HP Project and Portfolio Management Center

Software Version: 7.1

HP Time Management Configuration Guide

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Table of Contents

List of Figures

List of Tables

1 Getting Started with HP Time Management Configuration

In This Chapter:

- *Introduction to HP Time Management*
  - *Overview of the Time Management Process*
  - *Using Work Items in Time Sheets and Work Allocations*
  - *Using the My Tasks Portlet and Project Integration*
- *Overview of Configuring HP Time Management*
- *Related Information*

Introduction to HP Time Management

HP Time Management is an HP Project and Portfolio Management Center (PPM Center) application that allows users (resources) to use time sheets to report how long they worked on specific "work items." Work items are categorized in HP Time Management as tasks, requests, packages, or other miscellaneous types of work. Planners or operations managers assign work items to specific resources (users). For more information about work items, see *Using Work Items in Time Sheets and Work Allocations* on page 18.

Resources can also use the My Tasks portlet to report work they have done on projects and tasks.

On an ongoing basis, a resource's time sheets cover a consistent reporting period, such as weekly or semi-monthly. At the end of each reporting period, resources submit their time sheets for approval. Designated approvers then review and approve the reported time. Project managers can compare reported "actuals" to previously estimated time and associated costs.

Depending on your responsibilities, you can use HP Time Management to:

- Create and manage time sheets (many users will use HP Time Management for only this purpose)

- Review and approve time from time sheets

- Freeze and close time sheets

- Create work allocations for users

- Compare actual time reported by users against estimated time and associated costs

- Configure HP Time Management in a variety of ways as described in this guide.

Chapter 1, *Getting Started with HP Time Management Configuration,* on page 13 (this chapter), provides an overview of the processing of time sheets; introductions to using work items, the My Tasks portlet, and integration with HP Project Management; an overview of configuring HP Time Management; and a list of other documents related to HP Time Management.

Overview of the Time Management Process

HP Time Management uses time sheets to efficiently manage the time reporting and approval process. *Figure 1-1* illustrates the HP Time Management process, and subsequent sections outline the steps and the people involved in the process, and related information in this guide.

Most HP Time Management users are resources assigned to specific work items who complete time sheets to report their time, submit their time sheets for approval, and occasionally rework or cancel their time sheets, as described in detail in the *HP Time Management User's Guide.* However, PPM Center administrators can configure many different aspects of HP Time Management to meet their business needs, as described in this guide.

Figure 1-1. HP Time Management process overview

Create Work Allocations

Depending on functional requirements, managers or planners can optionally create work allocations, one per work item, to specify:

■ The amount of time allocated to be spent on a particular work item.

■ Which resources (users) are allowed to spend time on the work item.

■ The charge code (or codes with relative percentages) against which the time can be billed. For information about configuring charge codes, see Chapter 6, *Configuring Charge Codes,* on page 61.

The work item must exist before its work allocation is created and specified. The planner can then compare the actual time entered on time sheets to the time specified in the work allocation.

> The scheduled effort for a task supersedes any work allocation for that task.

For more information, see the *HP Time Management User's Guide.*

Create, Complete, and Submit Time Sheets

Resources who use HP Time Management enter the time they spent on work items by creating time sheets to specify which work items they worked on during the current reporting period, how much time they spent on each one, and, if configured, what types of activities they performed on those work items. Each time sheet spans a predefined time reporting period (such as a particular week or month), as determined by the time sheet policy assigned to each resource. Each work item on the time sheet is represented by a separate line. Resources submit completed time sheets for approval by designated approvers. Their managers or specified delegates can also submit time sheets on their behalf.

An administrator assigns each resource a time sheet policy, which controls many aspects of the creation and processing of time sheets, including such parameters as the time reporting period and whether resources are sent email reminders that their time sheets are due. See Chapter 3, *Configuring Time Sheet Policies,* on page 27.

For details about how users create, edit, submit, and otherwise manage their time sheets, see the *HP Time Management User's Guide.*

There are many ways an administrator can configure time sheets and related functions, as described in *Overview of Configuring HP Time Management* on page 19.

Cancel Time Sheets

Users (or their managers or delegates) can cancel their own time sheets. Only unsubmitted time sheets can be cancelled. Once a time sheet has been cancelled, it cannot be reopened or updated.

Approve Time

When a user completes and submits a time sheet, it progresses to a status of Pending Approval. Then the designated time approver can review and approve (or reject) the time reported on the time sheet. Typically, at the end of each time reporting period, time approvers use the Approve Time Sheets portlet or the Approve Time page to keep track of time sheets that await their approval. Each line on the time sheet can be independently approved or rejected, as necessary.

Once all the lines on a time sheet are approved, the time sheet moves forward in the process. If an approver rejects any time sheet lines, the user must rework them by, for example, correcting them and resubmitting the time sheet, or providing additional information or justification. For details about the approval process, see the *HP Time Management User's Guide.*

Some situations require bypassing the approval process; in this case, a time sheet policy can be configured to automatically approve time sheets when they are submitted. Also, depending on the time sheet policy, users might be automatically notified when any of their submitted time is rejected. See Chapter 3, *Configuring Time Sheet Policies,* on page 27.

Freeze Time Sheets

Even after a time sheet is approved, a period of time can be allowed for users to make and submit updates and for approvers to approve the updates. However, at some point, a designated billing approver can optionally "freeze" the time sheet to prohibit further changes and allow reporting of the time sheet's information or extraction of the information for a billing or financial system. When a time sheet has been frozen for sufficient time (or if it does not need to be frozen), the billing approver can "close" it.

Bill or Charge with Third-Party Applications

After a billing approver freezes a time sheet, costs can be retrieved to bill an internal or external customer. While HP Time Management does not explicitly perform this billing function, it does make the costs associated with each line of a time sheet available for billing, broken down by activity and charge code if applicable. For information about configuring charge codes, see Chapter 6, *Configuring Charge Codes,* on page 61. Freezing a time sheet effectively prevents any further changes to that time sheet, facilitating a stable period of time during which time information can be extracted and sent to third-party financial applications.

Once a time sheet has been approved and, if necessary, frozen for data extraction or other external use by a billing or financial system, the billing approver closes the time sheet and final reports can be generated.

Using Work Items in Time Sheets and Work Allocations

There are four high-level types of work items:

- **Request.** A request in HP Demand Management. For detailed information about requests, see the *HP Demand Management User's Guide.*

- **Package.** A package in HP Deployment Management. For detailed information about packages, see the *HP Deployment Management User's Guide.*

- **Project or task.** A project or task in HP Project Management. Projects can specify whether time is tracked at the project level, at the summary task level, or at the individual task level. For detailed information about projects, see the *HP Project Management User's Guide.*

- **Miscellaneous.** A miscellaneous item in HP Time Management, such as meetings and vacations. You can configure other miscellaneous work items, as required by the business.

Work items are specified in the following interactions:

- When a resource adds lines to a time sheet, he selects which type of work item to add, selects the specific item of that type, and adds that item to his time sheet. Each line on a time sheet represents one work item.

- When a planner creates an allocation for a work item, he selects the type of work item and then selects the specific item of that type for which to create the allocation.

A work item can require time and effort from more than one resource, and can span multiple steps of the process shown in *Figure 1-1* on page 15. For example, a request to fix a defect in a software application might involve adding functionality to the application. Several different resources might contribute to this request, each performing a different type of work, such as:

- Initial design

- Design review and signoff

- Coding

- Testing

- Release

All involved resources can specify the same request on their time sheets, and log their individual time against that request.

Using the My Tasks Portlet and Project Integration

If a user is licensed to use HP Project Management, the My Tasks portlet is available on his PPM Center default page. The My Tasks portlet allows him to log time that is then automatically copied to time sheets for projects that are integrated with HP Time Management, so that he does not need to separately access and complete the time sheets.

From this portlet, you can enter the breakdown (in hours per day, for example) of the time worked on each task over the same time period as the time sheet. This portlet is used to report time only for tasks, not for any other types of work items such as requests or packages.

A project manager can integrate HP Time Management and HP Project Management on a project-by-project basis. If a project uses this integration capability, users report details of the time they worked on that project's tasks in either HP Time Management time sheets or in the My Tasks portlet. Then that reported time is automatically reflected in the My Tasks portlet or the time sheets respectively.

For more information about the My Tasks portlet and integration, see the *HP Time Management User's Guide.*

Overview of Configuring HP Time Management

HP Time Management administrators can control many aspects of time sheet creation and processing, depending on business needs. The major configuration items are as follows:

- **Period types and time periods.** A period type specifies the frequency at which resources must submit time sheets, such as weekly, semi-monthly, or monthly. A time period is a specific date range of a given period type.

  For configuration information, see Chapter 2, *Configuring Period Types and Time Periods,* on page 23.

- **Time sheet policies.** Every resource (user) who completes a time sheet is assigned a time sheet policy. A time sheet policy sets rules in regard to completing time sheets, such as:

  - The period type (defined above).

  - The way users enter time—on an hourly basis day by day over the time period, on an hourly basis for the entire time period, or as a percentage of the entire time period.

  - Whether users are allowed to have more than one time sheet per time period.

  - Whether reminder email notifications to submit time sheets are sent to users. Reminders can be sent before unsubmitted time sheets are due, on their due date, or when they become overdue (delinquent).

  - Whether emails are sent to users whose approvers rejected reported time.

  - The minimum and maximum hours that can be reported on a time sheet, and if a user violates the policy, whether to prevent him from submitting the time sheet or just warn him (and the approver) of the violation.

  - Whether resources are required to complete a time sheet for each time period

  - The default charge codes for the time sheet policy.

  - Whether users must specify activities for particular types of work items.

  You can create and specify different time sheet policies for different resources as needed.

  For configuration information, see Chapter 3, *Configuring Time Sheet Policies,* on page 27.

- **Resources.** A resource who uses HP Time Management must have his time sheet policy, his time approver, and his billing approver configured using HP Resource Management. (Other aspects of resource configuration include, for example, the resource's organization, role, and calendar.)

  For configuration information, see Chapter 4, *Configuring Resources,* on page 51.

- **Activities.** You can configure a list of activities the organization uses to categorize work, such as design work or coding (see *Using Work Items in Time Sheets and Work Allocations* on page 18). Then, in addition to tracking the total time spent on a given work item, HP Time Management also tracks how much of the time was spent performing different activities. Activities can also be used to classify work as depreciable for financial accounting. (You can require that users specify activities on time sheets for particular work item types, such as requests or packages.)

  For configuration information, see Chapter 5, *Configuring Activities,* on page 57.

- **Charge codes.** Charge codes are entities used as links between work items and charge accounts to allow time information to be extracted for a billing system used by an internal customer, external customer, or requestor.

  For configuration information, see Chapter 6, *Configuring Charge Codes,* on page 61.

- **Override rules.** Override rules allow you to implement specific business rules that govern the approvers or charge codes for specific work items (time sheet lines), overriding an existing time sheet policy or time approvers. For example, you can configure an override rule such that time submitted by any resource toward a particular task is sent for approval to a specific manager, regardless of any default time approver settings.

  For configuration information, see Chapter 7, *Configuring Override Rules,* on page 67.

- **Filters.** Filters for HP Time Management limit the work item auto-complete lists on work allocations and time sheets.

  For configuration information, see Chapter 8, *Configuring Time Management Filters,* on page 79.

- **Validations.** Validations determine the acceptable input values for fields. You can add custom items to certain fields. For example, you can supplement the default set of miscellaneous work items that can be included on a time sheet—Vacation, Meetings, and Other—with additional validations appropriate for your business, such as Business Travel.

  For configuration information, see Chapter 9, *Configuring Time Management Validations,* on page 91.

- **User data.** User data comprises a set of custom fields that can be defined as needed by your business. HP Time Management uses the user data type named Time Sheet Line User Data, where you can define additional fields for users to complete on the **User Data** tab of the Work Items Details window for their time sheet lines. Optionally, you can configure user data fields such that users must specify values for them on each time sheet line before they can save the time sheet. For example, you might require that users select either **Internal** or **External** from a drop-down list for a field you call **Initiative Type,** and that users specify a text field you call **# Staff Affected.**

  For configuration information, see Chapter 10, *Configuring Time Management User Data,* on page 97.

- **Rules for the Suggested Items list.** HP Time Management automatically provides a Suggested Items list of work items that users are likely to add to their time sheets. This reduces the need for users to search for work items. You can customize the rules that govern which work items are automatically included in the Suggested Items list.

  For configuration information, see Chapter 11, *Configuring Rules for the Suggested Items List,* on page 103.

Related Information

The following documents also include information related to configuring HP Time Management:

- *HP Time Management User's Guide*

- *HP Demand Management User's Guide*

- *HP Deployment Management User's Guide*

- *HP Project Management User's Guide*

- *HP Deployment Management Configuration Guide*

- *HP Financial Management User's Guide*

- *Commands, Tokens, and Validations Guide and Reference*

- *Security Model Guide and Reference*

- *HP-Supplied Entities Guide* (includes descriptions of all HP Time Management portlets, reports, and request types)

Other more general information of interest is available in the *Getting Started* guide.

2 Configuring Period Types and Time Periods

In This Chapter:

Overview of Period Types and Time Periods

This section details how to configure HP Time Management period types and time periods.

A period type specifies the frequency at which resources must submit time sheets. A time period (period) is a specific date range of a given period type.

The available period types are:

- **Weekly.** Resources submit time sheets every week. Each period starts on a Monday by default. To change which day of the week each period starts on, see *Enabling and Disabling Period Types* on page 24.

- **Bi-Weekly.** Resources submit time sheets every two weeks. Each period starts on a Monday by default. For example, 3/12/07 – 3/25/07 and 3/26/07 – 4/8/07 are successive bi-weekly time periods in March and April 2007. To change which day of the week each period starts on, see *Enabling and Disabling Period Types* on page 24.

- **Semi-Monthly.** Resources submit time sheets twice a month. The first time period always starts on the 1st and ends on the 15th of the month. For example, the two semi-monthly time periods of March 2007 are 3/1/07 – 3/15/07 and 3/16/07 – 3/31/07.

- **Monthly.** Resources submit time sheets once a month. Each time period covers one full calendar month, such as 3/01/07 – 3/31/07 for March 2007.

Enabling and Disabling Period Types

Up to four period types can be enabled. Enabling period types makes them available to HP Time Management. For information about selecting an enabled period type to use in a time sheet policy, see Chapter 3, *Configuring Time Sheet Policies,* on page 27.

Enabling or disabling period types requires knowledge of SQL and DBA privileges. See your application administrator regarding selecting and enabling period types. The supported period types are listed in *Table 2-1*. Supported values for the associated `duration_code` are case sensitive.

Table 2-1. Period types and supported duration_code values

Period Type	Supported `duration_code` Values
Weekly	WEEKLY
Bi-Weekly	BI_WEEKLY
Semi-Monthly	SEMI_MONTHLY
Monthly	MONTHLY

By default, only the Semi-Monthly period type is enabled.

To enable or disable a period type:

1. Connect to the database schema containing the PPM Center installation (using SQL*Plus or your choice of SQL editor).

2. Run the following query to check the supported options:

   ```
   SQL> SELECT * FROM KTMG_PERIOD_TYPES
   ```

   This query should return the four period types.

3. To enable a period type, set the enabled flag to **Y** for the period types.

   For example:

   ```
   SQL> UPDATE ktmg_period_types
   SQL> SET enabled_flag = 'Y'
   SQL> WHERE duration_code = '<Supported Value>'
   ```

   where *<Supported Value>* is one of the supported values listed in *Table 2-1*.

   Each period type can be enabled or disabled. For example, to enable Weekly and Monthly period types and disable Bi-Weekly and Semi-Monthly period types, use:

   ```
   SQL> UPDATE ktmg_period_types
   SQL> SET enabled_flag = 'Y'
   SQL> WHERE duration_code = 'WEEKLY'

   SQL> UPDATE ktmg_period_types
   SQL> SET enabled_flag = 'N'
   SQL> WHERE duration_code = 'BI_WEEKLY'

   SQL> UPDATE ktmg_period_types
   SQL> SET enabled_flag = 'N'
   SQL> WHERE duration_code = 'SEMI_MONTHLY'

   SQL> UPDATE ktmg_period_types
   SQL> SET enabled_flag = 'Y'
   SQL> WHERE duration_code = 'MONTHLY'
   ```

4. For the Weekly and Bi-Weekly period types, you can change the day of the week that starts the time period, as specified by start_day_code. By default, the start day is Monday, but you can use SQL to change it to any day of the week. For example, to set start_day_code to Sunday for the Weekly period type, use:

   ```
   SQL> UPDATE ktmg_period_types
   SQL> SET start_day_code = 'SUNDAY'
   SQL> WHERE duration_code = 'WEEKLY'
   ```

The possible values for `start_day_code` are:

- SUNDAY
- MONDAY
- TUESDAY
- WEDNESDAY
- THURSDAY
- FRIDAY
- SATURDAY

Creating Time Periods

This section details how to create time periods. When you create time periods, you specify the number of time periods to create. For example, if the period type is set to Weekly and 52 time periods are created, a year's supply of time periods becomes available to users for time sheet creation. You can add other time periods at any time. Period types must be configured before creating time periods (see *Enabling and Disabling Period Types* on page 24).

To create time periods, you must have administrative access to the PPM Center application server such that you can run scripts under the home directory of the PPM Center application suite. The following steps outline how to use the tools provided on the PPM Center application server to create the required time periods:

1. Log on to the PPM Center application server as the application administrator.

2. Navigate to the `<PPM_Home>/bin` directory, where `<PPM_Home>` is the location where PPM Center was installed.

3. Run the `kGenTimeMgmtPeriods.sh` command as follows:

   sh kGenTimeMgmtPeriods.sh `<number of periods to create>`

   where `<number of periods to create>` is the number of time periods to create for a specific period type.

   A prompt is displayed for you to choose the period type. By default, time periods start from the current date.

   For additional `kGenTimeMgmtPeriods.sh` options, such as specifying a starting date for the time periods, execute the script with no parameters and select **Help.**

4. Repeat step 3 for each enabled period type.

3 Configuring Time Sheet Policies

In This Chapter:

- *Overview of Configuring Time Sheet Policies*
- *Creating a Time Sheet Policy*
    - *Configuring General Information and the Time Sheet Policy Tab*
    - *Configuring the Notifications Tab*
    - *Configuring the Min/Max Enforcement Tab*
    - *Configuring the Charge Codes Tab*
    - *Configuring the Activities Tab*
- *Configuring the Global Time Sheet Policy*

Overview of Configuring Time Sheet Policies

Time sheet policies are rules designed to control the creation and operation of time sheets. You can configure different time sheet policies and apply them to different resources (one by one) as needed. For example, you might want different time sheet policies to apply to different resources depending on their business units or whether they are employees or contractors.

Every resource is assigned a time sheet policy. You can designate one time sheet policy as the global time sheet policy (see *Configuring the Global Time Sheet Policy* on page 49). By default every resource is assigned this time sheet policy.

After you create new time sheet policies, you can assign them to specific resources as needed. If necessary, you can also edit existing time sheet policies, and the changes will apply to their assigned resources.

➤ Most changes to existing time sheet policies affect only time sheets that are created after the policy change. Exceptions are noted in following sections where appropriate.

The Time Sheet Policy window consists of the following section and tabs (configuration of each is described in this chapter):

- **General information section.** This section appears above the Time Sheet Policy window tabs and shows the **Name** of the time sheet policy and the **Period Type**—**Weekly, Bi-Weekly, Semi-Monthly,** or **Monthly**—that is to be used to log time.

- **Time Sheet Policy tab.** This tab is the default tab displayed when the Time Sheet Policy window opens. On this tab, you specify how resources who are assigned this policy are to enter time worked on their time sheets—by **Day in Hours, Period in Hours,** or **Period in Percent.** You can also allow a resource to create multiple time sheets for the same time period, require resources to submit a time sheet for each time period, and set up automatic time sheet approval.

- **Notifications tab.** On this tab, you can specify when email notifications should be sent to resources and what they should say. Notifications can be used to remind resources to submit time sheets (before or after they are due, or both). Notifications can also be used to tell resources that an approver has rejected time they submitted.

- **Min/Max Enforcement tab.** On this tab, you can set the maximum hours that resources can report on a time sheet for one day, and the minimum and maximum number of total hours they can report on a time sheet (or the minimum and maximum percentages they can report if time is entered by **Period in Percent**). You can also set the level of enforcement to only warn resources and approvers of policy violations, or to prevent resources from submitting time sheets that have violations.

- **Charge Codes tab.** On this tab, you set the default charge code or apportioned charge codes for the time sheet policy. For information about creating charge codes and how HP Time Management prioritizes time sheet policies among other factors in determining which charge codes to apply to the time logged by a resource, see Chapter 6, *Configuring Charge Codes,* on page 61.

- **Activities tab.** This tab allows you to require that users specify activities for any of the work item types—requests, tasks, packages, or miscellaneous items—on their time sheets. For information about creating activities, see Chapter 5, *Configuring Activities,* on page 57.
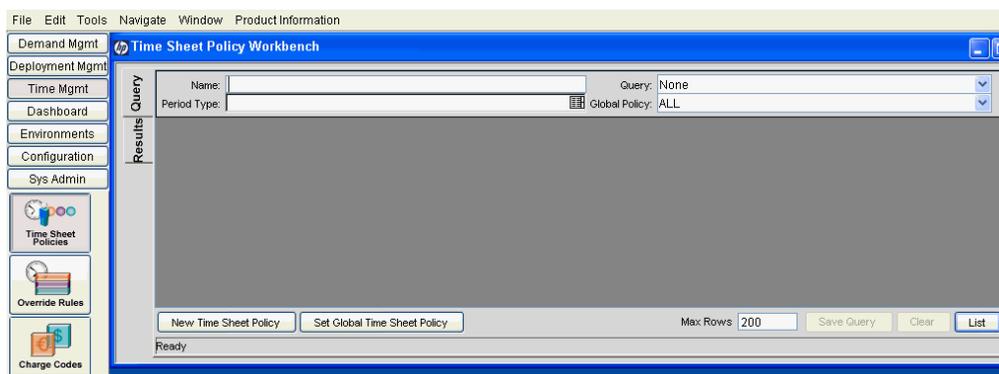
Creating a Time Sheet Policy

To create a time sheet policy, open the Time Sheet Policy Workbench for configuration as follows:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Time Sheet Policies.**

   The Time Sheet Policy Workbench opens.

4. Click **New Time Sheet Policy.** (If you want to revise an existing policy, click **List,** and open the desired policy in the **Results** tab.)

The Time Sheet Policy window opens.

5. Configure the time sheet policy as described in the following sections:

- *Configuring General Information and the Time Sheet Policy Tab* on page 31

- *Configuring the Notifications Tab* on page 34

- *Configuring the Min/Max Enforcement Tab* on page 42

- *Configuring the Charge Codes Tab* on page 46

- *Configuring the Activities Tab* on page 48

Configuring General Information and the Time Sheet Policy Tab

To complete the general information section of the time sheet policy:

1. Make sure that the required period types and time periods are configured, as described in Chapter 2, *Configuring Period Types and Time Periods, on page 23*.

2. At the top of the Time Sheet Policy window, in the **Name** field, enter the name of the new time sheet policy. (This procedure uses the policy name **Contractors** as an example.)

3. In the **Period Type** field, select the period type to use for this policy.

To complete the **Time Sheet Policy** tab:

1. In the **Enter Time by** field, specify how resources will enter time in their time sheets. The options are:

   ■ **Day in Hours.** Resources will report time for each work item in hours, with one column for each day of the time period. The number of columns depends on the period type (7 for weekly, 14 for bi-weekly, and so on).

   ■ **Period in Hours.** Resources will report time for each work item in total number of hours over the entire time period. There is only one column for the entire time period.

   ■ **Period in Percent.** Resources will report time for each work item as a percentage of the entire time period. There is only one column for the entire time period. Selecting this option enables the **Hours in a time period** options below it, as described in step 2.

   ➤ Unless you specify a maximum of 100 percent and a minimum of 100 percent per time sheet on the **Min/Max Enforcement** tab, resources who enter time by **Period in Percent** can submit a time sheet with lines that total more than or less than 100 percent. See *Configuring the Min/Max Enforcement Tab on page 42*.

2. If you chose to have resources enter time by **Period in Percent** in step 1, the **Hours in a time period** options became enabled. In this case, you must select one of the following options and specify a number of hours so that HP Time Management can convert the percentages resources enter into actual hours for each work item for the time period:

   ■ **(Number of workdays in the time period) X Hours in a day ___,** where **X** denotes multiplication and you enter the number of work hours in a day in the numeric text box. With this selection, the number of hours in a time period—the product of the multiplication—varies among time periods according to the number of workdays each time period has.

     When you specify that resources are to enter time by **Period in Percent** with this variable number of hours in a time period, there are subtleties to consider. The basis (denominator) of the percentage a resource specifies is intended to be the total time in the time period. Assuming five workdays every week, time periods for a **Monthly** period type vary in length from 20 to 23 workdays, and time periods for a **Semi-Monthly** period type vary from 9 to 12 workdays. In addition, the applicable calendar that HP Time Management uses can specify that certain days are not workdays, regardless of the period type.

     Finally, for the numerator of the percentage, if a work item of fixed duration is performed repeatedly, for example if a two-hour meeting is held every Tuesday, there are four occurrences (four Tuesdays) in some months and five in others, or two occurrences in some semi-monthly time periods and three in others.

     If time sheets must be precise, resources who work on more than one work item might need to recalculate for each time sheet the *percentages* of the time they report for each work item. HP recommends using this option only if it is acceptable for resources to report approximate percentages.

   ■ **Fixed number of hours ___** for a time period. With this selection, every time period has the same number of hours. E8ven the effect of specifying any normal working days as non-working days in calendars is overridden.

   For example, suppose that:

   ■ The **Period Type** is **Monthly.**

   ■ Time is entered by **Period in Percent.**

   ■ The **(Number of workdays in the time period) X Hours in a day ___** option is chosen, with **Hours in a day** specified as **8.**

   ■ The user creates a time sheet for a month that has 22 working days.

   If the user enters 10 percent for a particular work item, HP Time Management displays and reports that time as 10% of 22 * 8 hours, or 17.60 hours.

3. Select the appropriate checkboxes for this time sheet policy. In summary, these three checkboxes provide the following capabilities:

- Selecting the first checkbox allows resources who are assigned this policy to create multiple time sheets for any given time period. Selecting this option disables the **Min/Max Enforcement** tab. Since time is approved at the time sheet line level, you might not need to allow multiple time sheets in a period.

  For projects that use integration of HP Time Management and HP Project Management, a user's My Tasks portlet shows the total time he reported for a project or task in all his time sheets from all time periods, whether or not multiple time sheets for any one time period are allowed. The My Tasks portlet provides the user with links to each of his time sheets. For details about integration, see the *HP Time Management User's Guide.*

- Selecting the second checkbox results in all of the following:

  □ Resources who are assigned this policy (or their managers or delegates) are required to complete a time sheet for each time period, even if they are on vacation or performed no work that is tracked.

  □ Overdue time sheets for those resources appear in the Delinquent Time Sheets report.

  □ Email notifications can be sent to resources to remind them to submit their time sheets. These notifications can be sent before unsubmitted time sheets are due, on their due date, or when they become delinquent. For information about configuring these notifications, see *Configuring the Notifications Tab* on page 34.

- Selecting the third checkbox causes time to be approved automatically when submitted by resources who are assigned this policy. This option is useful when detailed approvals are not important to the organization.

  Changes to automatic approval take effect when currently unsubmitted or new time sheets are submitted.

  If a project explicitly requires time approval by a project representative (as specified in the **Cost and Effort** policy of the Project Settings page), the time logged against that project's tasks is not automatically approved, regardless of the setting of this option.

  For more information about configuring time approval in the **Cost and Effort** policy of the Project Settings page, see the chapter on integrating HP Time Management and HP Project Management in the *HP Time Management User's Guide.*

4. At the bottom of the Time Sheet Policy window, click **OK.**

   The time sheet policy is created.

5. Double-click the new time sheet policy in the list to reopen it.

As described in the following sections, complete the other tabs of the time sheet policy as needed.

Configuring the Notifications Tab

In the **Notifications** tab, you can specify that resources with this time sheet policy will be sent the following types of email notifications:

■ Reminders to submit their time sheets, if this policy's resources are required to complete time sheets for each time period. You specify when the reminders are to be sent and what to say in them. See *Sending Reminders to Users to Submit Time Sheets* on page 35.

■ Email messages whenever time the resources have submitted for approval gets rejected. See *Sending Notifications of Rejected Time to Users* on page 39.

Changes to notification configuration take effect within the time specified for the EMAIL_NOTIFICATION_CHECK_INTERVAL parameter in the server.conf file (set to 20 seconds by default), for both open and new time sheets. Open time sheets are time sheets that have not been closed.

You can enable or disable all notifications for individual resources, overriding any configuration of the time sheet policy's **Notifications** tab for those individuals. For example, you might not want to send notifications to certain executives. See *Configuring a Resource's Time Sheet Policy and Default Approvers* on page 54.

## Sending Reminders to Users to Submit Time Sheets

Time sheets are due when their time periods end. You can send users who are required to submit time sheets one or more email reminders to do so. You specify how many days before or after the due date a reminder is to be sent. You can configure multiple reminders. Each user is sent one email per time sheet per configured reminder.

If a user has already submitted a time sheet when a reminder for that time sheet is scheduled to be sent, the reminder is not sent.

Reminders are sent soon after midnight the day after the day you specify; examples are provided later in this procedure.

To send reminders to submit time sheets to all the users with this time sheet policy:

1. Make sure that the checkbox requiring users to complete time sheets for each time period (the second checkbox) is selected on the **Time Sheet Policy** tab.

2. In the Time Sheet Policy window, select the **Notifications** tab.
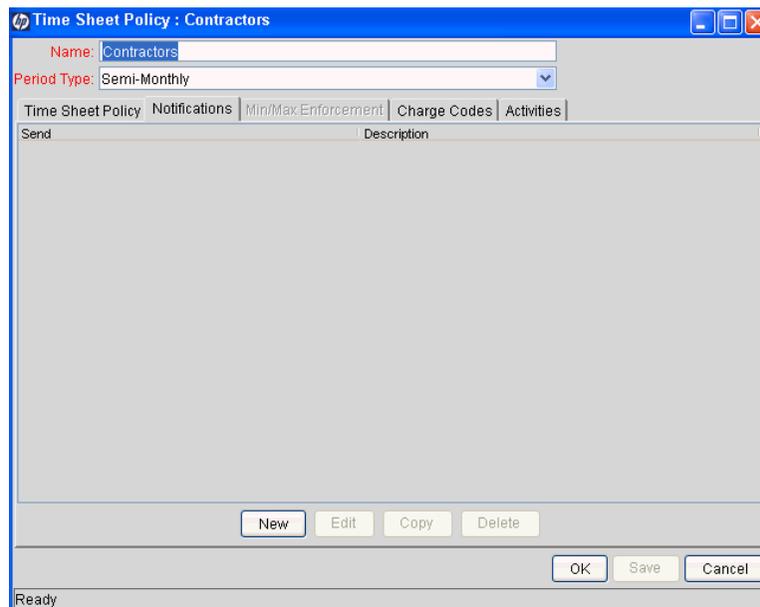
3. In the **Notifications** tab, click **New.**

The Add Notifications window opens, with two tabs:

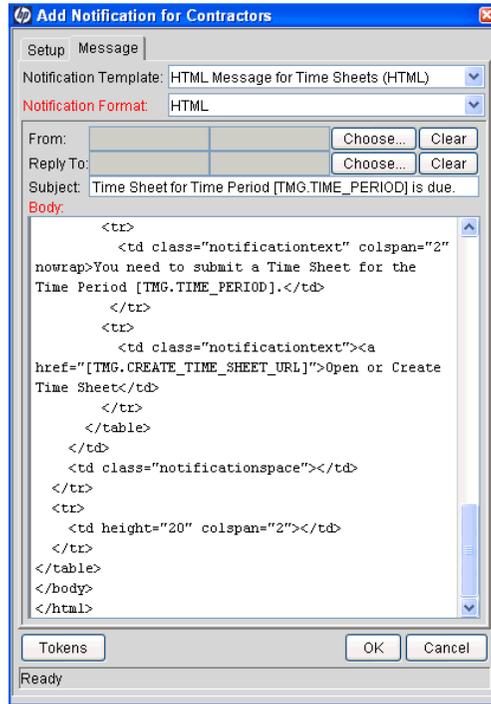- The **Setup** tab (displayed by default)

- The **Message** tab
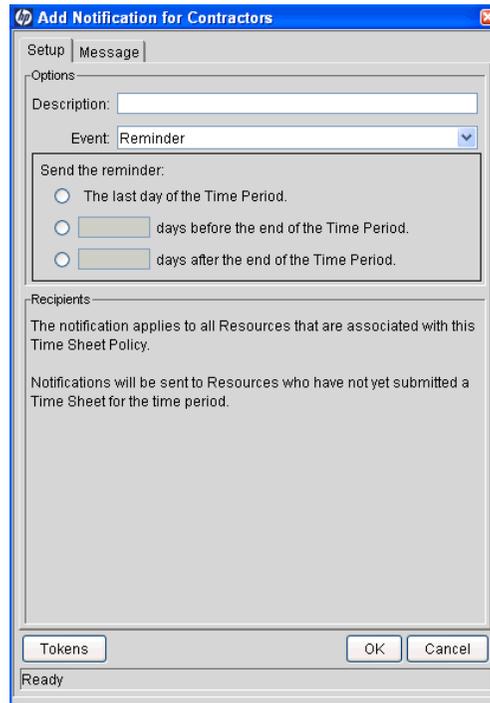
4. On the **Setup** tab:

   a. In the **Event** field, select **Reminder.**

   b. In the **Description** field, enter a description of the reminder.

   c. In the **Send the reminder** section, specify when to send the reminder.

   Each user with this time sheet policy will be sent this reminder only once per time sheet, soon after the *end* of the day you select. For example, if a Weekly time period ends on Friday, March 23 and the reminder is configured to be sent the last day of a time period, it could be sent at about 12:05 a.m. on Saturday, March 24. If you want each user to see a reminder each Friday in this example, configure the reminder to be sent each Thursday, the day before the end of the time period.

5. Select and complete the **Message** tab:

a. In the **Notification Template** field, select the notification template.

b. In the **Notification Format** field, select the notification format.

Notifications can be in plain text or HTML.

c. Click the **Choose** button to the right of the **From** field, which specifies who users will see as the sender of the email notification.

The Email Header Field window opens, with the following options:

- **Enter a Username.** Use this option to specify a particular user to receive the notification. The user must have an email address.

- **Enter an Email Address.** Use this option to enter an email address for the notification.

- **Enter a Standard Token.** Use this option to select from a list of system tokens that correspond to a user, security group, or email address.

- **Enter a User Defined Token.** Use this option to enter any field token that corresponds to a user, security group, or email address.

Select one of these options. The other fields of the Email Header Field window are automatically updated accordingly.

d. Complete the other fields in the Email Header Field window and click
    OK.

e. Repeat step c on page 37 and step d for the **Reply To** field, which
    specifies where user replies will be sent.

f. Complete the **Subject** field for the reminder notification.

    The default **Subject** field is:

    `Time Sheet for Time Period [TMG.TIME_PERIOD] is due.`

    The token `[TMG.TIME_PERIOD]` displays the time period for which the
    notification is being sent. You can use the default **Subject** field entry or
    enter your own subject line to be used in the email notification. You
    might want the **Subject** field to reflect when the reminders will be sent
    relative to when the time sheets are due.

g. In the **Body** field, complete the text of the notification that reminds
    users to submit time sheets. Use or revise the default entry, or enter
    your own message. You might want the text to reflect when the
    reminders will be sent relative to when the time sheets are due.

h. Click **OK.**

    The changes are added to the **Notifications** tab.

6. If you want to send email reminders to users with this time sheet policy on
    multiple days before or after their time sheets are due, repeat step 3
   on page 36 through step 5 on page 37.

7. Click **OK** or, to configure other tabs, click **Save.**

    The changes to the time sheet policy are saved. For details about when
    reminder notifications are sent, see step 4 on page 36.

Sending Notifications of Rejected Time to Users

To immediately notify users who are assigned this policy if some of their submitted time (that is, some of the time sheet lines on their time sheets) has been rejected by an approver:

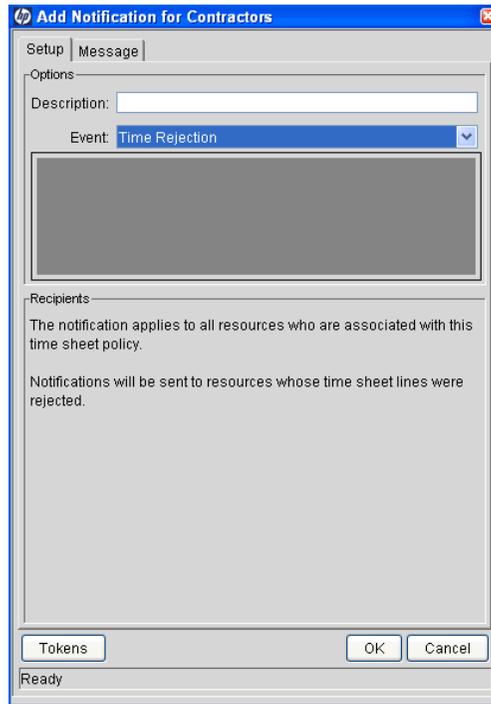1. In the Time Sheet Policy window, select the **Notifications** tab.
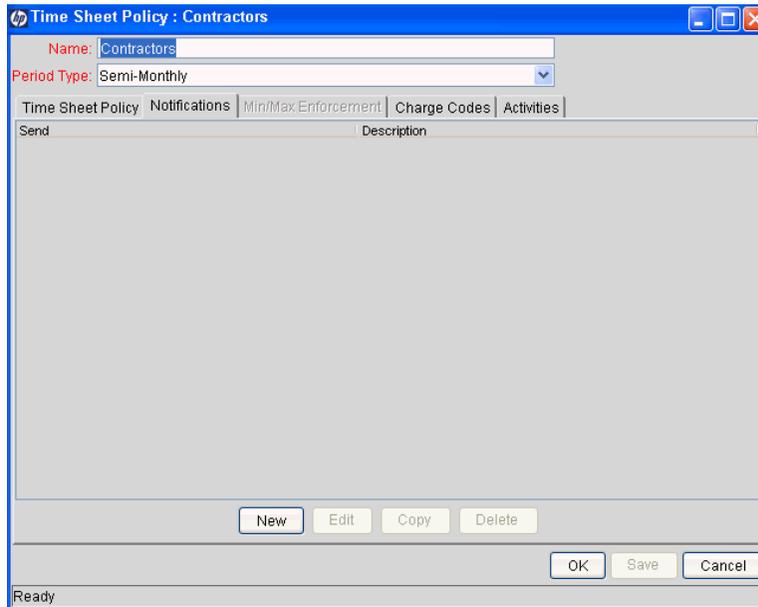
2. In the **Notifications** tab, click **New.**
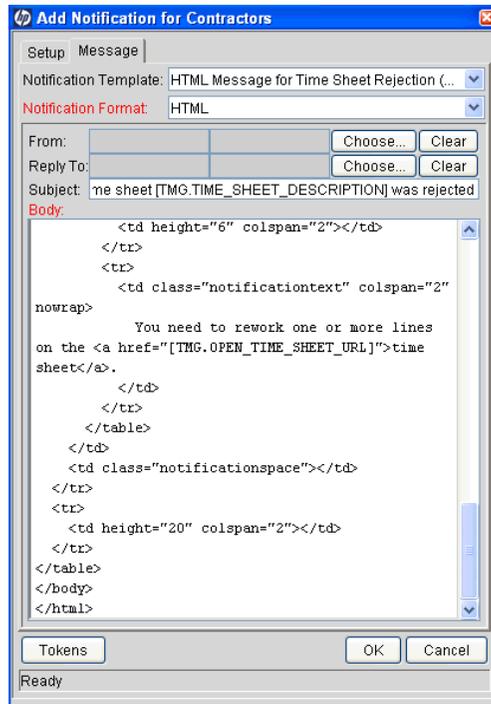
The Add Notifications window opens, with two tabs:

- The **Setup** tab (displayed by default)

- The **Message** tab

3. On the **Setup** tab:

a. In the **Event** field, select **Time Rejection.**

b. In the **Description** field, enter a description of the notification.

4. Select and complete the **Message** tab:

a. In the **Notification Template** field, select the notification template.

b. In the **Notification Format** field, select the notification format.

   Notifications can be in plain text or HTML.

c. Click the **Choose** button to the right of the **From** field, which specifies who users will see as the sender of the email notification.

   The Email Header Field window opens, with the following options:

   - **Enter a Username.** Use this option to specify a particular user to receive the notification. The user must have an email address.

   - **Enter an Email Address.** Use this option to enter an email address for the notification.

   - **Enter a Standard Token.** Use this option to select from a list of system tokens that correspond to a user, security group, or email address.

   - **Enter a User Defined Token.** Use this option to enter any field token that corresponds to a user, security group, or email address.

   Select one of these options. The other fields of the Email Header Field window are automatically updated accordingly.

d. Complete the other fields in the Email Header Field window and click **OK.**

e. Repeat step c and step d for the **Reply To** field, which specifies where user replies will be sent.

f. Complete the **Subject** field for the notification.

   The default **Subject** field is:

   `Your time sheet [TMG.TIME_SHEET_DESCRIPTION] was rejected.`

   The token `[TMG.SHEET_DESCRIPTION]` displays the current time sheet description. You can use the default **Subject** field entry or enter your own subject line to be used in the email notification.

g. In the **Body** field, complete the body of the notification that tells users that time they submitted has been rejected, and that rework is required. Use or revise the default entry, or enter your own message.

h. Click **OK.**

   The changes are added to the **Notifications** tab.

5. Click **OK** or, to configure other tabs, click **Save.**

The changes to the time sheet policy are saved. Users are notified whenever time on their submitted time sheets gets rejected.

Configuring the Min/Max Enforcement Tab

➤ The **Min/Max Enforcement** tab is disabled if resources are allowed to enter multiple time sheets per time period as specified on the **Time Sheet Policy** tab. See *Configuring General Information and the Time Sheet Policy Tab* on page 31.

➤ Before you configure the **Min/Max Enforcement** tab, you must enable the desired period types and create time periods as described in Chapter 2, *Configuring Period Types and Time Periods,* on page 23.

On this tab, you can configure:

■ If resources enter their time in hours per day or hours per period, the maximum hours you allow them to enter for any one day, and the minimum and maximum hours you allow them to enter for an entire time sheet

■ If resources enter their time as a percentage of the period, the minimum and maximum percentage of the period you allow them to enter

■ An enforcement level for the limits you specify

In all entries of minimum and maximum hours, you can specify partial hours such as 10.5.

To configure this tab:

1. In the Time Sheet Policy window, select the **Min/Max Enforcement** tab.

The options and associated text that appear in the **Enforce the Following Policies** section depend on the values specified for the period type and for how resources enter time. The configuration of the options in the **Enforce the Following Policies** section varies accordingly, as described in step 2.

2. Use the procedure in one of the following three major bullets to complete the checkboxes and numeric fields in the **Enforce the Following Policies** section:

■ If the **Time Sheet Policy** tab specifies that resources enter time by **Day in Hours** or **Period in Hours,** *and* the **Period Type** specified above the tabs is **Monthly** or **Semi-Monthly** (where, in each case, time periods have a variable number of workdays):

□ As needed, select the first checkbox and, in the **Maximum hours allowed per day** field, specify the highest number of work hours to allow a resource to enter for any one workday.

□ As needed, select the second checkbox and, in the **Maximum hours allowed per Time Sheet** field, specify the maximum number of hours to allow a resource to enter for any one workday. HP Time Management will multiply this value by the (variable) number of workdays in a time period.

□ As needed, select the third checkbox and, in the **Minimum hours allowed per Time Sheet** field, specify the minimum number of hours to allow a resource to enter for any one workday. HP Time Management will multiply this value by the (variable) number of workdays in a time period.

Go to .

■ If the **Time Sheet Policy** tab specifies that resources enter time by **Day in Hours** or **Period in Hours,** *and* the **Period Type** specified above the tabs is **Bi-Weekly** (in which case there are 14 days and ten workdays in every period) or **Weekly** (in which case there are seven days and five workdays in every time period):

□ As needed, select the first checkbox and, in the **Maximum hours allowed per day** field, specify the highest number of work hours to allow a resource to enter for any one workday.

□ As needed, select the second checkbox and, in the **Maximum hours allowed per Time Sheet** field, specify the maximum total number of work hours to allow a resource to enter for any one time sheet.

□ As needed, select the third checkbox and, in the **Minimum hours allowed per Time Sheet** field, specify the minimum total number of work hours to allow a resource to enter for any one time sheet.

Go to .

■ If the **Time Sheet Policy** tab specifies that resources enter time by **Period in Percent:**

□ As needed, select the first checkbox and, in the **Maximum percent allowed per Time Sheet** field, specify the maximum percentage of work time to allow a resource to enter for any one time sheet, using the total time in each particular time period as a basis.

□ As needed, select the second checkbox and, in the **Minimum percent allowed per Time Sheet** field, specify the minimum percentage of work time to allow a resource to enter for any one time sheet, using the total time in each particular time period as a basis.

➤ Unless you specify a maximum of 100 percent and a minimum of 100 percent per time sheet, resources with this time sheet policy can submit a time sheet with lines that total more than or less than 100 percent. If, for example, you specify a maximum of 110 percent and a resource specifies time sheet lines with a total of 105 percent on a time sheet, the resource is saying he worked 105 percent of the total time nominally covered by that particular time sheet's time period.

3. In the **Choose the Level of Enforcement** section, select either the option to warn the resource and approver that a minimum or maximum time requirement is not met but still allow the time sheet to be submitted or approved, or the option to prevent the resource from submitting the time sheet until the requirements are met.

4. Click **OK** or, to configure other tabs, click **Save.**

The changes to the time sheet policy are saved.

Configuring the Charge Codes Tab

Charge codes are created and maintained from the Charge Code Workbench. See Chapter 6, *Configuring Charge Codes,* on page 61 for:

- Detailed information about creating charge codes.

- Detailed information about precedence of charge codes as specified in work allocations, the time sheet policy, and override rules.

- Information about how users specify charge codes. (For details, see the *HP Time Management User's Guide.*)
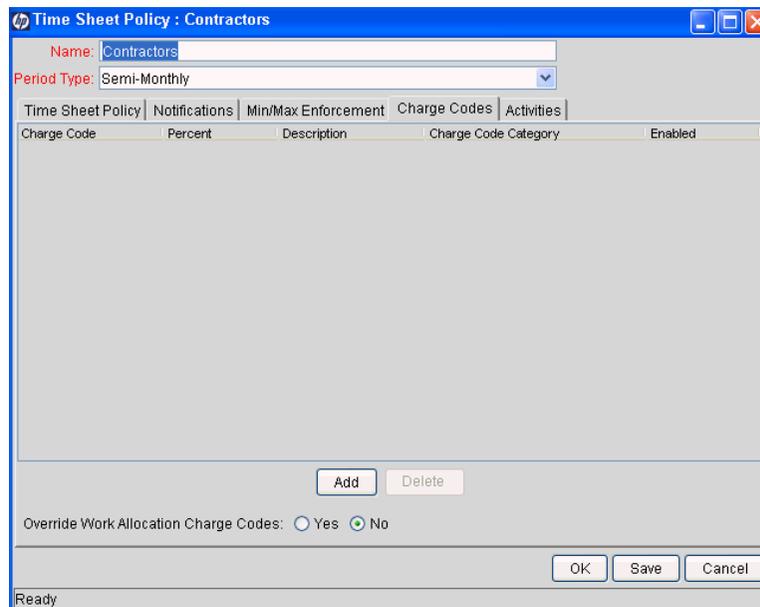
In the following procedure, you select one or more existing charge codes.

When you specify charge codes for a time sheet policy, they (and their percentage breakdown if you specify more than one charge code) apply to all the time sheet lines for all the resources assigned to that time sheet policy, except for lines that are subject to override rules.

Again with that exception, changes to charge code configuration take effect immediately, for both open and new time sheets. Open time sheets are time sheets that have not been closed. (If a charge code is being deleted, but it is used for work items on an open time sheet, its usage thus far on the time sheet is retained.)
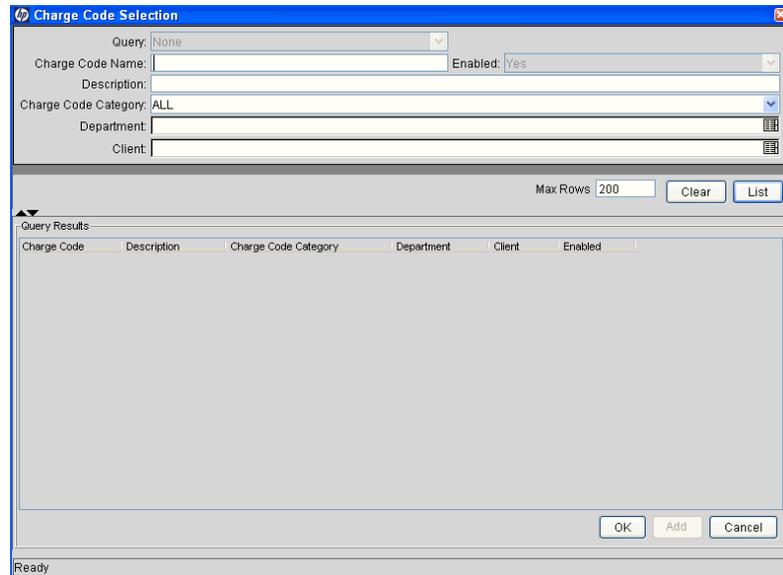
To set the time sheet policy's charge codes:

1. In the Time Sheet Policy window, select the **Charge Codes** tab.

2. Click **Add.**

The Charge Code Selection window opens.

3. Search for existing charge codes by completing the fields as desired in the Charge Code Selection window, as described in the following table. To display all charge codes, do not enter search criteria and skip to step 4.

Field Name	Description
Query	Limits the search to the selected saved query.
Charge Code Name	Limits the search to a charge code with the specified name.
Enabled	Limits the search to enabled or disabled charge codes.
Description	Limits the search to charge codes having the specified text in their descriptions.
Charge Code Category	Limits the search to charge codes with the specified charge code category.
Department	Limits the search to charge codes for the specified department.
Client	Limits the search to charge codes for the specified client name.

4. Click **List.**

The results of the query are listed in the Charge Code Selection window. Charge codes that are already listed on the **Charge Codes** tab of the time sheet policy are shown in bold.

5. Select one or more charge codes and click **OK.**

   The Charge Code Selection window closes, and the selected charge codes are added to the **Charge Codes** tab.

6. On the **Charge Codes** tab, specify values in the **Percent** column that add up to 100 percent.

7. In addition to the charge codes specified on the time sheet policy to be applied to all time logged under this policy, a work allocation can specify separate charge codes, with percentages, that are to be specifically applied to a particular work item. (For more information, see the *HP Time Management User's Guide.*)

   On the **Charge Codes** tab of the time sheet policy, you can specify whether policy-level charge codes take precedence over charge codes specified on individual work allocations. If you select **Yes** for the **Override Work Allocation Charge Codes** option, the time sheet policy's charge codes override (prevail over) the charge code settings in any work allocations specified for the same work items. If you select **No,** the work allocation charge code settings prevail, and the policy-level charge codes are applied to only work items for which no charge codes are specified on a work allocation or for which no work allocation exists.

   For more information about configuring charge codes and how HP Time Management prioritizes time sheet policies in determining them, see Chapter 6, *Configuring Charge Codes,* on page 61.

8. Click **OK** or, to configure other tabs, click **Save.**

   The changes to the time sheet policy are saved.

Configuring the Activities Tab

You use the **Activities** tab to specify the types of work items—requests, tasks, packages, and miscellaneous items—for which a resource must specify one or more activities when logging time.

When you require users to specify activities for any particular work item type, make sure the appropriate set of activities is configured for them to select, otherwise they will not be able to submit their time sheets.

See Chapter 5, *Configuring Activities,* on page 57 for:

■ Detailed information about creating activities.

■ Information about how users specify activities. (For details, see the *HP Time Management User's Guide.*)

To set the time sheet policy's activity requirements:

1. In the Time Sheet Policy window, select the **Activities** tab.
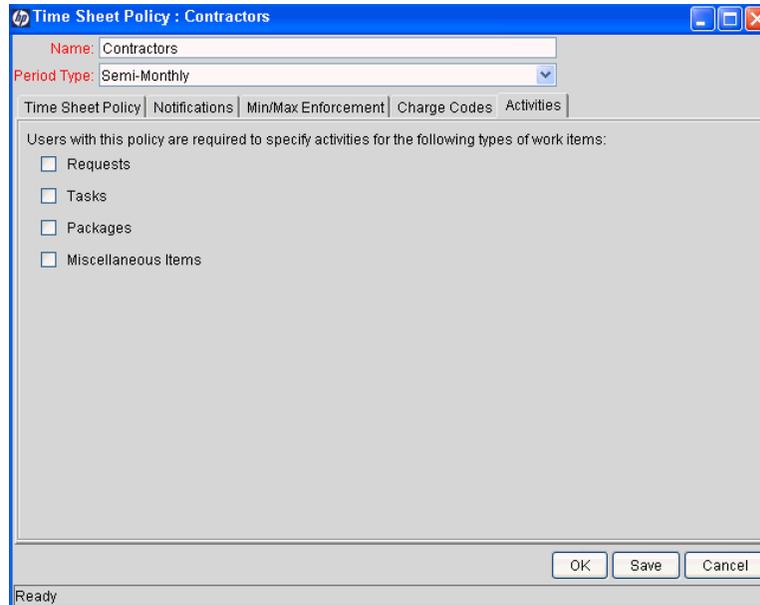
2. Use the checkboxes to indicate the types of work items for which users with this policy will be required to break down time by activity.

3. Click **OK.**

Configuring the Global Time Sheet Policy

HP Time Management provides one predefined time sheet policy that is set as the global time sheet policy. After you create other time sheet policies, you can make any of them the new global time sheet policy. Then, when a resource is added to the system, he is automatically assigned the current global time sheet policy by default (but he can be assigned another policy as needed). When you change which time sheet policy is the global one, previously assigned time sheet policies for other resources are not changed. (For information about assigning a specific time sheet policy to a resource, see *Configuring a Resource's Time Sheet Policy and Default Approvers* on page 54).
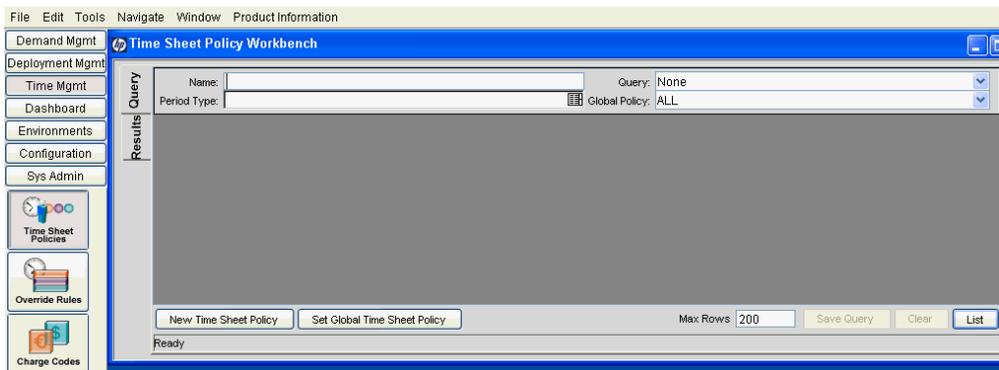
To make a time sheet policy the global time sheet policy:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Time Sheet Policies.**

   The Time Sheet Policy Workbench opens.

4. Click **Set Global Time Sheet Policy.**

   The Set Global Time Sheet Policy window opens.
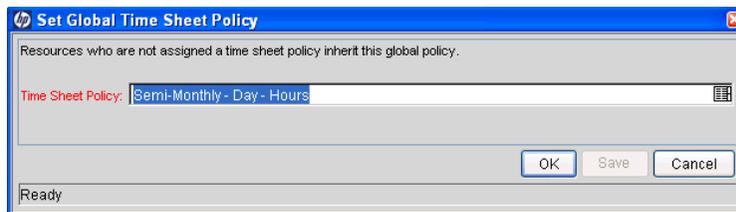
5. In the **Time Sheet Policy** field, select the time sheet policy that is to become the global one.

6. Click **OK.**

   The selected time sheet policy becomes the global time sheet policy, and it is automatically assigned to new resources by default.

4 Configuring Resources

In This Chapter:

- *Overview of Time Management Settings for Resources*
  - *Determining Time Approvers*
- *Configuring a Resource's Time Sheet Policy, Default Approvers, and Delegates*
  - *Configuring a Resource's Time Sheet Policy and Default Approvers*
  - *Configuring a Resource's Delegates*

Overview of Time Management Settings for Resources

A resource is an individual user who can be assigned to specific work items and can log time against them on time sheets. Resources are configured with fields such as their roles, departments, and managers.

Each resource uses HP Time Management–related features (time sheet policies, approvers, and delegations) that are configured in the standard interface on the **Time Management** tab of the Modify Resource window.

▶ Time sheet policies are applied to resources. If you plan to use time sheet policies other than the global policy, create them before configuring the resources. See Chapter 3, *Configuring Time Sheet Policies,* on page 27.

Determining Time Approvers

When a time sheet is saved or submitted, HP Time Management determines (derives) the approvers of each time sheet line.

Only people identified as time approvers (or their delegates) and who have have the Time Mgmt: Approve Time Sheets access grant can approve a given time sheet line. Default time approvers can be specified for individual resources (users), as described in this chapter. In fact, time approvers are determined several ways and they are derived according to the following priorities, depending on the work item type:

■ **For requests, packages, and miscellaneous items:**

1. If the resource's time sheet policy specifies automatic approval, approval is automatic. For information about configuring a time sheet policy to allow automatic approval, see *Configuring General Information and the Time Sheet Policy Tab* on page 31.

2. Otherwise, if there is an override rule that specifies a time approver and if its dependencies (filters) are met, that person is the time approver. For information about override rules, see Chapter 7, *Configuring Override Rules,* on page 67.

3. Otherwise, the approver is the resource's default time approver as specified on the **Time Management** tab for the resource. See *Configuring a Resource's Time Sheet Policy, Default Approvers, and Delegates* on page 53.

■ **For projects and tasks:**

1. If there is an override rule that is *specific to the task* and that specifies a time approver, and if the override rule dependencies (filters) are met, that person is the time approver. For information about override rules, see Chapter 7, *Configuring Override Rules,* on page 67.

2. Otherwise, if the project (in the **Cost and Effort** policy of the Project Settings page) requires approval by a project representative, that person (or persons) is the time approver. For information about configuring time approval in the **Cost and Effort** policy of the Project Settings page, see the chapter on integrating HP Time Management and HP Project Management in the *HP Time Management User's Guide.*

3. Otherwise, if the resource's time sheet policy specifies automatic approval, approval is automatic. For information about configuring a time sheet policy to allow automatic approval, see *Configuring General Information and the Time Sheet Policy Tab* on page 31.

4. Otherwise, if there is an override rule that is *not* specific to the task and that specifies a time approver, and if the override rule dependencies (filters) are met, that person is the time approver. For information about override rules, see Chapter 7, *Configuring Override Rules,* on page 67.

5. Otherwise, the approver is the resource's default time approver as specified on the **Time Management** tab for the resource. See *Configuring a Resource's Time Sheet Policy, Default Approvers, and Delegates* on page 53.

Configuring a Resource's Time Sheet Policy, Default Approvers, and Delegates

You can specify a resource's time sheet policy, default approvers, and delegates on the **Time Management** tab for the resource. To access this tab:

1. From the menu bar in the standard interface, select **Resource Management > Resources > Search Resources.**

   The Search Resources window opens.

2. Complete the search criteria for the resource whose time sheet policy or approvers you want to set, and click **Search.**

   The resources who meet your criteria are added in the **Select Resource to View** section of the Search Resources window.

3. Click the link for the desired resource in the **Username** column.

   The Modify Resource window for that resource opens, with the **General** tab selected.

4. Select the **Time Management** tab.

5. Proceed to one of the following sections:

   ■ *Configuring a Resource's Time Sheet Policy and Default Approvers on page 54*

   ■ *Configuring a Resource's Delegates on page 55*

Configuring a Resource's Time Sheet Policy and Default Approvers

To configure the time sheet policy and approvers for a resource:

1. If you have not already done so, access the **Time Management** tab for the resource. See *Configuring a Resource's Time Sheet Policy, Default Approvers, and Delegates on page 53*.

2. In the **Resource Time Management Settings** section, under the heading **Resource will:,** specify whether this resource will inherit the indicated global time sheet policy or use a particular time sheet policy you select.

3. Use the **Do not send this resource time sheet notifications** checkbox to indicate whether to send time sheet notifications to this resource. Selecting this checkbox prevents this resource from receiving any time sheet notifications for submitting time sheets or for reworking rejected time sheet lines, regardless of the configuration of the **Notifications** tab of that resource's time sheet policy (see *Configuring the Notifications Tab on page 34*).

4. Complete the two **Default Time Approver** fields to specify default approvers of this resource's submitted time. The default time approver is the individual resource or resource group who approves time sheet lines for this resource, unless other priorities take precedence as described in *Determining Time Approvers* on page 52. Time approvers must have the Time Mgmt: Approve Time Sheets access grant.

5. Complete the two **Default Billing Approver** fields to specify who can freeze and close this resource's time sheets. A default billing approver is an individual resource or a resource group who freezes and closes time sheets after they are approved and who manages billing processes. See *Overview of the Time Management Process* on page 15.

6. Click **Save.**

   The selected time sheet policy and default approvers for this resource are saved.

If you change which time sheet policy a resource uses, then only new time sheets for that resource are affected.

If you change approvers for a resource, when that resource's unsubmitted time sheet is later saved or submitted, the new approvers are derived for that time sheet (delegate information is not used in determining the approvers at that time).

Configuring a Resource's Delegates

HP Time Management includes the concept of delegation, where one person (the delegator) temporarily assigns his or her duties and responsibilities to another person, the delegate. Typically, people in management positions delegate review and approval authority for their time sheets to others, with specific start and end dates (for example, to cover upcoming vacations).

If a delegate has the required licenses and access grants, the delegate can, on behalf of the delegator:

■ Create, edit, and submit time sheets

■ Approve and reject submitted time logged

■ Freeze and close time sheets

Both the resources and their delegates must have HP Time Management licenses. Delegates do not inherit HP Time Management licenses or access grants from delegators. For example, charge code access is not transferred to a delegate. To enable delegates to perform their duties, make sure they have the access grants, such as Time Mgmt: Edit Time Sheets or Time Mgmt: Approve Time Sheets, they need to perform the delegated responsibilities.

A manager has implicit delegations, such as the ability to edit the time sheets of his or her direct reports, if the manager has the Time Mgmt: Edit Time Sheets access grant.

When you search time sheets, in addition to applying any filter criteria you specify, HP Time Management shows you only the time sheets that meet at least one of the following requirements:

- You created the time sheet (or someone created it for you).

- You are the manager of the time sheet's resource.

- You are the delegate of the time sheet's resource.

- You are a time approver of at least one line of the time sheet.

- You are the billing approver for the time sheet.

To specify a delegate for a resource:

1. If you have not already done so, access the **Time Management** tab for the resource. See *Configuring a Resource's Time Sheet Policy, Default Approvers, and Delegates* on page 53.

2. In the **Delegation Information** section, click **Add Delegate.**

3. Select a user from the list that appears.

   That user's name is added to the list of delegates, with **Start Date** and **End Date** fields that default to today's date.

4. Change the **Start Date** and **End Date** fields as necessary.

5. Repeat step 2 through step 4 as needed.

6. Click **Save.**

   The changes to the delegates for this resource are saved.

5 Configuring Activities

In This Chapter:

- *Overview of Activities*
- *Creating Activities*
- *Editing Activities*

Overview of Activities

HP Time Management can track actual time not only at the work item level, but also at a more granular level, using activities you define that are meaningful to your organization. The same activity can be used by any combination of work item types you specify—requests, tasks, packages, and miscellaneous. This information can be useful for reporting of total work by multiple resources on each activity, and for future planning estimates.

Common activities include:

■ Design

■ Design review

■ Coding

■ Testing

In a time sheet policy, you can require users to specify activities for any combination of the work item types when they enter time on their time sheets. See *Configuring the Activities Tab* on page 48.

You can also define activities specifically for assets. However, the time sheet policy does not provide a separate option to require that users specify activities for asset work items. Instead, in the time sheet policy, you can require that users specify activities for request work items in general (see *Configuring the Activities Tab* on page 48); assets are a type of request.

You can use activities to track capitalization for SOP 98-1 compliance. The SOP 98-1 functionality must be enabled for the activities to be marked as capitalized and for projects and tasks associated with those activities to track capitalization data. For information about SOP 98-1 functionality and using activities to track capitalized costs, see the *HP Financial Management User's Guide.*

➤ To create or edit activities, you must have the Config: Edit Activities access grant.

After selecting a time sheet line and clicking **Line Details,** users add activities to their time sheet lines on the **Charge Codes/Activities** tab. See the example in *Figure 5-1* and see the *HP Time Management User's Guide.*

➤ If a task in a work plan has a specified activity, that task can have only that one activity and users cannot change it or add any other activity to it. If a task in a work plan has no specified activity, users can select and add one or more predefined activities to that task on their time sheets; multiple activities are not transferred to the work plan, but their total time is.

Figure 5-1. Work Item Details, Charge Codes/Activities tab

Creating Activities

To create a new activity:

1. From the menu bar in the standard interface, select
   Administration > Time Management > Create an Activity.

   The Create Activity window opens.

2. Complete the fields in the Create Activity window and click **Create.**

   You can select an SOP 98-1 category and capitalize the item only if SOP 98-1 functionality is enabled and only if the activity is being defined for tasks. See the *HP Financial Management User's Guide.*

   The activity is saved and the Create Activity window closes.

Editing Activities

To edit an existing activity:

1. From the menu bar in the standard interface, select
Administration > Time Management > Manage Activities.

   The Manage Activities window opens, with a list of existing activities in
   the **Select an Activity** section.

2. Click the activity of interest in the **Activity Name** column.

   The Edit Activity window opens, with the same fields as when the activity
   was created.

3. Change the fields as necessary and click **Save.**

   The activity is saved and the Edit Activity window closes.

6 Configuring Charge Codes

In This Chapter:

- *Overview of Charge Codes*
- *Creating Charge Codes*
- *Editing Charge Codes*
- *Deleting Charge Codes*
- *Precedence of Setting Charge Codes*

Overview of Charge Codes

This chapter details procedures to configure and maintain charge codes. Charge codes are entities used as links between work items and charge accounts.

In some organizations, actual time is used as information for charge-backs to an internal customer, external customer, or requestor. HP Time Management does not explicitly perform this charge-back or billing function. However, HP Time Management can specify charge codes, so that links can be created between work items and charge accounts to allow the time information to be extracted for a billing system.

Charge codes do not have hierarchical information or any dependencies. Charge codes are simply a list of values. The Charge Code window creates, views, and updates charge codes.

➤ To make new charge codes visible to a user, that user must be a member of a security group with **Restrict Charge Codes to the following rules** deselected in the **Charge Code Rules** tab in the Security Group Workbench, or that user must have the appropriate rules configured to allow access.

After selecting a time sheet line and clicking **Line Details,** users add charge codes to their time sheet lines on the **Charge Codes/Activities** tab. See the example in *Figure 6-1* and see the *HP Time Management User's Guide.*

Figure 6-1. Work Item Details, Charge Codes/Activities tab

Default charge codes can be set for a time sheet line based on their configuration in work allocations, time sheet policies, and override rules. See *Precedence of Setting Charge Codes* on page 66.
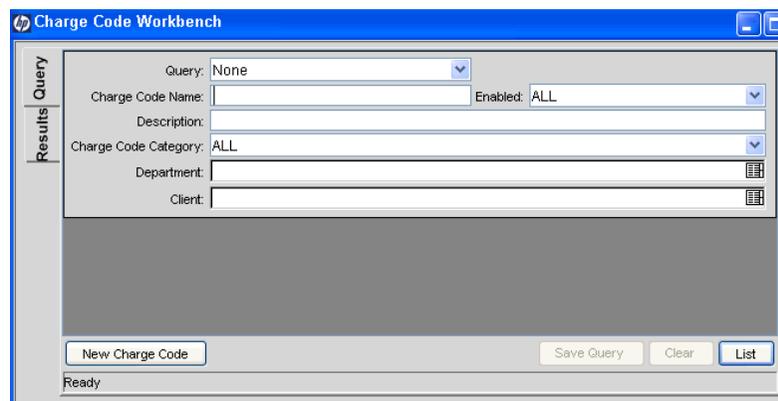
Creating Charge Codes

To create a new charge code:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**
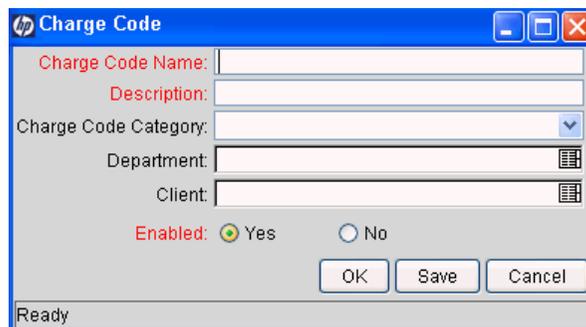
    The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Charge Codes.**

    The Charge Code Workbench opens.

4. Click **New Charge Code.**

    The Charge Code window opens.

5. Complete the fields in the Charge Code window as specified in the following table.

Field Name (*Required)	Description
*Charge Code Name	The name of the charge code.
*Description	The description of the charge code.
Charge Code Category	The category of the charge code. The default options are: ■ blank (the default, equivalent to **ALL** in the Charge Code Workbench) ■ **Billable** ■ **Non-Billable** These options can be changed as described in Chapter 9, *Configuring Time Management Validations,* on page 91.
Department	The department of the charge code.
Client	The client associated with the charge code. The default options are: ■ blank (the default) ■ **Client 1** ■ **Client 2** These options can be changed as described in Chapter 9, *Configuring Time Management Validations,* on page 91.
*Enabled	Whether or not the charge code is enabled.

6. Click **OK.**

The charge code is added to the system.

Editing Charge Codes

To edit an existing charge code:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Charge Codes.**

   The Charge Code Workbench opens.

4. In the **Query** tab, enter search criteria and click **List.**

   The **Results** tab lists the charge codes that meet your search criteria.

5. In the **Results** tab, open the existing charge code of interest.

   The Charge Code window opens.

6. Change the fields as necessary. See the table in

7. Click **OK.**

   The changes to the charge code are saved.

Deleting Charge Codes

To delete a charge code:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Charge Codes.**

   The Charge Code Workbench opens.

4. In the **Query** tab, enter search criteria and click **List.**

   The **Results** tab lists the charge codes that meet your search criteria.

5. In the **Results** tab, select an existing charge code and click **Delete.**

   A dialog box opens for confirmation.

6. Click **Yes.**

   The charge code is deleted.

Precedence of Setting Charge Codes

Default charge codes can be set for a time sheet line according to the following order of precedence:

1. **Setting the charge codes in the work allocation.** A work allocation can have associated charge codes with settings that specify whether users can update charge codes and whether users are required to enter charge codes for the time sheet line. If charge codes are required but the user does not enter any, the time sheet shows an error message when it is submitted. When a manager or planner creates a work allocation, access to it can be restricted to specified resources and groups. (For information about assigning charge codes to work allocations, see the *HP Time Management User's Guide.*) When a user adds a work item to a time sheet, if any work allocation charge codes have been specified, they get assigned to the time sheet line. Any changes to the work allocation charge codes after the time sheet line has been created are not available for that line.

2. **Setting the charge codes in the time sheet policy.** The **Charge Codes** tab in the Time Sheet Policy window allows you to set default charge codes for a time sheet policy. (See *Configuring the Charge Codes Tab* on page 46.) In the absence of work allocation charge codes, the default charge codes for a resource (using his or her time sheet policy) are set for every time sheet line added to a time sheet. However, if work allocation charge codes exist, the **Override Work Allocation Charge Codes** option on the **Charge Codes** tab in the Time Sheet Policy window controls which charge codes are applied.

3. **Setting the charge codes in override rules.** Override rules can determine charge codes, whether users can change them, and whether users are required to enter them for the time sheet line. If a time sheet line meets the dependencies specified for an override rule and if charge codes are specified as results of the override rule, those charge codes are applied (if none have been applied yet). If the charge codes are updateable, the user can change them. If the charge codes are required, the user must specify charge codes for the line. If charge codes are required but the user does not enter any, the time sheet shows an error message when it is submitted. The override rule takes precedence over time sheet policy and work allocation charge codes only if the **Override Time Sheet Policy Charge Codes** and **Override Work Allocation Charge Codes** fields in the Override Rule window are set to **Yes.** For more information about override rules, see Chapter 7, *Configuring Override Rules,* on page 67.

7 Configuring Override Rules

In This Chapter:

Overview of Override Rules

Override rules allow you to supersede the default processes by which HP Time Management determines (derives) who approves particular time sheet lines and which charge codes apply to those lines.

For information about specifying a resource's default time approvers, see *Configuring a Resource's Time Sheet Policy and Default Approvers* on page 54. For information about how HP Time Management derives approvers, including the priority of override rules, see *Determining Time Approvers* on page 52.

For information about configuring charge codes and how HP Time Management prioritizes override rules in determining them, see Chapter 6, *Configuring Charge Codes,* on page 61.

All override rules have two parts:

■ **Dependencies.** The filters that must be satisfied to apply the override rule.

■ **Results.** The resulting rules that apply when the specified dependencies are met.

Figure 7-1 shows an example of an override rule with **Dependencies** and **Results** sections. The **Work Item Type, Work Item Set,** and **Work Item** dependencies are related to the time sheet line and the **Department (of Resource)** and **Title** dependencies are related to the resource. You can specify any subset of the five dependencies in an override rule. If all the specified dependencies are met, then the specified rules in the **Results** section are applied to the associated time sheet line.

If dependencies for more than one override rule are met, only the override rule with the highest precedence takes effect. See *Precedence of Dependencies Among Multiple Override Rules* on page 75 for detailed information about override rule precedence.

If results of an override rule are not specified, other override rules with *lower* precedence can provide results under some circumstances. See *Precedence of Results Between Override Rules and Other Settings* on page 78.

Figure 7-1. Example Override Rule window
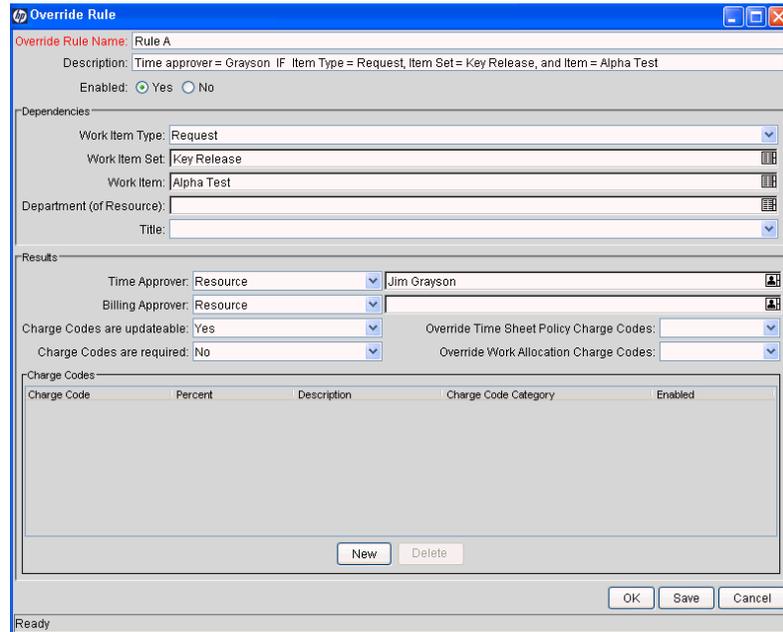
When the dependencies of an override rule are met, the various results of the override rule are applied at specific times of the HP Time Management process, as indicated in *Table 7-1*.

Table 7-1. When rules are applied

Rule in Results Section	Time When Rule Is Applied
Time Approver	When time sheet is saved or submitted.
Billing Approver	When time sheet is saved or submitted.
Charge Codes are updateable[a]	When charge codes in time sheet line details are edited or when the time sheet is saved.
Charge Codes are required[a]	When charge codes in time sheet line details are edited or when the time sheet is saved.
Override Time Sheet Policy Charge Codes[a]	When time sheet line is added.
Override Work Allocation Charge Codes[a]	When time sheet line is added.
Charge Codes	When time sheet line is added.

a. If this field is left blank rather than selecting Yes or No, this override rule has no effect on (that is, it never overrides) settings related to this field that may be specified elsewhere in HP Time Management.

Creating Override Rules

To create a new override rule:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**
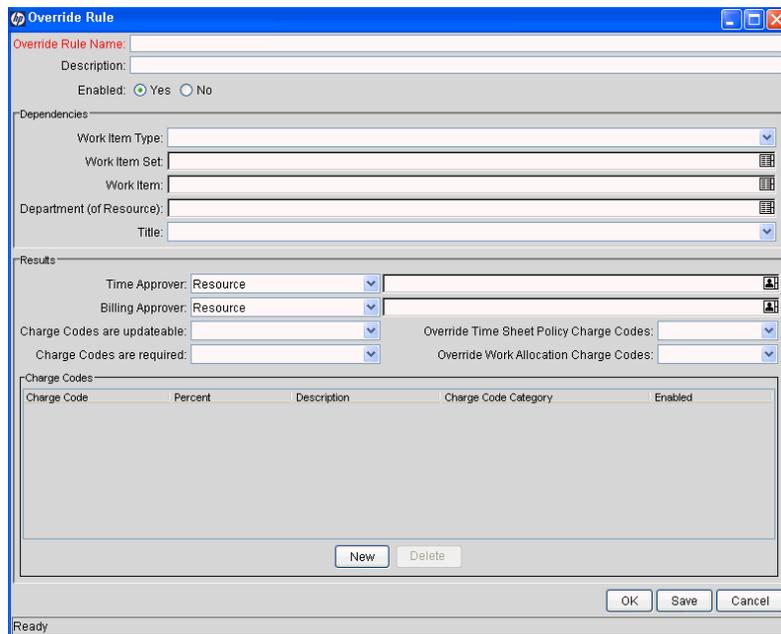
   The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Override Rules.**

   The Override Rule Workbench opens.
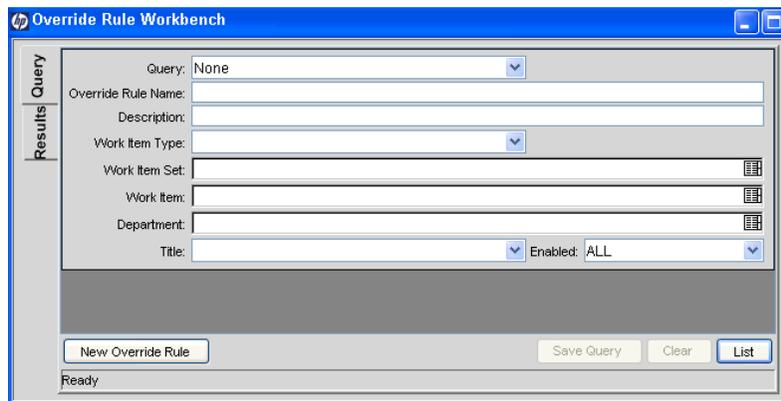
4. Click **New Override Rule.**

   The Override Rule window opens.

5. Complete the fields in the Override Rule window as specified in the following table. (For more information about the Results section, see *Precedence of Results for Override Rules* on page 77.)

Field Name (*Required)	Description
*Override Rule Name	The name of the override rule.
Description	The description of the override rule.
Enabled	Whether the override rule is enabled or not.
Dependencies section	
Work Item Type	The override rule will check the time sheet lines for the specified work item type (request, package, task, or miscellaneous).
Work Item Set	The override rule will check the time sheet lines for the specified work item set, which can be a specific request type, project, or package workflow. Options depend on the selected **Work Item Type.**
Work Item	The override rule will check the time sheet lines for the specified work item, which can be a specific request, package, task, or miscellaneous item. Options depend on the selected **Work Item Set.**
Department (of Resource)	The override rule will check the time sheet lines for resources in the specified department.
Title	The override rule will check the time sheets for resources with the specified title.
Results section	
Time Approver	These two fields set override time approver information.
Billing Approver	These two fields set override billing approver information regarding who can freeze and close a time sheet.
Charge Codes are updateable	Whether resources will be allowed to update the charge codes after the override rule is executed.
Charge Codes are required	Whether resources will be required to enter charge codes after the override rule is executed.
Override Time Sheet Policy Charge Codes	Whether to override charge codes that have had defaults set by the **Charge Codes** tab in the Time Sheet Policy window.
Override Work Allocation Charge Codes	Whether to override charge codes that have had defaults set by a work allocation.

Field Name (*Required)	Description
Columns in Charge Codes section	
Charge Code	(Read-only) The charge code or codes assigned to the override rule.
Percent	The percentage of each charge code or codes assigned to the override rule. You can specify tenths of a percent. The total percentage must equal 100 percent.
Description	(Read-only) The description of the charge code or codes assigned to the override rule.
Charge Code Category	(Read-only) The category of the charge code or codes assigned to the override rule.
Enabled	(Read-only) Whether or not the charge code or codes assigned to the override rule are enabled.

6. To add and apportion charge codes:

   a. In the **Charge Codes** section, click **New.**

   The Charge Code Selection window opens.

b. Search for existing charge codes by completing the fields as desired in the Charge Code Selection window, as described in the following table. To display all charge codes, do not enter search criteria and skip to step c.

Field Name	Description
Query	Limits the search to the selected saved query.
Charge Code Name	Limits the search to a charge code with the specified name.
Enabled	Limits the search to enabled or disabled charge codes.
Description	Limits the search to charge codes having the specified text in their descriptions.
Charge Code Category	Limits the search to charge codes with the specified charge code category.
Department	Limits the search to charge codes for the specified department.
Client	Limits the search to charge codes for the specified client name.

c. Click **List.**

The results of the query are listed in the Charge Code Selection window. Charge codes that are already listed in the override rule are shown in bold.

d. Select one or more charge codes and click **OK.**

The Charge Code Selection window closes, and the selected charge codes are added to the **Charge Codes** section of the override rule.

e. In the **Charge Codes** section, specify values in the **Percent** column that add up to 100 percent.

7. In the Override Rule window, click **OK.**

The override rule is saved.

Editing Override Rules

To edit an override rule:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Override Rules.**

   The Override Rule Workbench opens.

4. In the **Query** tab, enter search criteria and click **List.**

   The **Results** tab lists the override rules that meet your search criteria.

5. In the **Results** tab, open the existing override rule of interest.

   The Override Rule window opens.

6. Change the fields as necessary. See the table in

7. Click **OK.**

   The changes to the override rule are saved.

Deleting Override Rules

To delete an override rule:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Time Mgmt > Override Rules.**

   The Override Rule Workbench opens.

4. In the **Query** tab, enter the search criteria and click **List.**

   The **Results** tab lists the override rules that meet your search criteria.

5. In the **Results** tab, select an override rule and click **Delete.**

   A dialog box opens for confirmation.

6. Click **Yes.**

   The override rule is deleted.

Precedence of Dependencies Among Multiple Override Rules

All of an override rule's specified dependencies (filters) must be satisfied to apply the rule. If all the dependencies for more than one override rule are met, only the override rule with the highest precedence takes effect. (However, see also *Precedence of Results for Override Rules* on page 77 for more information.)

The precedence among override rules whose dependencies are all met is based on which *combination* of dependencies is met for each of the override rules. *Table 7-2* shows the order of override rule precedence according to which of the five dependencies are met.

Table 7-2. Override rule precedence based on which dependencies are met

Precedence	Work Item Type	Work Item Set	Work Item	Department (of Resource)	Title
1	X	X	X	X	X
2	X	X	X	X	
3	X	X	X		X
4	X	X	X		
5	X	X		X	X
6	X	X		X	
7	X	X			X
8	X	X			
9	X			X	X
10	X			X	
11	X				X
12	X				
13				X	X
14				X	
15					X
16					

Note that whenever an override rule B has a subset of the dependencies of an override rule A, and all the dependencies of rule A and rule B are met, rule A takes precedence over rule B, so the specified results of rule A take effect. In other words, more restrictive rules take precedence. For example, only

precedence 1 requires that all five of the rule's dependencies be met by a time sheet line and a resource, whereas lower precedence 2 imposes no requirement upon the resource's **Title.** Similarly, for precedence 11, the time sheet line's **Work Item Type** and the resource's **Title** are specified, whereas only the **Work Item Type** is specified for lower precedence 12.

➤ If a particular project's **Cost and Effort** policy specifies that a project representative must approve time for the project, that policy supersedes any override rules for determining approvers, except where the override rule applies to a particular task. For more information about precedence of approvers, see the *HP Time Management User's Guide.*

Consider the following example cases and the dependencies for two override rules named Rule A (with precedence 4) and Rule B (with lower precedence 6), shown in *Table 7-3*. For precedences 4 and 6, the user's title does not matter (see *Table 7-2*), so it is not considered in the example.

Table 7-3. Example of precedence of dependencies among override rules

Precedence	Override Rule	Specified Dependencies				Time Approver Result
		Work Item Type	Work Item Set	Work Item	Department (of Resource)	
4	Rule A	Request	Key Release	Alpha Test		Jim Grayson
6	Rule B	Request	Key Release		Development	Joan Bell

In the following cases, assume that, for all time sheet lines, the **Work Item Type** is **Request** and the **Work Item Set** is **Key Release.**

Case One. An engineer from Development is working on the **Alpha Test** work item of the **Key Release** request. The **Work Item Type, Work Item Set,** and **Work Item** dependencies for Rule A are met. So are the **Work Item Type, Work Item Set,** and **Department (of Resource)** dependencies for Rule B. Because Rule A has higher precedence, the engineer's time approver is set to **Jim Grayson.**

Case Two. An accountant from Finance is working on the **Alpha Test** work item of the **Key Release** request. The **Work Item Type, Work Item Set,** and **Work Item** dependencies for Rule A are met. The **Department (of Resource)** dependency for Rule B is not met. As a result, the accountant's time approver is set to **Jim Grayson.**

Case Three. A programmer from Development is working on the Beta Planning work item of the **Key Release** request. The **Work Item** dependency for Rule A is not met. The **Work Item Type, Work Item Set,** and **Department (of Resource)** dependencies for Rule B are met. As a result, the programmer's time approver is set to **Joan Bell.**

Case Four. A consultant from Services is working on the Beta Planning work item of **Key Release.** The **Work Item** dependency for Rule A is not met. The **Department (of Resource)** dependency for Rule B is not met. Neither rule applies, so the consultant's time approver is her default time approver.

Precedence of Results for Override Rules

The following sections discuss what can occur when a field in the **Results** section of an override rule is left blank.

Precedence of Results Among Override Rules

If a field in the **Results** section of an override rule is left blank, other override rules with *lower* precedence can populate the blank result field if their dependencies are met.

See *Table 7-4* and consider the cases of the previous example, with the same specified dependencies (not shown), the same specified time approver results, and the added charge code result shown.

Table 7-4. Example of precedence of results in override rules

Precedence	Override Rule	Time Approver Result	Charge Code Result
4	Rule A	Jim Grayson	
6	Rule B	Joan Bell	55

Case One. The engineer from Development and his work item met the dependencies for both Rule A and Rule B. Since Rule A takes precedence, the time approver was set to **Jim Grayson.** In addition, since Rule B's dependencies are also met and Rule A does not specify a charge code, Rule B supplies the charge code result—the engineer's charge code is set to **55.**

Case Two. The accountant from Finance and his work item met the dependencies for Rule A but not Rule B, so no result of Rule B can be applied. The accountant's time approver is set to **Jim Grayson** and his default charge code is used.

Case Three. The programmer from Development and her work item met the dependencies for Rule B but not Rule A, so no result of Rule A can be applied. The programmer's time approver is set to **Joan Bell** and her charge code is set to **55.**

Case Four. The consultant from Services and her work item did not meet the dependencies for either Rule A or Rule B, so her default time approver and default charge code are used.

Precedence of Results Between Override Rules and Other Settings

If a field in the **Results** section of an override rule is left blank (and the field does not become populated by a rule of lower precedence as described in *Precedence of Results Among Override Rules* on page 77), the override rule does not affect the value of the field as set elsewhere in HP Time Management.

For example, each of the four **Results** fields related to charge codes (see *Figure 7-1* on page 69) can be left blank, set to **Yes,** or set to **No.** For each field that is left blank, the override rule does not affect that field's aspect of charge code settings. If the settings are specified elsewhere, such as on the Work Allocation Charge Code Information page, those settings remain in effect. (For detailed information about the precedence of work allocations, time sheet policies, and override rules in setting charge codes, see *Precedence of Setting Charge Codes* on page 66.)

8 Configuring Time Management Filters

In This Chapter:

Overview of Work Item Filters

On their time sheets, users click **Add Items** to add work items directly to their time sheets. They can also build a My Items list. In either case, they select the type of work item—**Request, Package, Project / Task,** or **Miscellaneous**—to add from a drop-down list as shown in *Figure 8-1*.

Figure 8-1. Time sheet with Add Items drop-down list

When a user selects one of the first three work item types (but not **Miscellaneous**), a window with work item filter criteria opens. The window for each work item type offers the same set of general filters plus a set of filters that is unique to that work item type. For example, selecting **Add Items > Add Request** displays the screen in *Figure 8-2*.

Figure 8-2. Add Requests to Time Sheet window

The same work item filters are also available when creating work allocations (however, they all appear in one window, covering all work item types).

Users can specify values for these filters to limit the size and characteristics of the auto-complete lists of work items they can potentially add to time sheets and work allocations. See the *HP Time Management User's Guide* for detailed information. These filters are collectively listed in *Table 8-1*.

This chapter describes how you can add other filter criteria and make them available to users.

Table 8-1. Work item filters (page 1 of 2)

Filter	Description
General filters	
Modified in Last x days	Limits the list of work items to those that were modified within the specified number of days.
Created in Last x days	Limits the list of work items to those that were created within the specified number of days.
Include Closed	Indicates whether to include closed work items in the list of returned work items. Closed work items are: ■ Requests that are closed ■ Tasks that are complete and whose projects still allow time to be logged ■ Packages that are closed
Request filters	
Request Type	Limits the list of requests to those with the specified set of request types.
Request Assigned To	Limits the list of requests to those assigned to the specified user.
Request Assigned Group	Limits the list of requests to those with the Request Assigned Group specified from a list of security groups.
Package filters	
Package Workflow	Limits the list of packages to those with the specified workflow.
Package Assigned Group	Limits the list of packages to those with the Package Assigned Group specified from a list of security groups.
Package Assigned To	Limits the list of packages to those assigned to the specified user.

Table 8-1. Work item filters (page 2 of 2)

Filter	Description
Task filters	
Project	Limits the list of tasks to those in the specified project.
Project Manager	Limits the list of tasks to those in projects that have the specified project manager.
Project Assigned Resource	Limits the list of tasks to those with the specified assigned resource.
Task Type	Limits the list to tasks or to summary tasks, or displays both.
Task Status	Limits the list to tasks of a particular status.
Scheduled Start From	Limits the list of tasks to those that start on the specified date or later.
Scheduled Start To	Limits the list of tasks to those that start on the specified date or earlier.
Scheduled Finish From	Limits the list of tasks to those that finish on the specified date or later.
Scheduled Finish To	Limits the list of tasks to those that finish on the specified date or earlier.

Adding Work Item Filter Fields

This section details how to add a field to the work item filters. The work item filters appear on the Create Work Allocations page and during the creation and editing of time sheets.

> Modifications to the HP Time Management work item filters should be made with the help of HP-Mercury support.
>
> Updating the database requires privileges a DBA might not want to grant to the application administrator.
>
> As described in the *HP Time Management User's Guide,* users see a "Suggested Items" list of work items they can add to their time sheets. If HP Time Management validations are customized, Suggested Items list queries might need to be correspondingly customized.

Overview of Adding Work Item Filter Fields

The following major steps are required to add a filter field to the work item filters:

- Determine the information described in *Prerequisites* on page 83.

- Add the new filter field to the work item filters by editing the TMG Configurable Filters request type. See *Adding a New Filter Field to the Work Item Filters* on page 84.

- Create and edit an SQL validation for the new work item filter. The HP Time Management SQL validations are HP-supplied data and cannot be edited. Creating a new SQL validation requires the following steps:

    - Copying an existing validation.

    - Editing the copied validation to include SQL for the new filter field.

    See *Creating and Editing an SQL Validation* on page 86 for complete instructions on how to change the SQL validation for the work item filters.

- Update the database. See *Updating Database Tables* on page 89.

Prerequisites

Before adding a filter field, you must determine the following:

- **The name of the new SQL validation.** This name depends on:

    - Whether the new filter field is to be added to work allocations or time sheets

    - Whether the new filter field applies to task-related items (the existing validations whose names end with Task Work Items) or to requests or packages (the existing validations whose names end with Work Item).

Table 8-2 lists the existing validations and corresponding suggested names for the new ones.

Table 8-2. Suggested names for new SQL validations

Existing Validation Name	Suggested Name for New Validation
TMG - Time Sheet Details - Task Work Items	TMG - Time Sheet Details - Task Work Items New
TMG - Work Allocations - Task Work Items	TMG - Work Allocations - Task Work Items New
TMG - Time Sheet Details - Work Item	TMG - Time Sheet Details - Work Item New
TMG - Work Allocation Work Bench - Work Item	TMG - Work Allocation Work Bench - Work Item New

- **The SQL to support the new filter field.** Knowledge of SQL and database schema is required to write the SQL for the new filter field.

- **The name of the new filter field.** An example is Creation Date.

- **The token for the new filter field.** An example is CREATION_DATE. (When editing the SQL code in the SQL validation, add the FLTR prefix to the token name, as in FLTR.CREATION_DATE.)

Adding a New Filter Field to the Work Item Filters

To add a new filter field to the work item filters, edit the TMG Configurable Filters request type:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Demand Mgmt > Request Types.**

   The Request Type Workbench opens.

4. In the **Request Type** field of the **Query** tab, enter **TMG** and click **List.**

   The **Results** tab lists only the request types associated with HP Time Management.

5. In the **Results** tab, select the **TMG Configurable Filters** request type and click **Open.**

   The Request Type window opens with the **Fields** tab selected.

6. In the **Fields** tab, click **New.**

The Field: New window opens, with the **Attributes** tab selected.
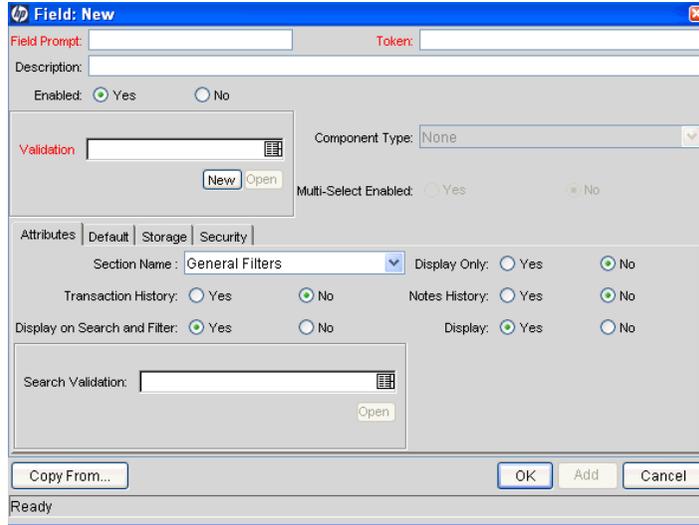
7. Complete the fields in the Field: New window as specified in the following table.

Field Name (*Required)	Description
*Field Prompt	The name of the new filter field, such as **Creation Date.** This field name will appear among the general filters or the filters for a specific work item type, as specified in the **Section Name** field in the **Attributes** tab.
*Token	The token for the new field. This token must be the same as the token added to the SQL statement in *Creating and Editing an SQL Validation* on page 86, but without the "FLTR." prefix. For example, if the validation SQL adds FLTR.CREATION_DATE, use the non-prefixed token name CREATION_DATE for this field.
Description	The description of the new field.
Enabled	**Yes** to enable the field for use. **No** to disable the field.

Field Name (*Required)	Description
*Validation	The validation for the new filter field. This validation is for the validation for the work item filter field. The section *Creating and Editing an SQL Validation on page 86* creates the validation for the work item auto-complete list. Depending on the selection, this field enables the **Component Type** and **Multi-Select Enabled** fields.
Component Type	The type of field, such as drop-down list or text field. This field is enabled by the **Validation** field.
Multi-Select Enabled	Whether multiple entries can be selected from this field. This field is enabled by the **Validation** field.
Attributes tab	
Section Name	Which section the new work item filter field will appear in.
Display Only	Whether or not the field will be read-only and cannot be updated, even at initial request entry.
Transaction History	Whether or not transaction auditing will occur for this field. If **Yes,** whenever this field changes in a request, the change is logged in a transaction history table.
Notes History	Whether or not notes auditing will occur for this field. If **Yes,** whenever this field changes in a request, the change is logged in Notes for the request.
Display on Search and Filter	Whether or not the field will be displayed in Search and Filter pages in the standard interface.
Display	Whether or not the field will be displayed in the standard interface.

8. Click **OK.**

   The changes to the new field are saved and the Field: New window closes. The Request Type window is displayed.

9. In the Request Type window, click **OK.**

   The changes to the request type are saved.

Creating and Editing an SQL Validation

This section details how to create and edit the new work item filter's SQL validation. The SQL validation must be copied from the existing SQL validation and edited with new SQL code to support the new filter field.

To create and edit the SQL validation:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Configuration > Validations.**

   The Validation Workbench opens.

4. In the **Validation Name** field, enter `TMG` and click **List.**

   The **Results** tab lists only the validations associated with HP Time Management.

5. In the **Results** tab, select (but do not open) one of the existing validations listed in *Table 8-2* on page 83, depending on where the new filter field is to be added.

6. Click **Copy** to copy the selected validation.

   The Copy Validation window opens.

7. In the **Validation Name** field, enter the name of the new validation. Suggested names are shown in *Table 8-2* on page 83.

8. Click **Copy.**

   A dialog box asks whether you want to edit the new validation now.

9. Click **Yes.**

   The Validation window opens.
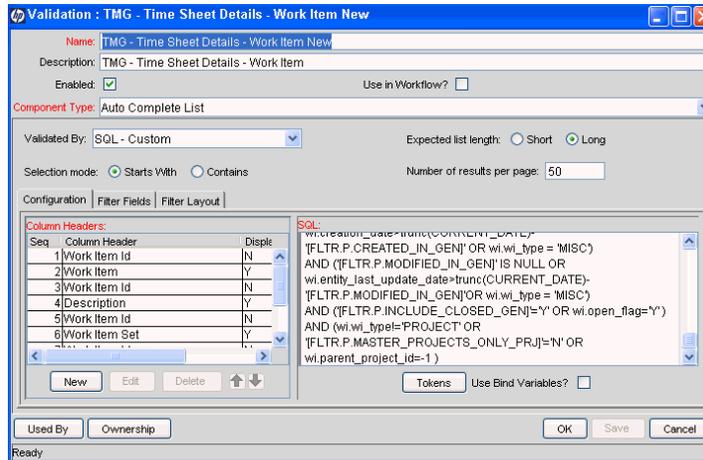
10. In the Validation window, edit the SQL.

    Include the new prefixed token, such as FLTR.CREATION_DATE. The prefixed token should be added to the WHERE clause of the validation SQL.

11. In the Validation window, click **OK.**

    The changes to the validation are saved.

Updating Database Tables

The database tables KNTA_VALIDATION_PROFILES and KNTA_FIELD_FILTERS must be updated to reference the new SQL validation. Updating the database tables requires privileges a DBA might not want to grant to the application administrator.

To update the database tables:

1. Connect to the database containing the database schema.

2. Determine the validation_id for the new SQL validation. Run the following:

```
SQL> SELECT validation_id
SQL> FROM Knta_validations
SQL> WHERE validation_name like '<validation name>'
```

For example, to find the validation_id for the **TMG - Work Allocation Work Bench - Work Item New** SQL validation, run the following:

```
SQL> SELECT validation_id
SQL> FROM Knta_validations
SQL> WHERE validation_name like
'TMG - Work Allocation Work Bench - Work Item New'
```

3. Update the KNTA_VALIDATION_PROFILES and KNTA_FIELD_FILTERS tables to refer to the created validations.

The component names for the work item fields are shown in the following table.

Work Items	Component Name
Time Sheet Details page, work items related to tasks	TsWwRsTaskWorkItem
Work Allocations page, work items related to tasks	WaDfTaskWorkItem
Time Sheet Details page, work items related to requests or packages	TsWwRsWorkItem
Work Allocations page, work items related to requests or packages	WaDfWorkItem

Update the KNTA_VALIDATION_PROFILES table by running the
following SQL (in all cases, `<validation id>` is the new validation ID):

- To update the work item component for tasks on the Time Sheet
  Details page:

```
SQL> UPDATE Knta_Validation_Profiles
SQL> SET validation_id = <validation_id>
SQL> WHERE component_name = 'TsWwRsTaskWorkItem'

SQL> UPDATE KNTA_Field_Filters
SQL> SET validation_id = <validation id>
SQL> WHERE field_filter_id = 21
```

- To update the work item component for tasks on the Work Allocations
  page:

```
SQL> UPDATE Knta_Validation_Profiles
SQL> SET validation_id = <validation_id>
SQL> WHERE component_name = 'WaDfTaskWorkItem'

SQL> UPDATE KNTA_Field_Filters
SQL> SET validation_id = <validation id>
SQL> WHERE field_filter_id = 24
```

- To update the work item component for requests or packages on the
  Time Sheet Details page:

```
SQL> UPDATE Knta_Validation_Profiles
SQL> SET validation_id = <validation_id>
SQL> WHERE component_name = 'TsWwRsWorkItem'

SQL> UPDATE KNTA_Field_Filters
SQL> SET validation_id = <validation id>
SQL> WHERE field_filter_id = 30000
```

- To update the work item component for requests or packages on the
  Work Allocations page:

```
SQL> UPDATE Knta_Validation_Profiles
SQL> SET validation_id = <validation id>
SQL> WHERE component_name = 'WaDfWorkItem'

SQL> UPDATE KNTA_Field_Filters
SQL> SET validation_id = <validation id>
SQL> WHERE field_filter_id = 30001
```

The database tables, KNTA_VALIDATION_PROFILES and KNTA_
FIELD_FILTERS, now refer to the new validations.

4. Shut down and restart the PPM Server so that the changes take effect.

9 Configuring Time Management Validations

In This Chapter:

- *Overview of Time Management Validations*
- *Adding Values to a Time Management Validation*
- *Copying Validation Values from a Different Validation*

Overview of Time Management Validations

Validations determine the acceptable input values for fields, such as the particular miscellaneous work items to be supported. HP Time Management includes the following validations that you can customize to meet specific business requirements:

■ **TMG - Charge Code Categories - Enabled.** The categories that can be specified for charge codes (see *Figure 9-1* and *Creating Charge Codes on page 63*). You can use charge code categories to restrict charge code access. The HP-supplied **Charge Code Category** values are:

  ▢ **Billable**

  ▢ **Non-Billable**

■ **TMG - Clients - Enabled.** The clients (internal or external customers, or both) that can be specified for charge codes (see *Figure 9-1* and *Creating Charge Codes on page 63*). You can use charge code clients to restrict charge code access. The HP-supplied **Client** values are:

  ▢ **Client 1**

  ▢ **Client 2**

■ **TMG - Misc. Work Items.** The miscellaneous and untrackable work items that users can add to their time sheets or their My Items lists (see *Figure 9-2* and the *HP Time Management User's Guide*). The HP-supplied **Miscellaneous** work item values are:

  ▢ **Vacations**

  ▢ **Meetings**

  ▢ **Other**

Figure 9-1. Charge Code window

Figure 9-2. Window for users to add miscellaneous items
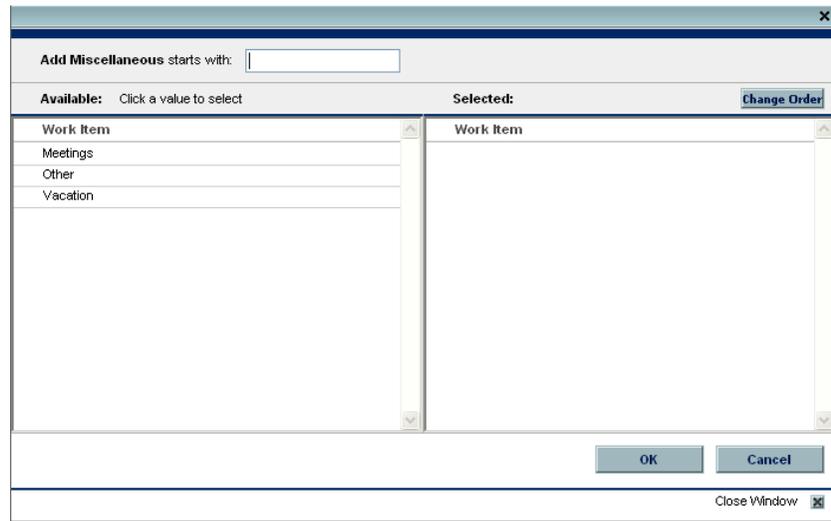
For example, you might want to add a validation called **Business Travel** to the set of HP-supplied **Miscellaneous** work items shown in *Figure 9-2*.

Adding Values to a Time Management Validation

To add values to a customizable HP Time Management validation:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.

3. From the shortcut bar, select **Configuration > Validations.**

   The Validation Workbench opens.

4. In the **Validation Name** field on the **Query** tab, enter `TMG` and click **List.**

   The **Results** tab lists only the validations associated with HP Time Management.

5. Select the customizable HP Time Management validation of interest from the following list and click **Open:**

   - **TMG - Charge Code Categories - Enabled**

   - **TMG - Clients - Enabled**

   - **TMG - Misc. Work Items**

The Validation window opens with the current values of the validation.
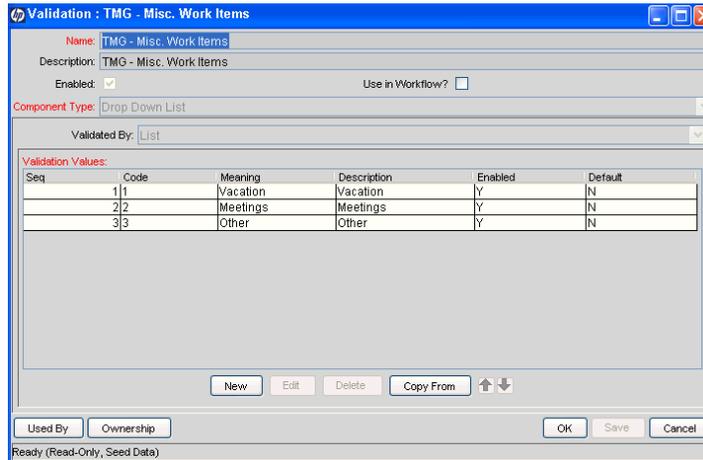
6. In the Validation window, click **New.**

   The Add Validation Value window opens.
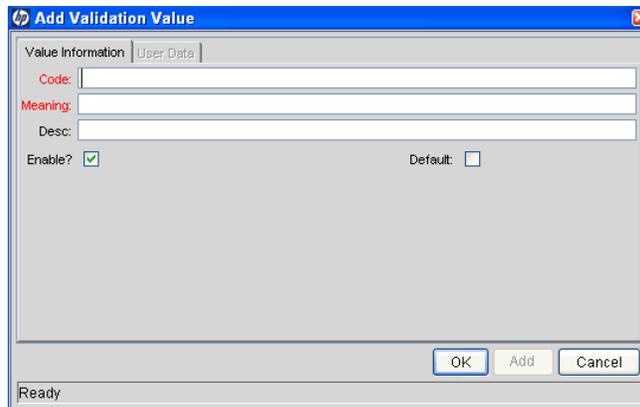
7. In the Add Validation Value window, complete all required fields and any optional fields. **Code** field entries must be unique. For TMG - Misc. Work Items validations, the **Code** field must be numeric.

8. Click **OK.**

   The new value is added to the validation. The Add Validation Value window closes.

9. In the Validation window, click **OK.**

   The changes to the validation are saved.

Copying Validation Values from a Different Validation

To copy a validation value from a different validation:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

    The PPM Workbench opens.

3. From the shortcut bar, select **Configuration > Validations.**

    The Validation Workbench opens.

4. In the **Validation Name** field on the **Query** tab, enter **TMG** and click **List.** (This step assumes that the validation value of interest is in HP Time Management.)

    The **Results** tab lists only the validations associated with HP Time Management.

5. Select a customizable HP Time Management validation and click **Open.**

    The customizable HP Time Management Validations are:

    ■ **TMG - Charge Code Categories - Enabled**

    ■ **TMG - Clients - Enabled**

    ■ **TMG - Misc. Work Items**

    The Validation window opens, showing the values of the validation.

6. In the Validation window, click **Copy From.**

   The Copy Validation Values window opens.
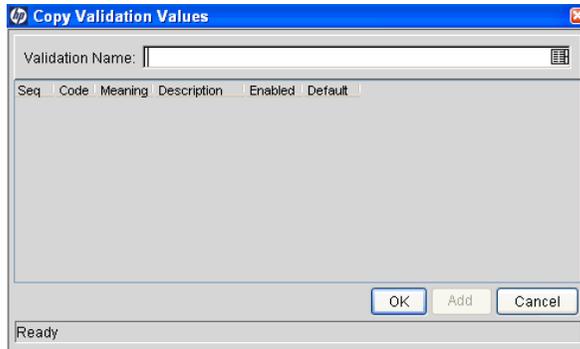
7. In the **Validation Name** field, select the validation containing the validation value to be copied and click **OK.**

   The Copy Validation Values window is populated with the values from the selected validation.

8. In the Copy Validation Values window, select one or more values to copy. **Code** field entries must be unique.

9. Click **OK.**

   The selected validation value is copied to the Validation window and the Copy Validation Values window closes.

10. In the Validation window, click **OK.**

    The changes to the validation are saved.

10 Configuring Time Management User Data

In This Chapter:

- *Overview of Configuring User Data*
- *Configuring User Data*

Overview of Configuring User Data

After selecting a time sheet line and clicking **Line Details,** users specify values for fields on the **User Data** tab, as in the example in *Figure 10-1*. You configure these custom fields as described in this chapter. (The user data for *all* the lines of a time sheet is displayed on the time sheet's **Additional Information** tab.) For more information about how users complete these fields, see the *HP Time Management User's Guide.*

Figure 10-1. Example of User Data tab for a work item
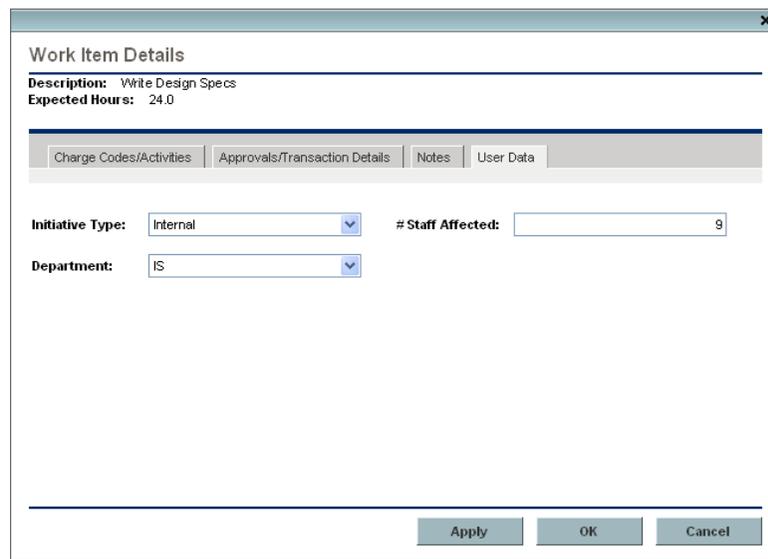
In the PPM Workbench, you configure the user data fields and associated validations that resources specify for their time sheet lines. For example, as in *Figure 10-1*, you might configure a field named **Initiative Type** that resources can optionally complete. The field's validation could be a drop-down list with supported values of **Internal** and **External.**

For general information about configuring user data, see the *HP Deployment Management Configuration Guide.*

Configuring User Data

Configure user data fields for time sheet lines in the User Data Workbench, as follows:

1. Log on to PPM Center.

2. From the menu bar, select **Administration > Open Workbench.**

    The PPM Workbench opens.

3. From the shortcut bar, select **Configuration > Validations.**

    The Validation Workbench opens.

4. Validations determine the acceptable input values to be supported. In this step, create as necessary the validations with supported values that you will later assign to the user data fields you plan to add.

    For example, if you want to create the user data fields of *Figure 10-1* at the XYZ Corporation, you could:

    ■   For the **Initiative Type** user data field, create a new validation named **XYZ Initiative Type,** and specify that it is a drop-down list with validation values of **Internal** and **External.**

    ■   For the **Department** user data field, create a new validation named **XYZ Department,** and specify that it is a drop-down list with validation values of **IS** and **R & D.**

    ■   For the **# Staff Affected** user data field, create a new validation named **XYZ Number of Staff Affected,** and specify that it is a text field with a numeric data mask.

5. From the shortcut bar, select **Configuration > User Data.**

    The User Data Workbench opens.

6. Click **List.**

    The **Results** tab lists the available user data types.

7. Select **Time Sheet Line User Data** and click **Open.**

The User Data Context : Time Sheet Line User Data window opens.
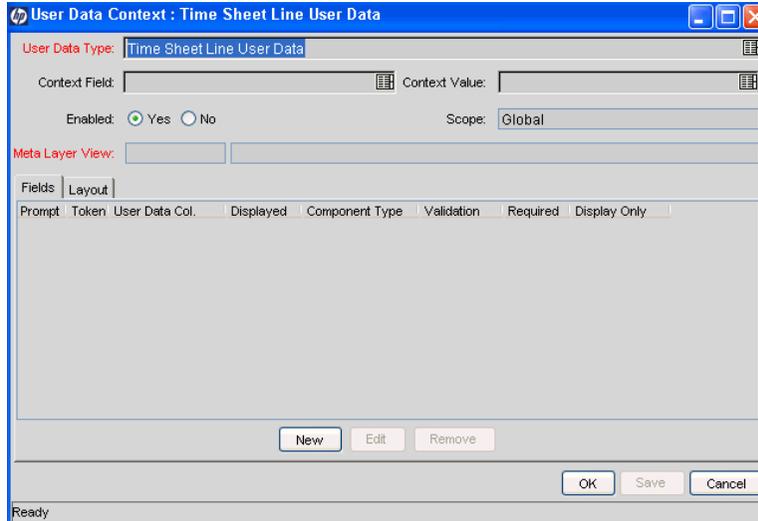
8. To add a new field for users to complete, click **New.**

The Field: New window opens.
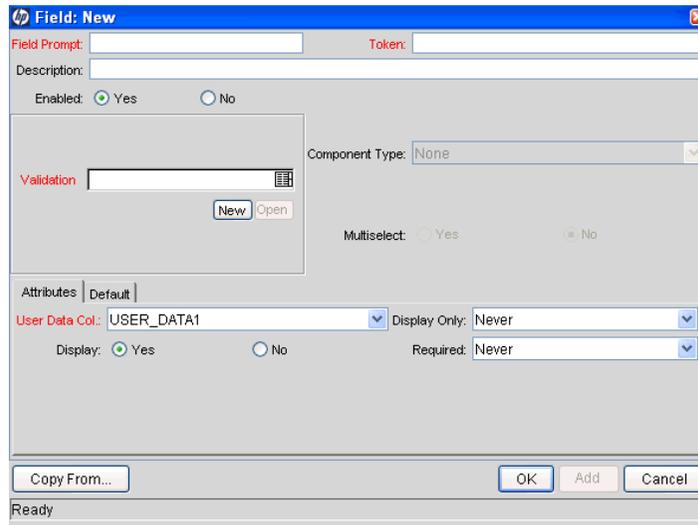
9. As needed, complete the fields, including any **Validation** field you created in step 4 on page 99, and click **OK.**

10. Repeat step 8 and step 9 as needed to define all the user data fields for time sheet lines. In our example, the fields **Initiative Type, Department,** and **# Staff Affected** are meaningful for users' time sheet lines.

11. Use the **Layout** tab as needed to rearrange the fields as you want the user to see them (for example, as in *Figure 10-1* on page 98).

i
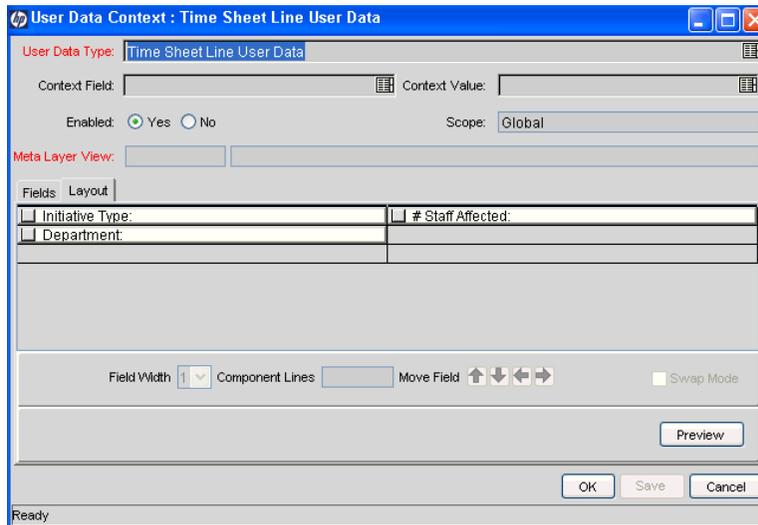
12. After configuring the user data fields you need, click **OK** in the User Data Context : Time Sheet Line User Data window.

11 Configuring Rules for the Suggested Items List

In This Chapter:

Overview of Configuring Rules for the Suggested Items List

To help resources add appropriate items to their time sheets, HP Time Management automatically generates the Suggested Items list and presents it to the resource on the **Suggested Items** tab, as in the example in *Figure 11-1*. (Also for convenience, each user can build a personal list of work items on the adjacent **My Items** tab. Each user completely controls its contents.)

Figure 11-1. Example Suggested Items list

Default rules populate the Suggested Items list with the following work items, excluding any that are already on the time sheet:

- Work items of any type
  - That are on your time sheet from the previous time period

    and

  - That you can still log time against (because they are not closed)
- Projects or tasks
  - That are assigned to you

    and

  - That can have time logged against them during this time sheet's time period, which are the tasks with a status of either:
    - Ready, with a scheduled start-to-finish date range that overlaps at least part of the time sheet's time period

      or

    - In Progress

Note that the Suggested Items list is specific to the resource and the time period. Again, particular work items that are already on the time sheet are not included in the Suggested Items list.

You can create custom rules to control what appears in the Suggested Items list, as described in this chapter. These rules apply to all resources. HP strongly recommends that you keep the SQL efficient and the Suggested Items list short.

➤ Modifications to the rules for generating the Suggested Items list should be made with the help of HP-Mercury support. Changing the rules requires strong knowledge of SQL and updating the server file system requires privileges you might not have.

The rules for the Suggested Items list are driven by flat text files that are read on server startup, so a restart is required after changes are made. You cannot directly modify HP-supplied rules, however you can do the following:

- Disable HP-supplied rules.

- Create new custom rules, either from scratch or by copying an existing rule as a starting point and revising it.

You are responsible for modifying custom rules as may be necessary if HP Time Management is patched or upgraded with new HP-supplied rules.

Configuring Rules for the Suggested Items List

Rules for the Suggested Items list are configured using XML on the PPM Center application server. Files related to the Suggested Items list are located at <*PPM_Home*>/conf/quicklist.

This `quicklist` directory has a master file named `QuickListMaster.xml`, which identifies the rules and whether they are enabled.

The `quicklist` directory also has two subdirectories:

- `core_derivations`, which contains only the HP-supplied rules

- `custom_derivations`, where you must save all custom rules

Each rule includes a definition XML file with identifiers and SQL query information.

To create a custom rule:

1. Copy and rename an existing HP-supplied rule from the `core_derivations` directory or an existing custom rule from the `custom_derivations` directory.

   Alternatively, create the new rule from scratch as an XML file.

2. Write the new rule. See *Rule Definitions* on page 106.

3. Save the new custom rule in the `custom_derivations` directory.

4. Revise the `QuickListMaster.xml` master file in the `quicklist` directory as follows (see *QuickListMaster.xml File* on page 109):

   a. If appropriate, disable the HP-supplied rule (found in the `core_derivations` directory) that your custom rule will replace.

   b. Add and enable your custom rule (found in the `custom_derivations` directory).

> When you create a new rule, you do not need to stop and restart the server.
> If you delete a rule, you do need to stop and restart the server.

Rule Definitions

Each rule definition is in an XML file that uses the following structure:

```
<derivation>
    <name>work_items_on_last_time_sheet</name>
    <reason>OnLastTimeSheet</reason>
    <context>TIME_WORK_ITEM</context>
    <sql>
        SELECT ...
        FROM ...
    </sql>
</derivation>
```

The values for `name`, `reason`, `context`, and `sql` are described in the following sections.

Name

This is a case-sensitive code-style name (that is, one with no spaces or special characters) that uniquely identifies the rule. The `<name>` value in the rule definition and the `<name>` value to be used in the `QuickListMaster.xml` file must match.

Reason

Enter the key to the resource (text) that you want to appear in the Suggested Items list. For example, the key `OnLastTimeSheet` could display the text `Item from previous time sheet`.

Context

Keep the context value as `TIME_WORK_ITEM`.

SQL

Define an SQL statement to identify work items for the Suggested Items list. Multiple lines are allowed.

Including a `<![CDATA[ ]]>` tag around your SQL statement allows inclusion of special or reserved characters.

The following tokens are supported:

- `[TMG.RESOURCE_ID]`

- `[TMG.PERIOD_ID]`

To be read correctly, the `SELECT` columns of the SQL statement must be aliased to the following column names (but the return order of the columns does not matter):

work_item_id (ID of the work item):

- For tasks (including summary tasks/root node): task_id

- For requests: request_id

- For packages: package_id

- For miscellaneous: lookup_code

work_item_name (display name of the work item):

- For tasks: task_name

- For requests: request_id

- For packages: package_id

- For miscellaneous: lookup_meaning

work_item_set_id (ID of the work item set, such as project or request type):

- For tasks: work_plan_id

- For requests: request_type_id

- For packages: workflow_id

- For miscellaneous: validation_id

work_item_set_name (name of the work item set):

- For tasks: work_plan_name

- For requests: request_type_name

- For packages: workflow_name

- For miscellaneous: lookup_type

description (description of the work item):

- For tasks: project path list to the task

- For requests: request description

- For packages: package description

- For miscellaneous: lookup description

work_item_type (type of the work item—internal code):

- For tasks: TASK

- For requests: REQUEST

- For packages: PACKAGE

- For miscellaneous: MISC

For example, the following SQL selects all the requests assigned to the user that are in Approved status:

```
<sql>
 <![CDATA[
select r.request_id work_item_id,
       r.request_id work_item_name,
       r.request_type_id work_item_set_id,
       rt.request_type_name work_item_set_name,
       r.description description,
       'REQUEST' work_item_type
  from kcrt_requests r,
       kcrt_request_types rt,
       kcrt_statuses s
 where r.assigned_to_user_id = [TMG.RESOURCE_ID]
   and r.request_type_id = rt.request_type_id
   and r.status_id = s.status_id
   and s.status_name = 'Approved'
 ]]>
</sql>
```

QuickListMaster.xml File

The `QuickListMaster.xml` file includes the following for each rule:

- **Name.** A case-sensitive code-style name (that is, one with no spaces or special characters) that uniquely identifies the rule. The name is used throughout all the files to link information together, and it must be consistent with the `<name>` value in the rule definition.

- **Enabled flag.** A flag to indicate whether or not the rule should be used. You must change this flag on any HP-supplied rule that is to be replaced by a custom rule. Allowed values are **N** and **Y.**

- **File path.** The path to the file that defines the rule, relative to the `quicklist` directory. This path is:

  - `core_derivations/<filename.xml>` for HP-supplied rules

  - `custom_derivations/<filename.xml>` for custom rules.

  HP recommends keeping all filenames unique.

Following is a sample `QuickListMaster.xml` file:

```
<quicklist>
    <derivation>
        <name>tasks_assigned_to_me</name>
        <enabled>Y</enabled>
        <file>core_derivations/tasks_assigned_derivation.xml</file>
    </derivation>
    <derivation>
        <name>work_items_on_last_time_sheet</name>
        <enabled>Y</enabled>
        <file>core_derivations/work_items_on_last_time_sheet.xml</file>
    </derivation>
</quicklist>
```

After you complete the new rule and the revisions to the `QuickListMaster.xml` file, the application can apply the new rule. You do not need to stop and restart the server.

Index

U

updating database tables for work item filters in Time Management 89

user data
configuring in Time Management 98

V

validations in Time Management 92
adding values 93
configuring SQL validations for work item filters 87
copying values 95

values
adding to validations in Time Management 93
copying from validations in Time Management 95

W

work allocations
configuring charge codes in 66
creating 16

work item filters for time sheets 80
adding fields 82
prerequisites to adding fields 83

work items for time sheets 18