Contributers: Neeraj Garg, Constance Kim, Chris Panero, Eugene Yefimov

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described in this document unless you have purchased Oracle Project
Time and Expense and are a licensed user.
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Entering Time and Expense Information

Use the project time and expense windows described in this document to:

- Enter, view, modify, and submit for review and approval your timecards and expense reports directly in Oracle Projects.
- View, modify, and submit for review and approval timecards and expense reports entered using the character–mode versions of Oracle Project Accounting (10.6 and earlier).
- View (but not modify) timecards and expense reports entered using the pre–approved expenditures windows, Oracle Personal Time and Expense, or imported via the Transaction Import process.

Those users who are responsible for entering timecards and expense reports for a group of employees can also use these windows. For example, you might enter expense reports based on receipts you have received from several employees.

You can speed data entry by copying and modifying an existing timecard or expense report, and by creating aliases and hotkeys for project information and comments.

Notes:

- Oracle Project Time and Expense is not included in Oracle Project Costing or Oracle Project Billing. You cannot use any of the features described in this document unless you have purchased Oracle Project Time and Expense and are a licensed user.
- Your implementation team controls which fields and features are available to you. Your implementation of the time and expense windows may not match exactly the one described here.
- The time and expense windows are different from the windows used to enter batches of pre–approved expenditures. For more information, see: Pre–Approved Expenditures in the Oracle Projects User’s Guide.
- To enter time and expense information offline (for example, when you are travelling and don’t have access to Oracle Projects), you must use Oracle Personal Time and Expense. For more information, see: Overview of Oracle Personal Time and Expense in the Oracle Projects User’s Guide.
About Expenditures

Timecards and expense reports are classes of expenditures. Each timecard or expense report covers one week. Your implementation team specifies the day that starts each expenditure week. See: Implementation Options in the Oracle Projects User’s Guide for more information.

Navigating to the Project Time and Expense Windows

The following table provides a quick reference for the navigation paths to the project time and expense windows:

<table>
<thead>
<tr>
<th>Window Title</th>
<th>Standard Path</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy Expenditure</td>
<td>Navigate to Find Expenditures. Choose Find. Select an expenditure and then choose Copy To. or Navigate to Find Expenditures, choose New, fill in the New Online Expenditure window and then choose Create. In the Expenditure Items window, choose Copy From.</td>
<td>Page 5</td>
</tr>
<tr>
<td>Edit Comment Aliases</td>
<td>Navigate to Find Expenditures, Expenditure Summary, or Expenditure Items. Then choose Edit Comment Aliases from the Special menu.</td>
<td>Page 16</td>
</tr>
<tr>
<td>Edit Expenditure Aliases/Hotkeys</td>
<td>Navigate to Find Expenditures, Expenditure Summary, or Expenditure Items. Then choose Edit Expenditure Aliases/Hotkeys from the Special menu.</td>
<td>Page 15</td>
</tr>
<tr>
<td>Expenditure Items</td>
<td>Navigate to Find Expenditures. Choose Find. Select an expenditure and choose Open. or Navigate to Find Expenditures, choose New, fill in the New Online Expenditure window and then choose Create.</td>
<td>Page 5</td>
</tr>
<tr>
<td>Find Expenditures</td>
<td>Expenditures &gt; Online Expenditures &gt; Entry. Then choose Personal or Administrative, as specified by your system administrator.</td>
<td>Page 7</td>
</tr>
<tr>
<td>Hotkeys</td>
<td>Navigate to Expenditure Items. Choose Show Hotkeys from the Special menu.</td>
<td>Page 17</td>
</tr>
<tr>
<td>New Online Expenditure</td>
<td>Navigate to Find Expenditures. Choose New.</td>
<td>Page 5</td>
</tr>
<tr>
<td>Expenditure Summary</td>
<td>Navigate to Find Expenditures. Choose Find.</td>
<td>Page 19</td>
</tr>
</tbody>
</table>
Online Settings
Navigate to Find Expenditures, Expenditure Summary, or Expenditure Items. Then choose Online Settings from the Special menu.

Expense Report Payment Status
Navigate to Find Expenditures. Choose Find. Select an approved expense report and then choose Paid Status.

Reverse Online Expenditure Items
Navigate to Find Expenditures. Choose Find. In the Expenditure Summary window, select an approved online expenditure and choose Reverse.

Routing History
Navigate to Find Expenditures. Choose Find. In the Expenditure Summary window, select a submitted, approved, or rejected online expenditure and choose Routing.

Submit Online Expenditure
Navigate to Find Expenditures. Choose Find. In the Expenditure Summary window, select a working or rejected online expenditure and choose Submit.

Table 1 – 1 Navigating to the project time and expense windows

About Expenditure Sources
You can view timecards and expense reports that have been entered online or in pre–approved batches, as well as those imported from Oracle Personal Time and Expense or from other transaction sources. However, you can modify only those timecards and expense reports that are entered online.

<table>
<thead>
<tr>
<th>This source</th>
<th>Identifies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>Expenditures entered directly in the project time and expense windows, as well as expenditures entered in Oracle Project Accounting Release 10.6 and earlier</td>
</tr>
<tr>
<td>PTE</td>
<td>Expenditures entered into Oracle Personal Time and Expense and then submitted to Oracle Projects</td>
</tr>
<tr>
<td>Pre–Approved</td>
<td>Pre–approved expenditures entered and processed as a batch in Oracle Projects</td>
</tr>
</tbody>
</table>

Table 1 – 2 Expenditure Sources
Expense reports entered in Oracle Web Employees or the Invoices window in Payables and then interfaced from Payables. For more information, see: Integrating Expense Reports with Oracle Payables: Oracle Web Employees and Oracle Projects Integration Documentation Supplement.

Expenditures that are imported using the Transaction Import process. For more information, see: Transaction Import in the Oracle Projects User’s Guide.

### Table 1 – 2 Expenditure Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Payables</td>
<td>Expense reports entered in Oracle Web Employees or the Invoices window in Payables and then interfaced from Payables. For more information, see: Integrating Expense Reports with Oracle Payables: Oracle Web Employees and Oracle Projects Integration Documentation Supplement.</td>
</tr>
<tr>
<td>&lt;user–defined transaction source&gt;</td>
<td>Expenditures that are imported using the Transaction Import process. For more information, see: Transaction Import in the Oracle Projects User’s Guide.</td>
</tr>
</tbody>
</table>

### About Expenditure Statuses

As an expenditure (from any source) is created, submitted, updated, and approved, its status changes.

You can modify online expenditures (that is, expenditures that have a source of Online). How and whether you modify an online expense depends upon its status.

<table>
<thead>
<tr>
<th>This status</th>
<th>Means that</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working</td>
<td>You have not submitted the expenditure. You can modify working expenditures as needed.</td>
</tr>
<tr>
<td>Submitted</td>
<td>The expenditure is awaiting review. You can rework submitted expenditures and make corrections.</td>
</tr>
<tr>
<td>Approved</td>
<td>A submitted expenditure is approved for payment. You cannot rework an approved expenditure, but you can reverse one or more items and submit the reversing items.</td>
</tr>
<tr>
<td>Rejected</td>
<td>The expenditure is not approved. You can modify and resubmit rejected expenditures.</td>
</tr>
</tbody>
</table>

Table 1 – 3 Expenditure Statuses

For more information about modifying expenditures, see: Modifying Timecards and Expense Reports on page 24.
Creating Timecards and Expense Reports

You can start with a new timecard or expense report, or copy an existing timecard or expense report to use as a template.

Starting With a Blank Timecard or Expense Report

Complete the following steps to create a new timecard or expense report.

To create a new timecard or expense report:

1. Navigate to the Find Expenditures window and then choose New. The New Online Expenditure window opens.
   
   Note: You can also create a new timecard or expense report by choosing New in the Expenditure Summary window.

2. Choose an expenditure class (Timecards or Expense Reports) and then enter date and employee information as necessary, choose Create, and then enter detail information in the Expenditure Items window.

   For more information, see: Entering Information on Timecards and Expense Reports on page 9.

   Note: Once you are in the Expenditure Items window, you can copy data from an existing expenditure by choosing Copy From and then proceeding to Step 4 in Copying an Existing Timecard or Expense Report.

3. Save your work.

Copying an Existing Timecard or Expense Report

When you use an existing expenditure as a template, you can copy the expenditure data into a new expenditure, or copy the data from the copied expenditure into an existing expenditure.

Note: For reversed transactions and the transactions that reverse them (“net zero” transactions), you can copy the project, task, and expenditure type information but not the quantities.

To use an existing timecard or expense report as a template:

1. Navigate to the Find Expenditures window.
2. Enter the criteria for the timecard or expense report that you want to copy and then choose Find. For more information, see: Finding Existing Timecards and Expense Reports on page 7.

3. In the Expenditure Summary window, select the timecard or expense report you want to copy and choose Copy To.

   **An alternate way to copy an expenditure:** In the Find Expenditures window, choose New, fill in the New Online Expenditure window, and then choose OK. In the Expenditure Items window, choose Copy From.

4. In the Copy Expenditure window, choose the List of Values icon in the upper-left corner of the window to display a list of all your existing expenditures.
   - To narrow the list further, enter selection criteria in the Find field and then choose the Find button.

   **Note:** You can set how many weeks into the past are displayed in the Copy From window. For more information, see: Setting the Date Range on page 19.

5. Select an item from the list and choose OK.
   The information in the expenditure that you selected appears in the Copy Expenditure window.

6. Specify the attributes that you want to copy.
   - You can copy item comments and item descriptive flexfields only if you are also copying quantities.
   - You can copy quantities only if you are also copying expenditure types.

7. Choose Copy.
   The Expenditure Items window opens and is populated with detail items from the copied (template) timecard or expense report.
   If you are copying data into an existing expenditure (rather than copying to a new expenditure), the two sets of data merge. For reversed transactions and the transactions that reverse them ("net zero" transactions), Oracle Projects copies the project, task, and expenditure type information but not the quantities.

8. Make any changes that you want and then save your work.
Finding Existing Timecards and Expense Reports

You can use the Find Expenditures window to do the following tasks:

- Create a new timecard or expense report
- Locate any existing expenditure

Oracle Projects lists the expenditures in the Expenditure Summary window. For more information, see: Viewing Timecards and Expense Reports on page 19.

Once you locate the expenditures you want to see, you can:

- Review the routing status of selected online and PTE expenditures that have been submitted, rejected, or approved
- Review the payment status of approved expense reports
- View the detail lines for a selected expenditure
- Update the detail lines for a selected online expenditure whose status is Working or Rejected
- Select an expenditure and then copy all of its items into an existing timecard or expense report
- Create a new expenditure

You start by locating the expenditures that you want to view or copy.

▶ To find timecards and expense reports:

1. Navigate to Find Expenditures.

2. Specify the criteria for the expenditures you want to see, fill in the fields described below, and then choose Find.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Name</td>
<td>If you can enter expenditures only for yourself, you cannot modify these fields. If you are responsible for entering expenditures for others, select an employee name or number.  (Oracle Projects fills in the other field for you.)</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> If you do not select an employee, you may not get the results you expect. For more information, see: Setting Profile Options on page 27.</td>
</tr>
<tr>
<td>Employee Number</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Select Timecards, Expense Reports, or Both from the pop-up list.</td>
</tr>
<tr>
<td>Control Number</td>
<td>Expenditure identification number generated by Oracle Projects.</td>
</tr>
<tr>
<td>Expnd Ending Date</td>
<td>Select from the list of values (a calendar) an ending date or a range of dates. Leave both fields blank to see all the expenditures that meet the other criteria.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> You can set a default to specify how many expenditure weeks you want to show. See: Setting the Date Range on page 19.</td>
</tr>
<tr>
<td>Date Submitted</td>
<td>Select a range of dates from the list of values (a calendar), or enter the same date in both fields.</td>
</tr>
<tr>
<td>Total Hours</td>
<td>(For timecards only) Type a number of hours or a range of hours recorded on a given timecard.</td>
</tr>
<tr>
<td>Total Cost</td>
<td>(For expense reports only) Type a number or range of numbers representing the total raw cost on a given expense report. You do not need to format the numbers.</td>
</tr>
<tr>
<td>Status</td>
<td>Choose one or more options to find expenditures of the specified status, or none to find all statuses.</td>
</tr>
<tr>
<td>Source</td>
<td>Choose one or more options to find expenditures from the specified source, or none to find all expenditures from all sources.</td>
</tr>
</tbody>
</table>

Table 1 – 4 Find Expenditures window

---

8 Oracle Project Time and Expense User’s Guide
Entering Information on Timecards and Expense Reports

You enter your timecards and expense reports in a spreadsheet (matrix of columns and rows) format, using as many rows as you need. How and when you enter your time and expense information is up to you. You can enter as much information as you want during a session, and then save and close your expenditure. Until you submit the expenditure for approval, you can revise it at any time.

If you prefer, you can enter your hours and expenses throughout the week and submit at the end of the week. You can also enter and submit your hours or expenses each day as you incur them.

You can include attachments, such as receipts or memos. For more information, see: Including Attachments on page 14.

Oracle Projects validates your entries, including the data in the descriptive flexfields, when you advance to the next expenditure line, save your work, or exit the spreadsheet portion of the Expenditure Items window.

Filling In an Expenditure

Use these steps when you want to perform the following tasks:

• Fill in a new timecard or expense report

• Revise an existing expenditure that has a Working or Rejected status. For more information, see: About Expenditure Statuses on page 2.

Note: If you are responsible for entering expenditures on behalf of other employees, you can revise online expenditures for any employee that ever reported to your supervisor or, if you are a supervisor, to you. For example, if an employee moves from one supervisor to another, data entry users in both departments can modify online expenditures for that employee.

► To enter timecard or expense report information:

1. Create a new expenditure or open an existing expenditure.

For more information, see: Creating Timecards and Expense Reports on page 5 and Finding Existing Timecards and Expense Reports on page 7.

For new expenditures, go to the next step. For existing expenditures, skip to Step 4.
2. In the New Online Expenditure window, enter header (employee and date) information for this expenditure.

<table>
<thead>
<tr>
<th>For this field</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>Select Timecards or Expense Reports from the pop-up list.</td>
</tr>
<tr>
<td>Expnd Ending Date</td>
<td>Enter a date. If the date you enter is not the end date for the expenditure cycle, Oracle Projects corrects the date.</td>
</tr>
<tr>
<td>Employee Name</td>
<td>If you can enter expenditures only for yourself, you cannot modify these fields.</td>
</tr>
<tr>
<td>Employee Number</td>
<td>If you are responsible for entering expenditures for others, select an employee name or number. (Oracle Projects fills in the other field for you.)</td>
</tr>
<tr>
<td>Organization</td>
<td>Display only</td>
</tr>
<tr>
<td>Comment</td>
<td>(Optional) Enter a descriptive comment about this expenditure. The comment is displayed in the Expenditure Items and Expenditure Summary windows.</td>
</tr>
<tr>
<td>[]</td>
<td>Descriptive flexfield. Enter the information specified by your system administrator.</td>
</tr>
</tbody>
</table>

Table 1 – 5 New Online Expenditure window

3. Choose Create.

The Expenditure Items window opens.
4. Enter or update the detail information for your expenditure. Use the Tab key to move from field to field. To view or update totals, choose Daily Totals.

<table>
<thead>
<tr>
<th>For this field</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>(Optional) Type an alias or choose a hotkey to enter a project, task, expenditure, type, and item comment combination. For more information about aliases and hotkeys, see: Entering Data Quickly on page 15.</td>
</tr>
<tr>
<td>Project</td>
<td>Enter valid values for the project and task numbers and expenditure type.</td>
</tr>
<tr>
<td>Task</td>
<td></td>
</tr>
<tr>
<td>Expnd Type</td>
<td></td>
</tr>
</tbody>
</table>
| days of the week | For timecards, enter the number of hours worked. For expense reports, enter an amount or quantity. **Notes:**  
  - The starting day of the week is set by your implementation team.  
  - You can use the folder menu or tools to reorder or hide days. See: About Folders on page 21. |

Table 1 – 6 Expenditure Items window
The following display–only columns may not be visible in the window or included in the folder:

- Total Amount
- Total Units
- UOM (unit of measure)

You can add the columns to your folder and then view, resize, and rearrange them. For more information, see: Customizing the Presentation of Data in the Oracle Applications Users Guide.

5. For new expenditures, enter information about the selected expenditure day or line in the fields below the horizontal scroll bar.

For existing expenditures, you can change the quantity and (in the fields below the horizontal scroll bar) the Item Comment field and descriptive flexfield.

<table>
<thead>
<tr>
<th>This field</th>
<th>Displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Comment</td>
<td>Optional descriptive comment for this item. Type or select a comment. You can modify or add a comment by choosing a comment alias value from the List of Values or typing a comment.</td>
</tr>
<tr>
<td>[ ]</td>
<td>Descriptive flexfield. Enter the information specified by your system administrator.</td>
</tr>
</tbody>
</table>
| Adjustment Status| (Display only) If the item has been adjusted, this field shows the adjustment status:  
  - Reversed: The item has been reversed  
  - Reversing: The item reverses another transaction  
  - Unmatched: The item is a negative amount that does not reverse an existing transaction (also known as an unmatched negative) |
<p>| Project Name     | (Display only) Project name as defined when the project was created.     |</p>
<table>
<thead>
<tr>
<th>This field</th>
<th>Displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Name</td>
<td>(Display only) Task name as defined when the project was created.</td>
</tr>
<tr>
<td>Raw Cost</td>
<td>(Display only) Expense reports only. Oracle Projects calculates raw costs</td>
</tr>
<tr>
<td>Cost Rate</td>
<td>based on the cost rates effective at the time of entry. If the rates</td>
</tr>
<tr>
<td>UOM (Unit of measure)</td>
<td>change before you distribute expense report costs, the calculations</td>
</tr>
<tr>
<td></td>
<td>will not match your actual raw costs. Once you distribute your</td>
</tr>
<tr>
<td></td>
<td>expense report costs, actual raw costs will be reflected in the</td>
</tr>
<tr>
<td></td>
<td>appropriate windows and reports.</td>
</tr>
</tbody>
</table>

Table 1 – 7 Expenditure Items window (fields below the scroll bar)

6. After you enter a quantity for the last day in the row, press Tab to move to the next row.
Oracle Projects validates the detail information, including information in the descriptive flexfields, when you save your work or advance to the next expenditure line.

7. Save your work.

8. If you are ready to submit your timecard or expense report, choose Submit.
The Expenditure Items window closes, and the Expenditure Summary and Submit Online Expenditure windows open.

9. Route your expenditure by entering an overriding approver (if you have that option) and a routing comment. The status for the expenditure changes to Submitted or (if your implementation uses automatic approval) Approved.

10. Choose Submit.
For more information about submitting and routing an expenditure, see: Submitting Timecards and Expense Reports on page 22.

Displaying Daily Totals

Oracle Projects can display the daily totals as you enter or view expenditure items.

▶ To view an expenditure’s totals:

1. Find the expenditure you want to view and open it.
2. On the Expenditure Items window, choose Daily Totals. If you make any changes, choose Daily Totals again to refresh the totals.

Including Attachments

You can include attachments, such as receipts or memos, by linking an expenditure to one or more scanned images, text files, or other types of documents. For more information about attachments, see: Working with Attachments in the Oracle Applications User’s Guide.

▶ To include an attachment:

1. Open the Expenditure Summary window.
   For more information, see: Viewing Timecards and Expense Reports on page 19.
2. Select an expenditure and then choose Attachments from the Edit menu.
3. Enter a category, description, and data type.
4. Depending on the data type you choose, enter the text of your attachment or the name of the file or URL you want to attach.
5. Choose Save from the Action menu.

▶ To view an attachment:

1. Open the Expenditure Summary window.
2. Select an expenditure that has an attachment.
   When a selected expenditure has an attachment, the attachment button on the toolbar shows a paper clip holding a piece of paper.
3. To view the attachments, choose the attachment button.
   The Attachments window opens.
4. Select the attachment you want to see. For images and web page attachments, choose Open Document.
Entering Data Quickly

As you create timecards and expense reports, you will probably find that you often enter the same project and task information.

If your new timecard or expense report will be similar to one that you have previously created, you can copy the entire timecard or expense report and alter it to create a new expenditure. For more information, see: Copying an Existing Timecard or Expense Report on page 5.

If you find that you often enter the same type of expenditure information, or use the same types of comments, you can define an unlimited number of short codes, called aliases:

- Expenditure aliases are for any combination of project number, task number, expenditure type, and comment. In addition, you can assign up to 20 of your aliases to “hotkeys,” buttons that you can click to use the alias in a timecard or expense report.
- Comment aliases enter text such as “Includes Saturday night stay” or “Entertaining clients.”

You can modify aliases and hotkeys at any time.

Upgrading from previous versions:
- Oracle Projects preserves any aliases defined by upgrade users of Oracle Project Accounting Release 10.6 and earlier. Project/task aliases are now called Expenditure Aliases.
- Users of Oracle Personal Time and Expense cannot upload their PTE hotkeys into Oracle Projects. You must recreate your hotkeys in Oracle Projects.

Creating Aliases

You can maintain an unlimited number of expenditure and comment aliases and up to 20 hotkeys.

If you enter timecards and expense reports for other employees, note that you define a single set of aliases, not one set for each employee.

► To define or edit expenditure aliases:

1. Open one of these windows:
   - Find Expenditures
   - Expenditure Summary
   - Expenditure Items
2. Choose Edit Expenditure Aliases/Hotkeys from the Special menu.

3. Click the row that you want to enter or edit.

   To create a new row, choose New Record from the Edit menu. You can create an unlimited number of rows.

4. Type the information that you want to include in the alias. (You do not have to enter all the fields.) Press the Tab key to move from field to field.

<table>
<thead>
<tr>
<th>For this field</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>(Required) Type a name (up to 20 characters).</td>
</tr>
<tr>
<td>Shared</td>
<td>Click the check box if you want to use the alias in both timecards and expense reports. You cannot enter an expenditure type for shared aliases.</td>
</tr>
<tr>
<td>Project</td>
<td>Select a project number from the list of values.</td>
</tr>
<tr>
<td>Task</td>
<td>Select a task number from the list of values.</td>
</tr>
<tr>
<td>Expnd Type</td>
<td>Select an expenditure type from the list of values.</td>
</tr>
<tr>
<td>Comment</td>
<td>Type a comment or comment alias.</td>
</tr>
</tbody>
</table>

Table 1 – Edit Expenditure Aliases/Hotkeys window

5. To create a hotkey for this alias, click the Enable box. Enter a unique number between 1 and 20.

   If you do not want to create a hotkey for this alias, save your work and close the window.

6. Set the text and color for the button. You can see the results of your selections in the Hotkey Preview area.

   • Specify the text that you want to appear on the button. In the Label field, accept the default (the first seven characters in the Alias field) or type up to seven characters for a new name.

   • Select a color for the button from the Hotkey Colors options.

7. Save your work and close the window.

**To define comment aliases:**

1. Open one of these windows:
   - Expenditure Items
   - Find Expenditures
   - Expenditure Summary
2. Choose Edit Comment Aliases from the Special menu.

3. In the Comment Alias field, type a shortcut code (up to 20 characters).

4. In the Expenditure Item Comment field, type the comment that you want to appear when you use the alias.

5. Save your work and close the window.

Using Aliases and Hotkeys

You can set an option to allow information in an alias or hotkey to merge with the existing data in an expenditure line. This means that you can define some aliases or hotkeys with project and task information, others with expenditure type information, and still others with row–level comments so you can mix and match multiple aliases for a single expenditure line. For more information, see: Setting Alias and Hotkey Options on page 18.

By default, the information in an alias or hotkey does not overwrite existing data in an expenditure line.

► To use an alias:

1. In the Expenditure Items window, click the Alias field in an expenditure line.

2. Type an alias or select it from the List of Values.

   You can use only shared aliases or those aliases that are appropriate for the expenditure class (timecard or expense report) that you are working with.

   The Project, Task, Expenditure Type, and Item Comment fields fill with the data associated with the alias. The comment appears in the Expenditure Items window in the Item Comment field for every day of the expenditure week.

► To use a hotkey:

1. Open the Expenditure Items window.

2. Display the hotkey palette by choosing Show Hotkeys from the Special menu.

   You see the hotkeys that are appropriate for the expenditure class (timecard or expense report) that you are working with.

3. Click anywhere in the row where you want to enter data.
4. Choose the hotkey you want to use.

The Project, Task, Expenditure Type, and Item Comment fields fill with the data associated with the key. The comment appears in the Expenditure Items window in the Item Comment field for every day of the expenditure week.

Setting Alias and Hotkey Options

You can tailor how the aliases and hotkeys work to suit your needs. You can:

- Indicate whether the data in an alias or hotkey replaces existing expenditure data in an expense line. Existing expenditure data may include project and task numbers, expenditure type, and an item comment.
- Change the orientation of the hotkey palette

► To set alias and hotkey options:

1. Navigate to one of these windows:
   - Find Expenditures
   - Expenditure Summary
   - Expenditure Items
2. Choose Online Settings from the Special menu.
3. Set the options:
   - Select Alias Overwrites Data to merge the alias or hotkey values with existing information in the expenditure line.
   - Deselect Alias Overwrites Data if you do not want the alias or hotkey to overwrite existing data in an expenditure line.
   - Choose Horizontal or Vertical to change the orientation of the hotkey palette.
4. Choose OK.
Setting the Date Range

You can change the default interval between the:

- First and last dates in the Expnd Ending Date fields in the Find Expenditures window.
- First and last dates displayed when you copy an expenditure using the Copy From window.

The initial default is 4, so the display of expenditures extends four weeks into the past from the end of the current expenditure week.

To set the number of weeks displayed:

1. Navigate to one of these windows:
   - Find Expenditures
   - Expenditure Summary
   - Expenditure Items
2. Choose Online Settings from the Special menu.
3. Type a number for Ending Date Range (in weeks).
4. Choose OK and then save your changes.

The change does not affect the dates in the Find Expenditures window until the next time you open the form. The change is reflected immediately in the Copy From window.

Viewing Timecards and Expense Reports

For a given employee, you can view any timecard or expense report that was entered online, in pre–approved batches, in Oracle Personal Time and Expense, or imported via the Transaction Import process.

You can see both summary and detail information.

To view summary information in a list:

1. Navigate to the Find Expenditures window.
2. Specify the criteria for the expenditures you want to see. For more information, see: Finding Existing Timecards and Expense Reports on page 7.
The Expenditure Summary window displays the expenditures that fit the criteria. You cannot modify any of the fields.

<table>
<thead>
<tr>
<th>This field</th>
<th>Displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>The source of this expenditure. For more information, see: About Expenditure Sources on page 3.</td>
</tr>
<tr>
<td>Class</td>
<td>Timecard or Expense Report</td>
</tr>
<tr>
<td>Ending Date</td>
<td>The last day of the period covered by this timecard or expense report</td>
</tr>
<tr>
<td>Status</td>
<td>The expenditure’s status. For more information, see: About Expenditure Statuses on page 4.</td>
</tr>
<tr>
<td>Total Hours</td>
<td>(For timecards) The number of hours accumulated on the timecard</td>
</tr>
<tr>
<td>Total Cost</td>
<td>(For expense reports) The sum of all raw costs accumulated on the expense report</td>
</tr>
<tr>
<td>Control Number</td>
<td>Expenditure identification number generated by Oracle Projects</td>
</tr>
<tr>
<td>[ ]</td>
<td>Descriptive flexfield. Displays information specified by your system administrator.</td>
</tr>
</tbody>
</table>

Table 1 – 9 Expenditure Summary window

The following columns may not be visible in the window or included in the folder. You can add the columns to your folder and then view and rearrange the columns. For more information, see: About Folders on page 21.

**Note:** You can use the Query menu for any displayed field, even if it is hidden by default.

<table>
<thead>
<tr>
<th>This field</th>
<th>Displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment</td>
<td>The comment entered in the New Online Expenditure or Expenditure Items window. The comment is repeated in the Expnd Comment field at the bottom of the window.</td>
</tr>
<tr>
<td>Created By</td>
<td>The person (employee or data entry user) who created the timecard or expense report</td>
</tr>
<tr>
<td>Date Submitted</td>
<td>The actual date this timecard or expense report was submitted</td>
</tr>
</tbody>
</table>
## Displays

<table>
<thead>
<tr>
<th>This field</th>
<th>Displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Name</td>
<td>The name and number of the employee who did the work or incurred the expense</td>
</tr>
<tr>
<td>Employee Number</td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>The expenditure organization for the employee.</td>
</tr>
</tbody>
</table>

Table 1 – 10 Expenditure Summary window

### To view details for an expenditure:

In the Expenditure Summary window, select the expenditure you want to see and choose Open.

### About Folders

You can use folders to present the data you want to view, in the order that is most useful to you. To add a column to your folder, choose Show Field from the Folder menu. Click the field you want to add to the window and then choose OK. (Columns that have been added to the folder are not visible in the Show Field list of values.) To save the changes you have made to the folder, choose Save from the Folder menu.

To view columns that have been added to the folder but are not visible in the window, use the horizontal scroll bar to show the additional columns.

For more information about creating folders and displaying data in folders, see: Customizing the Presentation of Data in the Oracle Applications Users Guide.

### Viewing Expenditure Information in Reports and Windows

Expenditures entered in the project time and expense windows appear in the following Oracle Projects reports and windows:

- Timecard Entry report
- Expense Report Entry report

Labor hours appear in the Timecard Entry report and project expenses appear in the Expense Entry report. You can generate these reports by selecting an expenditure and choosing Print, or by submitting a request and entering any combination of the Week Ending, Employee Name, and Organization parameters.
• Review Online Time and Expense window
  Supervisors can query expenditures and perform all permitted functions (forward, forward with approval, reject, print).
• Expenditure Inquiry window

### Submitting Timecards and Expense Reports

You can submit online expenditures that have a status of Working or Rejected.

**To submit timecards and expense reports:**

1. Locate the timecard or expense report that you want to submit, using one of these methods:
   • Display the expenditure in the Expenditure Summary window and then select the expenditure that you want to submit.
   • Display the expenditure in the Expenditure Items window.
2. Choose Submit.
3. Add an optional comment.
   You can select an overriding approver if your regular approver has delegated the task.
4. Choose Submit.
   The status of the expenditure changes to Submitted.

### Checking an Expenditure’s Progress

You can check the progress of a timecard or expense report through the approval process, or see if an approved expense report has been paid and in what amount. You cannot change the information displayed. You can check an expenditure’s progress only when the:

• Source is Online or PTE (Oracle Personal Time and Expense)
• Status is Submitted, Approved, or Rejected

**Note:** If you are responsible for entering timecards or expense reports for a group of employees, you must monitor the status of the expenditures. The system routes rejected timecards and expense reports back to the employee who performed the work.
or incurred the expenses. The Routing History window shows the name of the employee who performed the work or incurred the expenses in the appropriate To and From fields.

To check routing progress:

1. Locate the timecard or expense report you want to check.

For more information about finding an expenditure, see: Finding Timecards and Expense Reports on page 7.

2. In the Expenditure Summary window, choose Routing.

You see the routing history for the specified expenditure:

<table>
<thead>
<tr>
<th>This field</th>
<th>Displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routing Action</td>
<td>Submitted, Approved, or Rejected. For more information about the status of an expenditure, see: About Expenditure Statuses on page 4.</td>
</tr>
<tr>
<td>To From</td>
<td>The name of the person who initiated, acted on (From), or received (To) the expenditure. <strong>Note:</strong> This is the name of the employee who did the work or incurred the expense, not the person who may have entered the data in the employee’s behalf.</td>
</tr>
<tr>
<td>On</td>
<td>Date the action occurred</td>
</tr>
<tr>
<td>Elapsed Days</td>
<td>Number of days since the last action was taken on this expenditure</td>
</tr>
<tr>
<td>Comment</td>
<td>Information entered by the person routing the expenditure</td>
</tr>
</tbody>
</table>

Table 1 – 11 Routing History window

3. Choose OK.

To check payment status of an approved expense report:

1. Locate the expense report you want to check.

For more information about finding an expenditure, see: Finding Timecards and Expense Reports on page 7.

2. In the Expenditure Summary window, choose Paid Status.

You see the total amount of the expense report, the amount already paid, and the outstanding amount for the specified expense report.

3. Choose OK.
Modifying Timecards and Expense Reports

You can modify expenditures whose source is Online. How you modify an online expenditure depends on its status.

Note: You cannot use the project time and expense windows to modify expenditures from any other source. Refer to Expenditures in the Oracle Projects User’s Guide for information on reversing, correcting, or adjusting expenditures from other sources.

<table>
<thead>
<tr>
<th>Status</th>
<th>Do This</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working or Rejected</td>
<td>Open and modify the expenditure.</td>
</tr>
<tr>
<td>Submitted</td>
<td>Rework the expenditure.</td>
</tr>
<tr>
<td>Approved</td>
<td>Reverse the expenditure.</td>
</tr>
</tbody>
</table>

After you modify or rework an expenditure, you can resubmit it. After you reverse an expenditure, you can submit a new one.

To modify a working, rejected, or submitted expenditure:

1. Locate the expenditure you want to modify. (The status must be Working, Rejected, or Submitted and the source must be Online.) For more information, see: Finding Timecards and Expense Reports on page 7.

2. In the Expenditure Summary window, select the expenditure.
   - For expenditures with a status of Working or Rejected, choose Open.
   - For expenditures with a status of Submitted, choose Rework.

The Expenditure Items window opens. The status of Submitted expenditures changes to Working.

3. Modify the expenditure items as needed.
   - To delete a line from the expenditure, choose Delete Record from the Edit menu or delete selected data from the line. Choosing Clear Record from the Edit menu only clears the line from the screen.
   - For more information, see: Filling In an Expenditure on page 9.

4. Save your work.
To reverse items on an approved expenditure:

1. Locate the expenditure you want to modify. (The status must be Approved and the source must be Online.)
   For more information, see: Finding Timecards and Expense Reports on page 7.

2. In the Expenditure Summary window, select the expenditure and choose Reverse.
   The Reverse Online Expenditure Items window opens, populated with the detail lines for the selected expenditure. Lines that have already been reversed (and the items that reversed them) do not appear. You cannot modify the data in the fields.

3. Select the lines you want to reverse and then choose Reverse. (The button shows how many items are selected.) Confirm your decision by choosing Yes.
   The Expenditure Items window opens, populated with the items you selected. All existing items show an adjustment status of Reversing.

4. Modify the expenditure as necessary. You can:
   - Add new lines or enter new data. You can enter data in any blank days of the week or enter a positive quantity. To enter a positive quantity, first exit the field, click in the field again, and then enter the positive quantity.
   - Delete entire lines (choose Delete Record from the Edit menu) or the quantity.
   - Change the comment and descriptive flexfield.
     Note: You cannot revise existing project, task, expenditure type, or quantity information.

5. Choose Submit to submit the reversal for approval.

Printing Timecards and Expense Reports

You can submit a request to print a report (Timecard Entry or Expense Report Entry) for all online timecards or expense reports.

Note: If a cost rate changes after you create an expense report but before you print the Expense Report Entry report, the report displays two lines for items with the expenditure type
associated with the cost rate. One line shows the old cost rate and the other shows the new cost rate.

► To print timecard and expense reports:

1. Display the expenditure you want to print in the Expenditure Summary window.

2. Select an expenditure (source must be Online) and then choose Print. Note the Request ID that appears in the toolbar.

3. Choose View My Requests from the Help menu to check the status of the report.

4. Choose Report to view the output of the report.
Setting Up the Online Time and Expense Feature

The implementation team and system administrator can affect the behavior of the online time and expense windows for employees and data entry users by doing the following:

• Setting profile options. See: Setting Profile Options on page 27.
• Adapting client extensions. See: Writing Online Time and Expense Client Extensions on page 30.
• Modifying views. See Modifying Views on page 44.

Setting Profile Options

This section describes how to use profile options to set up the online time and expense windows.

For more information about profile options, see: Appendix B, Profile Options in the Oracle Projects User’s Guide.

PA: Audit Online Expenditure Entry

Indicates whether or not Oracle Projects stores attributes and values for all items (historical and current) in your online expenditures. You can use this information to view all changes that have been made to a particular online expenditure. The system administrator can view and update the PA: Audit Online Expenditure Entry profile option at the site and application levels. The internal name for this profile option is PA_ONLINE_EXP_AUDIT.

Yes
Oracle Projects stores the entire change history of expenditure items, including the following:
– Dates, attributes, and values of each expenditure item
– The name of the person who made each entry and update
– The date and time each change was made.
You can use the PA_EXPENDITURE_HISTORY_V view to create your own reports.

No
Oracle Projects stores only the current version of this expenditure item.

(No value)
Equivalent to No
PA: AutoApprove Expense Reports

Indicates whether to automatically approve expense reports submitted from the online time and expense windows or Oracle Personal Time and Expense.

This profile option integrates with the AutoApproval client extension. For more information, see: Expenditure Access, Project User, and AutoApproval on page 35.

The system administrator can view and update the PA: AutoApprove Expense Reports profile option at the application level. The internal name for this profile option is PA_PTE_AUTOAPPROVE_ER.

Yes

Oracle Projects automatically changes the expense report status to Approved. You do not need to route or review your expense reports.

No

Default value is No; in other words, expense reports are not automatically approved. They require review and approval.

(No value)

Equivalent to No

PA: AutoApprove Timesheets

Indicates whether to automatically approve timecards submitted from the online time and expense windows or Oracle Personal Time and Expense.

This profile option integrates with the AutoApproval client extension. For more information, see: Expenditure Access, Project User, and AutoApproval on page 35.

The system administrator can view and update the PA: AutoApprove Timesheets profile option at the application level. The internal name for this profile option is PA_PTE_AUTOAPPROVE_TS.

Yes

Oracle Projects automatically changes the timecard status to Approved. You do not need to route or review your timecards.

No

Default value is No. Timecards require review and approval.

(No value)

Equivalent to No
PA: Licensed to use Project Time and Expense
Indicates whether you have purchased Oracle Project Time and Expense and are a licensed user.

The system administrator can view and update the PA: Licensed to use Project Time and Expense profile option at the site level. The internal name for this profile option is PA_TR_OTE_LICENSED.

| Yes       | Oracle Project Time and Expense has been purchased and licensed. Entitles the user to features and support. |
| No        | (Default) The user does not have access to Oracle Project Time and Expense features and support.             |
| (No value)| Equivalent to No                                                                                         |

PA: Override Approver
Indicates whether users can override the default approver when submitting expenditures created with the online time and expense entry windows.

The system administrator can view and update the PA: Override Approver profile option at the site, responsibility, application, and user levels. The internal name for this profile option is PA_ONLINE_OVERRIDE_APPROVER.

Note: You can modify the WHERE clause in the PA_EXP_OVRRDE_APPROVER_V view to change the default list of overriding approvers.

| Yes       | Users can select an overriding approver from a List of Values. By default, the List of Values contains all supervisors within the company. |
| No        | Users cannot select an overriding approver. The approver is determined by the expenditure routing extension.             |
| (No value)| Equivalent to No                                                                                         |

PA: Tab to Online Expenditure Item Comment Field
Indicates how users navigate to the Comment and descriptive flexfield regions of the Expenditure Items window.

The system administrator can view and update the PA: Tab to Online Expenditure Item Comment Field option at the site, application,
responsibility, and user levels. The internal name for this profile option is PA_ONLINE_EXP_ITEMS_NAV.

**Yes**  
Users can tab to the Item Comment and descriptive flexfield regions.

**No**  
Users can tab from one quantity field to the next.

**No value**  
Equivalent to No

### PA: Tasks to Display for Expenditure Entry

Indicates which tasks to display in the list of values for the Task fields when users enter online and pre-approved expenditures in Oracle Projects, supplier invoices in Oracle Payables, and requisitions and purchase orders in Oracle Purchasing.

The user and system administrator can view and update the PA: Override Approver profile option at the site, responsibility, application, and user levels. The internal name for this profile option is PA_TASKS_DISPLAYED.

- **All Tasks**: Displays the entire WBS (work breakdown structure) of the selected project
- **Chargeable Tasks**: Displays only the chargeable tasks of the selected project
- **Lowest Tasks**: Displays only the lowest tasks of the selected project

### Writing Online Time and Expense Client Extensions

Client extensions extend the functionality of Oracle Projects so you can implement site-specific rules. Client extensions use PL/SQL procedures that Oracle Projects calls at specific processing points. For more information about client extensions, see: Client Extensions in Oracle Projects in the *Oracle Projects User’s Guide*.

This section describes the client extensions that affect the behavior of the online time and expense feature:
Expenditures Submission Flow

When a user submits an expenditure, the Summary–Level Validation, AutoApproval, and Routing expenditures interact like this:
Figure 1 – 1
The Expenditure Submission Flow

1. Submit Expenditure
   - Call the Summary-Level Validation extension
     - Does the expenditure pass summary-level validation?
       - YES or Null
         - NO
           - Fail, show message (if any) and return to the Expenditure Summary window.
         - YES
           - Call the AutoApproval extension
             - Does the expenditure qualify for automatic approval?
               - YES
                 - Change the status of the expenditure to Approved.
               - NO or Null
                 - Call the Routing extension
                   - Does the extension return an approver?
                     - YES or Null
                       - NO
                         - Display the Submit window.
                           - User enters an overriding approver (as necessary) and submits the expenditure.
                       - YES
                         - Check the profile option PA: Override Approver
                           - Is the user allowed to enter an overriding approver?
                             - YES
                               - Check the profile option PA: Override Approver
                                 - Is the user allowed to enter an overriding approver?
                                   - YES
                                     - Display the Submit window.
                                       - User enters an optional routing comment and submits the expenditure.
                                   - NO
                                     - Create a routing record and change the status of the expenditure to Submitted.
                           - NO
                             - Display the Submit window.
                               - User enters an overriding approver (as necessary) and submits the expenditure.
                         - NO or Null
                           - Check the profile option PA: Override Approver
                             - Is the user allowed to enter an overriding approver?
                               - YES
                                 - Display the Submit window.
                                   - User enters an optional routing comment and submits the expenditure.
                               - NO or Null
                                 - Create a routing record and change the status of the expenditure to Submitted.
                       - YES
                         - Display the Submit window.
                           - User enters an optional routing comment and submits the expenditure.
About Routing Records

If a transaction fails validation, Oracle Projects does not create a routing record. This is different than Oracle Personal Time and Expense, which creates a routing record for any transaction that is submitted, even if the transaction fails validation.

Oracle Projects always creates routing records for imported timecards and expense reports, even if the Transaction Import extension rejects the expenditure.

Summary–Level Validation Extension

Use the summary–level validation extension to check the validity of one or more items in a submitted expenditure. For example, you could automatically reject any timecard that contains more (or less) than 40 hours or any expense report that includes meals that exceed a specified amount.

Writing the Summary–Level Validation Extension

To implement summary–level validation extensions, you modify a procedure that is contained in a template package provided with Oracle Projects. The name of the package is pagtcx, and the name of the procedure is summary_validation_extension. The package does not contain any rules, but does show sample logic to reject timecards that contain more than 40 hours.

Print and review the following files before you write your summary–level validation extensions. The files are located in the Oracle Projects admin/sql directory.

- **PAXTGTCB.pls** The Summary–Level Validation Extension Package Body Template contains the procedure that you modify to implement summary–level validation extensions. You can define as many extensions as you want with this package or within the predefined procedure.

- **PAXTGTCS.pls** Summary–Level Validation Extension Package Specification Template. If you create procedures outside the predefined procedure within the package, you must also modify this file to include the new procedures.
Oracle Projects provides the following parameters for the summary-level validation extension and passes all values for the expenditure being processed:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Usage</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_expenditure_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Identifies the expenditure</td>
</tr>
<tr>
<td>X_incurred_by_person_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Identifies the employee that submitted the expenditure</td>
</tr>
<tr>
<td>X_expenditure_end_date</td>
<td>IN</td>
<td>DATE</td>
<td>Ending date of the expenditure period</td>
</tr>
<tr>
<td>X_exp_class_code</td>
<td>IN</td>
<td>VARCHAR2</td>
<td>Identifies the expenditure class (OT for timecards and OE for expense reports)</td>
</tr>
<tr>
<td>X_status</td>
<td>OUT</td>
<td>VARCHAR2</td>
<td>Denotes the status of the expenditure (APPROVED or REJECTED). See: About the status Parameter on page 34.</td>
</tr>
<tr>
<td>X_comment</td>
<td>OUT</td>
<td>VARCHAR2</td>
<td>Comment to be passed back to the employee who submitted the expenditure. Stored as an expenditure routing comment.</td>
</tr>
</tbody>
</table>

Table 1 – 13 Parameters for the Summary-Level Validation Extension

**About the status Parameter**

Use the `status` parameter (`X_status`) to handle error conditions for your procedure. This parameter indicates the processing status of your extension:

- **x_status = 0**: The extension executed successfully.
- **x_status < 0**: An Oracle8 error occurred. Oracle Projects displays an error message in the Review Online Time and Expense window.
- **x_status > 0**: An application error occurred. Your extension must return an error message code to the Review Online Time and Expense window.
Expenditure Access, Project User, and AutoApproval Extension

The Expenditure Access, Project User, and AutoApproval Extension contains three procedures:

- Use the expenditure access procedure to restrict the actions that users can perform on online expenditures.
- Use the project user procedure to indicate whether an employee is an Oracle Projects user.
- Use the autoapproval procedure to define conditions under which timecards and expense reports are approved automatically.

Note: The procedures included in this extension may contain references to expenditures with a source of AP (Oracle Payables) or SELF SERVICE. These sources support integration with Web Employees. For more information, see: Oracle Web Employees and Oracle Projects Integration Documentation Supplement.

Writing the Expenditure Access, Project User, and AutoApproval Extension

To implement this extension, you modify one or more procedures that are contained in a template package provided with Oracle Projects. The name of the package is `pa_client_extn_pte`. The package contains three procedures:

- `pte_access_option` specifies which employees can enter timecards and expense reports.
- `check_time_exp_proj_user` reads the value of the PA: Allow Profile Time and Expense Entry profile option. The procedure is used in the integration with Web Employees.
- `get_exp_autoapproval` reads the values of the AutoApproval profile options.

Print and review the following files before you write your extension. The files are located in the Oracle Projects admin/sql directory.

- PAXPTEE.BLS: The Expenditure Access, Project User, and AutoApproval Extension Package Body Template contains the procedure that you modify to implement time or expense extensions. You can define as many extensions as you want with this package or within the predefined procedure.
- PAXPTEES.BLS: The Expenditure Access, Project User, and AutoApproval Extension Package Specification Template. If you create procedures outside the
predefined procedures within the package, you must also modify this file to include the new procedures.

Package.Procedure  pa_client_extn_pte.pte_access_option

This procedure contains default logic to allow employees to enter both timecards and expense reports.

Oracle Projects provides the following parameter for the expenditure access procedure:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Usage</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_person_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Identifies the employee</td>
</tr>
</tbody>
</table>

Oracle Projects passes in the value for the ID of the person who opened the online time and expense windows. The returned value indicates the type of actions a user can perform in these windows:

<table>
<thead>
<tr>
<th>Value</th>
<th>Action permitted for the specified employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Query only</td>
</tr>
<tr>
<td></td>
<td>(PTE shares this procedure but does not recognize the value.)</td>
</tr>
<tr>
<td>1</td>
<td>Enter timecards only</td>
</tr>
<tr>
<td>2</td>
<td>Enter expense reports only</td>
</tr>
<tr>
<td>3</td>
<td>Enter both timecards and expense reports</td>
</tr>
<tr>
<td>4</td>
<td>Cannot access the time and expense windows</td>
</tr>
<tr>
<td></td>
<td>(PTE shares this procedure but does not recognize the value.)</td>
</tr>
</tbody>
</table>

Table 1 – 14  Values for Expenditure Access

Package.Procedure  pa_client_extn_pte.check_time_exp_proj_user

The Web Employees self-service application calls this procedure. The procedure contains default logic to read the value of the PA: Allow Project Time and Expense Entry profile option.

Package.Procedure  pa_client_extn_pte.get_exp_autoapproval

This procedure contains default logic to read the values of the AutoApproval profile options.

Oracle Projects provides the following parameters for the expenditure autoapproval extension:
### Routing Extension

Use the routing extension to set the business rules for routing timecards and expense reports for approval. For example, expense reports that contain entertainment expenses and timecards that contain overtime could be routed to the project manager of the charged project.

### Writing the Routing Extension

To implement the routing extension, you modify a procedure that is contained in a template package provided with Oracle Projects. The name of the package is `paroutingx`, and the name of the procedure is `route_to_extension`. The package contains default logic to route all expenditures to an employee’s current supervisor (as defined in the Human Resources tables).

Print and review the following files before you write your routing extensions. The files are located in the Oracle Projects admin/sql directory.

- **PAXTRTEB.pls**
  
  The Routing Extension Package Body Template contains the procedure that you modify to implement routing extensions. You can define as many extensions as you want with this package or within the predefined procedure.
Routing Extension Package Specification Template.

If you create procedures outside the predefined procedure within the package, you must also modify this file to include the new procedures.

Package.Procedure

paroutingx.route_to_extension

Oracle Projects provides the following for the routing extension. Oracle Projects passes all values from the expenditure being processed.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Usage</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_expenditure_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>System–generated identifier of the expenditure</td>
</tr>
<tr>
<td>X_incurred_by_person_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Identifies the employee who performed the work or incurred the expenses</td>
</tr>
<tr>
<td>X_expenditure_end_date</td>
<td>IN</td>
<td>DATE</td>
<td>Ending date of the expenditure week</td>
</tr>
<tr>
<td>X_exp_class_code</td>
<td>IN</td>
<td>VARCHAR2</td>
<td>Identifies the expenditure type, either OT for timecards or OE for expense reports</td>
</tr>
<tr>
<td>X_route_to_person_id</td>
<td>OUT</td>
<td>NUMBER</td>
<td>Identifies the employee to whom expenditure is to be routed</td>
</tr>
</tbody>
</table>

Table 1 – 16 Parameters for the Routing Extension

Approval Extension

You can set up the approval extension to validate whether a supervisor has the authority to approve a particular expenditure that was created from either the online time and expense windows or Oracle Personal Time and Expense. For example, a particular supervisor may not be allowed to approve timecards that contain overtime, or expense reports that exceed a specified amount.

Oracle Projects calls your approval extensions when you select the Approve action in the Review Online Time and Expense window. The extension returns a result of success or failure, and is intended to either allow or disallow approval of the expenditure. If the result is a failure, your extension should return a message code so the form can display a predefined error message. (For more information about messages, see Writing Error Messages on page 43.)
Writing the Approval Extension

Oracle Projects provides a template package that contains the procedure you modify to implement the approval extension. The name of the package is **pa_client_extn_rte** and the name of the procedure is **check_approval**. The template package contains default logic to allow approval of all expenditures.

Print out and review the following files before you begin writing review and approve extensions. These files are located in the Oracle Projects admin/sql directory.

- **PAXRT1B.pls** Review and Approve Extension Package Body Template. This file contains the procedure that you modify to implement review and approve extensions. You can define as many procedures as you want within this package or within the predefined procedure.

- **PAXRT1S.pls** Review and Approve Extension Package Specification Template. If you create procedures outside the predefined procedure within the package, you must also modify this file to include those new procedures.

**Package.Procedure pa_client_extn_rte.check_approval**

Oracle Projects provides the following parameters for the approval extension. Oracle Projects passes all values from the expenditure being processed.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Usage</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_expenditure_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>System-generated identifier of the expenditure</td>
</tr>
<tr>
<td>X_incurred_by_person_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Identifies the employee who performed the work or incurred the expenses</td>
</tr>
<tr>
<td>X_expenditure_end_date</td>
<td>IN</td>
<td>DATE</td>
<td>Ending date of the expenditure week</td>
</tr>
<tr>
<td>X_exp_class_code</td>
<td>IN</td>
<td>VARCHAR2</td>
<td>Identifies the expenditure type, either OT for timecards or OE for expense reports</td>
</tr>
<tr>
<td>X_amount</td>
<td>IN</td>
<td>NUMBER</td>
<td>Amount of expenditure – either hours for X_exp_class_code = OT, or dollars for OE</td>
</tr>
</tbody>
</table>

Table 1 – 17 Parameters for the Approval Extension
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Usage</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_approver_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Application user ID of employee attempting to approve expenditure</td>
</tr>
<tr>
<td>X_routed_to_mode</td>
<td>IN</td>
<td>NUMBER</td>
<td>Responsibility of approving employee; either SUPERVISOR or ALL. See: About the routed_to_mode Parameter on page 40.</td>
</tr>
<tr>
<td>X_status</td>
<td>OUT</td>
<td>VARCHAR2</td>
<td>Status of procedure. For more information, see: About the status Parameter on page 34.</td>
</tr>
<tr>
<td>X_application_id</td>
<td>OUT</td>
<td>NUMBER</td>
<td>Short name of application defined in AOL. (PA for Oracle Projects)</td>
</tr>
<tr>
<td>X_message_code</td>
<td>OUT</td>
<td>VARCHAR2</td>
<td>Message code</td>
</tr>
<tr>
<td>X_token_1</td>
<td>OUT</td>
<td>VARCHAR2</td>
<td>Message tokens passed back to be used in message</td>
</tr>
<tr>
<td>X_token_2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X_token_3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X_token_4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X_token_5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 – 17 Parameters for the Approval Extension

**About the routed_to_mode Parameter**

Users navigate to the Review Online Time and Expense window using one of two menu paths:

- Expenditures > Online Expenditure Review > Supervisor
- Expenditures > Online Expenditure Review > All

Depending on the navigation path, the `routed_to_mode` parameter contains the value SUPERVISOR (Review and Approve) or ALL (Review and Approve All). For example, if a user navigates to the Review Online Time and Expense window using Supervisor and approves an expenditure, the value for `routed_to_mode` is SUPERVISOR.

You can use this parameter to allow the approver to circumvent the rules you enforce in the approval extension. For example, you might want to use this parameter for a supervisor who needs to approve expenditures irrespective of special logic in your extension.
Online Administrator Access Extension

By default, only supervisors have the authority to view and create timecards and expense reports for themselves and all employees that report directly to them. All other users can view and create only their own online expenditures. While all Oracle Projects users can navigate to both the Personal and Administrative options in Expenditures > Online Expenditures > Entry, only supervisors can query and enter data using either option. Otherwise, employees must choose the Personal option.

Use the Online Administrator Access extension to indicate if you want to change the group of employees whose online expenditures supervisors can access or if you want non–supervisor users to have this privilege as well.

To implement the Online Administrator Access extension, you modify both procedures that are contained in a template package provided with Oracle Projects. The name of the package is `pa_admin_ext`. The package contains the following procedures:

- The procedure `allowed_all` specifies for which employees data entry users can query or modify expenditures.
- The procedure `allowed_current` specifies for which employees data entry users can create expenditures.

Both procedures call the `pa_online_exp.GetAdminPersonId` function, which identifies the supervisor or data entry user (that is, the person who uses the online time and expense windows in Administrative mode). Modify the procedures to alter the list of employees whose online expenditures a supervisor or data entry user can view and enter. You can modify the WHERE clause in the `PA_EMPLOYEES_ADMIN_V` and `PA_CUR_EMP_V` to define additional logic.

Writing the Online Administrator Access Extension

To implement the online administrator access extension, you modify both of the procedures that are contained in a template package provided with Oracle Projects. The name of the package is `pa_admin_ext`, and the name of the procedures are `allowed_all` and `allowed_current`.

The `allowed_all` procedure contains default logic to allow administrative users to view and revise online expenditures for all employees who have ever reported to that user (if a supervisor) or the user’s supervisor (if a data entry user). By default, both current and previous supervisors for a particular employee can revise online expenditures for that employee. Supervisors and data entry users...
should decide who should modify which expenditures. For example, if Don Gray formerly reported to Amy Marlin but now reports to Theresa Quinlan, both Amy and Theresa can modify Don’s expenditures. Amy and Theresa agree that Amy will modify the expenditures that occurred before Don’s transfer date and Theresa will modify expenditures that occurred after Don’s transfer date.

The **allowed_current** procedure contains default logic to allow administrative users to create online expenditures for all employees currently reporting to that user (if a supervisor) or the user’s supervisor (if a data entry user).

Print and review the following files before you write your extension. The files are located in the Oracle Projects admin/sql directory.

**PAXTRX1B.pls** The Online Administrator Access Extension Package Body Template contains the procedures that you modify to implement administrator access extensions.

**PAXTRX1S.pls** The Online Administrator Access Extension Package Specification Template. If you create procedures outside the predefined procedures within the package, you must also modify this file to include the new procedures.

**Package.Procedure** **pa_admin_ext.allowed_all**

Oracle Projects provides the following parameters for the approval extension. Oracle Projects passes all values from the expenditure being processed.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Usage</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_person_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Identifies the employee who performed the work or incurred the expenses</td>
</tr>
</tbody>
</table>

Table 1 – 18 Parameters for the Online Administrator Access Extension (allowed_all)

**Package.Procedure** **pa_admin_ext.allowed_current**

Oracle Projects provides the following parameters for the approval extension. Oracle Projects passes all values from the expenditure being processed.
### Writing Error Messages in Client Extensions

Depending on how you have defined your messages, you can return up to five tokens with your message code. Tokens act as variables and allow you to return different values based on the processing in your extension. For example, you can define a default message such as:

"You can approve expense reports only for amounts up to token_1. Please forward to token_2."

In this example, the extension looks at the approver, references a table of approval limits for employees, and determines that the approver can approve amounts up to $1,000 and that the approver’s supervisor is Don Gray. The extension would return two tokens and a message code referencing the default message. The user would see the resulting message:

"You can approve expense reports only for amounts up to $1,000. Please forward to Don Gray."

You should consider the following information before you start to write error messages:

- Define messages in a custom application so they are maintained between upgrades.

  The **application_id** identifies your extension as registered in Oracle Applications Object Library. Registering it as a separate application preserves it when you upgrade Oracle Projects. For more information, see the *Oracle Applications Object Library Reference Manual.*

- Define the extension to return the application ID of the application that owns the message, message code, and up to five token values to display the message.

---

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Usage</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_person_id</td>
<td>IN</td>
<td>NUMBER</td>
<td>Identifies the employee who performed the work or incurred the expenses</td>
</tr>
<tr>
<td>X_ending_date</td>
<td>IN</td>
<td>DATE</td>
<td>Ending date of the expenditure week</td>
</tr>
</tbody>
</table>

Table 1 – 19 Parameters for the Online Administrator Access Extension
(allowed_current)
The **message_code** identifies a message you have defined under the application_id of your extension. Oracle Projects protects message codes during an upgrade.

### Modifying Views

Oracle Projects provides a number of views that you may find useful in your implementation of the online time and expense windows:

- **Control the lists of values for projects and tasks in the online time and expense windows by adding WHERE clauses to the views PA_ONLINE_PROJECTS_V and PA_ONLINE_TASKS_V.**
  
  **Caution:** Do not change the base views PA_PROJECTS_EXPEND_V and PA_TASKS_EXPEND_V.

- **Change the default list of overriding approvers by modifying the WHERE clause in the PA_EXP_OVRRDE_APPROVER_V view.** For more information, see: PA: Override Approver on page 29.

- **Create your own reports with the PA_EXPENDITURE_HISTORY_V view.** For more information, see: PA: Audit Online Expenditure Entry on page 27.

- **Control which employees a certain supervisor or data entry user can view in lists by modifying the WHERE clause in the PA_EMPLOYEES_ADMIN_V and PA_CUR_EMP_V.** For more information, see: Online Administrator Access Extension on page 41.

If you want implement additional controls, review the business rules and controls established for Oracle Projects to see how they may affect the online time and expense windows.
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A66749–01

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