TIBCO iProcess® Workspace (Browser)

User Guide

Version 11.10.0 | May 2025

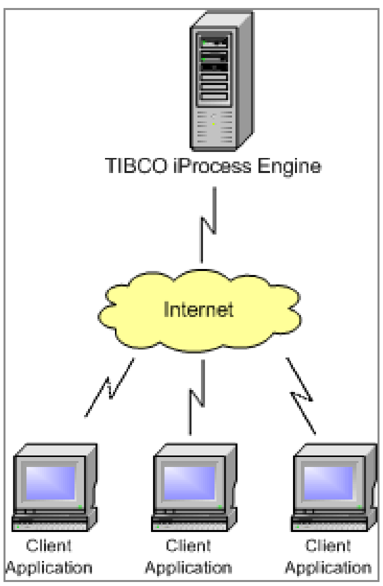
Contents

Introduction

This section provides an overview of the TIBCO iProcess® Workspace (Browser).

What is the TIBCO iProcess Workspace (Browser)?

The TIBCO iProcess Workspace (Browser) is a Business Process Management (BPM) application that runs over the internet or an intranet. As a BPM application, it automates the movement of data/information through your business process, whatever your business may be. It may automate the process of filing an insurance claim, a loan application, or any process that has multiple steps.



The TIBCO iProcess Workspace (Browser) application is run in a browser (e.g., Microsoft Internet Explorer). You connect to a TIBCO iProcess Engine over the internet or an intranet by entering a web address that is determined by the location at which your TIBCO software is installed.

After connecting to the TIBCO iProcess Engine by entering a valid user name and password, you will be presented with screens that allow you to perform the functions your specific application was designed to perform. Each time you initiate an action in your client application (i.e., by clicking on something), a request is sent to the TIBCO iProcess Engine instructing it to either send data to the client or to perform some sort of action (e.g., save the data you've just entered).

All data pertinent to your business process is stored in a database on the TIBCO iProcess Engine. The iProcess Workspace (Browser) provides a way for you to access and manipulate that information via the internet.

Understanding a Business Process

At the heart of the iProcess Workspace (Browser) is the iProcess "procedure," which defines the flow of information in your application. Procedures are defined with a TIBCO tool called **TIBCO Business Studio™**. A procedure consists of a number of "steps," including manual steps (which require user action), automatic steps (which are executed automatically by the iProcess Engine), and condition steps (which branch based on the result of a condition).

An example of a very simple procedure is shown below.

Someone using the iProcess Workspace (Browser) starts a "case" of a procedure, which typically causes a screen to be displayed onto which the user enters information. For example, if the procedure defines the processing of a loan application, the first screen may involve entering demographic information for the applicant. The next step might involve another person reviewing the application — the procedure would be defined such that the information entered in the first step is automatically sent to the person(s) responsible for reviewing it. The application process will progress through the steps of the procedure until it is completed.

The following table provides definitions of terms that are used throughout this document and in your iProcess Workspace (Browser).

Term	Description
Procedure	Represents the definition of a business process, which ensures that information flows in a consistent and timely manner through the system. An iProcess procedure is defined using TIBCO Business Studio. An example is shown in the illustration above.
Case	This is a particular instance of an iProcess procedure. A case is created when a procedure is "started," and remains in existence until that instance of the procedure is purged from the system.
Step	A procedure is made up of a number of steps, which define the activities that take place within the flow of a procedure. Each step defines what must be done, who must do it, and, optionally, a deadline by which it must be done.
Work Queue	This is a list of work items (see below) that are awaiting action. A work queue can belong to an individual user (personal work queue) or to a group of users (group work queue). If it is a group work queue, any user that belongs to that group has access to the work items in that group queue.
Work Item	A work item represents an action item listed in a work queue. It relates to a step in an active case. A user manages the work items in their work queue by performing some sort of action upon them, such as entering data on a form, forwarding the item to another user or group, "keeping" it (placing it back in the work queue for further action at a later time), or "releasing" it (completing the required action and sending it on to the next step in the procedure).

You may not necessarily need to understand the entire structure of the procedure(s) you are working on. Generally, users are focused on performing some sort of work on the work items that appear in their work queue. The type of work you perform will depend on the type of business you are in and how your procedure was designed.

Functions Performed by the TIBCO iProcess Workspace (Browser)

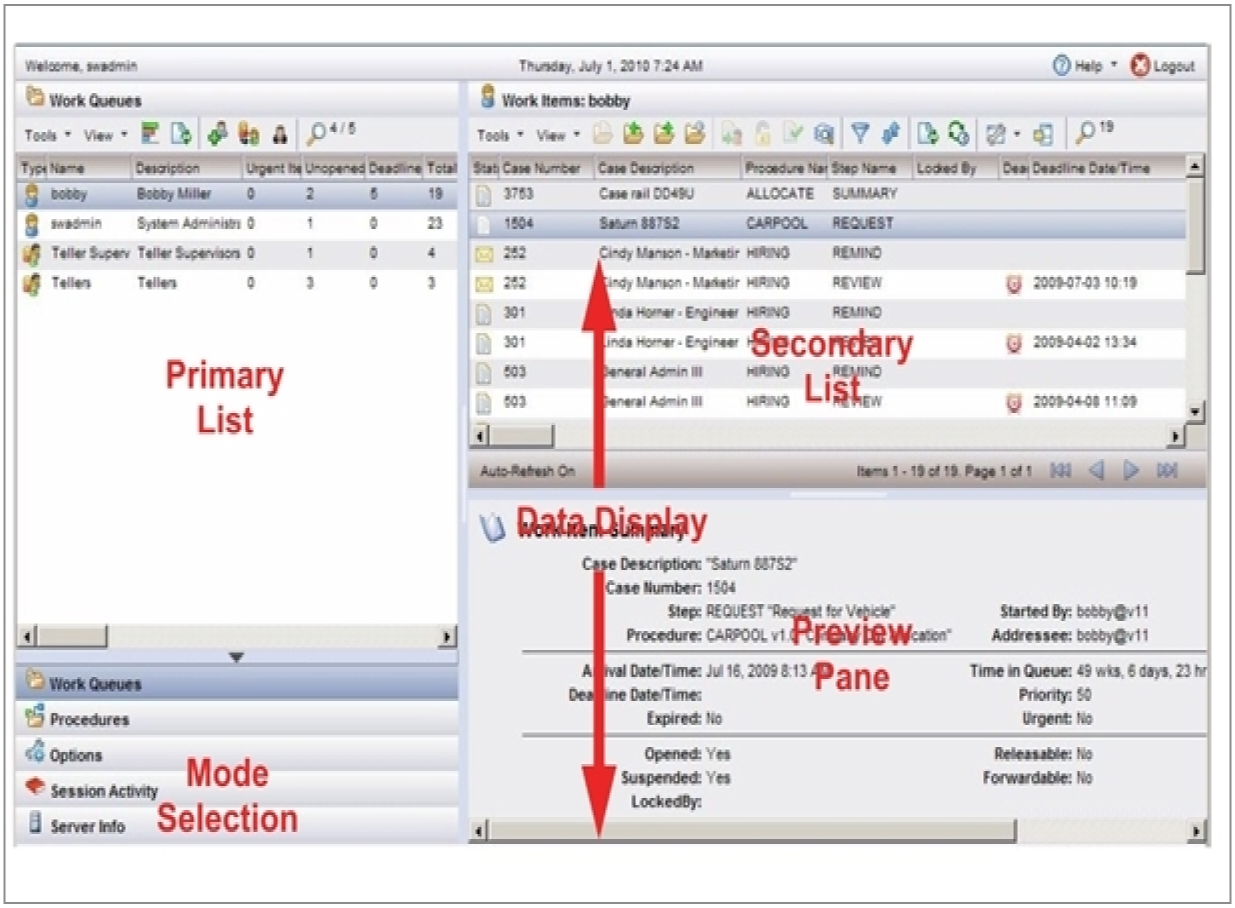
The following are the types of functions you are typically performing with the TIBCO iProcess Workspace (Browser):

- Open and view work queues:
  - User work queue - Each user has a “personal” work queue into which work items are sent that user is responsible for dealing with.
  - Group work queue - Users may be added to a “group,” which gives that user access to the group’s work queue. For example, all applications in need of review may be sent to the “Reviewer” group queue. All users that have been added to the Reviewer group have access to, and are able to process, work items in the Reviewer work queue.
- Apply filter and/or sort parameters to a work queue so only the desired work items are listed in the desired order.
- Open individual work items.
- Enter information into forms that are displayed when you open a work item.
- Either “keep” a work item, which closes it and places it back in the work queue, or “release” a work item, which causes the case to advance to the next step in the procedure.
- Forward work items to a different work queue (user or group).
- Start a case of a procedure.
- Suspend or reactivate a case.
- View the history of a case.
- Allow temporary access to your personal work queue to another user.
- Temporarily redirect work items from your work queue to another work queue.

While these are the primary functions you’ll be performing, there are many additional functions that can be performed with the iProcess Workspace (Browser). These are described in the remainder of this document.

The TIBCO iProcess Workspace (Browser) Screen Layout

The TIBCO iProcess Workspace (Browser) screen consists of the following sections.



Each of these sections are described below.

Mode Selection

This section contains buttons/icons that allow you to select the type of information that is displayed in the other sections of the screen. The available selections are:

- **Work Queues** - Displays the work queue list in the **Primary List** section.
- **Procedures** - Displays the procedure list in the **Primary List** section.
- **Options** - Displays user options in the **Data Display** section. User options allow you to specify settings such as display options, layout options, etc.

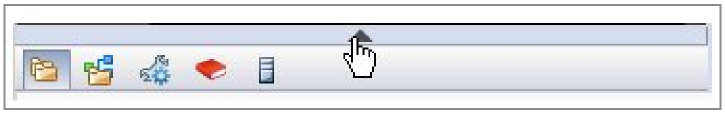
  For more information about user options, see User Options.
- **Session Activity** - Displays the session activity log in the **Data Display** section. The session activity log provides information about the activity that has taken place during the current login session.

  For more information about the session activity log, see Login Session.

- **Server Info** - Displays a server information window in the **Data Display** section. This provides technical information about the server, such as TCP port, IP address, etc.

  For more information about the server information window, see Viewing Server Information.

Note: You can display either buttons with text on them, or icons, in the **Mode Selection** section by clicking the arrow between the **Primary List** and **Mode Selection** sections:



This arrow acts as a toggle, switching between the buttons with text and icons.

Primary List

This section always contains either the work queue list or procedure list, depending on the selection made in the **Mode Selection** section. If one of the other mode selections are made (Options, Session Activity, or Server Info), this section will still display either the procedure or work queue list, whichever was most recently selected.

For information about the work queue list, see The Work Queue List.

For information about the procedure list, see The Procedure List.

Secondary List

This section lists either a work item list or a case list, depending on whether you've selected a work queue or procedure in the **Primary List**.

If you select a mode other than **Work Queues** or **Procedures**, this list is overlaid with the options, session activity, or server info, depending on which you select.

The work item and case lists provide a **Preview** icon that can be used to turn off the **Preview Pane**, which causes the **Secondary List** to encompass the entire right side of the screen.

For information about work item lists, see Work Item Lists.

For information about case lists, see Case Lists.

Preview Pane

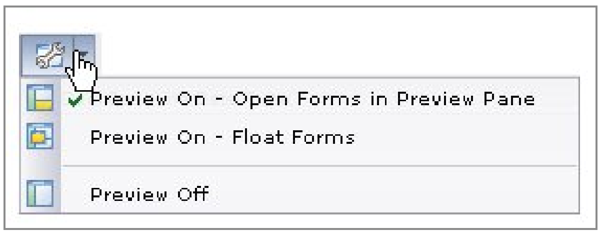
This section displays summary information for the selected work item or case.

The Preview Pane can be turned on or off by:

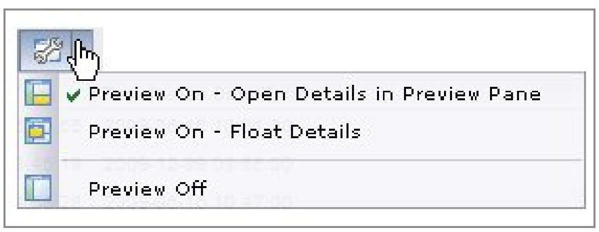
- clicking the  icon on the work item or case list, or
- by selecting **Preview** from the work item or case list **View** menu.

Both of these cause the **Preview** drop-down menu to be displayed:

Preview menu from the work item list:



Preview menu from the case list:



The preview settings are as follows:

— **Preview On - Open Form/Details in Preview Pane**: When you select (single-click) a work item or case in their respective list, the work item or case summary is displayed in the Preview Pane.

When you open (double-click) a work item or case, the work item form or case details are also displayed in the Preview Pane. (Note - You may not be able to open a work item form in the Preview Pane, depending on the type of work item form your application uses — for more information, see Work Item Form Location.)

— **Preview On - Float Form/Details**: When you select (single-click) a work item or case in their respective list, the work item or case summary is displayed in the Preview Pane.

When you open (double-click) a work item or case, the work item form or case details are displayed in a separate floating window.

- **Preview Off**: When the Preview Pane is turned off, single-clicking a work item or case in their respective lists has no effect.

  When you open (double-click) a work item or case, the work item form or case details are displayed in a separate floating window.

If you are choosing to display the work item form in a separate floating window, the separate floating window may be either a dialog or a new browser window, depending on the setting of a user option for the logged-in user — for more information, see Floating Work Item Form Window . (Note - You may not be able to open a work item form in a separate dialog (it may have to be a separate browser window), depending on the type of work item form your application uses — for more information, see Work Item Form Location.)

If you are choosing to display case details in a separate floating window, the floating window will always be a separate dialog — case details cannot be displayed in a new browser window.

Selections you make on the **Preview** menu are not persistent; the next time you log in, the **Preview** menu setting defaults to the setting in user options. For more information, see Work Item Preview Default and Case Preview Default .

Resizing the Preview Pane

You can specify that the Preview Pane automatically resize when you open a work item or a case. For instance, you may want the Case Details to open so that the Preview Pane encompasses 80% of the Data Display area. It will then revert to its original size when you close the work item or case.

To configure the Preview Pane to automatically resize, see Layout Options.

Displaying a Floating Window

From the work item or case list, you can display a separate floating window containing whatever information is currently displayed in the **Data Display** section. This allows you to create multiple views of the same list, or to view details about multiple work items or cases from the same list simultaneously.

To display a separate floating window:

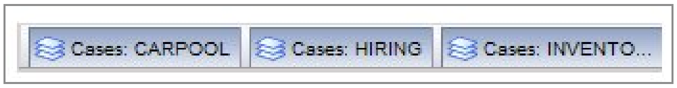
- From the work item list, select **Float Work Items List** from the **View** menu.
- From the case list, select **Float Cases List** from the **View** menu.

- From either the work item list or case list, click the  icon.

A separate floating window is displayed containing the same information currently in the **Data Display** section. This floating window is always opened as a separate dialog within the application (rather than as a new browser window).

Floating Window Task Bar

As windows are floated, an icon for that window is added to the task bar on the bottom of the screen:

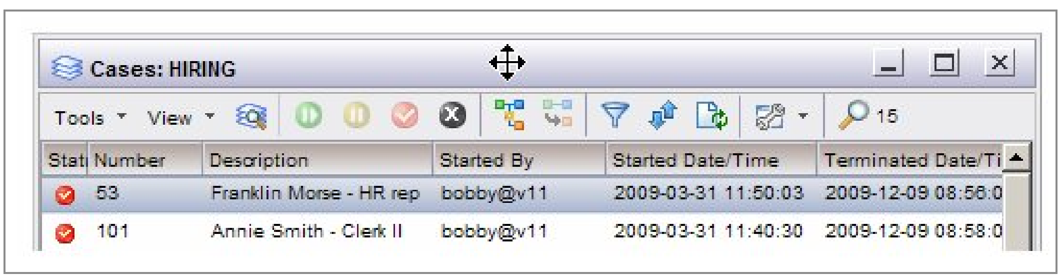


The task bar allows you to select one of the floating windows without clicking on the window itself — when windows are floating, they can become hidden behind other floating windows.

Clicking on an icon in the task bar works as a toggle — successive clicks on an icon causes the window associated with that icon to alternately be brought to the foreground and background.

Moving a Floating Window

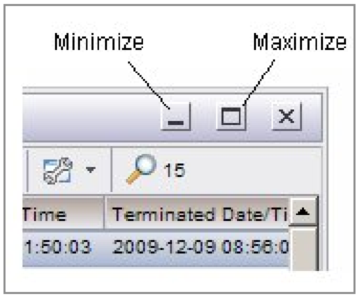
You can move a floating window around the screen by placing the cursor in the window's header bar. When the cursor changes to an icon that contains multi-directional arrows (see the illustration), click and hold the left mouse button while moving the window to the desired location.



Resizing a Floating Window

Floating windows provide the following methods of resizing the window.

- **Minimize Toggle** - Clicking this button causes the window to minimize — the window is removed from the screen, and a button representing the window appears on the task bar. Click the button on the task bar to cause the window to reappear.
- **Maximize Toggle** - Clicking this button toggles between the window expanding to cover the entire screen, and collapsing to its original size.



- **Dragging to Desired Size** - Placing the cursor in the lower right corner of the floating window causes the cursor to change to a double arrow. Pressing and holding the left mouse button when the double arrow appears allows you to resize the window to the desired size.

Closing a Floating Window

To close a floating window, click the **x** in the upper right corner of the floating window.

Finding Items in a List

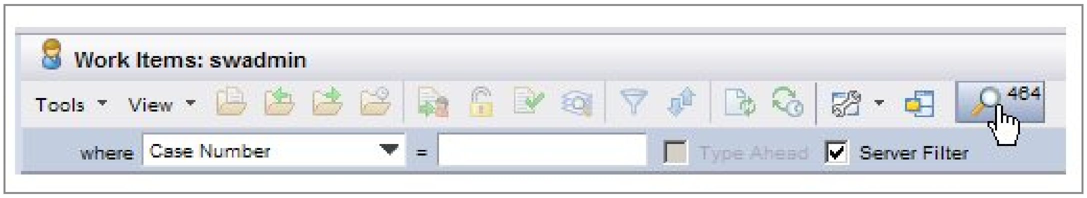
The find function allows you to quickly locate items in a list. All four of the primary lists (procedure, work queue, case and work item) contain a find function. It is also available on other dialogs throughout the iProcess Workspace (Browser).

When using the find function on work item and case lists, it is often used in conjunction with the filter function (for information about the filter function, see Filtering a Work Item List and Filtering a Case List). When used on these lists, the intent is for the find function to refine the search that has already been done using the filter function. Typically, the filter function is used to present a list of work items or cases that are of continual interest. You can then use the find function to further refine the search through the list of filtered work items or cases. When you are done with the find function, and close it, the list returns to the list presented by the filter function. If you want a different list of work items or cases that are of continual interest, the list should be filtered using the filter function. (Note that the **Filter**, **Sort**, and **Refresh** icons and menu selections are disabled while the find function is being used — you must close the find function to change filter or sort criteria, or to refresh the list.)

To use the find function:

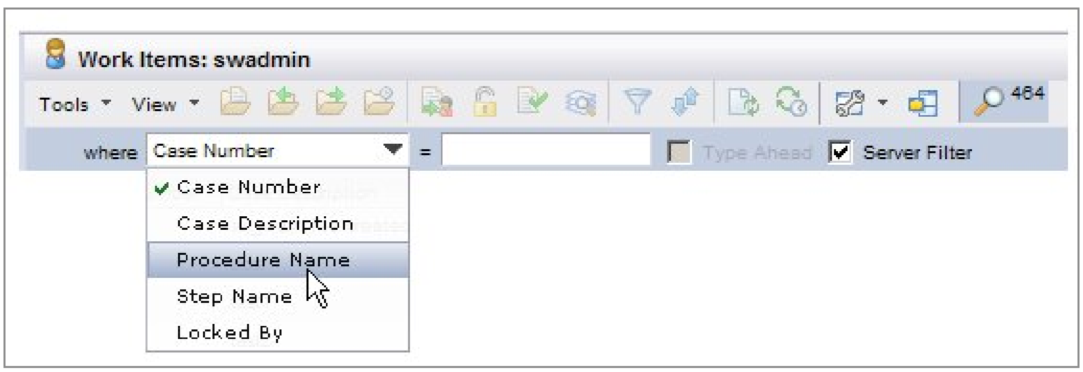
Procedure

1. Click on the **Find** button in the list window. This causes the "**where**" fields to be displayed.



Notice the number next to the **Find** button. This number indicates the number of items (work items, cases, work queues, or procedures) in the list.

2. From the first **where** field drop-down list, select the column you want to use to find the item. For example, if you are searching for a work item from a specific procedure, you would select the **Procedure Name** column (the columns available will depend on the type of list from which you are searching).



3. In the second **where** field, enter the value you are searching for. For example, if you are searching for a work item from the "Checkout" procedure, you would enter "Checkout" in the second field.

You can also use the "type ahead" feature, which causes the system to search for the value entered as each character is typed in. If it's enabled, items that match the characters you have entered so far are listed. In the example shown here, when "C" is entered, all work items from procedures beginning with "C" are listed. When you enter the second character (“h”), all work items from procedures beginning with “Ch” are listed, and so on.

To enable the “type ahead” feature, ensure the **Type Ahead** check box is checked.

> **Note:** If you are using the find function on the work item list, there is an additional check box labelled **Server Filter**. Checking the **Server Filter** check box disables the **Type Ahead** check box. For information about using the **Server Filter** check box, see Finding Work Items in the Work Item List.

4. Press **Enter** after entering the value in the second **where** field — assuming the “type ahead” feature is not enabled (see the previous paragraph). If the “type ahead” feature is enabled, you will not need to perform this step.

The items that meet the search criteria you entered are displayed in the list.

If the number to the right of the **Find** button is displayed in a *##/##* format, it indicates how many items the find function found. Note, however, that this number can be influenced by things other than the find function, depending on the type of list. See the following sections for more information about this number for each list type:

- Number of Work Queues in a Work Queue List
- Number of Work Items in a Work Item List
- Procedure List Columns
- Number of Cases in a Case List

Turning the Find Function Off

The **Find** button acts as a toggle — subsequent clicks turn the find function on and off. When the find function is off, the **where** fields are not displayed and the entire list is shown (although, possibly filtered using the filter function).

Turning the find function off does not clear values from the **where** fields — previously entered values are still in the **where** fields if you toggle the find function back on. However, closing the list, then re-displaying the same list causes values in the **where** fields to be cleared.

Selecting Items in a List

The way in which you select items in a list depends on the type of list, as well as other factors, as described below.

Work Queue and Procedure Lists

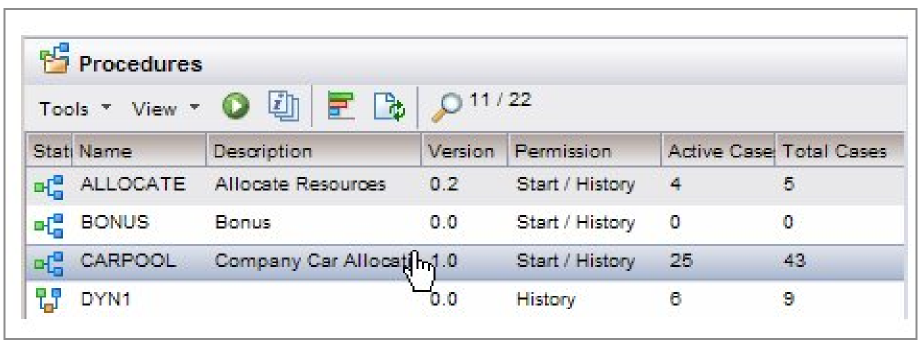
Selecting a work queue from the work queue list causes the work item list for that work queue to be displayed in the Secondary List section of the screen.

Selecting a procedure from the procedure list causes the case list for that procedure to be displayed in the Secondary List section of the screen.

The work queue and procedure lists allow you to select only a single item at one time. To select a single item:

- Click the desired line with the cursor, or
- use the keyboard up/down arrow keys to move the highlight up or down to the desired item.

The selected item is shown in a different color than the rest of the items in the list:



Work Item and Case Lists

The effect of selecting an item from the work item or case list depends on whether or not the preview feature is turned on (see Preview Pane):

- If preview is turned off, selecting an item from the work item or case list has no effect.
- If preview is turned on:

— selecting a work item from the work item list causes the work item summary to be displayed in the Preview Pane section.

— selecting a case from the case list causes the case summary to be displayed in the Preview Pane section.

Selecting a Single Item

To select a single item in the work item or case list:

- Click on the desired line with the cursor, or
- use the keyboard up/down arrow keys to move the highlight up or down to the desired item.

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The selected item is shown in a different color than the rest of the
items in the list:
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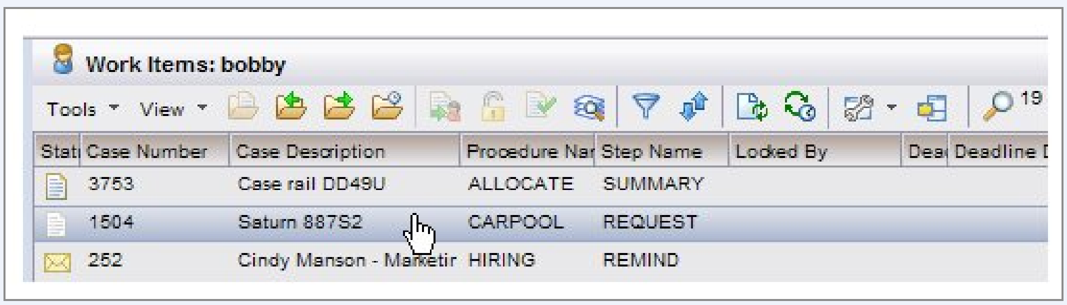


Note: Double-clicking an item on a work item or case list opens that item. When you open a work item, the work item form is displayed. When you open a case, the case details are displayed in a tabbed window. For more information about opening work items and cases, see Opening Work Items and Opening Cases, respectively.

Selecting Multiple Items

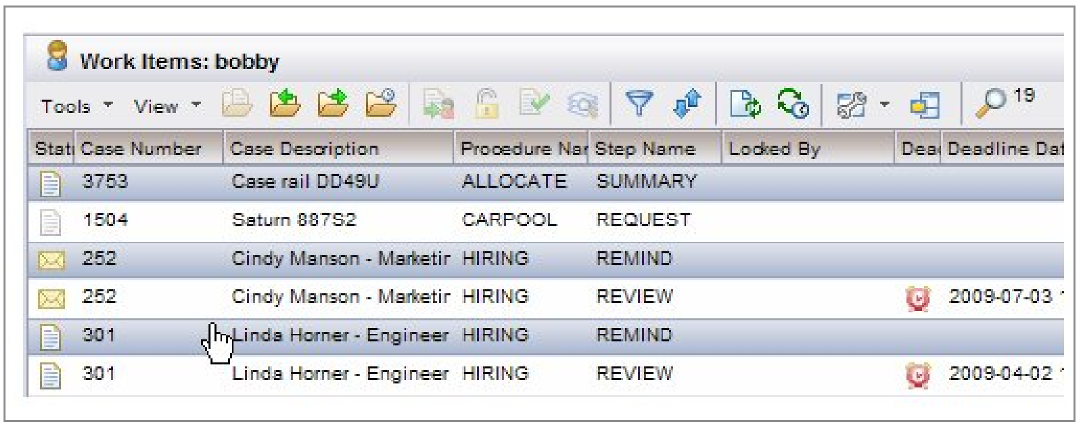
You can also select multiple items at one time on the work item and case lists, as many of the functions available from these lists can be applied to more than one item at a time (e.g., forward work item(s), release work item(s), close case(s), etc.).

Note: You cannot select multiple procedures from the procedure list nor multiple work queues from the work queue list. To list the cases from multiple procedures, or the work items from multiple work queues, you must select and list them one at a time.

However, if you select multiple items in work item or case list, and have the preview feature turned on, the Preview Pane will show the summary information only for the first work item / case selected.

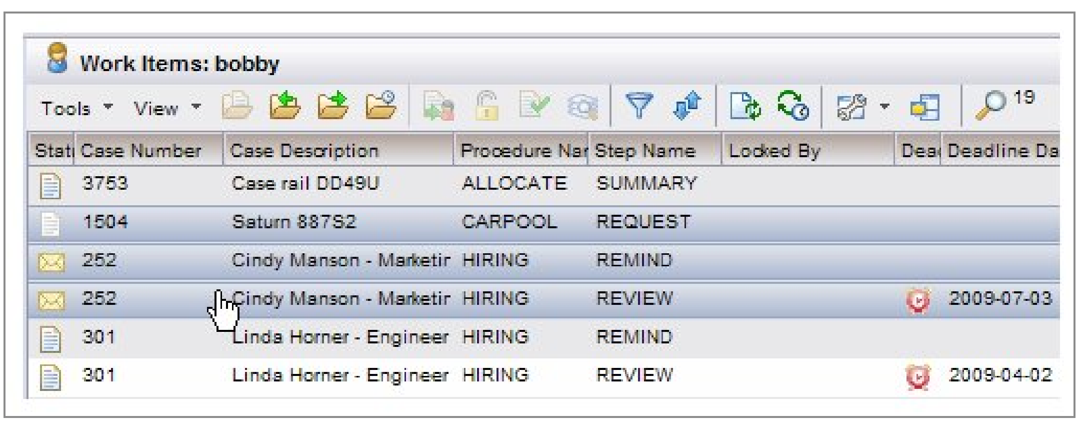
To select multiple items that are not grouped together:

- Select one of the desired items, press and hold the **Ctrl** key, then click on the other desired items. All selected items are shown in a different color than the rest of the items in the list.



To select multiple items in a list that are grouped together:

- Select the first item in the group, press and hold the **Shift** key, then either click on the last item in the group, or move the arrow key until all desired items are selected. All selected items are shown in a different color than the rest of the items in the list.



Refreshing Information in a Window

Each window that contains a list of procedures, cases, work queues, or work items is a **snap shot** of the information in the list when the list was displayed. For example, if you click on a work queue to display a list of work items in that work queue, the list contains all of the work items in that queue (possibly filtered) at the moment the list was displayed. It is not automatically updated to provide the latest items. You must “refresh” the list to get the latest information from the iProcess Engine.

Refresh a list by:

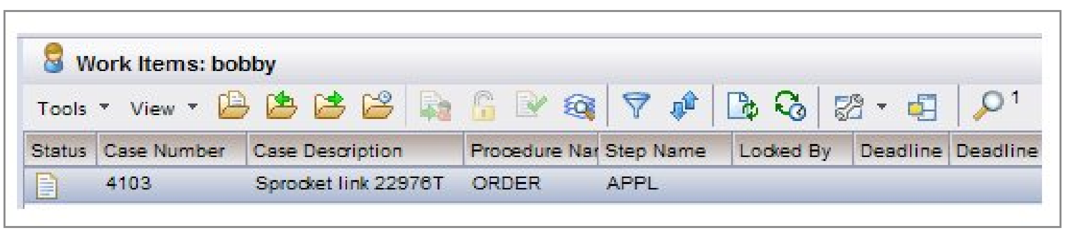
- selecting **Refresh...** from the **View** menu, or
- by clicking the icon.

Note that refreshing the list causes the client application to ask the iProcess Engine to re-send the information in the list. This can take some time, depending on the number of items in the list, the speed of your computer, etc.

If you are working with a work item list, you can also specify that the list automatically refresh at specified intervals. For information see, Refreshing the Work Item List.

Customizing Columns in a List

By default, certain columns are displayed in each type of list. For example, the following shows the default columns that are displayed in the work item list:

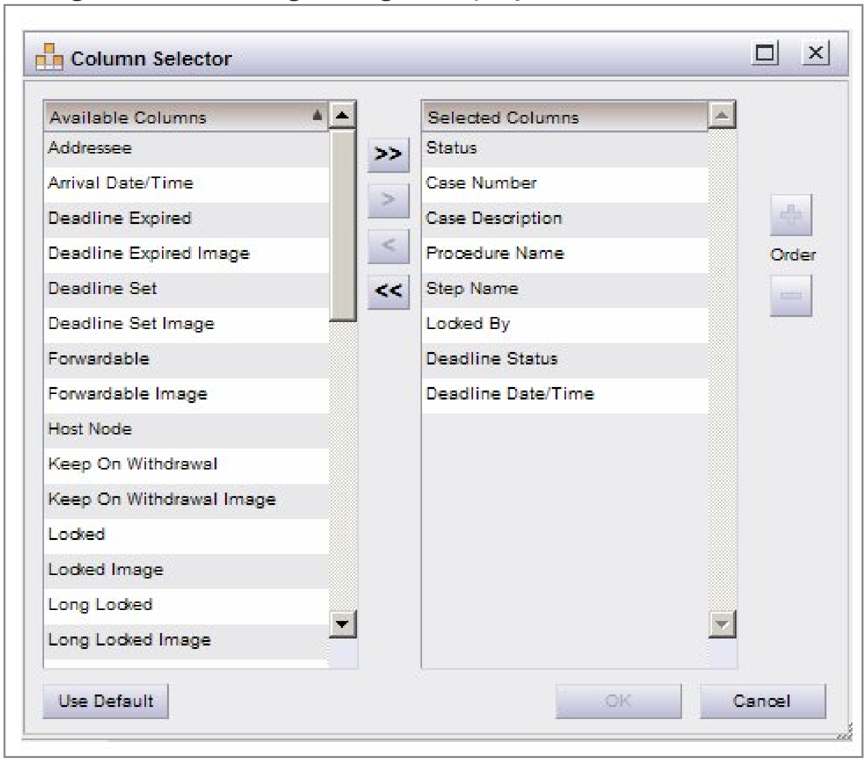


However, these may not be the columns you would like to see. The iProcess Workspace (Browser) allows you to customize the columns displayed in each of the list types — work item, case, work queue, and procedure list.

To customize the columns in the currently displayed list, follow these steps:

Procedure

1. Choose **Select Columns** from the **View** menu on the list whose columns you want to change. The following dialog is displayed:



This dialog shows all of the columns available for the type of list you are working with. This example is for the work item list.

The **Available Columns** section on the **Column Selector** dialog shows the columns that are not currently displayed, but are available to display. The **Selected Columns** section shows the columns that are currently displayed.

2. Select the desired columns, using the following actions:

— Individual columns can be selected by clicking on the desired name.

— Multiple columns can be selected by holding down the **Ctrl** key while clicking on the desired names.

— A group of columns can be selected by clicking on one name, then holding down the **Shift** key and clicking the last name in the desired group.

3. Move columns to the desired section on the Column Selector dialog:

— Columns can be moved back and forth between lists by selecting the desired column(s), then clicking the “**>**” or “**<**“ buttons.

— An individual column can be moved from one list to the other by double-clicking on the column name.

   - — All columns can be moved from one list to the other by clicking on the “**>>**” or “**<<**“ buttons.

   You can also change the columns to the system defaults by clicking the **Use Default** button.

4. Once the desired columns are listed in the **Selected Columns** section (these are the columns that will be displayed), you can change the order in which they will appear on the list by using the **Order** buttons. Click the column whose order you would like to change, then click on the ‘**+**’ or ‘**-**’ **Order** button to move the column up or down in the list.

5. Click **OK** when the list on the right contains the columns you would like displayed, in the order you would like them displayed.

> **Note:** There is currently no means of making column changes on all work item lists.

Changes made to column order using the **Column Selector** are saved either locally or on the server, depending on a configuration setting made by the system administrator:

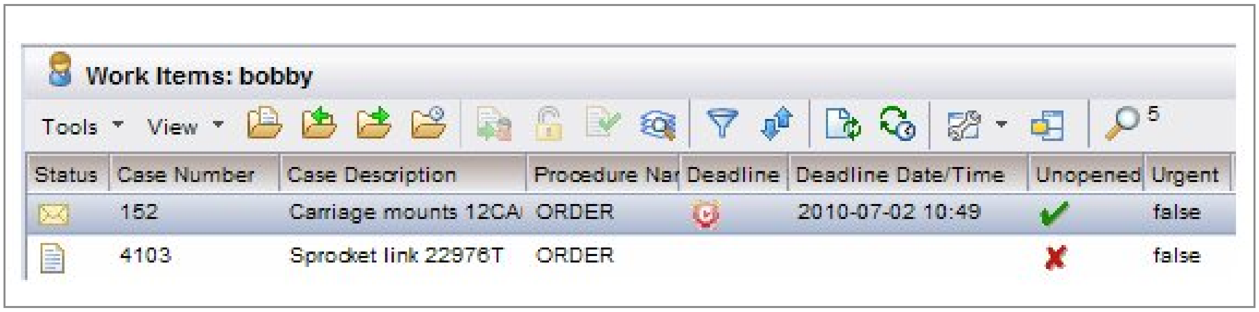
- — If saved locally, and you log into a different machine, the changes you made will not be in effect on that new machine — changes made on a specific machine will apply only to that individual machine.
- — If saved on the server, and you log into a different machine (and connect to the same server), the changes you made will be in effect on the new machine.

Displaying Images in Columns

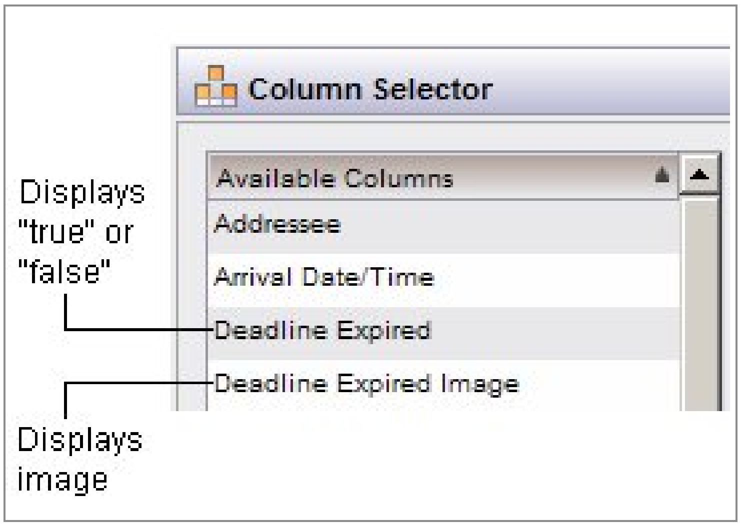
Some of the columns in lists allow you to display either text or an image in the column. Typically, these are columns that contain true or false values (two exceptions are the **Status** and **Deadline Status** columns on the work item list, which always display images — for information about the images in these columns, see Work Item Status and Deadline-Related Columns, respectively).

When images are displayed in a column, true values are shown as a green check mark; false values are shown as a red X.

For example, the following shows the work item list with images in the **Unopened Image** column, whereas the **Urgent** column does not contain images — it will shown either “true” or “false”:

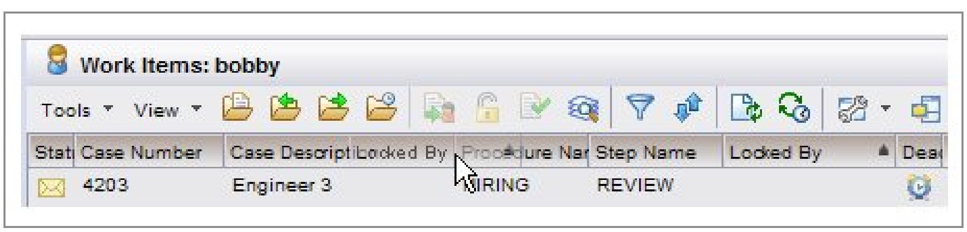


To display an image in a column, simply choose the “Image” column instead of the “non-image” column in the **Column Selector**:



Manually Changing Column Order in Lists

You can also manually change the order of the columns in a list by dragging the column left or right to the desired location.



Manual changes made to column order are saved either locally or on the server, depending on a configuration setting made by the system administrator:

— If saved locally, and you log into a different machine, the changes you made will not be in effect on that new machine — changes made on a specific machine will apply only to that individual machine.

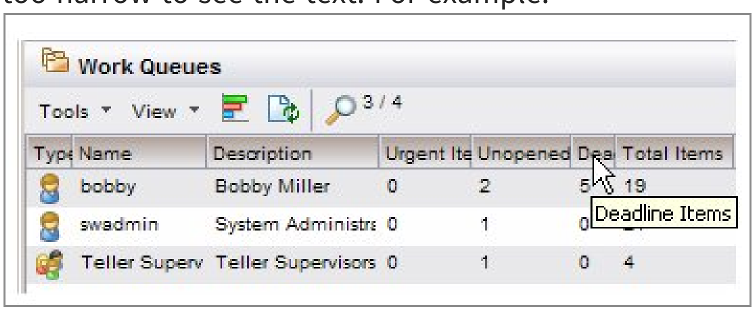
— If saved on the server, and you log into a different machine (and connect to the same server), the changes you made will be in effect on the new machine.

Help

There are two kinds of help available in the iProcess Workspace (Browser):

- **Tool-tip Help** - This type of help allows you to place the cursor on a tool icon to cause a box to appear that describes the purpose of the tool.

Tool-tip help can also be helpful to view column header text when the column width is too narrow to see the text. For example:



- **On-line Help** - An on-line help system is available that provides descriptions of the functions available in the iProcess Workspace (Browser). This help can be accessed by clicking on the **Help** button in the upper right part of the screen.

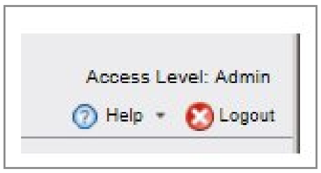
User Access Profiles

Each user of the iProcess Workspace (Browser) has a user access profile that determines what functions and menu selections are available to that user.

For example, your user access profile determines whether or not you can close cases of a procedure. The buttons and menu selections used to close cases will be displayed in the application only if your user access profile specifies that you can close cases.

This document describes all functions that are available in the iProcess Workspace (Browser), even though you may not be able to see/use that function because of your user access profile.

The access profile name assigned to the logged-in user is displayed in the upper-right part of the iProcess Workspace (Browser) screen. In the example below, the logged-in user is an “Admin” user, which gives the user access to the functions that have been specified for all Admin users:



User access profiles are assigned by a system administrator. For more information, see *TIBCO iProcess Workspace (Browser) Configuration and Customization*.

Logging In and Out

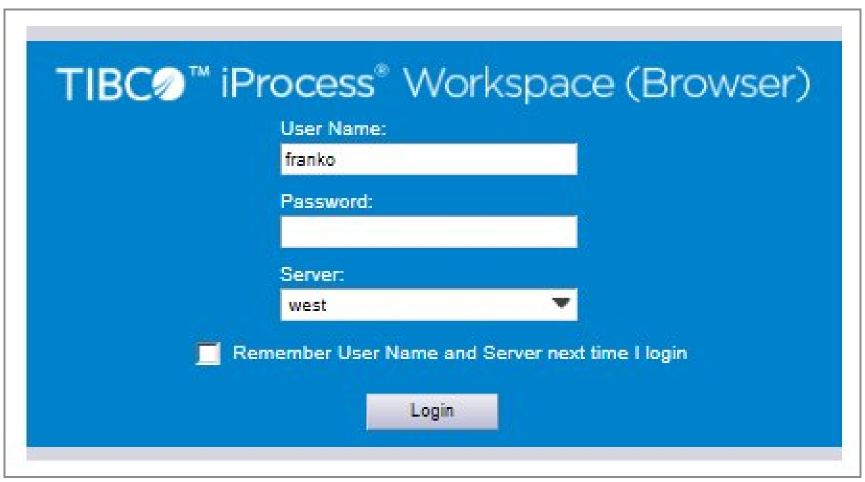
This section describes how to log in and log out of the TIBCO iProcess Workspace (Browser).

Logging In

Logging in to the TIBCO iProcess Workspace (Browser) validates your user name and password to ensure you are authorized to use the system. It also looks at your user access profile to determine how much functionality you are authorized to perform (for information about user access profiles, see User Access Profiles).

Your system administrator will determine how you actually start the iProcess Workspace (Browser). It may involve starting a browser and entering a URL (Universal Resource Locator — or “website address”), or you may click on a link on a specified web page.

After the browser connects to the proper web site, you are presented with a login window:



To log in to the iProcess Workspace (Browser):

Procedure

1. Enter your user name in the **User Name** field.
2. Enter your password in the **Password** field.

3. Choose a server in the **Server** field. This field is a drop-down list that may contain one or multiple server names, depending on how your system is configured. (The names in this drop-down list are TIBCO iProcess Objects Servers, which in turn are connected to a TIBCO iProcess Engine.)
4. If you would like your user name to be automatically entered in the **User Name** field the next time you login to the iProcess Workspace (Browser) on this computer, check the **Remember User Name and Server next time I login** box.

> **Note:** The **Remember User Name ...** check box may or may not be displayed, depending on a configuration parameter set by the system administrator.

5. Click **OK**.

   If the login is successful, either the procedure list or the work queue list is displayed, depending on how your system is set up.

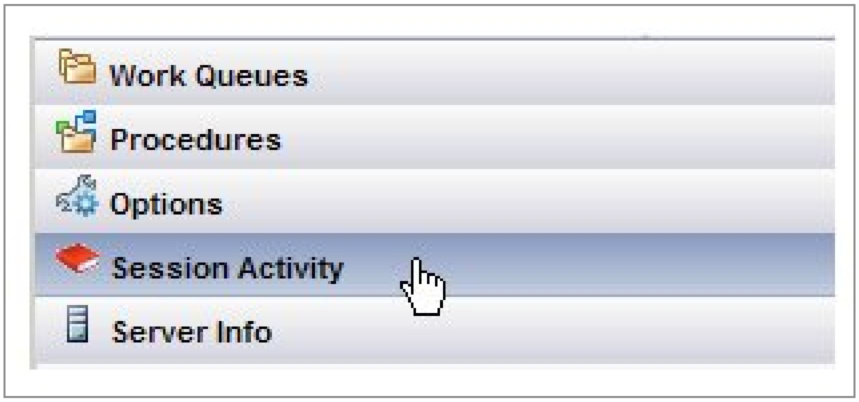
   If your password has expired, a **Change Password** dialog may be displayed (this dialog is displayed only if the appropriate access element is enabled in your access profile). If the **Change Password** dialog is displayed, you must change your password before you can proceed.

   If there is a problem with the login (e.g., you've entered an invalid user name or password, or the selected server is not running properly), an error dialog is displayed.

Login Session

The period of time between when you log in and log out is called a "login session". At any time during your login session, you can display a log that shows all of your activity during the current login session.

To display the login session log, click the **Session Activity** button/icon:



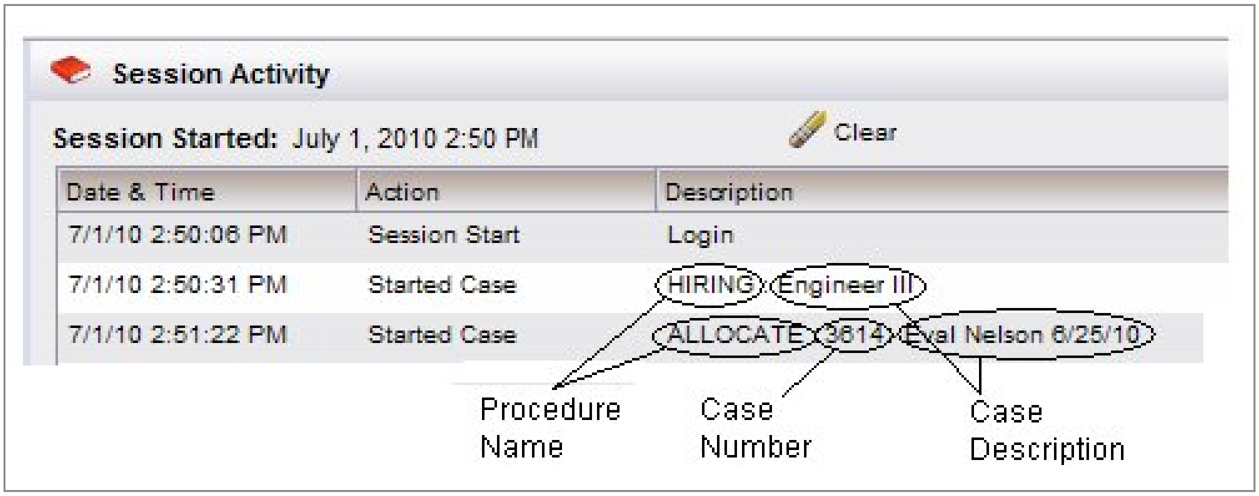
An example session activity log is shown below:

The session activity log is maintained locally — it is not returned from the iProcess Engine. The log is cleared when you log out.

> **Note:** A “Started Case” entry in the Session Log is only verifiable if the entry includes a case number. A case number is included in the log entry only if the addressee of the first step in the case being started is someone other than the person starting the case.

In the example below, the first case that was started (a case of the Hiring procedure) does not include a case number, because the first step was addressed to the person starting the case.

The second case that was started (a case of the Allocate procedure) includes a case number, because the first step was addressed to another user.



The reason the case start cannot be verified if the user starting the case is the addressee of the first step is because the user may close the form without keeping or releasing the work item (by clicking on the "x" in the upper right corner of the browser window). If this occurs, the case does not actually start.

Login Session Timeout

If there is no activity in the iProcess Client for a certain period of time, your login session may timeout.

A session timeout can be initiated by the following components:

- the iProcess Client
- the application server

These are described below.

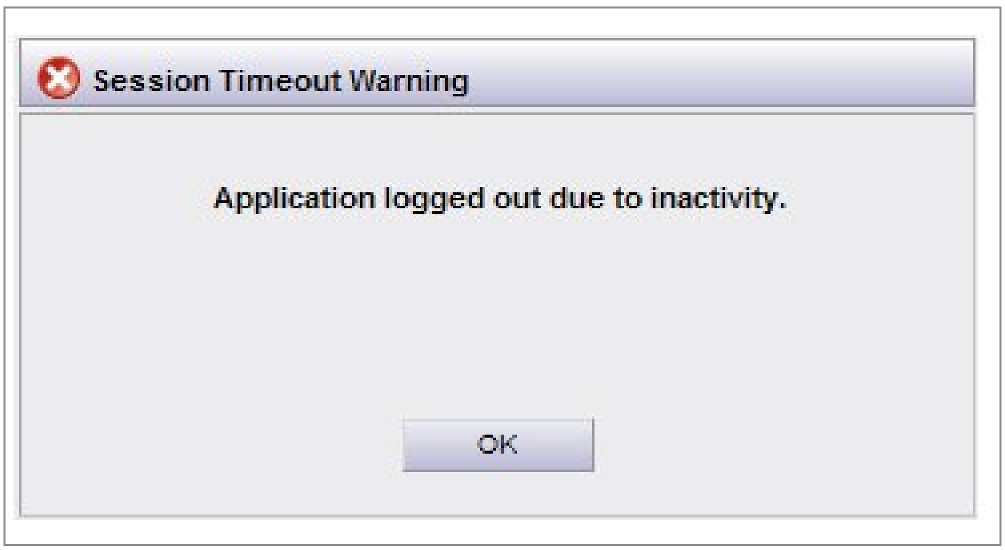
iProcess Client Session Timeout

There is a configuration parameter (`SessionMonitor`) in the iProcess Client's configuration file that allows the system administrator to specify a session timeout value.

If this parameter is configured, and you are logged into the iProcess Client, but are inactive for a period of time that exceeds the timeout value, the following warning message is displayed first:

You can click **OK** to return to the iProcess Client.

If you do not click **OK** in a specified period of time, you will be automatically logged out and the following message is displayed:

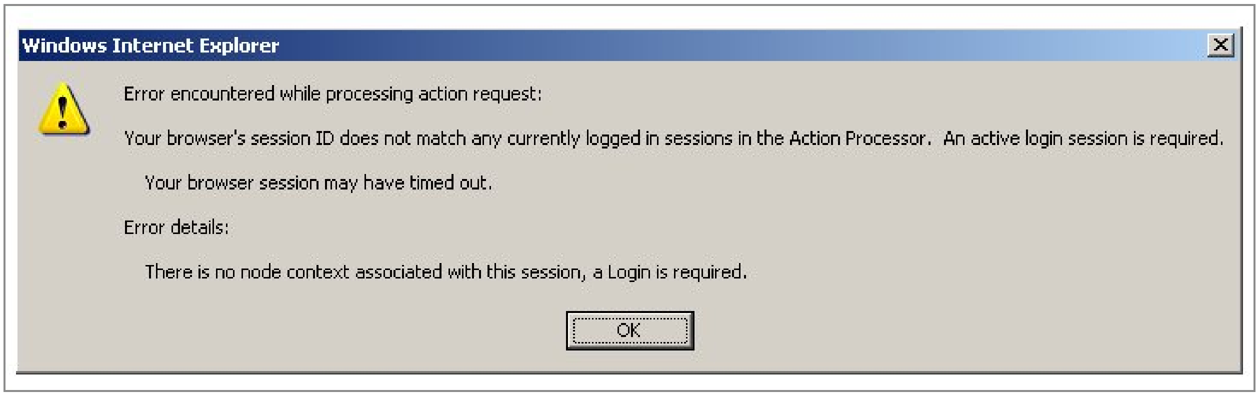


You can click **OK** to remove the message window and log back into the iProcess Client.

Application Server Session Timeout

There is also a configuration parameter on application servers that specify a timeout value.

If this parameter is configured, and you are logged into the iProcess Client, but are inactive for a period of time that exceeds the timeout value, a message similar to the following is displayed (the message varies, depending on the application server you are using):

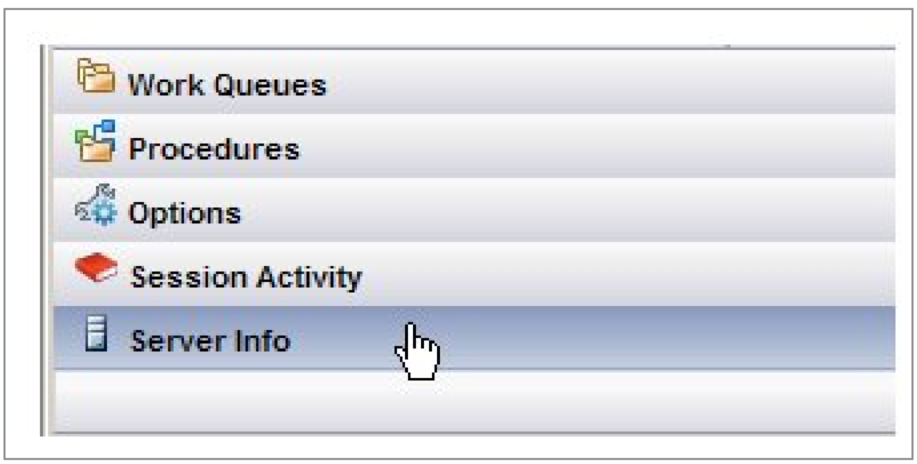


Click **OK** to return to the login window.

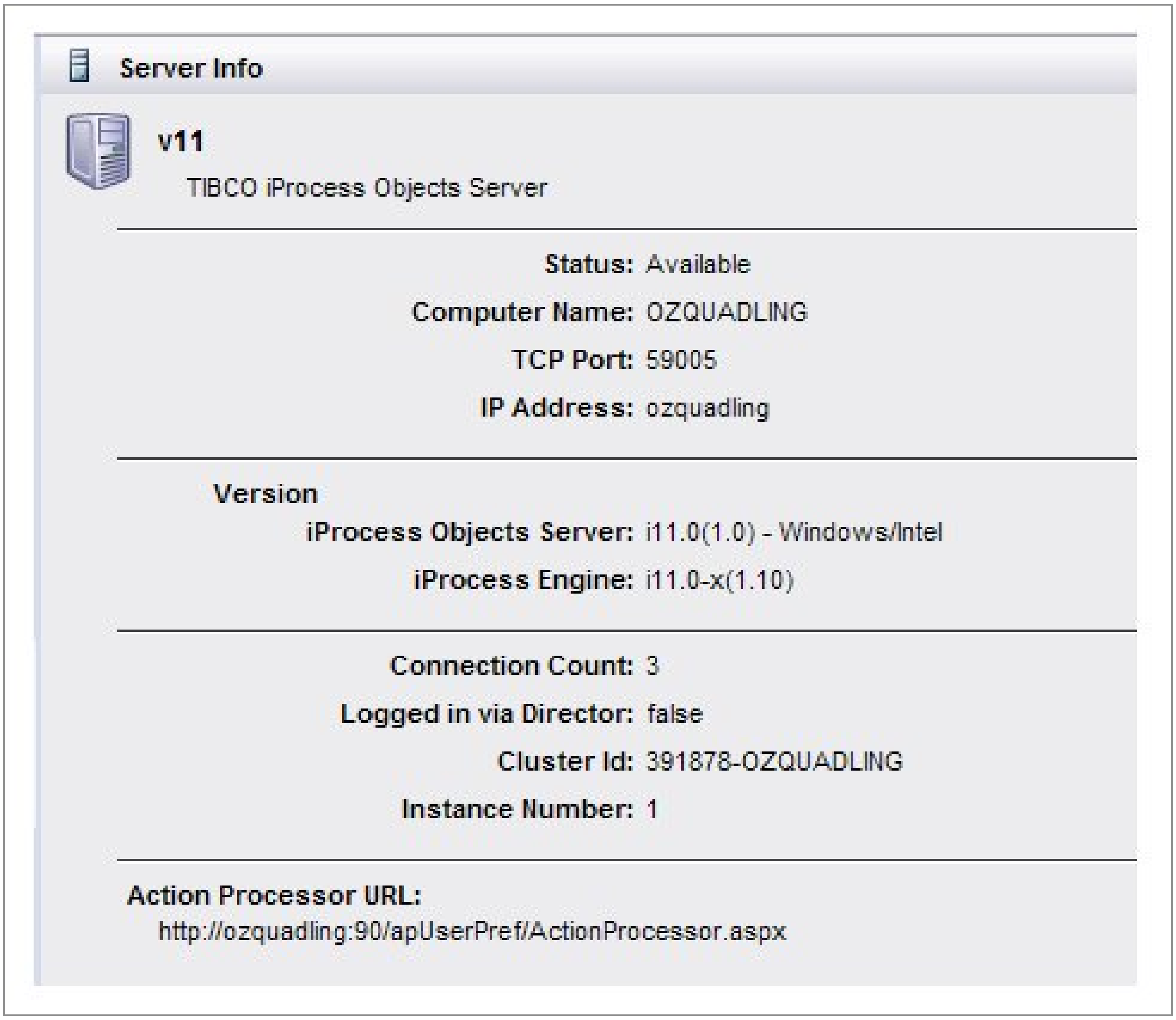
Viewing Server Information

After logging in to a server, you can display a window that provides technical information about the server. (Technically, when you log in to the system, you are logging into a TIBCO iProcess Objects Server, which in turn is connected to a TIBCO iProcess Engine.)

To display the server information window, click the **Server Info** button in the lower left part of the iProcess Workspace (Browser) screen:



An example **Server Info** screen is shown below:



Logging Out

When you are finished doing the work you need to do, you should log out of the iProcess Workspace (Browser).

> **Note:** If you just close your browser rather than log out, you will eventually be logged out internally. However, the proper “clean up” is performed internally when you log out, making the most efficient use of resources.

To log out of the iProcess Workspace (Browser):

1. Close (keep or release) any currently open work items.
2. Click **Logout** in the upper right part of the iProcess Workspace (Browser) screen.

   When you are successfully logged out, the **Login** window is displayed. You can either log in again, go to another web site, or close the browser.

   > **Note:** If there is no activity in the iProcess Workspace (Browser) for a certain period of time, the application will timeout, automatically logging you out. For more information, see Login Session Timeout.

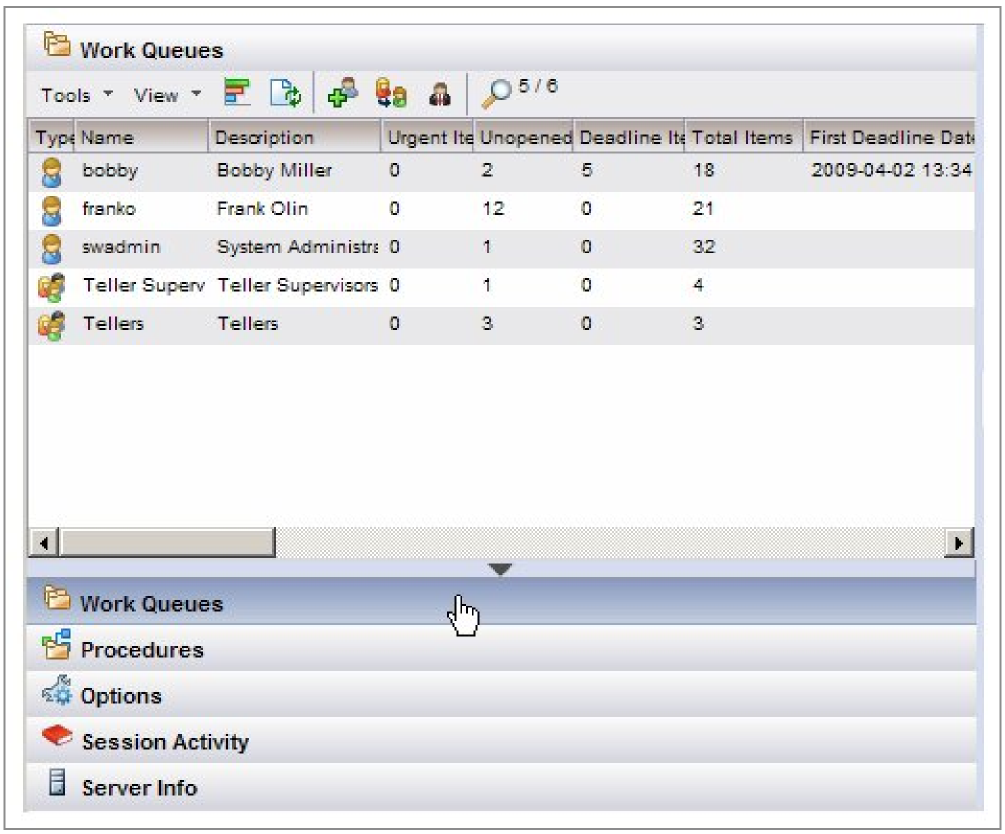
Using Work Queues

This section describes work queues and the functions you can perform from them.

The Work Queue List

The work queue list shows all of the work queues to which the logged-in user has access.

Display the work queue list by clicking on the **Work Queues** button (or icon) in the lower left portion of the iProcess Workspace (Browser) screen:



Note that the work queue names correspond to user names and group names. Each time a user or group is added to the TIBCO system, a work queue is created for that user or group; all work items addressed to that user or group are sent to their work queue.

> **Note:** A time delay may be experienced when displaying a work queue list if either the “Redirected” or “Redirected Image” column has been added to the list, and the user has access to a large number of work queues.

Information about each work queue is provided in the columns of the list. In the example shown above, the number of urgent work items and the number of new (unopened) work items in the work queue is shown. The specific information that is displayed on your system will depend on how your system was set up.

For information about selecting items from lists, see Selecting Items in a List.

Work Queue Access

Access to work queues is summarized below:

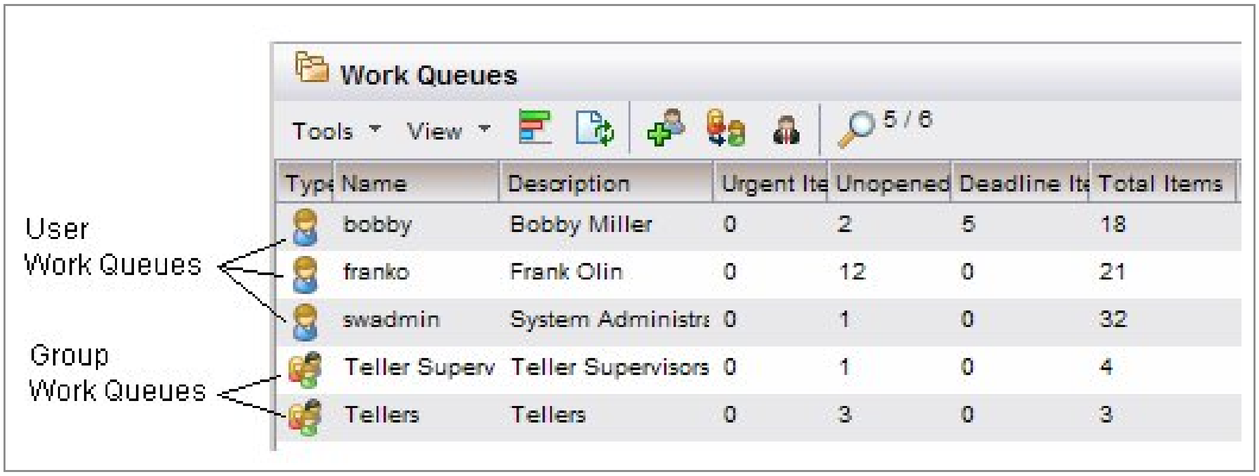
- **User Access** - All work items that are sent to you appear in your personal work queue. Note, however, depending on how the system has been configured by the system administrator, you may or may not have access to your personal work queue.

  If you do have access to your personal work queue, a queue with your user name will appear in the work queue list.

  For more information, see Hidden Personal Work Queues.

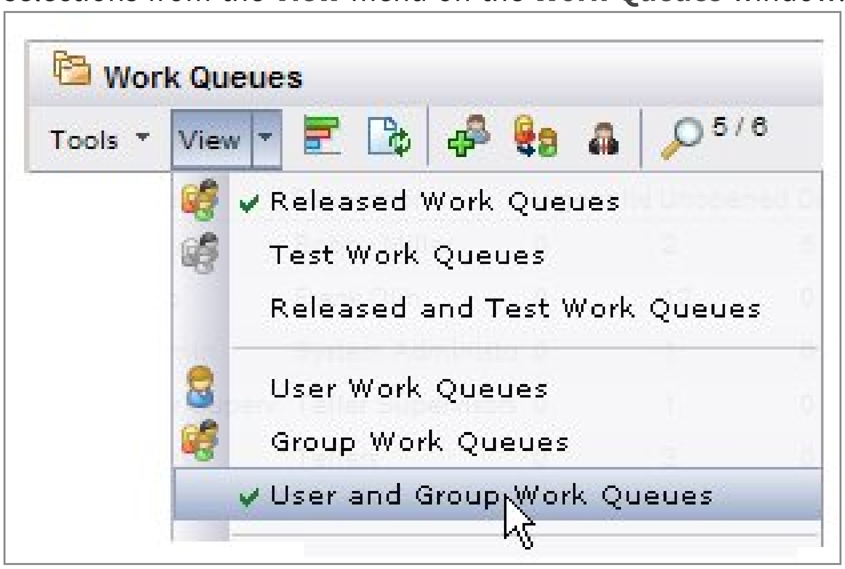
- **Group Access** - Every user who is a member of a group has access to the work items in that group’s work queue. All work items that are sent to a group are accessible by all members of the group.

  User and group work queues are denoted by the icon in the **Type** column on the work queue list (these icons may not be displayed if the columns on your system have been changed from the default. See the example below.



Note: If the user or group work queue icon is shown in a gray color, it means it is a "test" work queue. For information, see Released vs. Test Work Queues.

You can list the user and/or group work queues to which you have access by making selections from the **View** menu on the **Work Queues** window:



Additional work queue access is available in the following ways:

- **Participation Access** - You may be given temporary "participation access" to another user or group work queue. A work queue supervisor must set up a "participation schedule" that specifies the duration of the participation access. During that period, the work queue to which you have been given participation access will appear in the work queue list, and you will have access to the work items in that work queue. For more information about participation, see Participation Access to a Work Queue.

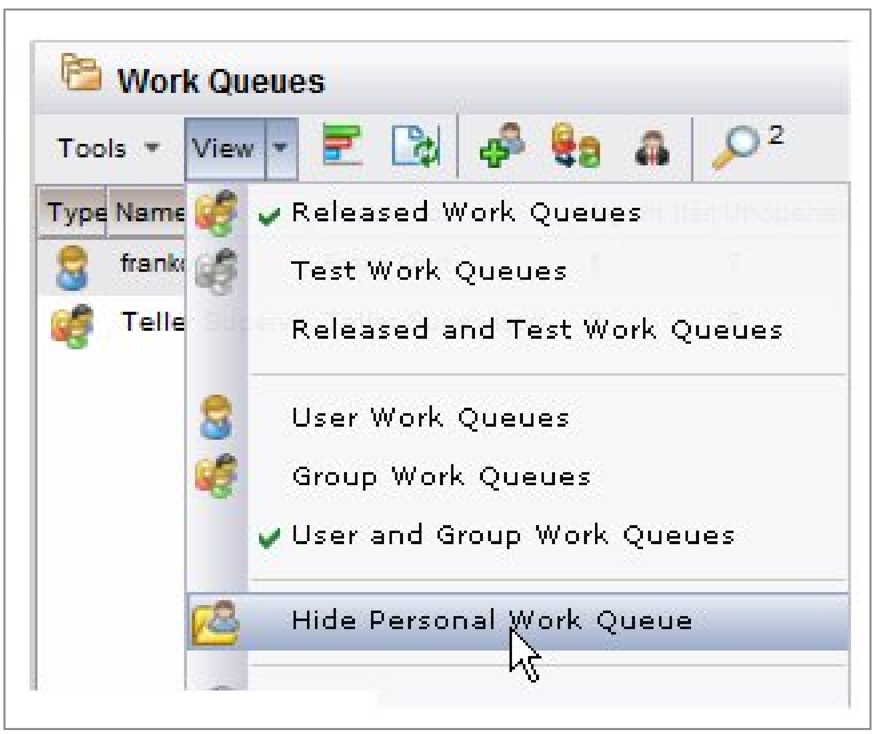
- **Redirection Access** - Although this does not give you direct access to another work queue, it causes work items that were originally destined to another work queue to be redirected to your work queue instead. A work queue supervisor must set up a “redirection schedule” that specifies the duration of the redirection. For more information about redirection, see Redirecting Work Items to Another Work Queue.

Hidden Personal Work Queues

When the system is configured, it can be specified that your personal work queue either be shown or hidden by default. If it is shown by default, when you first log in, a work queue with your user name appears in the work queue list; if it is hidden by default, a work queue with your user name does not appear.

Also, depending on how the system is configured, you may or may not have the authority to change the default setting, that is, if the queue is shown by default, you can hide it; if the queue is hidden by default, you can display it.

If you have the authority to change the default, the work queue list **View** menu will contain either the **Hide Personal Work Queue** or **Show Personal Work Queue** selection (depending on its current state):



Use this menu selection to either hide or show your personal work queue.

Released vs. Test Work Queues

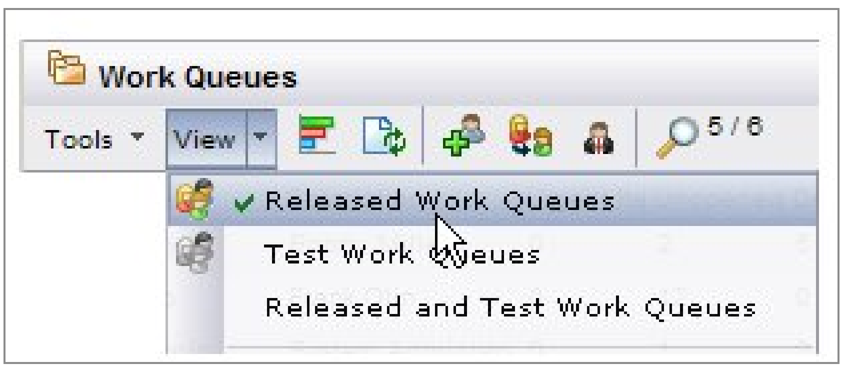
Whenever a user or group is created in TIBCO, both a “released” and “test” work queue is created for that user or group:

- Work items that result from cases of procedures with a status of **Released** are sent to the **released work queue** for the user/group.
- Work items that result from cases of procedures with a status of **Unreleased** (a new procedure being tested for release) or **Model** (a procedure that has been imported) are sent to the **test work queue** for the user/group.

Typically, you are working with released work queues — the norm in a production environment.

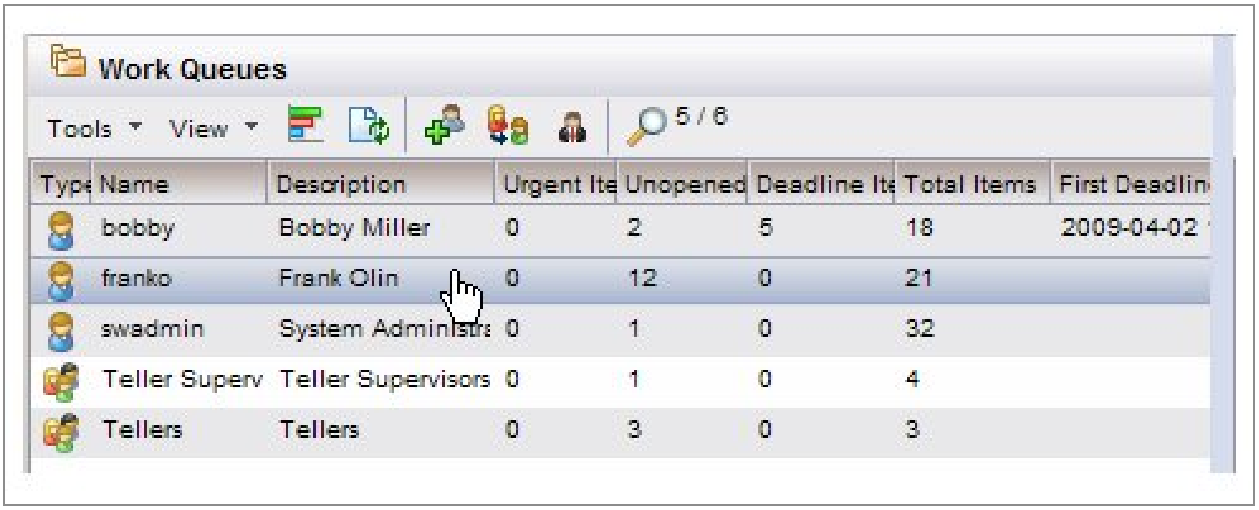
You may occasionally be asked to use test work queues — this is done in a testing or training environment.

To display released and/or test work queues, make the appropriate selection from the **View** menu on the work queue list:



Viewing Work Items in a Work Queue

To view the list of work items in a work queue, single-click the desired work queue in the work queue list:



Once a work queue is selected, you can also move the highlight bar with the keyboard arrow keys to select other work queues.

Either the list of work items in the selected work queue is displayed, or the work items list filter dialog is displayed because the number of work items in the list exceeds the specified threshold. For more information, see Work Item Lists.

Work Queue List Columns

By default, certain columns are displayed in a work queue list. You can easily customize the columns that are displayed by either using the **Column Selector**, or by changing them manually. For information, see Customizing Columns in a List.

The following table describes the columns of information that can be displayed on the work queue list:

Column Name	Description
Deadline Items	The number of work items in the work queue that have a deadline.
Description	A description of the work queue — typically, the name of the user or group.
First Deadline Date/Time	The date and time of the deadline that will be the first to expire in the work queue.

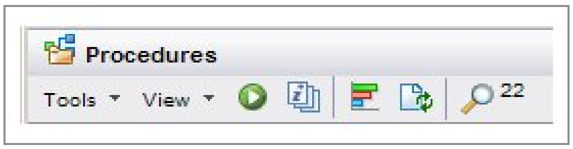
Column Name	Description
Group Queue / Group Queue Image	True - The work queue is a “group” work queue. False - The work queue is an individual “user” work queue.
Host Name	The name of the TIBCO iProcess Engine to which the iProcess Workspace (Browser) is connected.
Name	The user / group name for the work queue.
Redirected / Redirected Image[1]	True - The work queue is currently being redirected to another work queue. False - The work queue is not being redirected.
Released / Released Image	True - The work queue is “released” (contains work items from “released” procedures). False - The work queue is a “test” work queue (contains work items from “unreleased” or “model” procedures).
Total Items	The total number of work items in the work queue.
Type	The icon in this column indicates whether it is a user or group work queue, as well as whether it is a released or test work queue. For information, see Work Queue Access and Released vs. Test Work Queues, respectively.
Unopened Items	The number of work items in the work queue that have not been opened yet.
Urgent Items	The number of work items in the work queue that have been flagged as urgent. Whether or not a work item is urgent depends on a priority value given to the step when the procedure was created, as well as a configuration value specified in the server. That is, if the priority exceeds (is smaller than —

[1]If the “Redirected” or “Redirected Image” column is added to the work queue list, a time delay may be experienced when the work queue list is displayed or refreshed if the user has access to a large number of work queues.

Column Name	Description
	with 1 being the highest priority) the configuration value, the work item is flagged as urgent.

Number of Work Queues in a Work Queue List

There is an indicator in the header bar of the work queue list to tell you how many work queues are in the list. This number is displayed to the right of the **Find** button. In this example, there are 9 work queues.



Note that if this number is displayed in the format "##/##" it means the list is being filtered in some way and only some of the work queues are listed. In the example below, 5 of the 9 possible work queues are listed.

The work queue list can be filtered in one of the following ways:

- The **Find** button has been used to filter the list. (For information about using the find function, see Finding Items in a List.)
- Only "Released Work Queues" or "Test Work Queues" has been selected from the **View** menu. (For information about displaying released and/or test work queues, see Released vs. Test Work Queues.)
- Only "User Work Queues" or "Group Work Queues" has been selected from the **View** menu. (For information about displaying user and/or group work queues, see Work Queue Access.)

If one or a combination of these methods have been used to filter the work queue list, the number is shown in the ##/## format.

Displaying Work Queue Loading

The work queue loading feature allows you to display a graphical summary that shows you how many work items are currently in one or more of the work queues to which you have access. The chart displayed by this feature provides a visual view of the amount of load the work queues are experiencing.

You can access work queue loading in one of two ways:

- Select **Work Queue Loading Chart** from the **Tools** menu, or click the  icon, on the work queue list toolbar.

  This displays a work queue loading chart that shows you all of the work queues to which you have access. Note that the very first time you display the work queue loading chart in this way, it lists all work queues to which you have access. If you pare down the list using the **Select Work Queues** function (see Displaying a Subset of Work Queues in the Work Queue Loading Chart), from then on the list only contains the subset you have chosen.

- Right-click on one of the work queues in the work queue list, then select **Work Queue Loading Chart** from the context menu.

  This displays a work queue loading chart that shows you only the work queue on which you right-clicked.

The following is an example work queue loading chart that shows multiple work queues:

Note: If your personal work queue is hidden by default on the work queue list and you do not have the authority to change the default via the **Show / Hide Personal Work Queue** selection on the work queue list **View** menu, your personal work queue is also hidden on the Work Queue Loading Chart. For more information about hidden work queues, see Hidden Personal Work Queues.

The red, green, and yellow-colored bars indicate the number of urgent, unopened, and with-deadline work items in each work queue. The blue bar shows the total number of work items in each work queue. Placing the cursor on the bars of the chart causes the exact counts for that work queue to be displayed.

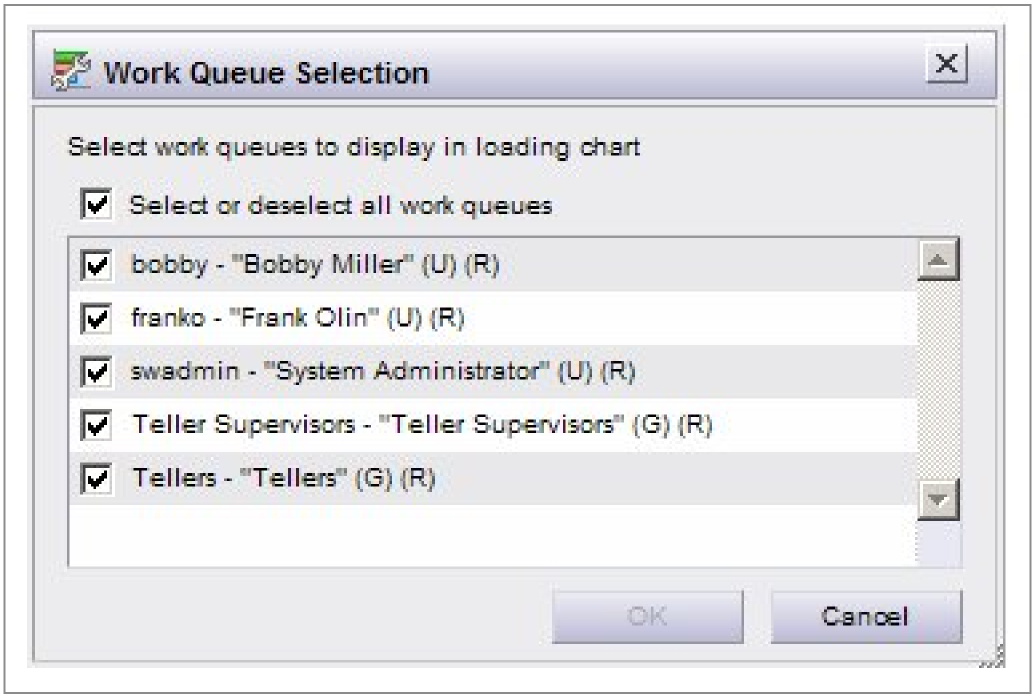
Selections are available on the **View** menu that allow you to display only the released work queues, only the test work queues, or both the released and test work queues. You can also use selections on the **View** menu to display only user work queues, only group work queues, or both user and group work queues.

The work queue loading chart can be refreshed at any time by either selecting **Refresh Work Queues** on the **View** menu, or by clicking on the  icon on the toolbar.

You can close the work queue loading chart by clicking on the X in the upper-right corner.

Displaying a Subset of Work Queues in the Work Queue Loading Chart

The first time you display the work queue loading chart, it will list all work queues to which you have access. You can, however, choose to display only a subset of the available work queues by selecting **Select Work Queues** from the **View** menu, or by clicking the icon on the **Work Queue Loading Chart** dialog. The following dialog is displayed:



This dialog contains a check box for each work queue to which you have access. You can select or deselect all of the boxes in the list using the first check box on the dialog; you can then check/uncheck individual boxes in the list, as desired. When the desired work queues are selected, click **OK**.

The work queue loading chart will list only the work queues that you've selected on the **Work Queue Selection** dialog. This selection will persist until you change it again.

Finding Work Queues in the Work Queue List

The work queue list contains a Find function that can be used to quickly find the work queue you are looking for.

To invoke the Find function, either select **Find** from the **View** menu or click the icon on the work queue list toolbar.

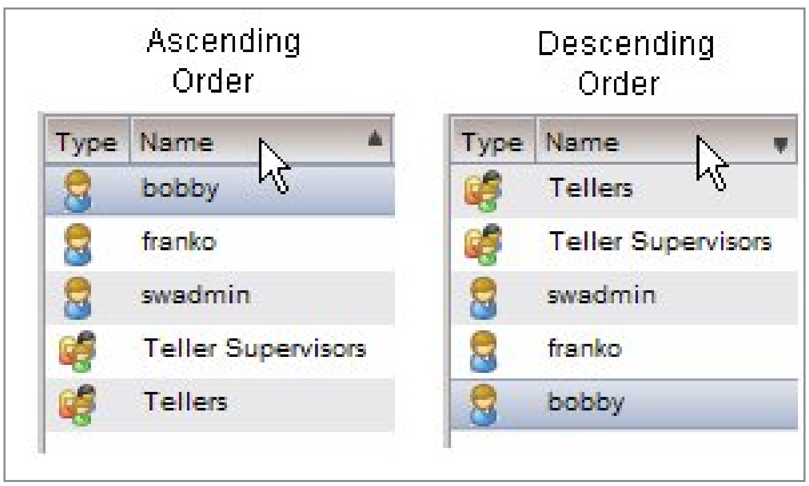
The number to the right of the icon tells you how many work queues are in the list.

As the Find function works the same on all lists, it is described in the Introduction chapter — see Finding Items in a List.

Sorting a Work Queue List

You can sort the work queue list on any one of the columns in the list. To sort on a column, click on the column header. If the column contains text, it is sorted in alphabetical order; if it is numeric, it is sorted in numerical order.

Once you click on a column header, a small arrow head appears in the column header, which indicates the order of the sort — if the arrow head is pointing up, the sort is in ascending order; if it's pointing down, the sort is in descending order:



Each successive click on the column header, toggles between ascending and descending order.

Refreshing a Work Queue List

When the work queue list is initially displayed, it is a **snap shot** of the work queues at that point in time. You can refresh the list to get the most recent list of work queues from the iProcess Engine by selecting **Refresh Work Queues** from the **View**menu, or by clicking on the icon on the work queue list toolbar

Do not overuse this feature — refresh the list only when you need an updated list. Each time you refresh the list, the iProcess Engine must send a new list to your system, which can impact performance, depending on the number of items in the list, the speed of your system, etc.

> **Note:** A time delay may be experienced when refreshing a work queue list if either the “Redirected” or “Redirected Image” column has been added to the list, and the user has access to a large number of work queues.

Work Queue Supervisors

A user must be designated as a “work queue supervisor” to perform the following tasks:

- Create, modify, or delete **participations schedules**. A participation schedule gives another user temporary access to the work queue. For information about participation schedules, see Participation Access to a Work Queue.
- Create, modify, or delete **redirection schedules**. A redirection schedule causes work items to be temporarily redirected to another work queue. For information about redirection schedules, see Redirecting Work Items to Another Work Queue.

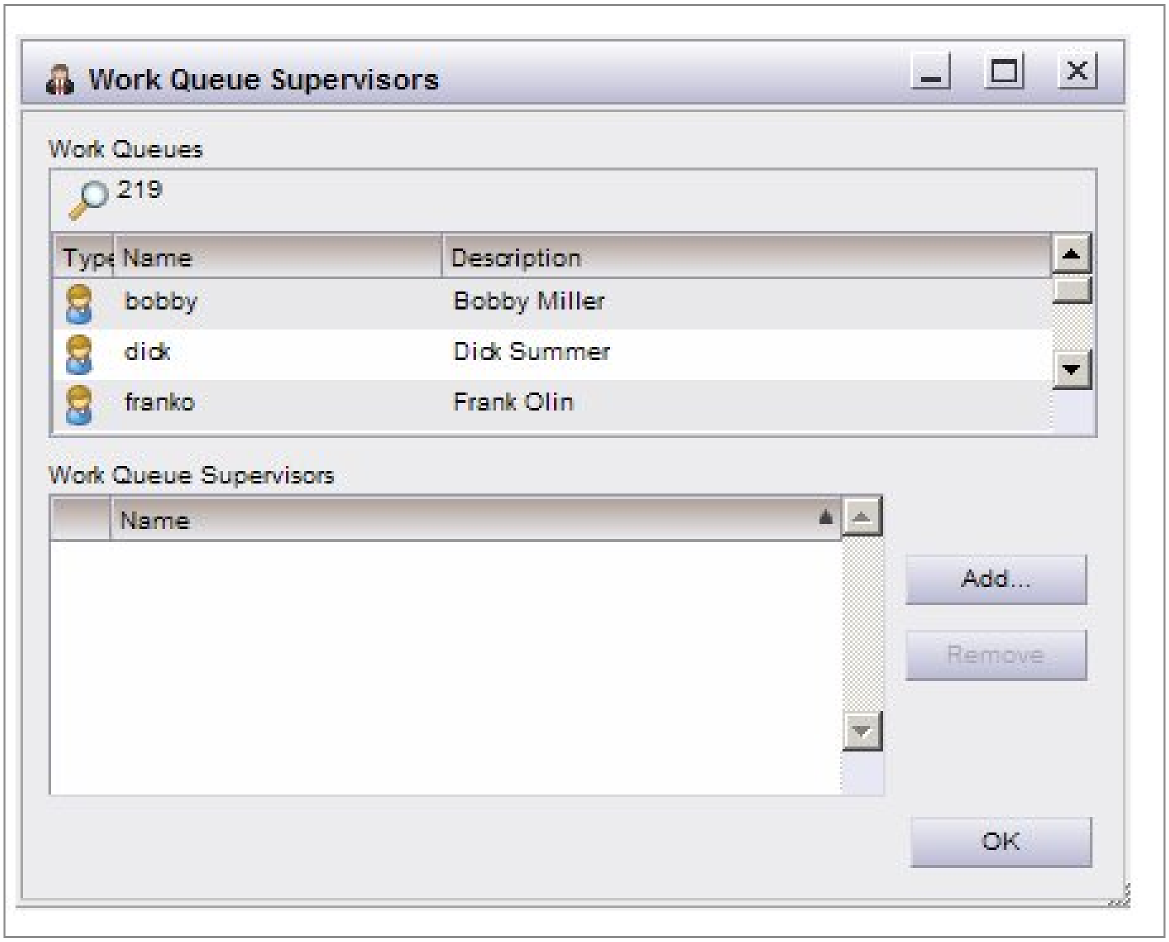
Each work queue can be assigned one or more work queue supervisors.

You must have system administrator authority to manage work queue supervisors.

To add or remove a user as the supervisor for a work queue:

1. Select **Manage Work Queue Supervisors** from the **Tools** menu on the work queue list, or click the  icon.

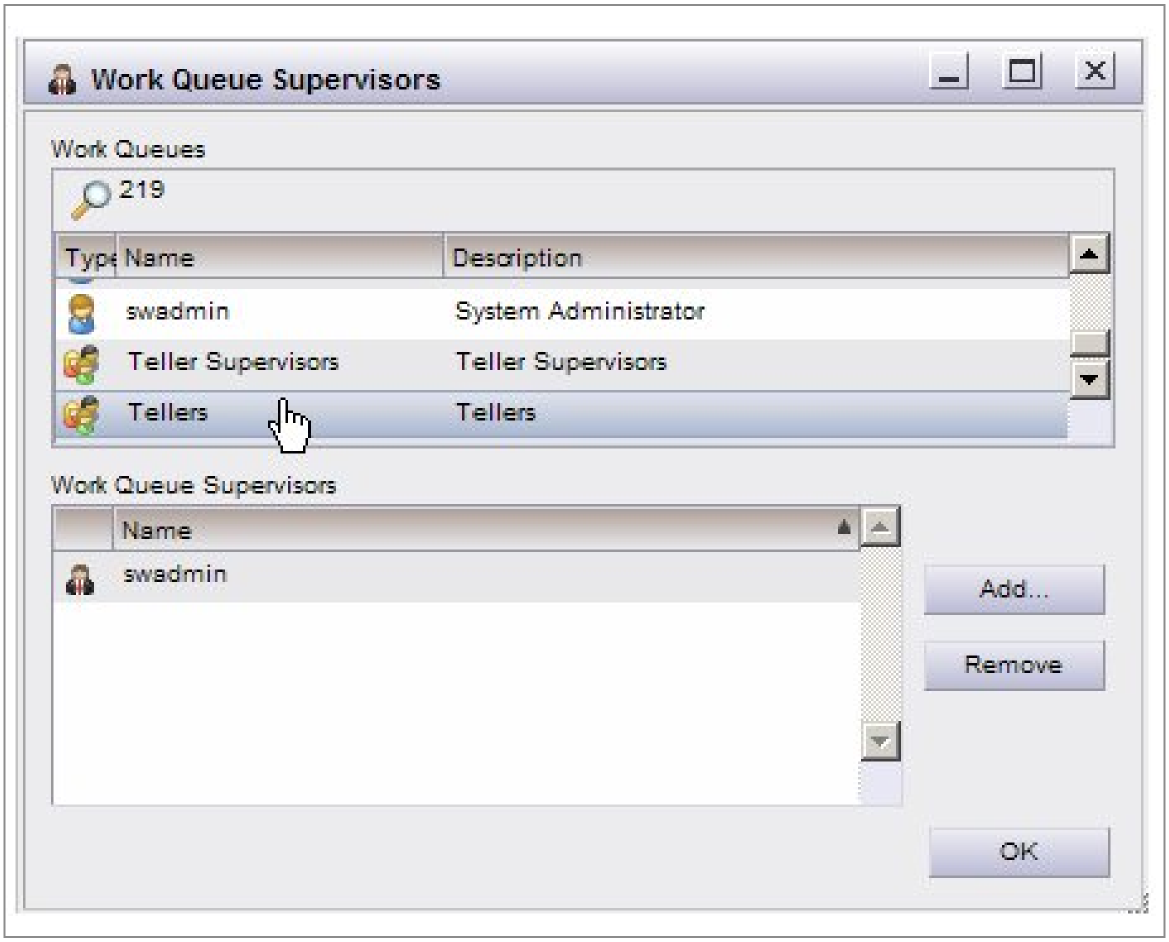
The following dialog is displayed:



The **Work Queues** section of this dialog lists all work queues (i.e., all users and groups) defined on your TIBCO system.

2. In the **Work Queues** section, select the work queue for which you want to manage supervisors.

   This causes the **Work Queue Supervisors** section to list all users who are currently supervisors of the work queue you chose, if there are any:



In this example, the **Tellers** work queue has a single supervisor currently specified, **swadmin**.

3. Manage supervisors for the selected work queue as follows:

   To **remove** a supervisor from the work queue, select the user name in the **Work Queue Supervisors** section, then click on the **Remove** button.

   The user name is removed from the **Work Queue Supervisors** list.

   To **add** a supervisor for a work queue, click on the **Add** button. The following dialog is displayed:

This dialog lists all of the current users on the system, except for those that are already designated as a supervisor of the selected work queue.

Select one or more users from the list, then click **OK**. The **Work Queue Supervisors** dialog is redisplayed, with the newly added users added to the **Work Queue Supervisors** section.

4. Click **OK** to save the changes you've made and close the **Work Queue Supervisors** dialog.

Participation Access to a Work Queue

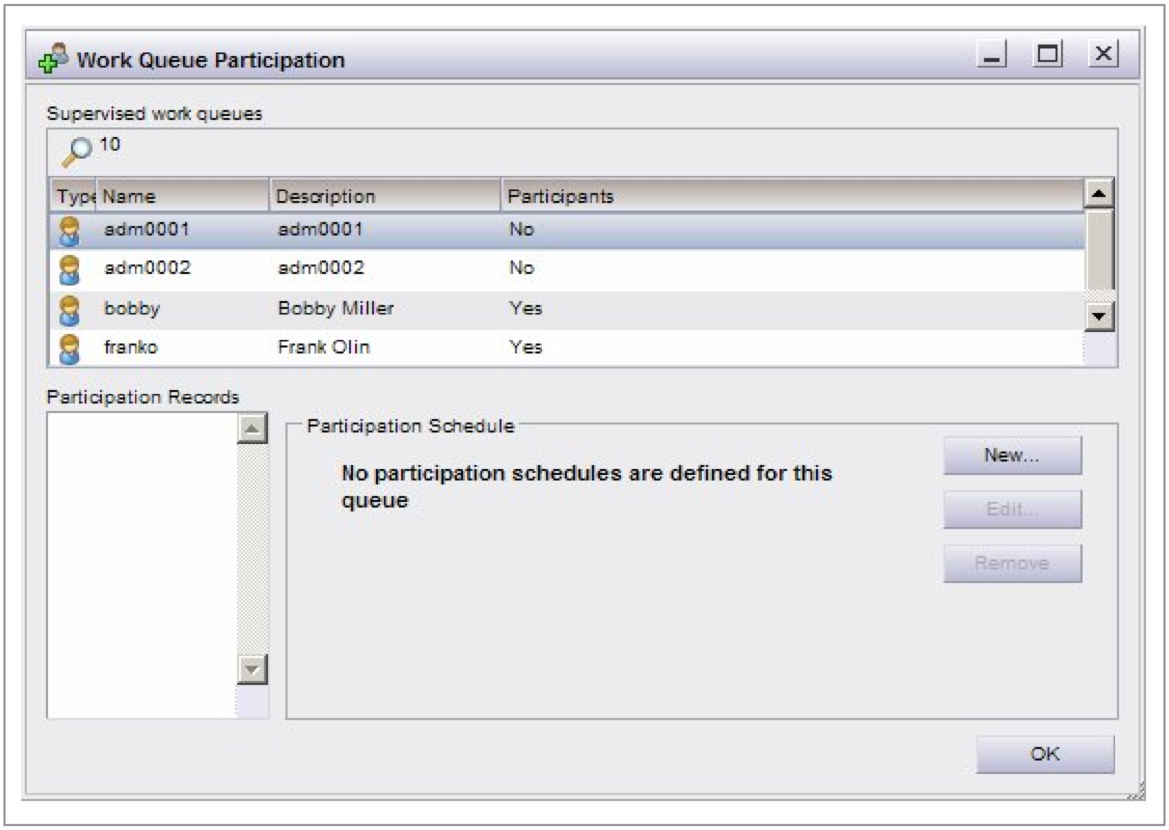
Allowing a user to "participate" in another user's or group's work queue is called "participation". Participation allows the participant user to have access to the work items in the other user's work queue.

To be a participant of a work queue, a user who has been designated as a supervisor for that work queue must create a "participation schedule" for the participant user. The participation schedule specifies which users will have access to the work queue, and the dates and times they will have access.

To set up a participation schedule for a work queue for which you are a supervisor:

1. Select **Manage Work Queue Participation** from the **Tools** menu on the work queue list, or click the  icon.

   The following dialog is displayed:

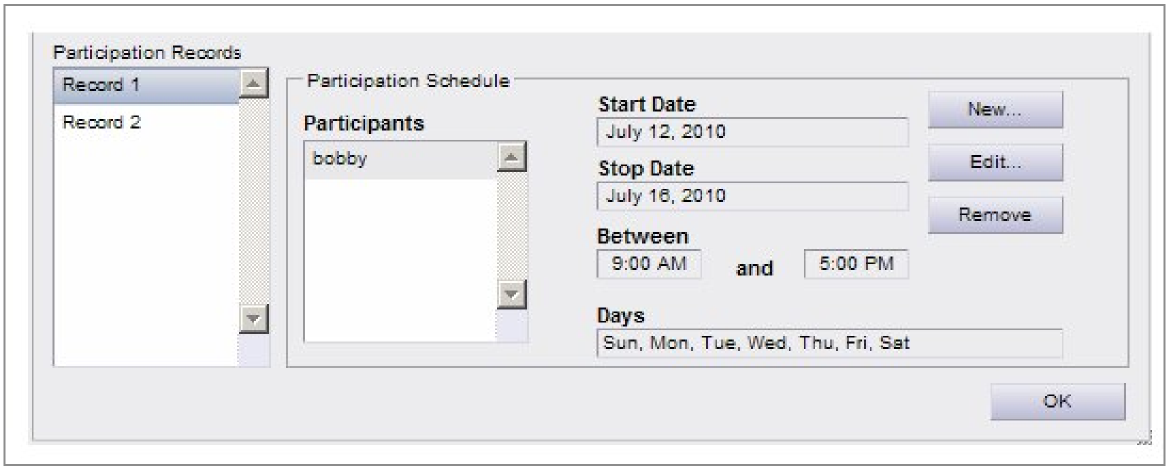
   

   The **Supervised work queues** section lists all work queues for which you are a supervisor — these are the work queues for which you are authorized to set up participation schedules.

2. From the **Supervised work queues** section, select the work queue for which you would like to manage a participation schedule.

   If the selected work queue does not currently have any participation schedules set up, “No participation schedules are defined for this queue” is displayed in the **Participation Schedule** section.

   If the selected work queue has one or more participation schedules defined, they are listed in the **Participations Records** section. By default, the first schedule is selected (Record 1), and the schedule definition is shown in the **Participation Schedule** section. For example:

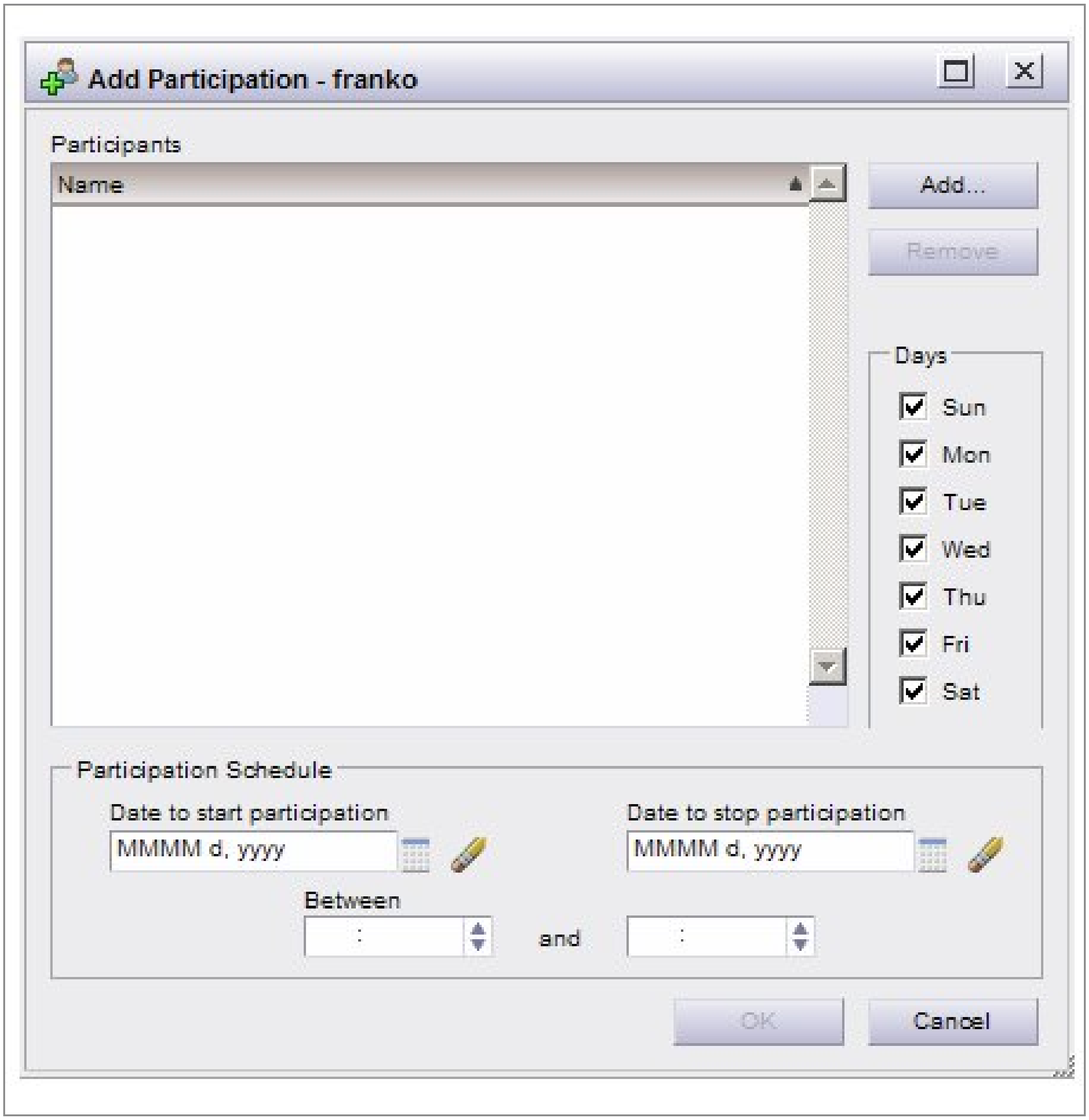


In this example, bobby has participation access to the work queue from 9:00AM on July 12, 2010 until 5:00PM on July 16, 2010, on all of the days listed in the **Days** field.

3. Manage participation schedules for the selected work queue as follows:

   To **add** a participation schedule for the work queue, click the **New** button on the **Work Queue Participation** dialog.

The following dialog is displayed:



Define each element of the participation schedule as follows:

— **Add participants** by clicking the **Add** button. The **Add Participants** dialog is displayed, from which you can select one or more users who will share the participation schedule you are going to define. After selecting the desired users on the **Add Participants** dialog, click **OK** to return to the **Add Participation** dialog.

> **Note:** Each of the date and time fields described below have a special meaning if the field is left blank. For information about these special meanings, see Meaning of Blank Date and Time Fields.

— **Define the start date** for the schedule by entering the desired date in the **Date to start participation** field. A “date picker” icon is available to the right of the field, which displays a calendar from which you can choose the day/date.

— **Define the ending date** for the schedule by entering the desired date in the **Date to stop participation** field. A “date picker” icon is available to the right of the field, which displays a calendar from which you can choose the day/date.

— **Define the start time** for the schedule using the first set of “Between” fields. Enter the desired start time. Note that the way in which you enter the time — 12-hour clock, 24-hour clock, with AM and PM, etc. — depends on your locale and the way in which your system has been configured. Please consult your system administrator.

— **Define the ending time** for the schedule using the second set of “Between” fields. Enter the desired ending time. Note that the way in which you enter the time — 12-hour clock, 24-hour clock, with AM and PM, etc. — depends on your locale and the way in which your system has been configured. Please consult your system administrator.

— **Define the days of the week** to allow participation using the check boxes in the **Days** section. This defines which days of the week to allow participation during the dates/times specified in the preceding fields. For example, the date and time fields may specify access from 9am to 4pm, from December 1 to December 15, while the days of the week selection specifies that participation access is allowed only on Mondays and Tuesdays during that time period.

To **edit** a participation schedule for the work queue, select the name of the participation schedule in the **Participation Records** section, then click the **Edit** button.

The selected participation schedule is displayed in the **Edit Participation** dialog. Edit the desired elements of the schedule, then click **OK** to return to the **Work Queue Participation** dialog. (See above for information about the elements in the participation schedule.)

To **remove** a participation schedule from the work queue, select the desired schedule in the **Participation Records** section, then click the **Remove** button.

The name is removed from the **Participation Records** list.

4. Click **OK** to save the changes you've made to the participation schedules and exit the **Work Queue Participation** dialog.

Meaning of Blank Date and Time Fields

The following table describes the participation schedule behavior when date/time fields are left blank:

Field	Meaning If Left Blank
Start Date	Participation access will begin on the next date allowed by the "days of the week" selection.
Start Time	Participation access will begin directly after midnight on the days on which access is allowed.
End Date	Participation access will last indefinitely.
End Time	Participation access will end at midnight (which constitutes the end of the day) on the days on which access is allowed.

Redirecting Work Items to Another Work Queue

Automatically forwarding work items to another work queue is called "redirection". Redirection allows you to "redirect" one user's work items to the work queue of another user or group for a specified period of time.

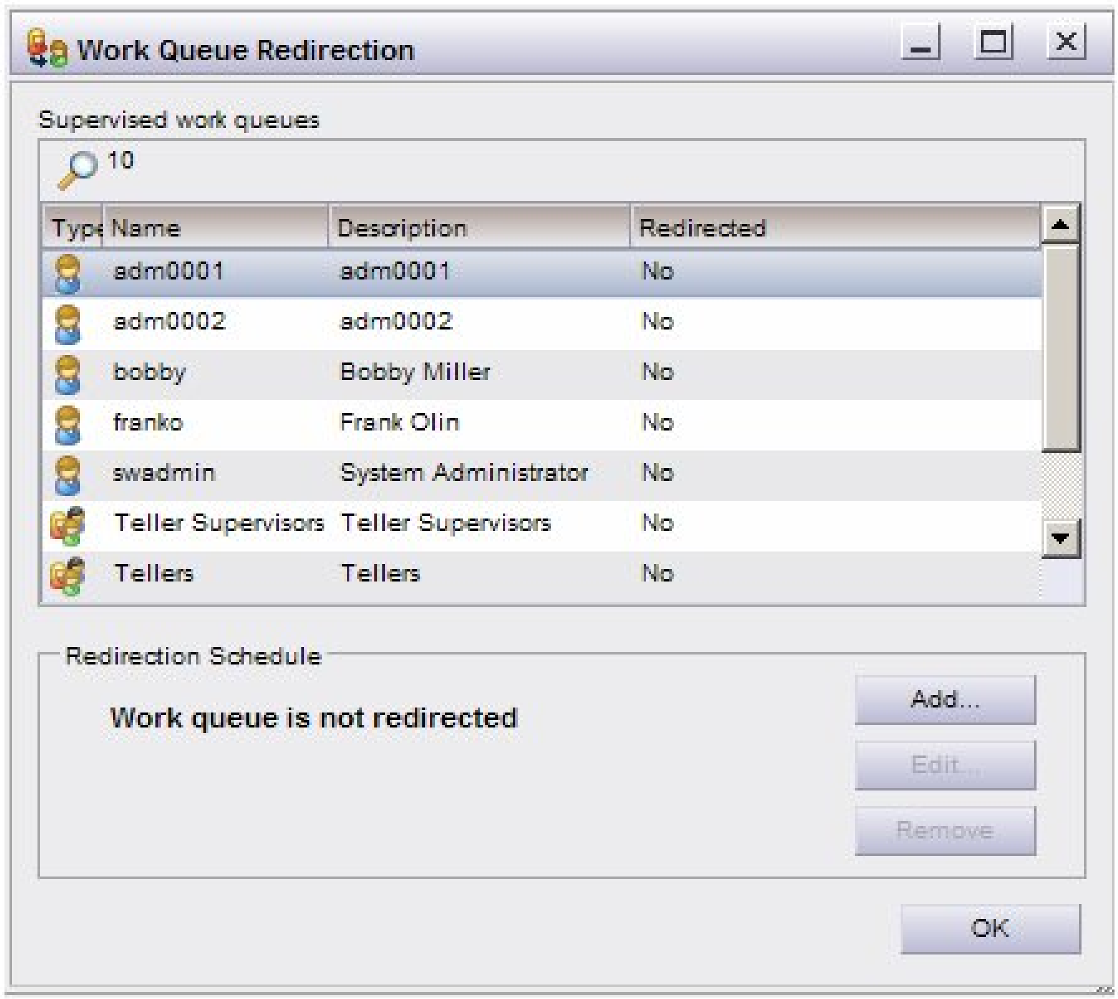
Note: For information about forwarding an individual work item from a work queue, see Forwarding Work Items.

To redirect work items, a user who has been designated as a supervisor for that work queue must create a "redirection schedule". The redirection schedule specifies to whom the work items are being redirected, as well as the date and time the redirection is to start and end.

To set up a redirection schedule for a work queue for which you are a supervisor:

1. Select **Manage Work Queue Redirection** from the **Tools** menu on the work queue list, or click the icon.

   The following dialog is displayed:

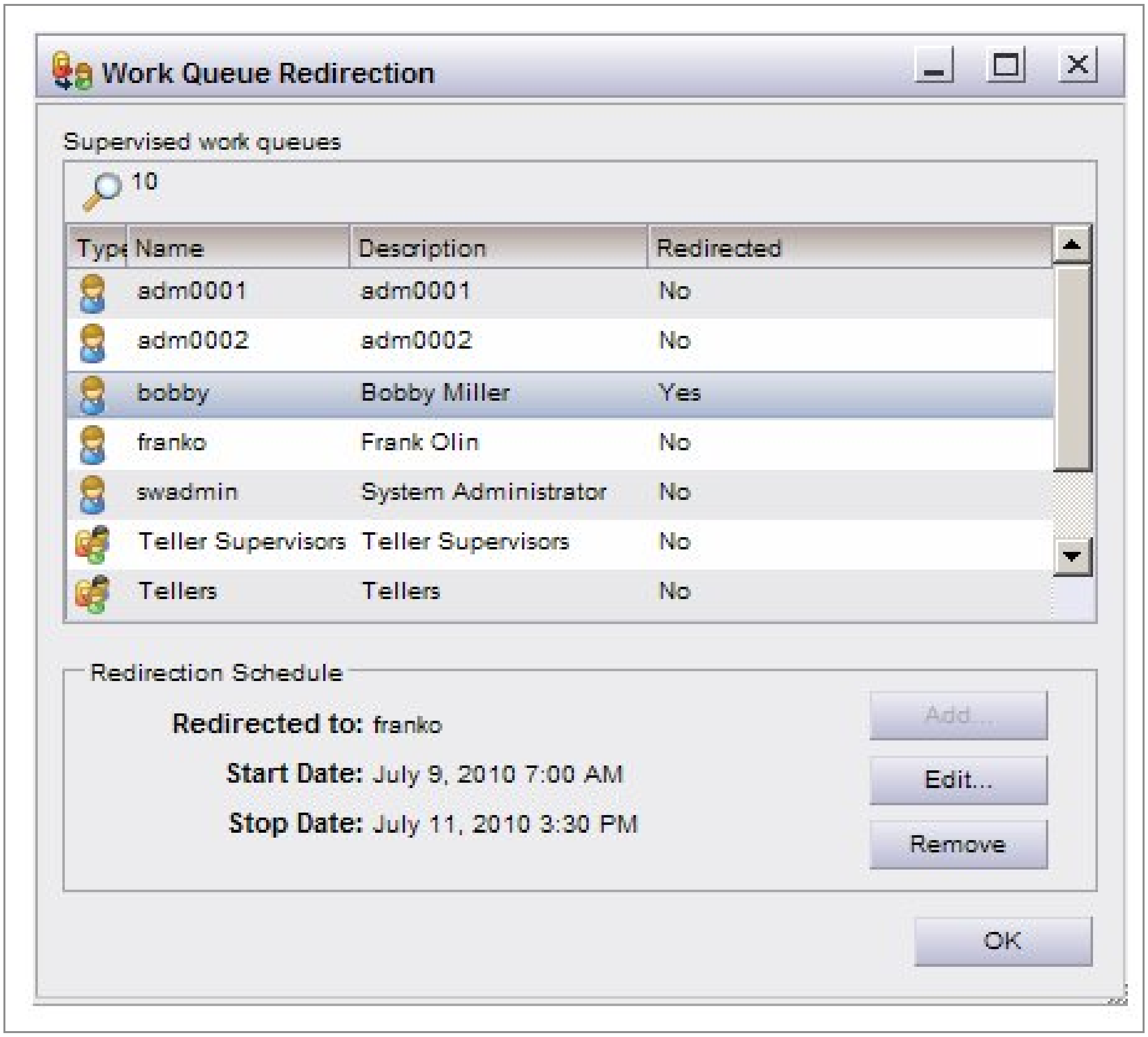
   

   The **Supervised work queues** section lists all work queues for which you are a supervisor — these are the work queues for which you are authorized to set up redirection schedules.

2. From the **Supervised work queues** section, select the work queue for which you would like to manage a redirection schedule.

   If the selected work queue does not currently have a redirection schedule set up, “Work queue is not redirected” is displayed in the **Redirection Schedule** section.

   If the selected work queue has a redirection schedule defined, it is shown in the **Redirection Schedule** section. For example:



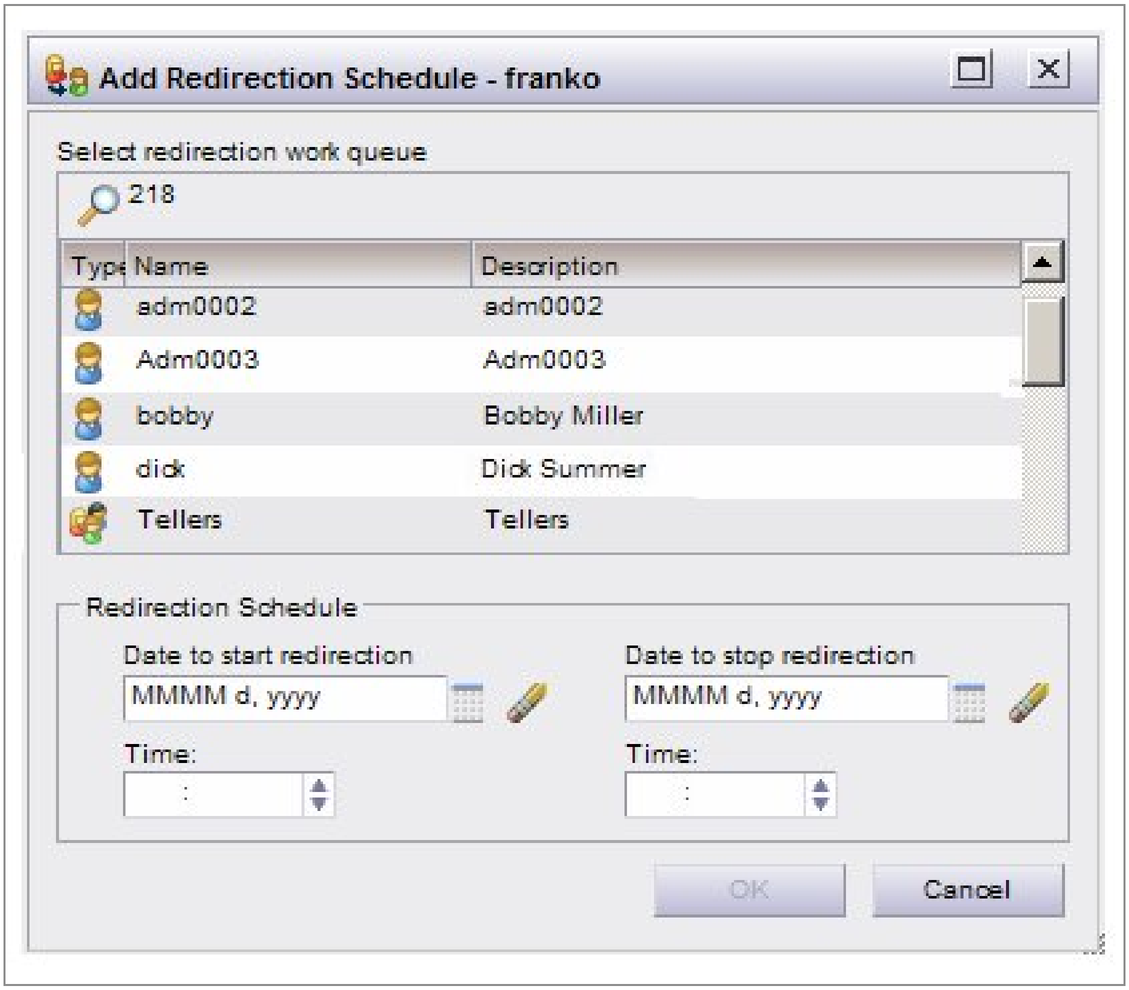
In this example, work items sent to bobby's work queue will be redirected to fanko's work queue from 7:00AM on July 9, 2010 until 3:30PM on July 11, 2010.

> **Note:** If the **Redirection Schedule** section contains a "Redirected to" name, but the start date and/or stop date is blank, it means the date was left blank when the schedule was created. Leaving the start date blank causes the redirection to start directly after midnight on the date specified (if the date specified is the current date, redirection begins immediately). Leaving the stop date blank causes the redirection to last indefinitely.

3. Manage a redirection schedule for the selected work queue as follows:

   To **add** a redirection schedule for the work queue, click the **Add** button on the **Work Queue Redirection** dialog.

The following dialog is displayed:



Define each element of the redirection schedule as follows:

— Specify the work queue to which the work items are to be redirected by clicking on the desired work queue name in the **Select redirection work queue** section.

> **Note:** Each of the date and time fields described below have a special meaning if the field is left blank. For information about these special meanings, see Meaning of Blank Date and Time Fields.

— **Define the start date** for the schedule by entering the desired date in the **Date to start redirection** field. A “date picker” icon is available to the right of the field, which displays a calendar from which you can choose the day/date.

— **Define the start time** for the schedule using the **Time** fields directly below the **Date to start redirection** field. Enter the desired start time. Note that the way in which you enter the time — 12-hour clock, 24-hour clock, with AM and PM, etc. — depends on your locale and the way in which your system has been configured. Please consult your system administrator.

— **Define the ending date** for the schedule by entering the desired date in the **Date to stop redirection** field. A “date picker” icon is available to the right of the field, which displays a calendar from which you can choose the day/date.

— **Define the ending time** for the schedule using the **Time** fields directly below the **Date to stop redirection** field. Enter the desired end time. Note that the way in which you enter the time — 12-hour clock, 24-hour clock, with AM and PM, etc. — depends on your locale and the way in which your system has been configured. Please consult your system administrator.

To **edit** a redirection schedule for the work queue, click the **Edit** button on the **Work Queue Redirection** dialog.

The redirection schedule for the work queue is displayed in the **Edit Redirection Schedule** dialog. Edit the desired elements of the schedule, then click **OK** to return to the **Work Queue Redirection**dialog. (See above for information about the elements in the redirection schedule.)

To **remove** a work queue’s redirection schedule, select the desired work queue on the **Work Queue Redirection** dialog, then click the **Remove** button.

4. Click **OK** to save the changes you’ve made on the **Work Queue Redirection** dialog.

Meaning of Blank Date and Time Fields

The following table describes the redirection schedule behavior when date/time fields are left blank:

Field	Meaning If Left Blank
Date and Time to Start Redirection	If both the start date and time are left blank, redirection will start immediately. If only the start time is left blank, redirection starts immediately after midnight on the date specified. (You cannot leave only the start date field blank.)
Date and Time to	If both the stop date and time are left blank, redirection will last

Field	Meaning If Left Blank
Stop Redirection	indefinitely. If only the stop time is left blank, redirection stops at the end of the date specified (the stop time defaults to 23:59). (You cannot leave only the stop date field blank.)

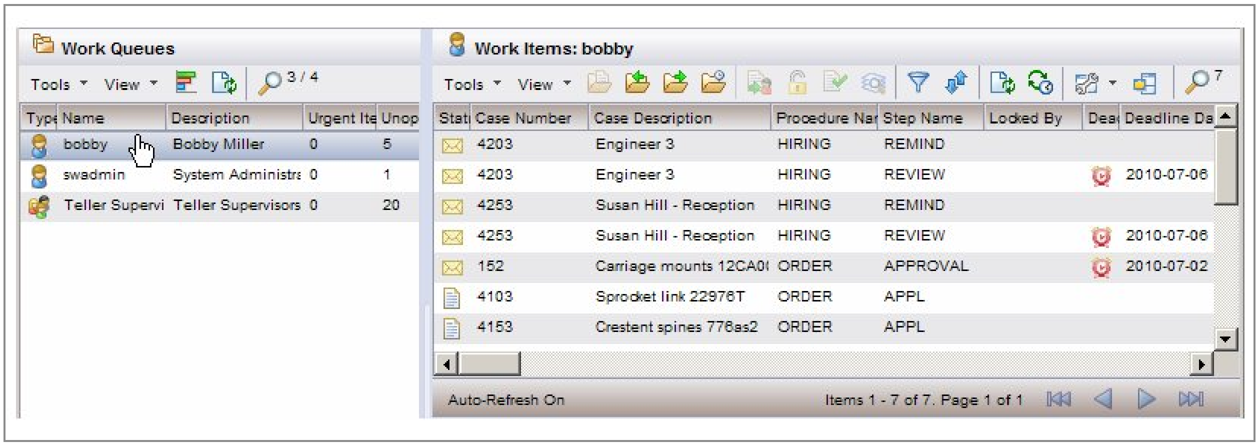
Working With Work Items

This section describes how to use lists of work items, as well as how to process (open, keep, release, etc.) individual work items.

Work Item Lists

A work item list presents all of the work items that are in a particular work queue.

To view a work item list, select (single click) a work queue in the work queue list:



When you select a work queue, one of two screens is displayed:

- The work item list (as in the example above)
- A filter dialog for the work item list

The window that is displayed depends on how your system has been set up. By default, the work item list is displayed. However, there is a *user options* setting that allows you to specify that if the number of work items in the queue exceeds a specified threshold, to automatically display the filter dialog first. This allows you to enter a filter expression to pare down the list before displaying it.

For information about specifying whether or not to display the filter dialog first, see Filter Options.

For information about using the filter dialog to filter the work item list, see Filtering a Work Item List.

If the work item list is displayed, and the **Filter** icon on the work item list toolbar has a green check mark, the list is currently being filtered — the last filter expression applied to the work item list is in effect. For more information, see Filtering a Work Item List.

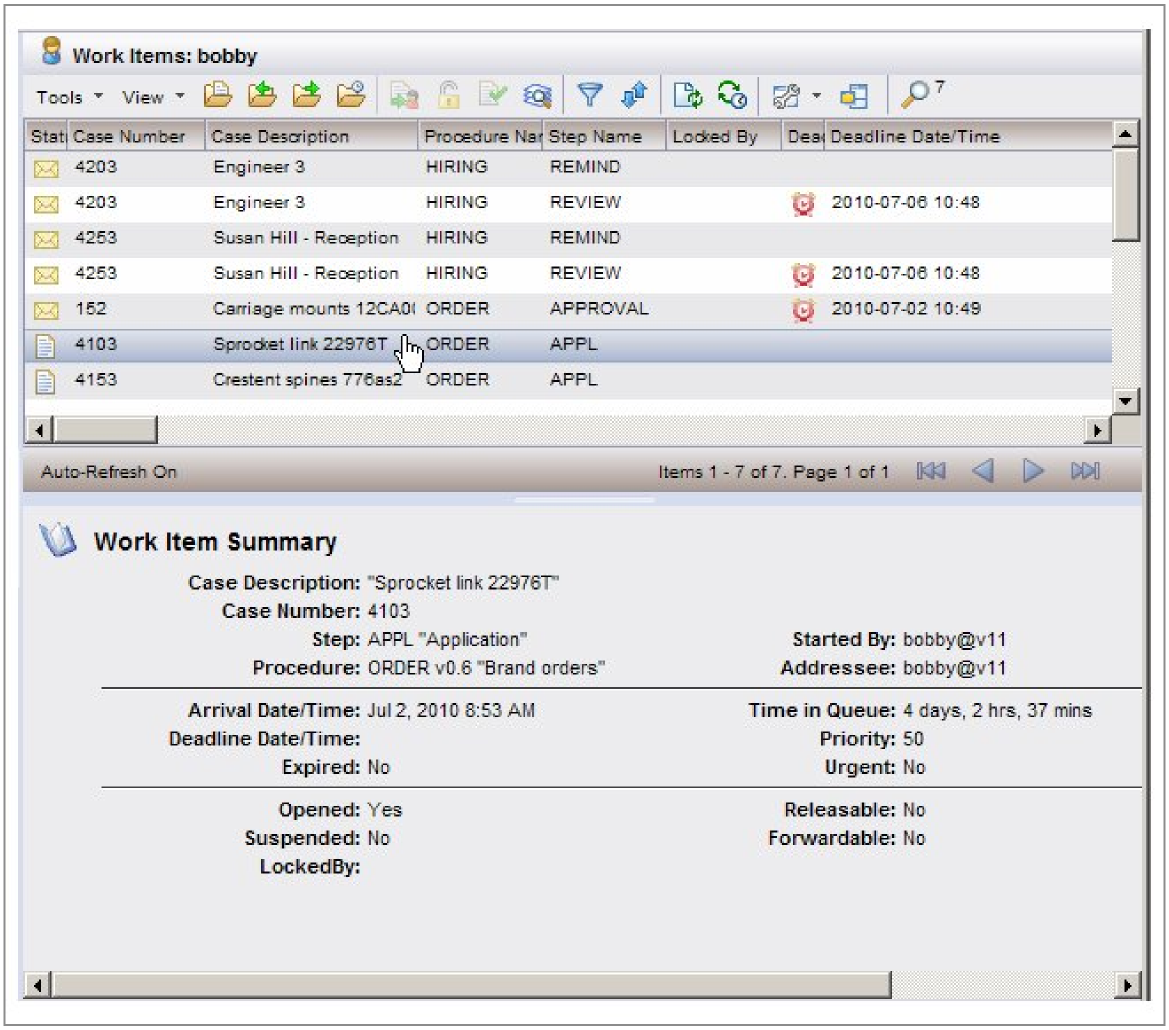
Also, if the **Sort** icon on the work item list toolbar has a green check mark, the list is currently being sorted — the last sort criteria applied to the work item list is in effect. For more information, see Sorting a Work Item List.

Information about each work item is provided in the columns of the work item list. The specific information that is displayed on your system will depend on how your system was set up — see Customizing Columns in a List.

Selecting Items in a Work Item List

The effect of selecting an item from the work item list (i.e., single-clicking an item, or moving the highlight bar with the keyboard arrow keys) depends on whether or not the preview feature is turned on:

- If preview is turned off, selecting an item from the work item list has no effect.
- If preview is turned on, selecting a work item from the work item list causes the work item summary to be displayed in the **Preview Pane** section, as follows:



The work item summary provides more information about the work item than what may be available from the columns in the work item list.

Note: Double-clicking a work item in the work item list constitutes opening the work item. Opening the work item causes the form for that work item to be displayed. For information about opening work items, see Opening Work Items.

The preview feature can be turned on and off using the  icon on the work item list toolbar, or by selecting **Preview** from the work item list **View** menu.

The following drop-down menu is displayed:

You can turn preview on by selecting either of the first two selections — the difference between the two is where the work item form will be displayed when you open (double-click) the work item in the work item list.

You can turn off the preview feature by selecting the **Preview Off** selection.

For more information about selecting items in general from lists, see Selecting Items in a List.

Work Item List Columns

By default, certain columns are displayed in a work item list. You can easily customize the columns that are displayed by either using the **Column Selector**, or by changing them manually. For information, see Customizing Columns in a List.

The following table describes the columns of information that can be displayed on the work item list:

Column Name	Meaning
Addressee	The user to whom the work item was sent. This is in the form *username@node*, where *node* is the name of the TIBCO iProcess Engine to which the iProcess Workspace (Browser) is connected (which is the same value in the **Host Node** column).
Arrival Date/Time	The date and time the work item arrived in the work queue. The order of the month and day (DD/MM/YYYY or MM/DD/YYYY) depends on a setting on the iProcess Engine to which you are logged in.
Case Description	The description that was entered when the case that generated this work item was started.
Case Number	A unique number used to identify the case. This is generated when the

Column Name	Meaning
	case is started.
Deadline Date/Time	The date and time the work item's deadline expires. If the work item does not have a deadline, this column is blank.
Deadline Expired / Deadline Expired Image	True - The work item has an expired deadline. False - The work item does not have an expired deadline.
Deadline Set / Deadline Set Image	True - The work item has a deadline. False - The work item does not have a deadline.
Deadline Status	An icon appears in this column if the work item has a deadline — it indicates whether or not the deadline is expired. For more information, see Work Item Deadlines.
Forwardable / Forwardable Image	True - The step definition in the procedure allows resulting work items to be forwarded. False - The step definition in the procedure does not allow resulting work items to be forward.[1]
Host Node	The name of the TIBCO iProcess Engine to which the iProcess Workspace (Browser) is connected.
Keep On Withdrawal / Keep On Withdrawal Image	True - The step was defined to be "kept on withdrawal" (see Work Item Deadlines). False - The step was not defined to be "kept on withdrawal".

[1]Although the step definition does not allow resulting work items to be forwarded, some users may still be able to forward the work item (e.g., system administrators) — for more information, see Forwarding Work Items.

Column Name	Meaning
Locked / Locked Image	True - The work item is currently locked (opened) by a user of an application other than the TIBCO iProcess Workspace (Browser) application. False - The work item is not currently locked by a user of an application other than the TIBCO iProcess Workspace (Browser) application.[1]
Locked By	The name of the user who has the work item open (locked).
Long Locked / Long Locked Image	True - The work item is currently locked (opened) by a user of the TIBCO iProcess Workspace (Browser) application. False - The work item is not currently locked (opened) by a user of the TIBCO iProcess Workspace (Browser) application.1
Mail Id	A number that uniquely identifies the work item; primarily used internally.
Orphaned / Orphaned Image	True - The work item still appears in the work queue even though it has been released by another user. It will be removed when the list is refreshed. False - The work item has not been released and is available to be processed.
Priority	A value that indicates the relative importance of the work item. This is specified when the step that generated the work item is defined in the procedure.
Procedure Description	A description of the procedure from which the work item was generated.
Procedure Name	The name of the procedure from which the work item was generated.
Reference	A unique number that identifies the case from which the work item was

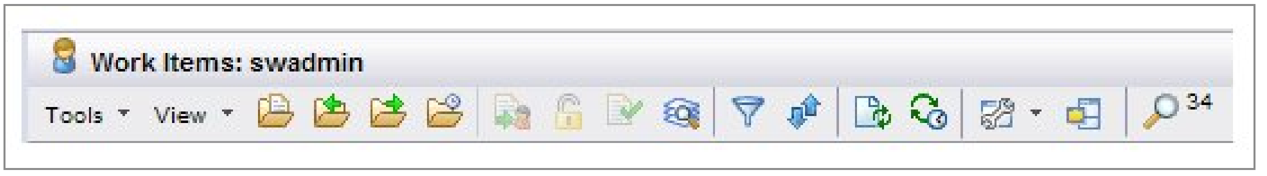
[1]For more information about the difference between a “lock” and a “long lock”, see Opening / Locking Work Items Multiple Times.

Column Name	Meaning
	generated.
Releasable / Releasable Image	True - The work item contains no input fields (required or optional) — it is directly releasable. False - The work item contains input fields.
Started By	The user that started the case from which the work item was generated. This is in the form *username@node*, where *node* is the name of the TIBCO iProcess Engine to which the iProcess Workspace (Browser) is connected (which is the same value in the **Host Node** column).
Status	An icon that indicates the current status of the work item. For more information, see Work Item Status.
Step Description	A description of the step related to the work item.
Step Name	The name of the step related to the work item.
Suspended / Suspended Image	True - The work item is in a case that has been suspended. False - The work item's case has not been suspended.
Unopened / Unopened Image	True - The work item has not been opened, i.e., it is a "new" work item. False - The work item has been opened.
Urgent / Urgent Image	True - The work item is flagged as urgent. Whether or not a work item is urgent depends on a priority value given to the step when the procedure was created, as well as a configuration value specified in the server. That is, if the priority exceeds (is smaller than — with 1 being the highest priority) the configuration value, the work item is flagged as urgent. False - The work item has not been flagged as "urgent".
Version	The version of the procedure from which the work item was generated.

Column Name	Meaning
WQParameter 1-4	These "work queue parameter" fields may contain case data that was entered on a form. These fields must be specifically configured to display case data so that they (the WQParameter fields) can be used to filter or sort the work item list.

Number of Work Items in a Work Item List

There is an indicator in the header bar of the work item list to tell you how many work items are in the list. This number is displayed to the right of the **Find** button. In this example, there are 34 work items.

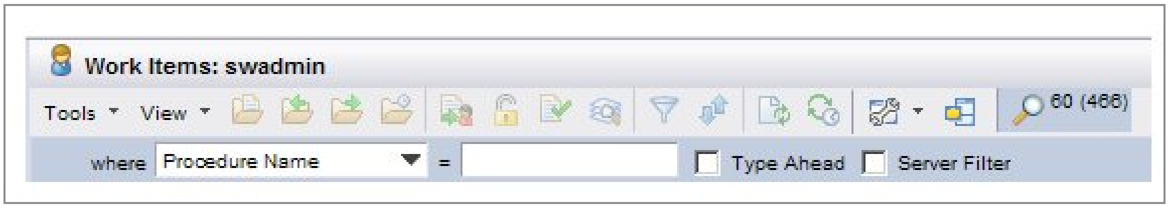


Note that this number may indicate the number of work items in the list after it has been filtered using the filter dialog — if the list has been filtered in this way, there will be a red check mark on the **Filter** icon (for information about using the filter dialog to filter work items, see Filtering a Work Item List).

This number can also be shown in two other formats:

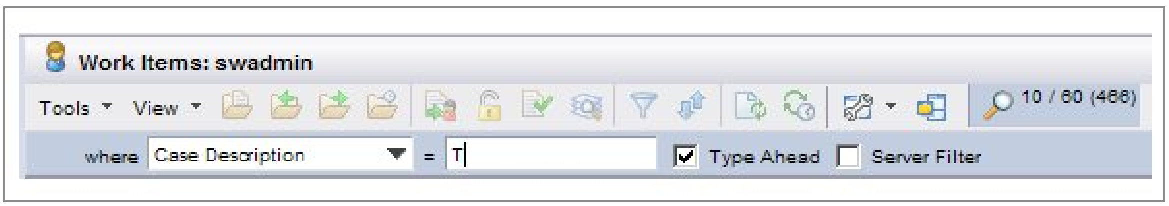
- ##(##) - This format (e.g., 60(466)) is displayed if you have clicked on the **Find** button, but you are *not* using the "server filter" feature with the find function. For more information about using the find function and the server filter feature, see Finding Work Items in the Work Item List.

  The number in the parentheses is the number of work items in the list. The number outside the parentheses is the number of work items that have been downloaded from the iProcess Engine; the find function will search through only the work items that have been downloaded from the iProcess Engine (work items are downloaded from the iProcess Engine only when you view the page containing those work items; viewing additional pages of work items causes more work items to be downloaded).



- #/##(##) - This format (e.g. 10/60(466)) is displayed if you have clicked the **Find** button and have entered search criteria to find work items in the list, but you are *not* using the “server filter” feature with the find function. For more information about using the find function and the server filter feature, see Finding Work Items in the Work Item List.

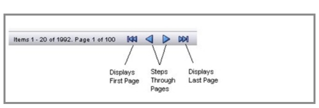
  The number before the forward slash is the number of work items that it found based on the criteria you entered (it only searches through the work items that have been downloaded from the iProcess Engine (60 in this example)).



Work Item List Page Size

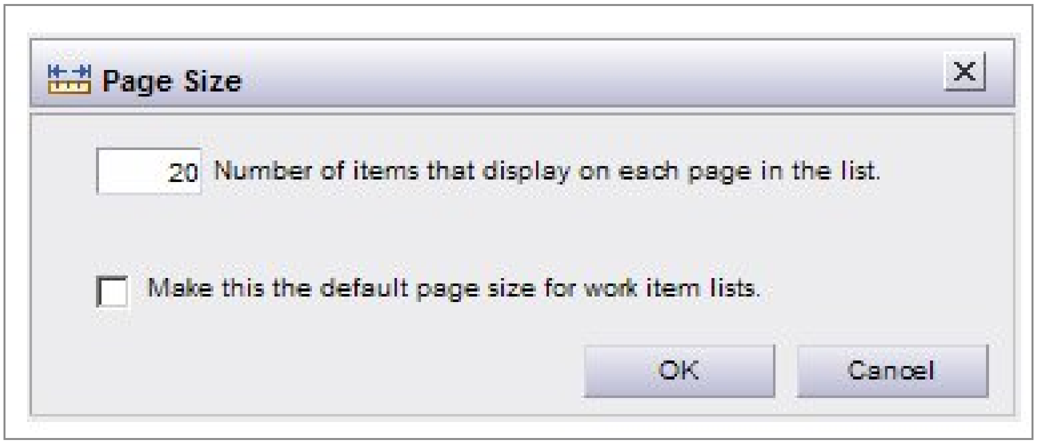
When a list of work items is displayed on your screen, only a *page* of work items is displayed at one time. This is done to speed up the display, especially if there are a very large number of work items.

If the list contains more work items than the number specified for the page, you can step through the multiple pages by clicking on the arrow icons in the lower right corner of the list:



In this example, there are 1992 work items in the list, and it is currently displaying the first page (which is specified as 20).

The number of work items in a page defaults to 20. You can change this number by selecting **Page Size** from the **View** menu on the work item list (note that this function is disabled if the local find function is currently active — see Finding Work Items in the Work Item List). The following dialog is displayed:



Enter the number of work items you would like displayed on each page.

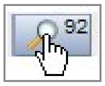
You can also make this page size persistent by checking the “default page size” box. If checked, the size specified becomes the default page size for work item lists every time you log in to the current machine (it is only saved locally; if you log into a different machine, it is not in effect).

Note: From a performance standpoint, it’s important that you understand that when a page of work items is displayed, the information about the work items in the page is downloaded from the iProcess Engine. Because of that, you should keep the page size at a reasonable number. If the page size is a large number, you could experience a delay when displaying a work item list due to the amount of information that must be downloaded.

Note: If you click a column header to sort the work items by that column, the sort is applied only to each individual page. It does not sort down through the entire work item list. For more information, see Sorting the Work Item List Using Column Headers. (If you need to sort through the entire list, make the page size large enough to encompass the entire list, or sort using the sort dialog. For information about the sort dialog, see Sorting a Work Item List.)

Finding Work Items in the Work Item List

The work item list contains a **Find** button that can be used to quickly find work items in the work item list.



For general information about using the find function, see Finding Items in a List. Note, however, that the find function works somewhat different when used with the work item list because of the way in which work items are downloaded from the server.

When used on the work item list, the find function can be used in one of the following two modes:

- **Local Find** - When using the find function in this mode, the system only searches through the pages of work items that have been downloaded from the server so far. Work items are downloaded from the server only when you view the page on which the work items are listed. For instance, if you've viewed two pages each containing 20 work items, only those 40 work items have been downloaded — the find function in local mode will only search through those 40 work items.

  To perform a local find, ensure that the **Server Filter** check box is not checked before entering your find criteria:

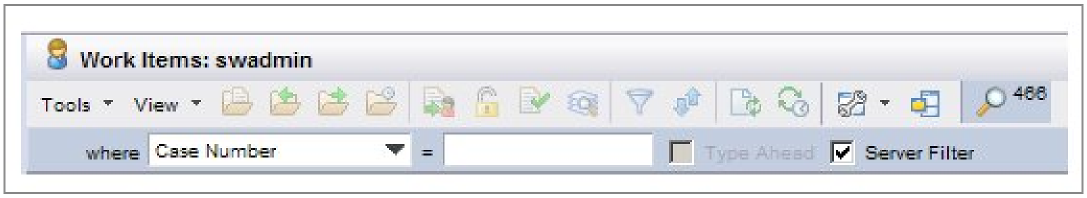
  

  Also note that the **Type Ahead** feature is available to use if you are performing a local find (it is not available when using the server find mode). For information about using the Type Ahead feature, see Finding Items in a List.

- **Server Find** - When using the find function in this mode, the system actually performs the search on the server, looking through the entire work item list, not just the work items that have been downloaded to the client. Note, however, that if you have filtered the list using the filter dialog prior to using the find function, the find function will only search through the work items that have satisfied the filter criteria.

  The thing to bear in mind when using the server find mode is that it requires that a message be sent to the server, and that the search be performed on the entire list (possibly filtered) at the server. This can take some time if it is a very large list. (If it's a very large list, you should pare it down first using the filter dialog prior to using the find function.)

To perform a server find, ensure that the **Server Filter** check box is checked before entering your find criteria:



Also note that the **Type Ahead** feature is NOT available to use if you are performing a server find (it is available when using the local find mode).

Wild card characters can also be used with the Server Find function, where "?" matches any single character, and "*" matches zero or more of any character.

The state of the **Server Filter** check box will persist between work item lists, as well as between logins. That is, whenever you display a work item list, and click on the **Find** button, the **Server Filter** check box will be in the same state you left it the last time you used the find function (it is not checked by default the very first time you click **Find**). (Note that the server filter state is only saved locally; if you log into a different machine, it will likely be different.)

Using the Find Function With the Filter Function

When using the find function on work item lists, it is often used in conjunction with the filter function (for information about the filter function, see Filtering a Work Item List). When used on the work item list, the intent is for the find function to refine the search that has already been done using the filter function. Typically, the filter function is used to present a list of work items that are of continual interest. You can then use the find function to further refine the search through the list of filtered work items. When you are done with the find function, and close it, the list returns to the list presented by the filter function. If you want a different list of work items that are of continual interest, the list should be filtered using the filter function.

Note: The **Filter**, **Sort**, **Refresh**, and **Auto-Refresh** icons and menu selections are disabled while the find function is being used — you must close the find function to change filter or sort criteria, or to refresh the list. Also, if you have the auto-refresh feature turned on, it is temporarily disabled while the find function is being used.

Refreshing the Work Item List

When a work item list is initially displayed, it is a **snap shot** of the work items at that point in time. You can refresh the list to get the most recent list of work items from the iProcess Engine by:

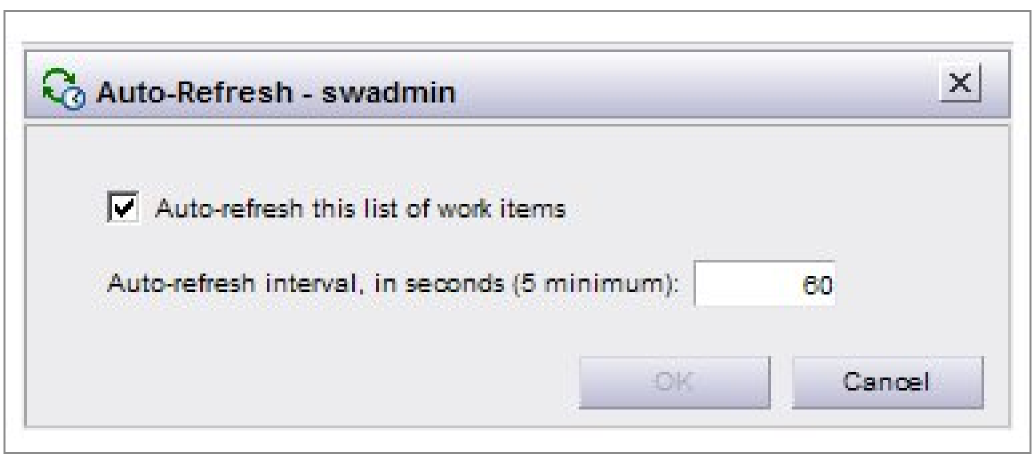
- selecting **Refresh Work Items** from the **Tools** menu, or
- by clicking the icon.

If you have defined filter and/or sort criteria for the work item list, they will be applied on the refreshed list of work items — the work item list is displayed if the number of work items does not exceed the specified number; the filter dialog is displayed if the number of work items exceeds the specified number (for more information, see Filtering a Work Item List).

Auto-Refresh of Work Item Lists

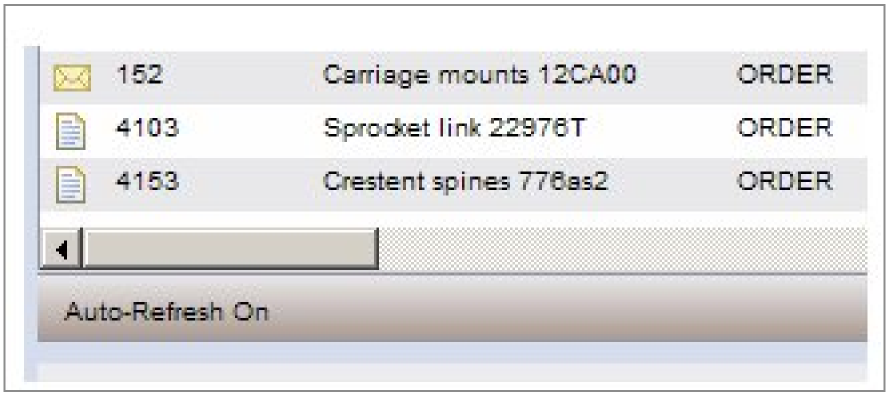
Work item lists also have an “auto-refresh” feature that, when enabled, causes the work item list to be automatically refreshed at specified intervals. The other list types do not have this feature.

To enable or disable the auto-refresh feature, either select **Auto-Refresh** from the work item list **View** menu, or click the icon. The following dialog is displayed:



To enable auto-refresh, check the **Auto-refresh** check box, specify the number of seconds you would like between refreshes (the minimum you can specify is 5 seconds), then click **OK.**

There is an indicator on the left side of the work item list status bar that tells you the current state of the auto-refresh feature:



This indicator changes to “Refreshing...” when the list is in the process of being refreshed.

You can specify whether auto-refresh is enabled or disabled by default every time you log in. This is done on the **Options** dialog — see Auto-Refresh of Work Item Lists.

Work Item Status

By default, the first column in the work item list displays icons that indicate the work item’s status. The following table shows the possible icons and their meanings:

Icon	Work Item Status
	The work item is “new” (i.e., it has never been opened).
	The work item has been opened since it arrived in the work queue.
 	If the icon is “grayed out”, it indicates the work item is part of a suspended case. The work item cannot be opened while the case is in a suspended state. A suspended work item may be one that has never been opened, or one that has been opened since it arrived in the work queue. For more information, see Case Suspensions.
	The work item is currently locked by a user.
	The work item is flagged as urgent. Note that this icon can be displayed in combination with any of the other icons. For example, the work item might be “new” and “urgent”. For example:

Icon	Work Item Status
	

Opening a Case from the Work Item List

Opening a case causes the case details to be displayed. Case details are presented in a tabbed format that contains **Summary**, **History**, **Outstanding**, and **Data** tabs. As the names of the tabs imply, you can view a summary of the case, the case history details, information about the outstanding work items in the case, and view/modify the case data fields.

You can open the case that is associated with a particular work item, by selecting the work item in the work item list, then:

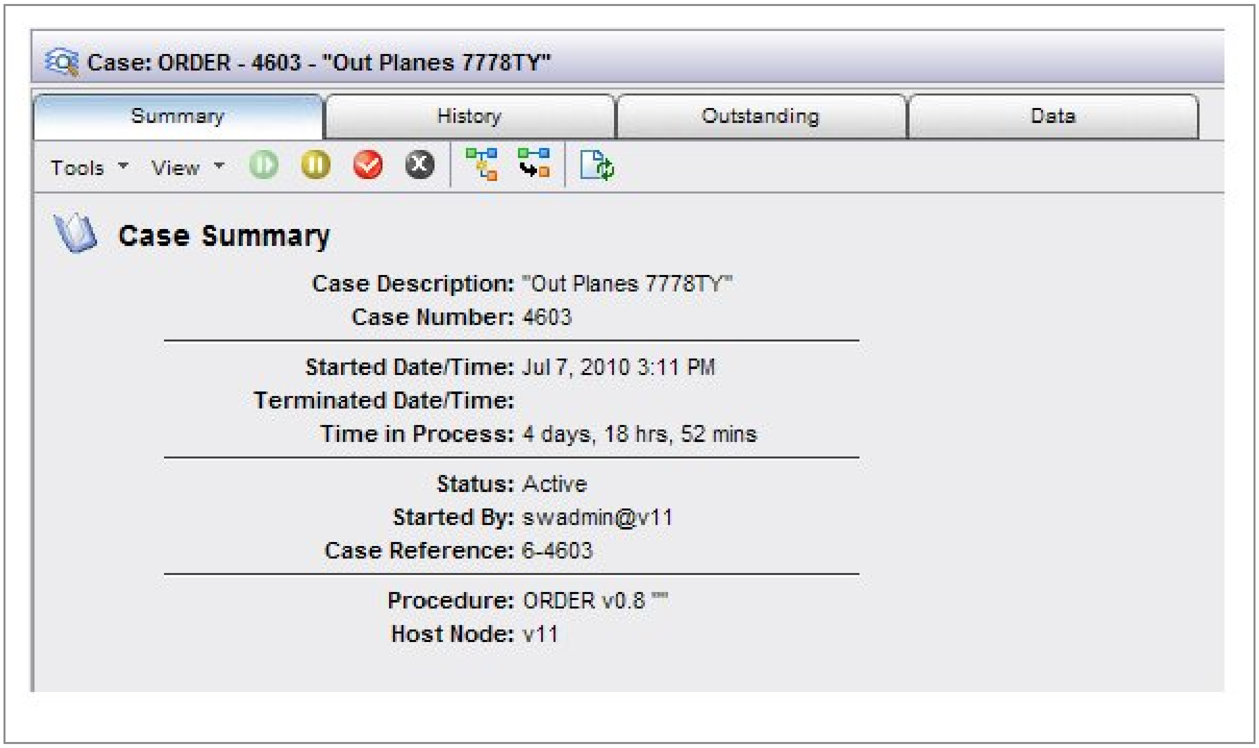
— select **Open Case** from the **Tools** menu,

> **Note:** You cannot open a case for multiple work items from the work item list. If you select multiple work items, the **Open Case** function becomes disabled.

— right-click the mouse button on the desired case and select **Open Case** from the drop-down menu, or

— click the  icon on the work item list.

All of these methods of opening a case cause the selected case to be displayed:



Note that when opened from the work item list, the case details are always displayed in a separate dialog — i.e., they cannot be displayed in the preview pane).

For information about using each of the tabs in the case details, see the following:

- **Summary Tab** - Case Summary
- **History Tab** - Case History
- **Outstanding Tab** - Outstanding Work Items in the Case
- **Data Tab** - Case Data Fields

Filtering a Work Item List

"Filtering" a list of work items involves entering filter criteria so that only some of the work items are shown in the list, rather than all of them. Filtering a list of work items allows you to display only the work items you are interested in. For example, you may only be interested in work items that arrived in the work queue after Dec. 15, 2004. You can filter the list so that only those work items are shown.

The filtering function allows you to build a "filter expression" that is applied to all work items for the work queue that was selected. If the work item satisfies the filter expression (e.g., it arrived after Dec. 15, 2004), it is shown in the work item list; if it does not satisfy the filter expression, it is not shown in the list (and is not downloaded from the iProcess Engine).

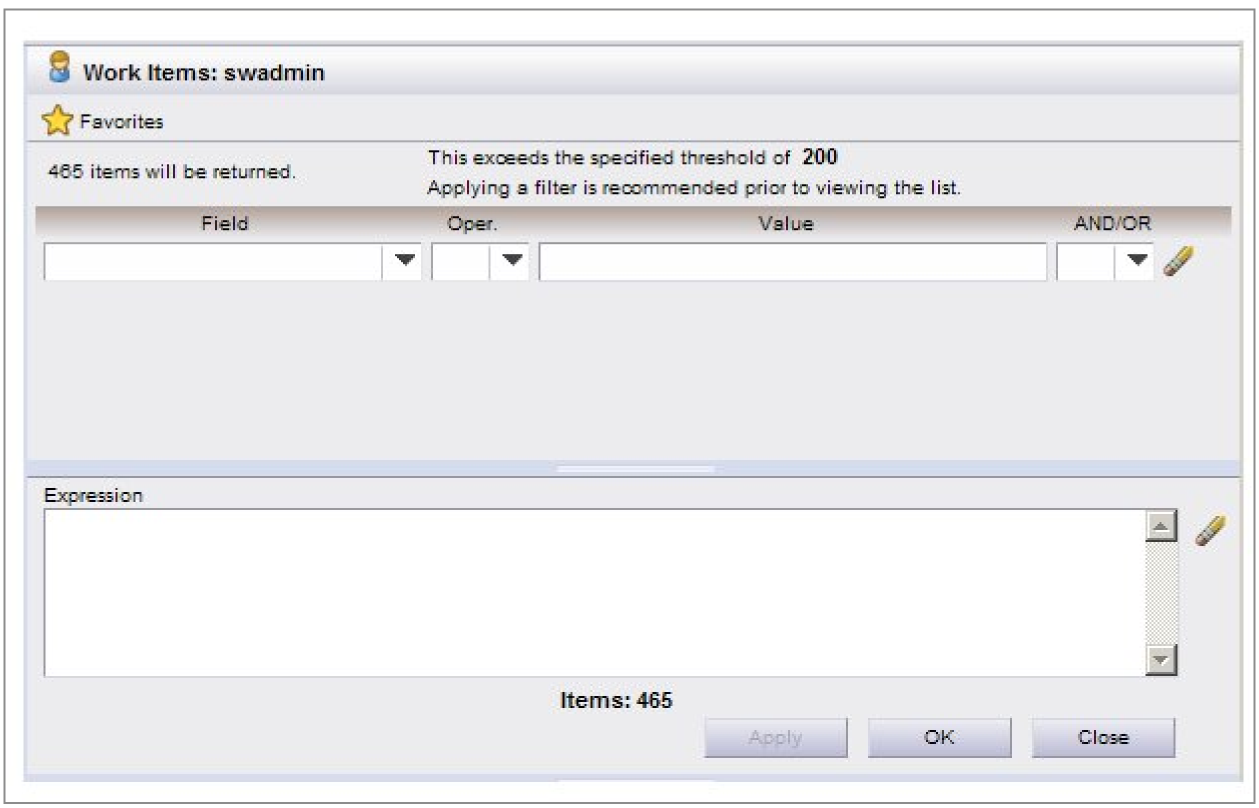
You can filter the work item list at any time by:

- clicking the  icon, or
- by selecting **Filter...** from the **View** menu on the work item list.

This displays the filter dialog, on which you can specify a filter expression. This is explained in the following subsections.

The filter dialog may also be automatically displayed when you attempt to open a work queue from the work queue list. This occurs if the number of work items in the work queue exceeds a threshold that you've specified in your user options (see Work Item Filters).

If the number of work items exceeds the threshold specified in your user options, the filter dialog is automatically displayed:



Note: If you had applied a filter expression the last time you viewed the work item list, that same filter expression will be applied when you open the list again — in other words, the most recently applied filter expression will remain in effect until you remove it or change it.

If a filter expression is still active, the **Filter** icon is shown with a green check mark (as shown below), and if the filter dialog is displayed, the previously entered filter expression will be shown in the **Expression** section.

Filter expressions for a particular list are saved either locally or on the server, depending on a configuration setting made by the system administrator:

- If saved locally, and you log into a different machine, the filter you defined for a particular list will not be in effect on that new machine — filters defined on a specific machine will apply only to that individual machine.
- If saved on the server, and you log into a different machine (and connect to the same server), the filters you defined will be in effect on the new machine.

Notice the “**465 items will be returned**” message in the upper left part of the example filter dialog. This is the number of work items that will be returned if you click the **OK** button to display the work item list. If this is a large number, you should enter a filter expression so that a smaller list is returned, making it easier to find the work items you want to work on.

The message on the upper right part of the filter dialog tells you the current threshold number that is specified in your user options — in this example, it’s 200. For information about specifying this number, see Work Item Filters).

Building a Filter Expression

The filter dialog allows you to build a “filter expression” that is used to evaluate each work item to determine if it should be included in the list.

The following summarizes building a filter expression:

- **Choose a field** to filter on. A “field” in this context is not necessarily a field that appears on a form in a work item — although it can be. These also include “system fields," which contain information about the work item that is stored in the system, such as the date/time the work item arrived in the work queue, whether or not the work item is "new" (i.e., unopened), etc.

- **Choose an operator** that will be used in your filter expression, e.g.,'=' (equals), '<' (less than), '>' (greater than), etc.
- **Enter the value** to be compared against the value in the field you chose. (The value entered in the **Value** field must match the data type for the field selected. For information about the valid data types, see Value Data Types.)

For example, to list only work items that arrived in the work queue after Dec. 15, 2004:

— **Field**: Arrival Date

— **Operator**: >

— **Value**: 15/12/2004

You can choose multiple fields to filter on.

At any time while building the filter expression, you can "apply" the expression by clicking the **Apply** button. The "**##### items will be returned**" message is updated to inform you of the number of work items that satisfy the filter expression you've built. This is the number of work items that will be listed when you click the **OK** button.

You can also click the **OK** button at any time without first clicking the **Apply** button — this causes any filter expression(s) you've entered to be applied and the list displayed. But you will not know the number of work items that will be returned in the list until after the list is displayed — clicking **Apply** first allows you to know how many will be returned before the list is displayed.

Also note that you can use the **Close** button to close the filter dialog without applying the filter expression (assuming you have not yet clicked **Apply**). Any expression you've entered will remain on the filter dialog, so that if you return to the filter dialog again prior to closing the work item list, the expression you had entered will still be available.

You can clear/remove the currently displayed filter expression at any time by clicking on one of the "eraser" icons on the right side of the filter dialog.

Each step required to build the filter expression is described in more detail in the following subsections.

Choosing a Field to Filter On

To choose a field to filter on:

1. Click the arrow on the right side of the **Field** column. The following drop-down list is displayed:

This drop-down list provides a comprehensive list of the fields you can filter on. It consists of:

- **System Fields** - These fields contain information that is provided by the system, e.g., the date and time the work item arrived in the work queue, the case number the work item is associated with, etc.

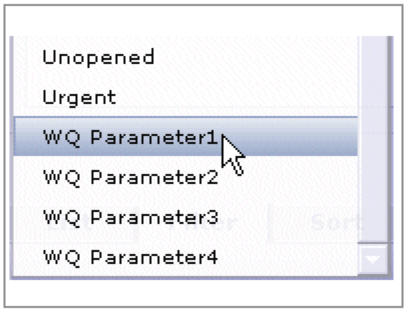
  A comprehensive list of available system fields is provided in System Fields Available for Filtering Work Items.

- **Case Data Fields** - These fields contain case data that was entered into a field on the form associated with a work item, e.g., a customer name or invoice number.

  A system administrator determines which case data fields are available to filter on, and in which work queues they are available.

  There are two types of case data fields that you can use to filter the work item list:

  — **Work queue parameter fields** - These are special fields that can be used to store work queue-specific data. Unless the system administrator assigned different names to these fields, they appear in the **Field** drop-down list as **WQ Parameter1 - 4**, as follows:

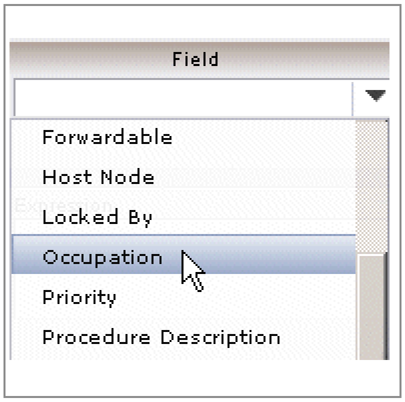


Filtering on a work queue parameter field allows you to filter on the value in the work queue parameter field. For instance, if the system administrator assigned the “customer name” field to the “work queue parameter 1" field, you could then filter on “**WQ Parameter1**” to display only the work items in the work queue that contain a certain customer name.

> **Note:** Work queue parameter fields are an “older” method of designating fields for filtering and sorting. A more recent method is using Case Data Queue Parameter (CDQP) fields (described below). Because of their improved flexibility, CDQPs are likely to be used in recently developed systems.

— **Case Data Queue Parameter (CDQP) fields** - These are similar to work queue parameter fields; they hold case data that was entered on a form associated with a work item.

A system administrator must assign case data fields to CDQP fields to make those fields available for filtering (and sorting). If this has been done, the name of the field appears in the **Field** drop-down list. In the following example, the **Occupation** field is a case data field that appears on a form and that has been designated a CDQP, causing it to appear in the Field drop-down list:



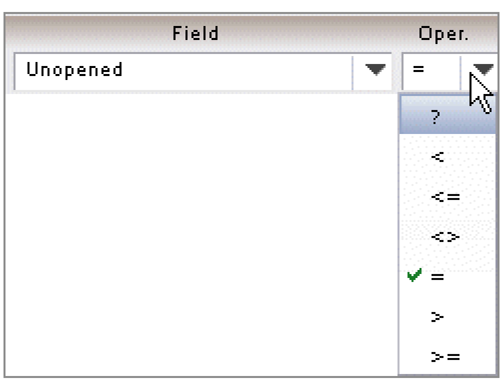
It’s important to understand that CDQP fields contain “work item data” (as opposed to “case data”.) “Work item data” is the data associated with a work item while it’s in a work queue — if you enter information in a form, then “keep” the work item, the information you’ve entered is written to *work item data*. “Case data” is the information that is written to the database after you’ve “released” the work item — if you enter information in a form, then “release” the work item, the information you’ve entered is written to case data. For more information about these types of data, see Case Data Fields.

2. Select the desired field from the drop-down list.

   For a list of the available system fields, see System Fields Available for Filtering Work Items.

Choosing an Operator for the Filter Expression

The **Oper.** field allows you to select an operator for the filter expression. Click on the arrow on the right side of the **Oper.** field. The following drop-down list is displayed:



Select the appropriate operator from the list (you can also type in the operator). The selections are:

Operator	Description
?	Equal to (regular expression equality operator[1])
<	Less than
<=	Less than or equal to
< >	Not equal to
=	Equal to
>	Greater than
>=	Greater than or equal to

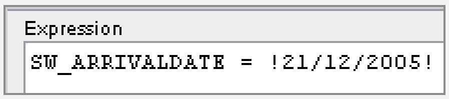
Specifying a Value for the Filter Expression

Enter the value in the **Value** field that you would like compared to the value in the field you selected in the **Field** field.

For example, to list the work items that are currently locked by user "susieq", enter "susieq" in the **Value** field:

[1]Using this operator allows you to enter "regular expression" syntax to perform more complex string search functions. As regular expressions are beyond the scope of this document, see an outside source for information about valid regular expression syntax.

Note: When the iProcess Workspace (Browser) sends a Date field value to the iProcess Engine for filtering, it must be enclosed in exclamation characters (e.g., !12/12/2005!), and Time field values be enclosed in '#' characters (e.g., #12:00#). Therefore, once you've entered a valid date or time in the **Value** field for those field types, the value shown in the **Expression** window is automatically enclosed in the applicable characters. For example:



DateTime field values are sent to the iProcess Engine enclosed in quotes (e.g., "12/12/2005 10:30").

Value Data Types

The value entered in the **Value** field must match the data type for the field selected. (For information about the valid data types for each of the system fields, see the list of system fields on System Fields Available for Filtering Work Items.)

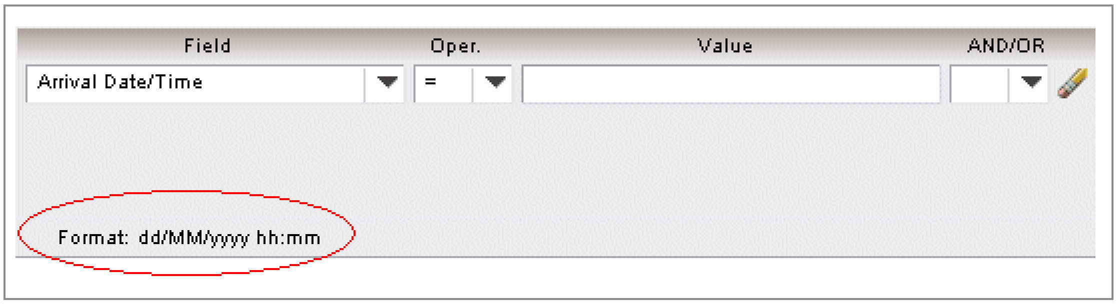
The following are the types of data that can be entered in the **Value** field:

Data Type	Description
Numeric	Consists of one or more of the numbers 0-9. Used for things like the case number and work item priority. Note that all of the system fields that are flags (i.e., fields that have either a true or false state (e.g., urgent , forwardable , etc.)) are numeric: 0 or 1, where 0 indicates false and 1 indicates true.
Text	Consists of any number of letters, numbers, or special characters (e.g., #, $, etc.). Used for things like the addressee name, case description, etc.
Date	The default date format[1] is "dd/mm/yyyy".

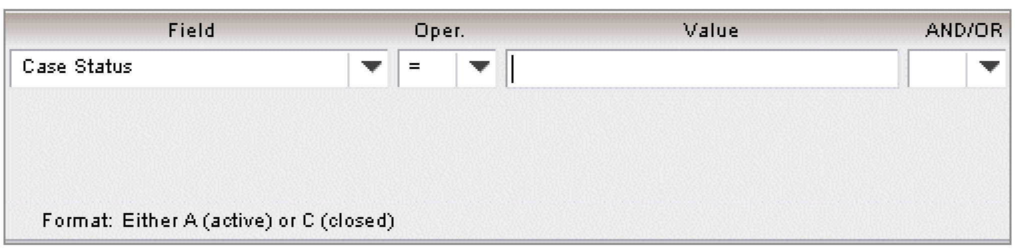
[1]The order of the day, month, and year, as well as the date and time separator characters are specified on the TIBCO iProcess Engine. These may be different on your system, depending on how it was set up.

Data Type	Description
	Example: 25/12/2005
Time	The default time formata is “hh:mm”, using a 24-hour clock. Example: 18:30
DateTime	The default date/time formata is “dd/mm/yyyy hh:mm”. Example: 25/12/2005 18:30

The date and/or time format that is currently specified on your TIBCO iProcess Engine is shown on the filter dialog when you select a date or time field in the **Field** drop-down list. For example:



The iProcess Workspace (Browser) also provides information about the format required for other types of fields selected from the **Field** drop-down list. In the following example, the client is telling you that since the “Forwardable” work item flag has been selected, the valid values are **1** (for forwardable) and **0** (for not forwardable):



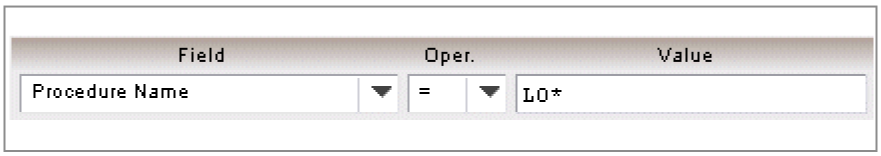
Using Wild Cards in the Filter Value

You can use the following “wild card” characters in the value you enter in the **Value** field when filtering on text fields (note that wild cards can’t be used with non-text fields (for a list of the field types, see System Fields Available for Filtering Work Items)):

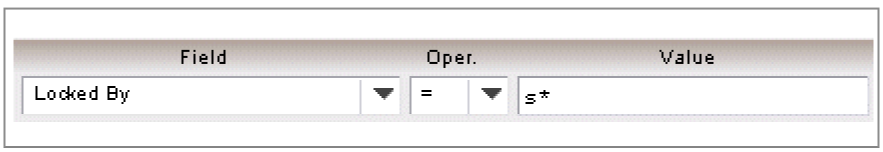
Wild Card Character	Description
*	The asterisk matches zero or more of any character.
?	The question mark matches any single character.

Wild card characters may be substituted for one or more characters in your filter value. For example:

- To list the work items that are from a procedure whose name begins with the letters “LO”:



- To list the work items that are currently locked by users whose user name begins with “s”:

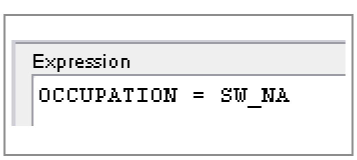


Filtering on Empty Fields

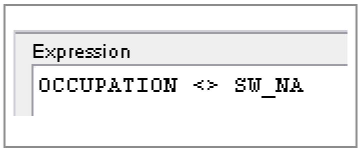
The special **SW_NA** value can be used in filter expressions to list work items that contain a field that is empty (the “NA” means “not assigned”).

Note, however, this value must be typed into the **Expression** section (free-form area — for information about building free-form expressions, see Building a Free-Form Filter Expression). If it is typed into the **Value** field, the system will enclose **SW_NA** in quotes in the expression — you don’t want quotes around it.

For example, to list the work items containing an **Occupation** field in which a value has not been entered:



Conversely, to list the work items containing an **Occupation** field in which a value HAS been entered, type in this expression (using the “not equal” operator):



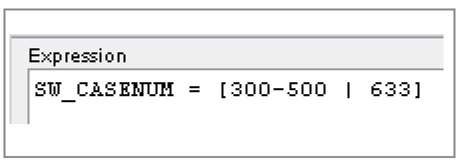
Ranges of Values

Ranges of values can be specified, although it requires you to enter special syntax in the **Expression** section. A range of values must be in the following form:

```
FilterField=[Val1-Val2|Val3|Val4-Val5|...]
```

This allows you to specify one or more ranges, each separated by a vertical bar character (|), all enclosed in square brackets ([ ]). You can also include individual values in the expression.

For example, the following expression will return all work items that have a case number between 300 and 500, as well as the work item with a case number of 633:

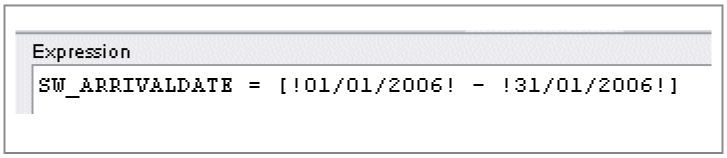


You can enter the entire expression free-form in the **Expression** section, if desired. Or, you can select the field and operator from the **Field** and **Oper**. field drop-down lists. You may or may not be able to enter the entire value in the **Value** field, depending on the filter field chosen. If required, modify the expression in the **Expression** section so that it is in the form shown above.

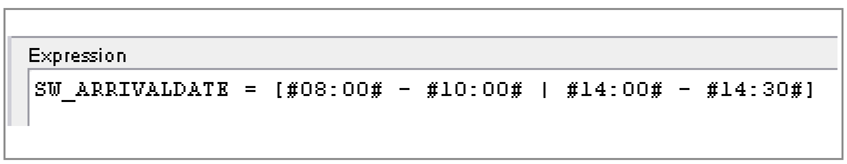
If dates and/or times are used in a range of values, they must be specified in the following format:

Dates/Times	Format Required
Date[1]	!dd/mm/yyyy!
Time	#mm:hh#
DateTime[a]	"dd/mm/yyyy mm:hh"

For example, the following expression will return all work items that arrived in the work queue between the dates of Jan. 01, 2006 and Jan. 31, 2006 (inclusive):



And the following expression will return all work items that arrived in the work queue between the times of 8am and 10am, as well as between the times of 2pm and 2:30pm (all inclusive):



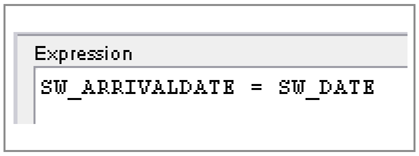
Filtering on the Current Date

The **SW_DATE** system field contains the current date. You can use this system field in filter expressions. For instance, you can search for all work items that have arrived in the work queue today (see the example below).

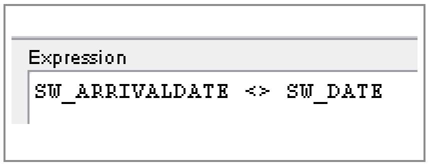
Note, however, this value must be typed into the **Expression** section (free-form area — for information about building free-form expressions, see Building a Free-Form Filter Expression). If it is typed into the **Value** field, the system will enclose **SW_DATE** in quotes in the expression — you don't want quotes around it.

For example, to list the work items that have arrived in the work queue today:

[1]The order of the day, month, and year can be modified by the system administrator. The correct order is shown on the filter dialog if you select a date field in the **Field** drop-down list.



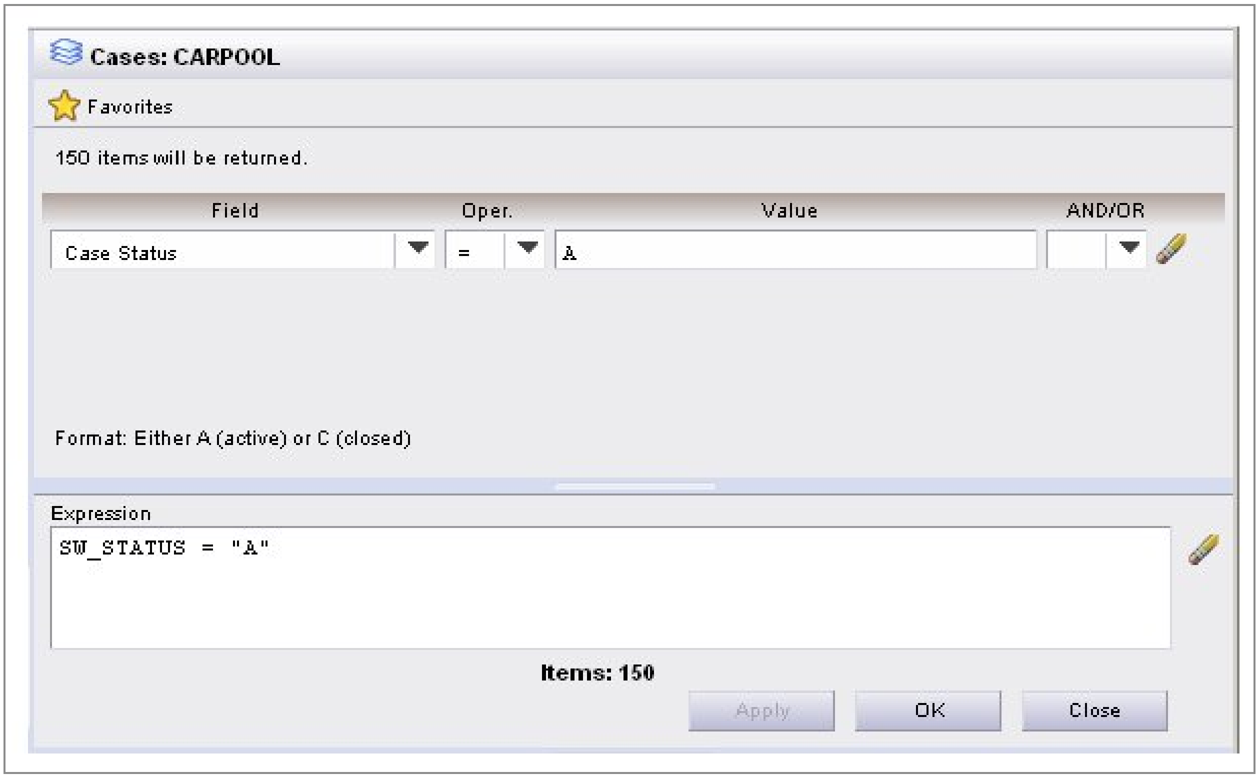
Conversely, to list the work items that arrived in the work queue any day other than today:



Applying the Filter Expression

To apply the filter expression shown in the **Expression** window, you can:

- Click the **OK** button. This causes any filter expression(s) you've entered to be applied and the list displayed. But you will not know the number of work items that will be returned in the list until after the list is displayed.
- Click the **Apply** button. The system will apply the filter expression and calculate how many work items satisfy the expression. This number is shown on both the top and the bottom of the filter dialog (22 in this example):



If you clicked **Apply**, and the number of work items that will be returned from the iProcess Engine is satisfactory, click the **OK** button to display the work item list (for information about the work item list, see Work Item Lists).

If the number of work items that will be returned is still too large, you can modify the filter expression by changing any of the selections in the **Field**, **Oper.**, or **Value** fields, then click **Apply** again to get a new work item count.

Anytime you add, delete, or modify a filter expression on the filter dialog, and have not yet clicked the **Apply** button to apply it, the following message is shown to notify you that the changed filter expression has not been applied:

Whenever the message shown above is displayed, the **Apply** button will be active.

You can also click one of the “eraser” icons to delete filter expressions. Clicking the one to the right of the filter fields clears that row of fields; clicking the one to the right of the **Expression** window clears all filter expressions entered so far.

Note that if you apply the filter expression, then view the work item list, the **Filter** icon now contains a red check mark to indicate that a filter has been applied on the list:

Specifying Multiple-Clause Filter Expressions

You can use logical operators to combine multiple “clauses” in your filter expressions.

A “clause” is a field/operator/value set. The expression:

```
SW_ARRIVALDATE = !20/10/2005! AND SW_ADDRESSEE = ”susieq”
```

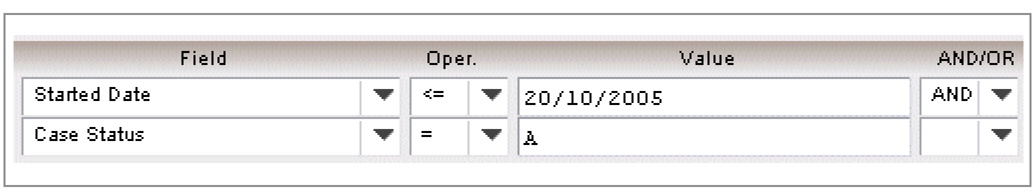
contains two clauses, separated by the AND operator. The following are the logical operators that can be used to separate clauses:

Operator	Description
AND	The expression is true if the first clause *and* the second clause are true.
OR	The expression is true if the first clause *or* the second clause is true.

Logical ANDs and ORs are entered into a filter expression using the **AND/OR** field. Click the arrow to display the drop-down list and select either AND or OR. When you select an AND or OR, another set of fields is displayed, in which you can specify the clause that will be ANDed or ORed to the preceding clause.

Example 1

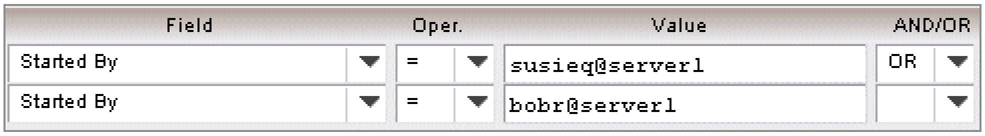
This example returns work items that arrived in the work queue on or before 20/10/2005, and that have a case description that begins with “C”:



In this example, both clauses must be true for a work item to be returned in the list.

Example 2

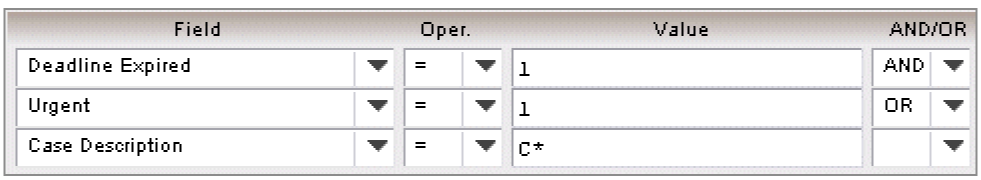
This example returns work items that either have an expired deadline or are flagged as urgent:



In this example, either one of the clauses can be true for the work item to be returned in the list.

Specifying More Than Two Clauses

If you specify more than two clauses, they are always evaluated in pairs from left to right. Consider the following:



In this example, the entire filter expression created is this:

```
SW_EXPIRED = 1 AND SW_URGENT = 1 OR SW_CASEDESC = "C*”
```

The system will evaluate this expression as if there are parentheses around the first two clauses in the expression. For example:

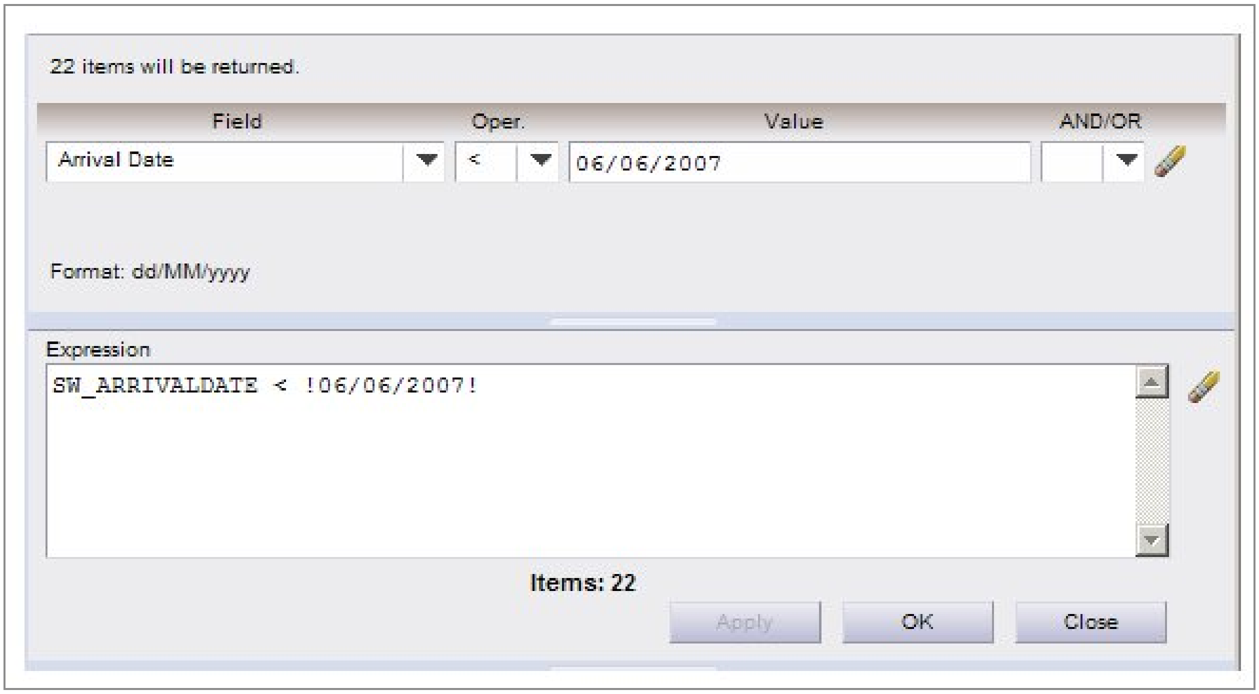
```
(SW_EXPIRED = 1 AND SW_URGENT = 1) OR SW_CASEDESC = "C*”
```

As you continue to add clauses to the expression, the system continues to evaluate from left to right. For example, if you added a fourth clause to the expression above, it would include the following implied parentheses:

```
((SW_EXPIRED = 1 AND SW_URGENT = 1) OR SW_CASEDESC = "C*”) AND SW_
PRONAME = "LOAN"
```

Building a Free-Form Filter Expression

After specifying filter criteria in the **Field**, **Oper.**, and **Value** fields, the filter expression appears in the **Expression** window:



The expression that appears in the **Expression** window is what is actually sent to the iProcess Engine. You are free to edit this text in any way desired. Note, however, that the results may not be what you expect if the expression is not in the format required by the iProcess Engine. For example, dates must be enclosed in exclamation characters (!07/05/2006!), times must be enclosed in the ‘#’ character (#18:30#). These special characters are automatically added for you when you use the **Field**, **Oper**., and **Value** fields to build the expression.

You can also add parentheses to the expression in the **Expression** window to create more complex filter expressions.

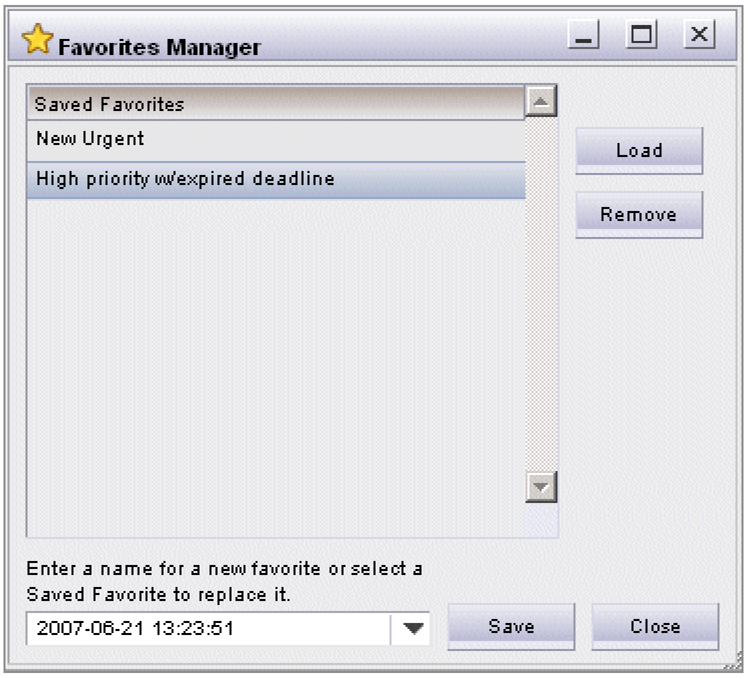
The system field names that appear in the **Expression** window (e.g., SW_DEADLINEDATE) are listed in the table of system fields on System Fields Available for Filtering Work Items.

Favorite Filter Expressions

The “favorites” feature allows you to save your favorite (i.e., commonly used) filter expressions. This allows you to quickly select an expression by name, rather than requiring you to enter each element of the expression.

To use the favorites feature, click the **Favorites** button on the filter dialog:

The following dialog is displayed:



In this example, there have already been two favorites saved: “High priority w/expired deadline” and “New Urgent”.

To use one of the saved favorites:

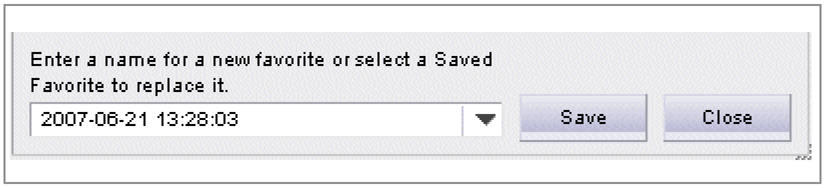
1. Select the desired favorite in the **Saved Favorites** section.
2. Click the **Load** button.

   The filter expression associated with that name is automatically entered into the **Expression** section on the filter dialog and is automatically applied to the work item list — the “### items will be returned” text is displayed on the filter dialog indicates how many work items satisfied the filter expression.

Saving a New Favorite Filter Expression

To save a new favorite filter expression:

1. Build the filter expression you would like to save using the filter dialog. See Building a Filter Expression.
2. Click the **Favorites** button on the filter dialog. The **Favorites Manager** dialog is displayed.
3. In the field on the bottom of the **Favorites Manager** dialog, enter the name you would like to give the filter expression you are saving in the favorites (the entry in this field defaults to the current date and time).



4. Click **Save** to save the new favorite.

System Fields Available for Filtering Work Items

The following table lists the system fields that can be included in expressions when filtering work items.

The text in the **Description** column in the table below corresponds to the text in the **Field** field drop-down list on the **Filter** dialog. When you choose a field from the **Field** field drop-down list, the actual system field name (e.g., SW_CASEDESC) is entered in the filter expression in the **Expression** window on the **Filter** dialog.

Description	System Field Name	Data Type	Comments
Arrival Date	SW_ARRIVALDATE	Date	
Arrival Date/Time	SW_ARRIVAL	DateTime	

Description	System Field Name	Data Type	Comments
Arrival Time	SW_ARRIVALTIME	Time	
Case Description	SW_CASEDESC	Text	
Case Number	SW_CASENUM	Numeric	
Deadline Date	SW_DEADLINEDATE	Date	
Deadline Date/Time	SW_DEADLINE	DateTime	
Deadline Expired	SW_EXPIRED	Numeric	1 - expired deadline 0 - no expired deadline
Deadline Set	SW_HASDEADLINE	Numeric	1 - has deadline 0 - no deadline set
Deadline Time	SW_DEADLINETIME	Time	
Forwardable	SW_FWDABLE	Numeric	1 - is forwardable 0 - not forwardable
Host Name	SW_HOSTNAME	Text	
Locked By	SW_LOCKER	Text	User name
Priority	SW_PRIORITY	Numeric	
Procedure Description	SW_PRODESC	Text	
Procedure Name	SW_PRONAME	Text	

Description	System Field Name	Data Type	Comments
Releasable	SW_RELABLE	Numeric	1 - releasable (no input fields) 0 - not Releasable
Started By	SW_STARTER	Text	username@node
Step Description	SW_STEPDESC	Text	
Step Name	SW_STEPNAME	Text	
Suspended	SW_SUSPENDED	Numeric	1 - suspended 0 - not suspended **Note:** This may not be available to you if you are using an older iProcess Engine.
Unopened	SW_NEW	Numeric	1 - unopened 0 - has been opened
Urgent	SW_URGENT	Numeric	1 - urgent 0 - not urgent
WQ Parameter1 *	SW_QPARAM1	Text	
WQ Parameter2 *	SW_QPARAM2	Text	
WQ Parameter3 *	SW_QPARAM3	Text	
WQ Parameter4 *	SW_QPARAM4	Text	

* The actual name that appears in the **Filter** field drop-down list for the work queue parameter fields may be different than those shown here if the system administrator has assigned different names to them.

Note: For information about data types used in system fields, see Value Data Types.

Sorting a Work Item List

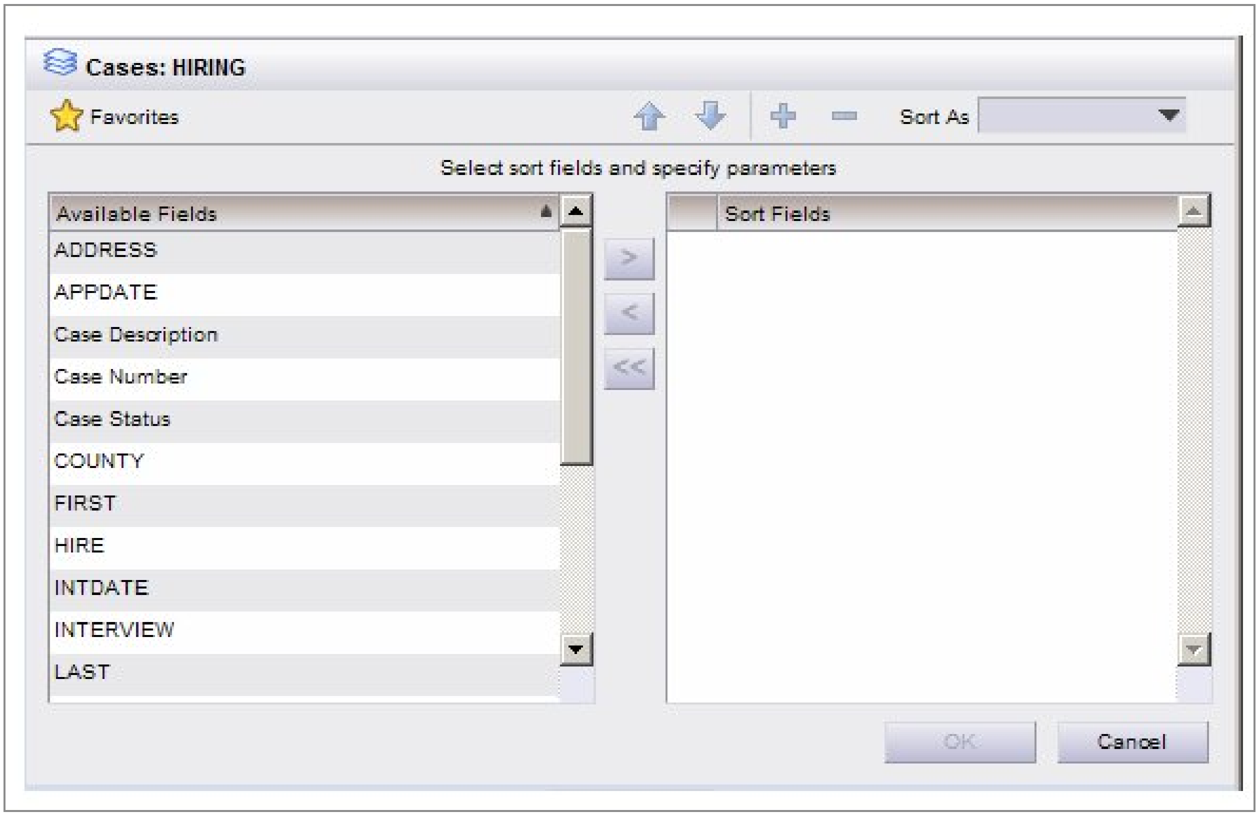
The iProcess Workspace (Browser) allows you to sort the information in the columns of the work item list so they are in the order you would like them listed.

For example, you may want to list all “new” (unopened) work items first, then sort those by arrival date/time, from oldest to most recent. This example requires you to sort on two fields: “Unopened” and “Arrival Date/Time ”.

To specify how work items in the work item list are sorted:

- click the  icon, or
- select **Sort...** from the work item list **View** menu.

The following dialog is displayed:



The list on the left shows all of the fields that are available to sort on. To sort the work item list, you must move the desired fields from the list on the left to the list on the right, then arrange them in the desired priority (order). This is described in the following subsections:

By default, all work item lists are sorted by **Procedure Name**, followed by **Case Number**, then **Step Name**, all in ascending order. If you specify one or more sort fields using the sort dialog, the default sort fields are replaced by your specification. For example, if you specify to sort on case description only, that is the only field on which the list will be sorted.

Note: If you had applied sort criteria the last time you viewed the work item list, that same sort criteria will be applied when you open the list again — in other words, the most recently applied sort criteria will remain in effect until you remove it or change it.

If previously applied sort criteria is still active when the work item list is displayed, a green check mark will be shown with the **Sort** icon.

Sort criteria for a particular list is saved either locally or on the server, depending on a configuration setting made by the system administrator:

- If saved locally, and you log into a different machine, the sort you defined for a particular list do not reflect on that new machine — sort criteria defined on a specific machine will apply only to that individual machine.
- If saved on the server, and you log into a different machine (and connect to the same server), the sort criteria you defined can be in effect on the new machine.

Selecting Sort Fields

The **Available Fields** list on the sort dialog provides a list of the fields you can sort on. It consists of:

- **System Fields** - These fields contain information that is provided by the system, e.g., the date and time the work item arrived in the work queue, the case number the work item is associated with, etc.

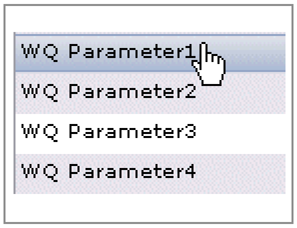
  A comprehensive list of available system fields is provided in System Fields Used to Sort Work Items.

- **Case Data Fields** - These fields contain case data that was entered into a field on the form associated with a work item, e.g., a customer name or invoice number.

  A system administrator determines which case data fields are available to sort on, and in which work queues they are available.

  There are two types of case data fields that you can use to sort the work item list:

  — **Work queue parameter fields** - These are special fields that can be used to store work queue-specific data. Unless the system administrator assigned different names to these fields, they appear in the **Available Fields** list as **WQ Parameter1 - 4**, as follows:

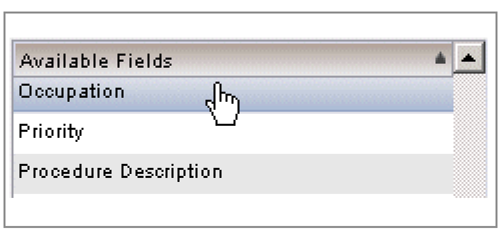


Sorting on a work queue parameter field allows you to filter on the value in the work queue parameter field. For instance, if the system administrator assigned the “customer name” field to the “work queue parameter 1" field, you could then sort on “**WQ Parameter1**”.

Note: Work queue parameter fields are an “older” method of designating fields for filtering and sorting. A more recent method is using Case Data Queue Parameter (CDQP) fields (described below). Because of their improved flexibility, CDQPs are likely to be used in recently developed systems.

— **Case Data Queue Parameter (CDQP) fields** - These are similar to work queue parameter fields; they hold case data that was entered on a form associated with a work item.

A system administrator must assign case data fields to CDQP fields to make those fields available for sorting (and filtering). If this has been done, the name of the field appears in the **Available Fields** list. In the following example, the **Occupation** field is a case data field that appears on a form and that has been designated a CDQP, causing it to appear in the list:



To specify sort fields:

1. Select the desired sort field(s) from the **Available Fields** list:

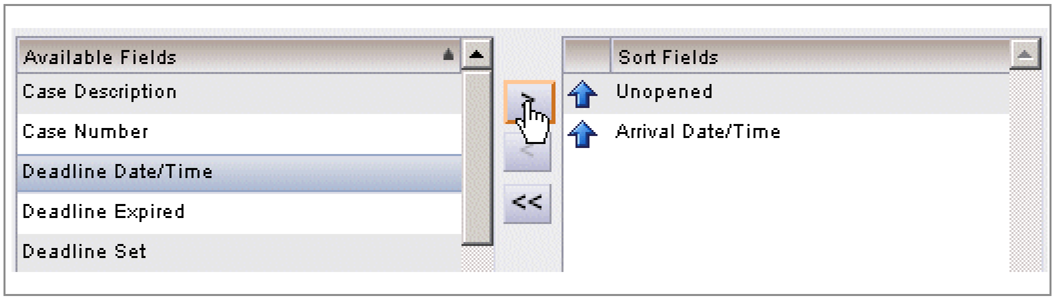
   — Individual fields can be selected by clicking on the desired name.

- Multiple fields can be selected by holding down the **Ctrl** key while clicking on the desired names. A group of fields can be selected by clicking on one name, then holding down the **Shift** key and clicking on the last name in the desired group.

2. Move the columns to the desired list:

   - Fields can be moved back and forth between lists by selecting the desired field (s), then clicking the "**>**" or "**<**" buttons.

     You can also move an individual field to the other list by double-clicking on the field name.



   - All fields can be moved from the **Sort Fields** section by clicking the "**<<**" button.

> **Note:** You can specify a maximum of 10 sort fields for a work item list.

Specifying Sort Priority

The order in which the sort fields are listed in the **Sort Fields** window specifies the priority of the sort. If you have multiple sort fields listed, all work items will first be sorted by the first sort field, then they will be sorted by the next sort field, and so on. For example, if you specified "Unopened" as the first sort field, then "Arrival Date/Time" as the second sort field (both ascending), the work items would be sorted in the following fashion:

Unopened	Jan. 1, 2006
Unopened	Jan. 2, 2006
Unopened	Jan. 3, 2006

Opened	Jan. 1, 2006
Opened	Jan. 2, 2006
Opened	Jan. 3, 2006

In the example shown above, all unopened work items will be listed first, followed by the opened work items. Within each group of unopened and opened work items, they are sorted by arrival date/time.

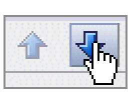
To change the priority, select the desired sort field(s) in the **Sort Fields** window, then click on the “**+**” or “**-**” button to move the field(s) up or down in the list.

Specifying a Sort Direction

The list of work items can be sorted in either ascending or descending order:

When a sort field is added to the **Sort Fields** list, it is ascending by default, which is denoted by the up arrow next to the field name:

To change the sort direction, select the desired sort field(s) in the **Sort Fields** list, then click the up or down arrow buttons on the sort dialog:



The arrow next to the field name changes to indicate the new sort direction:

System Fields Used to Sort Work Items

The following table lists the system fields available for sorting work items:

Sort Field	Data Type
Arrival Date/Time	DateTime
Case Description	Text
Case Number	Numeric
Deadline Date/Time	DateTime
Deadline Expired	Numeric
Deadline Set	Numeric
Deadline Timea	Time
Forwardable	Numeric
Host Name	Text
Locked By	Text
Priority	Numeric
Procedure Description	Text
Procedure Name	Text
Releasable	Numeric
Started Bya	Text

Sort Field	Data Type
Step Description	Text
Step Name	Text
Unopened	Numeric
Urgent	Numeric
WQ Parameter1b	Text
WQ Parameter2b	Text
WQ Parameter3b	Text
WQ Parameter4b	Text

a. Sorting by Deadline Time, Locked By, and Started By are inherently inefficient — sorting by these fields may slow down the sorting process.

b The actual name that appears in the Available Fields list on the sort dialog for the work queue parameter fields may be different than those shown here if the system administrator has assigned different names to them.

Note that the way in which the system sorts the values in the sort fields depends on the type of data in that field. For instance, since the "Procedure Description" field is text data, that field is sorted alphabetically; and since the "Arrival Date/Time" field is a DateTime data type, it is sorted chronologically according to the date/time.

Note: For information about data types used in system fields, see Value Data Types.

Sort As Different Data Type

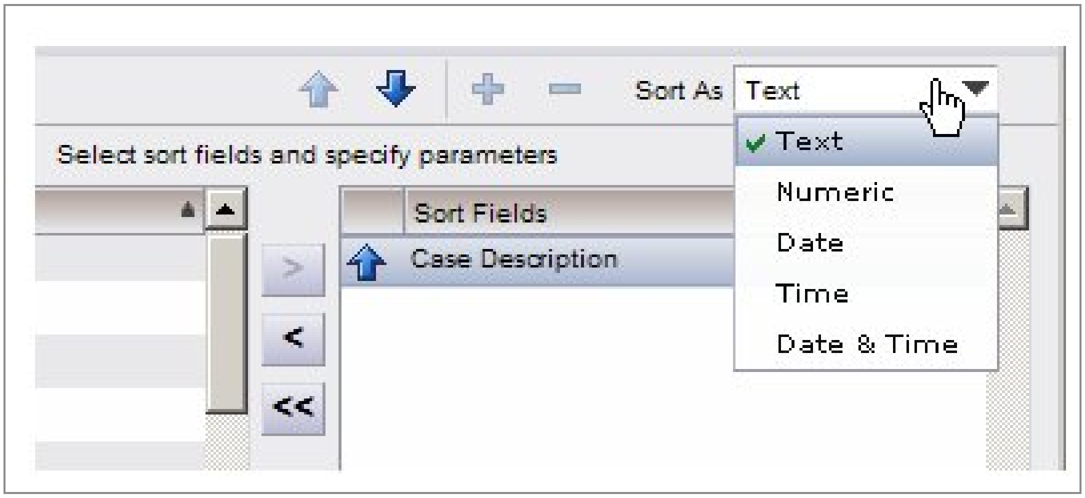
The way in which the system sorts the values in the sort fields depends on the type of data in that field (e.g., text data is sorted alphabetically, numeric data is sorted numerically, etc.).

You can, however, tell the application to sort the data in a field using a data type that is different than the field's data type when sorting on the following fields:

- Case description
- Work queue parameter fields
- Case Data Parameter Queue (CDQP) fields

For instance, you can tell it to sort the data in the Case Description system field (which is a text field) as numeric data.

To sort one of these sort fields as a different data type, select the desired sort field in the **Sort Fields** list, then click on the desired data type in the **Sort As** field (note that the **Sort As** field is active only when you've selected one of the fields that can be sorted as a different data type):



The value of the sort field will be converted to the specified data type before doing the sorting. For example, text fields containing numeric information could be sorted as numbers by setting the sort type accordingly. Note, however, that if the sort field does not contain something readily convertible to the specified type, the sort results may not be what you expect. For example, if sorting text as a numeric field but some of the text fields contain non-numeric data, the results may not be what you expected.

Applying the Sort Criteria

After specifying the sort fields, priority, direction, and so on, click the **OK** button to apply the sort criteria you've specified.

Anytime you modify a sort criteria, and have not yet clicked the **OK** button to apply it, the following message is shown to notify you that the changed sort criteria has not been applied:

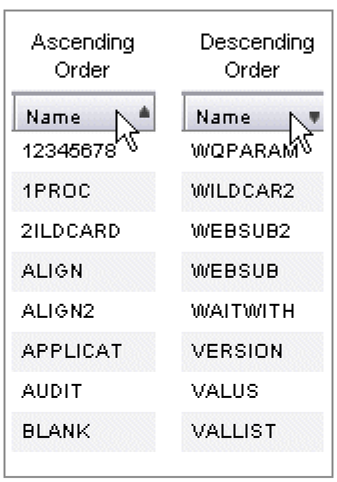
Whenever the message shown above is displayed, the **OK** button gets active.

When you click the **OK** button, a green check mark appears on the **Sort** icon to indicate sort criteria has been applied.

Sorting the Work Item List Using Column Headers

You can quickly and easily sort the work item list on any one of the columns in the list. To sort on a column, click on the column header. If the column contains text, it is sorted in alphabetical order; if it is numeric, it is sorted in numerical order; if it is a date, time, or DateTime, it is sorted in chronological order.

Once you click a column header, a small arrow head appears in the column header, which indicates the order of the sort — if the arrow head is pointing up, the sort is in ascending order; if it's pointing down, the sort is in descending order:



Each successive click on the column header, toggles between ascending and descending order.

If the work item list consists of multiple "pages" (see Work Item List Page Size), each page is individually sorted on the column you have clicked.

> **Note:** The ability to sort using column headers is controlled through user access privileges — if you do not have the authority to sort using column headers, the arrow head does not appear in the header when you click it.

Processing Work Items

A work item represents a step in a case (see the illustration of a procedure on Understanding a Business Process). Typically, a work item has an electronic form associated with it that must be **opened** and filled out (some forms may only display information and will not have fields to fill out). You can then **keep** the work item in your work queue so that it can be opened again and completed at a later time. When the form is completed, the work item is **released** so that the case can progress, possibly resulting in another work item that represents the next step in the case.

Opening Work Items

Opening a work item causes the form associated with that work item to be displayed, allowing you to enter information into the form.

Opening a work item also “locks” that work item, causing a lock icon ( ) to appear in the **Status** column.

If you attempt to open a work item that you’ve already opened, a message is displayed informing you that if you open it again, there could be a loss of data — the system will save any changes in data for the first of those work items that is kept or released. When you attempt to keep or release the second instance of the work item, an error is returned; your only option will be to click **Cancel** to close the work item, losing any changes made on that form.

If any user of the TIBCO iProcess Workspace (Browser) attempts to open a work item that another user has already opened, a message is displayed on their screen informing them that the work item is already opened. They will not be allowed to open it. (Multiple users can have access to a work item if the work item was sent to a group work queue; another user may also have access to a work item if “participation” has been used to give a user access to another user’s work queue.)

> **Note:** A user of the TIBCO iProcess Workspace (Browser) application can open a work item, then log in at a different workstation using the same username and open that same work item. The first one to release the work item will be successful; the second one to attempt to release the work item will fail.

Also, if a user opens a work item using an application other than the TIBCO iProcess Workspace (Browser), then you attempt to open that same work item with the TIBCO iProcess Workspace (Browser), a message is displayed telling you the work item is already open; it will not allow you to open it.

Work items can be opened from either the work item list or from the list of outstanding work items (**Case Detail** / **Outstanding** tab) using one of the following methods:

- Double-click on the desired work item in the list.
- Select one or more work items in the list, then:
  - press the **Enter** key,
  - select **Open Selected Work Item(s)** from the **Tools** menu on the list,
  - right-click the mouse button on the selected work item(s) and select **Open Selected Work Item(s)** from the drop-down menu, or
  - click the icon on the list toolbar.

If you are opening work items from the list of outstanding work items, they are always opened in a floating form, i.e., they cannot be opened in the Preview Pane.

If you are opening work items from the work item list, you cannot open multiple work items if you are displaying the work item forms in the Preview Pane. If you are opening forms in the Preview Pane, and you select multiple work items, the **Open Selected Work Item(s)** function is disabled.

Opening the First Available Work Item

When opening work items from the work item list, you can also open the “first available” work item, where “first available” means a work item that is not locked nor suspended, starting from the first work item in the list.

To open the first available work item, use one of the following methods:

- Select **Open First Work Item** from the **Tools** menu on the work item list,

- right-click the mouse button anywhere on the work item list and select **Open First Work Item** from the drop-down menu, or
- click the icon on the work item list toolbar.

Opening the Next Available Work Item

When opening work items from the work item list, you can also open the “next available” work item, where “next available” means a work item that is not locked nor suspended, starting from the currently selected (highlighted) work item.

To open the next available work item, select (highlight) the work item where you want the search for the next available work item to start, then:

- Select **Open Next Work Item** from the **Tools** menu on the work item list,
- right-click the mouse button on the selected work item and select **Open Next Work Item** from the drop-down menu, or
- click the icon on the work item list toolbar.

> **Note:** There is also a way to cause work items to automatically open. For information about this, see Automatically Opening Work Items.

Work Item Form Location

The location at which the work item form is displayed when you open a work item depends on whether or not the preview feature is turned on.

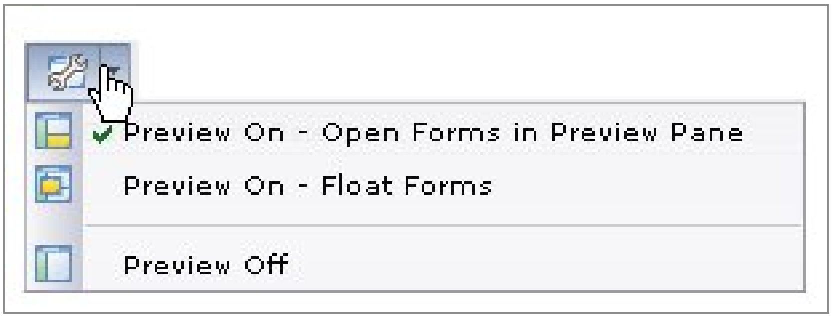
- If preview is turned off, the work item form is always opened in a separate floating window. Note that the window in which the form opens may be either a dialog or a new browser window, depending on a user options setting — for more information, see Layout Options.
- If preview is turned on, the work item form may be opened either in the Preview Pane or a separate floating window, depending on the current preview setting.

  The preview setting can be viewed or set by:

  — clicking the icon on the work item list toolbar, or

  — by selecting **Preview** from the work item list **View** menu.

  The following drop-down menu is displayed:



The check mark indicates the currently selected preview option.

— If the **Preview On - Open Forms in Preview Pane** selection is checked, the work item form is opened in the Preview Pane.

  Note that the Preview Pane may be set to automatically resize when a work item is opened, then return to the previous size when the work item is closed. For information about how this done, see Work Item Preview Default.

— If the **Preview On - Float Forms** selection is checked, the work item form is opened in a separate floating window. Note that the window in which the form opens may be either a dialog or a new browser window, depending on a user options setting — for more information, see Layout Options.

> **Note:** You may or may not be able to open work item forms in the Preview Pane or in a separate dialog, depending on how your forms were created, as follows:
>
> — if your application uses forms created with TIBCO® General Interface (GI forms), you can choose to open them in any of the three available formats: Preview Pane, separate dialog, or separate browser window.
>
> — if your application uses any non-GI form (also referred to as “external forms”), they will always be opened in a separate browser window, regardless of the setting of the Preview selections.

> **Note:** If you have chosen to display the work item forms in floating windows, and there are multiple work items selected when you open them, a floating window for each selected work item is displayed. But if you have chosen to display the work item forms in the Preview Pane, you cannot open multiple work items at one time — if you select more than one work item, the **Open Selected Work Item(s)** function becomes disabled.

Opening / Locking Work Items Multiple Times

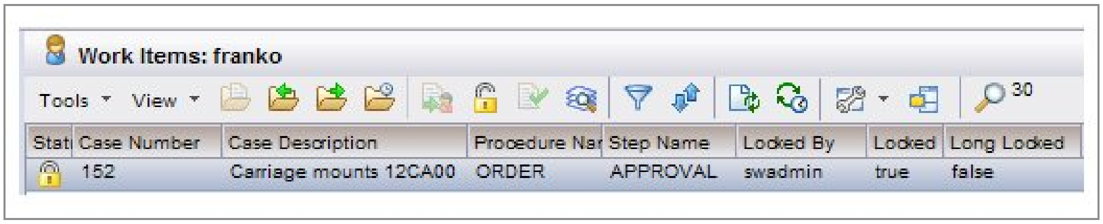
Be aware that in an “enterprise” environment, there may be other applications besides the TIBCO iProcess Workspace (Browser) application that affect the work items you see in work queues.

For this reason there are two “locked” flags that indicate the locked/opened status of work items:

- **Locked** - This flag indicates that a user of another application besides the TIBCO iProcess Workspace (Browser) application has the work item locked (opened). These work items cannot be opened by any user of the TIBCO iProcess Workspace (Browser) application.
- **Long Locked** - This flag indicates that a user of the TIBCO iProcess Workspace (Browser) application[1] has the work item locked (opened). Note that the same user who has the work item locked can log in using the same username at a different workstation and open the work item that is already open. The first one to release the work item will be successful; the second one to attempt to release the work item will fail.

Columns are available in the work item list that show the state of each of these flags (for information about changing the columns that show in the work item list see, Opening a Case from the Work Item List):

[1]If a work item is locked with the TIBCO iProcess Workspace Lite application (a TIBCO client application that allows persons with disabilities to access iProcess BPM functionality using standard accessibility aids, such as screen readers and magnifiers), it also sets the Long Locked flag to true.



In this example, a user using an application other than the TIBCO iProcess Workspace (Browser) application has locked the work item (the **Locked** flag is true). Notice, however, that regardless of the application that locked the work item, the **Status** column shows the work item is locked, and the **Locked By** column shows who has the work item locked.

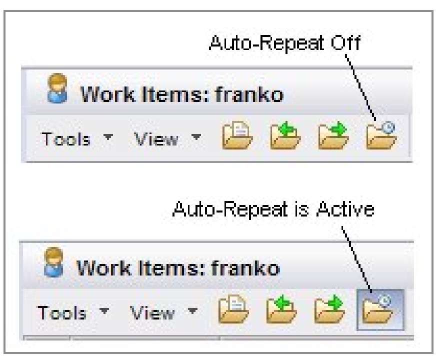
Automatically Opening Work Items

The work item list provides an auto-repeat feature that causes the next available work item to be automatically opened after you have released a work item, where “available” means a work item that is not locked nor suspended. This allows you to process work items in succession without manually opening each one.

To turn on the auto-repeat feature:

- click the  icon on the work item list, or
- select **Auto-Repeat Open Work Item** from the **Tools** menu.

The auto-repeat feature works as a toggle — clicking the  icon causes it to remain highlighted while the feature is enabled.



And selecting **Auto-Repeat Open Work Item** from the **Tools** menu causes a check mark to appear next to the selection, indicating the feature is active:

If the auto-repeat feature is turned on, but you keep or cancel a work item (rather than release it), the auto-repeat process ends (it does not toggle it off, but it does not open the next available work item).

The auto-repeat toggle is persistent — it remains in its current state until you change it. Note, however, that the auto-repeat state is saved either locally or on the server, depending on a configuration setting made by the system administrator:

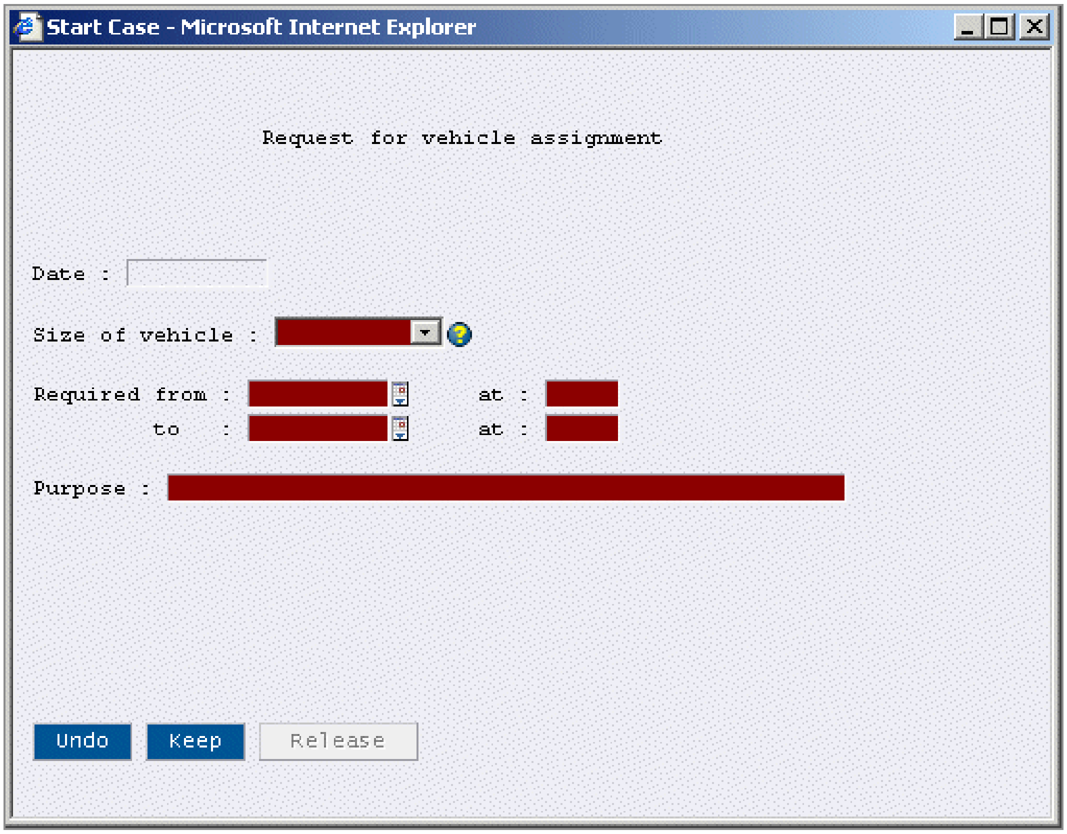
— If saved locally, and you log into a different machine, the auto-repeat state from the previously logged-in machine will not be in effect on the new machine — the auto-repeat setting made on a specific machine will apply only to that individual machine.

— If saved on the server, and you log into a different machine (and connect to the same server), the auto-repeat state from the previously logged-in machine will be in effect on the new machine.

Filling in a Work Item Form

The form that appears when you open a work item is specific to your installation. Each company that uses the iProcess Workspace (Browser) creates their own forms that relate to the specific business they are in.

Your company will instruct you in properly filling out the forms that they have designed for the iProcess Workspace (Browser). The following is an example of what a form may look like:



Note that the form may open in the Preview Pane, a separate dialog, or a separate browser window, depending on how your system is set up. For more information, see Preview Pane.

Use the **Tab** key to move from field to field on the form.

A “date picker” is available to enter dates in date fields. Click on the calendar icon next to the date field. A calendar is displayed from which you can choose a date; clicking on a date in the calendar causes it to be entered in the field.

Keeping Work Items

Keeping a work item causes any information you have entered in the form to be saved, then the work item is closed (and unlocked) and placed back in the work queue. The work item is then available to be opened and completed at a later time.

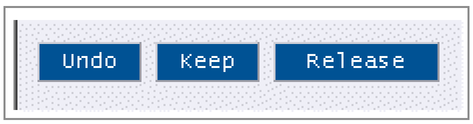
To keep a work item, click the **Keep** button on the work item form.

Releasing Work Items

Releasing a work item means that you are done with that work item. If there are any fields on the form associated with the work item that are marked as “required,” they must be filled in before the system will allow you to release the work item.

Releasing the work item causes any information you’ve entered to be saved, then the work item is closed (and unlocked) and it is removed from the work queue. The case advances to the next step in the procedure, possibly resulting in another work item appearing in someone’s work queue.

To release a work item from the work item form, click the **Release** button on the form:



Releasing a Work Item from the Work Item List

You can release a work item from the work item list (i.e., rather than from the work item form). However, the work item must be directly releaseable, meaning that it cannot have any data entry fields on the form associated with the work item (if it has a form). It does not mean the input fields have been filled in — the form cannot have input fields.

To release work items that are directly releasable, highlight one or more work items in the work item list, then:

- select **Release Work Item(s)** from the **Tools** menu on the work item list,
- right- click the mouse button on the desired work item(s) and select **Release Work Item(s)** from the drop-down menu, or
- click the  icon.

If a work item is not directly releasable, the **Release Work Item(s)** function will be disabled when you select the work item.

Canceling Changes

You can cancel any changes made on a work item form by “undoing” the changes.

To undo your changes, click the **Undo** button on the work item form. The work item is closed and returned to the work queue without saving changes.

Unlocking Work Items

Work items are automatically unlocked when you keep or release them; normally, you do not need to explicitly unlock work items.

This function is for those rare occasions when a work item was left open for some reason (e.g., a system crash).

Unlocking a work item using the unlock function causes any changes that were made on the form while the work item was open to be discarded.

Any user can unlock a work item that they have opened.

To unlock a work item that was opened by another user, you must have system administrator authority.

To unlock work items, highlight one or more locked work items in the work item list, then:

- click the  icon, or
- select **Unlock Work Item(s)** from the **Tools** menu.

A message is displayed confirming that the work item was unlocked.

Forwarding Work Items

You can select and manually forward one or more work items to another work queue (for information about setting up automatic forwarding of work items, see Redirecting Work Items to Another Work Queue).

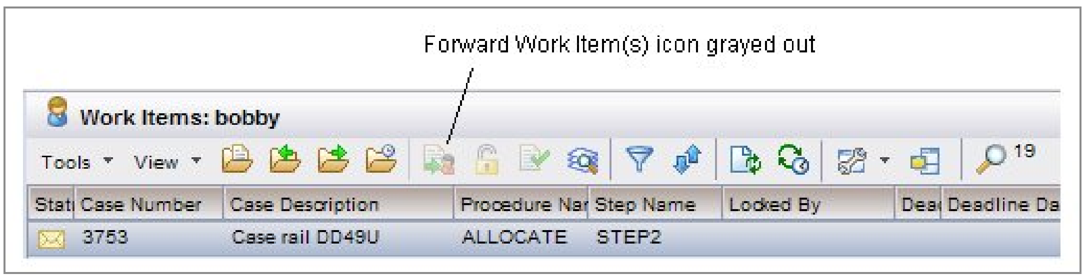
Note that there are several levels of access permission that determine whether or not you can manually forward work items, as follows:

- **User access profile** - If your user access profile does not allow you to forward work items, the **Forward Work Item(s)** menu selection and icon do not appear on the work item list.
- **Step definition** - When the procedure is defined, the designer specifies whether or not work items representing each step are forwardable. There is a **Forwardable**

column (as well as a **Forwardable Image** column) that indicates whether or not the step definition allows the work item to be forwarded.

- **User definition on the server** - A user attribute on the server can be set for each user that allows that user to:
  - forward work items that are "forwardable" based on the step definition (see above),
  - forward any work item, regardless whether or not the work item is "forwardable" based on the step definition (see above), or
  - never be able to forward work items.

If one or more of the work items you've selected are not forwardable, either because the step definition does not allow it, or because your user attribute definition does not allow it, the **Forward Work Item(s)** menu selection and icon are grayed out:



Additionally, if a work item is currently locked or it is in a case that is currently suspended, it cannot be forwarded.

For work items that can be forwarded. there are two ways in which you can forward them:

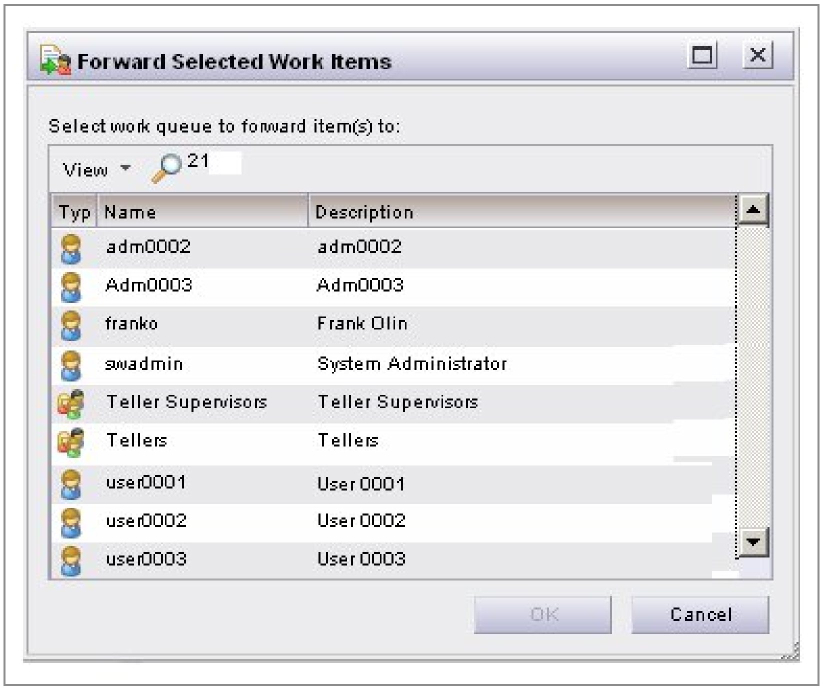
- **Using the "drag and drop" method** - To forward using this method, select one or more work items in the work item list, then "drag and drop" them onto the work queue to which you want to forward them.

  You are asked to confirm before the work items are forwarded.

  Using this method, you can forward only to work queues to which you have access (as those are the work queues that are displayed in your work queue list).

- **Using the Forward dialog** - To forward using this method, select one or more work items in the work item list, then select **Forward Work Item(s)** from the **Tools** menu on the work item list, or click the  icon on the work item list toolbar.

A dialog similar to the following is displayed:



This dialog lists all work queues on the system, or only the work queues to which you have access, depending on how your user access profile is set up (see User Access Profiles).

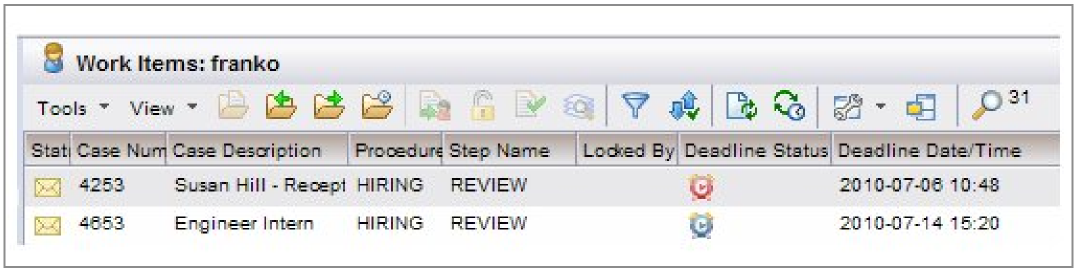
Select the desired work queue from the list (you can forward to only one work queue at a time), then click **OK**. The selected work items are forwarded and the work item list is automatically updated.

Work Item Deadlines

When a step is defined in a procedure, a deadline may be specified on that step to ensure that the work item associated with the step is completed within a specified period of time. For example, the step may specify that the work item must be completed within three days, otherwise a notification is sent to a manager.

Deadline-Related Columns

By default, the work item list displays the **Deadline Status** and **Deadline** columns, as follows:



The following is a list of all of the deadline-related columns that can be displayed in the work item list:

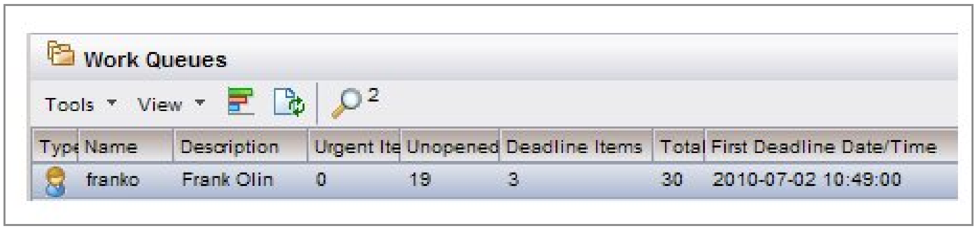
- **Deadline Status** - If the work item has a deadline, this column displays a “clock” icon — the icon’s color indicates the deadline’s status; if the work item does not have a deadline, nothing is displayed in this column (it’s blank). The possible clock icons are as follows:

Icon	Deadline Status
	The work item has an **unexpired** deadline (the clock icon is blue).
	The work item has an **expired** deadline (the clock icon is red).

- **Deadline Date/Time**- If the work item has a deadline, the date and time of the deadline is displayed in this column; if the work item does not have a deadline, nothing is displayed in this column (it’s blank).
- **Deadline Set or Deadline Set Image** - This is a true/false indicator of whether or not a deadline has been set on the work item. The non-image column will state either “true” or “false” The image column will contain either a green check mark (for true) or a red X (for false).
- **Deadline Expired** or **Deadline Expired Image** - This is a true/false indicator of whether or not the work item has an expired deadline. The non-image column will state either “true” or “false” The image column will contain either a green check mark (for true) or a red X (for false). (If the work item does not have a deadline, these columns will show false.)

For more information about the use of images in columns see, Displaying Images in Columns.

The work queue list may also contain a **First Deadline Date/Time** column that tells you the date and time of the earliest deadline in that work queue, as well as a **Deadline Items** column that tells you the number of work items in that work queue that have deadlines. For example:



Deadlines with Case Suspension

Deadlines are not affected by a case suspension (see Note that refreshing the case history refreshes the information for this single case.). If a case is suspended, deadlines will continue to expire, although no action is carried out until the suspension is lifted. In other words, if a deadline expires during suspension, the process will wait until the suspension is removed, then the process will continue down the deadline link to generate the next work item.

Note, however, that if a deadline expires for a work item while the case is suspended, the work item list is not updated to reflect the expired deadline until after the suspension is lifted.

Deadline Withdrawals

The deadline for a step may be defined in such a way that when the deadline expires, the work item is *withdrawn* from the work queue.

Withdrawals will not occur while a case is suspended. If a deadline defined to withdraw expires while a case is suspended, the withdrawal will not occur until the case suspension is lifted.

Keep on Withdrawal

When a deadline withdrawal is defined in a step, the definer can also specify that the work item “not be deleted upon withdrawal” (also referred to as “keep on withdrawal”). This means that if the deadline expires, the process flow moves down the “deadline link” path, and the work item is officially “withdrawn”, but it is not removed from the work queue. Instead, it will be handled differently when it is eventually released.

Work items that are “not deleted upon withdrawal” are still considered “outstanding” after their deadlines expire, even though they have officially been withdrawn (for information about outstanding items, see Outstanding Work Items in the Case).

Since the work item is still in the work queue, it can still be opened, kept, and released. When the work item is eventually released (or the sub-procedure case completes, if the step is a sub-procedure call), the following occur:

- the normal release actions are NOT processed, i.e., the process flow does not continue down the normal path (as is normal for withdrawn steps), and
- data that was entered into the fields of the work item is still applied to the main case data.

The work item list provides the following columns to view the “keep on withdrawal” definition for the work item:

- **Keep on Withdrawal** - Displays “true” if the “keep on withdrawal” flag for the work item is set to true; displays “false” if the flag is set to false. (See Work Item List Columns.)
- **Keep on Withdrawal Image** - Displays a green check mark if the “keep on withdrawal” flag for the work item is set to true; displays a red X if the flag is set to false.

Recalculating Deadlines

You can recalculate all of the deadlines in a case using the trigger event function. This causes the deadlines to be recalculated in either the main case only, or the main case and all sub-cases — you specify which when the trigger event function is initiated.

For information about using the trigger event function to recalculate deadlines, see Triggering an Event.

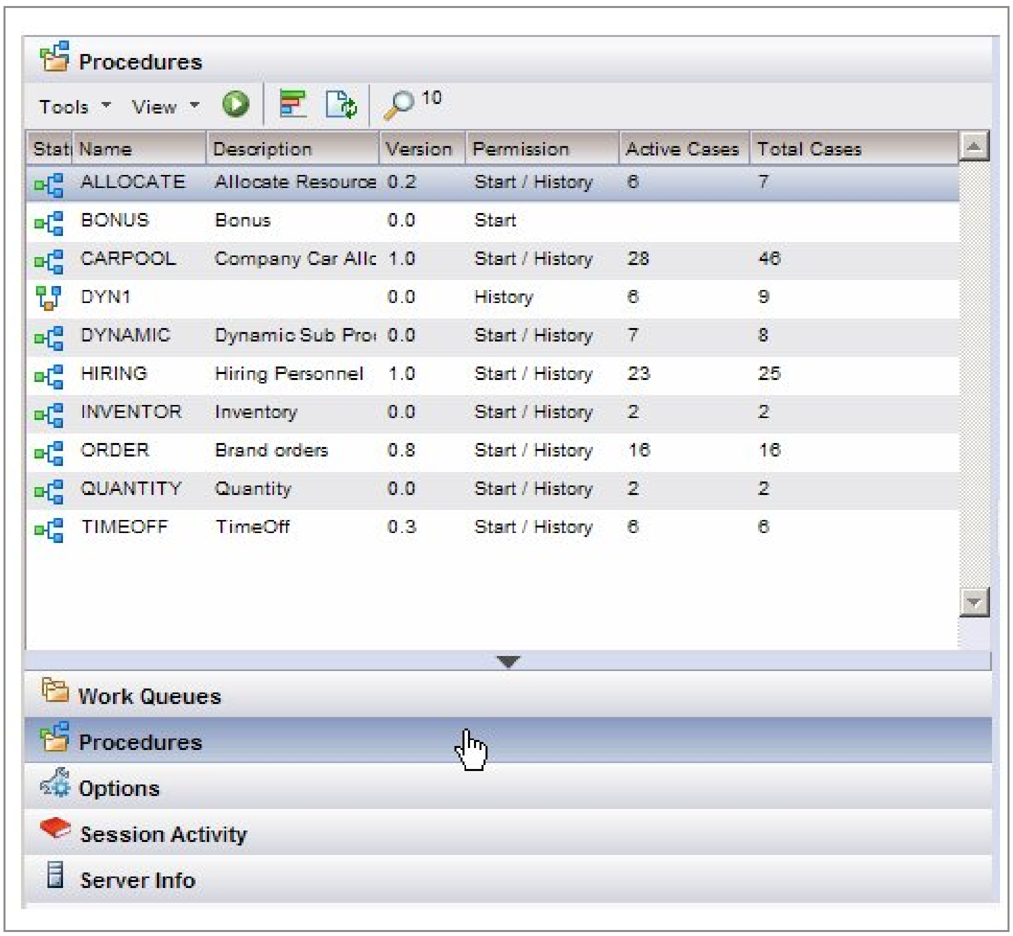
Working With Procedures

This section describes how to work with the procedure list.

The Procedure List

The procedure list provides a list of procedures to which you have access.

Display the procedure list by clicking on the **Procedures** button (or icon) in the lower left portion of the iProcess Workspace (Browser) screen:



There are two primary functions that are performed from the procedure list:

— **Starting a case of a procedure** - This involves selecting the desired procedure in the list, then clicking the **Start Case** button. (Note - It is common for cases to be started programmatically, therefore, the **Start Case** button may not be used to start cases on your system.)

If the logged in user has permission to start cases of a procedure, “Start” is shown in the **Permission** column for that procedure.

For details about starting cases, see Starting a Case of a Procedure.

— **Viewing a list of cases of the procedure** - This involves single-clicking on the desired procedure to display a list of the cases of that procedure.

If the logged in user has permission to view the cases of a procedure, “History” is shown in the **Permission** column for that procedure.

For information about using the case list, see Working With Cases.

For information about selecting items from lists, see Selecting Items in a List.

Procedure Permissions

Only procedures to which you have permission are listed in the procedure list. There are two types of permissions:

- **Start** - This gives you permission to start cases of the procedure.
- **History** - This gives you permission to view the list of cases of the procedure. Note that “History” in this context does not mean you have “case history” permission; rather it means you have “procedure history” permission — you can view the cases that have been started for that procedure.

You can have one or both of these permissions. They are shown in the **Permission** column of the procedure list:

Case start and history permissions are granted when the procedure is defined. Note that for both permissions, unless the procedure definer explicitly gives one or more users that permission, all users are given permission by default.

Note: Every user also has a *user access profile* that is determined by the *type* of user they are. Your user type is specified by the system administrator — it is shown in the upper right part of the iProcess Workspace (Browser) screen. In the example below, the user franko is an “Admin” user, which gives him access to the functions that have been specified for all Admin users:

Your user access profile may also affect the functionality to which you have access. For example, you may have access to start cases according to the procedure definition, although your user access profile doesn’t allow you to start cases (which would cause the **Start Case** button / menu selection to not be displayed). Also, you may have “History” permission, giving you access to the case list, although your user access profile may prevent you from “opening” the case.

Procedure List Columns

By default, certain columns are displayed in a procedure list. You can easily customize the columns that are displayed by either using the **Column Selector**, or by changing them manually. For information, see Customizing Columns in a List.

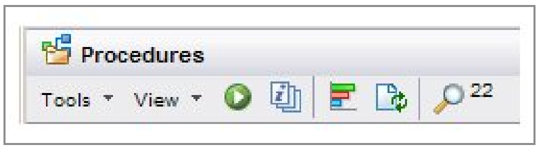
The following table describes the columns of information that can be displayed on the procedure list:

Column Name	Meaning
Active Cases	The number of cases of the procedure that are still active, i.e., not closed. Note that suspended cases are still considered active.
Closed Cases	The number of cases of the procedure that have been closed. For more information, see Closing Cases.
Description	A description of the procedure that was given when the procedure was defined.
Host Node	The name of the TIBCO iProcess Objects Server on which the procedure is defined.
Name	The name of the procedure.
Permission	Indicates whether or not the logged-in user has “Start” permission (ability to start cases of the procedure) and/or “History” permission (can view cases of the procedure). For more information, see Procedure Permissions.
Status	An icon that indicates the status of the procedure. For more information, see Procedure Status.
Sub-Procedure / Sub-Procedure Image	True - The procedure is defined as a sub-procedure. False - The procedure is defined as a main procedure. For more information, see Sub-Procedures.
Total Cases	The total number of active, suspended, and closed cases of the procedure. When a case is purged from the system, it no longer counts in the total.
Version	The version number of the procedure definition.

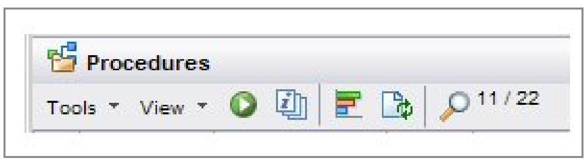
Note: If you are displaying the **Active Cases**, **Closed Cases**, or **Total Cases** columns, and they appear with a line through the header, it's because an administrator has configured your system to not display case counts. Therefore, if you display the case count columns, they will appear with a line through their header.

Number of Procedures in a Procedure List

There is an indicator in the header bar of the procedure list to tell you how many procedures are in the list. This number is displayed to the right of the **Find** button. In this example, there are a total of 22 procedures.



Note that if this number is displayed in the format "##/##" it means the list is being filtered in some way and only some of the procedures are listed. In the example below, 11 of the 22 possible procedures are listed.



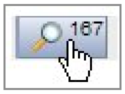
The procedure list can be filtered in one of the following ways:

- The **Find** button has been used to filter the list. For information about using the find function, see Finding Items in a List.
- Only some of the procedure statuses (released, unreleased, model, and withdrawn) on the **View** menu have been selected. For information about selecting procedure statuses to display, see Procedure Status.
- Only some of the procedure types (main and sub-procedure) on the **View** menu have been selected. For information, see Displaying Main and/or Sub-Procedures.

If one or both of these methods have been used to filter the procedure list, the number is shown in the ##/## format.

Finding Procedures in the Procedure List

The procedure list contains a **Find** button that can be used to quickly find the procedure you are looking for.



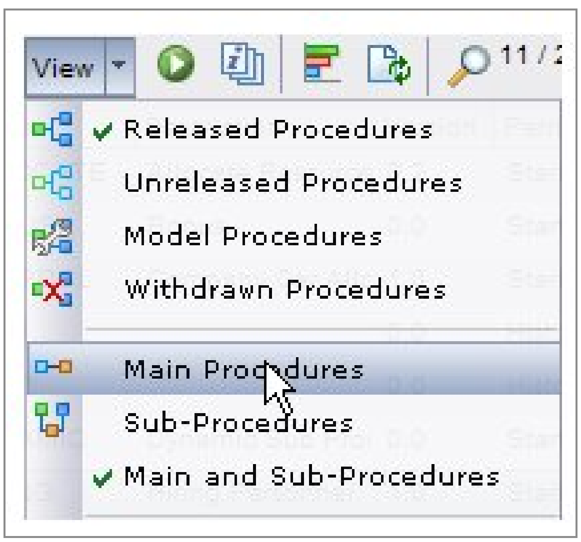
For information about using the find function, see Finding Items in a List.

Displaying Main and/or Sub-Procedures

You can choose the type of procedures to display in the procedure list:

- only main procedures,
- only sub-procedures, or
- both main and sub-procedures.

Make the desired selection from the **View** menu on the procedure list:



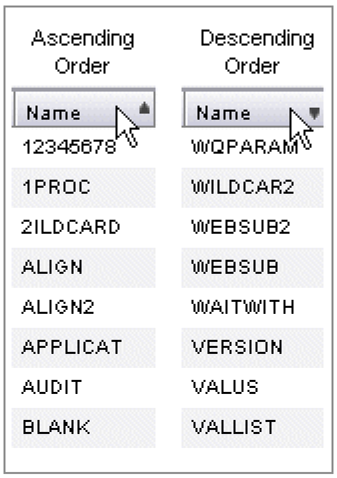
The check mark indicates the currently displayed type.

For more information about sub-procedures, see Sub-Procedures.

Sorting a Procedure List

You can sort the procedure list on any one of the columns in the list. To sort on a column, click on the column header. If the column contains text, it is sorted in alphabetical order; if it is numeric, it is sorted in numerical order.

Once you click on a column header, a small arrow head appears in the column header, which indicates the order of the sort — if the arrow head is pointing up, the sort is in ascending order; if it's pointing down, the sort is in descending order:



Each successive click on the column header, toggles between ascending and descending order.

Refreshing a Procedure List

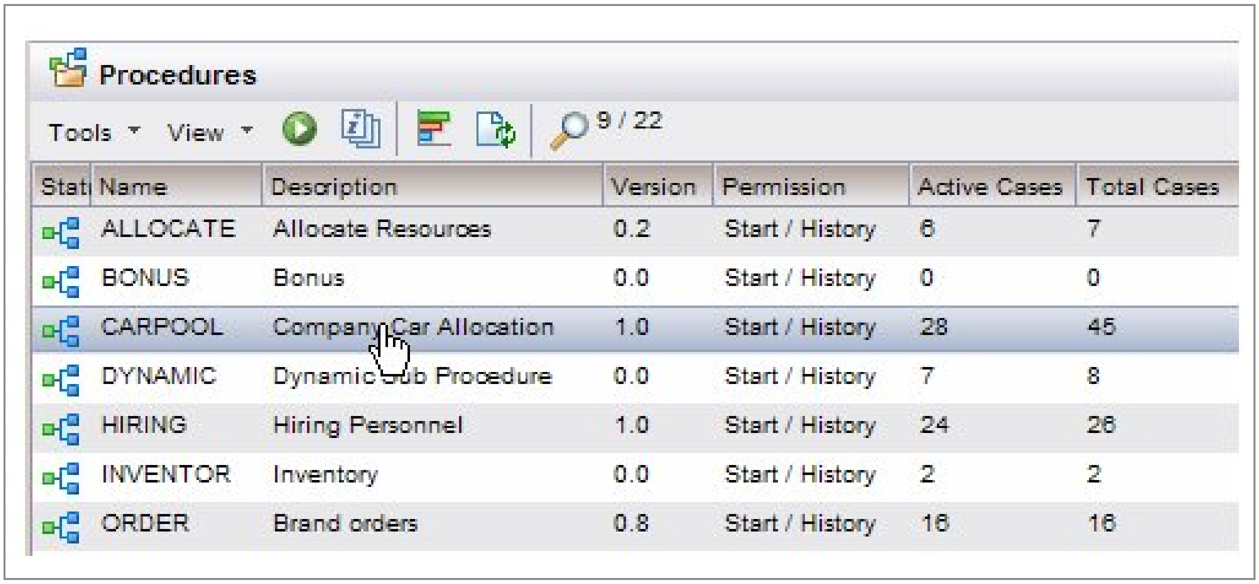
When the procedure list is initially displayed, it is a **snap shot** of the procedures at that point in time. You can refresh the list to get the most recent list of procedures from the iProcess Engine by:

- selecting **Refresh Procedures** from the **View** menu, or
- clicking on the  icon on the procedure list.

Do not over use this feature — refresh the list only when you need an updated list. Each time you refresh the list, the iProcess Engine must send a new list to your system, which can impact performance, depending on the number of items in the list, the speed of your system, etc.

Displaying the Cases of a Procedure

To display a list of the cases of a procedure, single-click the desired procedure in the procedure list:



Once a procedure is selected, you can also move the highlight bar with the keyboard arrow keys to select other procedures.

Either the list of cases for the selected procedure is displayed, or the case list filter dialog is displayed because the number of cases in the list exceeds the specified threshold. For more information, see Case Lists.

Displaying Procedure Loading

The procedure loading feature allows you to display a graphical summary that shows you how many cases there are on the system for one or more of the procedures to which you have access. The chart displayed by this feature provides a visual view of the case load for each procedure.

You can access procedure loading in one of two ways:

- Select **Procedure Loading Chart** from the **Tools** menu on the procedure list, or click the  icon on the procedure list toolbar.

  This displays a procedure loading chart that shows you all of the procedures to which you have access. Note that the very first time you display the procedure loading chart in this way, it lists *all* procedures to which you have access. If you pare down the list using the **Select Procedures** function (see Displaying a Subset of Procedures in the Procedure Loading Chart), from then on the list only contains the subset you have chosen.

- Right-click on one of the procedures in the procedure list, then select **Procedure Loading Chart** from the context menu.

  This displays a procedure loading chart that shows you only the procedure on which you right-clicked.

The following is an example procedure loading chart that shows multiple procedures:

The green and red-colored bars indicate the number of open and closed cases. The blue bar shows the total number of cases for each procedure. Placing the cursor on the bars of the chart causes the exact counts for that procedure to be displayed.

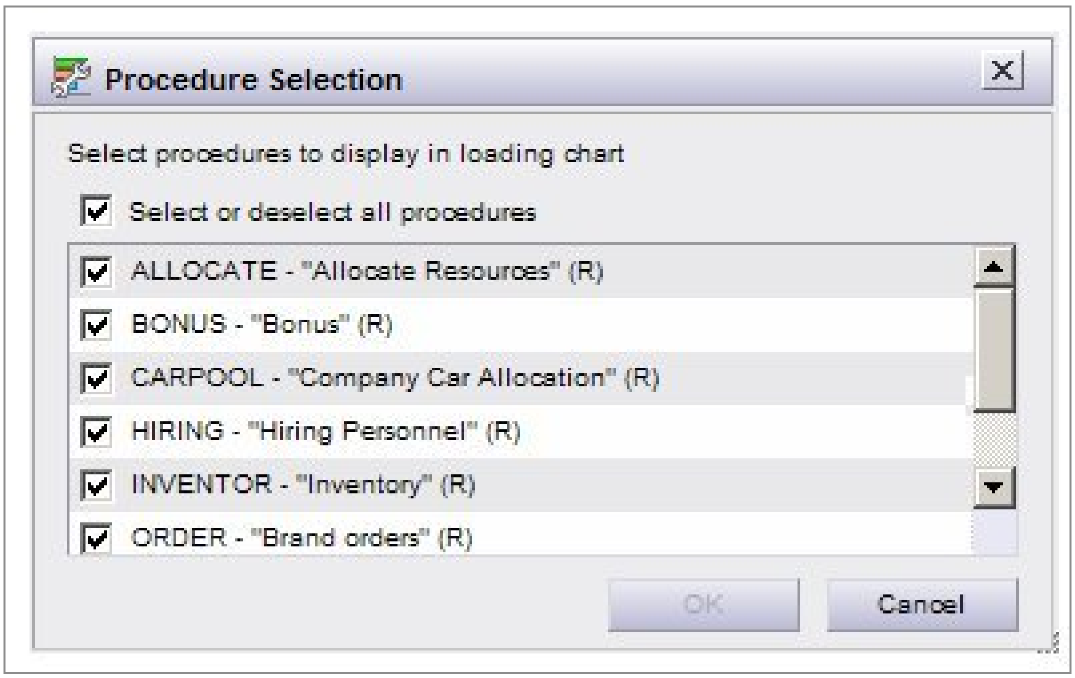
Selections are available on the **View** menu that allow you to display the statuses (released, unreleased, model, and withdrawn) of procedures you want shown on the chart. For more information, see Procedure Status.

The procedure loading chart can be refreshed at any time by either selecting **Refresh Procedures** on the **View** menu, or by clicking on the  icon on the toolbar.

You can close the procedure loading chart by clicking on the X in the upper-right corner.

Displaying a Subset of Procedures in the Procedure Loading Chart

The first time you display the procedure loading chart, it will list *all* procedures to which you have access. You can, however, choose to display only a subset of the available procedures by selecting **Select Procedures** from the **View** menu, or by clicking the  icon on the **Procedure Loading Chart** dialog. The following dialog is displayed:



This dialog contains a check box for each procedure to which you have access. You can select or deselect all of the boxes in the list using the first check box on the dialog; you can then check/uncheck individual boxes in the list, as desired. When the desired procedures are selected, click **OK**.

The procedure loading chart will list only the procedures that you've selected on the **Procedure Selection** dialog. This selection will persist until you change it again.

Procedure Status

You can display four statuses of procedures in the procedure list:

- **Released** - A procedure with this status can be used in live production. Cases can be started, with work items being sent to user/group work queues, etc.

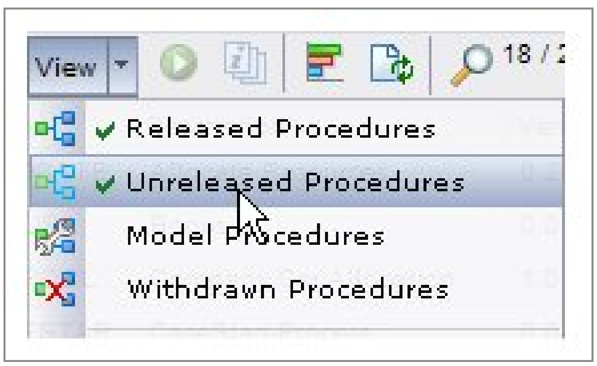
  You will typically be dealing with this status of procedure.

- **Unreleased** - New procedures default to a status of Unreleased. Work items from cases of procedures with a status of Unreleased go to a “test” work queue for the user or group who is the addressee of the step (for more information about test work queues, see Released vs. Test Work Queues). This allows the new procedure to be tested/evaluated prior to releasing it.

- **Model** - This is the status a Released procedure has after being imported (which is something a system administrator would do). This status allows new versions of a procedure to be imported without overwriting an existing Released or Unreleased version. Work items from cases of procedures with a status of Model go to a “test” work queue for the user or group who is the addressee of the step. This allows the new version to be tested/evaluated prior to adopting it on the target system.

- **Withdrawn** - Procedures with this status are no longer used in a production environment. Cases cannot be started against a withdrawn procedure.

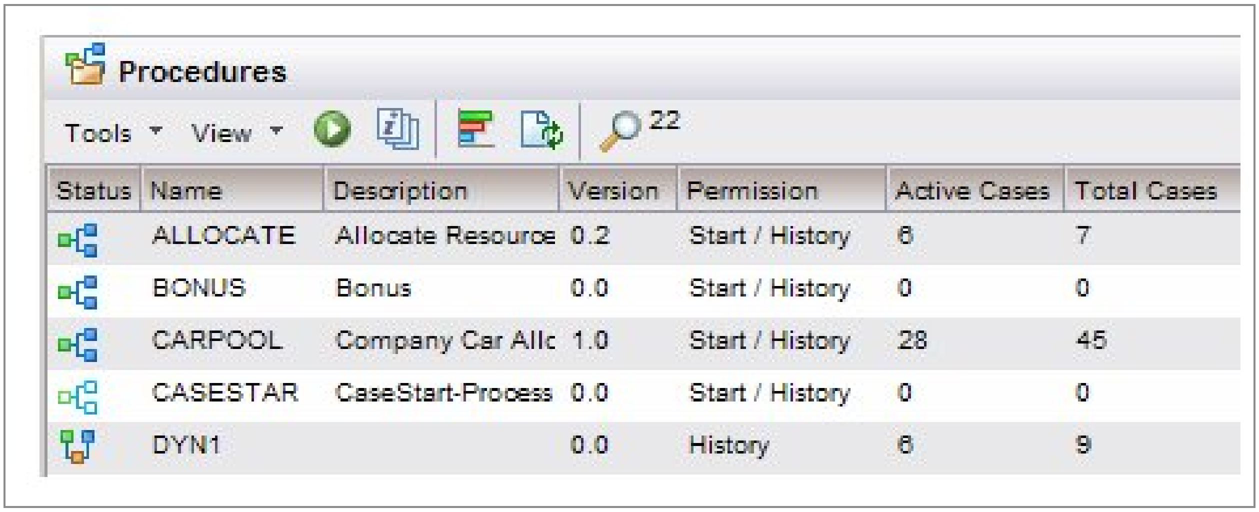
The default is to display Released procedures, although you can decide which statuses of procedure to display by selecting the desired status(es) on the **View** menu on the procedure list:



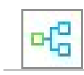
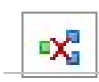
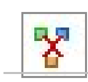
You can display any number of the statuses at one time.

Procedure Status Icon

By default, the procedure list displays a **Status** column that contains icons that represent the status of the procedure.



The possible procedure status icons are:

Icon	Status
	Released Procedure
	Released Sub-Procedure
	Unreleased Procedure
	Unreleased Sub-Procedure
	Model Procedure
	Model Sub-Procedure
	Withdrawn Procedure
	Withdrawn Sub-Procedure

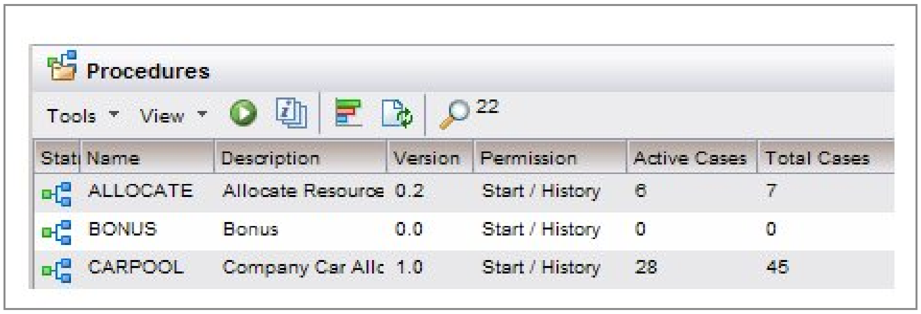
Procedure Versions

When procedures are defined, they are given a two-digit version number, in the format:

```
<MajorVersion#>.<MinorVersion#>
```

For example, 1.0, 1.1, 1.2, 2.0, and so on.

There can be multiple versions on your system at any one time. This allows administrators to test a modified procedure while still running the previous version in a live environment.



By default, the **Version** column is displayed in the procedure list, although your system may not show it. For information about customizing the columns in the procedure list, see Customizing Columns in a List.

Version History

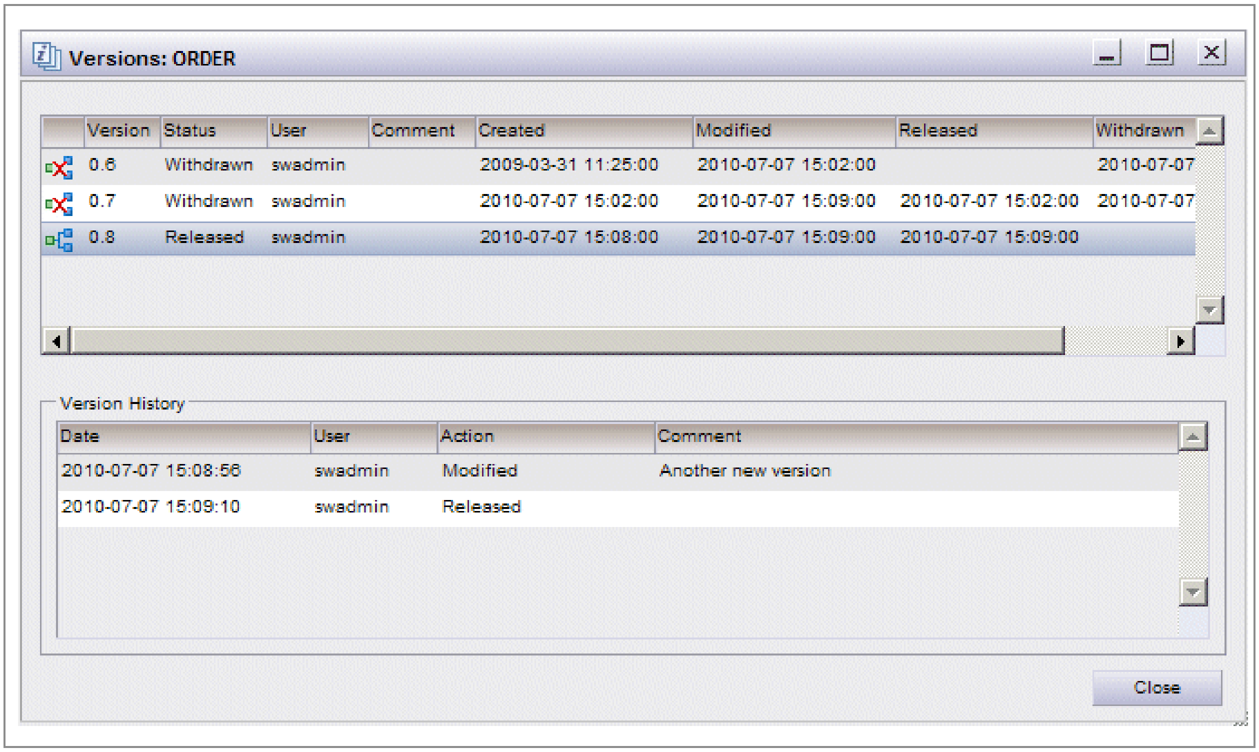
You can view a procedure's version history in one of the following two ways:

— Right-click on a procedure in the procedure list to open a context menu, then select **Versions** from the context menu. This allows you to view version history without opening a list of cases for the procedure.

or

— Click on the desired procedure in the procedure list; this displays the case list. Then either click on the  icon, or select **Versions** from the **Tools** menu on the procedure list.

A window similar to the following is displayed:



The section on the top of this window identifies all current and past versions of the selected procedure.

Clicking on one of the versions in the top section causes history information about that version to be displayed in the section on the bottom of the window.

Close the **Versions** window by clicking on the **Close** button.

Sub-Procedures

Sub-procedures provide the ability for a case of one procedure to start a case of another procedure as one of its steps.

When a sub-procedure is started, flow is halted along that particular path of the calling procedure until the sub-case has completed. When the sub-case completes, flow will resume in the main procedure.

When a procedure is defined, it is defined as either a “main procedure” or a “sub-procedure”. You can directly start a main procedure from the procedure list. Sub-procedures cannot be directly started; they can only be started by a step in another procedure.

Sub-procedures can be many levels deep, i.e., a sub-procedure can also contain a sub-procedure call step, and the sub-procedure started by that call step can contain another sub-procedure call step, and so on.

When a sub-procedure is started from another procedure, the system looks at the *sub-case precedence* setting to determine which status of the sub-procedure it should start. The default is to always start the *released* status of the sub-procedure, although you can specify that it look for other statuses of the sub-procedure to start. For instance, you may specify that the system look for a *model* status of the sub-procedure first, and if it doesn't find one then to look for a *released* status. For information about setting the sub-case precedence, see Sub-Case Version Options.

You can also view the case history for the sub-case by viewing the case history for a main case, which shows you when sub-cases are started and completed, as well as the actions that are performed within the sub-case. For more information, see Case History.

Also see Displaying Main and/or Sub-Procedures for information about choosing whether or not sub-procedures are displayed in the procedure list.

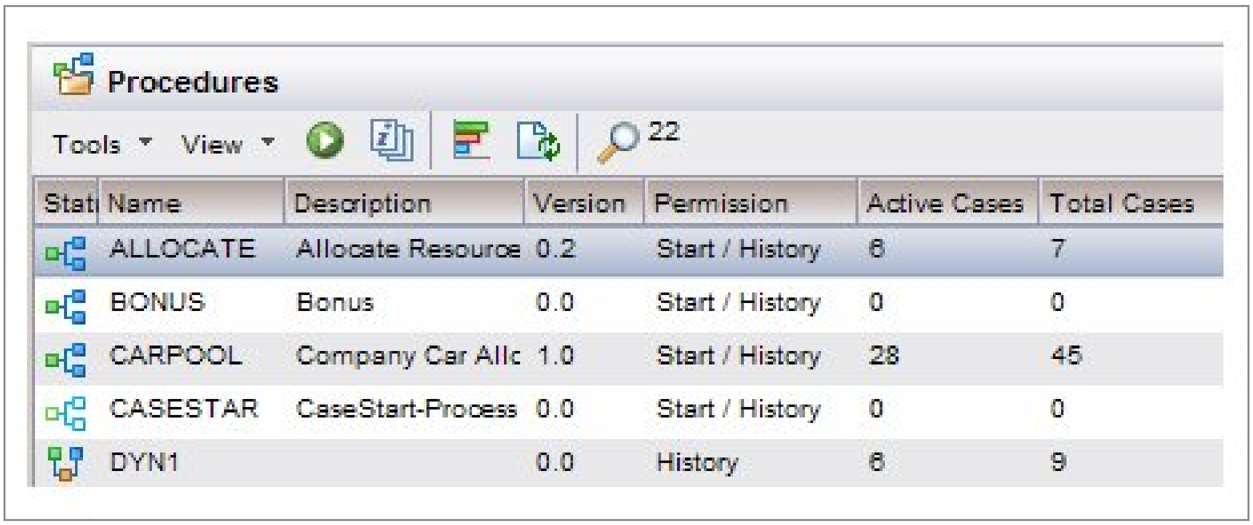
Starting a Case

This section describes how to start a case of one of the procedures in the procedure list.

Starting a Case of a Procedure

Starting a case of a procedure begins with selecting the procedure you would like to start.

Display the procedure list to view the list of procedures to which you have access:



Notice that the **Permission** column in the procedure list tells you which of the procedures you have permission to start (it also shows if you have "History" permission for the procedure). This is specified when the procedure is defined. (For more information, see Procedure Permissions.)

Also notice that the sub-procedure shown in the list above (DYN1) does not indicate start permission; that's because sub-procedures cannot be directly started; they must be started by a sub-procedure call step in another procedure.

> **Note:** It is common for cases to be started programmatically. Therefore, depending on how your system was designed, this may not be a function you will perform.

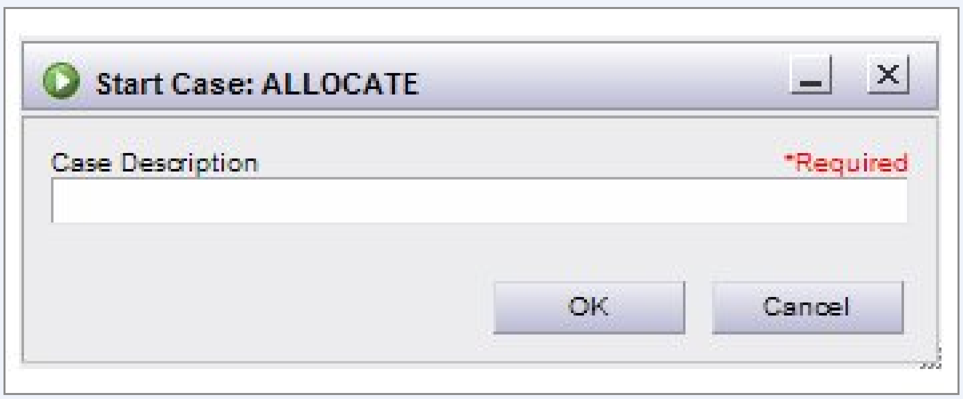
You can start a case in one of the following two ways:

— Right-click on a procedure in the procedure list to open a context menu, then select **Start New Case** from the context menu. This allows you to start a case without opening a list of cases for the procedure.

or

— Click on the desired procedure in the procedure list; this displays the case list. Then either click on the  icon, or select **Start New Case** from the **Tools** menu on the procedure list.

```
The following window is displayed:
```




```
Enter a case description, then click OK.
```

```
The case description may or may not be required, depending on how the
procedure was defined. If it’s required, “*Required” is displayed in
this window (as in this example).
```

```
Depending on how your procedure was defined, a form may be displayed at
this time, or starting the case may result in some other action that is
not apparent to you.
```

If a form is displayed, see Processing Work Items for information about working with forms.

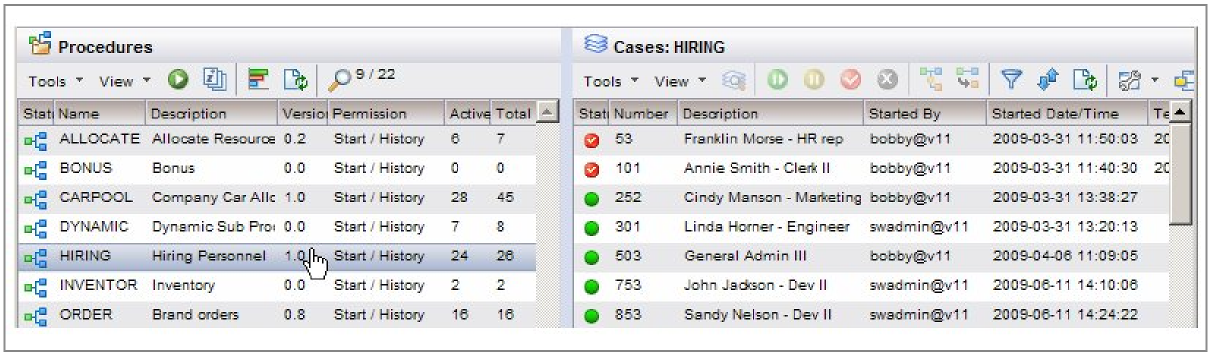
Working With Cases

This section describes working with cases of a procedure.

Case Lists

A case list presents all of the cases that have been started for a particular procedure.

To view a case list, select (single click) a procedure in the procedure list:



When you select a procedure, one of two screens is displayed:

- The case list (as in the example above)
- A filter dialog for the case list

The window that is displayed depends on how your system has been set up. By default, the case list is displayed. However, there is a *user options* setting that allows you to specify that if the number of cases for the procedure exceeds a specified threshold, to automatically display the filter dialog first. This allows you to enter a filter expression to pare down the list before displaying it.

Note: From a performance standpoint, it’s important that you understand that when a case list is displayed, the information about all of the cases in the list is downloaded from the iProcess Engine. There can potentially be thousands of cases for a particular procedure; if you download all of them, it could take a long time. That is why if the number of cases exceeds the specified threshold number, the system is suggesting you filter the cases prior to listing them (they are not actually downloaded from the iProcess Engine until you display the case list).

Also note that there is a configuration parameter that can be set by the system administrator that specifies the maximum number of cases to download at one time. For more information, see Limiting the Number of Cases Displayed.

For information about specifying whether or not to display the filter dialog first, see Filter Options.

For information about using the filter dialog to filter the case list, see Filtering a Case List.

If the case list is displayed, and the **Filter** icon on the case list toolbar has a green check mark next to it, the list is currently being filtered — the last filter expression applied to the case list is in effect. For more information, see Filtering a Case List.

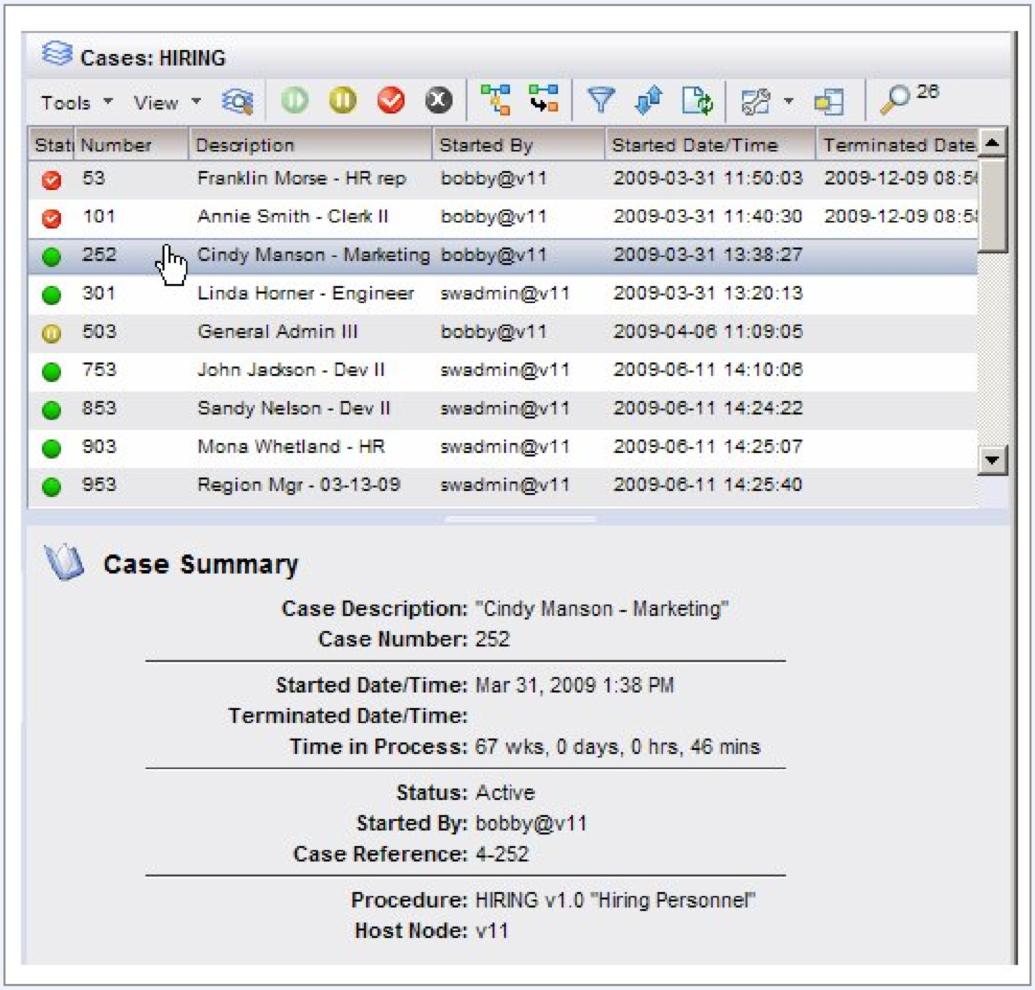
Also, if the **Sort** icon on the case list toolbar has a green check mark next to it, the list is currently being sorted — the last sort criteria applied to the case list is in effect. For more information, see Sorting a Case List.

Information about each case is provided in the columns of the case list. The specific information that is displayed on your system will depend on how your system was set up — see Customizing Columns in a List.

Selecting Cases in a Case List

The effect of *selecting* a case from the case list (i.e., single-clicking an item, or moving the highlight bar with the keyboard arrow keys) depends on whether or not the *preview* feature is turned on:

- If preview is turned off, selecting a case from the case list has no effect.
- If preview is turned on, selecting a case from the case list causes the case summary to be displayed in the **Preview Pane** section, as follows:

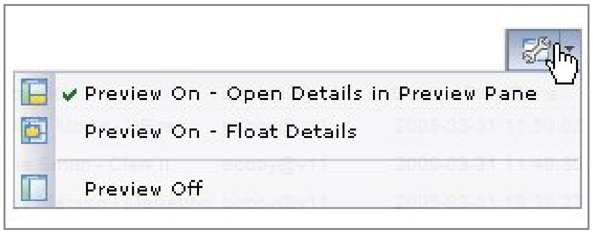


The case summary provides more information about the case than what may be available from the columns in the case list.

> **Note:** *Double-clicking* on a case in the case list constitutes *opening* the case. Opening the case causes the *case details* for that case to be displayed. For information about opening cases, see Opening Cases.

The preview feature can be turned on and off clicking the  icon on the toolbar, or by selecting **Preview** from the case list **View** menu.

The following drop-down menu is displayed:



You can turn preview on by selecting either of the first two selections — the difference between the two is where the case details will be displayed when you open (double-click) the case in the case list.

You can turn off the preview feature by selecting the **Preview Off** selection.

For additional information about selecting items in general from lists, see Selecting Items in a List.

Case List Columns

By default, certain columns are displayed in a case list. You can easily customize the columns that are displayed by either using the **Column Selector**, or by changing them manually. For information, see Customizing Columns in a List.

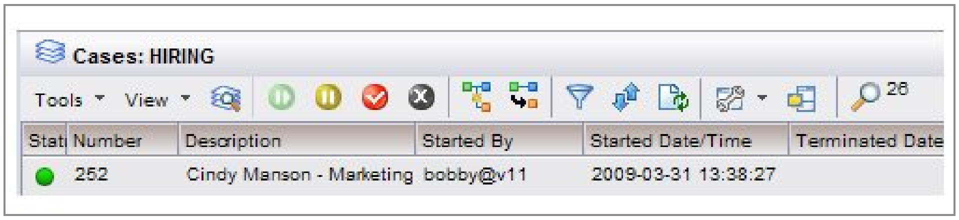
The following table describes the columns of information that can be displayed on the case list:

Column Name	Meaning
Description	The case description that was entered when the case was started. See Starting a Case of a Procedure.
Host Computer	The name of the computer containing the TIBCO iProcess Engine to which the iProcess Workspace (Browser) is connected.
Host Node	The name of the TIBCO iProcess Engine to which the iProcess Workspace (Browser) is connected.

Column Name	Meaning
Number	A unique number used to identify the case. This is generated when the case is started.
Open / Open Image	True - The case is currently open (active). False - The case is closed.
Procedure Description	A description of the procedure that was given when the procedure was defined.
Procedure Name	The name of the procedure that was started to create the case (a case is an *instance* of a procedure).
Reference	This is a case reference number that is built from the procedure number and case number; it uniquely identifies the case on the host node. For example, case reference number 4-1290 — the procedure number is 4 and the case number is 1290.
Started By	The name of the user who started the case.
Started Date/Time	The date and time the case was started.
Status	An icon that identifies the current status of the case. For information, see Case Status.
Suspended / Suspended Image	True - The case is currently suspended. False - The case is not suspended. For information, see Case Suspensions.
Terminated Date/Time	The date and time the case was terminated (i.e., closed).
Version	The version of the procedure that the case is an instance of.

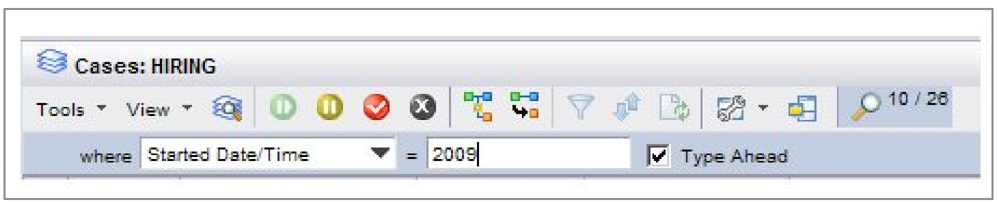
Number of Cases in a Case List

There is an indicator in the header bar of the case list to tell you how many cases are in the list. This number is displayed to the right of the **Find** button. In this example, there are 26 cases.



Note that this number may indicate the number of cases in the list after it has been filtered using the filter dialog — if the list has been filtered in this way, there will be a green check mark next to the **Filter** icon (for information about using the filter dialog to filter cases, see Filtering a Case List).

If this number is displayed in the format “##/##” it means the list is being filtered using the **Find** button. In the example below, 10 of the 26 possible cases are listed.

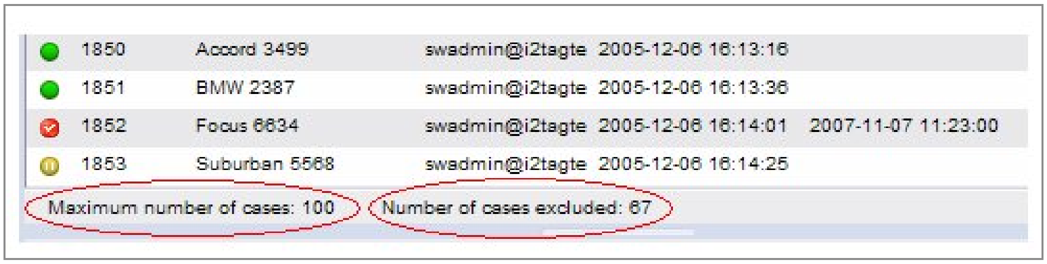


For information about using the **Find** button, see Finding Items in a List.

Limiting the Number of Cases Displayed

By default, when a case list is displayed, all available cases for the selected procedure are downloaded from the server. If there is a very large number of cases for the selected procedure, the list may be slow in displaying.

For this reason, there is a configuration parameter that can be set by the system administrator that limits the number of cases that are downloaded. If this parameter is set, and you select a procedure that contains a number of cases that exceeds the maximum specified, only the specified number are displayed. If this occurs, a message is shown on the bottom of the case list that tells you how many were downloaded, as well as the number of cases that were not downloaded because they exceeded the maximum number. For example:



If the configuration parameter is not set, or if it is set and the number of cases does not exceed the maximum, the message on the bottom of the case list is not displayed.

Finding Cases in the Case List

The case list contains a **Find** button that can be used to quickly find the case you are looking for.

For general information about using the find function, see Finding Items in a List.

When using the find function on case lists, it is often used in conjunction with the filter function (for information about the filter function, see Filtering a Case List). When used on the case list, the intent is for the find function to refine the search that has already been done using the filter function. Typically, the filter function is used to present a list of cases that are of continual interest. You can then use the find function to further refine the search through the list of filtered cases. When you are done with the find function, and close it, the list returns to the list presented by the filter function. If you want a different list of cases that are of continual interest, the list should be filtered using the filter function.

Note that the **Filter**, **Sort**, and **Refresh** icons and menu selections are disabled while the find function is being used — you must close the find function to change filter or sort criteria, or to refresh the list.

Refreshing a Case List

When a list of cases is initially displayed, it is a **snap shot** of the cases at that point in time. You can refresh the list to get the most recent list of cases from the iProcess Engine by:

- selecting **Refresh Cases** from the **Tools** menu, or

- by clicking the  icon.

Be aware that every time you refresh a list, it causes the entire list to be downloaded from the iProcess Engine. For information about the impact of this, see the note on Case Lists.

Note that if you have defined filter and/or sort criteria for the case list, they will be applied on the refreshed list of cases — the case list is displayed if the number of cases does not exceed the specified number; the filter dialog is displayed if the number of cases exceeds the specified number. (For more information, see Filtering a Case List.)

Case Status

By default, the first column in the case list displays icons that indicate the case's status. The following table shows the possible icons and their meanings:

Icon	Case Status
	The case is active.
	The case is suspended.
	The case is closed.
	The case has been purged. If the case list is refreshed, the purged case will no longer appear in the list.

Filtering a Case List

"Filtering" a list of cases involves entering *filter criteria* so that only some of the cases are shown in the list, rather than all of them. Filtering a list of cases allows you to display only the cases you are interested in. For example, you may only be interested in cases that were started earlier than a certain date. You can filter the list so only those cases are shown.

The filtering function allows you to build a "filter expression" that is applied to all cases for the procedure that was selected. If the case satisfies the filter expression (e.g., the start date is earlier than a specified date), it is shown in the case list; if it does not satisfy the filter expression (e.g., the start date is later than a specified date), it is not shown in the list (and is not downloaded from the iProcess Engine).

You can filter the case list at any time by:

- clicking on the  icon, or
- by selecting **Filter...** from the **View** menu on the case list.

This displays the filter dialog, on which you can specify a filter expression. This is explained in the following subsections.

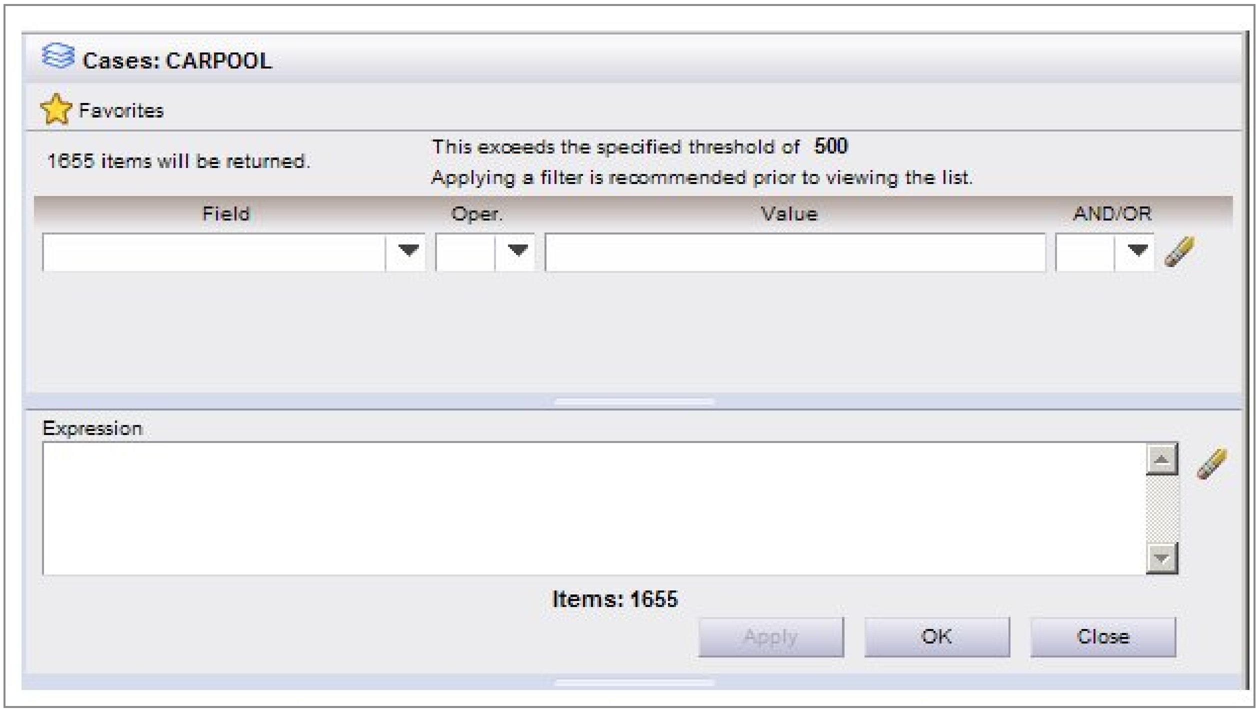
The filter dialog may also be automatically displayed when you attempt to display a list of cases by selecting a procedure from the procedure list. This occurs if the number of cases of the procedure exceeds a threshold that you've specified in your user options (see Case Filters).

If the number of cases exceeds the number specified in your user options, the filter dialog is displayed:

Note: If you had applied a filter expression the last time you viewed the case list, that same filter expression will be applied when you open the list again — in other words, the most recently applied filter expression will remain in effect until you remove it or change it. If a filter expression is still active, the **Filter** icon will be shown with a green check mark (as shown below), and if the filter dialog is displayed, the previously entered filter expression will be shown in the **Expression** section.

Filter expressions for a particular list are saved either locally or on the server, depending on a configuration setting made by the system administrator:

- If saved locally, and you log into a different machine, the filter you defined for a particular list will not be in effect on that new machine — filters defined on a specific machine will apply only to that individual machine.
- If saved on the server, and you log into a different machine (and connect to the same server), the filters you defined will be in effect on the new machine.



Notice the "**1655 items will be returned**" message in the upper left part of the filter dialog. This is the number of cases that will be displayed if you click on the **OK** button to display the case list. If this is a large number, you should enter a filter expression so that a smaller list is displayed, making it easier to find the cases you want to work on.

The message on the top right of the filter dialog tells you the maximum number of cases that will be downloaded without displaying the filter dialog — in this example, it's 500. For information about specifying this number, see Case Filters).

Building a Filter Expression

The filter dialog allows you to build a "filter expression" that is used to evaluate each case to determine if it should be included in the list.

The following summarizes building a filter expression:

- **Choose a field** to filter on. A "field" in this context is not necessarily a field that appears on a form in a work item — although it can be. These also include "system fields," which contain information about the case that is stored in the system, such as the date/time the case was started, the user who started the case, etc.
- **Choose an operator** that will be used in your filter expression, e.g.,'=' (equals), '<' (less than), '>' (greater than), etc.

- **Enter the value** to be compared against the value in the field you chose. (The value entered in the **Value** field must match the data type for the field selected. For information about the valid data types, see Value Data Types.)

For example, to list only cases that were started after July 15, 2005:

- **Field**: Started Date
- **Operator**: >
- **Value**: 15/07/2005

You can choose multiple fields to filter on.

At any time while building the filter expression, you can “apply” the expression by clicking on the **Apply** button. The “**##### items will be returned**” message is updated to inform you of the number of cases that satisfy the filter expression you’ve built. This is the number of cases that will be listed when you click on the **OK** button.

You can also click the **OK** button at any time without first clicking the **Apply** button — this causes any filter expression(s) you’ve entered to be applied and the list displayed. But you will not know the number of cases that will be returned in the list until after the list is displayed — clicking **Apply** first allows you to know how many will be returned before the list is displayed.

Also note that you can use the **Close** button to close the filter dialog without applying the filter expression (assuming you have not yet clicked **Apply**). Any expression you’ve entered will remain on the filter dialog, so that if you return to the filter dialog again prior to closing the case list, the expression you had entered will still be available.

You can clear/remove the currently displayed filter expression at any time by clicking on one of the ”eraser” icons on the right side of the filter dialog.

Each of the steps required to build the filter expression is described in more detail in the following subsections.

Choosing a Field to Filter On

To choose a field to filter on:

1. Click the arrow on the right side of the **Field** column. The following drop-down list is displayed:

This drop-down list provides a comprehensive list of the fields you can filter on. It consists of:

- **System Fields** - These fields contain information that is provided by the system, e.g., the date and time the case was started, the case number, etc.

  A comprehensive list of available system fields is provided in System Fields Available for Filtering Cases.

- **Case Data Fields** - These are fields that are defined by the designer of the procedure and that are placed on forms in the procedure. For example, there may be a “Last Name” field defined in the procedure. You can filter the cases so that only cases that contain a “Last Name” field with a value of “Smith” are displayed. (The example above contains some CDQP fields — ADDRESS, APPDATE, COUNTY, etc.)

  Note that case data fields contain “case data” (as opposed to “work item data”). (“Work item data” is the data associated with a work item while it’s in a work queue — if you enter information in a form, then “keep” the work item, work item data includes those changes. “Case data” is the information that is written to the database after you’ve “released” the work item — if you enter information in a form, then “keep” the work item, case data does *not* include those changes.) For more information about these types of data, see Case Data Fields.

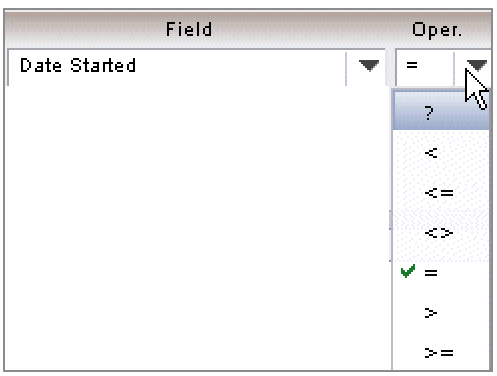
2. Select the desired field from the drop-down list. The field name may or may not immediately appear in the **Expression** window on the bottom of the filter dialog, depending on the data type of the field, as follows:

- If you select a **Text** field, the field name immediately appears in the **Expression** window.
- If you select a **Numeric**, **Date**, **Time**, or **DateTime** field, the field name does not immediately appear in the **Expression** window. For these types of fields, the system wants to validate the data you enter before allowing you to apply the expression. Therefore, it does not display the expression in the **Expression** window until you have entered a complete valid expression. (For Text fields, any value constitutes a valid expression.)

For information about the data type for each system field, see System Fields Available for Filtering Cases.

Choosing an Operator for the Filter Expression

The **Oper.** field allows you to select an operator for the filter expression. Click on the arrow on the right side of the **Oper.** field. The following drop-down list is displayed:



Select the appropriate operator from the list (you can also type in the operator). The selections are:

Operator	Description
?	Equal to (regular expression equality operator)[1]
<	Less than

[1]Using this operator allows you to enter “regular expression” syntax to perform more complex string search functions. As regular expressions are beyond the scope of this document, see an outside source for information about valid regular expression syntax.

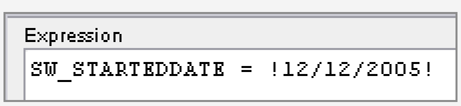
Operator	Description
<=	Less than or equal to
< >	Not equal to
=	Equal to
>	Greater than
>=	Greater than or equal to

Specifying a Value for the Filter Expression

Enter the value in the **Value** field that you would like compared to the value in the field you selected in the **Field** field.

For example, to list all cases that were started on Oct. 20, 2005:

Note: When the iProcess Workspace (Browser) sends a Date field value to the iProcess Engine for filtering, it must be enclosed in exclamation characters (e.g., !12/12/2005!), and Time field values be enclosed in ‘#’ characters (e.g., #12:00#). Therefore, once you’ve entered a valid date or time in the **Value** field for those field types, the value shown in the **Expression** window is automatically enclosed in the applicable characters. For example:



DateTime field values are sent to the iProcess Engine enclosed in quotes (e.g., “12/12/2005 10:30”).

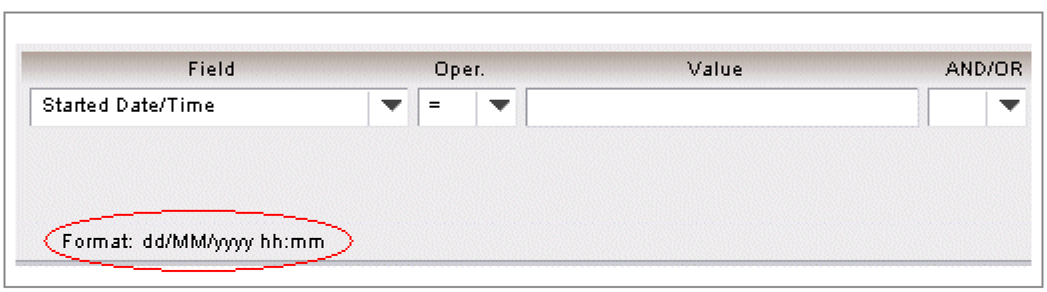
Value Data Types

The value entered in the **Value** field must match the data type for the field selected. (For information about the valid data types for each of the system fields, see the list of system fields on System Fields Available for Filtering Cases.)

The following are the types of data that can be entered in the **Value** field:

Data Type	Description
Numeric	Consists of one or more of the numbers 0-9. Used for things like the case number.
Text	Consists of any number of letters, numbers, or special characters (e.g., #, $, etc.). Used for things like the case description and the starter of the case.
Date	The default date format[1] is “dd/mm/yyyy”. Example: 25/12/2005
Time	The default time formata is “hh:mm”, using a 24-hour clock. Example: 18:30
DateTime	The default date/time formata is “dd/mm/yyyy hh:mm”. Example: 25/12/2005 18:30

The date and/or time format that is currently specified on your TIBCO iProcess Engine is shown on the filter dialog when you select a date or time field in the **Field** drop-down list. For example:



[1]The order of the day, month, and year, as well as the date and time separator characters are specified on the TIBCO iProcess Engine. These may be different on your system, depending on how it was set up.

The iProcess Workspace (Browser) also provides information about the format required for other types of fields selected from the **Field** drop-down list. In the following example, the application is telling you that you must enter either an “A” (to list active cases) or “C” (to list closed cases):

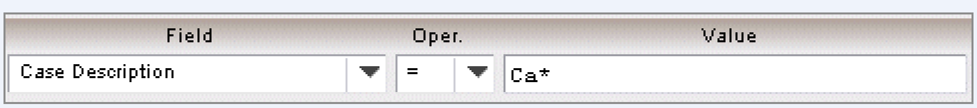
Using Wild Cards in the Filter Value

You can use the following “wild card” characters in the value you enter in the **Value** field:

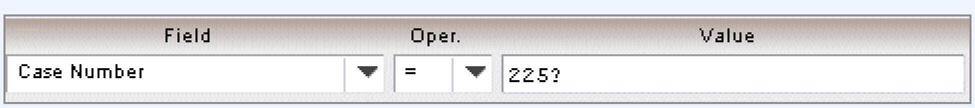
Wild Card Character	Description
*	The asterisk matches zero or more of any character.
?	The question mark matches any single character.

Wild card characters may be substituted for one or more characters in your filter value. For example:

- To list the cases with a case description that begins with the letters “Ca”:



- To list the cases with a case number from 2250 through 2259:



Filtering on Empty Fields

The special **SW_NA** value can be used in filter expressions to list cases that contain a field that is empty (the “NA” means “not assigned”).

Note, however, this value must be typed into the **Expression** section (free-form area — for information about building free-form expressions, see Building a Free-Form Filter Expression). If it is typed into the **Value** field, the system will enclose it in quotes in the expression — you don't want quotes around it.

For example, to list the cases containing an **Occupation** field in which a value has not been entered, type in this expression:

Expression
```
OCCUPATION = SW_NA
```

Conversely, to list the cases containing an **Occupation** field in which a value HAS been entered, type in this expression (using the "not equal" operator):

Expression
```
OCCUPATION <> SW_NA
```

Ranges of Values

Ranges of values can be specified, although it requires you to enter special syntax in the **Expression** section. A range of values must be in the following form:

```
FilterField=[Val1-Val2|Val3|Val4-Val5|...]
```

This allows you to specify one or more ranges, each separated by a vertical bar character (|), all enclosed in square brackets ([ ]). You can also include individual values in the expression (as shown with Val3).

For example, the following expression will return all cases that have a case number between 1700 and 1800, as well as the case with a case number of 1850:

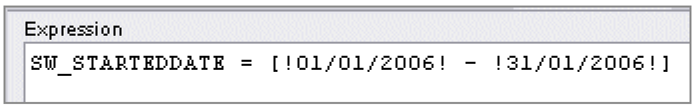
Expression
```
SW_CASENUM = [1700-1800 | 1850]
```

You can enter the entire expression free-form in the **Expression** section, if desired. Or, you can select the field and operator from the **Field** and **Oper**. field drop-down lists. You may or may not be able to enter the entire value in the **Value** field, depending on the filter field chosen. If required, modify the expression in the **Expression** section so that it is in the form shown above.

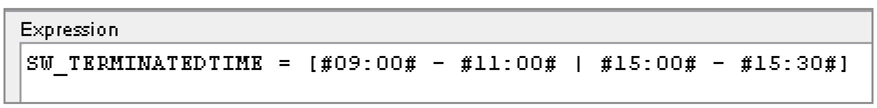
If dates and/or times are used in a range of values, they must be specified in the following format:

Dates/Times	Format Required
Date[1]	!dd/mm/yyyy!
Time	#mm:hh#
DateTime[a]	“dd/mm/yyyy mm:hh”

For example, the following expression will return all cases that were started between the dates of Jan. 01, 2006 and Jan. 31, 2006 (inclusive):



And the following expression will return all cases that were terminated between the times of 9am and 11am, as well as between the times of 3pm and 3:30pm (all inclusive):

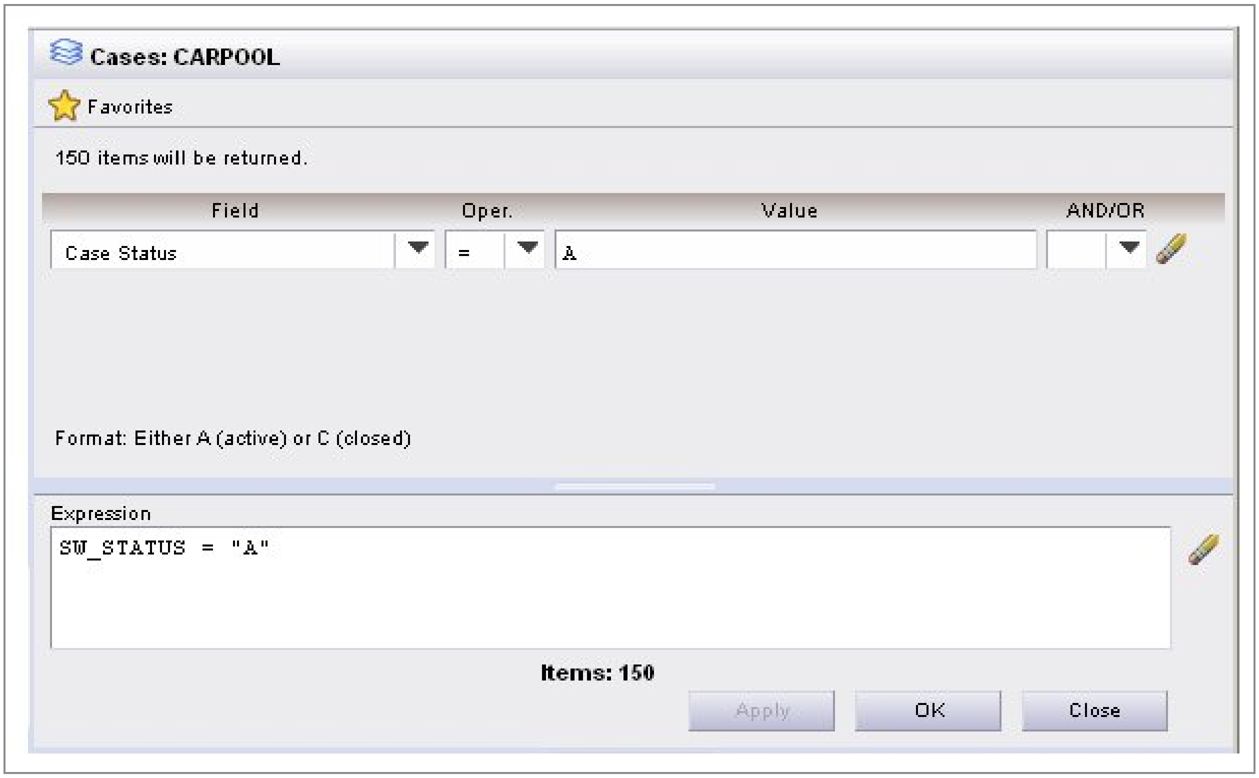


Applying the Filter Expression

To apply the filter expression shown in the **Expression** window, you can:

- Click the **OK** button. This causes any filter expression(s) you’ve entered to be applied and the list displayed. But you will not know the number of cases that will be returned in the list until after the list is displayed.
- Click the **Apply** button. The system will apply the filter expression and calculate how many cases satisfy the expression. This number is shown on both the top and the bottom of the filter dialog (150 in this example):

[1]The order of the day, month, and year can be modified by the system administrator. The correct order is shown on the filter dialog if you select a date field in the **Field** drop-down list.



If you clicked **Apply**, and the number of cases that will be returned from the iProcess Engine is satisfactory, click the **OK** button to display the case list (for information about the case list, see Case Lists).

If the number of cases is still too large, you can modify the filter expression by changing any of the selections in the **Field**, **Oper.**, or **Value** fields, then click **Apply** again to get a new case count.

Anytime you add, delete, or modify a filter expression on the filter dialog, and have not yet clicked the **Apply** button to apply it, the following message is shown to notify you that the changed filter expression has not been applied:

Whenever the message shown above is displayed, the **Apply** button will be active.

You can also click one of the “eraser” icons to delete filter expressions. Clicking the one to the right of the filter fields clears that row of fields; clicking the one to the right of the **Expression** window clears all filter expressions entered so far.

Note that if you apply the filter expression, then view the case list, the **Filter** icon will now contain a green check mark to indicate that a filter has been applied on the list:

Specifying Multiple-Clause Filter Expressions

You can use logical operators to combine multiple “clauses” in your filter expressions.

A “clause” is a field/operator/value set. The expression:

```
SW_STARTEDDATE < !20/10/2005! AND SW_STATUS = ”A”
```

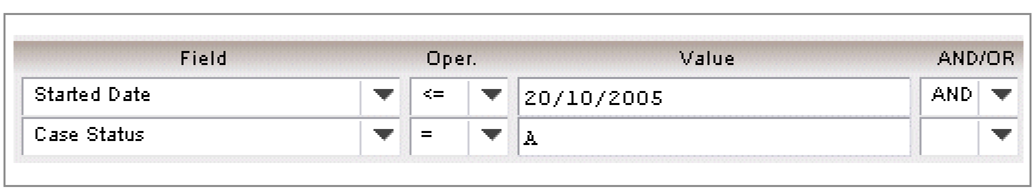
contains two clauses, separated by the AND operator. The following are the logical operators that can be used to separate clauses:

Operator	Description
AND	The expression is true if the first clause *and* the second clause are true.
OR	The expression is true if the first clause *or* the second clause is true.

Logical ANDs and ORs are entered into a filter expression using the **AND/OR** field. Click the arrow to display the drop-down list and select either AND or OR. When you select an AND or OR, another set of fields is displayed, in which you can specify the clause that will be ‘AND’ed or ’OR’ed to the preceding clause.

Example 1

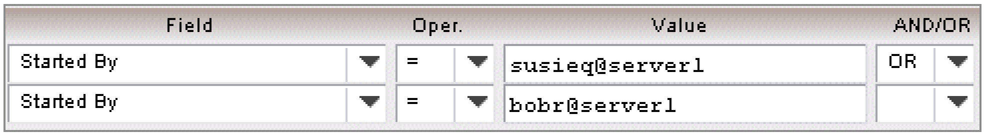
This example will return all cases that were started on or before 20/10/2005, *and* that are currently active (i.e., they have a status of “A”):



In this example, *both* clauses must be true for a case to be returned in the list.

Example 2

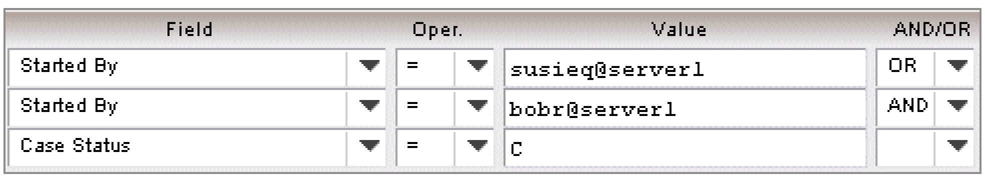
This example will return all cases that were started by either user “susieq” or “bobr” (note that when using the “Started By” field, the user name must be followed by “@node”, where node is the name of the server on which that user is defined):



In this example, *either one* of the clauses can be true for the case to be returned in the list.

Specifying More Than Two Clauses

If you specify more than two clauses, they are always evaluated in pairs from left to right. Consider the following:



In this example, the entire filter expression created is this:

```
SW_STARTER = "susieq@server1" OR SW_STARTER = "bobr@server1" AND SW_
STATUS = "C"
```

The system will evaluate this expression as if there are parentheses around the first two clauses in the expression. For example:

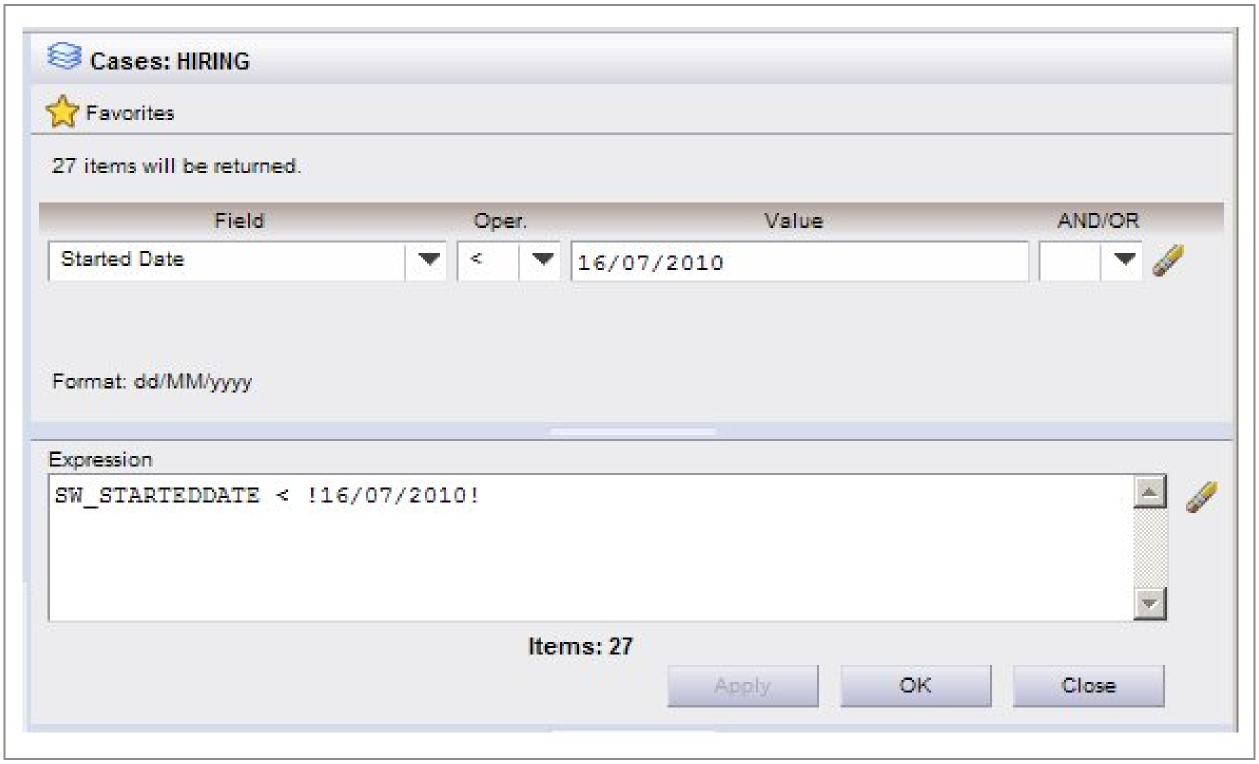
```
(SW_STARTER = "susieq@server1" OR SW_STARTER = "bobr@server1") AND SW_
STATUS = "C"
```

As you continue to add clauses to the expression, the system continues to evaluate from left to right. For example, if you added a fourth clause to the expression above, it would include the following implied parentheses:

```
((SW_STARTER = "susieq@server1" OR SW_STARTER = "bobr@server1") AND SW_
STATUS = "C") AND SW_PRONAME = "LOAN"
```

Building a Free-Form Filter Expression

After specifying filter criteria in the **Field**, **Oper.**, and **Value** fields, the filter expression appears in the **Expression** window:



The expression that appears in the **Expression** window is what is actually sent to the iProcess Engine. You are free to edit this text in any way desired. Note, however, that the results may not be what you expect if the expression is not in the format required by the iProcess Engine. For example, dates must be enclosed in exclamation characters (!07/05/2010!), times must be enclosed in the '#' character (#18:30#). These special characters are automatically added for you when you use the **Field**, **Oper.**, and **Value** fields to build the expression.

You can also add parentheses to the expression in the **Expression** window to create more complex filter expressions.

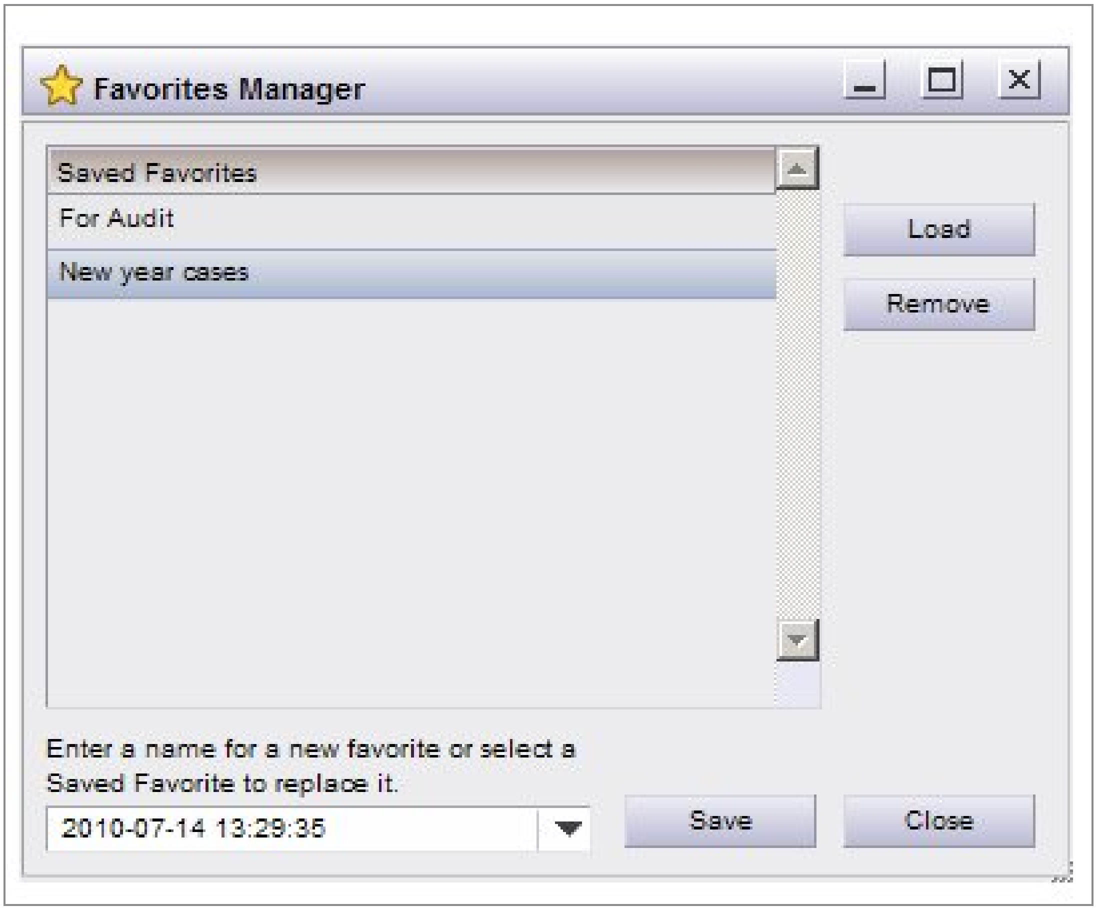
The system field names that appear in the **Expression** window (e.g., SW_STARTEDDATE) are listed in the table of system fields on System Fields Available for Filtering Cases.

Saving Favorite Filter Expressions

The “favorites” feature allows you to save your *favorite* (i.e., commonly used) filter expressions. This allows you to quickly select an expression by name, rather than requiring you to enter each element of the expression.

To use the favorites feature, click on the **Favorites** button on the filter dialog:

The following dialog is displayed:



In this example, there have already been two favorites saved: “For Audit” and “New year cases”.

To use one of the saved favorites:

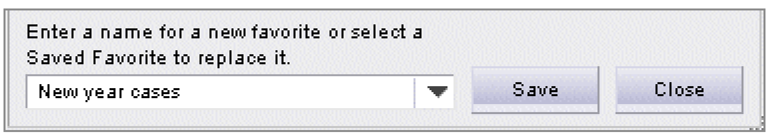
1. Select the desired favorite in the **Saved Favorites** section.
2. Click the **Load** button.

   The filter expression associated with that name is automatically entered into the **Expression** section on the filter dialog and is automatically applied to the case list — the “### items will be returned” text displayed on the filter dialog indicates how many cases satisfied the filter expression.

Saving a New Favorite Filter Expression

To save a new favorite filter expression:

3. Build the filter expression you would like to save using the filter dialog. See Building a Filter Expression.
4. Click on the **Favorites** button on the filter dialog. The **Favorites Manager** dialog is displayed.
5. In the field on the bottom of the **Favorites Manager** dialog, enter the name you would like to give the filter expression you are saving in the favorites (the entry in this field defaults to the current date and time).



6. Click **Save** to save the new favorite.

System Fields Available for Filtering Cases

The following table lists the system fields that can be included in expressions when filtering cases.

The **Description** column in the table corresponds to the text in the **Field** field drop-down list. The actual system field name (e.g., SW_CASEDESC) is automatically entered in the filter expression in the **Expression** window when you choose the system field description from the **Field** field.

Description	System Field Name	Data Type	Comments
Case Description	SW_CASEDESC	Text	
Case Number	SW_CASENUM	Numeric	
Case Status	SW_STATUS	Text	“A” = Active “C” = Closed
Procedure Description	SW_PRODESC	Text	
Procedure Name	SW_PRONAME	Text	
Started By	SW_STARTER	Text	username@node
Started Date	SW_STARTEDDATE	Date	
Started Date/Time	SW_STARTED	DateTime	
Started Time	SW_STARTEDTIME	Time	
Terminated Date	SW_TERMINATEDDATE	Date	
Terminated Date/Time	SW_TERMINATED	DateTime	
Terminated Time	SW_TERMINATEDTIME	Time	

Note: For information about data types used in system fields, see Value Data Types.

Sorting a Case List

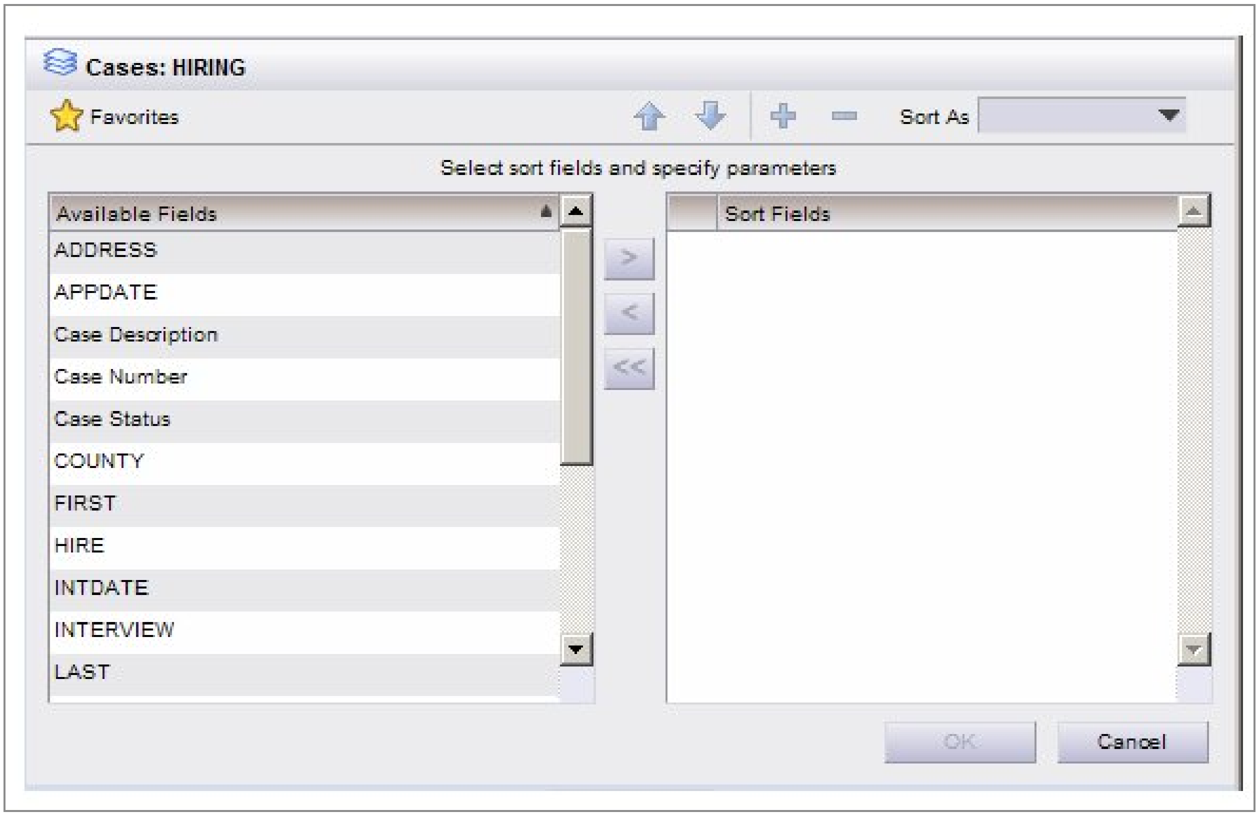
The iProcess Workspace (Browser) allows you to sort the information in the columns of the case list so they are in the order you would like them listed.

For example, you may want to list all cases started by user “susieq” first, then sort those by case-started date/time, from oldest to most recent. This example would require you to sort on two fields: “Started By” and “Started Date/Time”.

To specify how cases in the case list are sorted:

- click on the  icon, or
- select **Sort...** from the case list **View** menu.

The following dialog is displayed.



The list on the left shows all of the fields that are available to sort on. To sort the case list, you must move the desired fields from the list on the left to the list on the right, then arrange them in the desired priority (order). This is described in the following subsections.

By default, all case lists are sorted by case number, in ascending order.

Note: If you had applied sort criteria the last time you viewed the case list, that same sort criteria will be applied when you open the list again — in other words, the most recently applied sort criteria will remain in effect until you remove it or change it.

If previously applied sort criteria is still active when the work item list is displayed, a green check mark will be shown with the **Sort** icon.

Sort criteria for a particular list is saved either locally or on the server, depending on a configuration setting made by the system administrator:

- If saved locally, and you log into a different machine, the sort you defined for a particular list will not be in effect on that new machine — sort criteria defined on a specific machine will apply only to that individual machine.
- If saved on the server, and you log into a different machine (and connect to the same server), the sort criteria you defined will be in effect on the new machine.

Selecting Sort Fields

The **Available Fields** list on the sort dialog provides a list of the fields you can sort on. It consists of:

- **System Fields** - These fields contain information that is provided by the system, e.g., the date and time the case was started, the case number, etc.

  A comprehensive list of available system fields is provided in System Fields Available for Sorting Cases.

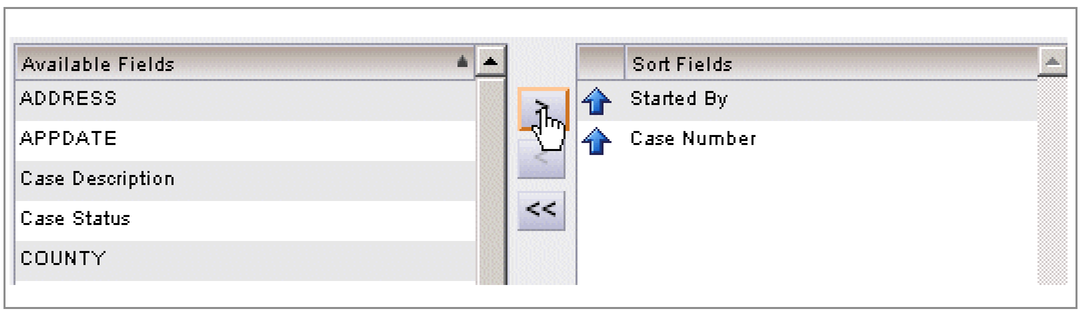
- **Case Data Fields** - These are fields that are defined by the designer of the procedure and that are placed on forms in the procedure.

  For example, there may be a “Last Name” field defined in the procedure. You can sort the cases so that they are listed alphabetically according to the text in the “Last Name” field.

  Note that case data fields contain “case data” (as opposed to “work item data”). (“Work item data” is the data associated with a work item while it’s in a work queue — if you enter information in a form, then “keep” the work item, work item data includes those changes. “Case data” is the information that is written to the database after you’ve “released” the work item — if you enter information in a form, then “keep” the work item, case data does *not* include those changes.) For more information about these types of data, see Case Data Fields.

To specify sort fields:

1. Select the desired sort fields from the **Available Fields** list:
   - Individual fields can be selected by clicking on the desired name.
   - Multiple fields can be selected by holding down the **Ctrl** key while clicking on the desired names. A group of fields can be selected by clicking on one name, then holding down the **Shift** key and clicking on the last name in the desired group.
2. Move the columns to the desired list:
   - Fields can be moved back and forth between lists by selecting the desired field (s), then clicking the “**>**” or “**<**“ buttons.



   - You can also move an individual field to the other list by double-clicking on the field name.
   - All fields can be moved from the **Sort Fields** list to the **Available Fields** list by clicking on the “**<<**“ button.

Note: You can specify a maximum of 5 sort fields for a case list.

Specifying Sort Priority

The order in which the sort fields are listed in the **Sort Fields** window specifies the *priority* of the sort. If you have multiple sort fields listed, all cases will first be sorted by the first sort field, then they will be sorted by the next sort field, and so on. For example, if you specified “Case Status” as the first sort field, then “Started Date/Time” as the second sort field (both ascending), the cases would be sorted in the following fashion:

Active	Jan. 1, 2006
Active	Jan. 2, 2006
Active	Jan. 3, 2006
Closed	Jan. 1, 2006
Closed	Jan. 2, 2006
Closed	Jan. 3, 2006

In the example shown above, all active cases will be listed first, followed by the closed cases. Within each group of active and closed cases, they are sorted by the date and time they were started.

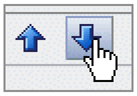
To change the priority, select the desired sort field(s) in the **Sort Fields** window, then click on the “**+**” or “**-**” button to move the field(s) up or down in the list.

Specifying a Sort Direction

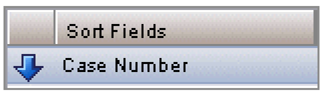
The list of cases can be sorted in either ascending or descending order:

When a sort field is added to the **Sort Fields** list, it is ascending by default, which is denoted by the up arrow next to the field name:

To change the sort direction, select the desired sort field in the **Sort Fields** list, then click on the up or down arrow buttons on the sort dialog:



The arrow next to the field name will change to indicate the new sort direction:



System Fields Available for Sorting Cases

The following table lists the system fields available for sorting cases:

Sort Field	Data Type
Case Description	Text
Case Number	Numeric
Case Status (“A” = Active; “C” = Closed)	Text
Started By[a]	Text
Started Date/Time	DateTime
Terminated Date/Time	DateTime

a. Sorting by Started By is inherently inefficient — sorting by this field may slow down the sorting process.

Note that the way in which the system sorts the values in the sort fields depends on the type of data in that field.

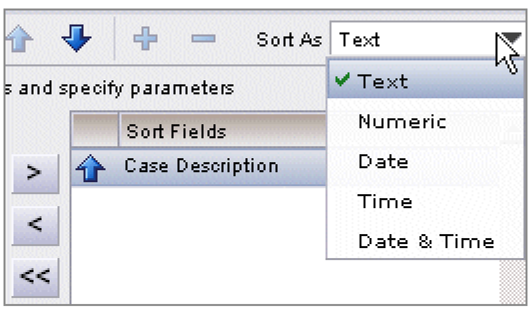
For instance, since the “Case Description” field is text data, that field is sorted alphabetically; and since the “Started Date/Time” field is a DateTime data type, it is sorted chronologically according to the date/time.

Sort As Different Data Type

The way in which the system sorts the values in the sort fields depends on the type of data in that field (e.g., text data is sorted alphabetically, numeric data is sorted numerically, etc.).

You can, however, tell the application to sort the data in a field using a data type that is different than the field’s data type. For instance, you can tell it to sort the data in the Case Description system field (which is a text field) as numeric data.

To sort a field as a different data type, select the desired sort field in the **Sort Fields** list, then click on the desired data type in the **Sort As** field:



The value of the sort field will be converted to the specified data type before doing the sorting. Note, however, that if the sort field does not contain something readily convertible to the specified type, the sort results may not be what you expect. For example, if sorting text as a numeric field but some of the text fields contain non-numeric data, the results may not be what you expected.

Applying the Sort Criteria

After specifying the sort fields, priority, direction, etc., click on the **OK** button to apply the sort criteria you’ve specified.

Anytime you modify a sort criteria, and have not yet clicked the **OK** button to apply it, the following message is shown to notify you that the changed sort criteria has not been applied:

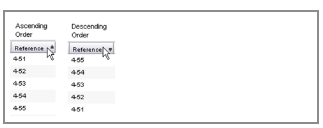
Whenever the message shown above is displayed, the **OK** button will be active.

When you click the **OK** button, a red check mark appears on the **Sort** icon to indicate sort criteria has been applied.

Sorting the Case List Using Column Headers

You can quickly and easily sort the case list on any one of the columns in the list. To sort on a column, click on the column header. If the column contains text, it is sorted in alphabetical order; if it is numeric, it is sorted in numerical order.

Once you click on a column header, a small arrow head appears in the column header, which indicates the order of the sort — if the arrow head is pointing up, the sort is in ascending order; if it's pointing down, the sort is in descending order:



Each successive click on the column header, toggles between ascending and descending order.

Note that the ability to sort using column headers is controlled through user access privileges — if you do not have the authority to sort using column headers, the arrow head does not appear in the header when you click it.

Opening Cases

Opening a case causes the *case details* to be displayed. Case details are presented in a tabbed format that contains **Summary**, **History**, **Outstanding**, and **Data** tabs. As the names of the tabs imply, you can view a summary of the case, the case history details, information about the outstanding work items in the case, and view/modify the case data fields.

You can open cases either from the case list or the work item list, as follows:

Opening Cases from the Case List

- Double-click on the desired case in the case list.
- Select one or more cases in the case list, then:
  - press the **Enter** key,
  - select **Open Case(s)** from the **Tools** menu on the case list,

    > **Note:** You cannot open multiple cases from the case list if you are displaying the case details in the preview pane. If you are opening cases in the Preview Pane, and you select multiple cases, the **Open Case(s)** function is disabled.

  - right-click the mouse button on the desired case(s) and select **Open Case(s)** from the drop-down menu, or
  - click on the  icon on the case list.

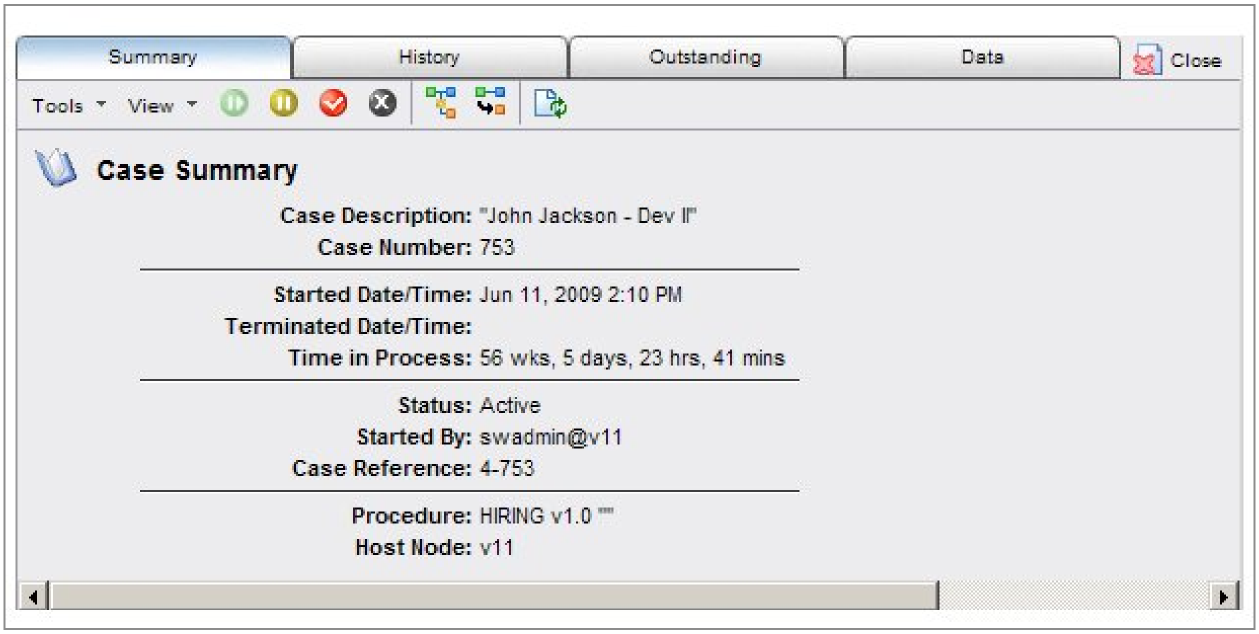
Open a Case from the Work Item List

Select the desired work item in the work item list, then:

- select **Open Case** from the **Tools** menu on the work item list,
- right-click the mouse button on the desired case and select **Open Case** from the drop-down menu, or
- click on the  icon on the work item list.

Case Details

All of these methods of opening cases cause the case details to be displayed:



For information about using each of the tabs in the case details, see the following:

- **Summary Tab** - Case Summary
- **History Tab** - Case History
- **Outstanding Tab** - Outstanding Work Items in the Case
- **Data Tab** - Case Data Fields

Case Details Location

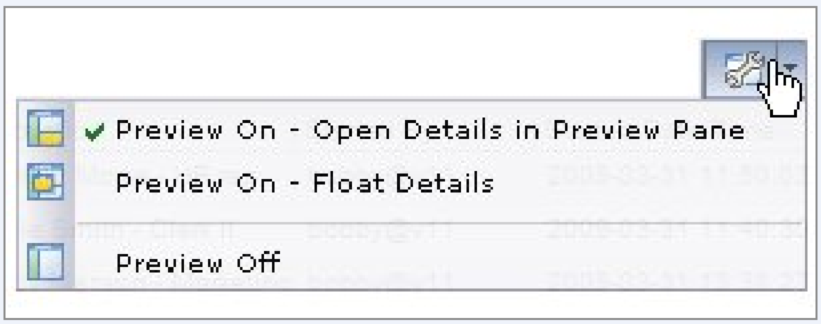
The location at which the case details are displayed depends on whether you are displaying them from the work item list or case list, as follows:

- When displayed from the **work item list**, case details are always displayed in a separate dialog.
- When displayed from the **case list**, the location of case details depends on whether or not the *preview* feature is turned on, as follows:
  - If preview is turned off, the case details are always displayed in a separate dialog.
  - If preview is turned on, the case may be opened either in the preview pane or a separate dialog, depending on the current preview setting.

    If the **Preview On - Open Details in Preview Pane** selection is checked, the case details are opened in the preview pane. (Note that the Preview Pane may be set to automatically resize when the case detail are opened, then return to the previous size when the case details are closed. For information about how this done, see Case Preview Default .)

If the **Preview On - Float Details** selection is checked, the case details are opened in a separate dialog.

The preview setting can be viewed or set by either clicking the  icon on the case list toolbar, or by selecting **Preview** from the case list **View** menu. The following drop-down menu is displayed:



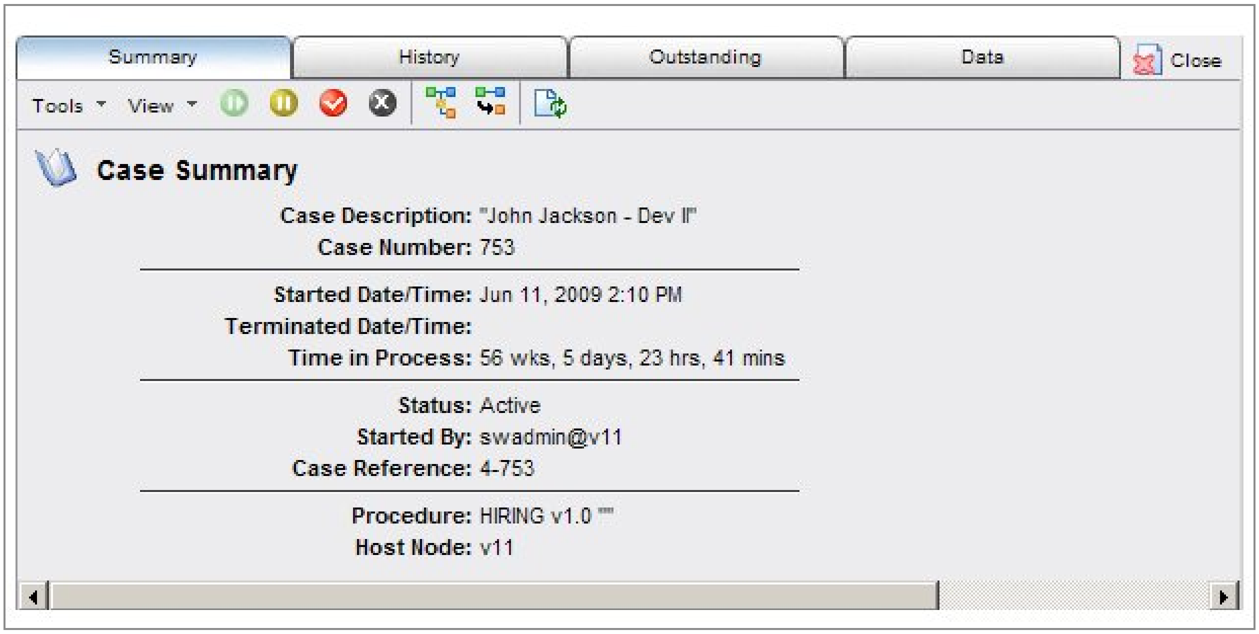
The check mark indicates the currently selected preview option.

Note: If you have chosen to display case details in a separate dialog, and there are multiple cases selected in the case list when you open them, a separate dialog for each selected case is displayed.

But if you have chosen to display the case details in the preview pane, you cannot open multiple cases at one time — if you select more than one case, the **Open Case(s)** function becomes disabled.

Case Summary

To view summary information about a case, open the case. The initial tab displayed is the **Summary** tab:



This window displays demographic-type information about the case, such as who started it, the date and time it was started and/or terminated, etc.

Refreshing the Case Summary

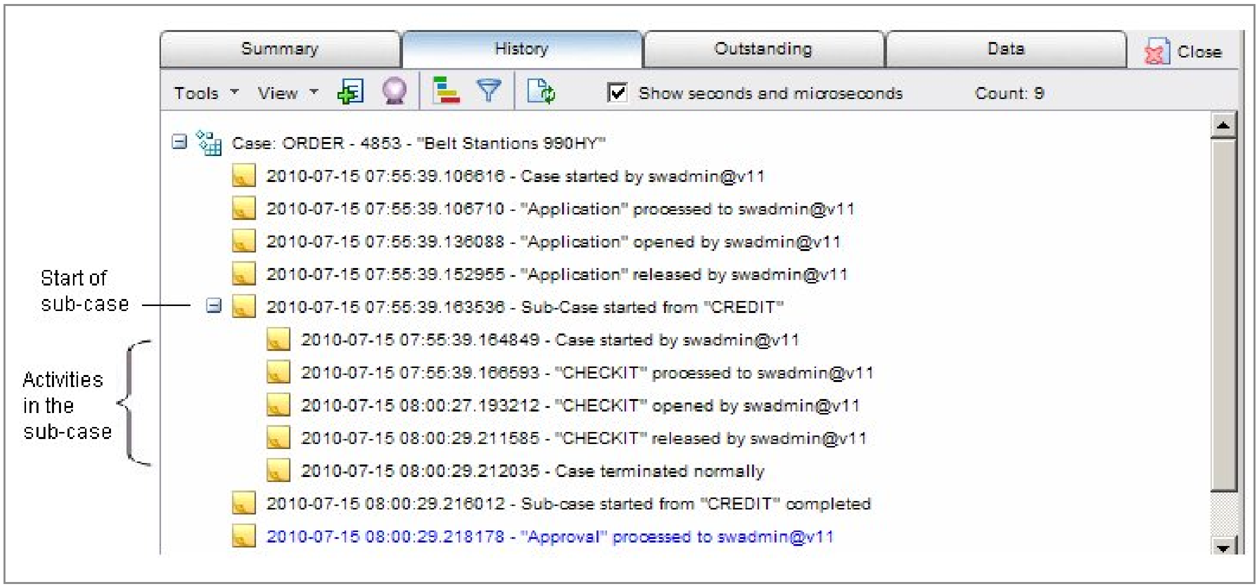
The information displayed in the **Summary** tab is the information that was downloaded from the iProcess Engine when the case list was initially displayed (or the last time it was refreshed). You can refresh this information by either clicking on the  icon on the **Summary** tab or by selecting **Refresh Case** from the **Tools** menu on the **Summary** tab.

This refreshes the information for this single case.

Case History

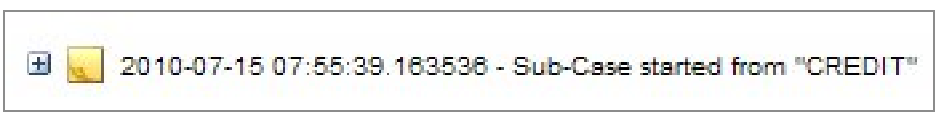
Viewing case history allows you to see the case's chronological progress through the procedure, that is, it shows you which steps (work items) have been processed and who processed them. This is sometimes referred to as the case "audit trail."

To view the case history, open the case, then click on the **History** tab. A window similar to the following is displayed:



In this example case history, you can see the date and time the case was started, and the user name of the person who started it. It also shows when each work item is sent to ("processed to") a work queue, as well as when each work item is opened, kept, and released.

If a sub-case is started in the case, it is denoted by a + icon to the left of the line at which the sub-case is started. For example:



Click on the **+** icon to expand that line so that it shows the activities in the sub-case. Clicking on the **+** icon causes it to change to a **-** icon. To collapse the activity list for the sub-case, click on the **-** icon.

Entries that are displayed in blue indicate that that step is currently outstanding, this is, that's where the process flow is currently sitting. Note that there may be multiple outstanding steps because the process flow may branch, resulting in more than one work item. Also, if there is an outstanding step in a sub-case, the sub-procedure call step is displayed in blue, as well as the step within the sub-case that is outstanding. For example:

You can also specify whether or not the times in the case history show seconds and microseconds. This is controlled using **Show seconds and microseconds** check box on the **History** tab:

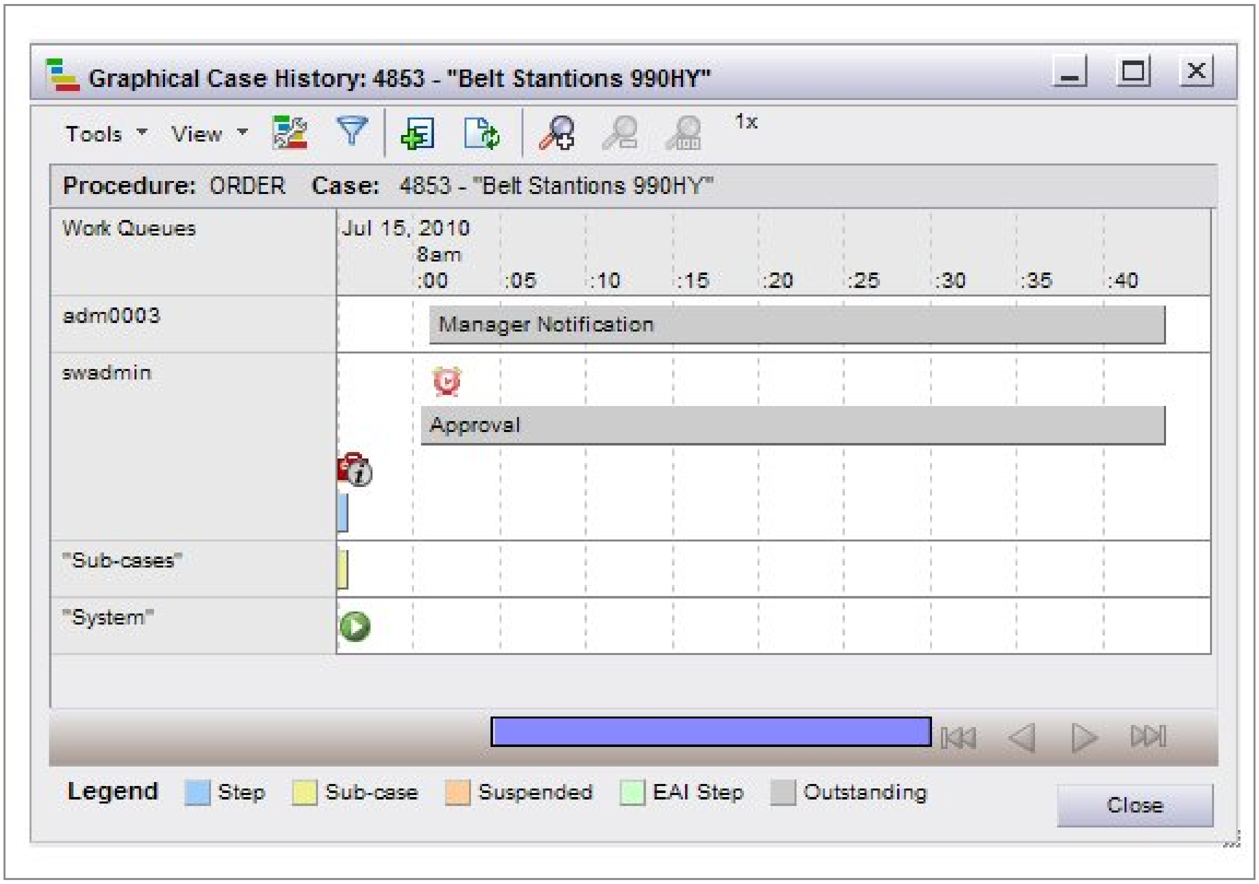
Clicking on this check box causes the case history list to refresh, toggling between displaying (when the box is checked) and not displaying seconds and microseconds. Note that changes made to the **Show seconds and microseconds** check box are saved either locally or on the server, depending on a configuration setting made by the system administrator:

— If saved locally, and you log into a different machine, the changes you made will not be in effect on that new machine — changes made on a specific machine will apply only to that individual machine.

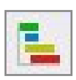
— If saved on the server, and you log into a different machine (and connect to the same server), the changes you made will be in effect on the new machine.

Viewing a Graphical Case History

The graphical case history feature allows you to view the actions that have taken place in a case in the form of a time-line chart, as in the example below:



To view a graphical case history, open the desired case, click on the **History** tab, then either:

- click on the  icon on the **History** tab, or
- select **Graphical History** from the **View** menu.

```
The graphical case history opens in a separate floating window that
provides a graphical representation of the case using the following:
```

- **Colored horizontal bars** - (Note - This is the default display. You can customize the display if desired, e.g., the bars can be displayed with hatch patterns instead of colors, they can be displayed vertically instead of horizontally, etc. For more information, see Configuring the Graphical Case History Display.) The bars illustrate one of the following:

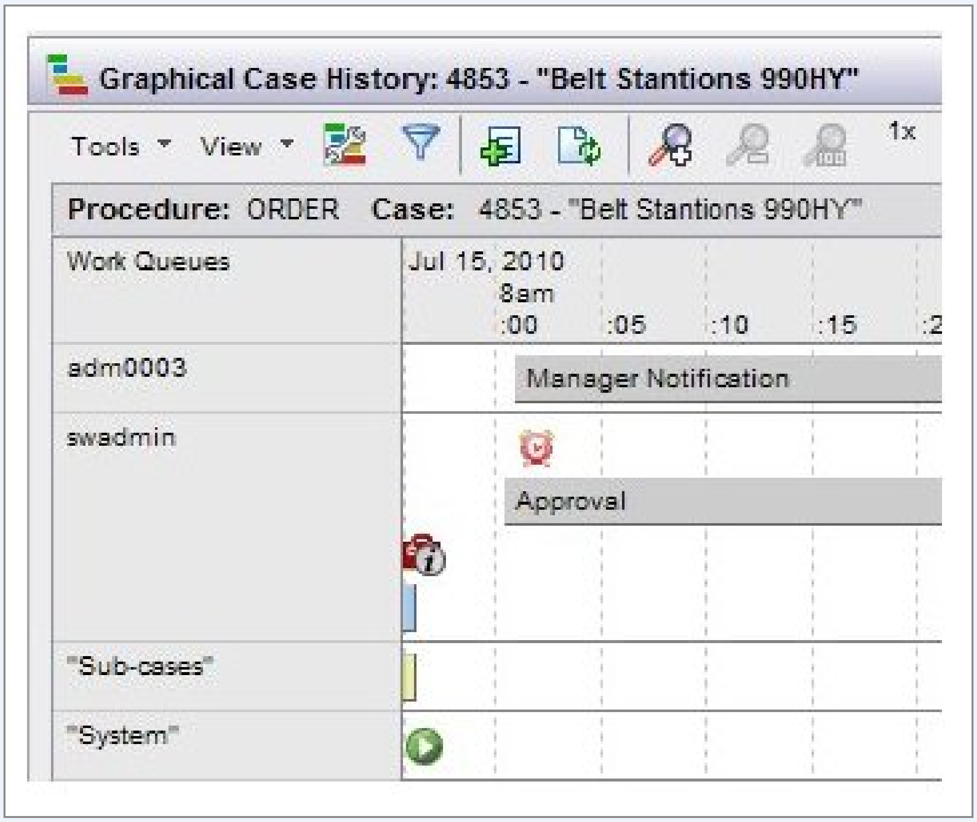
  — The period of time a work item was in a user’s work queue.

  — The period of time a case was suspended.

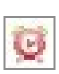
— The period of time a case was being processed in a sub-case.

A legend is displayed on the bottom of the window that shows the meaning of each color (or hatch pattern).

- **Milestone Markers** - These markers/icons illustrate when entries of types other than those described above are recorded in the case history. The following shows some examples of milestone markers.



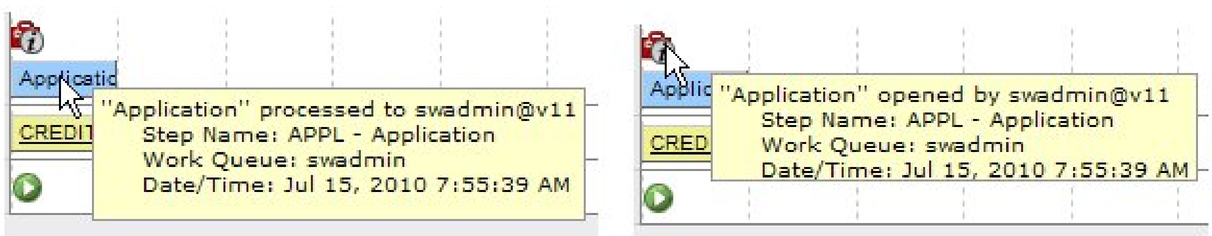
The possible milestone markers are:

Icon	Description
	Case start
	Case termination
	Deadline expired

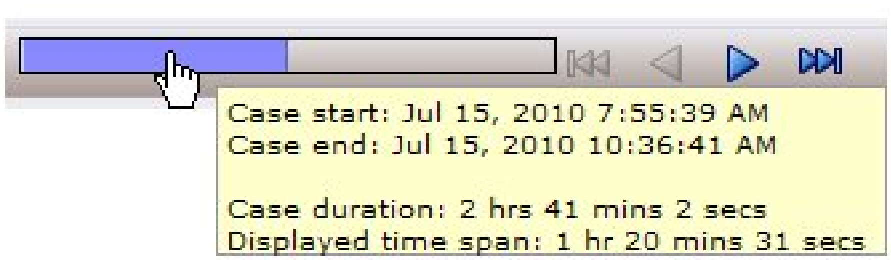
Icon	Description
	Process jump
	Event triggered
	Error message displayed
	Case migrated to another version of procedure
	User-defined entry to case history
	All other milestones

Graphical Case History Details

Details about any entry in the case history can be viewed by placing the cursor over any bar or milestone marker. For example:



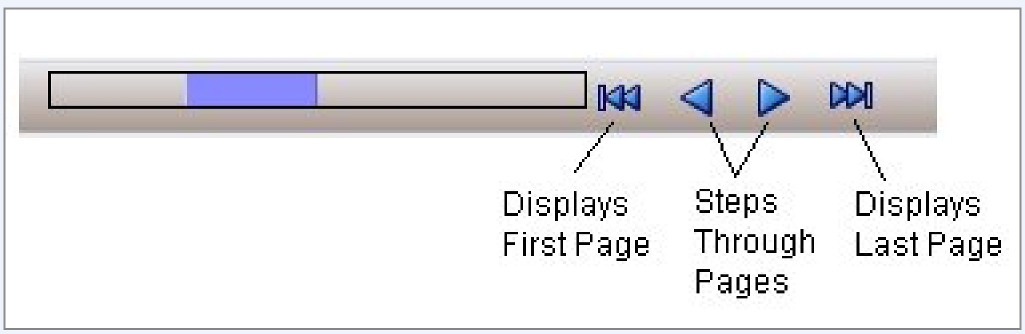
You can also view information about the duration of the case by placing the cursor over the paging bar on the bottom of the window, as follows:



Display Features

The following describes features available on the graphical case history display:

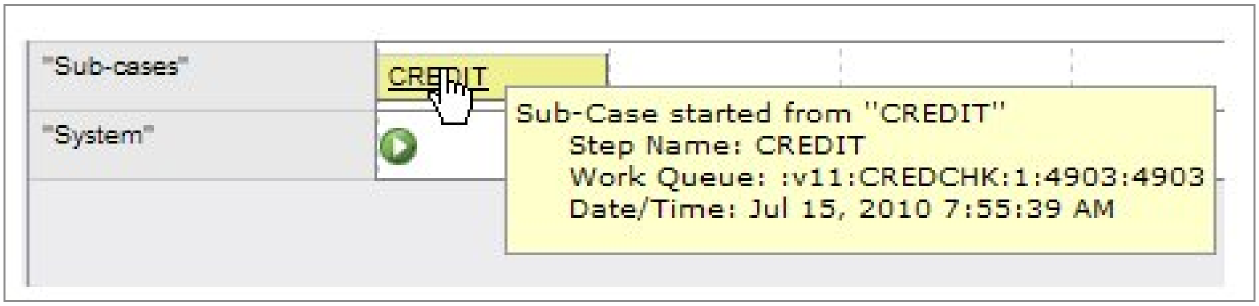
- **Time Scale** - The time scale on the display will vary depending on the amount of time that has elapsed since the case was started. It can be seconds, minutes, hours, days, etc.
- **Zooming** - You can zoom in or out to obtain an optimal view of the case history by either clicking on the zoom buttons on the top of the display, or by selecting the zoom options on the **View** menu. There is also an indicator to the right of the zoom buttons that indicates how much you have zoomed in (2X, 4X, etc.).
- **Paging** - The paging buttons become active if you zoom in on the display. These allow you to move to earlier or later *pages*, which represent different time periods in the case history. The bar to the left of the paging buttons indicate the current page's relative position in the case history.



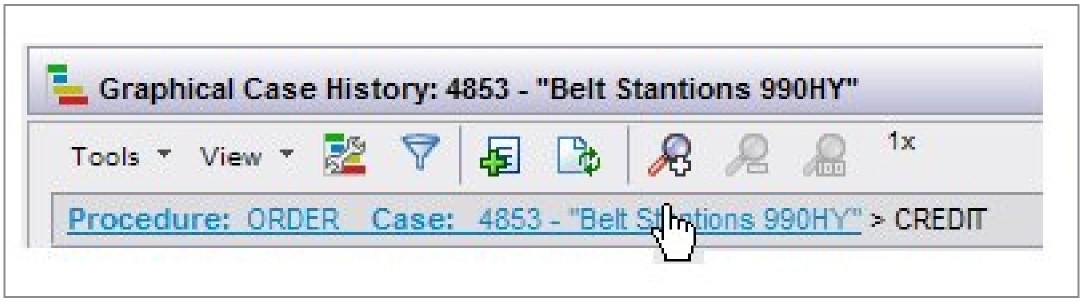
Displaying Sub-Case Information

If the case contains a sub-case, you can "drill down" into the sub-case to view its case history.

The bar that represents the sub-case will contain a link that you can click on to display its case history. The case history details also indicate that it represents a sub-case, as shown below.



After drilling down into a sub-case, a link is provided on the toolbar that allows you to navigate back to the parent case (or to other sub-cases if you've displayed other sub-cases to get to the current sub-case):



Configuring the Graphical Case History Display

You can configure/customize the display of the graphical case history by:

- clicking on the  icon on the graphical case history toolbar, or
- by selecting **Configure** from the **Tools** menu.

This displays the **Display Options** dialog, which allows you to perform various customizations of the graphical case history display. Changes to the display will be effective only for the current graphical case history display unless you click in the **Save these settings as the default** check box on the bottom of the dialog.

Also note that you can save the size and position of the **Graphical Case History** dialog, making the current size/position the default by checking the **Make this graph position and size the default** check box.

The **Display Options** dialog allows you to perform the following customizations:

- **Time Axis** - The time axis can be oriented either horizontally or vertically, which subsequently also causes the bars to be displayed horizontally or vertically.

- **Expanded / Compressed Format** - In expanded format, each bar and milestone marker, for each work queue or step, is displayed on its own row and are organized in chronological order.

  In compressed format, an attempt is made to display all bars on one row, and all milestone markers on another row, for each work queue or step. Note, however, that if there are bars that will overlap because of branching that creates multiple work items, additional rows of bars will be added. Additional rows are not added for overlapping milestone markers — you can zoom in to spread them out on the display.

- **Group by Work Queue or Step** - This option allows you to group the bars and milestone markers either by work queue or step. When grouped by work queue, each bar represents a work item in that work queue. When grouped by step, each bar represents the work queue in which that step (work item) resides.

  Note that some types of events may not have a work queue name or a step name associated with them. In these situations, the items without a name are grouped together in an unlabeled column. Some entries may also specify “System” as the work queue name if the entry is not related to a particular work queue. Also, some entries not related to a particular step may display information such as “Case Start”, “Termination”, etc., for the step name.

- **EAI Steps** - This option allows you to either display or hide bars related to EAI steps.

- **Predicted Steps** - This option allows you to either display or hide bars related to predicted steps, i.e., steps that are a result of performing the case prediction function.

- **Step Labels** - Steps (which represent work items) can be labeled with their name, description, or both.

- **Bar Shading** - This option allows you to specify that the bars be filled with either a color or a hatch pattern. A legend is displayed on the bottom of the graphical case history screen that shows the meaning of each color or hatch pattern, depending which option is selected.

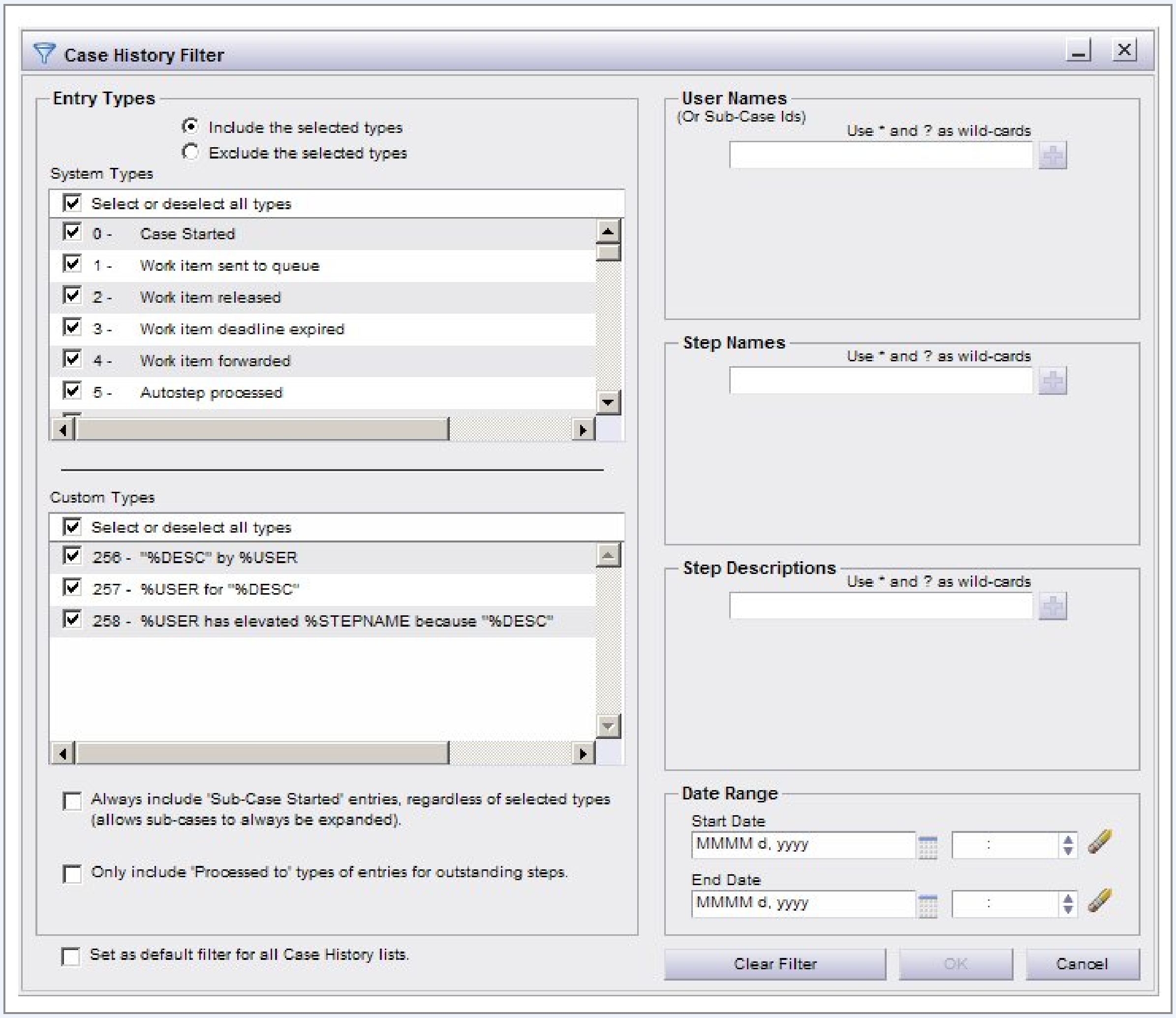
Filtering Case History Entries

For some cases, the case history can become very lengthy. Filtering the case history entries allows you to more easily find those you are interested in.

You can filter case history entries from either the **History** tab, or from the graphical case history display. From either of these displays:

- click on the  icon, or
- select **Filter** from the **View** menu.

```
The Case History Filter dialog is displayed:
```



This dialog allows you to pick and choose the types of criteria used to filter the case history. Only those case history entries that match ALL of the filter criteria specified are displayed in the case history.

After selecting/entering the desired criteria, click on the **OK** button to apply it. The filtered case history entries are displayed, and the **Filter** icon will display with a green check mark ()to indicate the list is filtered.

The applied filter criteria will persist for the current case history until you remove or modify it.

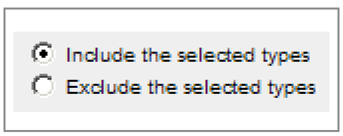
You can also cause the specified filter criteria to be applied to case histories displayed by checking the **Set as default for all Case History lists** check box, then clicking **OK**.

The following subsections describe details of filtering case history entries using the **Case History Filter** dialog.

Including/Excluding Selected Case History Types

A case history *type* is just a specific entry that is written to the case history. For instance, "Work item released" is a *type* of entry that is written to the case history every time a work item is released in the case.

You can choose to either include or exclude selected types of entries by selecting the desired types in the **System Types** and **Custom Types** sections, then choosing either the **Include the selected types** or **Exclude the selected types** radio buttons:

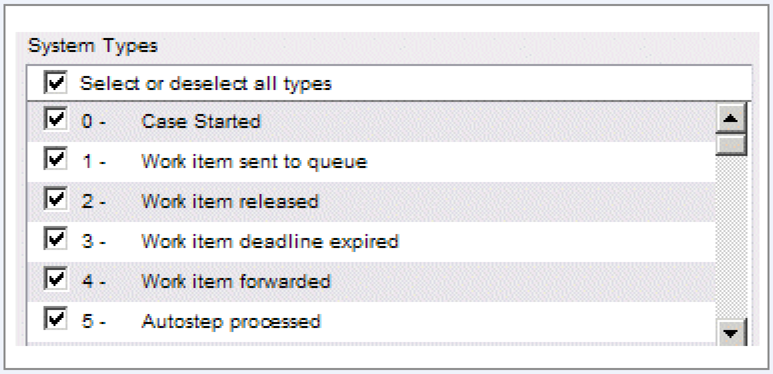


For example, if you select only the "Work item released" type, and **Include the selected types** is selected, only "Work item released" types are displayed in the case history. Conversely, if you select only the "Work item released" type, and **Exclude the selected types** is selected, all entry types *except* the "Work item released" type are displayed in the case history. (This assumes no other criteria are specified on the **Case History Filter** dialog.)

There are two groups of entry types you can select:

- **System Types** - This list provides check boxes for all types of activities that can be performed while operating the iProcess Workspace (Browser) application. For example, an entry is written to case history whenever a work item is sent to a work queue, an entry is written to case history whenever a sub-case is started, etc.

  All available system types are listed in the **System Types** section:

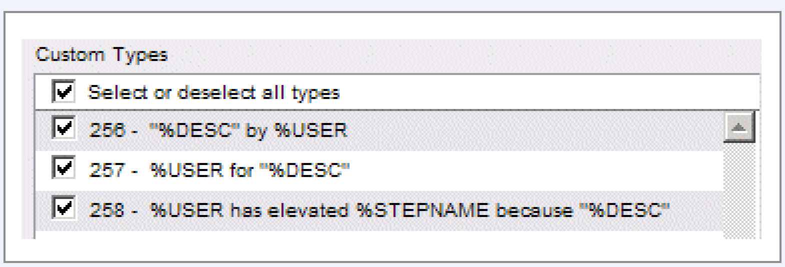


You can check or uncheck the individual type, as desired, by clicking in the appropriate check boxes, or you can check or uncheck all boxes by clicking in the **Select or deselect all types** check box. This allows you to choose which system types of entries to display in the case history.

All of the system types available are not described here as their descriptions in the **System Types** section are self explanatory. One notable exception is the “Work item sent to queue” system type that actually appears in the case history as “<*Step*> processed to <*User*>”. “Processed to” means a work item was sent to (i.e., “processed to”) a work queue. For more information about “processed to” entries, see Including Only “Processed to” Entry Types.

- **Custom Types** - This list provides check boxes all *custom types*. These are user-defined case history entries that were added to the case history using the **Add Entry** function on the case **History** tab.

  The entry types shown in the **Custom Types** list are user-defined entries that are stored in the **auditusr.mes** file by a system administrator:

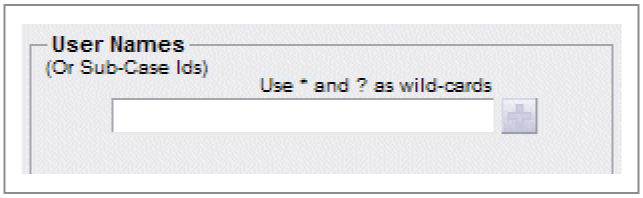


You can check or uncheck the individual types, as desired, by clicking in the appropriate check boxes, or you can check or uncheck all boxes by clicking in the **Select or deselect all types** check box. This allows you to choose which custom types of entries to display in the case history.

For information about how custom (user-defined) entries are added to the case history, see Adding an Entry to Case History.

User Names (or Sub-Case IDs)

The **User Names** section allows you to specify that only case history entries containing the specified user name(s) or sub-case IDs be displayed.



Note that only some entries actually contain a user name — for example, “Case started by <*User*>, <*Step*> released by <*User*>, etc. In these instances, the entry indicates who initiated the action. For some entries, the system initiates the action — for example, “<*Step*> processed to <*User*>”. In this instance, the entry indicates whose work queue the system sent the work item to.

User names must be entered in the following form:

```
username@servername
```

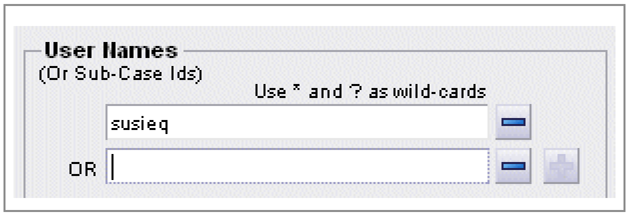
where:

— *username* is the user’s name, e.g., “susieq”.

— *servername* is the name of the server on which the user was logged in when the function that created the entry was performed. (Note - You can avoid having to enter the server name by using the “*” wild card, e.g., “susieq*”.)

Note that the **User Names** field can also be used to filter case history entries on sub-case IDs. Just enter a sub-case ID (also sometimes called a “sub-case number”) in the **User Names** field with or without wild cards.

You can specify multiple user names or sub-case IDs in the **User Names** section. If you specify more than one user name/ID, the case history will include entries that apply to *any* of the specified users/IDs. To specify multiple users/IDs, enter the first user name/ID in the available field in the **User Names** section, then click on the  icon to the right of the field. This causes another field to appear, in which you can specify another user/ID.



After adding another user name/ID, a  icon appears next to each of the fields. These icons can be used to remove any of the specified names/IDs from the filter criteria.

You can add up to five user names or IDs in the **User Names** section.

Note:

Wild card characters

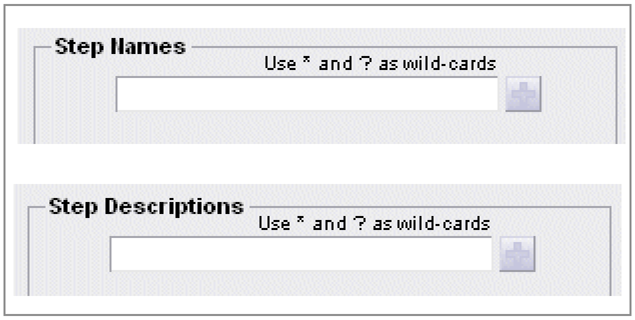
The wild card characters, * and ?, can be used when specifying user names, sub-cases IDs, step names, and step descriptions, as follows:

- ‘*’ matches zero or more of any character. For example:
  - “bo*” matches anything beginning with “bo”. For example, “bo”, “bobbl”, “boulton_anne”, etc.
  - “s*s” matches anything beginning with “s” and ending with “s”. For example, “ss”, “sues”, sid_lewis”, etc.
  - “*s” matches anything ending with “s”. For example, “franks”, “ls”, “martha_lyons”, etc.
- ‘?’ matches any single character. For example:
  - “bill?” matches anything beginning with “bill”, plus one more character. For example, “bills”, “bill5”, “billh”, etc.
  - “c?ndy” matches “cindy”, “candy”, “c3ndy”, etc.

Also note that all character matching is case insensitive.

Step Names / Step Descriptions

The **Step Names** and **Step Descriptions** sections allow you to specify that only case history entries containing the specified step name(s) or description(s) be displayed.

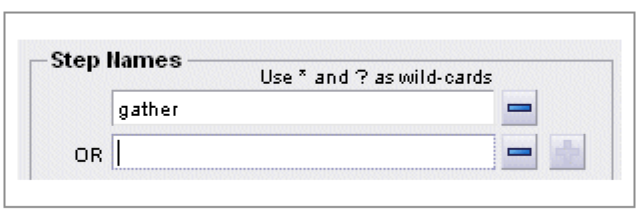


When procedures are created, each step is given a name, and possibly an optional step description. If they were not given a step description, the step name is shown in the case history entries. If they were given a step description, the description is shown in the case history entries. In the following example, “Request for vehicle” was specified as the step description when the step was defined:

The **Step Names** and **Step Descriptions** sections can be used to filter the case history entries based on the step name or description. Use the appropriate field, depending on whether names or descriptions are shown in your case history.

Remember that each “step” in a procedure results in a “work item” in a live case. Most case history entries containing a step name/description are referencing an action that affects a step (work item), for example, “*<Step>* processed to *<User>*”, *<Step>* opened by *<User>*”, “*<Step>* released by *<User>*”, etc.

You can specify multiple step names/descriptions in the **Step Names** and **Step Descriptions** sections. If you specify more than one step name/description, the case history will include entries that apply to *any* of the specified names/descriptions. To specify multiple names/descriptions, enter the first one in the available field, then click on the to the right of the field. This causes another field to appear, in which you can specify another name/description.



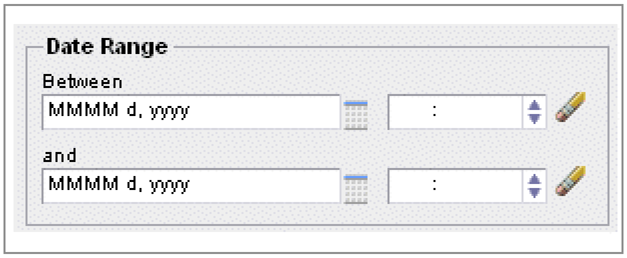
After adding another name/description, a icon appears next to each of the fields. These icons can be used to remove any of the specified names/descriptions from the filter criteria.

You can add up to five step names/descriptions in the **Step Names** and **Step Descriptions** sections.

The wild card characters, * and ?, can be used when specifying step names/descriptions. For information, see Wild card characters.

Date Ranges

The **Date Range** section allows you to specify that only entries that fall within a range of dates be shown in the case history.



You can either type in the desired dates using the format shown in the fields (months are spelled out), or click on the calendar icons next to the fields to select the desired dates. The desired times can also be typed in, or use the arrow buttons to the right of the time fields (to use the arrow buttons, the cursor must be in the Hours, Minutes, or AM/PM field, as desired).

To remove a date and time from the fields, click on the eraser icon to the right of the fields.

If you leave the beginning date blank, it assumes the beginning of time. If you leave the ending date blank, it assumes the current date.

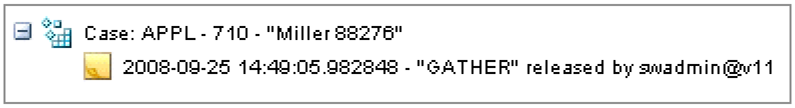
If you leave the beginning time blank, it defaults to 12:00 AM. If you leave the ending time blank, it defaults to 11:59 PM. (If you specify a time, you must also specify a date.)

Dates entered are inclusive, that is, case history entries that occur on that date are included in the case history (assuming they also meet the specified time criteria).

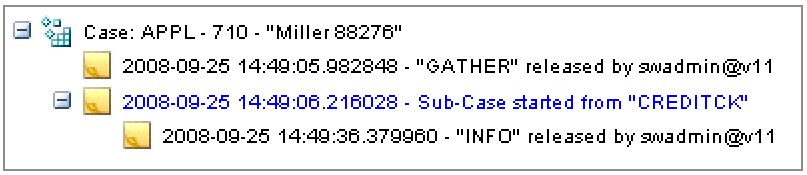
Always Including Sub-Case Started Entries

The **Always include Sub-Case Started entries...** check box is provided to allow you to specify that “Sub-Case started” entries always be included in the case history, regardless of the entry types you have selected. This can be beneficial because an entry you would like displayed may be inside a sub-case; if the “Sub-Case started” entry is not displayed, nothing inside that sub-case is displayed.

For example, let’s say you want all “work item released” entries to be displayed, and there are “work item released” entries in both the main case and in a sub-case. If you select *only* the “Work item released” system entry, the following may be displayed:



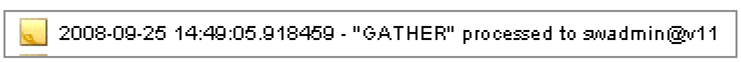
Whereas, if you select the “Work item released” system entry, *and* check the **Always include Sub-Case Started entries...** check box, the following is displayed:



All “Sub-Case started” entries are displayed so that you can expand them to see if the entry types you are interested in are in that sub-case.

Including Only “Processed to” Entry Types

The term “processed to” requires some explanation. When a work item is sent to a user’s work queue, the “<*Step*> processed to <*User*>” entry is written to the case history. For example:



This entry is displayed when the “Work item sent to queue” entry is selected in the **System Types** section on the **Case History Filter** dialog.

Note, however, there are other case history entries that are considered “processed to” entries. They are:

— “<*Step*> processed to <*User*>” [“Work item sent to queue” entry type]

— “<*Step*> forwarded to <*User*>” [“Work item forwarded” entry type]

— “<*Step*> redirected to <*User*>” [“Work item redirected” entry type]

— “<*Step*> resent to <*User*>” [“Work item resent to queue” entry type]

— “Sub-Case started from <*Step*>” [“Sub-case started” entry type]

The reason all of these entries are considered “processed to” entries is because they all result in a work item being sent to a user’s work queue.

You can specify that *only* “processed to” entries be displayed in the case history by checking the **Only include ‘Process to’ types of entries for outstanding steps** check box. Only those entries listed above are displayed.

Adding an Entry to Case History

Entries can be manually added to a case history.

This requires that a file (**auditusr.mes** file) be set up on the system that contains pre-defined messages that you can add to the case history — a system administrator will typically set up this file so you can choose a message from it. The following is a simple example of the contents of this file:

```
256:"%DESC" by %USER
257:%USER for "%DESC"
258:%USER has elevated %STEPNAME because "%DESC"
```

Each line in the file constitutes one user-added entry. The entry is identified by the three-digit number to the left of the colon. The text to the right of the colon is the message that will be added to the case history, where %USER, %DESC, and %STEPNAME are replaced with text you enter when you manually add an entry to case history.

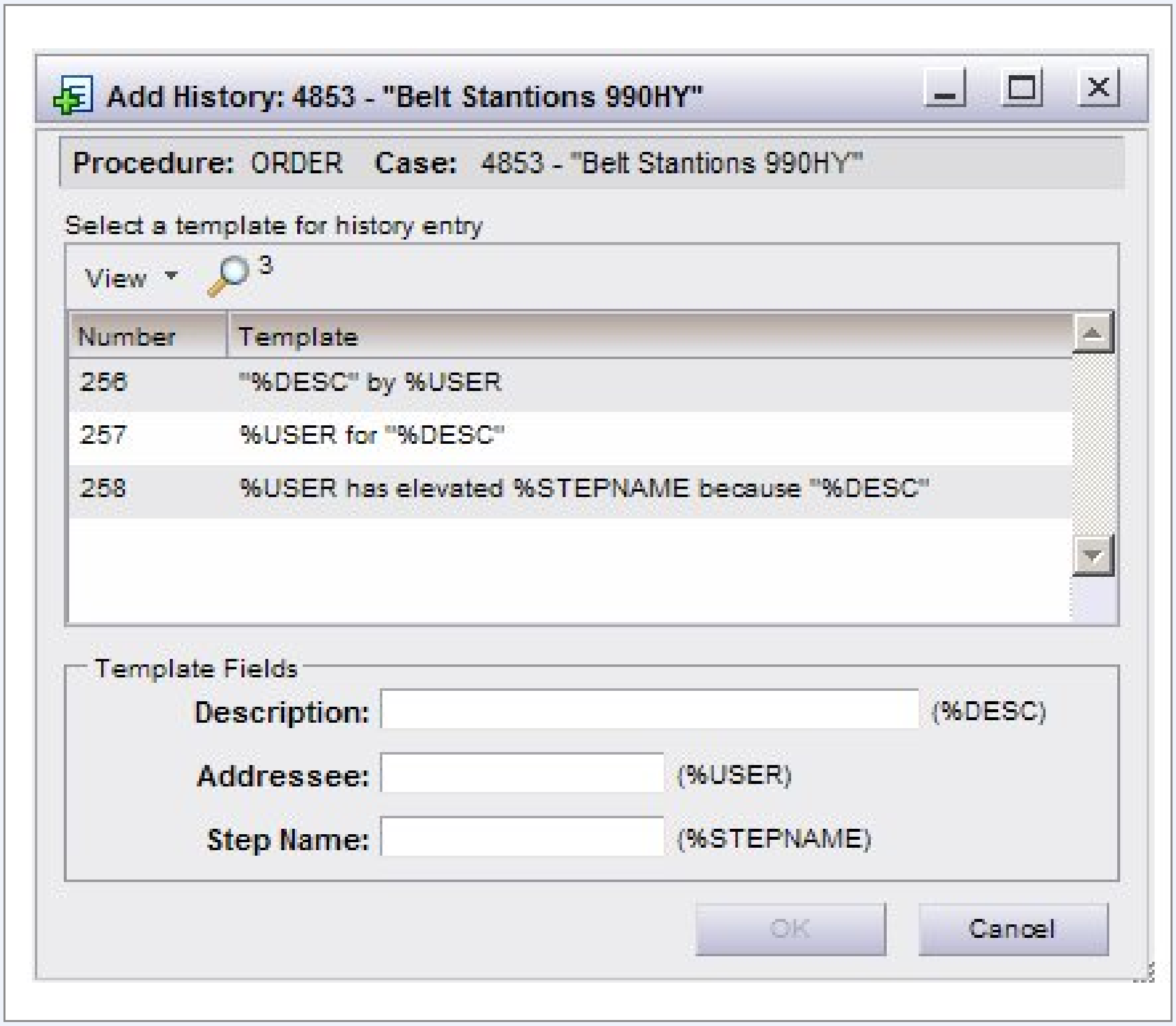
To add an entry to case history:

1. Either:

   — click on the  icon on the **History** tab, or

   — select **Add Entry** from the **Tools** menu (these buttons/menu selections can be found on both the “standard” case history display and the graphical case history display).

   The following dialog is displayed:



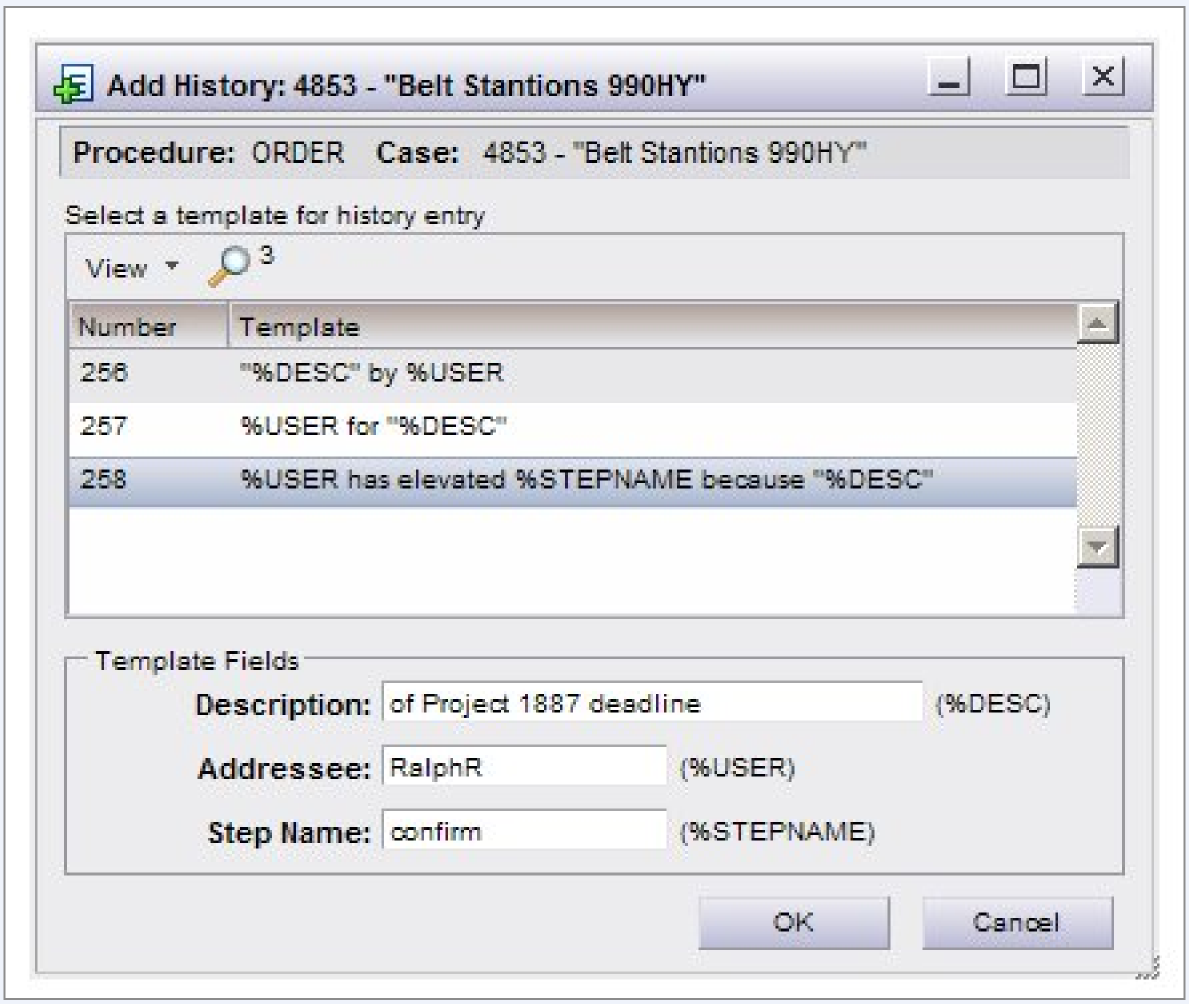
2. Select the desired message number / template from the list. This list is the contents of the **auditusr.mes** file described earlier in this section.

   Note: If your iProcess Engine does not support Add Case History “Templates”, the **Add History** dialog will contain a **Message Number** field instead of the list of available message numbers. If your system does not support templates, enter the the message number in the **Message Number** field.

3. In the **Description** field, enter the description text you want to appear in the message, if applicable; this text replaces the “%DESC” variable in the pre-defined message. This field can be left blank if it does not apply to the message you are adding.

4. In the **Addressee** field, enter the user name you want to appear in the message, if applicable; this user name replaces the “%USER” variable in the pre-defined message. This field can be left blank if it does not apply to the message you are adding.
5. In the **Step name** field, enter the step name you want to appear in the message, if applicable; this step name replaces the “%STEPNAME” variable in the pre-defined message. This field can be left blank if it does not apply to the message you are adding.
6. Click **OK** to add the message to the case history. (The message won’t appear until you refresh the case history — for information about refreshing case history, see Refreshing the Case History.)

   The following is an example using the pre-defined message file shown earlier.



This example results in the following entry being added to the case history:

Refreshing the Case History

The information displayed in the **History** tab is the information that was downloaded from the iProcess Engine when the case list was initially displayed. You can refresh this information by either:

- clicking on the  icon, or
- by selecting **Refresh History** from the **Tools** menu on the **History** tab.

Note that refreshing the case history refreshes the information for this single case.

Outstanding Work Items in the Case

“Outstanding items” represent the steps at which the process flow is currently sitting.

“Normal” steps that are outstanding result in a work item appearing in one or more work queues. Other step types (event steps, sub-procedure call steps, etc.) result in some other action, such as an external program being triggered, a sub-procedure starting, etc. These step types do not result in a work item appearing in a work queue, although they are still considered “outstanding” because the process flow has halted at that step until whatever action was started by that step is complete.

Often, there are multiple outstanding items in a case because the process flow can take multiple paths, depending on how the procedure is defined.

An administrator may have a need to know which items are currently outstanding in a case, possibly to determine how the case is progressing. There is also a function available that allows one or more outstanding items to be withdrawn, and other steps to be made outstanding (for information about how to do this, see Jumping to New Outstanding Steps).

To view a list of the current outstanding items in a case, open the case, then click on the **Outstanding** tab. The following window is displayed:

For the most part, the information provided on the list of outstanding items is the same as found on work item lists. For descriptions of each of the columns, see Work Item List Columns.

An exception is the **Work Queue** column, which shows you whose work queue the outstanding work item is in. If there is no entry in the **Work Queue** column, the outstanding item is for a step that doesn't result in a work item — it resulted in some other action, such as an external program being started, a sub-procedure being called, etc.

A couple of other columns that appear on the list of outstanding work items that don't appear on the work item list are **Path** and **Sub-Case Number** — these pertain to sub-cases — for information, see Viewing Sub-Case Information.

Also note that the **Arrival Date/Time** column allows you to determine how long each item has been outstanding, i.e., how long the process has been halted along that path (sort on this column by clicking on the column header).

For information about changing the columns on the list of outstanding work item, see Customizing Columns in a List.

Opening Outstanding Work Items

Work items in the list of outstanding work items can be opened in one of the following ways:

- Double-click on the desired work item in the list of outstanding work items.
- Select one or more work items in the list, then:
  - press the **Enter** key,
  - select **Open Selected Work Item(s)** from the **Tools** menu on the list,
  - right-click the mouse button on the selected work item(s) and select **Open Selected Work Item(s)** from the drop-down menu, or
  - click on the  icon on the list toolbar.

Note, however, that you must have access to the work queue in which the work item resides to be able to open it. If you select a work item to which you don't have access, the **Open Selected Work Item(s)** tool and menu selection is displayed. (The **Open Selected Work Item(s)** tool and menu selection is also disabled if you select multiple work items, and you don't have access to any one of the selected work items.)

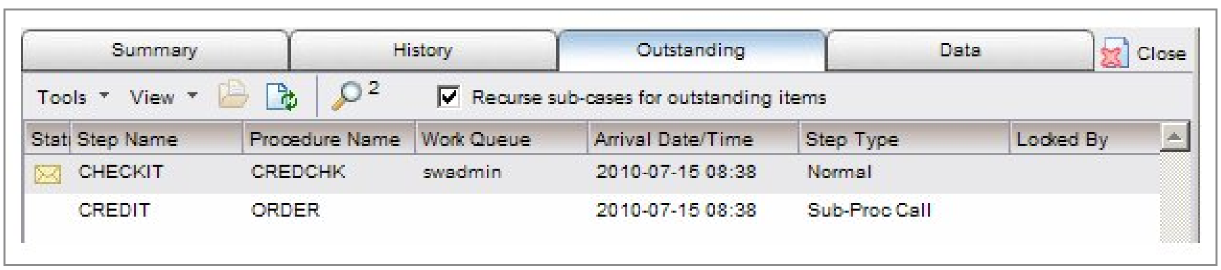
When opening work items from the list of outstanding work items, they are always opened in a floating form, i.e., they cannot be opened in the Preview Pane.

For more information about opening work items in general, see Opening Work Items.

Viewing Sub-Case Information

By default, the outstanding work item list shows outstanding work items that are located in sub-cases that are currently outstanding. This is controlled by the **Recurse sub-cases for outstanding items** check box. You can turn off the displaying of sub-case information in the current list by unchecking the **Recurse sub-cases for outstanding items** check box, then refreshing the list. You can also change the default setting for this check box using user options — see Sub-Case Version Options.

The following example shows both the outstanding sub-procedure call step, as well as the outstanding work item in the sub-case:



The following columns are available on the outstanding work item list to provide information about sub-procedures that have been started in the case:

- The **Path** column provides the *path* to the outstanding step, relative to the main procedure. This allows you to determine if the outstanding step is in the main procedure or a sub-procedure. For example, if the path is something like "CREDIT", it is a step in the main procedure. If it consists of multiple step names separated by vertical bars, the outstanding step is located in a sub-procedure. For example, if the path is "CREDIT|CHECK", the CREDIT step is in the main procedure and the CHECK step is in a sub-procedure (CREDIT would be a sub-procedure call step). If the case contains *dynamic sub-procedure call steps* or *graft steps* that start multiple sub-procedures, the name of the dynamic sub-procedure call step or graft step in the

Path will include an *index* in square brackets. The index (which is zero based) indicates the sequential order in which the sub-procedure was started by the engine for that dynamic sub-procedure call step or graft step. It allows you to identify the path through multiple sub-procedures to the desired outstanding item. For example, a path of "DYNAMIC[0]|STEP1" tells you that DYNAMIC is a dynamic sub-procedure call step in the main procedure; the first sub-procedure it started resulted in STEP1 being outstanding.

- The **Sub-Case Number** column identifies the case number of the sub-procedure started by the sub-procedure call step, dynamic sub-procedure call step, or graft step.

Refreshing the Outstanding Items List

The information displayed in the **Outstanding** tab is the information that was downloaded from the iProcess Engine when the case list was initially displayed. You can refresh this information by either:

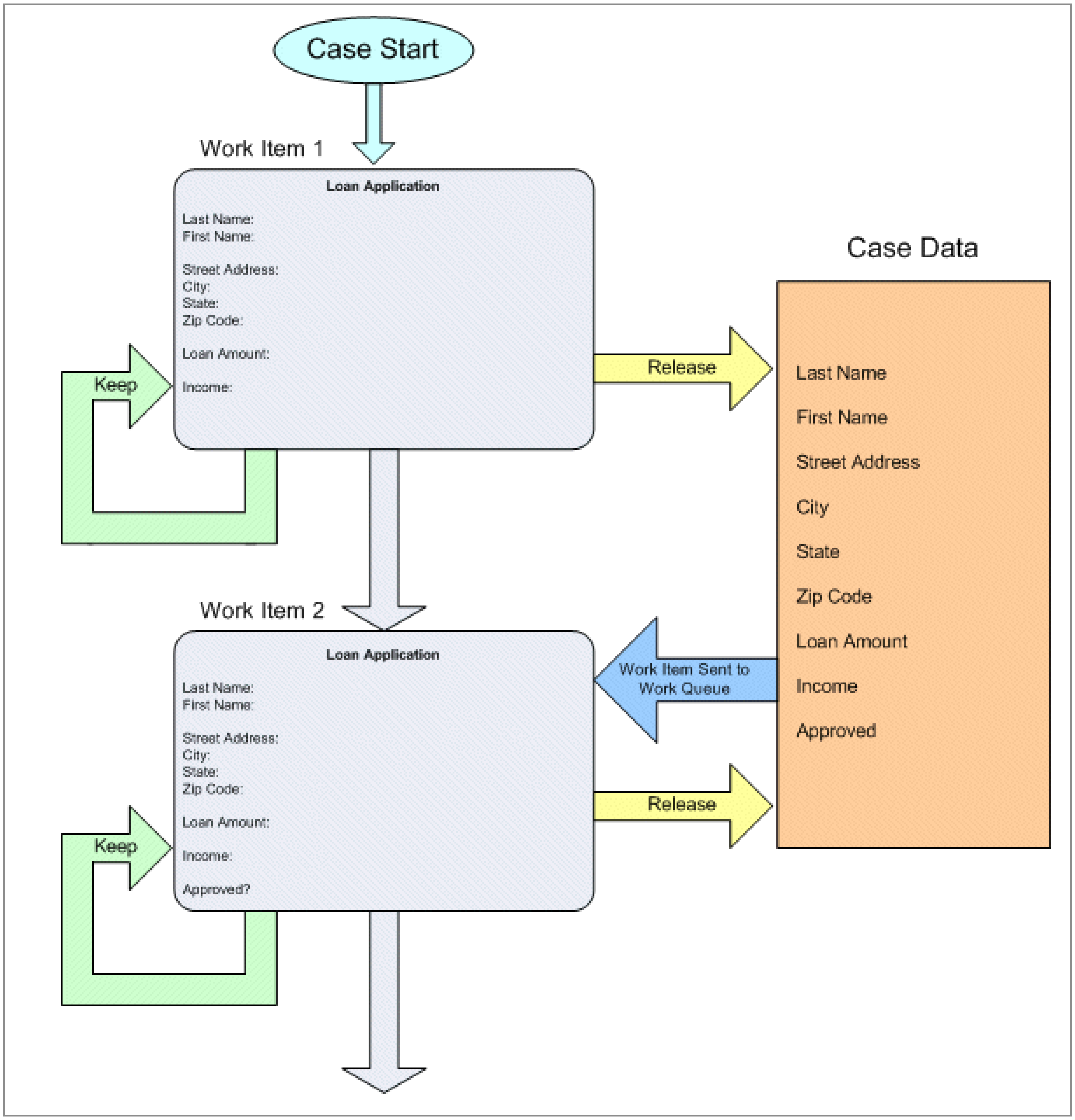
- clicking the  icon, or
- by selecting **Refresh Outstanding Steps** from the **View** menu.

Case Data Fields

Work item data is the data that is entered into forms on a work item that is then *kept*.

Case data is the data that is saved in the database each time a work item is *released*.

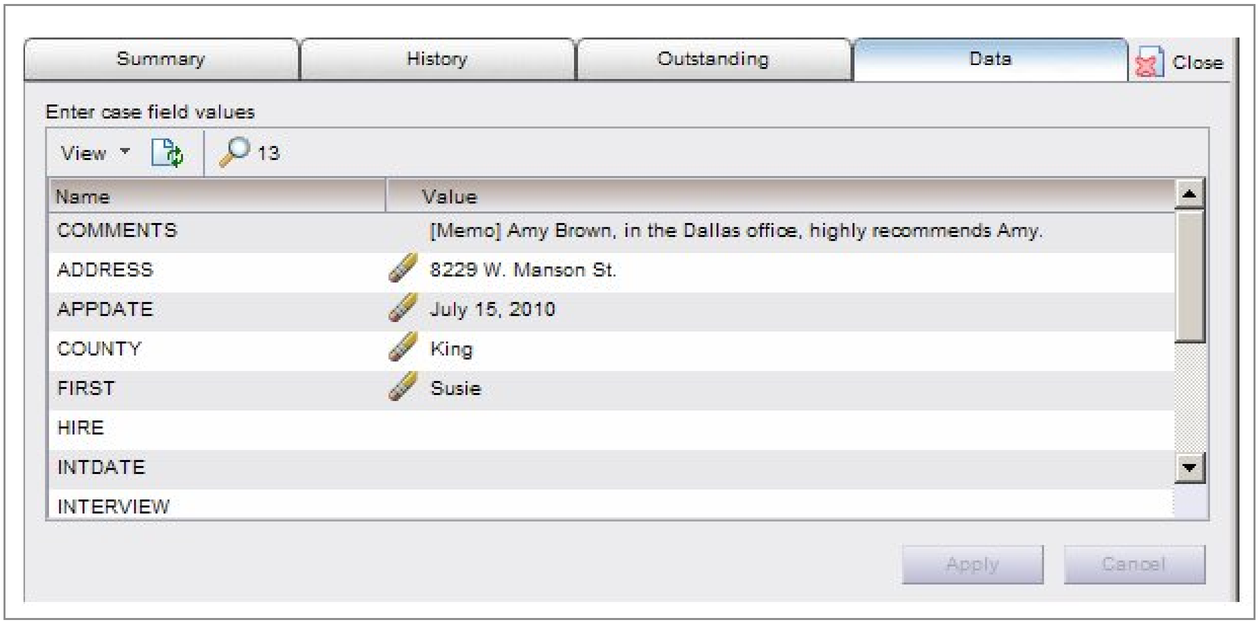
The graphic below illustrates that as information is entered into forms in work items, that information remains with the work item as long as the work item is kept — it is written to case data in the database only when the work item is released (the data associated with the work item before it is written to case data, is referred to as *work item data*).



Each case of a procedure has its own unique case data. Case data is written to the work item when a work item is added to a work queue.

Note that depending on how your procedure is designed, there may be more than one work item in a case that contains the same field. The value in the common field in each work item will be the value that was in case data when the work item was sent to a work queue. As each work item is released, the value in the field in that work item is written to case data. That means that when the case is finished, the value of the common field in case data will be the value from the last work item released that contained the common field.

To view the case data for a case, open the desired case, then click on the **Data** tab. The following window is displayed:



The **Name** column lists all fields that are defined in the procedure/case.

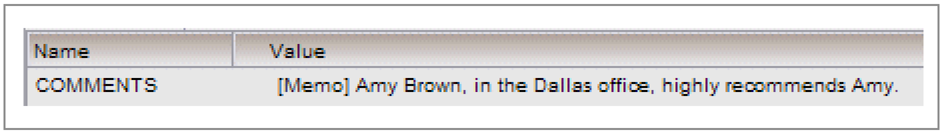
The **Value** column lists the current values for each field in the case. These are the values stored in the database for the case — when a work item is opened in this case, these are the values that are written to that work item. Note that memo fields work a little different than the other field types — for information about memo fields, see Viewing Memo Field Values).

Note: Since *work item data* is the data that is stored in the work item itself, to view work item data, you must open the work item and examine the values entered into the fields on the form.

Viewing Memo Field Values

One of the possible types of fields that can be defined in a procedure is the **memo** field. Memo fields differ from other field types in that they do not have a set size; they can be unlimited length.

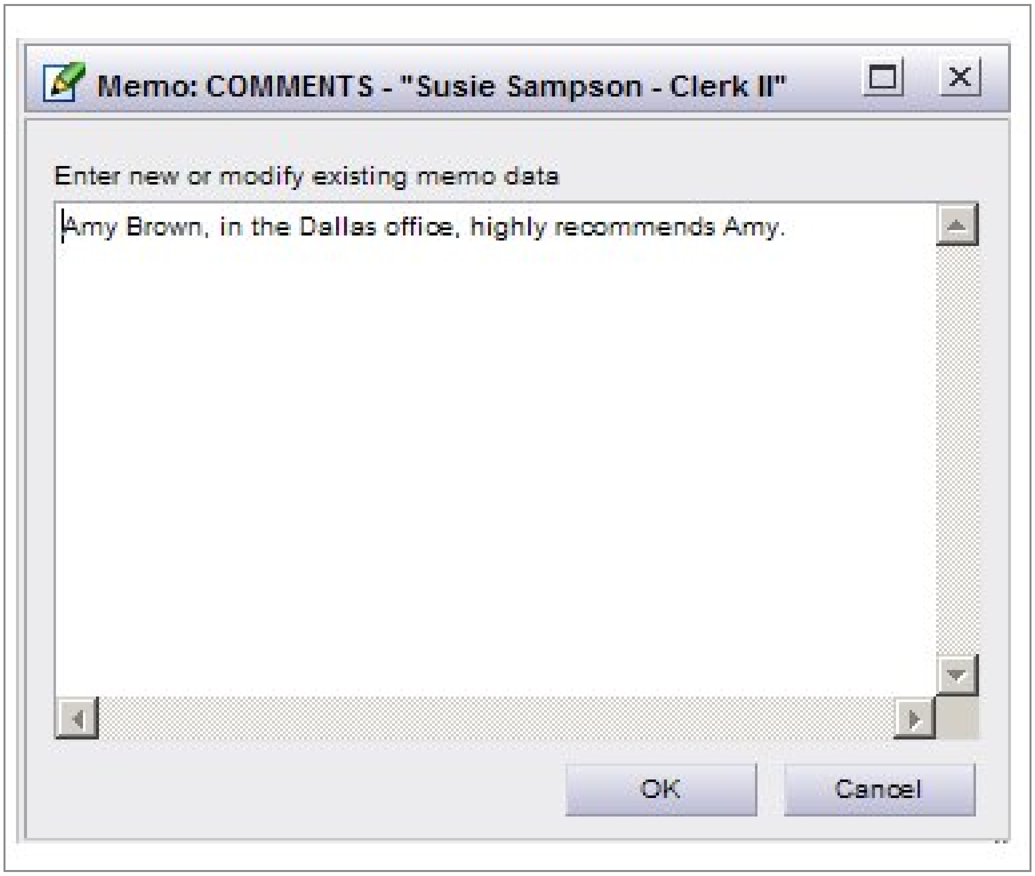
Memo fields are denoted on the case **Data** tab by “[Memo]” appearing in the **Value** column, followed by the first 60 characters of data in the memo field. For example:



Name	Value
COMMENTS	[Memo] Amy Brown, in the Dallas office, highly recommends Amy.

Clicking on “[Memo]” causes the text to change to a **Memo** button. If the cursor is placed over the **Memo** button, tool-tip text displays the first 120 characters of the text in the memo field; if the text in the memo field exceeds 120 characters, the tool-tip text is followed by “...”.

Clicking on the **Memo** button displays the **Memo** dialog. For example:



You can change the value of the memo field by typing in the desired text, then clicking the **OK** button. The new value will be written to case data (in the database) for this case.

Refreshing Case Data

The case data displayed on the **Data** tab is a **snap shot** of the case data at the time the case list was downloaded from the iProcess Engine. You can *refresh* the case data to get the most recent data from the iProcess Engine by either:

- clicking the  icon, or
- selecting **Refresh Case data** from the **View.**

Note that refreshing the case data refreshes the information for this single case.

Changing Case Data

You can directly change the values of case data using the **Data** tab.

To change case data:

1. Click in the **Value** column for the field whose case data you want to change:

   You can also use the eraser icon to clear the contents of the field.

2. Type in the desired value.

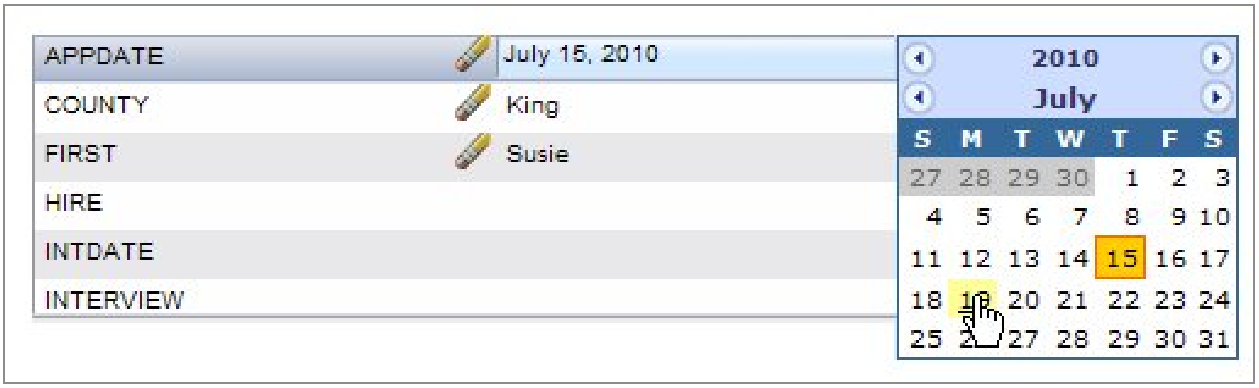
   > **Note:** If you delete the value in a text field, the value is set to an empty string. If you delete the value in any other type of field (numeric, date, etc.), the field is set to an uninitialized state.

   Notice that once you change the value in any field, the following message is shown on the bottom of the **Data** tab to notify/remind you that there’s been a change:

3. Click the **Apply** button to write the new value to case data in the database.

Date Fields

Each date field on the **Data** tab contains a “date picker” icon to the right of the field that appears when you click in the date field. Clicking on the date picker icon displays a calendar from which you can easily select a date. The selected date is automatically entered into the date field:



Time Fields

Time fields are divided into three sections: hour, minute, and AM/PM designator. You can move through the different sections by physically placing the cursor in the section, or by tabbing through them.

Each time field on the **Data** tab also contains a “time picker” icon to the right of the field that appears when you click in the time field. Clicking on the time picker icon “up” or “down” arrows causes the value in the portion of the field in which your cursor is located to increase or decrease, respectively. When the cursor is in the AM/PM portion of the field, clicking the “up” or “down” arrow causes it to toggle between AM and PM.

Or, you can just type in the desired values.

Case Suspensions

You can *suspend* activity in a case. Note that when you suspend a case, you are suspending the entire *case family*, which includes the main case and all of its sub-cases, if any. For information about sub-cases, see Sub-Procedures.

When a case is suspended, current work items from that case can no longer be opened.

If a work item is already open when the case is suspended, the work item can still be kept, which causes the work item to become immediately suspended, and it cannot be opened again until the case is reactivated. The opened work item can also be released; this causes any new work items as a result of the release to become immediately suspended (unless they are flagged to ignore suspensions; see Ignoring Case Suspensions).

Other effects of suspending a case are:

- **Deadlines** will continue to expire. However, if a deadline expires while the case is suspended, no action will be carried out until the case is reactivated. Once the suspended case is reactivated, the process flow will proceed as if the deadline just expired. For more information about deadlines, see Work Item Deadlines.
- **Event steps** do not recognize suspensions. If you trigger an *event*, the event is processed (because it doesn't result in a work item), but steps immediately after an event step that result in work items are suspended (unless they are flagged to ignore suspensions; see Ignoring Case Suspensions). For more information about triggering events, see Triggering an Event.
- **Withdrawals** will not occur while a case is suspended. For example, if a deadline expires (which occurs during suspensions), and the deadline definition states to withdraw the work item, the withdrawal will occur after the case has been reactivated. For more information about withdrawals, see Deadline Withdrawals.

Suspending a Case

To suspend one or more cases, follow these steps:

1. From the case list, select one or more cases, then:

   — click on the  icon, or

   — select **Suspend Case(s)** from the **Tools** menu.

   Or, from the **Summary** tab for a case, you can suspend that individual case by either:

   — clicking on the  icon, or

   — by selecting **Suspend Case** from the **Tools** menu.

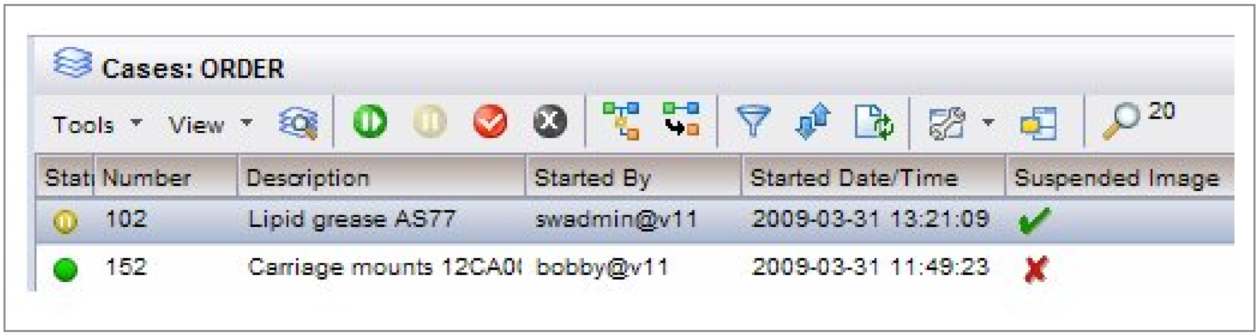
   A dialog is displayed to confirm that you want to suspend the selected case(s).

2. Click **OK** to confirm.

Suspension Status

A case's suspension status can be viewed in the case list in two ways:

- **Case Status Icon** - After a case is suspended, the case status icon in the case list changes to an orange-colored ball.
- **Suspended Column** - Depending on how your columns are set up, you may have a **Suspended** or **Suspended Image** column indicating whether or not the case is currently suspended (see Filtering a Case List).



Ignoring Case Suspensions

When a procedure is defined, a step can be flagged to ignore case suspensions. If flagged to ignore case suspensions, a step is processed normally even if the case in which it is located has been suspended, i.e., work items representing that step can be opened and processed as desired.

Reactivating a Suspended Case

Reactivating a suspended case causes the process to flow as usual. Work items that were suspended because the case they are a part of was suspended can now be opened and processed normally.

To reactivate a suspended case, follow these steps:

1. From the case list, select one or more cases to reactivate, then:
   — click on the  icon, or
   — select **Activate Case(s)** from the **Tools** menu.

Or, from the **Summary** tab for a case, you can reactivate that individual case by:

— clicking on the  icon, or

— by selecting **Activate Case** from the **Tools** menu.

A dialog is displayed to confirm that you want to reactivate the selected suspended case(s).

2. Click **OK** to confirm.

Predicting the Outcome of a Case

Case prediction provides the means for predicting the expected outcome of a live case. Running the case prediction function causes a list of “predicted work items” to be returned that represent the work items that are currently due (outstanding work items), as well as the work items that are expected to be due in the future.

Included with the predicted work items returned is information about the expected times the work items are predicted to start and end, providing information that can be used to predict the outcome of the case. This can be used to improve work forecasting and estimate the expected completion of cases.

An example use of case prediction is to determine all work expected to be performed for a particular patient during his expected stay in the hospital.

The prediction process moves through the case step-by-step using case data that has been entered so far in the case. Each step uses an expected duration (decided at design time) to calculate a start and end processing time for each step as it progresses through the prediction process. When the process is complete, you can use these end processing times to predict the outcome of the case.

During the prediction process, deadlines are processed, and withdrawal actions are performed, where appropriate.

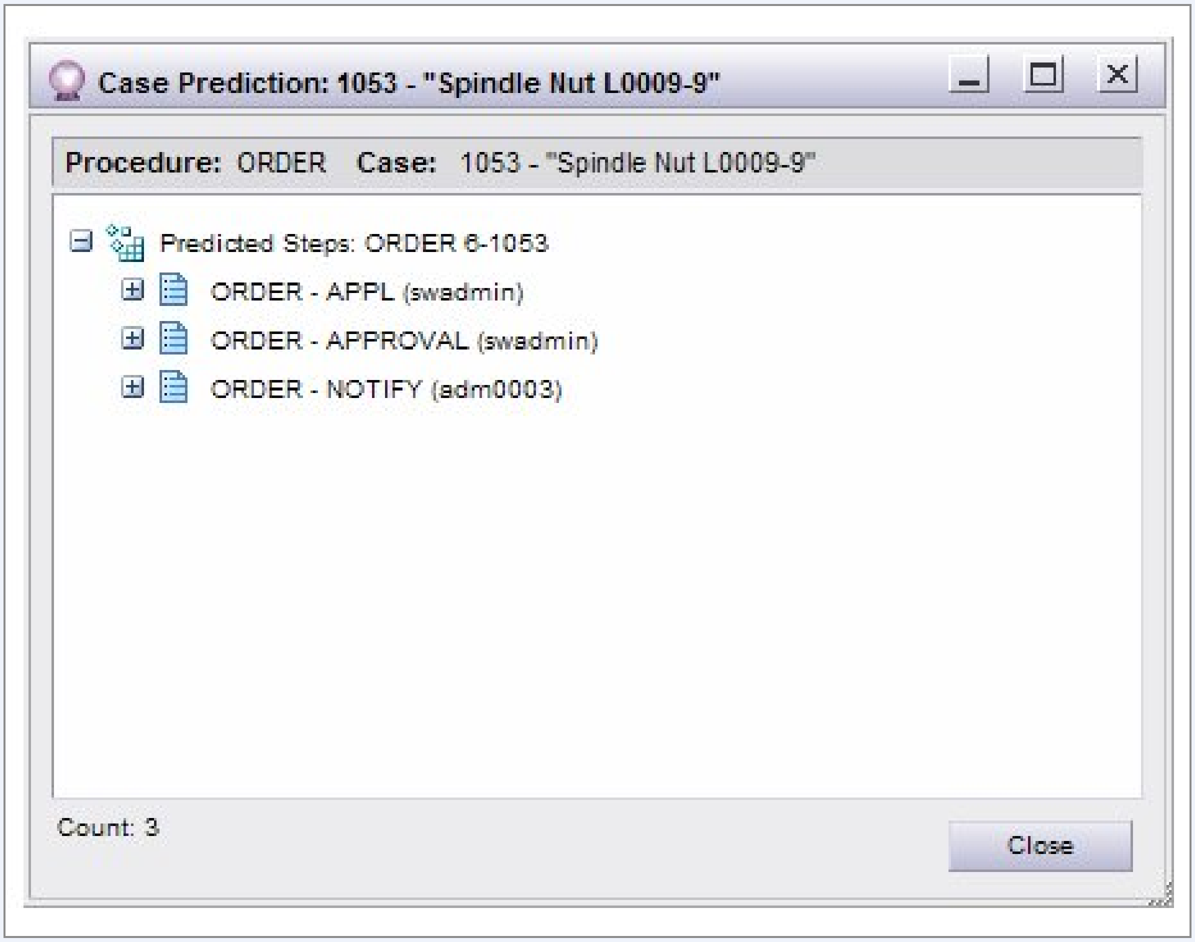
To perform a case prediction:

1. Open the desired case and display the **History** tab.
2. Either:

— click the  icon, or

— select **Predict Case** from the **Tools** menu.

A dialog similar to the following is displayed:



This provides a list of the *predicted steps* — the currently outstanding steps, and steps predicted to be outstanding as the case is processed to completion. For each step, it also indicates in parentheses the addressee of the step.

3. Click on a **+** icon to expand one of the steps to view information about the predicted start and end times for the step. Expanding the final step provides information about when the case is predicted to be completed:

   In this example, the case is predicted to end at 3:27 PM on July 15, 2010. (Whether or not the start/end times show seconds and microseconds depends on the setting of the **Show seconds and microseconds** check box on the **History** tab — for more information, see Case History.)

   Note that predicted steps can also be viewed using the graphical case history feature (you must configure the graphical case history display to show predicted steps — see Viewing a Graphical Case History).

4. Click **Close** to close the **Case Prediction** dialog.

Changing the Process Flow in a Case

There are a couple of ways in which the process flow in a case can be altered on an ad-hoc basis. One allows you to jump to different steps in the procedure, while the other allows you to trigger an event step at any time.

These are described in the following subsections.

Jumping to New Outstanding Steps

The “process jump” feature in the iProcess Workspace (Browser) allows you to change the process flow of a case in the following ways:

- You can select currently outstanding steps you would like to “withdraw,” i.e., make them no longer outstanding. (For information about outstanding items, see Outstanding Work Items in the Case.)
- You can specify a set of steps to “jump to,” making those steps the new outstanding items.
- You can optionally specify new case data when jumping to new outstanding work items. For information about case data, see Case Data Fields.

To jump to new outstanding steps:

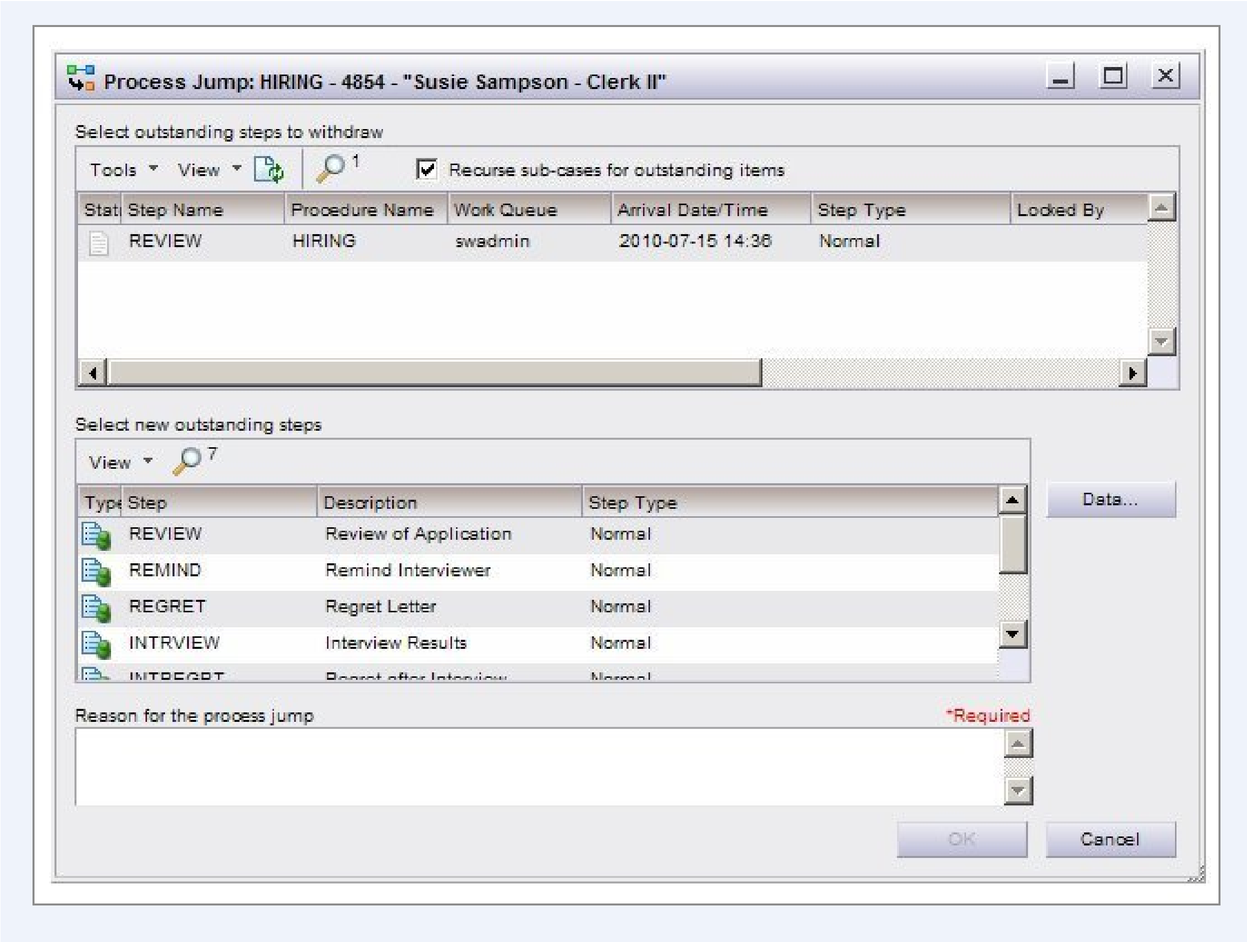
1. Select the desired case in the case list, or open the desired case and select the **Summary** tab for the case.
2. From either the case list or the **Summary** tab:

   — click on the  icon, or

   — select **Process Jump** from the **Tools** menu.

   If the case you have selected is currently active, a dialog is displayed that indicates the system must suspend the case while you are performing the process jump operation. This is because the system must display a list of the currently outstanding steps in the case — temporarily suspending the case prevents the outstanding steps in the case from changing while you are selecting from this list. The suspension is automatically lifted when you are finished with the process jump operation. Click **OK** on this dialog to suspend the case and display the **Process Jump** dialog (see below).

If the case you have selected was already suspended, the **Process Jump** dialog is displayed:



The **Select outstanding steps to withdraw** section lists all of the currently outstanding work items in the case — these are the work items that can be withdrawn. (This is the same list of outstanding work items as from the **Outstanding** tab. For information about this list, such as the available columns, how to display sub-case information, etc., see Case Data Fields.)

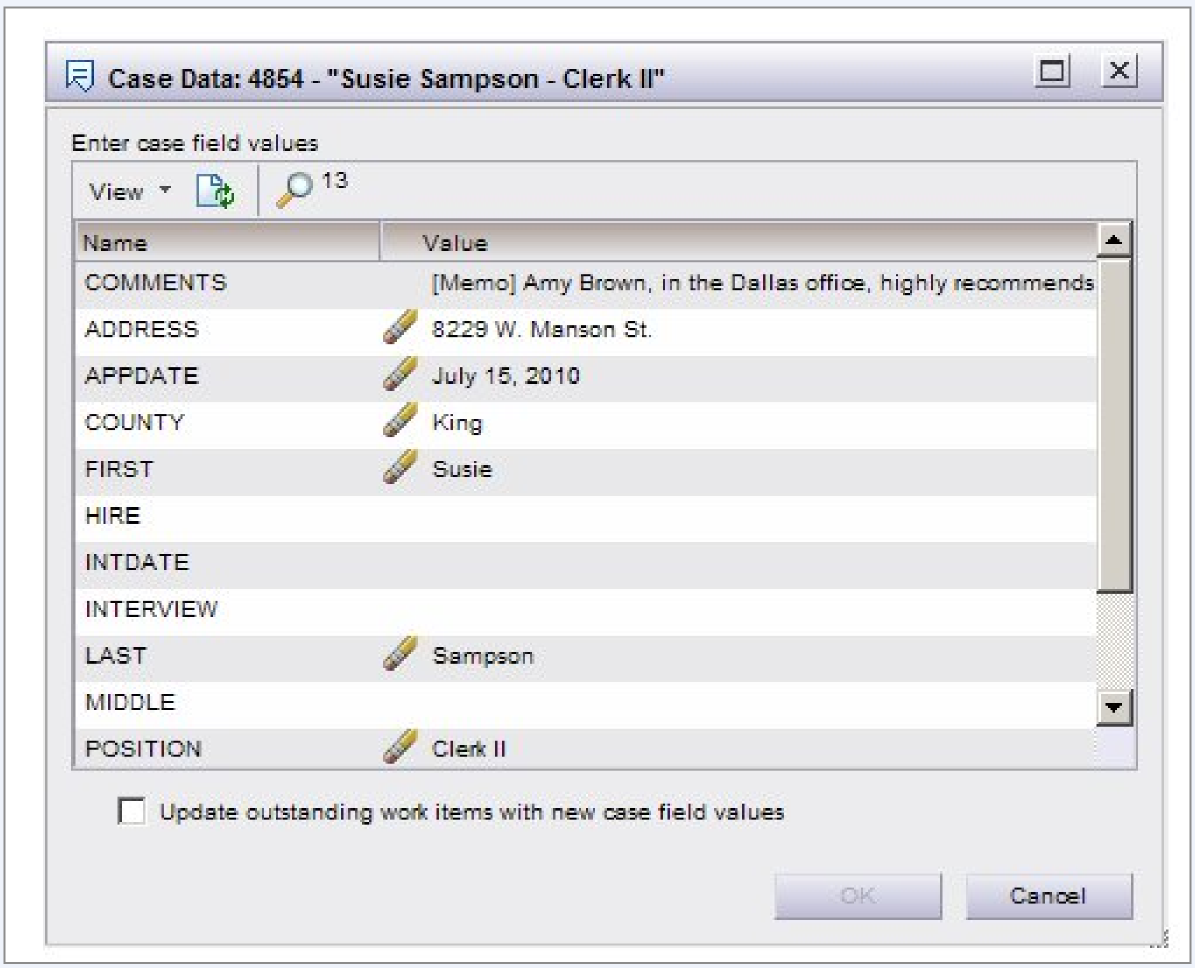
Note that, by default, the outstanding work item list shows outstanding work items that are located in sub-cases that are currently outstanding. This is controlled by the **Recurse sub-cases for outstanding items** check box. You can turn off the displaying of sub-case information in the current list by unchecking the **Recurse sub-cases for outstanding items** check box, then refreshing the list. You can also change the default setting for this check box using user options — see Sub-Case Version Options.

The **Select new outstanding steps** section lists all of the steps in the case, allowing you to jump to any of the steps. The **Usage URL** column will contain a value only if the step was defined with this information. The usage URL (uniform resource locator) is typically a link that provides information about the step.

3. In the **Select outstanding steps to withdraw** section, select one or more steps you would like to withdraw.

4. In the **Select new outstanding steps** section, select one or more steps you would like to make outstanding.

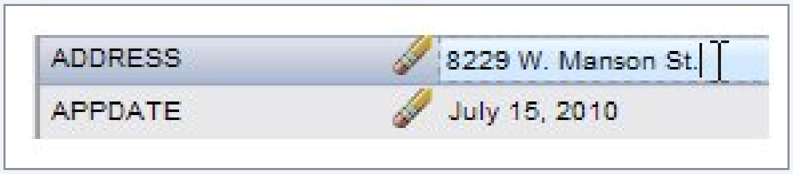
5. If you want to also change case data when the process jump is performed, click the **Data** button. The following dialog is displayed:



This dialog provides a list of all of the data fields defined in the case. You can change the value of one or more of the data fields. (Note that the data shown in this dialog is “case data”, not “work item data”. For information about the difference, see Case Data Fields.)

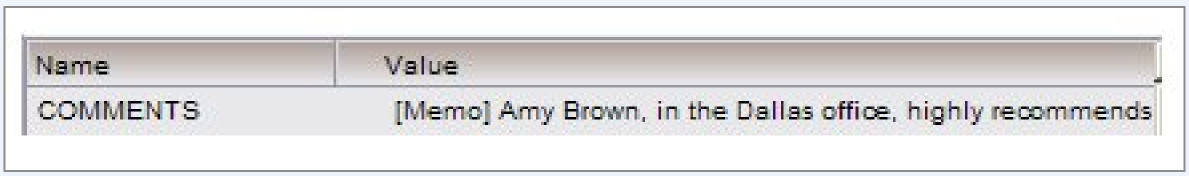
The **Case Data** dialog also contains a **Refresh** button to allow you to get the most recent case data for the case.

To change the data in a field, click in the **Value** column for the desired field, then type in the new value:



You can also use the eraser icon to clear the contents of the field.

If the case contains one or more memo fields, they are denoted by “[Memo]” appearing in the **Value** column for that field:

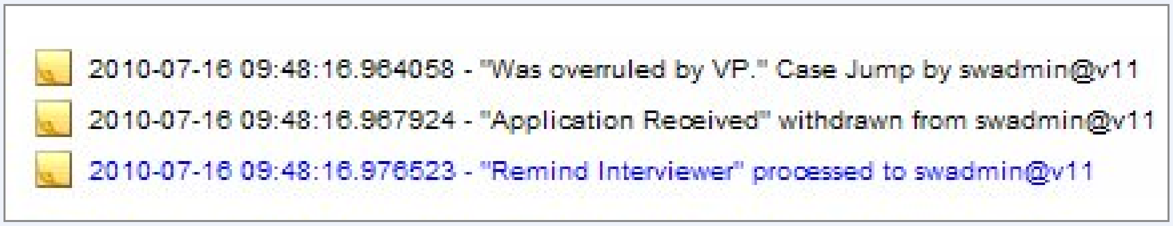


To change the value of a memo field, click on “[Memo]”, which causes it to change to a **Memo** button. Click on the **Memo** button to display the **Memo** dialog. Use the **Memo** dialog to modify the value of the memo field as desired, then click **OK** to save the change.

You can also choose to update the “work item data” for the case. To do this, click in the **Update outstanding work items with new case field values** check box. For information about the difference between case data and work item data, see Case Data Fields.

Click **OK** to apply the changes you’ve made, or **Cancel** to discard the changes you’ve made. (Note that you must click **Apply** on the **Process Jump** dialog for case data changes to take effect — clicking **Cancel** on the **Process Jump** dialog causes changes made to case data to be discarded.)

6. Enter information about why you are performing the process jump in the **Reason for the process jump** field. This is a required field. This information is added to the case history entry that shows the process jump:



In this example case history, “Was overruled by VP” was entered for the process jump reason (this example also shows the entry for the withdrawal and the new work item becoming outstanding).

7. Click **Apply** to perform the process jump.

You can view the **Outstanding** tab for the case to see that the currently outstanding work items have changed (see Outstanding Work Items in the Case).

Triggering an Event

An *event step* is a step in a procedure that allows you to control the process flow in various ways, depending on how your procedure was designed. It can be used to perform actions such as:

- Suspending the flow of a case until an external action takes place.
- Starting a parallel branch of a case.
- Pausing a case for a specific period of time.

When the process flow reaches an event step, process flow is halted, and remains halted, until the user *triggers the event*. When the event is triggered, the process flow will continue again.

However, an event step does not need to be outstanding (i.e., process flow has reached the step) to be triggered. You can trigger an event step at any time, such as:

- before the process flow has reached the event step,
- after the process flow has been halted at the event step, or
- after the event step has been triggered — one event step can be triggered multiple times. This allows you to run a segment of the procedure at any time, as many times as necessary.

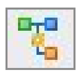
Also note that other actions can be performed when an even step is triggered. These include resurrecting a closed case, as well as recalculating deadlines in the case. These actions are described in the following steps used to trigger an event.

Event steps do not result in work items, although they do result in an outstanding item if the process flow has reached, and is halted, at the event step. For information about outstanding items, see Outstanding Work Items in the Case.

You can trigger an event step on a case that is suspended. However, steps immediately after an event step that result in work items are suspended (unless they are flagged to ignore suspensions).

To trigger an event step, follow these steps:

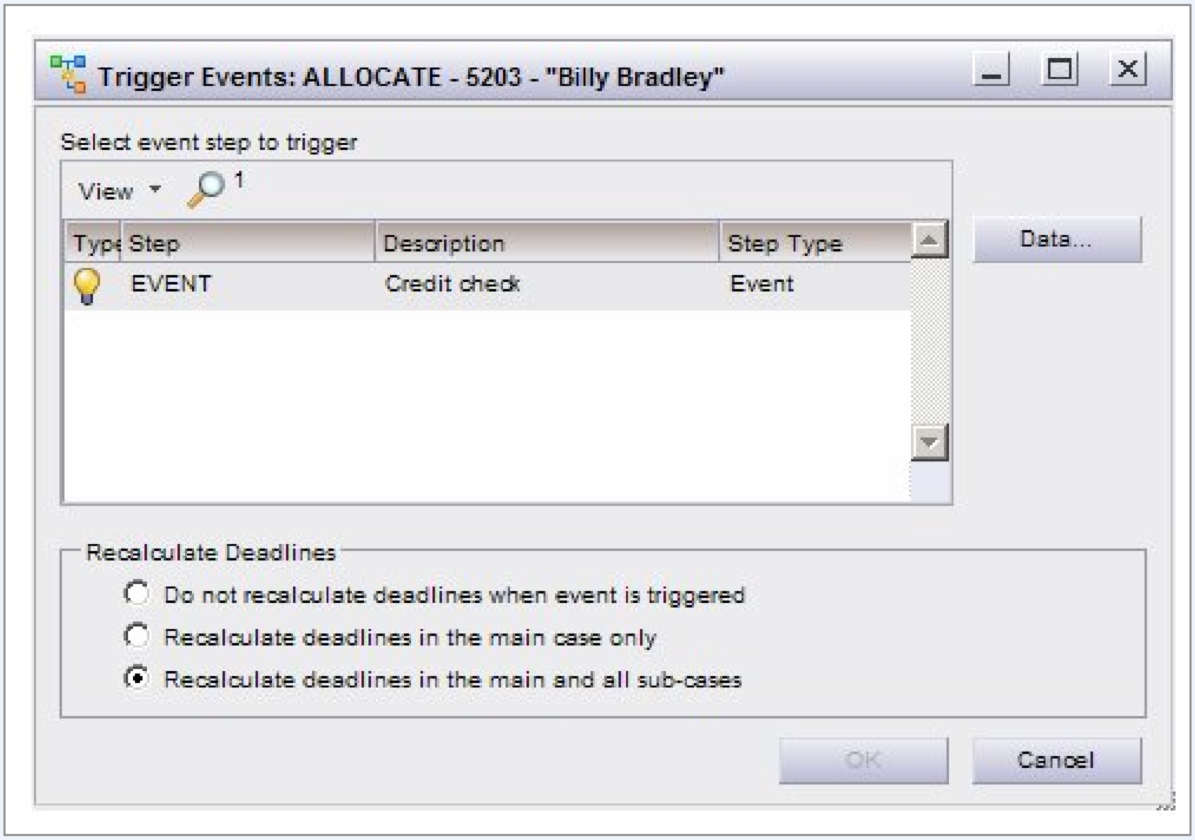
1. Select the desired case in the case list, or open the desired case and select the **Summary** tab, then either:

   — click on the  icon, or

   — select **Trigger Events** from the **Tools** menu.

   If the case you had selected is a closed case, triggering an event step in the case will cause the closed case to be *resurrected*, i.e., it becomes active again. If the case is closed, a dialog is displayed that says that proceeding will cause the closed case to become active; click **OK** to proceed.

   The following dialog is displayed:



This dialog lists all event steps in the case.

2. If you are using the trigger event to recalculate the deadlines in the case, click on the appropriate **Recalculate Deadlines** radio button, as follows:

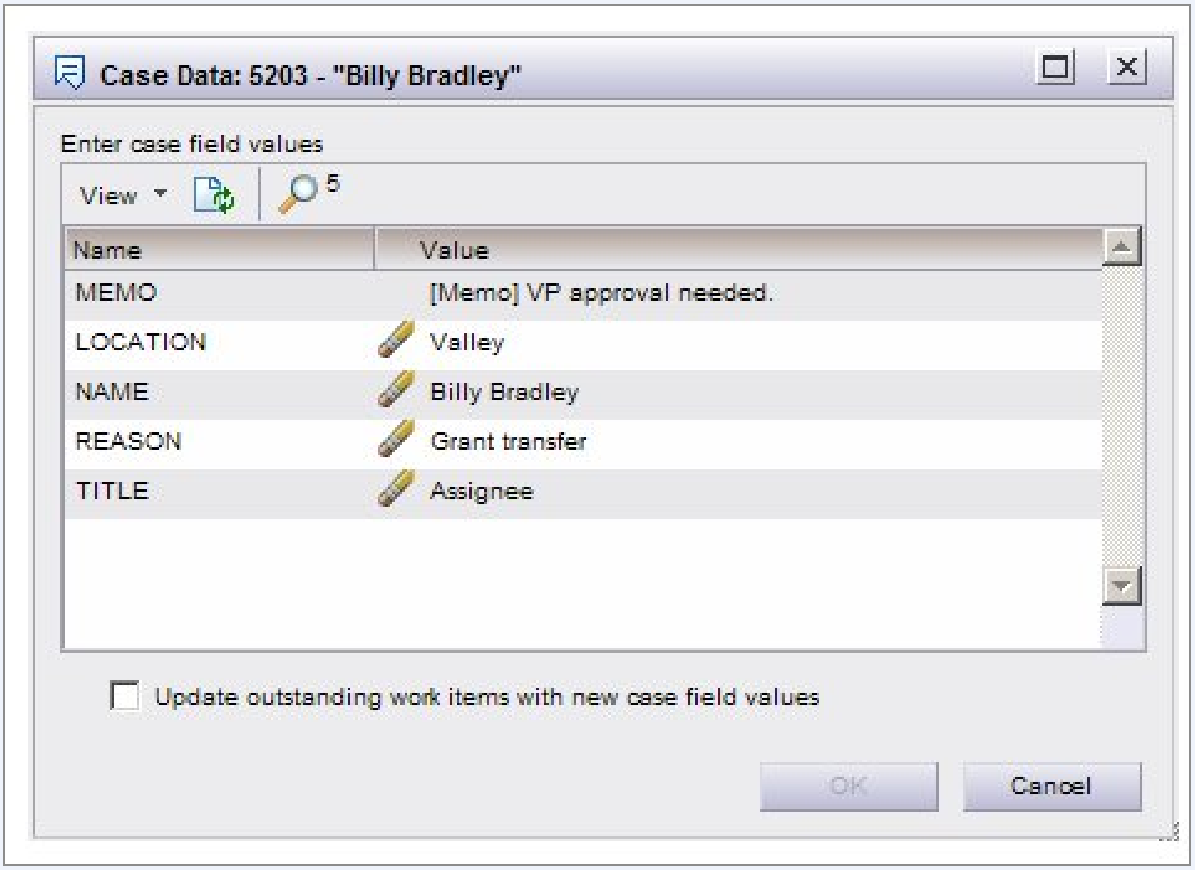
   — **Recalculate deadlines in the main case only** - Only deadlines in the main case are recalculated.

   — **Recalculate deadlines in the main and all sub-cases** - Also recalculates deadlines in sub-procedures that have been started in this case.

   The default selection of **Do not recalculate deadlines when event is triggered** is for all other uses of trigger event besides recalculating deadlines.

3. Select the event step you would like to trigger.

4. If you want to also change case data when the event is triggered, click on the **Data** button. The following dialog is displayed:



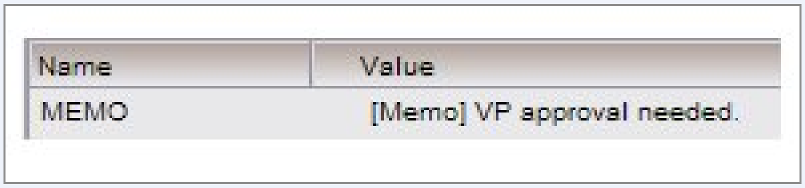
This dialog provides a list of all of the data fields defined in the case. You can change the value of one or more of the data fields. (Note that the data shown in this dialog is “case data”, not “work item data”. For information about the difference, see Case Data Fields.)

The **Case Data** dialog also contains a **Refresh** button to allow you to get the most recent case data for the case.

To change the data in a field, click in the **Value** column for the desired field, then type in the new value:

You can also use the eraser icon to clear the contents of the field.

If the case contains one or more memo fields, they are denoted by “[Memo]” appearing in the **Value** column for that field:



Name	Value
MEMO	[Memo] VP approval needed.

To change the value of a memo field, click on “[Memo]”, which causes it to change to a **Memo** button. Click on the **Memo** button to display the **Memo** dialog. Use the **Memo** dialog to modify the value of the memo field as desired, then click **OK** to save the change.

If the case contains outstanding work items, you have the option of also updating the work item data, as well as the case data. If the case contains outstanding work items, the **Update outstanding work items with new case field values** check box is displayed on the dialog (it’s not displayed if there are no outstanding work items). Ensure this check box is checked if you would like to also update work item data. For information about the difference between case data and work item data, see Case Data Fields.

> **Note:** If a work item is open when you trigger an event step and update its work item data, when the user who has the work item open tries to keep or release the work item, a message is displayed informing them that the work item has been updated elsewhere since they opened it. The keep or release operation is cancelled and any changes to field values made by the user are lost. Updates to field values made by the trigger event are applied.

Click **OK** to apply the changes you’ve made, or **Cancel** to discard the changes you’ve made. (Note that you must click **OK** on the **Events** dialog for case data changes to take effect — clicking **Cancel** on the **Events** dialog causes changes made to case data to be discarded.)

5. Click **OK** on the **Events** dialog to perform the trigger event.

Closing Cases

You can *close* a currently active case of a procedure, making it *inactive*. This stops the process flow for that case.

You must have system administrator authority to close cases.

To close one or more cases, follow these steps:

1. Select one or more cases in the case list, or open the desired case and select the **Summary** tab.
2. Do one of the following:

   From the case list, click on the  icon, or select **Close Case(s)** from the **Tools** menu, or right-click on the selected case(s) and select **Close Case(s)** from the drop-down menu.

   From the **Summary** tab, click on the  icon, or select **Close Case** from the **Tools** menu.

   A dialog is displayed to confirm that you want to close the selected case(s).
3. Either check or uncheck the **Trigger events when cases are closed** check box as follows:
   — Check the box to cause a procedure-level event to be triggered when the case is closed. This would be used if the procedure definition catches procedure-level events to perform some custom business logic either before or after closing the case.

   — Uncheck the box to prevent an event from being triggered when the case is closed.
4. Optionally specify a priority value in the **Priority** field.

   This specifies the priority at which the case close occurs in the background. The valid entries are 0 - 999, where 0 causes the method to use the default priority. Out of the box, the default priority is set to 50. Therefore, if 0 is specified, it is using a priority of 50 (note that an administrator may have changed the default priority value to a value other than 50, but that is typically not done). This allows you to force case close requests to process before other message requests that are pending at the server; a value of 1 is the highest priority. You can also force case close requests to defer to other message requests that are sent to the server; a value of 999 is the lowest priority.
5. Click **OK** to confirm you want to close the case(s).

The case’s status icon in the case list changes to a red circle (like a stop light) when it is closed.

Status	Number	Description	Started By	Started Date/Time	Terminated Date/Time
	351	Austin - FOD445	swadmin@v11	2009-03-31 14:47:06	2010-07-16 10:02:00

Also notice that the **Terminated Date/Time** column shows the date and time the case was closed (you must refresh the list for the date/time to appear in the **Terminated Date/Time** column).

Resurrecting a Closed Case

A closed case can be "resurrected" (i.e., it's status changed to "active") using the "trigger event" function (the procedure/case must contain an event step). For information about using the trigger event function to resurrect a closed case, see Triggering an Event.

Note that when a closed case is resurrected using the trigger event function, the process flow will proceed from the event step that was used to trigger the event.

The case's status icon changes to a green circle after it's been resurrected, plus the **Terminated Date/Time** column is cleared:

Status	Number	Description	Started By	Started Date/Time	Terminated Date/Time
	351	Austin - FOD445	swadmin@v11	2009-03-31 14:47:06	

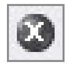
Purging Cases

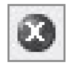
Purging cases permanently deletes them from the system. You can purge cases that have any status.

You must have system administrator authority to purge cases.

To purge cases, follow these steps:

1. Select one or more cases in the case list, or open the desired case and select the **Summary** tab.
2. Do one of the following:

From the case list, click on the  icon, or select **Purge Case(s)** from the **Tools** menu, or right-click on the selected case(s) and select **Purge Case(s)** from the drop-down menu.

From the **Summary** tab, click on the  icon, or select **Purge Case** from the **Tools** menu.

Two dialogs are displayed to confirm that you want to purge the selected case(s) (because it is non-reversible).

3. On the first confirmation dialog, either check or uncheck the **Trigger events when cases are purged** check box as follows:
   - Check the box to cause a procedure-level event to be triggered when the cases are purged. This would be used if the procedure definition catches procedure-level events to perform some custom business logic before purging the cases.
   - Uncheck the box to prevent an event from being triggered when the case is purged.
4. Optionally specify a priority value in the **Priority** field.

   This specifies the priority at which the case purge occurs in the background. The valid entries are 0 - 999, where 0 causes the method to use the default priority. Out of the box, the default priority is set to 50. Therefore, if 0 is specified, it is using a priority of 50 (note that an administrator may have changed the default priority value to a value other than 50, but that is typically not done). This allows you to force case purge requests to process before other message requests that are pending at the server; a value of 1 is the highest priority. You can also force case purge requests to defer to other message requests that are sent to the server; a value of 999 is the lowest priority.
5. Click **OK** to confirm you want to purge the case(s).

The case's status icon in the case list changes to a black circle after you've purged it.

Status	Number	Description	Started By	Started Date/Time	Terminated Date/Time
	255	Accountant3	swadmin@dana1(	2007-02-08 14:38:25	

Refreshing the case list causes purged cases to be removed from the list.

User Options

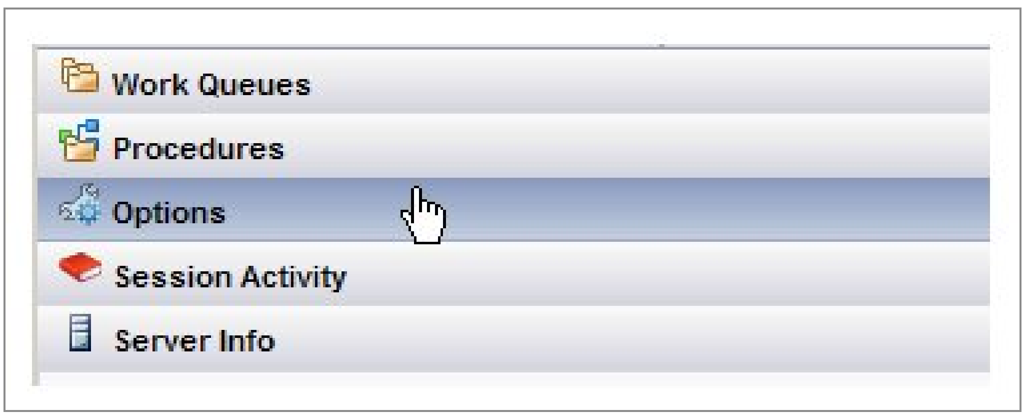
This section describes setting up user options, which define system behavior based on the user that logs into the system.

Introduction

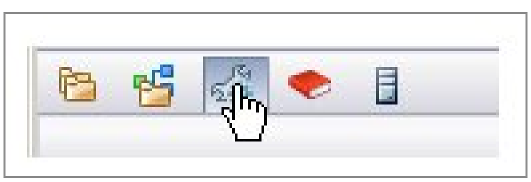
User options establish default settings for each user that logs into the iProcess Workspace (Browser). These include things such as whether the procedure list or work queue list is displayed when the user first logs in, whether preview is turned on by default, the size/location of work item forms, etc.

To set your user options, click on the **Options** button or icon in the lower left part of the iProcess Workspace (Browser) window.

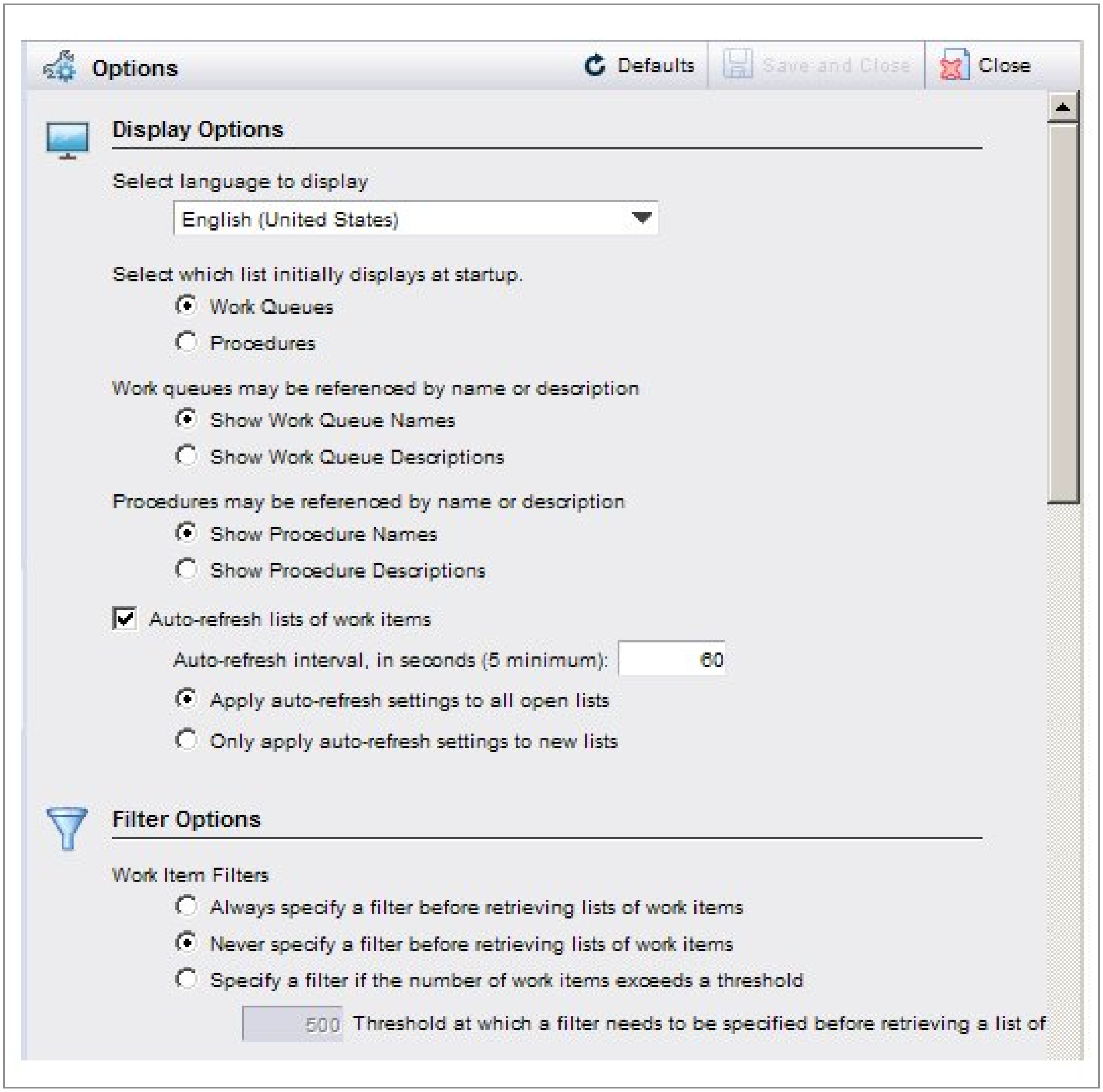
If you are displaying buttons:



If you are displaying icons:



The following dialog is displayed:



Scroll down this dialog to view all of the available user options.

You can use the **Defaults** button to return all options to their default values. (Default values are specified in the iProcess Workspace (Browser) configuration file — for information, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.)

The **Save and Close** button saves any changes you've made and closes the **Options** dialog.

The **Close** button closes the **Options** dialog without saving changes.

Note: If you leave the **Options** dialog without clicking the **Save and Close** nor **Close** button (e.g., by clicking one of the other mode selection buttons), any changes made will not be saved.

User Options Persistence

Settings you make on the **Options** dialog are persisted (i.e., saved) in one of two places, depending on a configuration parameter set by the system administrator:

- **Locally** - If persisted locally, user options you specify will be in effect only when you log into TIBCO iProcess Workspace (Browser) from the same machine. If you log into the TIBCO iProcess Workspace (Browser) on a different machine (and connect to the same server), the user options you specified will not be in effect on that new machine — user options defined on a specific machine will apply only to that individual machine.
- **On the Server** - If persisted on the server, and you log into a different machine (and connect to the same server), the user options you defined will be in effect on the new machine.

Display Options

The **Display Options** section allows you to set the following user options:

- **Language** - Specifies the language to display in the iProcess Workspace (Browser).
- **Initial Display** - Specifies whether the work queue list or the procedure list is initially displayed when you start the iProcess Workspace (Browser).
- **Work Queue Reference -** Specifies whether work queues are referenced by their name or description.
- **Procedure Reference** - Specifies whether procedures are referenced by their name or description.
- **Auto-Refresh of Work Item Lists** - Specifies whether or not the auto-refresh feature on work item lists should be enabled or disabled by default every time you log in.

These are described in the following subsections.

Language

You can specify which language to display on all of the screens and windows in the iProcess Workspace (Browser).

To specify the language:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Display Options** section on the **Options** dialog.
3. In the **Select language to display** field, select the desired language:

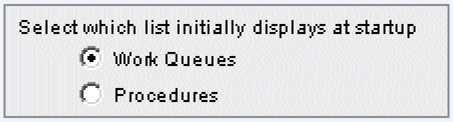
4. Click **Save and Close** to save the changes and close the **Options** dialog.

Initial Display

The initial display user option allows you to specify which list is initially displayed when you log in: work queue list or procedure list.

To specify the default initial display:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Display Options** section on the **Options** dialog.
3. Using the **Select which list initially displays at startup** radio buttons, select either **Work Queues** or **Procedures**:

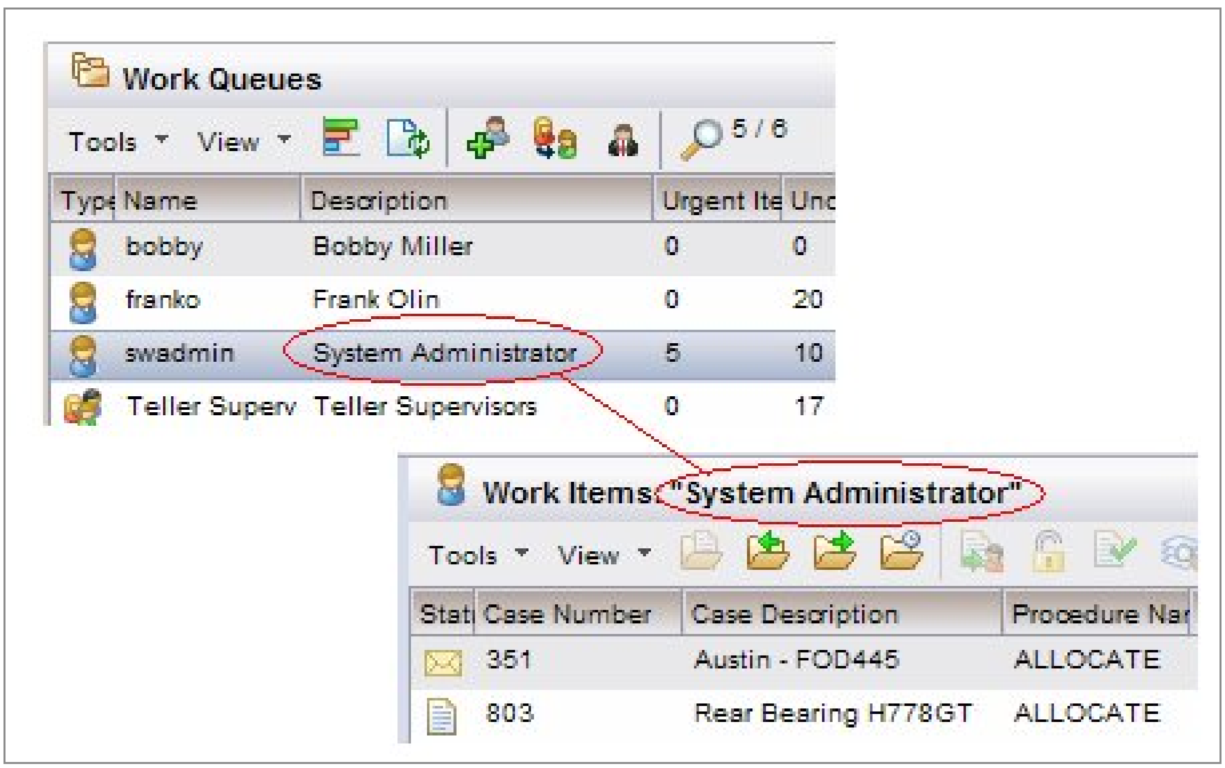


4. Click **Save and Close** to save the changes and close the **Options** dialog.

Work Queue Reference

This user option allows you to specify whether the work queue name or work queue description is displayed in the work item list caption.

In the following example, the description (System Administrator) is used as a caption, rather than the name (swadmin). (Names and descriptions are chosen by administrators when they add users to the system.)

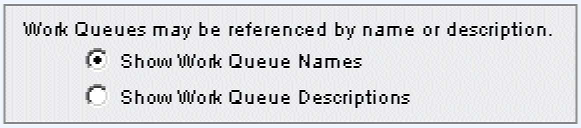


To specify whether the name or description should be used to reference the work queue in the work item list:

1. Click the **Options** button/icon to display the **Options** dialog.

2. Locate the **Display Options** section on the **Options** dialog.

3. Using the **Work Queues may be referenced by name or description** radio buttons, select either **Show Work Queue Names** or **Show Work Queue Descriptions**:

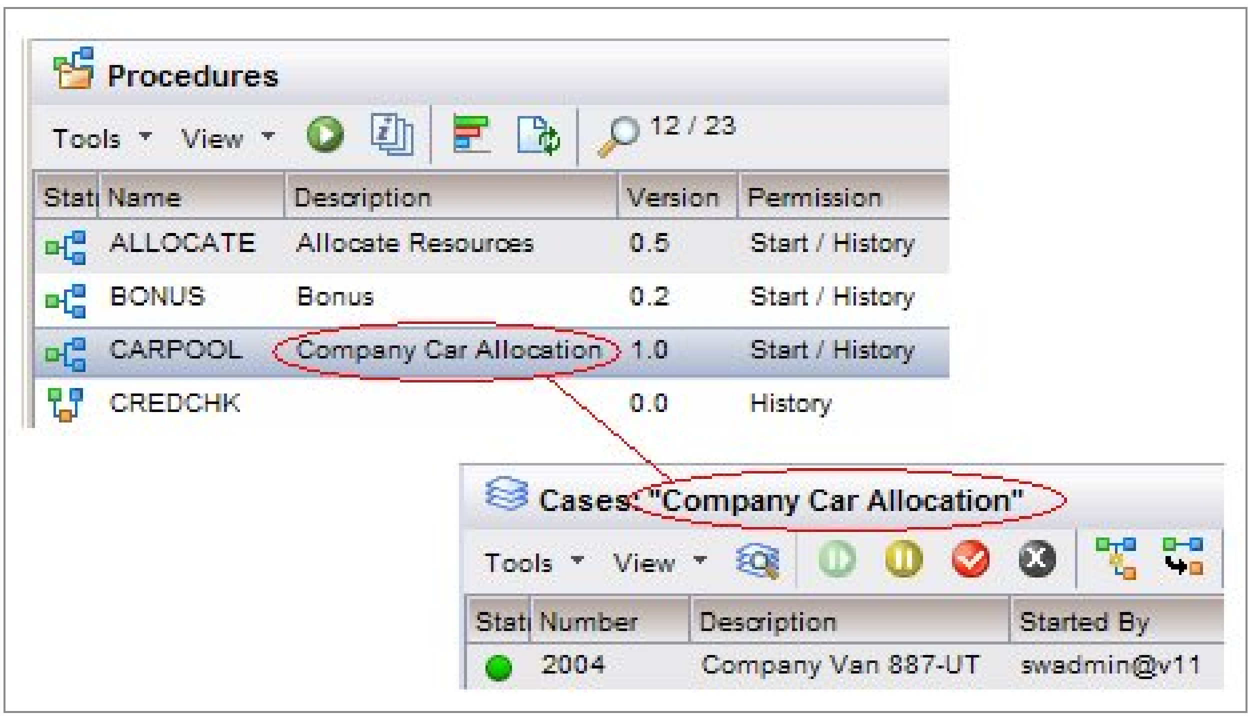


4. Click **Save and Close** to save the changes and close the **Options** dialog.

Procedure Reference

This user option allows you to specify whether the procedure name or procedure description is displayed in the case list caption.

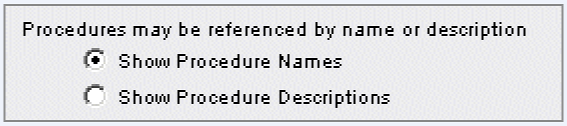
In the following example, the description (Company Car Allocation) is used as a caption, rather than the name (CARPOOL). (Names and descriptions are chosen by administrators when the procedure is defined.)



To specify whether the name or description should be used to reference the procedure in the case list:

1. Click the **Options** button/icon to display the **Options** dialog.

2. Locate the **Display Options** section on the **Options** dialog.
3. Using the **Procedure may be referenced by name or description** radio buttons, select either **Show Procedure Names** or **Show Procedure Descriptions**:



4. Click **Save and Close** to save the changes and close the **Options** dialog.

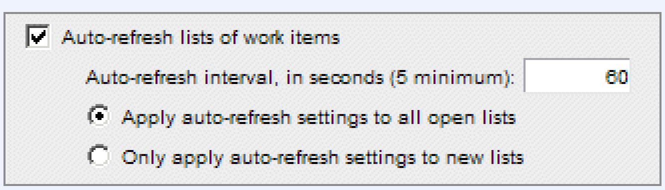
Auto-Refresh of Work Item Lists

This display option allows you to specify whether or not the auto-refresh feature on work item lists should be enabled or disabled by default every time you log in. When enabled, work item lists are automatically refreshed at a specified interval.

For information about the auto-refresh feature, see Auto-Refresh of Work Item Lists.

To set the default behavior of auto-refresh:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Display Options** section on the **Options** dialog.
3. Either check (to enable) or uncheck (to disable) the **Auto-refresh lists of work items** check box to specify the default behavior of the auto-refresh feature whenever you log in:



If you check the **Auto-refresh lists of work items** check box, also specify the following:

In the **Auto-refresh interval** field, specify the auto-refresh interval, in seconds. The minimum allowed is 5 seconds.

Choosing the **Apply auto-refresh settings to all open lists** radio button causes auto-refresh settings via the **Options** dialog to be applied to all work item lists currently open, as well as new lists opened in the future.

Choosing the **Only apply auto-refresh settings to new lists** radio button causes auto-refresh settings via the **Options** dialog to only apply to newly opened work item lists — not to lists that are currently open.

4. Click **Save and Close** to save the changes and close the **Options** dialog.

Filter Options

The **Filter Options** section allow you to set the following user options:

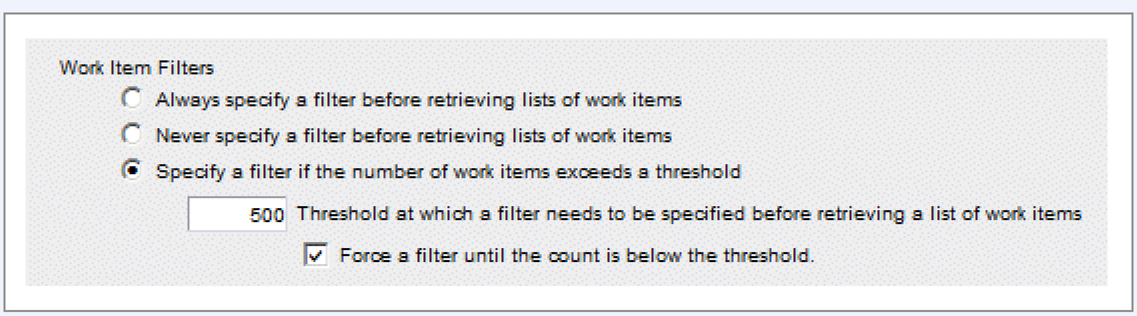
- **Work Item Filters** - Specifies whether or not to display the filter dialog before displaying the work item list.
- **Case Filters** - Specifies whether or not to display the filter dialog before displaying the case list.

Work Item Filters

This user option is used to specify whether or not to display the filter dialog before displaying the work item list.

To define the work item list filtering option:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Filter Options** section on the **Options** dialog.
3. Using the **Work Item Filters** radio buttons, select the appropriate option based on the descriptions below:



— **Always specify a filter...** - If this radio button is selected, the filter dialog is always displayed first when you select a work queue from the work queue list. This allows you to apply a filter before displaying the work item list.

— **Never specify a filter...** - If this radio button is selected, the filter dialog is not displayed first when you select a work queue from the work queue list. The first page of the work item list is always displayed. If you choose to filter the list later, you can click on the **Filter** icon and enter a filter expression.

— **Specify a filter if the number...** - This radio button is used in conjunction with the **Threshold** field below the **Work Item Filters** radio buttons. If this radio button is selected, the work item list is displayed only if the number of work items in the work queue does not exceed the number in the **Threshold** field. If the number exceeds the threshold, the filter dialog is displayed first, allowing you to apply a filter before displaying the work item list.

If you specify a threshold value, you can also force the user to filter the work items until the number of work items is below the threshold value. To do this, select the **Force a filter...** check box. This causes the filter dialog to be displayed, and forces the user to specify a filter that brings the number of work items below the threshold before the work item list is displayed.

> **Note:** For more information about filtering work item lists, see Filtering a Work Item List.

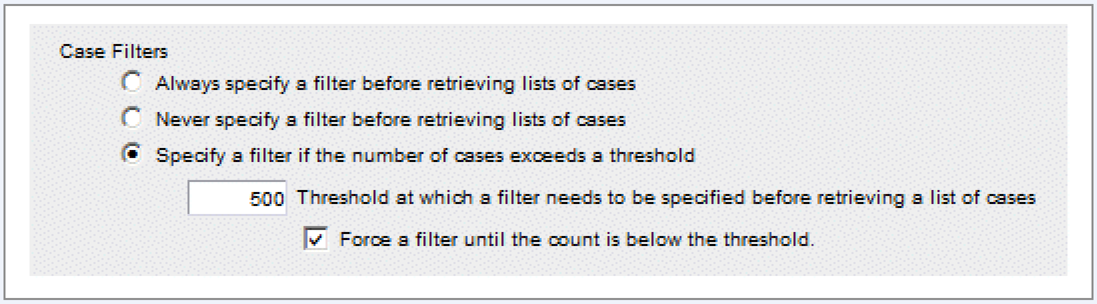
4. Click **Save and Close** to save the changes and close the **Options** dialog.

Case Filters

This user option is used to specify whether or not to display the filter dialog before displaying the case list.

To define the case list filtering option:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Filter Options** section on the **Options** dialog.
3. Using the **Case Filters** radio buttons, select the appropriate option based on the descriptions below:



- **Always specify a filter...** - If this radio button is selected, the filter dialog is always displayed when you select a procedure from the procedure list. This allows you to apply a filter before the list of cases is displayed.
- **Never specify a filter...** - If this radio button is selected, the entire case list is always displayed whenever you select a procedure from the procedure list.
- **Specify a filter if the number...** - This radio button is used in conjunction with the **Threshold** field below the **Case Filters** radio buttons. If this radio button is selected, the case list is displayed when you select a procedure from the procedure list only if the number of cases of that procedure does not exceed the number in the **Threshold** field. If the number exceeds the threshold, the filter dialog is displayed first, allowing you to apply a filter prior to displaying the case list.

  If you specify a threshold value, you can also force the user to filter the cases until the number of cases is below the threshold value. To do this, select the **Force a filter...** check box. This causes the filter dialog to be displayed, and forces the user to specify a filter that brings the number of cases below the threshold before the case list is displayed.

  > **Note:** For more information about filtering case lists, see Filtering a Case List.

4. Click **Save and Close** to save the changes and close the **Options** dialog.

Layout Options

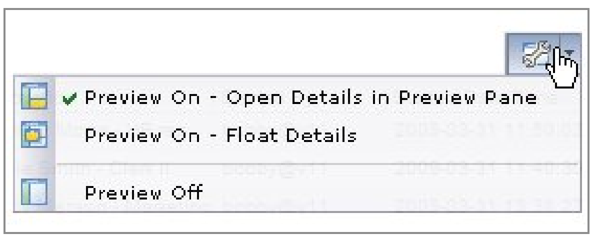
The **Layout Options** section allows you to set the following user options:

- **Case Preview Default -** Specifies whether the case details should be shown in the Preview Pane by default. This option also allows you to specify whether or not to automatically resize the Preview Pane when opening a case, as well as the percentage to resize.
- **Work Item Preview Default** - Specifies whether the work item summary should be shown in the Preview Pane by default. This option also allows you to specify whether or not to automatically resize the Preview Pane when opening a work item, as well as the percentage to resize.
- **Floating Work Item Form Window** - Specifies the type of window in which work items are opened when using floating windows.
- **Default Position/Size of Floating Windows** - Specifies the default position and size of floating windows used for work item forms and case details.

These are described in the following subsections.

Case Preview Default

This user option specifies the default setting of the **Preview** feature on the case list.



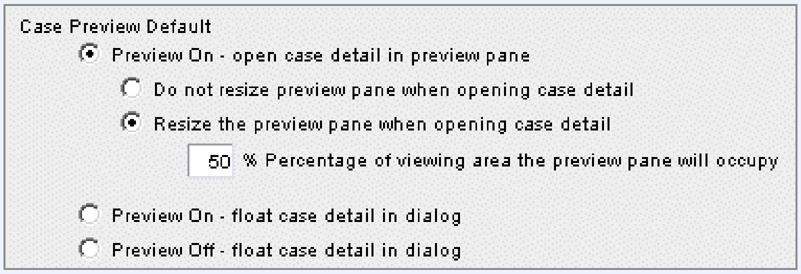
Each time you log in, the default specified here is in effect. You can change the current setting at any time using the Preview feature drop-down menu shown above. But the next time you log in, the default setting is in effect again.

For more information about the Preview feature, see Preview Pane.

To specify the case preview default:

Procedure

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Layout Options** section on the **Options** dialog.
3. Using the **Case Preview Default** radio buttons, select the option you would like to be set as the default for the Preview feature on the case list:

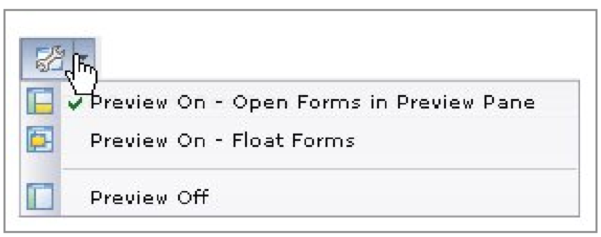


Notice that if you choose **Preview On - open case detail in preview pane**, additional radio buttons are displayed that allow you to specify whether or not the Preview Pane is automatically resized when a case is opened in the Preview Pane. If you choose to resize the Preview Pane, also enter a percentage (from 1% - 100%) in the **% Percentage of viewing area ...** field; this specifies the amount of the viewing area the Preview Pane will encompass when a case is open. When you close the case details, the Preview Pane reverts to its previous size.

4. Click **Save and Close** to save the changes and close the **Options** dialog.

Work Item Preview Default

This user option specifies the default setting of the **Preview** feature on the work item list.



Each time you log in, the default specified here is in effect. You can change the current setting at any time using the Preview feature drop-down menu shown above. But the next time you log in, the default setting is in effect again.

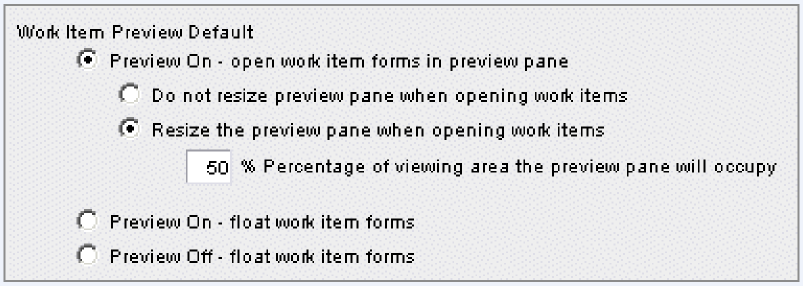
For more information about the Preview feature, see Preview Pane.

To specify the work item preview default:

Procedure

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Layout Options** section on the **Options** dialog.

3. Using the **Work Item Preview Default** radio buttons, select the option you would like to be set as the default for the Preview feature on the work item list:



Notice that if you choose **Preview On - open work item forms in preview pane**, additional radio buttons are displayed that allow you to specify whether or not the Preview Pane is automatically resized when a work item is opened in the Preview Pane. If you choose to resize the Preview Pane, also enter a percentage (from 1% - 100%) in the **% Percentage of viewing area ...** field; this specifies the amount of the viewing area the Preview Pane will encompass when a work item is open. When you close the work item, the Preview Pane reverts to its previous size.

4. Click **Save and Close** to save the changes and close the **Options** dialog.

Floating Work Item Form Window

This user option specifies the type of window in which the work item form is opened. This is applicable only if you are opening work item forms in a separate window; it is not applicable if you are opening work item forms in the Preview Pane. For information about the location in which work item forms are opened, see Preview Pane.

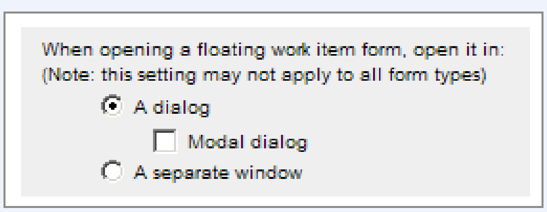
Note: This function may not be available to you, depending on the type of forms you are using. When your application was developed, the developers chose a method of creating the work item forms. The method they chose determines whether or not you have this function available (you may need to ask the system administrator which type of forms your application uses).

- if your application uses forms created with TIBCO® General Interface Builder (GI forms), this function is available because GI forms can be displayed in any of the three available formats: Preview Pane, separate dialog, or separate browser window.
- if your application uses any non-GI form (also referred to as “external forms”), this function is not available because non-GI forms can *only* be displayed in a separate browser window.

To specify the type of window in which work item forms are opened (when using floating windows):

Procedure

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Layout Options** section on the **Options** dialog.
3. Using the **When opening a floating work item form, open it in** radio buttons, select whether you would like work item forms to be opened in a dialog or a new browser window:



4. If you have selected to open floating forms in a dialog, also choose whether or not to make the dialog *modal* by checking or unchecking the **Modal dialog** check box (which is shown only if you have selected the **A dialog** radio button). (When a modal dialog is open, you cannot perform any other function until the dialog is closed.)
5. Click **Save and Close** to save the changes and close the **Options** dialog.

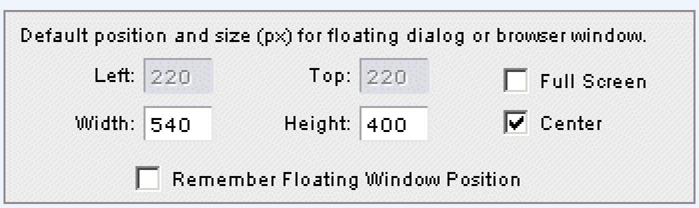
Note: The setting of this user option can be overridden for a particular work item form by a configuration parameter set by the system administrator. So, even though you specify to open floating windows containing work item forms in a separate dialog, for any particular work item, it may open in a separate browser window.

Default Position/Size of Floating Windows

This user option allows you to specify the default position and size of floating work item forms.

To specify the default floating window position and size:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Layout Options** section on the **Options** dialog.
3. Using the **Default position and size...** fields and check boxes, check either the **Full Screen** or **Center** check box, or uncheck them both, to specify that you want the window/dialog to be full screen, centered in the screen, or in a different position (uncheck both boxes):



   Some or all of the fields may become inactive, depending on which of the check boxes are checked.

4. Optionally enter values in the **Left**, **Top**, **Width**, and **Height** fields to specify the window/dialog position, in pixels.
5. Optionally check the **Remember Floating Window Position** check box to specify you want the system to remember the size and position of the floating window if you manually move it or resize it on your screen.

   If this check box is checked, the application will remember if you manually resize and/or re-position the work item form on your screen, and will size and position future forms. If this check box is not checked, future forms will all open in the position and size specified by the **Default position and size...** fields — it does not remember the size and location of work item forms you have manually resized/repositioned.

Also note that the **Remember Floating Window Position** option is not applicable for external forms (i.e., non-GI forms). The size and position of external forms is not remembered nor persisted — they always open according to the default settings of the Layout Options".

6. Click **Save and Close** to save the changes and close the **Options** dialog.

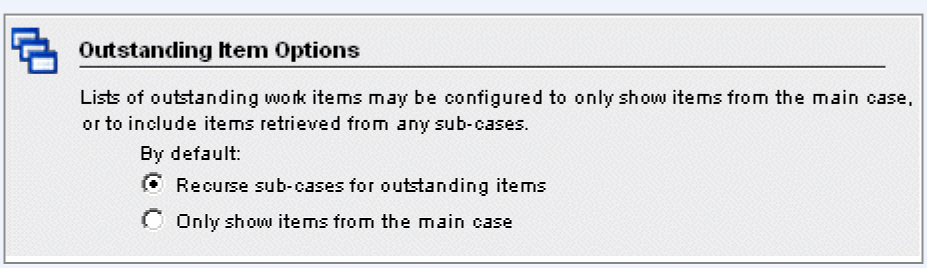
Outstanding Item Options

This user option specifies the default setting of the **Recurse sub-cases for outstanding items** check box on lists of outstanding work items, which specifies whether or not the outstanding work items list should include work items in sub-cases.

For information about the outstanding work items list, see Outstanding Work Items in the Case.

To specify this default setting:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Outstanding Item Options** section on the **Options** dialog.
3. In this section, click the appropriate radio button, as follows:
   - **Recurse sub-cases for outstanding items** - This causes the **Recurse sub-cases for outstanding items** check box on outstanding work item lists to be *checked* by default.
   - **Only show items from the main case** - This causes the **Recurse sub-cases for outstanding items** check box on outstanding work item lists to be *unchecked* by default.



4. Click **Save and Close** to save the changes and close the **Options** dialog.

Session Options

The **Session Options** section allows you to set the following user options:

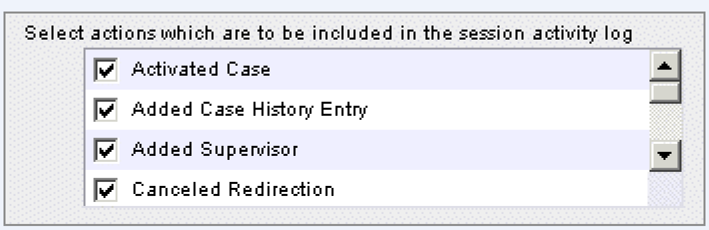
- **Session Activity Log** - Specifies how much information to write to the Session Activity log.
- **Change Password** - Allows the logged-in user to change his/her password.

Session Activity Log

This user option allows you to specify how much information to write to the Session Activity log. For information about the Session Activity log, see Login Session.

To specify the amount of session activity logging:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Session Options** section on the **Options** dialog.
3. Using the scrollable list of check boxes, check the activities you would like included in the Session Activity log:



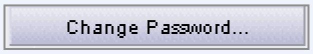
4. Click **Save and Close** to save the changes and close the **Options** dialog.

Change Password

You can change your password at any time using this option.

To change your password:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Session Options** section on the **Options** dialog.
3. Click on the **Change Password** button:



   The **Change Password** dialog is displayed.

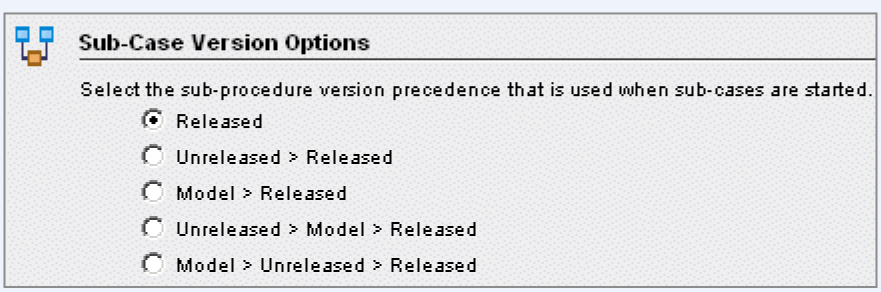
4. Enter your existing password in the **Old Password** field.
5. Enter your new password in the **New Password** field, then again in the **Confirm New Password** field.
6. Click **OK** to save the password changes and close the **Change Password** dialog.
7. Click **Save and Close** to save the changes and close the **Options** dialog.

Sub-Case Version Options

This option specifies the default order in which sub-procedure statuses are looked for when sub-procedures are started from another procedure.

To specify the sub-case precedence:

1. Click the **Options** button/icon to display the **Options** dialog.
2. Locate the **Sub-Case Version Options** section on the **Options** dialog.
3. Using the radio buttons in this section, select the desired precedence.



   For instance, if you select the **Model > Released** radio button, when a sub-case is started, the system will look for a model status of the sub-procedure first; if no model status of that sub-procedure exists, it will look for one with a released status.

The default is **Released** — the system will only look for the sub-procedure with a released status.

4. Click **Save and Close** to save the changes and close the **Options** dialog.

Note: Even though the “Sub-Case Version Options” section name refers to the precedence selections as “versions”, they are really “statuses.”

For more information about procedure statuses, see Procedure Status. For more information about sub-procedures, see Sub-Procedures.

User Administration

This section describes how users, groups, roles, and attributes are used in the TIBCO iProcess Workspace (Browser) installation.

Administering Users

The following provides definitions The following provides definitions of user-related terms used in the iProcess Workspace (Browser).

Term	Definition
User	A user is a person who has been defined on the iProcess Engine, and has been given a user name and password, which authorizes that user to log in to the iProcess Workspace (Browser). Each user has a personal work queue into which work items that are addressed to that user are placed.
Group	A group consists of a number of users. For example, a "Loan Reviewers" group might consist of a number of users whose responsibility it is to review loan applications. Each group has a work queue into which work items that are addressed to the group are placed. All users that are members of the group have access to the work items in the group’s work queue.
Role	A role is a job title or function, such as “Account Manager.” One user is assigned to the role. Then when a procedure is defined, the addressee of a step can be the “Account Manager.” Work items sent to “Account Manager” are actually sent to the user assigned to that role. That way if the person assigned to the job title (role) changes, all you have to do is change the user assigned to the role, rather

Term	Definition
	than change the procedure definition.
Attribute	An attribute is a property/characteristic of a user. When a user is defined on the system, attributes are specified for the user. One of particular importance for the iProcess Workspace (Browser) is the MENUNAME attribute. This attribute, which is assigned a value such as “User”, “Manager”, “Admin”, etc., specifies the user’s access to functions in the application. For more information, see User Access Profiles.

Users, groups, roles, and attributes can be created, changed, or deleted using the TIBCO iProcess User Manager. Information about using the User Manager can be found in the *TIBCO iProcess Workspace (Windows) Manager’s Guide*.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats.

The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

Documentation for TIBCO iProcess® Workspace (Browser) is available on the TIBCO iProcess® Workspace (Browser) Product Documentation page.

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking **Register** on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

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