Oracle® Business Process Management
Oracle BPM WorkSpace
10g Release 3 (10.3.1)

January 2009
## Contents

**WorkSpace Overview** ........................................................................................................... 5

**Basic Business Process Concepts** ..................................................................................... 6
  - Business Process Overview .................................................................................................. 6
  - Work Item Overview ........................................................................................................... 6

**Typical Workflow** ................................................................................................................ 8

**Configuring WorkSpace Settings** ....................................................................................... 9
  - WorkSpace Settings ............................................................................................................ 9

**Panels Overview** ................................................................................................................ 11

**Layouts Overview** .............................................................................................................. 12

**Views** ................................................................................................................................... 13

**Default Panels** .................................................................................................................. 14
  - Applications Panel ............................................................................................................. 14
  - Work Items Panel .............................................................................................................. 14
    - Selecting Work Items ..................................................................................................... 15
    - Searching for Work Items ............................................................................................. 16
    - Saving a View ................................................................................................................ 17
    - Creating a Presentation ................................................................................................. 17
    - Bookmarking Work Items ............................................................................................. 18
    - Removing Bookmarks from Work Items ...................................................................... 18
    - Exporting Work Items to File ....................................................................................... 18
    - Viewing in a Chart the Distribution of Work Items ...................................................... 18
  - Work Item Detail Panel ...................................................................................................... 19
    - Executing Tasks ............................................................................................................. 19
    - Adding Notes ................................................................................................................. 20
    - Viewing Notes .............................................................................................................. 20
    - Adding Attachments .................................................................................................... 20
    - Opening Attachments .................................................................................................. 21
    - Sending Consultations ................................................................................................. 21
    - Viewing Consultations ............................................................................................... 22
    - Viewing an Audit Trail ................................................................................................. 22
    - Viewing the Business Process ...................................................................................... 22

**Optional Panels** ................................................................................................................ 23
  - Application Panel .............................................................................................................. 23
  - Chart Panel ...................................................................................................................... 23
    - Chart Data .................................................................................................................... 23
    - Drill Down ..................................................................................................................... 24
  - Dashboard Panel .............................................................................................................. 24
    - Drill Down ..................................................................................................................... 24
    - Configuring a Dashboard Panel .................................................................................. 25
    - Enabling Drill Down to Work Items from a Dashboard Panel ..................................... 25
Views Panel ................................................................................................................................. 25
Default Views .......................................................................................................................... 26

**Handling Work Items** ............................................................................................................. 27
Viewing Work Items .................................................................................................................... 27
Sending Work Item to the Next Activity .................................................................................. 27
Sending Work Items to Participants .......................................................................................... 28
Sending Work Items Back .......................................................................................................... 28

**Standard Applications** .......................................................................................................... 29
Editing Business Rules ............................................................................................................... 29
Adding Conditions ..................................................................................................................... 29
Editing Conditions ..................................................................................................................... 30
Removing Conditions ................................................................................................................ 30
Advanced Editor Mode ............................................................................................................... 30

**Advanced Topics** .................................................................................................................. 31
Edit Mode ................................................................................................................................... 31
Using Edit Mode ........................................................................................................................ 31
Panel Interaction Customization .............................................................................................. 31
Configuring a Chart Panel ......................................................................................................... 32
Layout Customization ............................................................................................................... 35
Adding a Page ............................................................................................................................. 35
Modifying a Page ......................................................................................................................... 35
Removing a Page ........................................................................................................................ 37

**BPM Add-in for Office 2007** .................................................................................................. 37
Using the Oracle BPM Add-in .................................................................................................... 38
Configuration Information ......................................................................................................... 40
WorkSpace Overview

WorkSpace is the Oracle BPM Suite component that you use to carry out tasks that are part of a business process.

BPM stands for Business Process Management, a technique by which the various activities carried out in an organization are sequenced and organized into explicitly defined business processes.

The Oracle BPM Suite is made up of several components that can be used to design, implement, simulate, deploy and work with business processes defined in software. A business process generally includes tasks done automatically as well as tasks which require human interaction. WorkSpace is the component that provides an interface for the human activities in the business process.

For a more detailed description of business processes, you can read Business Process Overview on page 39

What can you do with WorkSpace?

WorkSpace is the application that you use to interact with business processes based on the roles assigned to you. WorkSpace is a Web application, so it will work from any browser with access to the WorkSpace application server.

With WorkSpace, you can manage process instances A business process is a sequence of steps. A process instance is a specific item moving through those steps . , get information about business processes, interact with other participants, and perform tasks. Specifically, with WorkSpace you may:

- View the list of process instances pending in your inbox
- Execute tasks. That is, carry out an interactive activity on a particular instance.
- Searching for Work Items on page 16 by different criteria
- Saving a View on page 17
- Work Item Detail Panel on page 19, including the Viewing an Audit Trail on page 22
- Assign an instance to yourself. This effectively locks it for your exclusive use.
- Create a new instance, if you have permission to do so.
- Adding Attachments on page 20 to an instance
- Adding Notes on page 20 to an instance
- Bookmarking Work Items on page 18

The WorkSpace main page contains panels, each of which has a specific function. Four panels are available by default:

- Applications Panel on page 14
- Views Panel on page 25
- Work Items Panel on page 14
- Work Item Detail Panel on page 19

A Note on Instances

Throughout the WorkSpace documentation, the term instance is used to denote a given item of work as it travels through the business process. Instance is a generic term, and in your particular environment you may never actually talk about instances. Instead, users will usually think about the specific job they are doing. If you handle purchase orders, your term for instance could be purchase order. If you process loan applications your term might be loan request , or if you handle insurance claims your instance may be called a claim application , or simply a claim.
Basic Business Process Concepts

To obtain a basic understanding of business processes, read the topics in this section.

Business Process Overview

A business process is a sequence of business tasks and activities that, when executed, produces a well-defined outcome. Once this outcome is achieved, the process is complete.

A simple business process can involve hiring an employee, processing a sales order, or reimbursing a business expense. A more complex business process can involve many people and activities across an organization.

Sometimes the main goal of a process cannot be achieved. For example, if a product is out of stock, a shipping clerk may need to cancel a sales order. For this reason, a business process must provide for outcomes other than the principal goal. For example, if the product is out of stock it may be possible to offer the client an alternative that the client can then accept or reject. Thus, a process can have a range of possible outcomes.

Activities

Business processes include logical steps, called activities, each of which can involve performing one or more tasks.

There are two types of activities: automatic and interactive. Automatic activities are executed automatically by the Process Execution Engine, whereas interactive activities require human input.

The activities of a business process are linked by transitions, which determine the order in which they are performed and the basic workflow of the process.

Roles and Participants

Each interactive activity belongs to a role, that is, a title or job function performed by participants in the organization. For example, a role could be Supervisor or Finance Administrator.

Participants are the individuals who interact with the process. To perform an activity, a participant must be assigned the role that the activity belongs to. A participant can have one or more roles.

Exceptions

Because it is often impossible to predict every outcome, a business process usually needs a way to deal with exceptions. An exception is an event in which a pre-defined outcome of a process cannot be reached.

The way in which a process deals with such an event, known as exception handling, can involve such steps as data clean-up or notifying a participant with a supervisory role that the situation needs attention.

Work Item Overview

If you think of a business process as a sequence of steps, then you can think of a work item as a specific item going through those steps.

For example, in a business process that handles purchases, each work item could be an individual purchase order. There can be any number of work items traversing a business process, just as there can be any number of purchase orders going through a purchase order system.
Every work item has a specific history and properties. For example, a purchase order usually contains a customer name, a list of items, an amount due, dates of delivery and payment, and other required data. A work item can also have various status conditions. In the case of a purchase order, you want to know if it has been approved, billed, or paid, or if the requested products have been shipped.

The life of each work item has a beginning and an end, as defined in the business process. As the work item proceeds through each step of the process, it is worked on by human participants or processed automatically by software.

Note: In order to understand what a work item is, you must first understand the concept of a Business Process Overview on page 39.

Note: Work Items are also called instances, a more technical term used by business process designers. A business process instance is the same thing as a work item.
Typical Workflow

In WorkSpace, a business process is executed in several automatic and manual steps. To illustrate how this works, we outline a typical workflow.

1. A participant logs in to WorkSpace. There may or may not be existing work items for the participant to work on. This is a function of the availability of work items in general, and also of the roles that are assigned to the participant.

2. If no work items are present, a participant who’s role allows him to generate a work item can do so. For example, in a purchase order process, a customer orders a product and the person who receives the order at initiates a purchase order work item. Alternatively, the BPM system creates the work item automatically, for example due to a purchase being made from a Web site.

3. The BPM system generates the work item and makes it available to those participants assigned to roles that allow them to handle the first task of the work item.

4. One of the participants who can handle the first task sees the new work item in his inbox. The participant assesses the work required and views any notes and attached files included with the work item. If necessary, the participant can send a consultation to another participant to ask a question about the work item.

5. The participant executes the task. The appropriate application launches automatically, the participant enters the required information, and the task is submitted.

6. The BPM system processes the work item and sends it to the participant assigned to the next task. Depending on how the process is designed, a single participant can handle more than one task.

7. The next participant performs the task, and the BPM system processes it and sends the work item to the next task and participant.

8. The result of a given activity may determine the next activity chosen. For example, if the purchase order requires a product which is out of stock, the process will require a different activity than if the product is in stock.

9. Once every task and activity applicable to a work item has been completed, the process is complete, and the work item ends.
Configuring WorkSpace Settings

The following procedure shows you how to modify your WorkSpace settings. WorkSpace settings are user based. The modified settings are only available to you.

To modify your WorkSpace settings:

1. Log in to WorkSpace.
2. In the upper right corner of the header, click Settings.
   A window to configure user settings appears.
3. Change the settings you need to modify.
   For a detailed description of the available settings, see WorkSpace Settings on page 9.
4. Click Save.

WorkSpace now uses the selected settings.

WorkSpace Settings

This reference describes the preferences you can configure for WorkSpace application.

User

This table describes the preferences shown in the User section. You cannot modify these preferences.

<table>
<thead>
<tr>
<th>Preference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full name</td>
<td>Displays your full name as designated by your administrator.</td>
</tr>
<tr>
<td>Login name</td>
<td>Displays the name you use to log in to WorkSpace.</td>
</tr>
<tr>
<td>E-mail</td>
<td>Displays your e-mail address as designated by your administrator.</td>
</tr>
</tbody>
</table>

General

This table describes the preferences shown in the General section.

<table>
<thead>
<tr>
<th>Preference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote scripting for BPM Object presentations</td>
<td>Specifies if the WorkSpace uses remote scripting to display BPM Object presentation. Remote scripting affects how the WorkSpace refresh BPM Object Presentations.</td>
</tr>
<tr>
<td>Show hidden views</td>
<td>Specifies if the WorkSpace shows views marked as hidden.</td>
</tr>
<tr>
<td>Notify me by e-mail when new work items arrive</td>
<td>Specifies if WorkSpace sends an e-mail when a new work item arrives to your inbox.</td>
</tr>
<tr>
<td>Maximize execution dialog</td>
<td>Specifies if WorkSpace maximizes the dialogs it displays so that they occupy the complete browser space.</td>
</tr>
<tr>
<td>Preference</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Execution dialog width</td>
<td>Specifies the width of the dialogs WorkSpace uses to display executions. This option is available only if the Maximize execution dialog preference is not selected.</td>
</tr>
<tr>
<td>Execution dialog height</td>
<td>Specifies the height of the dialogs WorkSpace uses to display executions. This option is available only if the Maximize execution dialog preference is not selected.</td>
</tr>
</tbody>
</table>

**Display**

This table describes the preferences shown in the Display section.

<table>
<thead>
<tr>
<th>Preference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Zone</td>
<td>Specifies the time zone WorkSpace uses.</td>
</tr>
<tr>
<td>Language</td>
<td>Specifies the language WorkSpace uses to display text and messages. Available languages are:</td>
</tr>
<tr>
<td></td>
<td>• Korean</td>
</tr>
<tr>
<td></td>
<td>• English</td>
</tr>
<tr>
<td></td>
<td>• Chinese</td>
</tr>
<tr>
<td></td>
<td>• Spanish</td>
</tr>
<tr>
<td></td>
<td>• Japanese</td>
</tr>
<tr>
<td></td>
<td>• French</td>
</tr>
<tr>
<td></td>
<td>• German</td>
</tr>
<tr>
<td></td>
<td>• Dutch</td>
</tr>
<tr>
<td></td>
<td>• Portuguese</td>
</tr>
<tr>
<td></td>
<td>• Italian</td>
</tr>
</tbody>
</table>

**About**

The About section displays the following information about the product:

- Version
- Build Number
Panels Overview

The WorkSpace home page is divided into panels, each of which has a specific function. As described in *WorkSpace Overview* on page 5, the following panels are available by default:

- Applications Panel on page 14
- Work Items Panel on page 14
- Work Item Detail Panel on page 19

In addition, you can add one or more of the following panels, depending on how your business processes are configured:

- Application Panel on page 23
- Chart Panel on page 23
- Dashboard Panel on page 24
- Task

**Refreshing a Panel**

Sometimes you may wish to refresh the content of a panel. For example, you may know that a new work item has been added to your Inbox or that the status of an existing work item has changed. In this case you would want to refresh the Work Items panel.

To refresh any panel, click on the Refresh (↻) icon in the panel title bar.
Layouts Overview
Views

If you work with a large number of work items, sometimes you need to see only a few of them at a time. To do this, WorkSpace has *views*.

A view is like a set of filters, or a query, that only retrieves work items that match the criteria specified by the view definition. WorkSpace displays views in a **Work List** panel. You select a view from the **View** drop-down list of the **Work List** panel, or from a **Views** panel.
Default Panels

There are three default panels in WorkSpace. They are described in this section.

Applications Panel

The Applications panel is where you can perform basic WorkSpace actions, such as creating a new instance or performing a given activity.

The Applications panel shows the list of applications available to you.

The applications available in WorkSpace depend on the process design and the roles assigned to the user currently logged in. The list of applications available also depends on the BPM processes that are deployed and running. The applications panel will be empty if no processes are running, or if you are not a participant able to execute an application in any of the processes currently running.

If it is available, you may access information about a given application in the Applications panel by clicking on the Documentation icon (смотреть).

Work Items Panel

The Work Items panel is where you see the list work items corresponding to the view you have selected in the Views panel.

From the Work Items panel, you can:

- Selecting Work Items on page 15 and perform operations on them or view detailed information in the Instance Detail panel
- Searching for Work Items on page 16 that match certain conditions
- Saving a View on page 17 with sets of search conditions, for later use
- Creating a Presentation on page 17, where you define the columns you want to see in a view
- Bookmarking Work Items on page 18 for later easy access
- Viewing in a Chart the Distribution of Work Items on page 18

Columns

In the Work Items panel you can choose the columns that are presented in a given view. You can define the columns you want to see, and save column arrangements. A particular column arrangement is known as presentation.

The following columns are available:

- Actions
- Activity
- Activity Deadline
- Copy
- Creation Time
- Deadline
- Description
- Has Attachments
- Has Notes
Special Columns

You can add or remove any column from your presentation except for the Actions column, which is always shown and is always the rightmost column. This column is identified by an ellipsis (...). You click on the ellipsis to edit the Presentation. The Actions column shows the actions you can perform on each work item. If your participant can do nothing with the work item, no action icons will appear. Otherwise, one or more of the following actions will be shown:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Action Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔄</td>
<td>Grab</td>
</tr>
<tr>
<td>⏱</td>
<td>Execute</td>
</tr>
<tr>
<td>🔄</td>
<td>Send</td>
</tr>
</tbody>
</table>

The Priority column is indicated by an icon (蝼), and priority level is shown by the color of the priority flag. If there is no flag, priority is normal. Priority status can be one of the following:

<table>
<thead>
<tr>
<th>Flag</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>🗸</td>
<td>Highest</td>
</tr>
<tr>
<td>🗸</td>
<td>High</td>
</tr>
<tr>
<td>none</td>
<td>Normal</td>
</tr>
<tr>
<td>🔻</td>
<td>Low</td>
</tr>
<tr>
<td>🔻</td>
<td>Lowest</td>
</tr>
</tbody>
</table>

The Status column shows an icon with the current status of the work item.

## Selecting Work Items

There are two modes of work item selection. You can select work items by clicking anywhere on the work item row, or you can select work items by setting the checkbox. Each mode of selection has a different use.

### Single Work Item Selection (Highlight)

When you select a work item by clicking on the row, the work item will be highlighted and the work item will be shown in the Work Item Detail panel. You can only select one work item at a time with this method, since only one work item at a time can appear in the Work Item Detail panel.

This documentation refers to this as a highlight selection.
Multiple Work Item Selection (Checkbox)

When you select a work item by marking the checkbox, the Operations menu is enabled. You can select many work items with this method, and any operation you perform will be done on all of them. Work items selected via checkbox do not appear in the Work Item Details panel. This panel always shows the work item currently highlighted, regardless of its checked state.

In this guide, this is called checkbox selection.

Searching for Work Items

If there is no view configured to retrieve the set of work items you need, you can perform a search based on conditions you specify.

You can search for work items using filters. You can filter by process, assigned roles, status, or whether the work items meet certain conditional criteria.

To search for work items:

1. In the Work Items panel, click Show Filters.
   The Filter by pane of the Work Items panel will expand near the top of the panel.
2. In the Processes section, select each of the processes you want to include in the search, and click on the right arrow (→) to add them to the Selected Processes list.
3. To search for work items based on their role assignment, in the Show Work Items section, set the Assigned to drop-down list to one of the following:
   - **Assigned to**
     - **Anyone, at any role** Retrieves all work items, regardless of the participant they are assigned to.
     - **Anyone, at any role in the process** Retrieves work items assigned to any participant who is assigned to a role in the process. Work items in automatic activities (and thus assigned to the automatic handler role).
     - **Anyone, but only visible from my role(s)** Retrieves work items that are currently at an activity that at least one of your roles lets you see.
     - **Me, or unassigned in my Role(s)** Retrieves work items that are either assigned to you, or unassigned at an activity in one of your roles.
     - **Me** Retrieves work items that are assigned to you.

   To include aborted or completed work items in the search, you must select **Anyone, at any role** for this option.
4. To search for work items based on their status, in the Include Work Items section, select check boxes for each of the statuses you want to include.
   - **Status**
     - **In Process** The work item is active, meaning it has not reached the end of the process.
     - **Completed** The work item has reached the end of the process.
     - **Aborted** The work item is no longer active, and did not reach the end of the process.

   Completed and Aborted work items are not available indefinitely. They are disposed after a period of time defined by your system administrator. The default period is 15 days.
5. You can add conditions to the filter as needed. To add each condition follow this sequence:
   a) Select the condition you want to specify from the Conditions drop-down list.
   b) Click Add condition button to add it to the search.
   c) Set the condition fields as needed.
d) To remove a condition, click on the Remove icon for that condition.

6. Click Apply Filter.
   The Work Items panel shows the list of work items returned by the filter set.

7. Before collapsing the Filter by pane, you can Saving a View on page 17, allowing you to use the same filter set again.

Saving a View

You can create custom views that specify which work items are displayed and how they are displayed. When you create a custom view, you can select it in the Work Items panel or from the Views panel.

As described in Searching for Work Items on page 16, you can search for work items based on various criteria. You can also choose how the work items in a view are displayed and sorted by Creating a Presentation on page 17.

To create and save a view:

1. Define a set of filters following the instructions in Searching for Work Items on page 16.
2. If you are satisfied with the results of the search, click Save As View to save the search as a view for future use.
   The Save View As dialog box will appear.
3. Fill in the Description text box. Optionally, specify a parent view (so your new view hangs from the parent view in the Views panel). Click Save.

Your view will have been saved with the search conditions specified. It will appear in the Views panel.

You may need to manually refresh the Views panel to see the new view.

Creating a Presentation

A presentation defines a column arrangement to be used when viewing instances in the Work Items panel. When looking at a view, you can use an existing presentation or create a new one to be associated with that view.

To create a presentation:

1. You should have a view in the Work Items panel. If not, select a view from the Views panel.
2. In the Work Items panel, click Add/Remove Columns.
   The Presentation dialog box will display, set in the Columns page.
3. Click on the New Presentation icon, and enter the name of the presentation you will create in the Presentation Id text box.
4. Under the Columns tab, you will see two list boxes, the Available Columns list box and the Presentation Columns list box. Select the columns you want to display from the first list and transfer them to the second by clicking on the right arrow. Remove unwanted columns from the presentation by selecting them and clicking on the left arrow.
   The set of columns you’ve chosen will appear in the Presentation Columns list box.
5. To set the position of a column, select it on the Presentation Columns list box, and use the up and down arrows to move the column to the position desired.
6. Optionally, you may set format and sorting options from the Format and Sorting tabs.
7. Once you have set your presentation, click Save.

A new presentation will be saved under the name you have chosen. This presentation will be associated to the current view.
Bookmarking Work Items
To help you easily access specific work items, you can bookmark work items and recall them from the Bookmarks view (a default view).

To bookmark a work item:

1. In the Work Items panel, select the checkbox for the work item(s) you want to bookmark.
2. From the Bulk actions drop-down list, select Bookmark.

The work item(s) will be bookmarked and will be visible in the Bookmarks view, so long as the work items are still active.

Note: The Bookmarks view only displays active bookmarked work items. Completed or aborted work items will no longer appear in the Bookmarks view.

Removing Bookmarks from Work Items
You can remove bookmarks from bookmarked work items in the Work Items panel, using the Bookmarks view.

This task assumes that you have previously bookmarked one or more work items.

To remove bookmarks from bookmarked work items:

1. In the Views panel, select the Bookmarks view.
   Currently bookmarked work items will be shown in the Work Items panel.
2. Checkbox select all the work items you want to remove bookmarks from.
3. Click Remove Bookmark from the Bulk actions drop-down list.
   The bookmarks are removed, and the selected work items disappear from the Bookmarks view.

Exporting Work Items to File
In the Work Items panel, you can export work items from the current view to a PDF or CSV file.

To view an Adobe PDF (Portable Document Format) file, you need to have Adobe Acrobat Reader installed on your system. To view a CSV (Comma Separated Values) file, you generally use a spreadsheet program such as Microsoft Excel or OpenOffice.org Calc, although any text editor can open this type of file.

You export work items from the Work Items panel, so one or more work items should be listed. You can export work items from any view.

To export work items:

1. In the Work Items panel, click on the Export instances icon ( ).
   A menu appears.
2. Select either PDF Document or CSV File.
   If you selected PDF Document, the Export Instances dialog box appears. If you have selected CSV File, your browser will offer to download the file, so go to step 4.
3. In the Export Instances dialog box, select a desired page size and orientation, and click Export.
   Your browser will offer to download the file.
4. Choose to save the file or to open it in the application that applies. In most cases the browser will offer to open PDF files in Adobe Acrobat Reader, and CSV files in a spreadsheet application.

Viewing in a Chart the Distribution of Work Items
You can view in a chart the distribution of items in the Work Items panel.
To perform the following procedure, the **Work Items** panel must contain one or more work items.

To view a distribution chart:

1. Click the **Show work items in chart** action ( ]] ).
   A chart showing the distribution of the work items in the **Work Items** panel appears.
2. From the **Type** drop-down list, select a chart type.
   The available graph types are:
   - Column 2D
   - Column 3D
   - Pie 2D
   - Pie 3D
   The default is Column 2D.
3. Select a dimension to group the chart data, from the **Group by** drop-down list.
   The available dimensions are:
   - Process
   - Activity
   - Participant
   - Priority
   - Status
   The default is Process.
4. If you want to save the chart to an image file:
   a) Right-click on the chart.
   b) Choose **Save as Image**

**Work Item Detail Panel**

The **Work Item Detail** panel provides detailed information about a work item that you have selected in the Work Items panel.

**Executing Tasks**

You process work items by completing tasks. Some tasks are mandatory (main tasks) while others are optional. You can execute both optional and main tasks from the **Work Item Detail** panel.

To execute a task on a work item from the **Work Item Detail** panel:

1. If you want to execute the main task, click on the **Execute** button ( ] ) on the **Work Item Detail** panel, and proceed to step 3.
2. If you want to execute an optional task, click on the **Optional Tasks** tab and click on the **Execute** button ( ] ) corresponding to the task you want to run.
3. Input the data or perform the steps required by the task. Some tasks, particularly optional tasks, may simply give you information and require no input on your part.

The task will be complete. If it was an optional task, it may still be available to execute (some optional tasks can be executed more than once). If it was a required task, the system may send the work item to the next task, removing it from your Inbox. If all required tasks are complete, and Oracle BPM did not send the work item, then you have to send the work item to the next activity manually.
Adding Notes
Participants can add text notes to a work item. Participants who work with the item later in the process can read the notes and add notes of their own if necessary.

⚠️ Caution: Once a note is added to a work item it remains for the life of the work item and cannot be removed or modified. You should verify the contents of any note you enter.

To add a note:
1. In the Work Item Detail panel, select the Notes tab. A table is displayed with the notes that have been added to the work item.
2. Click on the Add Note button.
3. Write or paste your note in the text box and click OK to add it. The note added to the notes table.

Note: Notes are sometimes added automatically to a work item as it advances through the process. These notes, which appear the same as notes added by participants, often indicate the status of certain tasks and activities.

Tip: Notes are lost after the work item has ended, when it is discarded a few days or weeks later, depending on how your business process is configured. If there are any notes you wish to access after the work item is no longer available, you should copy the note to a text file stored elsewhere.

Viewing Notes
Participants can add notes to a work item to maintain additional information about it for later reference.

You can determine if a work item shown in the Work Item Detail panel has notes by looking at the number between parenthesis displayed in the Notes tab. This shows the number of notes that have been added to the work item. If the number is 0 (zero), then the work item has no notes.

You can also determine if a work item has notes directly in the Work Items panel, so long as the Has notes column is visible. When the work item has notes, the Note icon appears in that column.

To view notes that have been added to a work item:
1. In the Work Item Detail panel, Select the Notes tab. A table is displayed with the notes that have been added to the work item.
2. If the note is short, the entire note is displayed in the Note column. If the note does not fit in the Note column, click on it to display the whole note.

Adding Attachments
You can attach files to a work item in order to provide additional information or documentation about it. Participants with proper permission can view, edit, and update the attached files.

To attach a file to a work item:
1. In the Work Item Detail panel, select the Attachments tab. A table is displayed with the attachments that have been added to the work item.
2. Click on the Attach file button.
3. Specify a file in the Select file text box, or by clicking on the Browse... button, so you can specify the file in a file selection dialog box.
4. Write a short description of the file in the Description text box. You may also add text to the Remarks text box. The description is required, while the remarks are optional.
5. Click on the Attach file button.

The file you specified in step 3 will be attached to the work item. If you do not see the file listed in the Attachments table, you may need to refresh the Work Item Detail panel.

Tip: Attached files are lost after the work item has ended, when it is discarded a few days or weeks later, depending on how your installation is configured. If there are any files you wish to have access to after the work item is no longer available, you should keep a copy of them elsewhere.

Opening Attachments

Explains how to open an attachment.

You can determine if a work item shown in the Work Item Detail panel has attached files by looking at the number between parentheses displayed in the Attachments tab. This shows the number of files that have been attached to the work item. If the number is 0 (zero), then no files are attached.

To view an attachment:

1. In the Work Item Detail panel, select the Attachments tab.
   A table is displayed with the files that have been attached to the work item.
2. Click on the file name.
   The Attachment Detail dialog box will appear, showing information about the file.
3. To download the file, click on the Download button, otherwise click on the OK button.
   If you clicked on the Download button, your browser will present download options, such as whether to open the file directly or save it to a folder.
4. Choose your download option and proceed with the download.
   The attached file is downloaded.

Sending Consultations

When processing a work item, you may need to ask other participants about it. To do this, you can send a consultation.

To send a consultation:

1. In the Work Item Detail panel, select the Consultations tab.
   A table is displayed with consultations about the work item.
2. Click on the New Consultation button ( ).
   The Consult dialog box appears.
3. To specify the destination for the consultation, type a name in the Participant text box, or click the participant icon ( ) next to the box and select a name from the list. If the list is long and has many pages, you can make it shorter by typing in a few characters of the participant's name and clicking on the participant icon.
4. Type the message for the consultation in the Note text box.
5. Click OK.

WorkSpace adds the consultation to the work item, and adds the work item to the Consultations view of the user you are consulting. This view has all the work items that have pending consultations. The consultation itself appears under the Consultations tab when that user highlights the work item that contains it.

WorkSpace also adds every consultation as a note. As with any other note, consultation notes are visible to all users who can see the work item.
Viewing Consultations

You can view work items that have consultations sent to you using the Consultations view. Then, you select a work item in this view, and read the consultation in the Work Item Detail panel.

1. To display a list of work items with consultations, select the Consultations view from the View drop-down list of the Work Items panel. The Work Items panel will show the view. This view shows only those work items that have consultations.
2. To view a consultation for a work item, select (highlight) the work item from the list. The work item will appear in the Work Item Detail panel.
3. In the Work Item Detail panel, to view the most recent consultation, select the Consultations tab. To view all previous consultations, select the Notes tab.

The consultation appears. You can read the consultation, and you can send a consultation in reply. See Sending Consultations on page 21.

Viewing an Audit Trail

Audit trails display the activity history of a work item, so you can determine how it reached its current status. To view the audit trail of a work item:

1. Select a work item from the Work Items panel. The work item will appear in the Work Item Detail panel.
2. In the Work Item Detail panel, to view the audit trail, select the Audit Trail tab.

You will see a table with each activity the work item has gone through, the events recorded for it (for example, Completed or Instance created), the user and date for the event, and the copy number of the work item. Note that some audit trail entries use the word instance instead of work item.

To view all the events for a given activity, you expand the activity by clicking on the expand button (.expand). To see only the last event of the activity, click on the collapse button (Collapse).

Viewing the Business Process

You can view an image of the business process the work item belongs to. The image shows the process diagram, and displays a flag on the current activity of the work item. To view a business process:

1. Select (highlight) a work item in the Work Items panel. The work item will appear in the Work Item Detail panel.
2. In the Work Item Detail panel, click the Process Map link.

WorkSpace opens a window with an image of the process. A flag shows the work item’s current location in it.

Note: If the process is large, your browser may reduce the size of the image so it will fit the window, making hard to read text labels. In this case, use the appropriate tool in your browser to expand the image to its regular size. You may need to scroll horizontally or vertically with the larger process image.
Optional Panels

In addition to the four standard panels, WorkSpace includes other panels that provide additional functionality. These panels may or may not be present in a specific configuration.

Application Panel

The Application panel is an optional panel configured to contain an application. Applications can respond to work item selections or run independently.

A WorkSpace application that responds to work item selections can behave in a manner similar to the **Work Item Detail** panel. The contents of such an application depend on the work item selected. An application that does not respond to work item selections does not require that you select a work item.

Chart Panel

You can use a Chart panel to monitor the processes visible to a given user.

More specifically, you can use it to view a given user’s work items graphically.

Chart Data

You can use a **chart panel** to display data in sets that have been predefined for you, or you can customize your own chart panel.

The following table describes the data sets you can use in a **Chart Panel**:

<table>
<thead>
<tr>
<th>Chart Data Set</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload by Process</td>
<td>Shows the distribution of work items by process.</td>
</tr>
<tr>
<td>Workload by Activity</td>
<td>Shows the distribution of work items by activities.</td>
</tr>
<tr>
<td>Workload by Assignee</td>
<td>Shows the distribution of work items by user.</td>
</tr>
<tr>
<td>Workload by Priority</td>
<td>Shows the distribution of work items by priority.</td>
</tr>
<tr>
<td>Workload by Status</td>
<td>Shows the distribution of work items by status.</td>
</tr>
<tr>
<td>Workload (with drill down from process to activity)</td>
<td>Shows the distribution of work items by process. To view the distribution of work items by activity in each process, click on the process.</td>
</tr>
<tr>
<td>Workload (with drill down from process to Assignee)</td>
<td>Shows the distribution of work items by process. To view the distribution of work items by assignee in each activity, click on the activity.</td>
</tr>
<tr>
<td>Custom</td>
<td>Allows you to define a custom graphic. You can choose an existing view or a default view to filter the work items as well as the indicator that this graphic shows. For a complete list of the properties you can configure, see <strong>Custom Chart Properties Reference</strong> on page 33.</td>
</tr>
</tbody>
</table>
Drill Down
The graphics in the Chart panel support drill down. Clicking on a bar of the chart or a slice of the pie displays detailed data about those work items.

You can drill down either to another chart or to specific work items.

Drilling Down to Another Chart
Clicking on the graphic displays another graphic with more details about the work items you want to examine. For example, in a bar chart that shows the work items distribution by process, clicking on a bar leads you to a bar chart that shows the distribution of the work items in that process, grouped by the activity they are sitting in.

The following chart data sets support drill down to another chart:

- Workload (with drill down from process to activity)
- Workload (with drill down from process to activity)
- Custom Charts with the drill down property enabled

Drilling Down to Work Items
You can drill down to obtain a list of the work items represented in the chart.

If any of the Work Items panels on your page is configured to listen to your Chart panel, then when you click on a bar or pie of the chart, the Work Items panel displays the work items you focused on.

The following chart data sets enable you to drill down to work items:

- Workload by Process
- Workload by Activity
- Workload by Assignee
- Workload by Priority
- Workload by Status
- The last chart in the drill down hierarchy of Workload (with drill down from process to activity)
- The last chart in the drill down hierarchy of Workload (with drill down from process to Assignee)
- The last chart in the drill down hierarchy of a Custom chart with the drill down property enabled

Dashboard Panel
A Dashboard Panel allows you to display the dashboards published with the project.

You can create a control panel by adding the different dashboards in your process in different panels.

The dashboard panel allows you to display any dashboard added to the process in a Global activity of type Show Dashboard.

You can use the same panel to display multiple dashboards, instead of adding a panel for each dashboard. If you choose to display multiple dashboards a drop-down list to choose which dashboard to display appears.

Drill Down
The dashboard shown in the Dashboard Panel may support drill down. If it does, you can click on dashboard items to get more detailed data.

If your dashboard supports drill down, when you place the mouse cursor over the chart, it becomes a hand.

There are two types of drill down:
To another chart
To work items

Drill Down to Another chart
When you click on the graphic you get another graphic that shows more detailed data about the work items you focused on. For example, in a bar chart that shows the work items distribution by process, clicking on a bar leads you to a bar chart that shows the distribution of the work items in that process, grouped by the activity they are sitting in.

Drill Down to Work Items
You can drill down to the highest level of detail to obtain a list of the work items represented in the chart.
If any of the Work List panels on your page is configured to listen to your chart panel, when you click on a bar or pie of the chart, the Work List panels displays the work items you focused on.

Configuring a Dashboard Panel
The following procedure shows you how configure of a Dashboard Panel.

To configure a Chart Panel
1. Click Edit Mode On.
2. Click on the edit icon of the panel.
3. Enter a title for the panel in the Label text box.
4. Select one or more dashboards from the Available Dashboards list.
   To select multiple dashboards press the Ctrl key.
   If you select multiple dashboards the Dashboard Panel provides the user a drop-down list to select the current dashboard.
5. If you selected multiple dashboards, select a default dashboard for the panel to display.
6. Click Apply.
7. Click Edit Mode Off in the upper left corner of Oracle BPM WorkSpace.

Enabling Drill Down to Work Items from a Dashboard Panel
The following procedure shows you how to enable drill down to work items for a Dashboard panel.

To enable drill down to work items:
1. Choose a Work List panel to display the drill down data.
2. Click on Edit Mode On on the selected Work List panel.
3. Select the Dashboard Panel in the Listen to list.
   For more information about panel interaction, see Panel Interaction Customization on page 31.

When you click on the last drill down level of the dashboard, the Work List panel shows the work items you focused on.

Views Panel
The Views panel shows a list of available views in a separate panel.
The Views panel displays the views which are available to you in an expandable tree, such as that found in Windows Explorer and similar programs. By expanding and collapsing the tree branches, you can easily
manage a large number of views. Related views go together, so for example the default History views all go into the History folder of the Views tree.

To create a view, see Saving a View on page 17.

**Default Views**

WorkSpace includes a number of default views, described in this topic.

<table>
<thead>
<tr>
<th>View</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbox [收件箱]</td>
<td>Displays work items currently available to you. Work items become available based on role assignments, consultations, and assignments from other users.</td>
</tr>
<tr>
<td>Bookmarks [🌟]</td>
<td>Recalls work items that you have bookmarked.</td>
</tr>
<tr>
<td>Consultations [💬]</td>
<td>Displays work items with consultations addressed to you.</td>
</tr>
<tr>
<td>History views [📜]</td>
<td>Provide a history of active work items you have processed. The default history views are:</td>
</tr>
<tr>
<td></td>
<td>• Today</td>
</tr>
<tr>
<td></td>
<td>• Yesterday</td>
</tr>
<tr>
<td></td>
<td>• <em>[Prior days of the current week]</em></td>
</tr>
<tr>
<td></td>
<td>• Last week</td>
</tr>
<tr>
<td></td>
<td>• Two weeks ago</td>
</tr>
<tr>
<td></td>
<td>• Three weeks ago</td>
</tr>
</tbody>
</table>

⚠️ **Note:** The default views do not display work items that have been completed or aborted.
Handling Work Items

Depending on the design of the process, there are a number of actions you can take when working with a work item. Usually you can execute a task on the work item, but other actions can be available.

**Executing tasks**
Tasks may be optional or required. Optional tasks can be executed from the Work Item Detail panel, while mandatory tasks can be executed from either the Work Item Detail panel or the Work Items panel.

**Performing Operations**
Operations are performed in the Work Items panel, and are available in the Bulk actions drop-down list. This is only enabled when work items are selected (checkbox). The options in the panel also vary as a function of the operations available in the process.

**Viewing Work Items**
You can view a list of work item by selecting a view. Views, which are listed in the Views panel, display collections of work items that meet the search conditions defined in the view.

A number of Default Views on page 26 are available. In addition to these, custom views can be created, edited, and deleted.

To view a list of work items:

- Select a view from the View drop-down list of the Work Items pane, or from the Views pane, if present.
  
  You may need to expand a parent view if it contains a child view that you want to display.

In the Work Items panel, a list of work items is displayed in a table with columns configured on the presentation for the current view. If no work items appear, then no work items match the conditions of the view.

**Sending Work Item to the Next Activity**
Some work items require that you send them to the next activity after performing a task, while others are sent automatically. This depends on the design of the process. You can use the Send or Send To operation to send a work item to the next activity.

If a work item is at an activity form which there is only one path to continue in the process, Oracle BPM will send it automatically to the next activity when you complete the execution of the mandatory tasks of the current activity. But there may be more than one path following the current activity. In this case, the user must specify the next activity or user with Send To (described below). Other work items might give you the option of sending them to the next activity while waiting on another task that cannot yet be performed.

To send a work item to the next activity:

1. In the Work Items panel, select (checkbox) the work items you want to send. The Operations menu becomes enabled.
2. From the Operations menu, select Send or, if you need to specify the next activity or participant, select Send To.
If you selected Send To, the Send To dialog box will appear. See *Sending Work Items to Participants* on page 28 for more information about this option.

The selected work item(s) are sent.

### Sending Work Items to Participants

You can send a work item to the next activity and assign it to a specific participant.

To send a work item to a participant:

1. To display a list of work items, select a view.
2. In the **Work Items** pane, select (checkbox) the work item you want to send.
3. In the Work Item toolbar, click the **Send To Work Item** button.
4. In the **Send To** dialog box, select the participant for the next activity and click **Send**. For some processes, you might have to specify the activity you are sending to.

The work item is sent. Other users will not be able to work on the sent work item until the selected participant has performed an action on it.

### Sending Work Items Back

If an exception occurs for a work item, you can send it back to the activity were it occurred, and continue processing it from that point.

To send a work item back to the previous activity:

1. In the **Work List**, select (checkbox) the work item you want to send back. The **Operations** menu becomes enabled.
2. From the **Work List Operations** menu, select **Back**.

**Note:** The **Back** menu option is only available if an exception handler was included in the process design, and an exception occurred for the work item selected.
There are several standard applications that can appear in the Applications panel. The applications available to you depend on your role, and are defined by the process design.

Editing Business Rules

Business rules can be edited in WorkSpace if the project design includes one or more Business Rule Editor activities. These activities appear in the Applications panel.

Like any other activity, a business rule editor activity is assigned to a particular role. If any of the roles you are in has been assigned such an activity, you will be able to edit business rules.

To edit a business rule:

1. If you don’t have the Business Rules Editor open, then in the Applications panel, click on the application which edits the Business Rule. This application will have a name assigned to it by the project designer. The business rule editor window will appear.
2. If more than one rule is available, select the rule you will edit from the Rule drop-down list.
   The Business Rules editor appears for the rule you have selected. If there is more than one version of the rule you can select the one you want to edit from the Rule version drop-down list.
   The dialog box will display the name of the participant who last edited the currently selected version of the rule, and the time and date this was done. If the rule has never been edited by a process participant, then the Oracle BPM administrator who deployed the process will be shown.
3. If you are in simple editor mode, you can Adding Conditions on page 29, Editing Conditions on page 30, or Removing Conditions on page 30 conditions in the business rule, or you can switch to the advanced editor by clicking on Switch to Advanced Editor.
4. Save your changes and close the business rule Editor when you are done.

To add, edit, or remove conditions, see topics below:

Adding Conditions

To add a condition:

1. To add a condition, select one of the available project variables or business parameters from the Add Condition drop-down list.
2. Click the Add Simple Expression button.
   A new condition line is added.
3. Select a comparison operator from the drop-down list next to the variable or parameter name.
   Different operators are available as a function of the data type of the variable or parameter you are comparing. Operators include Equals, Not Equals, Greater Than, Less Than, and so on.
4. Enter the value that will be compared to in the field on the right. Special options may be available depending on the data type of the value being compared. For example, a time value field will be accompanied by a calendar tool to help you pick a date.
5. Repeat steps 1 through 4 to add more conditions.
6. When you are done, save your changes by clicking Save.
Editing Conditions

To edit a condition:

1. To change the comparison operator, select another one from the drop-down list next to the variable or parameter name.
   Different operators are available as a function of the data type of the variable or parameter you are comparing. If you are looking for a comparison operator which is not in the list, it is not valid for the variable or parameter the condition will test.

2. To change the value that will be compared to, edit the field on the right.

3. When you are done, save your changes by clicking Save.

Removing Conditions

To remove a condition:

1. If you wish to remove a condition, click the Remove icon on the condition line.

2. When you are done, save your changes by clicking Save.

Advanced Editor Mode

Use the advanced editor mode to write complex business rules. This mode requires PBL coding, so use only if you are familiar with PBL syntax.

Note: If you write a complex business rule in the advanced editor mode, you will no longer be able to edit this rule in the simple editor mode.

To use the advanced editor:

1. In the simple editor, click Switch to Advanced Editor.
   The advanced editor opens. This is a PBL code editor. If you have already defined any conditions, these will be shown in code form.

2. In the editor, enter any PBL code you require to implement the business rule. You must exit your code with a return statement which returns a boolean value (true or false).
   For more information about PBL, consult the PBL Reference.

3. Save and close when you are done.
Advanced Topics

This section describes ways that you can customize your WorkSpace environment. If customization features are enabled in your installation, you can explore the topics in this section once you are comfortable with WorkSpace.

Edit Mode

You can modify the aspect, position, and behavior of WorkSpace panels. To do so, you turn on Edit Mode. You also need to be in edit mode to create and customize layouts.

Note: If your system administrator has disabled Edit Mode, you cannot customize WorkSpace.

Using Edit Mode

You can turn on Edit Mode to customize your WorkSpace environment and edit specific settings for each panel.

To use Edit Mode:

1. At the top left of the WorkSpace page, click Edit Mode on. WorkSpace enters edit mode. A number of controls appear near the top, below the Edit Mode link. These are for adding panels and editing layouts, and are described in the Layout Customization section.

Also, the following edit icons appear in each panel:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑</td>
<td>Move the panel up</td>
</tr>
<tr>
<td>↓</td>
<td>Move the panel down</td>
</tr>
<tr>
<td>←</td>
<td>Move the panel left</td>
</tr>
<tr>
<td>→</td>
<td>Move the panel right</td>
</tr>
<tr>
<td>⚙</td>
<td>Put the panel in Edit Mode</td>
</tr>
<tr>
<td>☐</td>
<td>Remove the panel</td>
</tr>
</tbody>
</table>

2. Move the panel with the arrow icons, put the panel in edit mode, or remove it as desired. The panel size changes automatically when you change its position.

3. To turn off Edit Mode, click Edit Mode off. WorkSpace goes back to normal mode.

Panel Interaction Customization

WorkSpace panels interact with each other by triggering updates on user selection. WorkSpace default panels come with a default configuration that determines how they interact with each other. You can modify this configuration.
By default, WorkSpace panels interact in the following way:

- Selecting a view in the View panel triggers an update on the Work Items panel content.
- Selecting a work item in the Work Items panel triggers an update on the Work Item Detail panel.

If you use WorkSpace with the default set of panels, generally there is no need to change the default configuration. But if you add panels to the default configuration then you probably need to configure their interaction with the rest of the panels. For example, if you add a second Work Items panel it is not necessary for both panels to interact with the same View panel. Instead you might configure one of them to ignore the View panel selection and display a specific view.

To change or remove the panel that triggers the update, configure it by following the procedure described in Configuring Panel Interaction on page 32.

The information about the interaction between panels is stored in the layout that contains those panels.

**Configuring Panel Interaction**

You can change the way panels interact with each other. The following procedure shows you how to configure a panel so that it reacts to the changes in another panel.

The following procedure requires you to enter WorkSpace edit mode and have permission to modify the panel interaction. By default these option are enabled. However the administrator may disable them.

To configure panel interaction:

1. Log in to Oracle BPM WorkSpace.
2. In the upper right corner of the header, click **Edit Mode On**.
3. On the panel whose content you want to update, click **Edit Mode On**.
4. Select the panel or panels that trigger the update from the **Listen to** list.
5. Click **Apply**.
6. Click **Edit Mode Off**.
7. In the upper right corner of the header, click **Edit Mode Off**.

When the user selects or modifies the selected panel, it triggers the update of the edited panel.

**Configuring a Chart Panel**

The following procedure shows you how configure of a Chart panel.

To configure a Chart panel:

1. Click **Edit Mode On**.
2. Click the edit icon ( edi t o n ) of the panel.
3. Enter a title for the panel in the **Panel Title** text box.
4. Choose a chart type.
   - For a description of the available chart types, see **Chart Data** on page 23.
   - If you choose Custom, then a pane to configure the custom properties appears.
5. If you chose custom, configure the properties of the custom chart.
   - For a detailed description of these properties, see the **Custom Chart Properties Reference** on page 33.
6. Click **Apply**.
7. Click **Edit Mode Off**.

**Enabling Drill Down to Work Items from a Chart Panel**

The following procedure shows you how to enable drill down to work items for a Chart Panel.

To enable drill down to work items:
1. Choose a **Work List** panel to display the drill down data.
2. Click Edit Mode **On**, and click on the Edit icon (.stopPropagation) of the Work List panel you’ve selected.
3. Select the Chart panel in the **Listen to** list.

   For more information about panel interaction, see *Panel Interaction Customization* on page 31.

When you click on the last drill down level of the chart, the **Work List** panel shows the work items you focused on.

**Custom Chart Properties Reference**

The following reference table provides detailed information about the properties you must configure for a custom chart.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Possible Values</th>
</tr>
</thead>
</table>
| Chart Data    | Specifies the data this graphic shows.           | • Workload by Process
• Workload by Activity
• Workload by Assignee
• Workload by Priority
• Workload by Status
• Workload (with drill down from process to activity)
• Workload (with drill down from process to assignee) |
| Refresh Time  | Specifies the time (in milliseconds) to wait between successive refreshes. | You can define the width in pixels or as a percentage of the column that contains the Chart panel. The default value is 100%. |
| Width         | Specifies the width of the Chart panel.          | You can define the width in pixels or percentages. The default value is 300 px. |
| Height        | Specifies the height of the Chart panel.         |                                                                                  |
| Chart Title   | Specifies the title of the chart.                |                                                                                  |
| Filter        | Specifies the filter to apply to the selected data. | Possible values are all defined custom views and the following default filters:
• All work items
• In-progress work items
• Completed work items
• All work items in interactive activities
• All work items assigned to the current user
• All work items assigned to the current user or unassigned in the current role
• Custom and default views |
### Chart Type
Specifies the graphic type used to render the selected data.
- Column 2D
- Column 3D
- Pie 2D
- Pie 3D

### Drill Down
Specifies if the graphic has drill down capabilities. The value of this property determines the available dimensions.
- true
- false

### Measure
Specifies the measure this graphic displays.
Possible values are all defined Business Indicators of type Dimension and the following default values:
- Work Item

You must configure the following properties for a chart without drill down capabilities:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Possible Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group by</td>
<td>Specifies the criteria used to group the displayed data.</td>
<td>• Process&lt;br&gt;• Participant&lt;br&gt;• Priority&lt;br&gt;• Status</td>
</tr>
</tbody>
</table>

You must configure the following properties for a chart with drill down capabilities:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Dimensions</td>
<td>Specifies the dimensions that you can use to group the data in the chart.</td>
</tr>
<tr>
<td>Selected Dimensions</td>
<td>Specifies the dimensions that are used to group the data in the chart. The order of these dimensions determines the drill down hierarchy.</td>
</tr>
</tbody>
</table>

### Filters

<table>
<thead>
<tr>
<th>Filter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All work items</td>
<td>Displays all the work items in the processes visible to the current user. This includes work items that completed the process.</td>
</tr>
<tr>
<td>In-progress work items</td>
<td>Displays all the in-progress work item of the processes visible to the current user.</td>
</tr>
<tr>
<td>Completed work items</td>
<td>Displays all the work items that completed any of the processes visible to the current user.</td>
</tr>
<tr>
<td>Filter</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>All work items in interactive activities</td>
<td>Displays all the work items sitting in interactive activities in the processes visible to the current user.</td>
</tr>
<tr>
<td>All work items assigned to the current user</td>
<td>Displays all the work items assigned to the current user.</td>
</tr>
<tr>
<td>All work items assigned to the current user or unassigned in the current role</td>
<td>Displays all the work items assigned to the current user, and those that are not yet assigned to a user, but are assigned to a role the current user belongs to.</td>
</tr>
</tbody>
</table>

**Layout Customization**

You can customize your WorkSpace environment according to your needs and preferences.

You can customize the User Layout by:

- *Adding a Page* on page 35
- *Modifying a Page* on page 35
- *Removing a Page* on page 37

**Note:** The User Layout is the only layout that you can modify as an end user. You cannot edit the layouts assigned to your role, only the administrator can modify them.

**Adding a Page**

The following procedure shows you how to add a new page to the current layout.

The following procedure requires you to enter WorkSpace edit mode. By default WorkSpace edit mode is enabled. However the administrator may disable this option. To enable edit mode follow the procedures described in *Enabling Oracle BPM WorkSpace Layout Edition*.

Layout edition is disabled by default. The following procedure shows you how to enable it.

To add a page to the current layout:

1. Log in to WorkSpace.
2. In the upper left corner of the header, click *Edit Mode On*. The action *Add Components* appears.
3. Click *Add Components*.
4. Click the *Add Page* tab.
5. Enter a label to identify the page, in the *Label* text box.
6. Click *Add*. The new page appears.
7. Click *Edit Mode Off*. This action is located in the upper left corner of the header.

**Modifying a Page**

The following procedures show you how to change WorkSpace default layout for all the users of the application.

The following procedure requires you to enter WorkSpace edit mode. By default WorkSpace edit mode is enabled. However the administrator may disable this option. To enable edit mode follow the procedures...
described in Enabling Oracle BPM WorkSpace Layout EditionLayout edition is disabled by default. The following procedure shows you how to enable it.

To modify a page in the current layout:

1. Click Edit Mode On.
   This action is located in the upper left corner of the header.
2. Create the desired page layout.
   You can change the page layout by:
   • adding new panels. See Adding a Panel on page 36.
   • changing the position of panels. See Changing the Position of a Panel on page 36.
   • changing the way panels interact with each other. See Configuring Panel Interaction on page 32
   • removing panels. See Removing a Panel on page 37
3. Click Edit Mode Off.
   This action is located in the upper left corner of the header.

Adding a Panel
To configure WorkSpace layout according to the requirements of the users, you can add new panels.

The following procedure requires you to enter WorkSpace edit mode. By default WorkSpace edit mode is enabled. However the administrator may disable this option. To enable edit mode follow the procedures described in Enabling Oracle BPM WorkSpace Layout EditionLayout edition is disabled by default. The following procedure shows you how to enable it.

To add a panel to the WorkSpace viewed by a certain user:

1. Log in to WorkSpace.
2. Click Edit Mode On.
   This action is located in the upper left corner of the header.
   The action Add Components appears.
3. Click Add Components.
4. Click the Add Panel tab.
5. Select the type of the panel to add.
6. Enter a label to identify the panel, in the Label text box.
7. Click Add.
   The new panel appears in edit mode so that you can configure it.
8. Click Edit Mode Off.

The new panel is added to the current page.

Changing the Position of a Panel
To meet user requirements, you can change the position of a panel.

The following procedure requires you to enter WorkSpace edit mode. By default WorkSpace edit mode is enabled. However the administrator may disable this option. To enable edit mode follow the procedures described in Enabling Oracle BPM WorkSpace Layout EditionLayout edition is disabled by default. The following procedure shows you how to enable it.

To change the position of a panel:

1. Log in to WorkSpace.
2. Click Edit Mode On.
   This action is located in the upper left corner of the header.
The actions to move, configure and remove a panel appear on each of the panels that make up WorkSpace.

3. Click on the arrows of the panel you want to move to change its position on the screen.
4. In the upper left corner of the header, click **Edit Mode Off**.

### Removing a Panel
To configure the WorkSpace layout according to the requirements of the user, you can remove panels.

The following procedure requires you to enter WorkSpace edit mode. By default WorkSpace edit mode is enabled. However the administrator may disable this option. To enable edit mode follow the procedures described in *Enabling Oracle BPM WorkSpace Layout Edition*.

**Layout edition is disabled by default. The following procedure shows you how to enable it.**

To remove a panel from the current layout:

1. Log in to WorkSpace.
2. Click **Edit Mode On**.
   
   This action is located in the upper left corner of the header.
   
   The actions to move, configure and remove a panel appear on each of the panels that make up WorkSpace.
3. Click **Remove** on the panel you want to remove.
4. In the upper left corner of the header, click **Edit Mode Off**.

The panel is removed from WorkSpace.

### Removing a Page
To configure the WorkSpace layout according to the requirements of the user, you can remove panels.

The following procedure requires you to enter WorkSpace edit mode. By default WorkSpace edit mode is enabled. However the administrator may disable this option. To enable edit mode follow the procedures described in *Enabling Oracle BPM WorkSpace Layout Edition*.

**Layout edition is disabled by default. The following procedure shows you how to enable it.**

Your layout must contain more than one page. You cannot remove a page if it is the only page in your layout.

To remove a panel from the current layout:

1. Log in to WorkSpace.
2. Click **Edit Mode On**.
   
   This action is located in the upper left corner of the header.
   
   A minus sign appears to the left of the label of the page.
3. Click - (minus sign) of the page you want to remove.
4. Click **Edit Mode Off**.
   
   This action is located in the upper left corner of the header.

The page is removed from WorkSpace.

**BPM Add-in for Office 2007**

You may find a link to download the BPM Add-in for Microsoft Office® 2007 at the bottom of your WorkSpace page. This add-in allows you to initiate work items for some processes directly from a Microsoft Office application.
You only use the add-in with processes that require an attached Microsoft Office document, and that have been setup to support it. If the Add-in is available in your system and the administrator has informed you that it is supported, read the topics in this section.

**Using the Oracle BPM Add-in**

The Oracle BPM Add-in for Microsoft Office 2007 allows you to create Work Items in a Business Process directly from a Microsoft Office application.

If you are unfamiliar with Business Processes and Work Items, you should read the topics under Basic Business Process Concepts.

You can create new Work Items from the following Microsoft Office 2007 applications:

- Excel
- PowerPoint
- Word

Since the BPM Add-in leverages the Microsoft Office 2007 ribbon, it cannot be used with previous versions.

If you don’t know if the Oracle BPM Add-in is installed in your system, open one of the applications listed above, and look for the *Business Processes* tab in the ribbon. If it is not present, the BPM Add-in is not installed or not enabled.

**Submitting a Document to a Business Process**

With the Oracle BPM Add-in, you can submit a document directly to a business process. When you do so, you create a new Work Item that has the document attached to it.

The following steps assume you have installed and configured the Oracle BPM Add-in for Microsoft Office 2007.

To submit a Microsoft Office document to a Business Process:

1. From the Microsoft Office application, with the document open, select the *Business Processes* tab and click *Submit to Business Process*. If you did not select the *Always use this process option*, the *Select Process* dialog box appears. Otherwise, the *Attachment Information* dialog box appears, and you can proceed to step 3.

2. Select the business process you want to submit the document to, and click *Next*. The *Attachment Information* dialog box appears.

3. In the appropriate text fields, you can enter a description and remarks about the document. Both of these are optional.

4. Click *Accept*.

   - **Note:** If this is a new, unsaved document, the Oracle BPM Add-in will open the *Save As* dialog box so that you can save it. You cannot submit a document that has not been saved.

   - **Note:** If it is an existing document that has unsaved changes, the Add-in will save it before creating the new instance.

   If the work item was created, the *Confirmation* dialog box appears.

**Configuring the Oracle BPM Add-in**

To be able to start a new Work Item with a document submission, you must specify your user name and the server you will submit the document to.

The steps below assume the Oracle BPM Add-in is installed.

You can configure the Oracle BPM Add-in from any of the supported Microsoft Office 2007 applications (Word, Excel, or PowerPoint).
To configure the Oracle BPM Add-in:

1. In the Microsoft Office Ribbon, select the Business Processes tab.
2. Click Change Settings.
   The Settings dialog box appears.
3. If your server is on the local network, select it from the Server Name drop-down list.
   
   **Note:** The Oracle BPM Add-in will search for servers in the local network. If you don’t see the server you want, you can click on Refresh List so that the Oracle BPM Add-in will search again. If you still don’t see it, or if you don’t see any servers at all, either there is no server on your local network, or your machine is somehow blocked. For example, you may have a firewall configured. Contact your network administrator for further assistance.

4. If your server is not on the local network, select Enter URL Manually from the Server Name drop-down list, and enter a complete URL address, which should be provided by your Oracle BPM Administrator.
5. Enter your user name and password in the Authentication section.
6. Click Test Connection to verify that your settings are correct.
   The result of the test will be displayed in the status section.
7. If the test in the previous step was successful, click Next.
   The Select Process dialog box appears. One or more processes should be listed.
8. Select a process from the list. If you will always use this process, select the Always use this process option.
   If you don’t set this option here, you can set it later when you create a Work Item.
9. Click Next.

**Basic Business Process Concepts**

To obtain a basic understanding of business processes, read the topics in this section.

**Business Process Overview**

A business process is a sequence of business tasks and activities that, when executed, produces a well-defined outcome. Once this outcome is achieved, the process is complete.

A simple business process can involve hiring an employee, processing a sales order, or reimbursing a business expense. A more complex business process can involve many people and activities across an organization.

Sometimes the main goal of a process cannot be achieved. For example, if a product is out of stock, a shipping clerk may need to cancel a sales order. For this reason, a business process must provide for outcomes other than the principal goal. For example, if the product is out of stock it may be possible to offer the client an alternative that the client can then accept or reject. Thus, a process can have a range of possible outcomes.

**Activities**

Business processes include logical steps, called activities, each of which can involve performing one or more tasks.

There are two types of activities: automatic and interactive. Automatic activities are executed automatically by the Process Execution Engine, whereas interactive activities require human input.

The activities of a business process are linked by transitions, which determine the order in which they are performed and the basic workflow of the process.

**Roles and Participants**

Each interactive activity belongs to a role, that is, a title or job function performed by participants in the organization. For example, a role could be Supervisor or Finance Administrator.

Participants are the individuals who interact with the process. To perform an activity, a participant must be assigned the role that the activity belongs to. A participant can have one or more roles.
Exceptions

Because it is often impossible to predict every outcome, a business process usually needs a way to deal with exceptions. An exception is an event in which a pre-defined outcome of a process cannot be reached.

The way in which a process deals with such an event, known as exception handling, can involve such steps as data clean-up or notifying a participant with a supervisory role that the situation needs attention.

Work Item Overview

If you think of a business process as a sequence of steps, then you can think of a work item as a specific item going through those steps.

For example, in a business process that handles purchases, each work item could be an individual purchase order. There can be any number of work items traversing a business process, just as there can be any number of purchase orders going through a purchase order system.

Every work item has a specific history and properties. For example, a purchase order usually contains a customer name, a list of items, an amount due, dates of delivery and payment, and other required data. A work item can also have various status conditions. In the case of a purchase order, you want to know if it has been approved, billed, or paid, or if the requested products have been shipped.

The life of each work item has a beginning and an end, as defined in the business process. As the work item proceeds through each step of the process, it is worked on by human participants or processed automatically by software.

Note: In order to understand what a work item is, you must first understand the concept of a Business Process Overview on page 39.

Note: Work Items are also called instances, a more technical term used by business process designers. A business process instance is the same thing as a work item.

Configuration Information

In general, the Oracle BPM Office Add-in will be configured by a system administrator or IT department. The information in this section is provided in case you will install the BPM Add-in yourself or need to troubleshoot an existing installation that isn't working.

Installing the Oracle BPM Add-in for Office 2007

The following procedure shows you how to install the BPM Add-in for Office 2007.

To install the Oracle BPM Add-in for Office 2007, you need the following:

- Office 2007 with one or more of the following applications:
  - Excel
  - PowerPoint
  - Word
  - Microsoft .NET Framework 2.0, 3.0, or 3.5. Windows Vista includes the .NET Framework, but Windows XP does not. If you have Windows XP, check if a compatible version of the .NET Framework is present, and if not install one. The .NET Framework can be downloaded from the Microsoft Download Center.

To install the Oracle BPM Add-in:

1. Locate the installation file, OracleBPM-OfficeAddIn.msi, in the following directory: <ORABPM_HOME>/webapps/workspace/office
2. Double click on the OracleBPM-OfficeAddIn.msi file to run the installer, and follow the Installation Wizard instructions.
   The Oracle BPM Add-in is installed.
You can verify that the Oracle BPM Add-in has been correctly installed by running Excel, Word, or Power Point and looking for the Business Processes tab. If the tab is present, the Add-in is installed and enabled. If not, the Add-in is either not correctly installed or disabled.

**Enabling the Oracle BPM Add-in**

If you installed Office 2007 before installing the Microsoft .NET Framework, the Oracle BPM Add-in may be disabled. This topic describes how to enable the Add-in.

The Microsoft .NET Framework, Office 2007, and the Oracle BPM Add-in should be installed in your machine.

Note: If you have just installed the Oracle BPM Add-in, the Add-in is not visible, and you are running Windows XP, the most likely reason the Add-in is disabled is that you are missing the Office 2007 Primary Interop Assemblies (PIA) component. This happens when you install the .NET Framework after installing Office 2007.

In this case, you must install the Primary Interop Assemblies (PIA) before proceeding with the steps below. You can download this component from the Microsoft Web site.

Follow this procedure if you have installed the Oracle BPM Add-in and do not see the Business Processes tab:

1. Click the Office Button, then the Excel Options, Word Options, or PowerPoint Options button, depending on the application you are using.
   The Options dialog box will appear for your application.
2. In the left panel, click Add-Ins.
   The Add-ins page will appear.
3. In the Manage drop-down list, make sure that COM Add-ins is selected, and click Go.
   The COM Add-ins dialog box appears.
4. In the Add-ins available list you should see the item BPM Ribbon with an unselected checkbox. Select this checkbox and click OK.
   The dialog box will close and the Business Processes tab should now appear in your application.