### Creating Calculation Components for Time Card Elements

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

1. Click the **Submit a Process or Report** task.
   - Select the legislative data group that you associated with the element.
   - In the Process or Report section table, select the **Create Time Card Calculation Components** flow pattern.
   - Click **Next**.
2. On the Submit a Process or Report: Enter Parameters page, complete these steps:
   - Enter the parameters, as shown in this table.

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

3. Click **Next**.
4. On the Submit a Process or Report: Enter Flow Interactions page, click **Next**.
5. On the Submit a Process or Report: Schedules page, click **Next**.
6. On the Submit a Process or Report: Review page, complete these steps:
   - Review the flow and parameter details to ensure everything is correct.
   - Click **Submit**.
   - On the Confirmation dialog box, click **OK and View Checklist**.
7. On the Payroll Flow page, Task Details tab you should see a green check mark in the **Upload File** row, **Task Type** column. If not, on the toolbar, click the **Refresh** icon intermittently until you do.
8. Click the **Go to Task** icon.
   - On the Upload File page, click **Done** to complete the submission and initiate the time data transfer.
10. On the Overview page, search for and click your payroll flow.
   - View the process results.
   - Check for any errors or warnings.
Configuring Element Eligibility for the Related Element with the CIR Suffix

Configure element eligibility for the element with the suffix **CIR**, such as **Regular CIR**. In either the Payroll Check list or Payroll Administration work area, complete these steps:

1. On the Manage Elements page, in the Payroll Calculation section, search for the element that you just created the calculation components for.
2. Click the element with the suffix **CIR**, such as **Regular CIR**.
3. In the Elements Overview section, select **Element Eligibility**.
4. On the **Actions** menu, select **Create Element Eligibility**.
5. In the Information section, configure the same eligibility criteria as the original element.
6. Click **Submit**.
7. Click **Done**.

Compiling the Formulas for the Calculation Components

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.
   c. Click **Next**.
2. On the Submit a Process or Report: Enter Parameters page, complete these steps:
   a. Enter the parameters, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Flow</td>
<td>Descriptive name for this specific flow process, such as <strong>Create calculation components for the Regular time card element</strong>.</td>
</tr>
<tr>
<td>Formula</td>
<td>To perform a bulk compile, enter %.</td>
</tr>
<tr>
<td>Formula Type</td>
<td>%</td>
</tr>
</tbody>
</table>

   b. Click **Next**.
3. On the Submit a Process or Report: Enter Flow Interactions page, click **Next**.
4. On the Submit a Process or Report: Schedules page, click **Next**.
5. On the Submit a Process or Report: Review page, complete these steps:
   a. Review the flow and parameter details to ensure everything is correct.
   b. Click **Submit**.
   c. On the Confirmation dialog box, click **OK and View Checklist**.
6. On the Payroll Flow page, Task Details tab you should see a green check mark in the **Upload File** row, **Task Type** column. If not, on the toolbar, click the **Refresh** icon intermittently until you do.
7. Click the **Go to Task** icon.
   a. On the Upload File page, click **Done** to complete the submission and initiate the time data transfer.
9. On the Overview page, search for and click your payroll flow.
   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 earnings elements for time entries, such as Regular, Overtime, and Shift Pay, you generate time attributes for the data dictionary. Optionally, you can also generate time card fields for them.

Complete the processes in this table using the Time and Labor functional area in the Setup and Maintenance work area, Workforce Deployment offering.

<table>
<thead>
<tr>
<th>Step</th>
<th>Process</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Generate Data Dictionary Time Attributes, required</td>
<td>Creates dependent payroll attributes for all element input values, such as hours and rate</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Caution:</strong> Failure to run the process might negatively affect the setup of fields, validation of payroll time types, or transfers of time data to payroll.</td>
</tr>
<tr>
<td>2</td>
<td>Generate Time Card Fields, optional</td>
<td>Creates time card fields using time attributes from the data dictionary for the specified legislative data group</td>
<td>Instead of running this process, use the Manage Time Entry Layout Components task to create time card fields and web clock buttons.</td>
</tr>
</tbody>
</table>

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.
Using Time and Labor with Project Costing

Prerequisite Setup of Project Costing for Use with Time and Labor: Procedure

Bill customers for project time worked by employees 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 this 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 employee’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 check box **Classify as project expenditure organization**. 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 these 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 employees 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 this figure shows, you can use the delivered objects to enable reporting of project costing time, or you can create your own objects. If you create your own value sets and time card fields, then you must create your own layout sets and time entry
profiles. To use the delivered time entry objects with your own groups, then you only have to create time entry profiles. You can use the delivered value sets, time card fields, and layout sets and associate them with your groups using your profiles.

Prerequisites
Set up initial assignment information and payroll relationships for employees in the New Person work area using the **Hire a Person** task. View and maintain employee assignments and payroll relationships using these tasks in the Person Management work area:

- Manage Employment
- Manage Payroll Relationships

Filter time card choice lists based on project team membership by assigning employees to project teams. Enable team membership by editing the Projects Party table using the **Manage Project Definition** task in the Project Financial Management work area.
Time Card Fields

The delivered primary assignment and project costing time card fields include data sources for field choice list values. Use the tasks described in this table to manage value sets and time card fields. These tasks are in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Value Sets</td>
<td>• View the delivered sets and create your own sets.</td>
</tr>
<tr>
<td></td>
<td>The data sources for project-specific field choice lists are value sets.</td>
</tr>
<tr>
<td>Manage Time Entry Layout Components</td>
<td>• View the definitions for the relevant delivered fields.</td>
</tr>
<tr>
<td></td>
<td>• Create other single-attribute fields based on the delivered fields.</td>
</tr>
<tr>
<td></td>
<td>To save time when creating fields, search for and duplicate the closest delivered project costing specific field.</td>
</tr>
</tbody>
</table>

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
- 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 employees with a payroll relationship. To filter the employees in the group, create additional groups using the Manage HCM Groups task. This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

- 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. An employee 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 time entry profile enables the entering of project time using the delivered time card fields, layout set, and group. Create your own profiles to use different groups or project layout sets, including
the delivered **Projects Layout Set Filtered by Project Team Members** layout set. Creating your own profiles lets you configure when employees can create, view, edit, and delete time cards.

Create and manage time entry profiles using the **Manage Worker Time Entry Setup Profile** task in the Time Management work area. To save time when creating time entry profiles for project costing, search for and duplicate the delivered profile **Projects Time Entry Profile**.

**Note:** The priority number determines the profile used to create the time card if an employee is eligible for more than 1 profile. To ensure that employees who are eligible for multiple profiles use the correct profile, move that profile to the top of the list. This move changes the profile priority to 1, which is the highest priority.

**Related Topics**

- Managing Layout Sets: Explained
- HCM Group Membership: Explained
- Defining Single-Attribute Fields for Time Entry: Procedure
- Time Setup and Device Processing Profiles: How They’re Derived

**Setting Up Combined Time Entry for Project Costing and Global Payroll: Explained**

Configure Oracle Fusion Time and Labor to enable employees 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 this figure shows, your employees can use delivered objects to report project and payroll time, or you can create and use your own objects. If you create your own value sets and time card fields, then you must create your own layout sets and time entry profiles. To use the delivered time entry objects with your own groups, then you only have to create time entry...
You can use the delivered value sets, time card fields, and layout sets and associate them with your groups using your profiles.

Prerequisite Setup for HR and Absence

Set up initial assignment information, work schedule, and payroll relationships for employees in the New Person work area using the **Hire a Person** task. View and maintain employee assignments and payroll relationships using these 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 these 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, employees 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 Setup for Payroll

Complete these 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:
   - 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 Setup for Project Costing

Complete these project setup tasks:

- Classify employee departments on Employment records as expenditure organizations.
- Populate the Projects table in Oracle Fusion Project Foundation.

Time Card Fields

The delivered time repository includes primary assignment, payroll, and project time card fields. It also delivers the multiattribute **Time Type** field, which includes these time attributes: **Payroll Time Type** and **Absence Management**. All fields include data sources for field choice list values. Use the tasks described in this table to manage value sets and time card fields. These tasks are in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Value Sets</td>
<td>• View the delivered sets and create your own sets.</td>
</tr>
<tr>
<td></td>
<td>The data sources for project-specific field choice lists are value sets.</td>
</tr>
<tr>
<td>Manage Time Entry Layout Components</td>
<td>• View the definitions for the relevant delivered fields.</td>
</tr>
<tr>
<td></td>
<td>• Create single-attribute fields based on the delivered fields.</td>
</tr>
<tr>
<td></td>
<td>To save time when creating fields, search for and duplicate the closest delivered project-specific field.</td>
</tr>
<tr>
<td></td>
<td>• Finalize the <strong>Time Type</strong> field, which provides the multiattribute definition structure.</td>
</tr>
</tbody>
</table>

Finalize the **Time Type** field by completing these steps for each field definition row that you add to the definitions table:

1. Enter the display value that time reporters see instead of the attribute value or combination of values selected in the row.
2. Select the time attribute values that the time repository stores.
**Caution:** If you set values for project or payroll and absence time attributes on the same row, the time entry routes to Absence Management. Project or payroll time data transferred to Project Costing and Global Payroll, respectively, doesn’t include any time entry shared with absence.

This table provides examples of display values for various time attribute 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 2 rows.

<table>
<thead>
<tr>
<th>Display Value</th>
<th>Expenditure Type Name</th>
<th>Payroll Time Type</th>
<th>Absence Management Type</th>
<th>Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bereavement</td>
<td></td>
<td></td>
<td></td>
<td>Bereavement</td>
</tr>
<tr>
<td>Vacation</td>
<td></td>
<td></td>
<td></td>
<td>Vacation</td>
</tr>
<tr>
<td>Regular Professional</td>
<td>Billable Time</td>
<td>Regular TL US LDG</td>
<td></td>
<td>Regular Professional</td>
</tr>
<tr>
<td>Regular Administrator</td>
<td>Billable Time</td>
<td>Regular TL US LDG</td>
<td></td>
<td>Regular Administrative</td>
</tr>
<tr>
<td>Overtime Professional</td>
<td>Professional Overtime</td>
<td>Overtime TL US LDG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overtime Administrator</td>
<td>Administrative Overtime</td>
<td>Overtime TL US LDG</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Layout Set**

In the Time Management work area, use the **Manage Layout Sets** task to:

- Review individual layouts in the delivered layout set **Projects and Payroll Layout Set**. The layout set filters choice lists by the employee’s primary assignment and includes the absence 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 employees with a payroll relationship. To filter the employees in the group, you must create additional groups using the **Manage HCM Groups** task. This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

- 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 profile **Projects and Payroll Time Entry Profile** enables your employees to enter project costing, project execution management, and payroll time. They enter the time using delivered time card fields, layout set, and group. Create your own profiles to use different groups or layout sets, including the delivered **Projects Layout Set Filtered by Project Team Members** layout set. Creating your own profiles lets you configure when employees 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 1 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 move changes the profile priority to 1, which is the highest priority.

### Related Topics

- Defining Multiple-Attribute Fields for Time Entry: Procedure
- Managing Layout Sets: Explained
- HCM Group Membership: Explained
- Time Setup and Device Processing Profiles: How They’re Derived

### Delivered Time Card Fields and Data Sources for Project Time Entry: Explained

The delivered time repository includes project-specific time card fields and data sources to expedite time entry setup for:

- Only project costing
- Project costing, project execution management, and payroll combined

Use the tasks described in this table to manage value sets and time card fields. These tasks are in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Value Sets</td>
<td>View the delivered value sets selected as data sources for the delivered time card fields.</td>
</tr>
</tbody>
</table>
| Manage Time Card Fields| • View the delivered fields  
                          • Finalize the Time Type field |

[Oracle Global Human Resources Cloud Implementing Time and Labor Chapter 21 Integrations with Absence Management, Payroll, and Projects]
Primary Assignment ID

Project time entry includes the delivered **Primary Assignment ID** time card field. The data sources use the same private view object, **List of Assignments**, which contains all employees with a payroll relationship.

### Single-Attribute Fields for Projects

This table lists the single-attribute time card fields delivered for projects and the value sets that are the data sources. It also identifies which layout sets use each time card field.

<table>
<thead>
<tr>
<th>Delivered Projects Time Card Fields</th>
<th>Filtered Time Entry Value Set</th>
<th>Unfiltered Setup Tasks Value Set</th>
<th>Layout Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number</td>
<td>PJC_PROJECTS_NUMBER_EXPEND_T_V</td>
<td>PJC_PROJECTS_NUMBER_EXPEND_A_T_V</td>
<td>Projects Layout Set</td>
</tr>
<tr>
<td>Optional Project Number</td>
<td>PJC_PROJECTS_NUMBER_EXPEND_T_V</td>
<td>PJC_PROJECTS_NUMBER_EXPEND_A_T_V</td>
<td>Projects and Payroll Layout Set</td>
</tr>
<tr>
<td>Project Number for Project Team Members</td>
<td>PJC_PROJECTS_NUMBER_TEAMMEMBER_T_V</td>
<td>PJC_PROJECTS_NUMBER_EXPEND_A_T_V</td>
<td>Projects Layout Set Filtered by Project Team Members</td>
</tr>
<tr>
<td>Project Unit</td>
<td>PJC_PROJECT_UNIT_T_V</td>
<td>PJC_PROJECT_UNIT_T_V</td>
<td>Projects Layout Set</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Projects Layout Set Filtered by Project Team Members</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Projects and Payroll Layout Set</td>
</tr>
<tr>
<td>Task Number</td>
<td>PJC_TASKS_EXPEND_T_V</td>
<td>PJC_TASKS_EXPEND_A_T_V</td>
<td>Projects Layout Set</td>
</tr>
<tr>
<td>Optional Task Number</td>
<td>PJC_TASKS_EXPEND_T_V</td>
<td>PJC_TASKS_EXPEND_A_T_V</td>
<td>Projects</td>
</tr>
<tr>
<td>Task Number for Project Team Members</td>
<td>ORA_PJC_TASKS_EXPEND_TEAMMEMBER_T_V</td>
<td>PJC_TASKS_EXPEND_A_T_V</td>
<td>Projects Layout Set Filtered by Project Team Members</td>
</tr>
<tr>
<td>Expenditure Type Name</td>
<td>ORA_PJC_EXPENDITURE_TYPES_NAME_T_V</td>
<td>ORA_PJC_EXPENDITURE_TYPES_NAME_A_T_V</td>
<td>Projects Layout Set</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Projects Layout Set Filtered by Project Team Members</td>
</tr>
<tr>
<td>Expenditure Type Class</td>
<td>PJC_EXPEND_TYPE_CLASS_T_V</td>
<td>PJC_EXPEND_TYPE_CLASS_T_V</td>
<td>Projects Layout Set</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Projects Layout Set Filtered by Project Team Members</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Projects and Payroll Layout Set</td>
</tr>
<tr>
<td>Expenditure Type(hidden)</td>
<td>PJC_EXPENDITURE_TYPES_EXPEND_T_V</td>
<td>PJC_EXPENDITURE_TYPES_EXPEND_A_T_V</td>
<td>Projects Layout Set</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Projects Layout Set Filtered by Project Team Members</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Projects and Payroll Layout Set</td>
</tr>
</tbody>
</table>
Multiple-Attribute Fields for Projects and Payroll

This table lists the time attributes that provide the field definition structure for the multiattribute **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.

<table>
<thead>
<tr>
<th>Time Attribute</th>
<th>Filtered Data Source for Time Entry</th>
<th>Unfiltered Data Source for Setup Tasks</th>
<th>Data Sources Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure Type Name</td>
<td>ORA_PJC_EXPENDITURE_TYPES_NAME_T_V</td>
<td>ORA_PJC_EXPENDITURE_TYPES_NAME_A_T_V</td>
<td>Value set</td>
</tr>
<tr>
<td>Payroll Time Type</td>
<td>List of Payroll Time Types for User</td>
<td>List of Payroll Time Types for Administrator</td>
<td>Private view object</td>
</tr>
<tr>
<td>Absence Management Type</td>
<td>List of Absence Types for User</td>
<td>List of Absence Types for Administrator</td>
<td>Private view object</td>
</tr>
<tr>
<td>Identifier</td>
<td>Default format value set for text</td>
<td>Default format value set for text</td>
<td>Value set</td>
</tr>
</tbody>
</table>

**Related Topics**

- Layout Components for Time Entry: Explained
- Data Sources for Layout Components: 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 employees. 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 this figure shows, you can use the delivered objects to process reported project time, or you can create your own objects. If you create any of your own processing objects, then you must also create time processing profiles to contain them. To use the delivered time processing objects with your own groups, then you only have to create time processing profiles. You can
use the delivered repeating time periods, categories, and consumer sets and associate them with your groups using your profiles.

**Repeating Time Periods**

You can use these 2 delivered repeating time periods to process project time:

- Projects Weekly Starting Monday
- Projects and Payroll Weekly Starting Monday

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.

This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.
Time Category

Use the Manage Time Categories task to:

- View the All Project Entries delivered. This category contains all time entries reported with these time attributes: Project, Task, and Expenditure Type.
- 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 category.

This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

Time Consumer Set

The 2 time consumer sets delivered that you can use to processing project time are Projects Only and Projects and Payroll. 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.

This task is in the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

Groups

The delivered Projects Usage group includes all workers with a payroll relationship. To filter the workers in the group, create additional groups using the Manage HCM Groups task. This task is In the Setup and Maintenance work area, Workforce Deployment offering, Time and Labor functional area.

- 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 2 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 this table to manage rule templates, rules, rule sets, and processing profiles.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Rule Templates</td>
<td>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 templates to create any rules and rule sets that you want to include for time processing.</td>
</tr>
<tr>
<td>Manage Rules</td>
<td></td>
</tr>
<tr>
<td>Manage Rule Sets</td>
<td></td>
</tr>
<tr>
<td>Manage Worker Time Processing Setup Profiles</td>
<td>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 calculation rule sets.</td>
</tr>
</tbody>
</table>
### Task
The priority number determines the profile used to process the time card if an employee is eligible for more than one profile. To ensure that employees who are eligible for multiple profiles use the correct profile, move that profile to the start of the list. This move 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
- Creating Time Consumer Sets: Points to Consider
- HCM Group Membership: Explained
- Time Setup and Device Processing Profiles: How They’re Derived
- Using Condition Components in Time Categories: Explained
- Repeating Time Period: How It’s Calculated
22 Time Entry and Processing Best Practice Configurations

Time Entry and Processing Best Practice Configurations for Terminations and Rehires: Examples

These examples provide high-level best practice time entry and processing configurations for various termination and rehire scenarios.

Today: Terminate on the Same Day or a Future Day, and Rehire

Scenario: Today you terminate and rehire someone with a termination date of today, or a future day. The rehire date is a future day.

Best practice configuration: Group membership is configured so that the employee continues as a member of relevant HCM groups even after the termination date. The group membership keeps the employee automatically associated with active time entry and processing setup profiles that include those HCM groups. Starting on the rehire date, the active employee changes HCM group memberships based on the new job. The membership change can be manual or automatic, based on group inclusion and exclusion conditions. The change in group membership automatically changes the time entry and processing setup profiles that the active employee is associated with.

Functional tasks supported by this configuration:

- Before and after the termination date, and before the rehire date:
  - Everyone with the appropriate privileges, and scheduled processes, can create, edit, delete, and submit time cards for the employee. This protects the sensitive period so that the employee can't detect a future termination that's entered in Global HR. Between the termination and rehire dates, managers with the appropriate privileges can adjust and resubmit.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee's time cards are submitted. Time card approval workflow task configurations determine the recipients.
- Before the termination date, administrators for applicable time consumers, such as payroll, transfer the approved time data. The employee's time consumer set configuration and the time card approval workflow task configurations determine time data approval. After the termination date and before the rehire date, they can't transfer the approved time data.
- After the rehire date:
  - Everyone with the appropriate privileges, and scheduled processes, can create, edit, delete, and submit time cards for the employee in the new job.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee's time cards are submitted. Time card approval workflow task configurations determine the recipients.
  - Administrators for applicable time consumers, such as payroll, transfer the approved time data. The employee's new time consumer set configuration and the time card approval workflow task configurations determine time data approval.
This figure provides a visual representation of the scenario, in context of a sample timeline where the termination and rehire dates are future days.

**Today: After Termination and Before Rehire**

Scenario: Today is after the employee left, the termination date, and before the rehire date. You must make adjustments and payment before the rehire date.

Best practice configuration: Starting on the termination date, the active employee becomes an inactive employee and changes HCM group memberships. Starting on the rehire date, the employee is active again and changes HCM group memberships based on the new job. The membership changes can be manual or automatic, based on group inclusion and exclusion conditions and whether the employee is active or inactive. The change in group membership automatically changes the time entry and processing setup profiles that the active and inactive employee is associated with.

Functional tasks supported by this configuration:

- Before the termination date:
  - The employee and line manager can’t create, edit, delete, or submit time entries.
Time and labor managers with the appropriate privileges, and scheduled processes, can adjust and submit time card data for the employee.

Approval, rejection, and informational notifications are automatically sent to recipients when the employee’s adjusted time data is submitted. Time card approval work flow task configurations determine the recipients.

- Between the termination and rehire dates, no person or scheduled process can create, process, approve, or transfer time data for the employee. Because the employee is gone, this period isn't sensitive or protected from the employee’s awareness.

- After the rehire date:
  - Everyone with the appropriate privileges, and scheduled processes, can create, edit, delete, and submit time cards for the employee in the new job.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee’s time cards are submitted. Time card approval workflow task configurations determine the recipients.
  - Administrators for applicable time consumers, such as payroll, transfer the approved time data. The employee's new time consumer set configuration and the time card approval workflow task configurations determine time data approval.

This figure provides a visual representation of the scenario, in context of a sample timeline. The termination date is before today and the rehire date is after.
Today: After Termination and Before Rehire

Scenario: Today is after the employee left, the termination date, and before the rehire date. You must make adjustments and payment before the rehire date.

Best practice configuration: Starting on the termination date, the active employee becomes an inactive employee and changes HCM group memberships. Starting on the rehire date, the employee is active again and changes HCM group memberships based on the new job. The membership changes can be manual or automatic, based on group inclusion and exclusion conditions and whether the employee is active or inactive. The change in group membership automatically changes the time entry and processing setup profiles that the active and inactive employee is associated with.

Functional tasks supported by this configuration:

- Before the termination date and after the rehire date:
  - Everyone with the appropriate privileges, and scheduled processes, can create, edit, delete, and submit time cards for the employee.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee’s adjusted time data is submitted. Time card approval work flow task configurations determine the recipients.
  - Administrators for applicable time consumers, such as payroll, transfer the approved time data. The employee's time consumer set configuration and the time card approval workflow task configurations determine time data approval.

- Between the termination and rehire dates, no person or scheduled process can create, process, approve, or transfer time data for the employee. Because the employee is gone, this period isn’t sensitive or protected from the employee's awareness.
This figure provides a visual representation of the scenario, in context of a sample timeline where today is after the termination and rehire dates.

Time Entry and Processing Best Practice Configurations for Hires and Terminations: Examples

These examples provide high-level best practice time entry and processing configurations for various hire and termination scenarios.

Hire Today: On the Same Day or a Future Day

Scenario: You hire someone today with a hire date that is also today, or a future date.
Best practice configuration: Starting on the hire date, the active employee becomes a member of relevant HCM groups. Membership can be manual or automatic, based on group inclusion and exclusion conditions. Group membership automatically associates the employee with time entry and processing setup profiles that include those HCM groups.

Functional tasks supported by this configuration:

- Before the hire date, no person or scheduled process can create, process, approve, or transfer time data for the employee.
- After the hire date:
  - Everyone with the appropriate privileges can create, edit, delete, and submit time cards for the employee.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee’s time cards are submitted. Time card approval work flow task configurations determine the recipients.
  - Administrators for applicable time consumers, such as payroll, transfer the approved time data. The employee’s time consumer set configuration and the time card approval workflow task configurations determine time data approval.

This figure provides a visual representation of the scenario, in context of a sample timeline where the hire date is after today.
Terminate Today: On the Same Day or a Future Day

Scenario: You terminate someone today with a termination date that is also today, or a future date.

Best practice configuration: Group membership is configured so that the employee continues as a member of relevant HCM groups even after the termination date. The group membership keeps the employee automatically associated with active time entry and processing setup profiles that include those HCM groups.

Functional tasks supported by this configuration:

- Before and after the termination date:
  - Everyone with the appropriate privileges, and scheduled processes, can create, edit, delete, and submit time cards for the employee. This protects the sensitive period so that the employee can't detect a future termination that's entered in Global HR.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee's time cards are submitted. Time card approval work flow task configurations determine the recipients.

- Before the termination date, administrators for applicable time consumers, such as payroll, transfer the approved time data. The employee's time consumer set configuration and the time card approval workflow task configurations determine time data approval.

- After the termination date, administrators for applicable time consumers, such as payroll, can't transfer the approved time data.
This figure provides a visual representation of the scenario, in context of a sample timeline where the termination date is after today.

![Timeline Diagram]

**Terminate Today: On an Earlier Date**

**Scenario:** You terminate someone today with a termination date that is earlier than today.

**Best practice configuration:** Starting on the termination date, the active employee becomes an inactive employee and changes HCM group memberships. The membership change can be manual or automatic, based on group inclusion and exclusion conditions. The change in group membership automatically changes the time entry and processing setup profiles that the now inactive employee is associated with.

**Functional tasks supported by this configuration:**

- Before and after the termination date, the employee can't create, edit, delete, or submit time entries.
Before the termination date:

- Managers with the appropriate privileges have full access to time data for the active employee before the termination date and can make any required adjustments. Scheduled processes can also adjust time data for the active employee.
- Approval, rejection, and informational notifications are automatically sent to recipients when the active employee's adjusted time cards are submitted. Time card approval workflow task configurations determine the recipients.
- Administrators for applicable time consumers, such as payroll, transfer the approved time data. The active employee's time consumer set configuration and the time card approval workflow task configurations determine time data approval.

After the termination date, no person or scheduled process can create, process, approve, or transfer time data for the inactive employee.

Special case: When the termination date is before today and the employee is still on site, we recommend that you set the HR termination date to today. Then, follow the first termination scenario in this topic.

This figure provides a visual representation of the scenario, in context of a sample timeline where the termination date is before today.
Time Entry and Processing Best Practice Configurations for Time Data Clean Up: Examples

This example provides a high-level best practice time entry and processing configuration for cleaning up time data based on termination and rehire scenarios.

Today: Terminating or Rehiring

Scenario 1: Today, you are terminating someone on an earlier day. Time data for the period after the termination date must be cleaned up, both for time and labor and payroll.

Scenario 2: Today, you are rehiring someone on a future day. Time data for the period between the termination and rehire dates must be cleaned up, both for time and labor and payroll.

Best practice configuration for both scenarios: Starting on the termination date, the active employee becomes an inactive employee and changes HCM group memberships. Starting on the rehire date, the employee is active again and changes HCM group memberships based on the new job. The membership changes can be manual or automatic, based on group inclusion and exclusion conditions and whether the employee is active or inactive. The change in group membership automatically changes the time entry and processing setup profiles that the active and inactive employee is associated with.

Functional tasks supported by this configuration for these scenarios:

- Before the termination date and after the rehire date:
  - Everyone with the appropriate privileges, and scheduled processes, can create, edit, delete, and submit time cards for the employee in each job.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee’s time cards are submitted. Time card approval workflow task configurations determine the recipients.
  - Administrators for applicable time consumers, such as payroll, transfer the approved time data. The employee’s time consumer set configuration for each job and the time card approval workflow task configurations determine time data approval.

- Between the termination and rehire dates:
  - The employee and line manager can’t create, edit, delete, or submit time entries. Because the employee is gone, this period isn’t sensitive or protected from the employee’s awareness.
  - Time and labor managers with the appropriate privileges, and scheduled processes, can adjust and submit time card data for the employee.
  - Approval, rejection, and informational notifications are automatically sent to recipients when the employee’s adjusted time data is submitted. Time card approval workflow task configurations determine the recipients.
  - Administrators for applicable time consumers, such as payroll, transfer the approved time data. The inactive employee’s time consumer set configuration and the time card approval workflow task configurations determine time data approval.
This figure provides a visual representation of these scenarios, in context of a sample timeline. The termination date is before today and the rehire date is after.

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Time Creation, Editing, Deletion, and Submission Allowed</th>
<th>Time Creation, Editing, Deletion, and Submission Not Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCM Groups</td>
<td>Time Creation, Editing, Deletion, and Submission Allowed</td>
<td>Time Creation, Editing, Deletion, and Submission Not Allowed</td>
</tr>
<tr>
<td>for Active</td>
<td>HCM Groups for Inactive Employee</td>
<td>New HCM Groups for Active Employee</td>
</tr>
<tr>
<td>Employee</td>
<td>Setup Profiles for Active Employee</td>
<td>New Setup Profiles for Active Employee</td>
</tr>
<tr>
<td></td>
<td>Setup Profiles for Inactive Employee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time Creation, Editing, Deletion, and Submission Allowed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Only Clean Up of Time Data Allowed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allowed for New Job</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allowed for New Job</td>
<td></td>
</tr>
</tbody>
</table>

This figure shows the configurations and functional tasks for different stages of employee status changes. The timeline includes dates for termination and rehire, with active and inactive employee setup profiles for different tasks.
23 Time Repository Data Extract Considerations

Using HCM Extract: Points to Consider

Extract time 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. It includes 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 the extract type HR Archive.

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. This table lists and describes the available levels for reported and calculated time.

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time card header</td>
<td>A grouping of hours for a person over the time card period</td>
</tr>
<tr>
<td>Time card header attribute</td>
<td>Additional information that applies to the entire time card period, such as a comment explaining why the time card was submitted late</td>
</tr>
<tr>
<td>Time card day</td>
<td>A 24-hour period within the time card, such as Monday, Tuesday, or Wednesday</td>
</tr>
<tr>
<td>Time card day attribute</td>
<td>Additional information that applies to a 24-hour period within the time card, such as a comment applicable to all hours for Monday</td>
</tr>
<tr>
<td>Time card entry</td>
<td>A range of time defined by start and stop times or a time duration on the time card</td>
</tr>
</tbody>
</table>
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 start date of the time card is less than 90 days

Related Topics
- Extract Components: How They Work Together
- Defining an Extract: Worked Example
**Glossary**

**action**
Determines how to react to a WFM event. For example, if an employee's overtime period changes, run the process Set Time Card Resubmission Status to Resubmit. The process recalculates the affected time card data using the correct period.

**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.

**calculation component**
An individual calculation captured on a calculation card, which is typically associated with an element.

**data dictionary**
A central repository that stores time attributes regardless of the source.

**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.

**dependent field**
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.

**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.
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 employee schedules.

filtered data source
Valid values for the time attribute, filtered by variable input attribute values. For example, the delivered Payroll Time Type attribute data source includes filters for primary assignment and start time. Absence Management, Global Payroll, and Project Costing provide lists of values and any filters for their delivered time attributes.

grace period
Number of minutes that employees 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.

layout
The time card, calendar, web clock, and shift components that appear on pages and dialog boxes, and the details of their appearance.

layout component
Specifies how a time attribute appears on time card, calendar, or web clock pages and transfers to the time consumer. Layout components are single-attribute fields, multiple-attribute fields, and web clock buttons.

layout set
A set of layout configurations that determine the appearance of the time card and calendar when reporting, reviewing, or viewing time.

LDG
Abbreviation for legislative data group.

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.

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 employee pay. 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 employees 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.

**unfiltered data source**
All valid values for the time attribute, used by time and labor administrators to configure time card fields, web clock buttons, and time categories. Absence Management, Global Payroll, and Project Costing provide lists of values for their delivered time attributes.

**view object**
A component that simplifies querying and working with business object rows.

**WFM event**
A change to a person’s data that can potentially require time card data be recalculated. You can track any and all events—creation, update, or deletion. For example, you track the creation of a bargaining unit or the update of a collective agreement.

**worker time entry profile**
A collection of layout rules and specifications that determine the time card appearance and control when employees can take action on their time cards.

**worker time processing profile**
A collection of the time card period and the time entry and time calculation rule sets for both the employee and the time consumer.