BEA WebLogic Integration™

Using the WebLogic Integration JSP Worklist

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Using the WebLogic Integration JSP Worklist

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N/A	February 2003	7.0 SP2

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About This Document

This document explains how to use the WebLogic Integration JSP Worklist.

Note: The JSP Worklist replaces the deprecated WebLogic Integration Worklist Swing client.

The document is organized as follows:

- Chapter 1, "Starting and Exiting the JSP Worklist," provides instructions for starting and exiting the Worklist and disconnecting/reconnecting to the WebLogic Integration server.
- Chapter 2, "Working with Tasks," describes the task functions in the Worklist.
- Chapter 3, "Working with Workflows," describes the workflow functions in the Worklist.
- Chapter 4, "Customizing the JSP Worklist," explains how to customize the Worklist display and behavior.
- Chapter 5, "JSP Developer Customizations," provides information for the JSP Developer on how to make additional customizations to the JSP Worklist.

What You Need to Know

This document is intended for users who complete workflow tasks and for JSP Developers who want to customize the JSP Worklist.

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Related Information

The following WebLogic Integration documents contain information that is relevant to using this product.

- *Learning to Use BPM with WebLogic Integration*
- *Using the WebLogic Integration Studio*

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In your e-mail message, please indicate which release of the WebLogic Integration documentation you are using.

If you have any questions about this version of WebLogic Integration Worklist, or if you have problems installing and running the product, contact BEA Customer Support through BEA WebSUPPORT at `www.beasys.com`. You can also contact Customer Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number
- Your company name and company address
- Your machine type and authorization codes
- The name and version of the product you are using
- A description of the problem and the content of pertinent error messages

Documentation Conventions

The following documentation conventions are used throughout this document.

Convention	Item
Ctrl+Tab	Indicates that you must press two or more keys simultaneously.
italics	Indicates emphasis or book titles.

Convention	Item

`monospace text`	Indicates code samples, commands and their options, data structures and their members, data types, directories, and filenames and their extensions. Monospace text also indicates text that you must enter from the keyboard.
	Examples:
	`#include <iostream.h> void main ( ) the pointer psz`
	`chmod u+w *`
	`\tux\data\ap`
	`.doc`
	`tux.doc`
	`BITMAP`
	`float`

`monospace italic text`	Identifies variables in code. *Example*: `String` *`expr`*
UPPERCASE TEXT	Indicates device names, environment variables, and logical operators. *Examples*: LPT1 SIGNON OR
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.

[ ]	Indicates optional items in a syntax line. The brackets themselves should never be typed.
	Example:
	`buildobjclient [-v] [-o name] [-f` *`file-list`*`]...`
	`[-l` *`file-list`*`]...`

|	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.

Convention	Item

`...`	Indicates one of the following in a command line:
	■ That an argument can be repeated several times in a command line.
	■ That the statement omits additional optional arguments.
	■ That you can enter additional parameters, values, or other information.
	The ellipsis itself should never be typed.
	Example:
	`buildobjclient [-v] [-o name] [-f` *`file-list`*`]...`
	`[-l` *`file-list`*`]...`

. . .	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.

1 Starting and Exiting the JSP Worklist

Note: The JSP Worklist replaces the deprecated Worklist Swing client.

The following sections describe how to start and exit from the JSP Worklist, and how to disconnect/reconnect to the WebLogic Integration server:

- Starting the JSP Worklist
- Logging Off from the WebLogic Integration Server

Starting the JSP Worklist

The JSP Worklist is deployed on startup of the WebLogic Integration Server. The server must be running to use the JSP Worklist.

To start the JSP Worklist:

1. One Windows, do one of the following:
   - If the local server is using port 7001, choose Start→Programs→BEA WebLogic Platform 7.0→WebLogic Integration 7.0→Worklist.
   - If the server is not using port 7001, open a browser and enter the following URL:

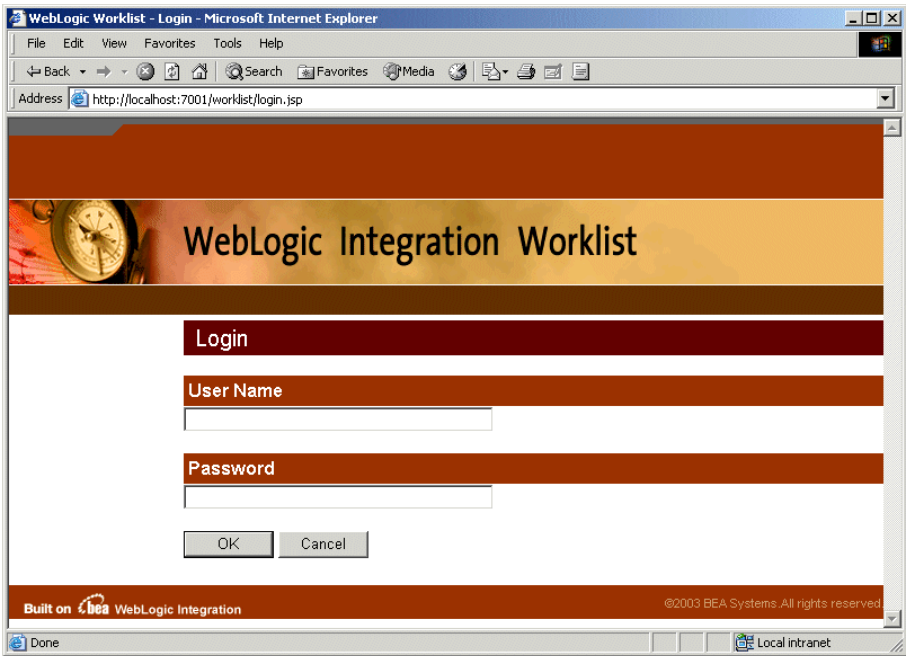
     `http://host:port/worklist`

   On UNIX, open a browser and enter the following URL:

```
http://host:port/worklist
```

The Logon page displays.

Figure 1-1 Logon to WebLogic Integration JSP Worklist



2. Enter your user name in the User Name field.
3. Enter your password in the Password field.
4. Click the OK button. The JSP Worklist displays, as shown in Figure 1-2.

Figure 1-2 JSP Worklist Main Page

The User ID is displayed on the left side of the page next to the Logout button. User and role information is displayed in the View list. The user ID is presented in bold text and the user's roles in plain text.

The information displayed in the worklist depends on the selected organization. An organization can represent different business entities or geographical locations. Use the drop-down list to switch between organizations. This allows you to view the task information for the chosen organization.

Note: To customize the task information displayed in the worklist, see "Selecting Columns to Displays" on page 4-1.

Logging Off from the WebLogic Integration Server

The Logout button is available on all JSP Worklist pages. After logging out, the JSP Worklist indicates that the session has ended and displays a Login button in case you want to log in again, as shown in Figure 1-3.

Figure 1-3 Log Off WebLogic Integration JSP Worklist

2 Working with Tasks

Note: The JSP Worklist replaces the deprecated Worklist Swing client.

The following sections explain how to work with Worklist tasks:

- Understanding Worklist Tasks
- Changing Task Properties
- Executing a Task
- Changing Task Status
- Reassigning a Task

Understanding Worklist Tasks

When a task in a workflow is first defined using the WebLogic Integration Studio, certain permissions are set for that task. These permissions determine what actions you can do with a particular task in the JSP Worklist. For more information, see *Using the WebLogic Integration Studio*.

There are three types of task assignments in the JSP Worklist:

- User—a task is assigned to a particular user ID. Only the assigned user can perform the task unless the user reassigns the task to another user. Reassignment can only occur if the task has permission to reassign at execution. For more information, see "Changing Task Properties."

Note: The View list on the Worklist page identifies the user's ID and associated roles.

- User who belongs to a role to which the task is assigned—a task is assigned to a role. A role is a common area of responsibility, ability, or authorization level that is shared by a group of individuals (such as a buyer or supervisor).

  Users can belong to one or more roles. Each role is listed below the user's ID. Tasks contained within a role can only be done by users who are members of that role. Any user who is a member of that role can take a task assigned to the role and execute it.

- User in a role—a task is assigned to a user in a role. The system automatically assigns the task to the user in the selected role who has the least number of tasks to do.

Changing Task Properties

To change task properties, take the following steps:

1. On the Worklist page, select the radio button for the task whose properties you want to change.
2. From the drop-down list, select Properties, and then click the Go button. The Task Properties page is displayed, as shown in Figure 2-1.

Figure 2-1 Task Properties Page

3. Select the task priority from the Priority drop-down list.

4. Select one or more of the following task-permission check boxes:

   - Modify at Execution—specifies whether users can change task permissions. If this permission is not set, users cannot select other permissions on the Task Properties page.
   - Mark Done Without Executing—denotes whether users can change task status to done.
   - Re-execute If Marked Done—specifies whether users can execute tasks even if the task has already been completed.
   - Unmark If Marked Done—denotes whether users can change task status to pending.
   - Reassign at Execution—specifies whether users can reassign tasks.

5. To save any property changes and return to the Worklist page, click the OK button.

Executing a Task

You can only execute tasks that are pending and have been assigned to you individually as a user, to a role of which you are a member, or to you as a user in a role.

To execute a task, do one of the following:

- For the task you want to execute, click its corresponding Execute button.
- Select the radio button for the task you want to execute, select Execute from the drop-down list, and then click the Go button.

The actual behavior during task execution is determined by the definition of the task at workflow design time. For more information, see *Using the WebLogic Integration Studio*.

Changing Task Status

You can change task status from pending to done or done to pending, as described in the following sections:

Changing Task Status to Done

To change task status from pending to done:

1. In the View list, select the user or user role for the task you are changing.
2. In the task list, select the task you want to change.
3. From the drop-list, select Mark Done, then click the Go button.

Changing task status to done sets the task completion date to the current date and executes the actions defined for the marked done event of the task. The ability to change task status to done is determined by the permissions set on the Task Properties page. For more information, see “Changing Task Properties.”

Changing Task Status to Pending

To change task status from done to pending:

1. In the View list, select the user or user role for the task you are changing.
2. In the task list, select the task you want to change.
3. From the drop-list, select Unmark Done, and then click the Go button.

Changing task status to pending clears the task completion date. This action does not affect a task that is not complete. The ability to change task status to pending is determined by the permissions set on the Task Properties page. For more information, see "Changing Task Properties."

Reassigning a Task

You can only reassign a task under the following conditions:

- The task is currently assigned to you individually as a user, to a role of which you are a member, or to you as a user in a role.
- The task reassign permission (Reassign at Execution) is set on the Task Properties page. For more information, see "Changing Task Properties."

To reassign a task, take the following steps:

1. In the View list, select the user or user role for the task you are changing.
2. In the task list, select the task you want to change.
3. From the drop-list, select Reassign, and then click the Go button. The Reassign Task page is displayed, as shown in Figure 2-2.

Figure 2-2 Reassign Task Page

4. Select one of the following sets of steps depending on your reassignment target:

   Reassignment to another user:

   a. Click the User radio button.

   b. Select another user in the Assignee drop-down list in the same organization associated with the workflow containing the task.

   c. To save the reassignment change and return to the Worklist page, click the OK button.

   Reassignment to a user in a role:

   a. Click the User in role radio button.

   b. Select a role in the Assignee drop-down list. At execution time, the system performs workload balancing by automatically assigning the task to the user in that role who is assigned the least number of current tasks.

   c. To save the reassignment change and return to the Worklist page, click the OK button.

Reassignment to a user in a role:

a. Click the Role radio button.

b. Select a role in the Assignee drop-down list in the same organization associated with the workflow containing the task.

c. To save the reassignment change and return to the Worklist page, click the OK button.

3 Working with Workflows

Note: The JSP Worklist replaces the deprecated Worklist Swing client.

The following sections explain how to work with Worklist workflows:

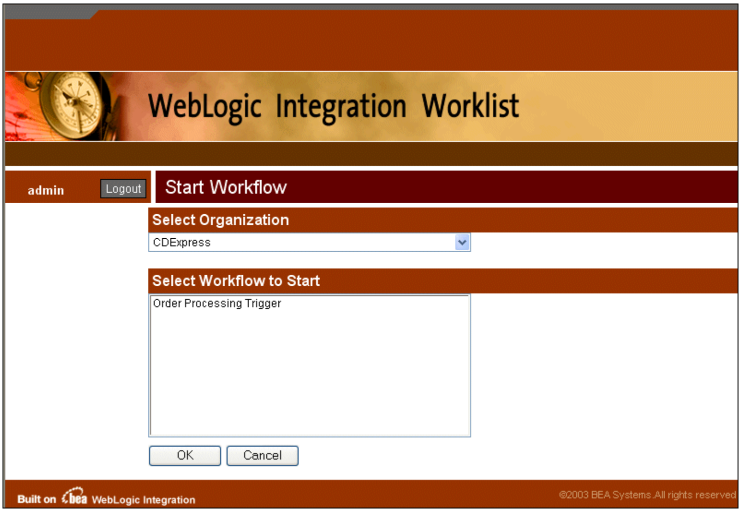
- Starting a Workflow
- Viewing Workflow Status

Starting a Workflow

To start a workflow:

1. Click the Start Workflow button. The Start Workflow page is displayed, as shown in Figure 3-1.

Figure 3-1 Start Workflow Page

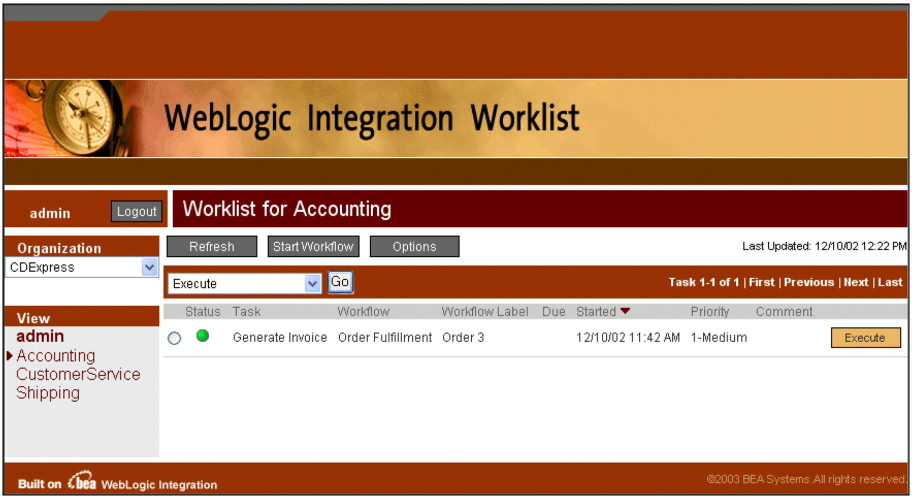


2. In the Select Organization drop-down list, select the organization that contains the workflow you want to start. This list displays all the organizations to which you belong.

3. In the Select Workflow to Start list box, select the workflow you want to start. The workflows that appear in this list represent all available workflow template definitions that you can start manually. Such workflows are defined as active and with a manual start at workflow design time.

4. Click the OK button to start the workflow. The processing that occurs during startup depends on the definition of the workflow created at design time. For more information, see *Using the WebLogic Integration Studio*.

Figure 3-2 Worklist Page—New Task

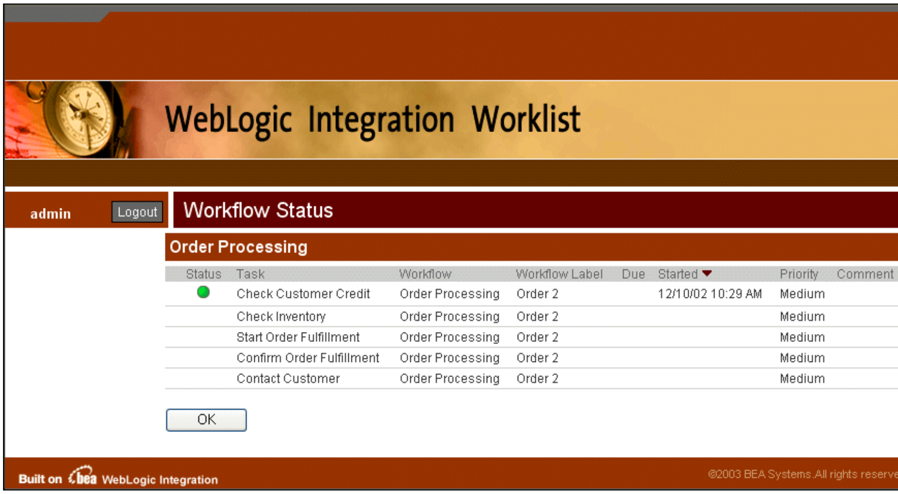


Viewing Workflow Status

To view the status of all tasks associated with the workflow for a selected task:

1. Select the radio button for the task whose workflow status you want to view.
2. From the drop-list, select Workflow Status, and then click the Go button. The Workflow Status page displays, as show in Figure 3-3.

Figure 3-3 Workflow Status Page



This page displays the current status of all tasks in the workflow.

3. To return to the Worklist page, click the OK button.

CHAPTER

4 Customizing the JSP Worklist

Note: The JSP Worklist replaces the deprecated Worklist Swing client.

The following sections explain how to customize the display and behavior of the Worklist:

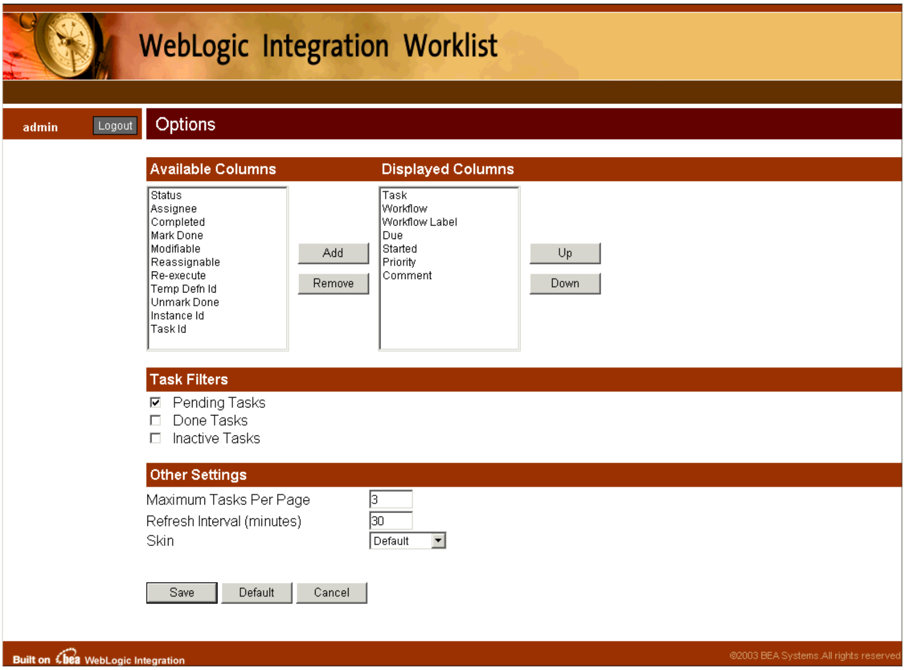
- Selecting Columns to Displays
- Working with Task Status
- Selecting Task Sort Order
- Other Settings

Selecting Columns to Displays

To select the columns to display in the task list, take the following steps:

1. Click the Options button. The Options page displays, as shown in Figure 4-1.

Figure 4-1 Options Page



2. Select a column in the Available Columns or the Displayed Columns list box.
3. Click the appropriate Add or Remove button to move your selection to the Available or Displayed Column.
4. Click the Up or Down button to reposition your selection in the list box. The list position for displayed columns, starting from top to bottom, determines the ordering of columns from left to right in the task list.
5. To save your column changes, click the Save button.

Working with Task Status

You can update task status and select which task status categories to display.

Updating Task Status

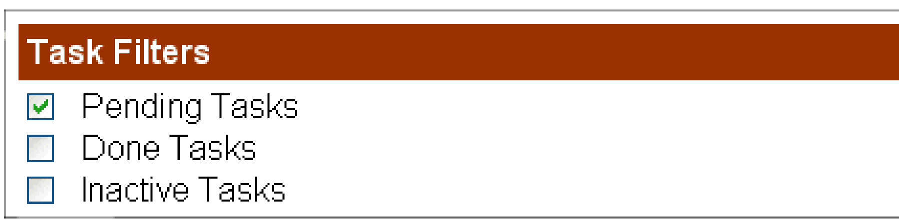
To update the status of all tasks shown for a user or role, click the Refresh button.

Selecting Which Tasks to Display

To select which type of tasks are displayed in the task list, take the following steps:

1. In the View list, select the user or user role, and then click the Options button. The Options page displays. The Task Filter section is located beneath the Available and Displayed list boxes, as shown in Figure 4-2.

Figure 4-2 Options Page—Task Filters



2. Select one or more of the check boxes for the type of task you want to display (described in Table 4-1).

Table 4-1 Task Filters—Displaying Status Categories to Display

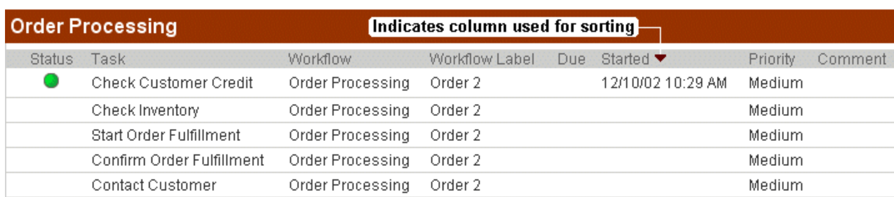
Task Filters	Description
Pending	Tasks that have not been executed yet.
Done	Tasks that have been completed.
Inactive	Tasks that have not been started in the workflow.

3. To save your task selection, click the Save button.

Selecting Task Sort Order

The sorting of tasks is based on the selected column. The arrow immediately to right of a column heading indicates that that column is used for sorting, as shown in Figure 4-3. Additionally, the sort order can be set to ascending or descending for each column. An up arrow indicates an ascending order and a down arrow indicates a descending order.

Figure 4-3 Sort Order



The following instructions tell you how to change the sort order:

- To select the task sort order, in the heading row of the task list, click the heading of the column for the sort order you want. The sort order switches to that column, as indicated by the arrow.
- To change the order between ascending and descending, click the text in the heading row, not the arrow. The sort order changes to ascending or descending, as indicated by the arrow.

Other Settings

The Other Settings section of the Options page allows you to control settings that affect the display, refresh rate, and appearance of the JSP Worklist. This section contains the following options:

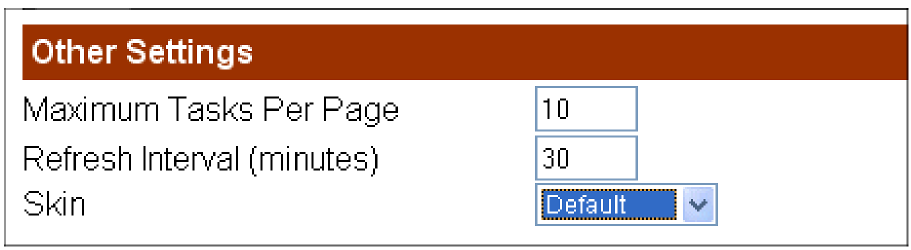
- Maximum Tasks Per Page—changes the number of tasks displayed on each page of the JSP Worklist.
- Refresh Interval—specifies the rate that tasks are updated in the task list.

- Skin—changes the appearance of the JSP Worklist. A skin alters such elements as the worklist logo, color of the pages, and default font and size. Skins consist of Cascading Style Sheet (CSS) files and directories of images. Four pre-built skins are provided; an HTML developer can create new skins by modifying the CSS files and creating new images.

To change any of the settings in this section, take the following steps:

1. On the Worklist page, click the Options button. The Options page displays. The Other Settings section is beneath the Task Filters, as shown in Figure 4-4.

Figure 4-4 Options Page—Other Settings



2. Enter your settings in the appropriate field or for skins select from the drop-list.

3. To save the new settings, click the Save button.

5 JSP Developer Customizations

Note: The JSP Worklist replaces the deprecated Worklist Swing client.

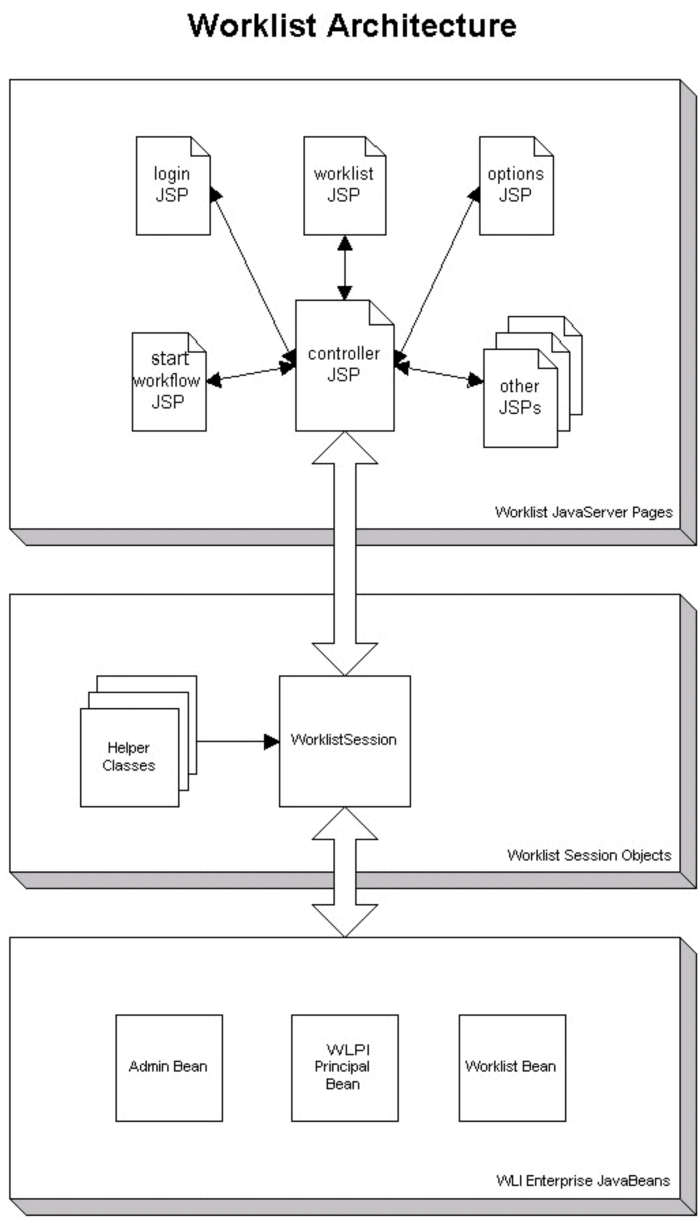
To allow customizing the new JSP Worklist, the source code for all pages and classes are included in this release. The following sections explain how to customize the JSP Worklist for your deployment:

- Architecture
- Customizing the JSP Worklist
- Migrating to the JSP Worklist

Architecture

The JSP Worklist is a Web application composed of JavaServer Pages (JSPs) and Java classes packaged in a Web Application Archive (WAR) file. There are three tiers in the overall architecture: Worklist JSPs, a Worklist session object, and WebLogic Integration Enterprise JavaBeans. Figure 5-1 shows the architecture.

Figure 5-1 JSP Worklist Architecture



The Worklist JSPs instantiates and uses one `WorklistSession` object. This session object then connects and uses the Admin, WLPI Principal, and Worklist WLI Enterprise JavaBeans (EJBs).

The Worklist session object is designed to be the interface between the JSPs and the WebLogic Integration Server. The WebLogic Integration API is referenced within this session object and isolates the JSPs from the complex WebLogic Integration coding.

JavaServer Pages

The JSP Worklist is made up of several JSPs that the end-user views and navigates. The worklist and controller pages are the most important pages.

The worklist page (`worklist.jsp`) is the primary page. This page displays the user and role task lists. From this page, the end-user can perform various task operations or select other related functions.

A controller page (`controller.jsp`) handles page navigation and processing between all JSP Worklist pages. As the user moves from page to page, the controller page is called and processes the user response. Specifically, the controller page determines the context of the user response, processes it, and then redirects the user to the appropriate page.

WorklistSession Class

The `WorklistSession` class (`com.bea.wli.jsp.worklist.WorklistSession`) acts as an interface between the Worklist JSPs and the WebLogic Integration EJBs. The JSPs make requests from the `WorklistSession` object, which then calls the WebLogic Integration EJBs. Any returned information is sent back to the `WorklistSession` object. The `WorklistSession` object may then convert and return the information in a usable format back to the requesting JSP.

The `WorklistSession` object also persists session state as the user navigates through the pages.

Customizing the JSP Worklist

This section describes how to customize the Worklist, rebuild it, and deploy it with your specifications.

End-User Custom Options

The end-user can customize the following options in Worklist:

- Displayed columns
- Task filter
- Maximum tasks per page
- Refresh interval
- Skin

These user settings are saved to a cookie so that the changes can be restored in the next session.

Customizing Skins

Worklist uses cascading style sheets (CSS) to control the look and feel for all pages. Four skins are included in this release that the end-user can use. Each skin is contained in its own directory and named after its skin name. You can create and add new skins by using one of the shipped skins as a template. These files are located in the following directory:

```
BEA_HOME\weblogic700\integration\src\jsp\worklist\skins
```

In the preceding line, `BEA_HOME` represents the WebLogic Platform home.

To create a new skin, take the following steps:

1. Create a new directory for your skin in the `skins` directory.

2. Copy the files from one of the existing skin directories into the new directory.
3. Modify the CSS and graphic images.
4. In the `options.jsp` file, update the drop-down menu list to include your new skin. The option tag's value attribute should be set to the name of your new skin directory.

   Note: The `options.jsp` file is located in the *`BEA_HOME`*`\weblogic700\integration\src\worklist` directory, where *`BEA_HOME`* represents the WebLogic Platform directory,

Customizing Worklist Page Content

The JSP component is the presentation layer of the JSP Worklist. In addition to customizing the skins to change the look and feel, you can modify the JSPs to change the layout of the page content.

The JSPs are written primarily in HTML using cascading style sheets. JSP scriplets are kept to a minimum because most of the processing logic is done in the `WorklistSession` class. This means a Web designer can focus on the presentation layer in the JSP files, while a Java developer can maintain the Java code within the `WorklistSession` and helper classes.

Extending Worklist

You are free to customize the Worklist JSPs to meet your requirements. The JSP Worklist architecture is a suggested model that separates the JSP presentation layer from the processing layers. The `WorklistSession` class is a processing layer that simplifies many of the WebLogic Integration EJB API calls.

To extend the Worklist functionality, modify the `WorklistSession` class or create other session classes to perform your own business functions. The Worklist JSPs can then be modified to make your new functionality available to the user.

Note: Future releases of WebLogic Integration will implement the JSP Worklist by using JSP custom tag libraries.

Rebuilding the JSP Worklist

An Ant build script is included for rebuilding the JSP Worklist Web application `worklist.war` file. All the JSP Worklist source code is included in the WebLogic Integration 7.0 SP2 release so you can perform a complete build,.

To rebuild the application, take the following steps:

1. Go to the following directory

   BEA_HOME`\weblogic700\integration\src\jsp\worklist\project`

   In the preceding line, *BEA_HOME* represents the WebLogic Platform home.

2. Run `antEnv` to set up your environment.

3. Run `ant` to begin the rebuild.

   The rebuild procedure recompiles the `WorklistSession` class and the JSPs. It then packages all the required resources into the `worklist.war` file.

Note: The rebuild procedure will overwrite the existing `worklist.war` file in the `integration\lib` directory.

Migrating to the JSP Worklist

The JSP Worklist web application is configured and deployed by default in WebLogic Integration 7.0 SP2. It is not a stand-alone Web application because it requires class files from other `EJBComponents` within the WebLogic Integration application.

To use the JSP Worklist for previously created WebLogic Integration 7.0 domains, you must update your domain `config.xml` file to properly deploy the `worklist.war` file. In your domain `config.xml`, add the following information inside the WebLogic Integration `<Application>` tag:

```
<WebAppComponent Name="WLI-BPM JSP Worklist"
Targets="<TARGET_NAME>" URI="worklist.war"/>
```

The value for `<TARGET_NAME>` should be either the server name or cluster name depending on your configuration.

The new `worklist.war file` is located in the `BEA_HOME\weblogic700\integration\lib` directory, where `BEA_HOME` represents the WebLogic Platform home.

Note: For more information about `config.xml`, see "WebLogic Integration Sample Configuration File" in *Starting, Stopping, and Customizing BEA WebLogic Integration*.

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