Oracle Fusion Cloud Human Resources

Set up time validations, calculations, and processing with Time and Labor

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1 Overview

About setting up time validations, calculations, and processing in Time and Labor

This playbook covers how to implement time validations, calculations, and processing for Global Payroll, Absence Management, and Project Costing time consumers.

Here's a summary of the workflow affected by this implementation:

1. Time entry rules that validate reported time run when people save time cards and submit them.
2. Managers resolve any time entry exceptions identified during this validation.
3. Calculation rules run using the time data validated by the time entry rules.
4. Time consumer validation runs for the relevant calculated time data.
5. Time consumer administrators transfer time data for further processing, such as payroll and project costing.
   Retroactive changes to people's data can require recalculation and transfer of time card data. Examples of retroactive changes are changes to the payroll relationship or overtime period.

Other playbooks cover these Time and Labor implementation tasks:

- Implementing time cards
- Reporting worked time, breaks, and meals with Web Clock and validating device events using geofences
- Reporting worked time, breaks, and meals using time collection devices, such as badge and biometric readers
- Submitting time entry change requests when workers aren't allowed to edit their time cards directly

Time validation, calculation, and processing setup and maintenance tasks

You configure the validations, calculations, and processing to support your policies by completing these tasks:

1. Set BIP, HXT_, and ORA_HXT profile options to control time entry behavior.
   a. Go to **Setup and Maintenance** > **Tasks panel** > **Search** > **Manage Administrator Profile Values**.

Profile display name	Description
ORA_HWM_DECIMAL_ROUNDING_LIMIT	Specify the decimal precision that Workforce Manager
ORA_HWM_EVENT_INLINE_THRESHOLD	The maximum number of time record groups handled time record events.
ORA_HWM_INTERNAL_TEST_FLAGS	Set internal flags to enable various processes in time r Change the value only when directed to by Oracle Sup

Profile display name	Description
ORA_HWM_PJC_VALIDATE_ONLY_UPDATED_ENTRIES	Identify which project costing time card entries to vali o No validates all entries. o Yes validates only entries that changed since the las
ORA_HWM_RULES_LOG_LEVEL	Set the logging level for the processing of fast formula which is the finest level.
ORA_HWM_RULES_LOG_MONTHS_TO_KEEP	Specify the number of months to retain log files gener repository rules. The maximum retention is 24 months

2. Configure ORA_HXT and ORA_HWM lookups used in time entry lists and fields.
    a. Go to **Setup and Maintenance** > **Tasks panel** > **Search** > **Manage Common Lookups**.
    b. Update lookup codes and meanings.
        - Use clear, concise values for Meaning because they appear in lists and read-only fields
        - Use lookup descriptions to provide additional context for administrators managing the values

Lookup type meaning	Description
ORA_HWM_CA_REASONS	Extensible lookup containing the change audit reasons, including reasons for absences created and deleted in Oracle Fusion Absence Management. o These reasons show as read-only information in the change audit history of affected time cards. o The Evaluate Absences process applies these reasons to affected time cards during reprocessing.
ORA_HWM_TCD_SUPPLIERS	Extensible lookup to define the list of time collection device suppliers that transfer time device events. These meanings make up the Supplier list on the Create Time Device Event Mappings page. You need to add your suppliers to this lookup before you change the lookup for the supplier device event. You do this because the lookup codes for device events need to start with the supplier lookup code.
ORA_HWM_TCD_SUPPLIER_EVENTS	Extensible lookup that defines the list of time collection device events transferred from supplier time collection devices. These meanings make up the Supplier Device Event list on these pages: o Create Time Device Event Mappings o Generate Time Events You need to start these lookup codes with the supplier lookup code. For example, if you've a supplier with the lookup code ABC, start the lookup code for that supplier's device events with ABC_.
HWM_RULE_CLASSIFICATION	Identifies the different purposes for rule templates, such as shift premium, meal, and break rules. The tag for each lookup code identifies which rule template list includes the classification. o TAR: Time audit rule templates o TCR: Time calculation rule templates

Lookup type meaning	Description
	○ TDR: Time device rule templates ○ TER: Time entry rule templates ○ TSR: Time submission rule templates ○ WCR: Workforce compliance rule templates You can't edit the rule-level classification, because it's inherited from the template.

3. Create repeating time periods to use with time cards, approvals, overtime, and balances. You can use these delivered periods or create your own.
    - Biweekly Starting Monday
    - Daily
    - Payroll Weekly Starting Monday
    - Projects and Payroll Weekly Starting Monday
    - Projects Weekly Starting Monday
    - Weekly Starting Sunday

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Repeating Time Periods**.

4. Optionally review the delivered value sets that people can use when creating time categories and rule templates. Create more value sets as needed.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Workforce Management Value Sets**.

5. Add reasons for audited changes to time collection device data. Also add reasons for incomplete or in error exceptions.

    Add more time rule classifications, as needed.

    Add the suppliers and supplier events for your time collection devices so that you can create time device event mappings.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Workforce Management Lookups**.

6. Identify the time entries to use in time rules, summaries, analytics, and transfers according to your time processing policies. You can use these delivered time categories, or create your own:
    - All Absence Entries
    - All Compensatory Time Entries
    - All Payroll Entries
    - All Project Entries

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Categories**.

7. Enable informational workflow for everyone linked to the time consumer set, for these processes:
    - Mass submit and approve time cards
    - Generate time cards
    - Generate time entries
    - Generate time cards from time collection devices

   Also for each time consumer, specify what actions start validation, what time data to validate, the approval period, and the transfer rules.

   Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Consumer Sets**.

8. Optionally change default approval workflows to support your policies for payroll and project costing time cards and entries.

   Go to **Setup and Maintenance** > **Tasks panel Search** > **Manage Task Configurations for Human Capital Management** > **Task Configuration**.

9. Optionally set shift limits, which you can include in various time rules. For example, create rules that generate exceptions when workers start late or leave early.

   Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Shift Properties**.

10. Optionally configure workday definitions that support your policies for earned dates and the day start for overtime. Time processing uses these definitions to derive and use the earned date for time entries that span midnight.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Workday Definitions**.

11. Optionally allocate time automatically to specific cost segments, such as Department, Fund, and Program, for payment.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Allocations**.

12. Optionally assign time allocations to individuals directly or using HCM groups. Allocation assignments use effective dating to identify which allocation to use in time rules applicable for the worker and time card period.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Allocation Assignments**.

13. Optionally create fast formulas to use in place of, or in addition to, the *delivered workforce management formulas*.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Fast Formulas**.

14. Create rule templates that support your time validation and calculation policies. You can use delivered rule templates, or create your own. You need to create rule templates for these conditions:
    - You use your own formulas.
    - You use multiattribute time card fields with more than one stored time attribute.

    You can use delivered rule templates if the time card field or web clock button stores a single time attribute.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Templates**.

15. Create time rules using rule templates.
    - Advanced time category rules identify time events and entries using complex logic not available in the condition components of a time category.
    - Time entry rules validate time entries and generate messages.
    - Time calculation rules generate calculated time, which transfers to time consumers, such as payroll and project costing.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Templates**.

16. Create collections of time entry and calculation rules and rule sets. Worker time processing profiles use these rule sets to apply the appropriate rules and rule sets to the associated workers.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Sets**.

17. Configure groups that identify the workers who share common time processing characteristics. For example, add workers whose overtime is calculated daily to one group and workers whose overtime is calculated weekly to another.

    You can use these delivered groups or create your own. You can't edit the delivered groups and all employees are members of each group.

    - Payroll Usage
    - Project Execution Management Usage
    - Projects and Payroll Usage
    - Projects Usage

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Groups**.

18. Refresh group membership for a specific date or range of dates. Run this process regularly so that everyone always has the appropriate time processing configuration.

    During implementation, refresh the groups that we provide so that you link everyone to a default time processing profile.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Groups** > **Refresh Group Membership** and **View Evaluation Status**.

19. Identify the rule sets, time consumer set, and time card periods to use to validate, approve, and transfer time. To automatically create public holiday entries on worker time cards, set the default value to use for the payroll time type attribute. Also identify the workers that each profile applies to.

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Worker Time Processing Profiles**.

20. Load WFM events and actions that automatically identify retroactive changes to worker data that require the recalculation of their time card data. Use these business objects, available in the **Global Payroll - Define** product area:
    - Event Group
    - Event Group Translation
    - Event Action
    - Event Action Translation

    Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Data Loader**.

> **Tip:** For all time processing objects, you can find the delivered categories by searching in the Description field for **Delivered**.

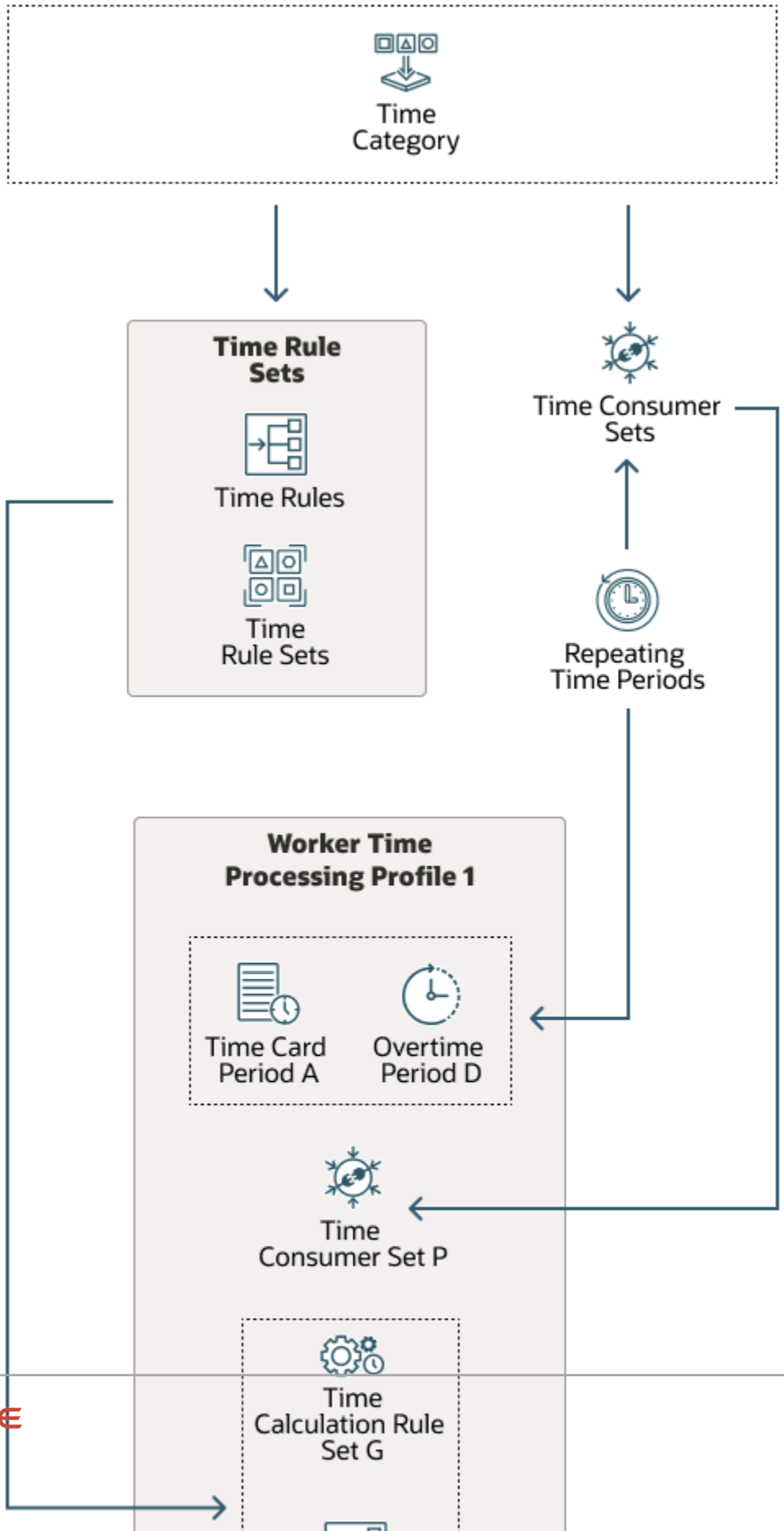
Security Reference

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

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

How many time processing objects to create

You need to create separate time processing profiles for each unique combination of the associated time processing objects, as shown in this diagram. To automatically add public holiday entries to time cards, you also need separate profiles for each LDG.


Time Category
Time Rule Sets
Time Rules
Time Rule Sets
Time Consumer Sets
Repeating Time Periods
Worker Time Processing Profile 1
Time Card Period A
Overtime Period D
Time Consumer Set P
Time Calculation Rule Set G

The more objects that you create, the greater the ongoing maintenance effort. Find a balance between optimizing the time processing for your workers and the effort required to maintain that processing.

Time consumer sets and validate on time card actions

Create one consumer set for workers with different time card actions that run validation for the same time consumer. Here are two examples where you'd have different consumer sets for the Payroll consumer:

- Save and Submit: For workers who report time every day of a time card period, or whose entries are on reports generated during the week.
- Submit only: For workers who create and submit time cards at the end of their week and for time and labor managers who correct time exceptions.

Time consumer sets and time categories

The type of time--such as payroll, project costing, or both--and the reporting frequency affect how you configure time consumer sets. If you use delivered time categories, you need to create only time consumer sets. Use these scenarios to help you figure out how many sets to create. In all instances, absence time entries automatically transfer to Absence Management and don't transfer to the selected time consumers.

Scenario	Delivered time category	Time consumer set
Some people always report only payroll and absence time.	All Payroll Entries	Only Payroll
Some people always report only project costing and absence time.	All Project Entries	Only Project Costing
Some people regularly, but not always, report project costing time and always report payroll and absence time.	All Payroll Entries and All Project Entries	Both Project Costing and Payroll
Some people always report only payroll and absence time and always or often track the number of meals that they take.	All Payroll Entries, which includes both hours-based and units-based time entries	Only Payroll

You can also create and use your own time categories instead of the delivered categories.

Time consumer sets and time card, approval, and overtime periods

You need a separate time consumer set for each unique combination of time card, approval, and overtime periods. The approval periods in the time consumer set need to match the time card period for the time processing profile. A person's overtime period can match or differ from the time card period.

Time categories, allocations, rules, and rule sets

Time categories identify the time entries to use in time allocations, rules, and rule sets. Here are examples of what the time categories can identify:

- Which entries the validation rules of the time consumer apply to
- Which entries make up the time data transferred to the time consumer
- Which entries to allocate across the specified cost segments
- Which end and start entries to compare with the defined rest period

- Which entries to compare with the worker's total scheduled hours
- Which entries to use when dividing reported daily or period time by the specified threshold value to calculate regular and overtime hours
- Which entries a time card needs to have for the member rule or rule set in a time rule set to run

You can use these delivered time categories, or create your own:

- All Absence Entries
- All Compensatory Time Entries
- All Payroll Entries
- All Project Entries

Time entry and time calculation rule sets

You can link only one time entry and one time calculation rule set to a time processing profile. Each rule set can include as many rules and rule sets as is appropriate for the workers linked to the processing profile. The number of rule sets you need to create depends on the different ways that you validate reported time and calculate time. Here are some examples:

- You generate validation exceptions for a group of workers when their total reported time exceeds 42 hours for the week. You generate validation exceptions for another group when their total reported time exceeds 10 hours a day.
- You pay people an overtime rate of 1.5 times their regular pay. For workers working in California, the overtime rate applies every worked hour over 8 hours in a 24-hour period. For workers working in Florida, the overtime rate applies for every hour worked over 40 hours in a 7-day period.

HCM groups

You link one or more HCM groups with each profile. Define separate groups wherever the characteristics are unique across time processing profiles or groups of profiles. For example, you group workers into separate groups for these reasons:

- One group has people who work in states that calculate overtime daily.
- Another group has people who work in states that calculate overtime weekly.

Change audit and public holiday settings

Create one profile for each group of workers with different change audit settings. Also create one profile for each group of workers who use the same payroll element to automatically create their public holiday entries. Typically, this means creating at least one profile for each LDG. For example, create one profile for people who use the Holiday US element. Create another profile for people who use the Holiday CAN element.

You can have more than one profile per LDG, depending on how many unique settings you have for the other profile options.

2 Repeating periods and time consumer validation, approval, and transfer

Repeating time periods for time processing

Time cards, approval workflows, overtime periods, and time balances need continually generated time periods, such as a weekly period that starts every Sunday. You can use delivered repeating periods or create your own.

Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Repeating Periods**.

Time processing uses repeating periods with these usages:

Usage	Description	Where used
Approvals	The date range when approvers can approve a submitted time card.	Approval lists in time consumer sets
Time cards	How often people need to submit their time card. All time card layouts support weekly, 2-week, and monthly repeating time card periods.	Time Card Period list in worker time processing profiles
Overtime	The date range used to calculate overtime. A person's overtime period can match or differ from the selected time card period. For example, workers report time using weekly time card periods that start on Saturdays. Their overtime is calculated using a weekly overtime period that starts on Mondays.	Overtime Period list in worker time processing profiles
Balances	The date range used to calculate time balances. For example, add 6 hours to a compensatory time balance every pay period.	**Repeating Time Period** > **Time Period** list in time balance dimensions

You can check the repeating period logic by providing a sample start date and preview start and end dates. Here are three examples:

Period	Weekly	Monthly	Semimonthly
Length	Biweekly	Calendar month	NA
Period generation logic	Generates periods every 14 days from the sample start date. All periods start on the same day of the week.	Generates periods from a specified day in 1 month up to that day in the following month.	Generates periods using a pattern: • The first period starts on the numeric day of the pattern starting date and lasts for 15 days. • The second period starts the day after the first period ends. It lasts through the day before the numeric day of the pattern starting date in the next month.
Sample start date	05/01/28	05/04/28	05/04/28

Preview start date	01/01/28	01/01/28	05/01/28
Preview end date	05/31/28	07/31/28	07/31/28
Generated sample periods	• 01/10/23 to 01/23/12 • 01/24/12 to 02/06/12 • 02/07/12 to 02/20/12 • 02/21/12 to 03/05/12 • 03/06/12 to 03/19/12 • 03/20/12 to 04/02/12 • 04/03/12 to 04/16/12 • 04/17/12 to 04/30/12 • 05/01/12 to 05/14/12 • 05/15/12 to 05/28/12	• 01/04/12 to 02/03/12 • 02/04/12 to 03/03/12 • 03/04/12 to 04/03/12 • 04/04/12 to 05/03/12 • 05/04/12 to 06/03/12 • 06/04/12 to 07/03/12	• 05/05/12 to 05/18/12 • 05/19/12 to 06/03/12 • 06/04/12 to 06/18/12 • 06/19/12 to 07/03/12 • 07/04/12 to 07/18/12

Delivered time consumer sets and time processing profiles use delivered repeating periods. You can also use the delivered periods in your time processing configurations.

Delivered period	Usages	Period type	Period length
Biweekly Starting Monday	Time Card Approval	Weekly	Biweekly
Payroll Weekly Starting Monday Projects and Payroll Weekly Starting Monday Projects Weekly Starting Monday Weekly Starting Sunday	Time Card Approval	Weekly	1 week
Daily	Balances	Daily	1 day

Create a time category

Time categories identify time entries that meet the configured conditions. Conditions can be single, compound, grouped, and embedded. A category can include time entries measured in days, hours, units, or a combination.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Categories**.
2. Create a time category.

3. Complete the basic information.
    - To save identified time entries for use in reports and time balance definitions, set Track Usage to **Yes**.
    - The selected unit of measure filters the Time Attribute lists. To use a combination of measures, leave Unit of Measure blank.
        - Days-based time entries reflect how to pay and cost reported absences.
        - Hours-based time entries reflect how to pay and cost reported time.
        - Units-based time entries are used to assign workers a flat payment amount.
4. Add at least one condition. The condition can be a category condition, an advanced condition, or a combination.

    Category conditions

    - To include time entries with no value for the time attribute, select the time attribute and leave the Value Type field blank.
    - - Use parentheses and operators to create compound and grouped conditions in time categories. Here's how:
        - Connect two or more conditions using the logical AND or OR operations to create a compound condition.
        - Group two or more conditions inside parentheses to form a separate statement, or group, within a compound condition.
        - Group a condition within another grouped condition.
    - Use the Embed Time Category icon to insert the category conditions from another time category. The embedded conditions are read only.
    - You can use the Ctrl key to select multiple rows for grouping, ungrouping, or deleting.

    Category advanced conditions

    The Rule Name list is populated by any advanced time category rules with the same unit of measure selected for this time category.

Create a time consumer set

You can identify the apps that consume time data for specific groups of workers. Also configure the consumer validation rules, approval periods, and transfer rules that apply to these worker groups.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Consumer Sets**.
2. Create a time consumer set.

3. Complete the required and relevant optional fields for the time consumer set.
    - Select the appropriate consumer or consumers based on how the time data is used:
        - To pay workers, select Payroll.
        - To bill customers for time worked on projects, select Project Costing.
        - To figure out project staffing, select Project Execution Management.
    - If managers regularly submit and approve many time cards at one time, we recommend that you don't enable informational workflow for bulk time card submission. Otherwise you could have hundreds of FYI notifications sent as a result.
    - If workers should approve or reject their own time cards, enable approval workflow for workers. This workflow is separate from the manager approval task and doesn't affect the time card status or processing.
    - Specify how all selected time consumers should handle approvals for absence entries on time cards.

Absence approval routing option	What the approval process does
Absence approval rules	- It uses the absence approval task to approve absence entries. - It uses the time card approval task to approve worked time entries. - It sets the time card status to Approved after both approval tasks complete.
Time approval rules	It uses the time card approval tasks to approve all time card entries, including absences. **Tip:** To include absences from time cards with only project and absence attributes, you also need to select the **Payroll** and **Project Execution Management** time consumers. Here's why: - The Payroll time card approval workflow handles absence approvals. - For projects, all absence data transfers only to project execution management.

4. Complete the required and relevant optional fields for each selected time consumer.
    - The time category that identifies the time data to transfer to the time consumer. For example, Global Payroll doesn't want time data with project attributes, so you select a time category that identifies only payroll-related data.
    - For Project Costing, we recommend that you continue to validate on Submit and Save time card actions. Then workers working on time cards know immediately if they're saving time entries to closed projects.
    - The Required Time Card Status option is only for reporting purposes.
        - To report on missing time cards when the consumer set is for workers who regularly submit time cards, we recommend that you select **Yes**.
        - To report on exceptions, such as absences and training, when the consumer set is for workers who submit time cards sporadically, we recommend that you select **No** .
    - When you configure a time processing profile, you select a time card period and a time consumer set. The period types, lengths, and start days need to match for each selected time consumer Approval period and the profile time card period.
    - If you want approvers to see only the time card entries that they need to approve, select **Entry level approval**. If you want approvers to see all time card entries, even those that they can't approve, don't select it.

3 Time card and entry approval workflows

How default approval workflows handle time cards and time entries

When you submit a time card that has project, payroll, or project and payroll data, you start approval workflows. These workflows are for either the time card or the time card entries depending on the time consumer set configuration.

For project time data, the default approval workflow tries to figure out the appropriate project manager.

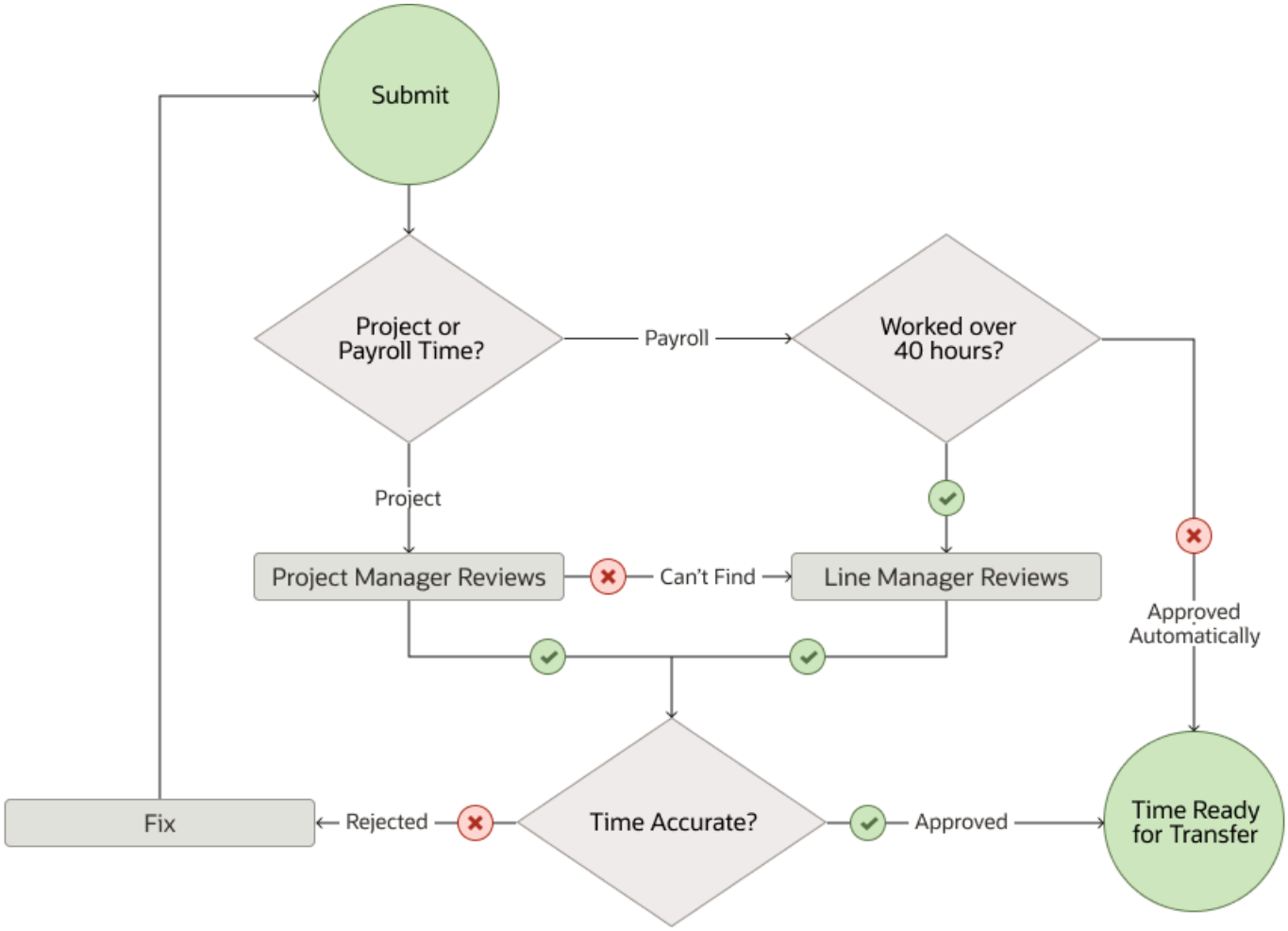
- If it can figure out who that person is, the workflow routes the data to them to review and approve or reject.
- If it can't figure out who that person is, the workflow routes the data to the individual's line manager to review and approve or reject.

For payroll time data, the default approval workflow checks the total payroll time.

- If it's up to or 40 hours, the workflow automatically approves the data.
- If it's more than 40 hours, the workflow routes the data to the individual's line manager to review and approve or reject.

After all approvers approve the time card, the approval workflow changes the time card status to Approved and the relevant time data is ready for transfer to Project Costing or Payroll. It changes the status to Rejected if at least one approver rejects the time card. And it notifies the worker that their time card was approved or rejected.

Here's a diagram of the default approval workflow for time cards.



The default approval workflows for time card entries are similar, but not identical to the time card workflows. The big difference is when the time data is ready for transfer to project costing and payroll.

- For project time data, as soon as a time entry is approved that project time data is ready for transfer to Project Costing.
- For payroll time data, the applicable approvers need to approve all entries for the time card period before the data is ready for transfer to Payroll.

Time approval workflow configurations overview

You send time data to the appropriate approvers using Payroll and Project Costing approval workflow tasks.

When Payroll, Project Costing, or both are selected in time consumer sets, the nonELA approval tasks run for the time data. The ELA tasks run when the time consumer configuration includes entry-level approval.

Payroll task	TimeCardApproval	TimecardApprovalELA

Supported approval configurations	Header-level and line-level configurations that use payroll time card data, for the specified worker and time card period.	Line-level configurations that use payroll time card data, for the specified worker and time card period.
Approver notifications	Sent when the time card status is Submitted.	
	Approvers see all payroll time card data, even the data that they don't approve.	Approvers see only the payroll time entries that they approve. Payroll data for the time card isn't ready for transfer until all time card entries are approved.
Specified recipient notifications	Sent based on time card status, for example, notifies workers when approvers approve or reject their time cards.	Sent based on time entry status, for example, let's workers when approvers approve or reject each time entry.

Project costing Task	ProjectTimeCardApproval	ProjectTimeCardApprovalELA
Supported approval configurations	Header-level and line-level configurations that use project time card data, for the specified worker and time card period.	Line-level configurations that use project time card data, for the specified worker and time card period.
Approver notifications	Sent when the time card status is Submitted.	
	Approvers see all project time card data, even the data that they don't approve.	Approvers see only the project time entries that they approve. Project data for the time entry is ready for transfer as soon as the approver approves the entry.
Specified recipient notifications	Sent based on time card status, for example, notifies workers when approvers approve or reject their time cards.	Sent based on time entry status, for example, let's workers when approvers approve or reject each time entry.

By default, the TimeCardApprovalFYI task notifies workers when approvers approve or reject their time entries for the specified time card period. You can disable this task so that workers don't get notified about approved or rejected time cards. Because this task isn't rule based, you can't configure it to disable only approval notifications or only rejection notifications. Workers either get both kinds of notifications or no notifications.

Stages and layers

The Payroll and Project costing approval workflow tasks have two stages and the payloads have two layers.

- Header-level approvals have the ApprovalTimeRecordHeader payload layer and the Serial participant type. The approvals include the total number of hours.
- Line-level approvals have the ApprovalTimeRecordGroup payload layer and the Parallel participant type, so the line-level rules always run in parallel for each line. The approvals include worker hours and time-card-related attributes, such as Expenditure Type or Payroll Time Type.

  ApprovalTimeRecordGroup attribute values vary by implementation. To figure out your value mapping, create your own data model report in **Tools** > **Reports and Analytics** using this query:

  ```
  select * from FUSION.hxt_tm_col_attr_map where LOCATION like 'Approval' and ENTERPRISE_ID = <ent_id>;
  ```

Configuration tasks

You configure the time approval workflows using these tasks:

Task	Comments
Manage Task Configurations for Human Capital Management	You configure the associated rules and rule sets on the Assignees tab. The Once per stage task aggregation on the Configuration tab ensures that the approval process sends only one notification per approver.
Manage Approval Groups	By default, the actionable time card approval workflow tasks route time cards using the dynamically decided supervisor hierarchy. You can identify specific approvers to route instead using this task. The informational workflow task sends the notification to the worker the time card is for.

Go to **Setup and Maintenance** > **Tasks panel Search** > **Define Approval Management for Human Capital Management**

Need an active rule or to call IgnoreParticipant

To avoid issues with approval routing for the payroll and project tasks, the specified rule sets and rules each need to have either an active rule or to call IgnoreParticipant.

Task	Rule set	Rule
TimeCardApproval	TimeEntryApprovalRuleSet	TimecardApprovalRules
ProjectTimeCardApproval	TimecardApprovalRuleSet ProjectTimeCardLineManagerRuleset	ProjectTimecardApprovalRules

Here's how you call IgnoreParticipant:

1. On the Assignees tab, click the appropriate participant.
2. In the participant configuration pane at the bottom, click **Advanced**.
3. Select **Ignore Participant**.
4. Save your changes.

Configure payroll time approval rules to use payroll values

This example has line managers reviewing and approving any time cards with overtime hours. And it automatically approves any time cards with only regular hours.

1. Go to **Setup and Maintenance** > **Tasks panel Search** > **Manage Task Configurations for Human Capital Management**.
2. For the TimecardApproval workflow task, TimeEntryApprovalRuleSet, select the **Assignees** tab.
3. Create the rule to manually approve overtime.
    a. Create this IF expression:

```
ApprovalTimeRecordGroup.measure more than 0 and ( ApprovalTimeRecordGroup.attributeChar5 is
 "Overtime" )
```

b. Complete the THEN fields, as shown here.

THEN field	Value
List Builder	Supervisory
Response Type	Required This response type makes the notification actionable, instead of informational.
Number of levels	1
Starting Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Top Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Auto Action Enabled	False
Auto Action	null
Rule Name	ManApproveOT

4. 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 here.

THEN field	Value
List Builder	Supervisory
Response Type	Required
Number of levels	1
Starting Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Top Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Auto Action Enabled	True
Auto Action	"APPROVE"

THEN field	Value
Rule Name	AutoApproveReg

Configure payroll time approval rules to use the time entry source

This example automatically approves time cards where all entries come from a time collection device. And it requires two levels of managers to review and approve any time cards with entries that don't come from time collection devices.

1. Go to **Setup and Maintenance** > **Tasks panel Search** > **Manage Task Configurations for Human Capital Management**.
2. For the TimecardApproval workflow task, TimeEntryApprovalRuleSet, select the **Assignees** tab.
3. 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_COLLECTION_DEVICE"
    ```

    b. Complete the THEN fields, as shown here.

THEN field	Value
List Builder	Supervisory
Response Type	Required
Number of levels	1
Starting Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Top Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Auto Action Enabled	True
Auto Action	"APPROVE"
Rule Name	AutoApproveTCD

4. Create the rule to manually approve time cards with entries that don't come from time collection devices.
    a. Create this IF expression:

```
ApprovalTimeRecordGroup.attributeChar18 isn't "ORA_HWM_TIME_COLLECTION_DEVICE"
```

    b. Complete the THEN fields, as shown here

THEN field	Value
List Builder	Supervisory
Response Type	Required
Number of levels	2
Starting Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Top Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Auto Action Enabled	False
Auto Action	null
Rule Name	ManApproveNonTCD

Configure payroll time approval rules to use reported time and cost segment

This example sends line managers actionable notifications to review and approve time card entries. And it sends department managers informational notifications for any time entries associated with their departments.

Key configuration assumption: The relevant time consumer set configuration has payroll approval rules set to use reported time data instead of calculated time data.

1. Go to **Setup and Maintenance** > **Tasks panel Search** > **Manage Task Configurations for Human Capital Management**.
2. For the TimecardApproval workflow task, TimeEntryApprovalRuleSet, select the **Assignees** tab.

3. Create the actionable notification rule for line managers.
    a. Create this IF expression:

    ```
    1 is 1
    ```

    b. Complete the THEN fields, as shown here:

THEN field	Value
List Builder	Supervisory
Response Type	Required This makes the notification actionable, instead of informational.
Number of levels	1
Starting Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Top Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Auto Action Enabled	False
Auto Action	null
Rule Name	ActionLineMgrs

4. 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 here:

THEN field	Value
List Builder	Supervisory
Response Type	FYI
Number of levels	1
Starting Participant	`HierarchyBuilder.getPrincipal (ApprovalTimeRecordGroup.entryDepartmentManager,-1,"","")`
Top Participant	`HierarchyBuilder.getPrincipal (ApprovalTimeRecordGroup.entryDepartmentManager,-1,"","")`
Auto Action Enabled	False

THEN field	Value
Auto Action	null
Rule Name	InfoDeptMgrs

Configure payroll time approval rules to use calculated time and cost segment

This example sends line managers actionable notifications to review and approve calculated time card entries. And it sends department managers informational notifications for any reported time entries associated with their departments.

Key configuration assumption: The relevant time consumer set configuration has payroll approval rules set to use calculated time data, instead of reported time data.

1. Go to **Setup and Maintenance** > **Tasks panel Search** > **Manage Task Configurations for Human Capital Management**.
2. For the TimecardApproval workflow task, TimeEntryApprovalRuleSet, select the **Assignees** tab.
3. 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 here.

THEN field	Value
List Builder	Supervisory
Response Type	Required This response type makes the notification an actionable, rather than informational, notification.
Number of levels	1
Starting Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Top Participant	`HierarchyBuilder.getManager("supervisory", Task.payload.process.Requester,-1,null,null)`
Auto Action Enabled	False
Auto Action	null

THEN field	Value
Rule Name	ActionLineMgrsCalcTime

4. Create the informational notification rule for relevant department managers.
    a. Create this IF expression:

```
ApprovalTimeRecordGroup.entryDepartmentManager isn't ""
```

    b. Complete the THEN fields, as shown here.

THEN field	Value
List Builder	Supervisory
Response Type	FYI
Number of levels	1
Starting Participant	`HierarchyBuilder.getPrincipal (ApprovalTimeRecordGroup.entryDepartmentManager,-1,"","")`
Top Participant	`HierarchyBuilder.getPrincipal (ApprovalTimeRecordGroup.entryDepartmentManager,-1,"","")`
Auto Action Enabled	False
Auto Action	null
Rule Name	InfoDeptMgrsReptTime

Make sure workers get only completed time card approval notifications with approval comments

By default, workers get the delivered TimecardApprovalFYI notification when their time cards are approved or rejected. Those notifications don't include approval comments. Here's how they can get only an approval or rejection notification that includes approver comments.

1. Go to **Setup and Maintenance** > **Tasks panel Search** > **Manage Task Configurations for Human Capital Management**.
2. On the BPM Worklist page, make sure **Task Configuration** is selected.
3. In the Search field, enter **Time** (no space after the term).

4. Run the search. Here are the approval tasks you should see listed.

Time consumer	Approval task	Information
Payroll	TimecardApproval	When ELA isn't enabled for the assigned Time Consumer
Payroll	TimecardApprovalELA	When ELA is enabled for the assigned Time Consumer
Project Costing	ProjectTimecardApproval	When ELA isn't enabled for the assigned Time Consumer
Project Costing	ProjectTimecardApprovalELA	When ELA is enabled for the assigned Time Consumer
Worker FYI Notification	TimecardApprovalFYI	Delivered FYI notification that can be set Inactive so workers only get the completed approver notification that contains approval comments

5. So workers see only the completed notification with approval comment, disable the delivered Worker FYI notification. That notification doesn't include any approval comments. Here's how to disable the FYI notification:
    a. Select **TimecardApprovalFYI**. When the task is selected, the task displays in the right region of the page.
    b. On the search toolbar, Select the **Edit** icon.
    c. On the Assignees tab, select the **SoaOlabel.Time** box. The box turns blue when selected.
    d. In the SoaOlabel.Timecard Submitter section, select **Advanced**.
    e. Select the **Ignore Participant** option.
    f. Save icon your changes and optionally enter a comment.
    g. To complete the update to the task, commit your changes.
6. Enable the approval notification to route the completed approval notification with comments to the approval initiator. For time card approval purposes, the initiator is always the worker the time card is for. Here's how:
    a. On the BPM Worklist page, search for and select the task, such as **TimecardApproval**.
    b. On the search toolbar, select the **Edit** icon.
    c. On the Notifications tab, in the table, add a row.
    d. In the Task Status column, select **Complete**.
    e. In the Recipient column, select **Initiator**. The row then shows as Complete and Creator.
    f. Save your changes.
    g. Optionally enter a comment about the changes.
    h. Commit your changes.

4 Entries that span midnight and overtime day start

Earned and overtime days in workday definitions

Global payroll uses the earned day for time entries that cross midnight as the pay date for calculated time entries. Overtime calculations use the day start time.

By default, the day start time for overtime is 12:00a of the current day. Overtime calculations split single time entries that cross the day start time into two entries.

- The first entry ends at the day start time.
- The second entry starts at the day start time.

Set up earned and overtime days for time calculations

To derive and use the earned date in, and specify the overtime day for time calculation rules, complete these setup tasks.

1. Configure workday definitions that support your policies for earned dates and the overtime day start.

   Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Workday Definitions**.

2. Assign a workday definition to each person whose time entries can span midnight or who has a nonstandard overtime day.
   a. On their Person Management page, Employment tab, correct or update the assignment.
   b. Next to the Working Hours field, select the **Assignment Hours Details** icon.
   c. Select the applicable workday definition.
   d. Save your changes.
3. Create time calculation rule templates, rules, and rule sets to calculate overtime entries using earned dates.

   Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Rule Templates**, **Rules**, and **Rule Sets**.

4. Link the time calculation rule sets to the appropriate worker groups.

   Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Worker Time Processing Profiles**.

Configure workday definitions

Create and edit workday definitions to specify the rule that identifies the earned day for time entries that span days. Also specify the overtime day start time. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Workday Definitions**.

The spanning day rules for earned days apply to reported time entries and on-call entries defaulted from Workforce Scheduling.

- **Start day:** The entry's earned and reference dates are the entry's start date. When an entry starts on one time card and ends on the next time card, the entry appears on the first time card. It also gets processed as part of that time card period.
- **Stop day**: The entry's earned and reference dates are the entry's stop date. When an entry starts on one time card and ends on the next time card, the entry appears on the first time card. It also gets processed as part of that time card period.
- **Grouping Threshold**: For both start and stop day rules, you can optionally set a grouping threshold measured in minutes. This threshold links multiple time entries together from 2 consecutive days to identify the applicable earned or reference date. For example, you want to treat the entries just before and after a meal break as one shift. So, you set a grouping threshold of 90 in the person's workday definition.

  Most entries will start and stop on the same day, but one entry might start on 1 day and end on the next.
- **Split at day start time**: The entry is split into two entries, an entry that stops at midnight and an entry that starts at midnight. The earned and reference dates for each of the two entries match the entry start dates.

Start Day Rule Example with a 90m Grouping Threshold

Here's how the time card entries get paid and accrued for 2 periods, April 5 to 11 and 12 to 18.

Shift	Day reported	Reported time	Earned and reference day	Hours paid and accrued
Wednesday	Period 1 4 5	6:30p to 11:30p 12:30a to 5:30a	4	10
Thursday	5 6	6:30p to 11:30p 12:30a to 5:30a	5	10
Friday	6 7	6:30p to 11:30p 12:30a to 5:30a	6	10
Saturday	7 Period 2 1	6:30p to 11:30p 12:30a to 5:30a	7	10

The final entry for the Saturday regular or on-call shift is reported on Sunday, April 12, which is part of the second period. But because of the grouping threshold, it appears on the April 5 to 11 time card. The hours also get paid and accrued as part of that first period.

Overtime Day Definition

Specify when the overtime day starts and whether it's on the current or next day. The default time is 12:00 AM of the current day.

All overtime entries that span 2 days will be split at the overtime day start time. The first entry ends at that time and the second entry starts at that time.

5 Time allocations

Before you create and assign time allocations

You need to configure the related time entry objects that let people allocate time, and view and override time allocations.

1. All the functional areas and tasks are in **Setup and Maintenance** > **Workforce Deployment**.

1. Prepare costing attributes for use in time card fields by completing these tasks:
    a. Create payroll value sets.

       Go to **Tasks panel** > **Search** > **Manage Value Sets**.
    b. Set up the cost allocation key flexfield and make sure that the usage so it's available at the element entry level.

       Go to **Payroll** > **Cost Allocation Key Flexfield**.
    c. Generate the costing time attributes.

       Go to **Time and Labor** > **Generate Data Dictionary Time Attributes**.
2. Uniquely identify regular and on call hours by creating payroll elements and calculation components for time cards.

   Go to **Payroll** > **Elements**.
3. Let workers and managers report relevant time by creating time card fields.

   Go to **Time and Labor** > **Time Entry Layout Components**.
4. Identify the regular and on call time entries by creating time categories.

   Go to **Time and Labor** > **Time Categories**.
5. Identify the workers to link to the time allocations by creating groups.

   Go to **Time and Labor** > **HCM Groups**.
6. Add the dependent attribute fields for the cost segments to the time entry layout in the relevant layout sets.

   Go to **Time and Labor** > **Time Layout Sets**.
7. Link each layout set to the relevant workers and their managers.

   Go to **Time and Labor** > **Worker Time Entry Profiles**.

Create a time allocation

To support your payment policies, automatically allocate worker's time to specific cost segments.

1. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Time Allocations**.
2. Create a time allocation.

3. Add at least one source.
    - You can use only hours-based time categories. Each time category identifies the time entries that the time calculation rule with the allocation uses to calculate the corresponding allocation outputs.
    - The processing sequence identifies in what order the allocation rule evaluates each time category condition. You can enter your source rows in any order and reorder them as needed to get the expected allocation output.
    - Day-level summations apply the allocations to all the hours for the entire day that match the time category conditions.
    - Time-level summations apply the allocations to all the hours for the entire period that match the time category conditions.
4. Configure the output columns by adding all the time attributes to allocate time to, such as Department and Fund.
5. Add at least one output.
    - The processing sequence identifies in what order to generate the allocation output. You can enter your output rows in any order and reorder them as needed to get the expected allocation output.
    - When the summation level is **Day**, the total output hours should equal or exceed 24 hours.
    - When the summation level is **Time card**, the total output hours should equal or exceed the time card period. For example, if the period is weekly, the total hours should equal or exceed 168.
    - A final hourly value of 999 safely covers any overflow for all summation levels because a blank value isn't valid.

Here's an example configuration for reference:

Processing sequence	Hours	Department	Fund
1	20	1111	
2	20	2222	
3	999		3003

Assign a time allocation directly

Direct allocation assignments take priority over allocation assignments derived from the worker's time processing profile.

We recommend that you create default time allocations and assign them to the appropriate workers through their time processing profiles. Then, assign more specialized allocations to specific workers using these steps.

1. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Allocation Assignments**.
2. Create an allocation assignment.
3. Select the time allocation and override the default start date, if appropriate.
4. Optionally select an end date.
5. Assign persons to the selected allocation by selecting at least one row in the search results.

    Press and hold the Shift key while selecting the first and last rows in a series to select all rows in the series. Press and hold the Ctrl key to select nonconsecutive rows.
6. Review the person assignments to make sure that they're correct.

7. Save your changes and close the guided process.

6 Time rule components

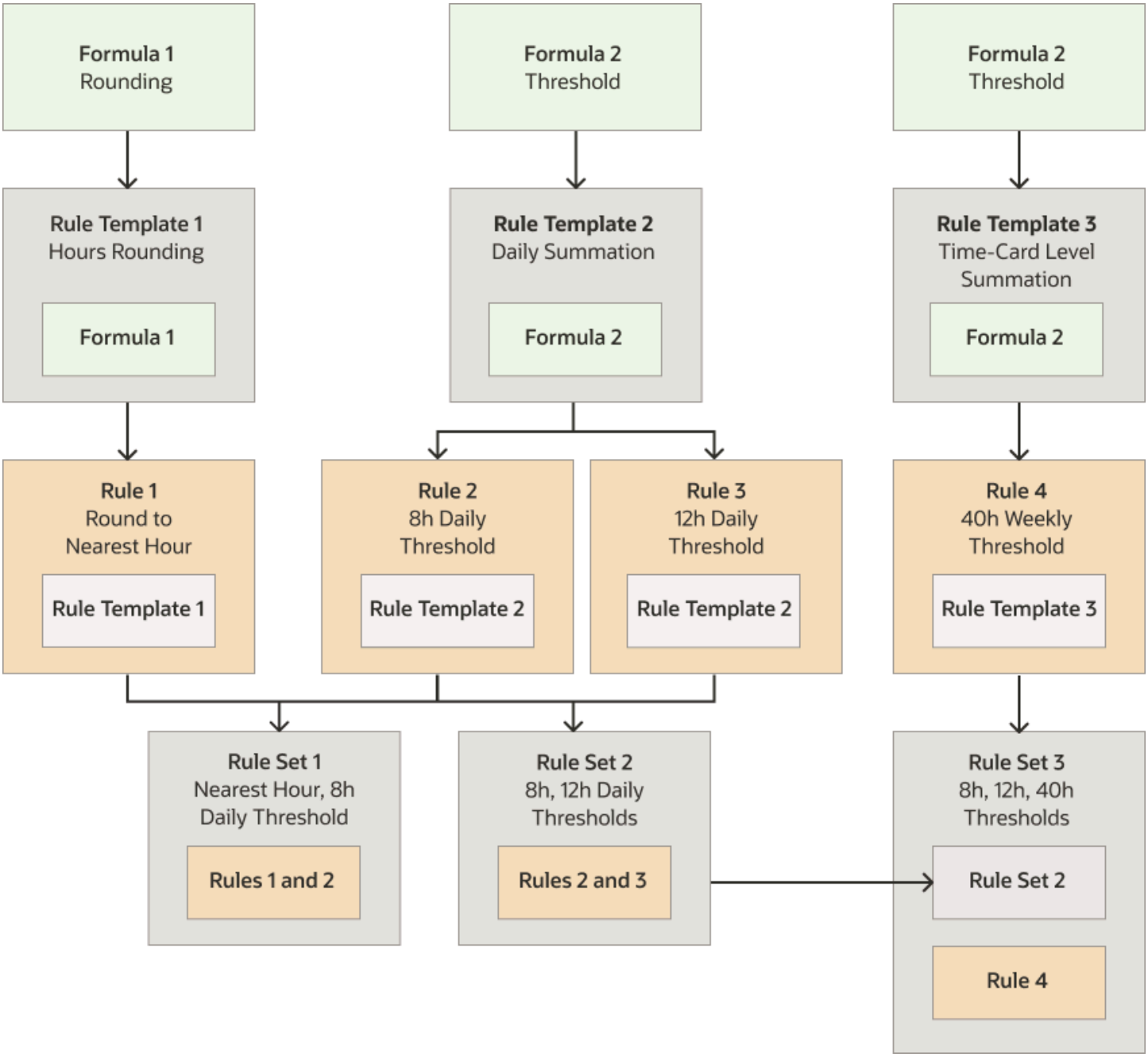
Time formulas, rule templates, rules, and rule sets

You can create time validation, calculation, and compliance rules based on time formulas using rule templates. Then you group rules for the same groups of workers into rule sets.

Component	Description	Relationship diagram example
Formulas	Contain the processing logic.	The Hours Rounding rule template uses the Rounding formula. The Daily Summation and Time-Card Level Summation rule templates use the Threshold formula.
Rule templates	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, a time calculation rule template can have an overtime threshold parameter. And, it can return Payroll Time Type attributes, such as Regular and Overtime, as outputs.	NA
	You can use one formula with multiple rule templates by varying the template configuration.	The Daily Summation rule template uses the Threshold formula to calculate daily totals. The Time-Card Level Summation template uses the same formula to calculate totals for the time card period.
Rules	Create them using a template instead of a formula. The template automatically populates the description of all outputs and helps you enter correct parameter values.	The Round To Nearest Hour rule was created with the Hours Rounding template.
	You can create multiple rules from a single template, varying the parameter and output values of each rule.	Two rules, 8h Daily Threshold and 12h Daily Threshold, were created with the Daily Summation template.
Rule Sets	A collection of rules and rule sets of the same type. You assign these rule sets to groups of workers with similar requirements for vacation, time validation, and time processing using worker time processing profiles.	The Nearest Hour, 8h Daily Threshold rule set has the Round To Nearest Hour and 8h Daily Threshold rules. The 8h, 12h, Daily Thresholds rule set has the 8h and 12h daily threshold rules. The 8h, 12h, 40h Thresholds rule set has the rule set with the 2 daily rules and the 1 weekly threshold rule.

Relationship diagram

Here's what the relationship among formulas, rule templates, rules, and rule sets look like.



Time formula, rule template, rule, and rule set types

Use the types to validate, calculate, and process time card data.

Type	Description	Example rule usages
Advanced time category	Define advanced conditions that you then associate with a time category.	Create rules to find time events or entries that don't match published schedule times.

Type	Description	Example rule usages
Time calculation	Create or update time card entries and uses the data to create calculated results based on formula logic.	Handle overtime or premium pay by updating reported time or creating more calculated time.
Time entry	Validate time card entries and generate a message with a defined severity.	When reported time exceeds a specified weekly maximum, display the specified message.
Workforce compliance	Identify upcoming compliance exceptions by reviewing time card data and unprocessed time events to help you prevent or quickly fix any exceptions.	Notify managers when young people are approaching mandated worked time limits.

References

To access the Workforce Management database items spreadsheet and information about array processing formula, including annotated examples, see the Time and Labor Fast Formula References (document ID *1990057.1*).

For information about delivered formulas, see the workforce management and time formula chapters in the *Administering Fast Formulas* guide.

Create an advanced time category rule template

Define advanced conditions to associate with a time category. For example, find time events or entries that don't match published schedule times.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Templates**.
2. Create an advance time category rule template to, for example, validate schedule deviation.
3. Enter the basic information.
4. Configure any formula parameters.
    - Optionally provide a more meaningful display name for people using the template to create rules.
    - Optionally reorder the display sequence. The lower the number, the higher the parameter appears in the list. The actual display sequences set in the template don't show when people create rules.
5. Optionally configure the output to provide a more meaningful display name for people using the template to create rules.

6. Explain the business purpose of the rule template and any rules create with the template.

   You can include message tokens as placeholders for parameter and output values. When people create rules with the template, the specific values they set replace these tokens in the rule explanation text. The Message Tokens list values are the parameter and output display names.

   Here are some best practices to keep in mind when you write text that includes tokens:

   - Include abbreviations in tokens that are easy to recognize.
   - Qualify tokenized text by inserting a word or phrase just 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 here.

Example of incorrect pairing	Examples of correct pairings
The time card was approved by the approver {STATUS}.	{APPROVER_NAME} approved the time card. The invoice was approved and now has a {STATUS} status.

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

Create a time calculation rule template

Create or update time card entries and use the data to create calculated results based on formula logic.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Templates**.
2. Create a time calculation rule template to, for example, set a threshold to calculate regular and overtime hours.
3. Complete the required and relevant optional basic information.
   a. Review the default rule execution type and change it as appropriate.

      For example, a rule based on this template has a daily threshold of 8 hours. Time worked over the scheduled 8 hours pays at 1.5 times the regular rate. Here's how each type handles 10 hours of reported time.

Type	Calculation logic	Calculation example
Create	Total time is 12 hours - The rule keeps the 10 hours of regular time at the regular hourly rate. - The rule creates 2 hours of premium time at .5 times the regular hourly rate.	(10 hours * 10 USD) + (2 hours *5 USD) = 110 USD

Type	Calculation logic	Calculation example
Update	Total time is 10 hours The rule adjusts the pay rate for 2 of the 10 reported hours. - 8 hours of regular time at the regular hourly rate - 2 hours of overtime at 1.5 times the regular hourly rate	(8 hours * 10 USD) + (2 hours *15 USD) = 110 USD

b. Review the default summation level and change as appropriate.

   For example, when workers are eligible for overtime after 8 hours in a day, you'd select Day. When workers are eligible for overtime after 40 hours in a week, you'd likely select Time Card.

   - **Details**: Applies the rule to all time entries that match the time category conditions. For example, select this option when workers should report worked time in specified increments, such as 15-minute, 30-minute, or hourly increments.
   - **Day**: Applies the rule to all the hours for the entire day that match the time category conditions. For example, select this option when workers are eligible for overtime after working 8 hours in a day.
   - **Time Card**: Applies the rule to all the hours for the entire period that match the time category conditions. For example, select this option when workers are eligible for overtime after working 40 hours in a week.

c. Optionally specify that by default the Save time card action should trigger rules created with this template. People can deselect default when they create rules.

   The Submit and Resubmit actions always start time calculation rules.

4. Configure the formula parameters.
   - Optionally provide a more meaningful display name for people using the template to create rules.
   - Optionally reorder the display sequence. The lower the number, the earlier the parameter appears in the list.
5. Configure the formula outputs.

a. Add any more time attribute outputs needed for rule calculations. If you don't add time attributes, then the rules created with the template use the time attribute for the reported time.

   For example, you use the same payroll attribute value as the reported time to store the calculated hours for regular time entries. You use a different attribute value to store any calculated overtime hours. So, you add the Payroll Time Type attribute to the output group for outputs over the threshold.

   For all measure outputs, such as OUT_MEASURE_UNDER and OUT_MEASURE_OVER, select the **Measure** time attribute.

b. Review the output group for each output and change as appropriate. For example, OUT_MEASURE_OVER defaults to Output Group: 1, but should be in Output Group: 2.

   Output groups link formula outputs to specific time attributes for calculations. For example, you add the PayrollTimeType attribute once to Output Group 2, as shown here:

Output group 1	Output group 2
OUT_MEASURE_UNDER	PayrollTimeType

Output group 1	Output group 2
	OUT_MEASURE_OVER

Even if both groups have the same payroll time attribute, the values that people set when they create rules with the template will be different. For example, the payroll value for hours below the measure is typically a regular pay rate. The payroll value for hours over the measure is typically an overtime or premium pay rate.

c. Optionally provide a more meaningful display name for people using the template to create rules.
d. Optionally reorder the display sequence. The lower the number, the earlier the output appears in the group.

> **Tip:** The bundled time allocation formula doesn't contain any outputs. You specify rule outputs in time allocation configurations that you create using the Time Allocation task.

6. Explain the business purpose of the rule template and any rules create with the template.

   You can include message tokens as placeholders for parameter and output values. When people create rules with the template, the specific values they set replace these tokens in the rule explanation text. The Message Tokens list values are the parameter and output display names.

   Here are some best practices to keep in mind when you write text that includes tokens:

   - Include abbreviations in tokens that are easy to recognize.
   - Qualify tokenized text by inserting a word or phrase just 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 here.

Example of incorrect pairing	Examples of correct pairings
The time card was approved by the approver {STATUS}.	{APPROVER_NAME} approved the time card. The invoice was approved and now has a {STATUS} status.

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

Create a time entry rule template

Validate time card entries and generate a message with a defined severity.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Templates**.

2. Create a time entry rule template to, for example, make sure workers work the minimum required hours.
3. Complete the required and relevant optional basic information.
    a. Review the default summation and reporting levels and change as appropriate.

Level	Summation	Reporting
Details	Applies the rule to all time entries that match the time category conditions. For example, select this option when workers should report worked time in specified increments, such as 15-minute, 30-minute, or hourly increments.	Display rule results for all time entries that match the time category conditions. For example, show the message for each time entry that violates the rule.
Day	Applies the rule to all the hours for the entire day that match the time category conditions. For example, select this option when workers are eligible for overtime after working 8 hours in a day.	Display rule results for all the hours for the entire day that match the time category conditions. For example, show the message for each day that time entries violate the rule.
Time Card	Applies the rule to all the hours for the entire period that match the time category conditions. For example, select this option when workers are eligible for overtime after working 40 hours in a week.	Display rule results for all the hours for the entire period that match the time category conditions. For example, show the message only once for the time card period, when a time entry violates the rule.

    b. Review the default suppress duplicate messages display value and change as appropriate.

    For example, a rule shows a warning message when a 16-year-old worker reports more than 20 worked hours for a week. When they save, submit, and resubmit their time cards, the rule triggers. During the winter break a worker reports working 8 hours per day for 5 days, and saves their time card each day. Here's how often messages would appear according to the reporting level and whether you suppress duplicate messages.

Reporting level	Suppress duplicate messages display	Message display frequency
Time Card	Either Yes or No	Once
Day	No	3 successive days after reported time exceeds the 20-hour maximum
Day	Yes	Once, on the third day when the reported time for the week exceeds the 20-hour maximum

    c. Review the default process empty time card value and change as appropriate. If you select **Yes**, the rule applies to all entries regardless of whether they have any quantities, such as hours or units.
    d. Optionally specify the default time card actions that should trigger rules created with this template. People can deselect any defaults when they create rules.
4. Configure the formula parameters.
    - Optionally provide a more meaningful display name for people using the template to create rules.
    - Optionally reorder the display sequence. The lower the number, the earlier the parameter appears in the list.

5. Configure the formula outputs.
    - Optionally provide a more meaningful display name for people using the template to create rules.
    - Optionally reorder the display sequence. The lower the number, the earlier the output appears in the list.
6. Explain the business purpose of the rule template and any rules create with the template.

    You can include message tokens as placeholders for parameter and output values. When people create rules with the template, the specific values they set replace these tokens in the rule explanation text. The Message Tokens list values are the parameter and output display names.

    Here are some best practices to keep in mind when you write text that includes tokens:

    - Include abbreviations in tokens that are easy to recognize.
    - Qualify tokenized text by inserting a word or phrase just 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 here.

Example of incorrect pairing	Examples of correct pairings
The time card was approved by the approver {STATUS}.	{APPROVER_NAME} approved the time card. The invoice was approved and now has a {STATUS} status.

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

Create a workforce compliance rule template

Identify upcoming compliance exceptions with rules that review time card data and unprocessed time events to help managers prevent or quickly fix any exceptions.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Templates**.
2. Create a workforce compliance rule template to, for example, make sure workers work the minimum required hours.
3. Complete the required and relevant optional basic information.
    a. Review the default reporting level and change as appropriate.

Level	When rule results display
Details	For all time entries that match the time category conditions. For example, show the message for each time entry that violates the rule.

Level	When rule results display
Day	For all the hours for the entire day that match the time category conditions. For example, show the message for each day that time entries violate the rule.
Time Card	For all the hours for the entire period that match the time category conditions. For example, show the message only once for the time card period, when a time entry violates the rule.

b. Review the default suppress duplicate messages display value and change as appropriate.

For example, a rule shows a warning message when a 16-year-old worker reports more than 20 worked hours for a week. When they save, submit, and resubmit their time cards, the rule triggers. During the winter break a worker reports working 8 hours per day for 5 days, and saves their time card each day. Here's how often messages would appear according to the reporting level and whether you suppress duplicate messages.

Reporting level	Suppress duplicate messages display	Message display frequency
Time Card	Either Yes or No	Once
Day	No	3 successive days after reported time exceeds the 20-hour maximum
Day	Yes	Once, on the third day when the reported time for the week exceeds the 20-hour maximum

4. Configure the formula parameters.
   - Optionally provide a more meaningful display name for people using the template to create rules.
   - Optionally reorder the display sequence. The lower the number, the earlier the parameter appears in the list.
5. Configure the formula outputs.
   - Optionally provide a more meaningful display name for people using the template to create rules.
   - Optionally reorder the display sequence. The lower the number, the earlier the output appears in the list.

6. Explain the business purpose of the rule template and any rules create with the template.

   You can include message tokens as placeholders for parameter and output values. When people create rules with the template, the specific values they set replace these tokens in the rule explanation text. The Message Tokens list values are the parameter and output display names.

   Here are some best practices to keep in mind when you write text that includes tokens:

   - Include abbreviations in tokens that are easy to recognize.
   - Qualify tokenized text by inserting a word or phrase just 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 here.

Example of incorrect pairing	Examples of correct pairings
The time card was approved by the approver {STATUS}.	{APPROVER_NAME} approved the time card. The invoice was approved and now has a {STATUS} status.

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

7. Review your configuration.
8. Save your changes and close the template.

Create a time entry, time calculation, or workforce compliance rule

Create these types of rules using rule templates of the same type. You'll group validation, calculation, or compliance rules into rule sets that get associated with workers who share the same requirements.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rules**.
2. Create the rule.
   a. Name it.
   b. Select the template type and then the template.
3. Optionally add a description of what the rule does. If the explanation is descriptive enough, you can reuse it as the description. People working with the rules in rule sets won't see the explanation, but they will see the description.
4. Change the defaulted time card events that trigger the rule, as appropriate.
5. Enter or select rule parameters values.
6. Enter or select output values.

   The bundled time allocation formula doesn't contain any outputs. You specify rule outputs in time allocation configurations that you create using the Time Allocation task.

7. Save your changes and close the rule.

Create a time entry, time calculation, or workforce compliance rule set

A rule set contains rules, and can contain other rule sets, that have the same type. You assign the rule set to workers with the same validation, calculation, or compliance requirements.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time Rule Sets**.
2. Create the rule set.

   The default effective date is the current device date. If you change the date, be sure to select a date that coincides with the start of the time card period the rule set will be associated with.
3. Add the applicable rules and rule sets as members of the rule set.

   For example, you'd create separate rule sets for workers whose overtime is calculated on a daily basis and on a weekly basis.
4. Optionally select a time category for one or more rule set members. Do this to have the rule or rule set run only for time cards that have time entries identified by the selected category.
5. Optionally reorder the processing sequence. Rule set members with lower processing sequences get processed before members with higher sequences.

   The processing order is particularly important for time calculation members because later rule calculations might use results from earlier rule calculations.
6. Save your changes and close the page.

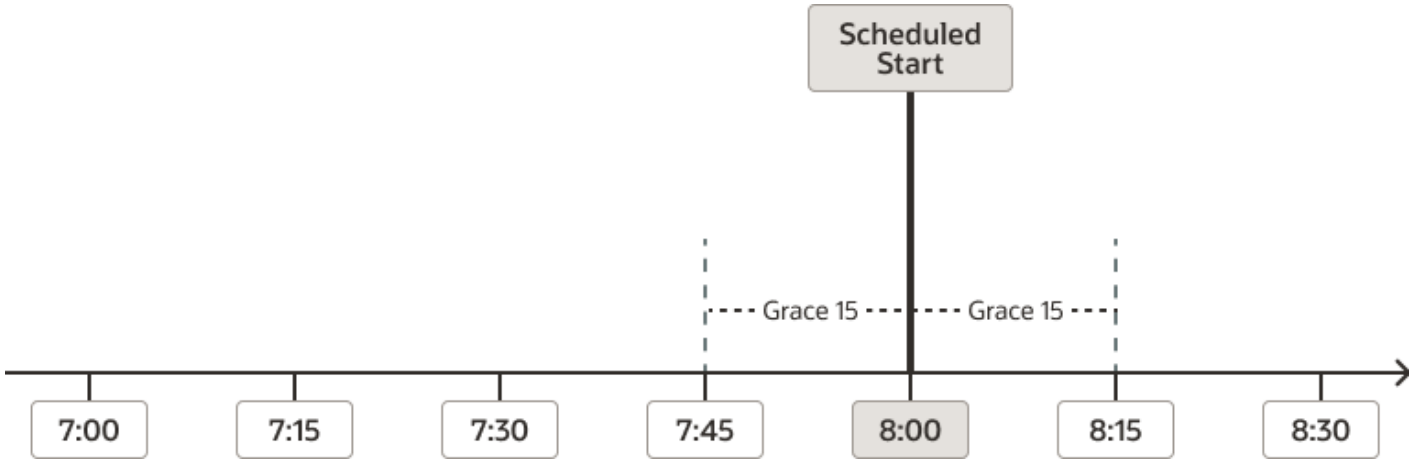
Shift limits in time validation and processing

Identify acceptable deviations from scheduled shift starts and stops when validating time entries. And identify the shift that time device rules use when evaluating Web Clock or time device events.

1. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Shift Properties**.
2. Search for and edit an existing shift, or create a time shift.
3. Complete the required and relevant optional fields.

4. Optionally specify the grace period.

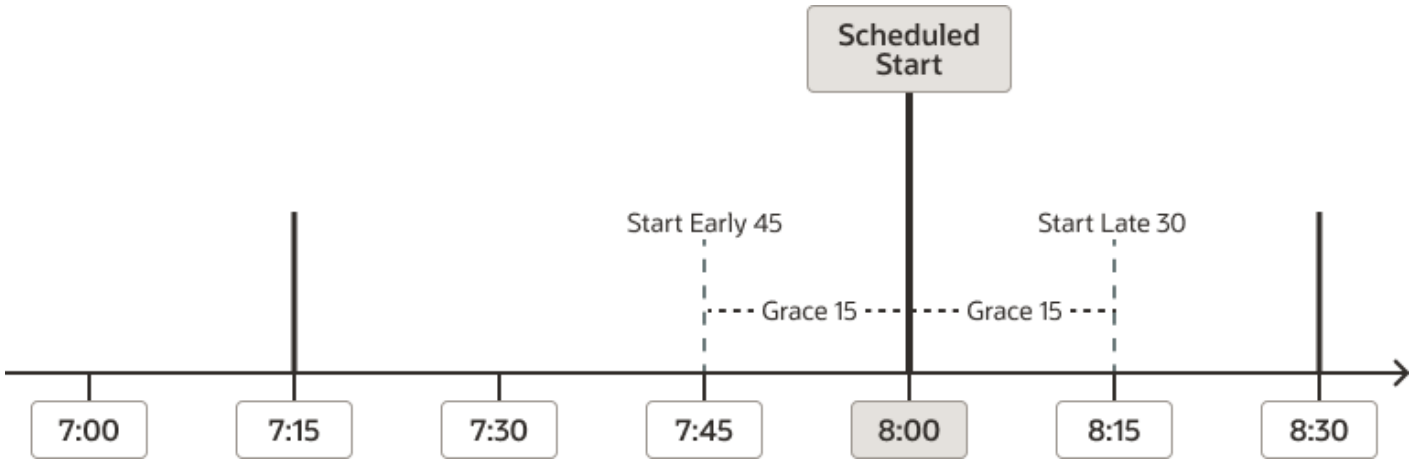
   This deviation applies both before and after the scheduled time. For example, the valid start period for a shift starting at 8:00 with a 15-minute grace period is 7:45 to 8:15.



5. Optionally specify the start and end early and late periods.

   These periods help time device rules evaluate Web Clock and time device events using identified shift start or stop times. For example, a scheduled shift starting at 8:00 has a 15-minute grace period, a 45-minute start early period, and a 30-minute start late period.

   - Both start periods include the 15-minute grace period.
   - The 45-minute start early period is 7:15 to 8:00.
   - The 30-minute start late period is 8:00 to 8:30.



6. Optionally select the corresponding violation types.

   Time device rules create time entry exceptions for Web Clock or time device events in the specified start and end early or late periods. They can also create exceptions for events outside the grace period, depending on how you set up the shift limits.

   Time entry exceptions include the Information, Warning, or Error type to categorize the messages for time and labor manager reviewers. A device rule uses the violation type that you set for the shift limits as the exception type for the time entry. If you don't set a violation type, it uses the message severity set in the rule. For example, the violation type for the start early period is Warning. The message severity in the device rule is Error. When the rule generates

an exception, it sets the type as Warning. If there wasn't any violation type for the start early period, the rule would generate an Error exception.

Time event processing also uses the rule message severity for time events outside of any specified start and end early and late periods. For example, the rule generates Error exceptions for time before start and end early periods, and after start and end late periods.

7 Time validation, calculation, and processing details analysis

How to diagnose time validation, calculation, and processing issues

Analyze the formulas, rules, and rule sets used to validate, calculate and process a person's time card.

1. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Analyze Rule Processing Details**.
2. Confirm your sign in credentials have the correct security.

   On the Analyze Rule Processing Details page, in the Search section, show the Worker list.

   - If it's empty, then the data role is missing or incorrectly configured. Complete the Data Role and Security Profile Setup and Job Role Setup steps.
   - If it values, the data role is correctly configured for you to view rule set and rule log files. Go to step 2.
3. Analyze validation, calculation, and processing details.
   - To view details of the time repository rule that includes the parameter and output values, analyze the rule definition.
   - To view the processing logs that help you diagnose processing issues, review either the rule or rule set processing log.
   - To view details of the formula associated with the rule templates, review the formula details.
4. Fix any errors using the relevant Tasks panel task, such as Rule Templates, Rules, or Rule Sets.
5. Create a data role and security profile by completing these steps:
   a. Go to **Setup and Maintenance** > **Tasks panel** > **Search** > **Manage Data Role and Security Profiles**.
   b. On the Select Role page, complete the fields as shown here.

Field	Value
Data Role	Time and Labor Administrator Role-TL1
Job Role	Time and Labor Administrator Select the job role with the ORA_HXT_TIME_AND_LABOR_ADMINISTRATOR_JOB role code.

   c. On the Security Criteria page, in each security profile list, select the **View All...** option. For example, in the Organization Security Profile list, select **View All Organizations**.

      In the person security profile lists, select **View all People**, not View all Workers.

   d. On the Assign Security Profiles to Role: Organization Security Profile page, in the Organization Security Profile list, select **View All Organizations**.
   e. Select **Next** repeatedly, until you open the Create Data Role: Review page.

f. Submit the data role and security profile.

6. Setup up the job role by completing these steps:
    a. Go to **Setup and Maintenance** > **Tasks panel** > **Search** > **Manage Job Roles**.
    b. On the Users task tab, search for and select the appropriate user name.
    c. Edit the user account details and add the Time and Labor Administrator Role-TL1 role.
    d. Save your changes and close the Edit User Account page.
7. Sign out of the app.
8. Sign in to the app.
9. Repeat steps 1 and 2.

Enable logging for time rules and rule set processing

Before you can troubleshoot issues with time and workforce compliance formulas, rules, and rule sets, you need to enable rule and rule set processing logs.

1. Sign in as an application administrator.
2. Go to **Setup and Maintenance** > **Tasks panel** > **Search** > **Manage Administrator Profile Values**
3. Search for and select the ORA_HWM_RULES_LOG profile option code.
4. Select the appropriate site-level profile value.

Log level	Rule set logs	Rules log
Incident	No, unless status is Failed	No, unless status is Failed
Finest	Yes	Yes
Finer	Yes	Yes for time calculation and entry rules No for workforce compliance rules
Fine	Yes for time calculation and entry rule sets No for workforce compliance rule sets	No

Enable automatic log deletions for time rules and rule sets

To manage performance, you can set a logging duration and automatically delete old log files.

1. Sign in as an application administrator.
2. Go to **Setup and Maintenance** > **Tasks panel** > **Search** > **Manage Administrator Profile Values**.

3. On the Manage Administrator Profile Values page, search for and select the profile option code ORA_HWM_RULES_LOG_MONTHS_TO_KEEP.
4. Enter a site-level profile value from **0** to **24**. The number indicates how many months to keep a log file before deleting it.
    - Entering 0 deletes all entries.
    - The rule and rule set processing logs older than 24 months are automatically deleted, so any entry over 24 automatically adjusts to 24.

    You can manually delete log files older than the profile value you set, but younger than 24 months.

    a. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Analyze Rule Processing Details**.
    b. Select **Actions** > **Delete Older Log Files**.

8 Compliance alerts and approval reminders and escalations

Configure time and compliance exceptions and alerts

You can prevent time exceptions by checking compliance outside of the time management process using workforce compliance time rule sets and HCM groups.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor**.
2. If the delivered fast formulas don't meet your requirements, create your own formulas using the Fast Formulas task. The delivered fast formulas identify missing time attestations, card, and entries. There's also a reminder escalation formula.
3. Create and edit workforce compliance rule templates using the Time Rule Templates task. Use time categories in the templates to summarize time and compare different categories of time.
4. Create and edit workforce compliance rules using the Time Rules task.
5. Create and edit collections of workforce compliance rules and rule sets using the Time Rule Sets task.
6. Create and edit groups to identify the workers you want to link to workforce compliance rules using the HCM Groups task.

   You use these groups when you schedule the Generate Time Exceptions from Compliance Rules process.

   You can reuse the existing HCM groups that are part of your worker time entry profiles. Or you can create as many HCM groups to identify time exceptions as makes sense for your organization. For example, you could create separate groups for each department, legislative data group (LDG), or business unit. You can also create a list of specific individuals.

7. Run the Generate Time Exceptions from Compliance Rules process once or schedule it to run regularly.
   a. Go to **Tools** > **Schedule Processes**.
   b. On the Advanced tab, select the appropriate combination of workforce compliance rule set, HCM group name, and date range.
   c. Select **Send alert immediately** to notify the relevant managers and workers about the noncompliance.

      Otherwise the process stores the compliance message as part of the existing time card data for that period. If a time card doesn't exist, the process stores it with the appropriate person and the time card period data.

   d. If you're sending alerts, select the **HWM Time Exceptions from Compliance Rules** template or the appropriate timeRecords or timeRecordsGroup resource alert notification that you created.
   e. Specify to run the process as soon as possible or using a schedule with a recurring frequency.
   f. Submit the process.

Alerts for in error change requests

You can notify workers and their managers about errors identified when the manager approved a change request. For example, the change request included a stop time before the start time, or there was an issue with the environment.

Notify them using **Tools** > **Alerts Composer** and the delivered HWM Time Change Request In Error alert. The alert includes these two alert templates, which are both enabled by default.

- Notify Individuals of In Error Change Request
- Notify Managers of a Subordinate's In Error Change Request

9 Time processing and HCM groups

Time processing and HCM croups

You can identify group of workers with similar characteristics to link to specific time consumer and rule sets. Define membership using conditions and including or excluding individuals, value sets, or other groups.

To create groups and view membership, go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Groups**.

> **Note:** Group members can change as you change the evaluation date. Only the workers that meet the inclusion membership conditions on the date you specify are members.

Create an HCM group with evaluation criteria to use in worker time profiles

Here's how you can create an HCM group that uses evaluation criteria to find the members. You can use these groups in worker time entry, processing, and device processing profiles.

1. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Groups**.
2. Create the HCM group.
    a. Complete the required and relevant optional group information.
    b. Create the evaluation criteria. For example, to create these three rows of employment evaluation criteria, complete the steps three times in the Evaluation Criteria dialog box.
        i. Add and apply the criteria from one row at a time.

Employment attributes	Operator	Value	Logical operator
Collective Agreement	Equal To	Registered Nurses	And
Labor Union	Equal To	Yes	And
Location Components	Equal To	(State) California	NA

        ii. After adding the criteria from the third row, save your changes and close the dialog box.
    c. Optionally group the criteria into a single condition.
        i. On the Create Group page, select all 3 rows.
        ii. Select the **Add Parentheses** icon.
        iii. Save your changes and close the page.
3. Refresh the group membership.
    a. Select the group to refresh.

b. Select the current date as the evaluation date.
c. Submit the refresh process.

Create an HCM group with embedded HCM groups to use in worker time profiles

Here's how you create an HCM group with embedded groups. You can use these groups in worker time entry, processing, and device processing profiles.

1. Create the groups to embed in this group. For example, you create the RN in CA on Primary Assign group and the All PTE with Annual groups.
2. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Groups**.
3. Create the HCM group.
    a. Complete the required and relevant optional group information.
    b. In the Include or Exclude Groups section, embed the applicable groups and set the priorities. Here's an example.

Priority	Group
1	RN in CA on Primary Assign
2	All PTE with Annual

    c. Specify whether the embedded group includes or excludes members.

    When you embed groups within another group, a worker can exist in more than one group. The priority numbers decide the worker's group membership. And the status of the highest-priority group they belong to decides whether they're included in or excluded from the group.

    d. Save your changes and close the page.
4. Refresh the group membership.
    a. Select the group to refresh.
    b. Select the current date as the evaluation date.
    c. Submit the refresh process.

Create an HCM group with a value set to use in worker time profiles

Here's how you can create an HCM group using a value set. You can use these groups in worker time entry, processing, and device processing profiles.

1. Create the value set. For example, you create the All Part-Time Workers with an Annual Salary Basis value set that includes this query:

```
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 query, 'PR' identifies the Part-Time Regular employment category.

   Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **Time and Labor Value Sets**.

2. Create the HCM group.
   a. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Groups**.
   b. Complete the required and relevant optional group information.
   c. In the Include or Exclude Groups section, add the value set and specify whether to include or exclude members the value set identifies.
   d. Save your changes and close the page.
3. Refresh the group membership.
   a. Select the group to refresh.
   b. Select the current date as the evaluation date.
   c. Submit the refresh process.

How you refresh HCM group membership for worker time profiles

You can evaluate HCM groups and update the list of members. Go to **Setup and Maintenance** > **Workforce Deployment** > **Time and Labor** > **HCM Groups**.

You can schedule regular refreshes for the HCM group using advanced options. You can also regularly refresh the membership of all HCM groups that meet both of these conditions:

- The group definition has the Include in Refresh All Groups Process option selected.
- At least one time entry, processing, or device processing profile configuration includes the group.

To include active and suspended assignments, select the Include assignments with an HR status of active or suspended option. To include only active assignments, deselect the option.

> **Tip:** To refresh all groups that meet both conditions, when you configure the process, be sure to leave the HCM Group and Person fields blank.

To maintain group membership for large populations or because of 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 using the first run date. Because we aren't sure at what time on what day the Wait runs, we change the Evaluation Date only when the process runs. For example, server loads can delay when the process actually runs. Also, using the original time during the Wait status helps you identify the original process because you can have multiple processes scheduled.

To see the processing status for group membership refreshes, select **View Evaluation Status**.

Here's how the Evaluate Group Membership process decides the final membership status of each worker as of the specified evaluation date.

Membership evaluation	Membership status when true
1. Is the worker directly included in or excluded from the group?	Include or exclude the worker.
2. Is the worker part of multiple child groups or value sets with different membership statuses?	Use the child group or value set with the highest priority that identifies worker, to include or exclude them.
3. Is the worker part of only one child group or value set that's included in or excluded from the parent group?	Include or exclude the worker.
4. Does the worker match evaluation criteria that has attributes, relational operators, and logical operators?	Include the worker. By default, these delivered groups include everyone: • Payroll Usage • Projects and Payroll Usage • Project Execution Management Usage • Projects Usage

Manually maintained HCM groups for worker time profiles

You can identify people who need to be excluded from worker approval reminders for a certain period. And, you can identify people to include in Oracle Transactional Business Intelligence (OTBI) audit reports.

Go to **My Client Groups** > **Time Management** > **Tasks panel** and use these tasks:

- Manually Maintained Excluded Members
- Manually Maintained Audit Members

The Actions menu has templates that you can use to merge and delete members if you prefer to maintain member using spreadsheets.

10 Worker time processing profiles

Time measure to show option for Redwood time cards and change requests

You can specify for Redwood time card and change request pages whether to show time measures in hours and minutes or set a decimal place.

For example, enter and show quantities on time card pages in the format Hours, Minutes (HH:MM).

Hours decimal options specify the number of places to show to the right of the decimal.

By default, the time entry layout has Decimal Places set to 2. You can edit the layout to change this default, as appropriate. We recommend that you review all the pages that correspond to any layouts where you changed the default value. Make sure that the number of decimal places that you see on each page is what you expect.

If the number of decimals from the time measure property doesn't match the number of decimals set on the layout, the setting from the layout is applied.

Time entry rules

Time entry rules can specify output messages that include the number of hours. Unchanged formulas and rule templates delivered before 2020 use the decimal format. To create your own formulas that use the Hours format, delivered reference the delivered formula ORA_TER_PERIOD_MAX_WITH_MSG_FORMAT_OPTION_AP.

Basic process to define time measures

1. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Worker Time Processing Profile.**
2. Select **Actions** > **Define Time Measures**.
3. On the Time Measure Properties Page, select the measure to use when showing time.

> **Note:** Your selection applies across the entire Oracle Fusion Cloud Time and Labor environment. It isn't specific to the individuals linked to a specific time processing profile, nor the managers acting on their behalf.

Create a worker time processing profile

Specify how reported time is validated, calculated and processed. Do this by linking a repeating time period, time consumer set, and HCM group and optionally time calculation and entry rule sets.

1. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Worker Time Processing Profile**.
2. Create a time processing profile.
3. Complete the required and relevant optional profile values.
    - Time calculation rules use the overtime period to calculate overtime hours for the associated workers.

- A person's information, such as the payroll relationship or assignment status, can change retroactively. These information changes can also change the person's associated layout set, time card period, or both. And, the person can add absences to and change absences on existing time cards. To include future time cards for associated workers when the scheduled Resubmit Time Cards process runs, select **Enable resubmission of future time cards**.
- By default, when people select **Submit** on time cards, the applicable time consumer validation and time entry and calculation rules run immediately. If your company has complex calculation rules or workers with monthly time cards, we encourage you to select **Submit time cards for scheduled processing**. This way, the time consumer validation, time entry, and time calculation rules for the associated workers run in the background. These workers and their managers can review any issues and calculated time results later, after the process completes.
- To configure time cards to automatically add public holiday entries, select the payroll element to automatically add to the entries.

  Your profile might include workers who work across multiple legislative data groups (LDGs), such as the US and Canada. The time attribute value of the holiday entry gets set automatically only for people in the same LDG as the public holiday element. For example, you select the US Public Holiday payroll element. The element gets used for people in the US LDG. It doesn't get used for people in the Canada LDG.

  To automatically add holiday entries for everyone, you need to create separate profiles for the two LDGs. The fastest way to do this is to duplicate the existing profile and then update the configurations accordingly, including HCM group assignments.
- To automatically default on-call entries for workers with work assignments that include on-call shifts, select the payroll element to apply to the on-call entries. Also select the time category that identifies the on-call entries.

4. Add the HCM groups that identify the workers to assign this profile to and update the from and to dates as appropriate.

   The dates matter because you can assign more than one group to a single time processing profile. For example, you assign the USA_Individs profile to the FullTime_USA_Individs and PartTime_USA_Individs groups. But you can't assign a single group to more than one time processing profile for the period. For example, the FullTime_USA_Individs group can't have the same or overlapping group assignments for both the USA_Individs and UK_Individs time processing profiles.

5. Assign the profile a unique priority number relative to other time processing profiles. The priority decides the profile to use for a worker who's eligible for multiple profiles of the same type. The highest priority is 1.

How time processing profiles get derived

Through HCM group membership, a worker can be eligible for multiple time processing profiles. The assignment type for each of a worker's eligible time processing profiles decides the single profile that applies.

Priority	Assignment type	Derivation description
1	Worker Assignment	The profile with this assignment has the highest priority and overrides all group profile assignments. Make these assignments on the Troubleshoot page using the Assign Profile to Person button.

Priority	Assignment type	Derivation description
2	Group Assignment	The profile with the lowest priority applies when multiple group memberships qualify a worker for multiple profiles of the same type.
3	Default Group Assignment	The profile with this group assignment applies to all workers who don't have any profile assignments. This way, they can report time and that time can get processed and transferred to the appropriate time consumers.

Compare time processing profiles

Troubleshoot issues related to unexpected rule results by comparing time profiles.

1. Go to **My Client Groups** > **Time Management** > **Tasks panel** > **Worker Time Processing Profiles**.
2. Select **Troubleshoot**.
3. On the troubleshoot profile page, search for and select a person.
4. Specify the profile evaluation date.
5. To list the profiles with an effective assignment on that date, select **Evaluate**.

   To see the various profile values, select up to three of the person's profiles and select **Compare Profiles**.